

Martin M1 HD

Safety and Installation Guide



Martin[®]
by HARMAN

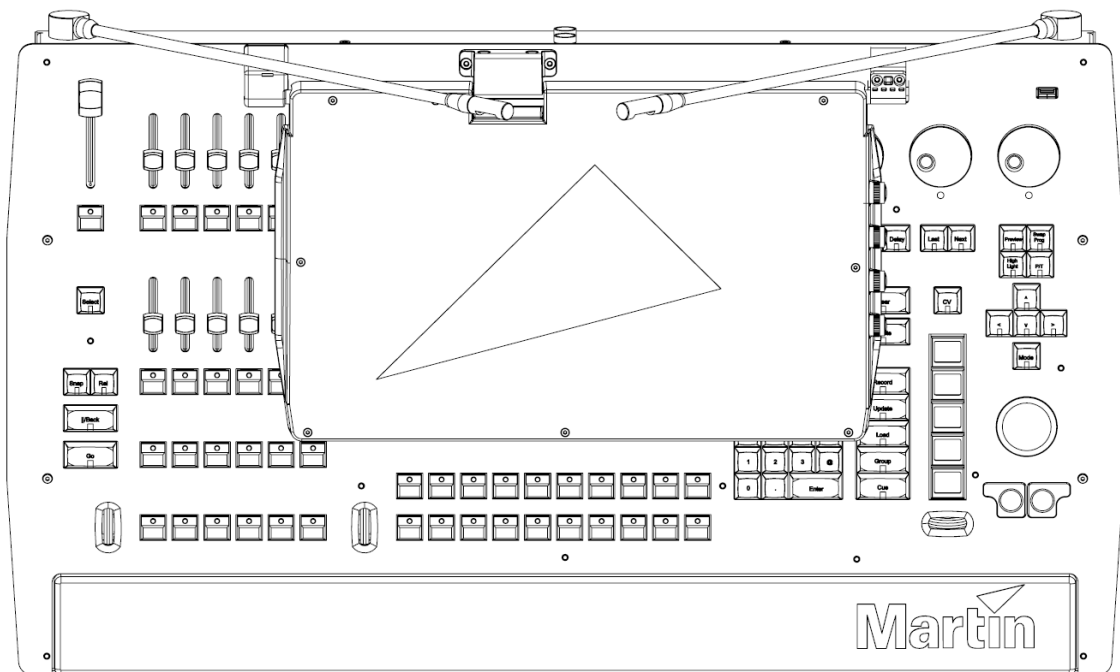
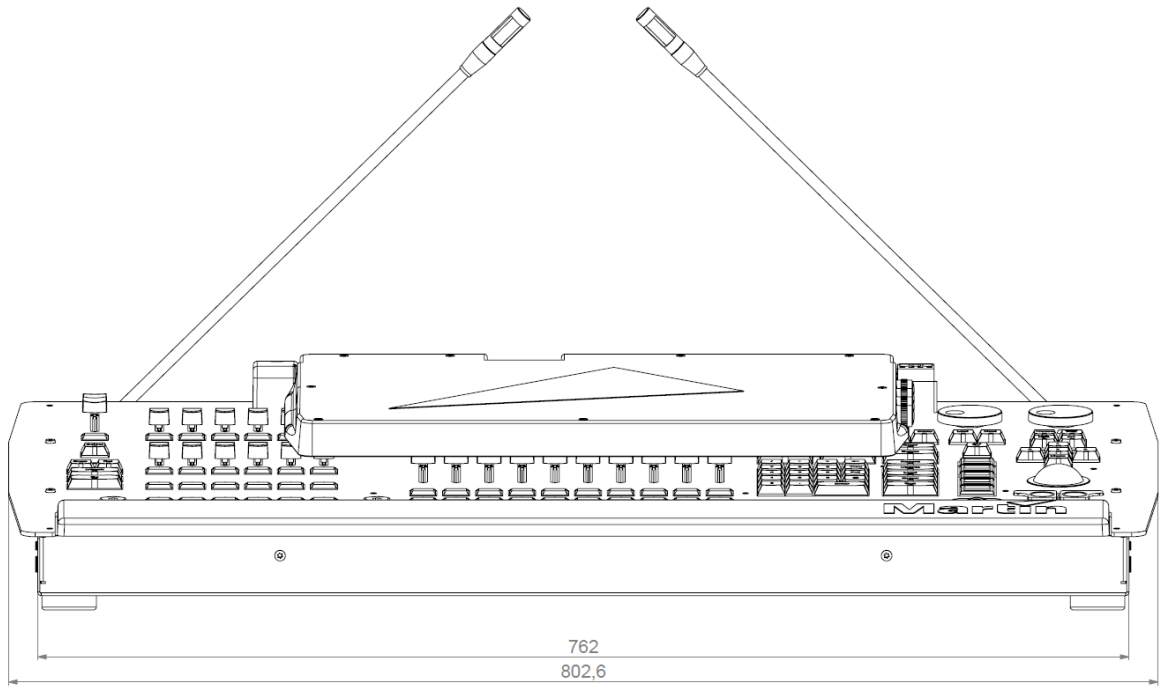
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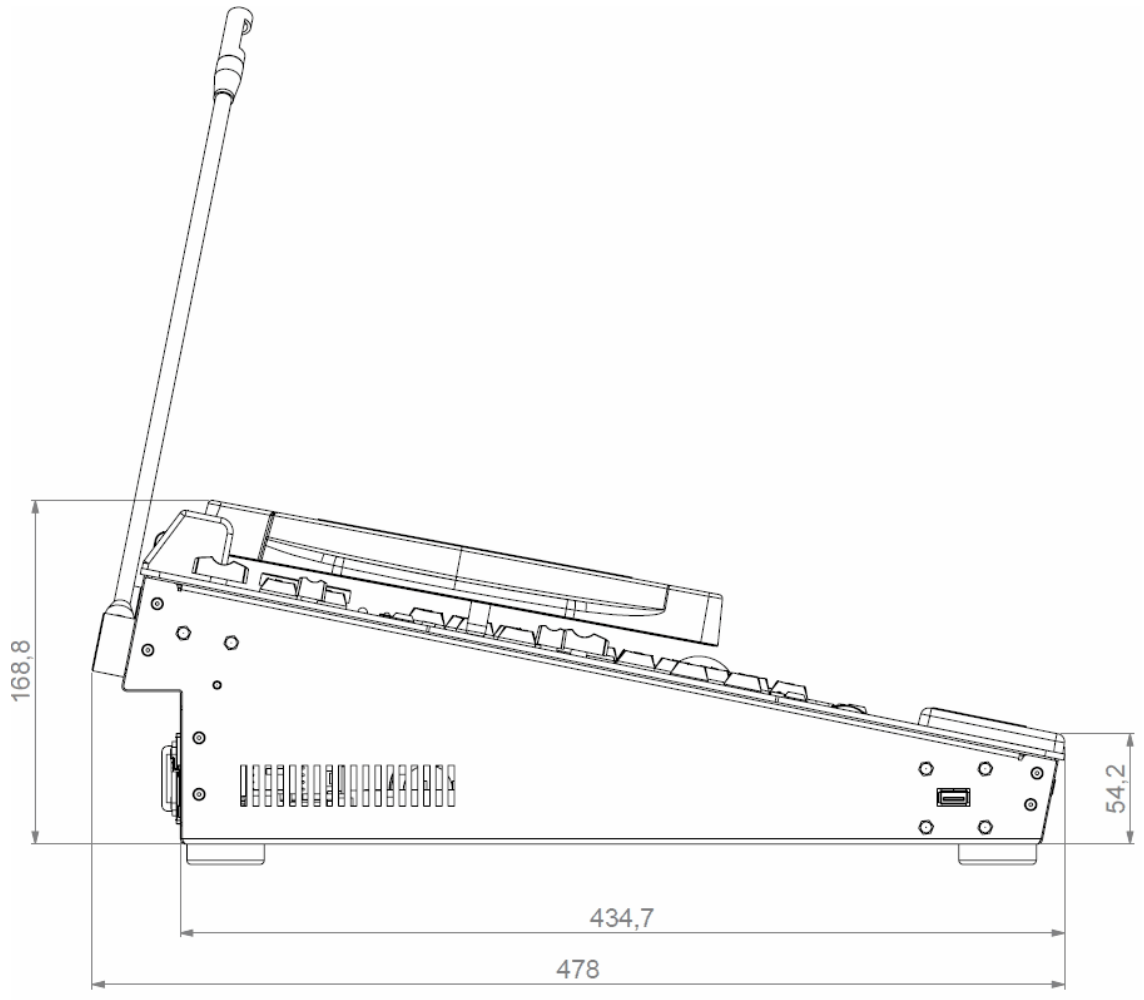
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Dimensions

All dimensions are in millimeters





Introduction

Thank you for purchasing the Martin™ M1 HD Lighting Control System.

The M1 HD continues the tradition of the M1, being one of the most ergonomic lighting consoles on the market.

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 HD and access to our user forums.

Technical Support

Most information regarding the controller systems of Martin Professional can be found at www.martin.com/controllersupport

Fixture Profiles

The software offers a fixture profile editor to create custom profiles. It is also possible to have Martin Professional add a new profile to the standard library.

Profile requests can be made on our website

http://www.martin.com/controllersupport/fixture_libraries.html

Please check whether the profile is already available before filling out a request.

Support Email

For specific questions please contact us directly at controllersupport@martin.dk

Training Videos

A large number of training videos showing the operation of the software can be found on our youtube channel.

<http://www.youtube.com/martincontroller>

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 HD , 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 at +45-8740-0000, or in the USA at 888-832-4180

This product is for indoor use ONLY.



Warning This is a product according to Class A. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

- 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 Neutrik PowerCon TRUE1 connector and chose the correct power cord for the country of operation.
- Replace fuses with ones of the same type and rating only. Never attempt to bypass a fuse.
- The fixture has double-pole/neutral fusing. If it is not completely disconnected from AC power, parts of the fixture may remain live even if one of the two mains fuses has blown
- 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 with an incorrect type. Dispose of used batteries according to local environmental regulations.

Included Items

Each Martin M1 HD contains the following items:

- Neutrik Powercon True1 connector
- 2x 2A T Fuses, installed
- Dust cover for M1 HD: P/N 91613070
- Two LED desklights, built-in
- USB Flash Recovery Drive
- Martin™ One-Key: ShowDesigner 6™ Lite 3D Visualizer 1-year license
M-PC Pro with 64 universe License
- Safety Manual and Installation Guide

Software

The software for the M1 HD is available from the support website www.martin.com/controllersupport
Please check periodically for new releases that may add new functionality or resolve a bug.

Important! Update to the latest release software before using the controller for the first time.

Setup and Assembly

Unpacking

Open the shipping box carefully and store the box together with all included foam inserts and protective covers for possible future use.

Do not transport the M1 HD in any other container than the factory-provided box or a custom manufactured protective case.

Martin Professional offers a road case specifically designed for the M1 HD.

Placement

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

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

Press down lightly on the rubber hand rest when operating the hinge mechanism. The hinges are strongly damped and the controller can tip over if the screen is not opened carefully.

Power Connections



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



WARNING! Double-pole/neutral fusing. The M1 HD is protected by two 2 A slow-blow mains fuses located in fuseholders next to the power input connector.

The provided True1 connector is not fitted with a cable or plug.

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

Install a 3-prong earthed (grounding) 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.

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

1. Check the power switch and ensure that is set to the OFF position.
2. Insert the provided True 1 connector, lock it securely in place and connect the cable to a properly protected and grounded (earthed) power outlet.
3. Turn on the M1 HD by toggling the power switch to ON.

Connections

Front panel

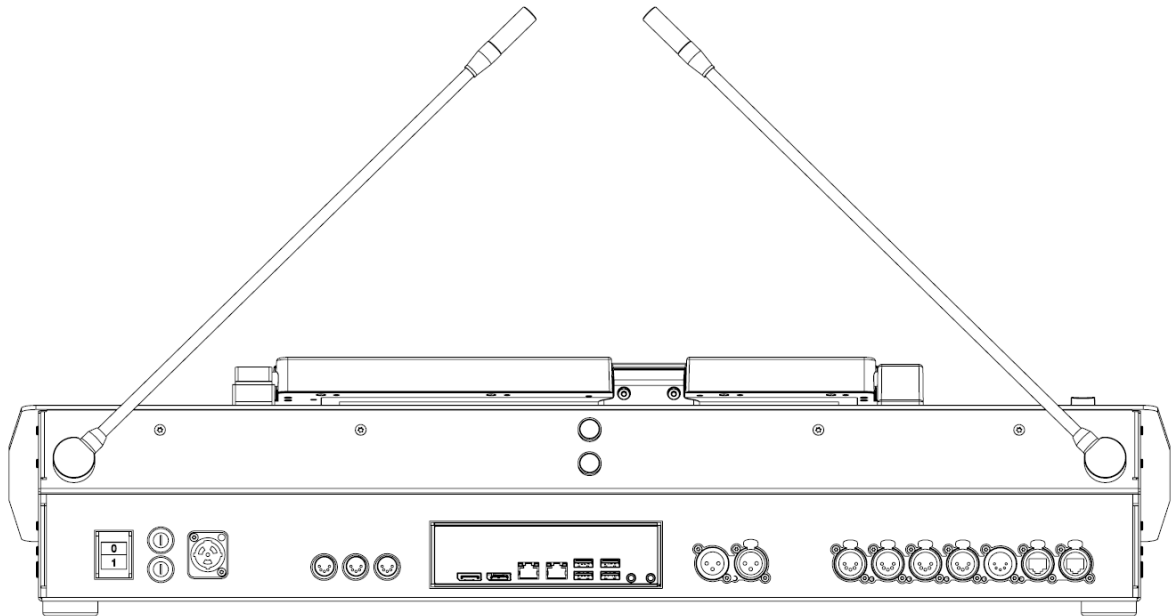
The surface panel offers a USB device socket in the top right-hand corner. This connector is ideally suited for USB memory sticks or a USB desk lamp.

On the front of the console are two additional USB device sockets for additional peripherals like a 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 500 ma on a USB device port.

Rear panel



Mains IN	Neutrik PowerCON TRUE1
DMX 1-4	5-pin XLR female DMX Outputs, RDM compatible
DMX IN	5-pin XLR male DMX Input
Wing Out	RJ45 Ethercon connections for M-Series Modules. Do not connect standard Ethernet devices to these ports.
Midi In/Out/Thru	5-pin DIN
SMPTE Out	3-pin XLR Female
SMPTE In	3-pin XLR Male
USB	USB 3.0 device connections (max. 500 ma)
Network	RJ45 Gigabit Remote network connection
EtherDMX	RJ45 Gigabit DMX Ethernet connection
2 x DisplayPort	HD Monitor Output
Line Out	3.5 mm stereo jack
Line In	3.5 mm stereo jack

Service

The Martin M1 HD 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 HD 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 a cleaner directly onto the desk, always spray onto a lint-free cloth and then wipe clean.



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

Fuse Replacement

The M1 HD has double-pole neutral fusing and is protected by two 2 A slow-blow mains fuses located in fuseholders next to the power input connector.

Parts of the product may remain live even if one of the two mains fuses has blown.



Disconnect the product from AC mains power before replacing a fuse.

Specifications

- High-resolution folding capacitive multi-touchscreen
- Integrated industrial high-speed processing
- Digital LCD buttons for fast and direct parameter access
- 8 digital encoders for parameter control
- 12 customizable function keys
- Multiple wing attachment (M-Series Modules)
- 4x DMX Universes direct from the console; up to 40 Universes via Artnet and sACN without external processors
- M-Series Manager Software for programming and triggering via time and calendar schedules, RS232 and IP triggers
- Customizable Graphical User Interface with context-sensitive toolbars and integrated help menu
- Powerful effects engine
- Controls up to 20480 parameters
- Built-in 2D visualizer for selection and real-time visualization
- 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
- MaxNet synchronized programming and playback support

Physical

Length: 823 mm (32.4 in.)

Width: 464 mm (18.3 in.)

Height: 178 mm (7.0 in.) closed; 395 mm (15.6 in.) open

Weight: 14.9 kg (32.8 lbs.)

Shipping weight (in cardboard box): 19.9 kg (43.9 lbs.)

Shipping weight (in flightcase): 32.7 kg (72.1 lbs.)

Control and Programming

Protocol: DMX512A (RDM), Artnet2, sACN 4 physical DMX ports

40 DMX universes

Integrated processing, 20480 parameters

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

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

Sub playback: 24 playbacks (twelve 40 mm playback faders with one assignable button 12 x single assignable buttons)

Other controls:

2x scrollwheels for bank changes

12x customizable multi-function keys

Playback Select button

Master Go section with Go, Pause, Snap and Release

4x digital rotary encoders with push function and status

LED for fixture parameter control

4x additional user-definable digital rotary encoders with push function on the right of the main display

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

Large command keys

Playback

Assign a cue, cuelist or effect to any playback fader

500 playback banks, each containing 10 playbacks

500 sub playback banks, each containing 24 playbacks

100 pages of 100 playbacks activated by touchscreen button

No limit to cues per cuelist

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 ("Sneak")

Cuelists can be executed in tracking or non-tracking mode

Hardware

Industrial 15.6 inch TFT 16:9 touchscreen (1376x768 pixels)
64GB SSD storage drive
Industrial motherboard, Intel Quad-Core Processor
8 GB RAM
Integrated graphics
2 x Integrated LED desklights

Software

Windows 10 Embedded OS
OS installation by USB 3.0 storage device
Show backup on hard disk or USB storage device (not included)
Support for ELO and Windows USB touchscreens

Connections

4 x DMX universe outputs: 5-pin locking XLR
1 x DMX in: 5-pin locking XLR
External displays: 2x DisplayPort(1920x1080 pixels)
Art-Net / sACN for up to 40 DMX universes: RJ-45 Ethercon
MaxNet controller link: RJ-45 Ethercon
2 x M-Series Module interfaces: RJ-45 Ethercon
MIDI In/Out/Thru (MIDI show control, MIDI notes, MIDI timecode): 5-pin DIN
SMPTE In/Out: 3-pin locking XLR
AC power input: Neutrik PowerCON TRUE1

USB (storage media/hardware peripherals)

Back of mainboard: 4 x USB 3.0
Side of console: 2 x USB 2.0
Front of console: 1 x USB 2.0

Electrical

AC power: 100-240 V nominal, 50/60 Hz
Typical Power and Current: 0.75 A, 80 W

Included Items

Dust cover for M1: P/N 91613070
Two LED desklights, integrated
USB Flash Recovery Drive
Martin™ One-Key: ShowDesigner 6™ Lite 3D Visualizer 1-year license, M-PC Pro with 64 Universe License

Accessories

Flightcase for M1 HD Console: P/N 91535070
Martin™ M-Play: P/N 90737030
Martin™ M-DMX Interface Box / Martin™ M-PC 2U package: P/N 90737070

Ordering Information

Martin™ M1 HD Console: P/N 90732090