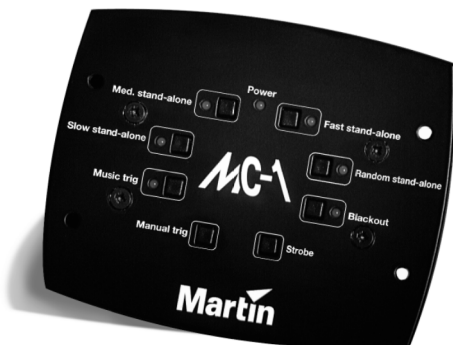


MC-1

user manual



INTRODUCTION

The MC-1 is a remote-control device that provides basic sound-activated operation of compatible Martin fixtures. This user manual describes the features programmed in firmware version 1.1.

SAFETY PRECAUTIONS

The MC-1 is not for household use. For safe operation, read this manual before use and follow the safety precautions listed below. If you have questions about how to operate the controller safely, please contact your Martin distributor or dealer.

- **Disconnect the fixture from AC power when not in use.**
- **Always ground (earth) the fixture electrically.**
- **Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection.**
- **Refer all service to a qualified technician.**
- **Do not expose the device to rain or moisture.**
- **Do not open the device or remove any part; there are no user-serviceable parts inside.**

UNPACKING

The MC-1 comes with:

- 1.5-meter IEC power cable
- 5-meter 3-pin XLR data cable
- 3-pin male XLR termination plug
- user manual

MC-1 SETUP


AC POWER CONNECTION

Warning! *For protection from electric shock, the fixture must be grounded (earthed). The AC mains supply shall have overload and ground-fault protection.*

The fixture's mains lead must be fitted with a grounding-type cord cap that fits your power distribution cable or outlet. Consult a qualified electrician if you have any doubts about proper installation.

To install a plug on the mains lead

- Following the cord cap manufacturer's instructions, connect the yellow and green wire to ground (earth), the brown wire to live, and the blue wire to neutral. The table shows some pin identification schemes.

Wire	Pin	Marking	Screw color
brown	live	"L"	yellow or brass
blue	neutral	"N"	silver
yellow/green	ground		green

DATA CONNECTION

A reliable data connection begins with the right cable. Microphone cable cannot transmit data reliably over long runs. For best results, use only cable designed for RS-485 applications. One cable for connecting the first fixture is included; you will need additional cables to connect additional fixtures. Your Martin dealer can supply suitable cable in various lengths.

The MC-1's data output, which is wired pin 1 to ground, pin 2 to signal - (cold), and pin 3 to signal + (hot), is configured for direct connection to all MC-1 compatible Martin fixtures.

To connect the data link

- 1 Connect a data cable to the MC-1's data output. Lead the cable to the first fixture and plug it into the data input.
- 2 Connect the data output of the first fixture to the data input of the next fixture. Continue connecting fixtures output to input; up to 32 fixtures may be connected.
- 3 Terminate the link by inserting the male termination plug, included, into the data output of the last fixture. A termination plug is an XLR connector with a 120 ohm resistor soldered across pins 2 and 3.

FIXTURE SETUP

FULLY COMPATIBLE FIXTURES

Fully compatible Martin fixtures automatically detect the MC-1 and *no DIP-switch setting is required* for factory-default operation.

Optional fixture settings may be available to modify behavior and create more varied light shows. These options are set using the fixture's DIP-switch; refer to the fixture manual for details.

Full compatibility with the MC-1 may require an update of the fixture software. Contact your Martin dealer for software updates. The table below shows the software version required for full compatibility.

Fixture	Compatible from
Acrobat	v. 1.4
CX-2	v. 1.2
MiniMAC Profile	v. 1.1
MiniMAC Wash	v. 1.1
MX-1	v. 1.7
MX-4	v. 1.1

PARTIALLY COMPATIBLE FIXTURES

The Martin SynchroZap, Punisher and Destroyer as well as the above products with earlier software versions are partially compatible with the MC-1. Though synchronized control and special options are not available, the MC-1 may be used to control some or all of the fixtures' 1-channel DMX mode functions.

Partially compatible fixtures must be set to 1-channel DMX mode and addressed to channel 1 as described below.

EARLY ACROBAT, X-SERIES

- Flip DIP-switch pins 1 and 11 on. Flip pins 2 - 10 off. Set pin 12 on or off as desired.



DESTROYER, PUNISHER, AND SYNCHROZAP

- Flip DIP-switch pins 1, 9, and 10 ON. Flip all other pins OFF.



OPERATION

This section describes the operating features available with fully compatible fixtures.

To control lights with the MC-1

- 1 Set up the MC-1 and the lights as described in the previous sections.
- 2 Apply power to the MC-1 and the fixtures. Allow the fixtures to reset.
- 3 For non-synchronized action at different speeds, press the **Slow, Medium, Fast, and Random Stand-alone** keys.
- 4 For synchronized action at different speeds, press the Stand-alone key for the desired speed (slow, medium, fast, or random) and then press the **Music trig** key.
- 5 To freeze action press the active control key.
- 6 To strobe fixtures, press and hold **Strobe**. Normal operation resumes when the key is released.
- 7 To send a single trigger pulse press **Manual trig**. This may be used on its own, with no function selected, or to supplement sound-activated triggers
- 8 To black out all fixtures, press **Blackout**. Press it again to return to normal operation.

TROUBLESHOOTING

Problem	Probable cause(s)	Remedy
LEDs fail to light.	No power.	Check that power is switched on and cables are plugged in.
	Internal circuit breaker open.	Disconnect the controller for several minutes to reset the circuit breaker. Consult service technician if problem reoccurs.
Fixtures fail to respond to controller.	Bad data connection.	Inspect data cables and connections, repair or replace damaged cables.
	The data link is not connected.	Connect data link.
	Missing termination.	Insert termination plug in output of last fixture.
	Incorrect address or mode setting.	Check and correct DIP-switch settings.
Fixtures respond to blackout and manual trig but not to music.	Volume is too low.	Place speakers closer to fixtures or increase volume.
	Damaged microphone or other component.	Refer fixture for service if problem occurs in stand-alone modes. Refer MC-1 to service if it occurs in Music trig mode.

SPECIFICATIONS

PHYSICAL

- Size 142 x 113 x 75 mm (5.6 x 4.4 x 3.0 in)
- Weight 1 kg (2.2 lbs)

CONTROL

- Data output connection..... 3-pin XLR, female
- Pin-outpin 1 shield, pin 2 cold (-), pin 3 hot (+)
- Control protocolDMX-512
- DMX channel 1

AC POWER

- Input 3-prong IEC male socket
- Maximum power and currentsee serial number label

ACCESSORIES

- 3U 19 inch rack mount kit for MC-1..... P/N 91613019