



MHL 60 SPOT 60W SPOT 12 DMX

Ref. nr.: 150.506



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1. Before you begin

1.1 Packing list

Product name	Qty
Mini moving head light	1
Signal cable	1
Power lead	1
Manual	1

1.2 Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

1.3 AC Power

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixtures specifications chart. A fixtures listed current rating is its average current draw under normal conditions. All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer source voltage matches the fixtures requirement. Check the fixture or device carefully to make sure that if a voltage selection switch exists that it is set to the correct line voltage you will use.

Warning! Verify that the voltage select switch on your unit matches the line voltage applied. Damage to your fixture may result if the line voltage applied does not match the voltage indicated on the voltage selector switch. All fixtures must be connected to circuits with a suitable Earth Ground.

1.4 Safety instructions

Please read these instructions cy. it includes important information about the installation, usage and maintenance of this product.

- Please keep this user guide for future consultation.
- If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- This product is intended for indoor use only!
- To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 20in(50cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Always disconnect from pore source before servicing or replacing fuse and be sure to replace with same fuse size and type.
- Secure fixture to fastening device using a safety chain.
- Never carry the fixture solely by its head.
- Use its carrying handles.
- Maximum ambient temperature (Ta) is 40°C. Do not operate fixture at temperatures higher than this.
- In the event of a serious operating problem, stop using the unit immediately.
- Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction.
- Please contact the nearest authorized technical assistance centre.
- Always use the same type spare parts.
- Don't connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or glugging on the cord.
- Avoid direct eye exposure to the light source while it is on.

2. Introduction

2.1 Features

- 12 channel DMX-512 .
- Pan:585°, Tilt:225°
- Color wheel: 7 colors+open, rainbow effect.
- Gobo wheel: 6 gobo's +open, gobo wheel spin effect.
- Variable electronic strobe.
- Variable electronic dimmer(0-100%).
- LED display menu with invert.
- Reset to factory settings option.
- Pan/tilt invert option.
- Fan cooled.
- Optional controllers.

2.2 DMX channel

Channel	Function
1	Pan
2	Tilt
3	Color wheel
4	Gobo wheel
5	Gobo rotation
6	Strobe
7	Dimmer
8	Prism
9	Pan/Tilt speed
10	Pan fine
11	Tilt fine
12	Reset

3. Setup

Disconnect the power cord before replacing a fuse and always replace with the same type fuse.

3.1 Fuse replacement

With a flat head screwdriver wedge the fuse holder out of its housing. Remove the damaged fuse from its holder and replace with exact same type fuse. Insert the fuse holder back in its place and reconnect power.

3.2 Fixture linking

You will need a serial data link to run light show of one or more fixtures using a DMX-512 controller or to run synchronized on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Maximum recommended serial data link distance:500 meters(1640ft).

Maximim recommended number of fixtures on a serial data link:32 fixtures.

Data cabling

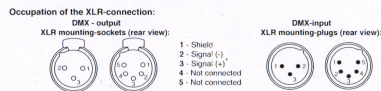
To link fixtures together you must obtain data cables. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

DMX data cable

Use a Tronios DMX data cable or equivalent cable which meets the specifications for EIA RS-485 applications. Standard microphone cables cannot transmit DMX data reliably over long distances.

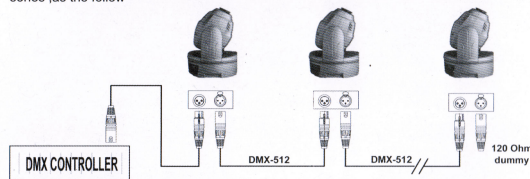
3.3 3-Pin to 5-Pin conversion chart

Note! If you use a controller with a 5 pin DMX output connector you will need to use a 5pin to 3 pin adapter.



3.4 Setting up a DMX serial data link

At first link the first light and DMX control through XLR-connection signal cable, then devalued the light in series, as the follow



3.5 Master/Slave fixture linking

1. Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3pin connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 pin connector. Then proceed to connect from the output as stated above to the input of the following fixture and so on.

3.6 Orientation

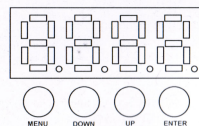
This fixture may be mounted in any position provided there is adequate room for ventilation.

4. Operating instructions

4.1 Navigating the control panel

Access control panel functions using the four panel buttons located directly underneath the LCD Display.

Button	Function
<MENU>	Used to access the menu or return to a previous menu option
<DOWN>	Scrolls through menu options in descending order
<UP>	Scrolls through menu options in ascending order
<ENTER>	Used to select and store the current menu or option within a menu



When a menu function is selected, the display will show immediately the first available option for the selected menu function. To select a menu item, press<ENTER>. Press the <MENU> button repeatedly until you reach the desired menu function. Use the <UP> and <DOWN> buttons to navigate the menu options. Press the <ENTER> button to select the menu function currently displayed or to enable a menu option. To return to the previous option or menu without changing the value, press the <MENU> button. NO alternative worth that return re-option or menu, press(MENU)button.

4.2 Menu map

A001 (Address code setting from A001—A512)

AU01 (auto-moving speediness)

AU02 (slow speed auto-moving)

SNOF (off Sound control)

SNON (on Sound control)

RPOF (Set pan to non-inverting)

RPON (Setting pan circumrotate reverse)

RTOF (Set tilt to non-inverting)

RTON (Setting tilt circumrotate reverse)

RDON (Set the LED readout to inverting)

RDOF (Set the LED readout to non-inverting)

DFON (Factory default on)

DFOF (Factory default off)

RST (Reset)

Note, output default setting address code is A001, pan is positive circumrotate, tilt is positive circumrotate, LED positively reveal.

4.3 User configurations

Setup single-desk light's auto moving mode(self-motion move)

- Press the MENU until it shows AU01
- Use the UP/DOWN buttons to set to AU01 or AU02 ,Press ENTER to confirm.

Setup single-desk light's auto moving mode(sound control)

- Press the Mode button until it shows SNOF
- Use the UP/DOWN buttons to set to SNOF,press ENTER to confirm.

Master/stave mode(auto-running, sound control)

- This mode will allow you to link up 32 units together without a controller.
- Use standard DMX cables to daisy chain your unit together via the DMX connector on the rear of the units. Proper performance it may be necessary to use a terminator at the last fixture.
- Choose a unit to function as the Master. Select NAFA / NASL OR NSIS (see below for readout) depending upon which master mode your require. The master unit must be the first unit in line. Finally chain the units together using DMX cable.

To set the pan to inverting

- Press the MENU until it shows RPOF.
- Use the UP/DOWN buttons shows RPON, press ENTER to confirm.

To set the tilt to inverting

- Press the MENU until it shows RTOF
- Use the UP/DOWN buttons shows RTON. press ENTER to confirm.

- To set the LED readout to inverting or non-inverting
- Press the MENU until it shows RDOF.
 - Use the UP/DOWN buttons shows RDON, press ENTER to confirm.
- Resume reverter windows default
- Press the MENU until it shows DFON.
 - Press ENTER to confirm.

DMX mode

This mode allows the until to be controlled by any universal DMX controller. The default mode for the fixture is DMX, as follow.

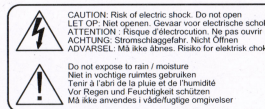
4.4 DMX channel values


Channel	Value	Function
1	0-255	Pan, 585°
2	0-255	Tilt, 225°
3	0-16	Color Wheel
	17	Open
	18-33	Color changing
	34-50	Color 1
	51-67	Color 2
	68-84	Color 3
	85-101	Color 4
	102-107	Color 5
	108-127	Color 6
	128-192	Color 7
	193-255	Color wheel positive turn (fast-slow)
		Color wheel reversal turn (slow-fast)
4	0-20	Gobo Wheel
	21-40	Open
	41-60	Gobo 1
	61-80	Gobo 2
	81-100	Gobo 3
	101-120	Gobo 4
	121-127	Gobo 5
	128-192	Gobo 6
	193-255	Gobo wheel positive turn (fast-slow)
		Gobo wheel reversal turn (slow-fast)
5	0	Gobo Rotation
	1-127	No
	128-255	Gobo wheel positive turn (fast-slow)
		Gobo wheel reversal turn (slow-fast)
6	0	Strobe
	1-255	Off
7	0	Dimmer
	1-255	No

8	0	Prism
	1-255	No
9	0	Pan/Tilt speed
	1-255	Most speed
10	0-255	Pan Fine
		Pan fine 16 bit
11	0-255	Tilt Fine
		Tilt fine 16 bit
12	0-149	Reset
	150-255	No

5. Technical specification

Voltage	220-240Vac / 50Hz
Fuse	F5A
Lamp resource	White LED 60W, 3500lm
Pan	585°, 16 bit fine
Tilt	225°, 16 bit fine
DMX data	512, 3pin XLR
Outside size	280 x 280 x 350mm
NW	7 kg



 **Electric products must not be put into household waste. Please bring them to a recycling centre. Ask your local authorities or your dealer about the way to proceed.**

The specifications are typical. The actual values can slightly change from one unit to the other. Specifications can be changed without prior notice.

WARRANTY CONDITIONS

The date the product leaves the importer is considered to be the date the warranty begins. The law obliges the retailer to offer a guarantee to the end-user. Ask your retailer for the warranty period. Only companies approved by **Tronics** are allowed to work on the equipment. During warranty period (defective) equipment must be returned to the dealer by pre-paid mail in the original box.

For all service enquiries, refer to your local distributor, as he is best able to help you.