Hybrid

HMH100S FX

LINKABLE
STAND ALONE

SOUND ACTIVATED

DMX512

User Manual

Please read the instructions carefully before use

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1. Safety Introductions

WARNING

Please read the instructions carefully which includes important information about the installation, operation and maintenance.

Please keep this User Manual for future consultation. If you sell the fixture to another user, be sure that they also receive this instruction booklet.

Unpack and check carefully there is no transportation damage before using the fixture.

Before operating, ensure that the voltage and frequency of power supply match the power requirements of the fixture.

- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.

Disconnect main power before servicing and maintenance.

- Use safety chain when fixes this fixture. Don't handle the fixture by taking its head only, but always by taking its base.
- Maximum ambient temperature is Ta : 40℃. Don't operate it where the temperature is higher than this.

In the event of serious operating problem, stop using the fixture immediately. Never try to repair the fixture by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.

Do not connect the device to any dimmer pack.

Do not touch any wire during operation and there might be a hazard of electric shock.

To prevent or reduce the risk of electrical shock or fire, do not expose the fixture to rain or moisture.

The housing must be replaced if they are visibly damaged.

Do not look directly at the LED light beam while the fixture is on.

Warning

To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.

Do not open the unit within five minutes after switching off.

The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

Caution

There are no user serviceable parts inside the fixture. Do not open the housing or attempt any repairs yourself. In the unlikely situation, your unit may require service, please contact your nearest dealer.

2. Technical Specifications

- 12 and14 DMXchannels
- Pan : 540degree Tilt : 270degree
- 4 Operational Modes: DMX, Master/Slave, auto , soundactivated
- Gobo wheel : 9 static gobos + open
- Color wheel: 9 fixed colors + White
- Prism : 3 facet prism with rotation
- Light Source: 1x80W Ultra Brightness White LED
  12pcs RGB-in-1 SMD 5050 LED
- Power supply: 100 - 240Vac, 50-60Hz
- Power consumption: 120 W
- Dimensions Size: L236×W172×H363mm
- Net Weight: 6.1kg

3. Installation

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Always ensure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture. The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people and has no one pass by or under it.

4. How To Set The Unit

Turn on the unit, press the **MENU** button to go into menu mode and press the **UP**/**DOWN** button until the required function is shown on the monitor. Select the function by the **ENTER** button. Use the **UP**/**DOWN** button to choose the submenu, press the **ENTER** button to store and automatically return to the last menu.

4.1 Main Function Chart

Display	Value		Noted
DmxAddr	001- 512		DMX address select
WorkMod	DMX512		DMX Mode
	AUTO		Auto Mode
	SOUND		Sound Mode
MS Mode	Master		Master Mode
	Slave		Slave Mode
ChanMod	12Ch		12channels Mode
	14Ch		14 channels Mode
Control	CH01-CH45		Manual control Mode
Tool	Display	ON	LCD Display ON
		60S	LCD Display Off after 60s no operate
	SundHig	0-32	Sound sensitive
	IR SW	OFF	Remote turn off
		YES	Remote turn on
MotorST	ColrREV		0-255
	GoboREV		0-255
	PrimREV		0-255
	FousREV		0-255
	Pan REV		0-255
	TiltREV		0-255
	Xreverse	NO	Pan Forward
		YES	Pan Reverse
	Yreverse	NO	Tilt Forward
		YES	Tilt Reverse
	Xyfbstin	NO	XY Optical Coupling Closed
		YES	XY Optical Coupling Open
Info	Version		Software Version
	RDM UID		UID Code
	Runtime		Units: hours
Rest	NO		
	YES		Reset

4.1 Address Setting

If you use a universal DMX controller to control the units, you have to set the DMX address from 1 to 512 so that the units can receive DMX signal.

Press the **MENU** button to enter menu mode, select ***DMX Functions***. Press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select ***DMX Address***. Press the **ENTER** button to confirm. The present address will blink the display, use the **UP**/**DOWN** button to adjust the address from 001 to 512. Press the **ENTER** button to store. Press the **MENU** button back to the last menu or idling let the unit idle one minute to exit menu mode.

Please refer to the following table to address your DMX512 channel for the first 4 units.

Channel mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
12channels	1	13	25	37
14channels	1	15	29	43

5. DMX512 Configuration

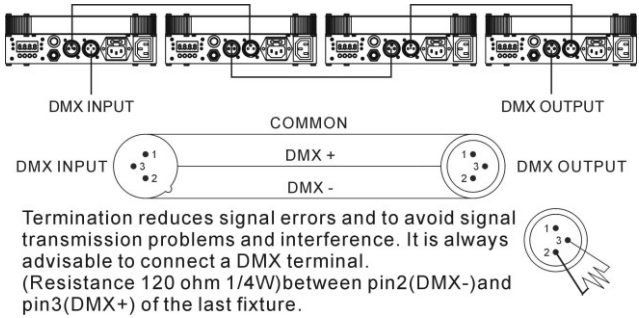
12CH	14CH	Value	Function
1	1	0-255	Pan
	2	0-255	Pan fine
2	3	0-255	Tilt
	4	0-255	Tilt fine
3	5	0-255	Pan/Tilt speed from fast to slow
4	6	0-4	Reserved
		5-255	Mater Dimmer
5	7	0-19	Shutter Closed
		20 -49	Shutter Open
		50- 64	Strobe-effect from fast to slow
		65-69	Shutter Open
		70 -84	Strobe-effect from fast off to slow open
		85 -89	Shutter Open
		90 -104	Strobe-effect from fast open to slow off
		105 -109	Shutter Open
		110-124	Random Pluse Strobe-effect
		125-129	Shutter Open
		130-144	Random Strobe-effect
		145-149	Shutter Open
		150-164	Random Strobe-effect
		165-169	Shutter Open
		170-184	pulse strobe-effect from fast to slow
		185-189	Shutter Open
		190-204	pulse strobe-effect from slow to fast
		205-209	Shutter Open
		210-224	Strobe-effect from slow to fast
		225-229	Shutter Open
		230-244	Strobe-effect by Continual positioning
		245 -255	Shutter Open

6	**8**	0 -127	Continual positioning
		128 -130	Colour half
		131 -133	Color 1
		134 -136	Colour half
		137 -139	Color 2
		140 -142	Colour half
		143 -145	Color 3
		146 -148	Colour half
		149 -151	Color 4
		152 -154	Colour half
		155 -157	Color 5
		158 -160	Colour half
		161 -163	Color 6
		164 -166	Colour half
		167 -169	Color 7
		170 -172	Colour half
		173 -175	Color 8
		176 -178	Colour half
		179 -181	Color 9
		182 -184	Colour half
		185 -194	White
		195 - 219	Forwards rainbow effect from fast to slow
		220 -224	No rotation (White)
		225 -249	Backwards rainbow effect from slow to fast
		250 -255	Colour Macro
7	**9**	0 - 4	Open
		5 - 9	Gobo 1
		10 -14	Gobo 2
		15 -19	Gobo 3
		20 - 24	Gobo 4
		25- 29	Gobo 5
		30 -34	Gobo 6

		35 -39	Gobo 7
		40-44	Gobo 8
		45-49	Gobo 9
		50-64	Open
		65-74	Gobo 1 Shake
		75-84	Gobo 2 Shake
		85-94	Gobo 3 Shake
		95-104	Gobo 4 Shake
		105-114	Gobo 5 Shake
		115 -124	Gobo 6 Shake
		125 -134	Gobo 7 Shake
		135 -144	Gobo 8 Shake
		145 -154	Gobo 9 Shake
		155 -179	No rotation (open)
		180 -204	Forwards gobo wheel rotation from fast to slow
		205 -214	No rotation (Stop)
		215 -239	Backwards gobo wheel rotation from slow to fast
		240 -255	Gobo Macro
8	**10**	0 -15	Open
		16 -127	Prism indexing
		128 -255	Prism Counter-clockwise rotation slow to fast
9	**11**	0 -255	Focus Continuous adjustment from far to near
10	**12**	0-4	Reserved
		5-39	SMD 5050 Monochromatic mode
		40-249	SMD 5050 Macro with rotation
		250-255	SMD 5050 Rainbow effect
11 Macro function	**13**	0 -19	Custom Control by CH1-CH10 / CH1-CH12
		20 -99	Auto (all of other CH invalid)
		100-199	Sound (all of other CH invalid)
		200-255	Custom Control by CH1-CH10 / CH1-CH12
12	**14**	0 -249	Custom Control by CH1-CH11 / CH1-CH13
		250-255	Reset

6. DMX512 Connections

The DMX512 is widely used in intelligent lighting control, with a maximum of 512 channels.



1. If you using a controller with 5 pins DMX output, you need to use a 5 to 3 pin adapter-cable.

2. Connect the fixture together in a “daisy chain” by XLR plug cable from the output of the fixture to the input of the next fixture. The cable cannot be branched or split to a “Y” cable. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system

3. The DMX output and input connectors are pass-through to maintain the DMX circuit when one of the units’ power is disconnected.

4. At last fixture, the DMX cable has to be terminated with a terminator to reduce signal errors. Solder a 120-ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.
5. Each lighting fixture needs to have an address set to receive the data sent by the controller. The address number is between 0-511 (usually 0 & 1 are equal to 1).

6. 3 pin XLR connectors are more popular than 5 pin XLR.
   3 pin XLR: Pin1: GND, Pin2: Negative signal (-), Pin3: Positive signal (+)
   5 pin XLR: Pin1: GND, Pin2: Negative signal (-), Pin3: Positive signal (+)
   Pin4/5: Not Used.

7. Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The fixture does not work, no light

1. Check the connection of power and main fuse.
2. Measure the mains voltage on the main connector.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the fixture or the previous one.
4. Try to use another DMX controller.
5. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

C. Some fixtures don't respond to the easy controller

1. You may have a break in the DMX cabling. Check the LED for the response of the master/ slave mode signal.
2. Wrong DMX address in the fixture. Set the proper address.

D. No response to the sound

1. Make sure the fixture does not receive DMX signal.
2. Check microphone to see if it is good by tapping the microphone.

9. Fixture Cleaning

The cleaning of internal must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the fixture's optics.

- Clean with soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.