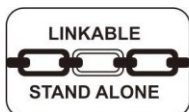


# Hybrid

## HMH100W FX



## 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  $T_a$ : 40°C. 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

- 18 and 26 DMX channels
- Pan : 540degree
- Tilt : 270degree
- 4 Operational Modes: DMX, Master/Slave, auto , soundactivated
- Motorized Zoom: 8-55 degrees
- Light Source: 3x40W Lumins RGBW LEDs
- Power supply: 100 - 240Vac, 50-60Hz
- Power consumption: 150 W
- Dimensions Size: L236×W172×H363mm
- Net Weight: 5.8kg

## 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	18Ch		18channels Mode
	26Ch		26 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
	FRotREV		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

## 4.2 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
18channels	1	19	37	55
26channels	1	27	53	79

## 5. DMX512 Configuration

26CH	Value	Function
1	0-255	Pan
2	0-255	Pan fine
3	0-255	Tilt
4	0-255	Tilt fine
5	0-255	Pan/Tilt speed from fast to slow
6	0-4	Reserved
	5-255	Mater Dimmer
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	

<b>8</b>	0 - 255	Red1 dimmer
<b>9</b>	0 - 255	Green1 dimmer
<b>10</b>	0 - 255	Blue1 dimmer
<b>11</b>	0 - 255	White1 dimmer
<b>12</b>	0 - 255	Red2 dimmer
<b>13</b>	0 - 255	Green2 dimmer
<b>14</b>	0 - 255	Blue2 dimmer
<b>15</b>	0 - 255	White2 dimmer
<b>16</b>	0 - 255	Red3 dimmer
<b>17</b>	0 - 255	Green3 dimmer
<b>18</b>	0 - 255	Blue3 dimmer
<b>19</b>	0 - 255	White3 dimmer
<b>20</b>	0 -4	Reserved
	5 - 255	Colour Macro
<b>21</b>	0 -4	Reserved
	5-255	Color Temperature Control (3200k-10000k)
<b>22</b>	0-4	Reserved
	5-255	Pixel Control effect of Chase 1~10
<b>23</b>	0-255	Focus Continuous adjustment from far to near
<b>24</b>	0 -127	Continuous positioning
	128-188	Forwards rotation from slow to fast
	189-194	No rotation
	195-255	Backwards rotation from fast to slow
<b>25</b>	0 -19	Custom Control by CH1-CH24
	20 -99	Auto (all of other CH invalid)
	100-199	Sound (all of other CH invalid)
	200-255	Custom Control by CH1-CH24
<b>26</b>	0 -199	Custom Control by CH1-CH25
	200-255	Reset

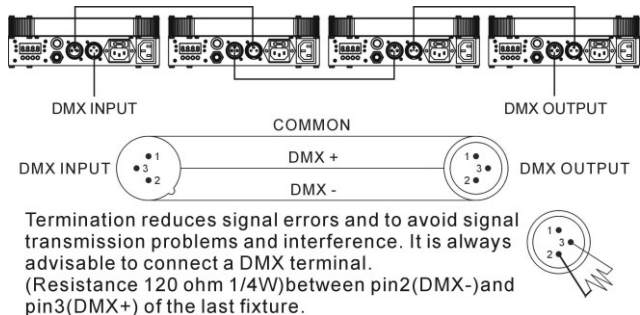


18CH	Value	Function
1	0-255	Pan
2	0-255	Pan fine
3	0-255	Tilt
4	0-255	Tilt fine
5	0-255	Pan/Tilt speed from fast to slow
6	0-4	Reserved
	5-255	Mater Dimmer
7	0-19	Shutter Closed
	20 -49	Shutter Open
	50- 64	Strobe-effect from fast to slow
	65-69	Shutter Open
	70 -84	Strobe-effect from fast off to slow 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	

<b>8</b>	0 - 255	Red dimmer
<b>9</b>	0 - 255	Green dimmer
<b>10</b>	0 - 255	Blue dimmer
<b>11</b>	0 - 255	White dimmer
<b>12</b>	0 -4	Reserved
	5 - 255	Colour Macro
<b>13</b>	0 -4	Reserved
	5-255	Color Temperature Control (3200k-10000k)
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	5-255	Pixel Control effect of Chase 1~10
<b>15</b>	0-255	Focus Continuous adjustment from far to near
<b>16</b>	0 -127	Continuous positioning
	128-188	Forwards rotation from slow to fast
	189-194	No rotation
	195-255	Backwards rotation from fast to slow
<b>17</b>	0 -19	Custom Control by CH1-CH16
	20 -99	Auto (all of other CH invalid)
	100-199	Sound (all of other CH invalid)
	200-255	Custom Control by CH1-CH16
<b>18</b>	0 -199	Custom Control by CH1-CH17
	200-255	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.