Hybrid
HMH 12

DMX CONTROL

MASTER / SLAVE

SOUND to LIGHT

RGB W

User Manual

Please read the instructions carefully before use

TABLE OF CONTENTS

Safety Instructions

WARNING

Please read the instructions carefully which include 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 that there is no transportation damage before using 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.
- Maximum ambient temperature is Ta : 40℃. Don't operate it where the temperature is higher than this.
- In the event of a 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 of spare parts.
- Do not connect the device to any dimmer pack.
- Do not touch any wire during operation as 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.
- There are no user serviceable parts inside the fixture. Do not open the housing or attempt any repairs by yourself. In the unlikely event your fixture may require service, please contact your nearest dealer.
- Due to the magnifying type lens, please keep the lens out of contact with direct sunlight. Direct sunlight can cause heat to build up inside of the unit, which will seriously damage the unit.

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

- Power supply:AC100-240V,50/60Hz
- Power consumption:75W
- Light source:40W RGBW 4 in 1 LEDs
- Effects: 12Pcs RGB 3IN1 SMD 5050 LED
- Life Time:50,000 hours
- Beam angle:6°
- Control panel:4 Digital LED display figures
- Control mode: sound activation, auto, master/slave, DMX512
- DMX channels:16/30CHS
- Pan/Tilt rotation:540°/ 270°, speed adjustable
- Packing size: 350x 240 x 220 mm
- Net Weight: 2.5kg

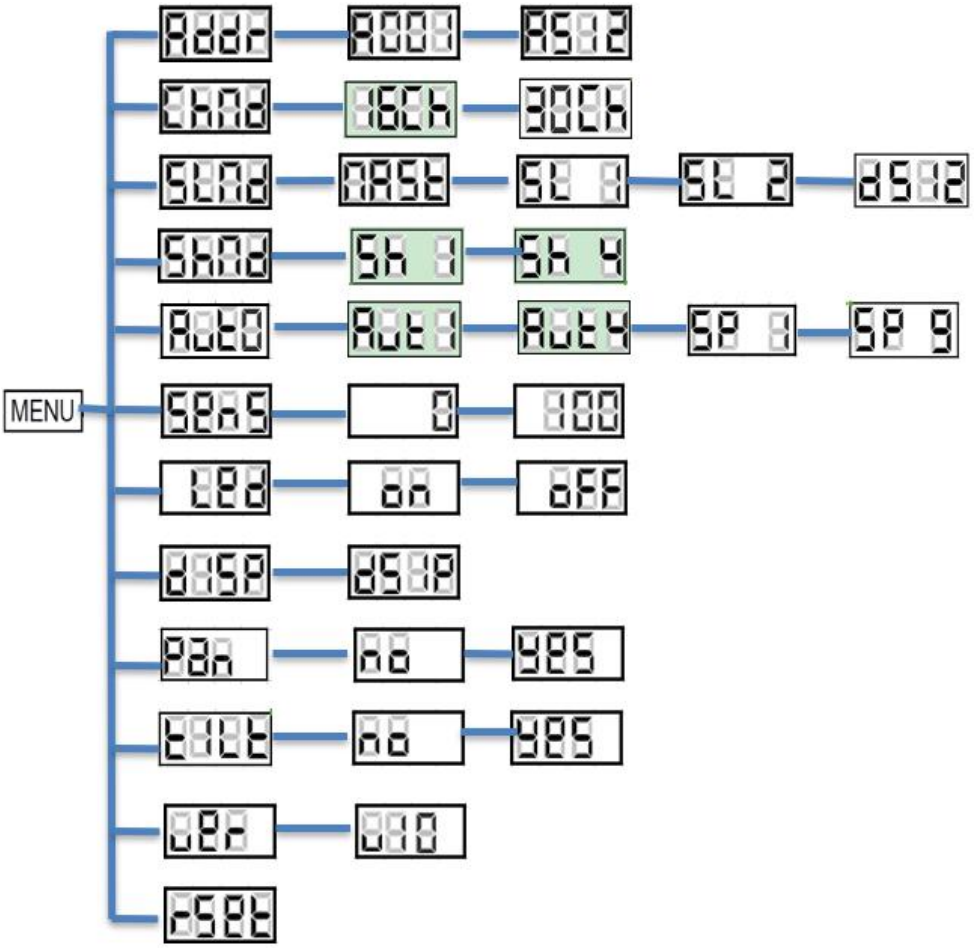
3. Installation

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 the unit's weight. Also always use a safety cable that can hold 12 times 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 the unit is out reach.

4. How to set up the unit

Main Function Chart



5. How to control the fixture

There are two ways to control the fixture

A. Universal DMX controller

B. Master/Slave operation

A. Universal DMX controller

The fixture can be set to the DMX address remotely by the universal DMX controller. First, you need to program two scenes into a chase, then link the fixtures to the universal DMX controller. When you run the chase, all the fixtures of the chain will be set to the series DMX address automatically. The fixture uses four channels. Please refer to the following table to set the address for the first four units.

Channels mode	Unit1 Address	Unit2 Address	Unit3 Address	Unit4 Address
CH16	**1**	**17**	**33**	**49**
CH30	1	**31**	**61**	**91**

B. Master/Slave operation

The fixture will allow you to link 16 fixtures together and operate without a controller. In Master/Slave mode, the first fixture will control the others to give an automatic, sound activated, synchronized light show. This function is good when you want an instant show. The first fixture's DMX input cable will have nothing to connect it, and the other fixtures will be set in slave mode automatically. Their DMX input cables connect the last fixture DMX output cable (daisy chain). Any fixture can act as a Master or as a Slave

6. DMX512 Configuration

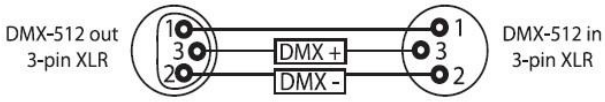
16CH Mode	Function	Value
1	Pan	000-255 Pan 0° ~ 540°
2	Pan Fine	000-255
3	Tilt	000-255 Tilt 0° ~ 270°
4	Tilt Fine	000-255
5	Pan& Tilt Speed	000-255 Pan/Tilt speed from fast to slow
6	Dimmer	000-255 Dimmer 0 ~ 100%
7	Strobe	000-008 No Function
		009-255 Strobe slow to fast
8	Red	000-255 Dimmer 0 ~ 100%
9	Green	000-255 Dimmer 0 ~ 100%
10	Blue	000-255 Dimmer 0 ~ 100%
11	White	000-255 Dimmer 0 ~ 100%
12	Dimmer5050	000-255 Dimmer 0 ~ 100%
13	Strobe 5050	000-008 No Function
		009-255 Strobe slow to fast
14	5050 chase	000-127 Color Macro
		128-255 Color chase
15	5050 chase speed	000-255 Color chase speed slow to fast
16	Special	000-199 No Function
		200-209 Reset
		210-239 No Function
		240-255 Sound Activated

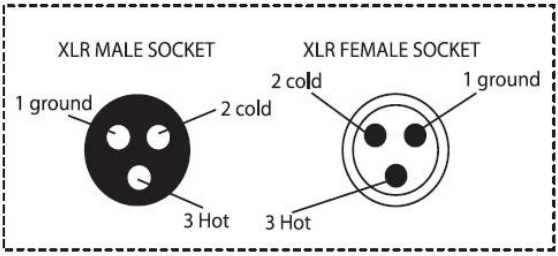
30CH Mode	Function	Value
1	Pan	000-255 Pan 0° ~ 540°
2	Pan Fine	000-255
3	Tilt	000-255 Tilt 0° ~ 270°
4	Tilt Fine	000-255
5	Pan& Tilt Speed	000-255 Pan/Tilt speed from fast to slow
6	Dimmer	000-255 Dimmer 0 ~ 100%
7	Strobe	000-008 No Function
		009-255 Strobe slow to fast
8	Red	000-255 Dimmer 0 ~ 100%
9	Green	000-255 Dimmer 0 ~ 100%
10	Blue	000-255 Dimmer 0 ~ 100%
11	White	000-255 Dimmer 0 ~ 100%
6	Dimmer5050	000-255 Dimmer 0 ~ 100%
7	Strobe 5050	000-008 No Function
		009-255 Strobe slow to fast
12	5050 R1	000-255 Dimmer 0 ~ 100%
13	5050 G1	000-255 Dimmer 0 ~ 100%
14	5050 B1	000-255 Dimmer 0 ~ 100%
15	5050 R2	000-255 Dimmer 0 ~ 100%
16	5050 G2	000-255 Dimmer 0 ~ 100%
17	5050 B2	000-255 Dimmer 0 ~ 100%
18	5050 R3	000-255 Dimmer 0 ~ 100%
19	5050 G3	000-255 Dimmer 0 ~ 100%
20	5050 B3	000-255 Dimmer 0 ~ 100%
21	5050 R4	000-255 Dimmer 0 ~ 100%
22	5050 G4	000-255 Dimmer 0 ~ 100%

23	5050 B4	000-255 Dimmer 0 ~ 100%
24	5050 R5	000-255 Dimmer 0 ~ 100%
25	5050 G5	000-255 Dimmer 0 ~ 100%
26	5050 B5	000-255 Dimmer 0 ~ 100%
27	5050 R6	000-255 Dimmer 0 ~ 100%
28	5050 G6	000-255 Dimmer 0 ~ 100%
29	5050 B6	000-255 Dimmer 0 ~ 100%
30	Special	000-199 No Function
		200-209 Reset
		210-239 No Function
		240-255 Sound Activated

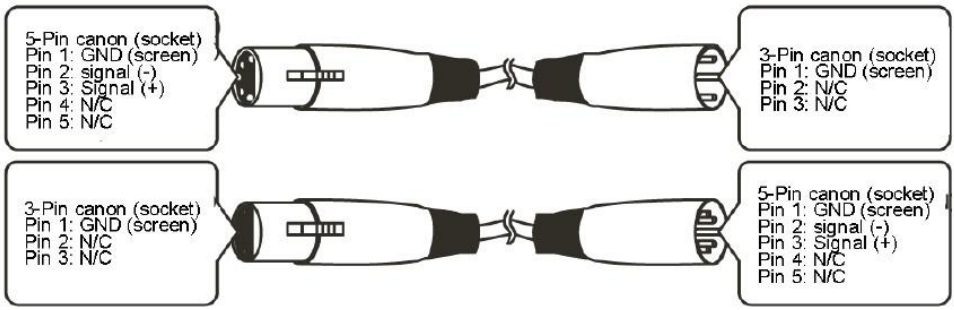
7. DMX512 Connections

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





XLR Pin Configuration
Pin 1 = Ground
Pin 2 = Negative
Pin 3 = Postive



1. Connect the fixture together in a “daisy chain” plug the XLR 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.
2. The DMX output and input connectors are pass-through to maintain the DMX circuit when one of the units’ power is disconnected.
3. 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.
4. 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).
5. 3 pin XLR connectors are more popular than 5 pins XLR.
   3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)
   5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+),
   Pin4/5: not used

8. Troubleshooting

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

A. The fixture does not work, it has no light

1. Check the connection of power and main fuse.
2. Measure the mains power supply’s 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 it is linked properly.
2. If the DMX LED is on and there is 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 the 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 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.
2. Check the LED for the response of the master/ slave mode signal.

D. No response to the sound

1. Make sure the fixture does not receive DMX signal.
2. Check microphone tapping the microphone.

E. One of the channels is not working well

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of order.

9. Fixture Cleaning

Internal cleaning 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 scan 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.