Litecraft®

LED MultiPAR 12FC

ILED-MP-12F5-020

USER GUIDE

PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE USE

TABLE OF CONTENTS

1. Safety Introductions

WARNING

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

- 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.
- All fixtures are intact from the manufacturer, please operate follow up the user manual, artificial fault are not under guarantee repair.
- Unpack and check carefully that there is no transportation damage before using the unit.
- The unit is for indoor use only. Use only in a dry location.
- Do install and operate by operator.
- Use safety chain when fixes the unit. Don't handle the unit by taking its head only, but always by taking its base.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots are blocked, otherwise the unit will be overheated.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Maximum ambient temperature TA : 40℃. Don't operate it where the temperature is higher than this.
- Don't connect the device to any dimmer pack.
- First run, there will be smoke or smells, and all disappearing a few minutes later.
- Make sure there are no flammable materials close to the unit while operating, as it is fire hazard.
- Look over power wires carefully, replace immediately if there is any damage.
- Never run on for a long time lest shortening lifespan.
- Avoid any inflammable liquids, water or metal objects entering the unit. Once it happen, cut off the mains power immediately.
- Do not operate in dirty and dusty environment, also cleaning fixtures regularly.
- Do not allow children to operate the fixture.

- Do not touch any wire during operation as there might be a hazard of electric shock.
- Avoid power wires together arounding other cables.
- Disconnect mains power before fuse/lamp replacement or servicing.
- Replace fuse only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- Do not open the unit as there are no user serviceable parts inside.
- 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 center.
- Disconnect the mains power if the fixture is not used for a long time.
- Do use original packing materials once transport it again.
- Do not look directly at the LED light beam while the fixture is on.

Installation

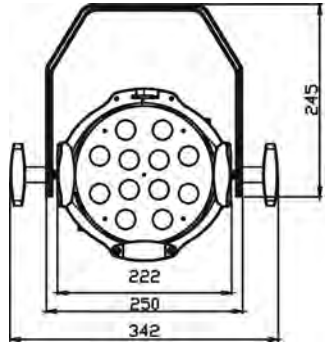
The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Always ensure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

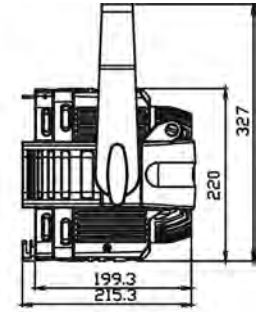
The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people and has no one pass by or under it.

2. Technical Specifications

- **Voltage**：AC100V-240V
- **LED:** 12*10Quad-color LED
- **Fuse:** T 6.3A
- **Power consumption**：156W

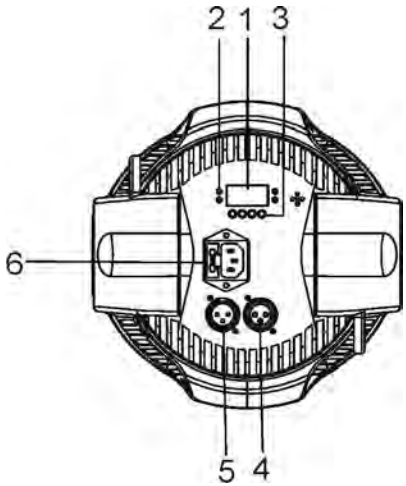
- **Dimension**：250 x 327 x 215 mm
- **Weight**：6kg





3. How To Set The Fixture

3.1 Control Panel



① **Display:** To show the various menus and the selected functions

② **LED:**

DMX	On	DMX input present
MASTER	On	Master Mode
SLAVE	On	Slave Mode
SOUND	Flashing	Sound activation

③ **Button:**

MENU	To select the programming functions
DOWN	To go backward in the selected functions
UP	To go forward in the selected functions
ENTER	To confirm the selected functions

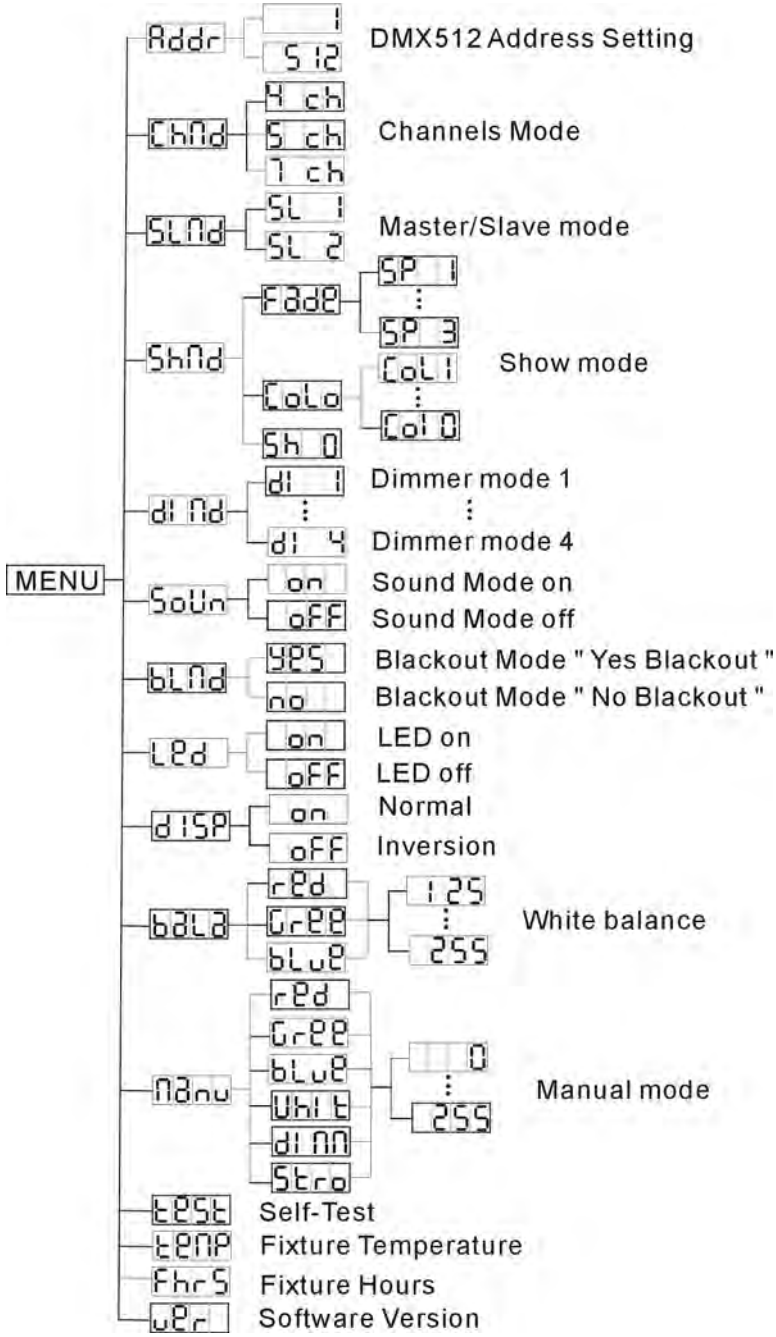
④ **DMX output:** For DMX512 link, use 3-pin XLR plug cable to link the next unit.

⑤ **DMX input:** For DMX512 link, use 3/5-pin XLR plug cable to input DMX signal

⑥ **Mains output:** Connect to supply power for the unit.

3.2 Main Function

To select any functions, press **MENU** button until the required one is shown on the display. Select the function by **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the mode. Once the required mode has been selected, press **ENTER** button to setup or it will automatically return to the main functions without any change after idling 7seconds. Back to the functions without any change press **MENU** button. The main functions are shown below:


MENU
Addr
001
512
DMX512 Address Setting
ChNd
4 ch
5 ch
7 ch
Channels Mode
SLNd
SL 1
SL 2
Master/Slave mode
ShNd
FAdE
SP 1
SP 3
Show mode
CoLo
CoL1
Col 0
Sh 0
dIMd
dI 1
dI 4
Dimmer mode 1
Dimmer mode 4
SoUn
on
oFF
Sound Mode on
Sound Mode off
bLNd
YES
no
Blackout Mode " Yes Blackout "
Blackout Mode " No Blackout "
LEd
on
oFF
LED on
LED off
dISP
on
oFF
Normal
Inversion
bALA
rEd
GrEE
bLuE
125
255
White balance
MAnu
rEd
GrEE
bLuE
WHIt
dIMM
Stro
000
255
Manual mode
tEST
Self-Test
tEMP
Fixture Temperature
FHrS
Fixture Hours
vEr
Software Version

 DMX 512 Address Setting

Press the **MENU** button up to when the  is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the DMX 512 address. Once the address has been selected, press **ENTER** button to setup or automatically exit menu mode without any change after 7seconds. Back to the previous functions without any change press **MENU** button.

 Channel Mode

Press the **MENU** button up to when the  is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the  (4 channels mode) or  (5 channels mode) or  (7 channels mode). Once the mode has been selected, press the **ENTER** button to setup or automatically exit menu mode without any change after 7seconds To go back to the functions without any change press the **MENU** button.

 Slave Mode

Press the **MENU** button up to when the  is showing on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the  (normal) or  (slave 2) mode. Once the mode has been selected, press the **ENTER** button to setup or automatically return to the main functions without any change after7seconds. To go back to the functions without any change press the **MENU** button again.

 Show Mode

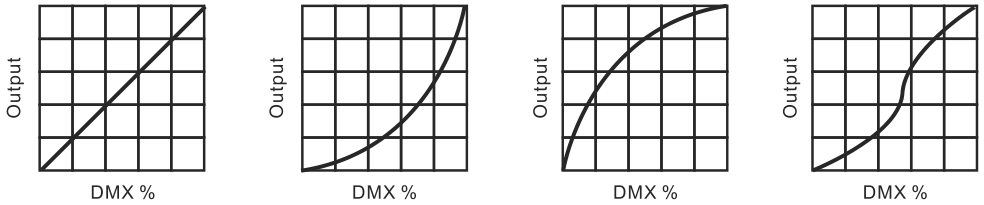
Press the **MENU** button up to when the  is shown on the display. Pressing **ENTER** button, Use **DOWN** and **UP** button to select the  (Random show) or  (color) or  (fade), if you select the color or fade mode, press **ENTER** button to confirm, and use **DOWN** and **UP** button to select color 1-10 or fade speed (speed 1: slow, speed 2: middle, speed 3: fast). Once select, press **ENTER** button to setup or automatically exit menu mode without any change after 7seconds. To go back to the last function without any change press the **MENU** button.

 Dimmer Mode

Press the **MENU** button up to when  is showing on the display. Pressing the **ENTER**

button and the display will blink. Use the **DOWN** and **UP** buttons to select the d1 1 (Dimmer Mode 1: **Optically Linear**) or d1 2(Dimmer mode 2: **Square Law**) or d1 3 (Dimmer mode 3: **Inverse Square Law**) or d1 4 (Dimmer mode 4: **S-cure**) mode. Once the mode has been selected, press the **ENTER** button to setup or automatically return to the main functions without any change after one minute. To go back to the functions without any change press the **MENU** button again.

Dimmer Modes



Optically Linear Square Law Inverse Square Law S-curve

Optically Linear: The increase in light intensity appears to be linear as DMX value is increased.

Square Law: Light intensity control is finer at low levels and coarser at high levels.

Inverse Square Law: Light intensity control is coarser at low levels and finger at high levels.

S-cure: Light intensity control is finger at low levels and high levels and coarser at medium levels.

SoUn Sound mode

Press the **MENU** button up to when the SoUn is shown on the display. Pressing **ENTER** button, Use **DOWN** and **UP** button to select the on (sound on) or oFF (sound off). Once select, press **ENTER** button to setup or automatically exit menu mode without any change after 7seconds. To go back to the functions without any change press the **MENU** button

bLnd Blackout mode

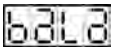
Press the **MENU** button up to when the bLnd is shown on the display. Pressing **ENTER** button, Use **DOWN** and **UP** button to select the yES (blackout) or no (normal). Once select, press **ENTER** button to setup or automatically exit menu mode without any change after 7seconds. To go back to the functions without any change press the **MENU** button

 LED display

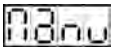
Press the **MENU** button up to when the  is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select  (display always on) or  (display off 20 seconds after exit menu) mode. Once select, press **ENTER** button to setup or exit menu mode without any change after 7seconds. Back to the functions without any change press **MENU** button again.

 Display Inverse

Press **MENU** button until  is blinking on the display. Use **DOWN** and **UP** button to select  (display normal) or  (display inverse), press **ENTER** button to setup. Back to the functions without any change press **MENU** button.

 White Balance

Press the **MENU** button up to when the  is shown on the display. Pressing **ENTER** button, and use **DOWN** and **UP** button to select  ,  or  , press **ENTER** button to confirm and use **DOWN** and **UP** button to adjust the value between 125 and 255, once select press **ENTER** button to setup or automatically exit menu mode without any change after 7seconds. To go back to the last function without any change press the **MENU** button.

 Manual setting color

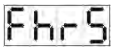
Press the **MENU** button up to when the  is shown on the display. Pressing **ENTER** button, and use **DOWN** and **UP** button to select  , or ··· or  (strobe), press **ENTER** button to confirm and use **DOWN** and **UP** button to adjust the value, once select press **ENTER** button to setup or automatically exit menu mode without any change after 7seconds. To go back to the last function without any change press the **MENU** button.

 Self-Test

Press the **MENU** button up to when the  is blinking on the display. Pressing the **ENTER** button and the unit will run the built-in programmer for self-test. To go back to the functions press the **MENU** button.

 Temperature Test

Press the **MENU** button up to when the  is blinking on the display. Pressing **ENTER** button and the display will show the temperature of the unit. To go back to the functions press the **MENU** button again.

 Fixture Hours

Press the **MENU** button up to when the  is blinking on the display. Pressing **ENTER** button and the display will show the number of working hours of the unit. To go back to the functions press the **MENU** button.

 Software version

Press the **MENU** button up to when the  is blinking on the display. Pressing **ENTER** button and the display will show the version of software of the unit. To go back to the functions press the **MENU** button again.

4. How To Control The Unit

You can operate the unit in two ways:

1. By master/slave built-in preprogram function
2. By DMX controller

No need to turn the unit off when you change the DMX address, as new DMX address setting will be effected at once. Every time you turn the unit on, it will show "  " on the display and move all the motors to their 'home' position. After that the unit will be ready to receive DMX signal or run the built in programs.

4.1 Master/Slave Built In Preprogrammed Function

The fixture will allow you to link 16 fixtures together and operate without a controller. In Master/Slave mode, the first fixture whose DMX input jack has with nothing connect will be master automatically, set other units to slave 1 or slave2 or … slave 16 via menu, then the first unit will control the others to give an automatic, sound activated, synchronized light show. This function is good when you want an instant show. Any fixture can act as a Master or as a Slave

2-light show

In slave mode, **Slave 1** means the unit works normally and **Slave 2** means 2-light show. In order to create a great light show, you can set **Slave 2** on the second unit to get contrast movement to each other, even if you have two units only.

4.2 DMX Controller

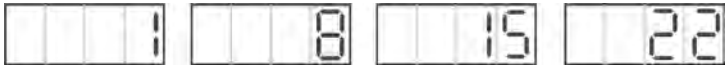
Use universal DMX controller to control the units, you have to set DMX address from 1 to 512 channel so that the units can receive DMX signal.

Press the **MENU** button up to when the Addr is showing on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the DMX512 address. Once the address has been selected, press and keep **ENTER** button pressed up to when the display stops blinking or storing automatically one minute later. To go back to the functions without any change press the **MENU** button again. If you use please refer to the following diagram to address your DMX512 channel for the first 4 units.

4 channels：

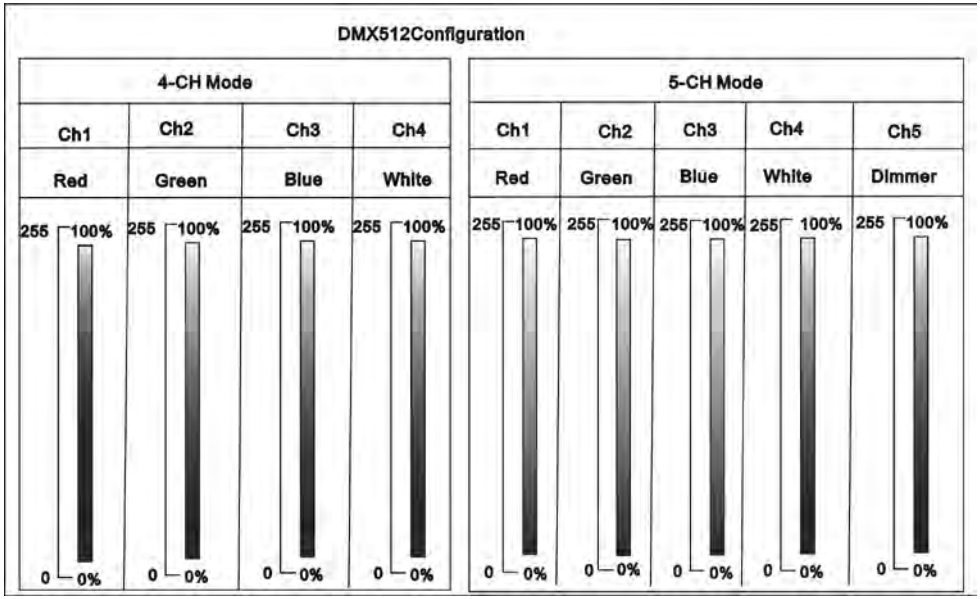
5 channels:

7 channels:

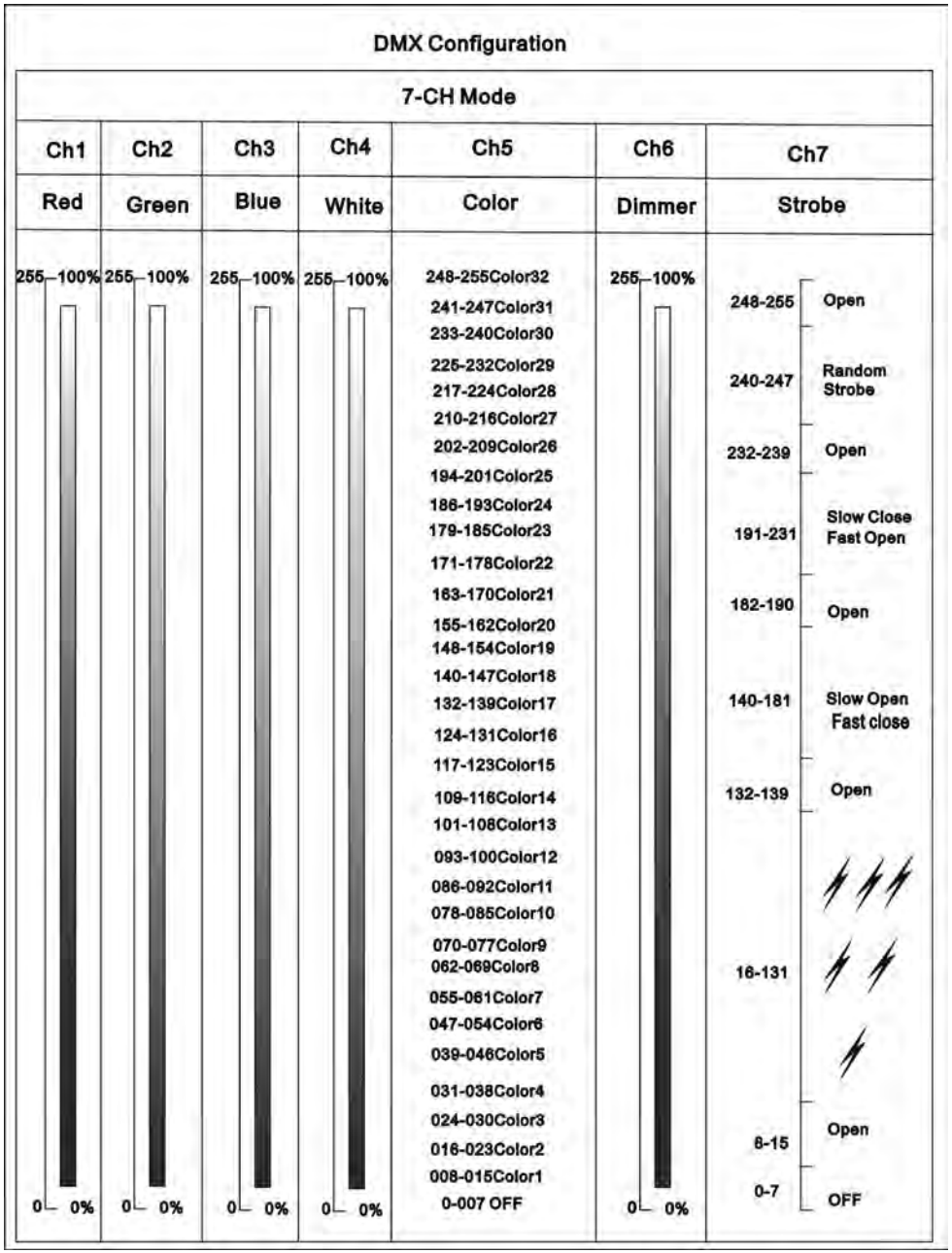


5.DMX512 Configuration

Mode4&5:

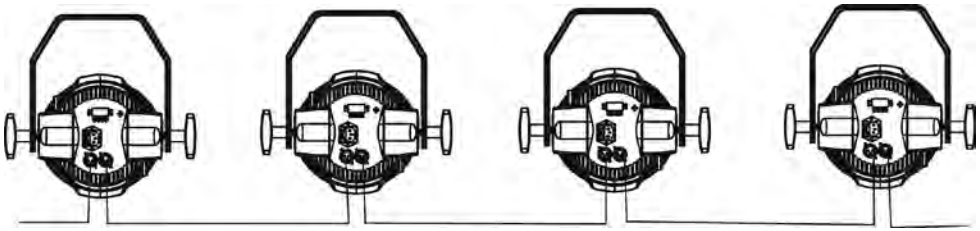


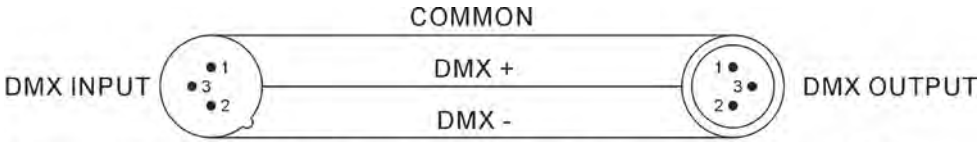
Mode 7:


DMX Configuration
7-CH Mode
Ch1
Red
Ch2
Green
Ch3
Blue
Ch4
White
Ch5
Color
Ch6
Dimmer
Ch7
Strobe
255
100%
0
0%
248-255Color32
241-247Color31
233-240Color30
225-232Color29
217-224Color28
210-216Color27
202-209Color26
194-201Color25
186-193Color24
179-185Color23
171-178Color22
163-170Color21
155-162Color20
148-154Color19
140-147Color18
132-139Color17
124-131Color16
117-123Color15
109-116Color14
101-108Color13
093-100Color12
086-092Color11
078-085Color10
070-077Color9
062-069Color8
055-061Color7
047-054Color6
039-046Color5
031-038Color4
024-030Color3
016-023Color2
008-015Color1
0-007 OFF
248-255 Open
240-247 Random Strobe
232-239 Open
191-231 Slow Close Fast Open
182-190 Open
140-181 Slow Open Fast close
132-139 Open
16-131
8-15 Open
0-7 OFF

6. DMX512 Connections

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





Termination reduces signal errors and voids signal transmission problems and interference. It is always advisable to connect a DMX terminal. (Resistance 120 ohm 1/4W)between pin2(DMX-)and pin3(DMX+) of the last fixture.

1. 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
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

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. 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.

D. 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 condition.

8. 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 day

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PROFESSIONAL LIGHTING TECHNOLOGY