

# LED MultiPAR 12FC

ILED-MP-12F5-020



# **USER GUIDE**

PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE USE



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# 1. Safety Introductions



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°C. 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

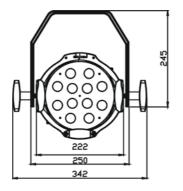
Fuse: T 6.3A

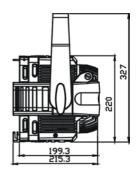
Power consumption: 156W

3 -

• **Dimension**: 250 x 327 x 215 mm

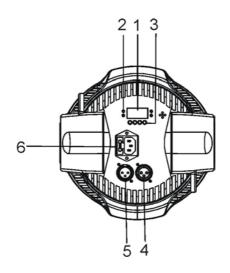
• Weight: 6kg





# 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

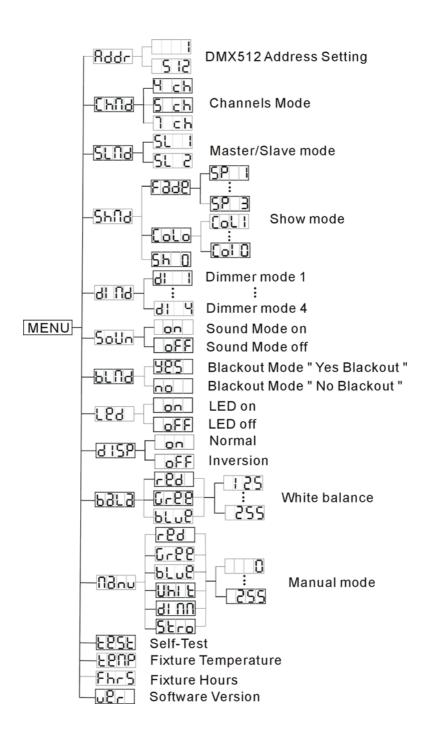
#### 3 Button:

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:



Press the **MENU** button up to when the **Down** 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.

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1		
<b>-</b>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Channel Mode

Press the **MENU** button up to when the **Child** is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **Child** (4 channels mode) or **Child** (5 channels mode) or **Child** (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 **SUGO** is showing on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the (normal) or **SUGO** (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

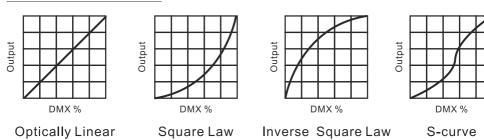
Press the **MENU** button up to when the **Shid** is shown on the display. Pressing **ENTER** button, Use **DOWN** and **UP** button to select the **Shid** (Random show) or **Colo** (color) or **FROD** (fade), if you select the color or fade mode, press **ENTER** button to confirm, and use **DOWN** and **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.



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

button and the display will blink. Use the **DOWN** and **UP** buttons to select the **DOWN** (Dimmer Mode 1: **Optically Linear**) or **DOWN** (Dimmer mode 2: **Square Law**) or **DOWN** (Dimmer mode 3: **Inverse Square Law**) or **DOWN** (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:** 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.

Sound mode

Press the **MENU** button up to when the **Solin** is shown on the display. Pressing **ENTER** button, Use **DOWN** and **UP** button to select the **Solin** (sound on) or **Solin** (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

**BLIId** Blackout mode

Press the **MENU** button up to when the **bloo** is shown on the display. Pressing **ENTER** button, Use **DOWN** and **UP** button to select the **BES** (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 <b>MENU</b> button up to when the LPD is shown on the display. Pressing <b>ENTER</b>
button and the display will blink. Use <b>DOWN</b> and <b>UP</b> button to select (display
always on) or LoFF(display off 20 seconds after exit menu) mode. Once select, press
<b>ENTER</b> button to setup or exit menu mode without any change after 7seconds. Back to the
functions without any change press <b>MENU</b> button again.
dl 5P Display Inverse
Press <b>MENU</b> button until  is blinking on the display. Use <b>DOWN</b> and <b>UP</b> button to
select (display normal) or FF (display inverse), press <b>ENTER</b> button to setup.
Back to the functions without any change press <b>MENU</b> button.
<b>BBLB</b> White Balance
Press the <b>MENU</b> button up to when the bold is shown on the display. Pressing <b>ENTER</b>
button, and use <b>DOWN</b> and <b>UP</b> button to select red, or blue, press <b>ENTER</b>
button to confirm and use <b>DOWN</b> and <b>UP</b> button to adjust the value between 125 and 255,
once select press <b>ENTER</b> button to setup or automatically exit menu mode without any
change after 7 seconds. To go back to the last function without any change press the $\textbf{MENU}$
button.
Manual setting color
Press the <b>MENU</b> button up to when the list is shown on the display. Pressing <b>ENTER</b>
button, and use <b>DOWN</b> and <b>UP</b> button to select F20 . DF22 or or Stco

Press the **MENU** button up to when the button is shown on the display. Pressing **ENTER** button, and use **DOWN** and **UP** button to select **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 **EDS** 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.



Press the **MENU** button up to when the **LEGP** 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.

Fhr5 Fixture Hours

Press the **MENU** button up to when the **Fhr5** 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 ullr 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 "TPOr" 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

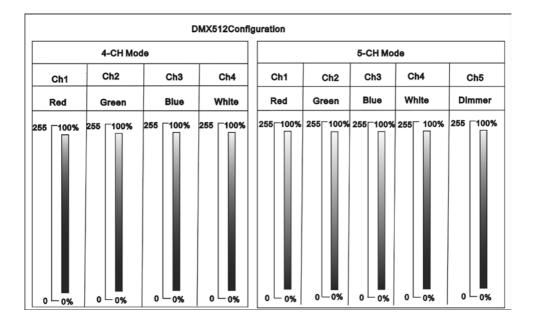
Use universal DMX controller to control the units, you have to set DMX address from 1 to 512 channel so that the units can receive DMX signal.

Press the **MENU** button up to when the **Rddr** 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:		9	
5 channels:	6		
7 channels:	8		22

# 5.DMX512 Configuration

#### Mode4&5:

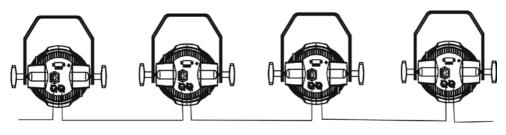


Mode 7:

#### **DMX Configuration** 7-CH Mode Ch3 Ch4 Ch<sub>5</sub> Ch1 Ch2 Ch<sub>6</sub> Ch7 Red Blue Color Green White Dimmer Strobe 255-100% 255-100% 255-100% 255-100% 248-255Color32 255-100% Open 248-255 241-247Color31 233-240Color30 225-232Color29 Random 240-247 Strobe 217-224Color28 210-216Color27 202-209Color26 232-239 Open 194-201Color25 186-193Color24 Slow Close 179-185Color23 191-231 Fast Open 171-178Color22 163-170Color21 182-190 Open 155-162Color20 148-154Color19 140-147Color18 140-181 Slow Open 132-139Color17 Fast close 124-131Color16 117-123Color15 132-139 Open 109-116Color14 101-108Color13 093-100Color12 086-092Color11 078-085Color10 070-077Color9 062-069Color8 16-131 055-061Color7 047-054Color6 039-046Color5 031-038Color4 024-030Color3 Open 8-15 016-023Color2 008-015Color1 0-7 OFF 0-007 OFF 0 ∟ 0% 0 ∟ 0% 0 ∟ 0% 0 ∟ 0% 0 ∟ 0%

#### 6. DMX512 Connections

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



		COMMON		
DMX INPUT	•1	DMX +	10	DMX OUTPUT
DWX INFOT	• 2	DMX -	2.	DIVIN OUTFUT

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.
- 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.
- 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

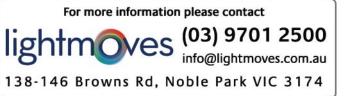
- 1. The stepper motor might be damaged or the cable connected to the PCB is broken.
- 2. The motor's drive IC on the PCB might be out of condition.

#### 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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