

LIGHT ENGINE USER MANUAL

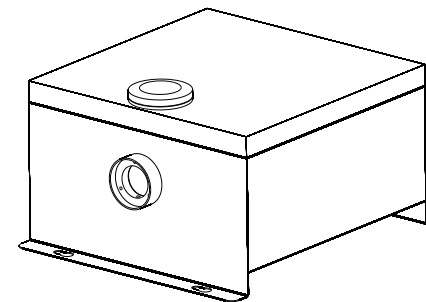
MODEL:

LEI-4001/WP

LEI-8001/WP

LEI-4001DMX/WP

LEI-8001DMX/WP



Accessories:

- Fiber Connector1 PC
- Wireless Remote Controller.....1 PC (Optional)
- User Manual1 PC
- Signal Cable1 PC (for DMX machine only)



**ISO9001:2000
CERTIFIED**

LIGHT ENGINE USER MANUAL

Welcome to use LEI series of professional light engine. Please read the manual carefully before using the light engine. If you have any questions concerning the operation or maintenance, please contact your wholesaler.

Safety Instruction

1. Make sure the Light Engine and Power Source have the same voltage;
2. Keep out of rain or moist area to avoid shock hazards;
3. Avoid to use at high ambient temperature (>40°C);

CHAPTER 1 LEI-4001/WP / LEI-8001/WP

1. Technical Data

Voltage: 110V 230V
 LED: White
 Color Wheel: 6 colors
 Life of LED : 50000H
 IP Rating : IP43
 Size: 335×287×173mm³
 Gross Weight: 7.0Kg
 Standard Aperture: Φ28mm/Φ24mm/Φ20mm (Optional: Φ30mm Max)

| | |
|----------------|---------------|
| Model: | LEI-4001/WP |
| Power: | 50W |
| Light Source: | 1-40W LED |
| Luminous Flux: | 3500Lm(6000K) |

| | |
|----------------|---------------|
| Model: | LEI-8001/WP |
| Power: | 90W |
| Light Source: | 1-70W LED |
| Luminous Flux: | 6100Lm(6000K) |

2. Installation dimension of light engine (see Fig.1):

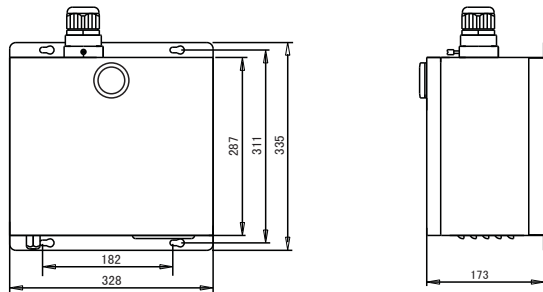


Fig. 1

3. Light Engine Setup:

- (1) DIP switches: SW1~SW3 for programs selection, please see Attached Table (1=ON, 0=OFF). SW4 and SW5 are unused; SW6 for remote controller (see fig. 2)

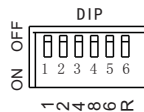


Fig. 2

- (2) Calculation of DIP address code:
 e. g. 003=2(2)+1(1), 005=4(3)+1(1)
- (3) Wireless Remote Controller:
 Set SW6 as "ON", and the remote controller starts to work. Button "🔒" is for color selection, button "🔌" for power on/off, and button "☀️" "🌑" used for brightness adjusting. (6 levels) (See Fig. 3)
- (4) Fixing Color Without Wireless Remote Controller : Firstly set SW2 and SW3 as " ON " to choose the inbuilt programme at a slow speed, then set all switches (SW1~SW6) into "OFF" when the light engine displays the colour that you need.

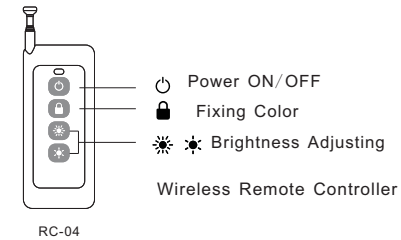


Fig. 3

Notice:

1. You could only control the motor to be on and off through "🔒" button. If you want to have different color-change speed, please use DIP switch.
2. The dimmer on the rear panel is used for brightness adjustment by hand. The factory default is 100% brightness, and there are 6 levels of brightness in total.

Attached Table:

| PRO. NO. | DIP SWITCH(1=ON, 0=OFF) | | | | | FUNCTION | |
|----------|-------------------------|---|---|---|---|----------|--------------------------------------|
| | 6 | 5 | 4 | 3 | 2 | | 1 |
| 00 | 0 | 0 | 0 | 0 | 0 | 0 | Motor stopped, LED working |
| 01 | 1 | 0 | 0 | 0 | 0 | 1 | W, Sky-B,G, Y, B, PP, fade (6RPM) |
| 02 | 1 | 0 | 0 | 0 | 1 | 0 | W, Sky-B,G, Y, B, PP, fade (4RPM) |
| 03 | 1 | 0 | 0 | 0 | 1 | 1 | W, Sky-B,G, Y, B, PP, fade (3RPM) |
| 04 | 1 | 0 | 0 | 1 | 0 | 0 | W, Sky-B,G, Y, B, PP, fade (2RPM) |
| 05 | 1 | 0 | 0 | 1 | 0 | 1 | W, Sky-B,G, Y, B, PP, fade (1.5RPM) |
| 06 | 1 | 0 | 0 | 1 | 1 | 0 | W, Sky-B,G, Y, B, PP, fade (1RPM) |
| 07 | 1 | 0 | 0 | 1 | 1 | 1 | W, Sky-B,G, Y, B, PP, fade (0.5RPM) |

- Notice:**
1. RPM is the speed of the color wheel;
 2. If DIP address is set beyond P07, the machine will run P07 instead.

CHAPTER 2

LEI-4001DMX/WP / LEI-8001DMX/WP

1. Technical Data

Voltage: 110V 230V
 LED: White
 Color Wheel: 6 colors
 Life of LED : 50000H
 IP Rating IP43
 Size: 335×287×173mm³
 Gross Weight: 7.0Kg
 Standard Aperture: Φ28mm/Φ24mm/Φ20mm (Optional: Φ30mm Max)

Model: LEI-4001DMX/WP
 Power: 50W
 Light Source: 1-40W LED
 Luminous Flux: 3500Lm(6000K)

Model: LEI-8001DMX/WP
 Power: 90W
 Light Source: 1-70W LED
 Luminous Flux: 6100Lm(6000K)

2. Installation dimension of light engine(see Fig.1):

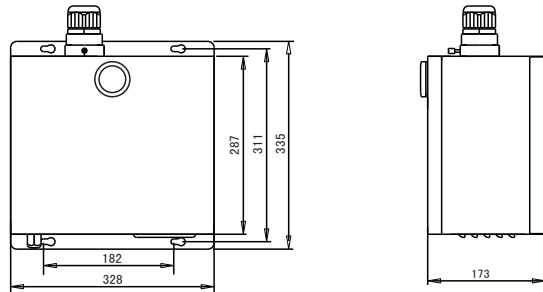


Fig. 1

3. Light Engine Setup

There are three control modes for LEI-Series DMX512 protocol Light Engine:

- * DMX512 Signal Control Mode: DMX512 Signal is received from a DMX512 controller.
- * Master/Slave Mode: One Light Engine is set as Master, while the rest light engines are set as Slave. Master sends control signal to slave so that all the machines run the program synchronously.
- * Audio Control Mode: Light engines are controlled by sound.

(1) DMX 512 signal control mode:

Address Code Setup:

Press button "UP" and "DOWN" at the same time (maybe several times) until the digital display shows "001-508", then press the button "UP" or "DOWN" to select the address code.

DMX Channels: 5 Channels

CH1:Color CH2:Speed CH3:Blank CH4:Dimmer (256 level) CH5:Strobe

Notice: CH2 controls the switching speed of colors in CH1.
 CH3 is the spare channel.

(2) Master/Slave mode: The setting of Master/Slave Machines Setup

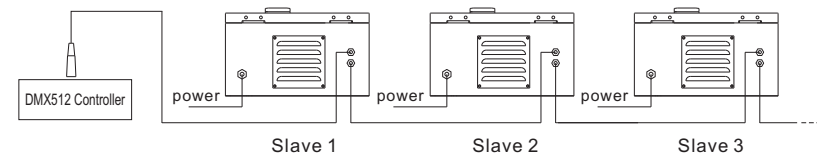
| STATUS | No. | MENU | DESCRIPTION OF FUNCTIONS | REMARKS |
|-------------------|-----|----------------|--|--|
| MASTER | 1 | p. 00-p. 11 | 12 preset programs(see attached list. When it displays "P.XX", press "UP/DOWN" to get into this menu) | 1.Press two buttons at the same time to switch among menus. |
| | 2 | ps. 1 -ps. 2 | PS. 1-PS. 2 are audio control programs (when it display "PS.X", press "UP/DOWN" to get into this menu) | |
| | 3 | s. 00 -s. 07 | Color wheel speed setup: total 8 levels:1/2RPM, 1RPM,2RPM,3RPM,4RPM,5RPM,8RPM,12RPM | 2.If you haven't pressed the buttons for a long time, the digital display will be turned off, and the buttons will be locked. Press"UP"or"DOWN" to restart buttons operation(When the power is on, you also need to follow these steps), it will display the last operation. |
| | 4 | d. 00 - d. 99 | Adjusting of brightness: total 8 levels: d.00,d.10,d.20, d.35,d.50,d.70,d.85,d.99.(d.99.means 100% brightness) | |
| | 5 | r. on - r. off | r.on: Remote control is on, r.off: Remote control is off. | |
| Slave DMXReceiver | 6 | 001-508 | DMX address,"001"- "508"are available | 3.When slave machines receive the DMX signal and the digital display is on, the 3rd digital number of the digital display will be flickering. |

Notice:

- ① If you need Master/Slaves to change color synchronously, please set all of slaves into"001";
- ② If you need Master/Slaves to change color in sequence, please set slaves into "006", "011" and so on (add "5" one after another) .

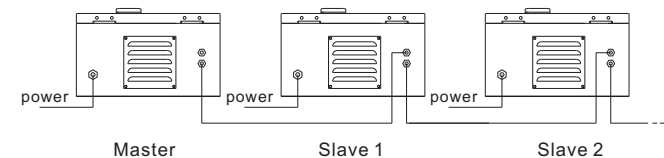
(3) The connection of DMX Signal Control Mode (See Fig. 2):

Fig. 2



(4) The connection of Master/Slave Control Mode (See Fig. 3):

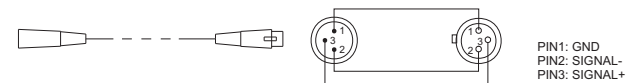
Fig.3



(5) Signal cable and connector (See Fig.4):

Signal cable is 2×0.5mm² audio cable.

Fig.4

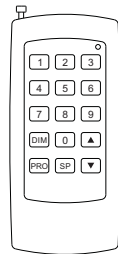


4. Wireless remote controller (See Fig.5):

Unlock and open the waterproof case, and you will find the Digital Display. Press the two buttons "UP" / "DOWN" besides the Display at the same time. When it displays "r. on" or "r. off", press either button of "UP" / "DOWN" to show "r. on" (status of remote control). The remote function is on.

15-Key Remote Controller:

- (1) Program Selection: Press "PRO", then press the digit key on the controller, "00"- "13", to choose the desirable program, or you can use "▲", "▼" to select.
- (2) Dimming: Press the key "DIM", then press "0"- "7" to have the desirable brightness, or you can use "▲", "▼" to adjust.
- (3) Speed of the color wheel: Press the key "SP", then press "0"- "7" to adjust the speed, or you can use "▲", "▼" to adjust.



RC-15
Wireless Remote Controller
Fig.5

Notice:

- ① Address code of slave (machines) are not adjustable under remote control status.
- ② When you are selecting the program, only double-digit numbers on the controller are recognizable (e.g. 00, 01, 02...).

Attached Table:

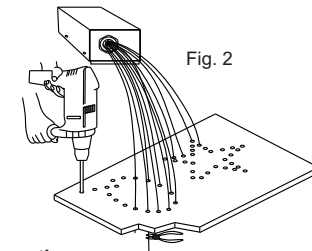
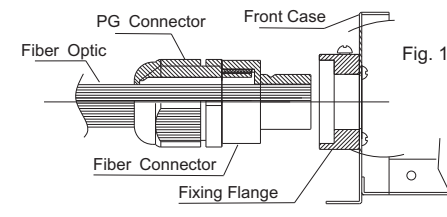
| Pro. No. | Function | Pro. No. | Function | Pro. No. | Function |
|----------|----------|----------|-----------------------|----------|-------------------------------|
| P.00 | No Light | P.06 | Red | PS.1 | 6 colors skip & audio control |
| P.01 | White | P.07 | 6 colors skip | PS.2 | 5 colors skip & audio control |
| P.02 | Sky-B | P.08 | 5 colors skip | | |
| P.03 | Green | P.09 | 6 colors fade | | |
| P.04 | Yellow | P.10 | 6 colors skip & chase | | |
| P.05 | Blue | P.11 | 6 colors fade & chase | | |

Chapter 3 Installation of Fiber Optic

1. Connecting the fiber optic with Light Engine:

Solid Core fiber optic(see Fig. 1):

- (1) Cut the fiber to the specified length. The cross section should be vertical to the fiber and keep clean and smooth.
- (2) Peel off 50-100mm of the PVC jacket of the fiber optic cable (not necessary if there is no PVC jacket). Be careful not to hurt the fiber optic.
- (3) Unscrew the PG Connector and insert the fiber optic cable into the PG Connector and Fiber Connector until the end of the cable is flush with the Fiber Connector. Screw tightly the PG Connector.
- (4) Insert the finished Fiber Connector into the Fixing Flange, screw tightly the Screw.

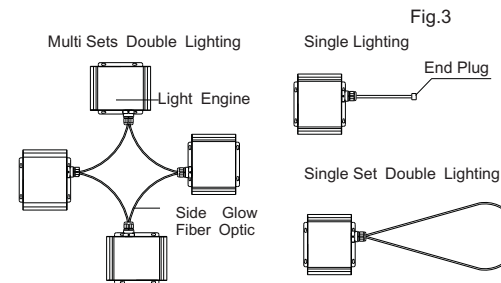


2.Installation of the end part of the Multi-String fiber optic:

- (1) Drill holes on the installing board according to the design. Then insert the fiber optic string into holes and fix it with epoxy glue. Trim the end of the fiber string to be flush with the board or at a required length. Fasten the other end of the fiber string to a harness and insert the harness into PG Connector and Fiber Connector. Apply the hot knife to cut fiber end flush with the Fiber Connector. (see Fig.2).
- (2) Insert the finished Fiber Connector into the Fixing Flange and screw tightly the Screw.

3. Commonly used installation method of fiber optic cable:

(1) Side Lighting Fiber Optic(see Fig.3).



(2) End Lighting Fiber Optic: (see Fig.4). Fig.4

