LEI 4001 DMX / 8001 DMX
User manual

LEI 4001 DMX / 8001 DMX

Model	LEI 4001 DMX	LEI 8001 DMX
Programs	Speed and brightness control, 14 programs	
DMX modes	(1) DMX 512 Signal mode (2) Master and slave mode (DMX socket standard: XLR)	
Remote controller	Yes, RF	
Light source type	LED CREE	
Luminous flux	3,500 Lm	6,100 Lm
IP rating	IP20	
Light colour mode	white	
Working voltage	110 / 230V	
Power	1-40W	1-70W
Material of housing	Aluminium	
Light engine dimensions	270 mm (L) x 264 mm (W) x 135 mm (H)	
Net weight	8 kg	
Fibre optic port diameter	30 mm	
Maximum number of fibre optic bundles at 0.75 mm diameter	1,250	
Lifetime	50,000 hours	
Warranty	1 year	
Package dimensions (excluding fibre optic bundle)	360 mm (L) x 330 mm (W) x 200 mm (H)	
Weight with packaging	8.5 kg	

Safety notices

Electrical work safety advice and tips

- Make sure the input voltage is correct.

- Avoid placing the light engine in the rain or in moist areas. Please ensure that the light engine has sufficient ventilation and is not placed in a completely sealed area.

- Do not open the LED light engine for inspection or re-wire the electronic circuits if you are not a professional. Opening the light engine might void your warranty.

- Avoid any debris on top or around the light engine as it can cause poor heat dissipation.

- Avoid using the device above 40 C temperature.

DIY tips and safety advice

- This task will involve working at height. A safe system of work should be established and maintained, in order to prevent injury.

- Consider your safety! Think about the potential risks and dangers of the work and the steps you should take to avoid them.

- Personal protective equipment. Make sure that you are equipped with suitable and sufficient personal protective equipment. This could include eye protection, face mask, protective overalls, safety footwear and gloves.

- Ensure that the work area is sufficiently illuminated.

- Check that the tools you will be working with are in a good operating condition. For the installation, you will need a cordless drill, epoxy glue, side cutters or scissors and drill bits.
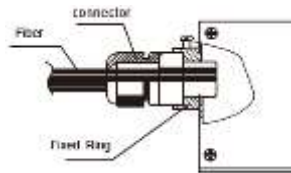
Light engine information and dimensions
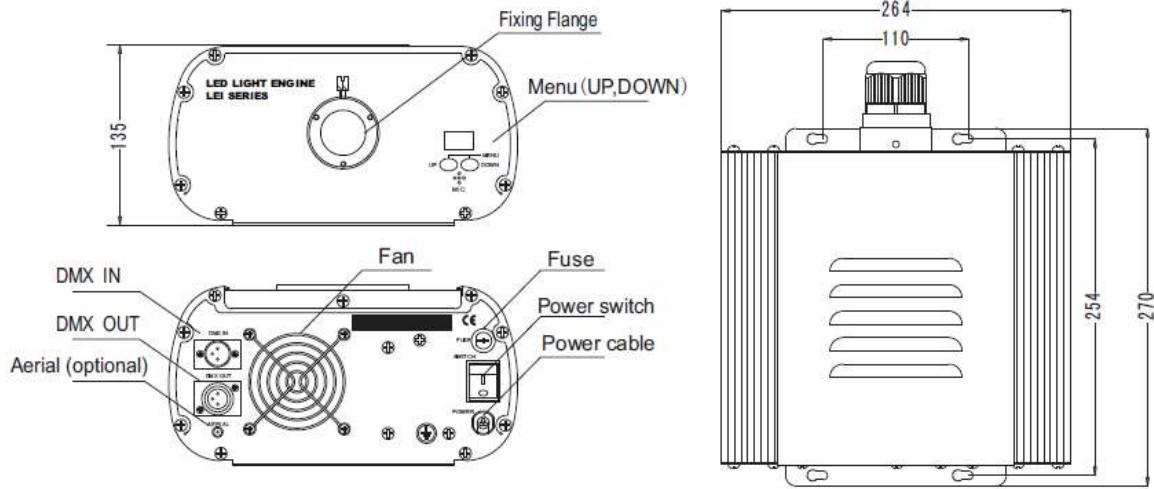
Connection method between optical fibres and the light engine

Your fibre optic bundle will come with the connector fittings ready to connect to the light engine.

If you need to adjust your bundle or you're making your own, follow the steps below.

1. Align all the optical fibre ends and fasten with tapes which can resist temperature over 130°C

2. Pass the fibres through the connector and fasten the rotary tensioner until the fibres are tightened.
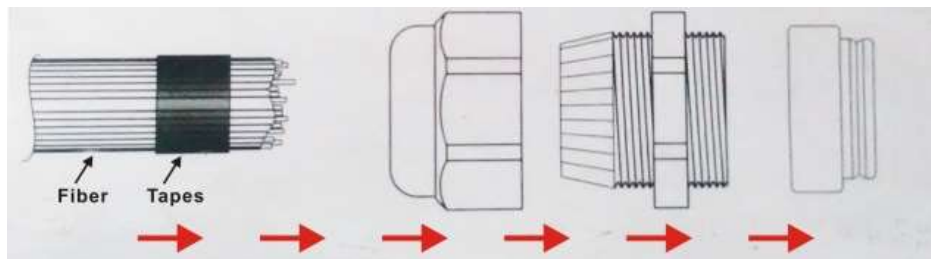
3. Cut the fibre bundle to a flat surface with a heat-knife or blade.

4. Make sure that the optical fibre bundle head is smooth and clean to ensure even light distribution.

5. Place the fibre optic bundle's connector into the light engine's port connector. Fasten the bundle with the screw on the top of the light engine's port connector.

Light engine control modes

- DMX 512 Signal mode: the operation of the light engine is controlled by a DMX 512 controller
- Master and slave mode: one light engine (master) controls the other light engines' (slave) light programs

DMX 512 Signal 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 an address code
- DMX Channels: 5 Channels: CH1: Colour CH2: Speed CH3: Blank CH4: Dimmer (256 level) CH5: Strobe. CH2 controls the switching speed of colours in CH1, CH3 is the spare channel.
- Light engine connection diagram in DMX 512 Signal mode:
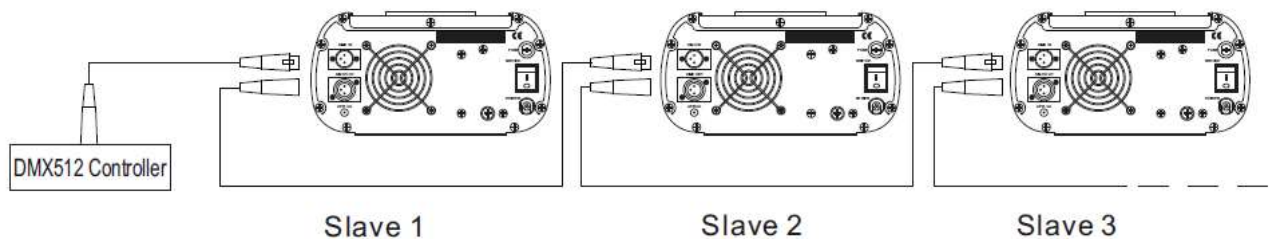
Master/Slave mode

- Master / slave mode light engine 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)	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.
	3	s. 00 -s. 07	Color wheel speed setup: total 8 levels:1/2RPM, 1RPM,2RPM,3RPM,4RPM,5RPM,8RPM,12RPM	
	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.means100% brightness)	
	5	r. on - r. oF	r.on: Remote control is on, r.oF: Remote control is off.	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.
Slave DMX Receiver	6	001-508	DMX address,"001"-"508"are available	

Notes
  o If you need Master/Slaves to change colour synchronously, please set all of slaves to "001";
  o If you need Master/Slaves to change colour in sequence, please set slaves into "006", "011" and so on (add "5" one after another).
  o In Maser/Slave remote control mode, only the Master light engine's remote control needs to be switched on.
  o In Maser/Salve mode, the Slave machine's address code should be set to "001"

- Light engine connection diagram in Master/slave mode
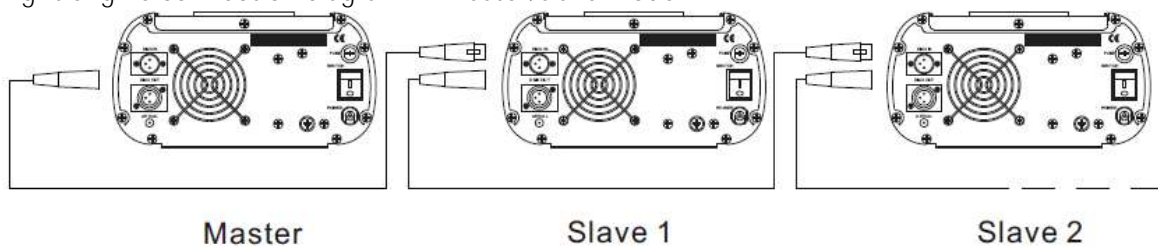
DMX signal cable and connector: 2 x 0.5 mm^2 audio cable

PIN1: GND
PIN2: SIGNAL-
PIN3: SIGNAL+
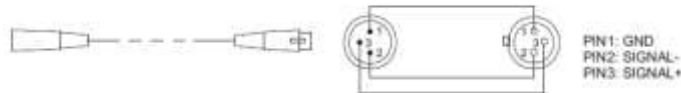
Wireless remote controller

On the light engine, press the buttons "UP" / "DOWN" besides the display at the same time. When the display shows "r. on" or "r. oF", press either button "UP" or "DOWN" to show "r. on". This indicates that he remote controller mode is turned on.

Please note that the battery is not included with the remote controller. "23A" type, 12V battery is required for this type of remote.

Operation of the 15-key remote:
- Program selection: Press "PRO", then press the digit key "00" – "13", to choose the desirable program or you can use the "▲" or "▼" buttons to scroll through the programs.
- Dimming: Press the key "DIM", then press "0" – "7" to set the desired brightness or you can use the "▲" or "▼" buttons to scroll through the brightness levels.
- Speed of the twinkle wheel: Press the key "SP", then press "0" – "7" to adjust the speed or you can use the "▲" or "▼" buttons to scroll through the speed levels.

Notes:

- The address codes of the slave machines are not adjustable when the remote-control mode is switched on.
- While selecting the programme on the remote, two digits need to be entered even for single digit numbers: 01, 02, 03 …

14 program codes:

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		

Troubleshooting for remote controller connection issues:

- Make sure that the remote controller is switched on by pressing the "On" button

- Check if the battery is operational in the remote controller: Press a button on the remote and the indicator light should flash up. If the light doesn't flash up, it means that there is either no battery in the remote or the battery needs replacing.

- If the remote's control light flashes up, check whether the green indicator light on the back of the light engine flashes up, when a button is pressed on the remote. If the indicator light is not flashing up, restart the device and test again. If the indicator light still doesn't flash up, please contact your supplier.