SS-300 Shooting star fibre optic star kit
User manual

Features:

- Complete shooting star kit for indoor ceiling projects with remote controller and fibre optic bundle
- Shooting star effect
- Fibre optic bundle with 300 fibres

Technical specification

Light engine model	LEN-5010 DMX
Programmes	20 programs, speed control, on/off
Remote controller	Yes, RF
Light source type	LED white light
CRI (Ra>):	70
IP rating	IP20
DMX mode details	10 DMX output channels, 256 output gray level, DMX512 socket standard RJ45
Working voltage	12V DC (100/240V power adapter included)
Rated power	5 W (10 x 0.5 W)
Material of housing	Aluminium
Light engine dimensions	155 mm (L) x 93 mm (W) x 32 mm (H)
Net weight	374g
Remote control dimensions	85 mm x 52 mm x 7 mm
Fibre optic port diameter	10 x 8 mm
Fibre optic bundle:	300 fibres: 300 x 0.75 mm at 2 m length
Lifetime	50,000 hours
Warranty	2 years
Package dimensions (excluding fibre optic bundle)	193 mm (L) x 160 mm (W) x 90 mm (H)
Weight with packaging	1.0 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 4O 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.

SS-3OO Shooting star fibre optic star kit
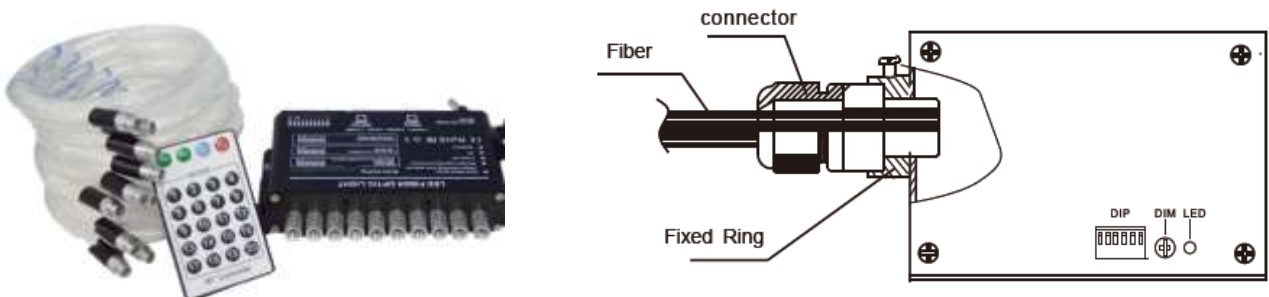## User manual

Installation
The installation dimension for the light engine (Fig. 1)

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.
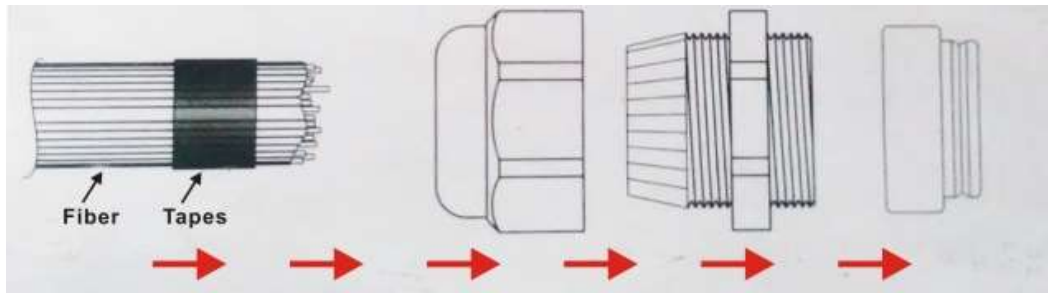

If you need to adjust your bundle or you're making your own, follow the steps below.

1. Align all the optical fibre ends and fasten with tapes which can resist temperature over 13O°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.

Programming the light engine

The LEN-5O1O DMX light engine has the following modes:

1. Remote controller mode
2. DIP switch control mode
3. DMX 512 Signal mode: the operation of the light engine is controlled by a DMX 512 controller

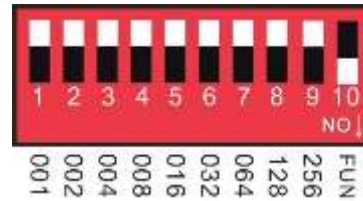The programs and functions are set on the controller with DIP switches.
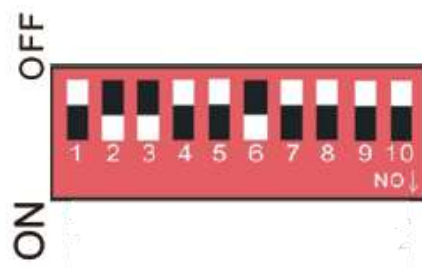
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Remote controller mode

DIP switch settings:

- DIP switch 1-9: OFF
- DIP switch 10: ON

Remote controller programmes

No.	Mode	No.	Mode
1	Meteor 1	11	Fade scan 1
2	Meteor 2	12	Fade scan 2
3	Meteor 3	13	Twinkle 1
4	Meteor 4	14	Twinkle 2
5	Scan left	15	Twinkle 3
6	Scan right	16	Twinkle 4
7	Scan right to left	17	Flash 1
8	Scan left to right	18	Flash 2
9	Fade 1	19	Flash 3
10	Fade 2	20	Flash 4

Pairing the remote controller

In some cases, if the remote controller gets unpaired from the light engine, follow these steps to re-pair:

1. Power on light engine – the red indicator light should indicate the operation.
2. Press buttons 12 and 16 simultaneously on the remote within the remote controller's range.
3. The red indicator light should start flashing on the light engine if the pairing was successful.
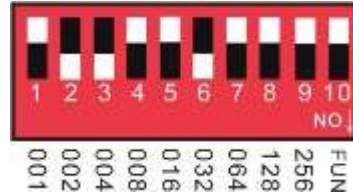
DIP switch control mode

DIP switch settings:

- DIP switch 1-4: program setting
- DIP switch 5-7: speed setting
- DIP switch 8-1O : OFF

Programs can be set with DIP switches 1-4

DIP 1	DIP 2	DIP 3	DIP 4	Mode
OFF	OFF	OFF	OFF	Meteor 1
ON	OFF	OFF	OFF	Meteor 2
OFF	ON	OFF	OFF	Meteor 3
ON	ON	OFF	OFF	Meteor 4
OFF	OFF	ON	OFF	Scan left
ON	OFF	ON	OFF	Scan right
OFF	ON	ON	OFF	Scan right to left
ON	ON	ON	OFF	Scan left to right

DIP 1	DIP 2	DIP 3	DIP 4	Mode
OFF	OFF	OFF	ON	Fade 1
ON	OFF	OFF	ON	Fade 2
OFF	ON	OFF	ON	Fade scan 1
ON	ON	ON	OFF	Fade scan 2
OFF	OFF	ON	ON	Twinkle 1
ON	OFF	ON	ON	Twinkle 2
OFF	ON	ON	ON	Twinkle 3
ON	ON	ON	ON	Twinkle 4

Program speed can be set with DIP switches 5-7

DIP 5	DIP 6	DIP 7	Speed
OFF	OFF	OFF	Speed 1
ON	OFF	OFF	Speed 2
OFF	ON	OFF	Speed 3
ON	ON	OFF	Speed 4

DIP 5	DIP 6	DIP 7	Mode
OFF	OFF	ON	Speed 5
ON	OFF	ON	Speed 6
OFF	ON	ON	Speed 7
ON	ON	ON	Speed 8

DMX 512 Signal mode

DIP switch settings:
- DIP switch 1-9: DMX address
- DIP switch 1O (FUN): ON – enables DMX signal mode
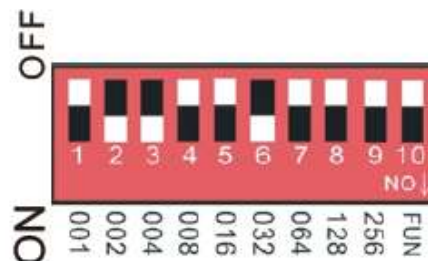
Calculating the DMX address:

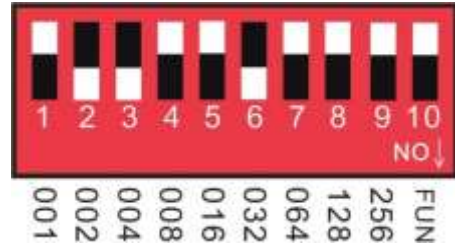- The DIP switches set the value of the DMX address.

Example 1. To set DMX address to 38: • 2nd switch ON (2) • 3rd switch ON (4) • 6th switch ON (32) = 38	
Example 2. To set DMX address to 388: • 3rd switch ON (4) • 8th switch ON (128) • 9th switch ON (256)= 388	