

# Luci SHIN FLEX IP65

### 7mm pitch · 18mm pitch

## **Instruction Manual**

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### **Safety Cautions**

The following is the safety cautions to prevent any harms or damages to others. If the product is used against cautions, it may cause damage, electric shock, smoke, or fire



Only supply power through the lead wire on one side using the dedicated connection for this product.

Electrical work certificate is needed to install and inspect this

product. Please ask electrician for the installation.

Supplying power through the lead wires on both sides may cause failure and fire.



DC24V

Do not supply the power

through the lead wire from

both sides.

Do not install the product in the following environments:

- A location where it may become submerged or remain wet for



abnormal current occurs, creating risk of fire. Always shut off the main power supply before performing work or

Always use a circuit breaker of suitable capacity in the power supply. If the capacity is not suitable, the breaker may not work when

Do not connect or disconnect the lead wires of the LED fixture while power is supplied.



Firmly insert and connect the connectors.

Use a DC24 V power supply.

Important notice for storage

in the following conditions:

- places with much litter or dust.

- places exposed to sun light directly.

- places of high humidity.

- wet location.

are volatilized.

tion period.

Never connect to any other power supply.

Incomplete connection may cause heating, smoke, and fire. Do not touch the ends of the connectors. Risk of electrical shock.



Do not place a flammable object such as a cloth or a paper or an insulating material on top of the fixture or cover it with such a material. It may cause the LED fixture not to turn on or fire.

Do not put a piece of metal or a flammable in clearance of the LED fixture. Do not place or install LED fixture in close contact with other electric equipment in or out of ceiling area to prevent fall, electric shock or fire caused by vibration from electric equipment.



DC24V

DC24V

- A location where it can be directly exposed to rain or water.

Supply the power through the

Waterproofing treatment

lead wire from one side.

is required.

prolonged periods.

- Places with a consistently high humidity level (saunas, public baths, etc.).
- A location where the temperature exceeds +35°C. (Note: The usage environment temperature is 0°C to 35°C).
- A dusty location.
- A location with corrosive or infammable gases.
- A highly airtight location.
- A location where the product is directly exposed to saltwater or organic solvents.
- A location where the product is exposed to direct sunlight.
- A location subject to the effects of electric or magnetic fields.
- A location subject to intense vibration or shock, or a location subject to continuous vibration.



Do not do the following to this product:

- Forcibly remove the product after mounting.
- Disassemble, modify or add holes to the product.
- Forcibly pull or twist the product.
- Cut or damage the power cable. Use a damaged cable.
- Press down on the product.
- Drop the product or subject the product to intense vibration or
- Bend or fold beyond the minimum bending radius of 50mm.

Do not cut the LED fixture and lead wire at a job site. To prevent water and moisture entry, ensure proper sealing at the connection of cables and the terminal of the connector.



When there is abnormal situations, please cut off the power immediately, consult with electricians, and do not touch the LED fixture with hands.



Ensure sufficient space for ventilation (heat dissipation) between the LED fixture and the surrounding.

When installing the LED fixture in a box or enclosure, please provide an air ventilation hole to facilitate proper airflow and heat dissipation, ensuring that the surrounding temperature does not exceed the specified operating temperature.

#### Plese read befere the usage

- For safety, do not directly view the LED light source.
- The minimum allowable bend range of this lamp fitting is R 50 mm. This means that the lamp fitting can be bent at most to a circle of diameter 100 mm. See the illustration in the lower right.
- When the air temperature is low, the lamp fitting may become stiff. Forcibly bending the fitting may cause damage. In this situation, it is recommended that you connect the lamp fitting to the power supply, turn on the light, wait until it warms up, and then bend.
- When handling the product, take care not to bend or twist it.
- This may cause malfunctioning. When mounting on a ceiling, under a shelf, or on a wall, mount tightly with no looseness or sagging.
- Use a mounting rail (option) to mount the lamp fitting in the mounting position.
- To mount the mounting rail in the mounting position, use mounting clips (option) and screws (commercially available).
- If you are using an instantaneous adhesive agent, wipe off aii dust, moisture, and oil from the mounting rail and mounting surface.
- Dirt on the surfaces to be glued may cause the mounting rails to detach.
- The product has been manufactured with the utmost care;

however, please understand that slight deviantions in LED color are unavoidable due to the characteristics of the product.

### **Meintenance and Inspection**

- LED fixture has a life span.
- Degradation occurs inside after 8-10 years of installation even when the LED fixture looks fine from the outside. Parts of the LED fixture degrade due to heat when the light is on for a long time. This causes not only safety issues, but also reduces power efficiency and it is recommended to have regular maintenance and inspection.
- Cleaning and inspection should be performed at least once every 6 months.
- Inspection by a specialist, such as a product contractor, should be performed at least once every 3 years.
- If the LED fixture is used for a long time without having an inspection, there a small possibility that it could lead to smoke, fire, electric shock.

#### Inspection Methods

- Is LED operating normally?
- Is there any unusual smell, sound or heat?
- Are there any cracks, aplits, or detached parts on any parts or joints?

#### Cleaning Method

- Wipe the LED fixture lightly with a soft cloth.
- To best clean the LED fixture, wipe dirt with a soft cloth with has been soaked in a neutral detergent diluted with water squeegeed dry. To finish off, wipe it with a damp cloth and dry it.

This product cannot be bent less than this angle

30/01/2025

LFY\*-\*-\*-CL-O-\*





- places with solvent such as a paint liquid is stored or volatile materials

During storing period, please do not put the cartons or individual

Observe the storing temperature of our LED fixtures: 0  $^{\circ}$ C to 55 $^{\circ}$ C

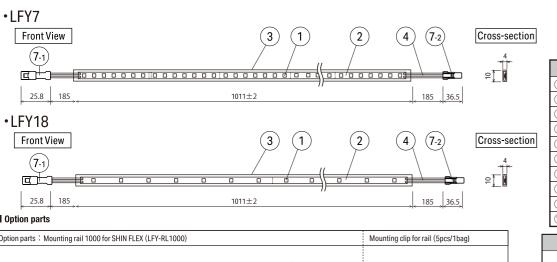
Please do not store the carton or the packages of our LED fixtures

packages vertically. Please do not open individual package until just before installing LED fixtures to avoid any damage to the LED fixtures.

Please do not place heavy object on the carton. Please do not use our LED fixtures as the working light during construc-



### **Product specifications**



	Input voltage
7	DC24V

#	Item	Name Materials etc.
1	LED	SMD type
2	Tape Substrate	FPC
3	Body	Flexible Acrylic, Clear
4	Lead Wire	Black+,White-
(5)	Mounting rail	AES
6	45°Mounting rail	AES
7	IP65 Connector	
8	Mounting clip for rail	Polycarbonate,Clear
9	Mounting clip	Polycarbonate,Clear
10	End cap	Polycarbonate,Clear

Cables
Recommended: VCTF-2C 0.5sq % Cables are not included

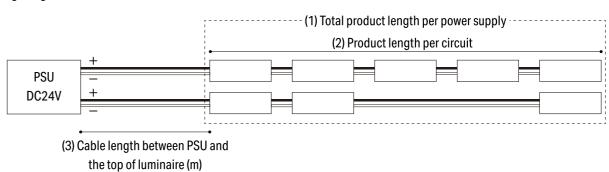
Option parts: Mounting rail 1000 for SHIN FLEX (LFY-RL1000)	Mounting clip for rail (5pcs/1bag)
970 42.5 200 200 85 200 200 42.5 Screw Holes $\varphi$ 3.5	16.4
Option parts: 45°Mounting rail 1000 for SHIN FLEX (LFY-45RL1000)	<b>+</b> (8)
970 42.5 200 200 85 200 200 42.5 Screw Holes $\varphi$ 3.5	

IP65 connector	Outdoor cable 3M TR connector ( CAD-3000-MEFE-0 )	Option parts :Mounting clip (LFY-RC) (10pcs/1bag)
25.8 8.1 7-) 5.5 1.5 16.5 7-2	+: Black -: White AWG22 3000±20 16.5 1.5,5.5 7-1 4	□ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10  □ 10
Item / Product Name		Luci SHIN FLEX
LED pitch	LFY7	LFY18

Item / Product Name		Luci SHIN FLEX								
LED pitch	LFY7				LFY18					
Model No.		LFY7-1000W -*-CL-0-10	LFY7-1000W -*-CL-0-6	LFY7-1000W -*-CL-0-4		LFY18-1000W -*-CL-0-12	LFY18-1000W -*-CL-0-10			LFY18-1000W -*-CL-0-2
Wattage	15.9 W/m	10.8 W/m	6.4 W/m	4.2 W/m	2.4 W/m	12.7 W/m	10.8 W/m	6.9 W/m	4.9 W/m	2.9 W/m
Input current	663 mA	450 mA	267 mA	175 mA	100 mA	529 mA	450 mA	288 mA	204 mA	121 mA
Number of LEDs	140 LED					56 LED				
Weight	40 g				40 g					
Environment		Indoor / Outdoor IP65 (No Condensation)								
Operating temperature		$0^{\circ}$ C $\sim$ $+35^{\circ}$ C (No Condensation)								
Max. length per circuit	4m	4m 5m								
Material (Body)		Soft Acrylic								
Min. allowable bend range	R50mm									
Attachments	-									
Accessories	Mounting rail, 45°Mounting rail, Mounting clip, Power supply cable									
Light source color (*)	Day light(D), Natural white (N), White(W), Warm white 3500K(WW), Warm white 3000K(L30), Warm white 2700K(L27), Warm white 2500K(L25), Warm white 2200K(L22), Warm white L2000K(L20), Warm white 1800K(L18)									
Dimmable		0								

### System configuration diagram

- 1. Total product length per power supply depends on capacity of the power supply. Recommended loading factor is 70% (without dimming) or 60% (with dimming).
- 2. Product length per circuit shall not exceed maximum product length per circuit. If the product length per circuit exceeds the maximum, split into mulitple circuits
- 3. To minimize voltage drop, select appropriate wire gauge/diameter and consider the cable length between PSU and the top of luminaire referring to the following table. If longer cable distances are required, use thicker wires or reduce the loading of the lighting fixtures in the circuit.



		Cross section	0.3 sq	0.5 sq	0.75 sq		
	Wire gauze	AWG 22	AWG 20	AWG 18			
Product code	Power	(2) Max. product length per circuit	1				
LFY7-T1000W-*-CL-O-15	15.9 W/m	4 m	2.6 m	4.1 m	6.6 m		
LFY7-T1000W-*-CL-O-10	10.8 W/m	5 m	3.0 m	4.8 m	7.5 m		
LFY7-T1000W-*-CL-O-6	6.4 W/m	5 m	5.1 m	8.2 m	13.0 m		
LFY7-T1000W-*-CL-O-4	4.2 W/m	5 m	7.8 m	12.5 m	20.0 m		
LFY7-T1000W-*-CL-O-2	2.1W/m	5 m	15.5 m	25.0 m	39.0 m		
LFY18-T1000W-*-CL-O-12	12.7 W/m	5 m	2.6 m	4.2 m	6.5 m		
LFY18-T1000W-*-CL-O-10	10.8 W/m	5 m	3.2 m	5.1 m	8.0 m		
LFY18-T1000W-*-CL-O-6	6.9 W/m	5 m	4.8 m	7.7 m	12.0 m		
LFY18-T1000W-*-CL-O-4	4.9 W/m	5 m	7.2 m	11.5 m	18.0 m		
LFY18-T1000W-*-CL-O-2	2.9 W/m	5 m	13.5 m	22.0 m	35.0 m		



#### **Installing the product**

Do not cut the LED fixture and lead wire at a job site.

To prevent water and moisture entry, ensure proper sealing at the connection of cables and the terminal of the connector.

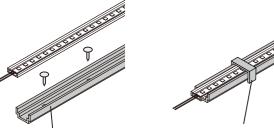
2. Push the mounting clip until click

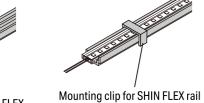
#### Installation with mounting rail

1. Fix the mounting rail by screws (pan head scew M3 recommended) sound. Recommended 5 pcs/m. supplied by installer. Insert the lighting fixture into the mounting rail.

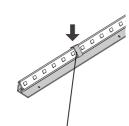
Mounting rail 1000 for SHIN FLEX

(LFY-RL1000)





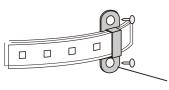
(LFY-RC)



45°Mounting rail 1000 for SHIN FLEX Mounting clip for SHIN FLEX rail (LFY-RC)

#### Installation with mounting clip

(LFY-45RL1000)

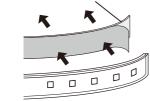


1: Fix the mounting clip by screws (pan head scew M3 recommended) supplied by installer. Recommended to use min. 5pcs/m.

Mounting clip (LFY-RC)

#### Installation with double sided tape

Double-sided tape supplied by installer



- Ensure that the surfaces are clean and dry before applying the tape. Dust, dirt, or moisture may affect the adhesion and cause the LED fixture to fall off.
- Properly align the LED fixture before sticking it with the tape. Repositioning the LED fixture after applying the tape may damage it or the surface.
- Select the appropriate double-sided tape for installation by checking the manufacturer's instructions. Temperature range and surface compatibility may affect the adhesion.

#### **Connecting to the power supply**

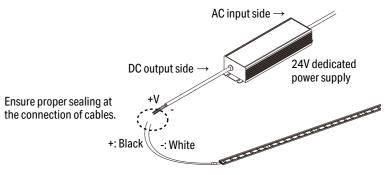
#### Caution: Installation environment of power supply

Follow the instructions in the manual for the power supply regarding the temperature, humidity, and other operating environment conditions.

- Cables used for connecting LED fixtures and Power supply must be a suitable type and gauge.
- Cables should be joined with suitable terminal block or methods as appropriate to the installation and operating environment. Caution: When using thin dimension cable in long extended length, the resistance of cable will increase. Voltage drop and heat dissipating may occur and result in brightness decreasing.

Caution: When separating one cable to multiple circuits in the same gauge, the current loading focuses on the junction of the branch circuit and high temperature will accumulate from there. Please consider the loading of the power supply (quantity of LED fixture) and review the wiring system to avoid the above problem.

- When connecting the dimmer driver with power supply, unpredicted noise might occur. It is a characteristic of electronic devices, not a malfunction of the LED fixture. Please choose an appropriate power supply and consider a place to install. Reducing the loading factor of LED fixture might improve the noise from the power supply while the noise for the LED fixtures might be improved by splitting the circuit of LED fixtures into multiple.



Outdoor cable 3M TR connector for FLEX (CAD-3000-MEFE-O)

## **Cautions**

The product is delicate electric equipment. Handle the lighting fixtures with care.

- Do not twist, pull, fold, step on, or apply pressure to the lighting fixtures during installation. Do not pull the lighting fixture in the longitudinal direction when installing it on the rail.
- Do not use roller or other tool to install the lighting fixture.
- When installing the lighting fixture into the rail, do not press or extend the tube.
- Do not paint on the lighting fixtures. It may cause color shifting.

