



# Luci Power FLEX EX Outdoor

15mm pitch (83.2mm cut Substrate)  
20mm pitch (125mm cut Substrate)  
30mm pitch (166.2mm cut Substrate)


## Instruction Manual

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### To ensure safe usage


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 cable for this product.**

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

 Do not supply the power through the lead wire from both sides.

 Supply the power through the lead wire from one side.



- **Electrical work certificate is needed to install and inspect this product. Please ask electrician for the installation.**
-  Use a DC24 V power supply.  
Never connect to any other power supply.  
Always use a circuit breaker of suitable capacity in the power supply.  
If the capacity is not suitable, the breaker may not work when abnormal current occurs, creating risk of fire.
-  Always shut off the main power supply before performing work or inspection.  
Do not connect or disconnect the lead wires of the LED fixture while power is supplied.
-  Firmly insert and connect the connectors.  
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.
-  Important notice for storage  
  
Observe the storing temperature of our LED fixtures: 0 °C to 55°C  
Please do not store the carton or the packages of our LED fixtures in the following conditions:  
- wet location- places of high humidity  
- places with much litter or dust  
- places exposed to sun light directly  
- places with solvent such as a paint liquid is stored or volatile materials are volatilized.  
  
During storing period, please do not put the cartons or individual 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 construction period.
-  Always test before connecting the LED fixture to a switch or dimmer.
-  Please rainproof using rainproof endcaps and lead wire coating when this product is used outside.
-  Do not use in the following environments:  
- A location at high temperature (+35°C or higher) (usage environment temperature is 0°C to +35°C).  
- A location where water collects, and under the water.  
  
- Place with a constantly high humidity level (sauna, public bath, etc.)  
- A dusty location.  
- A location with corrosive or inflammable gases.  
- A highly airtight location.  
- A location where the product is directly exposed to salt water 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 the LED fixture:  
- Forcibly remove the product after mounting it.  
- 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 shock.
-  When there is abnormal situations, please cut off the power immediately, consult with electricians, and do not touch the LED fixture with hands.
-  Do not cut the LED fixture and the lead wire of outdoor product at a job site.  
  
Please do appropriate treatment for the lead wire and connector of the terminal of outdoor LED fixture.

### Please read before 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 all 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 deviations in LED color are unavoidable due to the characteristics of the product.

### Maintenance 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 is 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, splits, 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 that has been soaked in a neutral detergent diluted with water and squeezed dry. To finish off, wipe it with a damp cloth and dry it.

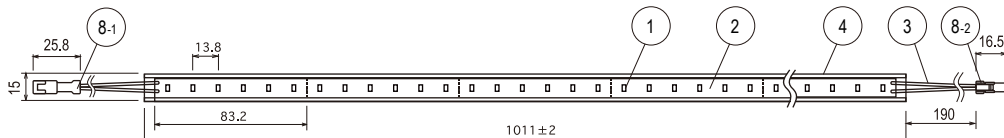
**This product cannot be bent less than this angle** 

## Product specifications

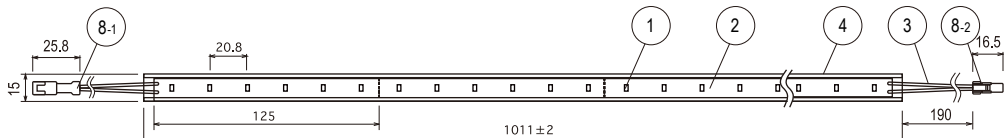
※unit of measure=mm

### ■ Front view

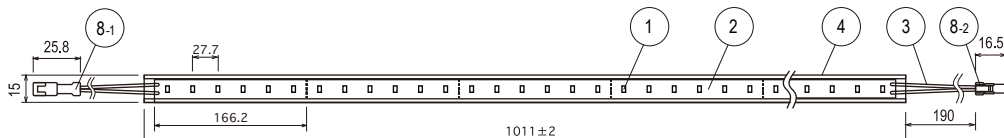
【LFPEX15-T1000W-※-CL-O】



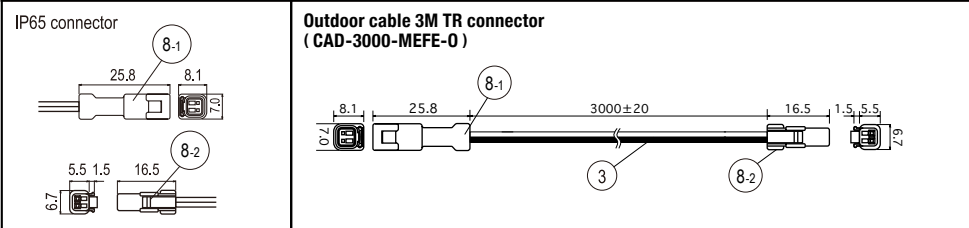
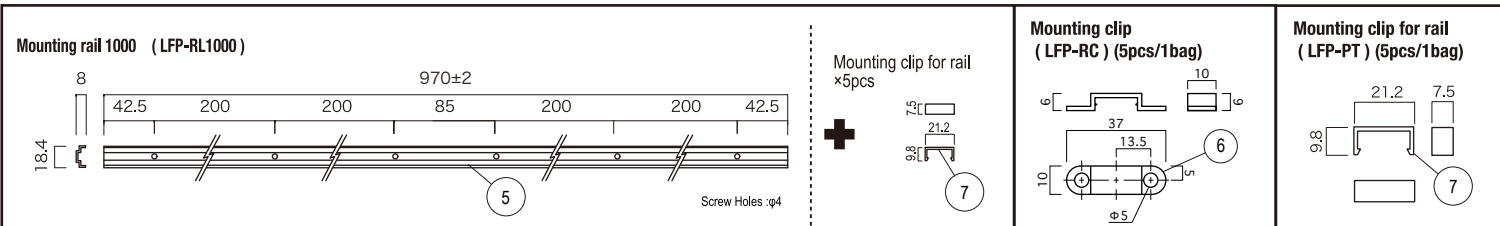
【LFPEX20-T1000W-※-CL-O】



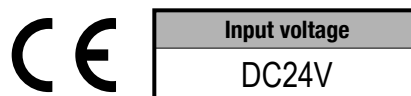
【LFPEX30-T1000W-※-CL-O】



### ■ Option parts

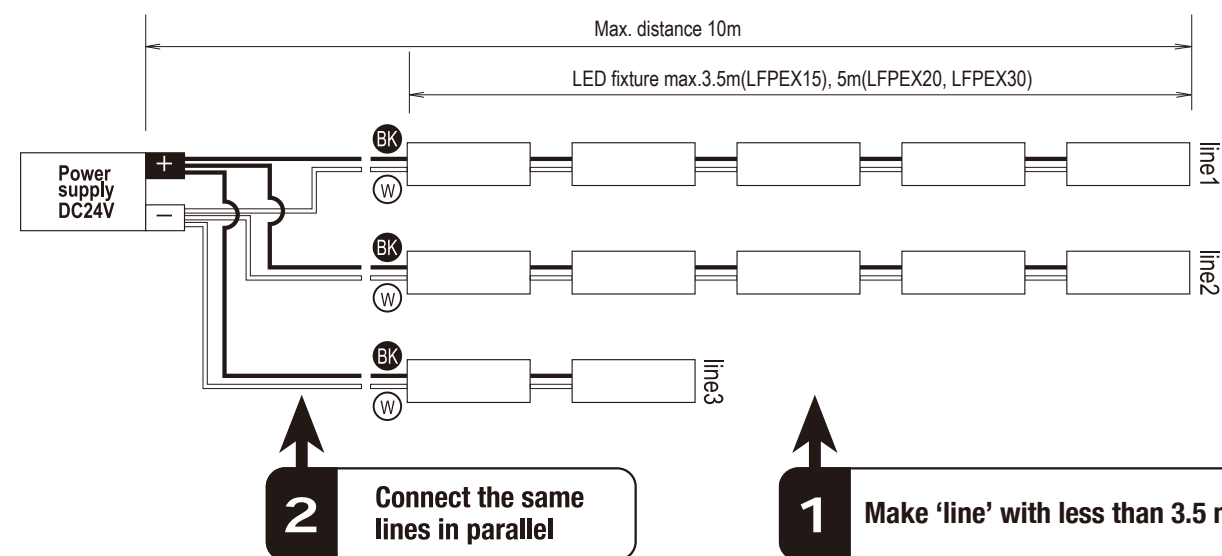


**Cables**  
Recommended : VCTF-2C 0.75sq  
※Cables are not included



#	Item	Name Materials etc.
①	LED	SMD type
②	Tape Substrate	FPC
③	Lead Wire	Black+, White-
④	Body	Flexible Acrylic, Clear
⑤	Mounting rail	AES
⑥	Mounting clip	Polycarbonate, Clear
⑦	Mounting clip for rail	Polycarbonate, Clear
⑧	IP65 connector	Nylon, White, UL94V-0

## Connecting lamp fittings



- ※Max. connectable length depends on the wattage of the power supply.
- ※Max. length per circuit of Luci power FLEX EX 15mm pitch IP65 is 3.5m.  
Max. length per circuit of Luci power FLEX EX 20mm pitch and 30mm pitch IP65 is 5m.  
If it exceeds, please split into multiple circuits.
- ※Max. distance from the power supply to the end of LED fixture is 10m.

Power supply	Max connectable length per power supply									
	15mm pitch		20mm pitch		30mm pitch(9.5W/ m)		30mm pitch(6.5W/ m)		30mm pitch(4.5W/ m)	
	Normal operation	During dimmer use	Normal operation	During dimmer use	Normal operation	During dimmer use	Normal operation	During dimmer use	Normal operation	During dimmer use
30W	1.1m	0.9m	1.7m	1.4m	2.2m	1.8m	3.2m	2.7m	4.6m	4m
50W	1.9m	1.6m	2.8m	2.4m	3.6m	3.1m	5.3m*	4.6m	7.7m*	6.6m*
75W	2.8m	2.4m	4.3m	3.7m	5.5m*	4.7m	8m*	6.9m*	11.6m*	10m*
100W	3.8m*	3.2m	5.7m*	4.9m	7.3m*	6.3m*	10.7m*	9.2m*	15.5m*	13.3m*
150W	5.7m*	4.9m*	8.6m*	7.4m*	11m*	9.4m*	16.1m*	13.8m*	23.3m*	20m*

\* : split into multiple circuits

Item / Product Name	Luci Power FLEX EX IP65				
LED pitch	15mm pitch	20mm pitch	30mm pitch(9.5W)	30mm pitch(6.5W)	30mm pitch(4.5W)
Model No.	LFPEX15-T1000W-※-CL-O	LFPEX20-T1000W-※-CL-O	LFPEX30-T1000W-※-CL-O-9	LFPEX30-T1000W-※-CL-O-6	LFPEX30-T1000W-※-CL-O-4
Power consumption	18.2W/m	12.1W/m	9.5W/m	6.5W/m	4.5W/m
Input current	760mA(max)	505mA(max)	395mA(max)	270mA(max)	187mA(max)
Number of LEDs	72 LED	48 LED	36 LED	36 LED	36 LED
Weight	60g				
Environment	In & Outdoors				
Operating temperature	0℃～+35℃(No Condensation)				
Max. sets connectable	3.5m	5m			
Material (Body)	Soft acrylic				
Min. allowable bend range	R50mm				
Accessories	-				
Option parts	Mounting rail, Mounting clip, Mounting clip for rail				
Light source color (※)	White(W), Warm white 3500K(WW), Warm white 3000K(L30), Warm white 2700K(L27), Warm white 2400K(L24), Warm white 2100K(L21), Warm white 1900K(L19)				
Certification	CE				
Dimmable	Yes				

## Warranty coverage table

Operation Environment	Indoor	Outdoor						
		Surface emitted light Interior light channel sign	Back channel sign	Semi-outdoor (Construction is not directly exposed to rain, etc.)	Construction in which rain, etc., does not collect	Construction in which rain, etc., collects	Exposed (Direct exposure to rain and ultraviolet light in sunlight)	Areas constantly emerged in water
Warranty	○	○	○	○	○	×	△	×

○ = Covered by warranty △ = Requires consultation × = Not covered by warranty

## Connecting to the power supply

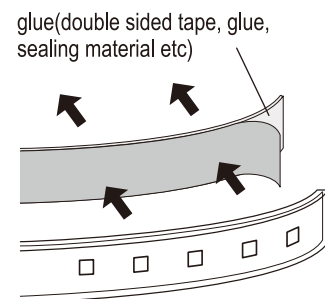
- Cables used for connecting LED fixtures and Power supply must be a suitable type and gauge.
- Cables should be joined with suitable terminal block or methods as appropriate to the installation and operating environment.  
Caution: When using a long cable with thin dimension, the resistance of cable will increase. Voltage drop and heat discharging 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 liberate on 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.

## Installing the product

### Usage when flexed

#### Mounting with glue

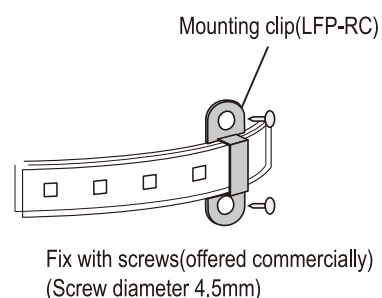
Use glue to mount the product when screws cannot be used.



※Acrylic materials are recommended for glue

#### Screw fixing

Mounting clip have screw holes so use them to fix the product.



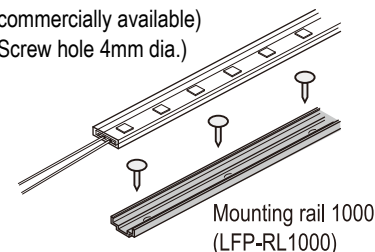
Fix with screws(offered commercially)  
(Screw diameter 4.5mm)

### Direct usage when flexed

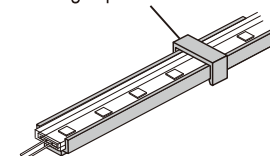
#### Mounting with screws

Fix with mounting rail or clip. However, both cannot be used at the same time.

Fixed with screws  
(commercially available)  
(Screw hole 4mm dia.)



Mounting clip for Power FLEX fail



#### Caution



When inserting the lamp fitting into the rail, do not press with excessive force, and exercise caution not to damage the LEDs, electronic components, board, and other parts with your fingers or a tool. Risk of LED non-illumination, wire breakage and other failure.

### Important points for rail mounting

**Do not push lengthwise into the rail**

Caution! If tension is applied for an extended period in the horizontal direction, non-illumination due to circuit breakage and other damage to the lamp fitting may occur.

- If you are inserting a tube into the rail, insert the side that is least thick first. (Note1)
- Do not use a roller or other tool to insert by pressing and extending the tube lengthwise along the rail.
- When inserting the tube, press down perpendicular to the rail on the thickest side of the tube with your thumb.
- The tube is a soft material. Do not apply stress to the top surface on which the LEDs are attached.
- To remove the tube, insert your finger between the rail and tube and gently detach the tube.

