



# Luci Power FLEX THOF

## Instruction Manual

**Luci Pte. Ltd.** Singapore World HQ  
52A Tanjong Pagar Road, Singapore 088473  
Tel: +65-6291-2410

**Luci Co., Ltd.** Tokyo Japan Regional HQ  
Akasaka Bldg.F44-13-13, Akasaka, Minato-ku,  
Tokyo 107-0052, Japan  
Tel: +81-3-6327-7409 Fax: +81-3-6327-7410

### 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.



**Electrical work certificate is needed to install and inspect this product.**  
**Please ask electrician for the installation.**



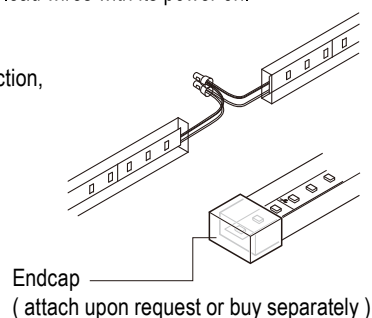
Please use DC24V power supply.  
Do not use other power supplies such as AC220~240V.



Please turn off all the powers when installation and inspection.  
Do not connect or disconnect the lead wires with its power on.



If the polarities are in wrong direction,  
electric resistances will become  
hot and lighting will be destroyed.  
Please connect the lead wires  
with same color and insulate  
with sleeve-insulation tape  
shrinkage tube.



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 light fittings: 0 °C to 55°C  
Please do not store the carton or the packages of our light fittings 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 leave the cartons or individual packages  
vertically.  
Please do not open individual package until just before installing light fittings to  
avoid any damage to the light fittings.

Please do not place heavy object on the carton.  
Please do not use LED fixtures as the working light during construction period.



When this product is cut, please use endcaps to ensure  
proper protection of the LED fixture against dirt and moist.



This lamp fitting is for indoor use only.  
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 with high humidity.  
- A dusty location.  
- A location with corrosive or inflammable gases.  
- A location where the product is exposed to direct sunlight.  
- A highly airtight location.  
- A location where the product is directly exposed to salt water or  
organic solvents.  
- A location subject to the effects of electric or magnetic fields.  
- A location subject to intense vibration or shock, or a location sub  
ject to continuous vibration.



Please do not do the followings to the product.  
- Cut where there is no cut-mark  
- Decompose or modify  
- Pull or twist strongly  
- Push strongly  
- Bend more than the max angle(R50mm)



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

### 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 instant sealing gulue, 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 LED.

### 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 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 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.

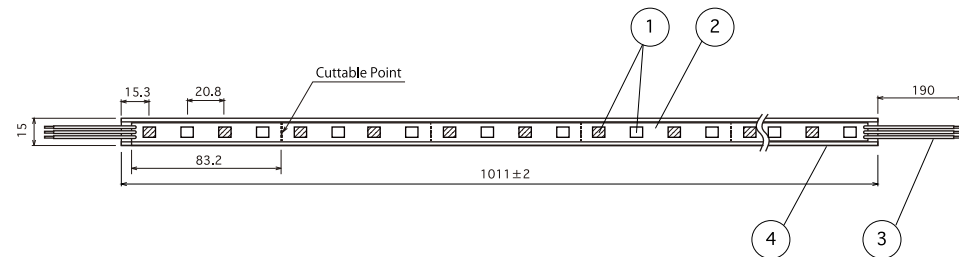
**This product cannot be  
bent less than this angle** 

## Product specifications

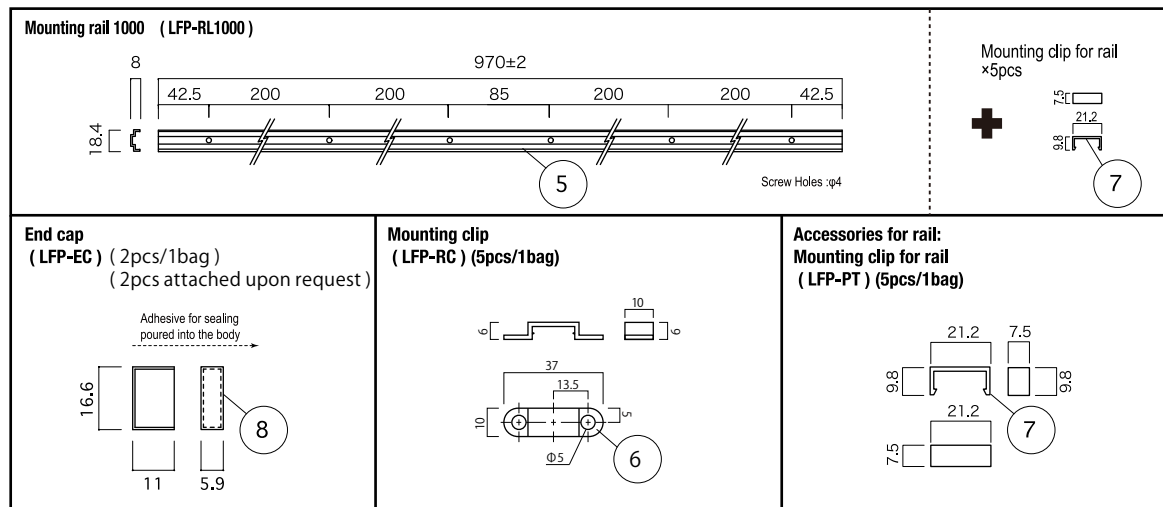
unit of measure=mm

### Front view

[LFPTH20-1000- \*-CL-I]

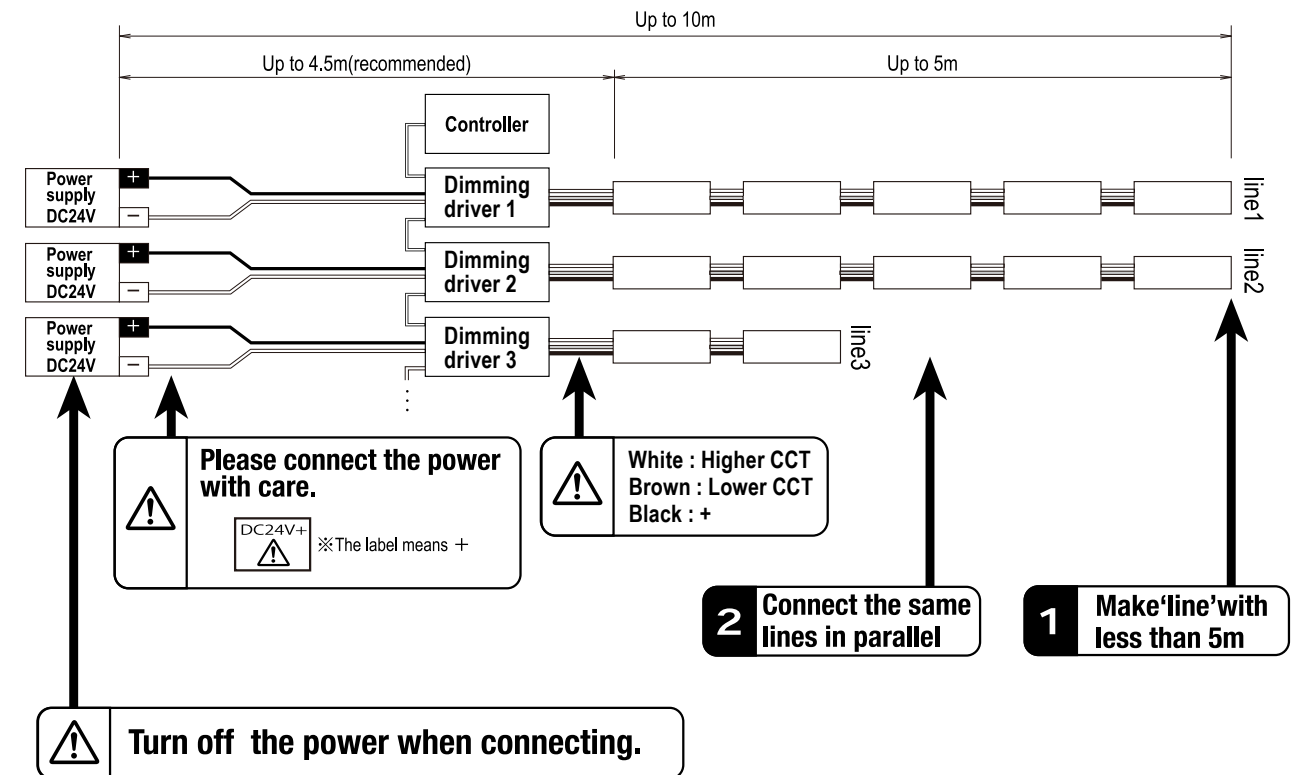


### Option parts



Input voltage		
DC24V		
#	Item	Name Materials etc.
①	LED	SMD/Top view type
②	Tape Substrate	FPC
③	Lead Wire	UL1007 AWG22 White1ch, Brown2ch, Black+24V
④	Body	Soft acrylic, Clear
⑤	Mounting rail	AES
⑥	Mounting parts	Polycarbonate, Clear
⑦	Mounting clip for rail	Polycarbonate, Clear
⑧	End cap	Polycarbonate, Clear

## Connecting lamp fittings



- ※Amount of the connecting device depends on the power output(W).
- ※Luci Power FLEX THOF can be max connectable units to 5m. The max distance between the power to the last device is 10m.
- ※Divide into multiple lines when the amount exceeds more than the max connectable units.

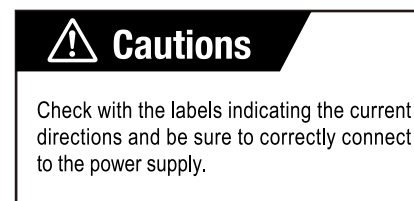
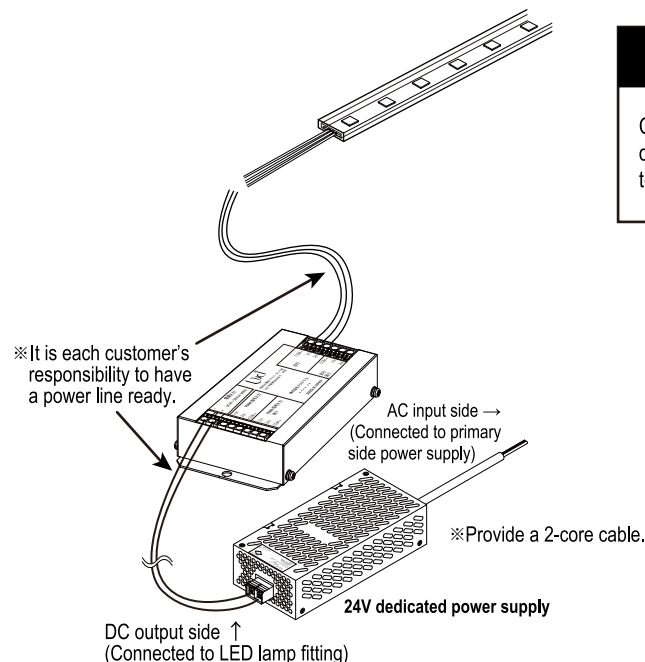
## Connecting to the power supply

**Caution: Installation environment of power supply**

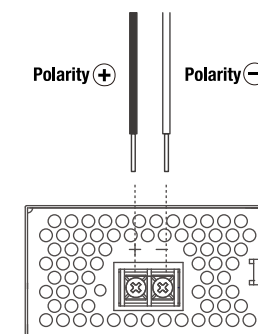
**Follow the instructions in the manual for the power supply regarding the temperature, humidity, and other operating environment conditions.**

Item / Product Name	Luci Power FLEX THOF 20mm pitch
Model No.	LFPTH20-T1000W- *-CL-I
Power consumption	11.0W (Max)
Current consumption	460mA (Max)
Number of LEDs	48
Weight	55g
Max. sets connectable	5m
Ambient temperature	0°C ~ +35°C (No Condensation)
Environment	Indoors
Material (Body)	Soft acrylic
Min. bending range	R50mm
Attachments	End cap × 2 (※upon request)
Option parts	End cap, Mounting clip, Mounting rail
Dimmerble / Tunable	○

Light source color (※)	
N ( Natural white 5300K ) , W ( White 4200K ) , WW ( Warm white 3500K ) , L30 ( Warm white 3000K ) , L24 ( Warm white 2400K ) , L21 ( Warm white 2100K ) , L19 ( Warm white 1900K ) , B ( Blue ) Possible to tone	
Max member connectable per power supply	
Power supply	Total connectable length * = for multiple systems
30W	~ 2m
50W	~ 3.3m
75W	~ 5m
100W	~ 6.6m*
150W	~ 10m*



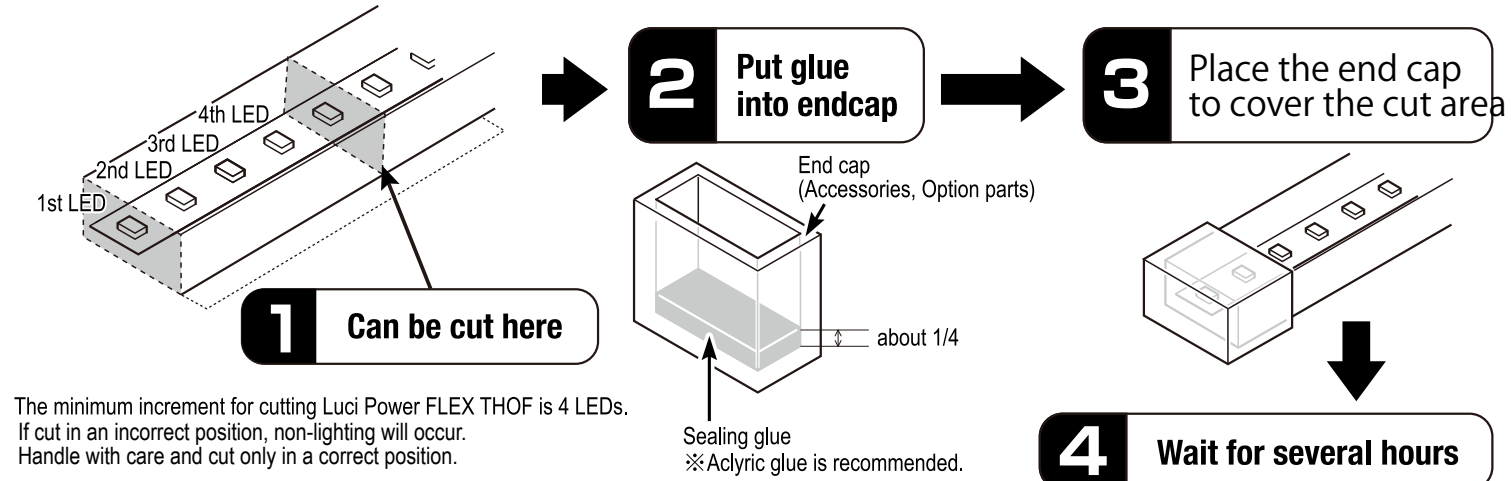
- When wiring, make your selection by paying careful attention to the cable used at the input and output. When current flows in a long cable, the loss (heat generation) is generated by resistance, etc.
- When the cable is bundled, heat dissipation becomes poor and the temperature becomes extremely high. When bundling 5 cables or more, connect by lowering the load factor (number of connected devices).



Ex: 150W dedicated power supply connection section details

## Cutting device See a separate document

The LED fixture can be shortened by cutting in increments of 4 LEDs



The minimum increment for cutting Luci Power FLEX THOF is 4 LEDs.  
If cut in an incorrect position, non-lighting will occur.  
Handle with care and cut only in a correct position.

## Installing the product

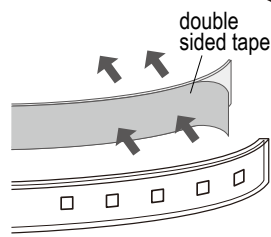
### Curved installation

#### Mounting with double sided tape

Use double sided tape to mount the product when screws cannot be used.

Completely wipe off any water, oil, or dust on the mounting surface.

\*The double sided tape may come off by turning the LED fixture on and off.

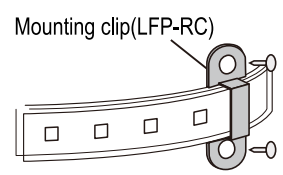


#### Screw fixing

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

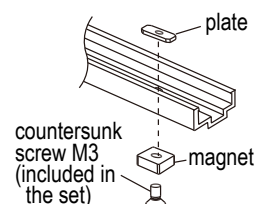
Fixed by screw (commercially available)  
(Screw hole 5.0mm dia.)

Recommended screw: pan head screw M3



### Magnet installation

When installing the magnet set, please read the instruction manual that comes with the magnet set and install it correctly.



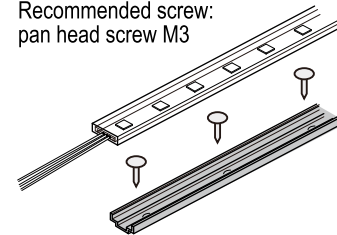
### Straight installation

Fix all points with screws.

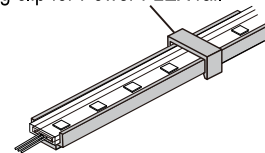
When rails are cut for use, they should be fixed with screws at every 200 mm position.

Fix the mounting clip 5pcs per 1M for downwards installation.

Fixed by screw (commercially available)  
(4mm screw hole)  
Recommended screw:  
pan head screw M3



Mounting clip for Power FLEX rail



• Mounting rail 1000 for Power FLEX (LFP-RL1000)

• Mounting rail 900 for Power FLEX (LFP-RL0900)

• Mounting aluminum rail 1000 for Power FLEX (LFP-RL1000-AL)

#### Caution



When inserting the LED Fixture into the rail, do not press with forces using fingers or a tool, it may cause damage to the LEDs, electric components boards, and other parts. There will be a high risk of unlighted LEDs, wire breakage and other failure occurring due to above improper mishandling.

### Important points for rail mounting

**Do not push lengthwise into the rail**

Caution! Applying a stretching force in the horizontal direction for a long period of time may cause the LEDs not lightening up due to circuit breakage or other reasons.

- If you are inserting a fixture into the rail, insert from one side to another side. (Note1)
- Do not use rollers or other tools to push and stretch the tube lengthwise along the rail to insert it.
- When inserting the tube, push it with your thumb in a direction perpendicular to the rail.
- The tube is a soft material and should not be too much stressed on the surface where the LED is attached.
- To remove the fixture from the rail, insert your finger between the rail and tube and gently detach the fixture.

