



# Luci SHIN UQ FLEX (LFUY-I: Top / Vertical bend) Luci SHIN UQ FLEX $\alpha$ (LFUAY-I: Side / Horizontal bend)


Indoor use only

## Instruction Manual

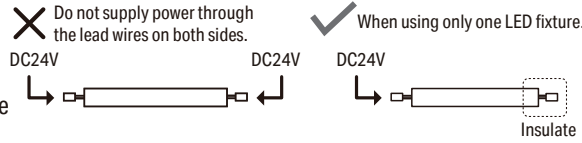
**Luci Pte. Ltd.** Singapore World HQ  
13A Bukit Pasoh Road, Singapore 089827  
TEL +65-6291-2410  
**Luci Co., Ltd.** Tokyo Japan Regional HQ  
Akasaka Bldg. 3F, 4-13-13, Akasaka, Minato-ku, Tokyo 107-0052, Japan  
Tel: +81-3-6327-7409

### ⚠ To ensure safe usage

The following are the safety cautions to prevent any harm or damage to others.  
If the product is used inappropriately, 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.  
If using only one light fixture, insulate the unused connector with self-adhesive tape or electrical tape.





✗ Do not supply power through the lead wires on both sides.  
DC24V DC24V


✓ When using only one LED fixture.  
DC24V Insulate


- 


A Certified Electrical Worker/Engineer is recommended to install and inspect the product.
- 


Use a DC24V power supply. Never connect to any other power supply. Always use overcurrent breakers and circuit breakers of the correct capacity for the power supply. If the capacity is not suitable, the breaker will not operate and abnormal current will flow, which may cause a fire.
- 


Always shut off the main power supply before performing work or inspection. Do not connect or disconnect the lead wires of the light 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 use the product if the cover is damaged. Risk of an accident and electrical shock.
- 


If the product is dirty, wipe with a dry cloth. Do not use thinner, benzene, or other organic solvents to clean the product and do not wash with water.
- 


Do not use a brush or an abrasive product to polish metal parts. Risk of damage and corrosion.
- 


**Important notice for storage**  
Please ensure the fixture is stored within -10°C to 60°C  
Please do not store the carton or the packages of our light fixtures in the following
- 

conditions:  
- wet location  
- places of high humidity  
- places with a lot of litters and dust  
- place that sunlight is directly exposed.  
- places where a solvent such as paint is stored
- 


During storing period, please do not place the cartons or individual packages vertically.
- 


Please do not place heavy objects on the carton.  
Please do not use our light fixtures as the working light during construction period.
- 


Always test before connecting the light fixture to a switch or dimmer.
- 

The product must be allowed to dissipate heat. Allow sufficient space for ventilation ( heat dissipation ) between the light fixture and building structure. Avoid installing the light fixture close to each other. It may shorten product life or cause a fire. When installing the light fixture in a box, please make sure to provide the air ventilation hole.
- 

✗ ✗

✓ ✓
- 

When there are abnormal situations, please cut off the power immediately, consult with electricians, and do not touch the lighting with bare hands.
- 

This light fixture is for indoor use only. Do not use the products in the following environments:  
**Outdoors**  
- Location at high temperature ( +45°C or higher ) (Operating temperature is -5°C to 45°C.  
- Location where water may splash onto the product.  
- Location with high humidity.  
- A dusty location.  
- Location with corrosive or inflammable gases.  
- Airtight location.  
- Location with direct exposure to salt water or organic solvents  
- Location in direct sunlight.  
- Location subject to the effects of electric or magnetic fields.  
- Location subject to intense vibration or shock, or a location subject to continuous vibration.
- 

**Do not do the following :**  
- 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 / connector.  
- Use or connect with a damage cable.  
- Do not apply pressure to the product.  
- Drop the product or subject the product to intense vibration or shock.  
- Solder the lead wire to the circuit board.

### Please read before the usage

- 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.
- To mount in the light fixture, use mounting clips (Accessories) and confirm that the mounting clip is securely fixed.

Caution : Must choose suitable power supply

Regarding the temperature, humidity, and other conditions of the operating environment, follow the instructions in the manual for the power supply.

### Maintenance and Inspection

- Light fixture has a life span.
- Degradation of inner materials occurs after 8-10 years of installation even when the light fixture looks fine from the outside. Components of the light fixture degrade due to the generation of 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 carried out at least once every 6 months.
- At least once every 3 years, an inspection should be carried out by a specialist such as a product contractor.
- If the light fixture is used for a long time without having an inspection, there is a small possibility that it could lead to fuming, igniting, electric shock and the like.

#### 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?

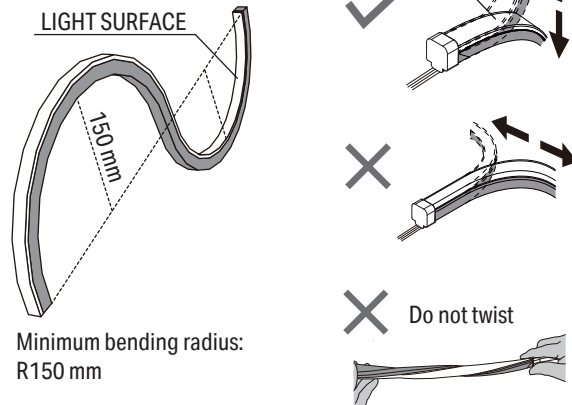
#### Cleaning Method

- Lightly wipe the light fixture with a soft cloth.
- To best clean the light fixture, wipe dirt with a soft cloth which has been soaked in a neutral detergent diluted with water and squeeze firmly. To finish off, wipe it with a damp cloth and dry it.

### Bendable direction and minimum bending radius

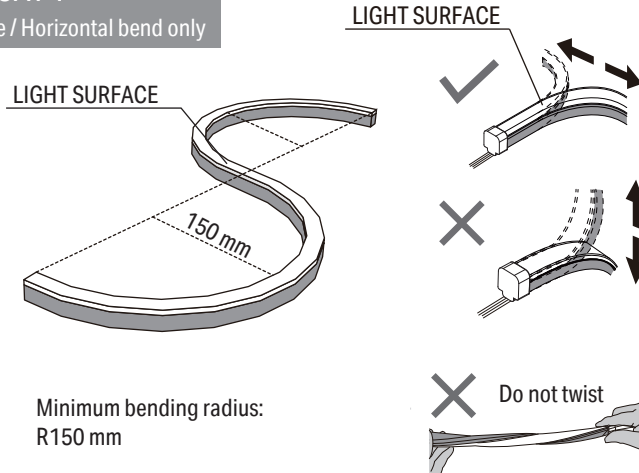
Caution: If light fixture is bend in the wrong direction or over-bended during installation work, it may damage the fixture and it may stop working.

**LFUY-I**  
Top / Vertical bend only



Minimum bending radius: R150 mm

**LFUAY-I**  
Side / Horizontal bend only

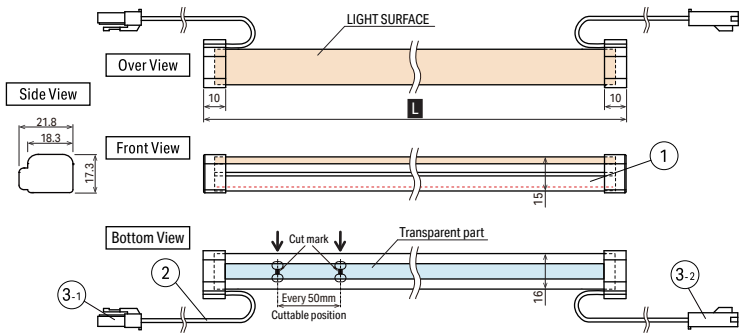


Minimum bending radius: R150 mm

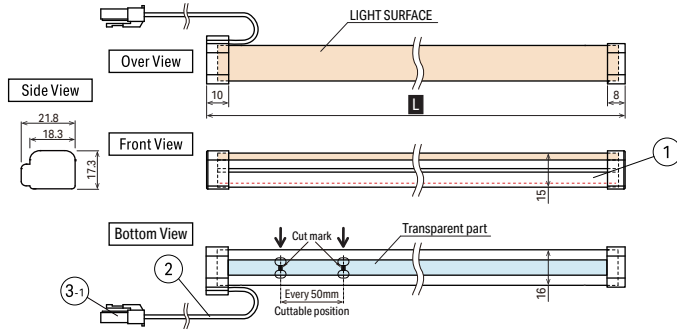
## Product specification

※unit of measurement

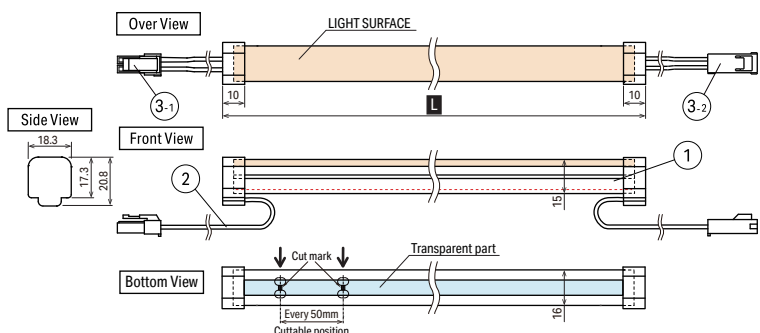
LFUY / LFUAY-T\*\*\*\*WR-\*-DF-I-\* | W: Both ends lead, R: Side ( Right ) feed



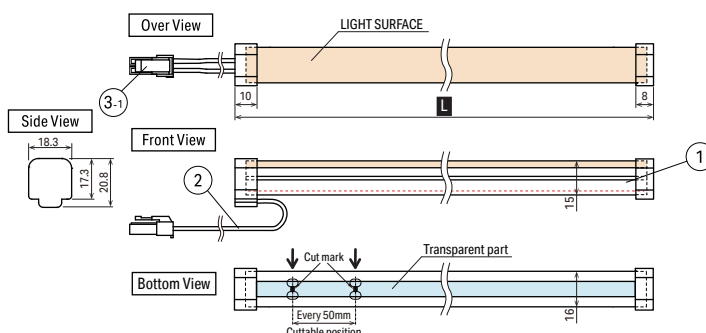
LFUY / LFUAY-T\*\*\*\*SR-\*-DF-I-\*      S: One end lead, R: Side( Right )feed



LFUY / LFUAY-T\*\*\*\*WB-\*-DF-I-\*      W: Both ends lead, B: Back feed



LFUY / LFUAY-T****SB-*-DF-I-*	S: One end lead, B: Back feed
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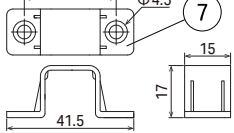
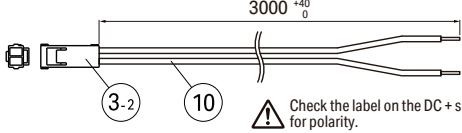
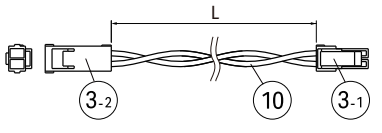
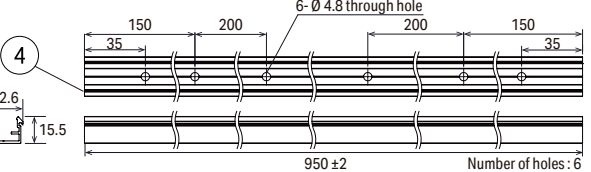
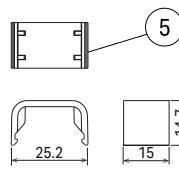
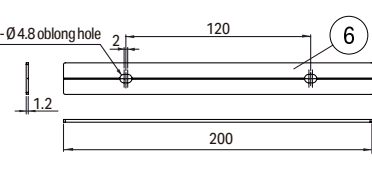
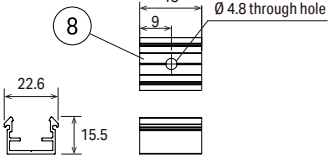
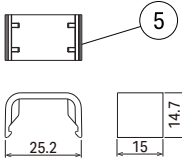
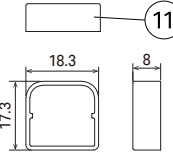
CE

**Input voltage**

DC24V

No	Item	Name of material
①	Body	Silicone, Diffuser
②	Lead wire	
③、③-②	Connector	
④	Aluminium mounting rail C	Aluminum
⑤	PC hold clip	PC
⑥	Joint plate	SUS
⑦	PC Mounting clip	PC
⑧	Aluminum mounting Parts	Aluminum
⑨	Connector cap	
⑩	Joint cable	+ : Red、- : Black
⑪	End cap	Silicone

Item / Product Name		Luci UQ FLEX (Indoor)			
Bendable direction		Top / Vertical bend only			
Lead wire	Cable feed direction	Model No.			
Both ends lead	Side(Right)feed	LFUY-T****WR-*-DF-I-20	LFUY-T****WR-*-DF-I-15	LFUY-T****WR-*-DF-I-10	LFUY-T****WR-*-DF-I-6
One end lead	Side(Right)feed	LFUY-T****SR-*-DF-I-20	LFUY-T****SR-*-DF-I-15	LFUY-T****SR-*-DF-I-10	LFUY-T****SR-*-DF-I-6
Both ends lead	Back feed	LFUY-T****WB-*-DF-I-20	LFUY-T****WB-*-DF-I-15	LFUY-T****WB-*-DF-I-10	LFUY-T****WB-*-DF-I-6
One end lead	Back feed	LFUY-T****SB-*-DF-I-20	LFUY-T****SB-*-DF-I-15	LFUY-T****SB-*-DF-I-10	LFUY-T****SB-*-DF-I-6
Item / Product Name		Luci UQ FLEX $\alpha$ (Indoor)			
Bendable direction		Side / Horizontal bend only			
Lead wire	Cable feed direction	Model No.			
Both ends lead	Side(Right)feed	LFUAY-T****WR-*-DF-I-20	LFUAY-T****WR-*-DF-I-15	LFUAY-T****WR-*-DF-I-10	LFUAY-T****WR-*-DF-I-6
One end lead	Side(Right)feed	LFUAY-T****SR-*-DF-I-20	LFUAY-T****SR-*-DF-I-15	LFUAY-T****SR-*-DF-I-10	LFUAY-T****SR-*-DF-I-6
Both ends lead	Back feed	LFUAY-T****WB-*-DF-I-20	LFUAY-T****WB-*-DF-I-15	LFUAY-T****WB-*-DF-I-10	LFUAY-T****WB-*-DF-I-6
One end lead	Back feed	LFUAY-T****SB-*-DF-I-20	LFUAY-T****SB-*-DF-I-15	LFUAY-T****SB-*-DF-I-10	LFUAY-T****SB-*-DF-I-6
Wattage (Ta=25°C)		20.7 W / m	15.9 W / m	10.8 W / m	6.4 W / m
Input Voltage (V)		24V			

<p>Accessories : PC Mounting clip for UQ FLEX (LFU-RC) ( 5pcs / 1bag )</p> 	<p>Accessories : Power supply cable 3000mm for SL connector (CAD-3000-MCNN-I)</p> 	<p>Accessories : Joint cable 1000mm / 5000mm for SL connector (CAD-1000-MCFC-I, CAD-5000-MCFC-I)</p>  <table border="1" data-bbox="1258 1434 1406 1497"> <thead> <tr> <th>Model number</th><th>Length</th></tr> </thead> <tbody> <tr> <td>CAD-1000-MCFC-I</td><td>1000±15</td></tr> <tr> <td>CAD-5000-MCFC-I</td><td>5000<sup>+250</sup><sub>-250</sub></td></tr> </tbody> </table>	Model number	Length	CAD-1000-MCFC-I	1000±15	CAD-5000-MCFC-I	5000 <sup>+250</sup> <sub>-250</sub>
Model number	Length							
CAD-1000-MCFC-I	1000±15							
CAD-5000-MCFC-I	5000 <sup>+250</sup> <sub>-250</sub>							
<p>Accessories : Aluminum mounting rail 950 for UQ FLEX Indoor (LFU-RL0950-AL-C-I)</p> 	<p>Attachment for rail &amp; Accessories : PC hold Clip for UQ FLEX AL rail (LFU-PT-B) ( 5pcs / 1bag )</p> 	<p>Attachment for rail &amp; Accessories : Joint plate for UQ FLEX AL rail (LFU-PT-E) ( 1pc / 1bag )</p> 						
<p>Accessories : Aluminum mounting parts for UQ FLEX Indoor (LFU-RL0018-AL-C-I) ( 5 pcs / bag )</p> 	<p>Attachment for rail &amp; Accessories : PC hold Clip for UQ FLEX AL rail (LFU-PT-B) ( 5pcs / 1bag )</p> 	<p>Attachment Accessories : Endcap for UQ FLEX indoor (LFU-EC) ( 2 pcs / bag )</p> 						

Spec • Rating may be subject to change without announcements.

Unit Of Measurement : mm

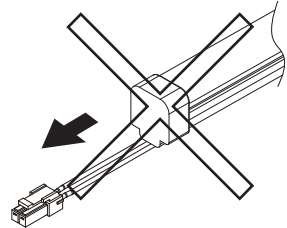
Environment	Indoor
Operating temperature	-5℃ to +45 ℃
Max. length per circuit	5m
Max. fitting length	5m
Attachment	Endcap for UQ FLEX indoor (LFU-EC) ( 2pcs / bag )
Accessories	Aluminum mounting rail 950 for UQ FLEX, Aluminum mounting parts for UQ FLEX, PC hold Clip for UQ FLEX AL rail ( 5pcs / 1bag ), PC hold Clip for UQ FLEX AL rail ( 5pcs / 1bag ), PC Mounting clip for UQ FLEX ( 5pcs / 1bag ), Joint plate for UQ FLEX AL rail, Endcap for UQ FLEX indoor ( 2 pcs / bag ), Power supply cable 3000mm, Joint cable 1000mm / 5000mm
Dimmable	Yes (0-10V/1-10V,DMX,DALI,PWM, Casambi)
Light source color	Daylight white (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 2000K (L20), Warm white 1800K(L18)

## Installing the product

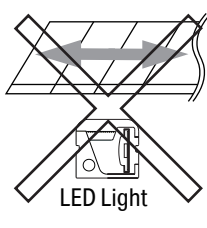
### ⚠ Cautions

In order to avoid causes leading to deformation of fixture during installation or transportation, please ensure the following;

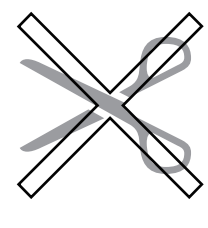
- The light fixtures longer than 2m should be transported to the installation site in their original packaging (polycarbonate cushioning material).
- For the light fixtures more than 2m in length, two or more persons should work on the installation.



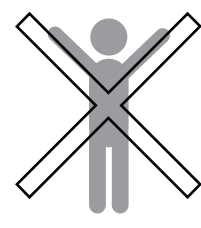
Do not pull the lead wires or side caps forcefully. It may cause wire breakage or end cap detachment, which may result in malfunction.



Do not move the Pen knife/Box cutter blade back and forth like a saw while cutting the fixture.



Do not cut with scissors, nippers, etc

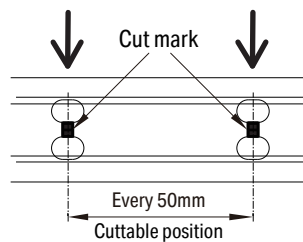
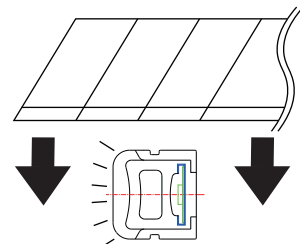


Do not install LED fixtures longer than 2m by one person.

## Cutting and terminal sealing

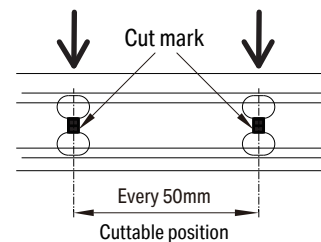
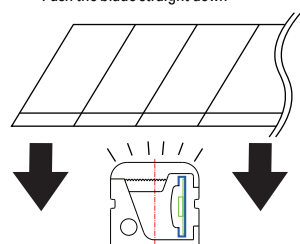
### LFUY-I Top / Vertical bend only

Pen knife / Box cutter  
Push the blade straight down



### LFUAY-I Side / Horizontal bend only

Pen knife / Box cutter  
Push the blade straight down



Wipe off any dirt, etc. from the adhesive area.

Use a thin blade such as a Pen knife / Box cutter for cutting. Use of thick blades, scissors, nippers, etc. will bend the board and cause malfunctions.

When cutting the light fixture, be sure to cut at the cutting marks shown above. If anywhere other than the cut mark is cut, the light fixture will not turn on.

When cutting, push the blade straight down along the cutting mark. Pulling the blade back and forth like a saw may cause the circuit board to fold, resulting in malfunction.

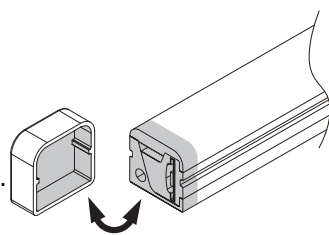
Cutting should always be done on a flat, stable surface.

The cut and insulated light fixture with end cap can only be used indoors. Do not install the products in wet or humid places.

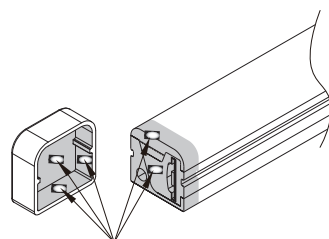
Before installation and lighting, check that the cap adheres properly.

### About Adhesives

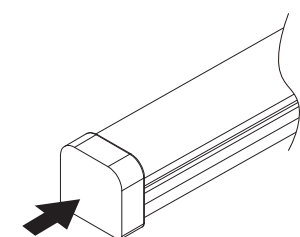
Use a set of instant adhesives and primers etc. specially designed for difficult-to-bond materials such as polyethylene, polypropylene and silicone rubber. Recommended adhesive: Cemedine Corporation CA-522



Apply primer on the cut area of the light fixture and the inside of the cap (gray area in the figure).



Apply sufficient adhesive on the cut area of the light fixture and the inside of the cap (gray area in the figure).

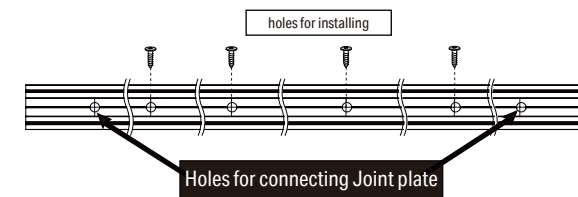


Immediately attach the end cap to the light fixture and dry it for at least 30 minutes.

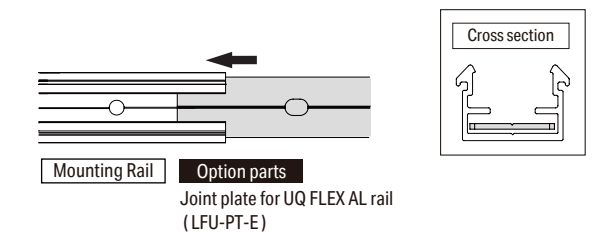
## Installation with mounting rail

The Aluminum mounting rail 950 for UQ FLEX( LFU-RL0950-AL-C) can be cut according to the length of lighting fixture. Aluminum rail mounting holes can also be made at the site by the installer. Please cut properly with a cutting tool for aluminum.

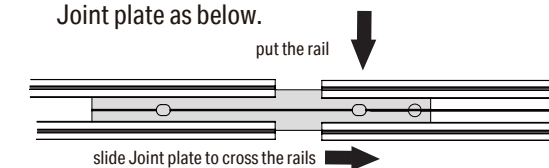
- ① Fix the aluminium rail by screws ( pan head screw M4 recommended ) supplied by installer. The screw holes at both ends should be left unused for installing with the Joint



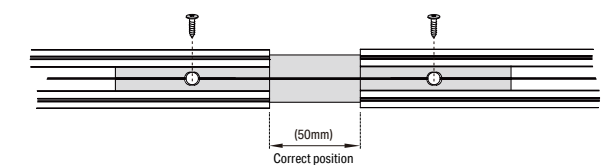
- ② When two or more rails are installed in a straight line, insert the Joint plate into bottom of the rail.



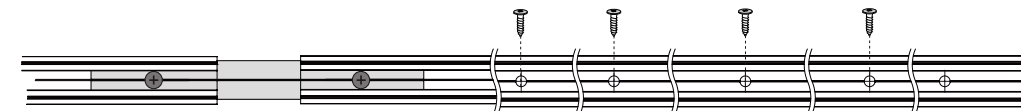
- ③ Put the second rail and slide the Joint plate as below.



- ④ Fix the holes of rails and plate altogether by screws.

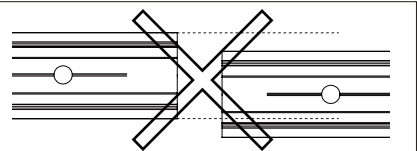


- ⑤ Fix the holes of second rail for installation like ①...



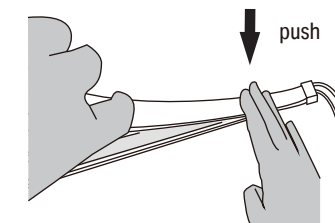
### ⚠ Cautions

When two or more mounting rails are used in a straight line, the joint plates must be used. If the rails are installed out of alignment, external force will be applied to the light fixture and it may cause defect.



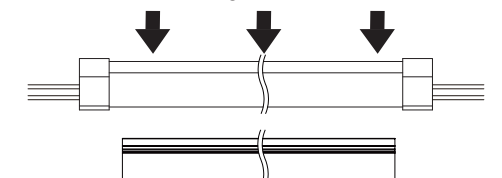
### LFUY-I Top / Vertical bend only

- ⑥ Hold one side of the light fixture and gradually push on the other side into the aluminum rail.



### LFUAY-I Side / Horizontal bend only

- ⑥ When installing LFUAY ( side bend ) on the mounting rail, the light fixture shall first be placed horizontally on the rail and the entire light fixture shall be pushed gradually horizontally into the rail so that the light fixture does not bend vertically.

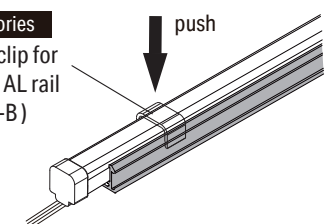


### ⚠ Cautions

When insert the light fixture into the rail, do not apply excessive pressure, and make sure not to damage the LEDs, electronic components, board, and other parts with your fingers or a tool. There are high risk of LED unlighted, wire breakage and other failure occurring due to above improper handling.

- ⑦ Push the PC hold clip for UQ FLEX rail ( LFU-PT-B ) until a click sound is heard and and make sure it is securely locked. SUS hold clip is recommended in the environment where requires durability or downwards installation. Recommended number of LFU-PT-B is minimum 3 pcs / m.

Accessories  
PC hold clip for  
UQ FLEX AL rail  
( LFU-PT-B )



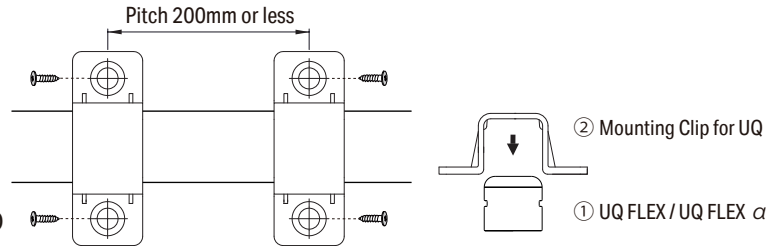


## Installation with mounting rail

### Accessories

PC mounting Clip B for UQ FLEX (LFU-RC)

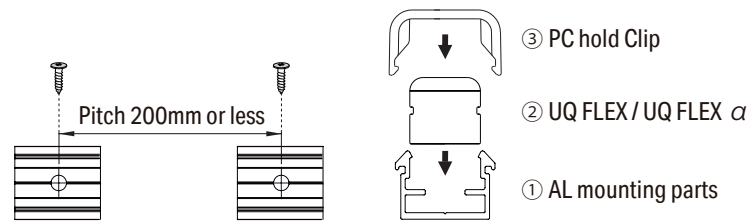
- Place the light fixture on the surface to be installed.  
Do not twist and bend the light fixture in the wrong direction.
- Fix the mounting clip by 2pcs of screws supplied by installer.  
( pan head screw M4 recommended )  
The recommended distance between clips is 200 mm or less. The clips at both ends should be 50 mm away from the ends of the LED luminaire to prevent it from lifting.



### Accessories

Aluminum mounting parts set for UQ FLEX Indoor (LFU-RL0018-AL-C-I)

- Fix the aluminum mounting parts by 1 pc of screw to the points where the light fixture is to be installed. ( pan head screw M4 recommended )  
The recommended distance between clips is 200 mm or less. The mounting parts at both ends should be 50 mm away from the ends of the light fixture to prevent it from lifting.
- Push the light fixture into the clip while keeping the correct bending direction.
- Put the PC hold clip ( LFU-PT-B ) until a click sound is heard and make sure it is securely locked. The hold clips should be used if the LED fixture is easily dislodged or installed downward.



## Connecting to the power supply

**Caution :**  
Must choose suitable power supply

Refer to the power supply manual for temperature, humidity and other operating conditions.

■ Cables used for connecting light 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.

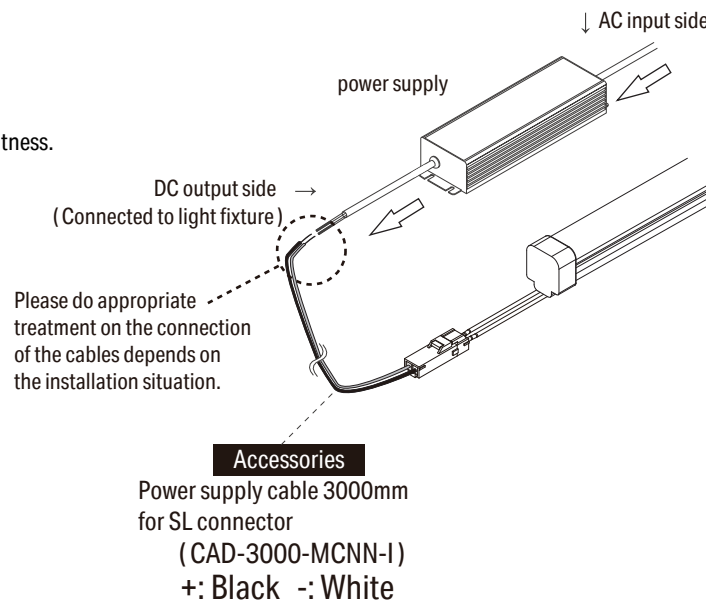
Caution: When using a long cable with thin dimension, the resistance of cable will increase. Voltage drop and heat dispatching may occur and result in a drop in brightness.

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 light 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 light fixture. Please choose an appropriate power supply and consider to have enough space to install.  
Reducing the loading factor of light fixture might improve the noise from the power supply while the noise for the light fixtures might be improved by splitting the circuit of light fixtures into multiple.

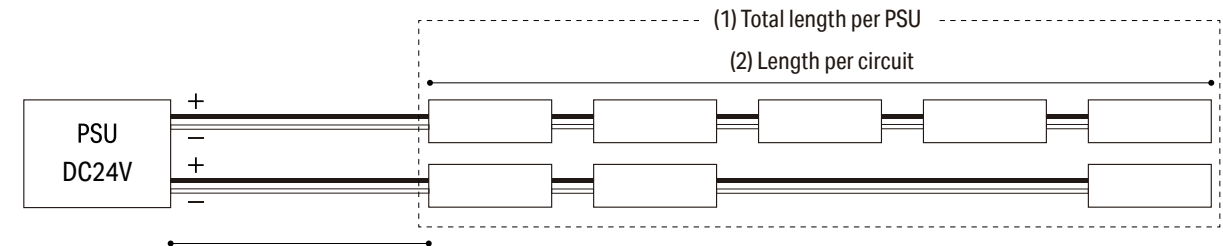
■ When you adjust the length of the power supply cable, please be careful not to damage the core wire.

■ When the cable is bundled, heat dissipation becomes poor and the temperature becomes extremely high. When bundling 5 cables or more, connect less number of light fixture for one cable.



## System configuration diagram

- Total product length per power supply depends on capacity of the power supply. Recommended loading factor is 70% ( without dimming ) or 60% ( with dimming ).
- 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.
- To minimize voltage drop, select appropriate wire gauge / diameter and consider the cable length between PSU and the beginning 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.



(3) Cable length between PSU and the beginning of luminaire (m)

Model No.	Wattage	Cross section			
		Wire gauze	0.3 sq	0.5 sq	0.75 sq
LFUY / LFUAY-T * * * - * -DF-I-6	6.4 W / m	5 m	5.1 m	8.2 m	12.9 m
LFUY / LFUAY-T * * * - * -DF-I-10	10.8 W / m	5 m	3.0 m	4.9 m	7.6 m
LFUY / LFUAY-T * * * - * -DF-I-15	15.9 W / m	5 m	2.0 m	3.3 m	5.2 m
LFUY / LFUAY-T * * * - * -DF-I-20	20.7 W / m	5 m	2.0 m	3.3 m	5.2 m

※ The length of cable that can be connected varies depending on the voltage drop.