



Luci UQ FLEX (LFU-I: Top / Vertical bend)

Luci UQ FLEX α (LFUA-I: Side / Horizontal bend)

Indoor use only

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. 4F, 4-13-13, Akasaka, Minato-ku,
Tokyo 107-0052, Japan
Tel: +81-3-6327-7409 Fax: +81-3-6327-7410

⚠ To ensure safe usage

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



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

When using only one LED fixture.

DC24V

DC24V

DC24V

Insulate



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



Use a DC24 V 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 does not match, 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 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 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 to polish metal parts.
Risk of damage and corrosion.



Important notice for storage
Observe the storing temperature of our LED fixtures: -25°C to 65°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 of exposing against sun light directly
- places with solvent such as paint is stored

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

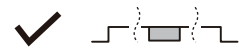
Please do not place heavy objects on the carton.
Please do not use our LED fixtures as the working light during construction period.



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



The product must be allowed to dissipate heat.
Allow sufficient space for ventilation (heat dissipation) between the LED fixture and building structure.
Avoid installing the light appliances close to each other. It may shorten product life or cause a fire.
When installing the LED 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 LED fixture is for indoor use only.
Do not use the products in the following environments:

- Outdoors
- A location at high temperature (+45°C or higher)
(usage environment temperature is -5°C to +45°C)
- A location where water may splash onto the product.
- A location with high humidity.
- 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/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 regarding installation environment of 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

- LED fixture has a life span.
- Degradation occurs inside after a few years of installation even when the 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 2 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 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

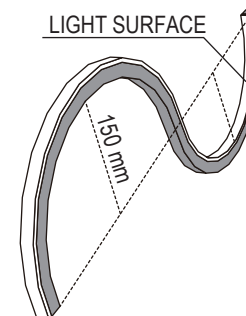
- Lightly wipe the LED fixture with a soft cloth.
- To best clean the LED fixture, wipe dirt with a soft cloth which has been soaked in a neutral detergent diluted with water and squeeze firmly. To finish off, wipe it with a damp cloth and dry it.

Bendable direction and minimum bending radius

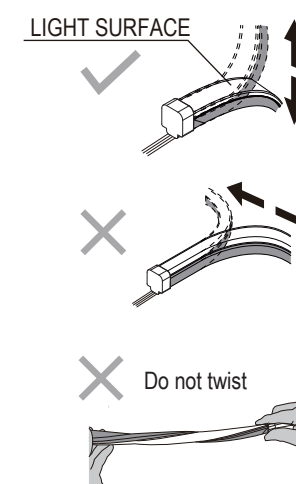
Caution: If bend the LED fixture in the wrong direction or over-bend during installation work or after fixing, it will be damaged and not turn on.

LFU-I

Top / Vertical bend only

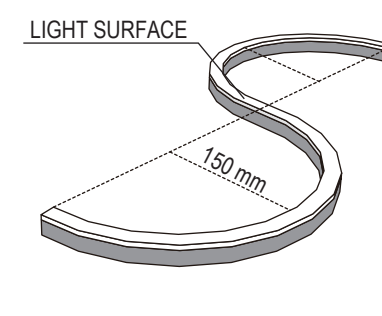


Minimum bending radius:
R150 mm

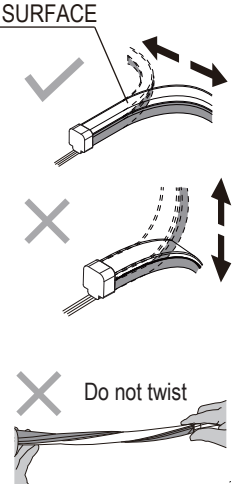


LFUA-I

Side / Horizontal bend only



Minimum bending radius:
R150 mm



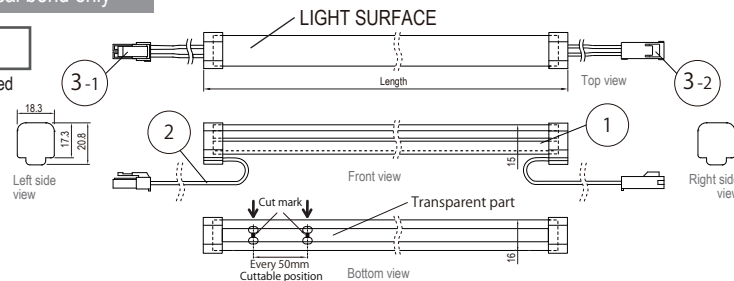
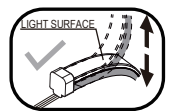
Product specification

※ unit of measure=mm

LFU-I Top / Vertical bend only

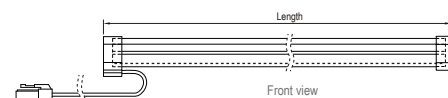
LFU-T***WB*-DF-I*

W: Both ends lead, B: Back feed



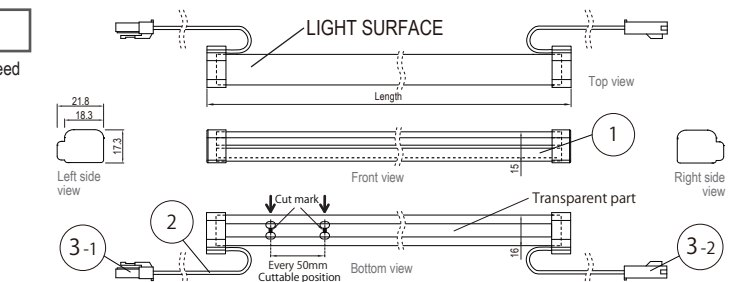
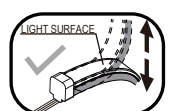
LFU-T***SB*-DF-I*

S: Single ends lead, B: Back feed



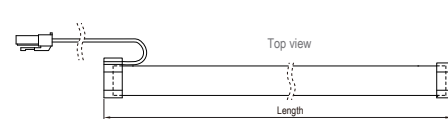
LFU-T***WR*-DF-I*

W: Both ends lead, R: Right feed



LFU-T***SR*-DF-I*

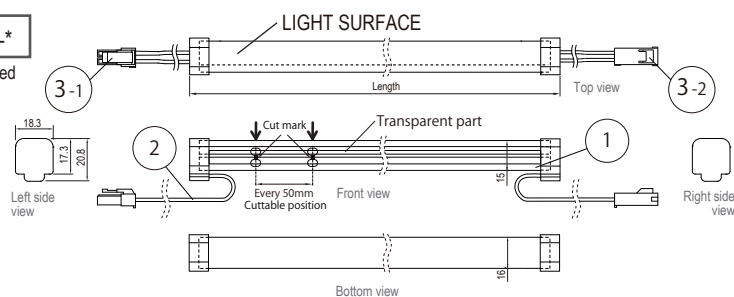
S: Single ends lead, R: Right feed



LFUA-I Side / Horizontal bend only

LFUA-T***WB*-DF-I*

W: Both ends lead, B: Back feed



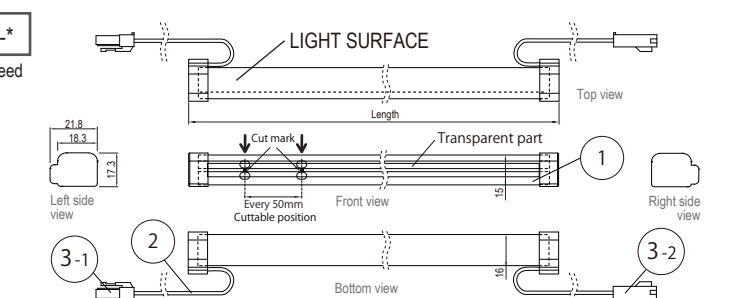
LFUA-T***SB*-DF-I*

S: Single ends lead, B: Back feed



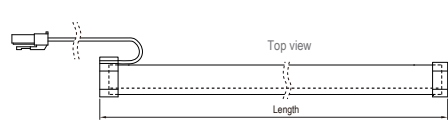
LFUA-T***WR*-DF-I*

W: Both ends lead, R: Right feed



LFUA-T***SR*-DF-I*

S: Single ends lead, R: Right feed



Luci UQ FLEX / UQ FLEX α (15.8W/m, 12.1W/m, 8W/m)
Corresponds to Length (mm) in the drawing and Model No.
W: Both ends lead : +8mm S: One end lead : +7.5mm

0050	0550	1050	1550	2050	2550	3050	3550	4050	4550
0100	0600	1100	1600	2100	2600	3100	3600	4100	4600
0150	0650	1150	1650	2150	2650	3150	3650	4150	4650
0200	0700	1200	1700	2200	2700	3200	3700	4200	4700
0250	0750	1250	1750	2250	2750	3250	3750	4250	4750
0300	0800	1300	1800	2300	2800	3300	3800	4300	4800
0350	0850	1350	1850	2350	2850	3350	3850	4350	4850
0400	0900	1400	1900	2400	2900	3400	3900	4400	4900
0450	0950	1450	1950	2450	2950	3450	3950	4450	4950
0500	1000	1500	2000	2500	3000	3500	4000	4500	5000

Input Voltage

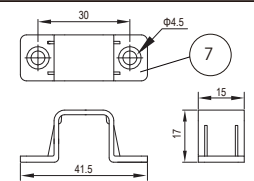
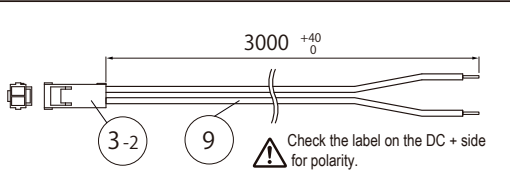
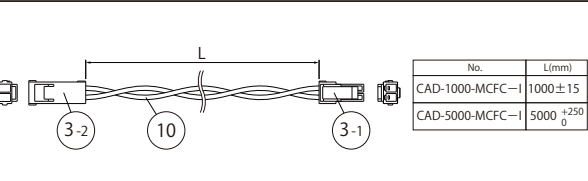
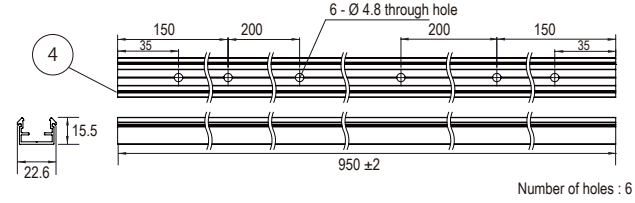
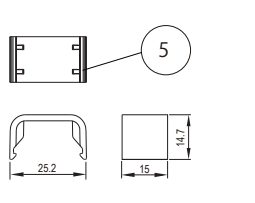
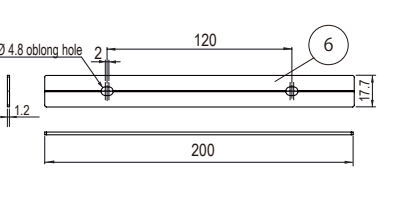
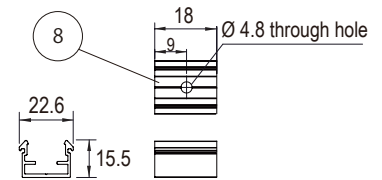
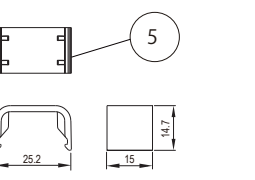
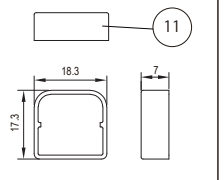
DC24V

No	Item	Name Material etc.
①	Body	Silicone
②	Lead wire	+ : Black, - : White
③-① ③-2	Connector	
④	Aluminum mounting rail	Aluminum
⑤	PC hold clip C	PC
⑥	Joint Plate	SUS
⑦	PC Mounting clip	PC
⑧	AL mounting Parts	Aluminum
⑨	Power supply cable	+ : Black, - : White
⑩	Joint cable	
⑪	Endcap	silicone

Product specification

※ unit of measure=mm

Option parts

<p>Option parts : PC Mounting clip for UQ FLEX (LFU-RC) (5pcs/1bag)</p> 	<p>Option parts : Power supply cable 3000mm for SL connector (CAD-3000-MCNN-I)</p> 	<p>Option parts: Joint cable 1000mm / 5000mm for SL connector (CAD-1000-MCFC-I, CAD-5000-MCFC-I)</p> 
<p>Option parts: Aluminium mounting rail 950 set for UQ FLEX Indoor (LFU-RL0950-AL-C-I)</p> 	<p>Accessories for rail & Option parts: PC hold Clip for UQ FLEX AL rail (LFU-PT-B)(5pcs/ 1bag)</p> 	<p>Accessories for rail & Option parts: Joint plate for UQ FLEX AL rail (LFU-PT-E)(1pc/ 1bag)</p> 
<p>Option parts: AL mounting parts set for UQ FLEX Indoor (LFU-RL0018-AL-C-I) (5 pcs/bag)</p> 	<p>Accessories for rail & Option parts: PC hold Clip for UQ FLEX AL rail (LFU-PT-B)(5pcs/ 1bag)</p> 	<p>Option parts: Endcap for UQ FLEX indoor (LFU-EC) (2 pcs/bag)</p> 

Item / Product Name		Luci UQ FLEX Indoor		
Bendable direction		Top / Vertical bend only		
Lead wire	Cable feed direction	Model No.		
Both ends lead	Back feed	LFU-T***WB*-DF-I-15	LFU-T***WB*-DF-I-12	LFU-T***WB*-DF-I-8
One end lead	Back feed	LFU-T***SB*-DF-I-15	LFU-T***SB*-DF-I-12	LFU-T***SB*-DF-I-8
Both ends lead	Side (Right) feed	LFU-T***WR*-DF-I-15	LFU-T***WR*-DF-I-12	LFU-T***WR*-DF-I-8
One end lead	Side (Right) feed	LFU-T***SR*-DF-I-15	LFU-T***SR*-DF-I-12	LFU-T***SR*-DF-I-8
Item / Product Name		Luci UQ FLEX α Indoor		
Bendable direction		Side / Horizontal bend only		
Lead wire	Cable feed direction	Model No.		
Both ends lead	Back feed	LFUA-T***WB*-DF-I-15	LFUA-T***WB*-DF-I-12	LFUA-T***WB*-DF-I-8
One end lead	Back feed	LFUA-T***SB*-DF-I-15	LFUA-T***SB*-DF-I-12	LFUA-T***SB*-DF-I-8
Both ends lead	Side (Right) feed	LFUA-T***WR*-DF-I-15	LFUA-T***WR*-DF-I-12	LFUA-T***WR*-DF-I-8
One end lead	Side (Right) feed	LFUA-T***SR*-DF-I-15	LFUA-T***SR*-DF-I-12	LFUA-T***SR*-DF-I-8
Power consumption (Ta=25°C)		15.8 W/m	12.6 W/m	8.4 W/m
Input current (A/m)		max. 0.66 A/m	max. 0.53 A/m	max. 0.35 A/m

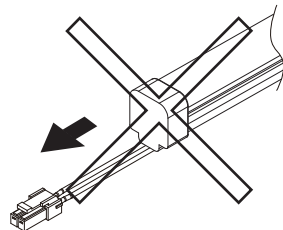
Environment	Indoors (No Condensation)
Operating temperature	-5°C to +45°C
Max. connectable Length per run	10m
Option parts	Power supply cable 3000mm for SL connector, Joint cable 1000mm for SL Connector Aluminum Mounting Rail 950 for UQ FLEX, Joint plate for UQ FLEX AL rail, AL mounting parts for UQ FLEX, PC hold clip for UQ FLEX rail, PC Mounting clip for UQ FLEX, Endcap for UQ FLEX indoor
Dimmable	○
Light source color	White(W), Warm white 3000K(L30), Warm white 2700K(L27), Warm white 2400K(L24) Daylight white(D), Natural white(N), Warm white 3500K(WW), Warm white 2100K(L21), Warm white 1900K(L19)

Installing the product

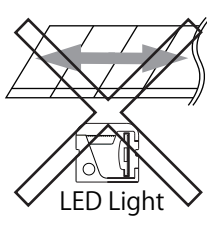
⚠ Cautions

In order to avoid caused of deformation during installation or transportation, please observe the following;

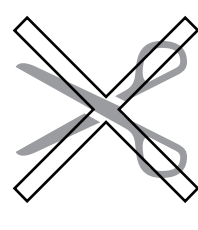
- The LED fixtures longer than 2m should be transported to the installation site in their original packaging (polycarbonate cushioning material).
- For the LED fixtures more than 2m in length, two or more persons should work on the installation.



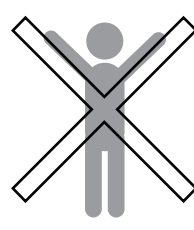
Do not pull the lead wires or side caps forcefully. It may cause wire breakage or end cap detachment, which may result in malfunction.



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



Do not cut with scissors, nippers, etc

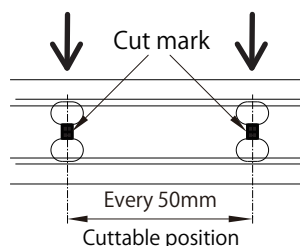
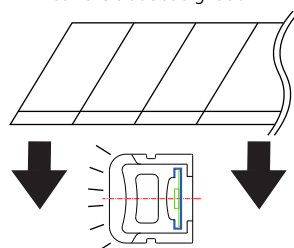


Do not install LED fixtures longer than 2m by one person.

Cutting and terminal sealing

LFU-I Top / Vertical 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 LED fixture, be sure to cut at the cutting marks shown above. If anywhere other than the cut mark is cut, the LED 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 LED fixture with end cap can only be used indoors. Do not install the products in wet or humid places.

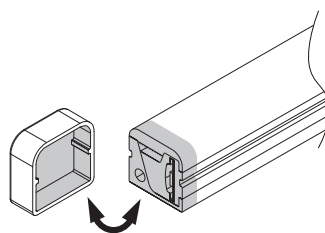
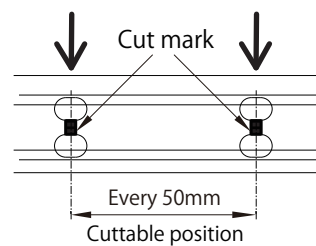
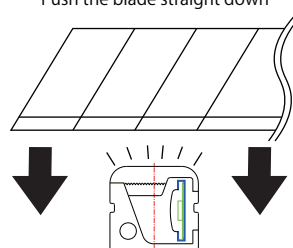
Before installation and lighting, check that the cap adheres properly.

About Adhesives

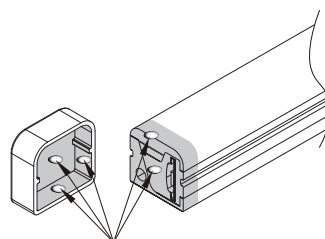
Use a set of instant adhesives and primers etc. specially designed for difficult-to-bond materials such as polyethylene, polypropylene and silicone rubber. Recommended adhesive: Cemedine Corporation CA-522

LFUA-I Side / Horizontal bend only

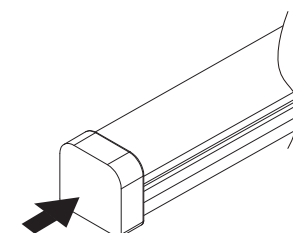
Pen knife/Box cutter
Push the blade straight down



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 LED fixture and the inside of the cap (gray area in the figure).

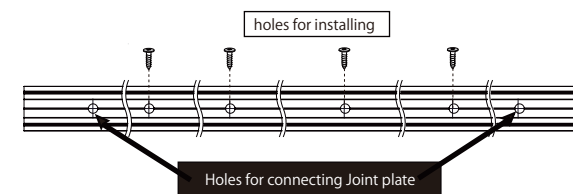


Immediately attach the end cap to the LED fixture and dry it for at least 30 minutes.

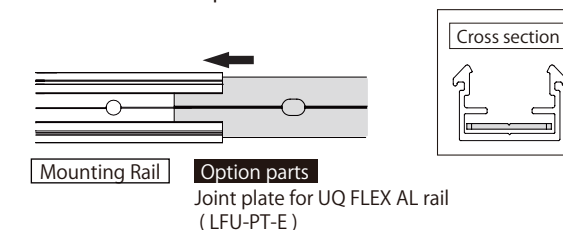
Installation with mounting rail

The Aluminum mounting rail 950 for UQ FLEX Indoor(LFU-RL0950-AL-C-I) 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.

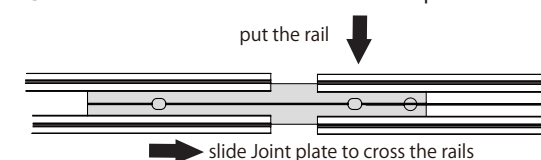
- ① Fix the aluminium rail by screws (pan head screw M4 recommended) supplied by installer. The screw holes at both ends should be left unused for installing with the Joint plate.



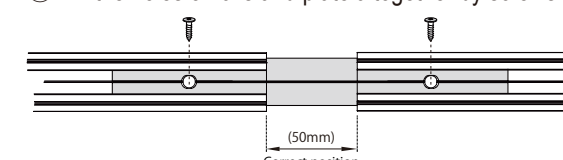
- ② When two or more rails are installed in a straight line, insert the Joint plate into bottom of the rail.



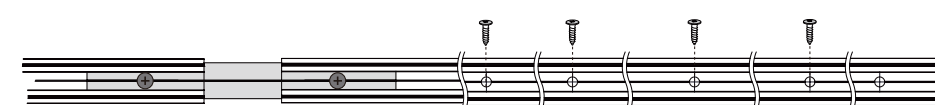
- ③ Put the second rail and slide the Joint plate as below.



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

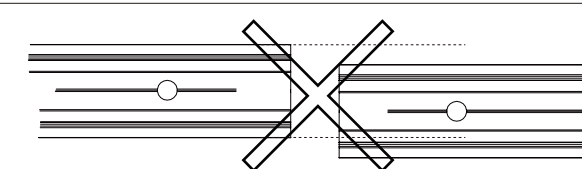


- ⑤ Fix the holes of second rail for installation like ①...



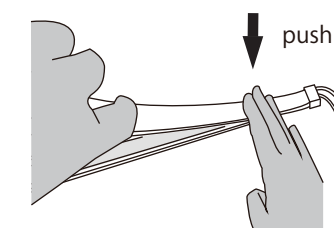
⚠ Cautions

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 forces will be applied to the LED fixture and it may cause of defect.



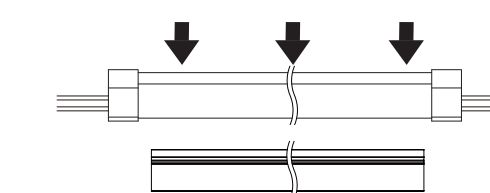
LFU-I Top / Vertical bend only

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



LFUA-I Side / Horizontal bend only

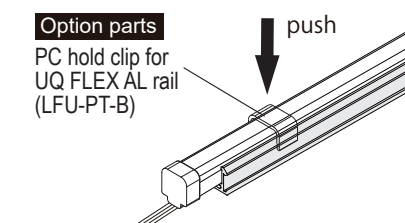
- ⑥ When installing LFUA (side bend) on the mounting rail, the LED fixture shall first be placed horizontally on the rail and the entire LED fixture shall be pushed gradually horizontally into the rail so that the LED fixture does not bend vertically.



⚠ Cautions

When insert the LED fixture into the rail, do not apply excessive pressure, and exercise caution 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 click sound 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.

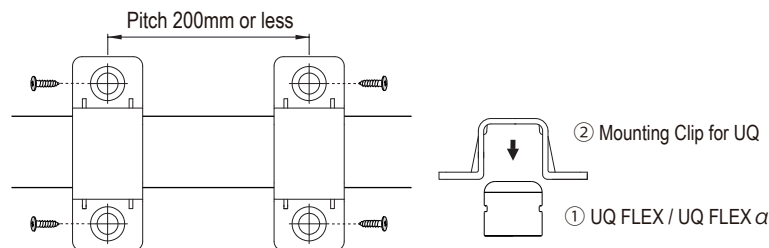


Installation with clips

Option parts

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

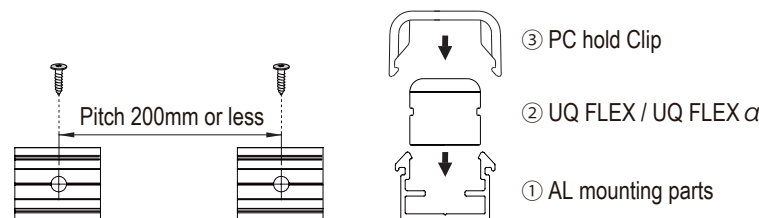
- Place the LED fixture on the surface to be installed.
Do not twist and bend the LED fixture in the wrong direction.
- Fix the mounting clip by 2pcs of screws supplied by installer.
(pan head screw M4 recommended)
The recommended distance between clips is 200 mm or less. The clips at both ends should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



Option parts

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 LED 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 LED fixture to prevent it from lifting.
- Push the LED fixture into the clip while keeping the correct bending direction.
Caution: Do not bend the LED fixture in the wrong direction.
- Put the PC hold clip (LFU-PT-B) until click sound 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

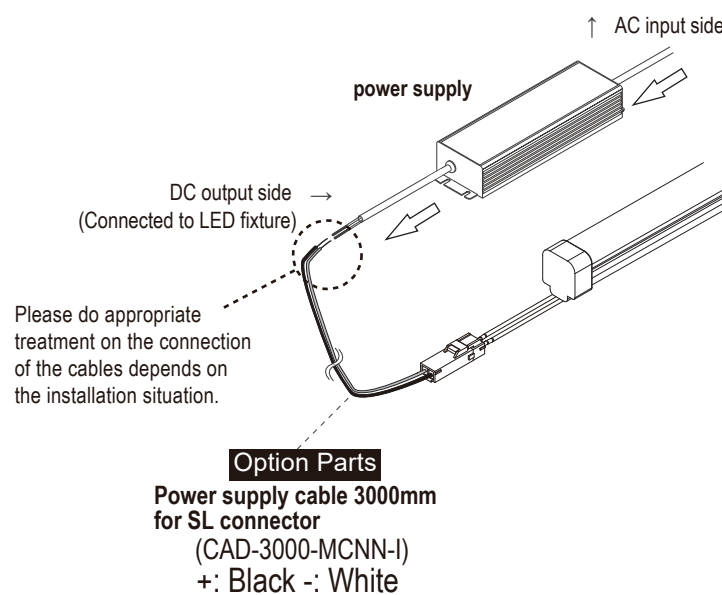
■ Cables used for connecting LED fixtures and Power supply must be a suitable type and gauge.

■ 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.

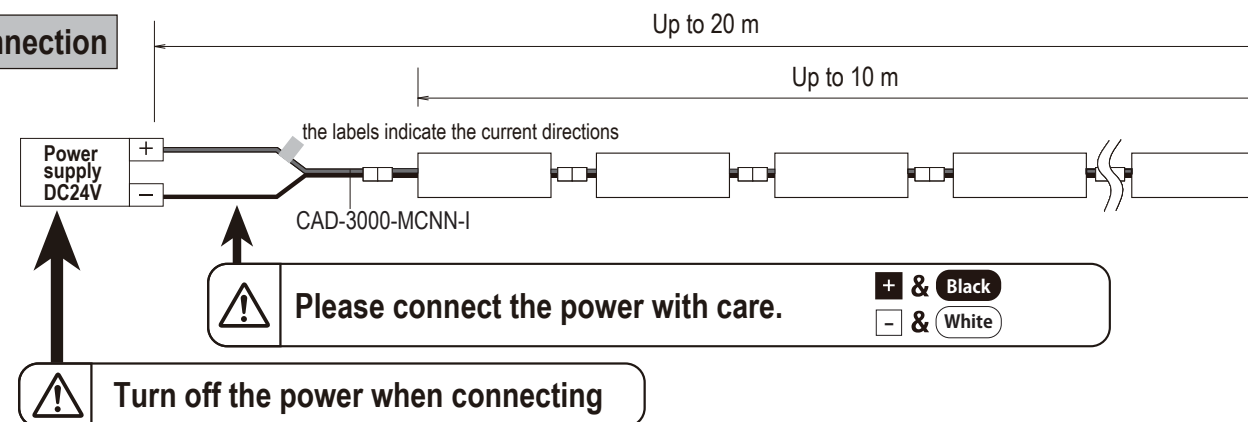
■ When connecting the dimmer driver with power supply, unpredicted noise might occur. It is a characteristic of electronic devices, not a malfunction of the LED fixture. Please choose an appropriate power supply and consider a place to install. Reducing the loading factor of LED fixture might improve 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.

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

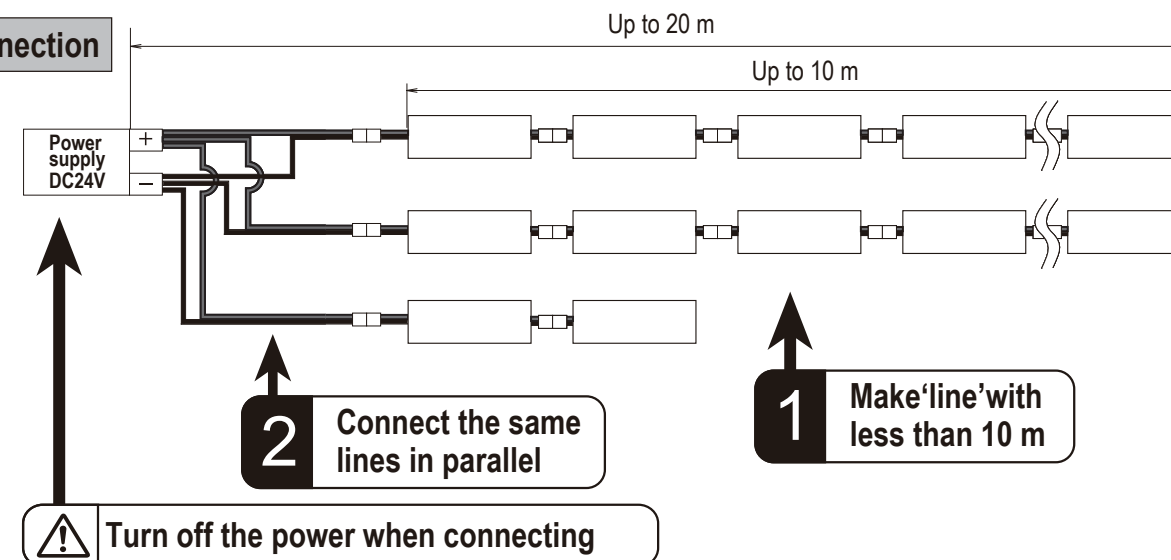


Connecting LED fixtures

Series connection



Parallel connection



! Cautions

The number of LED fixtures that can be connected to the power supply depends on the output (W) of the power supply.

For Luci UQ FLEX Indoor and Luci UQ FLEX α Indoor, the maximum number connectable in series is 10 m. It can be connected in series or in parallel. However, please observe and use the maximum number of connected units of 10 m.

It is recommended to connect the LED fixture at a load ratio of 70% (without dimming) or 60% (with dimming) of the power output since the load varies depending on the derating and the usage environment of the power supply. Please confirm the table on the right for details.

Product	Required capacity of power supply					
	LFU-T*****-DF-I-15	LFU-T*****-DF-I-12	LFU-T*****-DF-I-8	LFUA-T*****-DF-I-15	LFUA-T*****-DF-I-12	LFUA-T*****-DF-I-8
Power consumption	15.8 W/m		12.6 W/m	8.4 W/m		
LED fixture length per driver	Without dimming	With dimming	Without dimming	With dimming	Without dimming	With dimming
1m	23 W	27 W	18 W	21 W	12 W	14 W
2m	46 W	53 W	35 W	41 W	23 W	27 W
3m	68 W	79 W	52 W	61 W	35 W	40 W
4m	91 W	106 W	70 W	81 W	46 W	54 W
5m	113 W	132 W	87 W	101 W	58 W	67 W
6m	136 W	158 W	104 W	121 W	69 W	80 W
7m	158 W	185 W	121 W	142 W	80 W	94 W
8m	181 W	211 W	139 W	162 W	92 W	107 W
9m	204 W	237 W	156 W	182 W	103 W	120 W
10m	226 W	264 W	173 W	202 W	115 W	134 W

The power supply arranged by customers is not covered with the product warranty by Luci and proper operation cannot be guaranteed. It is recommended to check the power supply specification and manual when choosing a power supply. Especially pay attention to the wire capacity if using a 150 W or higher wattage power supply.