




Luci SHIN UQ FLEX IP67 (LFUY-O: Top / Vertical bend) Luci SHIN UQ FLEX α IP67 (LFUAY-O: Side / Horizontal bend)

Instruction Manual


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⚠ 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.




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





Supply the power through the lead wire from one side.




DC24V DC24V Attach the connector cap


 **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.

 When there are abnormal situations, please cut off the power immediately, consult with electricians, and do not touch the light fixture with wet hands. Do not place a flammable object such as a cloth or paper or insulating material on top of the fixture or cover it with such a material. It may cause the light fixture not to turn on or to fire.


 Do not allow an open-ended fixture to have contact with any metal. Do not place or install light fixtures in close contact with other electric equipment in or out of the ceiling area to prevent falls, electric shock or fire caused by vibration from electric equipment. Do not operate the fixture with wet hands. It may cause an electric shock.

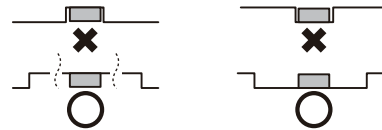
 **Important notice for storage**
Please ensure the fixture is stored within -10°C to 60°C
Please do not store the carton or the packages of our light fixtures in the following conditions:
- wet location.
- places of high humidity.
- places with a lot of litters and dust.
- place that sunlight is directly exposed.
- places where a solvent such as a paint liquid is stored.


During storage ensure the cartons upright.


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. It may shorten product life or cause a fire. Allow sufficient space for ventilation (heat dissipation) between the light fixture and building structure. When installing the light fixture in a box, please make sure to provide the air ventilation hole.

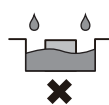


 Do not use the product if the cover is damaged. Risk of an accident and electrical shock. Avoid spraying detergent directly on the light fixture. If this happens, immediately rinse with water.


 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.

 Do not use in the following environments:
- Location at high temperature (+45°C or higher) (Operating temperature is -5°C to +45°C)
- Location where water collects, submerge light fixture under the water.



- Location with corrosive or inflammable gases.
- Airtight location.
- Location where the product is directly exposed to salt water or organic solvents.
- 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.

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?

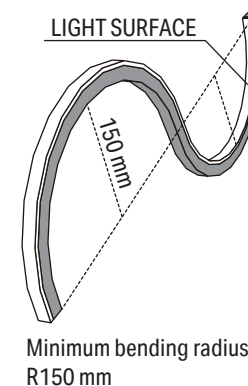
Cleaning Method

- 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.

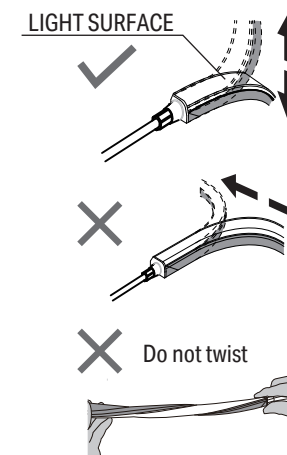
Bendable direction and minimum bending radius

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.

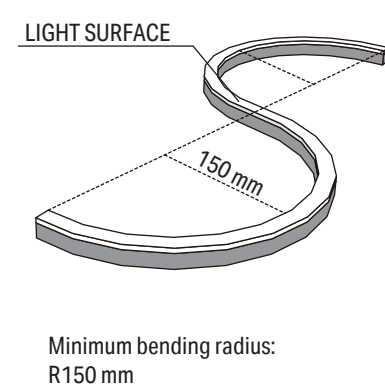
LFUY-O
Top / Vertical bend only



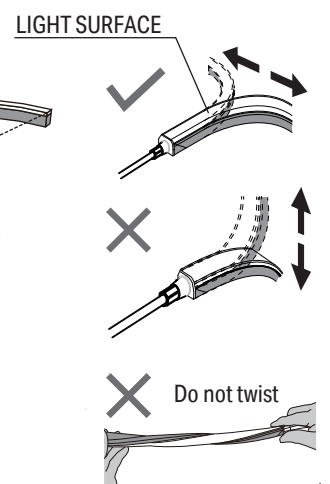
Minimum bending radius:
R150 mm



LFUAY-O
Side / Horizontal bend only

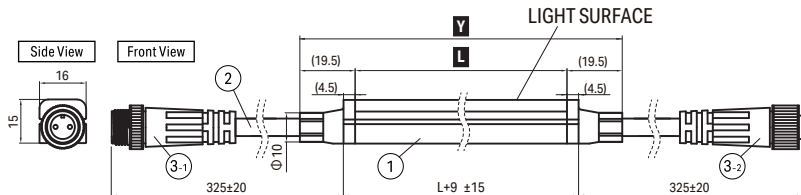


Minimum bending radius:
R150 mm

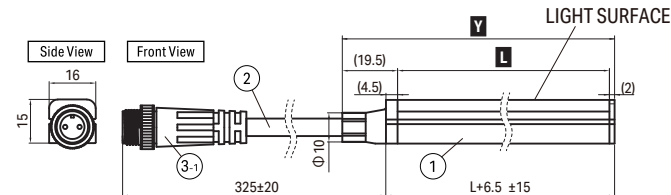


Product specification ※unit of measurement

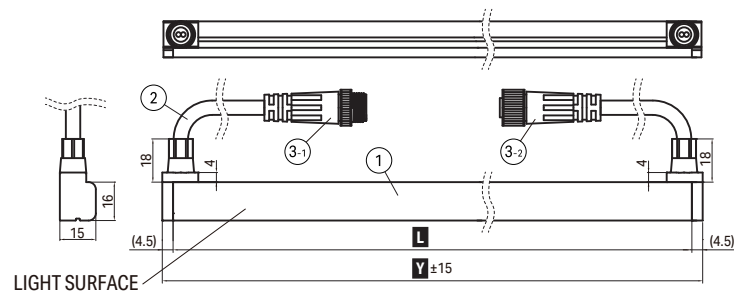
LFUY / LFUAY-T****WS* -DF-O* W: Both ends lead, S: Straight feed



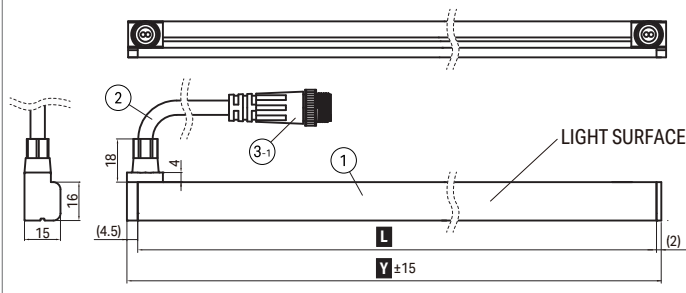
LFUY / LFUAY-T****SS* -DF-O* S: One end lead, S: Straight feed



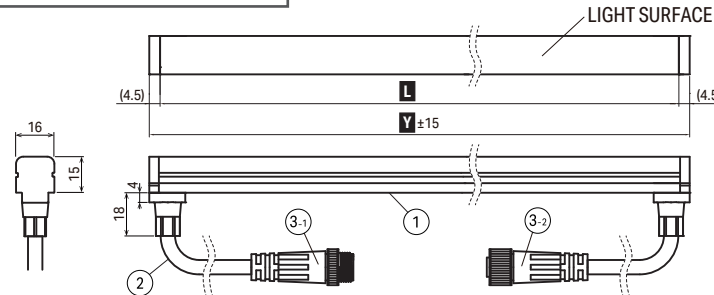
LFUY / LFUAY-T****WR* -DF-O* W: Both ends lead, R: Side (Right) feed



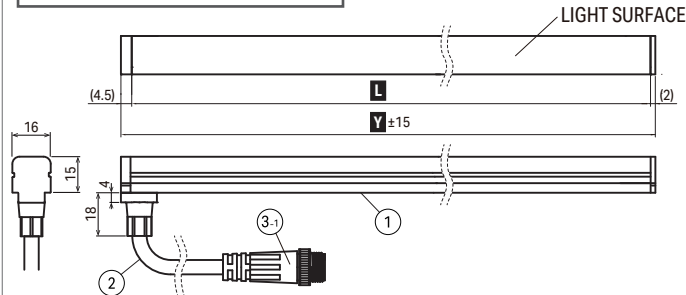
LFUY / LFUAY-T****SR* -DF-O* S: One end lead, R: Side(Right) feed

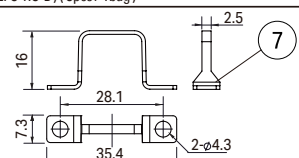
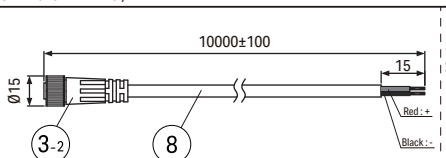
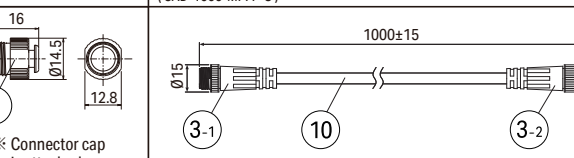
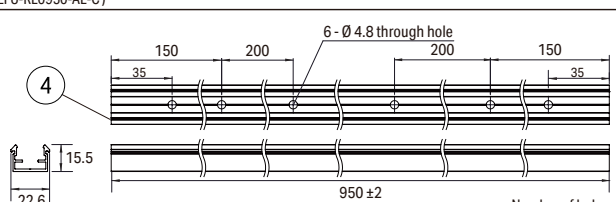
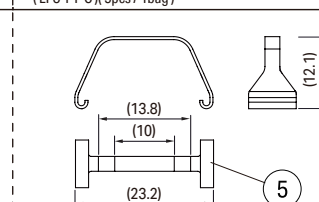
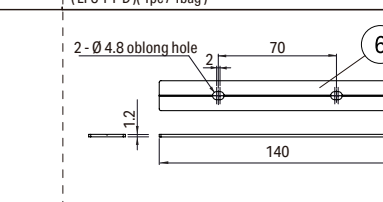


LFUY / LFUAY-T****WB* -DF-O* W: Both ends lead, B: Back feed



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



<p>Accessories : Mounting clip B for UQ FLEX (LFU-RC-B) (5pcs / 1bag)</p> 	<p>Accessories : Power supply cable 10M for UQ FLEX (CAD-V010M-FPNN-O)</p> 	<p>Accessories : Joint cable 1M for UQ FLEX (CAD-1000-MPPF-O)</p> 
<p>Accessories : Aluminium mounting rail C type950 for UQ FLEX H13 (LFU-RL0950-AL-C)</p> 	<p>Attachment for rail & Accessories : SUS hold Clip C for UQ FLEX AL rail C (LFU-PT-C) (5pcs / 1bag)</p> 	<p>Attachment for rail & Accessories : Joint plate for UQ FLEX AL rail C (LFU-PT-D) (1pc / 1bag)</p> 

The specifications and prices are subject to change without prior notice. Unit Of Measure : mm



Input voltage

DC24V

No	Item	Name of material
①	Body	Silicone, Diffuser
②	Lead wire	
③③②	Connector	
④	Aluminium mounting rail C	Aluminum
⑤	SUS hold Clip C	SUS
⑥	Joint plate	SUS
⑦	Mounting clip B	SUS
⑧	Power supply cable	+ : Red, - : Black
⑨	Connector cap	
⑩	Joint cable	

Item / Product Name		Luci UQ FLEX IP67 (Outdoor)			
Bendable direction		Top / Vertical bend only			
Lead wire	Cable feed direction	Model No.			
Both ends lead	Straight feed	LFUY-T****WS*-DF-O-19	LFUY-T****WS*-DF-O-14	LFUY-T****WS*-DF-O-9	LFUY-T****WS*-DF-O-5
One end lead	Straight feed	LFUY-T****SS*-DF-O-19	LFUY-T****SS*-DF-O-14	LFUY-T****SS*-DF-O-9	LFUY-T****SS*-DF-O-5
Both ends lead	Side(Right)feed	LFUY-T****WR*-DF-O-19	LFUY-T****WR*-DF-O-14	LFUY-T****WR*-DF-O-9	LFUY-T****WR*-DF-O-5
One end lead	Side(Right)feed	LFUY-T****SR*-DF-O-19	LFUY-T****SR*-DF-O-14	LFUY-T****SR*-DF-O-9	LFUY-T****SR*-DF-O-5
Both ends lead	Back feed	LFUY-T****WB*-DF-O-19	LFUY-T****WB*-DF-O-14	LFUY-T****WB*-DF-O-9	LFUY-T****WB*-DF-O-5
One end lead	Back feed	LFUY-T****SB*-DF-O-19	LFUY-T****SB*-DF-O-14	LFUY-T****SB*-DF-O-9	LFUY-T****SB*-DF-O-5
Item / Product Name		Luci UQ FLEX α IP67 (Outdoor)			
Bendable direction		Side / Horizontal bend only			
Lead wire	Cable feed direction	Model No.			
Both ends lead	Straight feed	LFUAY-T****WS*-DF-O-19	LFUAY-T****WS*-DF-O-14	LFUAY-T****WS*-DF-O-9	LFUAY-T****WS*-DF-O-5
One end lead	Straight feed	LFUAY-T****SS*-DF-O-19	LFUAY-T****SS*-DF-O-14	LFUAY-T****SS*-DF-O-9	LFUAY-T****SS*-DF-O-5
Both ends lead	Side(Right)feed	LFUAY-T****WR*-DF-O-19	LFUAY-T****WR*-DF-O-14	LFUAY-T****WR*-DF-O-9	LFUAY-T****WR*-DF-O-5
One end lead	Side(Right)feed	LFUAY-T****SR*-DF-O-19	LFUAY-T****SR*-DF-O-14	LFUAY-T****SR*-DF-O-9	LFUAY-T****SR*-DF-O-5
Both ends lead	Back feed	LFUAY-T****WB*-DF-O-19	LFUAY-T****WB*-DF-O-14	LFUAY-T****WB*-DF-O-9	LFUAY-T****WB*-DF-O-5
One end lead	Back feed	LFUAY-T****SB*-DF-O-19	LFUAY-T****SB*-DF-O-14	LFUAY-T****SB*-DF-O-9	LFUAY-T****SB*-DF-O-5
Wattage (Ta=25℃)		19.8 W/m	14.9 W/m	9.9 W/m	5.9 W/m
Input Voltage (V)		24V			

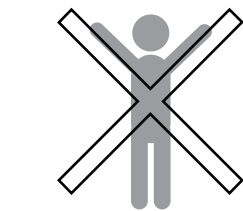
Environment	In & Outdoor, IP67
Operating temperature	-5℃ to +45℃
Max. length per circuit	5.9W/m 9.9W/m 14.9W/m : 10m, 19.8W/m : 7.5m
Max. fitting length	2m
Accessories	Aluminium mounting rail C type950 for UQ FLEX, Mounting clip B for UQ FLEX (5pcs / 1bag), SUS hold Clip C for UQ FLEX AL rail C (5pcs / 1bag), Joint plate for UQ FLEX AL rail C, Power supply cable 10M for UQ FLEX (Connector cap is attached), Joint cable1M for UQ FLEX
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 deformation during installation or transportation, please until a click sound is heard 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.

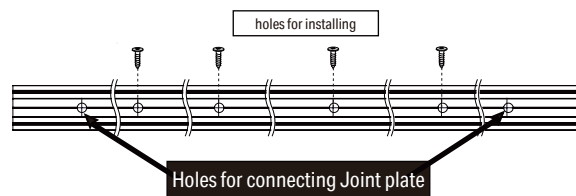


Do not install light fixtures longer than 2 m by one person.

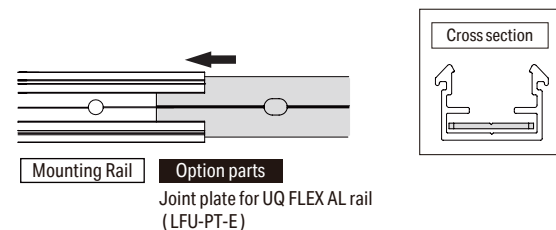
Installation with mounting rail

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.

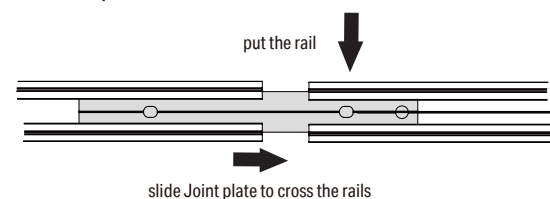
- ① Fix the alminium rail by screws (pan head screw M4 recommended) supplied by installer. The screw holes at both ends should be left unused for installing with the Joint



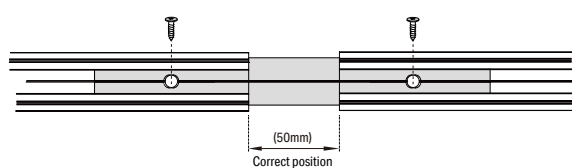
- ② When two or more rails are installed in a straight line, insert the Joint plate into bottom of the rail.



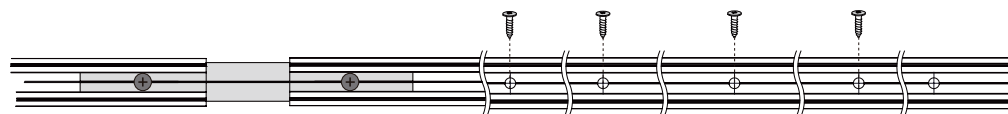
- ③ Put the second rail and slide the Joint plate as below.



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

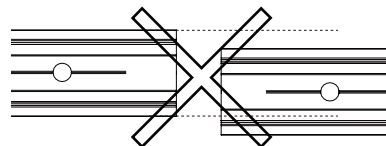


- ⑤ Fix the holes of second rail for installation like ①...



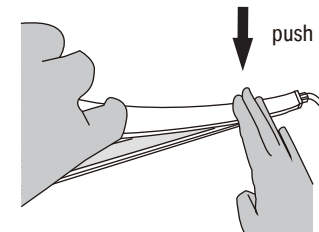
⚠ Cautions

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



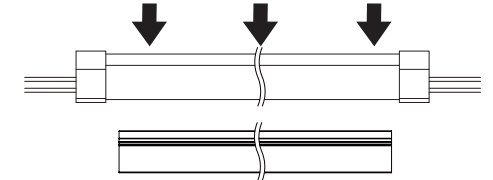
LFU-O Top / Vertical bend only

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



LFUA-O Side / Horizontal bend only

- ⑥ When installing LFUA (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.

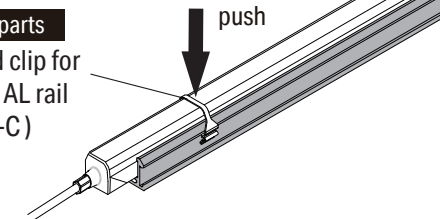


⚠ Cautions

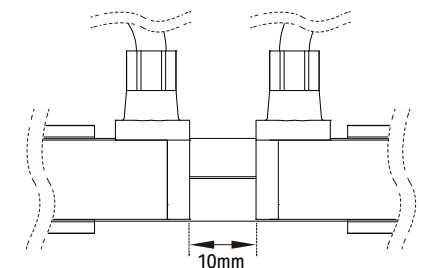
When insert the light fixture into the rail, do not apply excessive pressure, and make sure not to damage the LEDs, electronic components, board, and other parts with your fingers or a tool. There are high risk of LED unlighted, wire breakage and other failure occuring due to above improper handling.

- ⑦ Push the SUS hold clip (LFU-PT-C) 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-C is minimum 3 pcs / m.

Option parts
SUS hold clip for
UQ FLEX AL rail
(LFU-PT-C)



- ⑧ Please have 10mm gaps between 2 fittings to absorb the expansion and the contraction of lighting fixture.

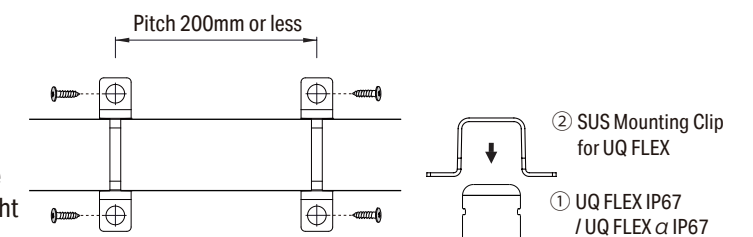


Installation with clips

Accessories

SUS Mounting Clip for UQ FLEX (LFU-RC-B)

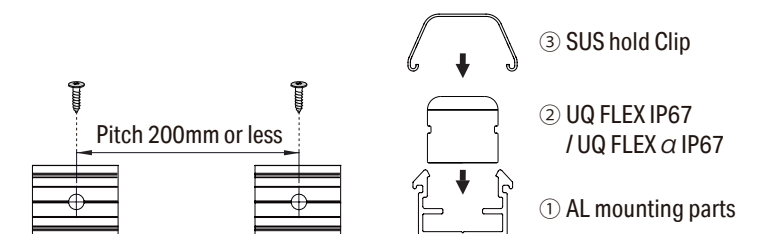
- ① Place the light fixture on the surface to be installed. Do not twist and bend the light fixture in the wrong direction.
- ② Fix the mounting clip by 2pcs of screws supplied by installer. (pan head screw M4 recommended)
- The recommended distance between clips is 200 mm or less. The clips at both ends should be 50 mm away from the ends of the light fixture to prevent it from lifting.



Accessories

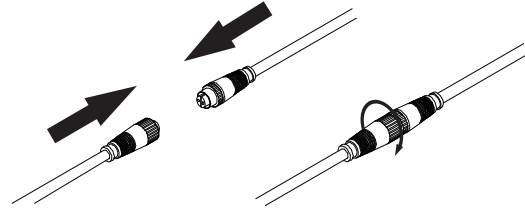
Aluminum mounting parts set for UQ FLEX (LFU-RL0018-AL-C)

- ① 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.
- ② Push the light fixture into the clip while keeping the correct bending direction.
- Caution: Do not bend the light fixture in the wrong direction.
- ③ Put the SUS hold clip (LFU-PT-C) until click sound and make sure it is securely locked. The hold clips should be used if the light fixture is easily dislodged or installed downward.



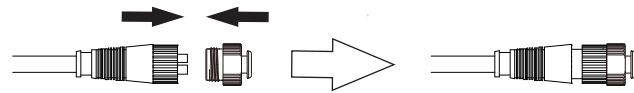
Fixing the connectors

Ensure the pin holes in the connectors are positioned correctly before joining them. To fasten, rotate the metallic knobs until tightened.



⚠ Cautions

The unenclosed connector at the terminal of LFUY-O (SHIN UQ FLEX IP67) and LFUAY-O (SHINUQ FLEX α IP67) must be covered with the connector cap which is enveloped in the power supply cable(CAD-V010M-FPNN-O). To fasten, rotate the metallic knobs until tightened.



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 that is appropriate to the installation and operating environment.

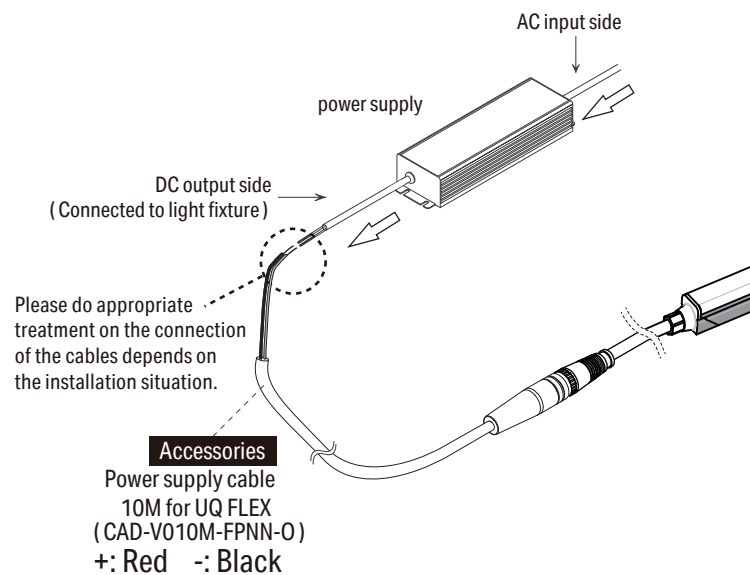
Caution: When using thin dimension cable in long extended length, the resistance of cable will increase. Voltage drop and heat dissipating may occur and result in a drop in brightness.

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 accumulate from 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 fixture into multiple.

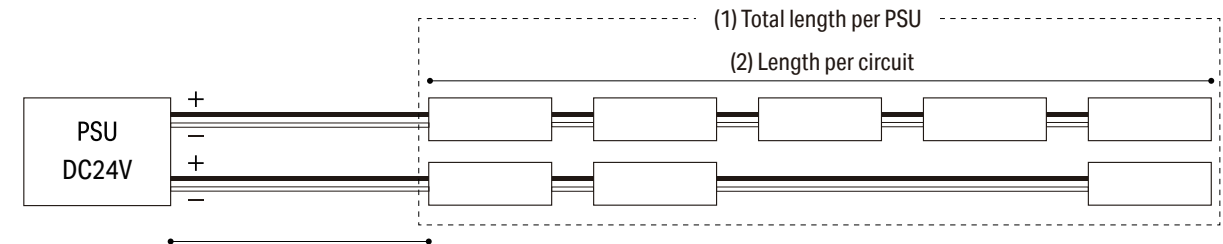
■ When you adjust the length of the power supply cable, please be careful not to damage the core wire.

■ 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 fixtures for one cable.



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 multiple circuits.
3. 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)

Cable length between PSU and the beginning of luminaire (m)		Cross section	0.3 sq	0.5 sq	0.75 sq
		Wire gauze	AWG 22	AWG 20	AWG 18
Model No.	Wattage	(2) Max. length per circuit	(3) Max. cable length between PSU and the beginning of luminaire.at (2) Max. length per circuit		
LFUY/LFUAY-T * * *- *-DF-O-5	5.9 W / m	10 m	48.0 m	76.0 m	120.0 m
LFUY/LFUAY-T * * *- *-DF-O-9	9.9 W / m	10 m	27.5 m	44.5 m	70.0 m
LFUY/LFUAY-T * * *- *-DF-O-14	14.9 W / m	10 m	18.0 m	29.0 m	45.0 m
LFUY/LFUAY-T * * *- *-DF-O-19	19.8 W / m	7.5m	13.0 m	21.0 m	33.0 m

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