Luci UQ FLEX IP67 (LFU-O: Top / Vertical bend)
Luci UQ FLEX α IP67 (LFUA-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 against cautions, it may cause damage, electric shock, smoke or fire.

Only supply power through the lead wire on one side using the dedicated connection cable for this product.

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

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

○ Supply the power through the lead wire from one side.

⚠ **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.

When there are abnormal situations, please cut off the power immediately, consult with electricians, and do not touch the LED fixture with 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 LED fixture not to turn on or to fire.
Do not put a piece of metal or a flammable in the clearance of the LED fixture.
Do not place or install LED 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

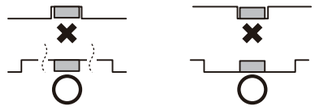
Observe the storing temperature of our LED fixtures: -25°C to 65°C
Please do not store the carton or the packages of our LED fixtures in the following conditions:
- wet location
- places of high humidity
- places with much litter or dust
- places of exposing against sun light directly
- places with solvent 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.
Risk of shortened service life and fire.
Allow sufficient space for ventilation (heat dissipation) between the LED fixture and building structure.
When installing the LED 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 LED 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 to polish metal parts.
Risk of damage and corrosion.

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

- 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 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.

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.

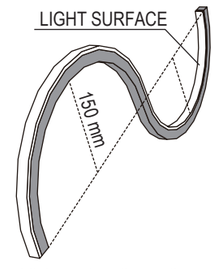
Inspection Methods
- Is LED operating normally?
- Is there any unusual smell, sound or heat?
- Are there any cracks, splits, or detached parts on any parts or joints?

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 wrung firmly. To finish off, wipe it with a damp cloth and dry it.

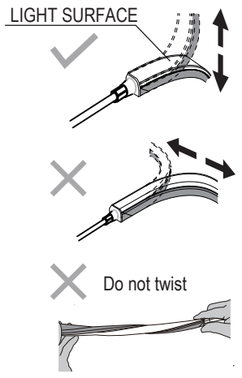
Bendable direction and minimum bending radius

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.

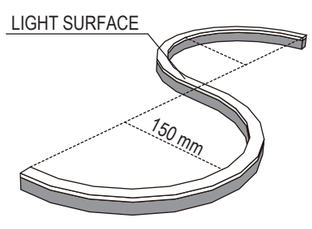
LFU-O
Top / Vertical bend only



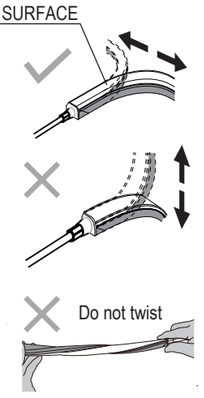
Minimum bending radius:
R150 mm



LFUA-O
Side / Horizontal bend only



Minimum bending radius:
R150 mm



06/09/2022
LFU/LFUA-T1000＊-＊-DF-O-8/12/15

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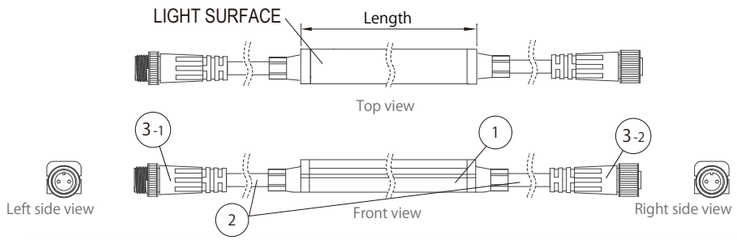
Product specification

※ unit of measure=mm

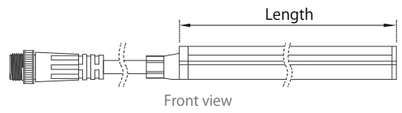
LFU-T****WS-*-DF-O-* | LFUA-T****WS-*-DF-O-*

W: Both ends lead, S: Straight feed



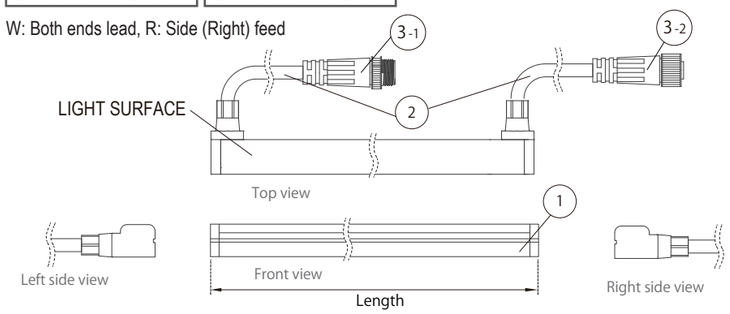
LFU-T****SS-*-DF-O-* | LFUA-T****SS-*-DF-O-*

S: One end lead, S: Straight feed



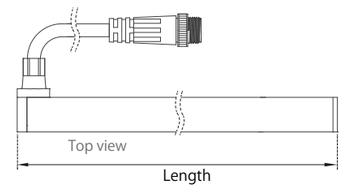
LFU-T****WR-*-DF-O-* | LFUA-T****WR-*-DF-O-*

W: Both ends lead, R: Side (Right) feed



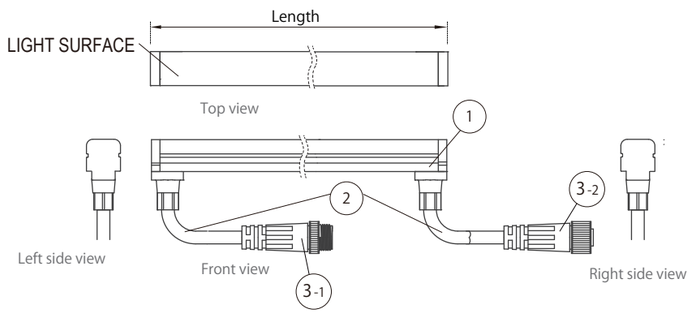
LFU-T****SR-*-DF-O-* | LFUA-T****SR-*-DF-O-*

S: One end lead, R: Side (Right) feed



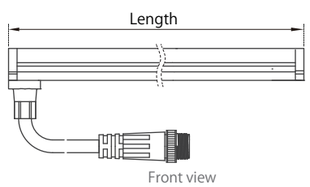
LFU-T****WB-*-DF-O-* | LFUA-T****WB-*-DF-O-*

W: Both ends lead, B: Back feed



LFU-T****SB-*-DF-O-* | LFUA-T****SB-*-DF-O-*

S: One end lead, B: Back feed



Luci UQ FLEX IP67/ UQ FLEX α IP67 (15.8W/m, 12.6W/m, 8.4W/m) Corresponds to Length (mm) in the drawing and Model No. W: Both ends lead : +9mm S: One end lead : +6.5mm		
	0100	1100
	0200	1200
	0300	1300
	0400	1400
	0500	1500
	0600	1600
	0700	1700
	0800	1800
	0900	1900
	1000	2000

Input Voltage
DC24V

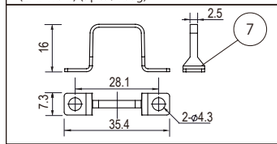
No	Item	Name Material etc.
①	Body	Silicone
②	Lead cable	
③-1 ③-2	Connector	
④	Aluminum mounting rail	Aluminum
⑤	SUS hold clip	SUS
⑥	Joint Plate	SUS
⑦	Mounting clip	SUS
⑧	AL mounting Parts	Aluminum
⑨	Power supply cable (Connector cap)	＋：Red 、－：Black
⑩	Joint cable	

Product specification

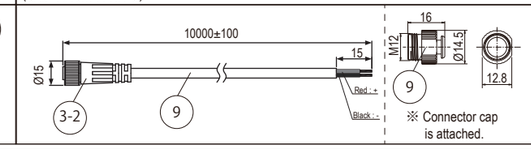
※ unit of measure=mm

■ Option parts

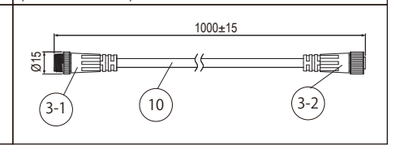
Option parts :
SUS Mounting clip for UQ FLEX
(LFU-RC-B) (5pcs /1bag)



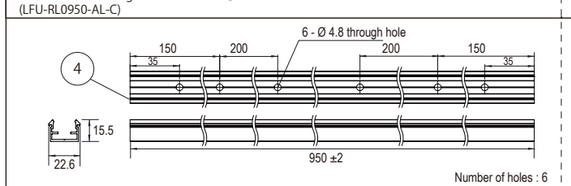
Option parts
Power supply cable 10M for UQ FLEX
(CAD-V010M-FPNN-O)



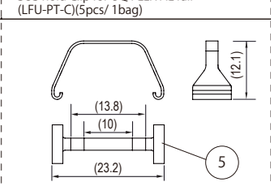
Option parts:
Joint cable 1M for UQ FLEX
(CAD-1000-MPFP-O)



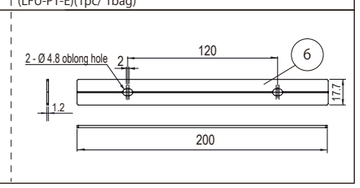
Option parts:
Aluminum mounting rail 950 set for UQ FLEX
(LFU-RL0950-AL-C)



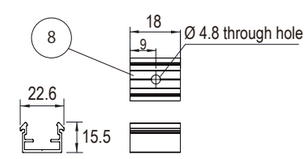
Accessories for rail & Option parts:
SUS hold Clip for UQ FLEX AL rail
(LFU-PT-C)(5pcs/ 1bag)



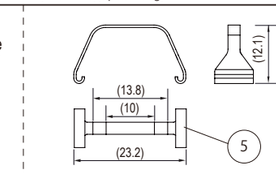
Accessories for rail & Option parts:
Joint plate for UQ FLEX AL rail
(LFU-PT-E)(1pc/ 1bag)



Option parts:
Aluminum mounting parts set for UQ FLEX
(LFU-RL0018-AL-C) (5 pcs/bag)



Accessories for rail & Option parts:
SUS hold Clip for UQ FLEX AL rail
(LFU-PT-C)(5pcs/ 1bag)



Item / Product Name		Luci UQ FLEX IP67		
Bendable direction		Top / Vetical bend only		
Lead wire	Cable feed direction	Model No.		
Both ends lead	Straight feed	LFU-T****WS-*-DF-O-15	LFU-T****WS-*-DF-O-12	LFU-T****WS-*-DF-O-8
One end lead	Straight feed	LFU-T****SS-*-DF-O-15	LFU-T****SS-*-DF-O-12	LFU-T****SS-*-DF-O-8
Both ends lead	Side (Right) feed	LFU-T****WR-*-DF-O-15	LFU-T****WR-*-DF-O-12	LFU-T****WR-*-DF-O-8
One end lead	Side (Right) feed	LFU-T****SR-*-DF-O-15	LFU-T****SR-*-DF-O-12	LFU-T****SR-*-DF-O-8
Both ends lead	Back feed	LFU-T****WB-*-DF-O-15	LFU-T****WB-*-DF-O-12	LFU-T****WB-*-DF-O-8
One end lead	Back feed	LFU-T****SB-*-DF-O-15	LFU-T****SB-*-DF-O-12	LFU-T****SB-*-DF-O-8
Item / Product Name		Luci UQ FLEX α IP67		
Bendable direction		Side / Horizontal bend only		
Lead wire	Cable feed direction	Model No.		
Both ends lead	Straight feed	LFUA-T****WS-*-DF-O-15	LFUA-T****WS-*-DF-O-12	LFUA-T****WS-*-DF-O-8
One end lead	Straight feed	LFUA-T****SS-*-DF-O-15	LFUA-T****SS-*-DF-O-12	LFUA-T****SS-*-DF-O-8
Both ends lead	Side (Right) feed	LFUA-T****WR-*-DF-O-15	LFUA-T****WR-*-DF-O-12	LFUA-T****WR-*-DF-O-8
One end lead	Side (Right) feed	LFUA-T****SR-*-DF-O-15	LFUA-T****SR-*-DF-O-12	LFUA-T****SR-*-DF-O-8
Both ends lead	Back feed	LFUA-T****WB-*-DF-O-15	LFUA-T****WB-*-DF-O-12	LFUA-T****WB-*-DF-O-8
One end lead	Back feed	LFUA-T****SB-*-DF-O-15	LFUA-T****SB-*-DF-O-12	LFUA-T****SB-*-DF-O-8
Power consumption (Ta=25℃)		15.8 W/m	12.6 W/m	8 .4W/m
Input current (A/m)		max. 0.66 A/m	max. 0.53 A/m	max. 0.35 A/m

Environment	Outdoor IP67, Indoor
Operating temperature	-5℃ to +45℃
Max. connectable Length per run	10m
Option parts	SUS Mounting clip for UQ FLEX, Power supply cable 10M for UQ FLEX(Connector cap is attached), Joint cable1M for UQ FLEX, Aluminum Mounting Rail 950 for UQ FLEX, SUS hold clip for UQ FLEX AL rail , Joint plate for UQ FLEX AL rail, Aluminum mounting parts set for UQ FLEX
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)

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Installing the product

⚠ Cautions

In order to avoid deformation during installation or transportation, please observe the following.

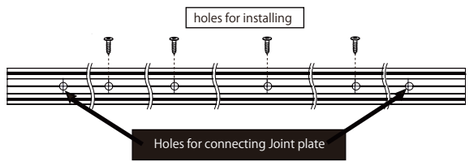
- The LED fixtures longer than 2m should be transported to the installation site in their original packaging (polycarbonate cushioning material).
- For the LED fixtures more than 2m in length, two or more persons should work on the installation.

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

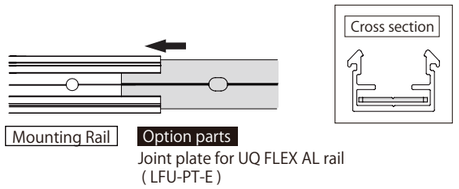
Installation with mounting rail

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.

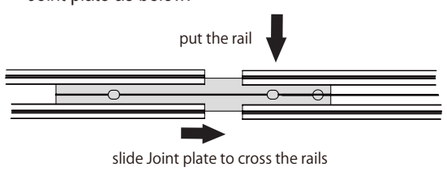
① Fix the alminium rail by screws (pan head screw M4 recommended) supplied by installer. The screw holes at both ends should be left unused for installing with the Joint



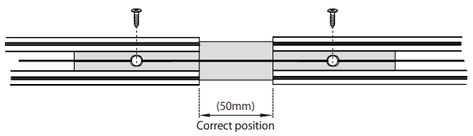
② When two or more rails are installed in a straight line, insert the Joint plate into bottom of the rail.



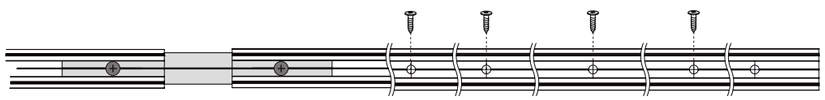
③ Put the second rail and slide the Joint plate as below.



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

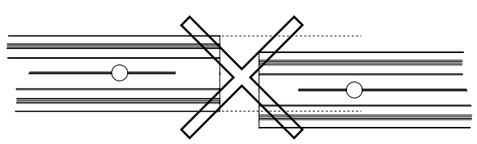


⑤ Fix the holes of second rail for installation like ①...



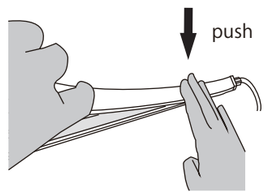
⚠ Cautions

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 LED fixture and it may cause of defect.



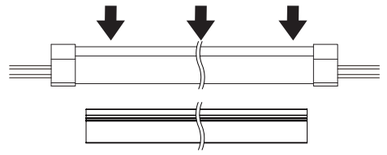
LFU-O Top / Vertical bend only

⑥ Hold one side of the LED 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 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.

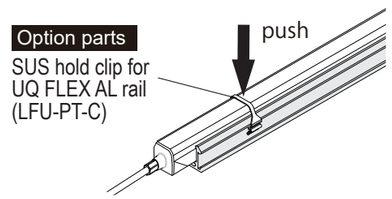


⚠ Cautions

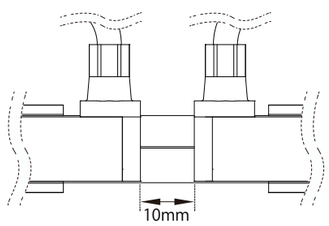
When insert the LED fixture into the rail, do not apply excessive pressure, and exercise caution not to damage the LEDs, electronic components, board, and other parts with your fingers or a tool. There are high risk of LED unlighted, wire breakage and other failure occuring due to above improper handling.

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)



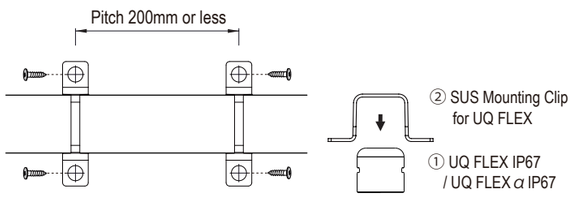
⑧ Please have 10mm gaps between 2 fittings to absorb the expansion and the contraction of lighting fixture.



Installation with clips

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

① Place the LED fixture on the surface to be installed.
Do not twist and bend the LED 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 LED fixture to prevent it from lifting.

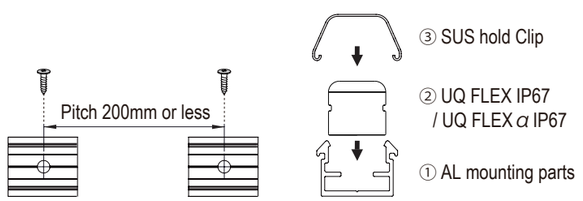


Option parts
Aluminum mounting parts set for UQ FLEX (LFU-RL0018-AL-C)

① Fix the aluminum mounting parts by 1 pc of screw to the points where the 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.

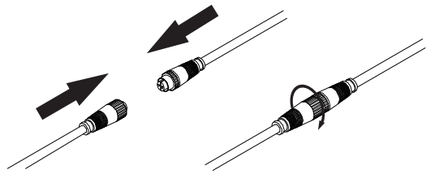
② Push the LED fixture into the clip while keeping the correct bending direction.
Caution: Do not bend the LED fixture in the wrong direction.

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 LED fixture is easily dislodged or installed downward.



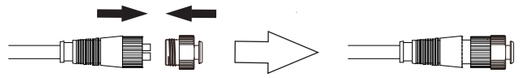
Fixing the connectors

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 LFU-O (UQ FLEX IP67) and LFUA-O (UQ 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.



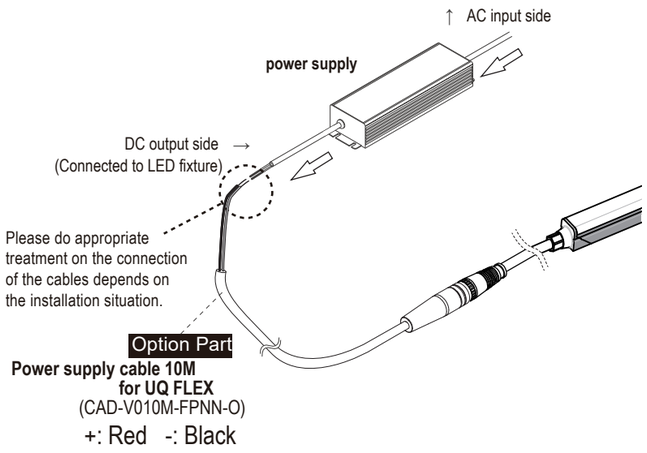
Connecting to the power supply

■ 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.

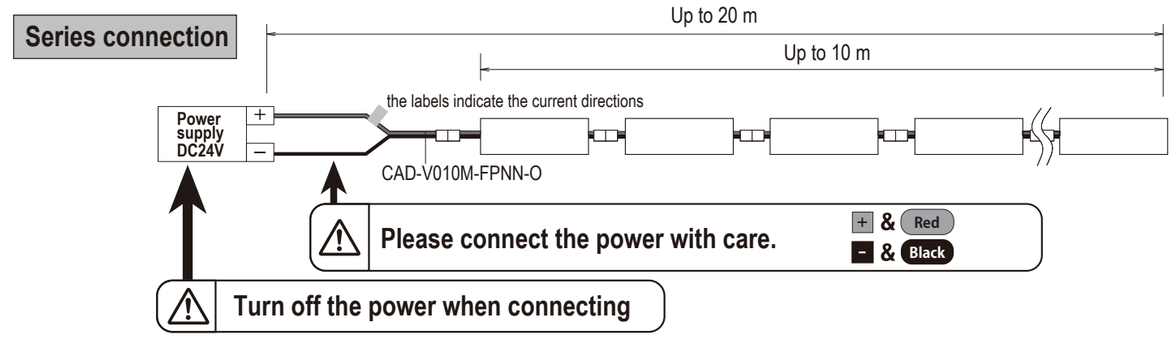
■ When connecting the dimmer driver with power supply, unpredicted noise might occur. It is a characteristic of electronic devices, not a malfunction of the LED fixture. Please choose an appropriate power supply and consider a place to install. Reducing the loading factor of LED fixture might improve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

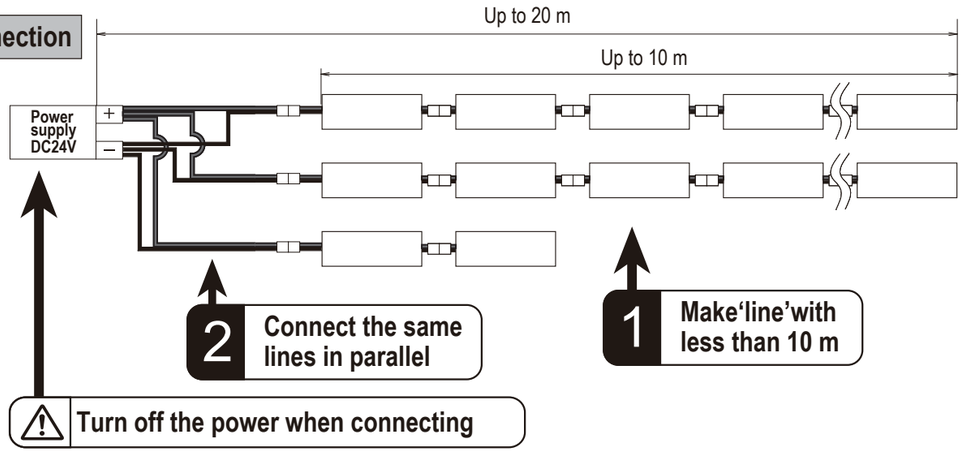


Connecting LED fixtures

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 IP67 and Luci UQ FLEX α IP67, 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-O-15 / LFUA-T******-*-DF-O-15		LFU-T******-*-DF-O-12 / LFUA-T******-*-DF-O-12		LFU-T******-*-DF-O-8 / LFUA-T******-*-DF-O-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.