



Luci UQ FLEX α mini IP67

Outdoor

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.



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 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 cause a 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: -10°C to 60°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.

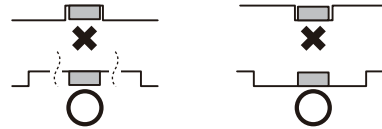
Please do not use our LED fixtures as the working light during construction period.



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.



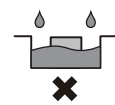
If the product is dirty, wipe with a dry cloth. Do not use thinner, benzene, or other organic solvents to clean the product, and do not wash with water.



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 -0°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 fine.

Inspection Methods

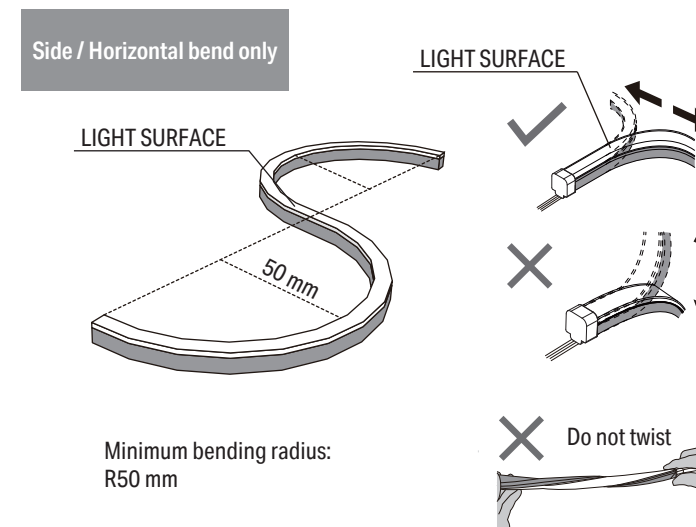
- Is LED operating normally?
- Is there any unusual smell, sound or heat?
- Are there any cracks, splits, or detached parts on any parts or joints?

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.

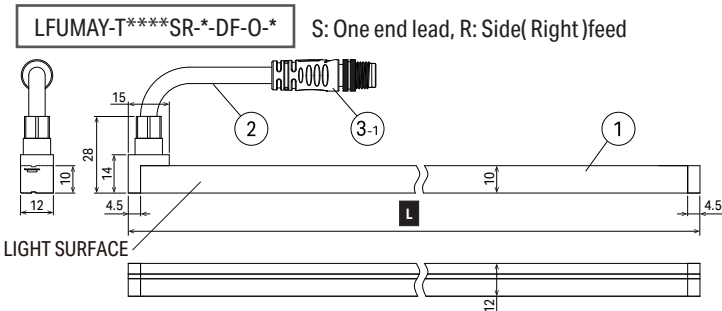
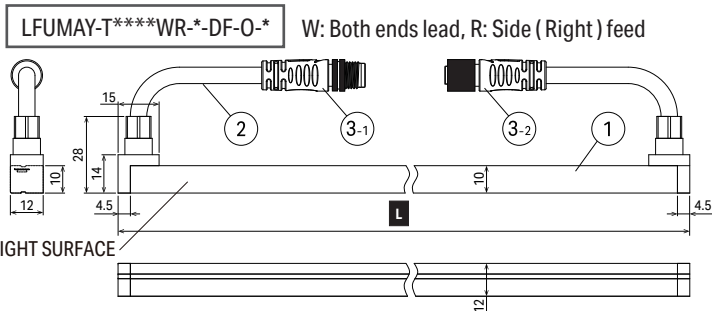
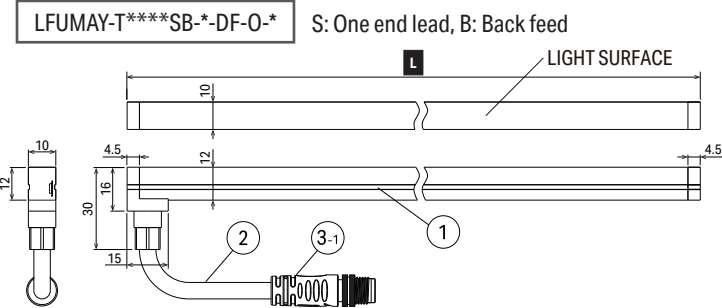
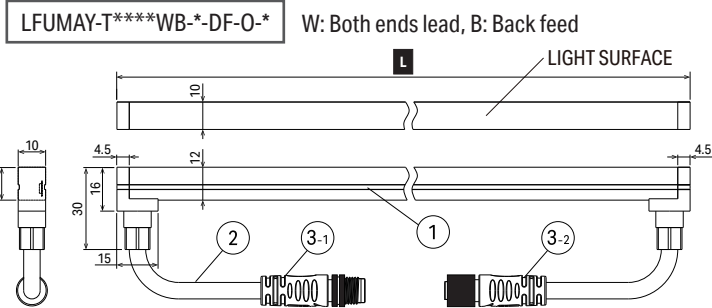
Bendable direction and minimum bending radius

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.



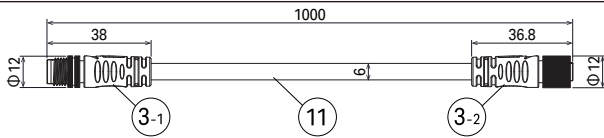
Product specification

※unit of measure=mm

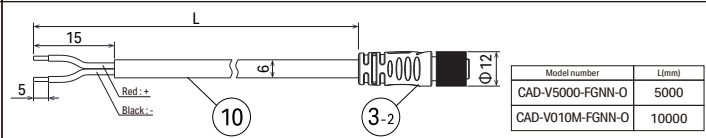


■ Option parts

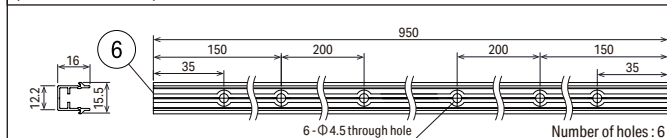
Option parts:
Joint caple 1M for SHIN UQ FLEX mini IP67
(CAD-V1000-MGFG-O)



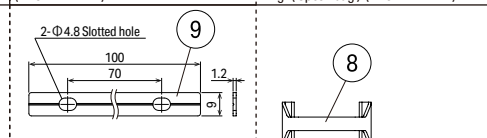
Option parts:
Power supply cable for SHIN UQ FLEX mini IP67
(CAD-V5000-FGNN-O, CAD-V010M-FGNN-O)



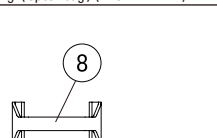
Option parts:
Aluminium mounting rail High 950 set for SHIN UQ FLEX mini
(LFUMAY-RL0950-AL-H)



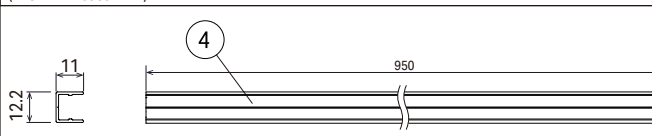
Accessories for rail High & Option parts:	A
Joint plate for SHIN UQ FLEX mini rail High	H
(LFUMAY-PT-B)	H



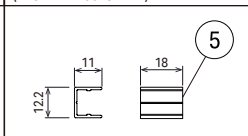
Accessories for rail High & Option parts :
 Hold clip for SHIN UQ FLEX mini rail
 High(5pcs / bag) (LFUMAY-PT-A)



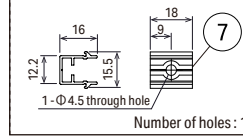
Option parts:
Aluminium mounting rail Low 950 for SHIN UQ FLEX mini
(LFUMAY-RL0950-AL-L)



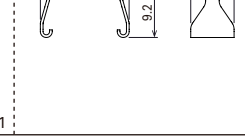
Option parts : Aluminium mounting parts
Low 18 for SHIN UQ FLEX mini (5pcs / bag)
(LFUMAY-RL0018-AL-L)



Option parts : Aluminium mounting parts
High 950 set for SHIN UQ FLEX mini
(5pcs / bag) (LFUMAY-RL0018-AL-H)



Technical drawing of a rectangular plate. The drawing shows a top view with a width of 16.4 and a height of 2.5. The plate has rounded corners. The dimensions are indicated with dimension lines and arrows.



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

Luci UQ FLEX mini alpha (2.1W/m,4.0W/m,5.9W/m,9.9W/m, 14.9W/m) Corresponds to Length (mm) in the drawing and Model No. W: Both ends lead S: One end lead			
0050	0550	1050	1550
0100	0600	1100	1600
0150	0650	1150	1650
0200	0700	1200	1700
0250	0750	1250	1750
0300	0800	1300	1800
0350	0850	1350	1850
0400	0900	1400	1900
0450	0950	1450	1950
0500	1000	1500	2000



Input voltage

DC24V

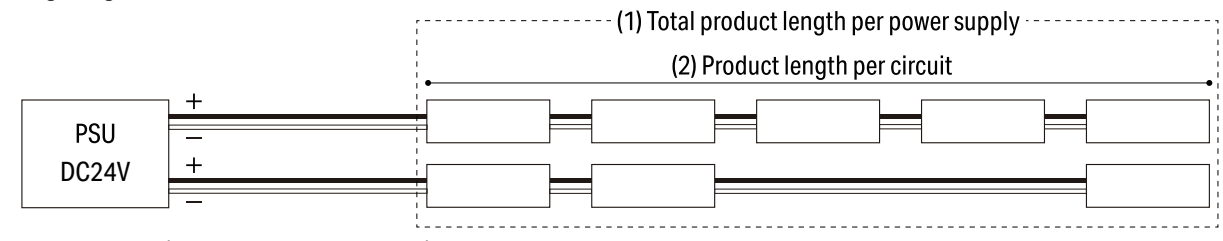
No	Item	Name Material etc.
①	Body	Diffuser
②	Lead wire	
③・③・②	Connector	
④	mounting rail Low 950	Aluminum
⑤	mounting parts Low 18	Aluminum
⑥	mounting rail High 950 set	Aluminum
⑦	mounting parts High 18 set	Aluminum
⑧	Hold clip rail High	SUS
⑨	Joint plate rail High	SUS
⑩	Power supply cable	+ : Red、- : Black
⑪	Joint cable	

Item / Product name		Luci UQ FLEX α mini IP67 (Outdoor)				
Bendable direction		Side / Horizontal bend only				
Lead wire	Cable feed direction	Model No.				
Both ends lead	Side(Right)feed	LFUMAY-T***WR*-DF-O-2	LFUMAY-T***WR*-DF-O-4	LFUMAY-T***WR*-DF-O-5	LFUMAY-T***WR*-DF-O-9	LFUMAY-T***WR*-DF-O-14
One end lead	Side(Right)feed	LFUMAY-T***SR*-DF-O-2	LFUMAY-T***SR*-DF-O-4	LFUMAY-T***SR*-DF-O-5	LFUMAY-T***SR*-DF-O-9	LFUMAY-T***SR*-DF-O-14
Both ends lead	Back feed	LFUMAY-T***WB*-DF-O-2	LFUMAY-T***WB*-DF-O-4	LFUMAY-T***WB*-DF-O-5	LFUMAY-T***WB*-DF-O-9	LFUMAY-T***WB*-DF-O-14
One end lead	Back feed	LFUMAY-T***SB*-DF-O-2	LFUMAY-T***SB*-DF-O-4	LFUMAY-T***SB*-DF-O-5	LFUMAY-T***SB*-DF-O-9	LFUMAY-T***SB*-DF-O-14
Wattage (Ta=25℃)		2.1W/m	4.0W/m	5.9W/m	9.9W/m	14.9W/m
Input voltage (V)		24V				
Max. fixture length		2m				

Environment	In & Outdoor, IP67
Operating temperature	-0 °C to +45 °C
Max. Length per circuit	10m
Accessories	Aluminium mounting rail Low 950 for UQ FLEX mini, Aluminium mounting parts Low 18 for UQ FLEX mini, Aluminium mounting rail High 950 set for UQ FLEX mini, Aluminium mounting parts High 950 set for UQ FLEX mini, Joint plate for SHIN UQ FLEX mini rail High, Hold clip for SHIN UQ FLEX mini rail High, Power supply cable 5M for UQ Flex mini IP67, Power supply cable 10M for UQ Flex mini IP67, Joint caple 1M for UQ Flex mini IP67
Dimmable	○
Light source color	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)

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 top 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.



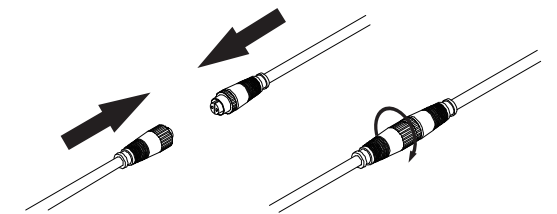
(3) Cable length between PSU and the top of luminaire (m)

the top of luminaire (m)		Cross section	0.3 sq	0.5 sq	0.75 sq
		Wire gauge	AWG 22	AWG 20	AWG 18
Model No.	Wattage	(2) Max.length per circuit	(3) Max. cable length between PSU and the top of luminaire at (2) Max length per circuit		
LFUMAY-T1000**-DF-O-2	2.1 W / m	10 m	64 m	103 m	162 m
LFUMAY-T1000**-DF-O-3	4.0 W / m	10 m	30 m	49 m	77 m
LFUMAY-T1000**-DF-O-5	5.9 W / m	10 m	18 m	29 m	45 m
LFUMAY-T1000**-DF-O-9	9.9 W / m	10 m	8 m	13 m	20 m
LFUMAY-T1000**-DF-O-14	14.9 W / m	10 m	3.1 m	5 m	7.8 m

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

Fixing the connectors

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

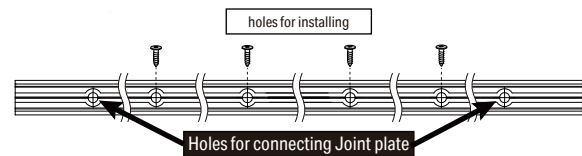


Installing the product

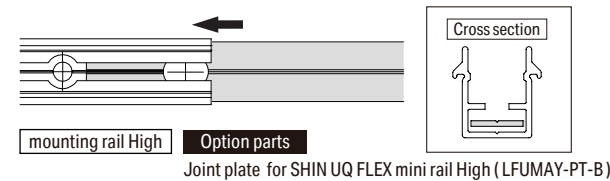
Installation with mounting rail

The Aluminium mounting rail High 950 set for SHIN UQ FLEX a mini (LFUMAY-RL0950-AL-H) 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.

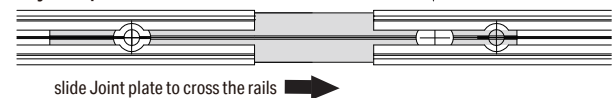
- ① Fix the alminium rail by screws (pan head screw M4 recommended) supplied by installer. The screw holes at both ends should be left unused for installing with the Joint.



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



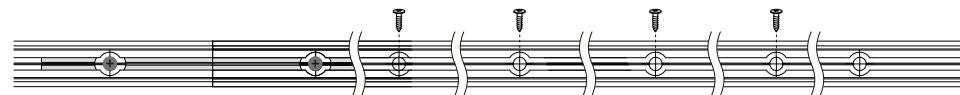
- ③ Put the second rail and slide the joint plate as below.



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

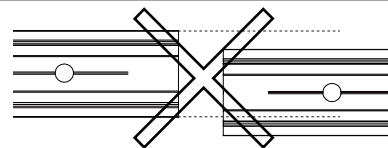


- ⑤ Fix the holes of second rail for installation like ①...



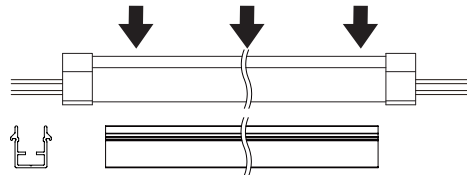
Cautions

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 defect.



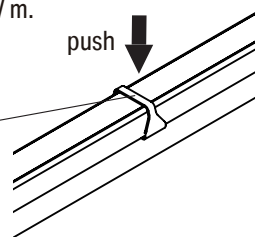
High mounting rail or parts

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



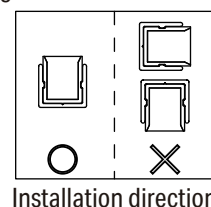
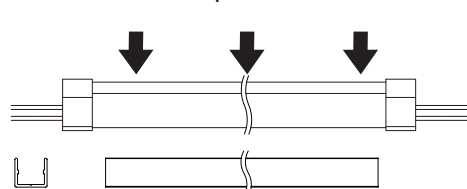
- ⑦ Push the SUS hold clip (LFUMAY-PT-A) until click sound and make sure it is securely locked. SUS hold clip is recommended in the environment where requires durability or downwards installation. Recommended number of LFUMAY-PT-A is minimum 3 pcs / m.

Option parts
Hold clip for SHIN UQ FLEX mini rail High (LFUMAY-PT-A)



Low mounting rail or parts

- ⑥ When installing LFUMAY on the mounting rail Low, the LED fixture shall first be placed horizontally on the rail and the entire LED fixture shall be pushed gradually down into the rail so that the LED fixture does not bend vertically. There is no Hold clip for Low rail. Therefore, when using Low rail, do not mount the light surface sideways or downward.



Installation direction

Cautions

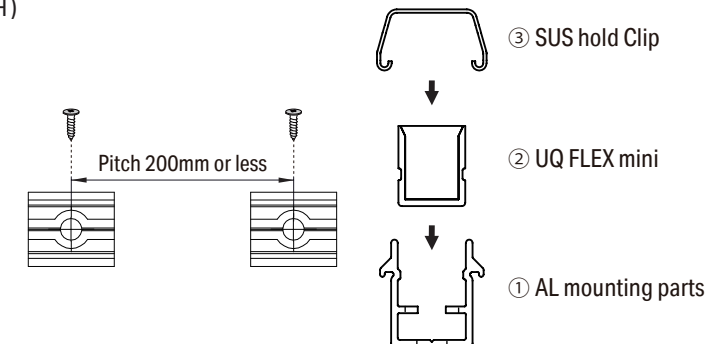
When insert the LED fixture into the rail, do not apply excessive pressure, and exercise caution not to damage the LEDs, electronic components, board, and other parts with your fingers or a tool. There are high risk of LED unlighted, wire breakage and other failure occuring due to above improper handling.

Installation with parts

Option parts

Aluminium mounting parts High set for SHIN UQ FLEX mini (LFUMAY-RL0018-AL-H)

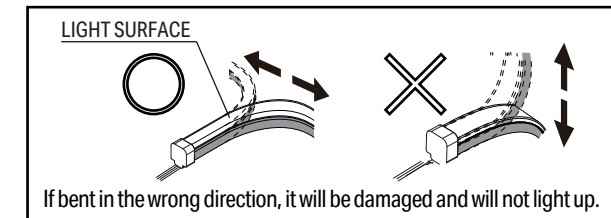
- ① Fix the aluminum mounting parts by 1 pc of screw to the points where the LED fixture is to be installed. (pan head screw M4 recommended) The recommended distance between clips is 200 mm or less. The mounting parts at both ends should be 50 mm away from the ends of the LED fixture to prevent it from lifting.
- ② Push the LED fixture into the clip while keeping the correct bending direction.
Caution: Do not bend the LED fixture vertically.
- ③ Put the SUS hold clip (LFUMAY-PT-A) 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.



Cautions

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

- The LED fixtures longer than 1m should be transported to the installation site in their original packaging.
- For the LED fixtures more than 1m in length, two or more persons should work on the installation.
- The luminaire is soft and should be handled with care during transportation and installation.
- When installing, be sure to straighten the luminaire and mount it on the rail.
- If LED fixture is bend in the wrong direction or over-bend during installation work or after fixing, it will be damaged and not turn on.
- Cannot be cut for outdoor model. Do not cut in the middle of the light fixture.



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.
- When the cable is bundled, heat dissipation becomes poor and the temperature becomes extremely high. When bundling 5 cables or more, connect by lowering the load factor (number of connected devices).

