

# Luci UQ FLEX \alpha mini

**Indoor use only** 

# instruction Manual

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### ↑ To ensure safe usage

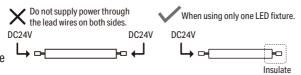
The following are the safety cautions to prevent any harm or damage to others.

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. If using only one LED fixture, insulate the unused connector with self-adhesive tape or electrical tape.





### <u>A Certified Electrical Worker / Engineer is recommended to install</u> 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 electric shock.



Do not use the product if the cover is damaged. Risk of an accident and electric 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: -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.

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:

- A location at high temperature (+45°C or higher)
   (usage environment temperature is -0°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 fine.

#### Inspection Methods

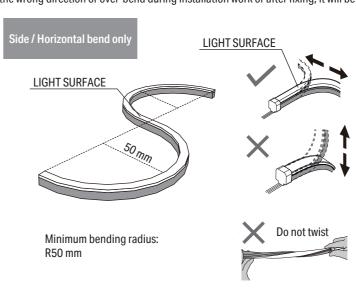
- Is LED operating normally?
- Is there any unusual smell, sound or heat?
- · Are there any cracks, splits, or detached parts on any parts or joints?

#### 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.

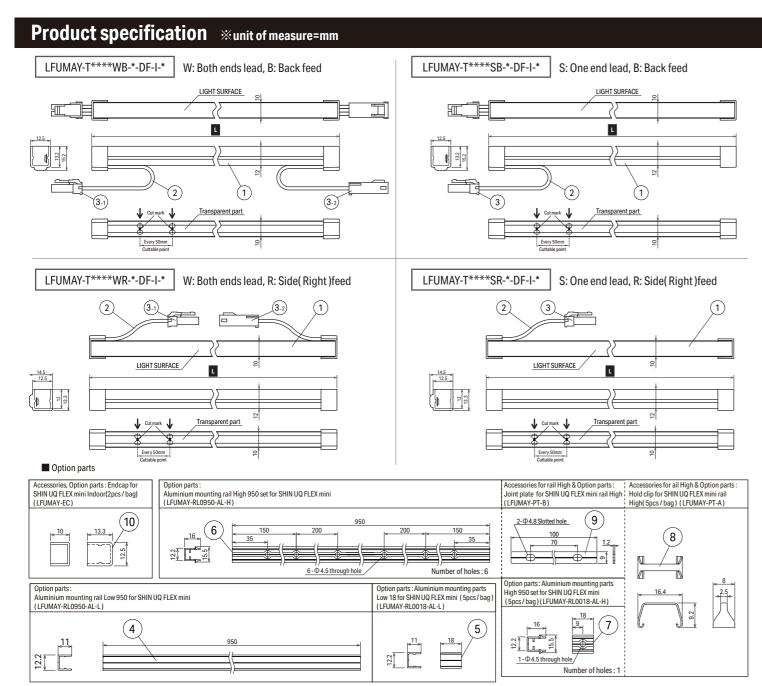


30/01/2025

### Luci UQ FLEX $\alpha$ mini

### Indoor

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

Luci UQ FLEX mini alpha (2.1W/m,4.2W/m,6.4W/m,10.8W/m,15.9W/m)  Corresponds to Length (mm) in the drawing and Model No.  W: Both ends lead S: One end lead					
0050	0550	1050	1550	2050	2550
0100	0600	1100	1600	2100	2600
0150	0650	1150	1650	2150	2650
0200	0700	1200	1700	2200	2700
0250	0750	1250	1750	2250	2750
0300	0800	1300	1800	2300	2800
0350	0850	1350	1850	2350	2850
0400	0900	1400	1900	2400	2900
0450	0950	1450	1950	2450	2950
0500	1000	1500	2000	2500	3000



Input voltage
DC24V

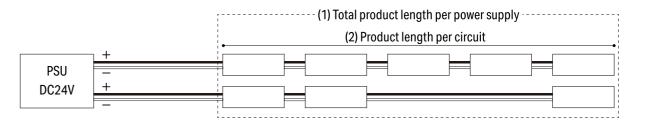
No	Item	Name Material etc.	
1)	Body	Diffuser	
2	Lead wire		
3-1 (3-2)	Connector		
4	mounting rail Low 950	Aluminum	
(5)	mounting parts Low 18	Aluminum	
6	mounting rail High 950 set	Aluminum	
7	mounting parts High 18 set	Aluminum	
8	Hold clip rail High	SUS	
9	Joint plate rail High	SUS	
10	End cap		

Item / Product name		Luci UQ FLEX α mini (Indoor)					
Bendable direction		Side / Horizontal bend only					
Lead wire Cable feed direction		Model No.					
Both ends lead	Side(Right)feed	LFUMAY-T****WR-*-DF-I-2	LFUMAY-T****WR-*-DF-I-4	LFUMAY-T****WR-*-DF-I-6	LFUMAY-T****WR-*-DF-I-10	LFUMAY-T****WR-*-DF-I-15	
One end lead	Side(Right)feed	LFUMAY-T****SR-*-DF-I-2	LFUMAY-T****SR-*-DF-I-4	LFUMAY-T****SR-*-DF-I-6	LFUMAY-T****SR-*-DF-I-10	LFUMAY-T****SR-*-DF-I-15	
Both ends lead	Back feed	LFUMAY-T****WB-*-DF-I-2	LFUMAY-T****WB-*-DF-I-4	LFUMAY-T****WB-*-DF-I-6	LFUMAY-T****WB-*-DF-I-10	LFUMAY-T****WB-*-DF-I-15	
One end lead	Back feed	LFUMAY-T****SB-*-DF-I-2	LFUMAY-T****SB-*-DF-I-4	LFUMAY-T****SB-*-DF-I-6	LFUMAY-T****SB-*-DF-I-10	LFUMAY-T****SB-*-DF-I-15	
Wattage (Ta=25°C)		2.1W/m	4.2 W/m	6.4W/m	10.8W/m	15.9W/m	
Input voltage (V)		24V					
Max. fixture length		3 m					

Environment	Indoor		
Operating temperature	-0 °C to +45 °C		
Max. length per circuit	5m		
Accessories	mounting rail Low 950, mounting parts Low 18, mounting rail High 950 set, mounting parts High 18 set(5pcs/bag), Hold clip(5pcs/bag), Joint plate, Endcap for UQ FLEX mini Indoor		
Dimmable	0		
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 mulitple circuits.
- 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 Cross section 0.3 sq $0.75 \, \text{sq}$ the top of luminaire (m) Wire gauze AWG 22 AWG 20 AWG 18 (2) Max. product (3) Max. cable length between PSU and the top of Product code Power luminaire at (2) Max. product length per circuit length per circuit LFUMAY-T1000\*\*-\*-DF-I-2 2.1 W/m 15.0 m 38.0 m 5 m 24.0 m LFUMAY-T1000\*\*-\*-DF-I-4 4.2 W/m 5 m 7.7 m 12.3 m 19.5 m LFUMAY-T1000\*\*-\*-DF-I-6 6.4 W / m 5 m 5.1 m 8.2 m 12.8 m LFUMAY-T1000\*\*-\*-DF-I-10 10.8 W/m 5 m 3.0 m 4.9 m 7.6 m LFUMAY-T1000\*\*-\*-DF-I-15 15.9 W/m 5 m 2.0 m 3.3 m 5.2 m

<sup>\*</sup>The length of cable that can be connected varies depending on the voltage drop.



### Luci UQ FLEX $\alpha$ mini

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### Installing the product

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

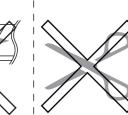
- The LED fixtures longer than 1m should be transported to the installation site in their original packaging.
- For the LED fixtures more than 1m in length, two or more persons should work for the installation.
- The luminaire is soft and should be handled with care during transportation and installation.
- When installing, be sure to straighten the luminaire and mount it on the rail.
- If 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.



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



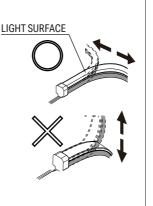
Do not move the Pen knife/ Box cutter blade back and forth like a saw Please cut in one shot from the top down by pen knife.



Do not cut with scissors, nippers, etc



For LED fixtures longer than 1m. be sure to have two or more people to install them. Do not work one person.



#### Cutting and terminal sealing

#### Side / Horizontal bend only

Pen knife / Box cutter Push the blade straight down

Wipe off any dirt, etc. from the adhesive area. Use a thin blade such as a Pen knife / Box cutter for cutting. Use of thick blades, scissors, nippers, etc. will bend the board and

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.

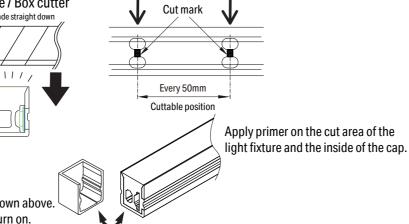
The cut and insulated LED fixture with end cap can only be used indoors. Do not install the products in wet or humid places.

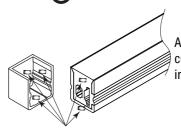
Before installation of lighting, check the cap is correctly fitted.

#### **About Adhesives**

cause malfunctions.

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





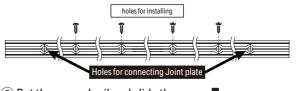
Apply sufficient adhesive on the cut area of the LED fixture and the inside of the cap.

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

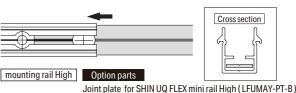
#### Installation with mounting rail

The Aluminium mounting rail High 950 set for SHIN UQ FLEX 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.

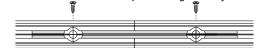
1) Fix the alminium rail by screws (pan head screw M4 recommended) supplied by installer. The screw holes at both ends should be left unused for installing with the Joint.



(3) Put the second rail and slide the Joint plate as below. put the rail (2) When two or more rails are installed in a straight line. insert the Joint plate into bottom of the rail.



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

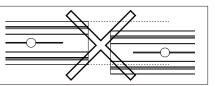


slide Joint plate to cross the rails 5 Fix the holes of second rail for installation like 1...



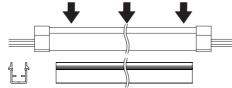
### **Cautions**

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.



#### High mounting rail and 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.

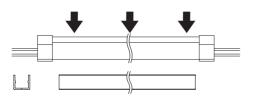


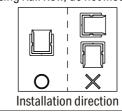
7) Push the SUS hold clip (LFUMAY-PT-A) until click sound and make sure it is securely locked. SUS hold clip is recommended in the environment where requires durability or downwards installation. Recommended number of LFUMAY-PT-A is minimum 3 pcs / m.



#### Low mounting rail and 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 Rail Low. Therefore, when using Rail Row, do not mount the light surface sideways or downward.





### **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.

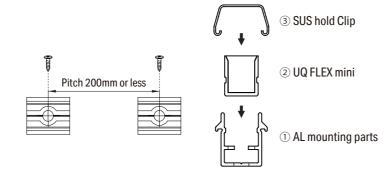


#### Installation with parts

#### Option parts

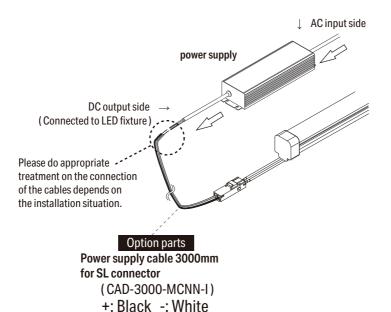
Aluminium mounting parts High set for SHIN UQ FLEX mini (LFUMAY-RL0018-AL-H)

- 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 in the wrong direction.
- ③Put 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.



### 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).



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