


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.




 Use a DC24 V power supply. Never connect to any other power supply. Always use a circuit breaker of suitable capacity in the power supply. If the capacity is not suitable, the breaker may not work when abnormal current occurs, which may cause fire.

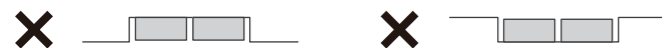
 Always shut off the main power supply before working or inspection. Do not connect or disconnect the lead wires of the LED fixture while power is supplied.


 Firmly connect the connectors. Incomplete connection may cause heating, smoke, and fire.


 Do not touch the ends of the connectors. Risk of electrical shock.

 Do not use the product if the cover is damaged. Risk of an accident and electrical shock.

 The product must be allowed to dissipate heat. Allow sufficient space for ventilation (heat dissipation) between the lamp fitting and building structure. Avoid installing the light appliances close to each other. It may shorten product life or cause fire.




 When there is abnormal situations, please cut off the power immediately, consult with electricians, and do not touch the lighting with bare hands.


 Do not place or cover the LED fixture with a heatable object such as cloth, paper or insulating material. It may fail to light up or cause fire.


Do not allow an open-ended fixture to have contact with any metal.


Do not place or install LED fixture in close contact with other electric equipment in or out of ceiling area to prevent fall, electric shock or fire caused by vibration from electric equipment.

Do not operate the device with wet hands. It may result in an electric shock.

 Do not use the product if the cover is damaged. Risk of an accident and electrical shock.


 Do not use a brush or an abrasive to polish metal parts. Risk of damage and corrosion.


 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.

 Important notice for storage
Please ensure the fixture is stored within -10°C to 55°C
Please do not store the carton or the packages of our light fittings in the following conditions :
- Wet location
- Places of high humidity
- Dusty or dirty places
- 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 open individual package until just before installing LED fixture to avoid any damage to the light fittings.

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

 This LED fixture is for indoor use only. Do not use in the following environments :
- Outdoors
- Location at high temperature (+35°C or higher) . (Operating temprature is 0°C to 35°C)
- Location where water may splash onto the product.
- Location with high humidity.
- A dusty location.
- Location with corrosive or inflammable gases.
- Airtight location.
- Location with direct exposure to salt water or organic solvents
- Location in direct sunlight.
- 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 to the lamp 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. Use a damaged cable.
- Press down on the product.
- Drop the product or subject the product to intense vibration or shock.

Please read before the usage

Use the special mounting fixture to mount the LED fixture to the mounting location, and verify that the mounting is secure.

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 product.

Caution : regarding installation environment of power supply

Refer to the power supply manual for temperature, humidity and other operating conditions.

Maintenance and Inspection

- LED fixture has a life span.
- Degradation of inner materials occurs after 8-10 years of installation even when the LED fixture looks fine from the outside.
- Components of the LED 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 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. Cleaning Method

Inspection Methods

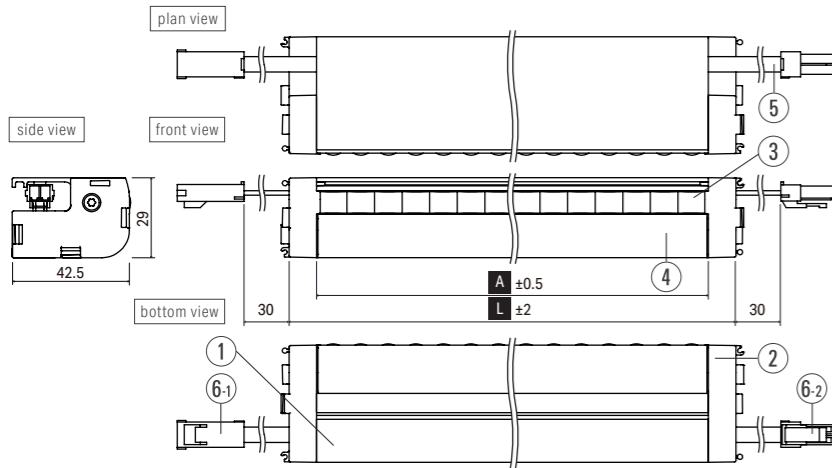
- Is LED operating normally?
- Is there any unusual smell, sound or heat?
- Are there cracks, slits, or detached parts on any part or joint?

Cleaning Method

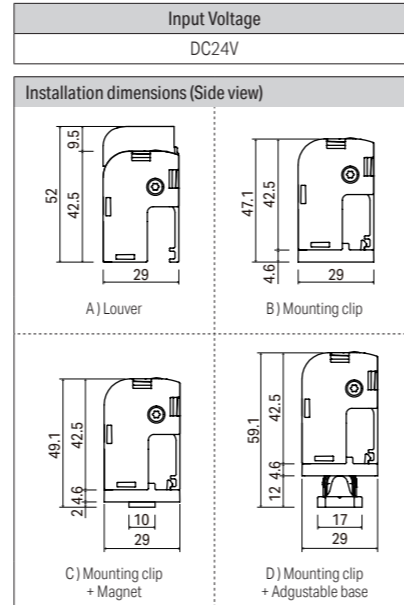
- Lightly wipe the LED fixture with a soft cloth.
- To best clean the LED fixture, wipe dirt with a soft cloth which has been soaked in a neutral detergent diluted with water and squeeze firmly. To finish off, wipe it with a damp cloth and dry it.

Product specification

LKF10-(Length) (Lead wire) -(Light source color)-(Beam angle)-I-(Wattage)-(Body color)



Length	A	L
0162	142	162
0302	282	302
0442	422	442
0582	562	582
0722	702	722
1012	982	1012
1282	1262	1282



No.	Item name	Material etc.
①	Body	Aluminum
②	Side cap	Polycarbonate
③	Cover A	Polycarbonate Lens
④	Cover B	Polycarbonate Diffuser
⑤	Lead wire	UL1007 AWG20, black+, white-
⑥-1	Connector	White
⑥-2	Connector	White

No.	Item name	Material etc.
⑦	Mounting clip for KIWA fuga	Polycarbonate Clear
⑧	Adjustable base for KIWA clip	
⑨	Louver for KIWA fuga	Polycarbonate Black / White
⑩	Power supply cable 3M	UL1007 AWG20, Black:+ White:-
⑪	Joint cable 1M	UL1007 AWG20, Black:+ White:-
⑫	Magnet set L	Silver

Accessories

Mounting clip for KIWA fuga (LKF-PT-A) (4pcs/1bag)

Attachment

Length	Number of clip
0162	1
0302	2
0442	2
0582	3
0722	3
1002	4
1282	4

Louver for KIWA fuga (LKF-PT-B-B/W) (4pcs/1bag)

Adjustable base for KIWA clip (LKW-PT-D) (4pcs/1bag)

Power supply cable 3M (CAD-3000-MCNN-I)

Check the label on the DC + side for polarity.

Joint cable 1M (CAD-1000-MCFC-I)

Magnet set L (MG-L)

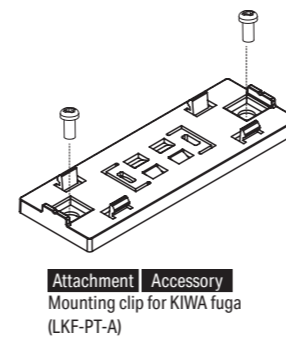
Item / Product Name	Luci KIWA fuga		
	LKF10-**-*-I-2-*	LKF10-**-*-I-11-*	LKF10-**-*-I-34-*
Model No.	LKF10-**-*-I-2-*	LKF10-**-*-I-11-*	LKF10-**-*-I-34-*
Wattage	2.7W/m	11.3W/m	34.9W/m
Input Voltage	24 V		
Weight	850 g / m		
Environment	Indoors (No Condensation)		
Operating temperature	0°C to +35°C (No Condensation)		
Max. length per circuit	10m	7m	3m
Material (Body)	Aluminum , Polycarbonate		
Attachment	Mounting clip for KIWA fuga		
Accessories	Mounting clip for KIWA fuga , Adjustable clip base for KIWA clip , Louver for KIWA fuga , Power supply cable 3M , Joint cable 1M , Magnet set L		
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)		
Dimmable	Yes (0-10V, 1-10V, DMX, DALI, PWM, Casambi)		

Installing the product

A Standard installation method

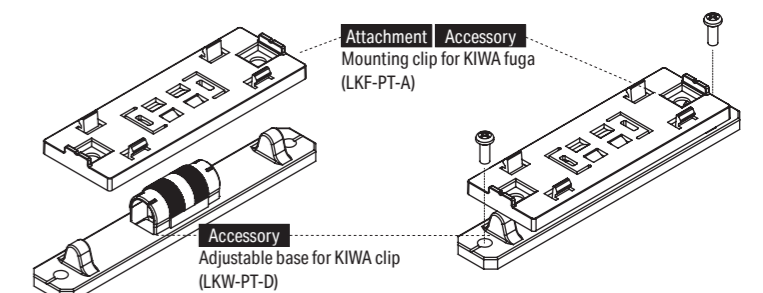
- Securely fasten the mounting clips. Use two commercially available screws (M3 screw recommended) to ensure a firm hold.
- Install until the light fitting clicks securely into place, ensuring there is no looseness or distortion.
- When removing, take care not to damage the clips.

Installation Method for Mounting clip for KIWA fuga

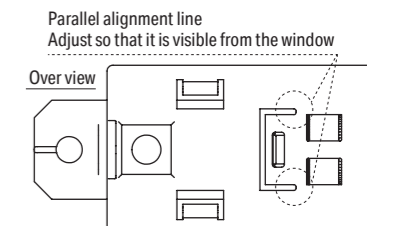
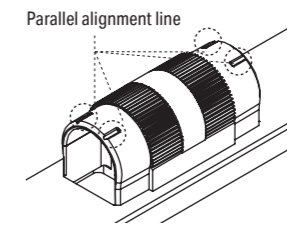


Installation Method for Adjustable base for KIWA clip + Mounting clip for KIWA fuga

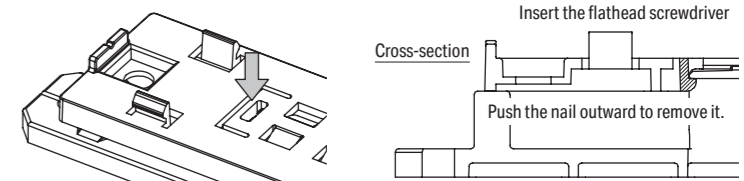
Secure the Adjustable base for KIWA clip (LKW-PT-D) and Mounting clip for KIWA fuga (LKF-PT-A). Press firmly until you hear a click. After attaching both components, secure them with screws.



Angle adjustment prior to fitting the LED fixture
Before installing the luminaire, adjust the angle to ensure it remains parallel. Align it with the parallel alignment line provided. Failure to install it in a parallel position may prevent the locking mechanism from engaging, creating a risk of the luminaire falling.



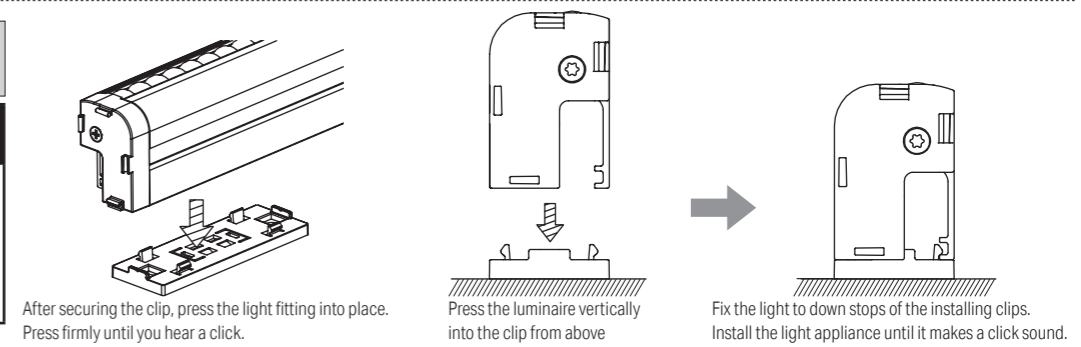
How to remove the clip
Removal method for the Mounting clip for KIWA fuga (LKF-PT-A) from the Adjustable base for KIWA clip (LKW-PT-D).
Insert a flathead screwdriver into this section and pull the clip out while applying force in the direction of pushing the tabs apart.



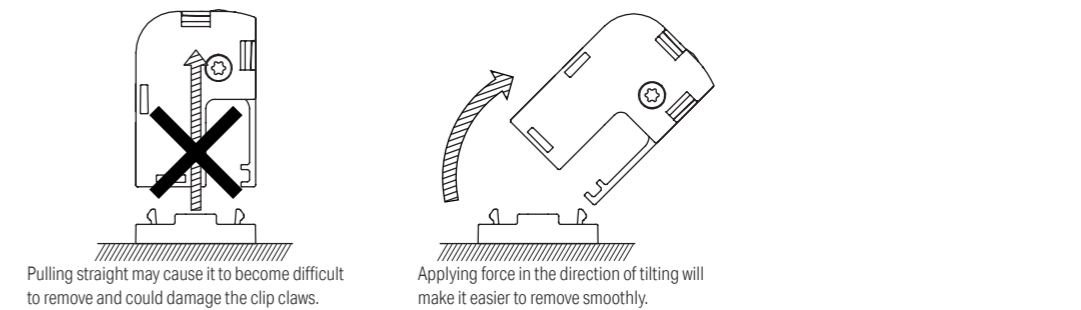
Method for Attaching the LED fixture to the clip

Caution

Do not repeatedly attach and detach to the mounting-clip. (Reference number of attachments and detachments: maximum 5)
The clip tab may be damaged.



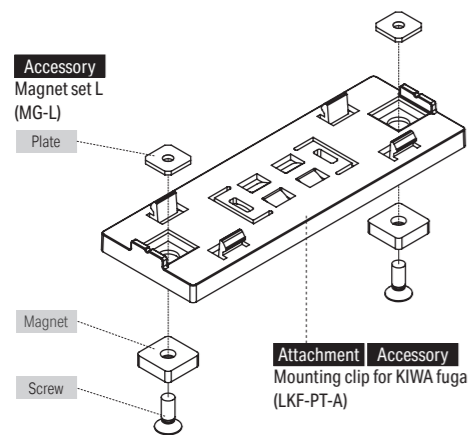
B How to remove



Installing the product

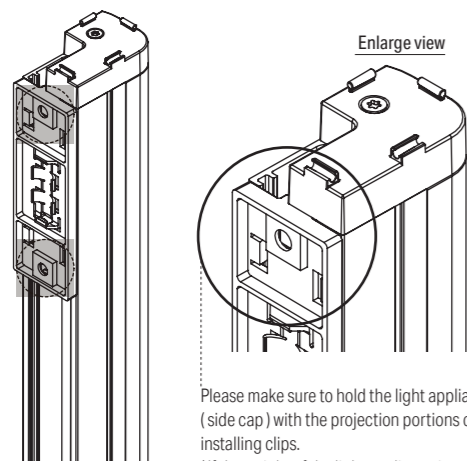
C Magnet installation for Mounting clip A

Mounting clip for KIWA fuga (LKF-PT-A) can also be secured magnetically. Please refer to the following for installation methods.

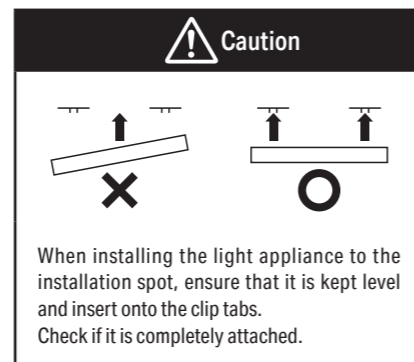


D How to install lengthwise

For installation in lengthwise direction, the light appliance and clip should be placed in accordance with the diagram below. Please make sure to fix tightly using 2 screws per an installing clip. Inadequate fastening may result in insufficient securing and holding force, posing a risk of the device falling.



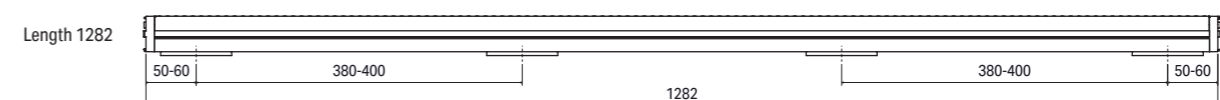
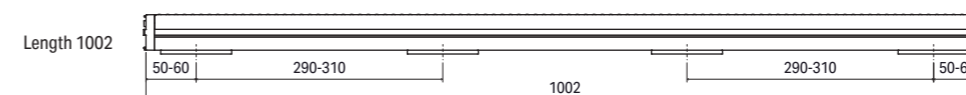
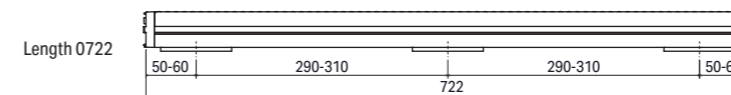
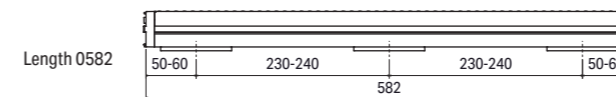
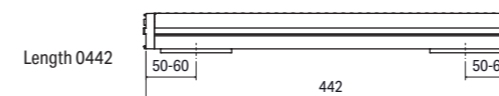
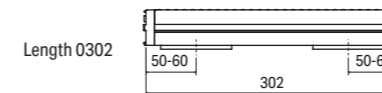
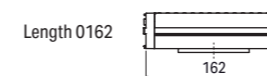
Please make sure to hold the light appliance (side cap) with the projection portions of the installing clips. (If the weight of the light appliance is not supported by the projection, it may fall and cause a hazard)



Installing the product

E Mounting clip positions and quantities by length

The recommended number and position of mounting clips for each length are as follows. The number of clips must be the same for the Mounting clip for KIWA fuga (LKF-PT-A), and Adjustable base for KIWA clip (LKW-PT-D).



Length	Number of clip
0162	1
0302	2
0442	2
0582	3
0722	3
1002	4
1282	4



- 1) When install the mounting clips, ensure that those are installed in the same level on a plane surface and alined on the centre line.
- 2) When install the LED fixture on the mounting clip, ensure to insert onto the clip tab and check if it is completely attached. Otherwise, caused by that distortion and incomplete attachment, the LED fixture might have unexpected crack sound and fall down from the clips.

Connecting to the power supply

Caution : Must choose suitable 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 a long cable with thin dimension, the resistance of cable will increase. Voltage drop and heat discharging may occur and result in a drop in brightness.

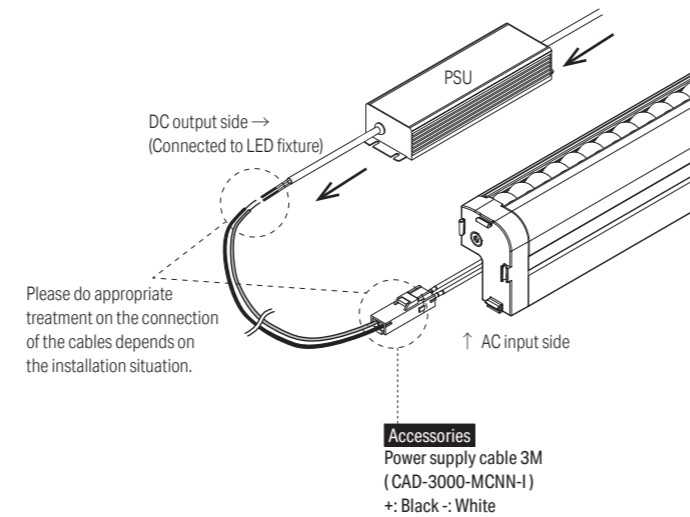
Caution: When separating one cable to multiple circuits in the same gauge, the current loading focuses on the junction of the branch circuit and high temperature will liberate on there. Please consider the loading of the power supply (quantity of LED fixture) and review the wiring system to avoid the 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 to have enough space 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 less number of LED fixture for one cable.

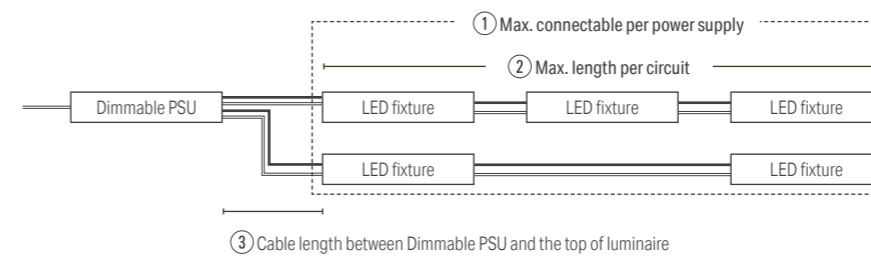
Refer to the power supply manual for temperature, humidity and other operating conditions.



① Max. connectable per power supply			
Length of LED fixture (70% loading factor) *: split into multiple circuits			PSU
2.7 W/m	11.3 W/m	34.9 W/m	
13.0m*	3.1m	1.0m	50 W
25.9m*	6.3m	2.0m	100 W
38.9m*	9.4m*	3.0m	150 W

System configuration diagram

- ① Max. connectable per Dimmable PSU depends on capacity of the Dimmable PSU. Recommended loading factor is 70% (without dimming) or 60% (with dimming).
- ② Max. 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 Dimmable 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 LED fixtures in the circuit.



Model No.	Wattage (W/m)	Cross section	0.3sq	0.5sq	0.75sq
		Wiregauge	AWG22	AWG20	AWG18
		② Max. length per circuit (m)	③ Max. cable length between PSU and the top of luminaire at ② Max. length per circuit (m)		
LKF10 - ** - * - * - I - 2 - *	2.7	10	6.0	9.8	15.5
LKF10 - ** - * - * - I - 11 - *	11.3	7	2.1	3.3	5.3
LKF10 - ** - * - * - I - 34 - *	34.9	3	1.5	2.5	4.0

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