

# UVC PURIFICATION PANEL LIGHT

Panel light with UVC tube on both sides

## Product description

This product has two functions, one is normal LED lighting, and another one is the UVC, it adopts mirror aluminum process, which can improve the radiation intensity and purification ability efficiently, the light also has microwave sensor to ensure the safety, and can realize the timing control through the remote control. The LED light uses the SMD light source, with uniform light and high luminance efficiency, and also has 0-10V dimming, PWM dimming, resistance dimming functions. This product has simple appearance and structure, can replace the UVC tube conveniently.

## Specifications

Model No.	Voltage(V AC)	Frequency(HZ)	Power(W)	CCT(K)	Luminous flux(LM)	Wavelength(NM)	Size(MM)
U22-90W-03	220-240	50/60	40 (LED)	2700-5700	4200-4600	/	595*595*57
	220-240	50/60	50 (UVC)	/	/	254	
U22-90W-05	100-277	50/60	40 (LED)	2700-5700	4200-4600	/	603*603*57
	100-277	50/60	50 (UVC)	/	/	254	

## Description of remote control

### Switch the work pattern:

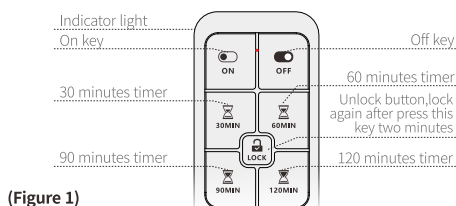
1. The remote control of the product has been paired before delivery.
2. To reset the remote control mode, press "120min" to pair the remote control within 5s after power-on and the lamp rings for 3 consecutive times, indicating successful pairing (remote control UVC).
3. To activate the default mode, press 60min + 90min and the lamp rings long, indicating the operation is successful. (Remote control failure and remote control cannot control the UVC).

### Default mode function description:

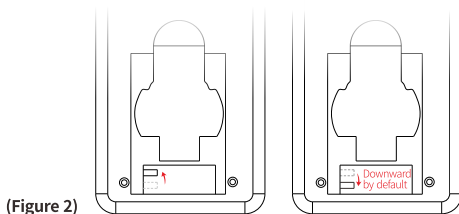
When power is on, the lamp will have a sound, intermittent sound for 12S first, then rapid sound for 6S, and then the UVC lamp turns on, and the microwave sensor starts to work. When the sensor is on, the UVC lamp will turn on after 2 minutes without detection, if detected, it will turn on 2 minutes later.

### Function description for remote control mode:

1. The lamp will have a sound when power is on.
2. When press "lock" key, just unlock, the UVC tube is not on, and the lamp will have a sound.
3. When press the keys ("ON" key and timing key included) on the remote control, the lamp will have a sound, intermittent sound for 12S first, then rapid sound for 6S, and then the UVC lamp turns on, the microwave sensor starts to work.
4. The timing keys are 30min/60min/90min/120min and "ON", which means no time limited. Timing keys can be switched between each other, but reset the timer after switching, and the item 3 will be repeated. To cancel the timing, need to press "OFF" key, instead of press the original timing key. The lamp will have a sound once the key is activated.
5. To match the remote control, press "120min" after the lamp turns on for 5S, the lamp rings 3 times continuously, pairing is successful.
6. When the sensor is on, the UVC lamp will turn on after 2 minutes without detection, if detected, it will turn on 2 minutes later.
7. The sensor detection will start once the lamp switch on.
8. The indicator light on the remote control lights up with each press of the key.
9. The switch is downward by default (as shown in Figure 2). UVC lamp turns off once the switch is dialed up, and the UVC lamp cannot be turned on automatically when no one is detected, need to press "on" key (This function requires to press "lock" to enter the switched mode).
10. Lamp will have a drip sound after press "lock" key on the remote control to unlock. The "lock" key only has unlock function, without lock function. When the "lock" key is activated, it will lock automatically after two minutes, other keys are out of function after locked, but can only be operated by re-unlocking (as shown in Figure 1).
11. Functions of other keys are shown in Figure 1.



(Figure 1)



(Figure 2)

## Notices

1. Other keys are out of function if the “lock” key is not pressed.
2. The UVC light will turn off automatically when the microwave sensor detects people or animals, and it will turn on automatically if the sensor detects nothing in 2 minutes.

## Prompt tone description

The lamp prompts and the UVC light flashes to indicate that the UVC light is about to turn on, and warn people or animals to leave the purification area as soon as possible to prevent injury from UV exposure.

## Technical parameters

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UVC operating temperature	LED operating temperature	Environmental humidity	Storage temperature	Sensor detection distance	Sensor detection range
0~35°C	-20~45°C	< 80%	-20~60°C	0-5M	360°

## Theory and factors of purification

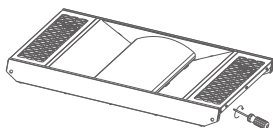
UVC wavelength: 254nm

Purification theory: C-band ultraviolet rays emitted by UVC light can destroy the germ's DNA and RNA structure.

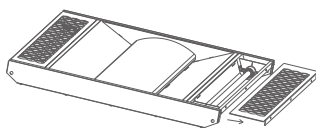
## Application

Product is used as purifying for medical institutions, schools, offices, commercial space, food, medicine industry, household use and other indoor places.

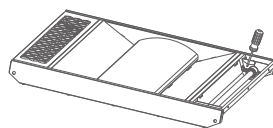
## Replace the UVC tube



1. Use a screwdriver to remove the screws on the mesh cover plate.

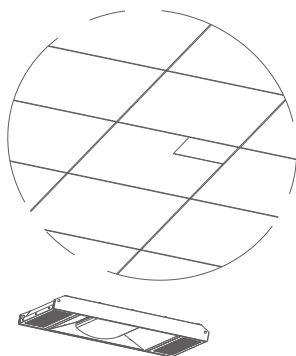


2. Remove the mesh cover plate.

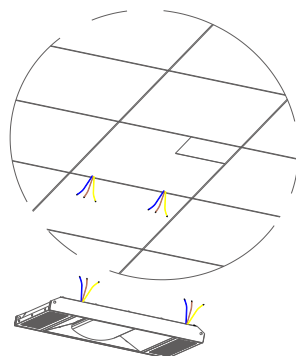


3. Use a screwdriver to remove the screws on the UVC tube clasp, pull out the wire and replace the tube with a new one.

## Installation steps

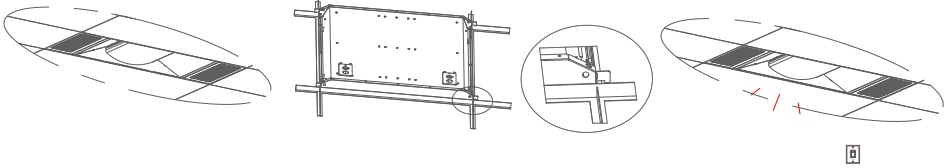


1. Choose the location you want to install.



2. Connect the UVC tube and LED on two switches respectively.

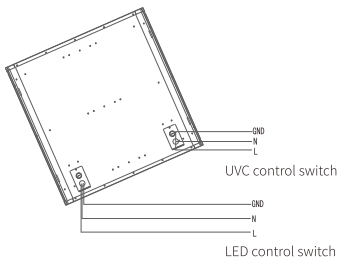
## Installation steps



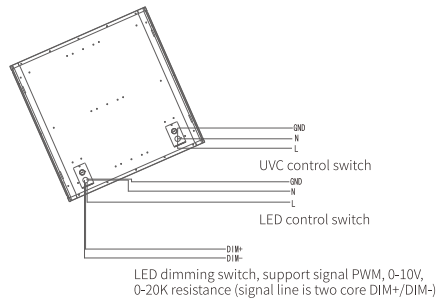
4. Install the lamp properly.
5. Then open the 4 rear side safety buckles at 90°
5. Turn on the switch to light the lamp.

## Wiring diagram

Circuit wiring diagram 1:



Circuit wiring diagram 2:



## Other notices

1. LED and UVC need to be controlled by different switches, the same switch can't be used to control LED and UVC at the same time.
2. This product is only allowed for purifying the surface of object and air, human body Purification is not allowed. When using this product, the surface of the Purification lamp should be kept clean. If there is dust on the surface, please wipe it in time. It is recommended to remove the lamp and wipe it with a Alcohol pad, then dry it. Never rinse it with water.
3. When using this product for air purification, please close the door and window to keep the room clean and dry. Not recommended to use the product if the room temperature is lower than 0 ° C or higher than 35 ° C.
4. When using this product to Purify the surface of objects, if there are paintings, plants, utensils that sensitive to ultraviolet light, please cover them, otherwise they may be damaged.
5. Object will be damaged irreversibly if purification in the UVC light for a long time, and the color of the white object will be changed if exposed to the Purification lamp, plastic items that are not UV resistant will become fragile.
6. Please open the door and window for 10 minutes after purification. Put away the remote control to avoid accidental lights and accidental injuries.
7. If the UVC tube is broken, please ventilate in time, wear the gloves and clean it by mercury vapor cleaning tools. Do not use normal vacuum cleaner.
8. After handling the damaged tube, please take off protective clothing and wash hands before eat food, smoke or use other items.
9. U22 products with L32 safety system must be used in the default mode.

## Precautions for Use

1. Only professional maintenance is allowed, so as not to damage the precision electronic components.
2. Microwave sensor may turn off the light by mistake in heavy rain. The light may be turned off by mistake when there is flowing of sewer pipe around, and it will have poor sensing to objects moving at a uniform speed. There should be no metal shielding in front of the microwave sensor and no vibration at the installation position, which will turn off the light by mistake.
3. please ensure a gap of 15cm between each light, otherwise there will be unexpected power-off.
4. When the lamp is on, it is not allowed to have any shielding in front of it, otherwise the Purification will be invalid. The UVC light can only penetrate quartz glass, it's difficult to other objects.

## Trouble shooting

NO.	Failure analysis	Solutions
1	No beep (the indicator light is off)	Confirm whether the power is on;
2	No beep (the indicator light is on)	Please send it back for repair;
3	Prompt sound (indicator light is off)	Please send it back for repair;
4	The UVC lamp cannot be turned on	Confirm whether the power is on and the installation meets the requirements;
5	Unartificial light-off appears	Confirm whether the situation is in this manual; If not,please send it back for repair;
6	The LED light cannot be turned on	Confirm whether the power is on; Confirm whether the dimmer is on; Confirm whether the signal line is short circuit; If not,please send it back for repair;
7	The remote control cannot control the UVC lamp	Confirm whether the remote control is matched successfully (Please refer to the second part in the users manual of the remote control,about the working model switch); Confirm whether the battery of the remote control is expired; If not,please replace the remote control.

## Quality assurance

Warranty of the product is 1 year since the purchasing date, free maintenance or replacement service is available for the quality problems such as manufacturing process, technology and components etc.

Paid service is available for the following cases:

1. Expiry.
2. Damage caused by the improper use such as improper installation without reference on the manual, shipping or other accidents,disaster, abnormal voltage, etc.
3. Normal aging and abrasion.
4. Other causes not for design,technology, manufacturing, quality etc.

## Disclaimer

1. The ultraviolet rays of this product cannot be used for lighting purposes and in applications or activities which may cause and or lead to death, personal or animals injury and/or damage to the environment.
2. UV-C luminaires systems must only be sold and installed and replaced by professionals according to our stringent safety and legal requirements.
3. When using this UVC product for indoor disinfection, please close the doors and windows, keep the room clean and dry, and reduce dust and moisture.
4. When UVC is irradiated on the object for a long time, it will cause irreversible damage to the object that is not UV resistant, and the object may undergo chemical or physical changes, such as the plastic items that are not UV resistant will become brittle and breakable. When using this UVC product,, if there are UV-sensitive items such as oil paintings, plants, and utensils that are within the range of the direct UV radiation, they should be covered, otherwise, they may be aged or damaged.
5. We do not promise or warrant that the use of the Products will protect any user from or prevent infection and/or contamination with any viruses, bacteria, protozoa, fungi, illness or disease.
6. There is high efficiency UVC generating device inside. No disassemble and open it except the professionals, as it may cause injury when ultraviolet rays are directly exposed to eyes or skin. Maintenance personnel need to wear professional uv protection goggles and skin protection before repair.
7. The UVC Products are not intended for and must not be used for medical purposes.

# Disclaimer

8. In addition to and without limitation of any exclusions or limitations of liability of us as set forth in any agreement for the sale, distribution or otherwise making available of the UV-C lamp/fixture/devices, we shall have no responsibility or liability whatsoever for any claim or damage that may arise from or relate to any use of the UV-C lamp/fixture/devices outside of their intended use or contrary to their installation and operation instructions, each as described in this document, the user manuals and/or the mounting instructions.

9. The product must be designated by the manufacturer's professional and technical personnel, other personnel are not allowed to dismantle or replace without authorization.

## Warnings and Safety:

A UV-C lamp/fixture/device product breaking is extremely unlikely to have any impact on your health. If the UV-C quartz tube breaks, ventilate the room for 30 minutes and remove the parts, preferably with gloves. Put them in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner.

### **Warning**

1. Ultraviolet rays are harmful to humans or animals. Do not directly irradiate the skin or eyes. Please leave the irradiation sterilization area as soon as possible after lighting.
2. If you feel uncomfortable when exposed, please leave the UV light source as soon as possible.
3. In severe cases, headache, dizziness, increased body temperature, stinging eyes or poor vision. If the skin is red, swollen, itchy, and desquamated, please seek medical attention in time.

