

UPPER AIR UV-C

U19 purification luminaire

Product description

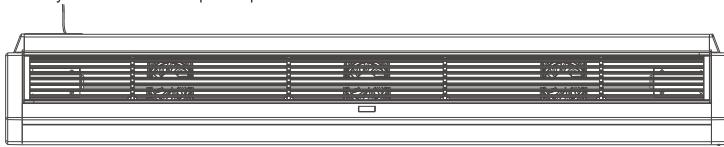
This item has two functions, one is normal led lighting, while another one is the UVC that purify the upper air, the best feature is the people can stay over there while the UVC works. Even the people who might be beamed by the UVC, then the internal PIR sensor will work to turn off the UVC light, so it is no worry about being burned by the UVC. What's more, with the internal fans for air convection, the product has higher efficiency to kill germ in the air. The LED light is 5 levels dimmable(20%/40%/60%/80%/100%) and 3 CCT levels(3000K/4000K/5000K) adjustable.

The purification theory and application

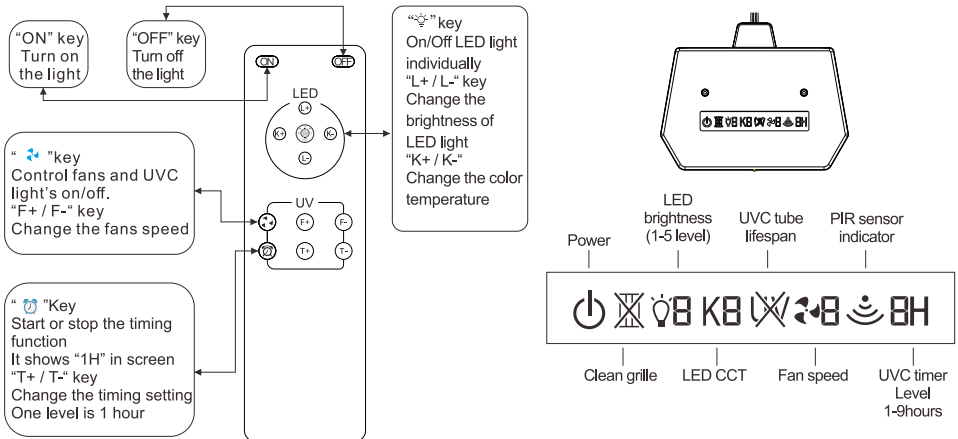
UVC wavelength: 254 nm

purification theory: Ultraviolet rays can destroy the germ's DNA and RNA structure.

Application: Product is used as purification and lighting for medical organizations, schools, offices, commercial places, food and medicine industry and other indoor public places.



Operation of remote control and LCD screen



Direction of symbol in the digital LCD screen

	Sign light "ON" means turning on the LED and UVC light; Sign light "OFF" means turning off the LED and UVC light.
	Sign light means cleaning of grille(countdown 1500hours), normally no sign light.
	Sign light indicate LED brightness level.
	Sign light indicate LED CCT level.
	Sign light on for long time means the UVC tube need to be changed.
	Sign light flicker means the damage of UVC tube or poor connection with the socket.
	Sign light on means starting the mode of UVC light and level of rotation speed of fans.it shows speed 0-3. Sign disappear when turned off.
	Sign light flickers means detecting the infrared rays of people (countdown 2 minutes), UVC light will turn off.No detecting last for 2 minutes, the UVC light will turn on automatically.
	Sign light on means starting the mode of timing setting, and figures changes when using the remote control; Level 1 is 1 hour.

Direction of remote control keys	
ON	Press it will turn on the LED and UVC light; Sign light appears in the LCD screen.
OFF	Press it will turn off the LED and UVC light; Sign light disappears in the LCD screen.
☺	Individual key to turn on or turn off the LED light; LED on status in default and "K", "F" appears in the LCD screen.
L+	Increase the brightness of LED light, and shows "1-5", "1=20%, 2=40%, 3=60%, 4=80%, 5=100%" in screen, level is not rotative; Level 5 is the highest.
L-	Reduce the brightness of LED light, and shows "1-5", "1=20%, 2=40%, 3=60%, 4=80%, 5=100%" in the screen, level is not rotative; Level 1 is the lowest.
K+	Increase the color temperature of LED light, and shows "K1-K3" (K1=CCT3000K K2=CCT4000K K3=CCT5000K) in the screen, level is not rotative; Level 3 is the highest.
K-	Reduce the color temperature of LED light, and shows "K1-K3" (K1=CCT3000K K2=CCT4000K K3=CCT5000K) in the screen, level is not rotative; Level 1 is the lowest.
🔌	Control the fans and UVC light to turn on and turn off; The factory default mode is on.
F+	Increase the rotation speed of fans, and shows "1-3" in the screen, level is not rotative; Level 3 is the highest.
F-	Reduce the rotation speed of fans, and shows "1-3" in the screen, level is not rotative; Level 1 is the lowest.
🕒	Start or stop the mode of timing setting, sign of "1H" appears in the LCD screen.
T+	Increase the dock timing, and shows level "1H-9H" in the screen, level is not rotative; Level 9 is the highest; "1H=60mins" showed in the screen.
T-	Reduce the dock timing, and shows level "1H-9H" in the screen, level is not rotative; Level 1 is the lowest; "1H=60mins" showed in the screen.

Other functions:

1. The light has memory ability to keep the previous setting when press key "ON", and there is sound when press any key after press "ON". In factory default mode, the LED and UVC light are turned on together, and color temperature is "K1", brightness of "LED" light is "5", speed of fan is "F1".
2. PIR sensor starts to work after 15 seconds warm-up.
3. LED light works normally after PIR sensor detects infrared rays of people.
4. The internal fans will cease working temporarily after PIR sensor detects people.
5. The timing will stop temporarily after PIR sensor detects people, but will continue counting after people leave.
6. The detection distance of PIR sensor is ≤ 2 meters; Horizontal detection beam angle is 120 degrees.

Notices

1. The UVC light will be turned off automatically when the PIR sensor detects the people, and light will be turned on automatically if the sensor detects nothing in 2 minutes.
2. The designed remote battery is AAA1.5V.

Parameters of the luminaire

Power (W)	125W
Wavelength(nm)	254nm
Luminous flux (lm)	5500(5000K)/5500(4000K)/5200(3000K)
Color temperature(CCT)	3000K/4000K/5000K
Storage temperature(°C)	-20-40°C
PIR sensor Detection distance (M)	≤ 2 M
Height of installation	≥ 2.5 M

Sensing way	Infrared rays
Control	Infrared rays
Product size(mm)	1065*209*163mm
Environment temperature(°C)	-10+35°C
Environment humidity (R.H)	$\leq 60\%$
Horizontal detection beam angle	120degrees
Installation way	Suspended

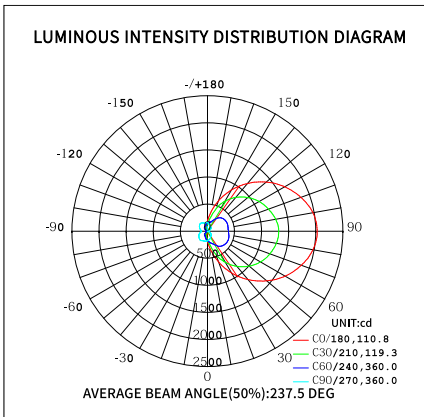
Parameters of radiation intensity of UVC light(60W)

Test conditions: Environment Temp. 23.4°C, Environment humidity 54%, Input voltage AC120V, Level 3 rotation speed							
Distance(meter)	1	1.5	2	2.5	3	4	5
Radiation lux(μ W/ cm ²)	118.2	51	23.4	9.4	3.5	0	0

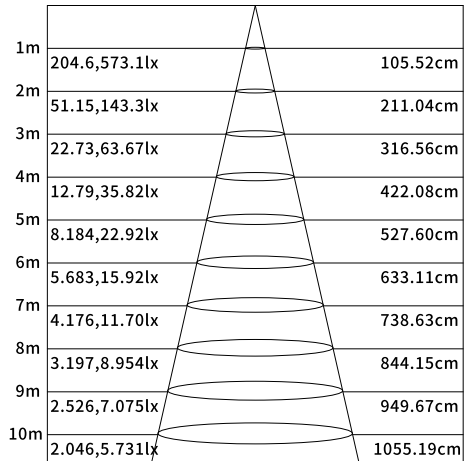
Parameters of LED light(60W)

Voltage(v)	Frequency(Hz)	Power (W)	Power factor	Luminous flux (lm)	Luminous efficiency(lm/w)	Color temperature(K)	CRI
120	60	59.44	0.971	5098.85	85.7	2907	86.2
277	60	61.15	0.971	5298.29	86.4	2909	86.2
120	60	57.96	0.995	5480.29	94.55	3865	87.7
277	60	59.7	0.994	5688.49	95.28	3868	87.6
120	60	59.73	0.962	5667.99	94.88	4850	84.6
277	60	61.04	0.954	5775.39	94.62	4845	84.5

LED distribution/illuminance curve



Flux out:181.7 lm

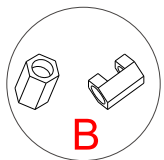
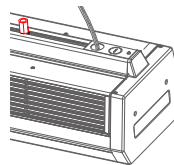
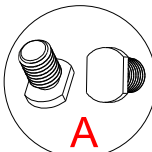
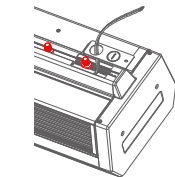
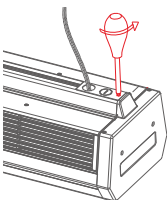


Height Eavg, Emax Angle:55.63deg Diameter
 Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distances.

Trouble shooting

No.	Failure analysis	Solutions
1	Remote control with no reaction	Check if the battery is there or the battery is expired
2	Audio prompt but no sign in the LCD screen	Send it back to supplier
3	Sign light appears in the screen but no audio prompt	Check if the remote control battery is expired, or send it back to supplier
4	Symbol of infrared ray flickers and no UVC light	It will recover in 2 minutes if there is no people around
5	No UVC light after replacement	Check the connection between UVC tube and socket
6	Unartificial lighting-off appears	If there is no people around, please check if it exceeds the operation temperature, or send it back to supplier
7	Symbol flickers after UVC tube replacement, but works normally	Press +F- in the remote control
8	Symbol flickers after cleanliness of grille	Press +T- in the remote control

Direction of telescopic rod installation way

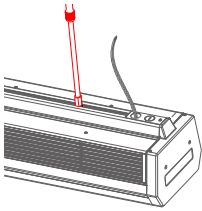


Step 1: Screw the outlet cover with cross screwdriver.

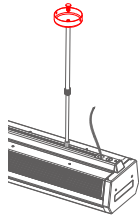
Step 2: Find the screw showed in the picture A, then insert it into slot, and revert the outlet cover.

Step 3: Find the nut showed in picture B and fix the screw. Distance between 2 nuts should be ≥ 600 mm.

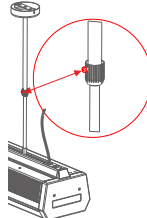
Direction of telescopic rod installation way



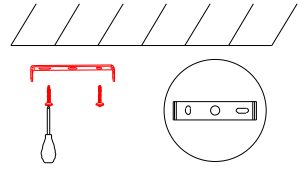
Step4: Find the telescopic pole and fix the thin end with the nuts.



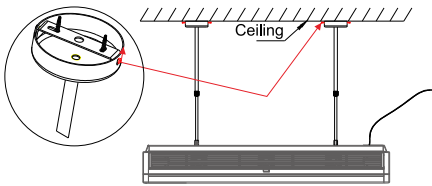
Step5: Find the mounting box and fix it with another end of telescopic pole.



Step6: Confirm the installation height, then fix the telescopic, and then install the screws.



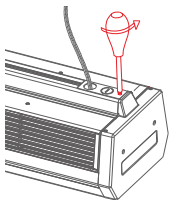
Step7: Drill holes in the ceiling and fix the bracket in it with screws.



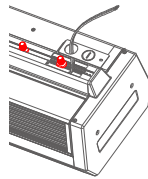
Step8: Fix the 2 rods with the 2 ceiling mounting brackets and tighten up the screws.

<p>Warning</p>	<p>Mounting warning</p>
	<ol style="list-style-type: none"> 1. Distance between floor and luminaire must be ≥ 2.5 meters. 2. Tighten up all the screws when install the luminaire.

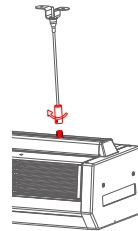
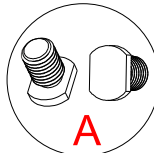
Direction of stainless steel rope installation way



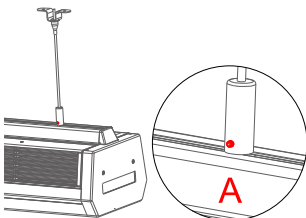
Step1: Screw the outlet cover with cross screwdriver.



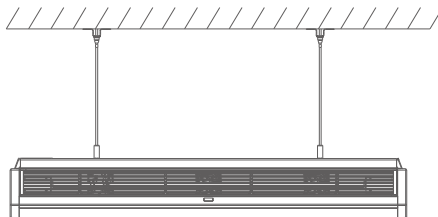
Step2: Find the screw showed in the picture A, then insert it into slot, and revert the outlet cover.



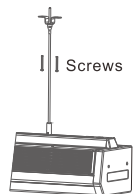
Step3: Find the stainless steel rope, and twist the step2's screws into the nuts of rope end. Distance between 2 nuts should be ≥ 600 mm.



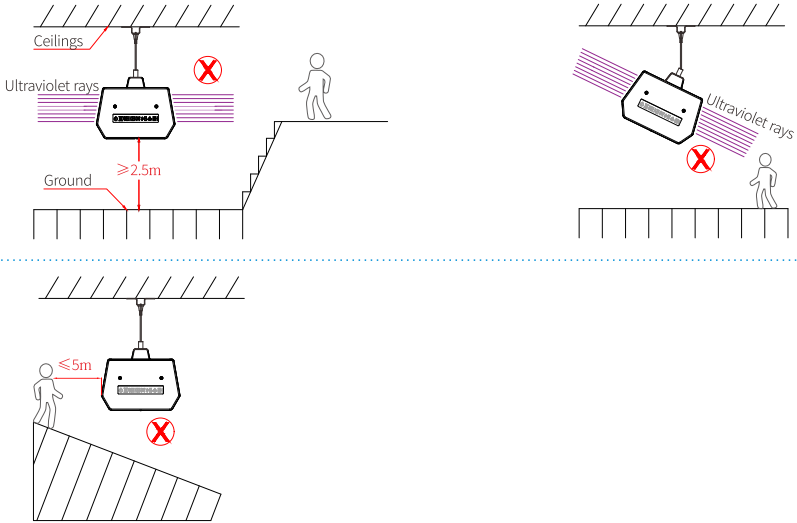
Step4: Fix the A side screws.



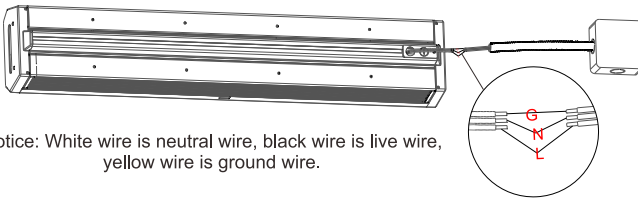
Step5: Drill holes in the ceiling and fix another end of rope in it with screws.



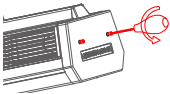
Installation Cautions



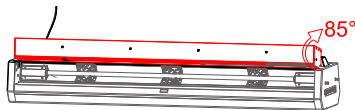
Wiring instructions



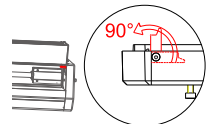
Tube change instructions



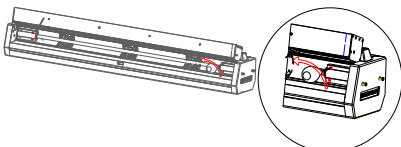
Step1: Remove the 2 screws at the screen side.



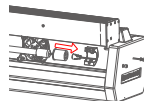
Step2: Open the grille.



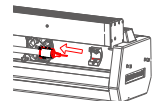
Step3: Pull out the baffle to avoid the close of side cover.



Step4: Take apart the locking slices at two ends of UVC tube.



Step5: Pull out the wire sockets and silicon rubber cases at two ends and install new tube.



Step6: Assemble the accessories and tighten up the screws from the side cover.

Notices of replacement of UVC tube

Notice: If troubles appear after replacement, please read the "Troubles shooting" in this manual.

Warning for use: Non-professional staffs can not maintain to avoid destroying the electronic components(UVC lighting direction can not be opposite to the reflector; Sensor can not be blocked to lose the sensing function).

Other notices

This product is not waterproof, outdoor use is forbidden.

This product can be used for lighting and purification.

This product is allowed for purification the surface of objects and air, human body purification is not allowed.

Please keep the product surface clean. If there is dust or oil, please clean it only with ethyl alcohol.

Please close the windows and keep the rooms clean and dry before purification. If there are paintings, plant and porcelains in the purification area, please cover them, or they may be damaged.

The objects will be damaged purification in the UVC light for long time, or changing the color of objects and being fragile.

If the UVC tube is broken, please ventilate in time to avoid mercury poisoning, and wear the gloves, protection suits or use the mercury vacuum cleaning tools(not general dust cleaner) to dispose it. After that, please take off the suits and wash hand before eat food, smoke or use sanitation supplies.

Warranty

1.Warranty of the UVC tube is 1 year since the purchasing date. Return service is available for the quality problems such as manufacturing process, technology and components etc.

2.Warranty of other parts of luminaire is 3 years since the purchasing date. Return service is available for the quality problems such as manufacturing process, technology and components etc.

3.Paid service is available for below causes:

—Expiry.

—Damage for the improper use such as incorrect installation without reference on the manual,shipping or other accidents, disasters and abnormal voltage etc.

—Normal aging and abrasion.

—Other causes not for design, manufacturing and quality etc.

Safety precautions

- Warning: UV-C emitted from this product. Avoid eye and skin exposure to unshielded product. Follow installation instructions and user manual.
- Warning: Our UV-C Products are not meant to be used in applications or activities which may cause and/or lead to death, personal injury and/or damage to the environment.
- As UV-C is invisible to the eye, the UV-C device must be installed together with adequate safeguards to ensure that the UV-C device can be operated in a safe way.
- The UV-C device are only to be used as components in a system that consists of adequate safety safeguards such as, but not limited to, those indicated in the mounting instructions and/or user manuals.
- Warning: Do not use without reading the content in Instructional Safeguards (Mounting Instruction and User Manual), ensuring control solution Containment Safeguard in place and completing a Training Safeguard.
- Warning: Materials that are exposed to UV-C for a long time may become damaged and/or discolored.
- Lamps include Mercury. If a lamp 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. Please follow User Manual.
- The luminaire shall be installed by a qualified electrician and wired in accordance with the latest IEE electrical regulations or the national requirements.
- During instalation or when maintaining the luminaire please use static free gloves to avoid marks on the luminaire.
- To remove dirt and spots use the following:
 - Dust: only use microfiber cloths.
 - Fingerprints, etc.: use a cleaner for synthetic materials with antistatic properties.



Warning

This is a UVC product. Please protect your eyes and skins and comply with the manual.