



UV Light Disinfection Air Curtain

(read user's manual before using)



UVAIR90-11

UVAIR120-11

UVAIR150-11

USER'S MANUAL

Before the use please carefully reads this instruction book
and installs by the professional qualified technician

1. Product introduction

1.1 Product description

The new developed UV light Air Curtain is cross flow type, with features of enough air flow, quiet, it is suitable for shopping malls, hotel conference rooms, theaters, offices, cold storages, operating rooms, etc. It is widely used in electronics, instrumentation, pharmaceutical, food, precision processing, medical and other industries. A curtain wall is formed in a specific area (such as a doorway), which has the functions of blocking the mixing of internal and external air, reducing heat exchange, preventing dust, preventing pollution, and preventing insects and so forth.

The UV air curtain adds UV sterilization function to the traditional air curtain machine, which can kill all kinds of bacteria, viruses, and microorganisms.

1.2 UV features and functions

1. UV lamp make of Use high purity quartz material with 8000-13000 hours product life.
2. The main spectrum is 253.7nm, which can kills all kinds of bactria, virus and microorganisms
3. UV light attenuation is small which is less than 30% attenuation with production life

Do not look directly at UV lamp in ON mode.

1.3 Safety Cautions

Because the ultraviolet energy emitted by the UV lamp is large, if there is no protective measures, it is extremely easy to cause huge harm to the human body. If the exposed skin is exposed to such UV lamps for a long time, the light ones will appear red, swollen, itchy, and desquamative; the serious ones may even cause cancer and skin tumors. At the same time, it is also an "invisible killer" of the eye, causing inflammation of the conjunctiva and cornea. Long-term exposure may cause cataracts. The following items should be noted during use

1. When starting the UV lamp, direct exposure to the human body should be avoided. After the UV lamp is turned on, people should not be in the sterilization room to prevent children from playing and touching;
2. UV rays can kill organic cells. Do not irradiate pets and plants for a long time;
3. Never look directly at the UV light during use;
4. The disinfection time is preferably 30 minutes to 2 hours;
5. Do not put damaged or worn-out lamps next to people or throw them into places with water to avoid polluting the water source.

1.4 Select from model code

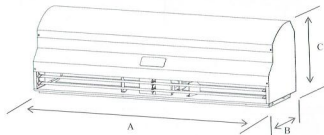
The selected model mainly depends on the width and height of the door; the length of the air curtain fan and the diameter of the blower. Generally speaking, the width of the door is slightly shorter than the length of the fuselage, and it can also be used in parallel with two or more; when the door is higher, you can choose an air curtain with a larger blower diameter; otherwise, use a smaller blower diameter Air curtain fan; when the environment requires quiet, you can choose the air curtain fan with a smaller blower diameter.

1.5 The use environment

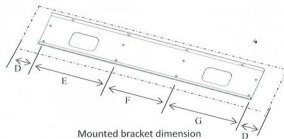
Project	Specification
Working conditions temperature, °C	-10~40
Ambient air relative humidity, %	≤90
Altitude above sea level, m	≤1000
Fixed supply voltage deviation, %	±10

2. Installation

2.1 Outlooks and sizes for installation



UV Air Curtain outlooks and dimensions



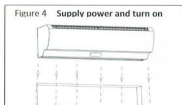
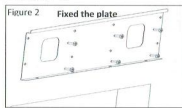
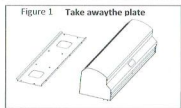
Mounted bracket dimension

Model Code	Dimension			Mounted bracket dimension			
	A	B	C	D	E	F	G
UVAIR90-11	900	234	270	25	300	250	300
UVAIR120-11	1200	234	270	45	370	370	370
UVAIR150-11	1500	234	270	195	370	370	370

2.2 Installation method

2.2.1 Installation steps

- 1) Remove the mounted bracket: after removing the package, loosen the plate clamping screws from the bottom to separate the plate from the whole machine (Figure 1);
- 2) Fix the mounted bracket: Use M8 bolts and nuts to fix the plate to the selected installation wall (if you are installing on a wooden wall, you can use wooden screws to fix) (Figure 2)
- 3) Fix the air curtain: hang the air curtain to the mounted plate, and fix the air curtain firmly with screws (Figure 3)
- 4) Power on: Turn on the power to turn on (Figure 4)



(Note: The installation diagram is only used as a demonstration of the installation steps, the appearance of the product should be based on the actual product)

2.2.2 Notes in installation

When customer installs the air curtain, please note the following, can increase the efficiency of air curtain.

1. Please install on the solid place, prevents the work from vibration, prevents noise which vibration to be produces.
2. Please install the air curtain on the inside of the room.
3. Please install to be suitable the model, if the installation position is too high, will be unable to display is scheduled the function.
4. When installs the air curtain, make sure the air outlet is right to the bottom of fitting surface.

5. If the width of door wider than the length of air curtain, please use two or more assemblies. In this situation, please make sure the distance is about 20~40mm.

6. When install the air curtain, please make sure the air curtain hanged the wall plate and the wall cannot leave space.

7. The distance between the air curtain and the ceiling do not be smaller than 30mm.

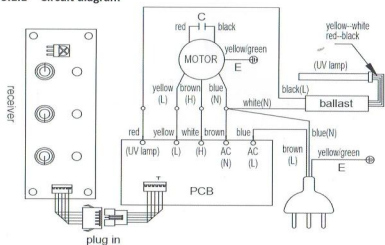
8. Please make sure the level to install.

9. When installed, please make sure the distance between air outlet and the ground more than 2.3m

3. The control and use of air curtain

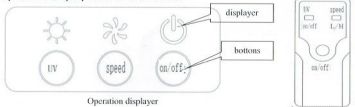
3.1 Operation

3.1.1 Circuit diagram



3.1.2 Bottom function

Operation display and remote control



1. Pause mode: After plugging in the power supply, the machine enters the Pause after a buzzing sound. Standby status indicator light has no display;
2. On / off: used to turn on / off the fan power. Press the switch key once, the buzzer sounds red, and the fan starts normally. When starting, the air speed

defaults to H speed, and the speed indicator is steady green. Press the key again, the machine will enter the Pause mode after buzzing;

4. Speed: used to switch between H and L speed. Press the air speed key once, and switch between H and L button after a buzzing sound, and the shift delay is 0.5 seconds. The air speed indicator light is steady red in L mode, and the green indicator light is steady green in L;

5. UV lamp button: used to turn on/off the UV lamp. Press the UV light button once, and then switch on/off the light after a buzzing sound. There is no delay when switching on; the UV indicator light is steady yellow when the light is turned on, and the UV indicator light is off when the light is turned off. (UV lamp can be used alone)

3.1.3 Remote control functions

- 1) operation same as PCB
- 2) battery: 2pcs No.7 battery

3.1.4 wind deflector

There is deflector in the air exit which is adjustable to get the win direction needed.

3.2 Parameters

Model	Voltage (V/Hz)	Air speed	Input power (W)	Air speed (m/s)	Air volume (m ³ /h)	Noise (dB)	N.W (Kgl)	Body sizes (mm)	UV lamp power (W)	UV intensity (uw/cm ²)
UVAIR90-11	220/60	H	175	11.5	1780	≤46	16	900*234*266	37	120
		L	140	9	1375	≤43				
UVAIR120-11	220/60	H	225	11.5	2370	≤48	20	1200*234*266	40	135
		L	140	9	1830	≤45				
UVAIR150-11	220/60	H	325	11.5	2970	≤51	24	1500*234*266	55	170
		L	250	9	2230	≤47				

(notes: input power is referring to air curtain, i.e, not include UV lamp power)

3.3 Normal troubleshooting

Fault	performance	Possible cause	solution
Motor does not start	Indicator not works	No power	Re-plug the power to ensure that the power supply is normal.
		Power terminal and PCB poor connection	Reconnect the PCB and the power terminal to ensure normal connect.
		PCB burnt	Change PCB
	Indicator works as normal	Terminal is burnt	Replace terminal
		Motor wiring is wrong	Re-connect motor wires
		Motor burnt	Replace motor
	Capacitor burnt	Replace capacitor	

Control is not working	Press buttons is normal, remote control is not working	door switch broken	Replace door switch
		Remote control no battery	Change battery
		Remote control is wrong	Change remote control
		Serious interfere	Reduce interference, increase anti-interference
Abnormal sound	Whole machine vibrate /abnormal sound	Motor run no stop	Replace door switch
		Door switch is wrong	Replace door switch
		Blower damage or not balance	Replace blower
		Motor bearings abrasion and rotate unbalanced	Replace bearings
		blower scratching box	Re-assembly and adjust blower
Motor magnetic big noise	Motor magnetic big noise	The cabinet is not fixed firmly	Tighten screws
		Motor Abnormal sound	Replace motor
UV lamp is not working	UV lamp is not lighting	UV Lamp burnout / damage	Replace UV lamp
		ballast burnout / damage	Replace ballast
		Poor wiring	Re-connect wires

Note: Common problems include but are not limited to the above, if there are still problems, or other problems occur, please contact the after-sales service center in time for more help

4. Service and maintenance

1. The power should be cut off before inspection and maintenance.
2. Motors, electrical components should be moisture-proof to prevent a short circuit.
3. Every six months to carry out a normal periodic repairs and maintenance to remove the dirt from air curtain.

*Please use cleaning detergents to clean, and then wipe with a clean soft cloth.

*Do not use gasoline, thinner, kerosene, fungicides or metal brush to clean the machine.

4. Damaged supply cords to be replaced by the manufacturer, service agent or similarly qualified person to avoid hazard.