

Professional Intelligent UV & Ozone Generator

UVP701C



2
years
warranty



24W UVC bulb



254nm UVC



Irradiance:
2340 μ W/cm²



60mg/m³
28ppm



IP20



UVC gen :
230x141x440mm
Ozone gen :
365x297x168mm



10.6 kg



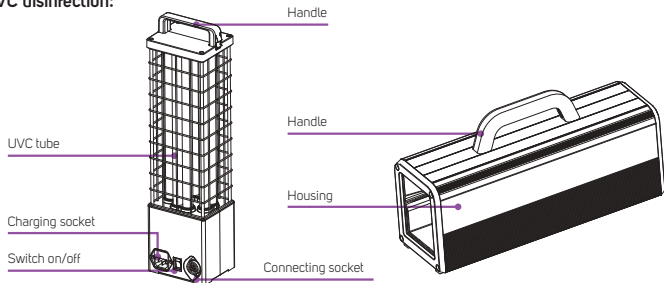
UVC gen: 120W
Ozone gen: 320W

Product Features:

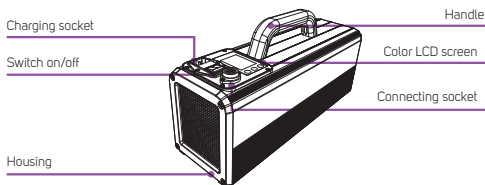
- Dual-effect disinfection combination, fully reflects the high efficiency of UV disinfection and ozone's no blind angle 360 degrees disinfection
- UVC disinfection lamp and Ozone generator can be combined or independently used.
- With the intelligent button operation interface, the user is able to independently select and adjust the disinfection mode and disinfection time
- Color LCD screen can display the information e.g. disinfection mode, disinfection time etc..
- The disinfection cabinet has a memory function. After each power-on, the screen shows the preset mode and time of the last disinfection operation
- During UVC disinfection, HBS intelligent Human Body Sensing system will start automatically, and it will automatically stop the disinfection operation if it detects there are people moving around

Schematic Diagram of Product:

UVC disinfection:



Ozone generator:



Operation Instruction:






- A. Combined operation (operation process: UVC disinfection → Ozone disinfection → UVC decomposes ozone)
1. Connect the power supply wire according to diagram 1.
 2. Press the power switch "I" on the ozone generator then press the power switch "I" on the UVC disinfect lamp.
 3. Display three modes on the screen, from left to right they are:  UVC disinfection (0-90minutes),  Ozone disinfection (0-240 minutes),  UVC quickly resolve ozone (0-90minutes) respectively (diagram 2). Short press the "OK" button to process mode shifting, short press "+" or "-" to process the working time adjustment at corresponding modes.
 4. Long press the "OK" button for 1.5s to start disinfect works after setting finished. The screen will display " 51 min" with flashing.
 5. Under the UVC disinfection mode, HBS intelligent Human Body Sensing system starts automatically, it will automatically stop disinfection operation immediately if it detects there are people moving around the equipment, at the same time, the screen will show " " mark to show that machine has stopped due to close proximity of personnel
 6. Long press "OK" button for 1.5s to stop the disinfection session, the timer will return to initial setting.



Diagram 1



Diagram 2

B. Ozone generator standalone use

1. Connect the power supply wire according to diagram 3.
2. Press power switch "I" to turn on power supply, short press "+" or "-" to adjust disinfection duration.
3. After desired settings are selected, long press "OK" button for 1.5s to start 30s countdown preparation period, any personnel must leave the room where the equipment is located, after 30 seconds, the equipment will automatically start.
4. Long press "OK" button for 1.5s to stop the disinfection session, the timer will return to initial setting.



Diagram 3

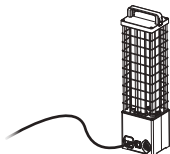


Diagram 4

C. UVC disinfection lamp standalone use

1. Connect the power supply wire according to diagram 4.
2. Press power switch "II" to open power supply, intelligent Human Body Sensing system will start automatically, then equipment will enter into preparation period, any personnel must leave the room where the equipment is located. It will automatically start disinfection operation immediately when equipment does not detect any more people moving around the equipment.
3. The device will automatically stop disinfection operation immediately if it detects there are people moving around the equipment to safely protect human body.
4. Please shut off the power supply switch after disinfect operation is finished.



SAFETY WARNING:

1. Please read and understand this user manual before use, to ensure that the product is safely and properly used
2. Our Company shall not be liable for product damage and other injuries caused by improper use or failure to follow this User Manual.
3. Strictly forbid any children 0-12 years old to use this product. Users should carefully select places without children before use and ensure that children do not touch the product.
4. Avoid the risk of electric shock during use.
5. The use of this product in gas, flammable and explosive substances, and heat source environments is prohibited.
6. Don't use wet hands in operating the product. Please keep the operating environment dry
7. Do not remove, repair and alter the product by oneself. Repairs and battery replacements can only be carried out by authorized service providers and manufacturers, and repair and replacement of batteries by authorized service providers and personnel other than manufacturers may result in injury. Replacing the battery with the wrong model is a risk of explosion
8. Use the product only at specified voltages and frequencies
9. UV Light Hazard. Harmful to bare skin and eyes. Can cause temporary or permanent loss of vision. Never look at the bulbs while illuminated. Any exposed skin must not be exposed to UV light



CAUTION:

UVC-Equipment Damage Hazard.

1. Ultraviolet light can cause color shift or structural degradation of plastic materials
2. Ultraviolet light can cause color shift or structural degradation of resin materials
3. Ultraviolet light can cause color shift or structural degradation of leatherwear
4. Ultraviolet light can cause color shift or structural degradation of organic compounds materials

OZONE-Equipment Damage Hazard.

1. OZONE can cause color shift or structural degradation of plastic materials
2. OZONE can cause color shift or structural degradation of resin materials
3. OZONE can cause color shift or structural degradation of leatherwear
4. OZONE can cause color shift or structural degradation of organic compounds materials
5. High concentrations of ozone for a long time can cause electronic products function damage

NOTES:

1. The design of this product based on IEC 62471:2006 Photobiological safety of lamps and lamp systems and other international standards
2. This product utilizes UVC bulbs to emit UV-C rays with peak value wave length at 254nm to disinfect
3. Ultraviolet tube is a relatively tight and fragile electronic component, users should avoid the impact on the product resulting in product failure.
4. The design of this product is according to Code of Federal Regulations Title 21, Volume 8 by US FDA, California Code of Regulations Title 17 Public Health, and IEC 62368-1[4] 7.3 and other international standards
5. According to code of federal Regulations Title 21, Volume 8, ozone is a toxic gas, according to the FDA. Although ozone has been reported to have adverse physiological effects on the central nervous system, heart and vision, its main physiological effect is to stimulate the mucous membranes. Inhalation of ozone causes enough irritation to the lungs, leading to pulmonary edema. The onset of pulmonary edema is usually delayed by several hours after exposure; As the hazards of ozone are widely understood, people pay full attention to the use of ozone.
6. At Ozone concentrations of 0.02PPM (0.04mg/m³), ozone can be smelled by people with acute olfactory senses, at 0.15PPM (0.32mg/m³), ozone can be smelled by the general population, at 1-10PPM (2.14 - 21.4mg/m³) ozone has reached the "stimulus range", and can be clearly smelled, at 10PPM (21.4mg/m³) ozone has reached the "toxic range" or more "poisonous range". The odor of ozone is not a reliable warning indicator due to the possibility of olfactory fatigue
7. Long term occupied enclosed spaces, such as houses, apartments, hospitals and offices, should have ozone volumes below 0.1mg/m³ (0.05PPM). The ozone concentration in the workplace, i.e. occupational exposure limit, is 0.1PPM
8. The amount of space used by the equipment used to place and use this device should not be less than 20m³ to ensure that the ozone remaining in the equipment has sufficient space to be decomposed to a safe level when the cabinet door is opened
9. When opening the equipment for ozone disinfection, make sure that the equipment is in a well ventilated environment. If the equipment cannot be ensured to be in a well-ventilated environment, only open the cabinet door at least 30 minutes after an ozone disinfection session has finished
10. Ozone is unstable, breaks down rapidly at high temperatures, slowly breaks down to (oxygen) at room temperature, has a half-life of about 16 minutes in 1% of ozone solution and about 25 minutes in the air.
11. Pure ozone, if receives impact or friction, will explode and decompose. High concentrations of ozone when heated is also prone to explosion. But as long as care is taken, such accidents are rather rare. Ozone should not have high concentrations of flammable and explosive gases at the disinfection site when it is used for air disinfection.
12. The user use 3M8514 welding protection mask (or equal grade protection masks) when use ozone to disinfect, and can process ozone protection which at 10 times occupation touch limit potency under 1PPM
13. In order to ensure the safety of the user, this product has set up a full safety device. Daily spot checks are necessary to ensure the safe use of equipment. Check as required by the specification and stop using the device immediately if the problem is identified. In the use of ozone disinfection, or equipment regular inspection, the use of 3M8514 welded protective mask (or similar grade protective mask), can be 10 times the occupational contact limit concentration (1PPM) ozone protection. When repairing the equipment, in addition to wearing the above protective mask, the equipment should be kept in a well

ventilated environment.

14. Because of the instability of ozone, ultraviolet light accelerates the decomposition of ozone and converts it back to oxygen. After the ozone work is completed, the equipment switches to UV mode to quickly reduce the ozone concentration in the equipment. The user must never open the cabinet doors before the device has completed the ozone disinfection operation (before the end of the timer countdown in the monitor)
15. Users are advised to equip users with ozone concentration detection instruments to regularly detect whether the leaked ozone value of the equipment exceeds the safe value: long term populated enclosed spaces, such as houses, apartments, hospitals and offices, ozone must be less than 0.1PPM in English. If ozone leakage value is found to have exceeded the above standard, the equipment must be immediately stopped.

To guarantee the disinfect effect of UVC:

1. Whether UV light can effectively disinfect depends on the amount of exposure received by the disinfection object, which depends on the radiation power of the UV light source, the distance of the disinfection object from the UV light source, and the duration of the exposure to UV light.
2. When killing common microorganisms, the irradiated dose should reach 10,000 $\mu\text{W}/\text{cm}^2$; 100,000 $\mu\text{W}/\text{cm}^2$ is the recommended dose to kill bacterial spores. The radiation dose should not be less than 100,000 $\mu\text{W}/\text{cm}^2$ when the target microorganism for disinfection is unknown
3. According to the radiation intensity of the UV light source of this product and the general distance of the UV light source from the irradiated object, it is recommended that:
 - In order to achieve the radiation dose of 10,000 $\mu\text{W}/\text{cm}^2$ to meet the general needs of daily use, the exposure time should be at least above 5 seconds
 - In order to achieve the radiation dose of 100,000 $\mu\text{W}/\text{cm}^2$ to meet the needs of the professional environment, the exposure time should be at least above 50 seconds

To guarantee the ozone disinfect effect:

1. Ozone can kill bacterial reproductions, viruses, fungi, etc., and can destroy botulinum toxin. In order for ozone to be effective as a disinfectant, its concentration must be much higher than that that can be safely tolerated by humans and animals. Ozone has a powerful killing effect on microorganisms in the air, and at the same time has the odor-removal characteristics, 30minutes of 20mg/m³ (9.35PPM) concentration of ozone in a sealed environments can achieve disinfection effect. Ozone on the surface of the items of the microorganism also has a killing effect, requiring 60mg/m³ (28.04PPM), relative humidity of 70%, and exposure of 60 minutes to 120 minutes, to achieve disinfection effect.
2. If the equipment is stopped in the middle of the operation, the disinfection effect cannot be guaranteed, a new disinfection session from the start will be necessary.

The reminding of damage about the disinfect objects:

1. The effects of ozone on a variety of substances vary considerably. Glass, stainless steel, butyl rubber, silicone, polycarbonate, and ABS plastics are better at ozone resistance, but nylon, zinc, glass-fibre-added plastics, and natural materials such as natural rubber and leather, are less resistant to ozone.
2. In order to ensure the service life, this product is designed with ozone-resistant materials.
3. In order to examine the accelerated aging effect of ozone on substances, the substance was tested for 60 minutes at a time using ozone concentrations of 35PPM.
4. After 10 tests of six different leather material colors samples, the results show color fading and hardening of the material, especially the brighter samples, whose fading was more pronounced
5. The same conditions were tested on stainless steel, aluminum, gold-plated PIN needles, silicone, cotton pads, cotton and ABS plastics, and no significant decomposition was found
6. It is recommended to avoid ozone disinfection of brightly colored leather, silk and other items. Some highly aged items, such as natural rubber, are also recommended to not undergo ozone disinfection. Since ozone has an oxidative effect on most metals, users should not use ozone disinfection on electronic products to avoid ozone damage to devices containing metal substances, such as circuit boards in electronic products.

MERCURY NOTICE: This device contains mercury in the sealed ultraviolet bulb(s). Do not place your used bulb(s) in the trash. Dispose of properly Broken Bulb Cleanup. Do not use a household vacuum. Sweep debris into a plastic bag and dispose of properly Contact your local waste management authority for instructions regarding recycling and the proper disposal of old bulb(s).

Equipment maintenance, please contact professional after-sales service stores or professionals.



WARNING HARMFUL OZONE may be created by this product.
Follow installation and operating instructions.



WARNING UV-C emitted from this product.
Avoid eye and skin exposure to unshielded product.
Follow installation instructions and user manual.



Breakable Glass Hazard. Can cause personal injury. Be careful when inserting bulb(s) into lamp base. Wear protective gloves when handling bulb(s).



OZONE can cause color shift or structural degradation of leatherwear.
High concentrations of ozone for a long time can cause electronic products function damaged.



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