GOLDENSEA UV

UV M216

USER MANUAL

KEEP THIS MANUAL FOR FUTURE NEEDS
Thank you for purchasing a GOLDENSEA UV product. You have acquired a powerful and versatile device. We are confident that you will be satisfied with our excellent products and service. For your own safety, please read this user manual carefully before installing and operating the device.

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1. Safety Instructions

ATTENTION!
Please read this statement carefully before use.

GOLDENSEA UV products manufactured by Guangzhou Haoyang Electronic Co., Ltd (GOLDENSEA) are a series of products using ultraviolet rays to sterilize air and surfaces. Since the metal mercury contained in the ultraviolet lamp and the wavelengths emitted by the ultraviolet rays are harmful to the human body, we remind the user that when using this series of products, the user must pay attention to the following:

1. Humans, animals, plants should not be present in the disinfection area while a UV product is operating, to avoid damage caused by direct UVC irradiation.
2. Only adults who have read and understood the contents of this manual are allowed to operate the products.
3. Do not place food or electronic devices with temperature resistance below 60 degrees Celsius in the line of sight of this series of products.
4. Never look directly at the lamp when it is active.
5. Do not use the products in a humid environment.
6. Do not place the products on an inclined or uneven surface.
7. Do not place the product on electrical products or near heat sources.
8. Do not continue to use the products when the lamp is damaged.
9. Do not use the product under the interference of strong electric fields and magnetic fields.
10. Insufficient disinfection time or insufficient radiation will influence the effect of disinfection.
11. If possible, the external power supply for GOLDENSEA UV products should be installed with a qualified inline leakage protection device.
12. Ensure the surface of the lamp tube is clean before use. If dust is found on the lamp tube, please wipe it with a clean cloth. Dirty tubes will influence sterilization effect. Do not rinse the products directly.
13. Do not directly expose valuable silk products, leather goods, calligraphy and paintings, collectible or important commemorative items to UV irradiation.
14. When sterilizing rooms with textile coverings and hangings (i.e. table cloth bedspreads, curtains and etc.), keep the product at least one meter away from these items. Prolonged exposure to UVC rays (same as occurs with direct exposure to sunlight) may cause discoloration of the textile.
15. Cosmetics and skin care products should be covered and sealed well when a UV product is in operation to avoid direct irradiation.
16. Unplug the product and store it in a safe place to keep out of children’s reach.
17. If the lamp needs to be replaced, refer to and follow the instructions in the user manual.
18. Dispose of used or broken lamps by following your local hazardous waste management guidelines. Do not dispose of lamps with household waste.

19. If there is a technical problem with any GOLDENSEA UV product, please contact GOLDENSEA or an official GOLDENSEA UV local distributor; Never disassemble a product without the instruction of qualified service personnel.

20. This series of products are for air and surface sterilization uses and do not have any medical functions. The description of this product should not be interpreted as suggesting or promoting medical effects.

Pursuant to the above, GOLDENSEA has explained all details that users must pay attention to when using this series of products. If users fail to use the series of products in accordance with the guidelines or regulations laid out above and in this manual, GOLDENSEA will not be liable for any losses, damages or consequences caused by the user's inappropriate use.

1.1. Important Safety Warnings

This device has left the factory in perfect condition. In order to maintain this perfect condition and to ensure safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes in this user manual.

<table>
<thead>
<tr>
<th>CAUTION!</th>
<th>THIS PRODUCT EMITS UV RADIATION, CONTACT WITH SKIN AND EYES MAY CAUSE DAMAGE.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAUTION!</td>
<td>HIGH VOLTAGE, RISK OF SEVERE OR FATAL ELECTRIC SHOCK.</td>
</tr>
<tr>
<td>CAUTION!</td>
<td>ALWAYS DISCONNECT MAINS SUPPLY BEFORE REMOVING ANY FIXTURE COVERS.</td>
</tr>
<tr>
<td>CAUTION!</td>
<td>TO AVOID EYES AND SKIN EXPOSURE TO UV LIGHT, IT IS FORBIDDEN FOR ANIMALS, PLANTS AND ALL PERSONNEL TO BE PRESENT WHEN THE UV LAMP IS ON.</td>
</tr>
<tr>
<td>CAUTION!</td>
<td>KEEP THIS DEVICE AWAY FROM RAIN AND MOISTURE.</td>
</tr>
</tbody>
</table>
Important:
Damage caused by disregarding this user manual is not subject to warranty. The dealer and manufacturer will not accept liability for any resulting defects or problems.

- To avoid eyes and skin exposure to UV light, people, animals and plants must not be present when the UV lamp is on.
- Operation shall be performed by qualified operator to avoid damage caused by misuse. Before operating the device, the operator must carefully go through this manual and operation guide.
- Do not irradiate valuable clothes, ornaments, calligraphy, paintings and other valuable items with UV lamps, which will cause discoloration.
- Do not put anything on the product.
- If the lamp is broken, immediately turn off the power and open doors and windows for ventilation. Broken lamps should be disposed of as toxic and hazardous waste according to your local regulations.
- Do not touch any metal parts exposed to air which is falling off or broken when the fixture is powered on to avoid risk of electric shock.
- The operator must wear anti-ultraviolet protective clothing and eyewear when operating the device.
- Keep the UV device away from children and non-professionals.

1.2. General Guidelines

1. This device is for industrial use, applications such as hotels, schools, factories, theaters, gymnasiuums, restaurants, offices, etc. Residential use is not allowed.
2. This fixture should be operated within the maximum alternating current as stated in the technical specifications in section 2 of this manual.
3. Handle the device with care. Avoid impact and strong vibration.
4. Do not use this product in high temperature and high humidity environments.
5. Do not use the product outdoors.
6. Do not use the product when it or its plug is damaged.
7. Do not repair or clean this product when it is powered on.
8. Do not operate in areas with flammable or explosive items to avoid burns or explosion.
9. The ambient operating temperature for the device is between -10°C to 45°C. Do not use the device in ambient temperatures outside of this range.
For safety reasons, please be aware that modifications to the device are prohibited and may lead to short-circuits or fire. GOLDENSEA will not be liable for any consequence caused by modifications to the product.

2. Features

Power Supply
- AC 100-240V~, 50/60Hz
- Power Consumption: 230W

Light Source
- Lamp:
  TUV 36W SLV/6 T8 (PHILIPS)
  or
  HNS L 36W G13 (G36T8/OF) PURITEC UV-C Germicidal Low Pressure Lamp (OSRAM)
- Extremely long Life: up to 9,000 H

Features
- Delayed start (3-min delayed start)
- Motion sensor
- Audio alarm
- Visual indicator lights
- 3 disinfection time settings
- Power switch
- Control panel with touch keys
- Through wall remote control
- Fall protection mode
- Moveable with wheels
- UVC wavelength: 253.7nm

Product Type
Industrial Ultraviolet disinfection light

Weight
Net weight: 13.86 kg
### Accessories List:

<table>
<thead>
<tr>
<th>Item</th>
<th>Included/Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>UV Tube</td>
<td>Included</td>
</tr>
<tr>
<td>Remote Control</td>
<td>Included</td>
</tr>
<tr>
<td>(battery type: CR2025)</td>
<td></td>
</tr>
<tr>
<td>UV Glasses</td>
<td>Included</td>
</tr>
<tr>
<td>(protective eyewear)</td>
<td></td>
</tr>
<tr>
<td>Warning Sign</td>
<td>Included</td>
</tr>
<tr>
<td>UV Irradiance Meter</td>
<td>Optional</td>
</tr>
</tbody>
</table>
3. Product Overview

1) Grid Opening Tabs
2) Handle
3) Protective Grid
4) UV Tube
5) Power Switch
6) Power Cable
7) Universal Wheel
8) Brake Lever
9) Indicator Lights
10) 30 mins - touch key
11) 60 mins - touch key
12) 120 mins - touch key
13) Start - touch key
14) Power Indicator
4. Dimensional Drawings

![Dimensional Drawings Diagram]
5. Installation Instructions

5.1. Installation of Wheels

The 3 universal wheels of this device had been turned inwards and fixed at the center of the bottom when it was packed. Before using the product, the 3 wheels must be installed back to the correct positions.

![Diagram showing installation process]

**Steps:**
1. Take the device out of the package, loosen the 3 screws (M4x10mm) at the bottom as shown by circle.
2. Swing the wheels outwards 180°.
3. Fix the wheels in place using the 3 screws (M4x10mm) loosened in step 1.

6. Operation Guide

**Note:**
Under ideal conditions (an open area with nothing inside), the recommended disinfection times and areas are: 30mins/60m², 60mins/120m², 120mins/240m².

6.1. Preparation
1. Make sure the device is on an even surface and the wheel brakes are engaged.
2. Make sure NO living beings (other than the operator) are in the disinfection area before proceeding.
3. Make sure the path to exit the disinfection area is clear before starting the device.
4. Keep in mind of the Delayed Start Time to make sure enough time to exit the disinfection area before the device starts to emit.
5. Wear anti-ultraviolet protective clothing and the supplied UV protective glasses before operating the device.
6. Place the supplied warning sign in a conspicuous place at the exit of disinfection area; if there is more than one exit, then place a warning sign at each exit.
7. Take the remote control with you when exiting the disinfection area or store it in the remote control bag.
8. Close the door of the disinfection area.
9. If there is a significant gap on the door, please make sure the gap is closed before operating.

6.2. Control Panel Operation
1. Connect the power cable of the device to the power socket, press the power switch <I/O > to <I>, the green power indicator light turns on.
2. Press the <30 mins>, <60 mins > or <120 mins > touch key to select your desired disinfection time, the corresponding indicator light under the touch key turns on.
3. Press the start button <>, then audible alarm will start beeping and red power indicator will flash regularly for 3 minutes.
4. You must exit the disinfection area during this 3 minutes.
5. Once the countdown has ended, the UV tubes will be activated and light up, and the red power indicator will stay on during the entire disinfection process.
6. Once the disinfection process has ended, the red indicator on the button will turn off and the power indicator will switch to green. An audible alarm will be also beeping to notify the user. Now it is safe to enter the disinfection area.
7. Upon entering the disinfection area, please open the windows to ventilate the disinfected area (you may find an unusual smell as a result of disinfection process, which is normal and harmless).

6.3. Remote Control Operation
1. Connect the power cable of the device to the power socket, press power switch <I/O > to <I>, the green power indicator light turns on.
2. Exit the disinfection area and close the door.
3. Take the remote control and press <30'>, <60'> or <120'> button to select your desired disinfection time, the corresponding indicator under the touch key on the device turns on.
4. Press the start button <>, then audible alarm will start beeping and red power indicator will flash regularly for 3 minutes.
5. If you are still inside the disinfection area, you must exit during this 3 minutes.
6. Once the countdown has ended, the UV tubes will be activated and light up, and the red power indicator will stay on during the entire disinfection process.

7. Once the disinfection process has ended, the red indicator on the button will turn off and the power indicator will switch to green. An audible alarm will be also beeping to notify the user. Now it is safe to enter the disinfection area.

8. Upon entering the disinfection area, please open the windows to ventilate the disinfected area (you may find an unusual smell as a result of disinfection process, which is normal and harmless).

6.4. Motion Detection

1. If the device detects any movement within 3m, the device will be deactivated immediately.
   Note: 3m is the measured value in an open area. Results may differ depending on different applications.

2. Once the disinfection process is stopped by the motion sensor, a dual audible alarm will start beeping and the red and green power indicators will flash until the operator restarts the device.
   Note: if the device is placed inside a room and close to the corridor or an area where people must be passing outside, the motion sensor may be triggered. The motion sensor is very powerful and can ‘see’ through walls. Please refer to the Best Placement document to ensure effective use of the product and minimize outside motion interference. Different materials and thickness of walls will have an impact of the through wall range of the motion detector, walls made of glass or wood will not decrease the range of the motion detector.
   Note: for safety reason, the UV lamp does not work if the motion sensor is defective.

6.5. Fall Protection Auto Power Off

1. When a working device detects a movement of more than 45°, it will automatically power off, thus preventing heat damage to surrounding objects, should the device fall over by accident or misuse.
2. To make it work again after auto power off, put the device back to the normal upright position, make sure the power plug is still well-connected to the power socket, re-start the operation again from the beginning.

6.6. Moving The Unit
This device has been integrated with 3 universal wheels and handles for fast and easy relocation.
1. Before moving the device, make sure the power cable is disconnected from power socket and the wheel brake is released. To release the brake, push the brake lever up with your foot.
2. To move the device, holding the handle and the power cable with your hand and move it to the desired place.
3. To avoid moving by itself, this device must be placed on an even surface and always apply the wheel brake before operating. To apply the brake, push the brake lever down with your foot.
7. Replacing The UV Tube

To maintain the sterilizing efficacy, the UV tube needs to be replaced after 9,000 hours of use.

Steps:
1. Wait for UV tube to cool down (to avoid scalding) after switching off the device.
2. Push the two locking Tabs ① from right to left to unlock the Protective Grid.
3. Move the Protective Grid from left to right ② until the left side edge of the grid comes out, holding by the edge of grid and take it out.
4. Holding the UV tube and turn it 90° anti clockwise (or clockwise) ③ as shown and take it out from its holder.
   Note: please follow your local toxic and hazardous waste regulations for lamp disposal.
5. Insert the new UV tube into the holder and turn the UV tube 90° anti clockwise (or clockwise) until it fits into place correctly and tightly.
   Note: direct contact with new UV tube should be avoided as grease from your skin may reduce the efficiency of the UV tube. It is advised to wear protective gloves when handling a new UV tube.
6. Re-install the Protective Grid: place it into the frame from right to left and then move it a little to the right to fit into the correct position. Pull the two locking Tabs ① from left to right to lock the Protective Grid. The device is now ready for use.
8. Troubleshooting Tips

8.1. What to do if the device doesn’t work?
1. Ensure the device is plugged into a working wall socket.
2. Ensure the plug is wired correctly and terminal well-connected.
3. If you still have issues with the device, please contact your local dealer or our customer service for assistance.

8.2. How often should the UV tube be replaced?
1. The UV tube is the core of the product, it should be replaced after 9000 hours of use to maintain the germicidal efficacy.
2. The UV tube is defected if it flashes, please contact your local dealer or our customer service to order a new UV tube. For replacing the UV tube, please refer to the instructions in this user manual.
3. After use for a period of time, it is normal to find some black spots on both sides of the UV tube.

8.3. The Audio alarm signal and LED indicator signal for this product:

<table>
<thead>
<tr>
<th>Status</th>
<th>Audio Alarm</th>
<th>Power Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standby</td>
<td>-</td>
<td>Green indicator on</td>
</tr>
<tr>
<td>Delayed Start</td>
<td>Beeping for 3 minutes regularly (frequency increase in the countdown 10 seconds)</td>
<td>Red indicator flashing for 3 minutes regularly (frequency increase in the countdown 10 seconds)</td>
</tr>
<tr>
<td>Lamp Strike</td>
<td>UV Lamp on after 15 seconds when the beeping stops</td>
<td>Red indicator on after beeping stops</td>
</tr>
<tr>
<td>Emitting (working)</td>
<td>Single Beeping every 10 seconds</td>
<td>Red indicator on</td>
</tr>
<tr>
<td>Motion Detected</td>
<td>Dual beeping every 10 seconds</td>
<td>Red &amp; Green indicators flashing</td>
</tr>
<tr>
<td>End of Cycle</td>
<td>Triple beeping every 10 seconds (in 30 seconds)</td>
<td>Green indicator on</td>
</tr>
<tr>
<td>Fall protection</td>
<td>Quadruple ping every 10 seconds</td>
<td>Green indicator flashing</td>
</tr>
</tbody>
</table>
9. Cleaning and Maintenance

1. To ensure the device remains in good condition and does not fail prematurely, regular maintenance, cleaning and checks are required.
2. For cleaning of the device, please use a lint-free cloth.
3. To avoid damage to the device, never use detergent or solvents.
4. Never spray insecticide towards the device, it can discolor or damaged.
5. Should you need any spare parts, please order genuine parts from your local dealer.

10. Service

For all service needs, please contact your local authorized dealer or GOLDENSEA customer service. Our contact details are:
Email: support@goldenseaув.com
Tel: +86 20 3996 6388
Address: No.109 Haiyong Road, Shiji Town, Panyu Zone, Guangzhou, China. 511450

Errors and omissions for all information given in this user manual are expected. All information is subject to change without prior notice.