

# Mid-Powered LED UV Curing Oven USER MANUAL



SKU: 510237

# **UV Curing Chamber Oven**

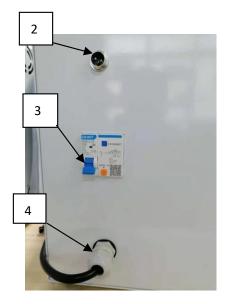
Thank you for purchasing our products, please read the instruction manual carefully before use

Contact Information: 1-800-977-7292 sales@cureuv.com 2801 Rosselle St., Jacksonville, FL 32205

#### 1. Main structure and working principle

#### 1.1 Main structure





|                              | Display the current real-time power, temperature, irradiation |  |  |
|------------------------------|---|--|--|
| 1. HMI                       | time and total production while starting and                  |  |  |
| 1                            | stopping the oven operation, parameter setting, function      |  |  |
|                              | selection and alarm information viewing                       |  |  |
| 2. Foot pedal socket         | Connect the foot pedal signal cable                           |  |  |
| 3. Leakage protection switch | Main power switch   |  |  |
| 4. Power cable               | External input power cord of the oven, connected to AC 110V   |  |  |

#### **1.2.** Working principle

- 1) Turn on the curing oven .
- 2) Set corresponding parameters and functions acording to the operation needed. (Please see the operating instructions for details).
- 3) Open the door, put in the product, and close the door.
- In manual mode, click the start button to start the oven , click the stop button or open the door to stop the irradiation
- In the automatic mode, close the door to start the irradiation and count down, and stop the irradiation when the time is up

| Dimensions                   | 220 * 230 * 130 (L*W*H)         |  |  |
|------------------------------|---------------------------------|--|--|
| Power                        | Single phase AC110V ±5% 50/60HZ |  |  |
| Control type                 | PLC                             |  |  |
| UVLED wavelength             | 365nm/385nm/395nm/405nm         |  |  |
| Effective Curing Area        | 200 * 200mm                     |  |  |
| Optical power adjustment     | 1-100% adjustable               |  |  |
| Cooling method               | Fan cooling                     |  |  |
| Working temperature          | -10°℃50°℃                       |  |  |
| Working environment humidity | 10%80%RH no condensation        |  |  |
| Power consumption            | ≤600W                           |  |  |

## 2. Main performance parameters

## 3. Installation

Installation precautions: Open the package, check whether the UV oven is in good condition, and whether the accessories are complete (product + foot pedal + instruction manual).

Installation sequence:

- 1. Steadly place the UV Oven on a flat clean surface.
- 2. Once the oven is safely placed connect the power cord.

#### 4. Instructions



#### **Boot interface**

Click the "Click to use" to enter the monitoring interface.

|       | Monitoring Back |                          |            |  |
|-------|-----------------|--------------------------|------------|--|
| Temp  | 0.0 °C          | Current<br>exposure time | <b>0</b> s |  |
| Power | 0 %             | Total<br>production      | 0 pcs      |  |
| Start | Stop            | arameter                 | Reset      |  |

## Monitoring interface

| Тетр                  | Display of current UVLED real-time temperature  |  |
|-----------------------|---|--|
| Power                 | Display of current UVLED output power   |  |
| Current exposure time | The display of the current UV LED irradiation time, the countdown will<br>be automatically turned on, and it will automatically stop when the time<br>is up, and the door will also stop halfway through. Manually light up to<br>start timing, click "Stop" or open the door to stop |  |
| Total production      | Production Quantity Statistics  |  |
| Start                 | Manually click the start button to turn on the lamp   |  |
| Stop                  | Turn of the lamp  |  |
| Parameter             | Click this button to jump to the parameter setting page   |  |
| Reset                 | Click this button to clear production quantity statistics   |  |
| Back                  | Return to the initial page  |  |

Click "Parameter" to display the following screen, Input "666888" and click "Enter".

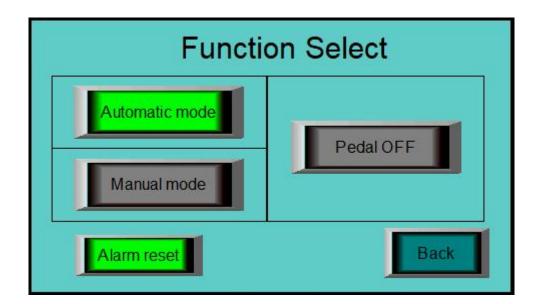
|   | Number In | put M | AX: 99 | 999999 | MIN: | (   |     |
|---|-----------|-------|--------|--------|------|-----|-----|
|   | 1         | 2     | 3      | 4      | 5    | -   | s   |
|   | 6         | 7     | 8      | 9      | 0    | Clr | pcs |
| < | 00        | •     | -      | Esc    | Ent  | er  |     |

After getting permission, go to "Parameter".

| Parameters Help |                     |                     |                     |
|-----------------|---------------------|---------------------|---------------------|
| Alarm temp      | <mark>65.0</mark> ℃ | Irradiation<br>time | <b>11.0</b> s       |
| Output power    | 80 %                | Total time          | 0 н                 |
| Fan delay       | <b>60.0</b> s       |                     |                     |
| Monitoring      | Function<br>Select  | Historical<br>data  | Revise the password |

## Parameter settings

| Alarm temp<br>Alarm temperature setting | When the real-time UVLED temperature is greater than the alarm setting temperature, the UVLED will be forced to turn off and an alarm will be prompted (alarm temperature setting range: $60^{\circ}C-65^{\circ}C$ ) |  |  |
|---|--|--|--|
| Output power<br>Output power setting    | UVLED output power setting (range: 1-100%)   |  |  |
| Irradiation time                        | UVLED irradiation time in automatic mode (range: 0.1-999.9S)   |  |  |
| Total time                              | Cumulative UVLED historical irradiation time   |  |  |
| Fan delay                               | After the UVLED is turned off, the cooling fan will stop after a delay (range: 0-999.9S)   |  |  |
| Help                                    | Basic operation introduction   |  |  |
| Monitoring                              | Click this button to return to the monitoring interface  |  |  |
| Function select                         | Click this button to enter the function selection interface  |  |  |
| Historical data                         | Store the irradiation time of each product, that is, the irradiation<br>power (the maximum storage is 100,000, the first data will be<br>automatically overwritten when the storage is full)                         |  |  |
| Revise the password                     | Click this button to enter the password change interface, you need to enter "891227" to obtain permission.   |  |  |



#### **Function selection interface**

| Automatic mode | Close the door, the UVLED lamp will turn on and start the countdown. When the time is up, the UVLED lamp will be automatically turned off.<br>Open the door halfway or click stop to turn off the UVLED lamp.   |  |
|----------------|---|--|
| Manual mode    | Close the door, the UVLED lamp turns on and starts to count up (that is, the cumulative time).<br>Open the door or click stop to turn off the UVLED lamp  |  |
| Pedal OFF      | After this function is selected, the start button will be invalid. This<br>function must be used with automatic mode or manual mode, (for<br>example: automatic mode + foot pedal function, close the door, step<br>on the foot pedal once to turn on the UVLED lamp and start the<br>countdown, and turn off the UVLED lamp when the time is up.<br>Open the door halfway or click stop to turn off the UVLED) |  |

| Back | Historical data |       |             | Set time  |
|------|-----------------|-------|-------------|-----------|
| Data | Time            | Power | Curing time | move up   |
|      |                 |       |             | move down |
|      |                 |       |             | next      |
|      |                 |       |             | PREV      |

#### **Historical data**

**Historical data:** store the production date, time, irradiation power and irradiation time of each product.

Set time: When the time is not on time, click to change the set time

| Back | Revise the password |
|------|---------------------|
|      | <del>******</del>   |
|      | OK                  |

Change permission "891227" is required.

You can change the access password for "Parameter".

|  |         | Help       | [      | Back |
|--|---------|------------|--------|------|
| Parameter  | setting | Instructio | ons:   |      |
| Output power setting range 1-100%, alarm temperature 45-65<br>degrees (45 degrees is recommended for water cooling,<br>Air cooling recommended 65 degrees)<br>The exposure time parameter is used in automatic mode.<br>The system will count down the time you set,<br>When the time is up, turn off the UVLED. |         |            |        |      |
| XO   | X1      | ¥4         | (Y5)   | ¥6   |
| Door sensor  | Pedal   | UV-EN      | Buzzer | Fan  |

#### Help

Help: Basic Operating Instructions

Indicator light: Check the input and output signals to judge the fault.

When a temperature alarm occurs, click "Alarm reset" after troubleshooting.



When the lamp is turned on in automatic mode, and the irradiation time has not expired, an alarm prompt will appear.

Click "Reset" to restart.



| Fault phenomenon          | Cause of issue  | Approach   |
|---------------------------|---|--|
|                           | Poor power cord contact   | Check the power interface<br>and whether the power cord<br>is in good contact  |
| No power on               | Leakage protection trips or fuse blows  | Open the electrical control<br>cabinet of the machine and<br>check whether the leakage<br>protector and fuse are normal<br>and in good contact.  |
| Over temperature alarm    | <ol> <li>The alarm temperature<br/>setting is too low.</li> <li>The temperature sensor<br/>is faulty.</li> </ol>                        | <ol> <li>Set the alarm<br/>temperature to 65°C.</li> <li>Enable the<br/>backup temperature sensor.</li> <li>(Contact the manufacturer)</li> </ol>  |
| UV lamp does not light up | <ol> <li>The control wire is loose<br/>and connected to the wrong<br/>wire.</li> <li>An alarm occurs.</li> <li>Other reasons</li> </ol> | <ol> <li>Strictly follow the<br/>wire numbers and tighten<br/>the screws.</li> <li>Eliminate the alarm<br/>according to the touch screen<br/>prompt.</li> <li>Contact the manufacturer<br/>to provide fault analysis.</li> </ol> |

# 5. Common faults and solutions

## 6 .Equipment daily maintenance

1. Clean the surface dust every day, keep the body and fan port regularly clean, and keep the cooling channel normal (clean once a month, depending on the environment).

2. Turn on the lamp to check whether the UV lamp is irradiating according to the set power. If it is abnormal, stopthe oven, contact the staff for inspection, or contact the manufacturer.

3. System maintenance should be carried out after the equipment runs for one month check if the UV lamp is aging.

# 7. Precautions

1. Please ensure that the power cord is in good contact and the ground wire is reliably grounded

- 2. Please ensure that the working voltage of the UV oven is stable and normal
- 3. Mismatch of power frequency will cause damage to the machine

4. This product is industrial equipment, non-professionals should not disassemble it