HEIGHT-LED

UV LED Curing OVEN

UV LED Curing Oven HTBX-II User Manual

Thank you very much for buying HTLD UV LED Curing Oven .

Please read the product manual before you use the it .
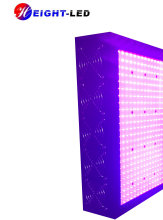
Content

1. Installation and connection of equipment

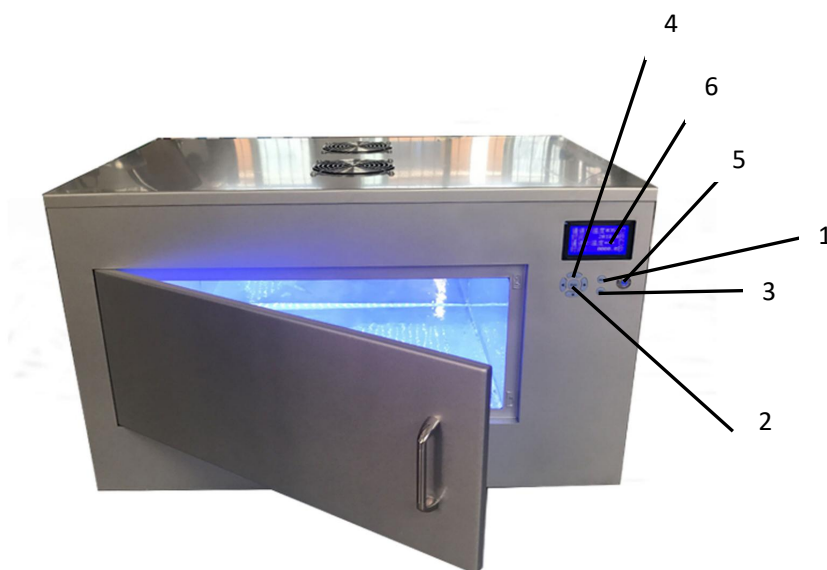## 1.1 Product Parts

UV LED Curing oven

UV LED Curing lamp

Manual

Power plug

1.2 UV LED Curing oven parts name and function

Item	Name	Function
1	Menu	Home menu display, auxiliary channel exposure settings
2	Enter	Confirm selection
3	Esc	Return
4	↑ ↓ ← →	Control cursor
5	Irradiation keys	Start or stop the UV LED Curing lamp
6	LCD	Display the working status of UV LED curing oven

1.2.1 The connection of pedal switch (the input signal port)

The port 1 indicates the pedal switch port of the UV LED lamp of the curing oven. The corresponding port corresponds to the corresponding channel. E.g, port 1 has two wiring hole on the left and right, press the button next to it to insert the root cable of the pedal separately. The method is the same for input the corresponding level signal ; When under manual control or automatic control, the pedal switch is depressed and the UV LED lamp is irradiated according to the corresponding control method.

1.2.2 Output signal port connection

Port 3 is the feedback signal of the uv led lamp , port 3 has two wiring hole on the left and right, press the button next to it to insert the signal connection lines separately. when the lamp is on, the port 3 will output a level signal of + 24V and a 0V level signal when the lamp shuts down.

1.2.3 AC power connection

Connect the power connector to the AC outlet on the back of the controller.

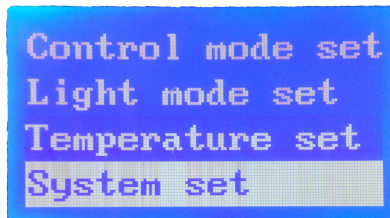## 2　Equipment basic operation and setting

2.1　Start and shut down

When starting up, please turn on the power, open the switch behind the controller, you can set on the controller. When Shut down, please turn off the UV-LED lamp, then turn off the back of the switch, unplug the power.

2.2 Functional operation

Open the Main stop button , Company logo (pic 1) is appear, wait a few seconds, display the main interface: control mode set, light mode set, temperature set , system set , as show on pic 2.

1

2

The parameter settings can only be performed during non-UV irradiation. You can set individual requirements by pressing "Menu + Direction Key + Enter + Esc". Pressing the 'Esc' button will return to the previous menu. Pressing the 'Menu' button will directly Return to the home menu, enter the setting state, use the '↑' '↓' button to select, use the 'Enter' button to select.

Control mode set ——Mainly set the control mode, mainly has the following functions: total button set, one button set, pedal set .
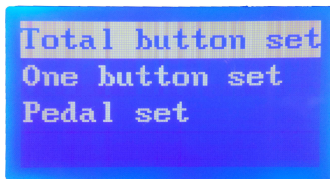
Light mode set —— Mainly set the light mode, mainly has the following functions: view fixed irradiation power and time set , the total time of irradiation , channel switch.

Temperature set ——set the maximum limit temperature of each channel.
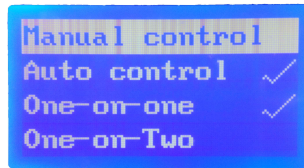
System set —— Mainly setting on standby time, language, restore factory settings.
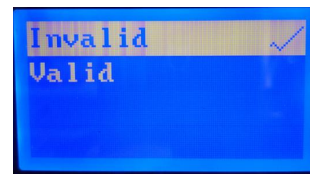
2.2.1 Control mode set

Pressing the "menu", select "control mode set", press "Enter" button to enter the next interface, there will be a total button set, one button set, pedal set, as shown in Pic 3 , it can be selected by the arrow keys, and press the "Enter" key to enter, as shown in Pic 4, Pic 5.

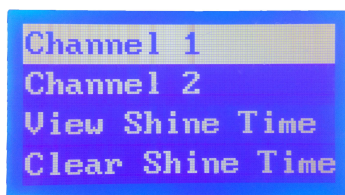3   4   5
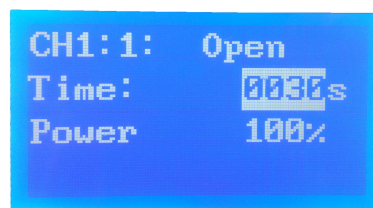
The total button set and one button set can be set valid or invalid, the Pedal set can be set by the up and down keys, manual control or Auto control. The pedal 1 controls two channels or pedals to be separated control. Manual control is the work of timing, by the peripheral switch continuous signal control or level signal continuous low-level signal control, switch signal is turned off or the level signal goes high, the work is stopped; Auto control   is the countdown operation, which is turned on or off along with the peripheral switch signal conversion, or turned on or off with the level signal conversion, and can also be timed.

2.2.2   Light mode set

Through the "menu" button, as shown in Pic 2, select "Light mode set", press "Enter" button to enter the next interface, there are two channel settings, as shown in Pic 6, you can use the up and down keys to select the channel, press "Enter "Enter the key as shown in Pic 7.

6   7

According to need, you can select "Channel 1"; the time and power can be set by the arrow keys and menu keys; "Channel Switch" is used to set this channel to open and close. "View Shine time" is to query the working time of the UV LED after leaving the factory. Clear Shine time is to clear the working time of the two channels. The operation requires a password. The factory default is fixed-power irradiation, the power is 100%, the irradiation time is 10S, and the channel is open.

2.2.2.1 Channel opening and power irradiation settings

Select "Channel 1" and "Enter" to enter Pic 7. Press "Enter" to switch the channel on or off as shown in Pic 8.

 8
 9
 10

Press the down arrow key again to switch to set the irradiation time. Press "Enter" key, the digit of the cursor is shown as Pic 9. Set the irradiation time 0-9999S by four direction keys, press "Enter" key. Press the down arrow again, the cursor moves to the irradiation power setting, and then press the Enter key,the digit of the cursor is shown as Pic 10. The irradiation power is set between 0-100% through the four direction keys. After the setting is completed, press the Esc to return to the display interface of Pic 7. This setting is completed. Channel 2 can be operated.

2.2.3 Temperature set

select "temperature set", press "Enter" to show as Pic 11, through the menu key to switch "on" or "off" as shown in Pic 12, press the down arrow key to switch to set temperature options, Press "Enter" , the digit of the cursor is shown as Pic13. Set the ideal monitoring temperature by up, down, left, and right arrow keys. If the monitored temperature reaches the set value, UV irradiation stops working and the buzzer keeps on alarming.

The factory default settings are: the total button set is active, the one button set is active, the pedal set is manual control, the temperature set is on, and the set temperature is 65°C.

 11
 12
 13

2.2.4 System set

In the menu interface, as shown in Pic 2, select "System Set", Pic 14 appears, standby screen , language, restore set. Select "standby screen" and press "Enter", You can select either "Always bright" or "Standby time" as shown in Pic 15. Use the arrow keys to select the standby time setting. Press "Enter" and the digits at the cursor is shown in Pic 16. The standby time is set by pressing the up, down, left, and right arrow keys. After setting, press the "Enter" to complete the setting.

"Language" settings, there are two languages to choose , Chinese and English, as shown in Pic 17, can be selected by "up and down + Enter" key, the factory default is English.

 14
 15
 16
 17
 18
 19

Select "Restore Sett" Enter Pic 18, you can choose to confirm or cancel, this item should be carefully selected, once you choose, you need to reset the parameters.

2.2.5 Irradiation

After finish the setting of light set mode and irradiation time of the UV LED curing oven, UV irradiation can control the UV LED lamp in three ways.

Note: The following three control ways can indirectly observe the turn-on / off of the UV LED lamp by observing the blinking of the Start key indicator.

1 UV LED lamp controlled by the control panel of the oven :

(1) When the pedal set is set to "Manual control & pedal discrete control", press the Start key , the indicator of the Start key lights up, the UV LED lamp begin to work according to the time set by the user, the buzzer will beep once, and the UV LED lamp will be turned off automatically when the countdown is completed,the buzzer sounds three times to indicate that the product is cured. When the countdown is not completed, reset the Start key and the indicate light off, UV LED lamp off;

(2) When the pedal set is set to "Auto control & pedal discrete control", touch the Start key , the indicator of the Start key lights up, the UV LED lamp begin to work according to the time set by the user, the buzzer will beep once, and the UV LED lamp will be turned off automatically when the countdown is completed, the buzzer sounds three times to indicate that the product is cured. When the countdown is not completed, reset the Start key and the indicate light off, UV LED lamp off;

2 Control the UV LED lamp through the input I/O signal of the oven or the pedal:

(1) When the pedal set is set to "Manual control & pedal discrete control", connect the pedal to the

I/O input signal port 1-1 and press the pedal (release), UV LED lamp begin to work according to the time set by the user, the buzzer will beep once, and the UV LED lamp will be turned off automatically when the countdown is completed, the buzzer sounds three times to indicate that the product is cured. When the countdown is not completed, released the pedal and UV LED lamp is off;

(2) When the pedal set is set to "Auto control & pedal discrete control", press the pedal and release at once, UV LED lamp begin to work according to the time set by the user, the buzzer will beep once, and the UV LED lamp will be turned off automatically when the countdown is completed, the buzzer sounds three times to indicate that the product is cured. When the countdown is not completed, press the pedal and release at once again, the UV LED lamp is off;

3 UV LED lamp controlled by the build-in sensor of the oven

（1）When the pedal set is set to "Manual control & pedal discrete control", close the door, UV LED lamp begin to work according to the time set by the user, the buzzer will beep once, and the UV LED lamp will be turned off automatically when the countdown is completed, the buzzer sounds three times to indicate that the product is cured. When the countdown is not completed, open the door, the UV LED lamp is off;

Note: This control way is only applicable to the pedal setting "Manual control & pedal discrete control".
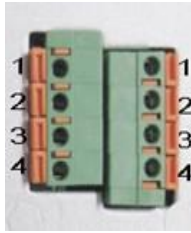
2.2.6   View irradiation parameters

Non-UV irradiation process to check the parameters set for each channel

Press the "Menu" button , enter the "Light Mode Set", enter each channel,

then view the "setting parameters of the relevant channel."

Total exposure time during non-UV irradiation

Press the "Menu" key to enter "Light Mode Set" and then enter "View Shine time " to see the UV irradiation time of each channel.

3 Peripheral equipment connection

I / O signal port

I / O signal port is double socket, access level signal (high +24 V, low 0V) or switch signal. When Access level signal, the left row of jacks are grounded, and are connected, the right row jack is positive (+24 V), is a separate interface, port 1 is the UV LED lamp's foot switch port of the Oven

When access switch signal, it can access to the corresponding parallel serial port. E.g, Port 1 have two wiring holes on the left and right, press the button, insert the pedal connection line respectively and release the button; under the premise that pedal control can be selected manual control or auto control , Press the pedal, the UV LED lamp is lit .

PLC programmer, according to positive and negative level signal to connect the IO communication port, PLC I / O connect to I / O signal port 1 on the right, PLC's GND connect to I / O signal port 1 on the left, and let PLC's I / O output a low level, the UV LED lamp is lit, when output a high level, the lamp is off .

The ports 3 is the lit feedback signal for the UV LED lamp . There two wiring holes on the left and right of the ports 3 respectively. Press the button, insert the signal cable connecting line respectively. When the lamp is on, the port 3 will output a +24V level signal and A 0V level signal is output when the lam is off.

4 Precautions

（1） UV LED light Do not direct eyes or skin.

（2）Do not disassemble UV LED radiation head , it may cause UV light leakage.

（3）To install or remove the UV LED head, be sure to turn off the power.

（4）Do not use thinner, volatile oil, acetone, kerosene and so on when cleaning the irradiation head and controller regularly. Put a small amount of ethanol on a soft cotton cloth and carefully wipe.

（5）please use in a cool, dry, ventilated, no high magnetic field, no high electric field environment.

（6）Please use the power adapter factory dedicated DC power supply.

（7）Do not open the controller privately to prevent the risk of leakage