

UV-LED Curing

System











UV LED Curing System Manual

Thank you very much for buying HTLD UV LED Curing system. Please read the product manual before you use the HTLD UV LED Curing system.



1. Installation and connection of equipment

1.1 Product Parts





Controller







Manual

Power

plug

1.2 UV LED Controller parts name and function:





Item	Name	Function
1	Touch screen	Select the control type, real-time display of current power, time,
		temperature
2	Lamp connection	Connect UV LED lamp
	port	
3	Input / output I / O	Connect foot switch or PLC programming to control the on/off
	terminal	of UV led irradiation
4	RS232 connection	Connect peripheral communication, control the Controller



	(COM)	
5	AC outlet	Connect 220V / 50HZ AC
6	switch (Power)	controller power on or off

2 UV LED Curing lamp connection

Connect the Lamp connection port on the controller with UV LED curing lamp connection port.

2.1 Computer signal connection

The computer signal line and the controller COM interface corresponding connection

2.2 The foot switch is the input signal port connection

The digital port 1 indicates the foot switch port of the main controller UV LED Curing lamp. The corresponding port corresponds to the corresponding channel. For example, the left and right ports 1 each have a wiring hole. Press the beside button, Insert the connection line of the pedal, you can also enter the corresponding level signal, the same method; When the control style is manual control or automatic control, depressing the foot switch, the lamp in accordance with the corresponding control irradiation.

2.3 Output signal port connection

Digital 3 is the feedback signal of the uv led curing lamp, digital 4-port is the high temperature fault feedback output signal port UV LED Curing lamp. Beside ports 3, 4, there is a connection hole, press the beside button, insert the signal connection lines. When the lamp is on, the digital port 3 will output a level signal of + 24V and a 0V level signal when the lamp shuts down. When the high temperature fault alarm, the digital port 4 will output a + 24V Level signal, and cancel alarm Digital 4 port will output a 0V level signal.

2.4 AC power connection

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

3 Equipment basic operation and setting

3.1 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.

3.2 Functional operation

Reset the Main stop button, wait a few seconds, display the main interface:

control type, irradiation type, view parameters, system set, start irradiation, Temperature Monitor.



Controller interface

Parameter settings can only be performed during non-UV exposure, and personal needs can

be set by touching the "Menu" display option. After setting, click 'Back' to return to the main menu.

Control type: set the control type, main functions: manual control;

Irradiation type: set the way of irradiation, main functions : irradiation power setting, the total

time of radiation inquiries and reset;

Temperature monitoring : set the alarm temperature to achieve display the light temperature;

System Set: Restore Factory Settings

Start - Start the light irradiation, under normal circumstances do not need to click this button;

Irradiation parameters: Check the irradiation power, alarm temperature and other parameters

3.2.1 Control type

Click the control type on the main interface, there manual control and automatic control, by clicking the switch button follow the control type to select the appropriate control type, if



the corresponding control mode switch button is open, indicating that the control mode is turned on , On the contrary closed; under any circumstances allows only one control mode to open. Manual control is timing work by the external switch continued to open the signal control or level signal continued low signal control, the switch signal is off or the level signal is high Level, the work is stopped; automatic control is countdown work, with the external switch signal that is off or with the level of signal conversion that is off, but also timing control.

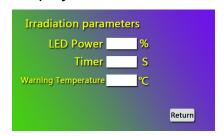


Control type (Automatic control is opening)

3.2.2 Irradiation type

When the menu is displayed, click "Irradiation type". Click the irradiation power, pop-up input

keyboard, type the number that you want, click Enter to confirm. Irradiation power input range is 0-100%, Irradiation time input range 0-9999 seconds. The total irradiation time can only be displayed, it can not be modified.



Irradiation type



Modify irradiation time, power

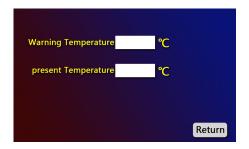
3.2.3 Temperature monitoring

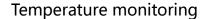
When the menu is displayed, click "Temperature monitoring", Click the Temperature, pop-up

input keyboard, type the number that you want, click Enter to confirm. The default warning temperature is 65 °C. The present temperature is current UV LED lamp temperature, if the



present temperature exceeds the warning temperature, UV LED lamp will stop working.







Change the Waring Temperature

3.2.4 System Set

When the menu is displayed, click "System Set". Click 'Restore Factory Settings' will restore

the factory raw data. The control mode is manual control, the irradiation type is 100% irradiation power, the temperature monitoring is set to 65 °C.



System Set



Restore Factory Settings

3.2.5 Start

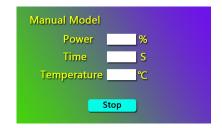
When the "Start Menu" is displayed, click the "Start " button, the UV LED lamp will start working and display the current control type operation interface. The operation interface of the control type includes the irradiation power, irradiation time and current temperature. (1) The irradiation power is the irradiation power set by the current user; (2) The irradiation time is the time when the lamp is irradiated in the current control type; (3) The current temperature is the real-time temperature of the lamp; Stop lighting and return to the Menu work screen.

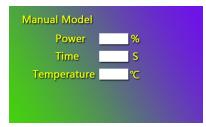
Manual control: (1) Click the "start " button, jump to the manual control interface, the lamp is lit, the irradiation power shows the power set by the user, the irradiation time starts with the time, the current temperature shows the temperature of the lamp in real time, click "Stop "button, the lamp stops the irradiation and returns to the" Menu "working interface.



(2) I / O port 1 connect the pedal or wire, depress the pedal or short with the wire, the lamp starts to irradiate. The touch screen jumps to the manual control running interface (the irradiation time is real time), Release the pedal or disconnect the wire, the lamp turn off and return to the "menu" working interface.







Manual control open operation

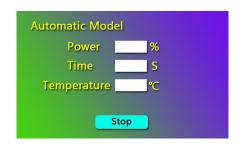
Manual control (1) operation

Manual control (2)

5

- 2. Automatic control: (1) Click the "Start" button, jump to the manual control interface, the lamp is lit, the irradiation power shows the power set by the user, the irradiation time starts to count down according to the time set by the user, the current temperature displays the lamp in real time. The lamp automatically shuts off after the countdown, and the touch screen automatically jumps to the end of the irradiation time interface. When the lamp irradiation time is not over, click the stop irradiation button, the lamp shuts off the irradiation and returns to the menu working interface.
- (2) I / O input port 1 connected to the pedal, depress the pedal immediately release, lamp start to irradiate, the touch screen jump to automatic control operation interface, when the countdown is not over ,depress the pedal and immediately release, the lamp shuts off and return to the "Menu "work interface; if the irradiation time is over, jump to the" irradiation time end "interface, depress the pedal immediately release the lamp start to irradiate again.







Automatic Control is opening

Automatic model operation

irradiation time over

3.2.6 View irradiation parameters

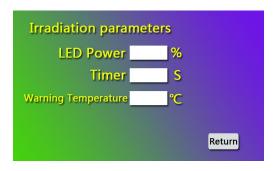


When the "Menu" is displayed, click the "View Irradiance Parameters" button to check the LED

power, warning temperature and other parameters.

3.2.7 High temperature fault alarm

When the UV LED lamp is running, if the temperature of the lamp is higher than the set temperature, the light is automatically turned off, the buzzer starts to alarm, the touch screen jumps to the high temperature alarm interface, wait for the staff to confirm, click the back button, Stop the alarm and return to the menu interface before restarting.



View irradiation parameters



High temperature warning

4. Peripheral equipment connection



I / O signal port



COM communication 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, digital port 1 is the main controller UV LED lamp foot switch port.

When Access switch signal, it can access to the corresponding parallel serial port. Such as port 1, on left and right of port 1 respectively, there is a wiring hole, press the button, insert the pedal connection line respectively and release the button; Foot control can be selected manually or automatically under the premise, Press the foot 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 received I / O signal port 1 on the right, PLC's GND received I / O signal port 1 on the left, so PLC's I / O output a low level, the UV LED lamp is lit, when the output of a high level, the lamp is off .When a high temperature fault alarm, I / O signal port 4 will output a +24 V high-level feedback signal.

COM communication port, RS-232 plug can be connected, you need to cooperate with the appropriate software to achieve.

5.2 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