

# 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

# 1. Installation and connection of equipment

# **1.1 Product Parts**

WUV-LED Curing System A和和時代を表示的社術報会内	
Controller	UV-LED Curing lamp
Manual	Power plug

BEIGHT-LED

# **1.2 UV LED Controller parts name and fun** ion:



Item	Button Name	Function
1	Menu	Home menu display, auxiliary channel exposure settings
2	Enter	Confirm selection
3	Esc	Return
4	$\uparrow \downarrow \leftarrow \rightarrow$	Control cursor
5	Irradiation head	Corresponding to the beginning or end of the button
	(1,2)	channel UV light irradiation, corresponding to the channel
		in the process of the irradiation process of the inquiry
6	Total	Open or lock screen parameters settings.
7	indicator light	To detect the normal connection of UV irradiation head or
		not, and to indicate the end of UV radiation.
8	Power	Turn On / off
9	Irradiation head	Connect the irradiation head to start UV irradiation
	connection port	
	( CH1/CH2 )	
10	AC outlet	Connect 220V AC power supply
11	Input and output	Connect the foot switch or PLC programming
	IO	
	terminal	
12	RS232 Connection	Connect peripheral communications to control the
	( COM )	Controller

# 2 UV LED Curing lamp connection

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

## 2.1 The foot switch is the input signal port connection

The digital port 1,2 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.

## 2.2 Output signal port connection

Digital 3 ,4 is the feedback signal of the 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.

### 2.3 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

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.



Control mode set Light mode set Temperature set System set Pic 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 '1' '1' 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.

button set One button set Pedal set

unual contro uto contro One-on-one One-on-Two

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

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**Temperature set** ——set the maximum limit temperature of each channel.

**System set** — Mainly setting on standby time, language, restore factory settings.

#### **3.2.1** 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 Invalid shown in Pic 4, Pic 5. Valid



#### 5 3 4

The total button set and one button set can be set to be valid or invalid, the Pedal set can be set by the up and down keys, manual control or Auto control, and 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.

# 3.2.2 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.



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.

# 3.2.2.1 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.



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

#### **3.2.3** Temperature set

select "temperature set", press "Enter" to enter 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" key, the digit of the cursor is shown in 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.



#### 3.2.4 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 position are shown in Pic 16. The standby time is set by pressing the up, down, left, and right arrow keys. After setting, press the "Enter" key to complete the setting. Select "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.



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.

#### 3.2.5 Irradiation

After the setting is completed, make sure that the required controller's head is

connected and the corresponding channel indicator is bright and yellow. UV irradiation can be controlled by two ways, one is through the host panel and the total button, press the digital UV irradiation button, the indicator light turns from yellow to red, the buzzer will beep, the corresponding channel UV irradiation began to work, the interface is shown as Pic 19. During the irradiation, if the set time has expired, UV irradiation will also stop, the indicator lamp turns from red to yellow, and the buzzer will beep once; UV irradiation can also be controlled through the button of total, and the same can be turned on and off. The other is a Pedal switch controls I/O signals. There are two types of Pedal control: manual control and auto control. Manual control is the process of the irradiation completely controlled by the foot pedal, which means when the pedal is illuminated, the light is turned off. When the level signal is controlled, Low on, high off. When "auto control", the irradiation process is automatically performed according to the set time and mode; "When the pedal 1 controls two-way," the pedal 1 simultaneously controls the opening and closing of the 1-2 channel, while the foot pedal 2 remains Can control the Channel 2 illumination switch; When "respectively control", each pedal respectively controls the corresponding channel, according to the user needs can also be in the "respectively control", a foot pedal simultaneously control two channels, the method is split two joints on a pedal, two parallel two series. The "buzzer setting" has "open" and "close". When it is turned on, the buzzer will beep once when each illumination is started. The buzzer will ring once when it stops, and the buzzer will alarm three times when there is an error. "

#### 3.2.6 View irradiation parameters

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

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

#### **4 Peripheral equipment connection**







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 1,2 are 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 1,2 on the right, PLC's GND received I / O signal port 1,2 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 .

The ports 3, 4 are the feedback signal for the UV-LED light source. There is a wiring hole on the left and right of the ports 3 and 4 respectively. Press the button next to it to insert the signal cable connecting line respectively. When the light source is on, the number 3, 4 ports will output a +24V level signal, A 0V level signal is output when the light source is off.

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

#### **5** 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