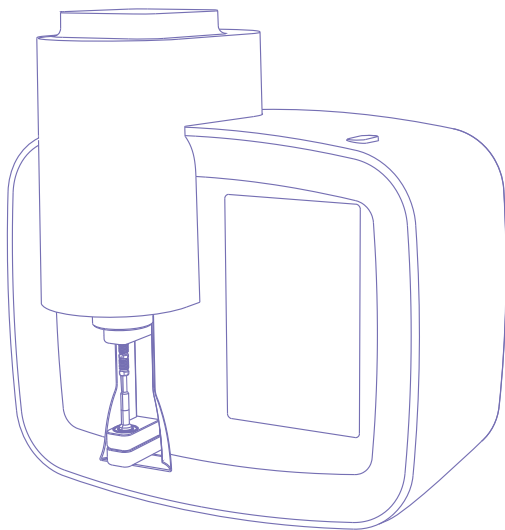




# UV Activator

Instruction Manual



**1 【Product name】 UV Activator**

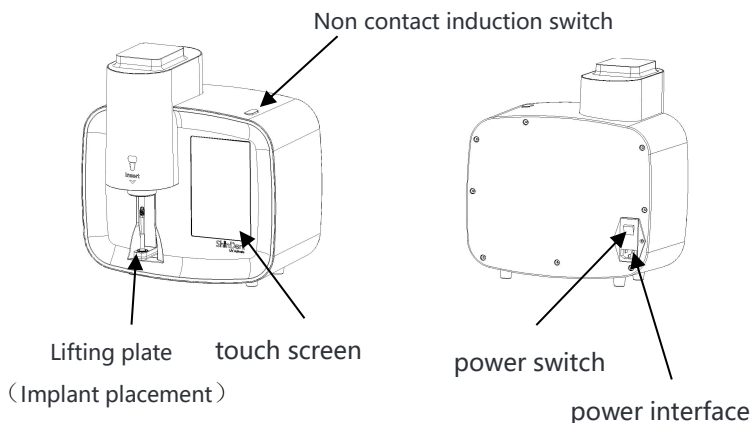
**2 【Brand】 Xpedent**

**3 【Model】 ShinDent**

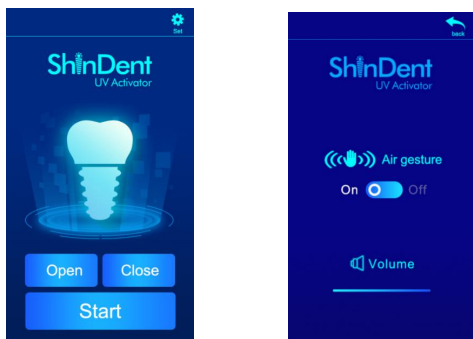
**4 【Product introduction】**

This product is irradiated by ultraviolet light at a special wavelength , the photocatalytic reaction of titanium dioxide on the surface of the implant was initiated, rapid decomposition of surface organic matter, it makes the implant super hydrophilic。 thus, the surface aging phenomenon of titanium implant can be delayed and restored, to improve the biological activity of implant surface, make the implant surface super hydrophilic to enhance bone bonding。

**5 【Product photographs】**



*Figure 5.1 Schematic diagram of the host*



**Note:** Please refer to Section 17 "Symbol Description" for each symbol description.

*Figure 5.2 Touch screen operation interface*

## **6 【Product formation】**

The implant hydrophilic instrument is composed of the main engine, power cord and support rod kit.

## **7 【Scope of application】**

This product is used to irradiate the surface of the implant with ultraviolet light of special wavelength, so that the surface of the implant produces super hydrophilic water and improves bone union

## **8 【Technical parameters】**

- 1) Power input: 220VAC, 50Hz/60Hz;
- 2) Input power: ≤170VA;
- 3) UV light source irradiation time: 10S;
- 4) Dimensions: 300\*250\*348 (length \* width \* height);
- 5) G/W: 9.5kg;
- 6) Fuse: F1L 250V;

## **9 【Security feature】**

- 1) Operation mode classification: continuous operation;
- 2) Anti-shock type classification: Class ii equipment;
- 3) Classification of degree of shock protection: Type B application part;
- 4) Classification of protection degree into liquid: the main machine is common equipment (IPX0), not waterproof.
- 5) Classification of safety when used in the presence of flammable anesthetic gases mixed with air or with oxygen or nitrous oxide: Equipment that cannot be used in the presence of flammable anesthetic gases mixed with air or with oxygen or nitrous oxide.

## **10 【Environmental requirement】**

Using the environment:

- 1) Ambient temperature range:  $+5^{\circ}\text{C} \sim +40^{\circ}\text{C}$ ;
- 2) Relative humidity: 30 ~ 90%RH;
- 3) atmospheric pressure: 80kPa ~ 106kPa.

Transportation and storage environment:


- 1) Temperature  $0^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ ;
- 2) Relative humidity:  $\leq 80\%\text{RH}$ ;
- 3) Avoid direct sunlight;
- 4) Keep away from heat and fire sources.



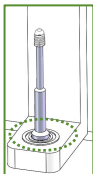
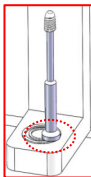

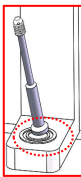

## 11 【Installation instructions】



- 1) Open the package, check whether all items of the equipment are complete according to the packing list, and then place the host on a firm plane facing the operator;
- 2) Turn off the power switch on the host, and then insert the power cable attached with the device into the power interface on the back of the host;
- 3) Insert the triangle plug of the power cable into the power socket (note: the ground cable of the power socket must be reliably grounded; otherwise, the device will not work normally);
- 4) Turn on the power switch on the back of the host, light up the touch screen, display the operation interface, and then start to work;



## 12 【Direction for use】

### 12.1 Implant hydrophilic treatment

Order	Schematic picture	Instructions
1		<p>Click the "Open" button on the touch screen, the lifting tray will automatically drop</p> <p>⚠ Do not place items under the lifting tray</p> <p>⚠ Do not operate before the lifting tray is lowered into place</p>

2		<p>Wear sterilizing gloves to connect the implant to the sterilized support rod, and then rotate the implant 2-3 times in a clockwise direction</p> <ul style="list-style-type: none"><li>⚠ The support rod must be sterilized before use</li><li>⚠ The implant should not touch the hand or other parts to prevent contamination of the implant</li><li>⚠ The original implant packaging vial should not be contaminated</li><li>⚠ The support rod must be selected to match the screw thread specifications of the implant</li><li>⚠ Confirm whether the implant is stably connected to the support, otherwise the device may fall off during operation</li></ul>
3	<div><div><p>Correct installation</p></div><div><p>Wrong installation</p><div><p>(Outside the circle)</p></div><div><p>(tilt)</p></div></div></div>	<p>Place the support rod with the implant stably installed in the center of the lifting plate ring</p> <ul style="list-style-type: none"><li>⚠ Ensure that the support rod is correctly installed in the center of the lifting panel ring. Otherwise, the device may be damaged</li></ul>


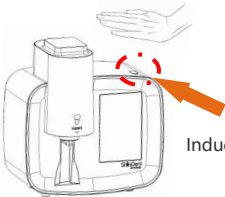
4		<p>Click the "Start" button on the touch screen, a prompt page will appear, and then click the "Yes" button. At this time, the lifting plate will automatically rise, and the device will automatically start the hydrophilic treatment of the implant, and the treatment progress will be displayed on the interface.</p> <p><b>⚠</b> Before clicking "Start", please confirm that the support rod has been accurately and stably installed in the center of the lifting disk ring</p>
5		<p>After the hydrophilic treatment of the implant is finished, the interface will display "Finished" and the lifting plate will automatically descend. The support rod can be removed after the lifting plate is lowered into place.</p> <p><b>⚠</b> When taking the support rod, please pinch the lower part of the support rod. Do not tilt or touch the implant.</p>


6		<p>The treated implants should be implanted immediately. If the implant is not used immediately, the treated implant should be returned to the original implant packaging bottle, and the implant support should be removed by counterclockwise rotation, and the protective cover should be closed. However, if the implant is not used for a long time after opening, it may be contaminated.</p>
7		<p>After the equipment is processed, the vacuum pump will continue to run for 10 seconds. When the vacuum pump stops running, click the "Close" button to close the lifting tray.</p> <p>If there is no operation within three minutes, the lifting plate will automatically rise and close.</p>



## 12.2 Gesture Sensing Function

The gesture sensing function controls the device through the non-contact induction switch on the upper right of the device. The "open", "close" and "start" functions of the device can be realized without touching the touch screen, which can effectively prevent hand cross infection.

Order	Schematic picture	Instructions
1		<p>Gesture sensing is set to on by default. To disable the gesture sensing function, click the "Setting" button in the upper right corner of the touch screen to enter the setting interface and click the "Switch" button.</p>
2	 <p>Inductive switch</p>	<p>With the lift panel closed, place your hand about 5 cm above the induction switch for 1 second, and then move away. The lifting tray will drop automatically.</p>

3	 <p>The diagram shows the ShinDent UV device, a white, boxy unit with a central vertical column and a base. Above the device, a hand is shown with fingers spread, indicating the placement of a support rod. Below the device, a smartphone screen displays the 'ShinDent UV App' interface. The app has a dark blue background with the 'ShinDent UV App' logo at the top. Below the logo, there is a 'Start UV processing' button with 'Yes' and 'No' options. At the bottom, there are 'Open', 'Close', and 'Start' buttons.</p>	<p>Place the support rod with the implant stably installed in the center of the lifting plate ring. Place your hand about 5 cm above the sensor switch for 1 second and then remove it. A prompt page appears. Then put your hand on the top of the induction switch about 5 cm away for 1 second and then move away, Confirm to start UV treatment, The device will start automatically.</p> <p>After the operation is completed, the lifting plate will automatically drop. Remove the treated implant. If there is no operation within three minutes, the lifting plate will automatically rise and close.</p>
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### 13 【Matters needing attention】

- 1) This product must be operated by qualified or trained personnel, and must meet the requirements of relevant operating codes and regulations of the medical department;
- 2) The equipment should be kept clean before and after use, and the support rod should be disinfected before each use;
- 3) The operator should be equipped with sufficient protection (such as gloves, etc.) to prevent cross-infection;

4) Do not place debris under the lifting plate, otherwise it will damage the equipment;

5) Our company is a company specializing in the production of medical equipment. We will not be responsible for the safety of the equipment only when the maintenance, repair and modification of the machine are carried out by our company or the technicians authorized by our company;

6) No harmful substances are produced in this product. When the product reaches the end-of-life period, the main engine and accessories shall be treated in accordance with relevant national regulations.

## **14 【Cleaning and disinfection】**

Support rods must be disinfected before use and cleaned and disinfected after each use.

High temperature disinfection method: support rod can be vacuum disinfection boiler for high temperature and high pressure disinfection, disinfection conditions: 134℃, 200 kpa (2 bar), disinfection time 18 minutes;

## **15 【Maintenance and troubleshooting】**

### **15.1 Device Maintenance**

1) The equipment should be handled with care, anti-vibration and moisture-proof;

2) Do not put the equipment together with toxic, corrosive, flammable and explosive items during storage;

3) When the equipment is not in use, turn off the power switch and unplug the power cord;

4) The support rod shall be stored in the packaging box after drying, and shall not be immersed in disinfectant for a long time;





















## 15.2 Common Faults and Solutions

Fault phenomenon	Possible fault causes	Solution
The main engine does not respond	The external power supply is not connected	Turn on the power switch and plug it in
	The internal fuse blew out	Contact your local distributor or our company
Gesture sensing does not respond	The gesture sensing function is disabled	Enable the gesture sensing function as described in 12.2
	The hand was too far away to pick it up	Place your hand about 5 cm above the sensor switch
	Induction switch damage	Contact your local distributor or our company
The lifting tray is unresponsive	Not starting in the correct sequence	Follow the instructions to correctly start the device function
	The lifting tray is blocked or stuck by a foreign object	Check whether there is any blocking foreign body under the lifting plate
	The support rod is not properly positioned to jam the lifting tray	Follow the instructions to place the support rod correctly, not in the wrong position

## 16 【Taboo】

Patients or doctors with pacemakers or other implanted electronic devices warn doctors or operators not to use small appliances such as razors and hair dryers.

## 17 【Symbol description】

	Registered trademark		storage temperature -10°C ~ +50°C		Keep dry
	Date of manufacture		manufacturers		Fragile
	Serial Number		Please read the instructions.		Storage humidity does not exceed 85%RH
	Recycling	IPX0	Waterproof level		Storage pressure 70kPa ~ 106kPa
T0.5AL 250V	A host of insurance		Grounding	Voltage: 220V AC50/60HZ	Power input
	Open lifting tray		Close lifting tray		Boot device
	Feature set		Gesture sensing function switch		Volume
	Return to main page		Dispose of waste products and accessories in accordance with the Waste Electronic Equipment (WEEE) Directive (2002/96/EC)		

## 18 【special instructions】

The Company may, upon request, provide circuit diagrams, lists of components, diagrams, calibration details, or other information necessary to assist the user's qualified technicians in repairing equipment parts designated by the Manufacturer as repairable.

The company reserves the right to modify the machine design, product technology or accessories, instruction manual and package contents at any time without prior notice. The product shall prevail in kind. The final interpretation right belongs to Guilin Yikeshi Medical Device Co., LTD.

## 19 【shipping list】

Serial number	Designation	Quantity	Note
1	Host	1	
2	Power line	1	
3	Disinfection box	1	
4	Support bar	3	
5	Guide rod of planting screwdriver	2	
6	Implant clamp	2	optional
7	Certificate of approval	1	
8	Instruction book	1	
9	Warranty card	1	

Date of production: see label

Product validity: five years

Revision date: 2022.12.12



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