Scaler & Air polish Device

Instruction manual

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Directory

1 【Product name】

AIRFLOW Prophylaxis Master

2 【Brand】Xpedent

3 【Model】PX-A

4 【Product introduction】

This product combines ultrasonic system and sandblasting system, which can clean and treat teeth quickly and efficiently. Ultrasonic handpiece and sandblasting handpiece can be removed and inserted freely, and can be sterilized in a high temperature environment of 134℃.

The ultrasonic system uses the cavitation effect produced by the ultrasonic vibration of the tip to remove dental stones, dental plaque, smoke spot, tea spot, etc., and also can carry out periodontal treatment and root canal cleaning.

The sandblasting system uses high pressure air to spray a special dental powder onto the tooth surface to remove the tooth surface. It can quickly and gently clean up the tea dirt, smoke dirt and food soft dirt attached to the teeth, and also clean up the dental pits and gaps that are not easy to reach.

5 【Product photographs】

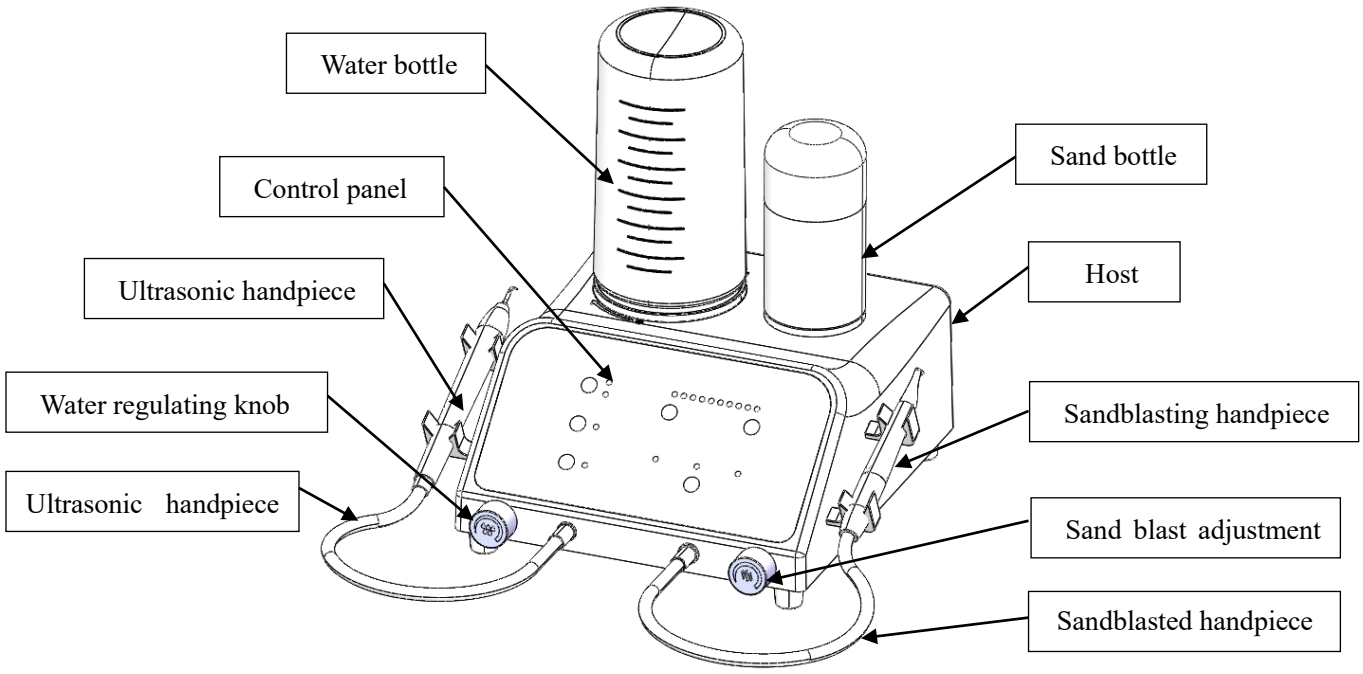


Figure 5.1 Front view of the host

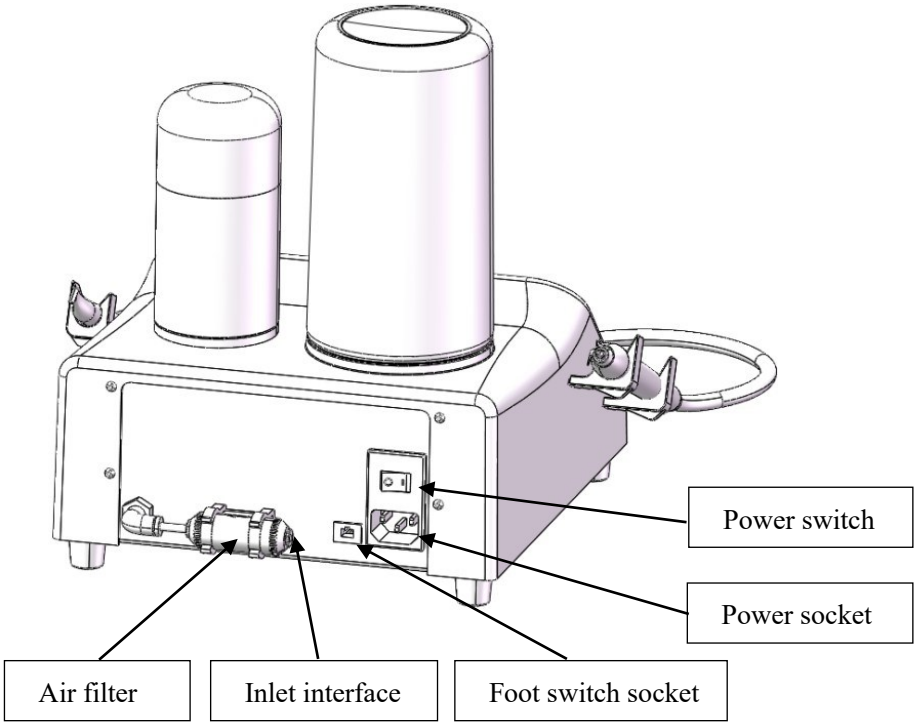
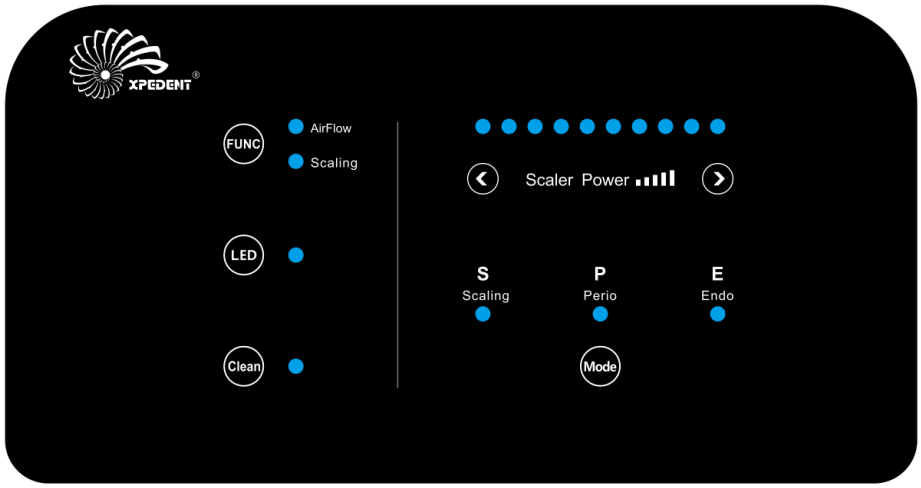


Figure 5.2 Schematic diagram of the back of the host



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

Figure 5.3 Schematic diagram of control panel

6 【Product formation】

Ultrasonic sandblasting periodontal therapeutic apparatus consists of main machine, water bottle, sand bottle, ultrasonic handpiece, sandblasting handpiece, power cord, foot switch and tip.

7 【Scope of application】

This product includes ultrasonic system and sandblasting system. The ultrasonic system is used for periodontal treatment, removal of supragingival and subgingival dental

stones, dental plaque, root canal cleaning and cleaning. Sandblasting system is used to remove plaque, pigment and implant maintenance.

8 【Technical parameters】

1) Power input: 220VAC, 50Hz/60Hz;
2) Intake pressure: 0.4mpa ~ 0.6mpa (4bar ~ 6bar);
3) Input power: ≤40VA;
4) Tip offset: 1μm ~ 100μm;
5) Root canal tip offset: < 1mm;
6) Tip vibration frequency: 20kHz ~ 40kHz;
7) Vibration frequency of root canal needle tip: 20kHz ~ 40kHz;
8) Tip half offset force: 0.1N ~ 2N;
9) The root canal tip semi-offset force was 0.1N-2N;
10) Main engine fuse: T0.5AL 250V.

9 【Security feature】

1) Operation mode classification: continuous operation;
2) Anti-electric shock type classification: Class ii equipment;
3) Classification of shock protection degree: type B application part;
4) The degree of protection into the liquid classification: the host is a common equipment (IPX0), not waterproof. Foot switch is (IPX1);
5) Classification of safety when used in the presence of flammable anesthetic gases mixed with air or oxygen or nitrous oxide: Equipment that cannot be used in the presence of flammable anesthetic gases mixed with air or oxygen or nitrous oxide.

10 【Environmental requirement】

Operating Environment:
1) Water supply temperature: +10℃ ~ +30℃;
2) Air supply temperature: +10℃ ~ +40℃;
3) Ambient temperature range: +5℃ ~ +40℃;
4) Relative humidity: 10-85% RH;
5) atmospheric pressure: 70kPa ~ 106kPa.
Transportation and storage environment:
1) Temperature: -10℃ ~ +50℃;
2) Relative humidity: ≤85%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 place the host on a firm plane facing the operator;

2) Insert the air pipe attached with the device into the air inlet interface of the air filter on the back of the host, and connect the other end to the compressed air source, and then feed 0.4mpa ~ 0.6mpa compressed air into the device;

3) Insert the plug of the foot switch into the socket of the foot switch on the back of the host;

4) Turn off the power switch on the host and insert the output connector of the power adapter into the power socket on the back of the host;

5) Insert the corresponding tail line of the ultrasonic handpiece and sandblasting handpiece respectively, and place the handpiece on the bracket on both sides of the host. The ultrasonic handpiece is placed on the left side, and the sandblasting handpiece is placed on the right side;

6) Load an appropriate amount of sand powder into the sand bottle (the amount of sand powder into the sand bottle shall not exceed the mark line of "Max"), align the sand outlet of the sand bottle with the sand outlet of the main machine, and then vertically insert it into the sand bottle groove above the main machine. As shown in Figure 11.1;

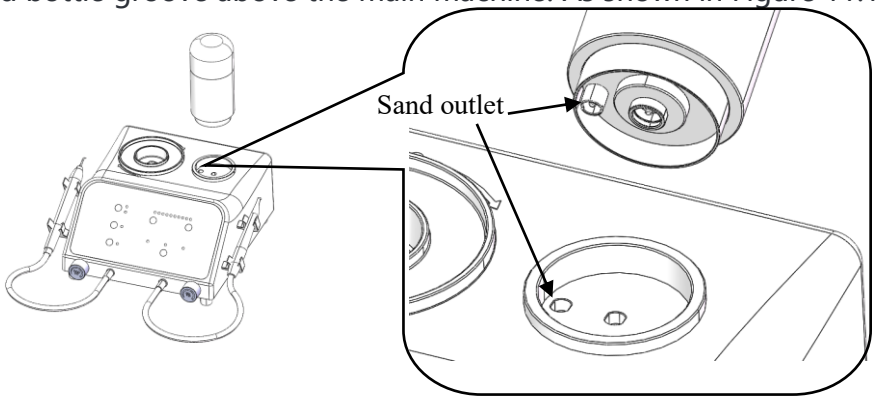


Figure 11.1 Schematic diagram of sand bottle installation

7) Fill the water bottle with an appropriate amount of purified water, align the round mark point of the water bottle with the mark point of the host, and then vertically insert the water bottle into the water bottle slot above the host, and then rotate the water bottle clockwise by 90° along the arrow, as shown in Figure 11.2.

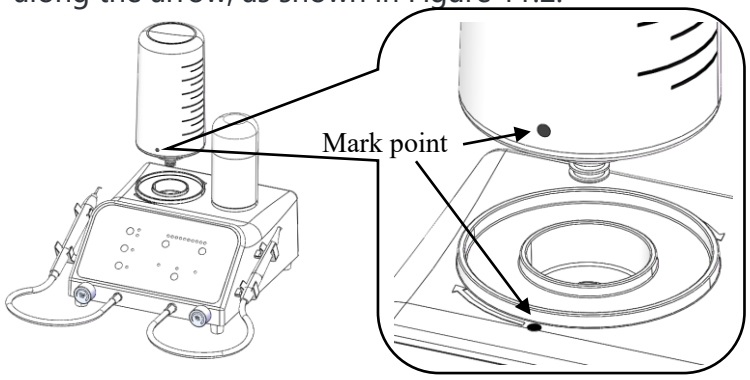


Figure 11.2 Schematic diagram of water bottle installation

8) Insert the input plug of the power adapter into the power socket and turn on the power switch to start work.

12 【Direction for use】

12.1 Ultrasonic System

1) Turn on the power switch at the back of the host, and the indicator on the control panel will light up. Tap the Function key to select the ultrasound function. Then tap the "Mode" key to select the desired working mode. The default working mode of the device is "Scaling-S".

2) Select the appropriate tip as required, and tighten the tip on the ultrasonic handpiece with a torque wrench.

3) Pick up the ultrasonic handpiece and step on the foot switch. The tip vibrates and water squirts out from the tip and appears atomized (after the first use, the water will come out after a few seconds). Release the tip of the foot switch and the vibration will stop and the water will stop. Tap the "LED" key to turn on or off the LED light at the front of the ultrasonic handpiece. After adjusting the equipment to the appropriate power and water volume, the teeth cleaning can be started.

4) The user generally holds the handpiece in the posture of holding the pen, and can operate according to the requirements and key points of the general cleaning operation. According to the direction of vibration, gently slide the working point over the tooth surface to remove the stone. Different tips can be selected for different cleaning parts. The vibration power can be adjusted at any time in the clinical process according to the sensitivity of the tooth and the hardness of the tooth stone.

5) When using the "Endo-E" mode, the root canal connector and special root canal file must be used (the device is standard equipped with type E1 root canal connector and root canal file #15 and #20). If you need to use other types of root canal connector and root canal file, please contact the supplier.

12.2 Sandblasting system

1) Fill the sand bottle with appropriate amount of sand powder (the amount of sand powder should not exceed the mark line "Max"), and then fill the water bottle with appropriate amount of pure water;

2) Tap the "Func" key to select the sandblasting function;

3) Pick up the sandblasting handpiece, adjust to the appropriate amount of water and sandblasting, aim the nozzle at the pool, step on the foot switch, and start cleaning the teeth when the nozzle can spray gas, sand powder and water spray normally;

4) Users generally hold the handpiece in the pen grip position and aim the nozzle at the tooth surface, but do not contact directly. The distance between the nozzle and the tooth surface should be 3-5mm, and the Angle is 30° -60 °. The smaller the Angle, the larger the cleaning area. During the cleaning, make small circular motions on the tooth surface;

5) The high-speed emptor on the dental comprehensive treatment machine should be used to absorb the air and sand mixture reflected from the tooth surface;

6) After treatment, turn the water volume to the maximum gear and polish the surface of all teeth.

12.3 Cleaning Function

It is recommended that you use the cleaning function to clean the pipes of the sandblasting system after each sandblasting treatment or before replacing the sand powder to prevent residual sand powder from accumulating in the pipes and forming blockage.

1) Pick up the sandblasting handpiece, aim the nozzle at the pool, and lightly press the "Clean" button. The high-speed airflow will eject the sand powder and water remaining in the pipeline;

2) The cleaning function will turn off automatically in about 5 seconds, and the high-speed airflow will stop ejecting in about 8 seconds;

3) If you feel that the air flow is not smooth and blocked, you can try to clean it for many times.

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. Please disinfect the ultrasonic handpiece, sandblasting handpiece, tip, torque wrench and other accessories before each use;

3) It is recommended that the equipment be supplied with potable water sources rather than unclean ones;

4) Before each clinical operation, please allow the equipment to work under the condition of water for 10 seconds to eliminate the residual water in the pipe;

5) The operator should be equipped with sufficient protection (such as goggles, face mask, etc.) to prevent cross-infection;

6) During the working period, it is not allowed to change the handpiece and working point when stepping on the foot switch;

7) The tip must be tightened. If the tip is not tightened or the tip is loose after a long time of use, the output power will be reduced and the cleaning effect will be affected;

8) In the cleaning process, do not put too much pressure on the ultrasonic handpiece, otherwise the tip will be broken;

9) When using the root canal washing function, ensure that the root canal connector is tightly connected with the handpiece, and ensure that the nut on the root canal connector clamps the root canal file;

10) Do not bend or polish the tip;

11) When the tip is worn out, the vibration strength decreases and the power output decreases, or even the power output cannot be output, resulting in heat damage of the handpiece. So the tip wear more than 2 mm must be replaced with a new tip;

12) Temperature warning⚠: in the process of operation, attention should be paid to the amount of water in the water bottle, maintain enough cooling water, otherwise the highest temperature of the tip may reach 48℃; Before the start of treatment, the doctor should inform the patient if the patient has hot, pain and other discomfort in time to use language or gesture to the doctor to stop; When treating patients with anesthetics, keep the tip in contact with the gingiva for no more than 10 seconds, and control the amount of pressure applied to the handpiece to avoid burning the patient.

13) During the sandblasting process, if you need to add sand powder to the sand bottle, please click the "Clean" button first, and then remove the sand bottle to add sand powder after the pressure in the sand bottle is completely released;

14) Before replacing the sandblasting handpiece or sprinkler head, please use a three-use gun to dry the water at the interface at both ends (especially the air route interface) to prevent water from entering the air route and prevent sand powder from congesting in the pipeline and causing blockage;

15) If sand powder is accidentally sprayed into the eye, it may cause eye injury. We strongly recommend that all personnel (including doctors, nurses and patients) wear goggles during the sandblasting treatment;

16) Please use sandblasting powder registered with the Food and Drug Administration;

17) Our company is a company specializing in the production of medical instruments. We will not be responsible for the safety of the instruments unless the maintenance, repair and modification of the machines are carried out by our company or by technicians authorized by our company.

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

14 【Cleaning and disinfection】

Ultrasonic handpiece, sandblasting handpiece, tip and torsion wrench must be disinfected before use, and must be cleaned and disinfected after each use.

1) Chemical disinfection method: the handpiece, working point and torque wrench can be chemically sterilized. First clean with alcohol, then use medical disinfectant or disinfection towel for disinfection, and finally rinse with distilled water;

2) High temperature disinfection method: the handpiece, tip and torque wrench can be sterilized by vacuum disinfection boiler at high temperature and high pressure. Disinfection conditions: 134℃, 200 kpa (2 bar), disinfection time 18 minutes;

3) Common disinfection method: the common pipeline and handpiece connection shall be disinfected with alcohol or dental disinfection towel. Do not soak the handpiece and tip in the disinfectant for a long time to avoid damaging the handpiece and tip.

15 【Maintenance and troubleshooting】

15.1 Device Maintenance

1) The equipment should be handpieced 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) When the tip and handpiece are not in use, they should be stored in the packaging box after drying, and should not be immersed in the disinfectant for a long time;

5) There are 2 O-rings in the handpiece insertion and removal part. Due to the need for disinfection and repeated insertion, in order to prolong the service life, it should be lubricated frequently with dental lubricant. Once damaged, the sealing rings should be replaced in time;

6) When the air filter is used for 6 months or obviously dirty, the filter element should be replaced. When replacing, the air source should be shut off first, the intake pipe on the air filter should be removed, and the filter should be removed from the bracket. Open the gland by turning counterclockwise along the "O" mark on the gland and remove the filter element. Install the gland after placing the new filter element, turn clockwise to tighten the gland according to the letter "L" on the gland, and then insert the air inlet pipe.

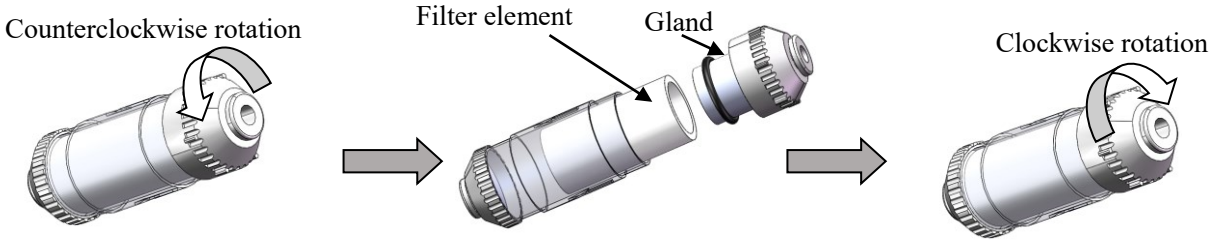


Figure 15.1 Schematic diagram of air filter element replacement

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
After power, step on the foot switch, the tip vibrates but no water flows out	The water regulating knob is not turned on	Turn on the water quantity adjusting knob as shown in 5.1
	The water bottle contains too little water	Fill your water bottle with plenty of clean water
	The water bottle is not filled properly	Install the water bottle as shown in 10.2
	Ultrasonic handpiece water channel or tip blockage	Remove the handpiece and tip and dredge it with a three-use gun
After power, step on the foot switch tip does not vibrate but water flows out	Loose tip	Use a torque wrench to tighten the tip
	The handpiece is not properly connected to the tailline	Insert and secure the plug
	Ultrasonic handpiece failure	Contact your local distributor or our company
	The ultrasonic tail line is faulty	Contact your local distributor or our company
The vibration of the tip is weak	Worn or deformed tip	Replace with a new tip
	Loose tip	Use a torque wrench to tighten the tip
	Power gear is too small	Adjust the power gear
	Improper use, the contact Angle between the working point and the tooth is not correct or the force is not enough	Use proper tips and operate in the correct way
	Ultrasonic handpiece failure	Contact your local distributor or our company
Root canal files do not vibrate	The nut is not tightened	Tighten the nut
Power after stepping on the foot switch sandblasting handpiece does not spray water or air	Pressure is too low	Open the air source and enter 0.4 Mpa ~ 0.6Mpa compressed air
	Foot switch is not in good contact	Plug in the foot switch
After power, step on the foot switch	The sandblasting adjustment knob is not	Turn on the sandblasting adjustment knob as shown in 5.1

sandblasting handpiece spray water but not air	opened	
	The sand bottle is not properly loaded	Install the sand bottle as shown in 11.1
	Sandblasting handpiece or nozzle blocked	Use three - purpose gun and needle dredge
	The tail line of the handpiece is blocked	Use the cleaning function to clean the line
Power down after the foot switch sandblasting handpiece jet but not water	The water regulating knob is not turned on	Turn on the water quantity adjusting knob as shown in 5.1
	The water bottle contains too little water	Fill your water bottle with plenty of clean water
	The water bottle is not filled properly	Install the water bottle as shown in 11.2
	Sandblasting handpiece water block	Remove the handpiece and dredge with a three-way gun
The efficiency of sandblasting is low	There is insufficient sand in the sand bottle	Add enough sand powder to the sand bottle
	Too little sand production	Turn up the sand blast adjustment knob
	The sandblasting handpiece or head is slightly blocked	Use three - purpose gun and needle dredge

16 【Taboo】

1) Patients with pacemakers or other implanted electronic devices or those whose doctors warn them not to use small household appliances such as razors and hair dryers are prohibited;

2) It is forbidden for hemophilia patients;

3) It is forbidden for patients with respiratory diseases such as asthma and chronic bronchitis;

4) Patients with heart disease, pregnant women and children should use with caution;

5) Patients with low-salt diet due to heart and kidney diseases do not need sodium bicarbonate dental cleaning powder when sandblasting;

6) For some patients with intrinsically severe lesions of the teeth may cause pain, it is recommended to use with caution.

17 【Symbol description】

XPEDENT®	Registered trademark	-10℃ +50℃	Storage temperature -10℃ ~ +50℃		Keep dry
	Date of manufacture		Manufacturers		Fragile
SN	Serial number		Please read the instructions	85% 0%	Storage humidity does not exceed 85%RH
	Class II equipment		Type B application section	kPa 106 70	Storage pressure 70kPa ~ 106kPa
	Recycling	IPX0	Waterproof level		Dispose of waste products and accessories in accordance with the Waste Electronic Equipment (WEEE) Directive (2002/96/EC)
	Pedal		Grounding	Air: 0.4Mpa-0.6Mpa	The input air pressure
T0.5AL 250V	A host of insurance	Voltage: 220V AC50/60HZ	Power input		Indicates that the power increases gradually from left to right
FUNC	Ultrasonic or sandblasting switch button	LED	Turn on or off ultrasonic handpiece front LED light	Clean	Enabling the Cleaning function

Mode	Switching operating mode		Ultrasonic system power reduction button		Ultrasound system power increase button
E Endo	Root canal washing mode	S Scaling	Ultrasonic tooth cleaning mode	P Perio	Periodontal treatment model
	Regulating volume		Sand blasting volume adjustment		

18 【Electromagnetic compatibility】

⚠ Attention

1) Unauthorized modification or modification of the equipment without the express consent of Guilin Yi Keshi Medical Device Co., Ltd. may cause electromagnetic compatibility problems of the equipment or other equipment.

2) The design and test of the PX-A ultrasonic sandblasting periodontal therapy instrument are in accordance with the operating procedures related to electromagnetic compatibility of YY 0505-2012. 3) The PX-A ultrasonic sandblasting periodontal treatment instrument has passed the test according to YY 0505-2012, which is not guaranteed to be free from electromagnetic interference in any way. The use of PX-A ultrasonic sandblasting instrument for periodontal treatment should be avoided in high electromagnetic environment. 4) The user shall install and use the electromagnetic compatibility information provided in the accompanying file. 5) Portable and mobile RF communication equipment may affect the performance of (equipment or system). Avoid strong electromagnetic interference when using, such as near mobile phones, microwave ovens, etc. 6) Please refer to the attachment for guidance and manufacturer's statement.

⚠ Warning:

The PX-A ultrasonic sandblasting periodontal therapy instrument should not be used in close proximity or superposition with other equipment. If it must be used in close proximity or superposition, it should be observed and verified that it can operate normally under the configuration used.

Basic performance:

Ultrasonic teeth cleaning function: When THE MAIN MACHINE IS IN THE ultrasonic tooth cleaning function, step on the foot switch, the front end of the handpiece should be discharged and atomized. Use the vibration effect of tip to remove dental stones, dental plaque, smoke spots, tea spots on the teeth. At the same time, due to the work of the tip after water supply, after vibration, will produce water mist, and then clean the tooth surface.

18.1 Requirements for Installing Cables

The name of the cable	Cable type	Cable length	
The power cord	Unshielded parallel lines	1.5m	
Foot switch wire	Unshielded parallel lines	2.4m	
Ultrasonic handpiece tail line	Unshielded parallel lines	1.8m	
Sandblasted handpiece tail line	Unshielded parallel lines	1.8m	

18.2 Key Components of Electromagnetic Compatibility

The key components of the product are the power line and transformer. The use or replacement of accessories and cables that are not in the matching design will significantly reduce the emission and interference immunity performance of the electromagnetic compatibility. Do not replace machine parts without authorization.

18.3 Guidelines and Manufacturer's Statement -- Electromagnetic Emission

Guidelines and Manufacturer's Statement - Electromagnetic Emission		
The PX-A ultrasonic sandblasting instrument for periodontal treatment is intended to be used in the electromagnetic environment specified below. The purchaser and/or user shall ensure its use in this electromagnetic environment.		
emission test	compliance	Electromagnetic environments - Guidelines
Rf launch GB 4824	1 set of	The PX-A ultrasonic sandblasting periodontal therapy instrument uses RF energy only for its internal function. As a result, its RF emission is low and there is little chance of interference with nearby electronics.
Conducted emission GB 482	Class B	The PX-A ultrasonic sandblasting instrument is suitable for use in all facilities, including household facilities and residential public low-voltage power supply grids directly connected to household use.
Harmonic emission GB 17625.1	Not Applicable	
Voltage fluctuation/flicker emission GB 17625.2	accord with	

18.4 Guidelines and Manufacturer's Statement -- Electromagnetic Immunity

Guidelines and Manufacturer's Statement - Electromagnetic Immunity			
The PX-A Ultrasonic sandblasting periodontal therapy instrument is intended to be used in the electromagnetic environment specified below. The purchaser or user of the PX-A ultrasonic sandblasting periodontal therapy instrument shall ensure its use in such electromagnetic environment:			
Immunity test	IEC 60601 test level	In line with the level	Electromagnetic environments - Guidelines
Electrostatic discharge (ESD) GB/T 17606.2	±6kV contact discharge ±8kV air discharge	±6kV contact discharge ±8kV air discharge	Floors should be wood, concrete or tile, and if floors are covered with synthetic materials, the relative humidity should be at least 30%
Electric fast transient pulse swarm GB/T 17606.4	±2kV power cable ±1kV pair of input/output lines	±2kV power cable	The grid power supply should be of the quality typically used in a commercial or hospital environment
surge GB/T 17626.5	Plus or minus 1 k line to line Plus or minus 2 kv line to ground	Plus or minus 1 k line to line Plus or minus 2 kv line to ground	The grid power supply should be of the quality typically used in a commercial or hospital environment

Voltage sag, short interruption and voltage variation on the power input line GB/T 17626.11	< 5%UT for 0.5 weeks (> 95% respite on UT) 40%UT for 5 weeks (60% respite on UT) 70%UT for 25 weeks (On UT, 30% respite) < 5%UT for 5S (> 95% respite on UT)	< 5% UT for 0.5 cycles (>95% respite on UT) 40% UT for 5 cycles (60% respite on UT) 70% UT for 25 cycles (On UT,30% respite) < 5% UT for 5S (>95% respite on UT)	The grid power supply should be of the quality typically used in a commercial or hospital environment. If the user of the PX-A ultrasonic sandblasting periodontal therapy apparatus needs continuous operation during the power outage, it is recommended that the PX-A ultrasonic sandblasting periodontal therapy apparatus be powered by an uninterruptable power supply or battery
Power frequency magnetic field (50/60Hz) GB/T 17626.8	3A/m	3A/m，50/60Hz	The power frequency magnetic field should have the horizontal characteristics of the power frequency magnetic field in a typical place in a typical commercial or hospital environment
Note: UT refers to the AC network voltage before the test voltage is applied.			

18.5 Guidelines and Manufacturer's Statement -- Electromagnetic Immunity

Guidelines and Manufacturer's Statement - Electromagnetic Immunity			
The PX-A Ultrasonic sandblasting periodontal therapy instrument is intended to be used in the electromagnetic environment specified below. The purchaser or user of the PX-A ultrasonic sandblasting periodontal therapy instrument shall ensure its use in such electromagnetic environment:			
immunity test	IEC 60601 test level	In line with the level	Electromagnetic environments - Guidelines
Transmitting radio frequency GB/T 17626.6 Rf radiation GB/T 17626.3	3Vrms 150kHz～80MHz 3V/m 80MHz～2.5GHz	3Vrms 3V/m	Portable and mobile RF communications equipment should not be used closer than the recommended isolation distance to any part of the PX-A ultrasound sandblasting periodontal therapy apparatus, including the cable. The distance shall be calculated by a formula corresponding to the transmitter frequency. Recommended isolation distance d = $1.2\sqrt{P}$ d = $1.2\sqrt{P}$ 80 MHz～800 MHz d = $2.3\sqrt{P}$ 800 MHz～2.5 GHz Where, P is the maximum output rated power of the transmitter provided by the transmitter manufacturer in watts (W), and D is the recommended isolation distance in meters (m). The field strength of the stationary RF transmitter is determined by surveying the electromagnetic site

			A and should be lower than the conformity level in each frequency range B. Interference may occur near devices marked with the following symbols. 
Note 1: At 80MHz and 800MHz frequencies, the formula of the higher frequency band is used. Note 2: These guidelines may not be suitable for all situations. Electromagnetic propagation is affected by absorption and emission from buildings, objects, and the human body.			
A Stationary transmitter field strengths, such as base stations for wireless (cellular/cordless) telephones and mobile terrestrial radios, ham radio, AM and FM radio broadcasts, and television broadcasts, are theoretically unpredictable. In order to evaluate the electromagnetic environment of stationary RF transmitters, the survey of electromagnetic sites should be considered. If the field intensity of the PX-A ultrasonic sandblasting periodontal therapy instrument is higher than the RF level applied above, the PX-A ultrasonic sandblasting periodontal therapy instrument should be observed to verify its normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorientation or positioning of the PX-A ultrasonic sandblasting device. B In the whole frequency range of 150kHz ~ 80MHz, the field intensity should be lower than 3V/m.			

18.6 Recommended isolation distance between portable and mobile radio frequency communication equipment and PX-A ultrasonic sandblasting periodontal treatment equipment

Recommended isolation distance between portable and mobile radio frequency communication equipment and PX-A ultrasonic sandblasting periodontal therapy equipment			
The PX-A ultrasonic sandblasting periodontal therapy instrument is intended to be used in an electromagnetic environment controlled by radiofrequency harassment. Depending on the maximum power output of the communication equipment, the purchaser or user of the PX-A ultrasonic sandblasting periodontal therapy equipment can prevent electromagnetic interference by maintaining A minimum distance between the portable and mobile radio frequency communication equipment (transmitter) and the PX-A ultrasonic sandblasting periodontal therapy equipment as recommended below.			
Rated maximum output power /W of the transmitter	Corresponding to the isolation distance of different transmitter frequencies /m		
	150 kHz ~ 80 MHz d = $1.2\sqrt{P}$	80 MHz ~ 800 MHz d = $1.2\sqrt{P}$	800 MHz ~ 2.5 GHz d = $2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23
For the rated maximum output power of the transmitter not listed in the above table, the isolation distance D is recommended, in meters (m), which can be determined by the formula in the corresponding transmitter frequency bar, where P is the rated maximum output power of the transmitter provided by the transmitter manufacturer, in watts (W). Note 1: At 80MHz and 800MHz frequency, the formula of higher frequency range is used. Note 2: These guidelines may not be suitable for all situations. Electromagnetic propagation is influenced by absorption and reflection from buildings, objects and the human body.			

19 【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.

20 【Shipping list】

Serial number	Designation	Quantity	Note
1	Host	1	
2	Water bottle	1	
3	Sand bottle	1	
4	Ultrasonic handpiece	1	
5	Sandblasting handpiece	1	
6	Power line	1	
7	Foot switch	1	
8	Torque wrench	1	
9	ICP Wrench	1	
10	Tips	11	Tips details: 2 P52, 1 P53L, 1 P53R, 2 P50L, 2 P50R, 1 P56, 1 TICP, 1 E1
11	U-FILES	4	2 pieces #15, 2 pieces #20,
12	Disinfection box	1	
13	6 * 4 mm tube	1	Length of 3 meters
14	Tee joint	1	
15	Filter element	1	
16	Certificate of approval	1	
17	Instruction book	1	
18	Warranty card	1	
19	Packing list	1	