



User's Manual Dental Unit With ChairKid's

A 8 0 0

Before using this product, please carefully read the <user's manual> and refer to the following content:



Danger ! –it means high degree of danger which might injury people or damage equipment or important information which are useful to the user and maintenance personal. Be careful.



Warning ! – It means moderate degree of danger which might injury people or damage equipment or important information which are useful to the user and maintenance personal. Be careful.



Warning ! – The user shall make sure that the equipment is connected to a 3*1.5mm² electric cable .The electric cable shall be protected by a double-pole circuit decoupler (10VA and 250V ; decoupling load of at least 6,000VA; the distance between two connecting points shall not be less than 3 mm) ,so as to ensure safety of the user ,reliability of the equipment and favorable operation effect.



Warning ! The colors of the three electric wires (live wire ,earth wire and zero wire)shall comply with current provisions.



Warning ! The safety fuse shall be replaced according to the required specifications. It is strictly prohibited to use safety fuse beyond the required specifications .



Warning ! The installation and debugging processes shall be finished by professionals.



Warning ! When the equipment is being maintained and repaired ,the user shall ,first of all ,drain out the water and gas .After that ,he/she shall shut down the water ,electricity and gas sources .Before using the equipment the water ,electricity and gas sources shall be connected .

Note: The machine enclosure shall be wiped up by wet cloth and rinsed by neutral detergent, so as to ensure smoothness and elasticity of the leather surface and that the leather surface will not be eroded; soft cloth wet with soap water shall be used to wash the PU components and ABS components; components with metallic baking paint shall be cleaned by soft cloth wet with soap water up with automobile wax injection.

Note: Before the sterilization process ,the three-purpose handle of airbrush and gas spout shall be put into a sterilization bag. After that ,they shall be subject to high-pressure steam sterilization (135C° (2bar)). The sterilization time shall not be less than 15 minutes.

Note: Before cleaning and sterilization of the high-speed turbine dental drill handpiece (high-speed handpiece)and the low-speed gas motor (low-speed handpiece) ,please read the <user's manual > provided by the manufacturer ,they shall be subject to high-pressure steam sterilization (135C° (2bar)). The sterilization time shall not be less than 15 minutes .



Warning !

The user shall be especially careful when he/she is to optical-fiber handpiece ,so as not to damaged the light-emitting end .In addition ,he/she shall make that the optical- fiber head will not come into contact with the after –treatment mixture. He/she shall keep a suitable distance between them or use a transparent matrix band 5 seconds before the treatment .

If the after-treatment mixture leaves any trace on the tool ,it shall be eliminated immediately .Dismantle the optical-fiber handpiece and clean it with a piece of cloth wet with alcohol.

Do not aim the light-emitting end of the optical-fiber handpiece at the eyes of the patient ! The emitting light might cause injury to some patients ., such as sufferers of cataract. Generally speaking ,emitting light of the optical –fiber does not cause permanent injury. However, it might cause temporary blindness .

Note: When the suction pipe is being dismantled ,the user shall not only snatch the suction pipe .

Note: The water filter shall be rinsed by ultrasonic wave or neutral detergent .



Warning ! It is strictly prohibited to use abrasive substances to clean the front protective cover and reverberate of the mouth illuminator .



Warning ! After being used ,metrical for cleaning and sterilization purpose shall be treated in a safe manner .



Warning ! Rated load of the dental chair is 135KG .If the rate load is exceeded ,normal work of the dental chair will not be ensured .



Warning ! If the user presses any bottom of the dental chair ,the dental chair will stop to working .



Warning ! Please do not use this equipment in large-scaled power transformation room or any place with intense magnetic field .



Warning ! If the equipment is jointly used with an eternal device for dental implant ,each time ,the power supply of the power supply of the dental chair shall be shut down ,so as to prevent persons concerned from touching any control bottom as a result of fault or carelessness and there for cause personal injury .



Warning !

Only when the high-speed handpiece and low-speed handpiece have completely stopped can the user take down the dental needle ;otherwise the clamping head might be damage or the dental needle might be drop out and cause personal injury.

Only high-quality dental needle and bolts with suitable size can be used .

Every day ,before beginning work ,the user shall inspect whether the clamping head is damage ,so as to make sure whether the dental needle is firmly stuck in the handpiece .



Warning !

After replacing dental needle of the high-speed handpiece ,the user shall put out the dental needle to see whether it is properly installed .

Diameter of the dental needle shall be 1.59-1.60mm(ISO 1797; the third kind of standard)and the maximum length shall be 25MM (ISO 6360-1 standard) .



Warning !

Only when the dental need or replacing tool are installed can the high-speed handpiece be used .

When the tool is being used ,the user shall not be press the bottom for disconnection of the dental needle .Friction between the button and blade wheel of the gas motor might cause of the head ,which might thus be burnt out .

Tissues (tongue ,cheek and list ,etc) inside the mouth of the patient shall be protected by suitable means (mirror,etc), so as to prevent them from touching the buttons.



Warning ! The user shall not be directly touch bulb of the mouth illuminating by his/her hand .He /she shall be wear protective gloves and ,after cooling down of the bulb, replace it ,so as to avoid scald.



Warning !It is strictly prohibited to touch the PC board or electric elements of the manufacture by hands or metallic tools .

Note: If the foot switch slides on the floor ,the user could use a piece of dry cloth to wipe up dusts on the non-slip mat on the bottom of the foot switch .



Warning ! Environment protection.

1. After treating the patient ,the doctor shall collect used wastes and at the same day put the wastes and residues into the appointed wastes area for local hospital and medical institutions.
2. If the operating life of any equipment or accessory expires,the doctor shall contact with local authorities of epidemic prevention to sterilize and discard products.

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●Product introduction

Thank you for your purchase of our Kid's Dental Units , they are research , design and developed by our researchers based on the comments and suggestions of the dentist, it is the crystallization of joint efforts of dentists and us. The kinematic structural design is in conformity with ergonomics.

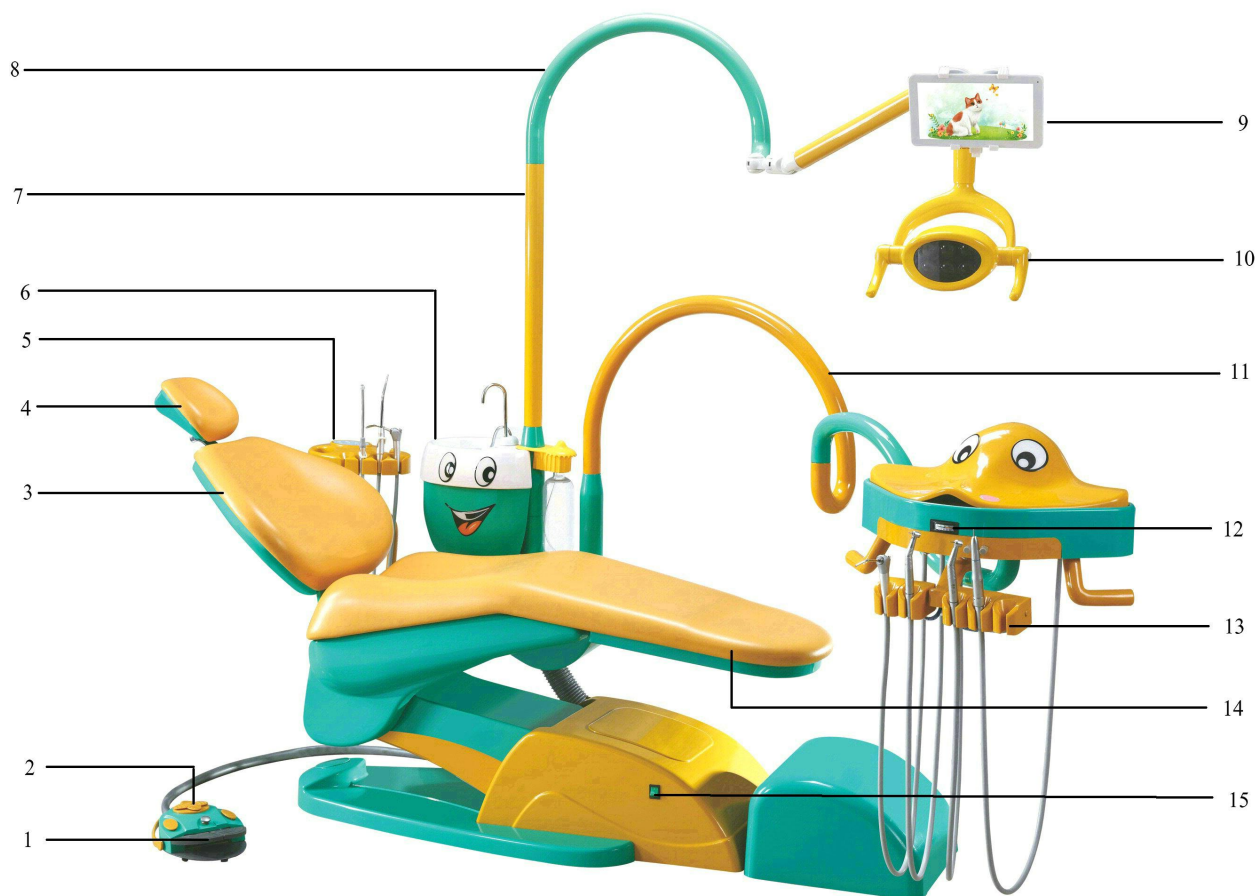
The therapy unit is made in novel animation model which is in lovely and childish design. From the perspective of psychology it is considered that children would feel insecure during therapy, so this apparatus is thus designed to distract them, relieving their fear and tension under the therapy environment, and making the whole diagnosis and treating easy.

●Intended use

Desired Application for Products

Complete Dental Unit (named dental unit below) , the dental unit applies to dental hospitals as the dental chair for dental patients. It is for treating ①pulpitis②periapical periodontitis③periodontal diseases④dental prosthetics⑤diseases of oral mucosa⑥Orthodontic treatment⑦dental extraction etc. and for making diagnoses and operation for the patients.

●Overall structure



1	Electric pedal switch	8	Lamp arm
2	Pedal switch	9	Player
3	Backrest	10	Led lamp
4	Headrest	11	Arm for tray
5	Assistant tray	12	Barometer
6	Cuspidor	13	Holder
7	Pole	14	Seat cushion
		15	On /off switch

●Technical parameters

- (1) External dimension of the therapy apparatus: Dinosaur chair, length 195cm, width 85cm, height 180cm

(2) External packing size: Dinosaur chair, length 160cm, width 110cm, height 120cm

(3) N/W:250KG N/W:180KG

●Overall structure A8000-IB

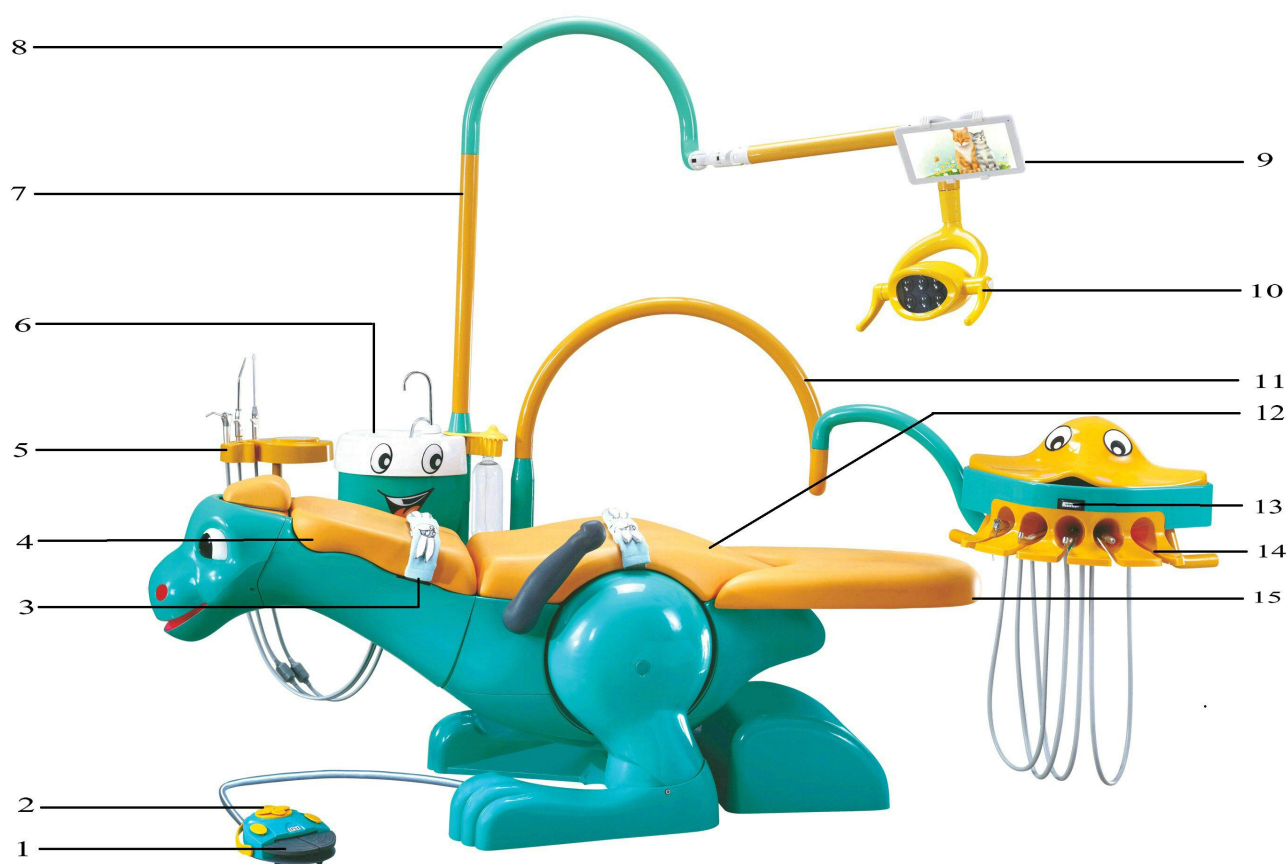


1 Foot switch	8 Smiling blue cat
2 Foot control switch	9 Lamp arm
3 Handrail	10 Player
4 Backrest	11 LED Operation light
5 headrest	12 Seat
6 Assistant tray	13 Extensive seat
7 cuspidor	14 Holder
	15 Extension seat

●Technical parameters

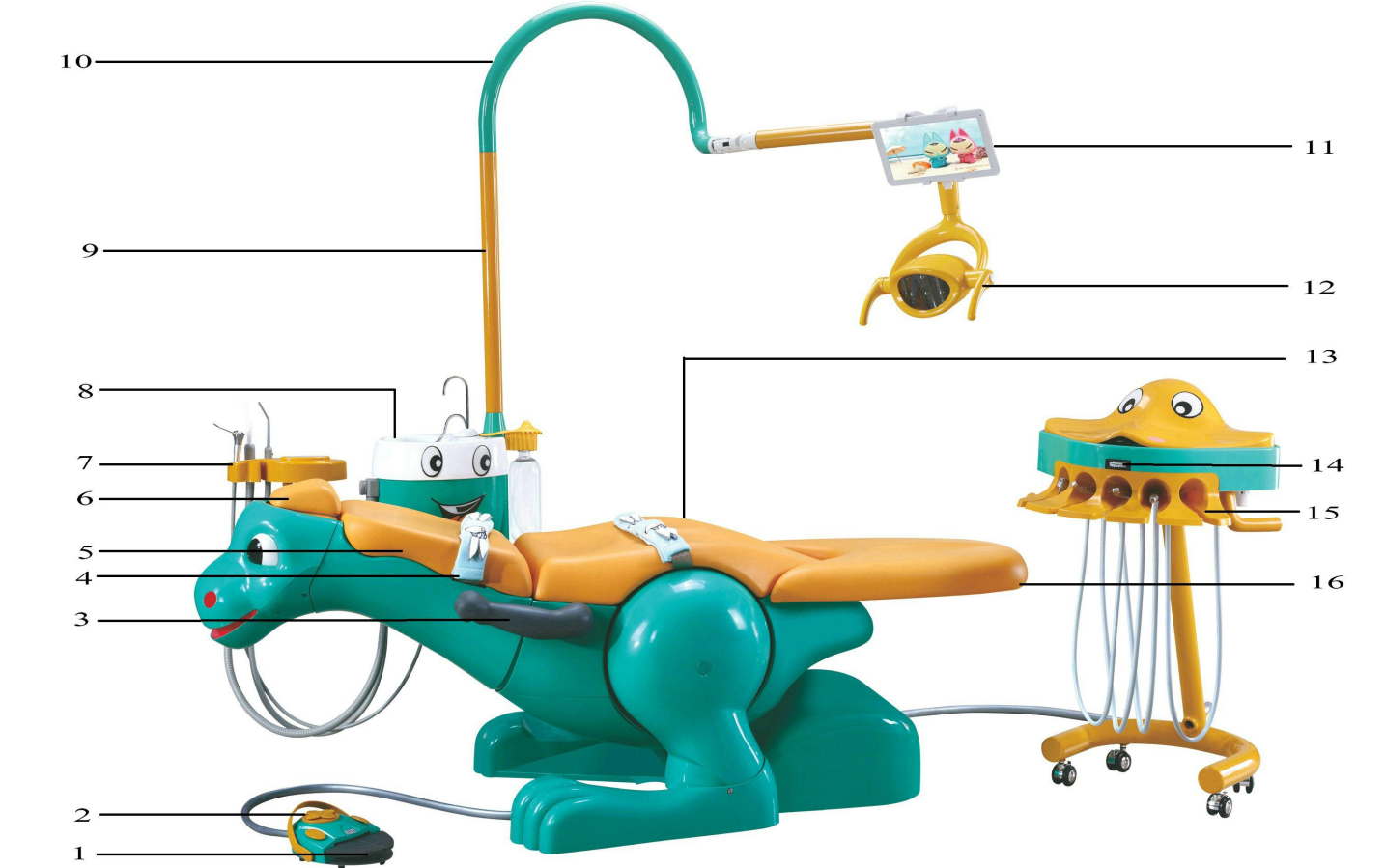
- (1) External dimension of the therapy apparatus: Dinosaur chair, length 195cm, width 85cm, height 180cm
Small fish tray:, length 70cm, width 70 cm, height 100 cm
- (2) External packing size: Dinosaur chair, length 155cm, width 95cm, height 84cm
cat, length 155cm, width 115cm, height 120cm
- (3) N/W: 320KG N/W:210KG

●Overall structure A8000-II(A)



1 Electric pedal switch	8 Lamp arm
2 Pedal switch	9 Player
3 Safety belt for child	10 Operation light
4 Back Headrest rest	11 Instrument Arm
5 Assistant control	12 Seat cushion for child
6 Cuspidor	13 Barometer
7 Pole	14 Holder

- (1) External dimension of the therapy apparatus: Dinosaur chair, length 195cm, width 85cm, height 180cm
- (2) External packing size: Dinosaur chair, length 160cm, width 110cm, height 120cm
- (3) N/W: 270KG N/W:190KG



1	Electric pedal switch	9	pole
2	Pedal switch	10	Lamp arm
3	Handrail	11	Player
4	Safety belt for child	12	Operation light
5	Backrest	13	Seat cushion for child
6	Headrest	14	Barometer

7 Assistant control	15 Holder
8 Cuspidor	16 Extensive seat

●Technical parameters

- (1) External dimension of the therapy apparatus: Dinosaur chair, length 195cm, width 85cm, height 180cm
- (2) External packing size: Dinosaur chair, length 155cm, width 115cm, height 120cm
- (3) N/W: 270KG N/W:190KG

●Classification

The type of protection against electric shock: Class I equipment

The degree of protection against electric shock: type B applied part

The degree of protection against ingress of water: IPX04

●The mode of operation

Dental chair shall be used according to intermittent working system that is used for 1 minute with intermittent time of 15 minutes.

●Technical Data

- (1) Power supply: AC220V, 50HZ
- (2) Input power: 1200VA
- (3) Fuse specification: 51F F6.3AH250V , 5.2*20mm
- (4) Operation light: AC12V/50VA .
- (5) X-film viewer: AC12V/1VA .
- (6) Water supply thermostat: AC24V/80VA.
- (7) Motor: DC24V/150VA .

Working environment

- A: An ambient temperature range of +5°C to +40°C.
- B: A relative humidity less than or equal 80%
- C: An atmospheric pressure range of 860 Pa to 1060 hPa.
- D: Installation of the electric appliances shall comply with legal provisions of the country
- E: Air pressure of the gas source :Not less than 500kpa; flow: Not less than 50L/min;water pressure :200kpa-400kpa
- F: Arrangement of pipeline for water drainage:Every 1 meter of pipeline shall tilt 1 cm towards the direction of water drainage.

●Transport and storage condition

- A: An ambient temperature range of -20°C to +40°C.

B: A relative humidity is not more than 95%.

C: An atmospheric pressure range of 700 hPa to 1160 hPa.

●Cleaning, sterilization and disinfection

*** Note: Handpieces are not regarded as standard assemblies of this equipment and their sterilization shall be upon the method described in the handpieces.**

The handpieces shall be used as follows: 1)Its CE Certification. 2)Its working pressure shall be 180-300kPa with filtered air. 3)Its mouth shall comply with International standard

The ultrasonic scaler

- 1 Use the hair brush and the clear water to clean surface before sterilization.
2. Take the tip out from the scaler, and pack the tip and the scaler well.
3. Sterilize the tip and the scaler in the high temperature sterilizer. Deploy: ①Sterilizing temperature 121℃ ②Sterilizing pressure 1.10 ③Vaccumizing time 8 min ④Admission time 2min ⑤Sterilizing time 30min ⑥Drying time 10min.

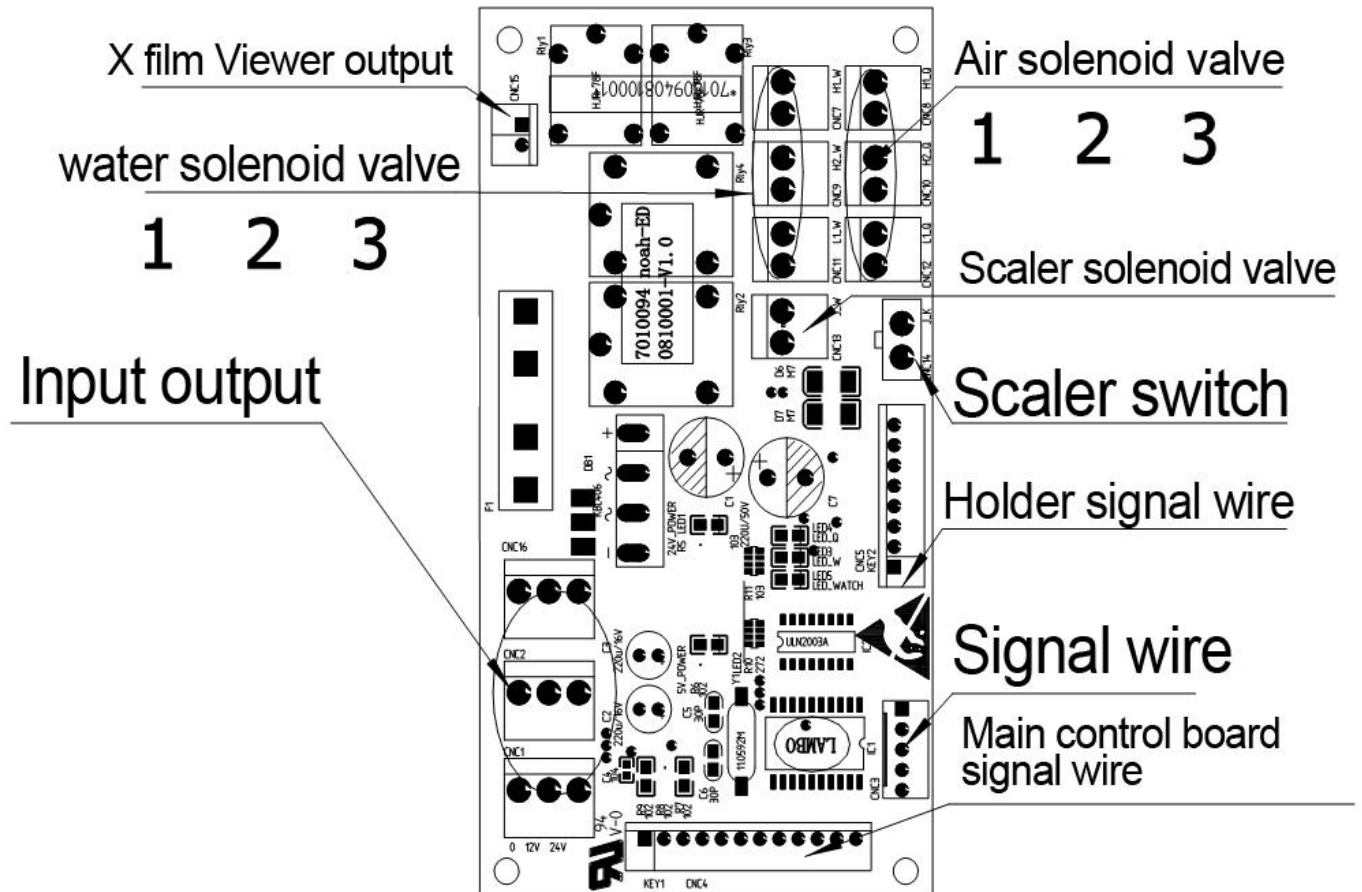
Curing light

Take out the glass tip from the curing light, and then sterilized with the medical alcohol and the glutaric dialdehyde.

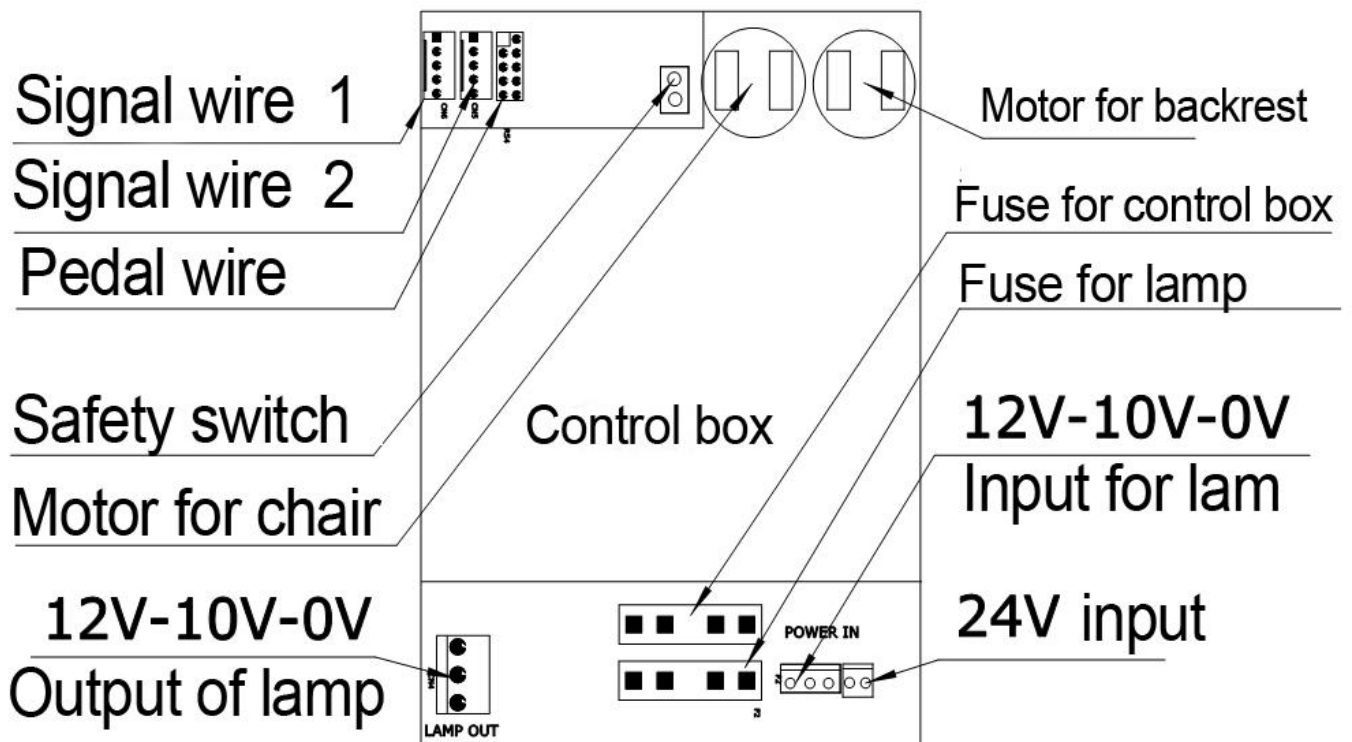
After sterilizing, packed it well.

● Connection

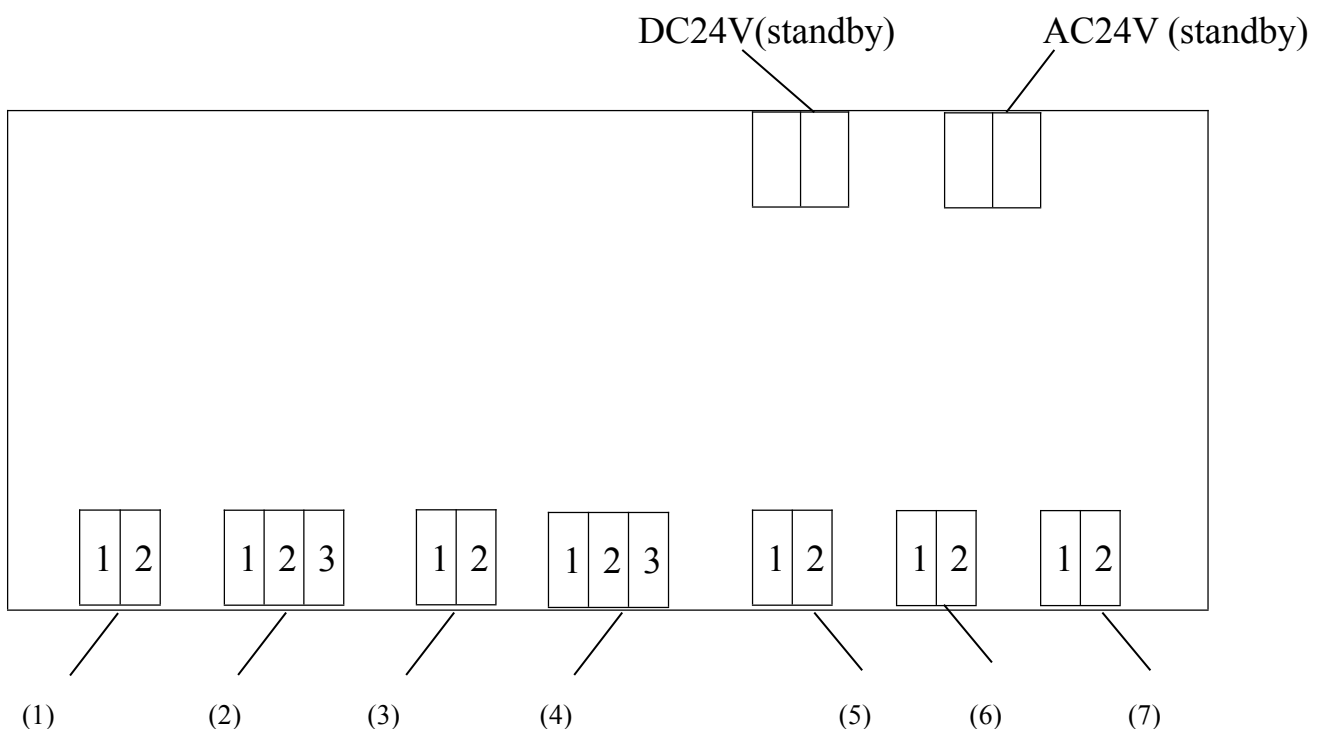
1. Treatment board



2. Controller



3. Printed Circuit Board (PCB) for suction and saliva ejector:



• Operation

1. Manual Control

A. “” down key

The chair goes downwards through slight pressing of the key “Down” by your foot, and stops after foot-releasing;

B. “” up key

The chair goes upwards through slight pushing of the key “Up” by your foot, and stops after foot-releasing;

C. “” forward key

The chair backrest leans forwards through slight right pushing of the key “Forward” by your foot, and stops after foot-releasing;

D. “” backward key

The chair backrest leans backwards through slight left pushing of the key “Backward” by your foot, and stops after foot-releasing.



Note: The chair will stop moving automatically if it reaches ultimate position.

2. Automatic control

A: Control by the Reset button “ (Reset)” and the chair will be lowered to the lowest position and the back of the chair will be lifted to the highest position.

B: Preset button

When the chair is under the “ (Reset)” status, press the “” button and the chair will return to the preset position.

C: The limit for chair moving depends on the positions of the two limit switches for the chair. The “lower limit” decides the limit for up and down of the chair and the “upper limit for the chair backrest” decides the limit for up and down of the backrest of chair.

3. Gargle water control

Press (Step down) “” button, water outflow, and it will stop automatic when the time is up (the time is set before).

And you can also press (Step down) “” to stop it if you want.

4. Wash cuspidor

Press (Step down) “” button, it starts to wash the cuspidor, and it will stop before). And you can also press

“” to stop it if you want.

5. Heat up control

Press (Step down) “” button, it starts to heat up, the indicator light will be glitter at the same time, and it will stop automatic when the time is up (The time is set before), the indicator light is on only. If the temperature goes down, it

will start to heat up automatic, press (Step down) “” button again, it will stop at once, the inductive light will be shut at the same time.

Prompt: in settings status, the system would automatically exit the said status in case of heating, filling or

washing cuspidor.

After it enters the set state, if the system is still in the process of adding gargle water, washing cuspidor or heating up, the system will automatically exit the following status.

6. Control of the film Viewer

Press the “” button and the film viewer will be lightened. Press the “” button again and the film viewer will extinguish.

Parameters setting

1. Setting the water outflow time (cup filler)

A: Press “” button for 2 seconds, the indicator light is on, it means the chair is on the setting status.

B: Press (Step down) “” button until the time you think is enough.

C: Press “” button again, the indicator light is shut down, the water outflow time of cup filler is saved.

2. Setting the wash cuspidor time

A: Press “” button for 2 seconds, the indicator light is on, it means the chair is on the setting status.

B: 30 minutes; press the wash button, and then press the “” button;

30 minutes; press the wash button two times, and then press the “” button;

Long time; press the wash button two times, and then press the “” button;

12 seconds; press the wash button two times, and then press the “” button;

C: Press the button “SET” again after the washing time is selected. The indicator light is shut down and the washing time is saved.

Appendix: 1. The limit position for the dental chair has been set in the factory;

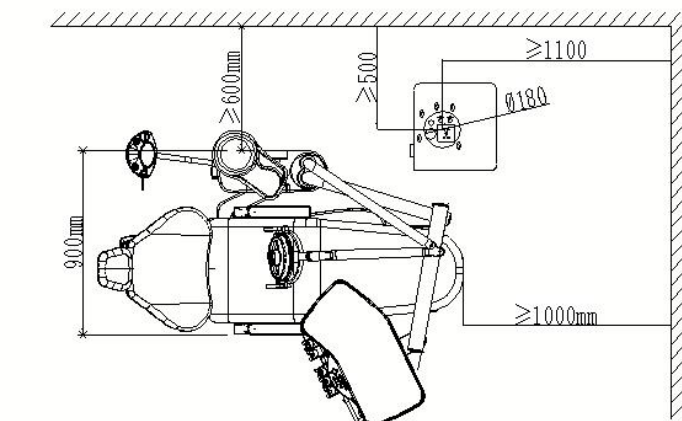
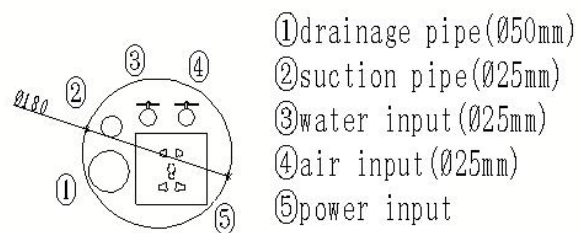
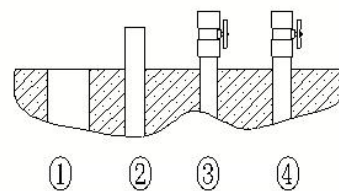
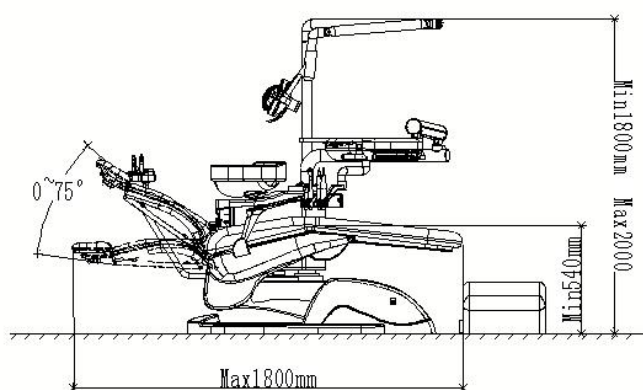
2. All the settings parameters can be saved automatically when the power is off.

3. When the power is restored after interruption, no any other safety problems will occur except that the ongoing operation is interrupted. Restart it for continuous operation.

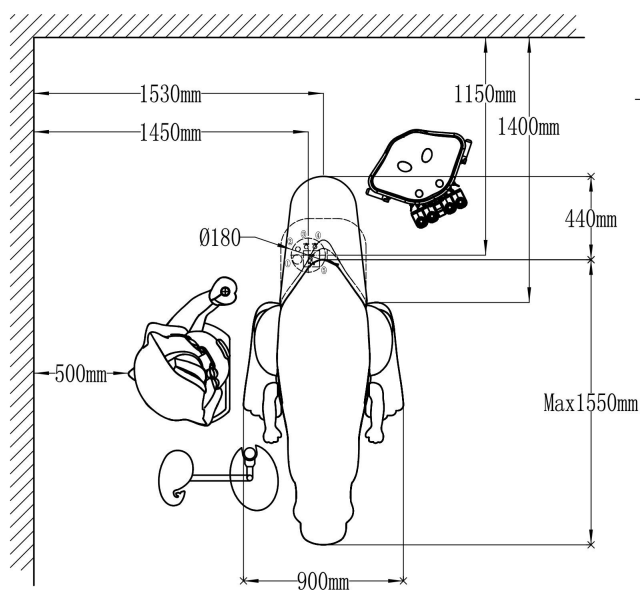
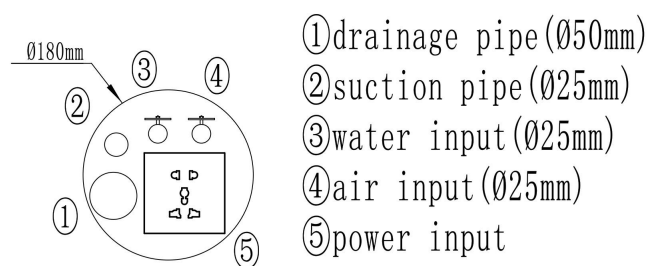
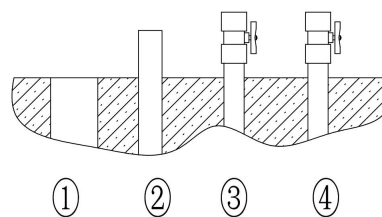
The method for use

Determine the location of equipment according to the general layout and lighting of the clinic room and the convenience of operation. Put the equipment on a clean, dry, ventilated and cool place and maintain a good operation environment. Be sure that the floor contracting with the bottom of the dental chair should be smooth, horizontal and stable.

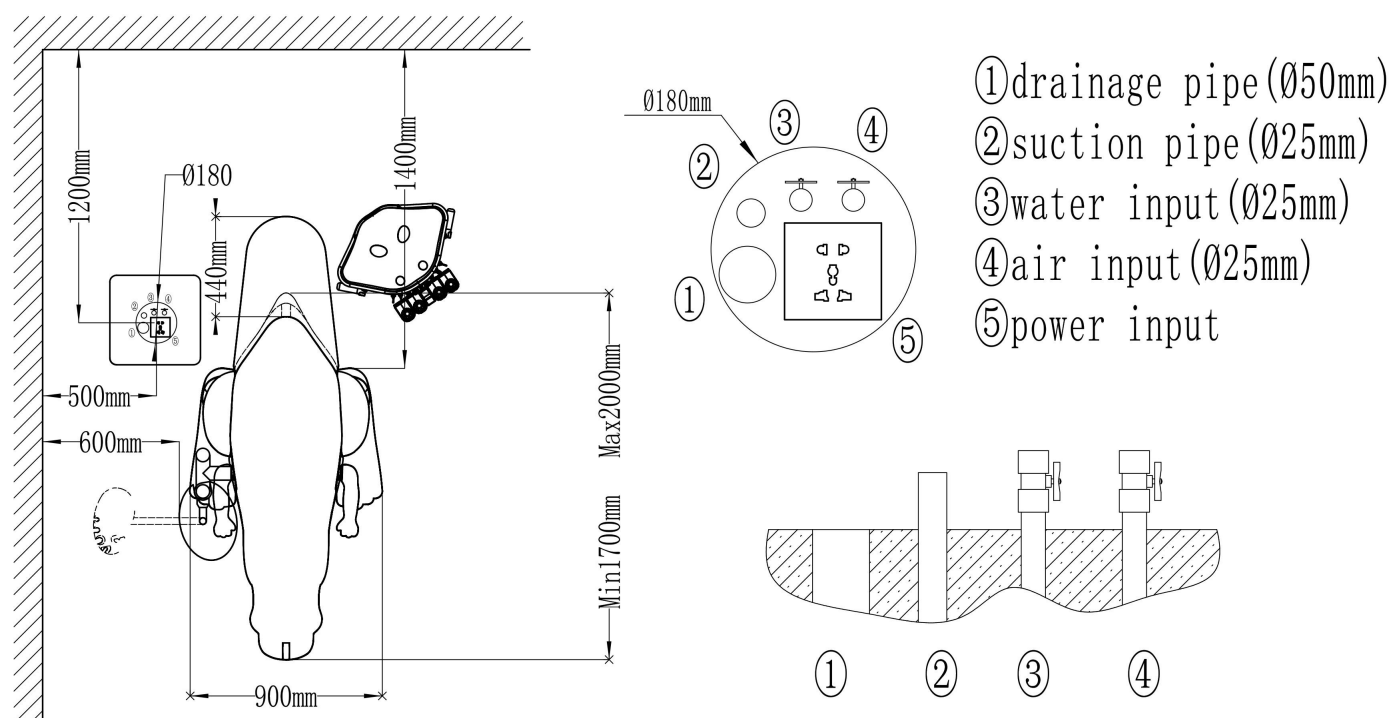
Under the floor where the ground box placed, the air input power and drain connector should be placed around 140*120mm. water and air input tube is 15m (1/2”). The tube end should have the thread R1/2”. The drain is around 40mm. Input wire composed by the three cores with 1.5mm² plastic cover is 30mm beneath the earth, the protection ground wire should be connected. Detail refers to the installation diagram. (as shown in diagram)



TR-KID-1



A8000-IB



A8000-II(A) / A80000-II(B)

Installation procedures

1. Unpacked check

Unpack the packing carton and check if the equipment is sound without any damage. Check if the accessories and spare parts are complete and sound according to the packing list. For any question, please do not hesitate to contact the manufacturer.

2. Dental chair installation

The dental chair should be installed on even and solid ground and keep the ambient clean, dry, ventilated and cool. Keep away the sunshine. Place the dental chair as planned. Since the stability of the whole machine has been the considered during its design and the installation ground is leveling, even and solid enough to prevent the incident from the uneven ground, no screw installation shall be under consideration. If uneven floor causes the rotation of equipment, take out four M10X16 hollow head set screws from the accessories and screws in four M10 tapped holes on the bottom of Dental chair and make the dental chair fully contract with the floor. Pay attention to the level of equipment and maximum value during adjustment and ensure the stability of equipment.

3. Connection of pipes

Put the equipment in the desired installation position, turn two pipe connectors G1/2" of the accessories into the intake water pipe and intake air pipe respectively. Pay attention to sealing while making connection, to prevent air leakage and

water leakage.

Before the connection of pipes, discharge the water and air inside the equipment first, then remove dirt and impurity inside the pipes to prolong the service life of this equipment.

Remove dirt and impurity inside the pipes and prolong the service life of this equipment first, then remove dirt and impurity inside the pipes to prolong the service life of this equipment.

Remove the cover of the floor box and install the floor box to the proper preservation location, where no bending of pipe between the treatment cabinet and the floor box will occurred during the upward and downward movement of dental chair, use 8*5 1PU pipe of the accessories (Blue one is Air-pipe, transparent one is water-pipe) to connect with water source and air source. Pay attention to air proof and put the white plastic drainage connector to drainage pipe and make proper connection. Be sure of firm and sealed connection.

4. Installation of cold-light dental lamp

Connect the cable to the lamp arm through the lamppost and make proper connection. Then connect the cable connector on the lamp arm to the connector on the stand inside the treatment cabinet, put it into the stand, assemble the lamp in the lamp pole over the stand and put the lamp arm on specific position, Be sure not to damage the cable.

Pass the cable connector of lamp through the decorative cover and connect to the cable connector of lamp arm.

Caution: Follow the color indication for voltage. Wrong connection of cables is strictly forbidden. Put the lamp head into the lamp arm and use tools in the accessories to fix it with screw. Put decorative cover over the screw and connect it after completion(as shown in figure 2.)

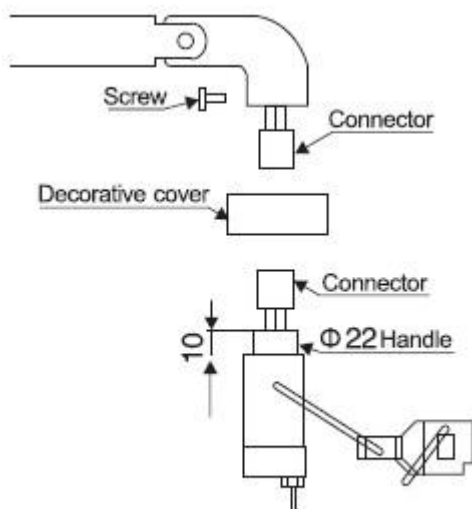


Figure 2

5. Connection to power source

Make connection to power source as shown in the wiring figure.

Make proper grounding connection and protection. Use the power plug of accessories to connect to power source if the cable has not been preset in the ground.

•Commissioning and operation

1. High/ Low speed hand bur

Connect water, air and power supply. Open the general air switch on the side of the floor box and check the

pressure gauge on the floor box. The value should be 0.55~0.6 MPa (factory setting). Adjust the filter relief valve if it is required to maintain the said value. Open the floor box, pull the handle on the top of the filter relief valve up for about 10mm as shown in figure 5, turn the handle clockwise to increase the pressure and anticlockwise to decrease the pressure.

Take the hand bur from the holder, step the pedal switch and turn on the band bur for operation. Be noted that the pressure indicated on the pressure gauge of the instrument disc is the operating pressure of the hand bur, which should be no more than the rated maximum pressure of the hand bur to protect the hand bur against damage (High speed: 2.0-2.5bar, Low speed: 3.5-4.0bar), see the figure 3. Adjust the operating pressure of hand bur if it is required by regulating the main control valve under the instrument disc. Turn the handle clockwise to increase the pressure and anticlockwise to increase the pressure. Adjust carefully and slowly (as shown in figure 4)



Figure 3 : Filtration/
Pressure-reducing Valve

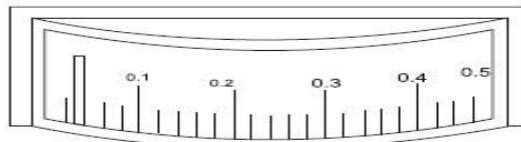


Figure 4 : Pressure Gauge

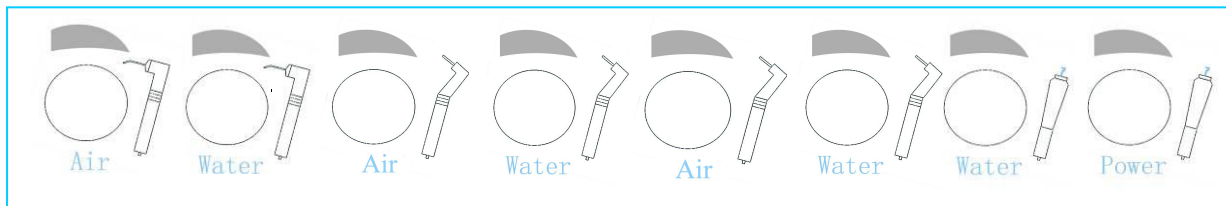


Figure 5 Controlled air-valve

(Note: In order to prevent the children from accidentally pressing the adjustment button for high speed and low speed turbine handpieces during treatment, the adjustment button will be installed in the bottom of seat cushion of the dental chair. Lift the seat cushion of the dental chair to find the button if you need to make relevant adjustment.) See picture 5

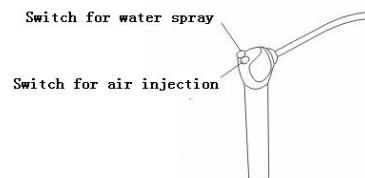


Figure 6

2. Three-purpose spray gun

Water and air pipes for three-purpose spray gun would be inserted in the joint of dinosaur-liked dental chair; water for transparent tube and gas for blue tube. The left button is for water and the right one is for gas. See picture 6.

3. Water suction and saliva ejector

Saliva aspirator and powerful aspirator are provided with this equipment. Take the saliva aspirator from the holder to start operation immediately. Water connection is required for low aspiration to guarantee minimum operating pressure required.

Strong-power and moderate-power Saliva suction ,central suction device)this treating machine is equipped with two systems:strong-power and moderate-power saliva suction .if the user takes up the suction from the hanger, the suction device will begin to work . its working will be supported by attached suction machine .for details of winning of the central suction machine, please see

Figure 7

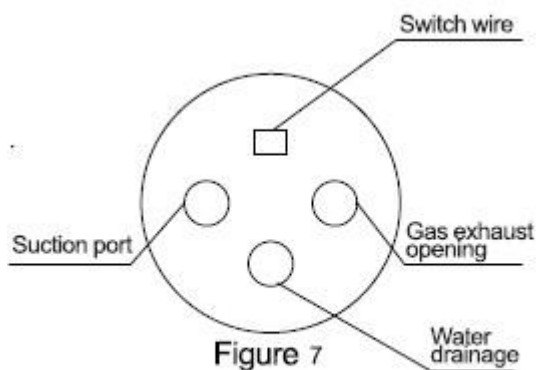
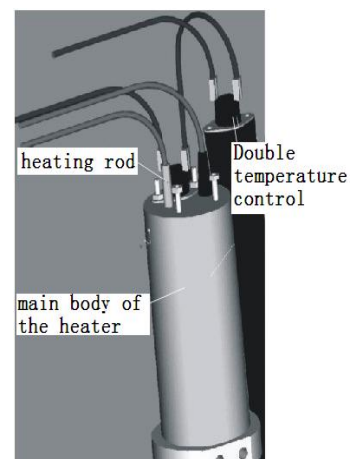


Figure 9

4. Mouth rinsing water

Mouth rinsing water is provided with auto thermostatic and water flow setting functions. The built-in auto thermostatic heater supplies warm water. Press the heater switch on the control panel if warm water is required as shown in figure 8. Water flow is controlled by the built-in computer control board and is preset by user freely.

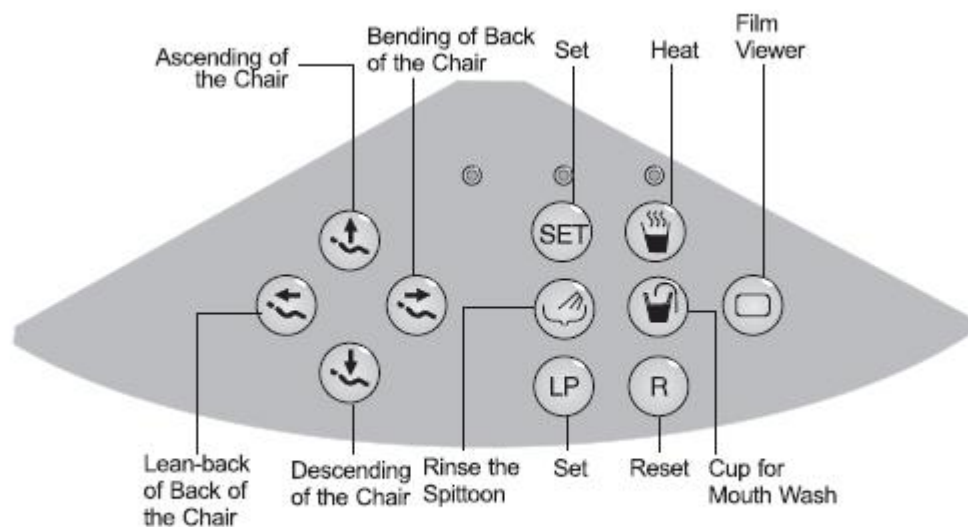


Figure 8

5. Water heater

Press “” key to turn on the heater and flash the indicator. The indicator will stop flashing and keep lighting on when warm water comes out. The indicator will start flashing again if heating is required due to the decrease of water temperature. Press “” key again if heating is not required to stop heating and light off the indicator.

 Before pressing the “heating” key to turn on the heater, you should check the water supply first. The water heater should not be run without water! (see the **Figure 9**)

6. Water bottle

For the equipment provided with water bottle, water required for hand bur and all other instruments on the instrument

disc is directly supplied by the water bottle. It is necessary to fill distilled water for medical purpose to the water bottle timely. Way of filling: Turn off the air switch by the water bottle to exhaust the compressed air inside the bottle. Hold the distilled water bottle with both hands, rotate clockwise to take off the water bottle, fill in water and rotate anticlockwise to tighten the bottle (sealed). Turn on the air switch to complete filling of water.

8. Headrest

8.1 Adjust headrest height

The headrest height is adjusted through slide block. The headrest will go up by pulling it upward and will go down by pushing it down.

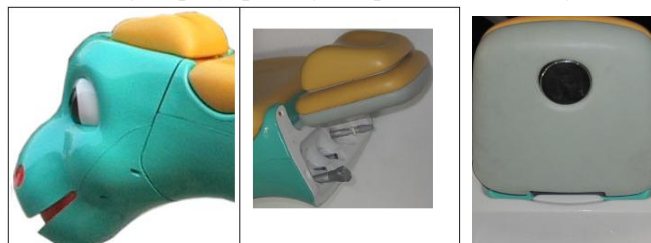


Figure 11

8.2 Adjust headrest inclination

The headrest inclination is fixed by button. Press the button in the middle of the headrest, and then push up or down the headrest for ideal position. Before the position is confirmed, use your hands to push up or down the headrest to check whether it has been fixed. See picture 11

Note: Be sure to lock the headrest after regulation to prevent accident during operation.

9. Mobile treatment station

A: During operation, it is only required to pull up upper cover, and you can see viewer and relevant common medicine, tools on mobile treatment station;

B: During treatment of children, whether mobile treatment station is locked with 4 movable blocks should be confirmed firstly, to avoid accident due to treatment station moving during operation;

C: total weight of medicine and tools on mobile treatment station should not be over 1.5kg;

D: after treatment, RXB and low speed pneumatic motor should be removed to avoid hands and clothes scratching by tools hanging on mobile treatment station;

E: After business hours, mobile treatment station should be sterilized and cleaned, and medicine and tools should be put in place. (During sterilization, medicine and tools should be taken out and the surface should be cleaned by alcohol, and after sterilization, cover should be put down gently) see figure 12.



Figure 12



Note: during treatment and sterilization, pay attention to avoiding hands scratching by cover

10. Lift of dental chair

The dental chair is provided with two control systems. The movement of dental chair may be controlled either by the

control panel or by the pedal switch for the same functioning. Press the upward control key on the upper part of the dental chair symbol to lift up the seat of dental chair or turn the pedal switch upward to lift up the dental chair. The indicator on the control panel will light on at the same time. Release the control key to stop lifting and light off the indicator. For operation, continuously press the relevant control key and release until the required position is reached. If the dental chair lift up to the high limit, it will stop lifting even the control key is pressed.

Note: As movable parts are provided with the dental chair and the treatment unit is connected to the movable parts of the dental chair, the treatment unit will move upward or downward with the dental chair. Therefore, it is necessary to ensure that no other articles will be contracted during the movement of the equipment to prevent against accident.

11. Dentistry chair and air compressor connect

Suggestion: The dentistry hospital or the polyclinic should first use: the maximum of atmospheric pressure 8MPa\ start barometric pressure 5.5 MPa of the air compressor connection with the dentistry chair. In the connection, draw out the blue air flexible tube from the pressure relief valve of the dentistry chair, and connection with the air feed connector of the air compressor

(Note: This unit completely uses import seal packing collar, for guaranteed its service life, please must use the dental special-purpose non-oil air compressor)

12. pedal control

take-up combined set jam on baseboard,
combined set at a moment's notice employment.

1. pedal
2. water
3. air
4. cup water
5. cuspidor water
6. position key

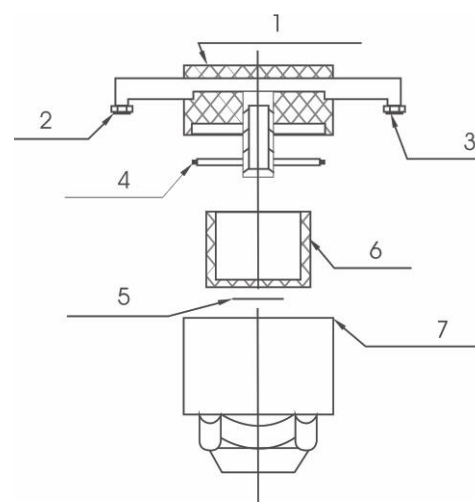


Figure 13

- 1 Casing of filter
- 2 Water inlet connector
- 3 Water outlet connector
- 4 Upper seal ring
- 5 Lower seal ring
- 6 Filter core
- 7 Filter corer

13. Water source input

The condition of fluid matter may be different in the headwaters of the different customers, the machine of the dentistry comprehensive treatment should input the edible running water resources, the water pressure should be no smaller than 2 MPa, At the same time, to assure the usage time limit of the treatment machine's internal valve, it has to be add the water filter at outputting.

● Operation Routines and Attendance & Maintenance

1. After adjust the pillow rack, ensure it is locked before it is used.
2. Regularly cleanse the water filter. Process refers to the wearable component change chapter.(see the **Figure 13**)
3. Power supply is 220VAC
4. Before and after the handpiece is used ,the user shall aim it at the spittoon and spray for 34 seconds. In this way ,filth resorted to tall tube of the handpiece will be drained out and cross infection will be avoided.
5. When the treating machine is attended and cleaned or spare parts are maintained and replaced, the user shall, first of all ,turn the power switch off .
6. When the cold light lamp is not used at any moment ,it shall be turn off ,so it to prolong it useful life.
7. After the cold light lamp is use for a certain period of time ,surface of the reflecting mirror will contain dancing light

and function of the surgery lamp will be influenced user shall regularly use three-purpose spray gun(gas)to blow it or wet soft cloth to wipe it up .

(note: it is strictly prohibited to scratch the reflecting mirror.)

8. User shall regularly inspect pressure of the air compressor and the gas tank . He /she shall also often drain out accumulated water inside the gas tank .
9. Intermittent mechanism is adopted by this machine . if the machine is not use for a long time ,please turn the power supply off .when the user get off the duty ,he/she also get the power supply off .
10. Every day ,the user shall clean the treating machine ,so as to maintain tidiness of it .the soft cushion shall be regularly treated by spray.

Note:when the treating machine is cleaned ,neutral detergent shall be adopted. So as not to cause any damage to surface of the dental chair .During the operation process,the user shall note that surface of the dental chair shall not be stained by erosive drugs,for this might cause irredeemable damage.

11. Cleaning the pipe of the water drainage :pour large amount of water into the spittoon to wash away different kinds of filths accumulated in the pipe .
12. Cleaning of the moderate-power and strong-power suction; After being used every time,the moderate-power and strong-power suction shall be rinsed .The method: Use the strong-power(moderate-power)suction to suck in large amount of water .Every week ,the filth-gathering cup and the moderate-power suction shall be rinsed at least twice.
13. Please pay close attention to every combining parts .if the combining part do not work smoothly or give out the squeak ,please add lubrication oils to them.
14. Before and after high-temperature sterilization of the turbine machine,lubrication oils shall be added to it ;without the dental needle being installed ,it shall not be allowed to rotate; the user shall open pay close attention to working pressure of the turbine machine and make suitable adjustments.

● **Contraindication, Matters Needing Attention, Warning and Illustrative Manual**

1. Before operating the treating machine,the user shall carefully read through and understand all contents of the <user's manual>
2. While operating the treating machine ,the user shall follow all warmings and instruments.
3. Wires of the electric sockets shall be subject to standard configuration and the earth wire shall be solid
4. It is strictly prohibited to turn switch of the water heater on without water supply.
5. the instrument tray shall not be loaded with over-weight articles.
6. Before the treating machine leaves the factory ,the gas pressure has been set .Non-professional shall not be allowed to adjust it at discretion.
7. Limits for movements of the dental chair have been locked up. Non-professional shall not be allowed to adjust it at discretion.
8. When the user is to get off duty ,he/she shall shut down main switch for water,gas and electricity sources.
9. If this treating machine is to be use by any unit or individual clinic,the waste drainage system of the dental treating machine shall be equipped with a separation device for alloy of mercury.

● **Common exception handling**

Trouble	Method	Disposal
Work system not reaction	The power supply not open	Check up the power supply , open the switch
Water suction and saliva ejector not work	Electromagnetism valve was burnout, piping was built up	Instead the electromagnetism valve, clean out the piping
Cold light not open	The bulb is broken	Change the lamp bulb
Water heater not heat up	No power supply output, heating stick broken	Change the heating stick
The H.P not work	Control valve not open, or the pressure is lower	Change the pressure to 0.6Mpa
X-film not open	Power not open, or the right was broken	Check the power, change the light
The dental scaler does not work or is working cooling-down water	The adjustment valve has not been turned on ;the electrocute-magnetic valve for control of water source has not been turned on	Open the adjustment valve clockwise; In spect power supply of the electromagnetic valve

● Replacement of wearing parts

1. Fuse

The fuse is in the ground box, the exchange process is as follows: Cut the power supply at first, than screw the fuse seat counter clockwise, and take the fuse, replace a new one and screw down clockwise.

2. Water filter

To ensure the proper use of the treatment machine, a water filter is set in the water entry in the ground box to filter the impurity of the water (as shown in figure 13) . After a long time use, the impurity may block the filter core and influence the current and pressure. To cleanse it or change the core is a must.

(1). Under the following situation, please cleanse it or change the core:

- ① Use if for and above half-year.
- ② Pressure losing in the filter core at 0.1 MPa.
- ③ Filter water is contaminated.
- ④ Exceed water is turbidity.

(2). Cleanse or change filter core process:

- ① Cut the power and water supply.
- ② Open the ground box, counter-clockwise screw open the component under the filter.
- ③ Screw open the bolt in the middle of the filter, then put out the core and cleanse or change.
- ④ After that, install it back.

Attention: During installation, do not overexert in crash the core. When put up the filter cover, ensure to water tight.

3. Air filter decompress valve

To ensure the input pressure is stable, clean and dry, an air filter decompress valve is installed in the air entry of the ground box. It can stable the air pressure, limit it under the setting value and filter the impurity and water in the air. The water be filtered will be collected and settled in the filter cup. After a certain time, the water should be let out in case to influence the filter.

(1). Under the following situation, please drain the air filter decompress valve:

- ① Use it for and above one week.
- ② The water is occupied of the cup.
- ③ The color of the water in the cup is change (not transparent).

(2). The drainage process of the air filter decompress valve is:

- ① Cut the power supply.
- ② Open the ground box, use the finger or some tools to up press the filter decompress bottom drainage valve, the water will be let out. Then release.
- ③ To keep the ambient clean and tidy, put something such as: cloth, tissue, spoon, in the water gap to absorb the water.

4. Rack switch

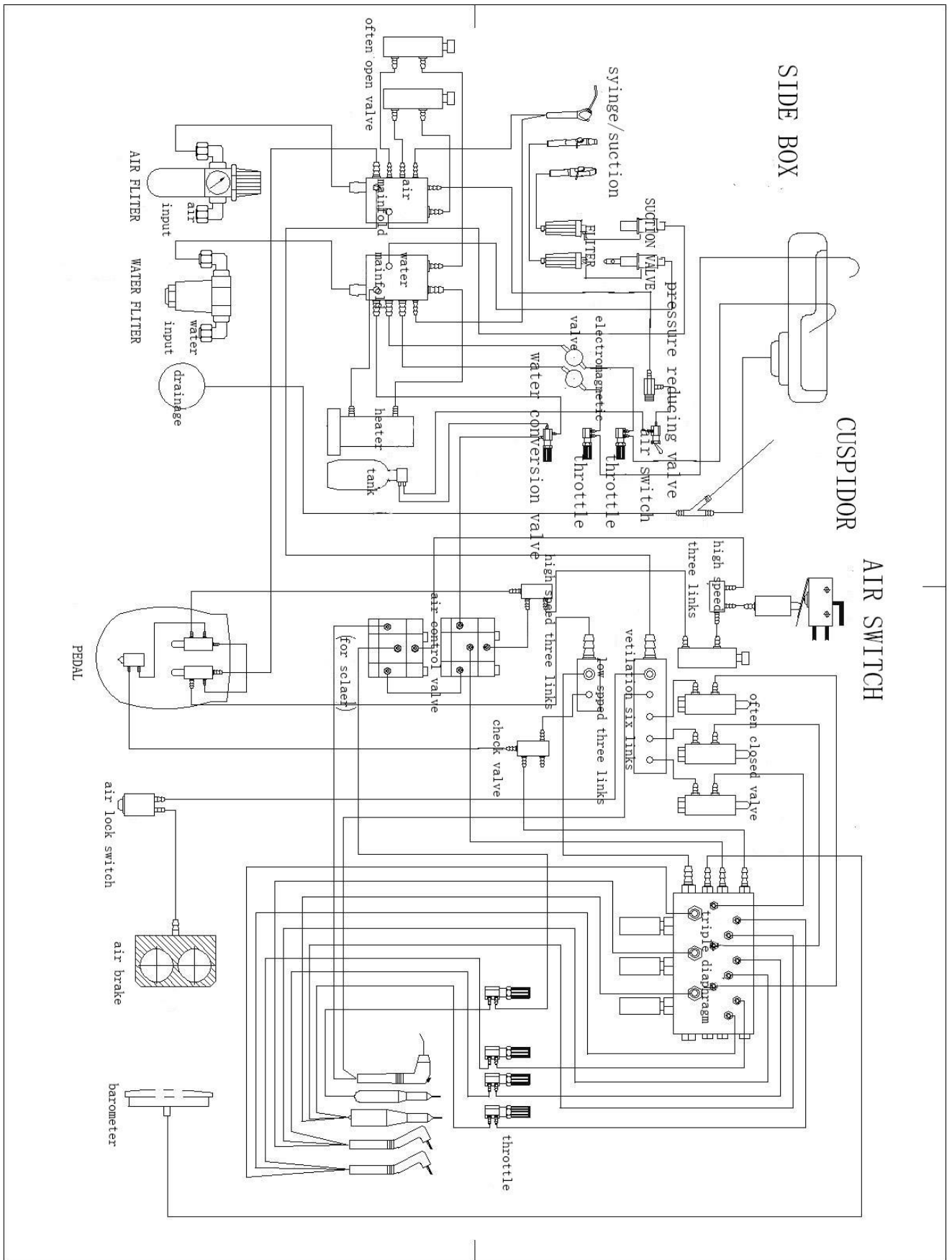
Rack switch is installed in the rack and fast by screw. The distant of the connect point can be adjusted. Under normal situation, handset, gentle spit sucker and strong spit sucker is plug in the rack then push the button. It will cut the electromagnetic valve power and valve turn off then cut the water and air supply. If handset and spit suckers are plug in the air and water supply is not cut, and appear the water and air leakage, the button connect point of the rack should be pried outward to check whether it can block the valve and cut the water and air supply. If it doesn't work, the rack need to be taken apart and check whether the switch is damage.

5. Holder valve

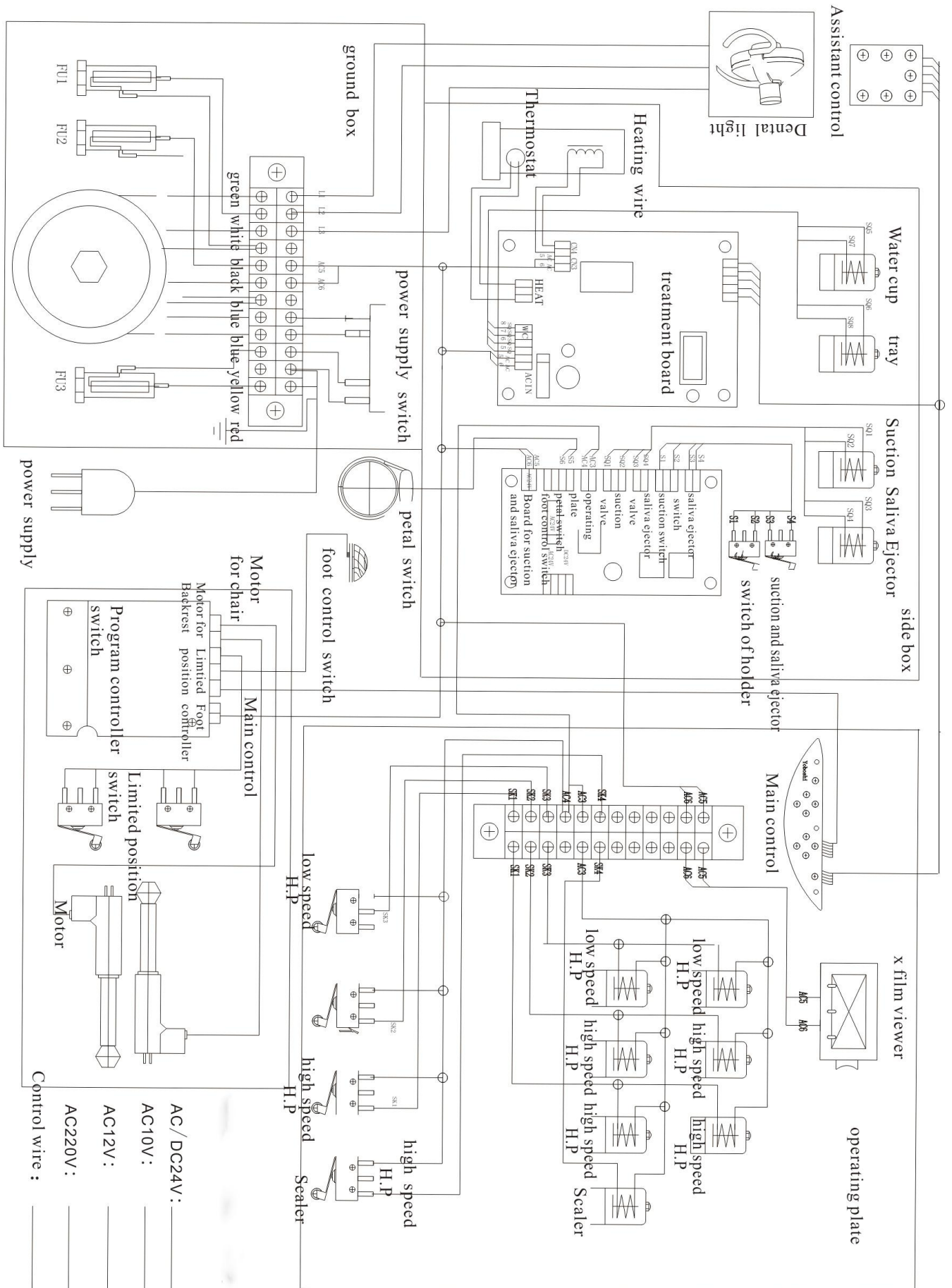
The holder is fixed nearby the handle of instrument disc and the treatment unit. Put the body of holder valve into the holder and fix by screws. Adjust the distance between the valve core and the probe. Under normal condition, place hand bur or saliva aspirator or powerful aspirator on the holder, press the probe to move the valve core leftward. Use 4×1.2 rubber O-ring to seal the outlet of airway. In case of failure of air block after putting the hand bur on the holder or air leakage after putting the saliva aspirator and hand bur on the holder, loose setscrew to move the holder valve rightward and check if the valve gate is locked and the air is blocked. If it does not work out, disassemble the holder valve and check if the O-ring is damaged.

● Water and Air Diagram

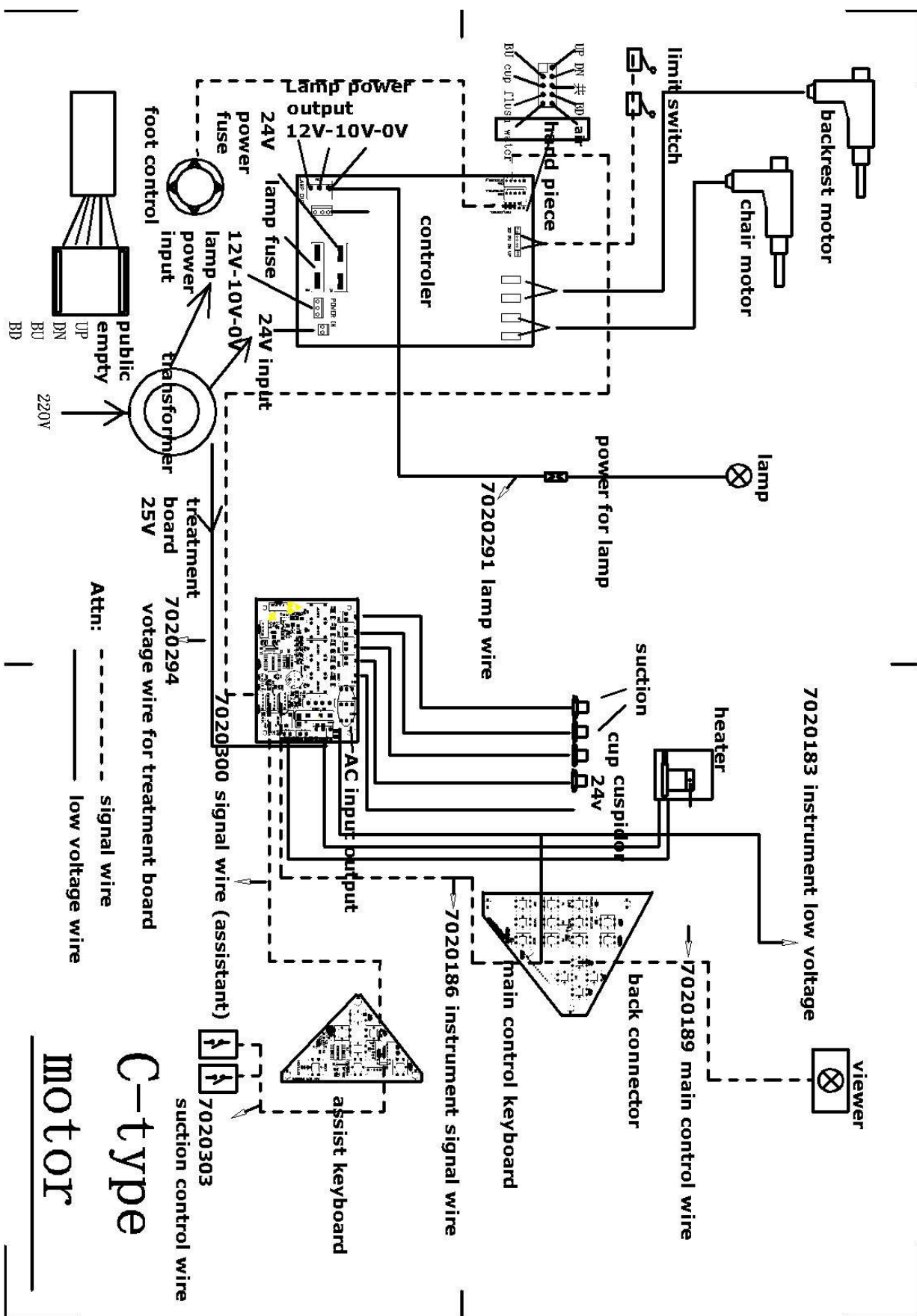
Air control



Electricity control



- **Circuit Diagram**



● Circuit Diagram

