

User Manual

Model No. : HR-OF808



Catalogue

Preface.....1

| | |
|--|------------|
| 1 Image, Symbol & abbreviation..... | 2 |
| 2 Product introduction..... | 2 |
| 2.1 Product features and specifications..... | 2 |
| 2.2 Application, Contraindication and notices..... | 3 |
| 2.3 Main structure..... | 4 |
| 2.4 Working principle and characteristics..... | 5 |
| 2.5 Main performance index..... | 1 |
| 2.6 Normal operating condition..... | 错误! 未定义书签。 |
| 3 Installation & Operation instruction..... | 5 |
| 3.1 Components installation..... | 5 |
| 3.2 Structure instruction..... | 错误! 未定义书签。 |
| 4 Operation notices, caution and attention..... | 10 |
| 4.1 Main frame..... | 11 |
| 4.2 Hand piece..... | 11 |
| 4.3 Touch screen..... | 11 |
| 4.4 Regular maintenance..... | 12 |
| 5 Consumables..... | 12 |
| 6. Operation procedures..... | 12 |
| 7 The way of solving tiny problems..... | 13 |
| 8 Warranty..... | 16 |
| 9 The categories and degrees of responsibilities which are should be assumed for accidents will be handled according to relevant laws and regulations..... | 17 |












Read this introduction carefully before operation, and pay special attention to part 4!!

CAUTION: Do use ground wire during operation!!!

Preface

- **“HR-OF808”** is a dedicated device designed for hair removal in a safe and efficient way.
- Please read this User Manual very carefully before operation and keep it for future reference.
- **“HR-OF808”** must be operated by qualified doctors who have been trained by our company.
- We are not responsible for consequences resulted from the improper operations declared in the User Manual.
- Please follow the instructions strictly to install and operate the machine.
- For any problem during operation, please call our service hotline: +86-10.

1 Image, Symbol & Abbreviation

| Image or symbol | Meaning |
|---|---|
|  | BF Equipment |
|  | Danger, high voltage |
|  | Attention ! Refer to the documents coming along with the machine. |
| IPX1 | Waterproof |
|  | Laser |
|  | Fragile Object |
|  | This way up. |
|  | Away from rain. |
|  | Manufacturer |
|  | Production Date |
|  | Disposal of Discarded Electronic Items |
|  | Emergency Laser Stop |

2 Product introduction

2.1 Product features and specifications

2.1.1 Product features

- This device is medical extra corporeal laser treatment equipment. It is categorized into Class III in China, America and Canada and Class IIb in EU according to the relevant regulations
- By the classification rules based on the safety of medical devices, this machine belongs to type I and ordinary movable equipment.
- Good protection to harmful liquid. this machine is ordinary equipment.

2.1.2 Product Specifications

- Energy density is adjustable within certain range. (1-80 J/cm²)
- Pulse frequency is adjustable.

- c) Different skin type treatment protocol is offered.
- d) Fast mode is designed for painless and fast hair removal. Energy density and frequency can be set freely.
- e) Offer data inquiry function.
- f) Hand piece cooling function assures safe and comfortable treatment.
- g) Four truckles are installed in the bottom of main frame and equipment can be moved only by loosening the brakes of truckles.
- h) Emergency switch, key switch, and foot switch are set for safe use.
- i) This machine is all controlled by micro computer and the display is liquid crystal screen. The main components adopt LSI and view field which is clear and reliable. This machine adopts modularization design and the structure is clear and can be installed and maintained conveniently.
- k) This machine is intelligent control and touch operation. Visible display makes the operation easy, safe and convenient.

2.2 Application, Contraindication and Notices

2.2.1 Application: This device is designed to remove hair for all skin areas except the eyelids.

2.2.2 Contraindications: The device is contraindicated for subjects with any of the following:

- Pregnant.
- Suntan within one to three months before treatment
- Person with immunosuppression action
- Person with skin disease
- use of isotretinoin (Accutane) within 6 months of treatment;
- Sun burnt within 3 months;
- Not for upper eyelid
- History of keloid formation;
- Bleeding disorder;
- Significant concurrent skin conditions affecting the area to be treated or any inflammatory skin conditions;
- Open lacerations or abrasions on the area to be treated;
- Prior use of anticoagulant drug;
- Use other hair removal methods like waxing within 6 weeks before treatment;
- Allergic to hydroquinol or other bleach agent.

2.2.3.1 Notices.

Before hair removal,

- a) Wear operator glasses
- b) Operator should have got through training courses offered by supplier.
- c) Clean the treatment area thoroughly, and shave the hair.
- d) Do not pull out hair in the way like waxing prior to use "HR-OF808" within 6 weeks; or

the laser therapy does not give best results.

- e) Avoid sun burning especially for dark skin. It is highly suggested to use sun lotion for about 4-6 weeks before treatment or use some medicine like hydroquinol.
- f) Try to avoid sun exposure to decrease rate of side effects.
- g) It is good to take test treatment on small skin site first and observe for 15 minutes before taking large area treatment.

2.2.3.2 Attention after hair removal

- a) Swelling and hot sensation might come after the treatment. Do not soak in 24 hours after the treatment. Avoid hot water and hard scrubbing.
- b) Patients could use ice to relieve pain.
- c) Protect from UV in 3-6months after hair removal, especially in summer, to avoid the pigment changes.

2.3 Main structure



2.3.1 This machine consists of main frame, hand piece, electric wire, and touch screen. See Figure 2.3-1 for the structure of the main frame.

Figure 2.3.1

2.4 Working principle and characteristics

2.4.1 Working principle

“HR-OF808” working principle is based on the photothermic theory. There is plenty of melanin in hair follicles and hair shafts. Melanin scatters among hair bulbs and hair shaft structure (like medullary substance, cortex and cuticula pili). “HR-OF808” targets on melanin and treat selectively in a precise way. Melanin could absorb the energy from the laser, which would result in temperature rapid increase, to destroy surrounding hair follicles, and finally remove hair.

2.4.2 Treatment characteristics

Different pulse widths are available according to different demands. Contact cooling system works at the same time. All above make the treatment process more comfortable, safe and convenient. The “sealing” -like treatment way is convenient for treatment operation.

2.5 Parameter

| | |
|-------------------------|---|
| Light Source | FIBER laser |
| Wavelength | 808nm / |
| Power | 200w |
| Output Energy | 1-80 J/cm ² |
| Pulse width | 10-400ms adjustable |
| Pulse frequency | 1-20Hz |
| Spot size | 10X10mm |
| Cooling system | Thermal electric cooling + water cooling+ Air cooling+sapphire contact cooling for laser head |
| Crystal temperature | 0-4°C |
| LCD screen | 10.4 inch 24 color multi color touch screen |
| Power requirement | AC220V±10%、50Hz, AC110V±10%、60Hz |
| Laser water temperature | 40°C |
| Net Weight | 27kg |
| Dimension | 680mm * 450mm * 520mm |

3 Installation instruction

3.1 Installation steps

3.1.1 Open packing and take out the main machine carefully.

3.1.2 Assemble methods

a) Lift main machine up from below, instead of forcibly pulling it out by holding the hanger.

b) As shown Figure 3.1.2.1, put the hand piece onto the hanger.

c) Show as figure 3.1.2.2, connect the foot switch to the corresponding socket " FOOT SWITCH" behind main frame, push up the blue switch and connect the power line.

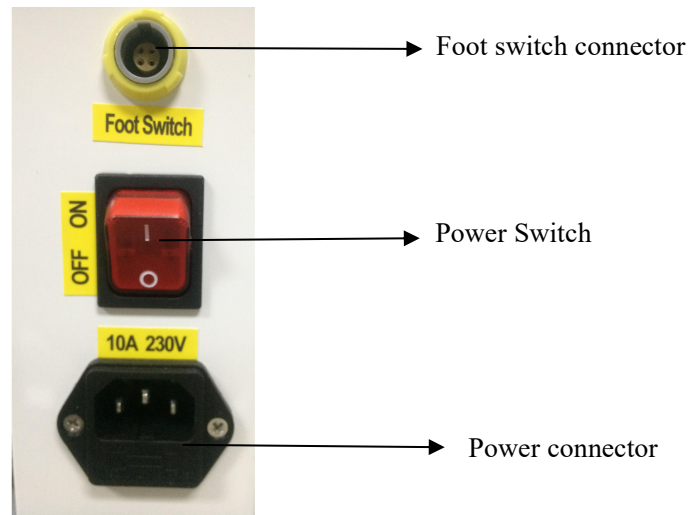


Figure 3.1.2.2



Figure 3.1.2.3

3.2 Operation procedure and interface introduction

3.2.1 Power on

For the sake of safety, please do in steps. Firstly, make sure power socket is well earthed, and then make sure the plug is well inserted in the power supply socket. Turn on the key switch on the front board.

"Welcome" shows on screen interface after powering on(see Figure 3.3.1-1) ,your logo can be added here.

The system enters equipment interface automatically 10 seconds later. (see Figure 3.3.1-2).

Press "  ",the system enters equipment settings interface. (see Figure 3.3.1-3)



Figure 3.3.1-1

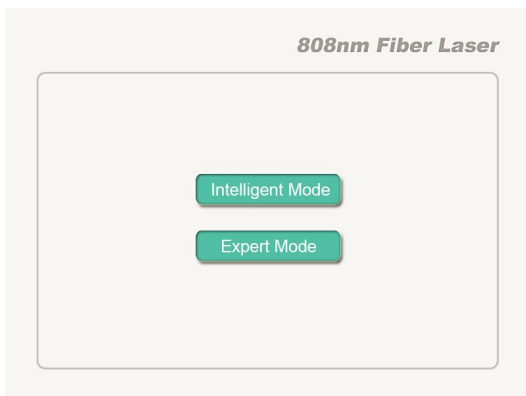
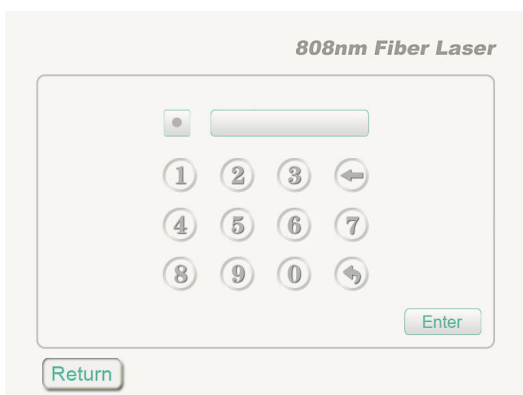


Figure 3.3.1-2

Touch "LANGUAGE" enters language setting interface as Figure 3.3.1-4.

Touch "Factory" enters counter resetting interface as Figure 3.3.1-5. Here,the password is needed.



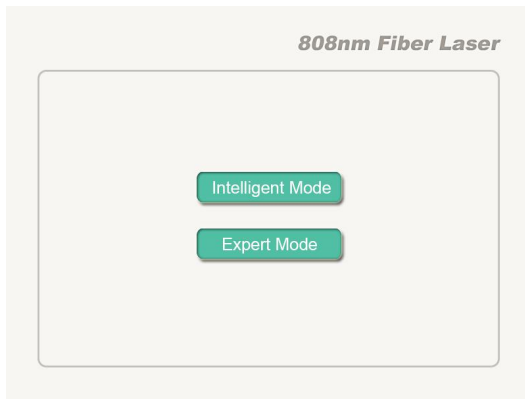
3.3.1-5

Touch "FACTORY " enters interface as Figure 3.3.1-6.Here,the password is needed.

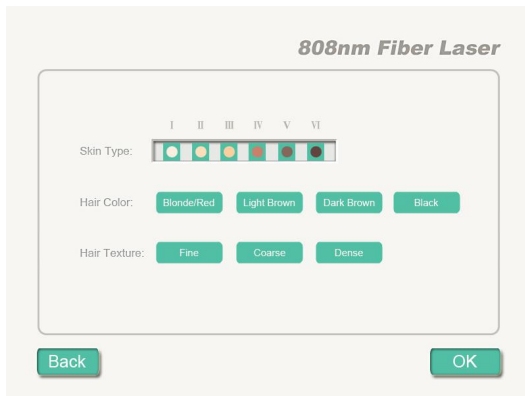
3.3.1-6

Note:The Factory Part only can be done by supplier and the machine has been setted well

before sending! So customers don't need to set the "factory settings".

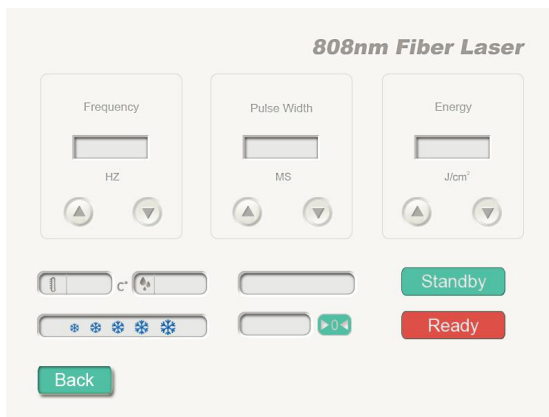


Chose the mode to go to the next operation interface,as Figure 3.3.1-9.



3.3.1-9

Chose the "Skin Type" "Hair Color" and "Hair Texture" depending on your customer's actual situations. Then press "Next" enter to the final interface, as Figure 3.3.1-10



3.3.1-10

3.3.2 Operation interface and parameters setting

3.3.2.1 working mode setting

There are three different modes "Fast" is designed for fast painless hair removal, and "Medium" and "Slow" allow operators to set energy density and frequency freely. Treatment region navigation is designed according to different areas.

[Clinical energy adjustment-reference](#)

| | Skin Type I | Skin Type II | Skin Type III | Skin Type IV | Skin Type V | Skin Type VI |
|-------------|--------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| | 40ms | 80ms | 200ms | 200ms | 300ms | 400ms |
| black | 10Hz 4-6 J/ cm ² | 5Hz 8-12 J/ cm ² | 2Hz 26-30 J/ cm ² | 1Hz 28-32 J/ cm ² | 1Hz 40-44 J/ cm ² | 1Hz 30-34 J/ cm ² |
| dark brown | 10Hz 4-6 J/ cm ² | 5Hz 8-12 J/ cm ² | 2Hz 28-32 J/ cm ² | 1Hz 30-34 J/ cm ² | 1Hz 42-46 J/ cm ² | 1Hz 32-36 J/ cm ² |
| light brown | 10Hz 5-7 J/ cm ² | 5Hz 10-14 J/ cm ² | 2Hz 30-34 J/ cm ² | 1Hz 32-36 J/ cm ² | 1Hz 44-48 J/ cm ² | 1Hz 34-38 J/ cm ² |
| blonde/red | 10Hz 6-8 J/ cm ² | 5Hz 12-16 J/ cm ² | 2Hz 32-36 J/ cm ² | 1Hz 34-38 J/ cm ² | 1Hz 46-50 J/ cm ² | 1Hz 36-40 J/ cm ² |

3.3.2.2 Skin type setting

The ratios of light absorption for different skin types are different. (dark skin easily absorb light energy, light skin absorb less light energy).Weak laser power is suitable for dark skin hair removal; strong laser power is suitable for light skin hair removal. **“ FIBER-808 I ”** concludes depilation treatment proposals for six different skin types.

3.3.2.3 Energy density (j/cm²)

Energy density (j/cm²) is the output energy per unit area. Energy density is adjustable within certain ranges(1-80j/cm² is adjustable for spot size of 5*15mm). Fast mode, A,B,C,D,E have preset energy density suitable for hair removal of different skin parts. Users can fine adjust energy density by touching "+", or "-". Press "Standby" and "Ready" key to start the treatment.

3.3.2.4 Frequency setting

Make setting for number of continuous pulses within one second. Frequency adjustable ranges are different for different working modes.

3.3.2.5 Cooling system

The cooling system is used to cool the probe on the hand piece and protect it from skin burn by overheating. Do turn on cooling system and cool the probe to a certain temperature before operation.

After powering on machine, it is required to start cooling system for 3 to 5 minutes before operation, Otherwise, the system would give alarm probe overheating and lock the Ready button to cool the probe surface until it reaches the safe temperature. And then automatic alarm disappears, unlock **“ready”** key.

The cooling system could be started both manually and automatically.

Automatic mode: The cooling system would start working automatically when pressing **“ready”** key.

Manual mode: user could turn on or turn off cooling system according to actual situation.

3.3.2.6 Number of Flash times

The screen would show the number of the flash times since the device is on. Two windows: one is the counter for the single treatment time; the other one is the total number.

3.3.2.7 Ready/Standby

Enter Ready status:

The device is defaulted on Standby status when it is turned on. When all the indexes are set down, start the cooling system to cool the probe for about 3 minutes first and then go into the shooting process. Once the probe is not cool enough to start the working status "Ready", the program would go back to "Standby" status automatically to protect the probe from burning.

Go back to Standby:

Under Ready mode, the operator could start shooting with treading on the foot switch. No shoot in 10s, the program would go back to Standby status from Ready status to prolong the service life and ensure the safety. And then in 1-2 minutes under the Standby status, it would automatically turn off the cooling system to save energy.

3.3.2.8 Alarm and warning tone

Alarms would be given by the program, as followings:

- 1) Electric current is over large;
- 2) Main frame temperature is over high;
- 3) Cooling water temperature is over high;
- 4) There is water shortage in water circulation system;
- 5) Cold water cycle malfunction;
- 6) Hot water cycle malfunction;
- 7) Laser temperature is over high;
- 8) Hand piece surface temperature is over high.

In alarm status, the program would give out a quick but short beep warning tone, whose frequency is 1s.

In non-alarm status, the program would give out the beep warning tone, with a frequency of 3s.

4 Operation notices, caution and attention



The laser is Class IV invisible laser. Don't view the laser shot under working mode directly.

During the operation,the patient and operator all should wear protective eye patches for eyes protection and avoid harm caused by light radiation to eyes.

Please handle hand piece with care and avoid the damage of valuable optical elements in hand piece.

Keep fiber and cable natural arch shape and from being folded.

Don't pull the fiber and cable strongly when moving hand piece.

It is forbidden to use laser in the area with inflammable gas and liquid.

It's forbidden to put any perfect reflection object in the front of tip and prevent laser from being reflected to people or fire goods.

Please confirm if the chosen energy and operation mode is fit for patient or not before the operation.

It's forbidden to do the operation if not prepare well.

4.1 Main frame

4.1.1 Please use power cord which is attached to machine

4.1.2 Please keep the machine far away from the location where magnetic field and electric wave is strong.

4.1.3 Please keep the machine far away from the location with serious dust and high temperature.

4.1.4 Don't take apart the main frame. Some electric charges also remain in some elements after power off, which is unsafe to people. So nobody can open the cover of machine except people authorized by our company.It's forbidden that non professionals do maintenance without leave or the consequences will be at their own risk.

4.1.5 Please accept inspection service if the machine has not been used for more than half a year.

4.1.6 Don't move main frame by pulling cable bearer.

4.2 Hand piece

4.2.1 Please handle hand piece with care and avoid the damage of valuable optical elements in hand piece. Keep fiber and cable natural arch shape and from being folded.

4.2.2 It's forbidden to take apart or remold tips and don't attack it strongly or rap it.

4.2.3 Keep hands dry when using the hand piece.

4.2.4 Please take off the hand piece when cleaning it and use the cotton fabric splashed with 75% alcohol. It is forbidden to immerse the tip into water and clean it.

4.2.5 Please clean and see if there is dirt on the tip lens or not before operating because dirt can influence energy output. One tip should be installed on the hand piece when the machine is free,so please keep the lens from dust.

4.3 Touch screen

4.3.1 Don't attack touch screen by sharp instruments.

4.3.2 Please keep touch screen free from drugs or other dirt.

4.3.3 Please keep touch screen free from wet goods.

4.3.4 Don't scrub touch screen by alcohol or washing powder etc. If needed please scrub it slightly by soft dustless cotton fabric.

4.3.5 Don't move touch screen and stretch data wire.

4.4 Regular maintenance

Calibrate the beam divergence, laser width and pulse energy regularly one year after the device leaves the factory. The calibration is expected to be done by the authorized computation department at least once a year.

5 Consumables

Attached protective eye patches and goggles are consumables. Please purchase them from original supplier when they are damaged.

Fiber and optical elements in the hand piece are delicate and valuable elements and man-made sabotage is beyond the warranty range.

6. Operation procedures

6.1 Clean the treated skin by water, dry skin and disinfect the skin by alcohol. Then smear anesthetic (Xylocaine), cover with plastic film and record the time. (anesthetizing time is 1 hour at least).

6.2 Start up the machine, select proper tip and disinfect the tip.

6.3 Pluck off plastic film and scrub anesthetic and do the second cleaning(can use alcohol directly this time). Now skin pores are splayed slightly which is normal anesthetic phenomenon.

6.4 Chose operation mode.

6.5 Press "Standby" key on the bottom-right of screen and stick the tip on the skin when "standby" turns into red. Now infrared detection function is started and tip shows blue light. And then push foot switch so the laser scan is finished on the selected skin area instantaneously.

6.6 Please move hand piece at uniform speed when using continuous scan mode to avoid uneven light spot.

6.7 Apply the ice block on small treated area: stick the ice block wrapped with gauze on the treated skin and move the ice block to and fro. Take the ice block away when the superficial skin feels numb and do the operation. During the operation applying,ice block can continue and water can't be left on the skin. Please scrub the skin with cotton fabric when there is water.

6.8 Skin shows red and swollen slightly after the operation which is normal phenomenon.

Swelling will disappear in 24 h and red will fade in 48 h. There is scab after the operation and pruritus can happen during the operation which all are normal phenomenon. Please pay attention to keep skin humid. And skin maybe peeled slightly when more than 2 times treatment caused by skin's metabolism, which is normal phenomenon. There maybe are blisters if use over high energy. Don't pierce the blisters and some solution can be smeared. 6.9 It is better to keep skin clean and dry within 24 h after the treatment. Please keep skin far from sunshine after 24 h.

7 The way of solving tiny problems

When there are faults during use, user can diagnose and clear some simple faults as following instructions. If it also can't be solved please call and consult our customer service department so solve the problems soon.

7.1 The machine can't be operated.

Please confirm if AC has been input properly, the plug is well inserted in the power supply socket, power has been switched on, fuse is normal and emergency stop switch is switched on. If the above situation are all normal but machine also can't be operated please open the back door of main frame and check if there are wires are flexible or broken.

7.2 Laser can't be shot

7.2.1 Please check if the operation way is right;

7.2.2 Please check if the tip touch skin well;

7.2.3 Please check if hand piece shows blue light when tip touch skin, if not, please cancel the infrared detection function on the setting interface and do the operation again. If laser can be shot it is the fault of infrared detection and if also no laser shot it is the fault of hand piece.

7.3 Touching touch screen is irresponsive.

Maybe the touch screen is stressed, please touch the touch screen tightly and then operate the machine again. If it is useless please cut off power first and open side door of main frame and check if wire connector is flexible or broken.

7.4 LCD screen shows abnormally and is halted.

Please power off and operate the machine again in two minutes.

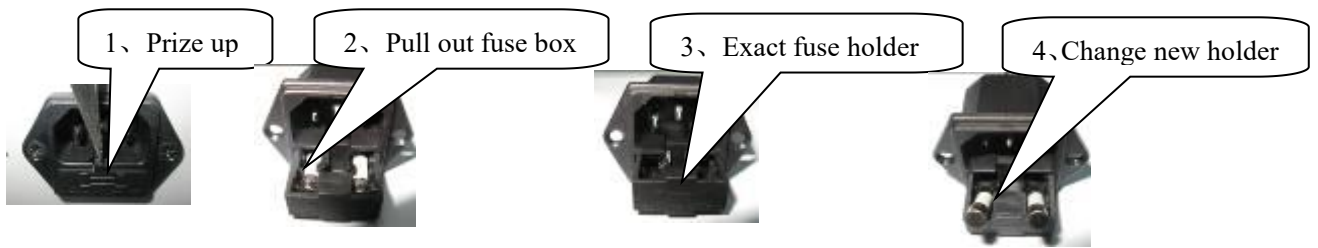
7.5 When there is abnormal situation and faults can't be cleared

Please contact our company and inform purchase date and we will give you reply about your problems in 24 hours.

7.6 The way of changing fuse. (The machine has two fuses, please refer to the exterior structure drawing and find the location)

Prize up fuse holder by "—" shape screwdriver in the area directed by arrow as image and then insert fuse into installation groove of fuse holder. When power is a.c.220V/a.c.230

specification of fuse is T.a.c.250V/10A and when power is a.c.110V/a.c.120 specification of fuse is T.a.c.250V/20A. Put fuse holder into socket.



7.7 Water circulation system and water shortage alarm

7.7.1 Water circulation system alarms due to water shortage in water tan. It is forbidden to use laser probe head before filling pure water in water tan.

7.7.2 Stages of filling water

7.7.2.1 Switch off machine, remove power cord

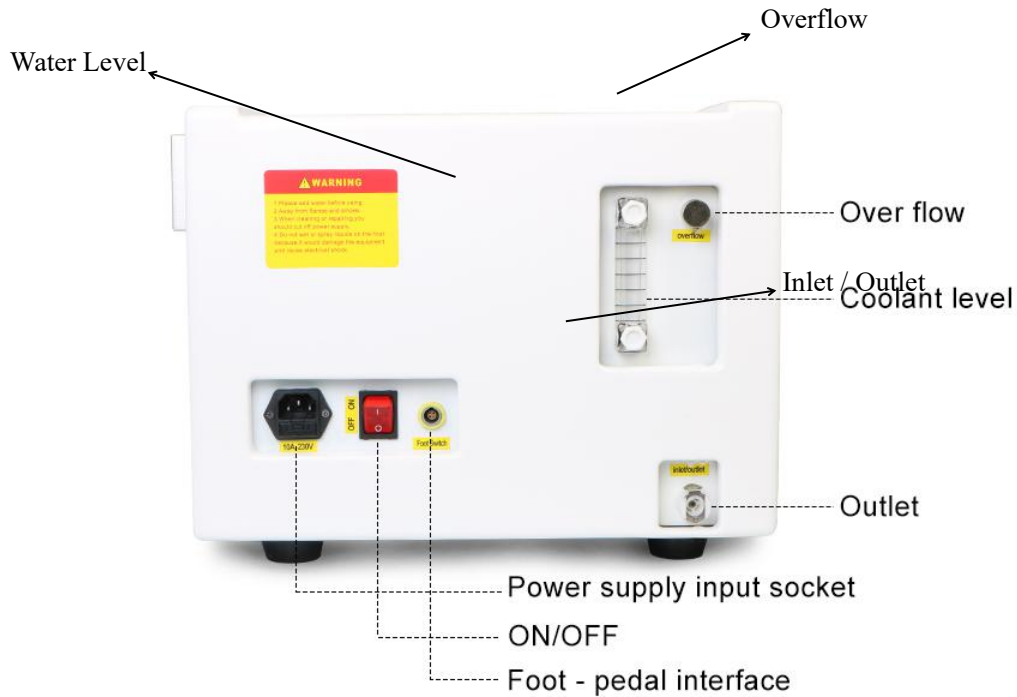
7.7.2.2 Open machine back cover,

7.7.2.3 Watch alarm situations display on screen(hot water alarm or cold water alarm), watch water level in water tan. In case of water shortage, take out the water cup from clamp, then screw out the plug inside water cup. Raise water cup higher than water tan.

7.7.2.4 As figure .7.7.2.4 fill pure water/distilled water in water cup slowly(pure water/distilled water could be sold on market, not tap water). If water does not flow fluently, shake gently water cup and water pipe. Watch water level when filling water, water should touch "upper limit" .

7.7.2.5. Screw off water cup plug, put water cup to origin position, put on back cover

7.7.2.6. Restart machine, you can see machine will restore to normal working condition.



7.7.2.4

7.8 Cold water, hot water system defect alarm

In case of cold or hot water system defect alarm shown on screen, it means water flows too slowly or water temperature is too high which is not up to working condition standard. In this case, it is forbidden to use laser probe head. Restart machine. Watch carefully if alarm appear again. If alarm appears, please contact with us.

7.9 Filtration system and ion removal system replacement for HALF A YEAR in the normal operation situation.

If alarm appears or fix maintenance is required, please contact with original supplier.

7.10 Probe head surface overheating alarm

It probe head surface overheating alarm appears, it will disappear after one to two minutes. If the alarm could not disappear, restart machine. If alarm still appears, you could contact with us.

7.11 Laser device overheating alarm

It laser device overheating alarm appears, please stop using for more than five minutes. Even after alarm disappears, probe head can not keep using, but restart machine first. If there is no alarm, you can continue to use machine. But if alarm still appears, you could contact with us.

8 Warranty

8.1 Warranty term

We provide one year guarantee from the purchase day.

8.2 Warranty rang

We provide free maintenance or replacement in warranty term but exclude the damage caused by abnormal use and force majeure.

8.3 Warranty limits

8.3.1 User should provide purchase invoice and warranty card when applying free warranty service in warranty term. The initial date of products' warranty term is purchase date indicated on the invoice. Warranty service can't be provided if there is no purchase date.

8.3.2 The damage caused by improper package in the trip you sending the machine back to us will be out of warranty policy.

8.3.3 The machine maintained by our maintenance center can go on share the warranty service in original warranty term. If the warranty term is less than 3 months to the expiry date of original warranty term, the replaced components can share 3 months warranty service from the replacing date.

8.3.4 All the replaced defective components need to be sent back to us before the new ones sent.

8.3.5 User should be responsible for the safety of data. We are not responsible for the damage and lost of data, procedures or removable storage medium.

8.3.6 User should keep warranty card and purchase invoice well. We will not provide any more warranty card and purchase invoice again.

8.3.7 We will not be responsible for the following situations and they are all out of warranty range.

a. The faults and damages caused by fire, earthquake and uncertain accidents. The machine is used under abnormal condition and is damaged by user's destruction on purpose or error and misuse.

b. The incidental loss caused by machine's effect and use (business' beneficial loss and discontinue, use loss, the cost of replacing any equipments, devices and services, customers' claim for compensation.

c. The damages caused by other operation ways not written in machine's user manual.

d. The situation beyond our company's control, the problems caused by using other accessories or substitutes not belong to our company and required services and components for solving problems; accepting unauthorized modification or services and required services for solving the problems; misuse, abuse, operate, maintain and disassemble and assemble the machine not obey our company's instruction.

e. The faults and damages caused by un-prescribed environment.

f. Improper keeping(damages caused by mouse and liquid inleakage).

g. The machine can' t be operated normally caused by using self-organizing or non-public procedures.

8.3.8 The machine' s lifespan is 5 years.

8.3.9 Please inquiry our customers service website or contact us for further information of machine' s technical issue.

9 The categories and degrees of responsibilities which are should be assumed for accident will be handled according to relevant laws and regulations.