

Ultra Picosecond Laser Skin Rejuvenation Device

L203



User Manual

Notice

Dear User:

Thank you for choosing our products! To ensure safe use and optimal effectiveness, please:

1. Read this manual carefully before use and keep it safe. Install and operate strictly according to the requirements.
2. Disassembly or modification of any part of the instrument is strictly prohibited. Unauthorized personnel are not allowed to open the cover or perform repairs.
3. If you encounter any problems during operation, please contact official customer service immediately.

This product is not a medical device and should not be used for the treatment of diseases.

I. Safety Precautions


1. Important Notes

- (1) Before use, check the machine's wiring connections and inject purified water through the water inlet . Do not use mineral water or tap water.
- (2) Laser/intense light may damage the eyes. Operators and those being operated on must wear appropriate protective equipment (operators wear Level 3 high-intensity light protection glasses, and those being operated on wear special protective goggles). It is strictly forbidden to look directly at the light emitted or reflected from the laser head.
- (3) Disassembling the instrument without the manufacturer's consent will result in consequences and void the warranty; the equipment contains high voltage, and unauthorized personnel are prohibited from opening the cover.

2. Instrument Safety

1. This machine is a high-tech beauty device used to remove skin blemishes and unwanted hair . It can be used safely if operated and maintained properly.
2. Shock-absorbing packaging is required during handling. The handle contains precision components and must not be dropped or bumped. Damage caused by human error is not covered under warranty.
3. The machine must be turned off before adjusting the laser or wiping the lens; after powering on, the self-test system will start, and you need to wait 1-3 minutes before operating.
4. In an emergency, the power can be quickly cut off using the red emergency stop switch; the optical guide crystal must be kept clean to prevent coupling agent from seeping into the optical head.
5. If water leakage is detected in the phototherapy head, the machine must not be turned on. If it has already been turned on, it must be turned off immediately.

3. Safety of strong light and laser

 High light warning

1. Strong light may cause fire or burns. Do not point it into the air when using it. When not in use, place it on the handpiece holder.
2. Some wavelengths are invisible infrared light, so the operating area must be marked with instructions on the use of high-intensity light, and a laser radiation warning sign must be posted at the entrance of the laser operating room.
3. Flammable and explosive materials (alcohol, ether, etc.) should be kept away from laser radiation areas; metal instruments may reflect laser light, so direct exposure should be avoided or they should be used as little as possible.

4. Safety of electrical appliances and machinery

1. Keep the panel and cover closed, as opening them may cause danger; when maintaining the equipment, turn it off and unplug the power cord, and do not operate it while it is powered on or leave it unattended.
2. Move the instrument carefully and slowly to avoid collisions; ensure that the rated voltage matches the voltage of the area.

5. Fire prevention

1. Flammable materials in or near the hazardous operating area should be reduced to prevent ignition

- by light.
- When handling or cleaning the laser head/components, do not use flammable materials such as alcohol or acetone; if alcohol is used for disinfection, it must be completely dry before turning on the machine.
 - Do not use soap or water to clean the skin; use saline solution instead. For alcohol disinfection, ensure the skin is completely dry before turning on the machine.

II. Specifications

| Parameters | Details | Parameters | Details |
|--------------------|-------------------------|-------------------------------|---|
| Display screen | 8" Touchscreen | pulse frequency | Up to 10Hz |
| Laser type | Nd:YAG | Indicator light | 650nm laser |
| Laser spot mode | Circular homogenization | Cooling system | Circulating water cooling |
| laser wavelength | 1064nm/532nm/1320nm | Input power | 200-240VAC, 50Hz/100-120VAC, 60Hz; |
| laser power | 500W@1064nm | Total power | 1200W |
| Q-switching method | Passive Q-switching | Overall dimensions/net weight | 30×48×68cm/14 Kg |
| Pulse energy | 50-2000mJ @1064nm | Packaging dimensions/weight | 43×53×66cm / 25 Kg |
| Spot area | Φ4 mm | Languages | Russian, German, French, Spanish, Portuguese, English |
| Laser pulse width | 6-10ns | | |

III. Instrument Installation and Instructions

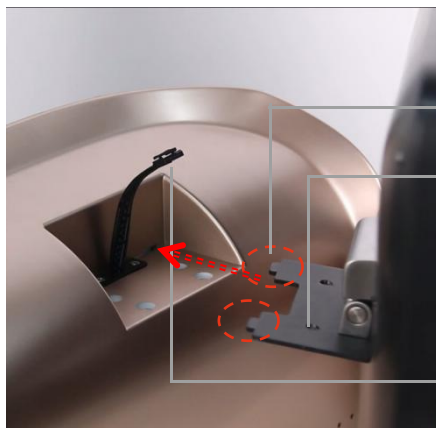
1. Instrument Overview



① 8- inch touchscreen display ② Power switch ③ Foot switch interface, power socket with fuse (from top to bottom) ④ Laser handle ⑤ Handle holder ⑥ Overflow port, water inlet/outlet (from top to bottom) ⑦ Laser handle plug/unplug

(—) Instrument installation

1. Screen installation



① Alignment clips embedded in the screen

② Screen secured with screws

③ Connect the flex cable to the screen

2. bracket installation

Remove the bracket screws and secure the bracket to the side of the instrument;

3. Handle installation

Connect the handle to the corresponding handle interface, and then place the handle into the hanger;

⚠️ Note: When connecting the handle, ensure that both blue buttons on the handle connector are fully popped out and the clips are in place; otherwise, the water flow may be obstructed.

4. Replace fuse



5. Water Injection/Water Addition Specifications



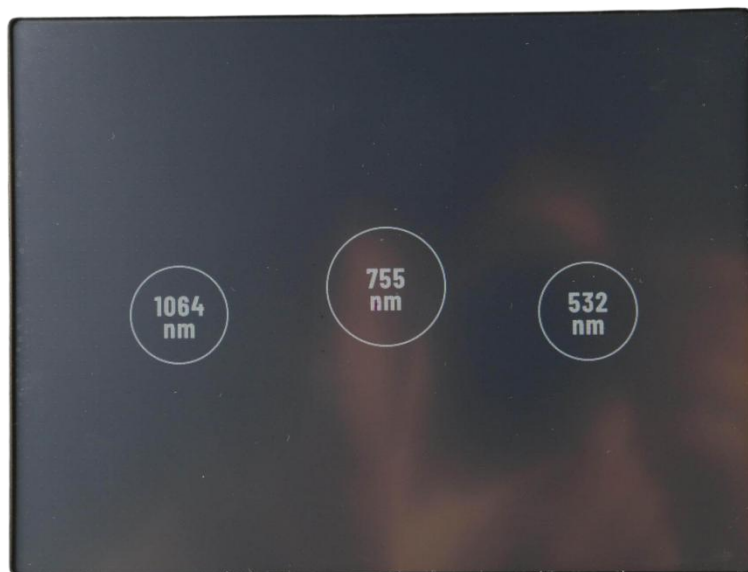
Water filling: Screw the water filling funnel to the water filling/draining port, open the overflow port sealing cap, and slowly add pure water or distilled water until water flows out of the overflow port, then stop.

When using: unscrew the sealing caps on the overflow port and the water inlet/drain port to ensure air circulation and water circulation.

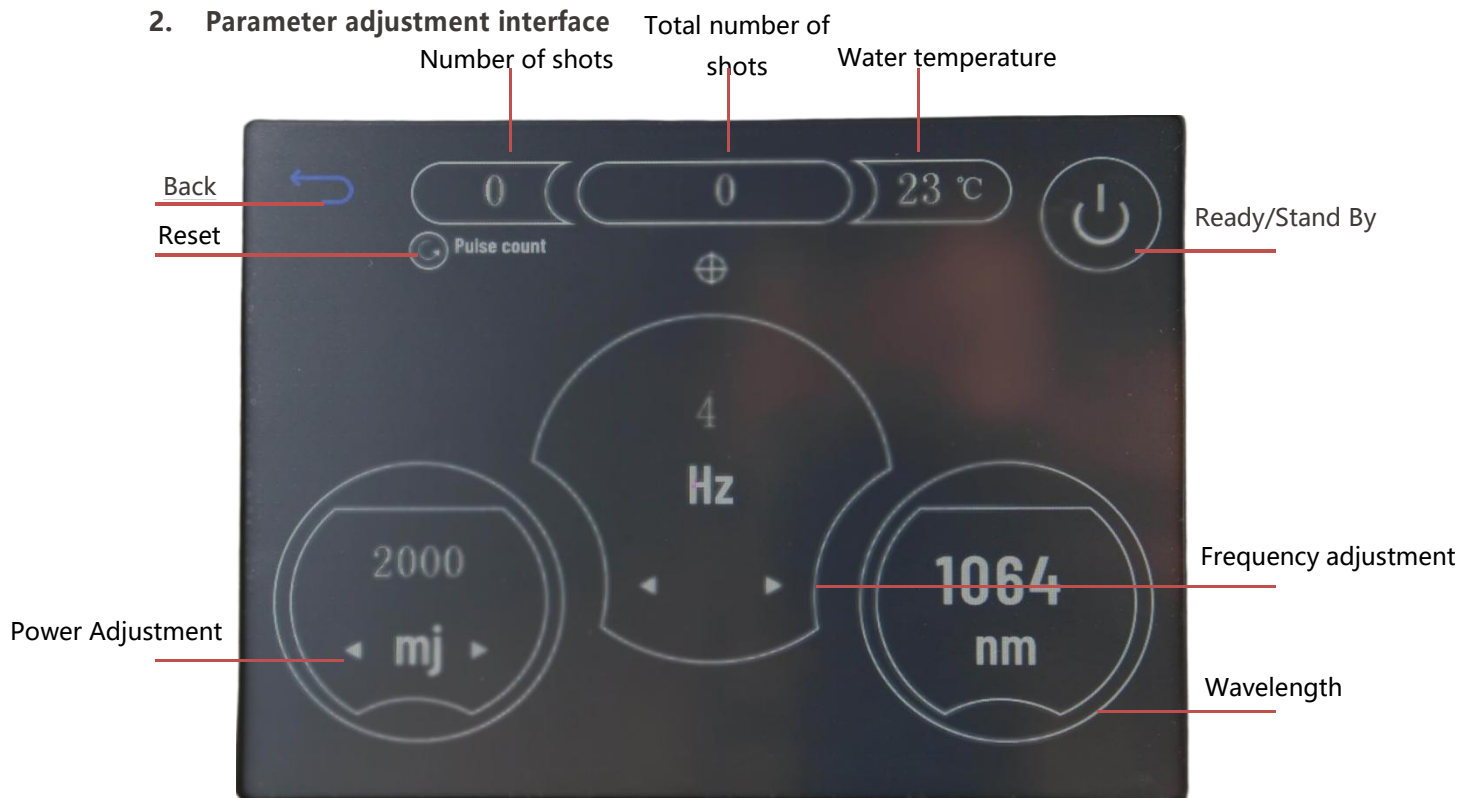
Transportation/Transfer: Tighten the sealing caps on the overflow and water inlet/drain outlets to prevent damage to the instrument due to water leakage.

IV. User Interface Description

1. Wavelength selection



2. Parameter adjustment interface



! Note : You need to select the corresponding option according to the actual situation, otherwise it may cause discomfort or injury.

V. Operating Instructions

1. Protective measures: The person being operated on should wear special protective goggles, and the operator should wear special protective glasses, a mask, and medical gloves.
2. Apply cooling gel: Apply a layer of cooling gel about 1 mm thick evenly to the treatment area.
3. Parameter testing: Set the initial energy parameters and test the light spot for 2-3 minutes. Wait 3-5 minutes to observe the skin reaction. For brown or black skin, you need to wait longer to observe in order to determine the appropriate setting parameters.
4. Energy adjustment: When operating on prominent areas of bone tissue (such as the forehead, temples and cheekbones), the energy should be reduced according to the patient's tolerance.
5. Operating instructions: Apply pressure to place the laser head on the skin, ensuring proper contact between the laser head and the skin; the laser spots should partially overlap to ensure complete coverage of the operating area.
6. Post-operative care: If persistent redness, swelling, burning pain, or other skin reactions occur on the face after the procedure, apply a cold compress immediately.

VI. Precautions and Instructions

1. Precautions before operation

1. Contraindications

- The three stages of a woman's life: pregnancy, breastfeeding, and menstruation.

- Outdoor workers;
 - Predisposition to keloid scarring, photosensitivity;
 - Patients with heart disease, high blood pressure, diabetes , or epilepsy;
 - Those with open wounds at the treatment site;
 - Those currently using freckle-removing products (please specify who reminded you) should stop using them for approximately 30 days before proceeding.
 - People with sensitive skin are highly susceptible to allergies;
 - People with metallic substances in their bodies.
2. **Special reminder:** People with darker or more sensitive skin should not increase their energy levels arbitrarily just because the immediate reaction is not obvious.
2. **Post-operation contraindications**
1. Avoid spicy and stimulating foods, seafood, and foods with artificial coloring for one week. Also avoid smoking, alcohol, and photosensitive vegetables such as celery, spinach, coriander, and white radish.
 2. Do not use irritating skincare products or functional spot-removing products for 3 days; facial care can be performed after 7-10 days.
 3. Strict sun protection is required; use sunscreen with SPF 30 or higher. Wash your face with cool water and avoid saunas.
 4. If scabs form, do not peel them off by hand; allow them to fall off naturally as they metabolize.
3. **Skin problems that may occur after the procedure**
- **Acne breakouts may** be caused by unmetabolized sebum on the skin, the use of irritating cosmetics or spicy foods, inadequate facial cleansing, or repeated use of cooling gel .
 - **Dull complexion :** This may be caused by excessive energy during each treatment, too short intervals between treatments, excessive consumption of spicy and irritating foods, use of irritating skin care and cosmetic products, or failure to take proper sun protection measures.
- Note:** The above problems usually improve gradually as the skin metabolizes .

VII. System Maintenance and Upkeep

1. Water requirements: Use only purified water or medical distilled water, and change it once a month.
2. Environmental requirements: The ambient temperature should be maintained between 10°C and 50°C.
3. Temperature adaptation: When the instrument is transferred from a low temperature/high temperature environment to another environment, it needs to stay for at least 20 minutes before running.
4. Transportation and maintenance: Before transportation, the water inside the instruments and tools must be drained, and the pipe openings at both ends must be plugged with silicone plugs.
5. Power-on procedure: After each power-on, when the light first appears, you need to place it on the ground twice.
6. Long-term shutdown: Drain the internal water and run for 30 minutes every three months.
7. Safety Precautions: Non-professional personnel are prohibited from opening the instrument to avoid high voltage risks.

VIII. Common Faults and Troubleshooting Methods

| Fault phenomenon | Fault Analysis | Solution |
|---|---|--|
| The instrument cannot be turned on. | Is the power cord plug properly inserted? (Poor contact) or damage. | Try unplugging and replugging the connector to ensure a tight connection, or replace the power cord and connector. |
| | The fuse blew. | Replace the fuse. |
| Foot switch malfunction (Some models do not come with a foot switch) | The accessory interface connected to the host is not properly plugged in. | Investigate and reconnect the interface. |
| | The foot switch is damaged or the power control components are damaged. | Contact the distributor or manufacturer |
| Weak output energy or significantly reduced energy | The bald head was contaminated. | Contact the distributor or manufacturer to clean the treatment head. |
| | The internal components of the hand tool are damaged or have reached the end of their service life. | Contact the distributor or manufacturer |

IX. Packing list:

Main unit × 1; Laser handle × 1; Handle holder × 1; 532 probe × 1; 1064 probe × 1; 1320 probe × 1; Foot switch × 1; Power cord × 1; Glasses (red) × 1; Eye mask × 1; Funnel (funnel + silicone tube + connector) × 1; Fuse × 2; Handle case × 1.