

VERTICAL HAIR REMOVAL BEAUTY MACHINE

----- manual

# Manuel Contents

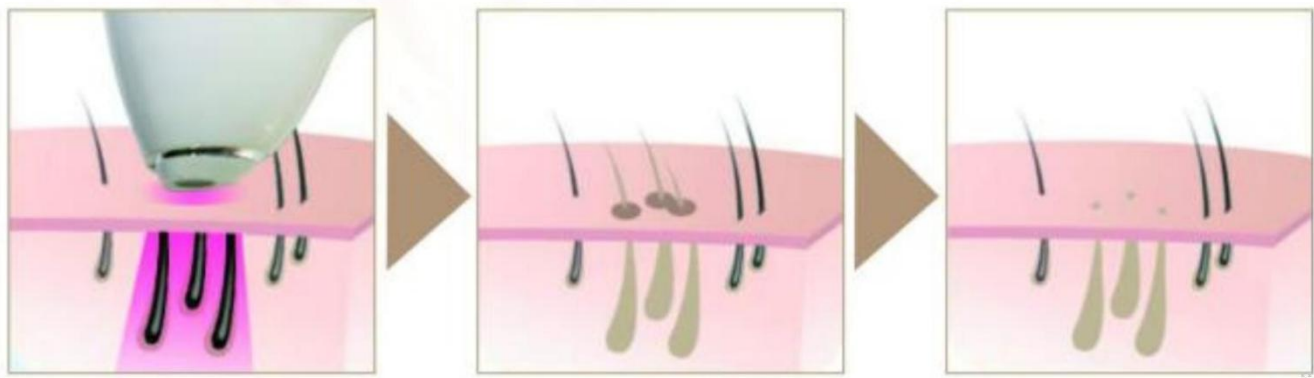
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## Product Description

This machine is Semi conductor Hair removal series ,which used the TEC and Cooling Technology of Sapphire Epidermis.The laser beam is based on high performance patented light shaping technology,which can be applied to white skin to light brown skin with dark black hair.

Before operating ,Please carefully read and strictly operate the machine according to guidelines in manual .

## Working Theory



Process:808nm laser acting on Skin - Melain of follicle absorbs laser caused heat increased sharply to distroy follicle - Achieving the effect of permanent Hair removal

Hair follicles and hair shafts are rich in melanin, which is distributed between hair bulb stromal cells. 。 Sem iconductor laser hair removal applicates specific wavelength laser,of 808nm ,a the target of melanin, selectively acting on the hair follicle, causing its temperature to rise sharply, destroying the hair follicle and its surrounding tissues, thereby destroying the hair growth center on which the hair grows.After absorption of laser light, melanin selectively destroys hairy cells due to photothermal effect, fundamentally terminates hair growth and achieves permanent hair loss reduction effect, not only avoiding damage to surrounding normal tissues, but also shrinkd the pore which always worrying people.. Making skin become smooth and flawless

The effective penetration depth of 808nm wavelength can reach the target tissue (hair nipple). The appropriate pulse duration ensures that the target tissue produces enough thermal damage and the surrounding tissue is almost unaffected; the proper amount of energy density guarantees sufficient time in a suitable time. The energy output is sufficient to damage the target tissue and the normal tissue is almost unaffected; suitable epidermal protection measures

ensure adequate damage to the target tissue, while the epidermis is almost unaffected, thus ensuring the safety of treatment;

On the basis of meeting the above design requirement ,808nm lase hair removal used the multi-pulse laser by special design to heat hair follicle to 48°C under the lower energy desity pattern,and keeping a period time(10Hz state) by sliding of treatment tool ,which makes stem cells lost their growth activity,thus achieving permanent hair removal.

## 755+1064NM+808NM Diode laser

Note: 755/1064 NM (Optional)

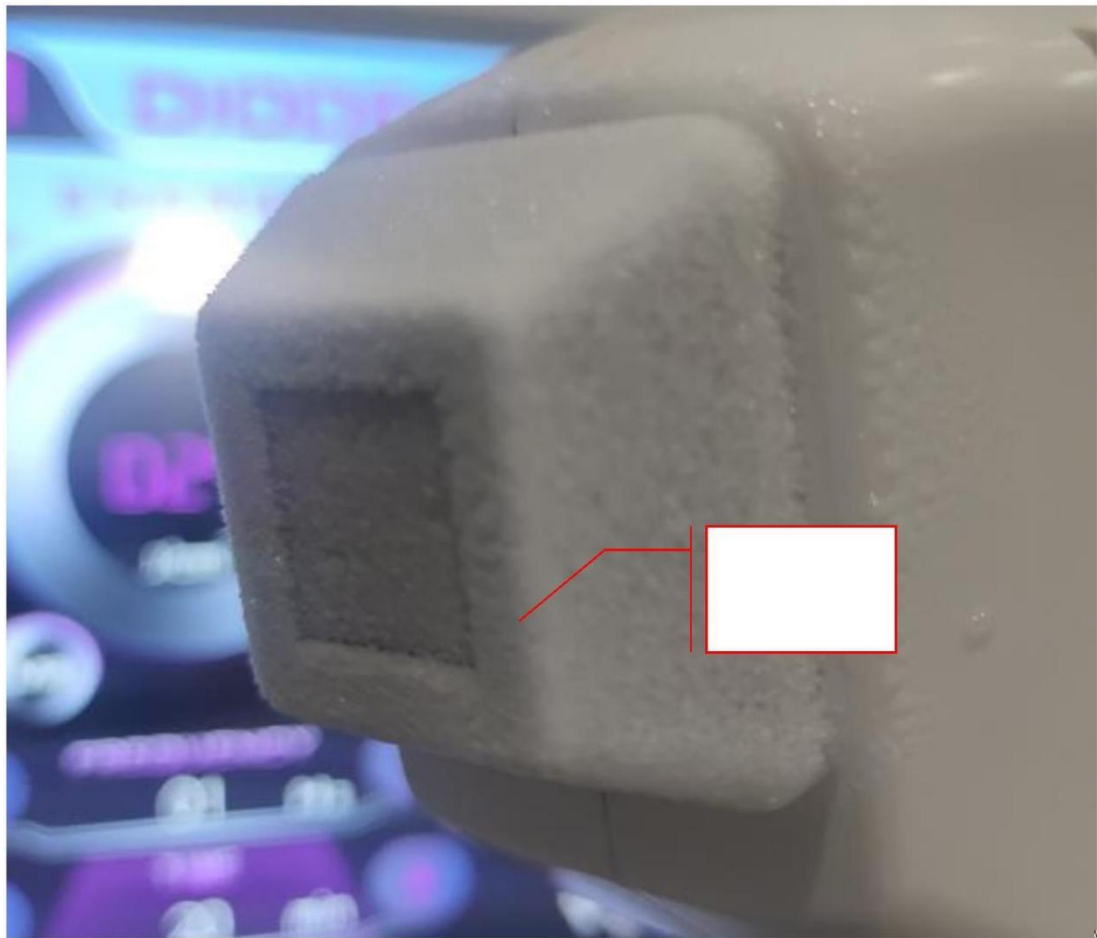
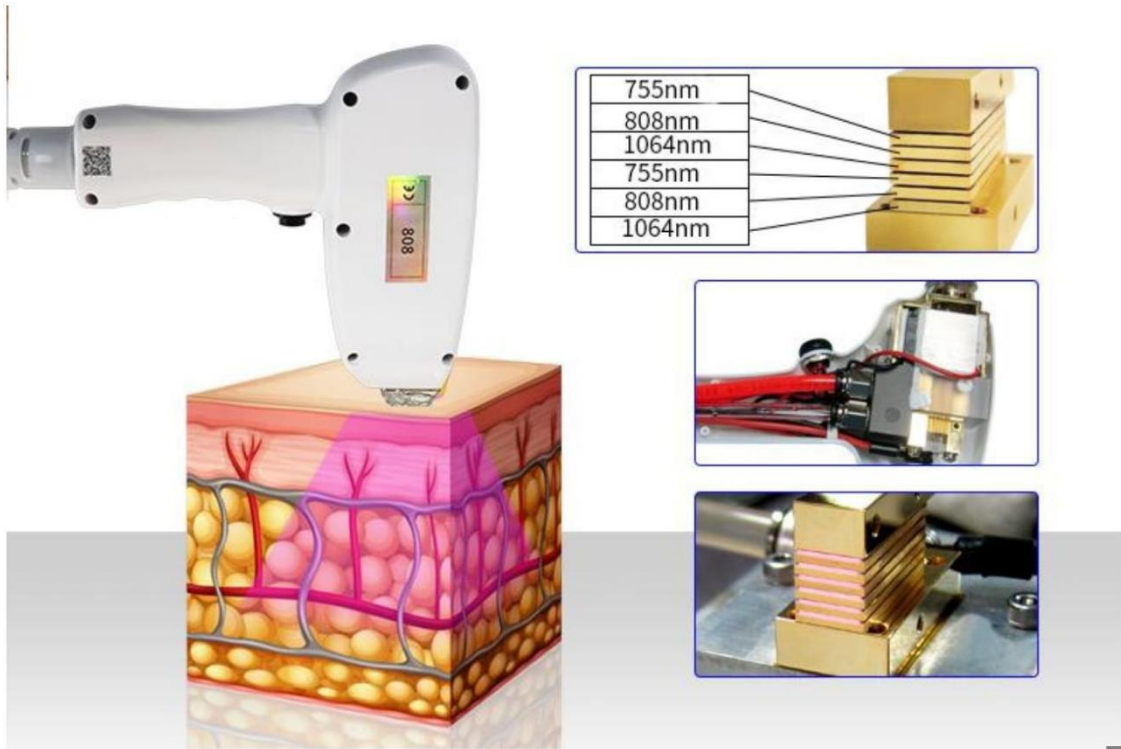
### Treatment range

Hair of various parts of the body, such as: the hairline of the face, lip hair; beard and body hair, chest hair; limb hair, bikini hair, etc.;

### Steps

1. Clean the treatment site, take photos before surgery, shave the hair with long hair, leave a little hair root, do not completely scrape it;
2. Select the appropriate wavelength and treatment head according to the treatment item, and select appropriate parameters according to the color depth of the customer's lesion tissue and the skin condition of the customer;
3. Select the corresponding skin color according to the customer's skin color on the operation interface, and then select the energy parameter according to the customer's pain and hair thickness, apply a gel at the treatment site, and operate with a sliding method;
- 4, the clinical end point is recommended: smell the hair burnt, the hair is rolled up, part of the hair roots are reddish;
- 5, after the treatment is completed, postoperative attention.





## Parameter setting:

Parameter setting reference		
Part	Intensity	Frequency
upper lip	20-30	1-2
Underarm	20-30	1-2
Limbs	30-45	2
Bikini	20-30	1-2
hairline	18-25	1-2
beard	18-25	1-2

**Note:** it is also based on skin color



## Technical parameter

Laser heat dissipation form	semiconductor refrigeration + water + air cooling constant temperature cooling
Laser type	Triple wavelenth diode laser 755nm+808nm+1064nm mixed wavelength
Laser wavelength	755nm+808nm+1064nm
Pulse width	0-600ms
Frequency	1Hz-10Hz
Max power	100J/ cm <sup>2</sup>
Light outlet	<b>10mm*10mm/ 15mm*15mm,20mm*20mm</b>
Cooling temperature:	-10°C to 10°C by cooled sapphire
Water flow	8L/min
LCD screen	10.4' Touch LCD
water tank	Built-in water tank
Input voltage	220VAC / 50-60Hz(110VAC can be customized ) IWith Macro Channel
Machine power	2000W
Handle shots	20,000,000 shots
Languages	With 8 languages optional.

## Safety considerations

According to the air transportation regulations, the water in the instrument must be emptied, and the user should add water after receiving the instrument; Make sure the tank is filled with distilled water. It is forbidden to turn on the machine without water, so the damaged bald head should be borne by the user. Mineral water or tap water is prohibited and deionized water (distilled water) is required.

Regular replacement of cooling water every week ( According to the quality of water quality, the water exchange period can be extended or shortened as appropriate.);

Check that the handle is good and check the protective sleeve of the handle to make sure the sleeve is not bent or pressed. If the casing is seriously compressed, it will cause water blockage or insufficient water flow, which is not conducive to the cooling of the instrument, and may cause problems.

Before using, first check if the line is connected correctly;

Make sure rated voltage conform to the voltage in your country

Treatment bald head should be placed on bald fixture when not in use. Hand-held operation should pay attention to protection, so as to avoid bald head falling.

After the machine starts, the water system will be circulated for one minute before operation, so that the water system can be completely circulated.

Treatment of the bald head is strictly prohibited to directly illuminate eyes

Cold gel must be added during operation. The treatment head must be lightly applied to the skin. Do not leave the skin during treatment to avoid burning the skin.

## [Warning instructions]

The strong light hazard prompt refers to the treatment of strong light emitted from the front of the bald head to illuminate the eyes, which is prone to danger; the operator is required to wear a protective goggle during operation and protect the operator from direct exposure to the human eye.

The instrument water tank must be filled with water before use.

When different functions need to be replaced or different parameter options need to be adjusted, the machine should be in standby state, and the function or parameter options can not be replaced in the ready state.

**[Declaration]: Low temperature area below 0°C**

If the instrument is not used for a long time or needs to change the site, the water in the interior (handle and main engine) must be emptied.

Try not to place the instrument for more than 3 hours in an environment below 0°C. It has been found that water below 0°C will appear to be tumbling up when moving. It is realized that the liquid water is below 0°C, and there will be rapid freezing during the movement. After the liquid water turns into solid ice, the volume increases rapidly, causing certain damage to components such as water



pipes, cooling water pipes, and laser waterways.

After the customer receives the instrument, it needs to be stationary for 24 hours in the room temperature of 23-26 °C before it can be used. If the equipment is not operated as required, and it is damaged due to the customer's own reasons, the company will only provide paid maintenance services. Because of the influence of temperature, we hope that customers will pay attention to it. And follow the requirements for routine maintenance.

## Operation instructions

### Instrument assembly

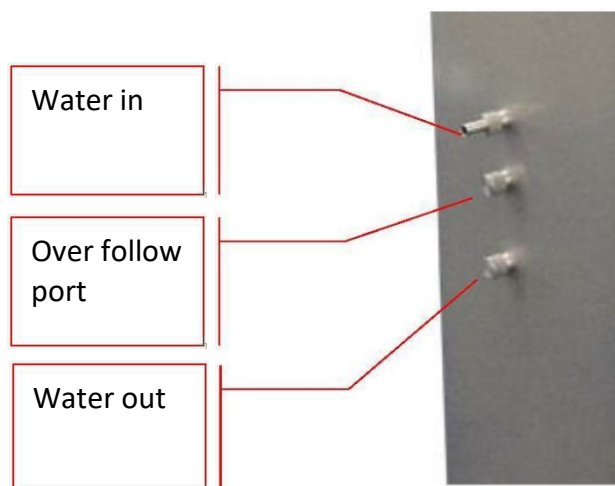
( Remarks: It is required to change the water once every 15 days. Clean the water tank when changing water, and ask to replace Watson's distilled water., The seriously consumption caused by water quality and changing the water not frequently)

1、 Handle installation: Align the joints first by the wire column, Then press the red buttons on the both sides to insert the connector , Finally, buckle the upper and lower locks.



2、 Add **distilled water**: Add distilled water from the injection port until there is water flowing out from the overflow port.

Donot close the water in hole during treatment  
Change the water per month



3、 Power Wire Installation: connect it well with the machine power port。



Screen introduction

一、 1、 connect well the power supply, Rotate the emergency stop

switch clockwise to bouncing



, Rotate the key

clockwise  , Start the animation automatically. Automatically jump

to the input password interface after playing the starter animation, as

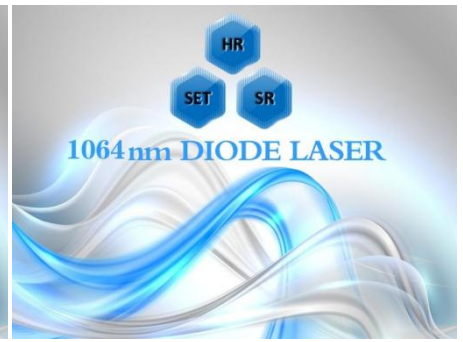
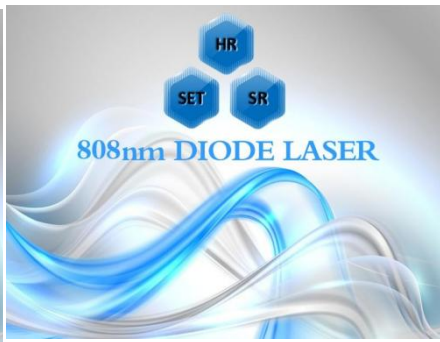
shown in the figure:

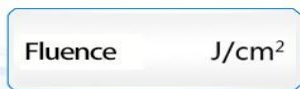


755nm for white skin (fine/ golden hair) hair removal.

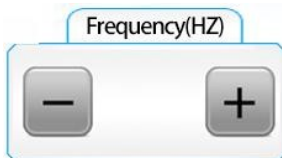
808nm for yellow (natural) skin hair removal.

1064nm for black skin (black hair) hair removal.





is for Energy adjustable.



is for frequency adjustable.



is for cooling intensity adjustable.



water temperature.indoor temperature.water flow rate.!



can choose for man or women.



is for shots

A、 B、 C、 D、 E are for the 5 parts of human body hair.

I, II, III, IV, V are for 5 kinds of skin

When the customer presses any mode, parameters can be set, including skin tone, location, energy, frequency, refrigeration strength, pulse

#### Iv. Alarm

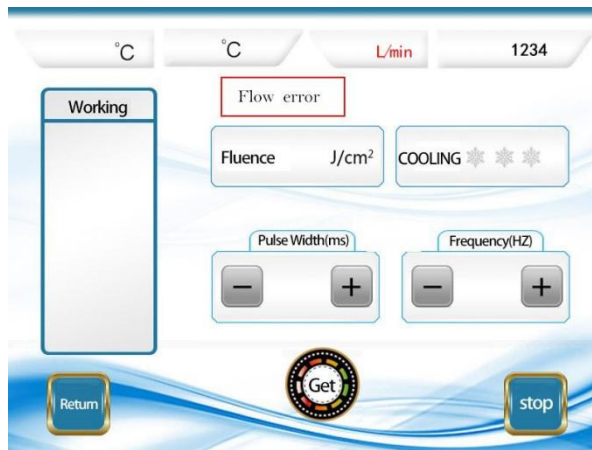
##### Water level Alarm



##### Water temperature Alarm



## Water flow Alarm



## Control panel temperature alarm



## Effect comparison diagram

### 808nm treatment before & after



## Treatment Notice and Contraindications to operation:

**Treatment Notice:**

The treatment of the hair removal needs experienced professionals. Don't use it if you have no experience for such kind of laser device.

Operators and patients must wear laser goggles to protect eyes from laser damage threat.

Please note that this is a high-energy laser device. If the patient feels very painful, stop and check whether the patient's skin has changed. Adjust to the energy that a patient can tolerate.

Skin color is very important. For white to light color, the power can be adjusted to 80%~100% to achieve good results. For light color to light brown, power can be lowered (e.g. 30%~60%).

Before treatment, the skin hair must be shaved off. Pulse width can be raised to protect the skin from burns. For dark skin, extend the treatment time to inject enough energy into the skin and hair follicles.

The handle pieces better to use SCANNING mode. It's faster.

Need to wait for several minutes before the cooling tip becomes cold.

The handle should be kept stuck to the skin. During treatment, the aluminum head at the edge of the handle can be used to reduce the temperature of the skin.

Never shot the laser pulses to eyes, or look at the light directly.

**Contraindications to operation:**

there is a history of keloid, allergies or scarring of the physique of the person does not recommend treatment;

suffering from hepatitis, syphilis, skin infection is not recommended for treatment;

blood diseases and coagulation mechanism disorders, menstrual period women do not recommend treatment;

preoperative administration of vascular dilatation drugs, anti-joint pain drugs are not recommended for treatment;

The use of 13-shun retinoic acid history within 6 months is not recommended for treatment;

During 6 weeks, treatment was not recommended for those who had used other methods (such as wax removal);

There is a heart disease, the device has the cardiac rhythm regulator and the pregnant woman does not recommend the treatment;

Those who have recently received sun exposure are not recommended for treatment;

Those with open wounds are not recommended for treatment;

Those with infected wounds are not recommended for treatment;

Patients with skin diseases and epilepsy are not recommended for treatment.

**Postoperative nursing care of**

1. after hair removal do not use scrub, alcohol, antiperspirant, bath should use warm water, hair removal area do not hot water hot wash and hard scrub;

2. Don't do sauna or swim in the swimming pool or beach within one week after hair removal.
3. Do not use cosmetics and skin care products containing fruit acid and A acid after depilation.
4. The depilated area may produce slight redness and swelling, sensitive skin, hot or itchy sensation. Ice compress can alleviate the pain if you feel pain.
5. Avoid sunshine as much as possible and use sunscreen when you go out.
6. Pay attention to the cleanliness and dryness of the depilation area. Do not wear clothes that are not clean or too tight to ensure that they are dry and breathable.
7. Pay attention to diet, prohibit smoking and alcohol, do not eat spicy stimulating foods, to supplement more vitamin C;

## Instrument Maintenance and Maintenance:

### I. Maintenance and Maintenance

1. Check and change water every week.
2. Instruments must be operated in an air-conditioning room. The indoor temperature should be lower than 28 degrees C.
3. Indoor temperature should not be lower than 0 degree C. Otherwise, ice will destroy the water pipe and handle of the instrument.
4. Clean the cold gel on the handle to ensure that there is no dust on the light spot of the handle.
5. Don't bend the protective sleeve of the handle by force, otherwise it may lead to wrong flow switch.
6. Do not insert and pull out the handle frequently. This may lead to leakage or poor power connection.
7. Don't shoot at will, or you may catch fire.

### II. Warranty Requirements

Instruments and handles should be protected during use. Note that the following conditions are not included in the warranty:

1. No water added during operation
2. Turn on without inserting a handle
3. Wrestling handle
4. Input Voltage Error
5. Other operational errors

## Many people who doubt. Below are some FAQ.

### ● Is it effective to take off once?

Laser hair removal usually takes three to six times to get rid of hair.

### There are two reasons:

1. The hair follicles are mostly bundled together in three groups and open to the



same pore. One hair in the pore is the hair growing from one of the three follicles under it. Therefore, one treatment can only destroy one hair follicle in one group.

2. Hair growth needs to go through growth period, regression period and rest period. Laser hair removal is effective in 75% of the growing hair, 25% of the regression period, and the rest period is almost ineffective.

- **Does it affect perspiration after depilation?**

Perspiration is mainly caused by small sweat glands, while small sweat glands are not in the hair follicles. At the same time, laser hair removal is to remove hair follicles and not harm sweat glands, so it does not affect human metabolism and perspiration.

- **Does the hair removal effect permanent?**

The current laser or glare therapy device has the function of permanent hair removal, so many people will misunderstand that the hair is not long after treatment, in fact, this permanent is not truly permanent.

The US Food and Drug Administration's understanding of permanent hair removal is that hair does not grow during a hair growth cycle after laser or intense light treatment. In general, hair clearance after treatment with multiple lasers or intense light can reach 90%, of course, its efficacy is affected by many factors.

- **Is there any damage to the skin caused by depilation?**

The skin of the human body is a relatively light-transmissive structure. The clinical experts of the beauty experts found that in the face of a powerful laser, the skin is simply a transparent cellophane, so the laser can penetrate the skin very smoothly through the skin, because there are many hair follicles. Melanin, so it can preferentially absorb a large amount of laser energy and eventually convert it into heat energy, so that the temperature of the hair follicle rises, and the function of destroying the hair follicle is achieved.

In this process, since the skin does not absorb laser energy relatively, or absorbs a small amount of laser energy, the skin itself will not be damaged.

- **Will the hair get blacker and darker?**

The hair remaining after treatment with laser or intense light becomes finer and the color becomes lighter. While shaving, plucking, hair removal cream removal, wax paper hair removal, etc., people who use these methods for a long time will gradually become thicker, harder and darker.

- **Does the hair removal effect the same for everyone and all parts?**

The number of hair removals depends on the location, the color and thickness of the hair, and the type of skin. Generally, the whiter the skin color, the darker and stronger the hair, the better the reaction, and the better the hair removal effect.

- **Can you sunbathe immediately after hair removal?**

After the hair removal, the skin surface protection function will be reduced, and it is easy to be sensitive. It should avoid further irritating the skin, so it is not suitable to take the sun immediately.

### **After sale instructions:**

**Please read the after-sales instructions carefully - attachment**