

MANUAL INSPIRPO+

**Alexandrite 755nm -Diode 808nm-
NDyag 1064nm -1600 watt**

Agent Company in Greece: MARKONIS I.K.E

Model name : MB808

CE number:2013-C628-EMC

**Water must be filled to the tank before starting the
machine.**

Replace the filter every 3 months



Working Principle

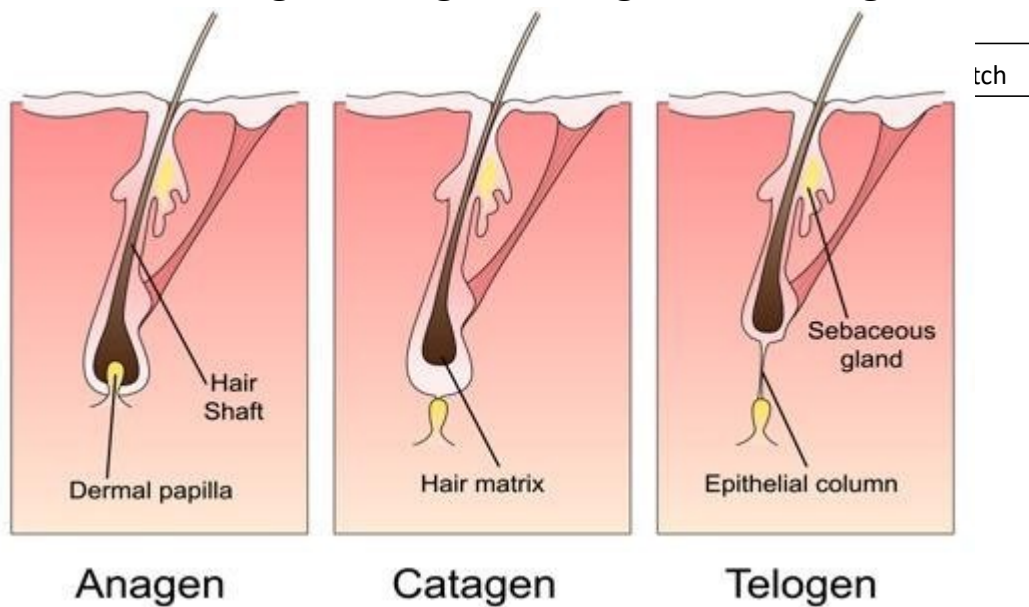
The instrument is used for any skin and parts for professional hair removal

The 755 + 808 + 1064 wavelength can stimulate the body for the skin layer, subcutaneous

hair all outside the organization, in order to achieve a one-time removal of the skin, not newborn.

In the working state, the laser head cooling capacity per second is about 300W, which the strongest hot laser cannot feel

Hair removal has 3 stages: Anagen, Catagen and Telogen.



When the hair is in Anagen, the treatment effect will be better.

Install the machine

- 1) Connect the handle to the machine and insert it firmly into the machine
- 2) Add pure water. Use a funnel to add water from the trough, about 5 to 7 liters, until the water flows out of the overflow hole.
- 3) Install the power cable and the foot switch, turn on the machine with Main switch behind the machine
- 4) Turn on the red button first, then turn on the key
- 5) After turning on the machine, listen for water sound inside the manipulation to confirm if the water cycle works well.
- 6) Press***** on the screen to reach the maximum, wait 2 minutes, and confirm if there is cooling in the head, if everything is correct, so you can do session now.
- 7) Apply cold gel on the patient's body, paste the treatment head on the skin to make session

It is recommended to shave the hair before treatment and keep the hair root approximately 1 mm.

After the treatment, return to the main system interface, then turn off the machine with the key.

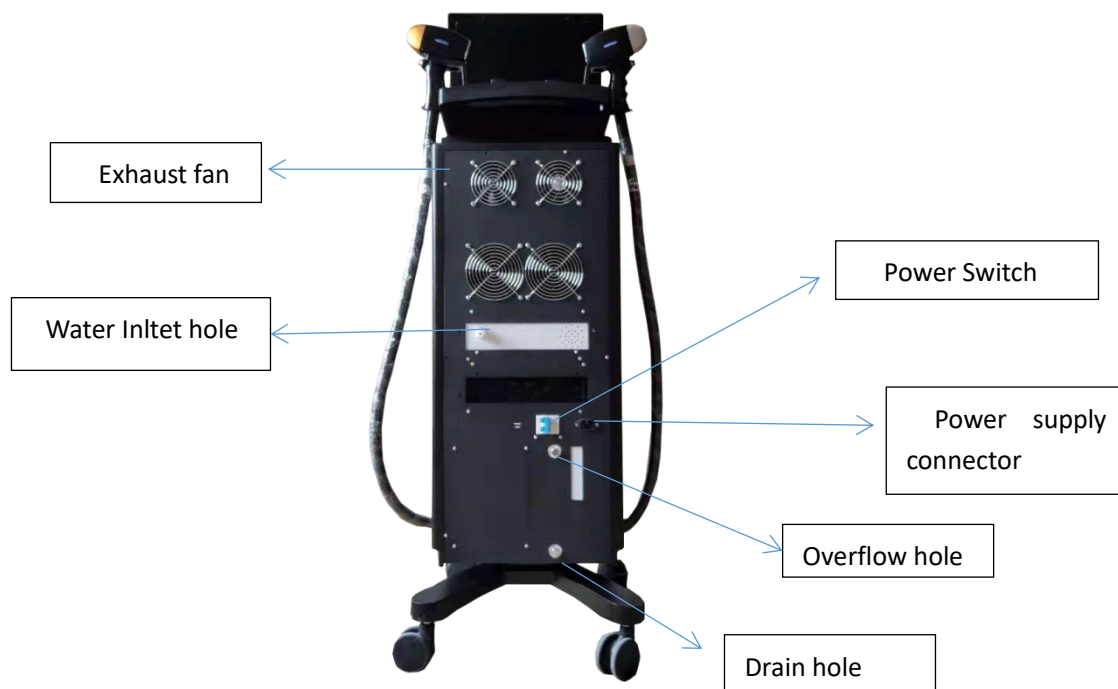
System illustration

About the machine

Control system: 8 chromatic touch screen, power switch, microcomputer control system, etc. to control the operation of the entire system;

Laser system: 755 + 808 + 1064nm semi-conductor laser technique;





2. Machine specification

Laser Type	Semiconductor mixed triple wave (Diode) laser
Laser wavelength	808nm+755nm+1064nm
Energy Density (Fluence)	0~150J/cm2 adjustable
Laser Bar	16 piece
Laser generator Power	1600W
Repetition Frequency	1Hz~10Hz
Cooling System	Water Cooling+Air Cooling
Beam Type	Collimated
Skin Cooling way	TEC + Sapphire
Laser Cooling Liquid	Distilled Water
Water Tank Volume	6L
Handle Piece Flow Rate	3.5~4.5L/min
Operation system	15.6 inch color touch screen
Water pump	24V
Machine power	3000W

3.Operation

1).Turn on the machine

Firstly, please check if the emergency stop is in the pop-up state. If not, turn the

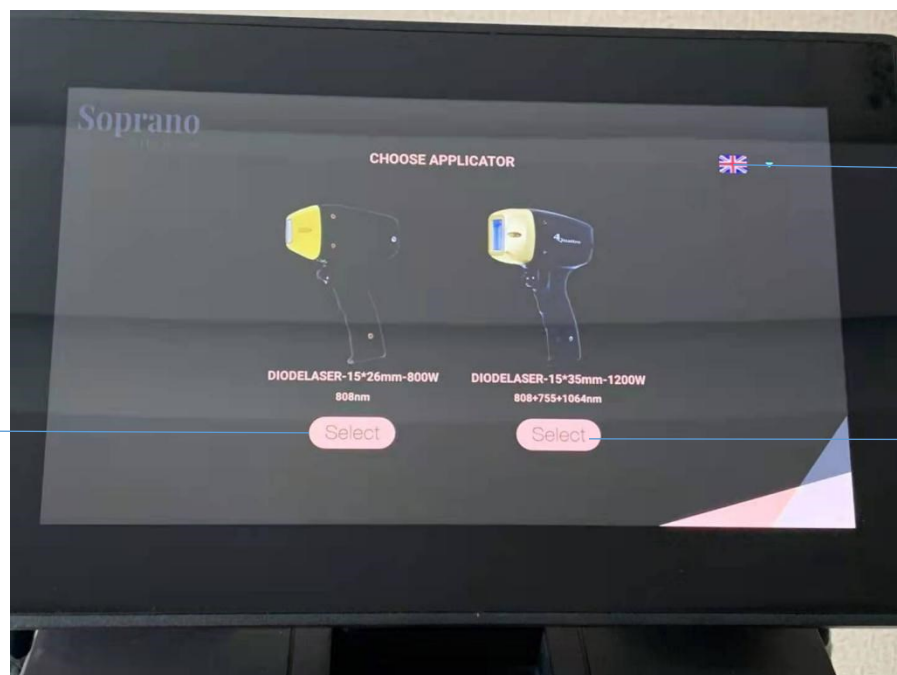
button in the direction indicated by the icon to make the emergency stop pop up.
Secondly, please wait about 2 minutes and check if there have water through the laser handle. If you can hear the water running in the laser handle, then turn the key switch.
The machine will be turned on.

2). Turn off the machine

First turn off the key switch. Wait for 2 minutes, then turn off red emergency button

Note: When you change the handle, please turn off the machine or back to initial operation interface. It is normal that the machine sound an alarm during you change the handle.

4.Interface Introduction:



Choose left handle

Language: English,
Russian, German,
French, Spanish,
Turkish, Arabic

Choose right handle

Treatment mode

SHR treatment mode



Treatment Size

Skin type

Treatment parts

go back to the
home page

Fluence:the energy of a laser pulse divided by the area

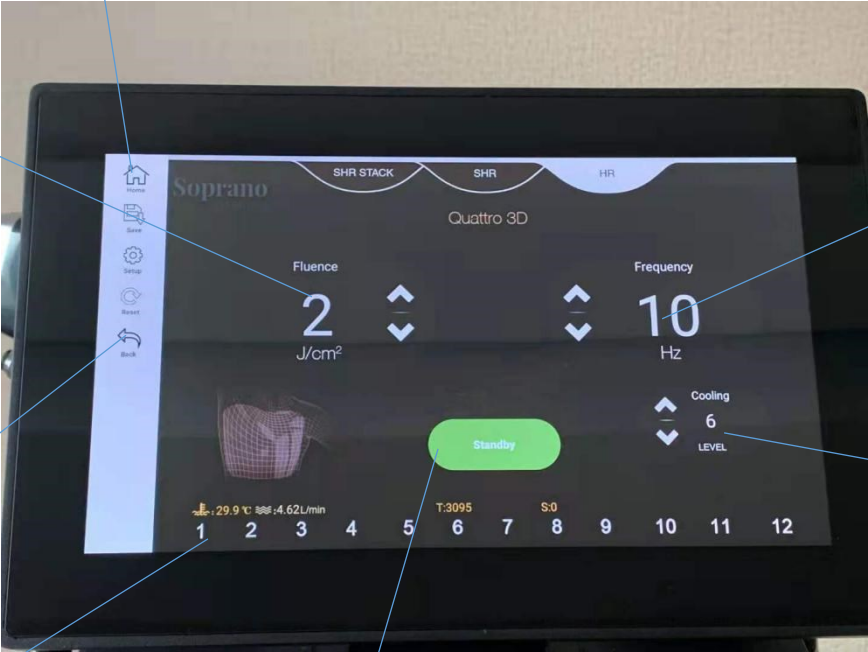
go back to the last page

Save treatment parameter

Work the handle

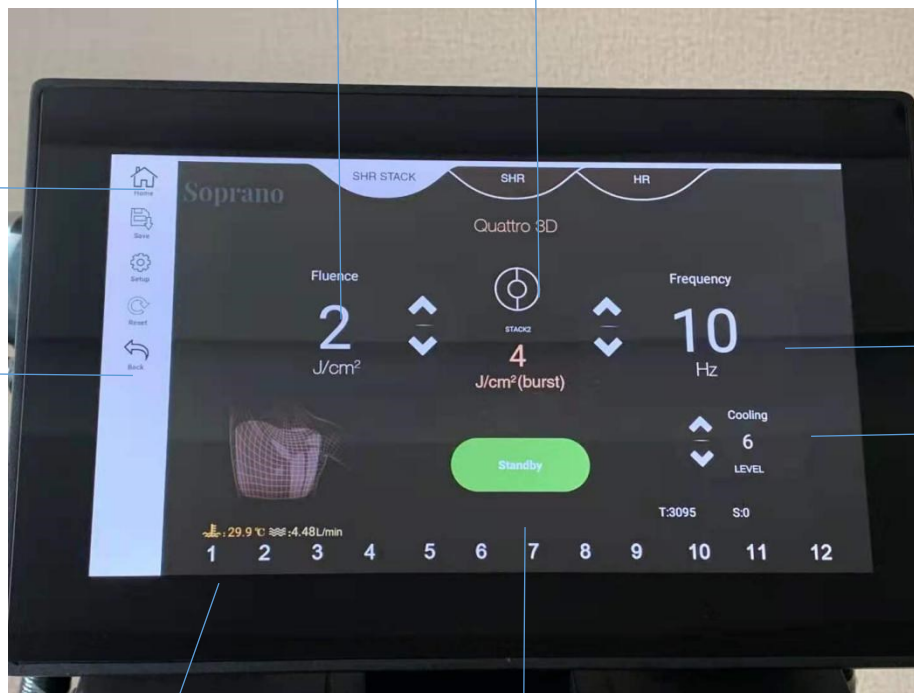
Frequency

Cooling



Fluence

Stack Energy



go back to the home page

go back to the last page

Save treatment parameter

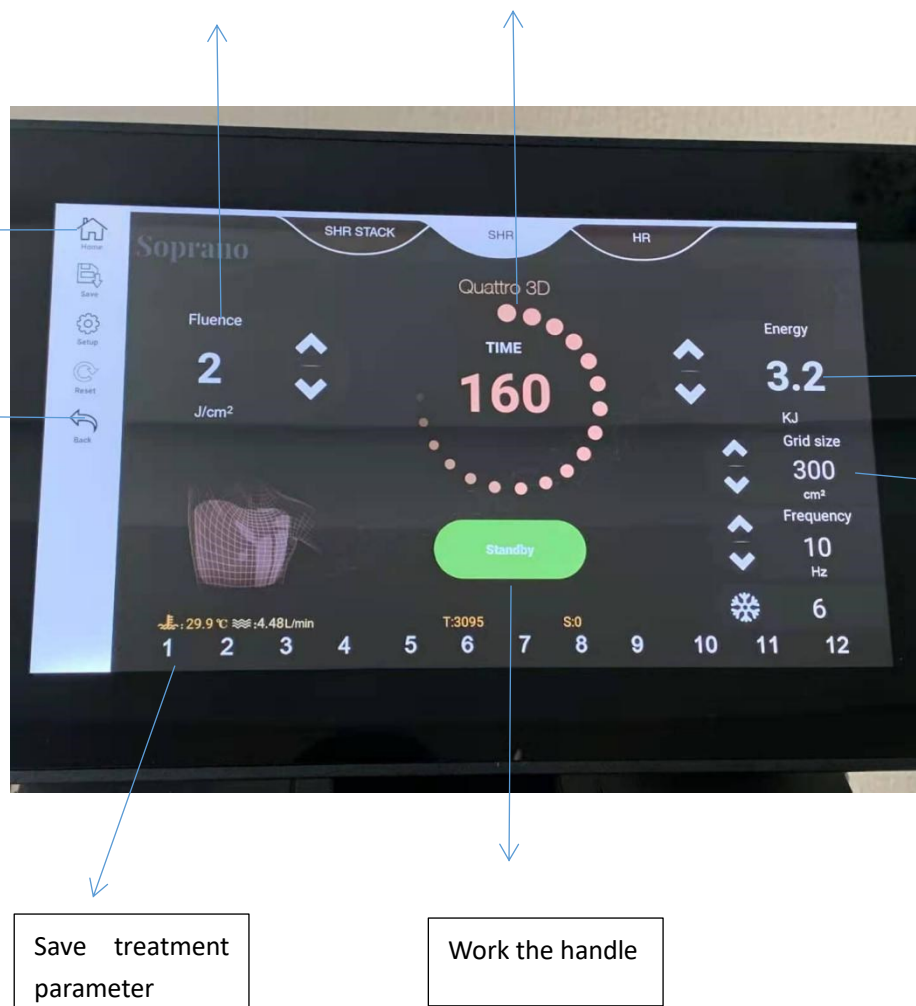
Work the handle

Frequency

Cooling

Fluence:the energy of a laser pulse divided by the area

Shot Time



5. Clinical Operation

1).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). Notices: Before hair removal

- a) Wear operator glasses
- b) Operator should have got through training courses offered by the supplier.
- c) Clean the treatment area thoroughly, and shave the hair. This is very important, because the visible hair will absorb the laser energy to damage the skin surface and more serious, it will also damage the laser handle, and also the bad smell.
- d) Cover the cooling gel in the treatment area, about 2-3mm.
- e) Do not pull out hair in the way like waxing prior to use Diode Laser 808nm within 6 weeks; or the laser therapy will not give best results.
- f) 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 hydroquinone.
- g) Try to avoid sun exposure to decrease rate of side effects.
- h) It is good to take test treatment on small skin site first and watch for 15 minutes before taking large area treatment.
- i) For the patients with sensitivity to pain, please use anesthesia like 5% EMLA cream, and cover the food wrapper for 1~2 hours.

3). Notices: During hair removal

Make sure the handle and treatment area touched well; before shoot, the handle needs to touch the skin for about 0.25 to 0.5s;

It's better for the handle to be applied certain pressure to the skin when do the treatment; at first, this can drive part of blood, to avoid the hemoglobin to absorb the laser energy; secondly, this can reduce the distance between the hair follicle and the skin surface to improve the treatment result.

Make sure the clean of the handle head, the dust will absorb the light to produce the heat, which will improve the damage of the skin surface and more painful.

No too many repeated shots, because this may damage the skin; not too wide among the shots, which will influence the treatment result.

4). 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 3-6 months after hair removal, especially in summer, to avoid the

pigment changes.

1.HR means hair removal, it is hair removal with fixed point mode. You can select 10 zones and 5 skin types to do hair removal.HR mode working as all type of Laser.

Cooling: select the maximum.

Energy: Select the Energy according to the patient's feeling, The client can feel a slight heat on the skin and a slight tingling, which is the best.

Ready: Start the work Standby: Stop the treatment Sessions

Thick and deep hair 4-6 sessions, every 3-4 week a session. Fine and light hair 4-8

2.SHR(Super hair removal), Hair removal with scanning Mode, You can select 5 zones and 5 skin types to do hair removal.

Cooling: select the maximum.

Frequency: Selection 3-5

Energy: Select the Energy according to the patient's feeling, use from low to up the energy (joules) if need to change the energy who will give us automatically the SHR Smart system of the SHR Mode. The client can feel a slight heat on the skin and a slight tingling, which is the best.

Ready: Start the work Standby: Stop the treatment

Back to the main interface



Sessions

Thick and deep hair 4-6 sessions, every 3-4 week a session. Fine and light hair 4-8 sessions, every 3-4 week a session.

3.SR(can also do Skin rejuvenation)Have 3 select Modes on the Laser Handle , Skin rejuvenation, It can select 5 zones and 5 skin types to make hair removal.

Cooling: select the maximum.

Energy: Select the Energy according to the patient's feeling, use it from 40j, The client can feel a slight heat on the skin and a slight tingling, which is the best.

Operation steps

After machine is installed, different treatment parameters can be set according to the different constitution and skin color of the patient.

The specific steps is as follow:

1, A: Cut the hair

B: Clean the hair removal area with alcohol C: Apply gel 0.1mm to prevent skin burns.

D: Turn on machine and enter for work

2, suggested parameters

The following recommendations are for reference only and should be adjusted by customers in different regions.

Method 1: Point Treatment(HR)

Set low frequency 1 Hz while setting a higher energy. The machine have setted the factory parameters, doctor could adjusts according to different situations, but do not adjust the frequency, just adjust the energy, in this mode, the pulse width will be automatically adjusted when you adjust the energy.

500W, 300W energy plus + 80% pulse width

Man	White Skin	Yellow Skin	Brown Skin	Black Skin
Beard	Energy: 30J/cm2 Pulse Width : 92ms Frequency: 1Hz	Energy: 28J/cm2 Pulse Width : 86ms Frequency : 1Hz	Energy : 27J/cm2 PulseWidth : 85ms Frequency : 1Hz	Energy: 25J/cm2 Pulse Width80ms Frequency: 1Hz
Armpit	Energy: 34J/cm2 Pulse Width : 100ms Frequency: 1Hz	Energy: 31J/cm2 Pulse Width : 88ms Frequency : 1Hz	Energy : 30J/cm2 PulseWidth : 95ms Frequency : 1Hz	Energy: 28J/cm2 Pulse Width86ms Frequency: 1Hz
Hairline	Energy: 25J/cm2 Pulse Width : 80ms Frequency: 1Hz	Energy: 23J/cm2 Pulse Width : 70ms Frequency : 1Hz	Energy : 22J/cm2 PulseWidth : 68ms Frequency : 1Hz	Energy: 20J/cm2 Pulse Width48ms Frequency: 1Hz
Bikini	Energy: 27J/cm2 Pulse Width: 76ms Frequency: 1Hz	Energy : 25J/cm2 Pulse Width: 80ms Frequency: 1Hz	Energy : 24J/cm2 PulseWidth : 70ms	Energy: 23J/cm2 Pulse Width: 70ms Frequency: 1Hz

			Frequency : 1Hz	
Thigh	Energy : 35J/cm2 Pulse Width : 100ms Frequency: 1Hz	Energy : 32J/cm2 Pulse Width : 95ms Frequency : 1Hz	Energy : 31J/cm2 Pulse Width : 90ms Frequency : 1Hz	Energy: 30J/cm2 Pulse Width: 90ms Frequency: 1Hz
Calf	Energy: 30J/cm2 Pulse Width : 90ms Frequency: 1Hz	Energy: 28J/cm2 Pulse Width : 86ms Frequency : 1Hz	Energy : 27J/cm2 PulseWidth : 90ms Frequency : 1Hz	Energy: 25J/cm2 Pulse Width80ms Frequency: 1Hz

Woman	White Skin	Yellow Skin	Brown Skin	Black Skin
Beard	Energy: 32J/cm2 Pulse Width : 110ms Frequency: 1Hz	Energy: 30J/cm2 PulseWidth : 100ms Frequency: 1Hz	Energy: 28J/cm2 Pulse Width:95ms Frequency: 1Hz	Energy: 26J/cm2 Pulse Width90ms Frequency: 1Hz
Armpit	Energy : 25J/cm2 Pulse Width: 110ms Frequency: 1Hz	Energy: 33J/cm2 Pulse Width: 100ms Frequency: 1Hz	Energy: 32J/cm2 Pulse Width:90ms Frequency: 1Hz	Energy: 30J/cm2 Pulse Width90ms Frequency: 1Hz
Hairline	Energy : 26J/cm2 Pulse Width: 85ms Frequency: 1Hz	Energy : 25J/cm2 Pulse Width: 80ms Frequency: 1Hz	Energy: 23J/cm2 Pulse Width:70ms Frequency: 1Hz	Energy: 20J/cm2 Pulse Width48ms Frequency: 1Hz
Bikini	Energy: 28J/cm2 Pulse Width: 80ms Frequency: 1Hz	Energy: 26J/cm2 Pulse Width : 90ms Frequency: 1Hz	Energy: 25J/cm2 Pulse Width:80ms Frequency: 1Hz	Energy: 23J/cm2 Pulse Width70ms Frequency: 1Hz
Thigh	Energy: 35J/cm2 Pulse Width: 100ms Frequency: 1Hz	Energy: 33J/cm2 Pulse Width : 100ms Frequency: 1Hz	Energy: 22J/cm2 Pulse Width:90ms Frequency: 1Hz	Energy: 30J/cm2 Pulse Width90ms Frequency: 1Hz
Calf	Energy : 32J/cm2 Pulse Width: 95ms Frequency: 1Hz	Energy : 30J/cm2 Pulse Width: 90ms Frequency: 1Hz	Energy: 28J/cm2 Pulse Width:90ms Frequency: 1Hz	Energy: 26J/cm2 Pulse Width85ms Frequency: 1Hz

Method 2: Sliding treatment

Set frequency 6HZ with lower energy. When using this treatment, the therapist does not need to adjust the parameters, just choose the number of treatments and time, depending on the patient's feelings.

500W, 300W energy plus + 80% pulse width

Man /Woman	White Skin	Yellow Skin	Brown Skin	Black Skin
Parameter	Energy: 20J/cm2 Pulse Width: 50ms Frequency: 6Hz			
Beard	Sliding Speed : 3cm/s Treatment time : 0.5min/5cm2	Sliding Speed : 3cm/s Treatment time : 0.5min/5cm2	Sliding Speed : 5cm/s Treatment time : 0.5min/5cm2	Sliding Speed : 5cm/s Treatment time : 0.5min/5cm2
Armpit	Sliding Speed : 3cm/s Treatment time : 0.5min/5cm2	Sliding Speed : 3cm/s Treatment time : 0.5min/5cm2	Sliding Speed : 5cm/s Treatment time : 0.5min/5cm2	Sliding Speed : 5cm/s Treatment time : 0.5min/5cm2
Hairline	Sliding Speed : 2cm/s Treatment time : 0.5min/5cm2	Sliding Speed : 2cm/s Treatment time : 0.5min/5cm2	Sliding Speed : 1cm/s Treatment time : 0.5min/5cm2	Sliding Speed : 1cm/s Treatment time : 0.5min/5cm2
Bikini	Sliding Speed : 2cm/s Treatment time : 1min/5cm2	Sliding Speed : 2cm/s Treatment time : 1min/5cm2	Sliding Speed : 1cm/s Treatment time : 1min/5cm2	Sliding Speed : 1cm/s Treatment time : 1min/5cm2
Thigh	Sliding Speed : 3cm/s Treatment time : 1min/5cm2	Sliding Speed : 3cm/s Treatment time : 1min/5cm2	Sliding Speed : 5cm/s Treatment time : 1min/5cm2	Sliding Speed : 5cm/s Treatment time : 1min/5cm2

Calf	Sliding Speed : 3cm/s Treatment time : 1min/5cm ²	Sliding Speed : 3cm/s Treatment time : : 1min/5cm ²	Sliding Speed : 5cm/s Treatment time : 1min/5cm ²	Sliding Speed : 5cm/s Treatment time : 1min/5cm ²
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Note: Excessive energy transfer can cause thermal damage to skin, which can lead to skin hypertrophy, atrophy or abnormal pigmentation.

Not recommended to treat hair that is lighter than the surrounding skin.

Treatment course:

1, according to the hair growth cycle and treatment of the difference, it is recommended to take 28 days as a course of treatment, do 4-6 courses.

The patient can report the treatment effect to the clinic after one month of treatment.

Pay Attention :

Strictly protect the patient's eyes during treatment

We do not recommend a one-time treatment of areas larger than 40cm². If the area to be treated is too large, please treat the area multiple times.

The treatment site should be lightly attached to the treatment site,

but the treatment site should not be stressed.

Wipe the light guide crystal clean with soft cotton dipped in alcohol

Trouble Maintenance and Diagnosis

Warning: After turning off the device for two minutes, you can end the power line. otherwise, it can harm humans or the machine itself.

Protection maintenance

The preventive service must be taken by our authorized personnel.

To clean Laser part

After each treatment, the laser handpiece will be cleaned by the dry towel

Chapter 5 Clinical Management

Principle and Functions Treatment

The instrument is used for any skin and parts for professional hair removal

The 755 + 808 + 1064 wavelength can stimulate the body for the skin layer, subcutaneous hair all outside the organization, in order to achieve a one-time removal of the skin, not newborn.

In the working state, the laser head cooling capacity per second is about 300W, which the strongest hot laser cannot feel

Contraindications:

- 1) Pacemaker and defibrillator in the body;
- 2) With skin diseases or cancer history;
- 3) With another serious illness, such as heart disease or diabetes;
- 4) The gestation period and the chest;
- 5) With thermal stimulus history;
- 6) The opening of the wound;
- 7) Light hypersensitivity;
- 8) Skin tanner due to solarization;

Notes

Preparation stuff:

Camera, facial treatment cleanser, essential oil for conditioning and alcohol swab

Preparation before treatment:

To illustrate the function of the equipment and the feeling during the treatment for the client; Do not use hormonal medications two weeks prior to treatment

Do not put metal;

Take the photo to keep the record; Pay attention to the backlight;

Take photos from three angles: left, right and front

Treatment procedures:

- 1: The curator must wear laser goggles.
- 2: Participants must wear the laser protection cap.
- 3: Place essential oil for the conditioning of the skin to be treated;
- 4: Start-up of equipment and adjust parameters;
- 5: Treatment

Treatment skills:

During the treatment, usually ask the customers' feeling, strength, heat received and comfort;

To see if the skin turns red and adjust the parameters and energy according to the response of the customers; You can reduce parameters when you try ribs and other thin skin.

Precautions in the operation

1) Tighten hair that is too long before hair removal (the best hair removal effect is 2 ~ 3 mm), avoiding the hair removal process, because the hair absorbs too much energy and burns the skin.

2) Forehead --- The skin is very thin, near the bone below, use as little energy as possible, there will be pain when

removing hair;

3) cheeks, nasal folds --- facial soft tissues, easy to attach,

can withstand more energy;

4) Upper lip: sensitive to pain;

5) Chin --- incomplete soft tissue with high curvature, hair

removal energy should not be too high;

6) For safety reasons, the upper part of the bone always uses

less energy (for example, the forehead);

7) Keep the handle operating head close to the skin surface to

ensure that the skin can fully absorb light and heat;

HR mode When repeating the same area, at least 30 seconds

or more between every two operations.

Effective operational characteristic

a) Deep rough hair: there are red papules around the rough hair follicles (usually disappear in 12 hours). Use the tweezers to gently pull the hair. When the hair is removed, the client has no pain. In general, some new hair will grow in a week. After 3 weeks, it was discovered that freshly grown hair was significantly smaller and thinner than before.

b) Shallow hair: there is a sensation of heat around the hair follicles

(usually disappears in 1 hour, or you can use the cold method to cool down). In general, the hair will obviously be reduced in 3 days after completion, and a new part will be found within 1 week. Hair, after 3 weeks, the amount of hair is significantly less than before hair removal, and freshly grown hair is thin and short.

When a laser pulse is emitted, some clients have varying degrees of discomfort: some people feel like being bitten, others are like an elastic band or a burning sensation for an hour after hair removal.

Precautions after operation.

- 1) If blisters or ulcers form on the skin after using the machine, apply it with an antibiotic ointment or an ointment for burns.
- 2) Customers should use double-fold sunscreen and moisturizing skin care products for care within a month after using the machine.

The treatment area and the surrounding skin may become fragile. Do not apply makeup and rubbing when this occurs (may cause skin damage)

