

Yag Laser Tattoo Removal

USER MANUAL

MODEL: Yinhe-V18

Please read this manual carefully
before operating this machine.
Retain it for future reference.



For your safety

- 1.You must fill the water (about 5L distilled water or purified water) to this machine before open it,or it will easily make it broken.
- 2.Keep any reflecting things out of the operating room,such as mirror,watch,jewellery...
- 3.Operator and the patient must wear the professional protective glasses and goggles.
- 4.Any intense pulsed light without correct using can injure the body. In the course of working,the device will produce high pressure.So every operator should keep warning, operating according to this introduction.
- 5.Patient:Well-trained operator and appropriate disposal treatment room is very necessary and important.Moreover,the patient should also know the treatment theory and wear the professional protective eyepatch, protecting eyes from burning.
- 6.Operator:During the treatment, it's possible to touch the intense pulsed light,so it's necessary to wear the professional protective glasses.
- 7.Treatment room: the room must clear mark "using intense pulsed light"
- 8.Except the authorized mechanic, anyone have no right to examine and repair the machine,especially the inside of device that including electrical source, cooling system,optical organs and treatment head.Notice the dangerous high pressure inside.
- 9.Make sure whether it's accordant to your resident voltage or not.
- 10.Maintenance must after turning off the device and drawing out the electrical source line.Or it's most possible to injure people and damage the equipment.
- 11.Keep the filter and the probe clean.
- 12.Stop turning on when finding slack from treatment head. If turning on, close right now.
- 13.Over light energy could burn skin, that results in atrophy or pigment deposit.
- 14.Do not directly see the intensified pulsed light during treatment,even wearing the protective glasses and eyepatch.
- 15.Do not allow to point the treatment handpiece to the air.Generally,hang it in the bracket of the machine.
- 16.High pressure inside the equipment. It's possible to deposit electricity in some parts even after switching off. So it's not allowed to open equipment beyond the authorized mechanics.
- 17.When maintaining, please close power, cover board, and observe in person.
- 18.Total weight is a little heavy, so please take care when moving.
- 19.The temperature will raise after absorbing light energy, so please take actions to reduce the flammable risk on treatment parts or around area.
- 20.Do not use ethanol, acetone or other flammable things on skin before treatment.If necessary,please use soap or water.
- 21.When lusterizing the treatment head or other parts in ethanol, please wait till dry

Important safety information



Danger

The following instructions contain important safety information, which may lead to death or critical injury if not followed.



Warning

Injury may occur when the following instructions are not followed.



Restriction

Refrain from administering if the person or the **area** to be treated is affected by one of the following condition.



Danger

The following instructions contain important safety information, which may lead to death or critical injury if not followed.



Be sure to keep the metal pins of the power plug free from dust or moisture. When cleaning, use a cloth-cleaner.



Using multiple products on a single outlet is not recommended.



Keep the unit and the power plug away from heaters or stoves.



Do not pull the power plug by force or with wet hands.



Neither bending the power cord nor placing heavy objects on the power plug is recommended.



The unit is not designed for cleaning with water. Always clean with a dry cloth-cleaner before storing the unit.

***Do not operate the product in elevated or wet places.**

***Ensure that the unit is turned off when connecting or disconnecting the power plug.**

***Do not leave the unit connected to the power when not in use over a long period of time.**

***Disconnect from the power supply when cleaning the unit.**



Warning

Injury may occur when the following instructions are not followed.



Always keep the hand piece in contact with the skin when the beam is on.



Do not beam direct on to unshielded eyes. Do not use the unit to eyes or eyelids.



The unit is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of **experience** and **knowledge**, unless they have been given instruction.



Restriction

Refrain from administering if the person or the **area** to be treated is affected by one of the following conditions.



A person whose activity was outdoors under strong sunlight, or who has received tanning treatment within the last 4 weeks.



A person whose skin color is black, or dark brown should use lower energy and parameters.



Pregnant women or the breast during the breast-feeding period.

Do not use to this area....

 **Skin area with tattoos**

 **Skin affected by diabetes or other skin diseases.**

Who is forbidden?

1. People who are allergic to light.
2. Pregnant women, Diabetes suffers, cardiac patients, people with Hypertension, Epilepsy and skin cancer.
3. People with cardiac pacemaker and defibrillator.
4. People whose treatment parts are damaged.
5. People are just back from the beach. The skin is very weak after the exposure in the sun in this time.
6. People have taken some photosensitive food or drug recently.

Important Information

This user's guide contains important information on the use and operation of this machine. Please read all the information carefully for optimal performance and to prevent any damage to or misuse of the machine. Any changes or modifications not expressly approved in this user's guide could void your warranty for this equipment.

Overview

❖ Accessories

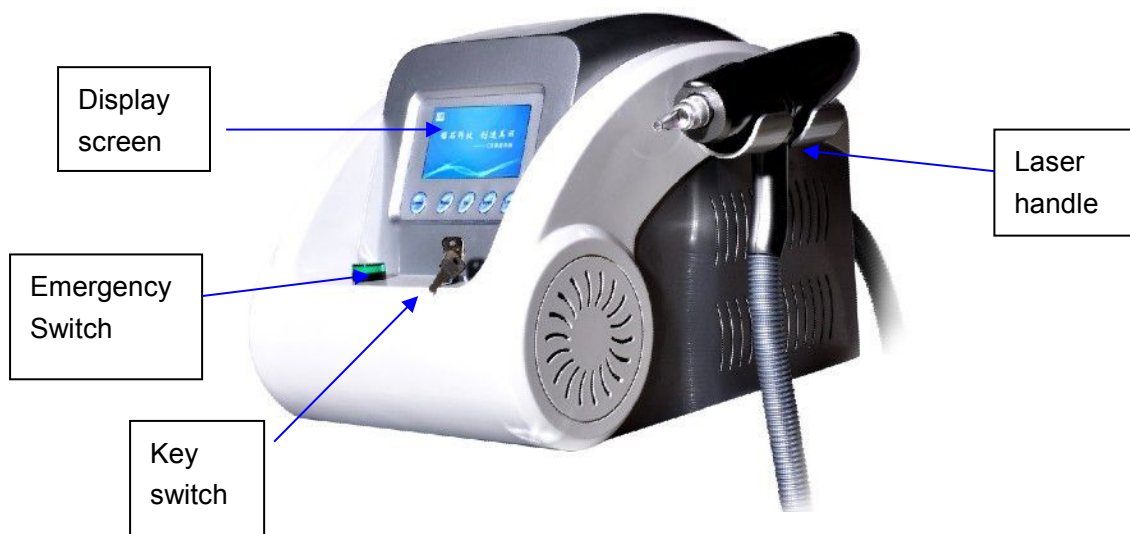
Check to make sure you have all parts shown below.



Remarks:

- 1.Power line:to connect machine
- 2.Foot switch:for operation
- 3.Treatment handpiece:for treatment
- 4.Trips:part of the treatment head
- 5.Protective glasses:for operator; Protective goggles:for patients
- 6.Keys:main switch to open and close the machine
- 7.Watering bottle:for filling water to the machine

Part of the machine
Front of the Machine



Picture one

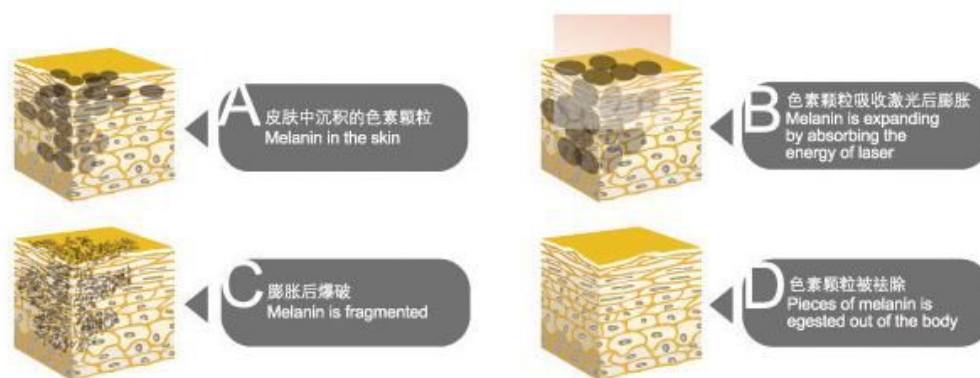
Pay attention:

1. Place the device on the level ground. (If there's water on the surface of the device, please wait till dry then input water to test). Keep 22°C-28°C temperature and the humidity not more than 20% in the treatment room.
- a. If there's something hurt suddenly happened, press down the **Red button** (Emergency switch) at once. **If you do not move the machine to long distance place, do not press down the emergency button.** When you finish the treatment, just close the key switch and pull out the power line rear of this machine.
3. **Gently** turn the **Emergency switch** (red button) towards right before opening key switch. Usually the button will bounce at once, if not, you should continue to revolving the red button until it's absolutely bounce.

1.1

Principle of Treatment

Laser uses the high energy laser beams emitted by a sapphire to effectively smash pigments inside pathologically changed tissues, i.e. light explosion and photo-thermolysis principle: the high energy produced by the laser is emitted instantly, so that laser beams with a fixed wavelength can penetrate the epidermis into pathologically changed tissues within a certain working time (12ns), and quickly smash corresponding pigments, which expand rapidly and explode instantly due to extreme heat. A part of the pigment cluster (on the surface of the epidermis) pops out of the body, a part of the pigment cluster (inside basal tissues) are smashed into fine particles that can be devoured by macrophages, while some dirt and cuticle remaining on skin epidermis are smashed and decomposed by the principle of active carbon explosion, then devoured and digested by macrophages, and finally expelled out of the body via the circulation of the human lymphatic system, thus the pigments in the pathologically changed tissues will fade out and disappear gradually. And yet no damage will be done to the normal skin tissues in the vicinity since they do not absorb laser beams with a certain wavelength.



b. Applications:

- 1) Removal of eyebrow line, eye line, lip line...etc
- 2) Removal of tattoo (red, blue, black...etc)
- 3) Clearance of speckle, black naevus, fleck, age spots...etc
- 4) Removal of vascular lesion and spider vessel...etc



c. Feature and Benefits:

- 1) Innovative in laser technology, strict in technical detection, precise in manufacture.
- 2) Special designed cooling system ensures constantly working.
- 3) New fashionable outlook design.
- 4) Portable and aseismatic, convenient for transportation.
- 5) No injury to normal tissue.
- 6) Remove pigmentation without side effects or scar.
- 7) Accurate infrared indication light makes the spot position more accurately and increases the utilization of light point

A Operating Instructions

When the instrument is turned on, the welcome screen (Figure 1) will show up. Press any button to enter into the treatment screen:

Screen Display:



After having entered into the treatment screen, the operator can press the Frequency

button and Voltage button to adjust working frequency and working voltage. Press the first button to the left (Trigger). When the xenon lamp is successfully turned on, the button status indication will show an "inverse effect". Press the Working button to enable working, an "OK" symbol will show up in the status indication zone. Then, the operator can start working by stepping on the foot pedal. During working, a pulse count is added whenever a pulse is released. To turn off the instrument, first press the Working button to stop working, then press the Trigger button to turn off the xenon light, and lastly turn off the power switch. During working, the operator can directly press the Trigger button to exit pre-ignition. When the foot pedal is stepped on, all the buttons will not work.

Introduction to Operation for Treating Various Defects

Removing Tattooed Eyebrow

1. Removing Monochromatic Blue or Black Tattooed Eyebrow

During operation, the patient should not open his/her eyes. The operator selects the required laser energy according to the depth of the tattooed eyebrow (adjust laser beams to a suitable energy level), and holds the laser gun by hand and slowly moves the gun close to the area to be treated from the normal skin around the area, so as to help the patient adapt psychologically. Then, the operator can set the laser beam emission rate to 5Hz, and perform the treatment when the gunpoint is 1-2 fingers width away from the area to be treated. It is OK to start treating from the tail of the eyebrow or the head of the eyebrow. If there is a sign of color recovery within 5-10 minutes after treatment, second treatment can be performed. At this time, the energy level should be 20-40 units higher than that used for the first treatment. The gunpoint should be 1-2 fingers width away from the area to be treated, so as to further smash pigments and boost absorption by the body. Check the result one and a half month later. For a patient who has some remaining pigments, second treatment can be performed. (If the energy cannot be absorbed due to faded color, active carbon can be applied for the treatment in order to facilitate energy absorption.)

2. Removing Makeup Tattooed Eyebrow (it will take 2-3 times of treatment to completely remove makeup tattooed eyebrow)

The operator can set the laser beam emission rate to 3 Hz. First use a 1064nm light head to perform the treatment with the gunpoint placed at a distance of 2-3 fingers width away from the area to be treated. Then use a 532nm light head to perform the treatment. Since coffee (brown) color is a mixed/harmonizing color, treatment usually needs to be performed more than two times, and the interval of treatment is 45-90 days. When performing treatment for the second time, the operator should select a light head according to the remaining color. (If the energy cannot be absorbed due to faded color, active carbon can be applied for the treatment in order to facilitate energy absorption.)

3. Removing Tattooed Eye Lines

The operator can set the laser beam emission rate to 3 Hz. Adjust the laser energy to the lowest level (initial laser beam emission value), and place the gunpoint at a distance of 1-2 fingers width away from the area to be treated – it will be just right when the light spot can be seen by eye! The operator must use a piece of thick medical gauze or an eyelid patch to well protect the eyes. First, the operator should remove the lower tattooed eye line – ask patient to tightly close his/her eyes and “look” upward at the same time. The operator uses his/her forefinger to hold the gauze and push the upper eyelid upward, uses his/her middle finger to open the lower eyelid to expose the lower eye line and uses 5Hz laser beams to perform the treatment. After this, the operator can remove the upper tattooed eye line – ask the patient to tightly close his/her eyes and “look” downward at the same time, while the operator uses his/her middle finger to hold the gauze and press the eyelid downward, uses his/her forefinger to push the eyelid upward to expose the upper tattooed eye line, and uses 5Hz laser beams to perform the treatment.

4. Removing Tattooed Lip Lines

The operator can set the laser beam emission rate to 5Hz, and place the gunpoint at a distance of 3-4 fingers width away from the area to be treated. When removing black, coffee, crimson or brown lip lines, the operator should first use a 1064nm light head to perform the treatment, and then repeat with a 532nm light head. When removing light red, red, light coffee or light brown eye lines, the operators should use a 532nm light head to perform the treatment.

Attention: Treatment must be performed on all tattooed lip lines within half a year after tattooing. Otherwise, the operation will fail. The course of treatment is 45-60 days. Periodical treatment should be performed until lip line tattoo is clear.

5. Removing Tattoo, Birthmark, Venus of Ota and Nevus Spilus

The operator can set the laser beam emission rate to 3-5Hz, place the gunpoint at a distance of 3-4 fingers width away from the area to be treated, and use the energy as close to the focal high energy as possible to perform the treatment. The result will be the best if bleeding spots show up. For removing common dark blue marks, the operator should select a 1064nm light head to perform the treatment. For removing red or coffee marks, the operator should select a 532nm light head to perform the treatment. The course of treatment is 45-90 days. Periodical treatment should be performed until the mark is cleared (if the energy cannot be absorbed due to faded color, active carbon can be applied for the treatment in order to facilitate energy absorption).

For treating a birthmark and nevus spilus, we recommend the use of a 1064nm light head. For treating a birthmark, the treatment must be performed until bleeding shows up. For treating a nevus of spilus, the result will be the best if bleeding spots show up. If a 1064nm light head is ineffective for treating a dark color birthmark, a 532nm light head can be used to perform the treatment. The course of treatment is 45-90 days. Periodical treatment should be performed until the mark is cleared.

6.Skin Rejuvenation with 755nm carbon

During operation, the patient should not open his/her eyes. The operator choose 490-900mj(according to the type of skin) and 3-5Hz and large spot size 755nm tips. Before the treatment cleaning the face and put the carbon on the face(0.1-0.2mm) and use the laser.After the treament it should be use a mask on the face for 15-30 Minites It can do every one week and the course of treatment is 45-90 days(5-10times). Periodical treatment should be performed until the mark is cleared.

绝对现场 揭秘 “黑臉娃娃”



7. Reaction During Operation

Due to the instant radiation of high energy laser beams, the pigment cluster of pathologically changed tissues quickly decomposes into fine particles that can be devoured by macrophages in the human body; some pigments on the epidermis instantly pop out of the body, while other pigments inside deep layer tissues are evenly distributed to the epidermis. Therefore, the color will be recovered somewhat within a short period of time after operation. When tissues with a dark color or deep lines are treated, local signs of redness, blain or even bleeding spots may occur due to the intense absorption of laser energy by melanin. These are normal reactions of the tissues. The degree of local inflammation varies with different patients. When inflammation is alleviated, the patient may feel itching or tissue hardening when touching the tissue. In general, all these will disappear naturally within 3-7 days after operation. They may last for 1-3 months for some patients with poor physical conditions.

8. Caring after Operation

Within 1-3 days after operation, the patient should never apply make up on the eyebrow, washing or touching the bleeding area, lest it might cause infection. The patient should pay attention to sunscreening to prevent sunlight from causing hyper-pigmentation. For a patient having serious bleeding or swelling, he/she can take some antibiotic medicines such as acetylspiramycin according to the instruction of his/her doctor. In 72 hours after operation, the patient should coat the treated area with recover/repairing cream to facilitate healing. The patient should avoid direct UV radiation. Taking vitamin C orally can alleviate pigment return. Before the crust peels off, the treated area should not be in contact with water or be rubbed. Within one week after operation, the patient should give up spicy food, seafood, irritating food, cigarette and wine, and never have dark color food such as coffee and cola. The patient should let the crust peel off naturally. Within one week after pigment treatment the patient should not have sex in order to prevent pigment return. Pigment fading away is a slow process, which is usually one and a half month or so. If a patient needs to be treated again in order to achieve the best result, the interval of treatment should be about 2 months. The treatment for some defects may need to be performed for multiple times according to the nature of pathological change, the shade/depth of pigments, and different areas.

Warns after treatment and Maintenance

❖ Warnings after treatment

1. Pay attention: In one month after treatment, the patient should use sunscreen SPF15, when going out, you'd better take an umbrella and wearing a hat in case of sunburn. If your skin expose in the sun, it will increase the regeneration rate of melanoma, directly result in excessive pigmentation.
2. You should often use moisture mask to supply water to your skin. Keep your skin retain water. You'd better use a mask before treatment.
3. Do not make up immediately after treatment. You'd better use the pure biological skin care products, not chemical products and the silty cosmetics. If there's flare on treatment area, a doctor should be notified immediately and stop make-up. Take some VitC or VitE.
4. Treatment course: 6-8 times as one course, 2-3 course in all. The next treatment should be carried out after 3 weeks. After one course treatment, the problems such as age spots, spots, ect will be solved, the skin becomes shiny and flexible.
5. As physical differences in personal, individual customers may be temporary discomfort, small blisters, pigmentations, flare, in this case, we suggest you use ice pack for 30 minutes, you can make up 5 days later after treatment.

❖ Maintenance

1. No stress on the Screen, prevent from breaking up
2. Keep the filters and probe clean, do not let the cooling gel enter into probe.

3.The handle is fragile, please take care when pick up and dropt it in the bracket.

4.Every 15 days to change the water. After changing water, please make sure water circulate normally before usage. If the probe continuing be in high temperature after continuing working too long,you could change half of water from the machine.In this case,the temperature will reduce at once.

5.To keep the powerful energy,we suggest you change the water after 3000 shots.

6.Please check the surface of treatment head if there's attachement object after treatment,if so,please lightly clean it with lens paper or absolute alcohol.

❖ **Malfunction and solutions**

1.No power supply:

a.Check up whether there is power sup

b.Check up whether the power line is connected well.

c.Check up the fuse, which could be pulled out at the bottom of hole for power plug.

d.Check up if you open the key switch and emergency switch.

Solution:

a.connect well the power line

b.change the fuse;

c.open the key switch and release the emergency switch button

2.Non-Refrigeration after opening the machine:

a.cooling electric source is broken

b.Semiconductor is broken

c.there's air in the treatment head,non well water circulation

Solution:

Contact us directly

3.Treatment Head leakage:

a.the srews of the head loose

b.the water pipe inner of the head has dropped down

c.lamp or crystal of the head is broken

Solution:

Contact us

4.The Treament head can't light on:

a.The head is broken

b.The controller is broken

c.The Power line is broken

Solution:

Contact us

No Flashing

a.Do not control well of the switch on the treatment head

- b. Make the wrong operation
- c. The controller is broken
- d. The power line is broken
- e. Need to change a new treatment head.

Solution:

Contact us