

Laser Tattoo Removal System

Model:HL-A04

Operation Manual



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CONTENT

1. Important Notice
2. Technical Specifications
3. Accessories
4. Product Features
5. Working principle
6. Operations
7. Operation skills for laser tattoo removal system
8. Requirement before treatment
9. Before & after treatment by laser
10. Maintenance
11. Common Questions and Fixing
12. Special illustration

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Important Notice:

1. Firstly check the circuitry connecting correctly or not before using the machine.
2. Before starting work, fill up the water-tank with distilled water from the affusion orifice.
3. Water must be distilled water or ion-wipe-off, not the mineral water or tap water.
4. Before using the machine, infuse the distilled water to the standard line on the water-tank. Prohibit to work without water. Otherwise, if shatter the laser head,the user bear it.
5. Avoid irradiation to eyes directly.
6. Forbid disassembling without manufacture permission.
7. Put the head light on fixture avoid broken after operation.
8. Change cooling water every month. (Long or short the time according to the water purity).
9. Start-up the machine after one minute later for the water circulation completely.
10. Ensure the machine well grounded.

Technical Specifications:

Type of laser: Q-switch Nd:YAG laser
Wavelength: 1320nm,1064nm, 532nm
Energy:2000mj;
Pulse duration:1-10ns
Frequency: 1-10Hz
Cooling system: wind + water cooling
Power supply: AC220V 50Hz
Power: 500W
Size: 45×60×51cm

Accessories:



Laser handle (1 pcs)



Laser probes (3 pcs)



Protective glasses (1 pcs)



Goggle (1 pcs)



Pedal (1 pcs)



Keys (2 pcs)



Fuse(3 pcs)



Application Range:

1. Remove the black & blue pigment on eyebrow, eye line and lip line. Scour off tattoo, freckle, lentigines, old aged marks, vascular expansion and type of blood vessel lesions etc.
2. No harm to the follicles and normal skin, leaving no scar, only to lustrate pigment.
3. To lustrate melanin not being eliminated by medicament and other means.
4. Be in no need of anesthesia and quick recovery. No negative influence.

Product Features:

1. Improve the efficiency and make the best solutions for no burning on the hand-piece at all.
2. Long lifetime for Xenon Lamp which is with the imported US technology.
3. More stability with the hand-piece structure inside improved.
4. Add the infrared Guide light to aim the target tissue correctly.
5. Portable design and easy operation can do the touring treatment; lower cost and wider usage can make quick return of investment.

Working Principle:

Laser emitted by the system has a strong penetration ability which allows it to reach the deep layer of dermis. The pigment particles absorb the light energy and explode sharply, burst into the tiny pieces, thus diminish the color density and get rid of it.

So the appliance can effectively do away with mutant pigmentations and vascular tissue based on undamaged ambient tissue. This is called 'Selective

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heat absorption' principle in medical field.

Installation:

a. Open the package when receiving the machine, 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.

b. Input water (water source: pure water or distilled water):

a) Screw off the screw caps of water inlet and spilt water orifice at the same time

b) Connect the water tube and water funnel well and insert the orifice to input water;

c) Automatic water spilt from the spilt water hole, means enough water input:

Caution: After inputting the water, do not tighten the two screw caps.

Change the water inside of the machine every 1 month or 3 months.



c. Join one end of the handle to the joint, show as follows:



d. Join the power line and the pedal line, then turn on the power source



After turning on the power supply, please observe the water circulation inside the device. Normally, you will hear the sound of water flow. About 3-5 minutes later, the probe runs cold, at this time, it's able to insert the relevant crystal and start to operation



If the water doesn't cycle inside the device, or the probe does not cold, it's possible that there is air in the pump. At this moment, please turn on the device, when turn to the welcome screen(do not do any operation on the screen at the moment), then fold the white hose(in handle) to the angle of 90 degrees and slack, then turn off the device; repeat this action for 3-6 times. That could exhaust the air to the water tank, then the air will exhaust from the orifice for spilt water and the orifice for input water (of course, at this moment, should screw off the screw caps of the orifice for spilt water and input water at the same time)

PARAMETERS INTRODUCTION

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After start the power switch of the equipment, it will appear the Welcome Interface (Fig. 1)



(Fig.1)

PARAMETERS INTRODUCTION



Select Laser on Function Selection Interface, enter “**Laser Treatment Mode Selection Interface**” (Fig.2). The Laser Treatment Mode Selection Interface provides six kinds of treatment modes for different parts of body for clients’ selection. When it needs to return from Laser Treatment Interface(Fig. 3) to Laser Treatment Mode Selection Interface after completing the treatment, the system will automatically record the treatment parameters: laser energy and bright dipping frequency, etc into the selected treatment mode. When selecting this mode next time, the system auto-calls the recorded treatment parameters in this mode.



(Fig.2)



(Fig. 3)

When enter into Laser Treatment Interface and wait for three seconds, press the work key to make it change into orange. Press the working button on the treatment end and there will be laser output and  will show on the screen at the same time, representing to output the laser now while  represents no laser to output now. Press the cease key after the treatment is finished and the system will automatically zero clear the current counter. Press ESC to return

Laser parameter adjustment method and explanation:

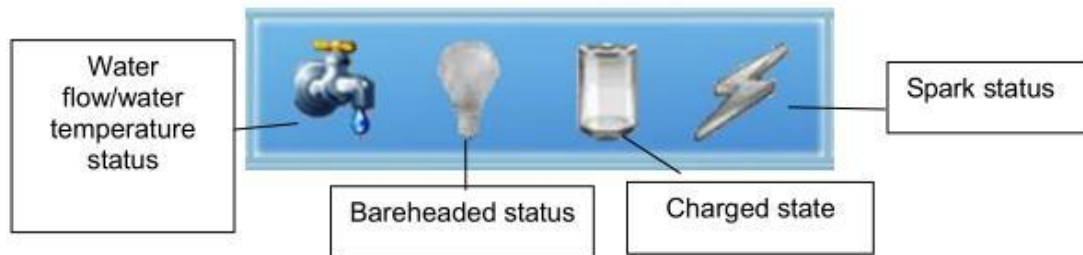
1. Laser energy adjustment:

The adjustment scope of the laser energy is: 0-1500mJ to adjust its size through the up and down arrows. If always press the adjustment button, laser energy will automatically increase or decrease. The energy adjustment step length is 10mJ for a single adjustment and 30mJ for the continuous adjustment. The bigger the number is, the greater the laser output energy is, which could adjust according to the actual situation.


2. Laser working frequency adjustment:

The laser working frequency scope is: 1 - 6 Hz to adjust its size through the up and down arrows. If always press the adjustment button, the laser working frequency will automatically increase or decrease. The adjustment step length of the laser working frequency is: 1 Hz. The bigger the number is, the faster the bright dipping is, which could adjust according to the actual situation.



3 Status prompt:





The current temperature:

The icon  represents the current temperature of the cycling water in the system. If the current temperature exceeds that set in the temperature protection item at the backstage. This icon will flicker and give off the alarm sound. At this time, all the keys on the screen could not be used.



Water flow status:

The icon  represents the normal recycling water in the system while  represents the abnormal recycling water in the system. When the water flow is blocked or there is no water in the system, the icon will alternately display and give off the alarm sound at the same time. At this time, all the keys on the screen could not be used.

Bareheaded status:

The icon  represents that the bare head has been lit; the icon  represents that the bare head has not been lit. After the bare head is lit, it could enter into the charged status. If it does not light the bare head for five seconds, then return to the ready mode.

Charged status:

The icon  represents successful charge while the icon  represents unsuccessful charge. Only after the successful charge could it enter into the treatment status for treatment. If the charge is not successful for five seconds, then return to the ready mode.

OPERTATION STEP

- 1) Fill water to machine, until water is out of overflow, it means the water is full of water tank.
- 2) Choose treatment head: 1064nm, 532nm. Then fix it in the laser gun.
- 3) Connect the power line to machine, turn on the urgency stop button and key switch, the screen will be light, you will hear sound from the machine, it is

water pump sound.

4) Adjust the parameters, point the laser output to the treatment area. then Press down the ready button and step on the laser foot switch, now the statue become to [work], start to emit laser. At this time, you will find the display screen start to count.

Pay attention: During the treatment, patients should be coordinated with operator, do not move, do not open eyes, or it will damage the eyes. The distance between probes and treatment area is about four fingers (about 12cm), the laser handle should be perpendicular to treatment area.

5) After finishing the operation, you have to release foot switch first, then back to [standby], when the machine cooling down, then turn off the key switch and laser control switch.

ATTENTION:

Uncomfortable Symptoms in 3-5 days after treatment

1. The face will be redness or become swollen, which is a role of heat that will promote collagen re-growth.

Pay attention: do not make ice cooling at this time, just wait for 20-60 minutes, they will be gradually disappeared.

2. The skin is very dry, so you have to pay more attention to keep moisture of skin.

3. Some people will have a little allergic to carbon powder, you can rub some external medicine.

Cosmetic and skin care products

1. Do not clean face with too hot water and irritant clean products;

2. Choose some moisture lotion and sun protection lotion for skin care;

3. Use some moisture essence, such as Hyaluronic Acid,B5 for skin repair

Daily Life

1. Do to go to High temperature places in 3-5 days after treatment, such as sauna, Hot spring,sunbathing

2. Do not smoke, drinking, stay up all night

3. Pay more attention when make-up remover.

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SETTING AND MAINTENANCE

1. Setting

Click the setup button on Function Selection Interface, enter “System Setup Interface” (Fig. 13).The System Setup Interface could conduct the operation

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including checking the use times of each treatment end, altering the system language, altering the system password, etc.



(Figure 13)

1) Alter the system language:

Click the language selection button; it will pop the language selection dialog box. Directly click the required language icon to alter the system language. The default system provides two languages of Spanish and English.



2) Alter the system password:

Click the password change button to switch to “System Password Change Display Interface” (Fig.14). It is OK to directly enter through the keyboard. The green password input box represents the current password input box. It could switch the other password input box into the current one by directly clicking it.



(Fig. 14)

3) Enter into the backstage

Click on the system setup interface to enter the backstage button. The system will require inputting the backstage password, shown in (Fig. 15). The default backstage password out of factory is: 666666, which could be changed according to the demand. The change method could reference “**System Password Change**”. If input the correct password, it will enter “**Backstage Setup Interface**” (Fig. 16). The backstage setup interface could conduct the operation, including zero clearing the treatment ends counter, encrypting the treatment ends counter, setting the water flow protection temperature, setting the water flow protection status, etc.



(Fig. 15)



(Fig. 16)

Zero clear the counter:

Click the data area to be zero cleared to finish zero clearing.

Counter encryption:

Press the icon on the upper left of the counter and switch to **Counter Encryption Interface** (Fig.17). Directly enter the counter's protection password and restricted times through the keyboard. Under the encryption status of the counter, the counter will automatically deduce one for each use of the treatment end. When the counter is zero, the treatment end will not be used again. If it needs to cancel the counter's encryption status, it could click the icon on the upper left of the counter and input the protection password of the treatment end on the password input interface.



(Fig. 17)

Water flow protection temperature:

The adjusting range of the water flow protection temperature is: 25 – 60°C. It will show closed at 60°C. When the temperature of the recycling water in the system is more than the set value, the system will stop working. Then it should stop the machine immediately and restart after the temperature of the recycling water falls down. The value could be altered by directly clicking.

Water flow protection status:

The water flow protection status could be altered by directly clicking. When the water flow protection status is On, if there is no recycling water in the system or the recycling water is blocked, the system will stop working and it should immediately stop the machine and restart after removing the faults.

Operation skills for laser tattoo removal system

Items	times	interval	Notice
eyebrow	1~2	30-60day	Remove eyebrow hair and protect eyeballs
eyelid	1~3	45-60day	Remove eyebrow hair and protect eyeballs
lips outline	1~3	15-45day	use 532nm mirror
Body tattoo	1~4	30-60day	Exude blood is effective
flecks ,aged spot	1~5	15-30day	Exude blood is effective
birth mark	3~7	45-90day	Exude blood is effective

Requirement before treatment:

- 1) Beautician should make record for customers, fully understanding customers' skin condition and chose the right laser mirror, at the same time communicate with your customer freely to let she or he feel relax.
- 2) Clear treating part skin and wait until it is totally dry and sterilize every apparatus.
- 3) Energy reference

application	best frequency	distance
eyebrow	5Hz	1-2cm
cover layer	5Hz	2-4cm
eyelid	5Hz	2-3cm
lip outline	5Hz	2-4cm
body tattoo	5Hz 3Hz	3-4cm
naevi	5Hz 3Hz	3-4cm
birth mark	5Hz 3Hz	3-4cm

Notice :

A.1064nm (round mirror) for blue and black colors

B.532nm (square mirror) for red and brown color

Before & after treatment by laser

1. Preparation before treatment by:

- (1) No inflammation in the treatment part.
- (2) No treatment for pregnant woman.
- (3) Fomentation on the treatment part avoid skin dehydration.
- (4) No cosmetic left ,clean the treatment part.
- (5) Taking photo before treatment, compare the effect after operation.

2. Skin appearance after treatment:

- 1) Reddish swelling on treatment part on the moment, it will disappear shortly.
- 2) To some special customers need to be higher, when you make the Volt too high,there comes the scab, but it will drop off naturally after 7 days, not to scratch it,skin becomes normally about 2 days. Taking some Vitamins can lighten the pigment circumfluence.Usually there is a feeling of scorching or slight bleeding, it is normal and no scar.
- 3) When the scabs fade away, the treatment part shows pink, 2-3 weeks later it appears coffee color, and 1-2 months later recover.

3. Care after treatment:

- 1) Can wash the skin with water or Non-stimulator after treatment.
- 2) If there is slight bleeding when adjust the Volt higher, please wipe off and smear the Antiphlogistin (such as Illotycin) until the scar drops off. Not cosmetic or other medicines.
- 3) If the treatment parts is flush and feeling it not comfortable, can do ice compress.Before the scab dropping off, the treatment part must be care not to touch water,not being scratching, avoiding certain food of hot, dark color of coffee, Coco Cola etc. Prohibit smoking and drinking .Let the scabs desquamate naturally not scale off in a force.
- 4) Not taking plenty of sports avoiding of sweat infection.
- 5) After the scab desquamating, No need to coat the Illotycin (Erythromycin) again,just smear the suntan lotion (SPF15 upwards)

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even in the room preventing UVA/UVB and keep along 3 to 6 months because of the treatment skin sensitivity to the sunlight. Using suntan lotion or umbrella preventing can improve the effect early.

- 6) Period for laser treatment: According to the different treatment parts and
- 7) pigment dark or not, the treatment may be several times. Normally one period of treatment is 1-2 times, every time at 20-30 days interval. If there is no special, every 2-4 weeks go to clinic check again, if there is anything abnormally, please cure it early.
- 8) Pigment fadeaway is a slow process, for the pigmentation skin, normally it is 1-3 months. In order to get more favorable effect, repeated treatment should be 1-3 months interval.

Maintenance:

- 1) Notice to use purified water or de-ionized water, not the mineral water or tap water.
- 2) Be careful not to irradiate the machine avoiding the surface of machine injured.

Common Questions and Fixing:

- 1) No signal after power on. The reason is that the power plug doesn't reach it, please directly connect the power plug.
- 2) No signal after power on because of the fuse blowing. Please replace the fuse with 5A/220V AC.
- 3) No signal on the screen because that the Crash-stop switch being pressed. Please lift the Emergency-stop switch up.
- 4) Touch-off light is off state pressing the button on the screen when the machine is on pre-ignition. One reason is that the Xenon Lamp is damaged need to replace a new one. Another reason is that the life time for Xenon is full, change a new one.
- 5) Water leaking out of machine, because of the impact during on shipment process. May in the tube joint. Please call the service people to deal with it.
- 6) If you feel the energy is not big enough or the curing treatment is not well enough, the reason maybe the temperature is too higher or no water in the machine and damaged the body machine. Please stop firstly, after half an hour starting the machine again.

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Instrument maintenance and after-sales service

1, the instrument from the date of purchase (with notes) host warranty 12 months, 6 months (non-artificial phenomena) free repair instrument malfunction. More than warranty period can also be responsible for maintenance, according to the regulations of the company to charge the cost of spare parts and consumables (transportation cost client). If need to supplement or purchase, please contact with the company.

2, for the following user personal causes of the fault, does not provide free maintenance warranty service:

- 1) to tear open outfit, modified the products caused by the fault;
- 2) the use of the company caused by the distribution of the adapter failure;
- 3) careless use, throw, drop caused by the fault;
- 4) the fault caused by the lack of reasonable maintenance;
- 5) not according to the instructions of the correct use and cause failure.

Product warranty

Product warranty card

The product name		The customer name	
Product model		phone number	
Purchase date		Contact address	
Maintenance date	The cause of the problem	Maintenance content	Maintenance people

Thanks for using our products! We will give you the best after sales service and technology solutions! Thanks again!