

# **Ndyag Q switch laser tattoo removal**

**Model #: RY280**

## **USER MANUAL**



# Catalogue

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# Chapter 1 Safety notice



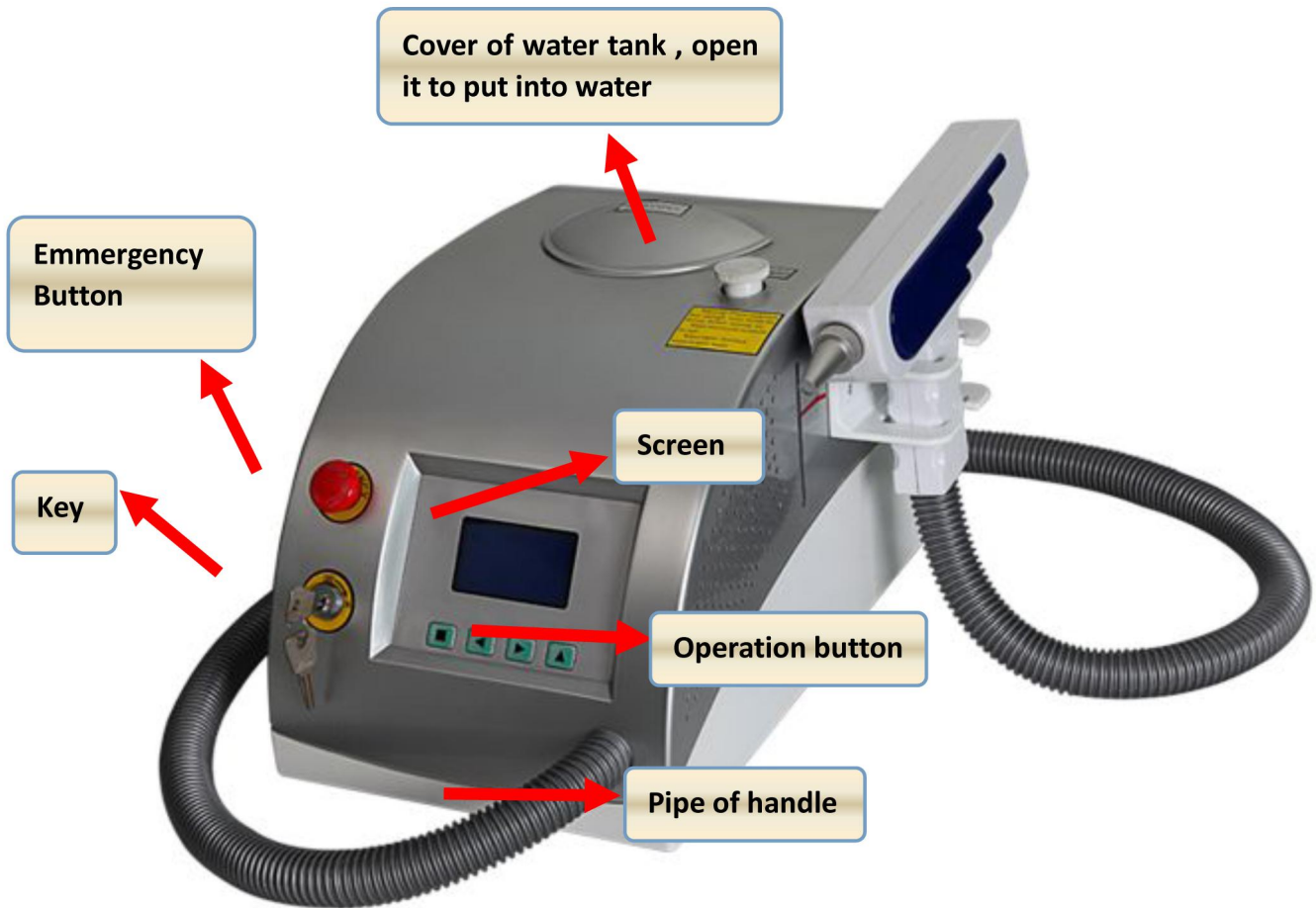
Operator must wear professional protective glasses.

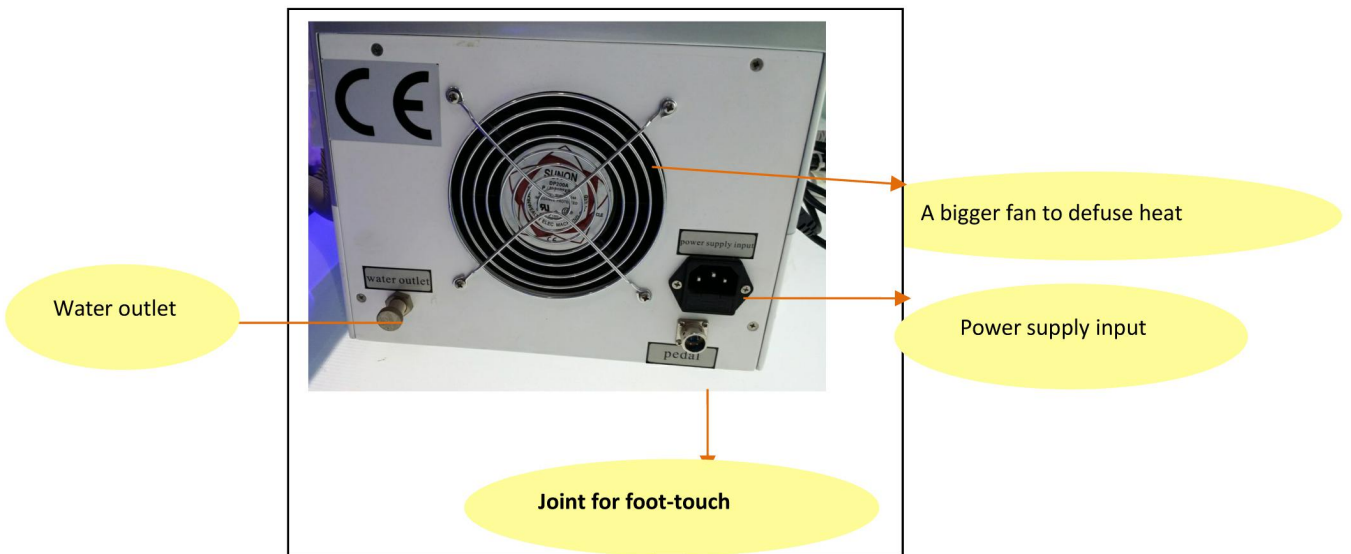
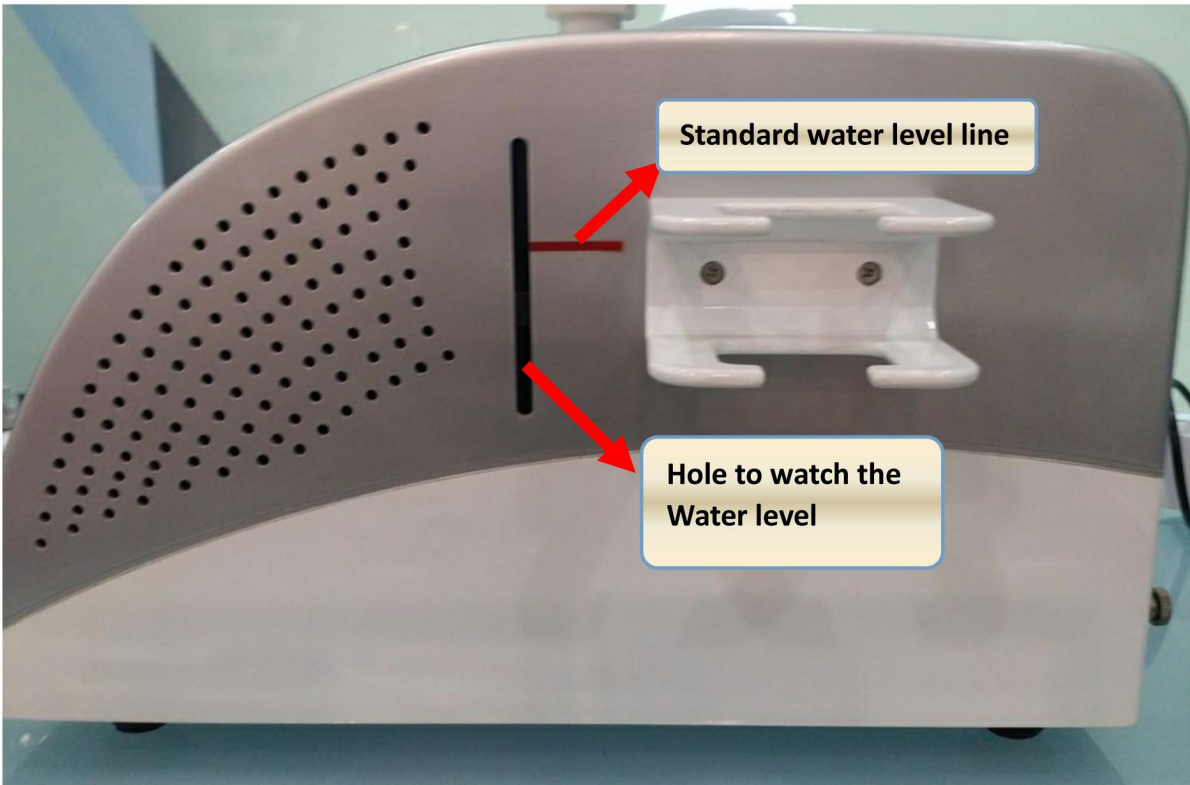
✧ Pls avoid laser radiate.

- ✧ The protection eyeglasses can not protect you for 100% safe. Because laser reflectes by glass, reflector, smooth surface of metal, etc. So you should better not watch the laser .
- ✧ Stupefacient, liquid, gas, etc. those flammability and explosive things should not appear in the operation room.
- ✧ Operator should not wear watch and necklace .because those things are easy to reflect the laser light.
- ✧ **It may cause harm to customer's eyes if they are not well protected such as keratitis, cornea brushing off even lose sight, and so the customer should wear the eye patch.**
- ✧ Pls do not open the shell of the machine even when the power is off, because there is high voltage inside.

## Chapter 2 Installation of RY 280

### I Introduction







Pedal



Power cord



Protector for eyeball

Handle ( note : the skin rejuvenation probe for optional )



Goggles for client

Tools for water inlet



Key



Glasses for doctor

## II Operation notices:

- 1) Pls keep the operation room clean when use the machine.
- 2) Operator should wear white or light color smock to avoid radiate laser.
- 3) Keep enough light to make apple of people's eyes as small as possible.
- 4) Don't allow things with luminant surface or could reflect laser in the room.
- 5) Operator should tell the customer possible reaction during and after the treatment
- 6) During the treatment, operator should not directly shoot other normal skin area.
- 7) Operator should make strict protection to customer's eyeball during eye liner treatment.



the harm to eyeball can not be recovered.

### III. Installation : Open the package, install the machine :

1. Place the machine on the ground .
2. Open the packing , take out the accessories and machine
3. Treatment room temperature : 22~28 degree , humidity  $\leq$  20%

Plug the foot pedal to machine



Plug the power cord



## Input distilled water or pure water

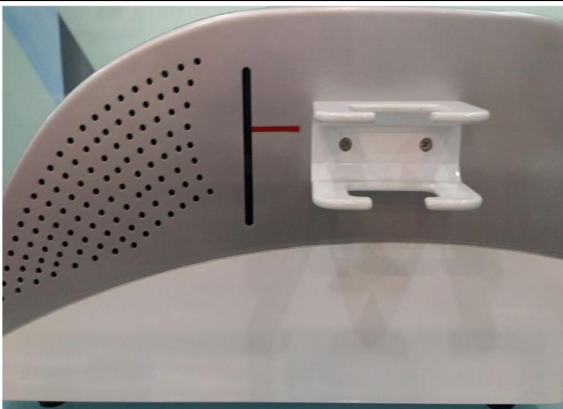
First, open the cape of water inlet



Second , input the pure water or distilled water .



Third , check the water input up to the red line marked .



### Note :

1. Usually, you might need 1500~2000ml of pure water or distilled water. When the water reaches this red line .it means the water is enough.
2. Observe water circulation from this hole and there is water spurting, make sure it cycles normally and sound of water circulation can be heard.



- 1) Make the emergency button on and insert the key to turn it right to open



Turn right and it will be on, press it and it will be off.

## Chapter 3 How to use RY 280

### 1. Make sure water circulates normally



Turn on and off machine 3

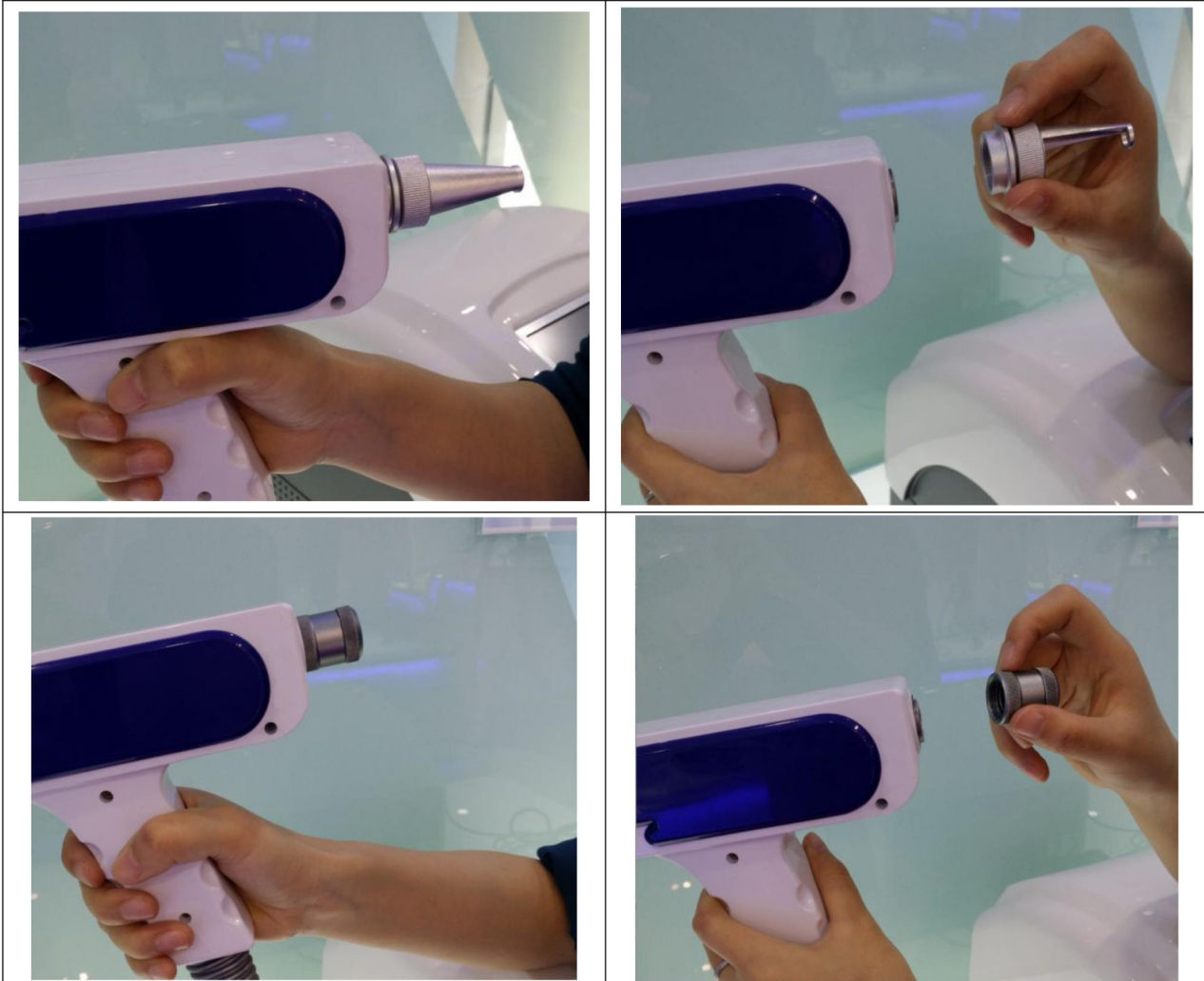
times first to check the water circulation .

Observe the water circulation by the water inlet

**Note : This is to make sure water cycles normally to continue the following steps .otherwise the machine is easy to be broken because of abnormal water cycles.**

## 2. Choose proper probe and Install it on the headpiece

Choose probe according to treatment, fix it well on the joint.

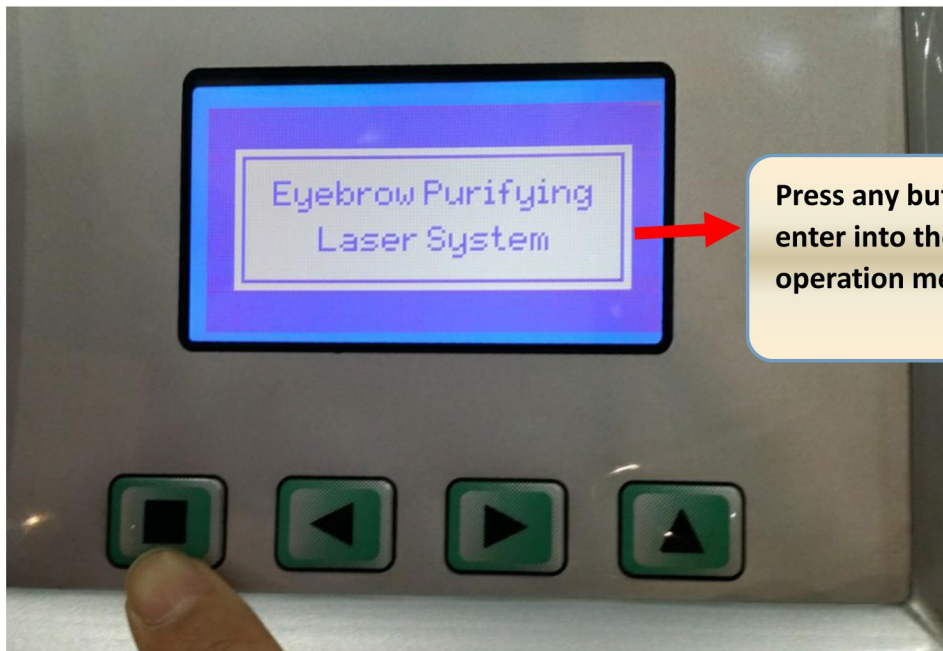


**Probe of 1064nm is suitable for blue, black and cyan pigment;**

**While 532 nm probes is suitable for red, green, coffee and brown pigment .**

### 3.The operation :

#### Button introduction :



Lamp light

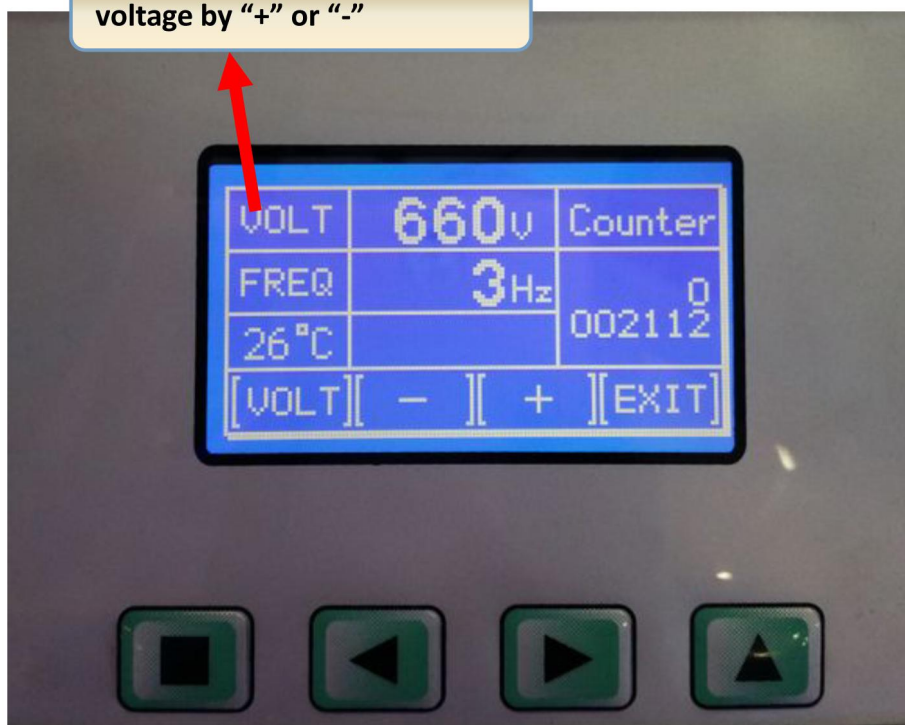
Down

Up

Excit

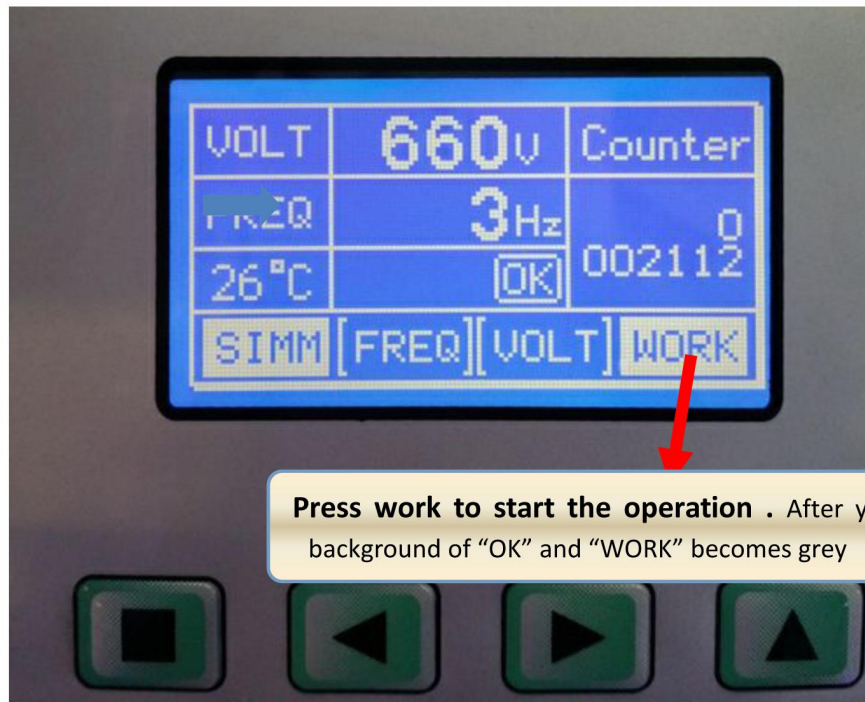
**Notice : Set the frequency at 3 HZ. And voltage is from 500V~1000V. But we suggest you use 660V or 670V is the best !**

Press the VOLT to adjust the voltage by "+" or "-"



Press the SIMM to light the lamp .After you press that key, the background of "SIMM" becomes grey. And you can hear sound of "ba"





**Press work to start the operation .** After you press that key, the background of "OK" and "WORK" becomes grey

**Note :** step the pedal , shots are relased from probe .

**CAUTION :** the visible light is dangerous , please do not point the probe to people's eyes .

### 1) Find the optimal treatment distance

If the distance between skin and headpiece is too small, the energy of shot is weak .but if you place the headpiece a little father away from skin, you will find that the shot is of highest energy, but if too far away from skin. The energy becomes weak again. So we need to find which distance is the best for the treatment.

For the shorter probe 1064nm, as it is used for blue, black and cyan pigment, let's use a black newspaper to test.



This red point is because there is infrared indicator in this headpiece .this will make the shot more accurately work on the target treatment skin area.



For the longer probe 532nm, as it is used for red, green, coffee and brown pigment, let's use colorful things to test.

## 2) Turn off the machine

First , press the work , then press the "SIMM", at last turn off the key

## 3) About the treatment

### I Operation skill & technique

Notice:

1064nm probe is mainly used for blue, black and cyan pigment treatment.

532nm probe is mainly used for green, red, coffee and brown pigment treatment.

2. During treatment, operator should make a right angle between handle and treatment area to make sure the light could shot upright and avoid losing energy of light as least as possible. During treatment for tattoo in eyebrow, eye line and lip line, the spot of light should lap over a little to move in line. During treatment for spot or nevus, operator should treat a small area at one time, best result should be that the treatment area seeps a little blood.

## II .Operation skill & technique for every treatment

### 1) Treatment for tattoo in eyebrow



Customer should not open eyes during treatment, operator should adjust energy according to depth of tattoo color, hold the handle , move it to treatment area slowly to make customer feel acceptable. the speed of flash could be set **3 HZ**, keep head of the handle a two-finger distance to treatment area, start treatment from head of eyebrow to end . treat again in 5-10 minutes if the color of tattoo re-appear.

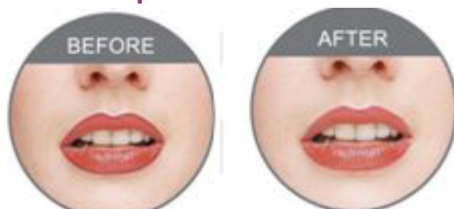
### 2) Remove eye line (Notice: a little danger)

The speed of flashes could be set **4~5 HZ**, adjust the energy of light to minimum energy, keep a one-finger distance between head of handle and treatment area. Operator should strict protect customers' eyes with panel for eyelid or medical pledget (panel for eyelid) of 1cm depth.

Treatment should be started from **down eye line**, patient should deeply close eyes and keep eyeball up-sight inside. Operator should press the pledget(panel for eyelid) with forefinger and push up eyelid, peel down eyelid with middle finger to bare the eye line, treat it with flashes of 4-5Hz.

Then, treat **up eye line**. Patient should close eyes and keep eyeball down-sight inside. Operator should press the pledget(panel for eyelid) with middle finger and push eyelid down, push eyelid up with forefinger to bare the eye line, treat it with flashes of 4-5Hz.

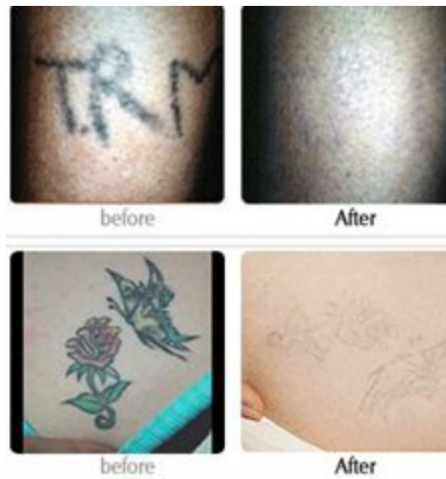
### 3) Remove lip line



The speed of flashed could be set **5HZ**, keep a 3/4 finger distance between head of handle and treatment area. It is better to remove black, coffee, deep red and brown lip line with 1064nm head at first time and then, treat again with 532 nm head.

**Notice:** All tattoo in lip should be treated in 6 months after making. OR removal treatment will fail. It should have 45-60 days interval to continue next treatment until remove all.

### 4) Remove tattoo



The speed of flashes could be set **3HZ/5HZ**. It is better to use high energy for treatment until treatment area seeps a little blood. It should have 45-90 days interval to continue next treatment until remove all.

#### 5) Remove spot and nevus

The speed of flashed could be set **3HZ/5HZ**. Keep 3-4 fingers distance between head of handle and treatment area. It is better to use high energy for treatment until treatment area seeps a little blood. It is advised to use 1064 nm head for normal spot and nevus treatment, but for deep color spot and naevus, it is better to use 532nm head for treatment. It should have a 15-30days interval to continue next treatment until remove all.

#### 6) Remove birthmark



The speed of flashes could be set **3HZ/5HZ**. It is better to use high energy for treatment until treatment area seeps a little blood. It is advised to use 1064nm head for birthmark treatment, but for red and deep color birthmark, it is better to use 532nm head for treatment. It should have 45-90 days interval to continue next treatment until remove all.

### III Determinant difficulty for pigment removal

#### 1) Pigment of tattoo quality:

It is easy to remove tattoo with foliage pigment and hard to remove tattoo with complex pigment and chemical pigment. Because complex and chemical pigment have iron ion and plumbum ion to make removal treatment difficult.

#### 2) Tattoo color



It is easy to remove light color tattoo, but difficult to remove deep color tattoo.

3) Corporeity difference

It includes age difference, skin difference etc.

## Chapter 4 Simple Maintenance of Ry280

### I Maintenance:

- 1) It is needed to check whether the surface of lens is clean after a period. Clean the lens with cosmetic tips dipped Ethanol.
- 2) It needs to change pure water inside every one or three month. Take out 2/3 water from water tank, and then put new pure water into. Watch water level after changing, turn key left to open the machine, check water current conditions until water cycle normally. Press [SIMM] button in 5 minutes.
- 3) It must be pure water or distilled water, medical distilled water is advised.
- 4) It is forbidden to knock down the machine without permission.

### II Indication for some malfunction

- 1) The machine could not be open until there is power supplying.**
  - a) Check whether there is power from electrical source , the power plug is fixed well.
  - b) Check whether red urgent key is open.
  - c) Check whether fuse is well .Pls change it at once if it is broken.
- 2) Water does not cycle after opening machine.**
  - a) Water does not flow or not cycle normally.
  - b) Check whether water level is too low inside from hole for watching. Open cover of water tank, put water into up to standard water level, keep handle lower than the machine then, open the machine, press [SIMM] button. It is proved the joint joining well when hear “ba” sound. Right now, water cycle normally and the machines hold for work.
- 3) There is no flashes when pressing foot-touch.**
  - a) Check whether the system enter into working condition.
  - b) Check whether foot-touch is well.Pls change it at once if it is broken.
  - c) Check whether press “Work” button.
  - d) Check whether it is lower energy output. Pls increase energy

**4) Laser gets thin or there is no laser.**

- 1、 Voltage is too low.
- 2、 Lens is not clean.
- 3、 The handle is broken, pls change it.
- 4、 The machine is too hot. Pls stop working to rest for about 30 minutes.
- 5、 Screw the probe off, check whether the lens is broken, change it at once if it is broken.
- 6、 Pls check carefully whether there is water leaking out from handle or probe.

**5) During operation, the machine is suddenly power off and stop working. Open it again, there is not laser output yet.**

- a) Cutting power device automatic open when water temperature is too high. Water temperature will be too high when using 5Hz for 15 minutes or continuously working with high energy. When it is up to 55°C ,cutting power device will automatic open to prevent from burning the lamp inside.

**Resolution:**

Take out 2/3 water from water tank, put cold water in and open the machine again to work.

- b) Pls examine and repair the machine at once if there is electrical damage.

**6) There is a sense of getting an electric shock when touch the machine with hand during using.**

- 1、 It may caused by static of body because of dry weather.
- 2、 Pls use three-phase plug.
- 3、 The voltage is not steady, pls collocate a manostat for the machine.

**7) During operation, press "SIMM" button hearing cheep**

- 1、 It has a slowly preignition because of long time not using. Pls open it repeatly.
- 2、 The circumstance is too cold, pls increase temperature of it.
- 3、 Humidity of room is too high, pls keep the room dry.
- 4、 The lamp is broken, pls change it.

**8) The energy gets thin during use.**

- a) Check whether the lens of probe is clean. Pls clean it with ethanol.
- b) Check whether the handle is too hot. Pls make the machine rest for about 30 minutes or change cold water inside.