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# **1. Product Appearance and Composition**

## **1.1. Description of Product Appearance and Components**

Machine appearance



Handwork Appearance



SHR



Note: The picture in the use manual is for reference only, if it does not conform to the actual product, please refer to the actual product.

# **1.2. Product Packing List**

Mainframe x 1 ND: YAG Laser Handle X1 ESHR insert handle x 1 Ice wave lift handle x

ESHR insertion x 6	ice electropola skin therapy head $ imes 3$	ND: YAG Laser Handle X3	Power cord x 1
Eye Mask x 1	Laser goggles x 1	Photon goggles x 1	Safety tube x 2
Funnel x 1	Hand pendant x 3	Instructions x 1	

1

# 2. Product safety

This chapter describes the safety precautions to be taken when using this machine. Operators and technicians who maintain the machine must undergo professional and good safety operation training, be familiar with the safety requirements and operation steps of the machine.

### 2.1 Optical safety

- Do not wear jewelry, watches or glasses and other reflectors to prevent reflection of strong pulse light.
- 2) Strong pulsed light may damage the eyes and cause skin burns. The necessary protective measures should be taken in use: all personnel should wear goggles when using this machine, and customers should wear goggles that can completely block the opaque material of light. Do not look directly at the high-intensity pulsed light or its reflected light from the operating handle, even when wearing goggles.
- 3) any part of the body should be away from the outlet of the operating handle when booting.
- 4) The operating handle shall not be used outside the limits of this manual, nor shall strong pulse light be emitted beyond the operating area.
- 5) the closed light guide crystal conducts the strong pulse light to the skin, and the strong pulse light can only be emitted from the front end face of the light guide crystal.
- 6) Emission of excessive light energy to the operating site may cause skin damage.
- 7) The operating handle shall be placed on the hanger when not in use, and the operating handle shall point to the place to be operated when in use.
- 8) Filter crystals should always remain clean and do not allow cold gels to penetrate into the inside of the operating handle.

### 2.2 Electrical safety

- 1) confirm that the area power supply grid is in accordance with the local input power supply.
- 2) Shut down and pull out the power plug for 10 minutes before maintenance of the machine, do not make the instrument in the cover plate open and unattended state, otherwise there may be a risk of personal injury or damage to the instrument.
- 3) This machine has dangerous high pressure except Beijing Set sail Other than technical personnel designated by Technology Limited, they are not detachable Any parts.
- 4) Do not turn on the machine when the operation handle is leaking; if it has been turned on, it must be shut down immediately.
- 5) This machine is grounded through the ground wire in the three-core power line, and good grounding is essential to the operation safety.

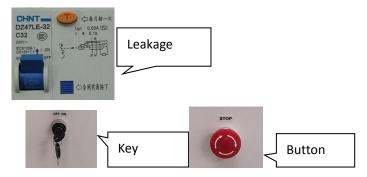
6) Make sure that all staff in the operation room are familiar with the control of the machine and know how to shut it down quickly.

## 2.3 Fire prevention

- 1) Please do not use this machine in an environment with explosive anesthetics or other combustible materials.
- 2) Take precautions to avoid strong pulse light ignition operation area or nearby flammables.
- 3) Use medical alcohol to clean and disinfect the parts of the machine, must be dry before boot use.
- 4) The instrument must not be left unattended.
- 5) The power cord should be unplugged for a long time without using the instrument.

## 2.4 Instrument safety devices

- Leakage switch: when overcurrent or leakage, leakage switch will automatically cut off the power supply, to protect the instrument and personal safety; when the machine is not in use for a long time, please disconnect the leakage switch; the following figure "off" is disconnected state;" on "is on state;
- 2) Key switch: instrument power switch control device, key switch and button switch are connected on the fire line, convenient switch;



## 2.5 Safety Identification Notes

- 1) "AC220V" or "AC110V" means input power specification identification;
- 2) "AC230V/10A" or "AC110V/15A" means fuse;
- 3) "Footpedal" means a foot mark;
- 4) "WaterFall/WaterInlet" means the note/drain mark;
- 5) "Vents" means vent marking;

# 3. Technical parameters of products

## 3.1. General technical parameters

- 1) Display:
- 2) Working mode: ND: YAG Laser, SHR, E-light, RF ice wave pimping
- 3) Operation items: hair removal, tender skin, freckle, lifting, wrinkle removal, whitening, tattoo removal,
- 4) Type of Handle:3

- 5) Handle connection: Quick insertion
- 6) Light source and output: laser, strong pulse light, ice electro-bola power output
- 7) Filter Crystal Material: Quartz
- 8) Spectral range:430 nm-1200 nm
- 9) Spot size:50mm ×15mm

10) Light (IPL) energy density:5-12

Handle Type	Spot size	Spectral range	Fast mode Light energy density (J/cm) <sup>2</sup> )
	50 mm ×15 mm	430 nm-1200nm	5-12

- 11) Number of IPL pulses:1 to 10
- 12) Shock Protection: Type I BF
- 13) Input power: AC220V  $\pm10\%,50\text{Hz}$   $\pm1\text{Hz}/\text{AC110V}$   $\pm10\%,60\text{Hz}$   $\pm1\text{Hz}$
- 14) Input Power:1600W
- 15) Net Heavy:
- 16) Packing Weight:
- 17) Instrument Size:
- 18) Packing Shape Size:

## 3.2. Environmental requirements

- 1) Working environment temperature:  $10 \circ C^{3} 0 \circ C$
- 2) Storage ambient temperature:0oC  $^{\sim}55oC$
- 3) Working relative humidity:≤70%
- 4) Storage relative humidity:≤93%
- 5) Atmospheric pressure:860hPa  $^{\sim}1060hPa$
- 6) Environmental requirements: Avoid direct glare
- 7) Cooling water: distilled or deionized water

#### Note:

If the indoor temperature is too low, or the instrument is not used for several

## 3.3. Handle type

# 4. Product installation

## 4.1. Operation handle support hanger mounting

1)

## 4.2. Operation Handle Installation and Replacement

#### Handle installation

- 1) Hang the operation handle on the hanger;
- Clear ND: YAG Laser handle inserted in left fast slot, ESHR handle inserted in In the middle slot, the RF ice wave lift handle is inserted in the right fast slot (from the front of the host);
- Insert the handle quickly Align the interface of the machine and rotate the thread knob of the handle;
- 4) Tighten handle nut clockwise;
- 5) Operation handle installation completed.

### 4.3. Water injection and replacement of cooling water

### Note: Use Pure water, deionized water or distilled water are strictly prohibited Water injection operation method:

- 1) Confirm vent Open, if Not open, please Unscrew the cap on the vent;
- 2) Insert the water injection joint of the funnel into the water injection port of the machine;
- Raise the funnel, let the funnel rise above the water line, and the water pipe bends naturally,

Can be water injection (the first water injection of 2 liters is appropriate);

- 4) The outlet overflows the water, indicating that the water has been filled;
- 5) Unplug the funnel.

#### How to Replace Cooling Water:

- 1) Confirmation Vents open if Not open, please Unscrew the cap above the vent;
- 2) Insert the water injection joint of the funnel into the water injection port of the machine;
- 3) Place the funnel in a prepared wide-mouth container of more than 2 liters. The container should be lower than the drain outlet. Unscrew the drain Cap, drainable;
- 4) After the drainage is completed according to the water injection operation method can be water injection.

# 5. Product operations Guide

### 5.1. Boot

Connect the power cord, turn on the leakage protection switch, after 30S, insert the key into the key switch, twist 90 degrees clockwise, power the instrument, the power indicator light is on, meanwhile, the instrument

starts to work and enters the initialization.

## 5.2. Instrument initialization

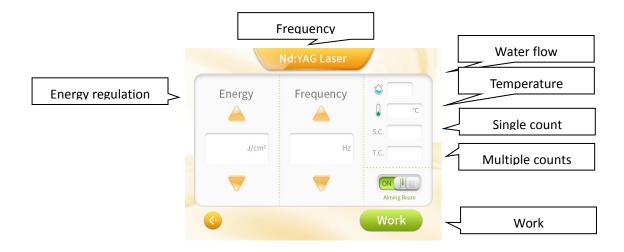


Turn on the instrument, the system automatically enters the initialization, the initialization interface displays the picture version number and the program version number, the interface progress bar is filled after the initialization is completed, the system automatically enters Choice of work mode Interface.

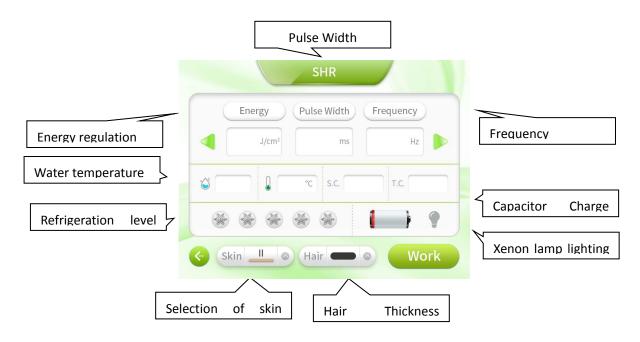
## 5.3. Choice of work mode Interface

Choice of work mode Interface Display Selectable Three modes of operation, system support ND: YAG Laser, SHR, E-light, RF ice wave pimping A total of four operation modes.

5.4. ND: YAG Laser Interface Operations



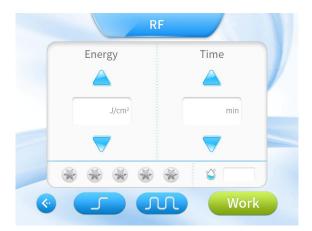
## 5.5. SHR interface Operations



**5.6.** E-light interface Operations

 E-light
Energy RF
℃ S.C. T.C.
430nm 🧿 🛞 🛞 🌦 🎡 🛞 🚺
Contraction Skin Loo Hair Contraction Work

5.7. RF Ice Wave Laper Interface Operations



## 5.8. Single Count Zero

## 5.9. Shutdown

After the operation is completed, exit the main operation interface, rotate the key 90 degrees counterclockwise, turn off the key switch, after the instrument is closed, turn off the leakage switch and pull out the power cord.

## 5.10. Alarm function

ND:YAG Laser	ESHR
Error 1: The water is not running (check the tank for	Error 1: The water is not running (check the tank for
water and the handle is plugged in)	water and the handle is plugged in)
Error 2: The temperature is too high	Error 2: Pre-combustion failure (replace the handle to
	see if it can be pre-burned, if not, please contact the
	manufacturer after sale)
	Error 3: The charge is not finished (replace the handle
	to see if it can be charged, if not, please contact the
	manufacturer after sale)
	Error 4: Too high water temperature is not suitable for
	treatment (stop working, turn off electricity, cool
	down the machine, or change water)
	Error 5: The temperature sensor is not installed or
	damaged. (Replug the temperature sensor terminal to
	check if the line is broken)

# 6. Daily product maintenance

Warning: Turn off and pull out the power plug 10 minutes after the maintenance of the machine, do not make the instrument in the cover plate open and unattended state, otherwise there may be personal injury or damage to the instrument risk.

## 6.1. Preventive maintenance

(1) Preventive maintenance by Beijing Set sail Technology Co., Ltd. Authorized technical personnel to execute.

(2) When submitting a service application, provide the serial number or photo on the nameplate on the back of the instrument.

(3) If there is a problem, contact the representative authorized by our company.

#### 6.1.1. Routine maintenance

Warning This machine produces high voltage and pulse light energy radiation; the inside of the instrument can only be repaired by the authorized personnel of our company.

#### 6.1.2. Visual inspection

Check the outside of the system once a week to ensure that there are no loose cables, the system is not damaged, and the LCD screen is in good condition. If problem is found, please contact our company.

#### 6.1.3. Instrument cleaning

(1) Clean the outside of the system upon receipt of the instrument.

The surface of the crystal should be cleaned with lint-free cloth dipped in a 70% concentration of medical alcohol or medical disinfectant solution.

#### 6.1.4. Handle cleaning and disinfection

Warning! Do not use unpasteurized handles. The use of unpasteurized handles can cause a potential risk of infection, leading to significant medical complications.

### 6.1.5. Crystal cleaning process

after use, clean before the crystal surface stain dry.

#### 6.1.6. Regular preventive maintenance

This equipment needs to be tested and maintained by specialized personnel to ensure the best operating conditions.

Testing / Services	Frequency	Operator
Crystal assembly cleaning	Used up every time	Operators
Routine external cleaning and disinfection	Used up every time	Operators
Check for serious damage to the surface of the instrument	Weekly	Operators
Press the Electric Leakage Switch Elliptical Orange button	Monthly	Operators

Routine Inspection and Maintenance Recommendations

#### 6.1.7. Replacement insurance Tube

- 1) Turn off the instrument, disconnect the leakage switch, unplug the power cord from the power outlet;
- 2) will Cross screw alignment, gently force the top, turn to the left 90 degrees to remove the fuse;
- 3) Replace the new fuse, align the fuse seat, gently push the top, move 90 degrees to the right, the fuse is replaced successfully;

Note:

- (1) To ensure that the specifications of the new safety pipe are consistent with those of the original safety pipe;
- (2) Replace both safety tubes at the same time.

## 6.2. Mobile and Transport Machines

### 6.2.1. Move This machine

When moving the machine, unlock the casters pedal, hold the top handle of the instrument, and push the instrument to move. Remove the foot and power cord before moving the machine. It is strictly forbidden to drag and drop the operation handle and power cord moving instrument.

### 6.2.2. Transport This machine

Preparation:

- (1) Unplug the power outlet
- (2) Unplug the power cord
- (3) Unplug the foot
- (4) Contact our company about transportation

Attention! Be sure to use the original packing material of the equipment when shipping. If the original packaging material of the equipment is not used, the damage caused by the equipment will destroy the warranty clause. if need packing material or need repacking instruction, please contact our company.

## 6.3. Troubleshooting

Reference 7.2 Troubleshooting Guide

# 7. Product Troubleshooting Guide

# 7.1. System Prompt Language Control Table

## 7.1.1. Troubleshooting guidelines

The following table lists some possible failures and measures that users can take:

Failure	Possible reasons	Measures taken	
phenomenon	rossible reasons	measures taken	
No boot	The power cord is not connected Leakage Switch Unclosed	Check that the power cord is reliably connected Close the leakage switch and reboot. If the leakage switch is disconnected again, contact	
	Safety pipe burns	authorized maintenance personnel Replacement of safety tubes	
Sound anomaly	Control board failure	Change the control board, please contact authorized maintenance personnel	
Touch screen No response	Control system failure	Turn off the power switch, reboot, if there is any trouble, please contact authorized maintenance personnel	
No	Operation handle malfunction	Change the operation handle, try again, if there is any trouble, please contact the authorized maintenance personnel	
precombust ion	Power failure	Replace power supply, please contact authorized maintenance personnel	
	Control board failure	Change the control board, please contact authorized maintenance personnel	
Refrigerat	Refrigeration Switch Power Failure	Please contact authorized maintenance personnel to replace the refrigeration switch power supply	
ion anomalies	Damage to refrigerating sheet	Change the operation handle, please contact authorized maintenance personnel	
Control board failure		Change the control panel, please contact authorized maintenance personnel	
	Handle button damaged	Please contact authorized maintenance personnel	
No light	Operating handle glows 100,000 times	Replace operation handle, total number zero	
	Control board failure	Change the control board, please contact authorized maintenance personnel	

	Power failure	Replace power supply, please contact authorized maintenance personnel
Low output light	Operating handle glows nearly 100,000 times	Increase the energy level properly and continue to use
energy	Poor water quality	Replace quality cooling water immediately
	Water tank shortage	Fill the tank with water
	Air in the water	Confirm that the vent plug is perforated
	Water sensor damaged	Please contact authorized maintenance personnel
Water alarm	Pump not activated	Please contact authorized maintenance personnel
	The waterway system has a	Please contact authorized maintenance
	bend	personnel
	Water pump damaged	Please contact authorized maintenance personnel

1) If the machine fails during start-up or normal operation, stop running immediately. Unless the water tank is short of water, other malfunctions can only be removed by the maintenance personnel authorized by Beijing sailing Junye Technology Co. Ltd.

2) If the instrument fails, please record these malfunctions and contact Beijing Set sail maintenance department contact of technology co., ltd.

If you encounter any other trouble, please contact Beijing Set sail maintenance department contact of technology co., ltd.

# 8. Product Application Guide

The three-in-one machine shall be operated by a professionally trained operator. Beijing Nubway co., ltd. requires operators to take part in the operation training of this machine.

## 8.1. Mechanism of ESHR

1) Biostimulation: The photochemical effect of strong pulsed light acting on the skin causes chemical changes in the molecular structure within the collagen and elastic fibers of the dermis, restoring the original elasticity. in addition, the photothermal effect produced by it can enhance the vascular function and improve the circulation, thus achieving the effect of reducing pores.

2) Light Selective Pyrolysis principle: due to The pigment content in the target tissue is far Higher than normal skin tissue To the light Absorption Also higher than normal skin tissue, use This feature enables target tissues (red blood cells/pigmentation/hair) to be placed in Normal Skin Organization The effect of depilation / freckle / removal of red blood was achieved without heat damage.

#### 8.1.1. Applicable conditions

This machine can improve wrinkles, repair vascular lesions and pigment problems and the latest expansion of hair removal technology, provides a new comprehensive beauty concept, which

can effectively improve facial skin condition without requiring customers to stop work and rest. Can also be used in other parts of the body, such as the neck, chest and back of the hand.

#### 1) Scope of application:

a) hair removal: limb hair excess body hair, hairline, lip hair, armpit, bikini, etc.

(b) Pigmentation changes in the skin: including pigmentation, freckles, skin heterochromism, senile plaques and other skin lesions caused by sunlight or photoaging.

c) For normal skin aging, large pores.

d) benign vascular changes in the skin: including capillary dilatation (red blood).

e) acne.

### 1) No Scope of application:

(a) Skin malignancies or precancerous lesions.

(b) Pregnancy.

- (c) People who have recently had a tan or sunburn or intend to spend their holidays in the sun.
- d) photosensitive diseases (sun rash, lupus erythematosus, epilepsy).
- (e) Acute skin infection (herpes, frostbite).
- (f) Recent (within one month) use of photosensitive drugs.
- (g) a thin, dry skin.
- h) Scar constitution.

(i) Diabetes, heart disease and customers with unrealistic expectations.

Customers with a heart starter.

- k) customers with metal in their bodies (including orthodontic appliances).
- 1) where the face has a prosthesis.
- (m) Skin that is in the allergic phase.

Customers who have used efficacy products must stop using them for at least a month, and are not allowed to use efficacy products during strong pulse lighting operations.

### 8.1.2. Recommended parameters for ESHR

## 8.2. RF Ice Wave Lap Pre-treatment preparation

A: Please have a skin test before treatment.

Do not expose the area to strong light during the week before B: treatment.

Remove cosmetic or oil stains from the area to be treated and keep dry before D: treatment. Remove the metal ornaments before E: treatment. Please remove the metal decration such as rings

or necklace before the therapy.

### 8.2.1. Recommended parameters

The following parameters are for reference only, and the actual treatment parameters should be set according to the actual feeling of the patient.

Men

Projects Location		Energy settings			
		Pulse mode	Continuous mode		
forehead		12-20	15-25		
Face	Eyes	8-20	10-25		
	Nose & cheek	15-25	20-30		
	Arms	17-27	20-30		
Body	Abdomen	20-30	20-35		
	Legs	18-28	23-33		
	Ms.				
Р	rojects	Energy settings			
Location		Pulse mode	Continuous mode		
	forehead	10-18	15-25		
Face	Eyes	6-18	8-24		
	Nose & cheek	15-20	18-28		
	Arms	15-25	18-28		
Body	Abdomen	18-28	18-32		
	Legs	16-26	21-31		

### 8.2.2. Note:

- > Please take moisturizing or sunscreen measures after treatment.
- > Do not wash or bathe with hot water (temperature above question) for 3 days after treatment.
- Attention should be paid to the zygomatic area, dangerous triangle area and mandibular area during face treatment.
- Make sure you set the parameters according to the patient's actual conditions, or follow the doctor's instructions.

### 8.2.3. contraindications:

➢ Scar constitution.

> If you have had plastic surgery, please inform your doctor.

Patients with high blood pressure, coronary heart disease or diabetes are not suitable for such treatment.

## 8.3. ND-YAG Laser Recommended Parameter Table

Ser ial nu mb er	Functi on	Energy settings	Frequency	Course of treatment recommended
1	Acne remova I	57%62%	1-3HZ	Flat mirror plus carbon powder treatment, each treatment interval of 30-60 days, need to do 2-6 times.
2	Birthm arks	55%—60%	1-4HZ	Each treatment interval of 45-60 days, need to do 3-8 times, spot repeat no more than 10%.
3	Freck I es	52%—57%	2-4HZ	Each treatment interval of 30-45 days, need to do 2-4 times, spot repeat no more than 10%.
4	To get a tattoo	50%—55%	2-3HZ	Each treatment interval of 30-60 days, need to do 3-6 times, spot repeat no more than 10%.
5	Eyebro w washin g	42%—47%	1-3HZ	Each time interval of 30-45 days, less pigment do 1-2 times, more pigment
6	Eye wash line	37%-42%	1-3HZ	do 3-6 times.
7	Lip	35%-42%	1-3HZ	

	wash	
8	Attent	The operation machine is not skilled, cannot wash the eye line, the eye
	ion	line should have the effective protection measure.
		1064nm to the blue and blue tattoo.
		530nm go red, brown, brown tattoo.
		Table 2 ND-YAG Laser Recommended Parameters

#### Table 2 ND-YAG Laser Recommended Parameters

## 8.4. Operational matters

#### 8.4.1. Communicate with customers

- 1) Ask the customer carefully what form of beauty he/she has received before to determine his/her suitability for the machine.
- 2) Explain to the customer the discomfort and limitations that may arise in the process of use, and dispel the unrealistic expectations of the customer.
- 3) The default value has been set for the convenience of the user. The default value is a safety parameter, normally the operator does not need to adjust the pulse parameter, can be adjusted according to the reference energy level range (energy density) provided by our company.

#### 8.4.2. Principle of energy level adjustment

- 1) Principle of one-by-one increase: prohibition of substantial adjustment;
- 2) Test spot principle (must close refrigeration): Before the official operation should test spot, and observe 5 minutes;
- 3) Use lower levels of complexion;
- 4) Lowering the energy level to the ground;
- 5) proper use of cold gels.

### 8.4.3. Operation flow

- 1) Prepare cold gel, duck tongue, goggles, protective mirror, tissue paper, record file;
- 2) Cleaning operation site;
- 3) Boot to enter the main operation of the corresponding project interface;
- 4) Operating parameters are set according to reference parameters (starting from low);
- 5) Operators and customers should wear protective mirrors;
- 6) Apply the cold gel correctly at the operating site; (thickness 1-2mm)
- 7) Test the spot (the outlet is perpendicular to the operation site and gently pressure to ensure the maximum area of contact), adjust the range of energy level according to the effective characteristics and determine the parameters;
- 8) perform all-position operation, and lower some energy levels in the sensitive part of the pain, the thinner part of the tissue and the darker part of the skin, and observe the skin reaction in the whole process for timely adjustment;
- 9) Clean up the operation area after operation;
- 10) Cold compress for about 20 minutes;

11) Replenish water and sunscreen.

Note: hair removal operation should first scrape off part of the hair, retain about 1.5 mm (light fine hair without scraping), and then clean.

#### 8.4.4. Operational Effective Features

To remove coarse hair: the skin has the process of heat-puncture-hot, the skin is slightly red; deep coarse hair capsule part has small bulge, small red papules, hair curl has paste flavor, individual hair can be easily pulled out; light fine hair capsule around slight red, part of hair curl has paste flavor.

Tender skin: the skin has a warm-hot-spike-hot process, the skin is slightly red; the skin is bright and smooth, pores shrink; tight; lift.

Acne blood: gray: blood coagulation.

#### perivascular microred: localized inflammation (2-3 days gone).

Vasoconstriction: collapse of the vascular wall (the color gradually becomes lighter within 21 days).

### 8.4.5. Discomfort

- 1) There may be some pain in use.
- 2) Temporary redness/oedema may occur after use, usually within 3 to 7 days of detumescence.
- There is a minor risk of producing side effects such as temporary pigmentation and changes in skin texture.
- 4) may form scab shells or blisters that need to heal for 5-10 days.
- 5) The skin in or near the operating area may become temporarily vulnerable (do not wear makeup or rub).

#### 8.4.6. Points for attention after operation

- 1) If blister or ulceration occurs on the skin after using the machine, apply with antibiotic ointment or burn ointment.
- 2) Customers should use high-magnification sunscreen and hydration skin care products within one month after using this machine.