

# Multifunctional Workstation

Model No.: AS-823



## Operating instructions

### 1. Product Introduction

Multifunctional Workstation is a comprehensive and efficient facial care system, which is also a multifunctional beauty equipment having a collection of three top core technologies in medical cosmetology, namely, IPL, RF and YAG laser. Combining a variety of powers and giving full play to solar energy, bipolar RF and laser, it has a significant clinical effect and has

been proved to safely and effectively apply to different skin types and skin complexion.

## 2、Technological Advantages

- Large vertical equipment, huge color touch screen, exalted and noble.
- Combining three technologies, intense pulsed light, radio frequency and laser, having more complete functions.
- Latest plug and play butt joint, separate water and electric design, more secure and easy to install.
- Perfect combine of large capacity stainless steel tank and industrial radiator, it provide water cycle cooling system which satisfies customers' continuous treatment demand.
- Nine operating languages suit to different colleagues in different countries.
- Water flow and temperate self- testing system and self-correcting system to guarantee safe operation.

## 3、Technical Principles

E-light technology -- Aimed at entire dermis and connective tissue, IPL and Bipolar RF technology stimulates and makes the collagen in different depths rearrange and grow so as to achieve the therapeutic effect, while bipolar radio frequency simultaneously releases energy, making diseased tissues in epidermis and dermis produce light pyrolysis through skin's selective absorption of light energy. Because of energy it needs far lower than traditional IPL, it makes the pigmented and vascular diseased tissues in epidermis and dermis absorb more energy without skin damage and removes these diseased tissues, by which achieves therapeutic effect.

## Wave function is introduced

430--1200nm	Acne removing remove acne	
480--1200nm	Tender skin wrinkle	

530--1200nm	<b>The spot to pigment</b>	
560--1200nm	<b>Tender skin</b>	
640--1200nm	<b>Hair removal</b>	

**SHR technology:**The effective depth penetration of 640nm-1200nm professional wavelength of hair removal can reach to papilla, and continuously shines to ensure the target tissues produce sufficient heat that makes hair follicles and stem cells around them lose activity until hair follicles atrophy and hairs stop growing; latest single pulse technique and sapphire contacting operation head making operation and cooling work simultaneously, not only have a good long-term effect in hair removal, but also protect normal skin tissues from harm and make customers feel more comfortable during the operation.

SHR core is capable of precise control of each pulse, and the energy of each pulse is no attenuation effect on our skin, it is precisely because this will form a perfect pulse energy, eliminate the first pulse E light IPL high energy peaks, one by one sub-pulse energy attenuation of the drawbacks of this technology, which makes the SHR had a special effect in the treatment of a significant improvement of the above, especially in the cream, hair removal, skin rejuvenation aspect. More Good improve skin texture, reduce the role of pores, skin rejuvenation technology is therefore a real sense, more important is the safety of the treatment is greatly improved, to avoid the kinds of IPL treatment often occur past skin burns, etc. side effects. The real pulse energy to the whole issue of uniform output steady, full intelligent control software, set pulsed light rejuvenation, pigmented lesions, vascular therapy in one, once SHR therapeutic effect equivalent to 2-3 times the conventional art therapy. Sapphire cooling technology, greatly improving the safety and effectiveness of treatment. This is the fourth generation of IPL technology through full breakthrough. Square wave technology that is perfectly controlled SHR intense pulsed light technology, is the latest generation of pulse technology.

YAG technology - on the basis of the theory that immediate and high-energy laser emission can efficiently crushes the pigment of diseased tissues, YAG makes irradiated pigment particles absorb power and swell to crack. Part of them splitting into more tiny nibs are excreted, and part of them are swallowed by body macrophage and excreted through lymphatic system, by which pigments are eliminated. Because normal tissue does not absorb the laser with fixed wavelength, thus the integrity of the cell framework is maintained without conditions that invoke scars form.

#### **4、Range of application**

- Hair removal: permanent hair removal, hairs through whole body(hairs in growing period, including tiny hairs with light color)
- Freckle removing: removing freckles, chloasma, sunburn, age spots, acne marks and facial blemishes
- Skin Rejuvenation: improving large pores, rough skin, tiny wrinkles, and restoring skin elasticity.
- Wrinkle Reduction: removing real and false wrinkles. Facial and body anti-aging.
- Telangiectasia treatment: redness, facial flush.
- Improving dull complexion to whiten and uniform skin
- Specifically eliminating red, brown, suntan and other colored tattoos.
- Effectively wiping out all kinds of eyebrow, embroider eyebrow, tattoos, eyeliner and lip liner.
- Treating pigmented skin lesions and mixed hyperpigmentation such as age spots, birthmarks, ota nevus, moles and so on.

#### **5、Technical Parameters**

Illuminant	IPL	Spectral , Range	480/530/640-1200nm
Illuminance Area	15*50mm(E-LIG HT) 15*50mm(SHR)	IPL Energy	1-50J/cm <sup>2</sup>

Adjustable pulse width	2-99ms(E-LIGHT ) 0.1-7.0ms(SHR)	SHR Frequency	1-10Hz
Laser Wavelength	1064nm/532nm	Laser Type	Q Switch Nd:YAG
Laser Energy	50	Laser Frequency	1-5Hz
Display Screen	8 inch and 5.7 inch	Cooling system	Water cooling + semiconductor refrigeration, air cooling
Total Power	2500W	Voltage	AC220V

## 6、Attachment Lists

Terms	Unit	Amount	Remarks
Main Engine	PCS	1	Standard
E-light handle	PCS	1	Standard
E-light handle high spectrum	PCS	1	Optional
RF handle	PCS	1	Standard
RF tips	PCS	3	Standard
YAG handle	PCS	1	Standard
YAG tips	PCS	3	Standard
E-light wavelength filter	PCS	8	5 Standard, 3 optional
E-light power supply board	PCS	1	Optional
RF power supply board	PCS	1	Optional
YAG power supply board	PCS	1	Optional
E-light spectrum changer	PCS	1	Standard
Reflector lens	PCS	1	Standard
Control board	PCS	1	Optional

Power cable	PCS	1	Standard
Keys	PCS	4	Standard
Protective glasses	PCS	3	Standard
Water injection tube	PCS	1	Standard

Please check the items immediately with the attachment list after unpack, and contact our company in 24 hours if there is any missing or damaged term.

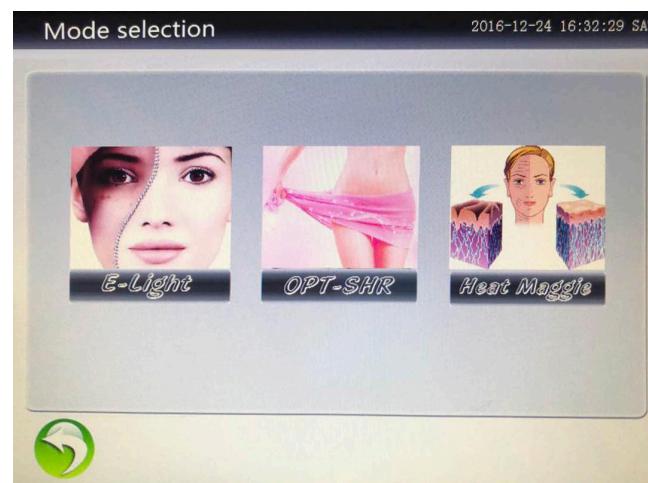
## 7、Installation and debugging

Step One: Hand-tool installation	<p>1、 Pick out rack screws and install E-light, laser and RF racks</p> <p>2、 Contact handpiece in handpiece interface tightly and appropriately and put handpiece on its holder.</p>  <div style="border: 1px solid red; padding: 2px; display: inline-block;">           Ensure the below and above blue buttons pop-up and the snap joint is tight and appropriate when connecting a handpiece, otherwise it will be easy to cause inefficient flow that will burns out hand tool.         </div>	Key Step
Step Two : Apparatus Injection	<p>1、 Screw off the sealing cap of injection hole and overflow hole.</p> <p>2、 Screw water-injected Funnel in injection hole and inject water(pure water or medical distilled water)in machine, until water flows from the overflow hole.</p> <p>3、 Screwed on the sealing cap after injection is completed, and screw tightly the sealing cap of overflow hole while injection hole is not used.</p>	Key Step

## 8、Operating Instructions

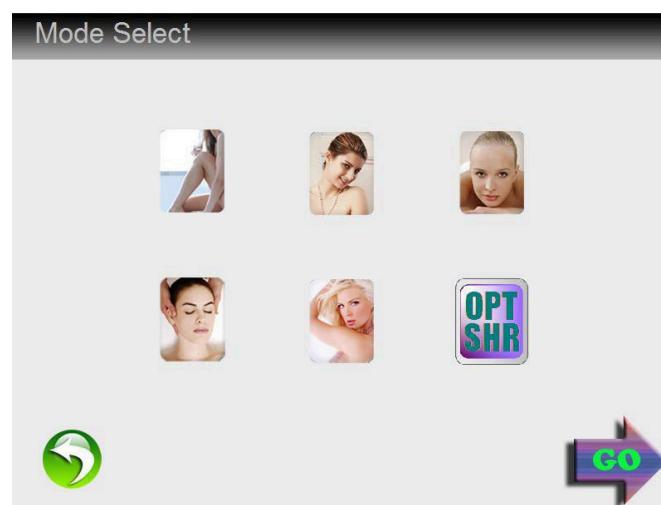
8.1 After the machine started and system automatic testing, click home screen and enter

function select.:.



### Operating instructions of E-light functions

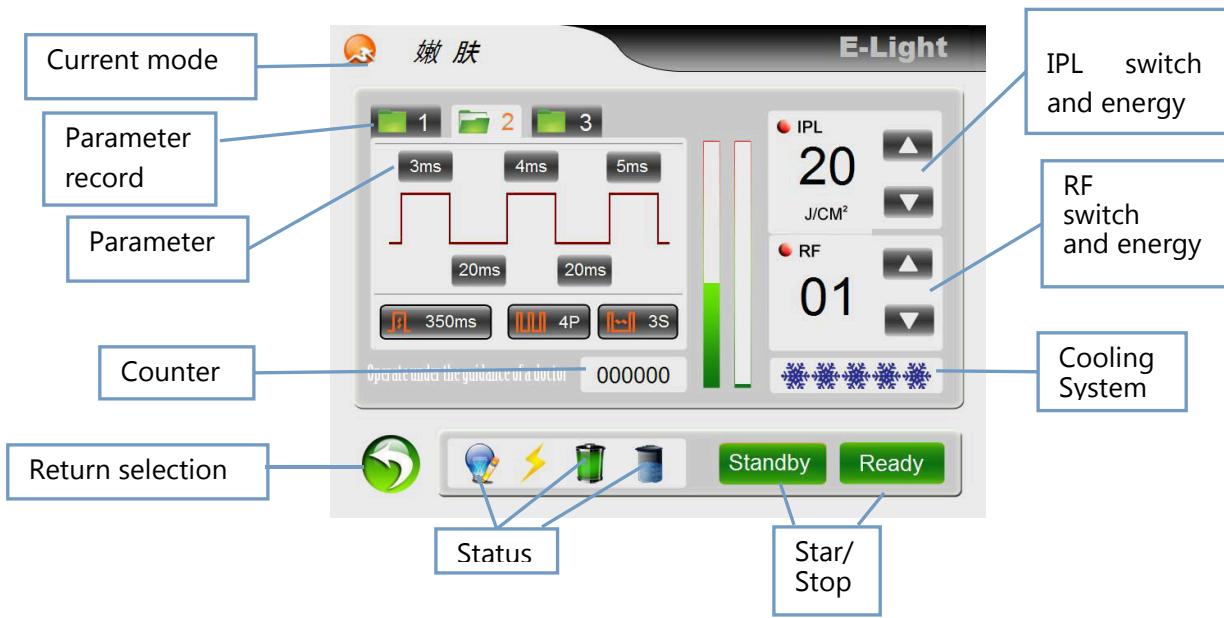
- ① Click E-LIGHT functions and enter select screen of treatment mode



- ② Click the treatment mode, hair removal, and enter operating screen



- ③ Introduction to E-LIGHT operation interface



**Physical therapy record:** Physical therapy record can show the present record. Also, it can record different physical therapy parameter for different customers. Click the button to choose three different physical therapy records.

**Number of Pulse:** It refers to the number of pulse when the system is triggered to discharge. Increasing the number of pulse can make the light deeper function in the skin. Click the button to adjust the range from 1 to 5.

**First pulse width:** It refers to the time that the first hard pulse functions in skin. Click the button to red and press to set. Click the button to white to quit the setting.

**Secondary pulse width:** It refers to the time that the secondary pulse functions in skin. The button will not light under the <sup>Counter</sup> condition of single pulse. Click the button to red and press to set. Click the button to white to quit the setting.

**Pulse interval:** It is the time between two pulses. Click the button to red and press to set. Click the button to white to quit the setting.

**RF time:** It is the time that RF functions in skin. The adjustment range is 50 to 2500ms. Click the button to red and press to set. Click the button to white to quit the setting.

**Total flash:** It refers to the total number of times of flashing.

**Flash this time:** It refers to the number of times that the machine flash this time.

**Status bar:** It shows the stage of light, stage of charging, stage of water level and stage of water temperature.

**Back:** Click the button to back to the operation interface.

**IPL adjustment:** Click the button to adjust the energy output of IPL. The window will show the present energy value during the adjustment.

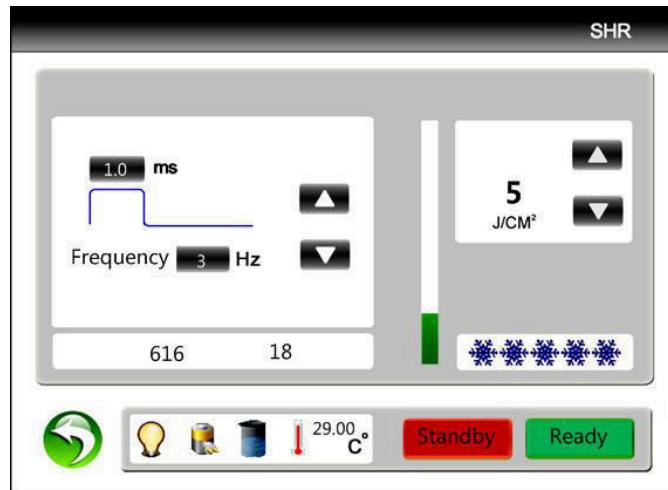
**RF adjustment:** Click the button to adjust the energy output of RF. The window will show the present energy value during the adjustment.

**Refrigeration:** Click the button to adjust physical therapy temperature. It totally has ten gears. The more the blue snow is, the lower the temperature is. No snows means refrigeration is closed.

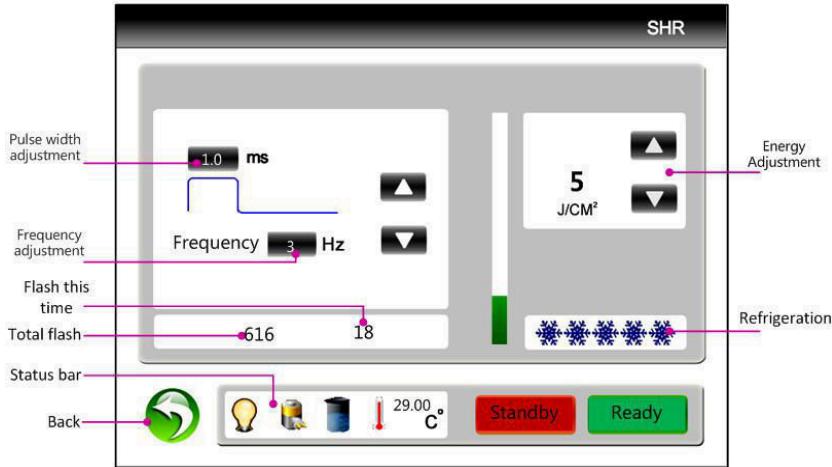
**Ready:** Click  to start the machine. And press the handle into the lighting stage.

**standby:** Click  to stop the machine.

④Click SHR into operation interface of SHR



⑤Introduction to operation of SHR



**Total flash:** It refers to the total number of times of flashing.

**Flash this time:** It refers to the number of times that the machine flash this time.

**Status bar:** It shows the stage of light, stage of charging, stage of water level and stage of water temperature.

**Back:** Click the button to back to the operation interface.

**Refrigeration:** Click the button to adjust physical therapy temperature. It totally has ten gears.

The more the blue snow is, the lower the temperature is. No snows means refrigeration is closed.

**Ready:** Click **Ready** to start the machine. And press the handle into the lighting stage.

**standby:** Click **Standby** to stop the machine

**Output mode:** Click continuation, RF will output energy continuously. Click pulse, RF will output energy rhythmically.

**Total time:** It refers to the total time that RF has functioned.

**Time:** It refers to the time that RF has functioned this time.

Click RF into operation interface of RF:



Introduction to operation interface of RF:



**Energy adjustment:** Click the buttons to adjust energy output of RF. The window will show the present energy value during the adjustment.

**Refrigeration:** Click the button to adjust physical therapy temperature. It totally has ten gears. The more the blue snow is, the lower the temperature is. No snows means refrigeration is closed.

**Output mode:** Click continuation, RF will output energy continuously. Click pulse, RF will output energy rhythmically.

**Total time:** It refers to the total time that RF has functioned.

**Time:** It refers to the time that RF has functioned this time.

## Introduction to operation of YAG



### 9.1 Taboo crowd

- Cardiac patients and hypertensive patients
- Pregnancy and epileptic patients
- Hypertensive patients and diabetics
- Light sensitiveness customer
- Customers who work long time in bright light and whose skin was sunburnt recently
- Customers who have changed skin recently
- Customers who are taking medicine like antioxidant and hormone

### 9.2 Preparation for physical therapy

- ① Consult before operation and fill in files
- ② Preparation: Prepare cold-set gels, scraper and safety glasses and preheat equipment
- ③ Operation procedure: Remove makeup—clean the face—scrap extra hairs—smear cold-set gels—facula test—physical therapy—operation—cold compress—moisturizing—smear repair products

### **9.3 Announcements during physiotherapy**

- ① Providing the clients with strict and effective eye protection( such as gauze and protective goggles)
- ② During operation, the use of gel is suggested to be 2 to 3mm and for the bareheads, the gel could form the perfect suction with the skin. Avoid pressing heavily or being dangling.
- ③ Slight uncomfortable stinging and mild fever within the tolerant range is normal phenomenon.
- ④ The energy parameters are successively regulated for 2 to 3 according to the personal acceptability and cutaneous reaction. After operation, skin redness, exothermic reaction and slight stinging are normal phenomenons and could be reduced by applying cold compress with 30 minutes. Pigment would be discomposed and extracted to the top layer of skin after cooling.
- ⑤ Clients with redness must carry out the first operation on the affected area with energy parameter at 15 to 18J/cm<sup>2</sup>. 5 minutes later, repeat the operation with energy parameter at around 25J/cm<sup>2</sup>. This process could repair cuticle cells and alleviate red blood symptoms. After the operation, the symptom of red blood might be more serious and would be alleviated after 10 days.
- ⑥ A few minutes after physiotherapy, skin with freckle and pigmented naevus may have hyperpigmentation phenomenon for pigment have been extracted to the surface of skin. The symptoms of freckle and pigmented naevus would be alleviated and disappeared along with the metabolism after 3 to 7 days.
- ⑦ After physiotherapy, there would be a painful burning and stinging sensation on the skin. The skin might turn red slightly and the symptoms would disappear in half an hour(the symptoms may last for 1 or 2 hours for special individuals, esp.those with sensitive skin); within few couple days, there will be itching feeling which is a normal reaction to metabolism and can be relieved by moisturizing.

### **9.4 Announcements during physiotherapy**

- ① Cooling, cold compress, cold spray and natural cooling are available.
- ② Moisturizing, it is suggested to apply hydrating masque for 7 days and avoid having sauna or steam. Can only clean face with cold water for 10 days.

- ③ Anti-sunburn, the use of sunscreen of SPF 20+ and without foundation is necessary. Protect the surgical spot from the sunlight and use sun-resistant products, such as sunshade when going out.
- ④ Do not take any irritative food like spice or seafood for a week after operation. Photosensitive food such as celery and parsley are forbidden. Do not take too much food with high pigment content and avoid alcohol and tobacco.
- ⑤ Cosmetics with certain effectiveness and hormone are banned during the treatment.
- ⑥ The interval period between two physiotherapies is about 28 to 45 days, and the interval of hair removal is 2 months.

## **10、Precautions**

### **10.1 Safe handling**

This equipment is composed of accurate spare parts, so it is better to avoid removing it for long distance. The water in the equipment must be evacuated and all water holes should be blocked before transportation. Anti-oscillation device provided by the original factory can and only can be used during delivery, or it may cause disorder in the optical system and influence the energy output.

### **10.2 Electrical safety**

When operating the equipment, it would generate high voltage. Even if the power is off, the high voltage devices are still full of danger. It is risky to open up the case arbitrarily.

### **10.3 Operation safety**

- ① Must fill the case with purified or distilled water, otherwise the special parts would be burnt down.
- ② Must check both the electricity and water circuits and keep eye on the security of the circuits during the hole process.
- ③ Must not look directly at the strong light emitted by the front-end export of the skinhead hands.
- ④ Avoid placing any reflective materials in therapeutic room, such as watch, mirror, jewel and so on.

- ⑤Keep the optical system clean and assure that the cooling gel would not pollute the system.

## **11、After-sale maintenance and services**

**11.1** The main engine of the equipment is guaranteed for 12 months(the invoice is needed). Maintenance-free for equipment failure(non-artificial) within guarantee period. The company could provide maintenance service for products that are beyond guarantee period, but with charge for the installation kits and consumables(the freight is also assumed by the clients). If there are necessities for supplement materials or purchasing information, please contact with us.

**11.2** The following equipment failures caused by the clients are excluded from maintenance-free range:

- ①Any consequences resulting from unauthorized tampering and refitting with the products.
- ②Any consequences resulting from using skinhead hands offered by other companies.
- ③Any consequences resulting from misusing, beating and dropping.
- ④Any consequences resulting from insufficient good maintenance.
- ⑤Any consequences resulting from disobeying the operation instruction.