# 980nm diode laser spider vein removal machine

# Manual



## ATTENTION

Thank you for choosing the instruments carefully designed and manufactured by our company. In order to better utilize the products, we sincerely recommend:

- ♦ ♦ Please read this manual carefully before using the instrument.
- ♦ ♦ Please install, use and operate correctly according to the requirements in the manual.
- $\blacklozenge$  Do not disassemble and modify any parts of this unit.

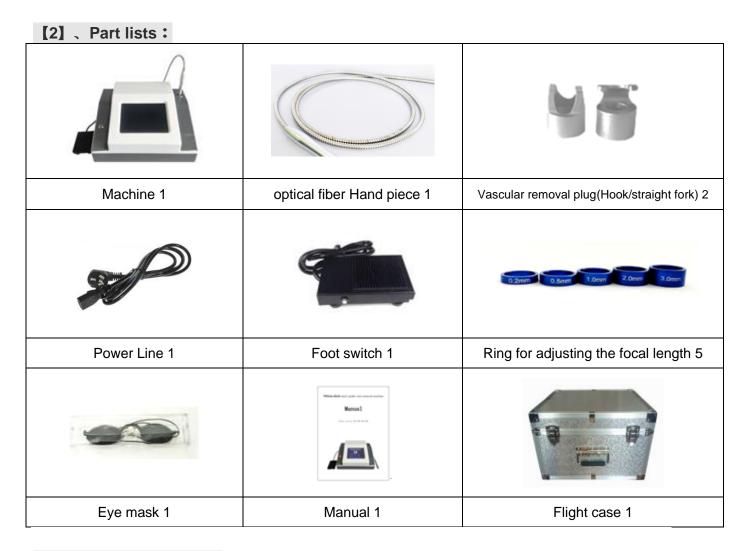
 $\blacklozenge$  Except for authorized personnel of the company, it is strictly forbidden to open the cover and disassemble the host.

- $\blacklozenge$  Non-professionals are strictly forbidden to carry out repairs and renovations.
- $\blacklozenge$  If there is any malfunction during the operation, please contact us.

### **980NM DIODE LASER SPIDER VEIN REMOVAL MACHINE**



[1] **Product Appearance** 



#### [3]、Treatment theory:

980nm laser is the optimum absorption spectrum of Porphyrin vascular cells. Vascular cells absorb the high-energy laser of 980nm wavelength, solidification occurs, and finally dissipated.

To overcome the traditional laser treatment redness large area of burning the skin, professional design hand-piece, enabling the 980nm laser beam is focused onto a 0.2-0.5mm diameter range, in order to enable more focused energy to reach the target tissue, while avoiding burn the surrounding skin tissue.

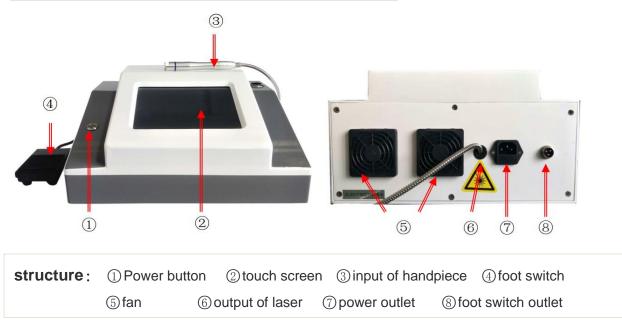
Laser can stimulate the dermal collagen growth while vascular treatment, increase epidermal thickness and density, so that the small blood vessels are no longer exposed, at the same time, the skin's elasticity and resistance is also significantly enhanced.

#### [4]、Application of diode laser 980nm Mainly for vascular therapy:

Remove all kinds of spider veins&vascular from the body surface.

[5]、Technology Parameters	:	
Output	Fibre-optic coupling	
Laser wavelength	980nm	
Pulsewidth	15ms—100ms	
Frequency	1-5Hz	
Mode	Pulse mode	
Net/Gross weight	4KG/9KG	
Input	AC: 96-264V、47-53Hz	
Length of Fiber	2m	
Operate mode	Touch screen	
language	English,Spanish,Russian,German,French,Portuguese or OEM	
Aiming Beam	Diode laser of 650nm±10nm,5mW (Max.),adjustable brightness	
Operation interface	8.0 inch Color LCD touch screen	
Cooling	Air cooling	
Light delivery system	detachable fiber systems, Core Size (Use only approved systems)≤200µm, SMA 905 connector	
Safety classification	Class I Type B	
Machine Dimensions	350mm*300mm*190mm	
Flight case Dimensions	420mm*400mm*280mm	

#### [6]、Structure of the machine and how to install it :



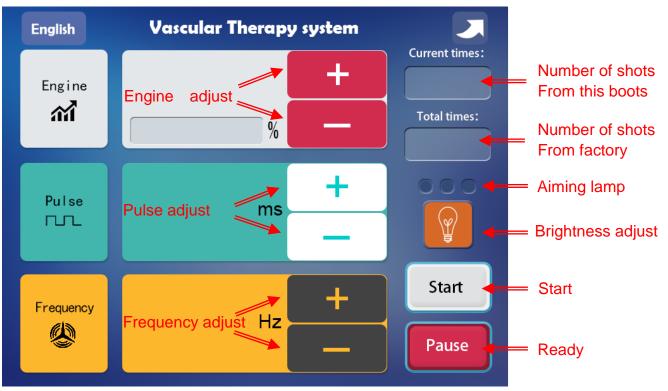
Install step: Install power line to  $\mathcal{D}$  power outlet, and install foot switch to  $\mathfrak{B}$  foot switch outlet.

#### [7]、Touch screen:

Click the language button to enter the corresponding language interface.

Optical Fi	iber Cou	ıpler laser
English	Spanish	Russian
German	French	Portuguese

Home page



English page for example

#### [8]、Operate guide

[1] Before insert power line ,confirm keyswich is in left ,and emergency switch is upspring.

[2] Don't look output of handpiece directly when machine is on. connect power line to machine.

[3] Turn keyswitch from left to right gently, the machine will power on, it will auto go to main interface.

[4] Setup parameters: power on the aiming lamp, set parameters of engine-pulse-frequency in ready status(when the start button is on, all parameters can't been changed).

Return button: Click the **L** button return the home page.

Setup aiming : push the adjust lamp, the aiming lamp in screen will on, there are three brightness, you can push the adjust lamp, it is loop setup.

Setup Pulse : push the(+)or (-)of pulse, you can adjust pulse of laser, it can be set from 15ms to 100ms, normally 50ms is recommended.

Setup Frequency : push(+)or(-)of frequency.It can be set from 1-5Hz,normally 3Hz is recommended.

Setup Engine :push(+)or(-)of engine.It can be set from 10% to 100%,normally 40%-68% is used.

Current times : it is pulse times used from power on, when you restart machine ,it will be cleared.

Total times : It is all pulse times used ,you can push the total times numbers about 5 seconds to reset it.

[5] When you finished setup parameters, you can press down the start button, then when you depress the foot switch, the laser will emit from handpiece.

#### [9]、Safety precautions

A: Don't look output of handpiece directly when machine is on.

B: Don't aiming laser to body continuously.

C: Don't bend fiber line.don't pull fiber hard. Fiber optic is delicate and fragile. Although it has metal threaded pipe protection, it can not be pulled by force and don't knock hard, so it needs to be treated with caution. The damage caused by pulling and dragging cannot be repaired and is not covered by the warranty!!!

D: All operation must follow Class IV safety precautions.

E. Don't use too high power when testing the instrument on the paper. If the paper pollutes the lens with smoke, you should wipe the lens clean!!!