



SEMICONDUCTOR

LASER

INSTRUMENT **AT-10**

User Introduction

The device is laser machine, please read manual carefully first to ensure using safety and know functions well .

Cautions

- (1) Do not watch the laser beam directly with eyes.
- (2) Do not place the device where children can touch to avoid accidental eyes damage of children.
- (3) It's forbidden for pacemaker users because the device may interfere with the operation of pacemaker.
- (4) For the elder and sensitive people, please use device from low power and short treatment time. Then, gradually increase the treatment power after the body is adapted. Normally, we suggest to use 1-2 times each day and 30mins each time.
- (5) Pay attention to the reasonable adjustment of diet structure and doing exercise to improve metabolism of body when using device.
- (6) Clearing nasal cavity before using nasal laser wire. And keeping the laser beam in clean. Otherwise, the power of laser will be loss.
- (7) People who are ischemic cardiac-cerebral vascular diseases can not reduce drug dose or stop taking medicine by yourself. Please under the advice of doctor after the symptoms have improved significantly.
- (8) It is normal phenomenon ,when user feel thirst, dry eyes, pulse quickened, or dizziness.
- (9) Charging device every 4 months or half year if don't using for a long time.

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Principle of Therapy

The blood vessels and acupoints are irradiated by a low-intensity laser with a wavelength of 650nm, and the blood viscosity was reduced through photochemical reaction, so that the hemodynamics, blood lipid, blood glucose metabolism and oxygen carrying capacity were improved. Through the surface irradiation of nasal mucosa, repair the wound, improve the local blood circulation around the nasal cavity, and immune ability of nasal mucosa.

Principle of EMS therapy

EMS stands for Electrical Muscle Stimulation and is a type of electrotherapy that uses electrical pulses to stimulate muscle contractions.

The pulses are generated by a device and delivered through electrodes (pads adhered to the skin) to the middle of the muscle to be stimulated. The pulses of EMS simulate action potentials from the central nervous system (the stimulus needed to make the muscle contract). This causes the muscles to contract.

Since EMS therapy produces steady electrical impulses, the stimulated muscles contract - many muscles contract during a continuous treatment session. This repetitive muscle contraction and relaxation has the following effects.

Increases blood circulation (blood flow) to the affected tissue area, which aids in repair.

Improves strength by flexing and exercising weakened muscles.

Slows the process of muscle atrophy by strengthening weakened or unused muscles.

Strengthens weak muscles, reduces swelling, relieves pain and aids wound healing.

Also EMS is used as an aid in the treatment of neurological disorders such as stroke, multiple sclerosis and brain infarction to reduce spasticity and help maintain muscle strength for as long as possible.

Structure

It consists of host, nasal laser wire, power adapter and nose cap.

Indications

It is suitable for the hyperviscosity, hyperlipidemia, ischemic cardiovascular and cerebrovascular diseases and auxiliary treatment of rhinitis.

Mode 1: Pat, suitable for human neck massage to relieve discomfort caused by cervical spine soreness and stiffness.

Mode 2: Acupuncture, recommended for local contusions, sprains and strains of the body to relieve painful problems.

Mode 3: Scraping, can stimulate body parts, reduce local soreness and swelling, and relieve fatigue discomfort.

Mode 4: Kneading, by stimulating the soles of the feet, makes the blood circulation smooth, suitable for sedentary, standing people.

Mode 5: Cupping, under stimulating effect, promotes local blood circulation and improves metabolism.

Mode 6: Acupressure, which is recommended for use with local discomfort caused by the body, for short periods of simulated acupressure massage.

Mode 7: Massage, through the back massage, can achieve to promote blood circulation and relieve fatigue;

Mode 8: Punch, suitable for people with long-term lumbar muscle strain, to relieve back pain problems.

Technical Specifications

650nm laser 4pcs (host) + 2pcs (nasal accessories)

460-465nm blue LED : 2pcs

586-589nm yellow LED : 2pcs

520-525nm green LED : 2pcs

Power adapter output voltage : DC5.0V

Ambient temperature: 5 ~40°C

Relative humidity: ≤80%

Atmospheric pressure: 860hpa-1060hpa

Battery voltage: DC 3.7~4.2V

Battery capacity: 1800mAh

Controlling, Adjusting and Maintain

Program name: Processing method

Control program: Refer to "Operation Instructions" for processing

Cleaning and disinfection:

The user can directly wipe the laser output port with 75% medical alcohol to clean and disinfect the product after use this device each time.

Protective measures: Follow "3R laser product notes" processing

Environmental protection:

The treatment device and accessories cannot be discarded casually at the end of their life. Please dispose of them in accordance with local laws or contact service personnel.

Note: If you do not use the control or adjustment device or perform various operations in accordance with this regulation, it may cause harmful radiation exposure.

Precautions of 3R class laser device

Classification restrictions

The treatment device belongs to Class 3R laser products. The emitted radiation of Class 3R laser products may exceed the MPE when viewed in a direct beam, but the risk of damage is relatively low in most cases. Because the AEL of Class 3R is only 5 times as much as Class 2 (visible laser beam) AEL or Class I (invisible laser beam) AEL. The risk of injury increases with the duration of exposure, and intentional eye exposure is dangerous. Because of the lower risk, its applicable manufacturing requirements and user control measures are less than those of Category 3B.

The risk is limited because:

--Unconscious irradiation rarely reflects the worst-case conditions, such as the beam is aimed at the pupil, and the worst-case eye adaptability adjustment;

--The inherent safety margin of MPE;

--The natural avoidance behavior of bright light under visible light radiation and far-infrared radiation from heating the cornea.

The laser beam of Class 3R laser products can cause dazzling, flash blindness and after-view images in the visible light range, especially in low-light environments. Temporary visual disturbances or startle reactions may cause indirect general safety issues. If the user is in an operation with demanding safety requirements may pay special attention on it, such as manipulating a machine, working at heights, having a high-pressure working environment, or driving, visual interference.

The laser beam of class 3R laser products can cause dazzle eye, flash blindness and backvision in the visible range, especially in the dark light environment. Temporary visual disturbances or shock reactions may cause indirect and general safety problems. Visual interference may be of particular concern if the user is operating a machine, working at high altitudes, in a high-pressure working environment, or while driving.

Class 3R lasers should only be used in occasions where direct beam internal viewing is impossible

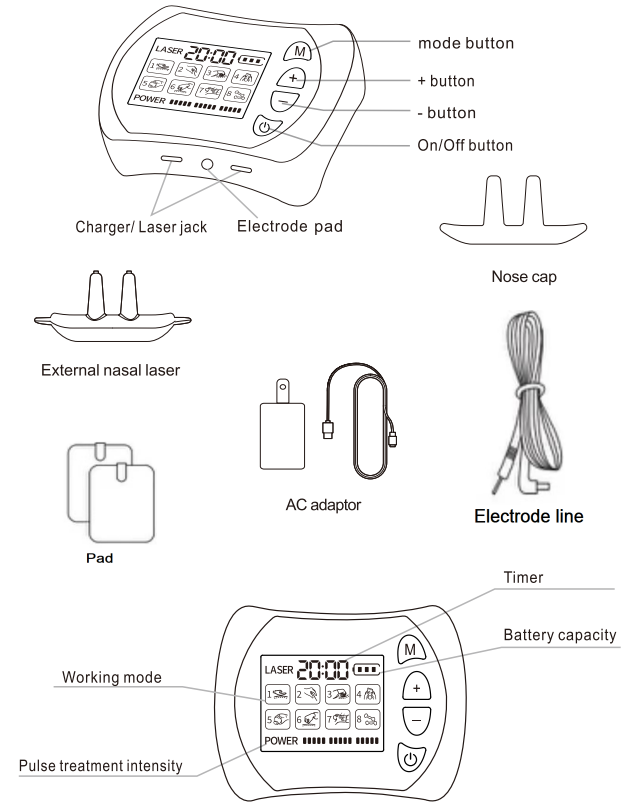
Although there are many methods for classification testing, not limited to strict conditions and worst-case scenarios, there are still limitations, in rare cases, it is possible for the laser cause a higher harm than the harm of its category.

For example:

--Use a large telescope to view the large-diameter collimating laser beam of the 3R laser product.

--Use a high-power magnification magnifying glass to view the divergent laser beam of 3R laser

Parts name



Operation instructions



1. Press the "On/Off" button for 2 seconds to turn on the machine, and the display will light up.
2. Insert the electrode accessories and nasal laser line into the corresponding interface of the host.
3. Default working time 15 minutes, short press "+" or "-" button to choose working time before start working, each press, adjust 5 minutes, you can choose 5-60 minutes (time is no longer adjustable during the working process).
4. Short press the "On/Off" button to open the laser + pulse function, pulse intensity default 1 file. During use, short press the "+" or "-" key to adjust the pulse intensity, 1 -15 intensity can be adjusted.
5. During the work process, short press the "Mode" button to select the working mode, 8 working modes are available, after changing the mode, you need to re-adjust the pulse intensity, press the "+" or "-" button to adjust. key to adjust.
6. In the process of working, short press the "On/Off" button, the product stops working.
7. If you need to stop the use, long press the "On/Off" button for 2 seconds to turn off the machine.

Trouble Shooting and Solutions

Faults	Causes	Solutions
Can not turn on the instrument	1. Press the "on/off" button for too short a time. 2. Battery power is low	1. Long press the "on/off" button. 2. Plug in the charger to charge
Wrist parts irradiation laser does not emit light	"On/off" button is not pressed. The instrument is charging	1. Short press the "on/off" button. 2. After charging is completed, short press the "on/off" button to start
Nasal irradiation laser does not emit light	1. The plug is not inserted 2. The instrument is charging	1. Plug the B end into the jack 2. After charging is complete, short press the "on/off" button to start.
Charging icon is not flashing	Please check the charging plug	Reconnect the charging connector
No laser output or weak light	Damaged laser or circuitry	Return to factory for replacement or repair

Remarking

According to regulation in EN60825-1 standard , each 3R laser product must be accompanied by a radiation warning sign and a radiation declarative sign.



Radiation warning sign



Radiation declarative sign

Description of other signs



Prohibition of free throw



Caution



Operating instructions



CE Mark

Maintenance and Preservation

1. Please use cottons soaked in neutral solution to clean the instrument surface. Do not use organic solution or gasoline.
2. Please use cotton balls soaked in alcohol to clean the lightening port and the treatment probe. Do not soak the instrument in liquid or clean it with something hard.
3. Please keep away from humidity, heat source and direct exposure to sunlight, in order to avoid the degradation of components which may shorten the service life of the instrument.
4. Please do not place the instrument with hard objects in order to avoid scratches on its surface or damage of the laser.
5. Please use and protect battery according to the description of charging.
6. The charging time of the instrument should be kept within above 10 hours during three previous charging.
7. If the instrument is not used for a long time, it should be charged once every 4-6 months, so as to prolong the service life of the battery.

Contraindications

Patients suffering from pregnancy/ cancer/ hemorrhagic diseases

Warranty information

Dear Honor Customers:

Thank you for your purchase of the company's products. Customer's satisfaction is our only service philosophy and to protect your legal rights and remove your future worries, we hereby make the following commitments and will provide you with satisfied warranty services:

1) It can be exchanged with the warranty bill or card in the case of quality problems under normal usage; valid for one year since the purchase date.

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(2) The Company will provide free service guarantee after one year; however, material costs will be charged.

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(1) No warranty bill or card.

(2) Damages caused by improper operation or mistakes.

(3) Breakdowns caused by self-disassembling.

(4) Damages caused by natural disasters.

(5) Material costs should be charged for products over the warranty period.

(6) Breakdowns or damages caused by accidents or human activities (scratches, soaking or self-replacement of parts).

Product List

1. Host	1 pc
2. External laser	1 pc
3. Charger	1 pc
4. Nasal cap	1 bag
5. User Manual (contain Warranty card)	1 pc

Warranty Card				
User name		Tel		Responsible person
Product name		Product model		Serial number
Date of purchase		Add		
The fault phenomenon				
Repair record				