

# **JUMPER**

## **Instruction Manual**

### **TENS Therapy Device**

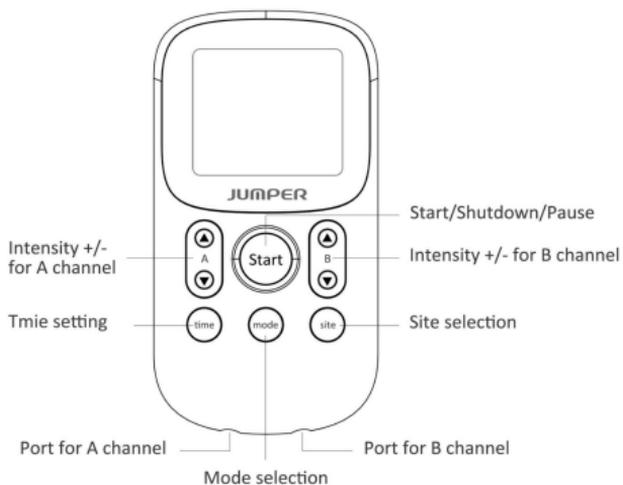
**Model: JPD-ES200**

Please read this manual carefully before use.

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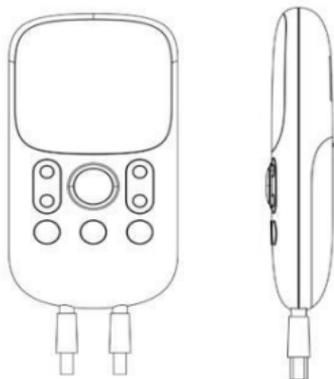
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## Product appearance diagram



**Figure-1 Appearance diagram**

## Main unit:



**Figure-2 Front and right side for the main unit**

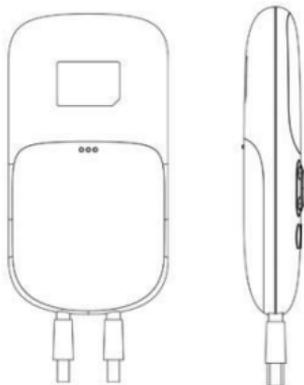
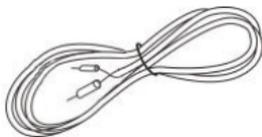
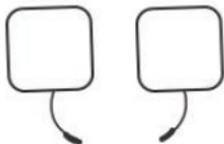


Figure-3 Back and left side for the main unit

### Accessories:

① self-adhesive electrode pad

② Connecting line



Note: Connecting line is used to make connection between the host and the electrode pads and not for any other use.

### Packing list:

TENS therapy device ×1

Electrode pad × 4

Electrode wire × 2

AAA 1.5V dry battery ×4

Instruction manual ×1

Storage bag ×1

### Product introduction

The TENS Therapy Device can instantaneously concentrate and spread energy of power spectrum based on a specific modulation characteristics, resulting in life-simulation of actual senses about massage, acupuncture, tapping, scraping and cupping on different body sites such as shoulders, hands, joints, abdomen, waist and legs. Frequently scheduled

use of the TENS Therapy Device on meridian points can play assistant effects to treat and alleviate various physical pains, or use of the TENS Therapy Device for massage leads to body and mind relaxation during or after work.

### **Product structure and composition**

It is mainly composed of TENS Therapy Device main unit, electrode connection wire, self-adhesive electrode pad and dry battery.

### **Intended use:**

For low-frequency electric pulse treatment on patient's acupoints.

### **Scope of application:**

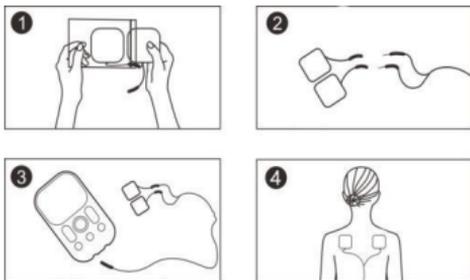
For adjuvant treatment of pain and arthralgia such as back pain, neural paralysis and muscle pain.

### **Product features:**

1. Five treatment modes switchable on the TENS Therapy Device;
2. Tailored pain therapy with 6 pain modes (shoulder, hand, joint, abdomen, waist and leg);
3. Dual-channel treatment available for two people at the same time;
4. Adjustable intensity of treatment at any time;
5. Fall-off alert for electrode pad, followed by automatic suspension of treatment.
6. Automatic shutdown in case of no-operation within 2 minutes except working state, more energy efficiency.
7. Exquisite and compact appearance, light weight and portability;
8. Low battery indication, alert indication for replacing battery in time.

### **Install the therapy device and connect to the treatment sites:**

Tear open the electrode wire transparent plastic bag and take out one electrode wire; tear open the electrode pad transparent plastic bag and take out two electrode pads; connect both heads of the electrode wire with the electrode pads, and then connect the TENS Therapy Device with the electrode wire. Remove the protective films on the electrode pads and stick the adhesive surface on the treatment sites such as the waist and other sites of the human body, and keep the electrode pad in close contact with the skin; after use, stick the protective films back for the next use.



## Operating instructions:

1. Long press on "start" button for 2s to start up;
2. Short press on "site" button to select the treatment sites (shoulders, hands, joints, abdomen, waist, leg);
3. Short press on "mode" button to select treatment modes (massage, acupuncture, tapping, scraping and cupping);

massage   acupuncture   tapping   scraping   cupping



4. Long press on "time" button for 2s to set the treatment time;  
Short press on "▲" button of A or B channel to increase the treatment time; long press for 2s to rapidly increase treatment time; maximum treatment time is 90min;  
Short press "▼" button of A or B channel to reduce the treatment time; long press for 2s to quickly reduce the treatment time. The minimum treatment time is 5min;  
Short press on "Start" or "time" button to exit the setting and save the current settings;
5. Short press on "▲" button of A or B channel to adjust the intensity and start running the A channel.
  - ※ Note: The increment or decrement unit is 1 energy value, the minimum is 0, and the maximum is 15.
  - ※ Note: Short press on "start" button for pause of intensity output and then Short press on "start" button for continue running;
6. When the running time is displayed as 0, the device will automatically stop running.
  - ※ Note: If no operation in 2 minutes, the LCD will be turned off and the system will

be turned off.

7. Long press on "start" button for 2s to shutdown

**Tip:** The treatment time is 5 minutes by default or the last set time.

**Notes:**

1. If you aren't feeling well during treatment, stop using it immediately.
2. During treatment, the adhesive surfaces of the electrode pads should have good contact with the skin so as to prevent sense of piercing pain due to untight contact.
3. During treatment, the slight paralysis sense may occur at treatment sites, which is the result of the coupling of the device's output current with human body, belonging to a normal circumstance.
4. Users who are treated for the first time may reduce their tolerance due to stress, so that the current intensity should not be too large. It is recommended that the intensity should be gradually increased from 0 to 15. Do not adjust the intensity too high, it is appropriate to adjust to the user's acceptable level.
5. The intensity will be automatically reset when switching the treatment mode, and the intensity needs to be re-adjusted.
6. Always remove the electrodes from the skin with a moderate pull in order to avoid injury in the event of highly sensitive skin.
7. Before applying the self-adhesive electrodes, it is recommended to wash and degrease the skin, and then dry it.
8. Do not turn on the device when the self-adhesive electrodes are not positioned on the body.
9. To remove or move the electrodes, first switch off the device in order to avoid unwanted irritation.
10. Never remove the self-adhesive electrodes from the skin while the device is still switched on.

## Replacing batteries

1. Slide the battery cover off along the marked direction and take it off.
2. Insert the four AAA (1.5V) dry batteries into the compartment according to the stated polarities.



Make sure that the batteries are installed correctly. Otherwise, the unit may be damaged.



If the low-battery symbol is displayed on the screen, replace the batteries.



Batteries of a same type should be used. Dispose the used batteries in accordance

with the local environmental policies.

### **Low battery specification:**

When the battery voltage is lower than  $4.2 \pm 0.2V$ , the battery symbol  appears and flashes.

### **Attentions:**

1. When treatment, in case of any discomfort, please stop using the product immediately.
2. When treatment, the adhesive surface of electrode pad shall be in good contact with the skin to avoid sense of piercing pain caused by loose contact.
3. There will be slight sense of tingling at the treatment site during the treatment, which is resulting from coupling of instrument output current and human body, a normal circumstance.
4. The user receiving the treatment for the first time might develop lowered resistance due to the tension, so the current intensity shall not be too high. It is suggested to increase the intensity slowly from 0 to 15, rather than too high at one time. The intensity shall be adjusted to the degree acceptable by the user.
5. If you switch the treatment mode during treatment, the intensity will fall to zero automatically, and you should adjust the intensity again.
6. TENS Therapy Device cannot operate during charging. If you want to use it, please disconnect the charger.

### **Buzzer sound specification:**

<b>Beep sound</b>	<b>State specification:</b>
One short sound	Start up Treatment time over
Short and continuous sound at interval of 1S	Fall-off of electrode pad

## **Cleaning and maintenance**

### **Cleaning and caring for host:**

Dip soft cloth in a small amount of neutral detergent to wipe the host and the connecting

cable.

-Never allow the liquid to penetrate into the Instrument.

-Do not use gasoline or volatile liquid for cleaning.

-Do not subject the TENS Therapy Device to moisture or dampness. -Do not hold the TENS Therapy Device under running water, do subject it in water or other liquids.

-The TENS Therapy Device is sensitive to heat and may not be exposed to direct sunlight.

Do not place the TENS Therapy Device on hot surfaces.

### **Cleaning and caring electrode pad:**

-Rinse with clean water. Dry in the air, and it can be used repeatedly after about 30 times.

-For reasons of hygiene, each user should use his/her own set of electrode.

-Do not use any chemical cleaners or abrasive agents for cleaning.

### **Contraindications**

Patients with skin diseases, malignant tumors, allergies to electrode pads, and implanted cardiac pacemaker are forbidden to use the device. Consult your doctor for other disabled situations.

### **Maintenance**

1) The manufacturer didn't authorize to any maintenance agencies abroad. If your device has any problem, please contact the distributor. The manufacturer will not be held responsible for the results of maintenance or repairs by unauthorized persons.

2) The user must not attempt any repairs to the device or any of its accessories. Please contact the retailer for repair.

3) Opening of the equipment by unauthorized agencies is not allowed and will terminate any claim to warranty.

### **Use the electrode pad**

1) The electrode may only be connection with the TENS Therapy Device. Make sure that the device is turned off when attaching or removing the electrode pads.

2) If you want to reposition the electrode during the application, turn the device off first.

3) The use of electrode may lead to skin irritations. If you experience such skin irritations, e.g. redness, blistering or itching, discontinue using the electrode pads. Do not use the TENS Therapy Device permanently on the same body part, as this may also lead to skin irritations.

4) The electrodes provided with this device are for single patient use only. For hygiene reasons, electrodes should not be shared between users.

5) The electrode must connect entirely to the skin surface to prevent high local currents, which may lead to skin burns.

6) The adhesive force of the electrodes depends on the skin properties, storage, and the number of applications. If your electrode pads no longer fully stick to the skin's surface, replace them with new electrodes. Stick the electrode pads back onto the protective foil after use and store them in the storage bag to prevent them from drying out. This retains the adhesive force for a longer period.

7) The electrodes need to be replaced after life time (30 times). You can contact the manufacturer to obtain replacement electrodes.

8) The electrode pads life time approx. 30 times. If you feel the electrode was loosen, please replaced it. Because during the electrode was loosen, result the contact area decrease, easy caused skin burn.

Each product in manufacturing has been through the systematic validation. The performance is stable and did not need to undertake the performance parameters of calibration and validation.

If your product can't reach the expected performance and the basic function have change in normal use, please contact the retailer.

## Warning



- 1) If you have had medical or physical treatment for your pain, consult with your physician before using this device.
- 2) If your pain does not improve, becomes more than mild, or continues for more than five days, stop using the device and consult with your physician.
- 3) Do not apply stimulation over your neck because this could cause severe muscle spasms resulting in closure of your airway, difficulty in breathing, or adverse effects on heart rhythm or blood pressure.
- 4) Do not apply stimulation across your chest because the introduction of electrical current into the chest may cause rhythm disturbances to your heart, which could be lethal.
- 5) Do not apply stimulation over, or in proximity to, cancerous lesions.
- 6) Do not apply stimulation in the presence of electronic monitoring equipment (e.g., cardiac monitors, ECG alarms), which may not operate properly when electrical stimulation device is in use.
- 7) Do not apply stimulation when in the bath or shower.
- 8) Do not apply stimulation while sleeping.
- 9) Do not apply stimulation while driving, operating machinery, or during any activity in which electrical stimulation can put your at risk of injury; and
- 10) Apply stimulation only to normal, intact, clean, healthy skin.
- 11) The long-term effects electrical stimulation are unknown. Electrical stimulation device do not have any curative value.
- 12) Stimulation should not be applied transthoracically in that the introduction of electrical current into the heart may cause cardiac arrhythmias.
- 13) Stimulation should not take place while the user is connected to high-frequency surgical equipment, which may cause burn injuries on the skin under the electrodes, as well as problems with the stimulator.

14) Do not use the stimulator in the vicinity of shortwave or microwave therapy equipment, since this may affect the output power of the stimulator.

15) Never use near the heart. Stimulation electrodes should never be placed anywhere on the front of the thorax (marked by ribs and breastbone), but above all not on the two large pectoral muscles. Here it can increase the risk of ventricular fibrillation and lead to cardiac arrest.



16) Never use on the eye, head and face area.

17) Never use near the genitals.



18) Never use on the areas of the skin which lack normal sensation

19) Keep electrodes separate during treatment, electrode in contact with other could result in improper stimulation or skin burns.

20) Keep the stimulator out of reach of children.

21) Consult your doctor if you are in any doubt whatsoever.

22) Discontinue and do not increase the intensity level if you feel discomfort during use.

## Precautions



1) TENS is not effective for pain of central origin including headache.

2) TENS is not a substitute for pain medications and other pain management therapies.

3) TENS devices have no curative value.

4) TENS is a symptomatic treatment and, such as, suppresses the sensation of pain that would otherwise serve as a protective mechanism.

5) Effectiveness is highly dependent upon patient selection by a practitioner qualified in the management of pain patients.

6) The long-term effects of electrical stimulation are unknown.

7) Since the effects of stimulation of the brain are unknown, stimulation

should not be applied across your head, and electrodes should not be placed on opposite sides of your head.

8)The safety of electrical stimulation during pregnancy has not been established.

9)You may experience skin irritation or hypersensitivity due to the electrical stimulation or electrical conductive medium (silica gel).

10)If you have suspected or diagnosed heart disease, you should follow precautions recommended by your physician,

11) If you have suspected or diagnosed epilepsy, you should follow precautions recommended by your physician.

12)Use caution if you have a tendency to bleed internally, such as following an injury of fracture.

13)Consult with your physician prior to using the device after a recent surgical procedure, because stimulation may disrupt the healing process.

14)Use caution if stimulation is applied over the menstruation or pregnant uterus.

15)Use caution if stimulation is applied over areas of skin that lack normal sensation.

16)For single patient use only.

17)Keep yourself informed of the contraindications.

18)This stimulator is never use by patients who have noncompliant, emotionally disturbed, dementia, or low IQ.

19)The instruction of use was listed; any improper use may be dangerous.

20)Caution should be used for patients with suspected or diagnosed heart problems.

21)Isolated cases of skin irritation may occur at the site of the electrode placement following long-term application.

22)Do not use this device at the same time as other equipment which sends electrical pulses to your body.

23)Do not use sharp objects such as pencil point or ballpoint pen to operate

the buttons on the control panel.

24) To check the electrode connections before each use.

25) Electrical stimulators should be used only with the electrodes recommended for use by the manufacturer.

## Troubleshooting

Fault phenomenon	Probable causes	Troubleshooting procedures
Unable to boot	Severe electricity shortage	● Replace the battery
Sense of piercing pain during treatment	The electrode pad is not stuck tightly	● Stick electrode pad again ● Replace electrode pad
Fall-off of electrode pad	● Sweat on skin ● Ineffective stickiness of electrode pad	● Wipe the sweat on skin and re-attach the electrode pad ● Replace electrode pad
Inconsistent strength between two electrode pads	Disconnected main unit, electrode wires and electrode pads	● Make sure the connection among main unit, electrode wires and electrode pads well
Power failure during use	● Electricity shortage	● Replace the battery before using it
Sudden alarm pause treatment in use	Fall-off of electrode pad	Re-attach the electrode pads on the treatment sites

## Working conditions

Ambient temperature: 5-40°C; relative humidity: ≤80%

## Storage conditions

Ambient temperature: -40°C~55°C; Relative humidity: 10%~93%

## Technical parameters:

1. Operating voltage: 6V DC
2. Working mode: continuous operation
3. Maximum output pulse energy: for 500 Ω of load resistance, the energy value ≤300mj
4. Pulse width: 0.15-0.20ms,error ±20%

5. Max Intensity: 48mA, error  $\pm 20\%$
6. Pulse frequency: 1-120Hz, error  $\pm 20\%$
7. Rated load resistance: 500  $\Omega$
8. Maximum output voltage peak in open circuit:  $\leq 500V$
9. Setting range of treatment intensity: 0-15; adjustable interval: 1
10. Dimensions (L\*W\*H) of main unit: 121.8 mm \* 63.6 mm \* 22.2 mm
11. Electrode pad dimension: 50mm\*50mm
12. Main unit weight: 86g (excluding battery)
13. Service life: 5 years
14. Manufacturing date: see the label
15. Atmospheric pressure range: 70.0 kPa~106.0 kPa

## Symbols

	Manufacturer
	Date of Manufacture
	Serials number
	Authorized representative in the European Community
	CE sign with the number of the notified body
	Waste electrical materials should be sent to a dedicated collection point for recycling.
	Type BF applied part
	Protected against solid foreign objects of 12,5 mm $\varnothing$ and greater Protection against vertically falling water drops when ENCLOSURE tilted up to 15°
	Caution, destroy it after using
	Refer to instruction manual/booklet

## Electromagnetic compatibility (EMC) tables

Guidance and manufacturer's declaration - electromagnetic emissions

The device is intended for use in the electromagnetic environment specified below. The customer or the user assure that it is used in such an environment.		
<b>Emissions test</b>	Compliance	Electromagnetic environment - guidance
<b>RF emissions CISPR11</b>	Group 1	The device use RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
<b>RF emissions CISPR11</b>	Class B	The device is suitable for use in all establishments including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
<b>Harmonic emissions IEC61000-3-2</b>	Not applicable	
<b>Voltage fluctuations/ Flicker emissions IEC61000-3-3</b>	Not applicable	

<b>Guidance and manufacturer's declaration — electromagnetic immunity</b>			
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.			
<b>Immunity test</b>	IEC 60601 Test level	Compliance level	Electromagnetic Environment-guidance
<b>Electrostatic discharge (ESD) IEC61000-4-2</b>	±8kV contact ±15kV Air	±8kV contact ±15kV Air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%. If ESD interfere with the operation of equipment, counter measurements such as wrist strap, grounding shall be considered.
<b>Electrical fast transient/burst IEC 61000-4-4</b>	±2 kV for power supply lines	Not applicable	not applicable (For INTERNALLY POWERED ME EQUIPMENT)

<b>Surge IEC 61000-4-5</b>	± 1 kV differential mode ± 2 kV common mode	Not applicable	not applicable (For INTERNALLY POWERED ME EQUIPMENT)
<b>Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11</b>	0% UT (100% dip in UT) for 0.5 cycle 0% UT (100% dip in UT) for 1 cycles  70% UT (30% dip in UT) for 25/30 cycles 0% UT (100% dip in UT) for 250/300 cycles	Not applicable	not applicable (For INTERNALLY POWERED ME EQUIPMENT)
<b>Power frequency (50Hz/60Hz) magnetic field IEC 61000-4-8</b>	30A/m	30A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

## Warranty

Please contact your dealer or the device centre in case of a claim under the warranty. If you have to send in the unit, enclose a copy of your receipt with clear statement of defect description.

The warranty terms as below:

The warranty period for device is one year from date of purchase. In case of a warranty claim, the date of purchase has to be proven by means of the sales receipt or invoice.

2. Repairs under warranty do not extend the warranty period either for the device or for the replacement parts.

3. The following cases are excluded under the warranty

- All damage which has arisen due to improper treatment, e.g. nonobservance of the user instruction.
- All damage which is due to repairs or tampering by the customer or unauthorized third parties.
- Damage which has arisen during transport from the manufacturer to the consumer or

during transport to the service centre.

- Accessories which are subject to normal wear and tear.
- Device damage due to privately disassembling devices.

Liability for direct or indirect consequential losses caused by the unit is excluded even if the damage to the unit is accepted as a warranty claim

## **After-sale Service**

After-sale service unit: Shenzhen Jumper Medical Equipment Co., Ltd.

Address: D Building, No. 71, Xintian Road, Fuyong Street, Baoan,  
Shenzhen, Guangdong, China

Tel: +86-755-26696279

Fax: +86-755-26852025

E-mail: [info@jumper-medical.com](mailto:info@jumper-medical.com)

Website: [www.jumper-medical.com](http://www.jumper-medical.com)

Postal Code: 518103



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