

Nerve And Muscle Stimulator (SDP-330)
Instruction Manual For Use

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Dear customers:

Thanks for choosing our Yuwell,
Please read the instruction manual carefully before using, and
keep it properly.
The illustrations in this manual are all renderings.

1. Introduction

SDP-330 Nerve and Muscle Stimulator can output low frequency pulse. It is indicated for treatment of pain of human body. It is intended for Hospitals,clinics, home healthcare environment use (Stop use and consult professional if any abnormal reactions occurred during the treatment). SDP-330 Nerve and Muscle Stimulator is an advanced electro-therapy unit, featuring 1 output channels, as well as adjustable mode and output intensity . Based on the traditional electronic treatment instruments, the SDP-330 Nerve and Muscle Stimulator combines modern micro computer technology with traditional Chinese medicine technology.

2. Intended Use

SDP-330 Nerve and Muscle Stimulator is used for applying low frequency pulse to stimulate the human body, may be used to apply an electrical current to electrodes on a patient's skin to treat pain, which is indicated for use by qualified practitioners. Recommended for adults over the age of 18.

3. Contraindications

The following patients are prohibited from using this product

- Patients with implantable medical devices such as pacemakers, life-sustaining medical devices such as artificial heart-lung devices, and medical devices such as electrocardiograph.
- Pregnant women, children, patients without the ability to express consciousness, patients suffering from acute diseases, infectious diseases, malignant tumors and heart disease, etc.
- Patients who have ulcer, scratch, new scar wound or irritation on skins.



4. Warnings and Precautions

- The following patients should use the product under the guidance of a doctor: patients whose temperature is over 38 °C (fever), patients

who are taking drugs, patients who are being treated by doctors, patients with abnormal blood pressure and blood glucose, patients with skin abnormalities, patients with cardiac disorders or cerebral nerve abnormality

- do not modify the instrument without authorization of the manufacturer.
- when the instrument is in use, all parts of the instrument shall not be serviced or maintained.
- the patient is an intended operator. Abnormal intelligence group needs to use this instrument in monitoring.
- while the instrument is during charging, plug of charger is intended to be used as isolation device from supply mains, please always make isolation device easy to operate.
- Never use the instrument when driving or operating a machine
- Never use the instrument when bathing and sweating
- When the instrument and electrode are in use, it is not allowed to touch metal objects (such as belt, neckless)
- When the instrument is in use, 2 electrode pads of the output terminal should not touch each other, otherwise it might cause short-circuit and damage the instrument.
- To avoid cross contamination, never use electrodes which have been used by others.
- The instrument should not be applied across or through the head, directly on the eyes, covering the mouth, on the front of the neck, (especially the carotid sinus), or from electrodes placed on the chest and the upper back or crossing over the heart.
- Never use the instrument in the place where there is flammable and explosive gas.
- Never inset the lead wire plug into a jack other than the lead wire jack of the instrument.
- Never use with other medical instruments or more then 2 sets of this instrument and coating reagent at the same time.
- The instrument should have a certain distance from TVs, radios, and other electrical instruments, in case of electromagnetic interference.
- If you notice any unexplained changes in the performance of the device, if it is making unusual sounds, if the device or the power supply are dropped or mishandled, or if the enclosure is broken, discontinue use and power off

the equipment, then contact your provider or Service Center.

- This equipment might not offer adequate protection to radio-frequency communication services. The user might need to take mitigation measures, such as relocating or re-orienting the equipment. (eg: When the equipment is in a humid environment such as the bathroom, the screen will not display clearly, and the equipment will be damaged after the water inside)
- portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30cm (12 inches) to any part of the SDP-330 Nerve and Muscle Stimulator, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.
- A warning on the following potential hazards:
 - Simultaneous connection of a patient to a h.f. surgical equipment may result in burns at the site of the stimulator electrodes and possible damage to the stimulator.
 - Operation in close proximity (e.g. 1 m) to a shortwave or microwave therapy equipment may produce instability in the stimulator output.
 - Application of electrodes near the thorax may increase the risk of cardiac fibrillation.
 - Except the charger supplied by the manufacturer as spare parts, using any unspecified accessories or charger may cause increasing emission or decreasing immunity of the instrument.
 - When the instrument is in use, never put it near other instruments or stack it on other instruments. If you have to put it near other instruments or stack it on other instruments.
- Arrange the use of lead wires to prevent strangulation caused by lead wires.
- During use, do not wrap lead wires around the neck.
- If contact with the instrument, electrode pads and other accessories, allergy, skin irritation and other adverse reactions, should immediately stop using the instrument.
- Never use of accessories, detachable parts, and materials not described in the instructions for use.
- Users should avoid using the device under the following conditions, or damage may be caused to the instrument:

- The effects of lint, dust, light (including sunlight), etc.
- A list of known devices or other sources that can potentially cause interference problems.
- (heat from a fireplace or radiant heater, moisture from a nebuliser or steam kettle.)
- The effects of degraded sensors and electrodes, or loosened electrodes, that can degrade performance or cause other problems.
- The effects caused by pets, pests or children.
- Sales of the instrument are prohibited to countries or regions (e.g., Japan) where the power supply is less than 110V.



5. Indicators and Function



Physiotherapy electrode icon

Intensity of stimulus

Power button

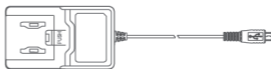


Battery power and charge

Remaining time of treatment

Mode Button

Intensity setting button



The product is composed of the instrument , electrode pad (skin electrode), charger and lead wire.

► Instrument

- » Electrode pad icon: The indicator flashes when the electrode pad or lead wire is not properly mounted.
- » Battery power and charge: after the instrument is turned on. When the power has less power left, the low battery icon lights up, please charge the battery. The instrument shuts down automatically after connecting to the charger. At this moment, press on/off button, the instrument has no treating output.
- » Intensity of stimulus
- » Remaining time of treatment
- » Intensity setting button: Intensity can be adjusted between 10 levels according to personal preference. Press the ▲ button one time, the stimulus increases by one level. Press the ▼ button one time, the stimulus decreases by one level.
- » Mode Button: The product has 8 modes of massage according to different massage parts and personal preference.
- » Power button: Press the button to turn on the instrument and the instrument screen is lit up. Press the button during the massage to turn off the instrument.

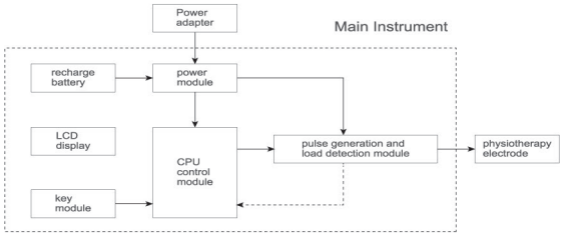
► lead wire

- » electrode pad (size:112mm x52mm x25mm)
- » the accompanying AC charger (Model No. UES06WNCP-050100SPA)
- » applied part: the electrode pads and parts conductively connected to them.

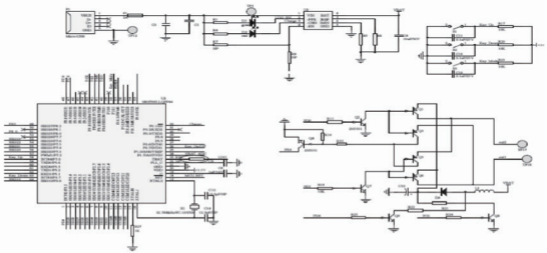
User related actions are as follows:

1. Preparation: connect the device with lead wires, then connect the lead wire button with the electrode pads.
2. Turn on the instrument
 - ON/OFF Press the power button
 - Mode Press the mode button
 - Intensity setting button
3. End of treatment: Press on/off button to cut off the power.

6. Block Diagram



7. Circuit Diagram



8. Parts List

Parts List			
NO.	Element Name	Code	Quantity
1	Integrated Circuit Block	IC	3
2	Transistor	Q	11
3	Inductance	L	1
4	Light Emitting Dide	D	2

5	Switching Dide	D	7
6	Capacitor	C	15
7	Resister	R	27
8	LCD Screen	LCD	1
9	Lithium Polymer Battery 3.7V	BAT	1
10	Fuse 125V/2A(IFT2A)	F1	1
11	LCD Socket	P2	1
12	Micro-USB	P1	1

9. Use of Battery and Charger

► Initial use

» Please charge the instrument for about 2 hours before using it.

⚠ Caution:

The instrument should be externally connected to a DC5.0V/1.0A(Special parts supplied by the manufacturer) charger to charge the battery.

► Battery service time

» The internal battery can meet the service time of 200 times for charge and discharge, service time may vary based on actual use. If the treatment times drop dramatically after fulling charged, please contact the manufacturer in time to replace the internal battery.

⚠ Caution:


If the device is not used for a long time, please charge it every 6 months. (Battery storage environment : temperature is $-20\text{ }^{\circ}\text{C} \sim 30\text{ }^{\circ}\text{C}$, humidity is 45%RH ~ 85%RH) otherwise will cause the battery power too low, service time reduced and cannot be used.

⚠ Warning:

Please do not destroy or modify internal battery, do not apply external

pressure to the battery, do not throw, knock, bend, slam the battery, otherwise it may cause heating, rupture, expansion, fire, explosion and other hazards.


- Charging function

- » In use, if it appears “” in the right upper corner of the screen, it indicates the battery is low, please charge as soon as possible.
- » After connecting to charger, automatic charging starts. At this moment, press on/off button, the screen is still off.

Caution:

when the charger is connected to charge, the instrument will automatically enter into shutdown mode.

Warning:

when the symbol “” appears in the screens, it indicates that the battery is quite low, please charge it immediately. Otherwise may lead to the decline of the battery service time, and may damage battery and the instrument in severe case.

- 4.Connecting the charger

- » Please connect the specialized charger to the power jack and medical power socket of the device, to ensure the reliable connection between charger and socket.

Caution:

The voltage and frequency of the medical power socket should be within the range of AC100 ~ 240V, 50 ~ 60Hz. If there is no indication of charging light when connecting the charger for charging, please contact the supplier in time.

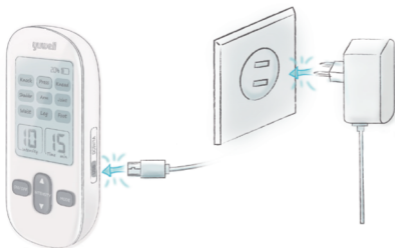
Warning:

Do not move the device while charging, otherwise the cable may fall off and the device may fall and hurt the patient.

Warning:

Do not use wet hands to plug or unplug the charger, otherwise it may cause electric shock and burn.

- ▶ Before preparing for charging, connect the instrument first and then connect the charger form mains supply.



- After the end of charging, first unplug the charger from mains supply, and then unplug the instrument.



10. Instructions for Use

► Preparation

Make sure the device is shut down and not charged, connect the device with lead wires, then connect the lead wire button with the electrode pads. Clean the skin where treatment is required, strip the transparent film(or transfer film)from the electrode pad and stick it to the treatment parts,

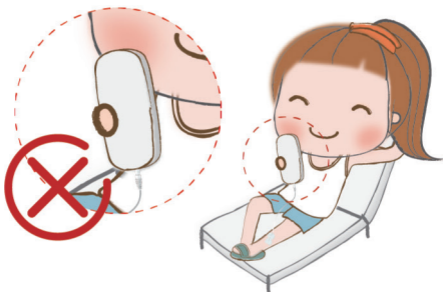
⚠ Caution

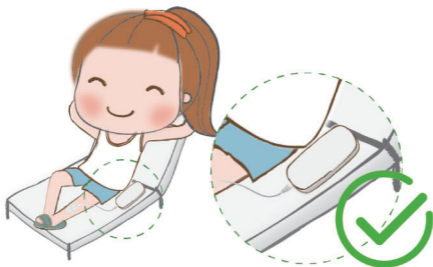
- Do not bend or stretch the lead wires arbitrarily. When pulling out the lead wires from the device, grab the plug and pull it out to avoid the wires being damaged or broken.

- Do not press the electrode pads hard, it will cause the adhesive surface damage.
- Two electrode pads must be pasted at the same time. The instrument cannot be used without pasting two electrodes at the same time.
- Do not bend the electrode pads, do not overlap the electrodes.
- The treatment part and electrode pads must be kept naturally dry.
- Do not tear off the electrode pads if they are accidentally stick to clothes or other objects. After turning off the device, Dip a little water on the inside of the pasting place to remove the electrodes.



⚠ Caution: Do not move device during use.





Examples of places of use

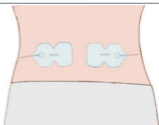
Shoulder neck



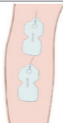
Upper arm



Waist



Lower leg

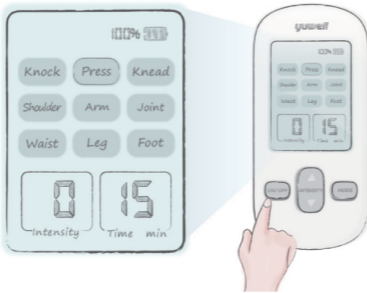


sole



► Turn on the instrument

» ON/OFF Press the power button



» Mode Press the mode button



After pressing the mode button, the mode will be switched in the order of knock-knead-press-waist-upper arm-neck & shoulder-shank-sole for selection confirmation.

Shoulder/ Arm/ Joint / Waist/ Leg/ Foot	These modes are based on the choices of paste parts for treatment
Knock/ Press/ Knead	These modes are based on symptoms and personal preferences for treatment

► Example of waveform description

» The output waveform frequency of press mode is 100HZ, The output characteristics are as follows: first, output the one-way positive wave with N seconds, stop output 0.8 seconds, and then output the one-way negative wave with N seconds, stop output 0.8 seconds. N represents a period of time, that is, when N=5, output the one-way positive wave with 5 seconds, stop output 0.8 seconds, and then output the one-way negative wave with 5 seconds, stop output 0.8 seconds. The length of N varies in 5 seconds, 4.5 seconds, 4 seconds, 3.5 seconds, 3 seconds, 2.5 seconds, 2 seconds, 2.5 seconds, 3 seconds, 3.5 seconds, 4 seconds, 4.5 seconds, 5 seconds. As shown in the waveform of C(Press) in above table. The forms of positive and negative waves are shown in figure 1

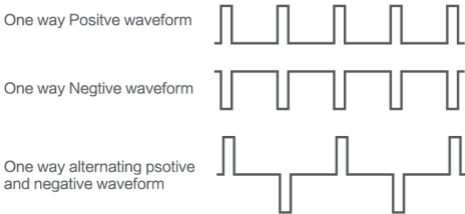


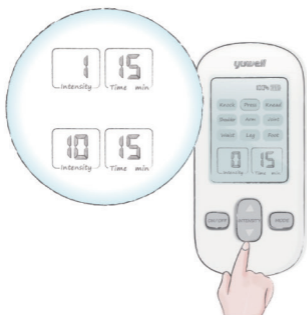
Figure 1: Example of output waveform

» When the output is started each time, When the output is started each time, the pulse width changes from 0us to 100us at a constant speed, and the duration of the change is 50% of the output time, and then the pulse width stays at 100us until the output stops. For example, when N=5, at the beginning of output, the pulse width increases from 1us to 100us at a constant speed. The duration of pulse width change is 2.5 seconds, and then keep the pulse width of 100us for 2.5 seconds to stop the output. As shown in figure 2. The pulse width changes in the same way when the new output starts.



Figure 2: Example of pulse width change

» Intensity setting button



Intensity can be adjusted between 10 levels according to personal preference.

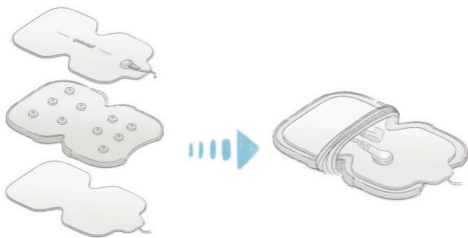
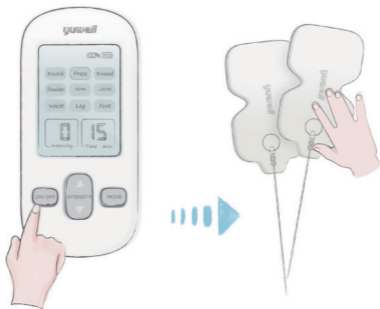
Standard of treatment
Time: 1 time each massage part, 10min–15 min.
Frequency: once or twice a day.
Intensity: based on feeling comfortable

The electrode pad icon flashes:

When the electrode pad is not pasted to the skin or the lead wire is loose, the device will automatically cut off the power after the electrode pad icon flashes for 30 seconds. Please operate again according to the instructions.

⚠ Caution

- Do not use in the same part for a long time (more than 30 minutes)
- In case of malfunction or physical discomfort, please cut off the power immediately and stop to use the device.
- If you want to move the electrode pads to other parts in the process of using, please cut off the power before moving.
- Do not use two electrode pads on the left and right of up half part of body in the same time to avoid the electric-current to pass through the heart.
- Do not use wet hands to move the electrode pads and unplug the lead wires.



Press on/off button to cut off the power. (Note: the device will shut down automatically after 15 minutes treatment)

Unplug the lead wire from the device, remove the electrode pad from the skin and paste it on the transfer plate. The fastener of the lead wire can always be placed on the electrode pad, and the lead wire can be rolled on the electrode pad transfer plate for storage.

11. Technical Specifications

Power	Charger rated output: DC5V,1A (Model No.: UES06WNCP-050100SPA) Rechargeable battery: Voltage DC 3.7V
Charger (provided as part of the instrument)	Model No.: UES06WNCP-050100SPA PART No.: UE190222WXYY1RM INPUT: 100-240V-50/60Hz. 0.2A OUTPUT: 5.0V 1.0A
Power input	10VA
Output current	≤ 6mA(rms , at 500Ω load impedance)
Output frequency	1Hz~100Hz,error is ± 8%
Output voltage	0V~5V (rms) ,error is ± 20%
Pulse width	0 μ S~100 μ S, error is ± 20%
d.c. component	0
Load impedance	500 Ω , error is ± 10%
Rated time	15 mins ± 30sec
Continuous working time	Not less than 4h
Environmental operating conditions – Continuous operating conditions	a. +5°C ~+40°C b. 15%RH~90%RH, non-condensing, but not requiring a water vapour partial pressure greater than 50 hPa c. 700hPa~1060hPa
conditions of transportation and storage	a. -20°C ~+60°C b. 10%RH~95%RH c. 700hPa~1060hPa d. 30min required for the device to warm from -20°C between uses until it is ready for intended use e. 30min required for the device to warm from 60°C between uses until it is ready for intended use
Expected service Life of the device	5 years
Cycle time of electrode pads	No more than 300 times as recommended

Size of electrode pads	area not less than 1256mm ² . Only the electrode pads matched with the device are allowed to be used. All sizes of electrode pads are suitable for 8 treatment modes
Operating principle	Nerve and muscle stimulator adopts transcutaneous electrical nerve stimulation (TENS).which is one of the commonly used low frequency electrotherapies. Transcutaneous electrical nerve stimulation is the Electrotherapy of pain treatment with a specific low-frequency pulse current inputing into human body through the skin
Operating mode	continuous operation
Electromagnetic compatibility (EMC)	Group I. ClassB
Level of protection for incoming liquid	Common equipment
Software version	V1.0.0.0

⚠ Note:

load impedance has no effect on output pulse width, and output pulse frequency. It is positively correlated to the max. output amplitude.

- This instrument is not an AP or APG equipment. Its waterproof grade is IP21
- This instrument conforms to the requirements of Class II (for charger) , the Internally powered equipment, Type BF Applied Part of IEC 60601-1.
- When measuring if the load resistance's variety is within $\pm 10\%$, the variety of pulse width of pulse durative period, repeated pulse frequency and pulse amplitude caused, including all DC components should be no more than 30%.
- If the variety of power voltage is within $\pm 10\%$, measure the variety of output pulse amplitude, pulse with, or repeated pulse frequency, the results should be $\leq \pm 10\%$.

12. Guidance and manufacturer's declaration

► List of cables

Name	Lengths(m)	Whether the cable is shielded
Cable(output)	1.2	No
Cable(DC)	1.2	No

► Technical description

» Compliance information for Emission test

Emission test	Compliance
RF emissions CISPR 11	Group 1
RF emissions CISPR 11	Class B
Harmonic emissions IEC 61000-3-2	Class A
Voltage fluctuations/flicker emissions IEC61000-3-3	Complies

» Compliance information for Immunity test

Immunity test	Compliance level
Electrostatic discharge(ESD) IEC61000-4-2	$\pm 8\text{kV}$ contact $\pm 2\text{kV}$, $\pm 4\text{kV}$, $\pm 8\text{kV}$, $\pm 15\text{kV}$ air
Electrical fast transient/burst IEC61000-4-4	$\pm 2\text{kV}$ 100kHz repetition frequency for power supply lines
Surge IEC61000-4-5	$\pm 0.5\text{kV}$, $\pm 1\text{kV}$ (line-to-line)differential mode
Voltage dips, short interruptions and voltage variations on power supply input lines IEC61000-4-11	Voltage Dips $0\%U_T$; 0.5 cycle At 0° , 45° , 90° , 135° , 180° , 225° , 270° and 315° $0\%U_T$; 1.0 cycle And $70\%U_T$; 25/30 cycles Single phase at 0° Interruptions $0\%U_T$; 250/300 cycle

Power frequency(50Hz) magnetic field IEC61000-4-8	30A/m 50 or 60 Hz
Radiated RF EM fields	10 V/m 80 MHz -2,7 GHz 80 % AM at 1 kHz
Conducted disturbances induced by RF fields	3 V rms 0.15MHz – 80 MHz 6V rms in ISM bands between 0.15MHz to 80MHz 80% AM at 1kHz
NOTE U_T is the a.c mains voltage prior to application of the test level.	

Test specifications for ENCLOSURE PORT IMMUNITY to
RF wireless communications equipment

Test Frequency (MHz)	Band ^{a)} (MHz)	Service ^{a)}	Modulation ^{b)}	Maximum Power (W)	Distance (m)	Immunity Test Level (V/m)
385	380-390	TETRA 400	Pulse Modulation ^{b)} 18 Hz	1,8	0,3	27
450	430-470	GMRS 460, FRS 460	FM ^{c)} ± 5 kHz deviation 1 kHz sine	2	0,3	28
710	704-787	LTE Band 13,17	Pulse Modulation ^{b)} 217 Hz	0,2	0,3	9
745						
780						
810	800-960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse Modulation ^{b)} 18 Hz	2	0,3	28
870						
930						

1720	1700– 1990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse Modulation ^{b)} 217 Hz	2	0,3	28
1845						
1970						
2450	2400– 2570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse Modulation ^{b)} 217 Hz	2	0,3	28
5240	5100– 5800	WLAN 802.11 a/n	Pulse Modulation ^{b)} 217 Hz	0,2	0,3	9
5500						
5785						

NOTE If necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME EQUIPMENT or ME SYSTEM may be reduced to 1 m. The 1 m test distance is permitted by IEC 61000–4–3.

a) For some services, only the uplink frequencies are included.

b) The carrier shall be modulated using a 50 % duty cycle square wave signal.











c) As an alternative to FM modulation, 50 % pulse modulation at 18 Hz may be used because while it does not represent actual modulation, it would be worst case.

» Precautions

According to IEC60601–1–2:2014, The Nerve and Muscle Stimulator (SDP–330) complies with all applicable electromagnetic compatibility requirements (EMC) .It may have harmful interference with other devices if you do not following the instructions. However, there is not certain it has not interference with other devices if you following the instructions. If it does have interference with other device, you can amend interference by the following methods.

- Enlarge the distance between this device and other device.
- Connect the two devices with different power socket.
- Ask engineer for help.

13.Symbol Explanation

	Type BF applied part
	Class II device for charger
IP21	2=protected against solid foreign objects of 12.5 mm ϕ and greater 1=protection against vertically falling water drops
	Caution
	Symbol for the marking of electrical and electronics devices according to Directive 2012/19/EU
	Serial number
	Date of manufacture
	Manufacturer
	Authorized representative in the European Community
	Simbolo CE
	Refer to instruction manual/ booklet

14.Product List

Item	Quantity
instrument	1 set
electrode pad	2 pieces
lead wire	1 piece
charger	1 set
user manual	1 set
certificate of product quality conformity	1 set

15.Care and Maintenance

► maintenance of the instrument

- » Before each use, please check the appearance of the instrument, charger, lead wire, and electrode pad for any damage (e.g., cracked shell, detached key, broken wire, etc.).
- » Never clean the appliance with water. If the instrument is particularly dirty, it can be wiped with a soft cloth stained with water or medical alcohol. after fully wrung out. Regular maintenance cycle for every month.
- » To ensure continued safe use of the instrument.do not place the instrument in a dusty, humid environment. Dust the instrument regularly with a dry soft cloth. Regular maintenance cycle is every six months.

► maintenance of electrode pad

- » After several times of use, the electrode pads become less viscous due to the adhesion of sundries such as dander and grease, and make the body sensation of the output strength weaken. Can clean them with small amount of water, after fingertip cleaning a few seconds gently, shake off water, and keep in a cool place for natural drying. (In case the electrode pad is dry, you can dip in water with your finger and wipe it to restore its stickiness)
- » The frequency of washing is recommended to be cleaned once every 30 times usage, with a total of about 10 times. The number of use of electrode pads may be shortened by the frequency of washing, the cleanliness of human skin and the state of storage.
- » After each treatment, please paste the electrode pads on the transfer plate and place them in a cool place`
- » expected shelf Life of the electrode pad is two years. the electrode pad is consumable. If it has expired or the adhesive surface is damaged or the stickiness drops, please replace it in time.

⚠ Note:

- do not wipe with diluent or gasoline when the instrument is dirty
- Electrode pads should not be cleaned with any liquid other than water, and should not be washed for a long time or frequently.
- Electrode pads should not be kept in places with too much dust, high temperature, high humidity and direct sunlight.

- ▶ Please store the appliance in the place out of reach of children.
- ▶ Never let the appliance fall or smash from high, extrude or soaking.
- ▶ Store the appliance in dry and ventilated place without corrosive gases. Avoid direct sunlight.
- ▶ The appliance has been tested strictly before leaving factory. Please do not disassemble or assemble the appliance yourself. expected service Life of the instrument is five years.
- ▶ expected service Life of the charger is five years. the frequency and method of use have a great influence on it, If the charger is broken or damaged, please replace it in time.
- ▶ expected service Life of the lead wire is five years. the frequency and method of use have a great influence on it, If the lead wire is damaged, broken or corroded, please replace it in time.
- ▶ When unplug the wire, please hold the plug and pull it out. Never pull the wire directly otherwise the wire might be damaged.
- ▶ If the instrument is not used for a long time (more than three months), the instrument should be recharged every three months to avoid battery leakage damage to the instrument.
- ▶ In case of any abnormal phenomenon, please stop using the equipment and accessories immediately and contact the manufacturer for after-sales service. No repairs shall be made to any person other than the manufacturer.
- ▶ Users are advised to send the instrument to the manufacturer for basic safety testing. The frequency is every two years.
- ▶ the user must contact its local authorities to determine the proper method of disposal of potentially bio hazardous parts and accessories.
- ▶ In order to avoid polluting the environment, the instrument and accessories used should be disposed according to the requirements of local authority rather than throw them away at random.

16. Trouble Shooting

Symptom	Cause analysis	Advice to remove the breakdown
Only the electrode pad icon is displayed on the screen	The electrode pads are not attached to the skin or the electrode pads have been detached from the skin	When the two electrode pads are not pasted to the skin, the power will be cut off automatically after 30 seconds. Please attach them to the skin.
	The lead wire has broken	Please replace the lead wire
	The lead wire is not properly connected	Please connect correctly
The power is shut down automatically during use	Battery dead	Please charge the battery in time
Electrode pads are not attached to the skin	The transparent film on the pasting surface of the electrode pad is not removed	Please remove the transparent film on the pasting surface.
	The pasting surface of the electrode pad is dirty	Clean them with small amount of water, after fingertip cleaning a few seconds gently, shake off water, and keep in a cool place for natural drying.
	Use directly after washing	Make the pasting surface dry naturally before use
	The pasting surface of electrode pads is damaged	Electrode pads are consumable, please replace with a new one

The pasting surface is too sticky	Use the device when sweating	Electrode pads are consumable, please replace with a new one
	Wash for a long time or frequently	
	The device is kept in places with too much dust, high temperature, high humidity and direct sunlight.	
The pasting surface of electrode pad is peeling and misplaced	There is a lot of sweat on the pasting surface of electrode pad	Electrode pads are consumable, please replace with a new one
Imperceptible stimulus Stimulation is very weak	The electrode pads are not attached on the skin firmly	Please attach the physiotherapy electrodes on the skin firmly
	The electrode pads are overlapped	Please do not overlap the electrode pads
	The pasting surface of the electrode pads is dirty	Clean them with small amount of water, after fingertip cleaning a few seconds gently, shake off water, and keep in a cool place for natural drying.
	The lead wire is not properly connected	Please connect the lead wire correctly
	The intensity setting is too low	adjust the intensity
	Battery dead	Please charge the battery in time
	The pasting surface of electrode pads is damaged	Electrode pads are consumable, please replace with a new one

Skin becomes red. The skin has a tingling sensation	The treatment time is too long	Suitable time is 10mins–15 mins
	The electrode pads are not attached on the skin firmly	Please attach the physiotherapy electrodes on the skin firmly
	The pasting surface of the electrode pads is dirty and dry	clean them with small amount of water, after fingertip cleaning a few seconds gently, shake off water, and keep in a cool place for natural drying.
	The pasting surface of electrode pads is damaged	Electrode pads are consumable, please replace with a new one

If you're unable to solve the problem with the information above, please contact the company for after-sales service.

17. Guarantee and Service

- The product is supplied with one year warranty form the date of purchase. Warranty is only valid under normal use. Damage due to operator's misuse is not covered under warranty.
- Spare parts, including lead wires, skin electrodes are not within the scope of the warranty. Please purchase the parts manufactured by us from the manufacturer to ensure the normal use of instrument.
- You should contact the manufacturer on the following issues:
 - Assistance in setting up, using, or maintaining the ME EQUIPMENT or ME SYSTEM when needed, or
 - To report unexpected operation or events.

If you need more information, please contact the manufacturer.

18. Warranty Card

Warranty policy description and service commitment

- ▶ Our company provides technical support and maintenance service for all our products. our company provides a year of free warranty and long-

term maintenance for the low-frequency electrotherapy instrument series from the date of purchase. Please fill in and keep the warranty card and the valid certificate issued when you buy the machine in the manual, and you are not allowed to change the warranty. Otherwise, you may lose the warranty opportunity

- ▶ In case of product failure within the warranty period, a copy of the valid purchase certificate (such as the invoice) and the warranty card shall be sent to the distributor or directly to the company for testing or maintenance. In case of failure within the warranty period, free maintenance shall be carried out according to this regulation. All replaced parts and components shall be owned and processed by our company
- ▶ Consumables such as lead wire and electrode pads are not covered by the warranty
- ▶ The following faulty instrument is not covered by the warranty, During maintenance, our company shall have the right to charge material costs, test and maintenance man-hour costs, logistics costs, etc., until no maintenance is made
 - » Failure to provide the warranty card of the product and/or the valid certificate issued when purchasing the instrument when the product breaks down for maintenance; There may be a warranty card and/or purchase certificate, but the warranty card and/or purchase certificate do not specify the date of purchase, customer name, corresponding instrument number and the situation of the dealer, etc., the contents of the warranty card and/or purchase certificate are incomplete, and there is improper alteration, defacement and the instrument number cannot be identified. However, if the product instrument number and corresponding company records show that the delivery date of the faulty instrument is within one year, our company can still provide warranty services.
 - » Failure caused by not operating, maintaining or keeping the product in accordance with the requirements of the product operation manual
 - » Failure caused by abnormal high voltage, natural disaster, war, emergency or other force majeure.
 - » Faults and damages caused by abnormal use after purchase, including but not limited to violent impact, extrusion, falling and liquid immersion.
 - » Products that have been dismantled, repaired or refitted

- ▶ For the same parts or components that are replaced by charging for maintenance, the warranty shall be provided within the remaining time of the warranty period or within six months from the date of maintenance, whichever is longer. If the customer has no specific requirements, all the replaced parts and components will be handled by our company.
- ▶ The instrument that is not within the scope of warranty sent by the customer can be maintained after testing confirmation, but the customer is not willing to pay 50% of the maintenance and inspection fee and all the logistics costs when repairing, the instrument will not be sent back
- ▶ All travel expenses and service charges will be afforded by customers for the on-site service.
- ▶ Under normal circumstances, the maintenance period shall not exceed 15 working days (this is the period when the company receives the goods until dispatch the goods after the maintenance, excluding the transportation time). Scarce models with individual problems and lack of spare parts may be exceeded, and for products that cannot be repaired within 15 days, our company will contact the user or dealer by phone for a solution or explanation.
- ▶ If the product fails within one month from the date delivery. Users may replace the same type of product if required, but all the packages and accessories must be complete and intact.

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Tel: +86-512-65110061

[Http://www.hwato-med.com](http://www.hwato-med.com)

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