Hua Tuo Candle

Hwato

China Time honored Brand 1-year deficiency of spleen in Chinese medicine



SDZ-III

Technical User Manual for Electronic Acupuncture Device

⚠ Please read this manual carefully before use.

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Dear user:

Welcome to Huatuo products.

Please read this manual carefully before use and keep it properly for future reference.

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I. Product Introduction

The Electronic Acupuncture Therapy Device (SDZ-I) is an electronic acupuncture therapy device that combines electronic technology with traditional Chinese acupuncture meridian theory, representing an upgraded version of the SDZ-II model. This device is intended for use in medical institutions such as hospitals and clinics, not in home care settings. The device consists of four components: the main unit, electrodes (medium-low frequency therapeutic conductive self-adhesive electrodes, millimeter needle electrode metal clips), a power adapter, and output wires. It does not contain acupuncture needles as electrode needles but is equipped with millimeter needle electrode metal clips (electrode needle connectors), which can be used as electrode needles for electroacupuncture therapy. Disposable acupuncture needles are recommended. The electrode needles should comply with the requirements of GB 2024-2016 and YY0780-2018 standards for electrode needles, and must be made of acupuncture needle materials such as 06Cr19Ni10 or other austenitic stainless steel, which have obtained medical device product registration certificates. The medium-low frequency therapeutic conductive self-adhesive electrodes consist of a conductive adhesive layer and other auxiliary layers (non-woven fabric, conductive fabric, conductive fiber, PVC protective film, wire connectors).

II. Scope of Application

The product is used in medical institutions for low-frequency electrical pulse therapy at acupoints on the human body, and is indicated as an adjunctive treatment for lumbago, neuralgia, myalgia, and arthralgia.

III. Contraindications

- Use is contraindicated in patients with active implants (e.g., cardiac pacemakers).
- Pregnant women, patients with acute diseases, infectious diseases, or malignant tumors.
- Patients with severe cardiac conditions should use with caution. Prior to administration, physicians should evaluate the potential adverse effects of electrical stimulation on the heart. Electrical stimulation is contraindicated around the heart.
- Electroacupuncture is contraindicated at skin lesions, local tumor, pregnant women's abdomen, and near carotid sinus.
- When using acupuncture needle therapy, the relevant contraindications of acupuncture needles should be observed.

IV. Precautions

- To ensure safe and effective use of the instrument's basic functions, please read the instruction manual carefully. Reading the manual serves as a form of training.
- Not for use while driving or operating machinery.
- Do not allow the instrument to come into contact with metal objects during use.
- During the startup therapy, two metal clips (electrode needles) or medium-low frequency physiotherapy conductive self-adhesive adhesive electrodes (skin

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The skin electrodes must not come into contact to avoid short circuits, which may cause abnormal instrument alerts and interrupt the treatment process.

Do not use electrode needles or skin electrodes that have been used by others to avoid potential cross-infection.

Use with caution. If symptoms such as skin flushing or pruritus occur during use, discontinue immediately. Do not use while bathing or sweating.

Do not attach skin electrodes to the eyelids, front of the neck, heart, or chest. The stimulation should not encircle or pass through the head,thin the eye, cover the mouth, the front of the neck (especially the carotid sinus), or pass through the heart from electrodes placed on the upper back or the hand.

- Do not use in flammable and explosive gas environments or oxygen-rich conditions.
- Keep a safe distance from electrical appliances such as televisions and radios to avoid potential electromagnetic interference.
- The user should avoid passing the current circuit through the heart.
- Modification of this instrument is not permitted; do not modify this instrument without authorization from the manufacturer; if modification is performed, appropriate inspection and testing must be conducted to ensure the instrument can be used safely and continuously.
- Skin electrode therapy should be administered by a licensed physician or under their supervision, while electroacupuncture requires a certified acupuncturist to operate the needles. Disposable needles are recommended for this purpose. Any needles showing signs of bending, surface oxidation, rust, or contamination must be discarded. When applying electroacupuncture near the medulla oblongata or spinal cord regions, use low current intensity to prevent accidents. Since the output current may exceed 2mA (r. m.s), adjustments should be gradual—increase slowly from low to high settings. Avoid abrupt increases to prevent patients from experiencing "electric shock" sensations, which could trigger muscle spasms, pain, needle bending, breakage, or even fainting.

Warning of the following potential hazards:

Concurrently connecting high-frequency surgical equipment to a single patient may cause burns or damage to the device at the electrode position.

- Use this instrument near shortwave or microwave therapy equipment (e.g., 1 m) as the output may be unstable.

-Using electrodes close to the chest increases the risk of cardiac fibrillation.

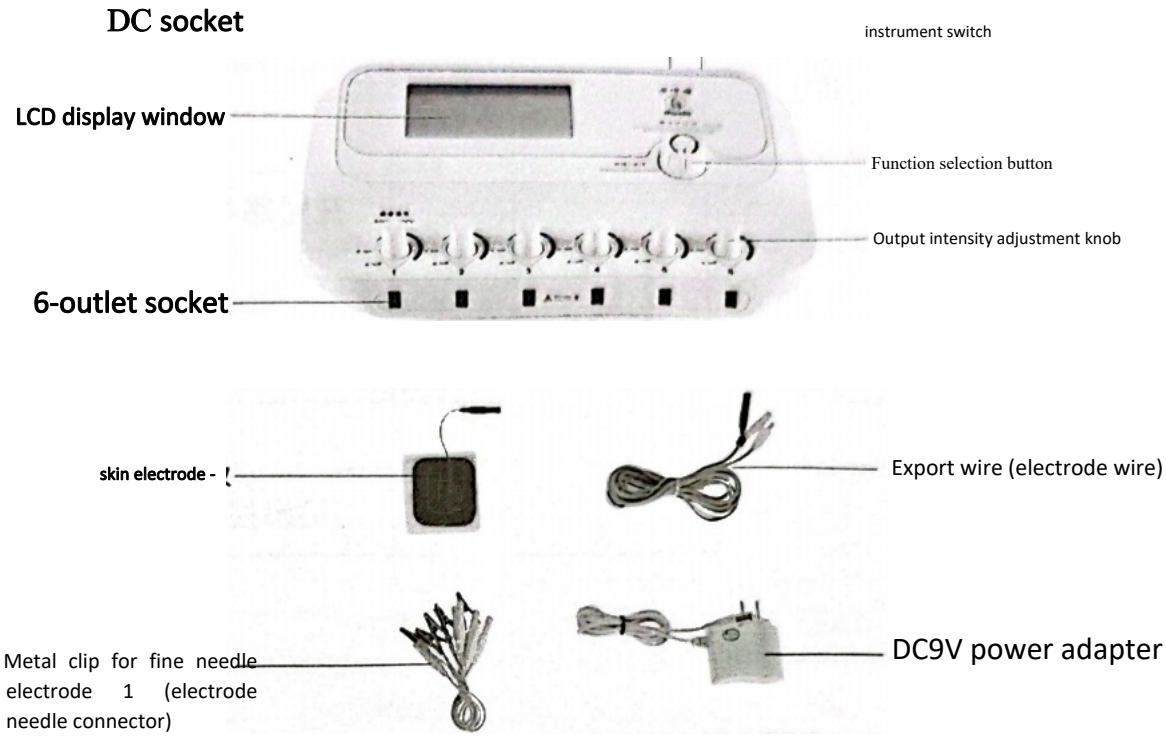
-Except for power adapters sold by manufacturers as spare parts, using accessories or power adapters not specified may increase the emission of this device or reduce its immunity.

Do not use in close proximity to or stacked with other devices. If such use is unavoidable, ensure proper operation under the specified configuration.

This instrument shall be used by a qualified physician or under the guidance of a qualified physician.

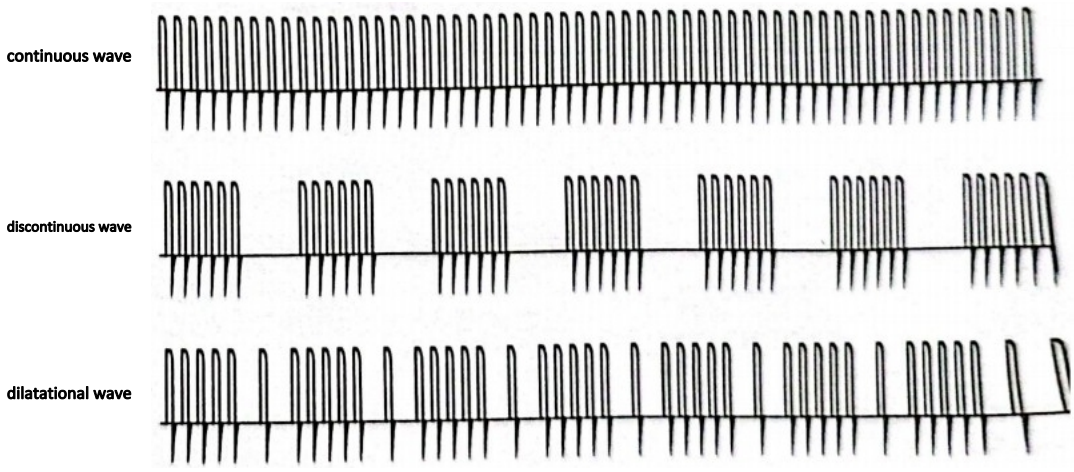
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5. Product Icons and Instructions



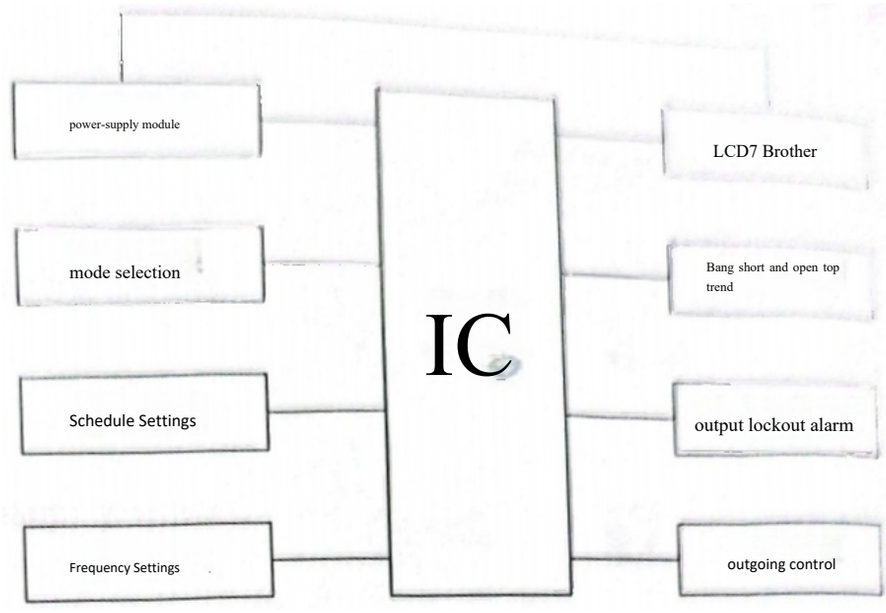
This instrument has no basic performance. The application part of the instrument consists of output wires (electrode wires), skin electrodes, and millimeter needle electrodes: clip (electrode needle connector).

VI. Pulse Waveform Sequence Diagram

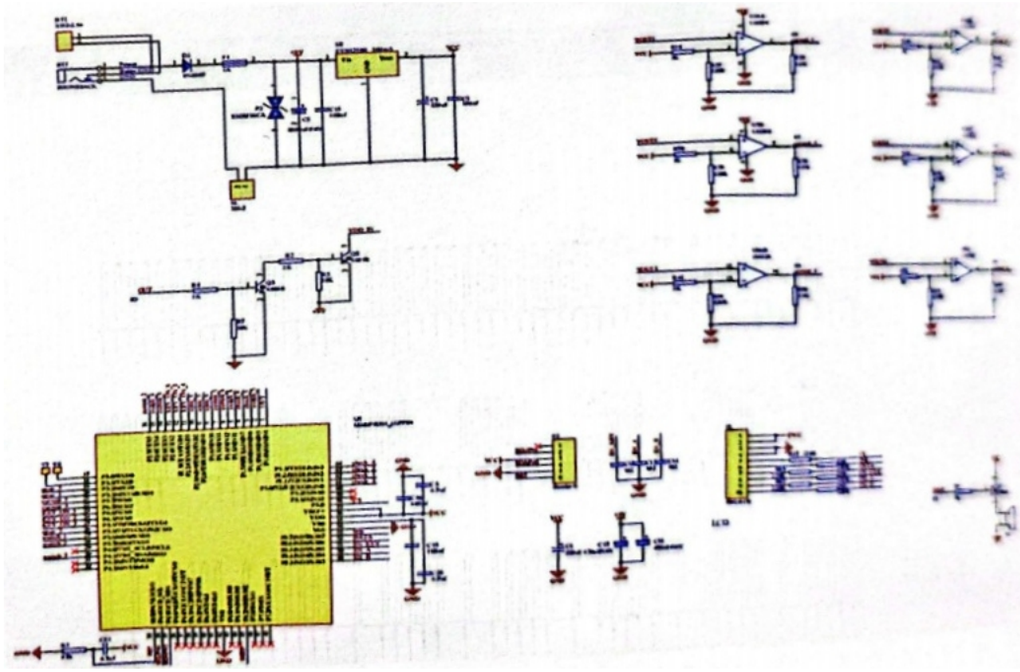


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7. Principle Block Diagram



8.Route Map



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IX. List of Components

List of components			
Order number	Material name	Code name	Quantity
Order number	Material name	Code name	Quantity
1	Resistance	R	98
2	Electric capacity	C	18
3	Diode	D	7
4	Dynatron	BG	9
5	Active sounder	HC	1
6	Magnetic bead	FB	36
7	Power chip	LDO	1
8	Integrated chip	IC	5
9	Output transformer	B	6
10	Function selection button	E	1
11	Output socket	CK	6
12	Fuse (16V1.1AF1812L)	RD	1
13	DC jack	CK	2
14	LCD module	LCM	1
15	Output potentiometer	W	6
16	Photocoupler	GD	12
17	Power adapter fuse (250V316mAF3.2×9.5mmL)	FR1	1

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X. Usage Instructions

1. Prepare

Insert six R14/UM2 batteries into the battery compartment at the instrument's base, or connect a power adapter (input: AC 220V±22V,50Hz±1Hz; output: DC 9V) to the external DC socket.

pay attention to :

- Users should select external power adapters that are certified by GS or CE and comply with standards like IEC 60601. They must ensure the polarity of the power output matches the markings on the instrument's external DC socket.
- When using an external power adapter, ensure its input voltage and frequency requirements match the local grid power supply. Before powering on the instrument, first connect the adapter's output plug to the instrument's DC socket, then turn on the grid power. After shutting down, unplug the external power adapter from the grid power supply and disconnect its output plug from the instrument.

⚠ The power adapter, which isolates the device from the mains power supply, should be placed in a location that is easy for users to access and disconnect from the mains. If any abnormal situation occurs during use, immediately disconnect the power adapter from the mains.

- Clean the treatment area: The skin of the area to be treated should be cleansed before device activation.
- Skin electrode therapy: Insert one end of the output lead (electrode wire) into the instrument's output socket, and the other end into the skin.

  In the electrode insertion hole, remove the adhesive paper from the skin electrode and attach it to the target treatment area.
- Electrode needle therapy: If the user employs electroacupuncture therapy, one end of the output wire (electrode lead) is inserted into the instrument's output socket, while the other end is connected to the microneedle electrode metal clip (electrode needle connector). The microneedle electrode metal clip (electrode needle connector) is then clamped onto the handle of the acupuncture needle that has been used for needling.

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pay attention to：

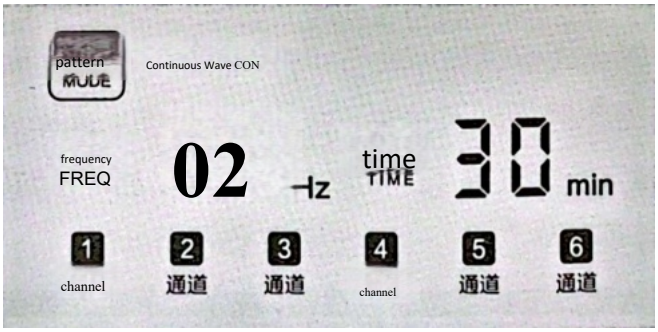
- The wires used in this instrument can be used with the skin electrode and the metal clip of the millimeter needle electrode (electrode needle connector) at the same time,which can be easily switched by users and can be connected reliably.Do not pull the wires forcefully,so as to avoid damage and breakage of the wires.
- Electroacupuncture must be performed by licensed acupuncturists following strict protocol guidelines. The recommended acupuncture needles for this device include: 1) Electrode needles with 0.20-0.24 mm diameter and 13-50 mm length; 2) Electrode needles with 0.25-0.45 mm diameter and 13-75 mm length. These needles must comply with GB 2024-2016 and YY 0780-2018 standards (Section 4.8 Electrode Needles) and be made of 06Cr19Ni10 or other austenitic stainless steel materials certified for medical device registration.
- The recommended skin electrode size is 50mm×50mm.

Check before turning on: Check the "Adjust Intensity" knob and adjust the knob to the "OFF/off"state.

2. Starting Up

Turn on the instrument switch to "on", and you will hear a "beep" sound. The LCD screen will display the following (settings from the last treatment):

Set parameters [waveform mode, frequency, set time]



If the instrument emits a 'beep beep' sound during startup, check the 'intensity adjustment (ADJUST)'

Turn the INTENSITY knob, set it to OFF, and then turn the instrument back on.

3. Setting

Note: Throughout the parameter setting process, the "Adjust Intensity" knob must remain in the "Off" position.

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If the device is in the 'off' state, it will emit a 'beep beep' sound; otherwise, it will sound a 'beep beep' buzzer.

▶ Mode Settings

- Press the "Function/Choose (Function/Choose Switch)" knob to select the cursor to "Mode". Users can select the three working modes of continuous wave, dense wave and intermittent wave by turning the "Function/Choose (Function/Choose Switch)" knob left/right according to the required treatment mode:

When the continuous wave mode is selected, the LCD screen displays 'CON' continuously, and the instrument outputs pulse waveforms at the user-set frequency.

Select intermittent wave, the LCD screen displays intermittent wave INT. The instrument intermittently outputs pulse waveforms according to the frequency set by the user;

When the user selects sparse wave, the LCD screen displays 'sparse wave D-D', and the instrument outputs pulse waveforms in an alternating pattern of sparse and dense waves at the user-defined frequency.

▶ frequency setting

- Press the "Function/Choose(Function/Choose Switch)knob to select the cursor" Frequency:"
- Users can adjust the output pulse frequency by rotating the "Function/Choose Switch" knob left/right according to the required treatment frequency, with the corresponding frequency value displayed on the LCD screen (the sparse wave mode only shows the sparse frequency).

▶ time set

- Press the "Function/Choose(Function/Choose Switch)knob to select" Time":
- Users can set the treatment duration (1min to 60min) by rotating the "Function/Choose Switch" knob left/right according to required treatment time. When the treatment duration is set to 60min, continue rotating the knob right to change the treatment time to "--", at which point the device will cease timing.

The parameters set above will be saved after entering the treatment working state and will automatically default to these values upon the next startup. To change the parameters, exit the treatment working state and reset them.

4. Treat

▶ output intensity setting

- After setting the treatment mode, rotate the "Intensity Adjustment (ADJUST INTENSITY)" knob clockwise to activate the intensity adjustment switch. Adjust the output pulse intensity to an appropriate level, and the instrument will enter the treatment working state.
- During treatment, users can rotate the "Function/Choose Switch" left/right

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The button adjusts the output pulse frequency to the user's suitable state.

Treatment Completion Notice

After **the set treatment time is over, the device will automatically emit a "beep beep beep beep" buzzer to indicate that the treatment time has ended.**

Error message

- During treatment, if any of the two physiotherapy electrode pads (skin electrodes) or millimeter needle electrode metal clips (electrode needle connectors) experience open circuit (poor contact or failure to connect with the patient) or short circuit (contact or collision), the instrument will cyclically emit a "beep beep" buzzer sound, while the corresponding channel on the display screen flashes, indicating that the instrument has triggered the open circuit or short circuit protection. The "Adjust Intensity" knob must be fully turned off to disable the abnormal prompt status. Check and ensure that the output wires (electrode leads), skin electrodes, or millimeter needle electrode metal clips (electrode needle connectors) are properly connected to the patient, with no open circuit or short circuit conditions. After the abnormal prompt is resolved, re-enable the "Adjust Intensity" knob to resume the treatment process.

pay attention to :

- Before treatment and during treatment when changing the treatment site, the "Intensity Adjustment (ADJUST INTENSITY)" knob should be fully closed. After securing the skin electrode or millipod electrode metal clip (electrode needle connector), the knob should be opened and the output gradually increased. Otherwise, it may cause instrument malfunction and trigger an abnormal prompt.
- During treatment, the two metal clips (electrode needle connectors) or skin electrodes of the same output channel should not be applied simultaneously to both sides of the upper body to prevent current from passing through the heart.

5. Shut Down

After each treatment, the device should be powered off. Turn the 'Intensity Adjustment (ADJUST INTENSITY)' knob counterclockwise to the off position, then turn off the instrument switch.

Remove the skin electrode or acupuncture needle, and disconnect the output wire (electrode lead). If an external power adapter is used, disconnect it from the mains power supply, remove the power adapter, and store the main unit and other accessories properly.

6. Sleep State

After the instrument is powered on, if the function selection button is not operated for more than 3 minutes while the output channel is closed, the instrument will automatically enter sleep mode and the LCD screen will automatically turn off.

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When the device enters sleep mode, press the "Function/Choose Switch" button to wake it up, and the LCD screen will automatically light up.

7. Restore Default Parameters

After powering on the device, press the "Function/Choose Switch" button for over 3 seconds while the output channel is off to automatically restore default settings.

- Mode: Continuous wave
- Frequency: 2Hz
- Time: 30 minutes

XI. Technical Parameters

- Power supply: Internal DC9V+5%

  Power adapter (input AC220V±22V 50Hz±1Hz,output DC9V)
- Input power: 10.0VA
- Output pulse waveform: asymmetric bidirectional pulse wave
- Number of output pulse channels: six
- Maximum output power: 0.3VA
- Output pulse frequency: adjustable from 1Hz to 100Hz, with a tolerance of ±20%
- Working mode: Continuous wave working mode: Continuous

  Pulse mode: 15 seconds on, 5 seconds off

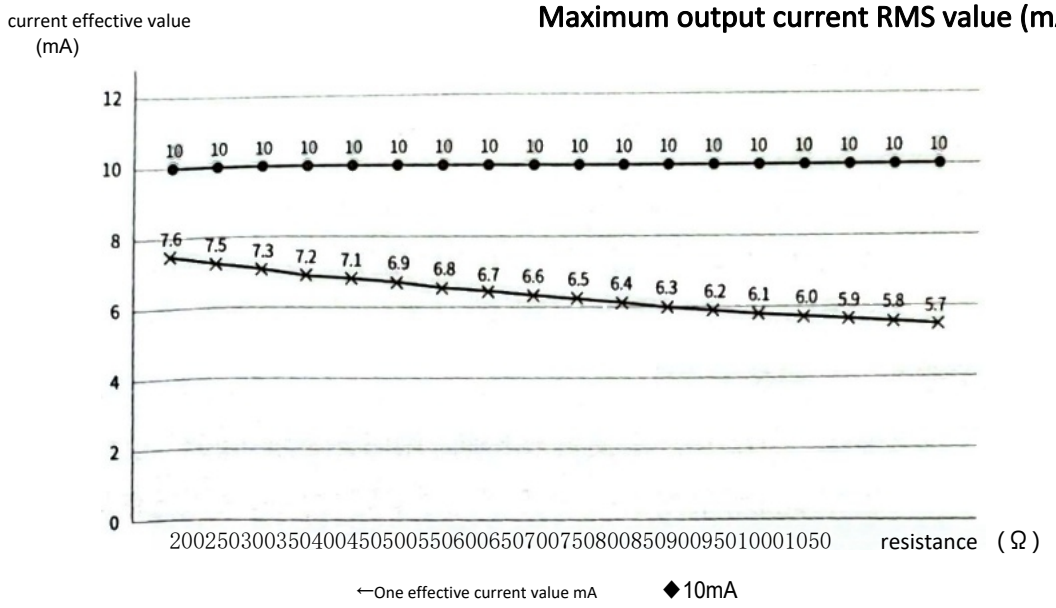
  Sparse wave mode: The ratio of sparse wave frequency to dense wave frequency is 1:5. Sparse wave operates for 5 seconds, while dense wave operates for 10 seconds.

  The time tolerance for intermittent and sparse waves is ±10%.
- The effective value of the output current should not exceed 10mA.
- Output DC component: None
- The pulse width was 0.2ms±20%.
- The load impedance of the needle electrode was 250Ω, and that of the skin electrode was 500Ω.
- The output voltage (effective value) ranges from 0 to 2V ±25% (250Ω load impedance).
- The wire length is not less than 1 m.
- The insulation impedance of the electrode wire insulation layer should not be less than 10MΩ.
- Single electrode needle connector and 150mm electrode lead connected to the electrode needle connector (including adapter, if applicable)

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The total mass of the sample should not exceed 3g.

- After connecting the electrode wire, electrode needle connector, and the electrode needle as listed in the user manual, the total DC impedance should not exceed 5Ω.
- Volume: 210mm x 100mm x 300mm
- Weight: 0.7kg (excluding battery)
- Software release version: V1
- The product material group is classified as Ⅲ Ib,the pollution level is 2, and the overvoltage category is Ⅱ.
- The maximum output current RMS value curve in the load impedance range (2000～10002)



pour
:

- The load impedance has no effect on the DC component, the output pulse width and the output pulse frequency, but it is positively correlated with the maximum amplitude of the output.
- This instrument is not an AP or APG device, with an IPX0 water resistance rating.
- This instrument complies with the requirements of IEC 60601-1 Class Ⅱ with internal power supply BF type application part equipment.
- When the load resistance is not more than ±5%, the pulse duration, pulse width, pulse repetition frequency and maximum amplitude, including any DC component, are not more than ±20%.
- The effect of ±10% power supply voltage fluctuation on the maximum output amplitude, pulse width or pulse repetition frequency of the instrument is not more than ±10%.

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12. EMC (Electromagnetic Compatibility) Statement

1. EMC (Electromagnetic Compatibility) Description

The electronic acupuncture device (model: SDZ-II) complies with the EMC (Electromagnetic Compatibility) standard YY 9706.102-2021, which specifies the requirements for the safe use of medical electrical equipment. The EMC standard is a customized standard designed to ensure the safe operation of medical electrical equipment, stipulating that the electromagnetic interference (EMI) generated by the device to other equipment, as well as the EMI emitted by other devices (such as mobile phones), must be controlled within certain limits. The standard YY 9706.102-2021 requires users to provide detailed information regarding the EMC environment necessary for the safe operation of the device. Below is a description of the relevant EMC technical specifications. (For details, please refer to YY 9706.102-2021.)

2. EMC (Electromagnetic Compatibility) Definition

EMC (Electromagnetic Compatibility) refers to the capability to meet the following two requirements:

It will not emit electromagnetic interference (EMI) beyond permissible levels to nearby electronic devices.

The device can function properly in an electromagnetic environment with interference from other electronic devices, such as noise. (Immunity)

3. EMC (Electromagnetic Compatibility) Related Technical Specifications

3.1 The electronic acupuncture therapy device (model: SDZ-III) requires specific EMC (electromagnetic compatibility) instructions. This instrument does not require installation and should be used in accordance with the EMC (electromagnetic compatibility) information provided in this manual.

3.2 Portable and mobile radio frequency communication devices may interfere with the electronic needle therapy device (model: SDZ-III).

3.3 Except for the power cord and output lead sold by the manufacturer of the electronic acupuncture device (model: SDZ-III) as spare parts for internal components, the use of accessories, power cords, and output leads other than those specified may result in increased emission or reduced immunity of this instrument.

3.4 The electronic acupuncture therapy device (model: SDZ-II) must not be placed in close proximity to or stacked with other equipment. If such placement is unavoidable, it must be verified that the device operates normally under the specified configuration.

3.5 Power cord and output wire specifications for the electronic acupuncture therapy device (Model: SDZ-III):

Order number	Name	Cable length (m)	Block	Manufacturer	Remarks
1	Adapter power cord	1.8	Deny	Jiangsu Chenyang Electronics Co., Ltd.	
2	Output wire	1.8	Deny	Suzhou Medical Supplies Factory Co., Ltd.	

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13. Guidelines and Manufacturer's Statements

Table 1

Table 1 guidelines in the standard and manufacturer's declaration on electromagnetic emissions		
The electronic acupuncture device (model: SDZ-III) is intended for use in the specified electromagnetic environment. The purchaser or user shall ensure its operation within this electromagnetic environment.		
Launching test	**Compliance**	**A Guide to Electromagnetic Environment**
Radio Frequency Emission GB4824	Group 1	SDZ-III utilizes radio frequency energy solely for its internal functions. Consequently, its radio frequency emission is minimal, and the likelihood of interference with nearby electronic devices is negligible.
Radio Frequency Emission GB4824	B class	SDZ-III is suitable for use in all facilities, including household facilities and direct connections to the public low-voltage power supply network of residential homes.
Harmonic Emission GB 17625.1	A class	
Voltage Fluctuation/Flas-hing Emission GB17625.2	Accord with	

Table 2

Table 2 of the standard guidelines and manufacturer's declaration on electromagnetic immunity			
The electronic acupuncture device (SDZ-I) is intended for use in the specified electromagnetic environment. The purchaser or user shall ensure its operation within this electromagnetic environment:			
Immunity test	**IEC 60601 test level**	**Complementary level**	**A Guide to Electromagnetic Environment**
Electrosta-tic Disch-arge GB/T 17626.2	±6kV contact discharge ±8kV air discharge	±6kV contact discharge **±8kV air discharge**	The floor should be made of wood, concrete, or tiles. If the floor is covered with synthetic materials, it should be relatively damp. **The degree should be at least 30%.**

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Electric fast transient pulse group GB/T 17626.4	±2kV for power lines; ±1kV for input/output lines	±2kV is not applicable to power lines	The power supply must meet the quality standards typically used in commercial or hospital environments.
Surge GB/T 17626. 5	±1kV line alignment ±2kV line to ground	±1kV line alignment Not applicable	The power supply should have a typical commercial Used in industrial or hospital settings Quality
Voltage Sags, Transients, and Fluctuations on Power Supply Input Lines GB/T 17626.11	<5%U, sustained for 0.5 cycles (above U,>95% temporary reduction); 40%U, sustained for 5 cycles (above U, 60% temporary reduction); 70%U, sustained for 25 cycles (above U, 30% temporary reduction) <5% U, sustained for 5 seconds (on U_1,> 95% temporary drop)	<5%U, lasting for 0.5 cycles (with a temporary decline>95% above U) 4 0% U, 5 cycles (60% temporary drop on U_1); 70% U, 25 cycles (30% temporary drop on U); <5% U, 5s (> 95% temporary drop on U_1)	The power supply should meet the quality standards typically used in commercial or hospital environments. If SDZ-III users require continuous operation during power outages, it is recommended to adopt an uninterruptible power supply (UPS) or battery power for SDZ-III.
Power frequency magnetic field (50Hz/60Hz) GB/T 17626. 8	3A/m	3A/m	The power frequency magnetic field should have in typical In commercial or hospital settings, the term "dian" (典) is used to refer to a specific type of document or record. The horizontal power frequency magnetic field of the type site Characteristic
Note:U_1 refers to the AC grid voltage before the applied experimental voltage.			

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Table 3

Table 4 of the standard guidelines and manufacturer's declaration on electromagnetic immunity			
The electronic acupuncture device (SDZ-III) is intended for use in the specified electromagnetic environment. The purchaser or user shall ensure its operation within this electromagnetic environment:			
Immunity test	IEC60601 test level	Complementary level	A Guide to Electromagnetic Environment
Radio frequency conduction GB/T17626.6	**3V (effective value)** 150kHz～80MHz	3V	Portable and mobile radio frequency communication devices should not be used closer than the recommended isolation distance from any part of the electronic needle therapy device (SDZ-III), including cables. The distance should be calculated using a formula corresponding to the transmitter frequency. Recommended isolation distance d=1.2 √P d=1.2 √P for frequencies 80MHz to 800 MHz; d=2.3 √P for frequencies 800MHz to 2.5GHz.
Radio-frequency radiation GB/T 17626.3	3V/m 80MHz～2.5GHz	3V/m	p---Maximum rated output power of the transmitter, in watts (W), as specified by the manufacturer; d-----Recommended isolation distance, in meters (m). **The field strength of a fixed RF transmitter is determined through electromagnetic field survey (a), with each** The frequency range b should be lower than the compliance level. Exposure to equipment marked with the following symbols may Interference detected. (2))

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Note 1: For 80MHz and 800MHz frequency points, the higher-frequency band formula is applied. **Note 2: These guidelines may not be applicable to all scenarios, as electromagnetic propagation is subject to absorption and reflection by buildings, objects, and human bodies.** The impact of the shot.
a. **Fixed RF transmitters, including wireless (cellular/wireless) telephones, ground-based mobile radio base stations, amateur radio, AM/FM radio broadcasting, and television broadcasting, cannot theoretically predict their field strength with precision. To evaluate the electromagnetic environment of fixed RF transmitters, electromagnetic field surveys should be conducted. If the measured field strength at the location of the electronic acupuncture device (SDZ-III) exceeds the applicable RF compliance level, the device should be tested to verify its normal operation. If abnormal performance is observed, corrective measures may be necessary, such as recalibrating the device's orientation or repositioning it.** b. The field strength should be less than 3V/m in the whole frequency range from 150kHz to 80MHz.

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Table 4

Table 6 of the Standard: Recommended Isolation Distance Between Portable and Mobile RF Communication Equipment and SDZ-III

SDZ-II is intended for use in electromagnetic environments where radio frequency (RF) radiation interference is controlled. Based on the maximum rated output power of communication equipment, purchasers or users may prevent electromagnetic interference by maintaining the minimum recommended distance between portable and mobile RF communication devices (transmitters) and SDZ-I.

Maximum rated output power of transmitter/W	Isolation distance per transmitter frequency		
	150kHz～80MHz d=1.2√P	80MHz～800MHz d=1.2√P	800MHz～2.5GHz d=2.3√P
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitter maximum rated output power not listed in the table above, the recommended isolation distance d (in meters) can be determined using the formula in the corresponding transmitter frequency column. Here, P is the maximum rated output power of the transmitter provided by the manufacturer, measured in watts (W).

Note 1: For the 80MHz and 800MHz frequency points, the formula for the higher frequency range is applied.

Note 2: These guidelines may not be suitable for all cases, as electromagnetic propagation is affected by the absorption and reflection of buildings, objects, and the human body.

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14. Symbol Interpretation

	**BF application section**
	Class II equipment
IPX0 protection rating	
Wind WEEE recycling logo	
	Warn
	Follow the instructions
	The normal environmental protection service life of the product is 10 years.
	Serial number (This symbol is identified together with the instrument's serial number, see label)
	Production date (this symbol appears together with the instrument's production date, see label)
	General warning symbol

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XV. Appendices

- Export wires (electrode leads): 6
- Skin electrode patches: 12 pieces (size: 50mm×50mm)
- Fine needle electrode metal clip (electrode needle connector): 12 pieces (size: 150mm)
- Instruction Manual: 1 copy
- Certificate of Conformity: 1 copy
- Product Warranty Card: 1 copy



The output lead (electrode wire), skin electrode, microneedle electrode metal clip, and power adapter included with the instrument are designed for use with the device. If any of these components become damaged, broken, rusted, or non-conductive during use, they should be replaced promptly to ensure proper functionality. For replacement, please use the dedicated output lead (electrode wire), skin electrode, microneedle electrode metal clip, and power adapter supplied by our company to maintain the instrument's normal operation. For inquiries, please contact our customer service hotline at 0512-65110061.

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16. Maintenance and Care

- Keep out of reach of children.
- The instrument must not be dropped from a height, subjected to heavy impact, compression, or immersion in water.
- Store in a dry, non-corrosive gas environment with good ventilation, and avoid direct sunlight.
- This instrument undergoes rigorous testing prior to factory release. Do not disassemble, assemble, or disintegrate it without authorization. The recommended service life of the main unit is five years.
- The instrument should not be submerged in water for cleaning. Instead, wipe it with a soft, clean cloth or use a 75% isopropanol alcohol solution for better cleaning results. The recommended maintenance interval is once a month, and multiple wiping cycles will not affect the instrument's basic safety. The skin electrode can be wiped with medical water or medical alcohol. Maintenance should be performed before and after each use to prevent dust accumulation. The skin electrode has a validity period of 2 years. If adhesion decreases, replace the skin electrode with a new one promptly.
- If the power adapter shows signs of breakage, damage, or a blown fuse, replace it immediately.
- Replace the output lead (electrode wire) promptly if it shows signs of damage, breakage, or corrosion.
- Replace the metal clip of the fine-needle electrode (electrode needle connector) promptly if damage, breakage, or corrosion occurs.
- If batteries are used, they should be regularly inspected and replaced to maintain their safe and functional condition. If the instrument is not used for an extended period, the batteries should be removed to prevent battery leakage from damaging the instrument.
- When removing or replacing the electrode wire, the plug should be pulled out instead of directly pulling the electrode wire with hands to avoid damage or breakage of the electrode wire.
- It is recommended that the user conduct at least one annual test for appearance, control components, and normal functionality. The user may also determine the testing interval based on actual usage conditions.
- Instrument maintenance shall be performed by personnel authorized by the user or local regulatory authorities.



To minimize environmental impact, do not discard scrapped instruments, accessories, or used batteries indiscriminately.

Handle as regular electrical waste or in accordance with local environmental regulations!

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take good care of one's health

Store in a place where insects and dust cannot reach.

High drop, heavy fall, crush or immersion.

Store in a non-corrosive gas and well-ventilated indoor area, away from direct sunlight. All parts have undergone rigorous testing. Do not disassemble, assemble, or disintegrate them without authorization. The recommended usage period for the main unit is

For cleaning, submerge in water and wipe with a soft, clean cloth. A 75% isopropyl alcohol solution may be used for enhanced cleaning efficacy. The recommended maintenance interval is once monthly, and repeated wiping will not affect overall performance. The skin electrode may be wiped with medical water or alcohol, and dust should be removed before and after each use to prevent adhesion. The skin electrode has a validity period of 2 years. If adhesion decreases, replace it promptly.

Replace immediately if fractures, damages, or blown fuses occur. Replace

immediately if the pole wires show signs of damage, breakage, or rust.

If the clamp (electrode needle connector) exhibits damage, breakage, or corrosion, it should be replaced promptly. Batteries should be inspected and replaced regularly to maintain their safe and functional condition. If batteries are not removed for an extended period, avoid battery leakage to prevent instrument damage.

When replacing the electrode wire, the plug should be held and pulled out; do not pull the electrode wire directly with your hands to avoid damage to the wire.

Annual testing of appearance, control components, and normal operation shall be conducted at least once, with the user unit independently determining the testing interval based on actual usage conditions.

Maintenance shall be performed by personnel approved by the user or local regulatory authorities.

To prevent environmental pollution, do not discard scrapped instruments, accessories, or used batteries carelessly. Dispose of them as electrical waste or in accordance with local environmental protection regulations.

17. Fault Analysis and Troubleshooting

Phenomenon	Analysis of causes	Recommended elimination method
The LCD screen does not display when the device is powered on.	The display screen is broken.	Contact the manufacturer for repair
	The battery is not properly installed or the power adapter is not connected.	After turning off the device, remove the battery and reinsert it or reconnect the power adapter.
	The battery is low.	Replace the battery
No pulse output (the electrode adheres to the skin without causing any sensation)	The electrode wires or skin electrodes are not properly connected or have poor contact.	Reconnect the electrode lead, skin electrode, or contact the manufacturer for replacement
	Electrode wire breakage, skin electrode sheet damage	Contact the manufacturer to replace
	The skin is either too dry or too oily.	Wipe the treated area with alcohol or a hot towel.
	The instrument is broken.	Contact the manufacturer for repair
The timer has expired, but no sound was detected.	The buzzer is broken.	Contact the manufacturer for repair
Skin turning red, Pricking sensation on the skin	The treatment duration is too long.	This instrument shall be used by a qualified physician or under the guidance of a qualified physician.
	The skin electrode is not in close contact with the skin.	Please keep the skin electrode tightly against the skin.
	The skin electrode adhesive surface is dirty and dry.	Wipe with medical water or medical alcohol, then allow to dry naturally in a cool place before use.
	Damage to the skin electrode adhesive surface	The skin electrode is a consumable item. Replace with a new one.
	Skin allergy, redness, and itching	Stop using now
The instrument circulates with a beeping sound of "beep beep", while the corresponding channel on the display screen flashes.	Open circuit or short circuit	Eliminate open-circuit or short-circuit faults in the electrodes or electrode wires.
Other faults		Contact the manufacturer

If your instrument is still not working as described above or if you are unable to resolve the above issues, contact the manufacturer or your nearest sales point.

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18. Storage and Transportation Conditions

- Environmental temperature range: -40℃ to 55℃
- Relative humidity range: ≤95%
- Atmospheric pressure range: 70.0kPa～106.0 kPa
- The packaged acupuncture therapy device should be stored in a room with a relative humidity below 95%, free from corrosive gases, and well-ventilated.

XIX. Operating Conditions

- Environmental temperature range: 5°C to 40°C
- Atmospheric pressure range: 70.0kPa～106.0kPa
- Relative humidity range: ≤80%
- Recommended for altitudes ≤3000 meters
- Power: Internal power supply $DC9V^{+5\%}_{-10\%}$
- Power adapter (input AC220V±22V 50Hz±1Hz,output DC9V)
- Running mode: Continuous

20. Production Date, Shelf Life

See the label for production date and expiration date.

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21. Guarantee and After-Sales Service

This product comes with a one-year warranty and long-term maintenance support. Human-induced damage to the instrument is not covered under warranty. Accessories such as output wires (electrode cables), skin electrodes, and metal clips for millimeter needles (electrode needle connectors) are not included in the warranty but may be provided at a discount. Our company can provide the instrument's circuit diagram, component list, schematic notes, calibration guidelines, or other materials necessary for qualified technicians to repair manufacturer-designated repairable parts. For warranty policy details and service commitments, please refer to the "Product Warranty Card".

Please keep your purchase receipt and product warranty card for our after-sales service.

If you have any quality issues and needs, please contact the store, agent or manufacturer where you purchased the product, and we will provide you with quality service.

Manufacturer's after-sales hotline: 0512-65110061,400-8820260. Feel free to contact us for inquiries.

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Names and concentrations of hazardous substances in the product

Copyright: Suzhou Medical Supplies Factory Co., Ltd. Number: ROHS-S-201605/A0

Component Name	Hazardous material					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium(Cr(VI))	Polychlorinated Biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Cabinet	0	0	0	0	0	0
Circuit board assembly	X	0	X	0	0	X
Output wire	0	0	0	0	0	0
Other wires	0	0	0	0	0	0
Electrode slice *	0	0	0	0	0	0
Mechanical timer *	0	0	0	X	0	0
Power adapter*	X	0	0	0	0	0
Silica electrode*	0	0	0	0	0	0
Cell *	0	0	0	0	0	0

Note: The circuit board assembly includes a printed circuit board (PCB) and its components, such as resistors, capacitors, integrated circuits, and connectors.

0: indicates that the content of the hazardous substance in all homogeneous materials of the component is below the limit specified in GB/T 26572.

X: indicates that the harmful substance exceeds the limit specified in GB/T26572 in at least one homogeneous material of the component.

Components marked with "X" cannot be replaced or reduced due to current industry limitations. *:

Some models may not include this component. Refer to the actual purchased model.



This symbol indicates that the standard environmental service life of this product is 10 years. When the product is discarded or reaches the end of its service life after proper use, please comply with local regulations on the recycling and disposal of waste electrical and electronic equipment.

Note: This duration refers to the environmental protection service life, excluding consumable components like clip wires and batteries, and does not constitute the product's safety service life.

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Hua Tuo Product Warranty Card

Dear user:

Thank you for purchasing and using HuaTuo products! To ensure your satisfaction with our services, please carefully read and properly keep this warranty card after purchase. Warranty Policy and Service Commitment:

1. All products from our company are provided with technical support and maintenance services. The main units of our electroacupuncture device series come with a one-year free warranty and long-term repair service from the date of purchase. Please keep the warranty card and valid purchase receipt included in the packaging properly. Do not alter or deface them, as this may result in the loss of warranty coverage.
2. If a product malfunctions during the warranty period, you may submit a copy of the valid purchase receipt (e.g., invoice) and warranty card to any authorized dealer or send the product directly to our company for inspection or repair. All repairs will be provided free of charge in accordance with these terms, and all replaced parts and components will be owned and handled by our company.
3. The output wires, clips, and self-adhesive electrodes of the electroacupuncture device series are not covered by the warranty.
4. The following malfunctioning instruments are not covered by warranty. During repairs, our company reserves the right to charge material costs, testing and repair labor fees, logistics expenses, etc., and may refuse to repair them.
   (1) When a product malfunctions and requires repair, the following conditions are not acceptable: (1) failure to provide the product's warranty card and/or valid purchase receipt; or (2) incomplete warranty card/purchase receipt records (e.g., missing purchase date, customer name, instrument serial number, or dealer details), or (3) evidence of unauthorized alterations, damage, or illegible serial numbers. However, malfunctioning instruments with a product serial number and corresponding company records indicating a factory date within one year may still qualify for warranty service.
   (2) Failure caused by non-compliance with the requirements of the product's instruction manual for operation, maintenance, and storage.
   (3) Due to abnormal high voltage, failures caused by natural disasters, wars, emergencies, and other force majeure events.
   (4) Any malfunction or damage resulting from improper use after purchase, including but not limited to severe impacts, compression, drops, or liquid exposure.
   (5) Products that have been disassembled, repaired, or modified by the user themselves.
5. For products under repair with replacement of identical parts or components, warranty coverage will be provided for the remaining warranty period or six months from the repair date, whichever is longer. Unless otherwise specified by the customer, all replaced parts and components shall be handled by our company.
6. For instruments outside the warranty scope that customers submit for repair, if the inspection confirms they can be repaired but the customer refuses to have them fixed, the customer must pay 50% of the repair inspection fee and all logistics costs; otherwise, the instrument will not be returned.
7. Customers requesting on-site service must pay additional travel and service fees.
8. Under normal circumstances, the repair cycle does not exceed 15 working days (this refers to the period from receipt of the repair to shipment of the completed product, excluding transportation time). For rare models with complex issues or missing spare parts that may take longer than 15 days to repair, we will contact the user or dealer by phone to provide solutions or explain the situation.
9. If a product fails within one month from the date of manufacture, the user may request a replacement of the same model, provided that all packaging and accessories are intact and complete.
10. This warranty policy takes effect from January 1, 2011.

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Product Warranty Card

User	Name		Contact number	
	Address		Postal code	
Agency	Name		Contact number	
	Address		Postal code	

The following must be filled out by the dealer and stamped with the store seal; otherwise, it will be invalid.

Product name		Model		Instrument number	
Date of purchase	YTD	Purchase voucher number			

Maintenance Record

Repair date:		Handover date:	
Failure cause：			
Troubleshooting status:			
Maintenance unit:		Maintenance personnel signature:	

Repair date:		Handover date:	
Failure cause：			
Troubleshooting status:			
Maintenance unit:		Maintenance personnel signature:	

Repair date:		Handover date:	
Failure cause：			
Troubleshooting status:			
Maintenance unit:		Maintenance personnel signature:	

Repair date:		Handover date:	
Failure cause：			
Troubleshooting status:			
Maintenance unit:		Maintenance personnel signature:	

Scan All-in-One Creation

Production License Number: Su Yao Jian Xie Sheng Chan Xu 20010020

Registration Number: Su Xie Zhu Zhun 20172200675

Product technical requirement number: Su Xie Zhu Zhun 20172200675

Registered/Manufacturer: Suzhou Medical Supplies Factory Co., Ltd.

Address/Production Address: No.18 Huatuo Road, Science and Technology City, High-tech Zone, Suzhou City

Tel: 0512-65110061

After-sales service unit: Suzhou Medical Supplies Factory Co., Ltd.

Sales service hotline: 400-8820260

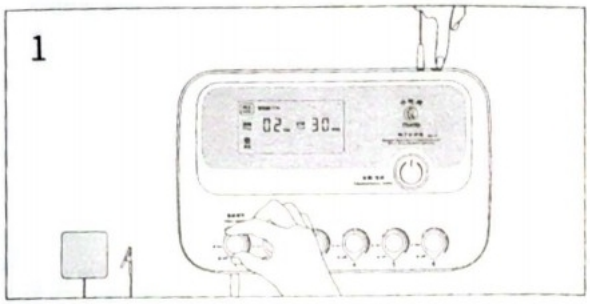
http://www.hwato-med.com

Revision date: 2024/06

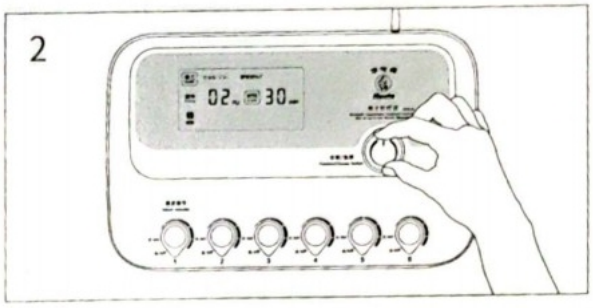
Scan All-in-One Creation

Quick Start Guide

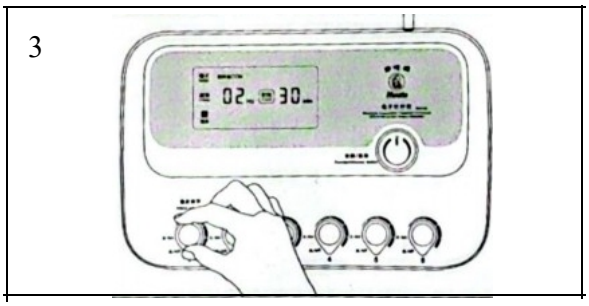
Electronic acupuncture device
sDZ-I



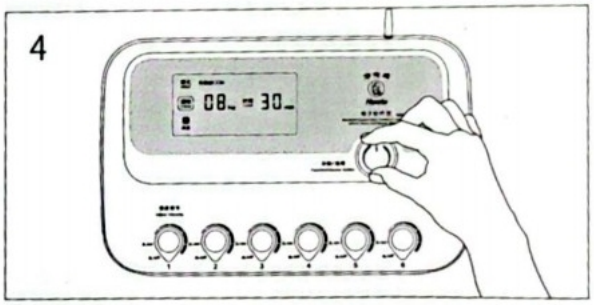
1. After connecting the output electrode wire to the patient, turn on the power **switch.**The screen displays the last treatment parameters. If no **parameter adjustment is required, the output knob can be turned on directly to start the treatment.**



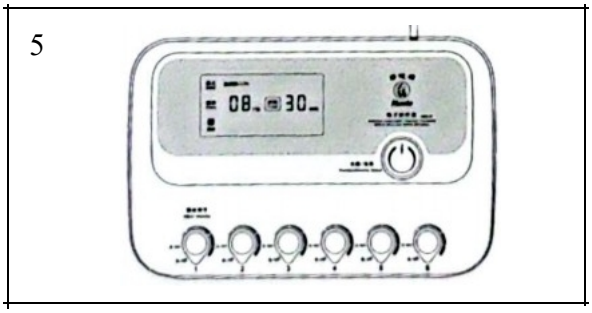
2. To adjust parameters, rotate and press the "Function/ Select" knob for parameter adjustment and selection.



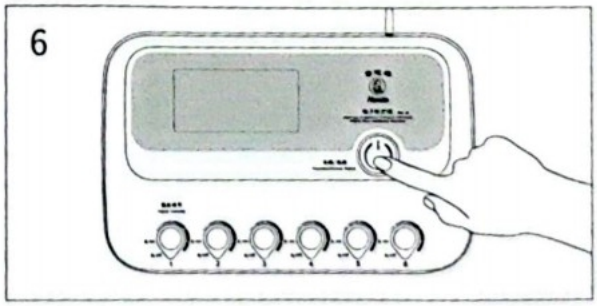
3. After completing the parameter settings, turn on the output knob to initiate the treatment. The corresponding output channel number will illuminate on the screen when the selected channel is activated.



4. During treatment, the output frequency can be adjusted by rotating the "Function/Selection" knob. If the instrument emits a "beep beep" buzzer, set the output knob to "OFF/OFF" and check for poor contact between the electrode leads or metal clips. Resume treatment by turning the output knob back to normal after resolving the issue.



5. After treatment completion, the device emits a beeping sound (drip-drip-drip-drip). Rotate all output knobs to the 'OFF' position to disable the audible notification.



6. If no operation is performed for more than 3 minutes after the instrument is powered on, it will enter a sleep state. The instrument can be awakened by pressing the "Function/Select" button.

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