Zewa®

USER MANUAL

Mini TEN&EMS Device

21021

(For OTC PURPOSE)

Zewa Inc
This manual is valid for the 21021 Stimulator
Be sure to read this instruction manual before operation and keep properly.
This user manual is published by Zewa Inc
Zewa Inc does not guarantee its contents and reserves the right to improve and amend it at any time without prior notice. Amendments will however be published in a new edition of this manual.

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Declaration of conformity:

Zewa Inc declares that the 21021
complies with following normative documents:
IEC 60601-1, IEC 60601-1-2, IEC 62304, IEC 62366, IEC 60601-1-11,
IEC 60601-2-10, ISO 10993-5, ISO 10993-10

1 FOREWORD

1.1 Introduction

The device 21021 is a single output channel Mini TENS&EMS device. Before using, please read all the instructions in this user manual carefully and keep it safe for future.

Mini TENS&EMS device belongs to the group of electrical stimulation systems. It has two basic function – TENS (Transcutaneous Electrical Nerve Stimulation) and EMS (Electronic Muscle Stimulation).

Function of the Mini TENS&EMS device: The device has 5 application programs (3 TENS programs and 2 EMS programs) and applies electric currents in the low-frequency range for therapy. The respective application program controls the generated electric impulses, their intensity, frequency and frequency range. The values for the respective program are listed on part 7.

The operation principle of electrical stimulation equipment is based on simulating the body's own pulses which are transcutaneously transmitted to nerve or muscle fibers by means of electrode. The intensity of the single channel can be adjusted separately and can be applied individually to one body region. The device has single channel and one butterfly-shaped electrode, which allows you to stimulate one muscle groups simultaneously with a large selection of standard programs. The electrical pulse is transmitted to the tissue, then affect the transmission of stimulation in nerve conduction as well as the Neuron and muscle tissue in the field of application part.

1.2 Medical background

1.2.1 EXPLANATION OF PAIN

Pain is a warning system and the body's method of reminding us that something is wrong. Pain is important signal; without it abnormal conditions may go undetected, causing damage or injury to vital parts of our bodies. Even though pain is a necessary warning signal of trauma or malfunction in the body, nature may have gone too far in its design.

Aside from its value in diagnosis, long-lasting persistent pain serves useless purpose. Pain does not begin until coded message travels to the brain where it is decoded, analyzed, and then reacted to. The pain message travels from the injured area along the small nerves leading to the spinal cord. Here the message is switched to different nerves that travel up the spinal cord to the brain. The pain message is then interpreted, referred back and the pain is felt.

1.2.2 EXPLANATION OF TENS?

TENS (Transcutaneous Electrical Nerve Stimulation) gives good results in relief of pain. It is clinically proven and used daily by physiotherapists, other caregivers and top athletes around the world. High-frequency TENS activates the pain-inhibiting mechanisms of the nervous system. Electrical impulses from electrodes, placed on the skin over or near the painful area, stimulate the nerves to block the pain signals to the brain, and the pain is not perceived. Low-frequency TENS stimulates the release of endorphins, the body's natural painkillers.

1.2.3 EXPLANATION OF EMS

Electrical Muscle Stimulation is an internationally accepted and proven way of treating muscular injuries. It works by sending electronic pulses to the muscle needing treatment; that causes the muscle to exercise passively. It is a product derived from the square waveform, originally invented by John Faraday in 1831. Through the square wave pattern it is able to work directly on muscle motor neurons. The Ultra EMS System has low frequency and this in conjunction with the square wave pattern allows direct work on muscle groupings.

2 SAFETY INFORMATION

2.1 Intended use

For program N1, B and H of TENS mode

To be used for temporary relief of pain associated with sore and aching muscles due to strain from exercise or normal household work activities.

For program E1 and E2 of EMS mode

To be used to stimulate healthy muscles in order to improve and facilitate muscle performance.

2.2 Contraindications

1) Do not use this device if you have a cardiac pacemaker, implanted defibrillator, or other implanted metallic or electronic device. Such use could cause electric shock, burns, electrical interference, or death.
2) The device should not be used when cancerous lesions or other lesions are present in the treatment area.
3) Stimulation should not be applied over swollen, infected, inflamed areas or skin eruptions (e.g. phlebitis, thrombophlebitis, varicose veins, etc.).
4) Electrode placements must be avoided that apply current to the carotid sinus region (anterior neck) or transcerebrally (through the head).
5) This device should not be used over poorly enervated areas.
6) Inguinal hernia
7) Do not use on scarred areas following surgery for at least 10 months after the operation
8) Do not use with serious arterial circulatory problems in the lower limbs

2.3 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 or mouth 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, that 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 heat. 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 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.

2.4 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, as such, 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; and
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) This device should be used only with the electrodes recommended for use by the manufacturer.

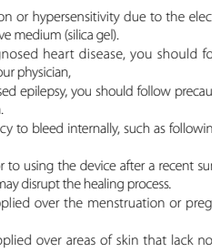
2.5 Adverse Reactions

1) Possible skin irritation or electrode burn under the electrodes may occur.
2) On very rare occasions, first-time users of EMS have reported feeling light-headed or faint. We recommend that you use the product while seated until you become accustomed to the sensation.
3) If the stimulation levels are uncomfortable or become uncomfortable, reduce the stimulation Intensity to a comfortable level and contact your physician if problems persist.

3 GETTING TO KNOW YOUR DEVICE

3.1 Front Rear Panel

1) [ON /SET+] button
2) Program name
3) [OFF /SET-] button
4) Electrode buttons
5) Battery compartment
6) Tape for removing battery
7) Batter cover



3.2 Key Functions

[ON/SET+] Button

In standby state: turn on the device; in treatment state: to increase the output intensity.

[OFF/SET-] Button

In power on state: press the button to select the treatment program; keep press the button to 2 seconds to turn off the device; in treatment state: to decrease the output intensity.

3.3 Accessories

No.	Description	Part No.	QTY
1	Pain Relief Plaster	ED405	1 pc
2	Self-adhesive Electrodes (28x 53 mm, Butterfly-shaped)	AC-EP2853U	1 pc
3	Ordinary batteries (1.5V, AAA)	AC-1UAAAC	2 pcs
4	User manual	/	1 pc

4 SPECIFICATION

4.1Technical information

Device name	Multi-function TENS&EMS Device
Model/type	21021
Power supply	3V d.c., 2x AAA batteries
Output Channel	Single channel
Wave sharp	Bi-phase square-wave pulse
Output voltage	Max. 35Vpp (at 500ohm load)
Output current	Max. 70mA (at 500ohm load)
Treatment time	30min
Output intensity	0 to 10 levels, adjustable
Number of program	5 programs: N, B, H, E1 and E2
Treatment mode:	TENS and EMS mode
Operating conditions	5℃ to 40℃ with a relative humidity of 30%-85%, atmospheric pressure from 700 hPa to 1060 hPa
Storage conditions	-10℃ to 50℃ with a relative humidity of
10%-90%, atmospheric pressure from 700 hPa to 1060 hPa	Less than 10uA (At power off mode)
Dormancy current	Less than 10uA (At power off mode)
Working current	Less than 50mA (At the N1 program)
Dimensions	57x45x16.5 mm
Weight	20g (without batteries) 42g (with batteries)
Automatic shutoff	3 minutes
Classification	BF type applied part, internal power equipment
Electrode detection function	The amplitude level will be reset to 0 V, when the amplitude level is 1 or greater and an open circuit at either channel is detected.
Size of electrodes pad	3" X 4", Butterfly-shaped
Output precision	All the output parameters allow ±20% error for the specification.

Technical specification

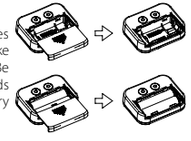
P.W. (pulse width)	200, 250us
P.R. (Frequency)	2, 80Hz (Hz=vibration per second)
Burst frequency	2Hz
Output characteristics	Constant Voltage (CV)
Normal	The pulse rate and pulse width output will be constant based on the design value.
Han	2Hz/250us first output 3 sec. and then output 3 sec. 80Hz/200us.

5 OPERATING INSTRUCTION

5.1 Battery

5.1.1 Check/ replace batteries

Open the battery cover, insert two batteries (type AAA) into the battery compartment. Make sure you are installing the battery properly. Be sure to match the positive and negative ends of the battery to the markings in the battery compartment of device.



BE SURE TO MATCH THE POSITIVE AND NEGATIVE ENDS OF THE BATTERY WITH THE MARKINGS IN THE BATTERY COMPARTMENT OF UNIT.

5.1.2 Disposal of battery

Spent batteries are not belong to the household waste. Dispose of the battery according to the current regulations. As a consumer, you have legal obligation to return spent battery to the Recycle Bin.

⚠ Caution:
1. If a battery was swallowed please seek medical attention immediately!
2. In case of battery leakage, please avoid contacting the battery with skin, eyes and mucus membranes, once contacting leakage, please wash the contact part with plenty of clean water and contact your doctor immediately.
3. Battery can not be dismantled, thrown into fire or short-circuited.
4. Protect battery from excess heat; Take the battery out of the product if they are spent or if you don't use it for a long time. This can prevent device damage because of the battery leakage.
5. Replace all of the batteries simultaneously!
6. Always replace the device with same type battery.

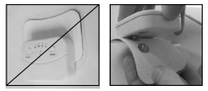
5.2 Connect electrode to device

Before proceeding to this step, be sure the device is completely turned OFF. Connect the electrode to the electrode button of stimulator correctly. Please see following photos for the correction connecting method.

⚠ Caution:
Always use the electrode which is comply with the requirements of the IEC/EN60601-1, ISO10993-1/-5/-10, such as the electrode with CE mark, or which are legally marketed in the US under 510(K) procedure.

5.3 Place electrodes on skin

Place the electrode on the part you need treatment, and base on the instructions of this user manual. Before use, please make the skin that need treatment and the silica gel of electrode clean and humid, to prevent the discomfort that cause by dry skin. Please ensure the skin and electrode connection well.

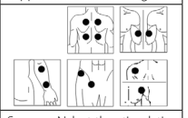
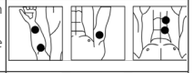
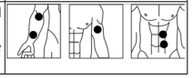


⚠ Caution:
1. Please turn off to prevent electric shock when pre-moving the treatment position of the electrode.
2. Before applying the electrode, it is recommended to wash and degrease the skin, and then dry it.
3. Never remove the electrode from the skin while the stimulator is still treating.
4. Only use the electrodes that provided by the manufacturer, use other accessories could result in injury to the patient.

5.3.4 Electrode placement

FDES106 is a kind of OTC stimulator, suitable for home use, you only need to use according to the user manual, place the electrode on the position where you feel pain and need to exercise, treating and adjusting base on your own feeling.

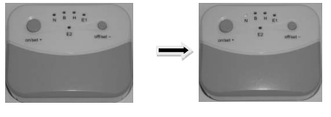
The different programs with corresponding applicable symptoms as below:

Program No.	Applicable disease symptoms	Applicable Location Diagram
N	Shoulder pain Arm pain Elbow pain 4. Low back pain	
B	Shoulder pain Arm pain Elbow pain 4. low back pain	Same as N, but the stimulation is blander.
H	Shoulder pain Arm pain Elbow pain 4. Low back pain	Same as N, but the stimulation strength is between N and B.
E1	Applicable for buttocks, thigh and leg: improve and facilitate muscle performance.	
E2	Applicable for hand, arm and abdomen: improve and facilitate muscle performance.	

6 INSTRUCTIONS FOR USE

6.1 Turn on

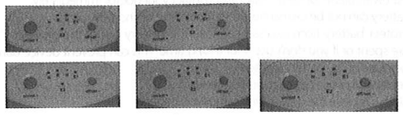
When use for the first time, open the battery cover and load two new batteries (Please kindly review item 5.1.1 for the operating steps and schematic diagram) Then press the [on/set+] button to turn the device on, and the default "N" program indicator LED will be lighting.



6.2 Select the application program

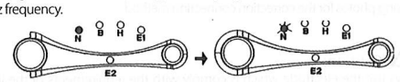
In the state of power on, press【off/ set -】to switch the current application program. The LED indicator of corresponding program will lighten when switching

Please see below picture:



6.3 Starting the treatment

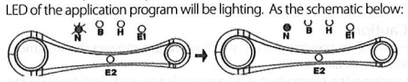
Press [on/set +] button to adjust the output intensity and the device will enter the working state, and the current application program indicator LED will be flicker for 1Hz frequency.



6.4 Adjust Channel Intensity

Place the electrode stick the application of body parts, press【on/ set +】key increase output intensity. The output intensity is increasing a level in each press the【on/set +】key, it has 10 levels output intensity. Please adjust the intensity in your feel comfortable condition. The LED of corresponding application program will be flash as 1Hz frequency to indicate that in treatment status.

If you fell the output intensity too strong, you can press【off/ set -】key to decrease the output intensity. The output intensity is decrease a level in each press the【off/ set -】key.
When the output intensity decreased to zero, it will return the wait mode, and the LED of the application program will be lighting. As the schematic below:

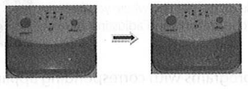


Caution:

If the stimulation levels are uncomfortable or become uncomfortable, reduce the stimulation intensity to a comfortable level and contact your medical practitioner if problems persist.

6.5 Turn the device off

Press the [off /set -] button for 2 seconds to turn off the device at any mode, and the all indication LED will be turn off.



6.6 Load detect function

When the device haven't detect the load or the electrode with skin connect not good, it will automatically detect the load if the intensity is added to 1 level, if it is judged to no-load, the intensity will automatically return to zero and the device will return to wait mode.

6.7 Battery

To replace the battery, open the battery cover and extract the battery. Replace it with AAA batteries. Make sure you insert the battery correctly.

Notice of batteries:

Batteries may be fatal if swallowed. Therefore, keep the batteries and the product out of the range of children. If a battery was swallowed, go to hospital immediately.
If the battery has leakage, avoid contact with skin, eyes and mucus membranes. Rinse the affected spots with lots of clear water immediately and contact a physician right away.
c. Batteries may not be charged, dismantled, thrown into fire or short-circuited.
d. Protect batteries from excess heat. Take the batteries out of the product if they are spent or in case you no longer use the article. This prevents damage caused by leaking batteries.
e. Always replace the full set of batteries with different set at the same time.
f. Press [on/set+] button to check the electric quality of battery, when the battery become low voltage, the LED indicator will be dim or the device can not power on.

6.8 Use of the adhesive electrode

a. The electrode may only be connection with the Mini TENS&EMS device. Make sure that the device is turned off when attaching or removing the adhesive electrode.
b. If you want to reposition the electrode during the application, turn the device off first.
c. The use of electrode may lead to skin irritations. If you experience such skin irritations, e.g. redness, blistering or itching, discontinue using the adhesive electrode. Do not use the Mini TENS&EMS device permanently on the same body part, as this may also lead to skin irritations.
d. Electrode is personal belongings, just for single person use. Please note that prevent cross use.
e. The electrode must connect entirely to the skin surface to prevent high local currents, which may lead to skin burns.
f. Do not use the adhesive electrodes for more than approx. 20 times, as contact between the electrodes and the skin deteriorates over time.
g. The adhesive force of the electrodes depends on the skin properties, storage, and the number of applications. If your adhesive electrodes no longer fully stick to the skin's surface, replace them with new electrodes. The adhesive electrodes must adhere entirely to the skin surface to prevent high local currents, which may lead to skin burns. Stick the adhesive electrodes 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.

Caution:

1) Before applying the electrode, it is recommended to wash and degrease the skin, and then dry it.
2) Never remove the electrode from the skin while the device is still switched on.
3) Only use the electrode that provided by the manufacturer. Use other products could result in injury to the user.

6.9 Where do I attach adhesive electrode?

a. Each person reacts differently to electric nerve stimulation. Therefore, the placement of the electrodes may deviate from the standard. If application is not successful, contact your physician to find out which placement techniques are best for you.
b. Do not use any adhesive electrodes with an electrode size smaller than the original attachment electrode issue by manufacturer, otherwise the current density may be too high and cause injuries.
c. The size of the adhesive pads may not be changed, e.g. by clipping off parts of them.
d. Make sure that the region radiating the pain is enclosed by the electrodes. In case of painful muscle groups, attach the electrodes in such a way that the affected muscles are also enclosed by the electrodes.

Usage advice for TENS:

If you fell the output intensity too strong, you can press【off/ set -】key to decrease the output intensity;
During the treatment if you don't feel any discomfort, we advise you use the device until the session end; normally, the pain relief occurs after 5~10 min treatment;
Normally, we advise 1~2 treatment per day, about a week as a period of treatment;
After a period of treatment, if the pain relief is not achieved or even the pain get worse, please consult your doctor.
Usage advice for EMS:
Place the electrodes on the body part you want to treat referring to the picture on page 11 (E1 & E2);
1~2 treatment per day, about a week as a period of treatment;
In the early days of treatment, you can use the Mode E1, and after a few days, you can use the E2; the frequency of E2 is comparatively higher;
We advise you use the device for one session per time. If you find discomfort during treatment, you can pause the session or decrease the intensity of the output.

7 PROGRAM

7.1 Application program

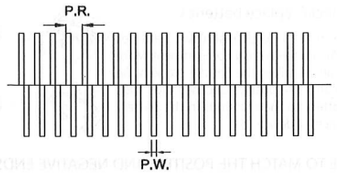
Program Name	Time min.	Frequency(Hz)	Pulse width(uS)	Wave (TENS)
N	30	80	200	Normal
B	30	2	200	Burst
H	30	2/80	250/200	Han

Program Name	Time min.	Frequency (Hz)	Pulse width(uS)	Wave (TENS)	Ramp up and ramp down time (s)	Keep Time (s)	Release Time(s)
E1	30	50	250	EMS	2	5	10
E2	30	20	250	EMS	2	5	10

7.2 The waveform of the stimulation program

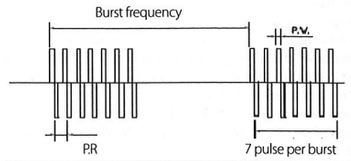
For TENS mode

1 Normal (Program N1, N2)



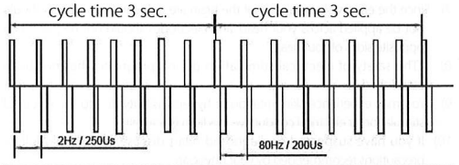
Waveform:	Biphasic square wave.
P.R (Frequency):	N1: 80Hz; N2: 2Hz
P.W (Pulse width):	N1: 200uS; N2:250uS
Output Voltage:	0 to 35Vpp(500 Ω Load), adjustable
Output Current:	0 to 70mA(500 Ω Load), adjustable

2) Burst (Program B)



Waveform:	Biphasic square wave.
P.R (Frequency):	100Hz
Burst Frequency:	2Hz
P.W (Pulse width):	200uS
Output Voltage:	0 to 35Vpp(500 Ω Load), adjustable
Output Current:	0 to 70mA(500 Ω Load), adjustable

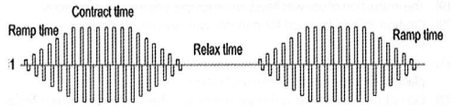
3) Han(Program H)



Waveform:	Biphasic square wave.
P.R (Frequency):	2Hz/ 80Hz
P.W (Pulse width):	250us/ 200us
Output order	2Hz/250us first output 3 sec. and then output 3 sec. 80Hz/200us.
Output Voltage:	0 to 35Vpp(500 Ω Load), adjustable
Output Current:	0 to 70mA(500 Ω Load), adjustable

For EMS mode

4) EMS program (program E1 and E2)



Waveform:	Biphasic square wave.
Wave characteristic:	All program of EMS mode output wave characteristic are same.
P.R. (Frequency):	For program E1: 50Hz For program E2: 20Hz
For program E2: 20Hz	0 to 35Vpp(500 Ω Load), adjustable
P.W. (Pulse width):	250uS
Ramp up time	2sec.
Ramp down time	2sec.
Contract time (on time)	5sec.
Relax time (off time)	10sec.
Output Voltage:	0 to 35Vpp (500 Ω Load), adjustable
Current:	0 to 70mA(500 Ω Load), adjustable

8 CLEANING AND MAINTENANCE

Fully comply with the following daily maintenance requirements are necessary, to make sure your product operate intact and guarantee the product Long-term performance and safety.

8.1 Cleaning and caring for the device

8.1.1 Pull the stimulator out of the electrode, and remove the batteries. Clean the device with a soft, slightly damp cloth. In case of heavier dirt build-up, you may also add a mild detergent.
8.1.2 Do not subject the Pain Relief Plaster to moisture or dampness. Do not hold the Pain Relief Plaster under running water, do not submerge it in water or other liquids.
8.1.3 The Pain Relief Plaster is sensitive to heat and may not be exposed to direct sunlight. Do not place the Pain Relief Plaster on hot surfaces.
8.1.4 Carefully clean the surface of the adhesive electrode with a damp cloth. Make sure the device is turn off!
8.1.5 For reasons of hygiene, each user should use his/ her own set of electrode.
8.1.6 Do not use any chemical cleaners or abrasive agents for cleaning.
8.1.7 Ensure that no water penetrates into the machine. If this should ever happen, only use the device again once it is completely dry.
8.1.8 Not to clean the device during treatment, be sure that the device is turned off and the battery is taken out when cleaning the device.

8.2 Maintenance

8.2.1 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.
8.3.2 The user must not attempt any repairs to the device or any of its accessories. Please contact the retailer for repair.
8.3.3 Opening of the equipment by unauthorized agencies is not allowed and will terminate any claim to warranty.

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.

9 TROUBLESHOOTING

Should any malfunctions occur while using the device.
Check whether the parameters are set to the appropriate form of therapy, adjust the control correctly. Please see the following table:

Malfunction	The reason	Countermeasure
LED no light replacing of the battery.	1. If there's foreign body in the battery compartment. 2. If the battery has used up or counter-install. 3. If there is foreign body in the battery interface. 4. If the battery is not the right specification or battery interface going wrong. 5. Exception reset	1. Check and clean. 2. Replace the new battery or install the battery correctly. 3. Check and clean. 4. Replace the battery with the right specification.
No feeling of stimulator or weak stimulating	1. If the electrode connect well to the skin. 2. If the connect between electrode connect well to the stimulator. 3. If the battery is used up. 4. If the skin is too dry.	1. Check and re-paste on it. 2. Check and re-connect. 3. Replace the new battery. 4. Use the wet cotton cloth immersion water wipe the electrode and the skin which will be use.
No feel of stimulator or Weak stimulating	1. If the electrode pad stick well to the skin. 2. If the connect between electrode pad and stimulator is right. 3. If the battery is used up. 4. If the electrode pad has been used too long, and with no stickiness.	1. Check and re-stick it. 2. Check and re-connect. 3. Replace the new battery. 4. Replace the new electrode pad.
Halt automatically in the treatment	1. If the electrode pad loosen from the body. 2. If the battery is used up.	1. Check and stick the electrode pad well. 2.Replace the new battery.
The skin of the treatment part redden or tickle	1. If the treatment time lasts too long. 2. If the electrode stick well to the skin. 3. If the interface of the electrodes is dirty or dry. 4. If the skin is sensitive to the electrode.	1. Do the treatment once a day, short the treatment time reasonable. 2. Check and paste on the electrode well. 3. Use the wet cotton cloth immersion have water wipe it, Then can use it 4. Check if the user has the history of allergic, the light sensitive, please change the sticking place or shorten the treatment time. The strong sensitive, should stop the treatment or to see the doctor.

10 STORAGE

Remove the batteries from the device if you are not going to use it for a longer period. Leaking batteries can damage the unit. Do not make any sharp kinks in the connecting leads or electrodes. After use, pull the electrode in original package. Do not expose the device to direct sunlight and protect it against dirt and moisture. Store the machine in a cool, well-ventilated place. Never place any heavy objects on the machine.

11 DISPOSAL

Spent batteries are not belong to the household waste. Dispose of the battery according to the current regulations. As a consumer, you have obligation to dispose of batteries correctly. Consult your municipal authority or your dealer for information about disposal.
At the end of the product lifecycle, do not throw this product into the normal household garbage, but bring it to a collection point for the recycling of electronic equipment.
Waste Electrical and Electronic Equipment can have potentially harmful effects on the environment. Incorrect disposal can cause harmful toxins to build up in the air, water and soil and can be harmful to human health.

12 Normalized symbols

	Attention: see Instructions for use!
	Consult instructions for use!
	Applied part of type BF
	Meaning of the symbols on the product, the packaging or in the operating instructions: electric devices are recyclable material and should not be disposed as household waste after their useful life! Help us to protect the environment and save resources and take this device to the appropriate collection points. Please contact the organization which is responsible for waste disposal in your area if you have any questions.
IP20	Common device, protected against access to hazardous parts with a finger, and non-protected of waterproof.
SN	Serial number

13 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:
1. 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 parities.
   - 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 dissembling devices.
4. 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

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