beurer

EM 70



DE	Kabelloses TENS&EMS-Gerät
	Gebrauchsanleitung2
EN	Wireless TENS & EMS Device
	Instructions for use21
FR	Wireless Electrostimulateur TENS/EMS
	numérique
	Mode d'emploi39
ES	Aparato TENS y EMS inalámbrico
	Instrucciones de uso57
IT	Apparecchio TENS/EMS wireless
	Istruzioni per l'uso75
TR	Kablosuz TENS ve EMS cihazı
	Kullanım kılavuzu93
RU	Беспроводной прибор TENS и EMS
	Инструкция по применению111
PL	Bezprzewodowe urządzenie TENS i EMS
	Instrukcja obsługi

ENGLISH

Content

1. Included in delivery	21
2. Package contents	
3. Glossary of symbols	
4. Important safety precautions and warnings	
5. How TENS works for pain relief	
6. How EMS works for musice stimulation	
7. Device description	26
8. Initial use	
9. Usage	28
9.1 Using the main unit	
9.2 TENS-Chronic Pain and Acute pain	
9.3 EMS-Muscle Stimulation	30
9.4 The remote controller to control the main device	31
10. Cleaning and storage	33
11. Replacement parts and wearing parts	34
12. Problems / solutions	
13. Technical Specifications	35
14. Product / battery disposal	36
15. Warranty / service	
16. Notes on electromagnetic compatibility (EMC)	



Read these instructions for use carefully and keep them for later use, be sure to make them accessible to other users and observe the information they contain.

1. Included in delivery

Check that the exterior of the delivery cardboard packaging is intact and make sure that all components are present. Before use, ensure that the device and accessories show no visible damage and all packaging material has been removed. If you have any doubts, do not use the device and contact your retailer or the specified Customer Service address.

You can also download the free "beurer PainAway" App for iOS and AndroidTM. The "beurer PainAway" app is an application assistance where you will get suggestions for the electrode placement and explanations on how TENS / EMS works.

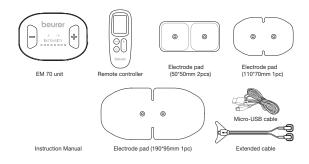
System requirements:

For the "beurer PainAway" app: $iOS \ge 10.0$, AndroidTM ≥ 5.0



2. Package contents

- 1 x EM 70 Unit
- 1 x Remote controller
- 1 x Electrode pad (50*50mm 2pcs)
- 1 x Electrode pad (110*70mm 1pc)
- 1 x Electrode pad (190*95mm 1pc)
- 1 x Micro-USB cable
- 1 x Extended cable
- 1 x Instruction Manual

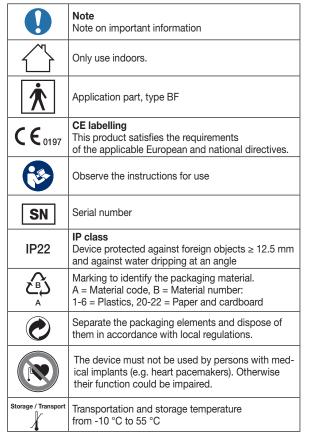


3. Glossary of symbols

WARNING

The following symbols appear in the instructions for use and on the device.

<u> </u>	to health
\triangle	IMPORTANT Safety note indicating possible damage to the device/accessory



Storage / Transport	Transportation and storage humidity limits from 10% to 90%
	Disposal in accordance with the Waste Electrical and Electronic Equipment EC Directive – WEEE
(F	Separate the product and packaging elements and dispose of them in accordance with local regulations.
\triangle	The device can emit effective output values above 10 mA, averaged over every five-second interval.
	Manufacturer
	Date of manufacture
EC REP	European Authorised Representative

4. Important safety precautions and warnings

It is important that you read all the warning and precautions included in this manual because they are intended to keep you safe, prevent injury and avoid a situation that could result in damage to the device.

To ensure safe usage of the device, follow the instructions in this user manual. Read the contraindications, warnings and precautions sections before you use this device. If you are not sure if the device is suitable for you, consult your physician before using this device.

↑ WARNING

Do not use this device with the following medical devices:

- Implanted electronic medical devices, such as pacemakers. This may cause electric shock, burns, or death.
- Electronic life support equipment, such as respirators or insulin pumps.
- Electronic medical devices worn on the body, such as electrocardiographs.
- If you use this device together with other electronic medical devices, these devices may not work correctly.
- If you are in the care of a physician, consult your physician before you use this device.
- If you have had medical or physical treatment for your pain, consult your physician before you use this device.
- If your pain does not improve, becomes more than mild, or continues for more than five days, stop using the device and consult your physician.
- Consult your physician before you use this device. The device may cause lethal disturbances to the heart rhythm in susceptible individuals.
- Do not use the device if you have a cognitive impairment (e.g. dementia, Alzheimer's disease). People who have a cognitive impairment may be unable to use the device according to the instructions and may become agitated by the treatment.
- Do not use the device on children, as it has not been evaluated for pediatric use.
- Do not use the device on the side of your neck (on the carotid sinus) or any area of the throat (front of the neck). This could cause severe muscle spasms that may result in closure of our airway, breathing difficulties, or adverse effects on heart rhythm or blood pressure.
- Do not use the device across your chest. The device introduces electrical current. Using the device in your chest may cause rhythm disturbances to your heart, which could be lethal.
- Use the device only on normal, intact, clean, and healthy skin.

- Do not use the device over open wounds or rashes, and over swollen, red, infected, or inflamed areas or skin eruptions (e.g., phlebitis. thrombophlebitis, varicose veins).
- Do not use the device if you have cancer.
- Do not place the electrodes inside body cavities, e.g. the mouth.
 This may cause skin irritation, skin burns or electrical shocks. This device is not designed for internal application.
- Do not use the device in the presence of electronic monitoring equipment (e.g., cardiac monitors, ECG alarms). This equipment may not operate properly when the electrical stimulation device is in use.
- Do not use the device on people with a high fever (e.g. > 39°C)
- Do not use the device on people with metal implants.
- Do not use the device on people with known or acute cardiac arrhythmia or disorders of the heart's impulse and conduction system.
- Do not use the device on people with seizure disorders (e.g. epilepsy).
- Do not use the device during pregnancy.
- Do not use the device after an operation, if strong muscle contractions could affect the healing process
- Do not use in the genital area.
- Do not use the device following alcohol consumption.
- Do not use the device if connected to a high-frequency surgical device.
- Do not use the device in the case of acute or chronic diseases of the gastrointestinal tract.
- Do not use this device accross or through the head like for example over your eyes, mouth, face, front of neck (especially in the carotid sinus) or across your heart because this could cause severe muscle spasms resulting in closure of your airway, difficulty breathing or adverse effects on heart rhythm or blood pressure.
- Do not use the device when in the bath or shower or humid enviorments.
- Do not use the device while sleeping.
- Do not use the device while driving, operating machinery, or during any activity in which electrical stimulation can put you at risk of injury.

- Do not modify the device or the electrodes without authorization of the manufacturer. This could cause improper functioning.
- As the electrical performance characteristics of electrodes may affect the safety and effectiveness of electrical stimulation, take the following into account:
 - If the electrodes are too small or not correctly applied, this may result in discomfort or skin burn.
 - Contact the manufacturer of the device, if you do not know if the electrode can be used with the device.

⚠ PRECAUTIONS

- TENS is not effective for pain of central origin, including headache.
- TENS is not a substitute for pain medications and other pain management therapies.
- TENS devices have no curative value.
- TENS is a symptomatic treatment. It suppresses the sensation of pain that normally serves as a protective mechanism.
- As TENS treatment may not be effective for everyone, consult your physician or healthcare professional to find out if TENS will work in your case.
- The long-term effects of electrical stimulation are unknown.
- Because the effects of stimulation on the brain are unknown, do not use the device on opposite sides of your head.
- Electrical stimulation or the electrical conductive gel may cause skin irritation or hypersensitivity.
- If you have suspected or diagnosed heart disease, follow the precautions from your physician.
- Use caution if you are likely to have internal bleeding, for instance, after injuries or fractures.
- If you had surgery recently, consult your physician before you use the device. Using the device may disrupt the healing process.
- Use caution when you use the device over areas of skin that lack normal sensation.
- Use caution when you use the device over the uterus during menstruction.
- Keep this device out of the reach of children. The unit contains small pieces that may be swallowed.

- Keep this device out of the reach of children. The cable may cause strangulation.
- Do not use the device or an electrode if it is damaged. Always check the device and the electrodes for damage before use.
- Do not use plaster or tape to attach the electrodes to the skin.
- Make sure that the electrodes do not touch metal objects, such as belt buckles or necklaces.
- Use this device only with the electrodes, and accessories recommended by the manufacturer.
- Always end the device by press the on/off button before you remove the device or the electrodes. If you do not end the treatment, you may get an unpleasant sensation in your fingers when you touch the buckle. This sensation is not harmful, but it can be unpleasant.
- Do not place on your spine or backbone.

General recommendations

- Do not use this device for any other purpose than what it is intended for.
- This device is designed for use by and on a single adult person.
 For hydienic reasons electrodes should not be shared.
- Do not use the device if you are connected to high-frequency surgical equipment. This may result in burns on the skin under the electrodes and may damage the device.
- Do not use the device within less than 1 meter (39 inches) from shortwave or microwave medical equipment. Close proximity to this equipment may cause unstable device output.
- Although you can use the device indoors and outdoors, it does not withstand all weather conditions.
- The electrodes have a limited shelf life. Please check the packaging for the use-by date before use. Do not use electrodes whose use-by date has expired.
- Always use and store the electrodes according to the instructions.
- You may experience skin irritation or hypersensitivity due to the electrical stimulation or electrical conductive medium (gel).

If the storage area of device differs greatly from that of the service environ ment, please wait the stimulator to the room temperature about 2 hours.



General risk

TENS only treats symptoms. It reduces the feeling of pain, but it does not cure the cause of the pain. Pain may be a signal from your body that some part of your body is damaged and needs attention.

Specific risks

- You may get skin irritation and burns under the electrodes applied to your skin.
- You may experience muscle exhaustion or muscle soreness after extended use on the same muscles.
- Stop using the device and consult your physician if you experience adverse reactions from the device

5. How TENS works for pain relief

What is it?

The WirelessTENS&EMS Device EM 70 is highly effective in temporarily relieving pain. Gentle electrical pulses are sent via water contact electrodes through the skin to the nerve fibres. Cramps, acute pain, pain resulting from injury and chronic pain are all natural warning signs that come from the body. TENS, or transcutaneous electrical nerve stimulation, relates to the electrical stimulation of the nerves via the skin. TENS is an effective nonpharmacological method of treating different types of pain that have a variety of causes. It has no side-effects if administered correctly. The method has been clinically tested and approved and can be used for simple selftreatment. The pain-relieving or pain-suppressing effect is achieved by inhibiting the transference of pain to nerve fibres (caused mainly by high-frequency impulses) and by increasing the secretion of endorphins in the body. Their effect on the central nervous system reduces the sensation of pain. The method is scientifically substantiated and approved as a form of medical treatment. Any symptoms that could be relieved using TENS must be checked by your doctor. Your doctor will also give you instructions on how to carry out a TENS self-treatment regime.

How TENS works?

Scientific theory suggests that electrical stimulation therapy may work in several ways:

- The gentle electrical pulses move through the skin to nearby nerves to block or shut out the pain message from ever reaching the brain from the source of the pain.
- The gentle electrical pulses increase the production of the body's natural pain killer, such as endorphins.

6. How EMS works for musice stimulation

What is it?

EMS works by sending electronic pulses to the muscle needing treatment; this causes the muscle to exercise passively. It is a product derived from the square waveform (ladder-shaped). Through the square wave pattern it is able to work directly on muscle motor neurons. This device has low frequency and this in conjunction with the square wave pattern allows direct work on muscle groupings.

How EMS works?

The principle of electrostimulation devices is based on the imitation of impulses in our bodies that are transferred to nerve and muscle fibres with electrodes via our skin. The electrical impulses are safe and virtually painless. You may merely notice a slight tingling or vibrating sensation. The electrical impulses that are sent into the tissue influence the transmission of stimulation into nerves, nerve centres and muscle groups in the application area.

Electrical muscle stimulation (EMS) is a widespread and generally recognised method, and has been used in sports and rehabilitation medicine for years.

Electrostimulation is a very effective method for making muscles work:

- With a significant improvement in various muscular qualities
- With no cardiovascular or mental fatique
- With limited stress exerted on joints and tendons. Electrostimulation thereby enables more muscular work than voluntary activity.

For optimum results, we recommend supplementing your electrostimulation sessions with other commitments, such as:

- Regular physical exercise
- · A balanced and healthy diet
- A balanced lifestyle

Indications for use:

The device is designed to be used for temporary relief of pain, including the acute and chronic pain relief.

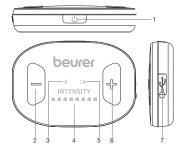
And it is designed to be used for stimulate muscles for prevention of muscular atrophy, increase of blood flow circulation, muscle strengthening and improve and facilitate muscle performance.

7. Device description

Main Unit

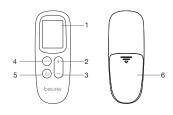
ton

- 1 Power ON/OFF button
- Decrease intensity button
- 3 Indicated successful Bluetooth® connection with Remote controller
- 4 Indicated the output intensity levels
- 5 Indicated low battery6 Increase intensity but-
- 7 USB charging port/ Extended output port



Remote Controller

- 1 LCD display
- 2 Increase intensity button / Switch treatment program and area
- 3 Decrease intensity button / Switch treatment program and area
- 4 Program setting/ enter/ cancel button
- 5 Power ON/OFF button / Emergency stop output
- 6 Battery cover

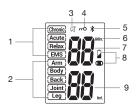


LCD Display of Remote controller

- 1 Treatment program icon
- 2 Treatment area icon
- 3 Sound off indicator for remote controller
- 4 Lock indicator
- 5 Remote controller and the main unit is paired and connected
- 6 Treatment time unit
- 7 Treatment time display
- 8 Low battery indicator for main unit
- 9 Treatment Intensity display

8. Initial use

Insert the Micro-USB plug of the Micro-USB cable into the Micro-USB charging port of the EM 70 device, and then connect to the Standard USB plug of the Micro-USB cable to the appropriate power supply device which could output 5V d.c. , 300mA. The intensity level indicators will show flow visualization in charging.



When charging completed, the intensity level indicators will light on and turn off automatically after 5 minutes. Then remove the micro-USB plug from the micro-USB socket of the device.

NOTES:



Turn off the device if you plug-in the USB cable for charging. Never turn on the device when the USB cable is plugged in because this could cause an electrical shock or damage the device or the power supply.

- Only use the Micro-USB cable which is provided by the manufacturer.
- Device must be charged prior to first use. Typically it takes 2-3 hours to charge the device.
- Please charge the device fully before beginning each session. If the charge is not complete at the beginning of a program, the battery may become depleted before the end of the session. You cannot use the device while it is charging.

- If your skin or eyes come into contact with battery fluid, rinse affected the areas with water and seek medical assistance.
- Protect batteries from excessive heat.
- Risk of explosion! Never throw batteries into a fire.
- Fully charge the battery of the main unit prior to initial use.
- Do not disassemble, open or crush the batteries.
- Only use chargers for the main unit specified in the instructions for use
- Battery of the main unit must be charged correctly prior to use.
 The instructions from the manufacturer and the specifications in these instructions for use regarding correct charging must be observed at all times
- Fully charge the battery of the Main unit at least every 6 months.
- Choking hazard! Small children may swallow and choke on batteries. Store batteries out of the reach of small children.
- Observe the plus (+) and minus (-) polarity signs.

- If the batteries of the Remote Controller leaks, put on protective gloves and clean the battery compartment with a dry cloth.
- If the battery of the Main Unit leaks, put on protective gloves and dispose the device.

9. Usage

9.1 Using the main unit

Attaching the electrode pads and device

Step 1 - Cleaning of skin

Clip excess hair from the treatment area and remove any jewelry that may come in contact with the stimulation of the device. Wash area with soap and water, and dry completely.





Dirt, grease or particles left on the skin may lodge themselves in the hydrogel of the electrodes. This has an adverse effect on the adhesive power of the electrodes.

Step 2 - Connect electrode pad

Take off the electrode pad and connect it with the device by attaching the snap button.





Do not use electrodes whose use-by date has expired. The use-by date is shown on the resealable plastic bag.

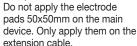
Replace the electrodes when they are damaged or dirty, when they have lost their adhesive power or when stimulation becomes uncomfortable.

If you use EMS mode, you can connect the extended electrodes to adapt to different treatment area. (See Electrode Pad Placement for details). You can also use the extension for TENS or Massage programmes.



How to use the extended electrodes?

Extended electrodes allow a alternate of the stimulation to a group of muscle. When you connecting the extended electrodes, the device will run the alternate muscle stimulation between Group A and Group B.





Do not apply the bigger electrodes on the extension cable. Only the electrodes with 50x50mm.

⚠ WARNING

• Do not plug the extended cable into the main source socket.

NOTE

The cable has grey cable and white cable. The left pad and grey pad are one group (Group A), the right pad and white pad are other group (Group B).

Step 3 - Placing the Electrode pads

Remove the clear plastic film from the back of the pad.
Place the device on clean, dry and healthy skin, near or surrounding the area with pain.



Replace the electrodes when they are damaged or dirty, when they have lost their adhesive power or when stimulation becomes uncomfortable, i.e. when you experience an unpleasant stinging or biting sensation.

↑ WARNING

Always connect the device before you place the electrodes on the skin. It is possible that you may need external assistance for placing the electrodes in certain areas.

Replace the electrodes if:

- they are damaged or torn.
- they are past the use-by date indicated on the re-sealable bag.
- they have lost their adhesive power. Never use plaster or tape to attach them to your skin.
- stimulation feels less strong.
- when stimulation is uncomfortable, i.e. when you experience an unpleasant stinging or biting sensation.



Always replace the electrodes with electrodes recommended for this device by the manufacturer.

↑ WARNING

• Make sure the device is turned off before applying electrodes.

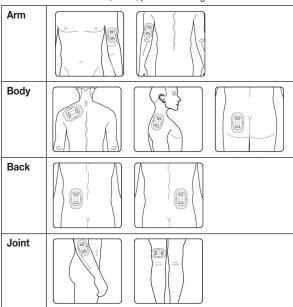
↑ WARNING

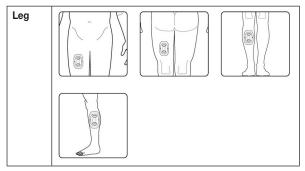
Place the electrode pads according to the electrode Pad placement illustrations.

9.2 TENS-Chronic Pain and Acute pain



To treat areas of shoulder, back, please use large size electrode.

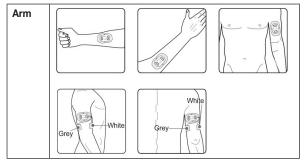


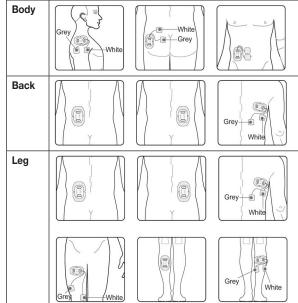


9.3 EMS-Muscle Stimulation

NOTE

You can connect the extended electrodes to adapt to different treatment area.



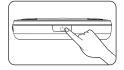


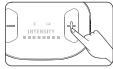
MASSAGE-Relax

The electrode pad placement is same as the TENS or EMS. Attach both pads on either side of the region where you want to relax.

Step 4 - Starting a session only through the EM 70 UNIT

Turn on the device by press [\(\tilde{\to}\)] button, then you can press [+] button to start a treatment. During first use the default program is Arm/ Chronic, after a first connection with the remote controller always the last used programm is the one which will be started from the main unit. During the treatment, you can adjust the intensity level through the [-] button and [+] button. If you have any discomfort ,press the [\(\tilde{\to}\)] button to EMERGENCY STOP the intensity output. After the session is finished, you can press [\(\tilde{\to}\)] button hold for 2s to power device off.





CAUTION

- If the electrodes are not placed firmly on skin or the main unit has not connected with the electrodes and when the output intensity level has reached 1 level, the intensity will stop automatically.
- If the stimulation levels make you feel uncomfortable, reduce the stimulation intensity to a comfortable level and contact your medical practitioner if problems persist.
- 3) If your pain does not improve and become sore from over-use, refrain from treating those areas for 2 days. If this issue reoccurs, reduce the treatment time and intensity settings for future treatment.
- 4) If you feel pain, dizziness, discomfort or nausea, call your physician or medical practitioner.
- You should therefore take care to work with maximum intensities, i.e., always at the limit of what you can support. Do not exceed your comfort level.

9.4 The remote controller to control the main device

Step 1 - Turn on the main unit and remote control

Press [b] button for 1s on the remote controller to turn it on. You will hear a long beep.

Press [6] button on the main unit, green LED light will light on. You will hear a long beep.

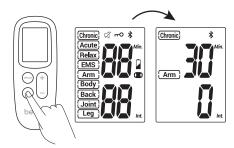
As soon as the device has connected to the remote control, you will hear two long beeps from the remote control.

If the connection is stopped or interrupted, you will hear three short beeps.

Attention: 10 icon will display if remote control has wireless connection with main unit.



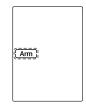
The device will work at the last treatment.



Step 2 - Choose Treatment Body parts

Press [PROG] button to set the treatment body parts (Arm-Body-Back-Joint-Leg). Switch between body parts by pressing [+/-] button. Selecting body part symbol is flashing. Press [PROG] to confirm selecting body part.





Step 3 - Selecting treatment program

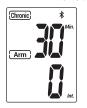
After confirmed the body part, you can set the treatment program (Chronic-Acute-Relax-EMS). Switch between treatment program by pressing [+/-] button. Selecting treatment program symbol is flashing and body part symbol is continuous. Press [PROG] to confirm program.





Step 4 - Start treatment and adjust intensity

Start the electrical stimulation by pressing [+]. Adjust electrical stimulation intensity by pressing [+] or [-] button.







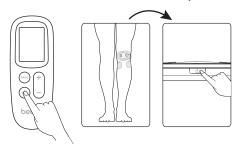
If there is any emergency happen, press [c] button on remote controller or press [c] button on main unit to stop treatment.

Step 5 - Turn off the device

Press hold [(¹)] button for 2 seconds to turn off remote controller.

CAUTION

If there is no operation in the panel for 3 minutes, the remote controller and main unit will be off automatically.



Key lock/unlock function

Press [PROG] and [\Diamond] button together to lock the intensity setting button in output status. The indicator [=••] will display on LCD. Press the same buttons again to unlock the buttons.





Sound on/off function

Press [PROG] and [-] button together to switch off the remote controller's sound. The [☆] will display on the LCD. Press [PROG] and [+] button together to switch on sound.





Low battery indicator for main unit

When []] and [and isplay on LCD, the battery of the main unit need to be charged as soon as possible.

Following completion of session

To turn off the device, press the [the button.

Remove the electrodes from the skin.

Remove the device from the electrodes. If you forget to turn off the device for more than 3 minutes, the device will shut-down automatically.

If the device is frequently used during the day, it is advisable to charge it before starting a new session.

10. Cleaning and storage

Cleaning the main device

- Turn unit off. Remove Micro-USB cable if device has been charging.
- 2. Clean the device after use with a soft, slightly moistened cloth and wipe gently.
- Do not use chemicals (like thinner, benzene).
- Do not let water get into the internal area.

NOTE

This device and accessories does not require sterilization.

Cleaning the electrode pads

- 1) Turn the power off
- 2) Remove pads from device.
- Wash the pads when the adhesive surface becomes dirty and/or the pads are difficult to attach.

Wash the pad softly with your fingertips under slow running cold water for several seconds (do not use a sponge/cloth/sharp object like a nail on adhesive side, do not use detergents, chemicals or soap).

4) Dry the pads and let the adhesive surface air-dry completely (do not wipe with a tissue paper or cloth).

CAUTION

- The life of pads may vary by the frequency of washing, skin condition, and storage state.
- If the pad no longer sticks to your skin or the pad is broken, immediately discontinue use and obtain replacement pads as recommended by the manufacturer.
- Before applying the self-adhesive electrodes, it is recommended to wash and degrease the skin, and then dry it.
- DO NOT turn on the device when the electrodes are not positioned on the body.
- Never remove the self-adhesive electrodes from the skin while the device is still turned on.

- If replacement electrodes are necessary, use only electrodes that are the same as the electrodes provided with the EM70.
- Always use electrodes with CE mark.
- Always clean the electrodes after your treatment every time.

Storing the electrode pads

Place clean, dry pads on the plastic film and then store in the sealed package between uses.

Storing the unit

Place the unit, electrodes and manual back in package. Store the box in a dry place, 14°F~131°F (-10°C~55°C); 10% ~90% relative humidity.

KEEP DEVICE AND ALL ACCESSORIES OUT OF REACH OF CHILDREN.

CAUTION

 Store the device in the dry, clean place. Do not expose the device to any chemical solvent, water, lint, direct sunshine or high temperature.

11. Replacement parts and wearing parts

You can obtain the following replacement parts directly from Customer Services:

Designation	Item number and/or order number
Adhesive electrode set: 2 x Electrode pad (50*50mm) 1 x Electrode pad (110*70mm) 1 x Electrode pad (190*95mm)	Item No. 648.22

12. Problems / solutions

Problem	Possible causes	Possible solution
The unit can not power on.	Are the batteries exhausted?	Charging.
Stimulation weak or cannot feel	Electrodes dried out or dirty.	Replace new electrodes.
any stimulation.	Electrodes cannot stick skin well.	Reconnect the electrodes.
Stimulation is	Intensity is too high.	Decrease intensity.
uncomfortable.	Electrodes are too close together.	Reposition the electrodes.
	Electrode active area size is too small.	Use the larger electrode pad included in delivery.
	Is the device being operated according to the manual.	Please check the manual before use.
Stimulation is ineffective.	Improper electrode placement.	Reposition electrode.
	Unknown.	Contact clinician.
The skin becomes red and/or you feel a stabbing pain.	Use the electrodes on the same site every time.	Re-position the electrodes. If at any time you feel pain or discomfort stop use immediately.
	The electrodes are not adhered to the skin properly.	Ensure the electrodes are securely adhered to the skin.

The skin becomes red and/or you feel a stabbing pain.	The electrodes are dirty.	Clean the electrodes according to description in this manual or replace new electrodes.
	The surface of the electrode is scratched.	Replace new electrode.
Output current stops during therapy.	The electrodes come off the skin.	Turn off the device and place the electrodes again.
	The power of the batteries has been exhausted.	Charging.
The Remote control can not power on	Are the batteries installed correctly?	Insert the batteries observing polarity.
The Remote control can't connect to the EM 70 device and the remote control displays E1.	The <i>Bluetooth</i> ® connection failure.	Restart the EM 70 and the Remote control.

13. Technical Specifications

Model:	EM 70
Type:	LT1102S (Unit) / LT1102S-R (Remote controller)
Suggested charger:	I/P: 100-240V~, 50/60Hz, 0.2A. O/P: 5V , 300mA.
Main unit Lithium Ion Battery:	3.7V , 250mAh, 0.925Wh

Remote control:	I/P: 2×1.5V AAA batteries
Frequency:	2Hz~290Hz
Pulse Width:	30us~300us
Wave form:	Biphasic square wave
Output Voltage:	max. 45V (at 1000 ohm load)
Max current:	45mA (at 1000 Ohm)
Output Intensity Level:	0~15 levels
Operating Conditions:	5 °C~40°C; 30%RH~75%RH; 700hPa ~1060hPa
Storage and transportation conditions:	14°F~131°F (-10°C~55°C); 10%RH~90%RH; 700hPa ~1060hPa
Size: Main unit: Remote controller:	72(L)×50(W)×14(H)mm 127(L) ×48.6(W) ×24.4(H)mm
Weight: Main unit: Remote controller:	approx. 38 g approx. 78 g(with batteries)
Service life of the device:	2 years
Service life of electrode pads:	10~20 times
Applied part:	Electrode
IP classification system:	IP22
Classification of ME Equipment:	Internally powered(operating) / Class II(charging)/ Continuous operation
Maximum separation distance:	10m (In the opened environment)
The recommended separation distance:	3m

Description of the Wireless Functions and Technology:

RF Frequency	2402 MHz - 2480 MHz
Modulation type	GFSK
Number of channel	40
Chanel spacing	2 MHz
Bluetooth® version	V4.0
Maximum Output Powers	<20 dBm

The EM 70 uses *Bluetooth*® low energy technology, frequency band 2.402–2.480 GHz, the maximum transmission power emitted in the frequency band 0 dBm.

The connection between the main device and the remote controller is a one-on-one *Bluetooth*[®] 4.0 connection.

We hereby confirm that this product complies with the European RED Directive 2014/53/EU. The CE Declaration of Conformity for this product can be found at:

www.beurer.com/web/we-landingpages/de/cedeclarationofconformity.php.

The serial number is located on the device. Battery life: With included batteries at 1000 approx. 4 applications (30 minutes each). Note: If the device is not used according to the instructions specified, perfect functionality cannot be guaranteed! We reserve the right to make technical changes to improve and develop the product.

This device complies with European standards EN60601-1 and EN60601-1-2 (in accordance with CISPR 11, IEC 61000-3-2, IEC 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-6, IEC 61000-4-6, IEC 61000-4-1) and is subject to special precautionary measures with regard to electromagnetic compatibility. Please note that portable and mobile HF communication systems may interfere with this device. For

more details, please contact our Customer Services at the address indicated. This device meets the requirements of European Directive 93/42/EEC for medical devices, as well as those of the Medizin-produktegesetz (German Medical Devices Act). For this device, a functional test and instruction in accordance with Section 10 of the Medical Devices Operator Ordinance (MPBetreibV) is not required.

14. Product / battery disposal

↑ IMPORTANT

For environmental reasons, do not dispose of the device in the household waste at the end of its service life. Dispose of the device at a suitable local collection or recycling point in your country. Dispose of the device in accordance with the Waste Electrical and Electronic Equipment EC Directive – WEEE. If you have any questions, please contact the local authorities responsible for waste disposal. The empty, completely flat batteries must be disposed of through specially designated collection boxes, recycling points or electronics retailers. You are legally required to dispose of the batteries.

The codes below are printed on batteries containing harmful substances:

Pb = Battery contains lead,

Cd = Battery contains cadmium,

Hg = Battery contains mercury.

Notes on handling batteries

 If your skin or eyes come into contact with battery fluid, rinse the affected area with water and seek medical assistance.

Pb Cd Hc

- Choking hazard! Small children may swallow and choke on batteries. Store batteries out of the each of small children.
- Observe the plus (+) and minus (-) polarity signs.
- If a battery has leaked, put on protective gloves and clean the battery compartment with a dry cloth.
- · Protect batteries from excessive heat.
- Risk of explosion! Do not throw batteries into a fire.
- · Do not charge or short-circuit batteries.

- If the device will not be used for some time, take the batteries out of the battery compartment.
- Use identical or equivalent battery types only.
- Always replace all batteries at the same time.
- Do not use rechargeable batteries.
- Do not disassemble, open or crush the batteries.

15. Warranty / service

Further information on the guarantee and guarantee conditions can be found in the guarantee leaflet supplied.

16. Notes on electromagnetic compatibility (EMC)

- The device is suitable for use in all environments listed in these instructions for use, including domestic environments.
- The use of the device may be limited in the presence of electromagnetic disturbances. This could result in issues such as error messages or the failure of the display/device.
- Avoid using this device directly next to other devices or stacked on top of other devices, as this could lead to faulty operation. If, however, it is necessary to use the device in the manner stated, this device as well as the other devices must be monitored to ensure they are working properly.
- The use of accessories other than those specified or provided by the manufacturer of this device can lead to an increase in electromagnetic emissions or a decrease in the device's electromagnetic immunity; this can result in faulty operation.
- Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should not be used closer than 30 cm to any part of the device, including cables specified by manufacturer. Otherwise, degradation of the performance of this equipment could result.
- Failure to comply with the above can impair the performance of the device.

HOW TO CONTROL AND REDUCE YOUR PAIN

When should the device be used?

Use as soon as your pain begins. Start with one session. If you get to your pain early, it may prevent the pain from becoming worse, or even chronic. It's better for you to get it under control sooner so that it does not reach a high pain threshold where it limits your daily activities.

Setting the intensity

Intensity is based upon your level of comfort. Begin the first session with a low intensity and a short duration while learning how to operate. You should therefore take care to work with maximum intensities, i.e., always at the limit of what you can support. Do not exceed your comfort level.

How long should you use the device?

Start with one session. Always turn unit off with pads still on. Rate your pain to check your progress, 1 low to 15 high. Intensity is based upon your level of comfort. Begin the first session with a low intensity and a short duration while learning how to operate. Stop therapy session if pain has reduced or stopped. If your pain does not improve and you become sore from over-use, refrain from treating those areas for 2 days. If this issue reoccurs, reduce the treatment time and intensity settings for future treatment.

Recommended treatment session as following:

You may use the device for once a day.

You may need to use it for longer (maximum 3 times per day and maximum 90 minutes in total) depending on the level of your pain.

CAUTION

When to stop using the device?

- If you experienced an adverse reaction (skin irritation/redness/ burns, headache or other painful sensation, or if you feel any unusual discomfort).
- If your pain does not improve, becomes seriously chronic and severe, or continues for more than five days.



If you feel pain, dizziness, discomfort or nausea, discontinue use of device and call your physician or medical practitioner.

What type of pain is it best for?

This therapy works best on acute pain because it is localized. Acute pain is pain in one area for less than 3 months. If you have chronic pain, you may have pain in more than one area and for longer than 6 months. Chronic pain may be compounded by other issues that this device cannot address.

Remember this device does not cure your pain or the original cause of the pain. It provides temporary relief or reduction of pain so that you can control your life and activities better.

The *Bluetooth*® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Beurer GmbH is under license. Other trademarks and trade names are those of their respective owners.

Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc., registered in the U.S. and other countries.

Google Play and the Google Play logo are trademarks of Google LLC.

Android is a trademark of Google LLC.



Shenzhen Dongdixin

Technology Co., Ltd

Floor 1-2, No.3 Building, Fanshen Xusheng Industrial Estate,

Xilixiaobaimang, Nanshan District,

518108, Shenzhen, China

Tel: 0086-755-27652316



Shanghai International

Holding Corp. GmbH (Europe)

Eiffestraße 80, 20537 Hamburg, Germany

Tel: 0049-40-2513175 Fax: 0049-40-255726

Disributed by Beurer GmbH • Söflinger Straße 218 • 89077 Ulm, Germany • www.beurer.com www.beurer-gesundheitsratgeber.com • www.beurer-healthquide.com

