prorelax®

TENS + EMS

SUPER DUO

USER MANUAL

CE 0120

Natural therapies to relieve pain
and for muscle building

Dear prorelax customer,

You have decided to purchase the prorelax **TENS + EMS SUPER DUO**.
For this, we would like to thank you sincerely. This modern device was developed for people suffering from painful, tense muscles and those who wish to build up muscles. We want to make sure that you are satisfied with this device.
We therefore ask that you read this user's manual carefully before first time usage and that you also pay attention to the safety instructions and warnings.

IMPORTANT NOTE

PRORELAX TENS + EMS DEVICES ARE VERY SAFE AND USER-FRIENDLY. THEREFORE THE INTENSITY IS CONTROLLED ONLY WHEN THE ELECTRODES ARE IN CONTACT WITH THE SKIN.

TABLE OF CONTENTS

INDICATIONS AND CONTRAINDICATIONS

READ THE OPERATION MANUAL BEFORE USING.

Read instruction manual before operation. Be sure to comply with all "CAUTIONS" and "WARNINGS" in the manual. Failure to follow instructions can cause harm to user or device.

Observe your physician's precise instructions and let them show you where to apply the electrodes. For successful therapy, the correct application of the electrodes is an important factor.

INDICATIONS FOR USE

The ***pro***relax® **TENS+EMS** SUPER DUO-System is a dual channel digital electrical stimulator for active treatment application as the following intended use:

Transcutaneous Electrical Nerve Stimulator (TENS) can be used for the following applications:

- For symptomatic relief of chronic intractable pain.

Electrical Muscle Stimulator (EMS) stimulation can be used for the following applications:

- Relax muscle spasms
- Prevent or retard disuse atrophy
- Re-educate muscles
- Maintain or increase the range of motion

WARNINGS AND PRECAUTIONS

⚠ WARNINGS

- If you are under the care of a Physician, consult with your Physician before using this System.
- The long-term effects of this System are not known.
- Do not place the pads on or close to your heart.
- Do not place the pads around or close to your neck. Do not apply stimulation over the neck. Severe spasm of the muscles may occur and the contractions may be strong enough to close the airway or cause difficulty in breathing. Stimulation over the neck could also have adverse effect hearing or blood pressure.
- Do not apply stimulation across the chest because the introduction of electrical current into the chest may cause rhythm disturbances to the heart.
- Do not place the pads on or around your head. The effects of stimulation of the brain are unknown.
- Do not use the pads over or close to sores.
- Do not place the pads on the front or sides of the neck across or through the heart (one pad on the front of the chest and one on the back), in the genital region, or on the head, because of the risk of stimulating inappropriate muscles and organs.
- Do not place the pads t over any recent scars, broken or inflamed areas of infection or susceptibility to acne, thrombosis or other vascular problems (e.g. varicose veins), or any part of the body where feeling is limited.
- Do not place the pads over areas of injury or restricted movement (e.g. fractures or sprains).
- Do not use this System while sleeping.
- Do not use if you feel numbness.
- Do not use this System in or close to water.
- Do not apply stimulation across the chest because the introduction of electrical current into the chest may cause rhythm disturbances to the heart, which could be lethal.
- Do not use the pads over or close to cancerous lesions.
- Use the pads only on normal, healthy, clean and dry skin. Do not use the pads on open wounds or rashes, or over swollen, red, infected or inflamed skin.
- If you have ever had back surgery, consult your Physician before using this System.

- Electronic monitoring equipment (such as ECG and ECG alarms) may not operate properly when electrical stimulation is in use.
- You must position the pads and operation the unit ONLY as indicated in this manual.
- Avoid areas in injury or restricted movement (e.g. fractures or sprains)
- Avoid placing the pads over metal implants.
- Avoid using different size electrodes together can cause skin irritation or increased stimulation intensity under the smaller electrode. Some programs may require the use of different sized electrodes for treatment.
- Do not use in the bath or shower, or in an environment of elevated humidity (e.g. Sauna, hydrotherapy, etc).
- Operation in close proximity, such as 3 feet (1 meter), to shortwave or microwave therapy equipment may produce instability in the device output and may shut the device off.
- Do not use the device in an environment where flammable or explosive fumes may exist.
- Patient should never operate potentially dangerous machinery such as power saws, automobiles, etc. during electrical stimulation.

Wait before using next until:

At least 6 weeks after the birth of your baby (you must consult your doctor before use).

- One month after an IUD contraceptive device (e.g. coil) has been fitted (you must consult your doctor before use).
- At least 3 months after having a caesarean section (you must consult your doctor before use).
- The heavy days of your period have finished, because vigorous abdominal exercise is not recommended at this time.

⚠ PRECAUTIONS

- Read User Manual before using this System for the first time.
- Keep this manual available whenever you use your System.
- The System is intended for personal use on healthy adult muscle only.
- The safety of using the System during pregnancy or birth has not been established.
- The effectiveness of the System depends greatly on a person's individual physical condition. It may not always be effective for every user.
- The safety of neuromuscular stimulation during pregnancy has not been established.

- Use caution when/if:
- Sensory nerve damage is present by a loss of normal skin sensation.
- Use caution prior to using this device on patients suspected of having heart disease.
- Use caution for patients with suspected or diagnosed epilepsy when using this device.
- Use caution following recent surgical procedures when muscle contraction may disrupt the healing process.
- Use caution when there is a tendency to hemorrhage, such as following acute trauma or fracture.
- A menstruating or pregnant uterus.
- Patient experiences skin irritation due to electrical stimulation or the electrical conductive medium used, remove the electrodes, discontinue stimulation, and consult the clinician. Irritation may be reduced by an alternative conductive medium or an alternative electrode placement. Isolated cases of skin irritation may occur at the site of electrode placement following long term application.
- Place electrodes in accordance with illustrations in the User Manual.
- This unit should not be used while driving, operating machinery or during any activity in which involuntary muscle contractions may place the user at undue risk of injury.
- Some users may experience skin irritation or hypersensitivity due to the electrical stimulation or the conductive medium.
- Keep this device out of the reach of children. If the patient is a child, make sure he/she is properly supervised during electrical stimulation.
- Application of moderate heat (thermal wrap) to muscles as well as moistening skin prior to treatment improves treatment efficacy; use of cold packs on treated muscles after treatment is likewise recommended.
- This unit should only be used with the leads, electrodes and accessories provided by the manufacturer.
- The device is not intended for medical use, for the treatment of any medical condition or for any permanent physical changes.
- Contact EUROMEDICS, or an authorized dealer, if your unit is not working correctly. Do not use in the meantime.

- An effective session should not cause discomfort.
- For first time users, muscle stimulation can be an unusual sensation. We recommend that you begin in a seated position with low stimulation intensity settings to familiarize yourself with the sensation before progressing to higher intensity settings.
- The leads and pads must not be connected to other objects.
- Do not over exert yourself while using muscle stimulation. Any workout should be at a comfortable level for you.
- Do not place pads over jewelry or body piercings.

Use Caution and consult your Physician before using System if any of the following conditions apply to you :

- You have any serious illness or injury not mentioned in this guide.
- You have recently undergone a surgical procedure.
- You take insulin for diabetes.
- You use the unit as part of a rehabilitation program.
- If you have suspected or diagnosed heart problem.
- If you have suspected or diagnosed epilepsy.
- If you have a tendency to bleed internally following an injury.
- If you recently had surgery, or have ever had surgery on your back.
- If areas of skin lack normal sensations, such as skin that tingles or is numb.
- During menstruation or during pregnancy.
- Some people may feel skin irritation or experience a very sensitive feeling in the skin due to electrical stimulation. If this occurs, stop using your System and consult your Physician.
- If skin under one of more pads feels irritated after using the stimulator for a long period of time, use the stimulator for a shorter period of time.
- Minor redness at stimulation placement is a normal skin reaction. It is not considered as skin irritation, and it will normally disappear within 30 minutes after the electrodes are removed. If the redness does not disappear after 30 minutes from the removal of electrodes, do not use the stimulator again until after the excessive redness has disappeared.

- Turn off the stimulator if the stimulation feels unpleasant or does not provide pain relief.
- Keep your System out of the reach of children.
- Use your stimulator only with the pads, snap cables and accessories recommended by the manufacture.
- Do not use this System when driving, operating machinery or when swimming.
- Before removing the pads, be sure to power off device to avoid unpleasant stimulation.

After strenuous exercises or exertion :

- Always use lower intensity to avoid muscle fatigue.

IMPORTANT :

- Effectiveness is highly dependent upon patient selection by a clinician qualified in the management of pain or rehabilitation.
- Do not use your unit at the same time as any other device, which transfers an electrical current into the body (e.g. another muscle stimulator).
- Cease using your unit if you are feeling light headed or faint. Consult doctor if this happens.
- Do not touch the pads or metal studs while the unit is switched on.
- Do not use unit if you are wearing a belly button ring. Remove ring before session.
- Use the device with only the leads and electrodes provided for use by the Well-Life with your device. Any others many not be compatible with your unit and could degrade the minimum safety levels. Use only the electrode placements and stimulation settings prescribed by your practitioner.
- This device is for external use only.

Note: If you are in any doubt about using device for any reason, please consult your doctor before

PAD/ELECTRODE PRECAUTIONS

- To reposition the pads during a session, always pause the program currently running, reposition the pads and then restart the program again.
- The pads are for single person use only.
- Do not plunge the pads into water.
- Do not apply solvents of any kind to the pads.
- Always ensure the unit is OFF before removing the pads.
- Apply the whole surface of the pads firmly to the skin. Do not use pads, which do not adhere properly to the skin.
- If your skin is red under the pad after a session, do not start another session in the same area until your redness has completed disappeared.

Adverse Reactions

- You may experience skin irritation and burns beneath the stimulation electrodes applied to your skin.
- You may experience headache and other painful sensations during or following the application of electrical stimulation near your eyes and to your head and face.
- You should stop using the device and should consult with your physician if you experience adverse reactions from the device.

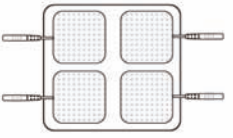
Conditions that may affect your *pro*relax® TENS+EMS SUPER DUO**-System**

Since the stimulator is a battery-operated electronic System, its output performance and safety may be affected greatly in extreme humidity. Therefore, it is very important to keep the stimulator dry to ensure the safety and performance of the stimulator.

PACKAGE CONTENTS

1. ***pro***relax®**TENS+EMS** SUPER DUO
2. Self Adhesive Electrodes,
   Size: 50x50mm, 4 pcs/bag
3. 3 AAA batteries
4. 2 lead wires
5. 1 storage bag
6. 1 Clipholder

1



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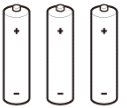

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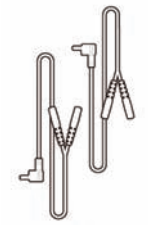

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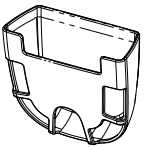

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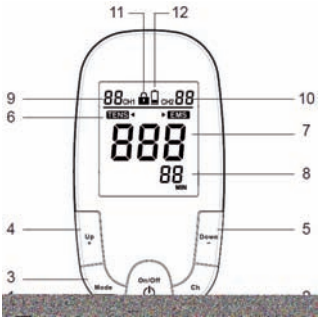
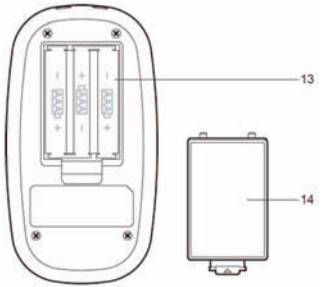
ABOUT THE DEVICE

1. Power On/Off key
2. CH key
3. Mode key
4. Up + key
5. Down – key
6. Therapy Mode
7. Program number
8. Therapy time remaining
9. CH1 intensity level
10. CH2 intensity level
11. Lock status indicator
12. Battery status indicator
13. Battery compartment
14. Battery cover
15. Output Socket

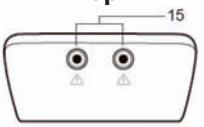
Front view



Rear view



Top



STEP BY STEP OPERATION GUIDE FOR TRAINING

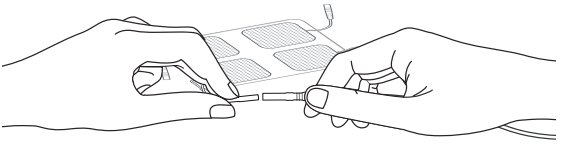
PREPARING THE SKIN FOR RUNNING A SESSION

Proper preparation of the skin covered by the electrodes allows more stimulation to reach targeted tissues, prolongs electrode life, and reduces the risk of skin irritation. After connecting the lead wire(s) to the stimulator, use the following steps to prepare your skin at the electrode placement sites:

1. Determine the placement sites for the electrodes.
2. Wash the area with mild soap and water (do not use alcohol). Rinse and dry thoroughly.
3. Trim excess body hair from the area with scissors (do not shave).
4. Optionally, apply skin prep to the area to form a protective barrier on your skin. Apply, let dry, and apply electrode as directed. This will both reduce the chance of skin irritation and extend the life of your electrodes.
5. When removing electrodes, always remove by pulling in the direction of hair growth.
6. It may be helpful to apply skin lotion on electrode placement area when not wearing electrodes.

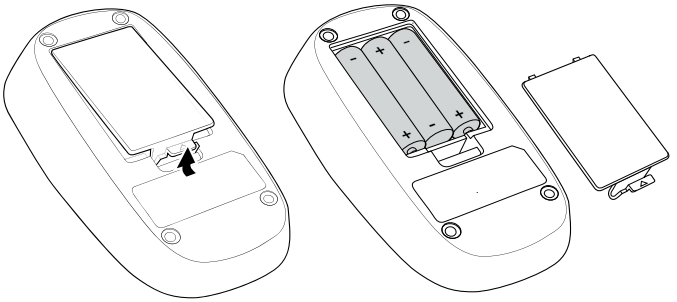
Connecting the Cable to The Device

1. Connecting the lead wire to the electrodes before applying to the Skin.



Inserting/Changing the Batteries

1. Open the battery compartment at the back of the device by pushing the battery cover labelled "Open" downward (this area features raised marks for easy identification).
2. Insert 3 AAA (1.5 V) batteries in the battery compartment; make sure to match up the symbols (+/–).
3. Close the battery cover by carefully placing the stud into the slot in the rear area and sliding it upward, applying slight pressure.
4. Follow the same procedure when replacing the battery at a later date.



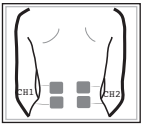
Note: for important precautions regarding the batteries, please be informed:

- Always use only 3x1.5V(AAA) batteries.
- Keep away from children.
- Do not recharge.
- Do not short-circuit.
- Do not throw into a fire.
- Please recycle. Do not dispose of old batteries with your household waste; dispose of them safely at your recycling centre or business where the batteries were purchased.

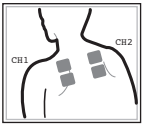
Placement of the Electrode Pads for TENS (Treatment of Pain)

Note:

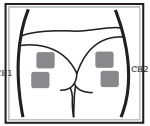
You may need help placing the Electrode Pads onto hard to reach areas (lower & upper back)



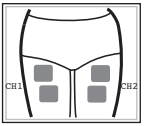
LOWER BACK
Place a pair of pads horizontally on each side of your back in the lower back area.



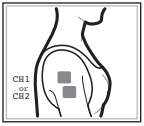
UPPER BACK
Place a pair of pads horizontally on each side of your back in the upper back area.



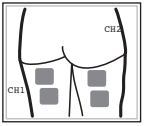
BUTTOCK
Place the pads horizontally on the buttocks, halfway between the centre line and the side of your body.



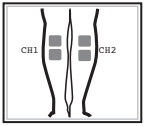
FRONT THIGHS
Place the pads on the buttocks horizontal, halfway between the center line and the side of your body.



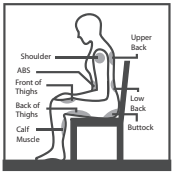
SHOULDER
Place one half of the pad on the top part of you shoulder and the other half on the side.



BACK OF THIGHS
Place a pair of pads horizontally on each calf muscle. Do not place the pads too low on the leg, as this can lead to unpleasant contractions.



CALF MUSCLES
Place a pair of pads horizontally on each calf muscle. Do not place the pads too low on the leg, as this lead to unpleasant contractions.



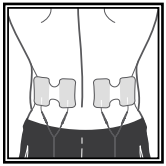
Note:

1. When stimulating the muscles of the arms or legs bear in mind that the muscles contraction may cause involuntary limb movement, which could cause injury to you or others. Always ensure the limb is secured to prevent movement

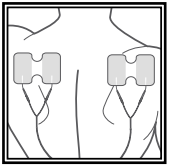
2. Do not turn the unit on until all electrodes and lead wires are properly attached

Placement of the Electrode Pads for EMS

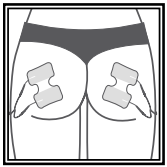
1. Connecting the lead wire to the electrodes before applying them to the Skin. Use the large Electrode Pads for EMS.
2. The pad placement chart hereafter illustrates the correct placement of the pads for a selection of target muscles.



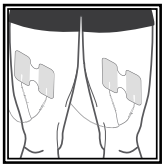
LOWER BACK
Place a pair of pads horizontally either side of your spine on the lower part of the back.



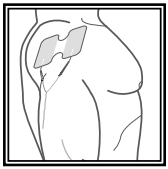
UPPER BACK
Place a pair of pads horizontally either side of your spine on the upper part of the back.



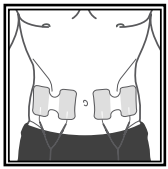
BOTTOM
Place a pair of pads horizontally across the buttocks halfway between the midlone and side of your body.



FRONT THIGHS
Place a pair of pads horizontally across each thighs muscles.

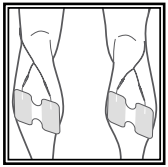


SHOULDERS
Place one half of the pad on the front of your shoulder and the otheron the side.

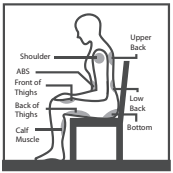


ABS
Place each pair of pads horizontally either side of your nevel.

BACK OF THIGHS
Place each pair of pads horizontally across your hamstring.



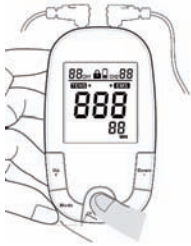
CALF MUSCLES
Place each pair of pads horizontally across calf muscle. Do not place them too low on the leg, as this can result in an uncomfortable contraction.



Note:

1. When stimulating the muscles of the arms or legs bear in mind that the muscle contraction may cause involuntary limb movement, which could cause injury to your or others. Always ensure the limb is secured to prevent movement.
2. Do not turn the unit on until all electrodes and lead wires are properly attached
3. Always start with a low intensity level, increase gradually. You may use any of the modes for EMS

Turning On/ Off the Device



To Turn On/Off the device, Press and hold the On/Off button for one (1) second to turn on the device.

1.The most recently selected treatment time and program will display on the screen

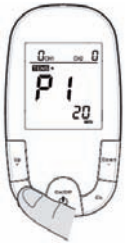
Note : Do not turn the unit on until all electrodes and lead wires are properly attached.

Note : When stimulating the muscles of the arms or legs bear in mind that the muscle contraction may cause involuntary limb movement which could cause injury to you or others. Always ensure the limb is secured to prevent movement.

2. The device turns off automatically after the therapy session time has elapsed.

Note : In an emergency you may also pull the connector(s) from the device and then remove the electrodes.
Note : To prevent unpleasant electric shocks, never remove the device while it is still turned on.

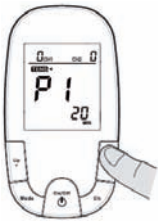
Selecting TENS/EMS Treatment Mode



The Device offers 8 different preset treatment programs respectively for TENS /EMS modes ; the programs differ with respect to varying pulse widths and frequencies.

1.Press MODE , the preset (default) therapy mode TENS/EMS will display on the screen.

2. Use the button Up+ ,or Down – , for choice of therapy mode. therapy mode.



3. Press Mode again, the numeric number of program is then flashing.Press the button Up + (to increase) or the button Down – (to decrease) for choice of program of the selected modality.

4.Press MODE again to save your selection.

Note : If you change programs during the course of a therapy session, the treatment time will not reset unless you manually reset it by performing the steps described above.

Selecting the program

The device offers 8 different preset treatment programs (P1~P8) respectively for TENS /EMS modes ; P9 is self-programmable program by the user to desirable pulse width between 50~260uS and frequency
at 2~60Hz (for TENS) and 7~70Hz (for EMS).

Choice of the appropriate mode
The mode you choose determines the kind of work that is imposed upon the stimulated muscles. Choose the mode that is appropriate to your needs or gives you the greatest pleasure.

For TENS programs:

When using any of the 8 programs for pain relief always start with the lowest intensity and gradually increase the
level of intensity until you feel a "tingling" sensation. All programs are different and therefore feel differently.
You may try all 8 programs in the beginning and choose one that feels pleasant. Never increase the intensity to a level so that it hurts, always stay under the point of discomfort. Start with short sessions of 5 or 10 minutes until your body gets used to the stimulation.

Program	Pulse width (uS)	Pulse rate (Hz)	Waveform Type
P1	260	15	Constant
P2	260	60	Burst
P3	260	60	Constant
P4	260~156	2~60	Dense-Disperese
P5	260~156	60	Modulation Pulse Width
P6	260	7~60	SD Pulse Rate
P7	260~156	60	SD Pulse Width
P8	Recycle (P1~P7)		
P9	50~ 260 uS	2~60 Hz	Self programmable

All electrical specification ±20%

For EMS programs:

When using the device for muscle stimulation (EMS) any of the 8 programs may be used. The intent is to cause a muscle to contract, and then release.
All 8 programs will achieve contraction and vary mainly by the rate and duration of the contractions. As with any exercise regiment, start out slowly with low intensity levels for a warm-up (5~10min). You may increase intensity level and treatment time as you progress with your muscle performance. Use the device regularly over a longer period of time as to maintain the benefit you may have gained during "exercise".

Program	Pulse Width (uS)	Ramp up (sec)	Hold on (sec)	Ramp down (sec)	Off Time (sec)	Pulse rate (Hz)	Function Mode
P1	260 uS (Fixed)	2	3	2	2	70	S
P2		2	4	2	3	60	S
P3		2	5	2	4	50	S
P4		2	6	2	5	50	S
P5		2	2	2	6	50	A
P6		2	4	2	8	60	A
P7		2	6	2	10	70	A
P8						7~60	S/MR
P9	50~260 uS			7~70 Hz			Self programmable

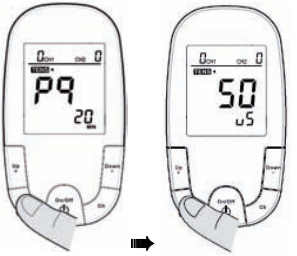
All electrical specification ±20%

Press MODE after treatment mode is set.

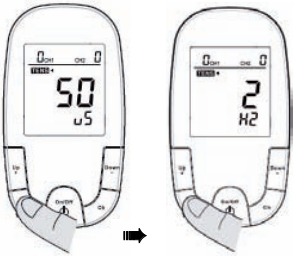
1. To choose Program (P1~P8), use Up + (to increase) or the button Down – (to decrease).

2. Program P9, it is self –programmable mode. To set up desirable pulse width between 50~260uS and frequency at 2~60Hz (for TENS) and 7~70Hz (for EMS) :

2.1. Press Mode button, the preset (default) Pulse Width is then flashing.
Press the button Up + (to increase) or the button Down – (to decrease) for choice of the selected Pulse Width .



2.2. Press Mode button again, the preset (default) Pulse Rate is then flashing.
Press the button Up + (to increase) or the button Down – (to decrease) for choice of the selected Pulse frequency.

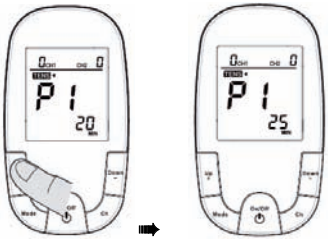


3. Press MODE again to save your selection. The treatment program you selected will appear on the display the next time you turn the device on.

Selecting the Treatment Time

1. Press MODE. The preset (default) treatment time will flash on the display.
2. To increase or decrease the treatment time, press the button ON + (to increase) or the button OFF – (to decrease) repeatedly until the desired duration appears on the display.
3. Press MODE again to save your selection. The treatment time you selected will appear on the display the next time you turn the device on.

Note: If you change programs during the course of a therapy session, the treatment time will not reset unless you manually reset it by performing the steps described above.



Selecting the Therapy Intensity Level

This device offer a maximum of 25 intensity levels.

The intensity of the electrical current determines the number of working fibers in the stimulated muscles. The lower the current intensity the lower the number of working fibers in the muscle. The higher the current intensity the greater the number of working fibers in the muscle.

If using the device for help with temporary relief of pain associated with sore and aching muscles then you will find that setting the current intensity to your own comfortable and pleasing level will give you much satisfaction. This level is different for each user so adjusts slowly and accordingly.

If you desire to stimulate healthy muscles (EMS) in order to improve and facilitate muscle performance then you want to achieve a significant number of working fibers. You require a minimum intensity (approx. 30mA) to accomplish this . This can be achieved relatively quickly (2 to 3 sessions) by progressively increasing the intensity during the session. Once this threshold is reached, continue to progressively increase the current intensity making the session more effective.

Selecting the Therapy Intensity Level

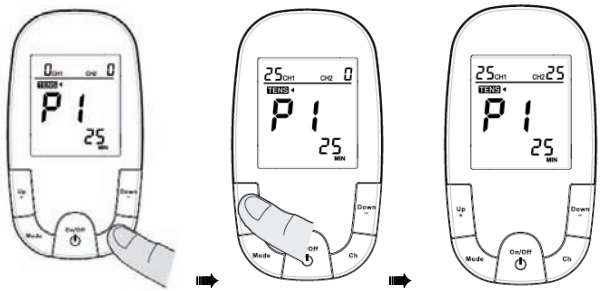
1.Intensity is adjustable according to the channel selected.
Select the channel you wish to adjust by pressing Ch button, it will flash on the display.

2.To increase or decrease the intensity, press Up + (to increase) or Down – (to decrease) repeatedly until the desired intensity level flashes on the display.

Note: You will feel the intensity increase or decrease as you select the intensity level. You can use this as a guide to select a level that is comfortable for you.

Note: If you change therapy mode/program during the course of a therapy session, the intensity level will reset to "0" showing on the screen, for safety reason.

3. Press MODE to save your selection.



SPECIAL FEATURES

TENS/EMS stimulator with back light
The device offers duo TENS/EMS device featured with 8 presets programs and 1 program adjustable on the
Pulse Width and Pulse Frequency. All the treatment status displays clearly on the big LCD screen, with backlight for 10 seconds ,with each entry of button.

Last Treatment Mode/Time Memory
The device offers 12 preset times: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55 and 60 minutes.
Time will countdown on the display in 1-minute increments for the duration of your session.
- The device turns off automatically when the therapy time has elapsed.
- The most recently set therapy time is stored.
- If you alter the program mode during your therapy, the therapy time won't restart, unless you reset the therapy time.
- The last treatment program you used will appear on the display, when you turn on the device.

Lock Function
Press and hold the UP + and Down – buttons simultaneously for 1 second to lock/ unlock the device.

Automatic Shut off
- The device automatically turns off when no button is pressed for 60 seconds.
- The device automatically turns off when the time for your therapy session has elapsed.

Intensity Level Reset
For your safety and comfort, the intensity level will reset to "0" each time the device turns off, including after therapy sessions.
The treatment will discontinue if the electrodes are not properly placed well, and/ or any entry for changing the mode setting during therapy session, it shall initiate to lowest intensity level, showing "0" on the screen.

Low Battery Status Indicator
The battery status indicator will light whenever the battery is low. This means that soon you have to replace the batteries.

CARE AND MAINTENANCE

Stimulator

The stimulator may be wiped clean with a small amount of soapy water on a clean cloth. Do not submerge the stimulator in liquids or expose it to large amounts of water.

- Never use aggressive cleaning products of stiff brushes to clean the device.
- Remove the batter before cleaning the device.
- Do no use the device again until it is completely dry.
- Do not expose the device to direct sunlight and protect it from dirt and moisture.

Cabels

- Disconnect the cables from the stimulator and electrodes.
- Do not pull on the cables, but on the connectors attached to the ends of the cables.
- Store the stimulator with the cables in a clean, dry place.

Electrode

The electrode pads are disposable and use an adhesive that will dry after prolonged usage or storage. Pads should be replaced when they lose their adhesive quality, or you sense a change in stimulation sensation.

If you're in doubt about the integrity of the pads, order fresh pads please order online at www.euromedics.de or contact authorized distributor(s).

How to Store Your System

1.Store your System at room temperature in a dry place, out of the reach of children.
2.If the stimulator will not be used for more than a week, remove the battery from the stimulator.

TROUBLE SHOOTING

Always check the unit and accessories before use to prevent damage and defects; these are some of the simple checks:

1. Make sure the battery has sufficient charge and is not corroded.

2. Make sure the cables fit tightly into the connection sockets of the device. The table below shows some common defects. If you cannot remedy the defects as described, contact your unit provider if it is not possible to remedy in the manner described.

Defect	Cause	Remedy
The device does not turn on	No battery or bad battery	Replace battery
The device turns on and then off again	Battery not inserted properly	Insert battery again Replace battery
	Battery life expired	Replace battery
The device turns on, but does not generate electric pulses	Cable broken	Replace cable
	Cable not connected Properly	Connect cable properly
	Treatment time has Expired	Switch unit to the OFF Position and switch back on.
The unit does not turn on even though new batteries have been inserted		Connect customer service.

*pro*relax® **TENS+EMS** SUPER DUO **STIMULATOR TECHNICAL SPECIFICATIONS**

Channel: Dual, isolated between channels.
Output Voltage: 0~40V peak into 500Ω load each channel.
Pulse Amplitude: Adjustable 0 – 80mA.
Pulse Rate: As pre-programming operation mode.
Pulse Width: As pre-programming operation mode.
Software ramp up feature: Pulse width ramp up when change mode.
Timer : 5~60 min. selectable.
LCD: Show modes, pulse rate, pulse width, timer, CH1/CH2, intensity level.
Wave Form: Symmetrical Bi-Phasic square pulse.
Max Charge per Pulse: 20.8 micro-coulombs maximum.
** All electrical specifications are ±20%
Operating Conditions: + 50°F (10°C) to +104° (40°C), 40-90% max. Relative humidity
Transport and Storage Temperature: +14°F (-10°C) to +140° (60 °C), 30-95% max. Relative humidity
Weight: 120 g (battery included)
Dim. : 122 x 66 x 30 mm

Power Source: 3 x AAA / 4.5 Volt batteries

(i) There are a number of technical symbols on your unit explained as follows:

SN	This symbols means " Serial number "
	This symbols means " Attention, consult the accompanying documents"
	This symbols means " Manufacturer "
	This symbol means type BF equipment; this device offers protection against electrical shock by standard compliance to leakage currents of electrode pad.
	This device shall be disposed in accordance with national laws after their useful lives
(ii) there is a label on the package of electrode explained as follows:	
	This symbol means "used before", represent as "YYYY-MM" (for year and month).

ELECTROMAGNETIC COMPATIBILITY

•The device complies with current specifications with regard to electromagnetic com patibility and is suitable for use in all premises, including those designated for private residential purposes. The radio frequency emissions of the device are extremely low and in all probability do not cause any interference with other devices in the proximity.

• It is recommended that you do not place the device on top of or close to other electronic devices. Should you notice any interference with other electrical devices, move the device or connect it to a different socket.

• Radio equipment may affect the operation of this device.

INFELECTROMAGNETIC COMPATIBILITY INFORMATION

<table>
<tr><td colspan="3">Guidance and manufacturer's declaration – electromagnetic emissions</td></tr>
<tr><td colspan="3">The TENS+EMS SUPER DUO is intended for use in the electromagnetic environment specified below. The customer or the user of the TENS+EMS SUPER DUO should assure that it is used in such an environment.</td></tr>
<tr><td>Emissions</td><td>Compliance</td><td>Electromagnetic environment-- guidance</td></tr>
<tr><td>RF emissions CISPR 11</td><td>Group 1</td><td>The TENS+EMS SUPER DUO uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.</td></tr>
<tr><td>RF emissions CISPR 11</td><td>Class B</td><td rowspan="3">The TENS+EMS SUPER DUO is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.</td></tr>
<tr><td>Harmonic emissions IEC 61000-3-2</td><td>Not applicable</td></tr>
<tr><td>Voltage fluctua-tions/ flicker emissions IEC 61000-3-3</td><td>Not applicable</td></tr>
</table>

Guidance and manufacturer's declaration – electromagnetic immunity			
The TENS+EMS SUPER DUO is intended for use in the electromagnetic environment specified below. The customer or the user of the TENS+EMS SUPER DUO should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment --guidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical fast transient/ burst IEC 61000-4-4	± 2 kV for power supply lines	Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV line(s) and neutral	Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % U_T (>95 % dip in U_T) for 0,5 cycle 40 % U_T (60 % dip in U_T) for 5 cycles 70 % U_T (30 % dip in U_T) for 25 cycles <5 % U_T (>95 % dip in U_T) for 5s	Not applicable Not applicable Not applicable Not applicable	Mains power quality should be that of a typical commercial or hospital environment. If the user of the TENS+EMS SUPER DUO requires continued operation during power mains interruptions, it is recommended that the TENS+EMS SUPER DUO be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) manetic field IEC 61000-4-8	3 A/m	3 A/m	The TENS+EMS SUPER DUO power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE U_T is the a.c. mains voltage prior to application of the test level			

Vorgaben und Herstellererklärung – Elektromagnetische Immunität

The TENS+EMS SUPER DUO is intended for use in the electromagnetic environment specified below. The customer or the user of the TENS+EMS SUPER DUO should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance Level	Electromagnetic environment – guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	Not applicable	Portable and mobile RF communications equipment should be used no closer to any part of the TENS+EMS SUPER DUO , including cables,than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation $d = 1{,}2\sqrt{P}$ $d = 1{,}2\sqrt{P}$ 80 MHz to 800 MHz $d = 2{,}3\sqrt{P}$ 800 MHz to 2,5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation Distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range .b Interference may occur in the vicinity of equipment marked with the following symbol: 
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2,5 GHz	3 V/m	

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

a.Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the TENS+EMS SUPER DUO is used exceeds the applicable RF compliance level above, theTENS+EMS SUPER DUO should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating theTENS+EMS SUPER DUO

b.Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distances between portable and mobile RF communications equipment and the TENS+EMS SUPER DUO

The TENS+EMS SUPER DUO is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the TENS+EMS SUPER DUO help prevent electromagnetic interference by maintaining a minimum distance
between portable and mobile RF communications equipment (transmitters) and the TENS+EMS SUPER DUO as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter	Separation distance according to frequency of transmitter M		
W	150 kHz to 80 $d = 1{,}2\sqrt{P}$	80 MHz to 800 MHz $d = 1{,}2\sqrt{P}$	800 MHz to 2,5 GHz $d = 2{,}3\sqrt{P}$
0,01	N/A	0,12	0,23
0,1	N/A	0,38	0,73
1	N/A	1,2	2,3
10	N/A	3,8	7,3
100	N/A	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Warranty

This ***pro***relax®**TENS+EMS** SUPER DUO carries a two-year warranty from the date of purchase.

The warranty does not apply to damage resulting from failure to follow the operating instructions, accidents, abuse, alterations or disassembly by unauthorized individuals.

The warranty applies to the main device and necessary parts and labor relating thereto.
Battery, electrodes, and other accessories are warranted to be free from defects in workmanship and materials at the time of delivery.

The distributors reserve the right to replace or repair the unit at their discretion.
EUROMEDICS GmbH

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distributed in Europe by:

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