I-TECH
MEDICAL DIVISION

USER MANUAL

Electrotherapy model

T-ONE REHAB

I.A.C.E.R. Srl
Via Enzo Ferrari 2 - 30037 Scorzè (VE) – Italia/Italy - Tel.: (+39) 041/5401356 - Email: iacer@iacer.it
PEC: iacer@pec.it - Web: www.itechmedicaldivision.com - Cod. Fisc./P.IVA/VAT N.: IT00185480274
R.E.A.: VE N. 120250 - M. VE001767 - Codice SDI/SDI Code: SUBM70N - Cap. Soc.: € 1.000.000,00 i.v.

Manufacturer

I.A.C.E.R. S.r.l.

Via Enzo Ferrari, 2 • 30037 Scorzè (VE)

Tel. 041.5401356 • Fax 041.5402684

IACER S.r.l. is an Italian manufacturer of medical devices (certified CE no. 0068/QCO-DM/234-2020 from the Notified Body n° 0068 MTIC InterCert S.r.l.).

Declaration of conformity

I.A.C.E.R. S.r.l

Via Enzo Ferrari, 2 – 30037 Scorzè (Ve), Italia

herewith declares under its own responsibility, that the product

T-ONE REHAB

UMDNS Code**: 13762**

has been designed and manufactured according to the European Medical Device Directive 93/42/EEC (transposed in Italy by the D.Lgs. 46/97), as modified by the Directive 2007/47/EC (D.Lgs.37/2010) and further modifications/integrations.

The products have been assigned to class IIa, according to Annex IX, rule 9 of the Directive 93/42/EEC (and further modifications/integrations) and bear the mark

CE 0068

Compliance of the concerned products with the Directive 93/42/EEC has been assessed and certified by the notified body:

0068 – MTIC InterCert S.r.l.

Via G. Leopardi 14, Milano (MI) 20123, Italia

Certified number: 0068/QCO-DM/234-2020

following the certification procedure according to Annex II (excluding point 4) of the Directive 93/42/EEC.

Scorzè, 31/01/2023

Place, date

MASSIMO MARCON

Legal Representative

Classification

The T-ONE REHAB has the following classification:

- class IIa (Directive 93/42/CEE, Annex IX, rule 9 and further amendments/additions);
- class II with BF type applied part (classif. EN 60601-1);
- equipment protection level IP22 against liquid and dust penetration;
- equipment and accessories not subject to sterilization;
- equipment unsuitable for use in presence of a flammable anesthetic mixture containing air, oxygen and nitrous oxide;
- equipment suitable for continuous operation;
- equipment unsuitable for outdoors use.

Purpose and scope

Clinical intended use:	Therapeutic
Environmental intended use:	Ambulatory and home

T-ONE REHAB è studiato ed indicato per:

- **TENS** therapy: pain relief treatments for the skeletal and muscular system and for the articular system.
- **REHA**: therapy: pain relief treatments for the skeletal and muscular system and for the articular system.
- **DENERVATED-TRIANGULAR:** treatment and rehabilitation of denervated muscles.
- **IONOPHORESIS**: programs for localised administration of active ingredients
- **WAVE**: wave rehabilitation treatment used in physiotherapy (interferential, Kotz, modulated Tens)
- **IPP** (Induratio Penis Plastica) or Peyronie's disease treated with iontophoresis
- **URO**: pelvic floor rehabilitation treatment
- **NEMS**: programs for professional and amateur sportive use
- **BEAUTY**: body care and beauty programs
- **MEM**: free memory in which you can set the TENS and NEMS programs

The patient population intended for electrotherapy treatment using the T-ONE REHAB device includes patients of both sexes, men and women, of age

(unless otherwise indicated by medical doctors). For further details, please refer to the Contraindications section.
The CE0068 mark is only for the medical programs (see the following paragraphs related to the detailed description of the programs).

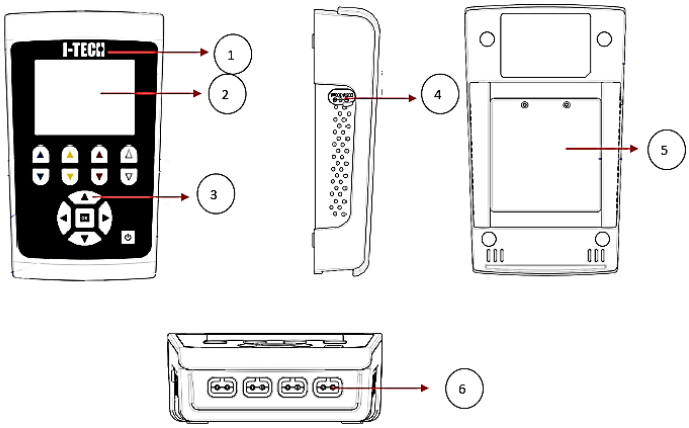
Technical characteristics

Characteristics	Specifica
Power supply	Batteries Ni-MH, 4.8V, 2300mAh
Recharger	Model AKN1G-0680030VW Input AC 100-240V, 50-60Hz, 0.2A Output DC 6.8V 0.3A
Isolation class (EN 60601-1)	II
Applied part (EN 60601-1)	BF
Dimensions (length x depth x height)	153x91x38 mm
Weight	295 g with battery
Max output current	120mA on 1KΩ
Wave type	Compensated biphasic square wave and monophase square wave
Wave frequency	From 0.2 to 1200Hz
Pulse width	From 20µs to 300ms
Therapy time	From 1 to 90 minutes

WARNING: the device has an output current over 10mA.

Expected useful life of the device is set in 3 years, meanwhile the expected useful life of the electrodes is set in 10/15 uses.

Device and commands description



1. Front panel
2. Colour graphic display
3. Keypad

[⏻] Start and return to program selection menu button

[OK] OK, end of program key

[▲] Selection/increasing intensity of active channels key

[▼] Selection/decrease intensity of active channels key

[◀] Left selection key

[▶] Right selection key

[▲] Increase intensity on channel 1 (blue)

[▼] Decrease intensity on channel 1 (blue)

[▲] Increase intensity on channel 2 (yellow)

[▼] Decrease intensity on channel 2 (yellow)

[▲] Increase intensity on channel 3 (red)

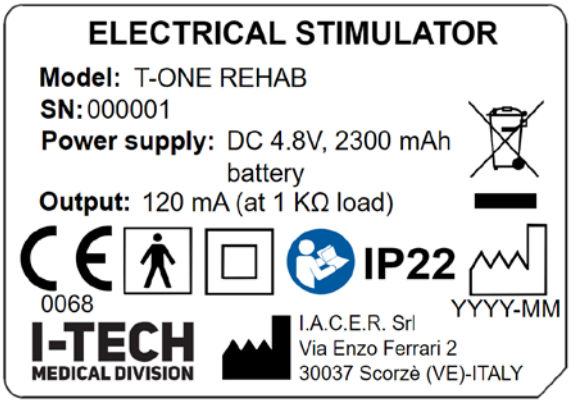
[▼] Decrease intensity on channel 3 (red)

[△] Increase intensity on channel 4 (white)

[▽] Decrease intensity on channel 4 (white)

4. Charging port
5. Battery compartment
6. Channel ports (1-4)

Labels



Symbol	Description
I-TECH MEDICAL DIVISION	Manufacturer's logo.
CE 0068	Product CE certification released by Notified Body n°0068.
	Manufacturer.
	Manufacturing date (YYYY-MM).
	Read instructions for use.
	The product must be disposed as "electronic waste", in accordance to WEEE Directive on waste electrical and electronic equipment.

Symbol	Description
	Class II device
	Applied part type BF
	Temperature humidity (temperature of the storage environment, on the package).
	Limits of relative humidity (relative humidity of the storage environment, on the package).
IP22	Medical device protected against the penetration of solids (with a diameter *d≥12,5mm*) and against the vertical drops when the device is kept at 15° from its normal functioning position.

Packaging content

The T-ONE REHAB packaging contains:

- n° 1 device;
- n° 1 battery pack (inside the device);
- n°1 battery charger;
- n° 4 cables for electro-stimulation;
- n° 2 sets of 4 square pre-gelled electrodes;
- n° 2 set of 4 rectangular pre-gelled electrodes;
- n° 1 ionophoresis kit (elastic band, 2 rubber electrodes, 2 sponges);
- n° 1 bag for the transportation;
- n° 1 user manual;
- n° 1 user manual of the electrodes' positions.

Accessories available on demand:

- anal probe;
- vaginal probe;
- handpiece for electro-stimulation.

Additional iontophoresis kits are available as accessories on request.

Contraindications

No significant side effects are known. In some cases of particularly sensitive people, skin redness occurs at the electrodes after treatment: the redness normally disappears few minutes after treatment. If the redness persists, consult a doctor.
In some rare cases evening stimulation causes some difficulties in falling asleep. If this occurs, stop carrying out the treatment in the evening.
However, this device should not be used by pregnant women, children, patients suffering from tuberculosis, juvenile diabetes, viral diseases (acute phase), fungal infections, dermatitis, heart diseases, severe arrythmia, acute infections, epilepsy or by patients with pacemakers, open wounds, magnetic prosthesis (unless otherwise prescribed by the doctor). Do not use the device if the source of the pain is unknown or not diagnosed. **Use the device ONLY after having a diagnosis.** In the event of injury, muscle stress or any other health problem consult your doctor before using the device and only use it under medical supervision.

Warning

It is recommended:

- to control position and meaning of all the labels on the equipment;
- not to damage the connection cables to the electrodes and to avoid winding the cables around the device;
- Do not use the device if it or any of its accessories are damaged (damaged cables): contact the manufacturer as indicated in paragraph *Support*;
- to avoid the use of the device by persons who did not read carefully this manual;
- avoid use in damp environments;
- not to wear metal objects during treatment.

It is forbidden:

- to position the electrodes in such a way that the current crosses the heart area (e.g. a black electrode on the chest and a red electrode on the shoulder blade);
- to position the electrodes on or close to skin injuries or cuts;
- to position the electrodes on the carotid sinuses (carotid) or genitals;

- to position the electrodes close to the eyes; make sure that the current delivered does not cross the eyeball (one electrode diametrically opposite to the other in relation to the eye); keep a distance of at least 3 cm from the eyeball;
- to use electrodes if they no longer stick to the skin. Repeated use of the same electrodes can compromise the safety of the stimulation, in fact it can cause skin redness that can last for many hours after the stimulation.

Warning:

- insufficiently sized electrode sections can cause skin reactions or burns;
- do not use damaged electrodes even if they well adhere to the skin;
- use only cables and electrodes supplied by the manufacturer.

The manufacturer considers himself responsible for the performances, reliability, safety and security of the device only if:

- any addition, modification and/or repair are carried out by authorized personnel;
- the environmental electrical installation to which T-ONE REHAB is connected is compliant to the national laws;
- the instructions for use contained in this manual are strictly followed.

Device use

T-ONE REHAB is a portable generator of TENS, NEMS and Galvanic currents with battery, specially designed for daily use in the treatments of the most common forms of muscular pains. T-ONE REHAB has 4 independent outputs that can be adjusted by the user. The device also comes with a 2+2 feature (multi patient feature), that allows treating up to two patients by setting two different programs (chosen from a list of 22 programs) on channels 1-2 and 3-4.

Main menu and single/multi patient selection

Start the device from key [⏻], open the menu and use the selection keys[◀] and [▶] to choose between SINGLE PATIENT, MULTI PATIENT AND LAST 10 PROGRAMS modes.

In the INDIVIDUAL PATIENT mode, the active program is set an all 4 output channels.
In the MULTI PATIENT mode, you can set two different programs (chosen from the list of 22 programs) on the 4 channels: channels 1 and 2 will operate on a program and channels 3 and 4 on the other program.
This function is particularly useful when you have to treat two patients in the same session but also when you need to use two different programs on a single patient, on two different areas of his body or for two different disorders.
The function LAST 10 PROGRAMS allows you to quickly find the list of the last 10 programs used.
Confirm the selection by pressing [OK].

Preliminary settings

CONNECTING THE CABLES AND THE ELECTRODES
Place electrodes near the area to be treated (see next paragraph), connect the electrodes to the connection cables and then connect the cables to the outputs located on the bottom of T-ONE REHAB.

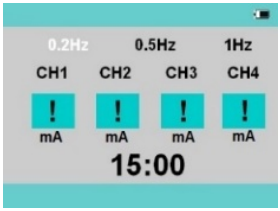
Single patient pre-set programs

To use the T-ONE REHAB pre-set programs, follow the instructions below.

1. **SELECTING THE PROGRAM MODE**
   After choosing the SINGLE PATIENT mode, you must proceed to the selection of the desired program, from the 6 groups of programs: REHA, TENS, NEMS, MEM, BEAUTY, URO. Switch between groups using the selection keys [◀] and [▶], and then select the desired program using the selection keys [▲] and [▼]; confirm the selection by pressing [OK].
2. **INTENSITY ADJUSTMENT**
   Use the coloured CH1/CH2/CH3/CH4 up arrow keys to increase the current intensity on the 4 channels. The value changes by 1mA

increments. To decrease the intensity, use the coloured CH1/CH2/CH3/CH4 down arrow keys.

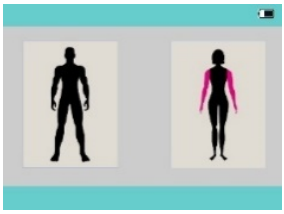
T-ONE REHAB can detect the connection of the electrodes: if incorrectly connected, it resets the intensity value once it reaches 10mA. On the display will appear setting similar to the ones below:



The settings displayed vary based on the program selected by you; you can also change the stimulation intensity for the selected program.
For programs consisting of a single phase, the device's screen will be similar to the one below, showing the overall treatment time and the intensity set on each channel:

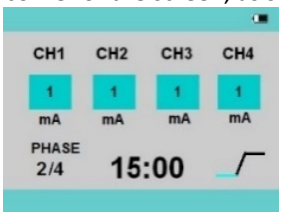
For programs consisting of multiple phases (from 2 to 4, typically NEMS and BEAUTY programs but also some of the TENS programs) the device's screen will be similar to the one below, showing the work phase (PHASE) in the lower left corner:

Some programs allow you to select the muscular area to be treated (upper limbs, trunk, lower limbs) and they also come with special MALE/ FEMALE modes. After choosing the program, the display will show a screen similar to the following:



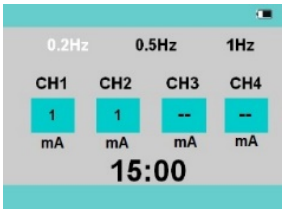
Use the selection keys [◀] and [▶] to choose the MALE/FEMALE mode and then use the selection keys [▲] and [▼] to select the desired treatment area (highlighted in yellow for males and in magenta for females). Confirm your selection by pressing [OK]; on the display will appear the main screen of the selected program.

Some programs (TENS, NEMS and BEAUTY) also provide different wave characteristics for contraction and recovery, and therefore, you need to set a different current intensity for the two stimulations. This setting is indicated by the icon in the lower right corner of the screen, as shown below:

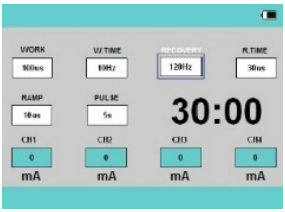


Icon  represents a contraction, while icon  represents a recovery.

The screen displayed when the programs for denervated muscles (REHA from P11 to P22) are selected is similar to the one below; at the top of the screen is displayed the work frequency that can be set by the user (0.2/0.5/1 Hz) using the selection keys [◀] /[▶]: the selected parameter is highlighted in white. These programs will be activated on channels 1 and 2.



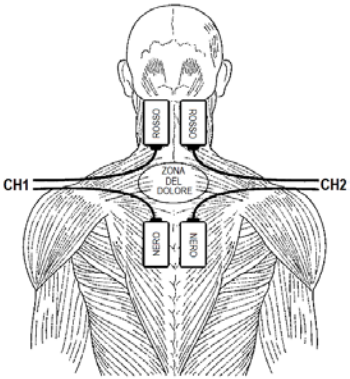
If one of the free memory MEM programs is selected, the screen will be similar to the one below; you can set all the characteristics of the stimulation wave (work frequency and pulse width for TENS memories, contraction, recovery parameters, ramp, etc. for NEMS memories). The parameter to be changed is highlighted in white and you can switch between parameters using the selection keys [◀] /[▶]:



See the following chapters for more details on program features, specifications and settings available.

Tips on how to adjust the intensity

TENS (Transcutaneous Electrical Nerve Stimulation): the intensity should be adjusted between the threshold of perception and the threshold of pain. The maximum limit is represented by the moment when the muscles surrounding the treated area begin to contract. We recommend that you stay under that limit.
The electrodes must be placed in a square formation around the painful area, using channel 1 and channel 2 (or channels 3 and 4) as shown in *Figure 1*.



IMPORTANT
Apply the electrodes in a square formation above the painful area, keeping a minimum distance of 4 cm between one electrode and the other.

Figure 1 – Electrodes' positioning.

IONOPHORESIS: the intensity must be increased until the patient experiences a significant tingling sensation in the treated area, producing a slight contraction of the muscles surrounding the area.

DENERVATED: the intensity should be adjusted so as to generate visible isolated muscle contractions. Please not that patients with denervated muscles experience muscle strain quickly. Therefore, we recommend short work sessions at high intensity, repeated even several times during the day (avoid 30-minute work sessions; instead, opt for 5/10 minutes 2/3 times a day).

NEMS (Neuro Electrical Muscle Stimulation): in the actual work phase, the programs alternate 5/7 seconds of contraction (when the muscle is visibly contracted) with 7/20 seconds of recovery (when the muscle is relaxed or subject slightly stimulated). The intensity during the contraction can be compared with the workload to which the muscle is subjected. Usually, the greater the stimulation intensity is, the greater the training load will be. This is true, however, until the maximum contraction limit of the muscle is reached; any increase in intensity beyond this level in unnecessary as it does not improve the training.
Important tip: to reduce the sense of discomfort and reach higher intensities, we recommend that you produce a voluntary contraction between the contraction generated by T-ONE. This voluntary contraction shall be carried out with the limb locked (technically in isometry), in other words, without moving the limb.

KOTZ: the indications are similar to those given for NEMS programs.

URO: the intensity for the pelvic floor programs must be adjusted based on the sensitivity of the patient. Increase the intensity gradually, without producing discomfort or pain. After several sessions, the patient compliance will increase and you will be able to reach higher intensity levels.

BEAUTY: the indications are similar to those given for NEMS programs.

I-TECH
MEDICAL DIVISION

List and characteristics of the programs available in single patient mode

REHA Programs

Prg	Medical prg. Yes/No	Description	PHASE 1	PHASE 2
R1	Yes	Ionophoresis L (low)	total time 30 min frequency 800 Hz, pulse width 100μs	
R2	Yes	Ionophoresis M (medium)	total time 30 min frequency 1000 Hz, pulse width 100μs	
R3	Yes	Ionophoresis H (high)	tempo tot 30 min frequency 1200 Hz, pulse width 100μs	
R4	Yes	MENS Micro-current	total time 30 min frequency 90 Hz pulse width 20μs	
R5	Yes	Haematomas	total time 30 min (5 sec 30 Hz – 200 μs + 5 sec 50 Hz – 150 μs + 5 sec 100 Hz – 120 μs) x 120 cycles	
R6	Yes	Oedemas	total time 30 min (6 sec 100Hz – 175 μs + 6 sec 2-100Hz modulated – 250 μs + 6 sec 150Hz – 60-200 μs)	
R7	Yes	TENS sequential	total time 30 min (6 sec 100Hz – 175 μs + 6 sec 2-100Hz modulated – 250 μs + 6 sec 150Hz – 60-200 μs modulated)	
R8	Yes	TENS Burst	total time 30 min frequency 2 Hz pulse width 80 μs Burst impulses	
R9	Yes	Atrophy prevention	total time 4 min frequency 6 Hz Adjustable pulse width (upper limbs, trunk, lower limbs)	total time 20 min (10 sec 3Hz + 5 sec 20Hz)

Prg	Medical prg. Yes/No	Description	PHASE 1	PHASE 2
R10	Yes	Atrophy	total time 4 min frequency 6 Hz Adjustable pulse width (upper limbs, trunk, lower limbs)	total time 20 min (10 sec 3Hz + 5 sec 40Hz)
R11	Yes	Denervated 50ms	total time 15 min frequency 0.2/0.5/1Hz pulse width 50ms	
R12	Yes	Denervated 100ms	total time 15 min Frequency 0.2/0.5/1Hz pulse width 100ms	
R13	Yes	Denervated 150ms	total time 15 min frequency 0.2/0.5/1Hz pulse width 150ms	
R14	Yes	Denervated 200ms	total time 15 min frequency 0.2/0.5/1Hz pulse width 200ms	
R15	Yes	Denervated 250ms	total time 15 min frequency 0.2/0.5/1Hz pulse width 250ms	
R16	Yes	Denervated 300ms	total time 15 min frequency 0.2/0.5/1Hz pulse width 300ms	
R17	Yes	Triangular 50ms	total time 15 min frequency 0.2/0.5/1Hz pulse width 50ms	
R18	Yes	Triangular 100ms	total time 15 min frequency 0.2/0.5/1 Hz pulse width 100ms	
R19	Yes	Triangular 150ms	total time 15 min frequency 0.2/0.5/1 Hz pulse width 150ms	
R20	Yes	Triangular 200ms	total time 15 min frequency 0.2/0.5/1 Hz pulse width 200ms	
R21	Yes	Triangular 250ms	total time 15 min frequency 0.2/0.5/1 Hz pulse width 250ms	
R22	Yes	Triangular	total time 15 min	

Prg	Medical prg. Yes/No	Description	PHASE 1	PHASE 2
		300ms	frequency 0.2/0.5/1 Hz pulse width 300ms	
R23	Yes	Interferential	total time 15 min frequency modul. 5-50Hz pulse width 150µs	
R24	Yes	TENS amplitude modulation	total time 30 min frequency 70 Hz pulse width modul. 50-200µs	
R25	Yes	TENS alternated	total time 30 min frequency 100 Hz pulse width 175 µs, 3 sec ON+3 sec OFF	
R26	Yes	TENS frequency modulation	total time 30 min frequency modul. 2-100 Hz pulse width 250 µs	
R27	Yes	TENS frequency modulation	total time 30 min Frequency mod. 2-110 Hz pulse width 175 µs	
R28	Yes	TENS amplitude modulation	total time 30 min frequency 150 Hz pulse width modul. 50-200 µs	
R29	Yes	Kotz Wave	total time 30 min frequency 50 Hz pulse width 100 µs Contraction 10 sec, recovery 20 sec	

The indications of the electrodes' positioning are available in the *Positions manual.*

IONOPHORESIS

For the ionophoresis programs the stimulation **intensity** shall be adjusted **so as to feel a remarkable tingling in the treated area**, producing a slight contraction of the surrounding muscles. If you feel discomfort (or pain), reduce the intensity and eventually stop the therapy.

The ionophoresis treatment exploits the polarity (negative or positive) that characterizes a specific drug, selected on the basis of the therapy to be conducted. When this drug is applied to the electrodes and the treatment starts, the issued current by the electrodes acts in such a way as to convey the drug's ions from one electrode (also called polo) to the other, therefore as to cross the location affected by the disease and then release the specific active ingredient.

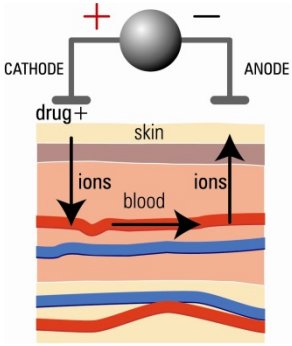


Table of the main drugs used in the iontophoresis treatments			
Drug	**Polarity**	**Prevalent action**	**Indications**
Calcium chloride (Sol. 1%-2%)	Positive	Sedative and ricalcifyc	Osteoporosis, spasmofilia, algodystrophic syndrome. Do not use in case of arteriosclerosis
Magnesium chloride (Sol. 10%)	Positive	Analgesic, sedative, fibrolytic	Calcium chloride substitute in patients with arteriosclerosis
Potassium iodide	Negative	Sclerolytic, emollient	Scars, Dupuytren's disease, keloids
Acetylsalicylate lysine	Negative	Analgesic	Arthrosis
Flectadol, Aspegic	Negative	Analgesic	Extra / intra articular arthrosis, rheumatism
Local anesthetics (novocaine, lidocaine)	Negative	Analgesic	Local anesthesia, trigeminal neuralgia
Benzidamina	Positive	Analgesic	Rheumatoid arthritis
Diclofenac sodium	Pos/Neg	Analgesic	hematoma
Orudis, Voltaren, Lometacen, Arfen, Tilcotil, Axera, Naprosyn	Negative	Anti-inflammatory	Degenerative and extra articular rheumatism, gout
Piroxicam, Feldene	Positive	Analgesic	Fractures
Sodium salicylate (1%-3%)	Negative	Analgesic	Articular rheumatism,

Table of the main drugs used in the iontophoresis treatments			
Drug	**Polarity**	**Prevalent action**	**Indications**
			myalgia
Ketoprofen, lysine salt	Pos/Neg	Anti-inflammatory	Osteoarthritis, arthritis
Thiomucase	Negative	Anti-oedemic	Post-traumatic and post-operative edema due to venous insufficiency.

If the prescribed drug does not appear on the above list, check the polarity indicated on the package or on the warnings of the drug itself or consult your doctor/pharmacist.

Before starting the ionophoresis session, clean the skin near the area to be treated; connect the jacks of the electrostimulation cable to the black rubber electrodes with cable disconnected from T-ONE REHAB.

Moisten the two sponge electrodes abundantly.

ATTENTION: wring the sponge electrodes to avoid dripping, then put the drug on an electrode as follows:

- drugs with positive polarity: dissolve this type of drug on the electrode connected to the positive pole (red connection, cathode).
- Drugs with negative polarity: dissolve this type of drug on the electrode connected to the negative pole (black connection, anode).
- Bipolar drugs: these can be dissolved on either the positive pole or the negative pole.

At this point, insert the two black rubber electrodes, previously connected to the electrostimulation cable inside the sponge coverings (one with the drug and the other without). Position the electrode with the drug on the painful area, and the other electrode on the other side (*Figure 2)* with the help of the elastic band supplied with the kit. Connect cable at the appropriate jack (channel 1) and turn T-ONE REHAB on.

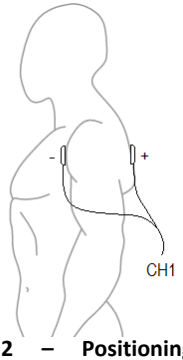


Figure 2 – Positioning of electrodes placed at the ends of the muscle to be stimulated.

ATTENTION. Do not use the iontophoresis program in proximity of metal prostheses.

REHA1-2-3 • Ionophoresis L-M-H (medical program)
The patient may experience a slight reddening of the skin at the end of the program; the redness should disappear a few minutes after the end of the program.

Channels 3 and 4 are disconnected for this type of programs.

Session duration: 30 minutes.
Electrodes' positioning: place the electrode with the medicine on the painful area and the other one transversely.
Intensity: for the iontophoresis programs **the intensity** must be adjusted so that the patient experiences a **significant tingling** sensation in the treated area, producing a slight contraction of the muscles surrounding it.

REHA 4 • Micro-current (medical program)
The use of the micro-current is similar to the conventional TENS, with the only difference that sometimes, the electrical current can be more easily adapted to the sensitivity of patients suffering from mild anxiety or to delicate body parts.
In general, it can be used for daily pains but if the origin of the pain is unknown, you should contact your doctor.
It can be considered as an analgesic current ideal for multiple applications, without side effects (except for a mild redness of the skin after long applications) and with few contraindications (those listed in the *Contraindications* paragraph)
Session duration: 30 minutes.
Electrodes' positioning: over the painful area as shown in *Figure 1*.
Intensity: adjusted just above the threshold of perception.

REHA 5 • Haematomas (medical program)
Consult your doctor before using this program on haematomas. Few applications within a few hours from the contusion. Combining different types of square wave pulses, this program increases microcirculation and drains the affected area (you can change the depth of drainage by changing the frequency of the pulses).
Session duration: 30 minutes.

Electrodes' positioning: form a square over the area to be treated, as shown in *Figura 1*.
Intensity: adjusted between the thresholds of perception and pain, without producing muscular contractions. You should adjust the intensity for moderate muscle solicitation, especially during the first 48 hours after the accident.

REHA 6 • Oedemas (medical program)
Program similar to REHA5.
Session duration: 30 minutes.
Electrodes' positioning: form a square over the area to be treated, as shown in *Figura 1*.
Intensity: adjusted between the thresholds of perception and pain, without producing muscular contractions at least within the first two weeks; gradually increase the intensity after this period.

REHA 7 • TENS sequential (medical program)
The frequency of the waveform and the width of the pulse change continuously during the treatment; a program that is more comfortable for the patient than the one with constant pulse width and frequency. Suitable for pain relief; it produces a massaging effect.
Session duration: 30 minutes.
Electrodes' positioning: form a square over the painful area, as shown in *Figura 1.*

REHA 8 • TENS Burst (medical program)
The stimulation produces an analgesic effect similar to TENS endorphinic. Widely used in pain management.
Session duration: 30 minutes.
Electrodes' positioning: form a square over the painful area, as shown in *Figura 1.*

REHA 9 • Atrophy prevention (medical program)
Program created to maintain muscle trophism.
This treatment focuses on muscle toning. Particularly indicated for patients recovering from an accident or an operation. Prevents muscle atrophy caused by physical inactivity. The muscle area concerned can be stimulated with daily applications of medium intensity; if you increase the intensity, leave a day of rest between applications to allow the muscles to recover.
Session duration: 24 minutes.
Electrodes' positioning: as shown in Figures 01 to 20 of the *Position manual*.

Intensity: adjusted to produce good muscle contraction in the treated areas.

REHA 10 • Atrophy trophism rehabilitation (medical program)

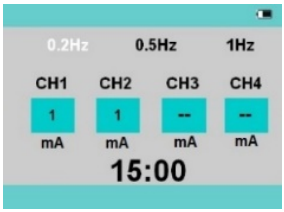
This program is ideal for recovering muscle trophism after a long period of inactivity or an accident and works selectively on slow fibers.
rogramme to be carried out when loss of muscle tone has already occurred Application on alternate days.
Session duration: 24 minutes.
Electrodes' positioning: as shown in Figures 01 to foto 20 of the *Position manual*.
Intensity: apply with caution (at low intensity, enough to produce slight muscle contractions) in the first 2/3 weeks. Gradually increase the intensity over the next 3/4 weeks.

REHA 11-12-13-14-15-16 • Denervated muscle (medical program)

These programs are ideal for rehabilitation of denervated muscles, for peripheral neuropathy. The specific form used allows adequate and painless muscle stimulation.

The duration of the pulses is greater than that of the regular rehabilitation programs (in terms of milliseconds and not microseconds as in case of the normally inverted muscle) and the frequency is much lower. The stimulation frequency can be set between 0.2/0.5/1 Hz for all programs, while the pulse width varies from 50ms (REHA 11 program) to 300ms (REHA 16 program).

Set the frequency (0.2/0.5/1 Hz) using the selection keys [◀] /[▶]: the selected parameter is highlighted in white. We recommend that you set it to 0.2 or 0.5 Hz to avoid muscle strain.



Session duration: 15 minuti in single phase (but you can perform several shorter phases multiple times a day).
Electrodes' positioning: : use 2 large self-adhesive electrodes (you can use suitably dampened electrodes with sponge inserts), placed across the muscle to be stimulated.

ATTENTION: program active on channels 1 and 2.

REHA 17-18-19-20-21-22 • Denervated muscle triangular wave (medical program)

These programs are ideal for rehabilitation of denervated muscles, for peripheral neuropathy. Triangular waveform to be used as an alternative to programs REHA 11-16.

The duration of the pulses is greater than that of the regular rehabilitation programs (in terms of milliseconds and not microseconds as in case of the normally inverted muscle) and the frequency is much lower. The stimulation frequency can be set between 0.2/0.5/1 Hz for all programs, while the pulse width varies from 50ms (REHA 17 program) to 300ms (REHA 22 program).

Set the frequency parameter as indicated in the previous paragraph.

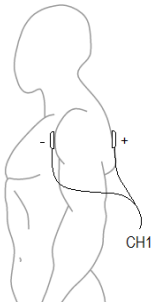
Session duration: 15 minutes in single phase (but you can perform several shorter phases multiple times a day).

Electrodes' positioning: use 2 large self-adhesive electrodes (you can use suitably dampened electrodes with sponge inserts), placed across the muscle to be stimulated.

ATTENTION: program active on channels 1 and 2.

REHA 23 • Interferential (medical program)

Stimulation that ensures deep tissue penetration. This pulse has a good analgesic effect, producing at the same time a good trophic action on the surrounding muscles. Well tolerated by the patient, indicated for the treatment of periarthritis, knee arthritis, meniscopathy and for recovery after cross ligament surgery.



ATTENTION: program active on channels 1 and 2.

Session duration: 30 minutes.

Electrodes' positioning: as shown in the diagram.

Intensity: enough to cause a good tingle, not painful. The intensity should be increased gradually each day. From the moment when the contractions begin to appear, the program should be continued keeping the limb locked, avoiding joint extension.

REHA 24 • TENS amplitude modulation (medical program)

The pulse's amplitude varies continuously, creating a more pleasant sensation than the programs with constant pulses. Suitable for pain relief; it produces a massaging effect on the surrounding muscles.

Session duration: 30 minutes.
Electrodes' positioning form a square over the painful area as shown in *Figure1*.

REHA 25 • TENS alternated (medical program)
TENS program with ON/OFF stimulation effect and pause on both channels, for a more delicate effect, ideal for patients who tolerate less the tingling sensation typical of TENS.
Session duration: 30 minutes.
Electrodes' positioning form a square over the painful area as shown in *Figure1*

REHA 26-27 • TENS frequency modulation (medical program)
TENS program with ON/OFF stimulation effect and pause on both channels, for a more delicate effect, ideal for patients who tolerate less the tingling sensation typical of TENS.
Session duration: 30 minutes.
Electrodes' positioning form a square over the painful area as shown in *Figure1*.

REHA 28 • TENS amplitude modulation (medical program)
The pulse's amplitude varies continuously, creating a more pleasant sensation than the programs with constant pulses. Suitable for pain relief; it produces a massaging effect.
Session duration: 30 minutes.
Electrodes' positioning: form a square over the painful area as shown in *Figure1*.

REHA 29 • Kotz Wave (medical program)
Proposed in the seventies by Y. M. Kotz, from which it takes its name. It is a medium frequency current used for strengthening normally innervated muscles. It uses 2.5 kHz interrupted carrier current. This consists of 10ms pulse waves followed by 10 ms of pause; therefore, this program delivers 50 packs of pulses per second. The program consists of 10 seconds of stimulation at the aforementioned parameters followed by 20 seconds of pause.
The motor exciting effect of the Kotz current takes place deep within the muscle, because the skin gives less resistance to these currents. It is actually proven that the electrical impedance of the skin decreases as the frequency increases.
It's a current with high depth of penetration and good analgesic action, also producing a trophic action on the patient's muscles. Well tolerated by the

patient, indicated for the treatment of periarthritis, knee arthritis, meniscopathy.
Session duration: 30 minutes.
Electrodes' positioning: as shown in Figures 01 to 22 of the *Position manual*.
Intensity: adjusted to produce good muscle contractions, up to the tolerance threshold (50 maximum settable value). The intensity can be selected only during the 10 seconds when the pulse is delivered and not in the OFF phase.
ATTENTION: program active on channels 1 and 2.

TENS Programs

Prg	Progr. medicale Sì/No	Descrizione	FASE 1	FASE 2	FASE 3
T1	Yes	TENS rapid	Total time 40min Frequency 90Hz Pulse width 50µs		
T2	Yes	TENS Endorphinic	Total time 30min Frequency 1Hz Pulse width 200µs		
T3	Yes	TENS maximum values	Total time 3min Frequency 150Hz Pulse width 200µs		
T4	Yes	Anti-inflammatory	Total time 30min Frequency 120Hz Pulse width 40µs		
T5	Yes	Neck pain	Total time 30min Frequency 90Hz Pulse width 60µs	Total time 10min Frequency 2Hz Pulse width 150µs	
T6	Yes	Backache/Sciatica	Total time30min Frequency 90Hz Pulse width 60µs	Total time 10min Frequency 2Hz Pulse width 150µs	
T7	Yes	Sprains / Bruises	Total time 30min (6s 100Hz–175µs		

Prg	Progr. medicale Si/No	Descrizione	FASE 1	FASE 2	FASE 3
			+ 6s 2-100Hz modulated–250µs + 6s 150Hz–60-200µs modulated)		
T8	Yes	Vascularisation	Total time 20min Frequency 2Hz Pulse width 200µs		
T9	Yes	Muscle relaxant	Total time 10min Frequency 2Hz Adjustable pulse width	Total time 10min Frequency 6Hz	Total time 10min Frequency 4Hz
T10	Yes	Hand/wrist pain	Total time 30min (6s 100Hz–175µs + 6s 2/100Hz modulated–250µs + 6s 150Hz–60/ 200µs modulated)		
T11	Yes	Plantar stimulation	Total time 30min (6s 100Hz–175µs + 6s 2-100Hz modulated–250µs + 6s 150Hz–60/ 200µs modulated)		
T12	Yes	Epicondylitis	Total time 30min (6s 100Hz–175µs + 6s 2-100Hz modulated–250µs + 6s 150Hz–60/ 200µs modulated)		
T13	Yes	Epitroclea	Total time 30min (6s 100Hz –175µs + 6s 2-100Hz modulated–250µs + 6s 150Hz –60/ 200µs modulated)		
T14	Yes	Periarthritis	Total time 30min Frequency 90Hz Pulse width 50µs	Total time 10min (7s 3Hz– 200µs + 3s 1Hz–	

Prg	Progr. medicale Si/No	Descrizione	FASE 1	FASE 2	FASE 3
				200µs + 5s 30Hz– 200µs)	
T15	Yes	Tens Burst	Total time 30min Frequency 2Hz Pulse width 80µs Burst impulses		
T16	Yes	Micro-current	Total time 30min Frequency 90Hz Pulse width 20µs		

The indications of the electrodes' positioning are available in the *Positions manual*.

TENS 1 • TENS rapid (medical program)

Program also called conventional TENS, used for analgesic purposes; its purpose is to induce the organism into blocking pain at the spine, in accordance with the "Gate Control Theory" by Melzack and Wall. Pain impulses leave part of the body (for example the hand) and run along the nerve tracts (through small-diameter nerve fibres) until they reach the central nervous system where the impulses are interpreted as pain. Conventional TENS activates large-diameter nerve fibres, blocking the path of small-diameter nerve fibres at the spine. Therefore, this action is mainly taken against the symptom: to simplify it further, the wire transmitting pain information is obstructed.

The rapid/conventional Tens is a current that can be used in the **treatment of daily pains in general, joint, muscular and tendon pains, arthrosis, arthritis, etc.** The first benefits can be seen after 10/15 treatments carried out on a daily basis (no contraindications id the dose is doubled). The program can be repeated at the end of the session if the patient experiences particularly persistent pain. Due to the nature of the pulse, the patient might experience an "addiction" effect due to which the pulse will be felt less and less: to counteract this effect, you can increase the intensity by one level if necessary.

Session duration: 40 minutes (no less than 30/40 minutes), in a single phase.

Electrodes' positioning: form a square above the painful area as shown in *Figure1*.

Intensity: to be adjusted in order to have a good solicitation of the stimulated part, but not over the pain threshold.

TENS 2 • TENS Endorphinic (medical program)

This type of stimulation produces two types of effects according to how the electrodes are positioned: positioning the electrodes in the dorsal region, see Figure 10 in the *Positions Manual*, promotes the endogenous production of morphine-like substances capable of raising the pain perception threshold; positioning the electrodes to form a square over the painful area, as shown in *Figure 1*, produces a vascularising effect. Vascularisation increases arterial flow, enhancing the removal of algogenic substances and facilitating the restoration of normal physiological conditions.

Session duration: 30 minutes in a single phase, on a daily basis.

Electrodes' positioning: Figure 08 of *Positions manual* or on the treated area as shown in *Figure 1*, do not place the electrodes near areas prone to inflammation.

Intensity: adjusted so as to ensure good solicitation of the part stimulated, the sensation must be similar to that of a massage.

TENS 3 • TENS maximum values (medical program)

This program blocks pain impulses peripherally creating a proper anaesthetizing effect in the treated area. This type of stimulation is suitable for injuries or bruises when rapid action is required. That is the reason why such stimulation is undoubtedly the least tolerated, but it is extremely effective. This type of stimulation is not recommended for particularly sensitive people and in any case the electrodes should not be positioned in sensitive areas such as the face and genitals or close to wounds.

Session duration: very short, 3 minutes in a single phase.

Electrodes' positioning: form a square above the painful area as shown in *Figure1*.

Intensity: it is the maximum tolerable value (well in excess of conventional TENS, and therefore with considerable contraction of the muscles surrounding the area treated).

TENS 4 • Anti-inflammatoty (medical program)

Program recommended for inflammatory conditions. To be applied until the inflammatory state is lessened (10-15 applications, once a day; the daily treatments can be doubled if required).

Session duration: 30 minutes.

Electrodes' positioning: identified the area to be treated, position the electrodes as shown in *Figure 1*.
Intensity: to be adjusted until a tingling feeling is produced in the area treated; avoid contracting the surrounding muscles.

TENS 5 • Neck pain (medical program)
Special program for neck pain relief. The first benefits can be seen after 10 to 15 treatments carried out on a daily basis; continue the treatment until the symptoms disappear.
Session duration: 40 minutes.
Electrodes' positioning: Figure 25 of the *Positions manual.*
Intensity: adjusted between the thresholds of perception and pain: the maximum intensity level is represented by the moment when the muscles surrounding the treated area begin to contract; over this limit stimulation does not become more effective, just more irritating, so it is best to stop before that point.

WARNING: the program changes the stimulation parameters after 30 minutes of operation. The current may be felt different: this is perfectly normal and is envisaged by the software: raise or lower the intensity according to your own sensitivity to reach a level of stimulation that is comfortable for you.

TENS 6 • Back/Sciatic pain (medical program)
Specific program for the treatment of pain in the lumbar area or along the sciatic nerve, or both. The intensity should be adjusted to a level between the thresholds of perception and pain: the maximum intensity level is the moment in which the muscles surrounding the treated area begin to contract; over this limit the stimulation does not become more effective, just more irritating, so it is best to stop before that point. The first benefits can be seen after 15 to 20 treatments carried out daily; proceed with the treatment until the symptoms pass.
Session duration: 40 minutes.
Electrodes' positioning: Figure 27 and 28 in the *Positions manual*.
Intensity: to be adjusted between the threshold of perception and pain.

TENS 7 • Sprains/Bruises (medical program)
The program develops its effectiveness after this type of injury by inhibiting pain locally, producing three selectively acting, differentiated impulses, with analgesic and draining function. Until pain is lessened, the treatment is recommended daily (even 2/3 times a day).

Session duration: 30 minutes.
Electrodes' positioning: form a square above the painful area as shown in *Figure 1.*
Intensity: to be adjusted between the threshold of perception and pain.

TENS 8 • Vascularisation (medical program)
Has a vascularizing effect on the treated area. Vascularization increases arterial flow and consequently aids the removal of allogenic substances and helps to restore normal physiological conditions. Do not position the electrodes close to inflamed areas. Daily application is recommended, the number of applications is not defined; the program can be used to reduce pain.
Session duration: 20 minutes.
Electrodes' positioning: Figure from 25 to 33 of the *Positions manual*; do not position the electrodes close to inflamed areas.
Intensity: to be adjusted between the perception threshold and slight discomfort.

TENS 9 • Muscle relaxant (medical program)
Program used to speed up the recovery of muscle function after intense training or strain from work; the effect is immediate. Two treatments per day for three or four days are recommended.
Session duration: 30 minutes.
Electrode's positioning: Figure from 01 to 28 of the *Positions manual*.
Intensity: to be adjusted in order to have a moderate muscle solecitation.

TENS 10 • Hand and wrist pain (medical program)
This program is suitable for all types of hand and wrist pain: aching caused by strains, arthritis in the hand, carpal tunnel syndrome, etc. A combination of various types of square-wave impulses has a general analgesic effect on the area to be treated, in fact impulses at different frequencies stimulate different sized nerve fibres promoting an inhibitory action at spinal level.
Session duration: 30 minutes.
Posizione elettrodi: form a square above the area to be trated as shown in *Figure 1.*
Intensity: to be adjusted between the threshold of perception and pain, without causing muscle contraction.

TENS 11 • Plantar stimulation (medical program)
This program has a relaxing and draining effect on the stimulated limb. It is ideal for people suffering from a sense of "heaviness in the legs".

Session duration: 30 minutes.
Electrodes' positioning: 2 electrodes on the sole of the foot (one positive, the other negative), one close to the toes and the other under the heel.
Intensity: just a little bit over the perception threshold.

TENS 12 • Epicondylitis (medical program)
Also known as "tennis elbow", it is an insertional tendinopathy concerning insertion of the elbow bone into the epicondylar muscles, those enabling finger and wrist extension (bending backwards).
It is recommended 15 applications once a day (even twice), until the symptoms pass. First it is recommended that you consult your doctor to identify the precise cause of the pain in order to prevent the condition from reoccurring.
Session duration: 30 minutes.
Electrodes' positioning: Figure 29 of the *Positions manual*.
Intensity: to be adjusted above the perception threshold.

TENS 13 • Epitrochlea (medical program)
Also known as "golfing elbow", it affects golfers but also those who carry out repetitive tasks or tasks involving frequent intense strain (for example carrying a particularly heavy suitcase). It causes pain in the flexor and pronator tendons inserted in the epitrochlea. Pain is felt when bending or straightening the wrist against resistance, or when clenching a hard rubber ball in the hand.
It is recommended 15 applications once a day (even twice), until the symptoms pass. First it is recommended that you consult your doctor to identify the precise cause of the pain in order to prevent the condition from reoccurring.
Session duration: 30 minutes.
Electrods' positioning: Figure 29 in the *Positions manual*, but with all the electrodes positioned on the inside of the arm (with a rotation of about 90°).
Intensity: to be adjusted above the perception threshold.

TENS 14 • Periarthritis (medical program)
Scapulo-humeral periarthritis is an inflammatory condition affecting the fibrous tissues surrounding joints: tendons, serous sacs and connective tissue. These appear altered and can break into fragments and calcify. If neglected, this condition can become heavily crippling. For this reason, after carrying out a cycle of 15/20 applications once a day, it is recommended that you consult your doctor for a cycle of specific rehabilitation exercises to reduce the pain.

This program consists of various phases including TENS and muscle stimulation aimed at improving the tone of the muscles surrounding the joint.
Session duration: 40 minutes.
Electrodes' positioning: Figure 26 of the *Positions manual*.
Intensity: to be adjusted above the perception threshold with small muscle contractions at the end of the program (10 minutes before the end).

TENS 15 • TENS Burst (medical program)
The stimulation produces an analgesic effect similar to TENS endorphinic. Widely used in pain management.
Sesion duration: 30 minutes.
Electrodes' positioning: form a square over the painful area, as shown in *Figure1.*

TENS 16 • Micro-current (medical program)
The use of the *micro-current* is similar to the *conventional Tens (TENS1)*, with the only difference that sometimes, the electrical current can be more easily adapted to the sensitivity of patients suffering from mild anxiety or to delicate body parts. In general, it can be used for daily pains but if the origin of the pain is unknown, you should contact your doctor.
It can be considered as an analgesic current ideal for multiple applications, without side effects (except for a mild redness of the skin after long applications) and with few contraindications (those listed in the first paragraph).
Session duration: 30 minutes.
Electrodes' positioning: over the painfulò area as shown in *Figure 1*.
Intensity: adjusted just above the threshold of perception.

Main pathologies summary table

Pathology	Progr.	No. Of treatments	Treatment frequency	Position of electrodes
Arthrosis	TENS1+ TENS2	Until pain is lessened	Daily (TENS1 up to 2/3 times a day, TENS 2 once a day)	On the painful area
Neck pain	TENS5	10/15	Daily, even twice a day	Figure 25
Cervicogenic headache	TENS5	10/15	Daily, even twice a day	Figure 25
Back pain	TENS6	10/15	Daily	Figure 25 but with all electrodes placed 10 cm lower

Pathology	Progr.	No. Of treatments	Treatment frequency	Position of electrodes
Backache	TENS6	12/15	Daily	Figure 27
Sciatic pain	TENS6	15/20	Daily, even twice a day	Figure 28
Cruralgia	TENS6	15/20	Daily, even twice a day	Figure 18 with all electrodes placed on the inside of the thigh
Epicondylitis and	TENS12/ TENS13	15/20	Daily, even twice a day	Figure 29
Epitrocleitis	TENS1	10/20	Daily, even twice a day	Figure 30
Hip pain	TENS1	10/20	Daily, even twice a day	Figure 31
Knee pain	TENS3	5/7	Daily, up to 2/3 times a day	Figure 32
Ankle sprain	TENS1	10/15	Daily, even twice a day	Figure 33
Carpal tunnel syndrome	TENS16	10/15	Daily	Figure 24
Trigeminal neuralgia	TENS1 +TENS9	8/10	Daily, even twice a day	Figure 25
Wryneck	TENS14	15/20	Daily	Figure 26

The indications of the electrodes' positioning are available in the *Positions manual*.

IMPORTANT: FOR ALL THESE PROGRAMS, THE STIMULATION INTENSITY MUST BE ADJUSTED BETWEEN THE THRESHOLD OF PERCEPTION OF THE PULSE AND THE MOMENT WHEN THE PULSE STARTS TO CAUSE DISCOMFORT.

NEMS programs

Prg	Medical Progr. Yes/No	Description	PHASE 1	PHASE 2	PHASE 3	PHASE 4
N1	No	Warming up	Total time 3min Frequency 3Hz Adjustable pulse	Total time 5min Frequency 8Hz	Total time 20min (20s 10Hz + 2s 2Hz +	

Prg	Medical Progr. Yes/No	Description	PHASE 1	PHASE 2	PHASE 3	PHASE 4
			width		8s 25Hz)	
N2	No	Resistance	Total time 5min Frequency 6Hz Adjustable pulse width	Total time 20min (18s 8Hz + 2s 2Hz + 10s 18Hz)	Total time 20min (20s 10Hz + 2s 2Hz + 8s 25Hz)	Total time 5min Frequency 3Hz
N3	No	Resistant strength	Total time 5min Frequency 6Hz Adjustable pulse width	Total time 10min (20s 6Hz + 10s 30Hz)	Total time 10min (20s 6Hz + 10s 40Hz)	Total time 5min Frequency 3Hz
N4	No	Basic strength	Total time 5min Frequency 8Hz Adjustable pulse width	Total time 10min (13s 6Hz + 7s 50Hz)	Total time 10min (14s 4Hz + 6s 70Hz)	Total time 5min Frequency 3Hz
N5	No	Fast strength	Total time 3min Frequency 6Hz Adjustable pulse width	Total time 10min (14s 6Hz + 6s 70Hz)	Total time 8min (5s 4Hz + 5s 70Hz)	Total time 5min Frequency 3Hz
N6	No	Explosive strength	Total time 3min Frequency 6Hz Adjustable pulse width	Total time 10min (24s 2Hz + 6s 90Hz)	Total time 10min (24s 2Hz + 6s 110Hz)	Total time 5min Frequency 3Hz
N7	No	Deep capillarisa-tIon	Total time 30min (20s 5Hz–200µs 100% + 20s			

Prg	Medical Progr. Yes/No	Description	PHASE 1	PHASE 2	PHASE 3	PHASE 4
			8Hz–150µs 100% + 20s 12Hz–100µs 100%)			
N8	No	Muscle recovery	Total time 5min Frequency 6Hz Adjustable pulse width	Total time 5min Frequency 4Hz	Total time 5min Freque-cy 2Hz	
N9	No	Agonist / Antagonist	Total time 3min Frequency 6Hz Adjustable pulse width	Total time 20min Contr. altern.CH 1/2 3/4 (6s 8Hz + 8s 50Hz CH1/2 + 8s 50Hz CH3/4	Total time 1 min Frequen-cy 3Hz	
N10	No	Sequential tonic contrac-tions	Total time 3min Frequency 6Hz Pulse width 300µs	Total time 20min Frequency 50Hz Pulse width 40-300µs	Total time 2min Freque-cy 3Hz Pulse width 300µs	
N11	No	Sequential phasic contrac-tions	Total time 3min Frequency 6Hz Pulse width 300µs	Total time 20min Frequency 90Hz Pulse width 40-300µs	Total time 2min Frequen-cy 3Hz Pulse width 300µs	
N12	No	Muscle relaxant	Total time 15min			

Prg	Medical Progr. Yes/No	Description	PHASE 1	PHASE 2	PHASE 3	PHASE 4
			Frequency 3 Hz			
N13	No	Deep massage	Total time 30min (20s 5Hz–200µs + 20s 8Hz–150µs + 20s 12Hz–100µs)			
N14	No	EMS	Total time 5min Frequency 6Hz Pulse width 250µs			
N15	No	30' Resistance	Total time 30min (18s 8Hz + 2s 2Hz + 10s 18Hz)			
N16	No	30' Resistance strength	Total time 30min (20s 6Hz + 10s 30Hz)			
N17	No	20' Basic strength	Total time 20min (13s 6Hz + 7s 50Hz)			
N18	No	20' Fast strength	Total time 20min (14s 6Hz + 6s 70Hz)			
N19	No	20' Explosive strength	Total time 20min (24s 2Hz + 6s 90Hz)			
N20	No	20' Hypertro-phy	Total time 5min (5s 3Hz + 5s			

Prg	Medical Progr. Yes/No	Description	PHASE 1	PHASE 2	PHASE 3	PHASE 4
			100Hz)			

⚠ **IMPORTANT. Stimulation intensity:** sport programs (Resistance, Strength, Agonist/Antagonist) are divided into warm up phases, work phases, recovery phases. During the warm up phase (phase 1), the stimulation intensity should be adjusted to produce a slight tickling sensation in the treated muscle; this should be enough to warm up the muscle without straining (18÷30mA). During the work phases (the phases in the middle of the programs), the contraction pulses are alternated with active recovery pulses. The user has to select the two intensities separately: for the contraction phase (on display ⌐)the intensity should be set to 20÷30mA for relatively unfit people, 30÷50mA for fit people, and over 50mA for very fit people.
For the active recovery pulses, between a contraction and the other, the intensity should be set to a value lower than the contraction intensity by about 15□20%. During the recovery phase (the last phase) the intensity should be set so as to obtain a good massaging effect on the stimulated area, without causing pain (18÷30mA).
Important tip: to reduce the sense of discomfort and reach higher intensities, we recommend that you produce a voluntary contraction between the contraction generated by T-ONE. This voluntary contraction shall be carried out with the limb locked (technically in isometry), in other words, without moving the limb.
Why is the active muscle contraction important during the T-ONE contraction?
The advantage are as follow:
→ it improves the neuronal activity (the central nervous system participates to the T-ONE contraction, "recognising" the stimulated fibres);
→ the sense of discomfort is significantly reduced and the intensity can be increased without affecting the comfort of the patient;
→ it triggers a proprioceptive virtuous cycle: T-ONE stimulates, the central nervous system recognises and subsequently activates the muscle fibres in question.

The indications of the electrodes' positioning are available in the *Positions manual*.

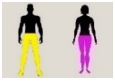
NEMS1 • Warming up (no-medical program)

Program suitable for use before training sessions or competitions, very useful for sports involving maximum effort right from the start. Suitable for all muscle groups.

Session duration: 28 minutes.

Electrodes' positioning: from Figure 01 to 20 of the *Positions manual*.

Intensity: medium; the muscle must work without strain.

N1 Warming up	Total program duration: 28 minutes
	Biceps (Figure 02/15), Triceps (Figure 03/16), Hand extensors (Figure 04), Hand flexors (Figure 05), Deltoid (Figure 06).
	Abdominals (Figure 01/20), Pectoralis major/breast (Figure 07/17), Trapezius (Figure 08), Latissimus dorsi (Figure 09), Glutes (Figure 19).
	Quadriceps/thighs (Figure 11/18), Biceps femoris (Figure 12), Calves (Figure 13) Tibialis anterior (Figure 14).

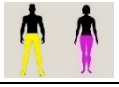
NEMS2 • Resistance (no-medical program)

The Resistance program is used in sports to increase muscle resistance, acting mainly on slow twitch fibres. Program indicated for endurance sports: **marathon runners, cross-country skiers, ironman, etc**. In the event of muscle ache after stimulation, use the NEMS8 (Muscle recovery).

Session duration: 50 minutes.

Electrodes' positioning: from Figure 01 to 20 of the *Positions manual*.

Intensity: during the contraction: if not particularly fit, start at low intensity and then increase gradually. For trained athletes, the intensity used should be enough to produce visible muscle contractions.

N2 Resistance	Total program duration: 50 minutes
	Biceps (Figure 02/15), Triceps (Figure 03/16), Hand extensors (Figure 04), Hand flexors (Figure 05), Deltoid (Figure 06).
	Abdominals (Figure 01/20), Pectoralis major/breast (Figure 07/17), Trapezius (Figure 08), Latissimus dorsi (Figure 09), Glutes (Figure 19).
	Quadriceps/thighs (Figure 11/18), Biceps femoris (Figure 12), Calves (Figure 13) Tibialis anterior (Figure 14).

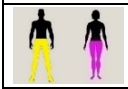
NEMS3 • Resistant strength (no-medical program)

This program is designed to help increase resistance to physical stress, or rather withstand intense effort for a longer amount of time in muscle regions subjected to stimulation. Recommended for sports requiring intense and prolonged effort. In the event of muscle ache after stimulation, use the NEMS8 (Muscle Recovery).
Session duration: 30 minutes.
Electrodes' positioning: from Figure 01 to 20 of the *Positions manual.*
Intensity: during the contraction: start with a low level of intensity and then increase it gradually. For trained athletes, the intensity used should be enough to produce visible muscle contractions.

N3 Resistant strength	**Total program duration: 30 minutes**
	Biceps (Figure 02/15), Triceps (Figure 03/16), Hand extensors (Figure 04), Hand flexors (Figure 05), Deltoid (Figure 06).
	Abdominals (Figure 01/20), Pectoralis major/breast (Figure 07/17), Trapezius (Figure 08), Latissimus dorsi (Figure 09), Glutes (Figure 19).
	Quadriceps/thighs (Figure 11/18), Biceps femoris (Figure 12), Calves (Figure 13) Tibialis anterior (Figure 14).

NEMS4 • Basic strength (no-medical program)
This program is used in sport to develop basic strength, which for definition is the maximum tension that a muscle can exert against constant resistance. In work phase, the contractions alternate with periods of active recovery, training the muscle without strain and improving oxygenation at muscle level. The following basic procedure will enable you to obtain the first results: two sessions per week (for
each muscle region) during the first three weeks at medium/low intensity, three sessions per week over the next three weeks at high intensity. Suspend training for a few days in the event of fatigue and proceed with the NEMS8 (Muscle recovery) program.
Session duration: 30 minutes.
Electrodes' positioning: from Figure 01 to 20 of the *Positions manual.*
Intensity: must be increased gradually treatment by treatment, without overstraining the muscles.

N4 Basic strength	**Total program duration: 30 minutes**
	Biceps (Figure 02/15), Triceps (Figure 03/16), Hand extensors (Figure 04), Hand flexors (Figure 05), Deltoid (Figure 06).

	Abdominals (Figure 01/20), Pectoralis major/breast (Figure 07/17), Trapezius (Figure 08), Latissimus dorsi (Figure 09), Glutes (Figure 19).
	Quadriceps/thighs (Figure 11/18), Biceps femoris (Figure 12), Calves (Figure 13) Tibialis anterior (Figure 14).

NEMS5 • Fast strength (no-medical program)

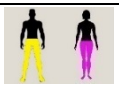
This program is designed to increase speed in fast athletes and develop it in athletes lacking the quality.

The exercise assumes a fast pace and the contraction is short, as is the recovery. It is usually best to complete a three-week basic strength cycle of increasing intensity before using this program. Then continue with three weeks of fast strength program three times a week; the stimulation intensity during contraction should be high, close to the tolerance threshold.

Session duration: 26 minutes.

Electrodes' positioning: Figure from 01 to 20 of the *Positions manual.*

Intensity: gradually increased session after session without overexerting the muscles until reaching the maximum level of tolerance.

N5 Fast strength	**Total program duration: 26 minutes**
	Biceps (Figure 02/15), Triceps (Figure 03/16), Hand extensors (Figure 04), Hand flexors (Figure 05), Deltoid (Figure 06).
	Abdominals (Figure 01/20), Pectoralis major/breast (Figure 07/17), Trapezius (Figure 08), Latissimus dorsi (Figure 09), Glutes (Figure 19)
	Quadriceps/thighs (Figure 11/18), Biceps femoris (Figure 12), Calves (Figure 13) Tibialis anterior (Figure 14).

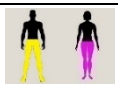
NEMS6 • Explosive strength (no-medical program)

Explosive strength programs increase the explosive power and speed of the muscle mass, with extremely short, strengthening contractions and very long active recovery times to allow the muscle to regain strength. It is usually best to complete a three-week basic strength cycle of increasing intensity, before using this program. Then continue with three weeks of explosive strength twice a week.

Duration: 28 minutes.

Electrodes' positioning: Figure from 01 to 20 of the *Positions manual.*

Intensity: during contraction, the intensity has to be the highest that can be endured in order to obtain maximum muscle exertion whilst involving the greatest number of fibres.

N6 Explosive strength	Total program duration: 28 minutes
	Biceps (Figure 02/15), Triceps (Figure 03/16), Hand extensors (Figure 04), Hand flexors (Figure 05), Deltoid (Figure 06).
	Abdominals (Figure 01/20), Pectoralis major/breast (Figure 07/17), Trapezius (Figure 08), Latissimus dorsi (Figure 09), Glutes (Figure 19)
	Quadriceps/thighs (Figure 11/18), Biceps femoris (Figure 12), Calves (Figure 13) Tibialis anterior (Figure 14).

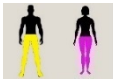
NEMS7 • Deep capillarisation (no-medical program)

This program significantly increases arterial flow in the treated area. Prolonged use of this program develops the intramuscular capillary network of fast-twitch fibers. The effect obtained is an increase in the capacity of fast-twitch fibers to withstand strain over extended periods of time. For an athlete with good resistance, the capillarization program is very useful for recovery after intense aerobic work, before anaerobic work and when training is not possible (due to bad weather or an injury).

Session duration: 30 minutes.

Electrodes' positioning: Figure from 01 to 20 of the *Positions manual.*

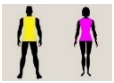
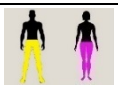
Intensity: medium.

N7 Deep capillarisation	Total program duration: 30 minutes
	Biceps (Figure 02/15), Triceps (Figure 03/16), Hand extensors (Figure 04), Hand flexors (Figure 05), Deltoid (Figure 06).
	Abdominals (Figure 01/20), Pectoralis major/breast (Figure 07/17), Trapezius (Figure 08), Latissimus dorsi (Figure 09), Glutes (Figure 19)
	Quadriceps/thighs (Figure 11/18), Biceps femoris (Figure 12), Calves (Figure 13) Tibialis anterior (Figure 14).

NEMS8 • Muscle recovery (no-medical program)

Can be used for all sports, after competitions or the most demanding training sessions, in particular after long and intense exertion – to be used immediately after exertion. This program helps drainage and winding down,

improving muscle oxygenation and helping to discharge synthetic substances produced during exertion.
Session duration: 15 minutes.
Electrodes' positioning: Figure from 01 to 20 of the *Positions manual* in relation to the area that you wish to stimulate.
Intensity: medium-low, increased during the last 5/10 minutes.

N8 Muscle recovery	**Total program duration: 15 minutes**
	Biceps (Figure 02/15), Triceps (Figure 03/16), Hand extensors (Figure 04), Hand flexors (Figure 05), Deltoid (Figure 06).
	Abdominals (Figure 01/20), Pectoralis major/breast (Figure 07/17), Trapezius (Figure 08), Latissimus dorsi (Figure 09), Glutes (Figure 19)
	Quadriceps/thighs (Figure 11/18), Biceps femoris (Figure 12), Calves (Figure 13) Tibialis anterior (Figure 14).

NEMS9 • Agonist/Antagonist (no-medical program)
The electronic stimulator produces alternated contractions on 2 channels: during the first 4 minutes of warm-up the 4 channels work simultaneously, during the middle work phase (15 minutes) muscle contractions are alternated first between channels 1 and 2 (agonist muscles) and then between channels 3 and 4 (antagonist muscles). The program is designed to restore muscle tone to the quadriceps and its antagonist, the biceps femoris, or to the biceps brachii and the triceps. The work aims at developing strength. With this program, muscle relaxation is obtained by simultaneous stimulation from all 4 channels during the last 5 minutes. Suspend training for a few days in the event of fatigue and proceed with the NEMS8 (Muscle recovery) program.
Session duration: 24 minutes.
Electrodes' positioning: Figure from 02 to 05 and 11-12 of the *Positions manual.*
Intensity: stimulation intensity during the contraction: enough to produce good muscle contraction + voluntary contraction to reduce the sense of discomfort and reach higher intensities. Intensity must be increased gradually treatment by treatment, without overstraining the muscles.

N9 Agonist/antagonist	**Total program duration: 24 minutes**

N9 Agonist/antagonist	Total program duration: 24 minutes
	Biceps (CH1+CH2 - Figure 02) / Triceps (CH3+CH4 – Figure 03), Hand extensors (CH1+CH2 – Figure 04) / Hand flexors (CH3+CH4 - Figure 05).
	Quadriceps (CH1+CH2 – Figure 11) / Biceps femoris (CH3+CH4 - Figure 12).

NEMS10 • Sequential tonic contraction (no-medical program)
This program increases microcirculation within and around the muscle fibres treated creating rhythmic contractions, fostering better drainage and toning. It can also be applied to older people to improve blood and lymphatic circulation in the lower limbs (e.g. applying CH1 to the right calf, CH2 to the right thigh, CH3 to the left calf, CH4 to the left thigh). These programs can be carried out using self-adhesive electrodes.
Session duration: 25 minutes.
Electrodes' positioning: Figure from 01 to 20 of the *Positions manual.*
Intensity: stimulation intensity must be sufficient to produce good muscle contractions during the treatment but not enough to cause any soreness. It stimulates mainly slow-twitch fibres.

NEM11 • Sequential phasic contractions (no-medical program)
This program produces rhythmic contractions with a stimulation frequency typical of fast-twitch fibres. Thanks to the high stimulation frequency, it is suitable for increasing muscle strength sequentially. The programs produce sequential phasic contractions on all 4 channels. Unlike the previous program, this one uses a higher stimulation frequency during the contraction phase and therefore focuses mainly on muscle strength.
Session duration: 25 minutes.
Electrodes' positioning: Figure from 01 to 20 of the *Positions manual.*
Intensity: Stimulation intensity must be sufficient to produce good muscle contractions during the treatment but not enough to cause any soreness.

NEMS12 • Muscle relaxant (no-medical program)
This program is suitable for everyday problems. In some sports applications it is called recovery program. After a long day's work, especially for those who spend many hours standing, this program stimulates microcirculation, eliminating the "heavy legs" symptom (for this application, the electrodes should be placed first on the calves, running the program once; then on the thighs, running the program once again). Session duration: 15 minutes, one phase.

Electrodes' positioning: Figure from 01 to 20 of the *Positions manual*.
Intensity: initial recommended intensity (15÷20mA), so as to produce a good movement of the treated area; gradually increase the intensity until obtaining a massaging effect on the treated area (20÷30mA).

NEMS13 • Deep massage (no-medical program)
This program can be used for all sports, after competitions or the most demanding training sessions, in particular after long and intense exertion – to be used immediately after exertion. It is similar to the previous one: however, it uses lower frequencies with a greater capacity for vascularization. It helps drainage and capillarization, improving muscle oxygenation and helping to discharge synthetic substances produced during exertion.
Session duration: 30 minutes.
Electrodes' positioning: Figure from 01 to 20 of the *Positions Manual*.
Intensity: medium-low, increased during the last 10 min.

NEMS14 • EMS (no-medical program)
This electrostimulation program increases microcirculation within and around the muscle fibres treated creating rhythmic contractions, fostering better drainage and toning.
Session duration: short, 5 minutes.
Electrodes' positioning: Figure from 01 to 20 of the *Positions manual.*
Intensity: enough to produce good muscle contractions during the treatment, but not enough to cause any soreness. It mainly works on slow-twitch fibers.

NEMS15 • 30' Resistance (no-medical program)
This program includes the main training phases of the NEMS 2 program, specially created for trained athletes who want to increase their resistance to physical stress. Also see the indications relating to NEMS 2 program.
Session duration: 30 minutes.

NEMS16 • 30' Resistant strength (no-medical program)
This program includes the main training phases of the NEMS 3 program, specially created for trained athletes who want to enhance their capacity of withstanding intense exertion for longer periods of time. Also see the indications relating to NEMS 3 program.
Session duration: 30 minutes.

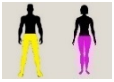
NEMS17 • 20' Basic strength (no-medical program)

This program includes the main training phases of the NEMS 4 program, specially created for trained athletes who want to enhance their basic strength. Also see the indications relating to NEMS 4 program.
Session duration: 20 minutes.

NEMS18 • 20' Fast strength (no-medical program)
This program includes the main training phases of the NEMS 5 program, specially created for trained athletes who want to enhance their speed. Also see the indications relating to NEMS 5 program.
Session duration: 20 minutes.

NEMS19 • 20' Explosive strength (no-medical program)
This program includes the main training phases of the NEMS 6 program, specially created for trained athletes who want to enhance their explosive strength. Also see the indications relating to NEMS 6 program.
Session duration: 20 minutes.

NEMS20 • 20' Hypertrophy (no-medical program)
Program specially created for trained athletes, to build muscle and mass.
Session duration: 20 minutes.
Electrodes' positioning: Figure from 01 to 20 of the *Positions manual*.
Intensity: during the contraction should be the maximum bearable.

N20 20' Hypertrophy	**Total program duration: 20 minutes**
	Biceps (Figure 02/15), Triceps (Figure 03/16), Hand extensors (Figure 04), Hand flexors (Figure 05), Deltoid (Figure 06).
	Abdominals (Figure 01/20), Pectoralis major/breast (Figure 07/17), Trapezius (Figure 08), Latissimus dorsi (Figure 09), Glutes (Figure 19)
	Quadriceps/thighs (Figure 11/18), Biceps femoris (Figure 12), Calves (Figure 13) Tibialis anterior (Figure 14).

Treatment programs for muscle strength

Muscle	**Figure**	**Weekly training program**				**No. of weeks**
		Day 1	**Day 3**	**Day 5**	**Day 7**	
Abdominal muscles – basic strength	1/20	NEMS4	NEMS8+ NEMS4	NEMS4	NEMS7	5
Pectoral	7/17	NEMS4	NEMS8+	NEMS4	NEMS7	5

Muscle	Figure	Weekly training program				No. of weeks
		Day 1	Day 3	Day 5	Day 7	
muscles – basic strength			NEMS4			
Quadriceps – basic strength	11/18	NEMS4	NEMS8+ NEMS4	NEMS4	NEMS7	5
Glutes – basic strength	19	NEMS4	NEMS8+ NEMS4	NEMS4	NEMS7	5
Arm biceps basic strength	2/15	NEMS4	NEMS8+ NEMS4	NEMS4	NEMS7	6
Arm triceps basic strength	3/16	NEMS4	NEMS8+ NEMS4	NEMS4	NEMS7	6

The indications of the electrodes' positioning are available in the *Positions manual*.

ATTENTION: moderat eintensity during the first two weeks, increasing it over the following weeks.

Programmi MEM

These programs shoul be used only by medical or expert staff who followed the company's training courses.

Prog.	Medical progr. Yes/NO	Description	PHASE 1
M1-M5	Yes	TENS Free memories	Tot time 1-90 min Frequency 1-200 Hz Pulse width 20-250 μs
M6-M10	No	NEMS Free memories	Tot time 1-90 min Contraction frequency 10-120 Hz Contraction time 1-10 sec Recovery frequency 1-10 Hz Recovery time 0-30 sec Ramp 0-5 sec Pulse width 50-450μs
M11-M12	No	NEMS Alternated	Tot time 1-90 min

Prog.	Medical progr. Yes/NO	Description	PHASE 1
		free memories	Contraction frequency 10-120 Hz Contraction time 1-10 sec Recovery frequency 1-10 Hz Recovery time 0-30 sec Ramp 0-5 sec Pulse width 50-450µs
M13	No	Battery test	

MEMS1-MEMS5 • TENS Free memories (medical program)
Free memories for TENS analgesic treatment.

MEMS6-MEMS10 • NEMS Free memories (no- medical program)
Free memories for muscle recovery and/or training.

MEMS11-MEMS12 • NEMS Alternated free memories (no-medical program)
Free memories for muscle recovery and/or training with alternated signals on 4 chanels.

MEMS13 • Battery test program (no-medical program)
Program for battery calibration; to be used only by the manufacturer.

BEAUTY programs

Prg	Medical Prog. Yes/No	Description	PHASE 1	PHASE 2	PHASE 3	PHASE 4
B1	No	Firming up	Total time 5min Frequency 6Hz Adjustable pulse width	Total time 10min (13s 6Hz + 7s 30Hz)	Total time 10min (13s 6Hz + 7s 30Hz)	Total time 5min Frequency 3 Hz
B2	No	Toning up	Total time 5min Frequency 6Hz Adjustable pulse width	Total time 12min (13s 8Hz + 7s 45Hz)	Total time 12min (13s 8Hz + 7s 45Hz)	Total time 5min Frequency 3 Hz
B3	No	Definition	Total time	Total time	Total time	Total

Prg	Medical Prog. Yes/No	Description	PHASE 1	PHASE 2	PHASE 3	PHASE 4
			8min Frequency 6Hz Adjustable pulse width	10min (13s 6Hz + 7s 50Hz)	10min (14s 4Hz + 6s 70Hz)	time 5min Frequen-cy 3Hz
B4	No	Modelling	Total time 30min (4min 8Hz + 1min 3Hz) Adjustable pulse width			
B5	No	Microlifting	Total time 15min Frequency 12Hz Pulse width 100µs			
B6	No	Lipolysis abdomen	Total time 5min Frequency 6Hz Pulse width 250µs	Total time 20min Contr. alternate (6s 8Hz CH1/2/3/4) + (7s 40Hz CH1/2) + (7s 40Hz CH3/4), 250µs	Total time 5min Frequency 3Hz Pulse width 250µs	
B7	No	Lipolysis thighs	Total time 5min Frequency 6Hz Pulse width 300µs	Total time 20min Contr. alternate (6s 8Hz CH1/2/3/4) + (7s 40Hz CH1/2) +	Total time 5min Frequency 3Hz Pulse width 300µs	

Prg	Medical Prog. Yes/No	Description	PHASE 1	PHASE 2	PHASE 3	PHASE 4
				(7s 40Hz CH3/4), 300µs		
B8	No	Lipolysis glutes e hips	Total time 5min Frequency 6Hz Pulse width 250µs	Total time 20min Contr. alternate (6s 8Hz CH1/2/3/4) + (7s 40Hz CH1/2) + (7s 40Hz CH3/4), 250µs	Total time5min Frequenza 3Hz Pulse width 250µs	
B9	No	Lipolysis arms	Total time 5min Frequency 6Hz Pulse width 200µs	Total time 20min Contr. alternate (6s 8Hz CH1/2/3/4) + (7s 40Hz CH1/2) + (7s 40Hz CH3/4), 200µs	Total time 5min Frequency 3Hz Pulse width 200µs	
B10	No	Tissue elasticity	Total time 10min Frequency 4Hz Pulse width 250µs	Total time 10min (10s 5Hz–250µs + 5s 20Hz–250µs)		
B11	No	Capillarisation	Total time 20min Frequency 12Hz Pulse width 250µs			
B12	No	Heaviness in	Total time	Total time		

Prg	Medical Prog. Yes/No	Description	PHASE 1	PHASE 2	PHASE 3	PHASE 4
		legs	10min Frequency 3Hz Pulse width 250µs	20min Frequency 20Hz Pulse width 250µs		
B13	No	Microlifting face with handpiece	Total time 15min Frequency 25Hz Pulse width 100µs			
B14	No	Microlifting seno with handpiece	Total time 15min Frequency 18Hz Pulse width 100µs			
B15	No	Microlifting décolleté with handpiece	Total time 15min Frequency 50Hz Pulse width 100µs			
B16	No	Face wrinkles with handpiece	Total time 15min Frequency 25Hz Pulse width 100us			
B17	No	Forehead wrinkles with handpiece	Total time 15min Frequency 25Hz Pulse width 100µs			
B18	No	Collagen	Total time 15min (15s 12Hz–150µs +			

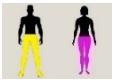
Prg	Medical Prog. Yes/No	Description	PHASE 1	PHASE 2	PHASE 3	PHASE 4
			15s 6Hz–150µs)			

The indications of the electrodes' positioning are available in the *Positions manual*.

BEAUTY1 • Firming up (no-medical program)
Indicated for firming up muscles in the arms, the bust, or the legs; working mainly on slow-twitch fibres. Suitable for people who have never done any physical activity or have been inactive for a long period of time. Method of use:

1. identify the muscle to be treated. To obtain good results it is best to treat just a few muscles at a time and complete the process described below;
2. place the electrodes as shown in the Figures (see below);
3. increase the intensity until the pulse can be felt (use a low intensity for the first session so that you can understand how the machine works);
4. during the program and over the next few days the intensity should be increased gradually without causing pain;
5. during the contraction generated by the machine, contract the muscle voluntarily.

A cycle of 15/20 applications must be completed before the first results can be seen; one application for each muscle every two days with a day of rest in between. You work on pairs of muscles, for example thighs and abdominal muscles, treating one set one day and the other the next day. Working on too many muscles at the same time is not recommended. **Constantly little by little!**
Session duration: 30 minutes.
Electrodes' positioning: Figures from 01 to 20, according to the interested muscles, of the *Positions manual*.
Intensity: it depends on the sensibility of the patient, it is recommended starting at low intensity levels and then gradually increase the intensity, never reaching or exceeding the pain threshold.

B1 Firming up	Total program duration: 30 minutes
	Biceps (Figure 02/15), Triceps (Figure 03/16), Hand extensors (Figure 04), Hand flexors (Figure 05), Deltoid (Figure 06).
	Abdominals (Figure 01/20), Pectoralis major/breast (Figure 07/17), Trapezius (Figure 08), Latissimus dorsi (Figure 09), Glutes (Figure 19)
	Quadriceps/thighs (Figure 11/18), Biceps femoris (Figure 12), Calves (Figure 13) Tibialis anterior (Figure 14).

BEAUTY2 • Toning up (no-medical program)

Indicated for toning up muscles in the arms, the bust, or the legs; working mainly on fast-twitch fibres It is recommended to those who already practice moderate physical activity. Method of use:

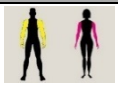
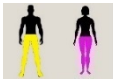
1. identify the muscle to be treated. To obtain good results it is best to treat just a few muscles at a time and complete the process described below;
2. position the electrodes as shown in the Figures (see reference below);
3. increase the intensity until the impulse can be felt (use a low intensity for the first session to help you to understand how the device works);
4. during the program and over the next few days, the intensity should be gradually increased so that muscle contractions are not painful;
5. during contraction generated by the unit, contract the muscle voluntarily.

A cycle of 15/20 applications must be completed before the first results can be seen; it is recommended one application for each muscle every two days with a day of rest in between. It is possible to work on pairs of muscles, for example thighs and abdominal muscles, treating one set one day and the other the next day. Working on too many muscles at the same time is not recommended. **A little, but constantly!**

Session duration: 34 minutes.

Electrodes' positioning: Figures from 01 to 20, according to the interested muscles, of the *Positions manual*.

Intensity: it depends on the sensibility of the patient, it is recommended starting at low intensity levels and then gradually increase the intensity, never reaching or exceeding the pain threshold.

B2 Toning up	Total program duration: 34 minutes
	Biceps (Figure 02/15), Triceps (Figure 03/16), Hand extensors (Figure 04), Hand flexors (Figure 05), Deltoid (Figure 06).
	Abdominals (Figure 01/20), Pectoralis major/breast (Figure 07/17), Trapezius (Figure 08), Latissimus dorsi (Figure 09), Glutes (Figure 19)
	Quadriceps/thighs (Figure 11/18), Biceps femoris (Figure 12), Calves (Figure 13) Tibialis anterior (Figure 14).

BEAUTY3 • Definition (no-medical program)

Indicated for defining muscles in the arms, the bust, or the legs; working on fast-twitch fibres. It is recommended to those who already practice good physical activity and wish to define their muscles in greater detail. Method of use:

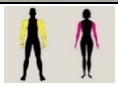
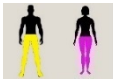
1. identify the muscle to be treated. To obtain good results it is best to treat just a few muscles at a time and complete the process described below;
2. postion the electrodes as shown in the Figures (see reference below);
3. increase the intensity until the impulse can be felt (use a low intensity for the first session to help you to understand how the device works);
4. during the program and over the next few days, the intensity should be gradually increased so that muscle contractions are not painful;
5. during contraction generated by the unit, contract the muscle voluntarily.

A cycle of 15/20 applications must be completed before the first results can be seen; it is recommended one application for each muscle every two days with a day of rest in between. It is possible to work on pairs of muscles, for example thighs and abdominal muscles, treating one set one day and the other the next day. Working on too many muscles at the same time is not recommended.

Session duration: 25 minutes.

Electrodes' positioning: Figures from 01 to 20, according to the interested muscles, of the *Positions manual*.

Intensity: it depends on the sensibility of the patient, it is recommended starting at low intensity levels and then gradually increase the intensity, never reaching or exceeding the pain threshold.

B3 Definition	Total program duration: 25 minutes
	Biceps (Figure 02/15), Triceps (Figure 03/16), Hand extensors (Figure 04), Hand flexors (Figure 05), Deltoid (Figure 06).
	Abdominals (Figure 01/20), Pectoralis major/breast (Figure 07/17), Trapezius (Figure 08), Latissimus dorsi (Figure 09), Glutes (Figure 19)
	Quadriceps/thighs (Figure 11/18), Biceps femoris (Figure 12), Calves (Figure 13) Tibialis anterior (Figure 14).

BEAUTY4 • Modelling (no-medical program)

This program helps mobilise fat in areas where it tends to accumulate thanks to a combination of capillarising and toning pulses by using a medium intensity. . It is recommended a daily application.

Session duration: 30 minutes, one phase.

Electrodes' positioning: refer to phots 01 to 20 and Figure 22 and 23 of the *Positions manual*.

Intensity: medium.

BEAUTY5 • Microlifting (no-medical program)

The following program , is used to tone facial muscles using a special pulse which improves both the appearance and the dynamism of the facial muscles.

Session duration:15 minutes.

Electrodes' positioning: indicated for Figure 24 of the *Positions manual*. N.B. keep a minimum distance of 3 cm between the electrode and the eyeball.

IMPORTANT: take care when adjusting the intensity as facial muscles are particularly sensitive; intensity should be increased gradually, starting with a very low level of stimulation (just above the threshold of perception) and increasing with care until reaching a good level of stimulation, represented by good muscle activation.

IMPORTANT: the intensity level should not be so as to cause discomfort! The equation "more pain = more benefit" is completely misleading and counterproductive.

Great and significant results can be obtained only through consistency and patience.

BEAUTY6/7/8/9 • Lipolysis abdome (6), thighs (7), glutes and hips (8), arms (9) (no-medical program)

Program widely used in beauty treatments, suitable for areas with accumulations of fat, works by increasing blood circulation and favouring

lymphatic activity. This program increases local metabolism, having a trophic action; helps reducing the annoying "orange peel" appearance. All supported by a low-calorie diet. It can be used daily.
The program produces, in the middle work phase of work, sequential tonic contractions (first CH1/CH2 and then CH3/CH4), reproducing the typical effect of electronic lymphatic drainage. Therefore, the electrodes should be applied as follows: CH1/CH2 at the ends of the limbs (e.g. calf or forearm) and CH3/CH4 in the upper part (e.g. thigh or biceps brachii).
Session duration: 30 minutes.
Electrodes' positioning:

- hand extensors CH1/hand flexors CH2 – Figure 04/05 of the *Positions manual* with 2 electrodes.
- Biceps brachii CH3/Triceps CH4 – Figure 02/03 of the *Positions manual* with 2 electrodes.
- Calves CH1/tibial anterior CH2 – Figure 13/14 of the *Positions manual* with 2 electrodes.
- Quadriceps CH3/biceps femoris CH4 – Figure 11/12 of the *Positions manual* with 2 electrodes.

Intensity: enough to produce good muscle contractions (not painful) in the stimulated areas (15÷30mA).

BEAUTY10 • Tissue elasticity (no-medical program)
Program consisting of two phases that stimulates surface muscle fibres. The frequencies used facilitate the removal of substances accumulated on the surface of the skin, improving its dynamic appearance.
Session duration: 30 minutes.
Electrodes' positioning: place the electrodes to form a square around the area to be treated as show in *Figure 1*.
Intensity: should be set to produce "surface vibrations".

BEAUTY11 • Capillarisation (no-medical program)
The capillarisation program significantly increases arterial flow in the area treated. The capillarisation program is very useful for recovering after intense aerobic work (toning up training) and improves local microcirculation.
Session duration: 20 minutes.
Electrodes' positioning: refer to Figure 01 to 20 of the *Positions manaul*.
Intensity: medium.

BEAUTY12 • Heaviness in legs (no-medical program)

This program is used to improve blood flow and muscle oxygenation speeding up the elimination of lactic acid (produced after anaerobic sessions for muscle definition), reducing soreness and the risk of contractures. Thanks to this program the muscle treated will be ready for a new training session or competition much more quickly.
Session duration: 30 minutes.
Electrodes' positioning: from Figure 01 to 20 of the *Positions manual*.
Intensity: initial medium-low, so as to produce a good movement of the treated area; gradually increase the intensity until obtaining a strong massaging effect on the treated area.

BEAUTY13/14/15 • Microlifting face/breast/cleavage with handpiece (no-medical program)

The following program is used to tone up the treated muscles, using a special pulse which improves both the appearance and the dynamism of the muscles.
We recommend that you use the handpiece for stimulation (optional): in this case, you need to use a neutral conductive gel to enhance the stimulating action of the handpiece. Always keep the handpiece in contact with the skin.
Session duration: 15 minutes.
Electrodes' positioning: based on the treated area. N.B. keep a minimum distance of 3 cm between the electrode and the eyeball.

IMPORTANT: take care when adjusting the intensity as facial muscles are particularly sensitive; intensity should be increased gradually, starting with a very low level of stimulation (for example 3÷5mA) and increasing with care until reaching a good level of stimulation, represented by good muscle activation.

IMPORTANT: the intensity level should not be so as to cause discomfort! The equation *more pain = more benefit* is completely misleading and counterproductive.

Great and significant results can be obtained only through consistency and patience.

BEAUTY16/17 • Face/forehead wrinkles with handpiece (no-medical program)

The following program is used to relax the facial muscles and removes any skin imperfections, using a special pulse which improves both the appearance and the dynamism of the muscles.
We recommend that you use the handpiece for stimulation (optional): in this case, you need to use a neutral conductive gel to enhance the stimulating

action of the handpiece (we recommend that you use a gel with collagen stimulating effect). Always keep the handpiece in contact with the skin.
Session duration: 15 minutes, single phase.
Electrodes' positioning: based on the treated area. N.B. keep a minimum distance of 3 cm between the electrode and the eyeball.

IMPORTANT: take care when adjusting the intensity as facial muscles are particularly sensitive; intensity should be increased gradually, starting with a very low level of stimulation (for example 3÷5mA) and increasing with care until reaching a good level of stimulation, represented by good muscle activation.

IMPORTANT: the intensity level should not be so as to cause discomfort! The equation *more pain = more benefit* is completely misleading and counterproductive.

Great and significant results can be obtained only through consistency and patience.

BEAUTY 18 • Collagen (no-medical program)
The following program is particularly to stimulate the superficial layers of skin, having a rejuvenating, relaxing effect.
Session duration: 15 minutes, single phase.
Electrodes' positioning: based on the treated area. N.B. keep a minimum distance of 3 cm between the electrode and the eyeball.

IMPORTANT: take care when adjusting the intensity as facial muscles are particularly sensitive; intensity should be increased gradually, starting with a very low level of stimulation (for example 3÷5mA) and increasing with care until reaching a good level of stimulation, represented by good muscle activation.

IMPORTANT: the intensity level should not be so as to cause discomfort! The equation *more pain = more benefit* is completely misleading and counterproductive.

Great and significant results can be obtained only through consistency and patience.

Treatment plans for muscle firming and lipolysis

Muscle	Figure	Weekly training program				No. of weeks
		Day1	Day3	Day5	Day7	
Abdominal muscles - firming up	1/20	BEAUTY 11	BEAUTY 1	BEAUTY11+ BEAUTY1	BEAUTY 1	6

Muscle	Figure	Weekly training program				No. of weeks
		Day1	Day3	Day5	Day7	
Abdominal muscles – post partum	20	BEAUTY 11	BEAUTY 1	BEAUTY11	BEAUTY 1	8
Pectoral muscles - firming up	7/17	BEAUTY 11	BEAUTY 1	BEAUTY1	BEAUTY 1	6
Thighs - firming up	11/18	BEAUTY 11	BEAUTY 1	BEAUTY11+ BEAUTY1	BEAUTY 1	5
Glutes - firming up	19	BEAUTY 11	BEAUTY 2	BEAUTY11+ BEAUTY1	BEAUTY 2	5
Arms biceps firming up	2/15	BEAUTY 11	BEAUTY 1	BEAUTY11+ BEAUTY1	BEAUTY 1	5
Arms triceps firming up	3/16	BEAUTY 11	BEAUTY 1	BEAUTY11+ BEAUTY1	BEAUTY 1	5
Lipolysis abdomen	20	BEAUTY 6	BEAUTY 11	BEAUTY6	BEAUTY 1	6
Lipolysis thighs	21	BEAUTY 7	BEAUTY 11	BEAUTY7	BEAUTY 1	6
Lipolysis glutes	19	BEAUTY 8	BEAUTY 11	BEAUTY8	BEAUTY 1	6
Lipolysis hips	23 (CH1 on right hip CH2 on left hip sx)	BEAUTY 8	BEAUTY 11	BEAUTY8	BEAUTY 1	6
Lipolysis arms	15+16 (4 ch1 electro-des on right arm and 4 ch2 electro-des on left arm)	BEAUTY 9	BEAUTY 11	BEAUTY9	BEAUTY 1	6

The indications of the electrodes' positioning are available in the *Positions manual*.

ATTENTION: moderate intensity during the first two weeks, increasing it over the following weeks.

URO programs

All URO programs start with an active recovery pulse (low stimulation frequency) and then switch automatically to contraction pulses: increase the intensity gradually over the first 20/30 seconds of the program so as to set the recovery and contraction pulses according to the patient's sensitivity.

Prog	Medical Prog. Yes/No	Description	PHASE 1
U1	Yes	Stress incontinence	Total time 20min Frequency 6s 3Hz + 4s 40Hz Pulse width 180µs
U2	Yes	Stress incontinence	Total time 20min Frequency 9s 3Hz + 6s 45Hz Pulse width 180µs
U3	Yes	Stress incontinence	Total time 20min Frequency 12s 3Hz + 8s 50Hz Pulse width 180µs
U4	Yes	Urge incontinence	Total time 25min Frequency 8Hz Pulse width 180µs
U5	Yes	Urge incontinence	Total time 26min Frequency 10Hz Pulse width 180µs
U6	Yes	Urge incontinence	Total time 27min Frequency 12Hz Pulse width 180µs
U7	Yes	Mixed incontinence	Total time 25min Frequency 6s 3Hz + 4s 20Hz Pulse width 180µs
U8	Yes	Mixed incontinence	Total time 25min Frequency 9s 3Hz + 6s 22Hz Pulse width 180µs
U9	Yes	Mixed incontinence	Total time 25min Frequency 12s 3Hz + 8s 25Hz Pulse width 180µs

URO1-2-3 • Stress incontinence (medical program)

Programs suitable for the treatment of stress urinary incontinence in women and faecal incontinence in men (only U1), designed to strengthen and tone up the perineal muscles and the muscles of the pelvic floor which have lost force and contractile capacity, or the sphincter muscles with weak contractile capacity. The stimulation should be as strong as possible without being painful. In addition, it helps if the patient performs voluntary contractions during the stimulation phase. To be associated with appropriate training exercises for muscle strengthening. Applications: 3-5 sessions per week. Use the vaginal probe for the treatment of urinary incontinence in women and the anal probe for fecal incontinence in women and in men.

URO4-5-6 • Urge incontinence (medical program)
Program suitable for the treatment of urge urinary incontinence in women and faecal incontinence in men (only U4). Low-frequency stimulation which favours bladder relaxation in case of hyperactivity. The stimulation should be as strong as possible without being painful. In addition, it helps if the patient performs voluntary contractions during the stimulation phase. Applications: 2-5 sessions per week. Use the vaginal probe for the treatment of urinary incontinence in women and the anal probe for fecal incontinence in women and in men.

URO7-8-9 • Mixed incontinence (medical program)
Program suitable for the treatment of mixed urinary incontinence in women and faecal incontinence in men (only U7). The stimulation should be as strong as possible without being painful. In addition, it helps if the patient performs voluntary contractions during the stimulation phase. To be associated with appropriate training exercises for muscle strengthening. Applications: 3-5 sessions per week. Use the vaginal probe for the treatment of urinary incontinence in women and the anal probe for fecal incontinence in women and in men.

List and characteristics of the programs available in multi patient mode

All programs consist of a single work phase

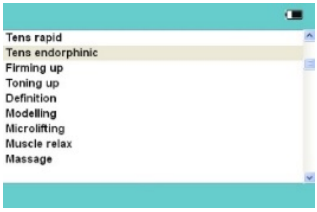
Prg.	Medical Prog. Yes/No	Description	Phase
1	Yes	Tens rapid	Total time 30 min, Frequency 90 Hz Pulse width 50µs

Prg.	Medical Prog. Yes/No	Description	Phase
2	Yes	Tens endorphinic	Total time 30 min, Frequency 1 Hz Pulse width 200 µs
3	No	Firming up	Total time 30 min (10 sec 3 Hz + 5 sec 30 Hz – 250 µs)
4	No	Toning up	Total time 30 min (10 sec 3 Hz + 5 sec 30 Hz – 250µs)
5	No	Definition	Total time 30 min (10 sec 3 Hz + 5 sec 70 Hz – 250 µs)
6	No	Modelling	Total time 30 min (4 min 8 Hz + 3 Hz repeat – 250 µs)
7	No	Microlifting	Total time 30 min, Frequency 12 Hz Pulse width 100 µs
8	No	Muscle relaxant	Total time 30 min, Frequency 3 Hz Pulse width 250 µs
9	No	Massage	Total time 30 min, Frequency 4 Hz Pulse width 250 µs
10	No	Deep capillarisation	Total time 30 min (4 min 8 Hz + 3 Hz repeat – 250 µs)
11	Yes	Anti-inflammatory	Total time 30 min, Frequency 120 Hz Pulse width 40 µs
12	No	Resistance	Total time 30 min (18 sec 8Hz + 2 sec 2Hz + 10 sec 18Hz – 250 µs)
13	No	Resistant strength	Total time 20 min (20 sec 6Hz + 10 sec 30Hz – 250 µs)
14	No	Basic strength	Total time 20 min (13 sec 6Hz + 7 sec 50Hz – 250 µs)
15	No	Fast strength	Total time 20 min (14 sec 6Hz + 6 sec 70Hz – 250 µs)
16	No	Explosive strength	Total time 20 min (24 sec 2Hz + 6 sec 90Hz – 250 µs)
17	No	Hypertrophy	Total time 15 min (5 sec 3Hz + 5 sec 100Hz – 250 µs)
18	No	Face microlifting with handpiece	Time 15 min Frequency 25Hz Pulse width 100 µs
19	No	Breast microlifting with handpiece	Time 15 min Frequency 18Hz Pulse width 100 µs
20	No	Cleavage microlifting with handpiece	Time 15 min Frequency 50Hz Pulse width 100 µs
21	No	Facial wrinkles with	Time 15 min Frequency 25Hz Pulse

Prg.	Medical Prog. Yes/No	Description	Phase
		handpiece	width 100 µs
22	No	Forehead wrinkles with handpiece	Time 15 min Frequency 25Hz Pulse width 100 µs

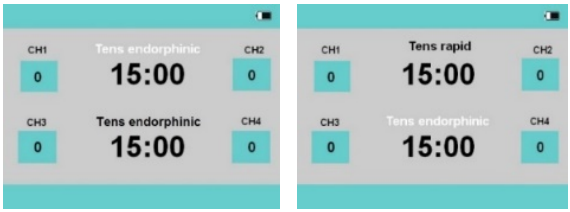
In the MULTI PATIENT mode, you can set two different programs (chosen from the list of 22 programs) on the 4 channels: channels 1 and 2 will operate on a program and channels 3 and 4 on the other program.
This function is particularly useful when you have to treat two patients in the same session but also when you need to use two different programs on a single patient, on two different areas of his body or for two different disorders.
From the main menu, select the relevant icon and confirm by pressing the key [OK]:

On the display will appear the main screen of the selected program. Browse through the list using the selection keys [▼] and [▲] and confirm your selection by pressing [OK]:



The device will show the following screen, in which both programs (CH1+CH2) and (CH3+CH4) are equal and not highlighted (black text).

Use the selection keys [▼] and [▲] to select the program you want to change (the name of the program will turn white) and you will be able to select a different program from the list. The status bar at the bottom of the screen shows the channels (CH1+CH2) or (CH3+CH4) to which the program being changed belongs.



Select the desired program and confirm by pressing [OK]. Start the therapy increasing the intensity on the 4 channels.

TENS Rapid (medical program)

Refer to the specifications and instructions for use reported in this manual for TENS1 program.

Session duration: 30 minutes.

Electrodes' positioning: form a square over the painful area, as shown in *Figure1*.

TENS Endorphinic (medical program)

Refer to the specifications and instructions for use reported in this manual for TENS 2 program.

Session duration: 30 minutes.

Electrodes' positioning: form a square over the painful area, as shown in *Figure1*.

Firming up (no-medical program)

Refer to the specifications and instructions for use reported in this manual for BEAUTY 1 program.

Session duration: 30 minutes.

Toning up (no-medical program)

Refer to the specifications and instructions for use reported in this manual for BEAUTY 2 program.
Session duration: 30 minutes.

Definition (no-medical program)

Refer to the specifications and instructions for use reported in this manual for BEAUTY 3 program.
Session duration: 30 minutes.

Modelling (no-medical program)

Refer to the specifications and instructions for use reported in this manual for BEAUTY 4 program.
Session duration: 30 minutes.

Microlifting (no-medical program)

Refer to the specifications and instructions for use reported in this manual for BEAUTY 5 program.
Session duration: 30 minutes.

Muscle relxant (no-medical program)

Refer to the specifications and instructions for use reported in this manual for NEMS12 program.
Session duration: 30 minutes.

Massage (no-medical program)

Refer to the specifications and instructions for use reported in this manual for NEMS13 program.
Session duration: 30 minutes.

Deep capillarisation (no-medical program)

Refer to the specifications and instructions for use reported in this manual for NEMS7 program.
Session duration: 30 minutes.

Anti-inflammatory (programma medicale)

Refer to the specifications and instructions for use reported in this manual for TENS4 program.
Session duration: 30 minutes.

Resistance (no-medical program)

Refer to the specifications and instructions for use reported in this manual for NEMS2 program.
Session duration: 30 minutes.

Resistance strength (no-medical program)

Refer to the specifications and instructions for use reported in this manual for NEMS3 program.
Session duration: 20 minutes.

Basic strength (no-medical program)
Refer to the specifications and instructions for use reported in this manual for NEMS4 program.
Session duration: 20 minutes.
Fast strength (no-medical program)
Refer to the specifications and instructions for use reported in this manual for NEMS5 program.
Session duration: 20 minutes.
Explosive strength (no-medical program)
Refer to the specifications and instructions for use reported in this manual for NEMS6 program.
Session duration: 20 minutes.
Hypertrophy (no-medical program)
Refer to the specifications and instructions for use reported in this manual for NEMS20 program.
Session duration: 15 minutes.
Microlifting face/breast/cleavage with handpiece (no-medical program)
Refer to the specifications and instructions for use reported in this manual for BEAUTY13/14/15 programs.
Session duration: 15 minutes.
Face/forehead wrinkles with handpiece (no-medical program)
Refer to the specifications and instructions for use reported in this manual for BEAUTY16/17 programs.
Session duration: 15 minutes.

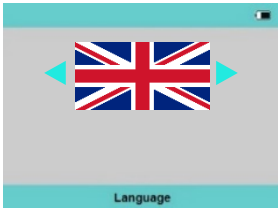
Last 10 programs used

The device can store the last 10 programs used and you can quickly select them from the main menu by enabling the function LAST 10 PROGRAMS.
Select the relevant icon from the main menu using the selection keys [◀] and [▶], and confirm by pressing [OK]; on the screen will appear a list with the last 10 programs used.
Scroll through the list using the selection keys [▼] and [▲], and confirm your choice by pressing [OK]

Selecting the language and restoring the device to factory settings

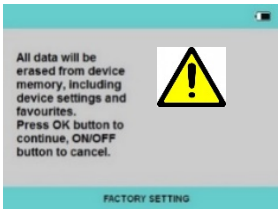
You can set the language of the device (ITA, ENG, FRA, GER, ESP).
Turn on the device using the key [⏻] and press the keys [⏻]+[OK] at the same time; on the display will appear the following selection screen:

Press [OK] to set the language; on the display will appear the following screen (English):



Use the selection keys [◀] and [▶] to select the desired language (ITA, FRA, ESP, GER). Confirm the selection by pressing [OK].
The device will restart using the desired language.

To restore the device to factory settings, resetting all user set parameters (MEM programs settings, language settings, last 10 programs used etc.), open the selection screen by pressing the [⏻]+[OK] keys at the same time, press [▼] to select “Reset to factory settings” and confirm by pressing [OK]. The device will show the following screen:



Maintenance

If used following the instructions given in this user guide, the equipment does not require any particular kind of maintenance.

CLEANLINESS

Clean the device using only a dry soft cloth. Resistant strains can be removed using a sponge soaked in solution of water and alcohol.

Device not subject to sterilization.

TRANSPORTATION AND STORAGE

Precaution for the transportation

There is no particular precaution to be taken during transportation of the device, since T-ONE REHAB is a portable device. In any case it is recommended to store T-ONE REHAB and its accessories in the supplied carrying bag after each treatment. Protect the device from high temperature, direct daylight and liquids. Store the device in a cool, well-ventilated place. Do not store heavy objects on the device.

Precaution for the storage

The performances of the equipment are granted if it is stored according to the following conditions:

During operation

Temperature	from +5 to +40°C
Relative humidity	from 30 to 75%
Pressure	from 700 to 1060 hPa

Inside the supplied carrying bag:

Temperature	from -10 to +55°C
Relative humidity	from 10 to 90%
Pressure	from 700 to 1060 hPa

Troubleshooting

In case of any malfunctions or problems when using T-ONE REHAB, see the indications below:

- **T-ONE REHAB does not start and/or the display does not turn on.** Check the batteries level and replace them if exhausted (see chapter "Replacing the batteries"). Make sure the batteries are correctly inserted. If the problem persists, contact the manufacturer.
- **T-ONE REHAB does not transmit electrical pulses**. Make sure you have connected the cables with the electrodes and check if the plastic cover has been removed from the electrodes. Make sure the cables are correctly connected (connector properly inserted in the device). Make sure the cables and electrodes are not damaged or faulty. If the problem persists, contact the manufacturer.
- **T-ONE REHAB transmits weak and/or intermittent pulses.** Check the condition of the cables and of the electrodes and replace them if necessary. If the problem persists, contact the manufacturer.
- **T-ONE REHAB transmits painful pulses and/or the stimulation is uncomfortable.** Check the position of the electrodes and their condition. Use electrodes of appropriate size (see the positions manual). Decrease the intensity. If the problem persists, contact the manufacturer.
- **The stimulation is intermittent.** Check the position of the electrodes. If the problem persists, contact the manufacturer.
- **Skin redness and/or intense pain.** Reposition the electrodes, if the pain persists stop the treatment immediately and consult your doctor. Make sure that the electrodes are positioned properly and adhere firmly to the skin. Make sure that the electrodes are in perfect state and clean and replace them with new ones if worn out.
- **Stimulation stops during the session.** Check the correct connection of the cables and of the electrodes, as well as their condition. If necessary, replace the electrodes and/or cables. If the problem persists, contact the manufacturer.
- **T-ONE REHAB shuts down during operation.** Replace the batteries and start the treatment again. If the problem persists, contact the manufacturer.
- **The intensity cannot be adjusted or T-ONE REHAB does not apply the set value and resets itself**. Replace the batteries and start the treatment again. If the problem persists, contact the manufacturer.

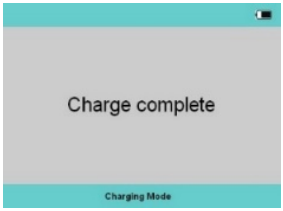
- **On the display appears "EEPROM ERROR".** Reset the device following the instructions in the paragraph "Selecting the language and restoring the device to factory settings".

Charging the batteries

If the batteries are exhausted or low, the display will show the icon  . In this case you might not be able to start the session or you might not be able to complete it.
To recharge the batteries, please follow the following simple steps:

- Make sure the device is off or turn it off by pressing [OK];
- Connect the battery charger to the device and then connect the battery charger to the mains;
- The device will display a screen with the battery icon flashing in the top right. The word "Charging" will appear on the screen.

The charging ends automatically after 5 hours and the display will show the following screen for about 3 minutes (after which the display will shut down):



Carry out two charge cycles of 5 hours (maximum time set for recharging) to obtain a full charge of the batteries, as at least 8/10 hours are required. Once the battery is charged, disconnect the battery charger from the mains and from the device and place it in the carrying bag.

WARNING: at the end of the charge wait at least 30 minutes before switching on the device; in order to allow the cooling of the battery pack, overheated during charging and the closure of the integrated safety system that prevents the device from turning on.

For a good maintenance of the battery it is suggested to always recharge the device every 6 treatments.

WARNING: in case of prolonged inactivity it may be necessary to perform some charging cycles to restore the normal capacity of the battery.

Replacing the batteries

To replace the battery, proceed as follows:

- Turn off the device by pressing [⏻].
- Open the rear battery compartment by removing the 2 screws that hold the cover, use a cross-head screwdriver.
- Disconnect the connection cable and remove the battery
- Connect the new battery.
- Close the battery compartment and fasten the cover with the two screws.

We recommended that you remove the battery in case of prolonged periods of inactivity.
The battery should be handled by adults only.
Keep out of reach of children.
Only use batteries that are equivalent to the originals and supplied by the Manufacturer.
Dispose of the battery in accordance with the regulations in force (WEEE).

ATTENTION: the battery service life depends on the number of charge/discharge cycles to which it is subjected. Take the following precautions to increase the battery's service life:

- Recharge the battery once a month, even when not using the device;
- Discharge the battery as much as possible during use;
- Use only the original charger supplied with the device or another one purchased from the manufacturer /distributor. Do not open and do not tamper with the charger.

Disposal

T-ONE REHAB was designed and engineered to have minimal negative environmental impact, in consideration of its performance and safety requirements, following the disposition given by the European Directive 2012/19/EU, regarding the waste of electrical and electronic equipment.
Rigorous standards were followed in order to minimize the amount of waste, use of toxic materials, noise, non-required radiation and energy consumption.
A deep research on the optimization of machine performances guarantees a significant consumption's reduction, in accordance to the saving energy principles.

This symbol means that the product shall not be disposed as domestic waste.

The correct disposal of obsolete equipment, accessories and most of all of batteries contributes in preventing possible negative consequences on human and environmental health.
The user must dispose of scrap equipment by taking it to a recognized center for recycling of electrical and electronic equipment.
For further information on the obsolete equipment disposal please contact the dedicated disposal service or the shop in which the device was bought.

Warranty

IACER Srl guarantees a warranty period from the purchasing date for T-ONE REHAB device, unless information contained in this manual regarding installation, use and maintenance is strictly adhered. The wearing parts (batteries and electrodes) are not included in the warranty, unless of visible manufacturing defects. The warranty is void in case of tampering of the device and in case of intervention on the same by personnel not authorized by the manufacturer or by the authorized dealer.
As established by the Medical Device Directive 93/42/EEC, the manufacturer is obliged to trace at any time the equipment supplied to intervene promptly, if necessary, as a result of manufacturing defects.
The warranty conditions are those described in the following paragraph Warranty conditions*. The warranty is provided by IACER.*
Should you need to return the goods then please pack the device and all the accessories so that it won't be damaged during transportation. In order to be entitled to the warranty assistance, the purchaser must enclose to the device a copy of the purchasing receipt, proving origin and purchasing date.
For more information on the warranty please contact the distributor or vendor, in order to check the norm and standard in force in your Country, or ultimately the manufacturer IACER Srl.

Warranty conditions

1) Should assistance be needed, enclose the purchasing receipt when sending the device to the manufacturer.
2) The warranty period is valid only on the electronic parts. The warranty will be granted by the shop or directly by the manufacturer.
3) The warranty covers only the product damages, which causes its malfunctioning.
4) Warranty means that only the manufacturing defect components or material are covered by reparation or free substitution, hand work included.

5) Warranty is not applied to damages caused by negligence or use not compliant to the given instructions, by intervention on the device from personnel not authorized, accidental causes or negligence form the purchaser.
6) Warranty is not applied in case of damages caused by unsuitable power supplies.
7) Warranty does not apply to wearing parts.
8) Warranty does not include transportation costs which have to be covered by the purchaser.
9) After the warranty period, the warranty is no more applicable. In this case all the assistance interventions will be performed by debiting the costs of the substitution of the parts, the hand work and the transportations costs.
10) The court of Venice has exclusive jurisdiction over any dispute.

Support

The manufacturer is the one and only allowed to operate with technical assistance. For any technical assistance contact:

I.A.C.E.R. S.r.l.
Via Enzo Ferrari, 2 • 30037 Scorzè (VE)
Tel. 041.5401356 • Fax 041.5402684

Technical documentation related to repairable parts could be attached, but only with previous authorization from the manufacturer and only after giving proper training to the staff employed in technical assistance.

Spare part

The manufacturer makes available at any time the original spare parts for the equipment. Please contact:

I.A.C.E.R. S.r.l.
Via Enzo Ferrari, 2 • 30037 Scorzè (VE)
Tel. 041.5401356 • Fax 041.5402684

In order to preserve the warranty, the functionality and the security and safety of the product, it is highly recommended to use exclusively the spare parts given by the manufacturer.

Electromagnetic interferences and electromagnetic compatibility tables

The T-ONE REHAB equipment has been designed and manufactured according to the TECHNICAL STANDARD on ELECTROMAGNETIC COMPATIBILITY legislation EN 60601-1-2:2015 with the aim of providing adequate protection from harmful interference when installed in homes and health establishments.
The equipment does not generate significant radio frequency energy and is adequately immune to radiated electromagnetic fields. Therefore, it does not detrimentally interfere with radio-electric communications, electro-medical equipment for monitoring, diagnosis, therapy and surgery, office electronic devices such as computers, printers, Figurecopiers, fax machines, etc. or any electric or electronic equipment used in these environments, as long as the equipment complies with the ELECTROMAGNETIC COMPATIBILITY directive.
In any case, in order to avoid any interference problems, it is recommended to use the therapy equipment enough far away from critical equipment for monitoring vital patient functions, and to be careful when applying therapy to patients with pacemakers.

For more details, please see the EMC tables at the end of this manual.

Edition: MNPG236-06 of the 31/01/2025

TABELLE DI COMPATIBILITÀ ELETTROMAGNETICA – ELECTROMAGNETIC COMPATIBILITY TABLES

<table>
<tr><th colspan="3">Guida e dichiarazione del costruttore – EMISSIONI ELETTROMAGNETICHE – PER TUTTI GLI APPARECCHI ED I SISTEMI
Guidance and manufacturer's declaration – ELECTROMAGNETIC EMISSIONS – FOR ALL EQUIPMENT AND SYSTEMS</th></tr>
<tr><td colspan="3">Il T-ONE REHAB è previsto per funzionare nell'ambiente elettromagnetico sotto specificato. Il cliente o l'utilizzatore di T-ONE REHAB deve garantire che esso venga usato in tale ambiente.
T-ONE REHAB is intended for use in the electromagnetic environment specified below. The customer or the user of T-ONE REHAB should assure that it is used in such an environment.</td></tr>
<tr><td>Prova di emissione
Emissions Test</td><td>Conformità
Compliance</td><td>Ambiente elettromagnetico - Guida
Electromagnetic environment - guidance</td></tr>
<tr><td>Emissioni RF
RF emissions
CISPR 11</td><td>Gruppo 1
Group 1</td><td>Il T-ONE REHAB utilizza energia RF solo per il suo funzionamento interno. Perciò le sue emissioni RF sono molto basse e verosimilmente non causano nessuna interferenza negli apparecchi elettronici vicini
T-ONE REHAB 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>Emissioni RF
RF emissions
CISPR 11</td><td>Classe B
Class B</td><td rowspan="3">Il T-ONE REHAB è adatto per l'uso in tutti i locali compresi quelli domestici e quelli collegati direttamente ad un'alimentazione di rete pubblica a bassa tensione che alimenta edifici usati per scopi domestici.
T-ONE REHAB is suitable for domestic establishment and in establishment directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.</td></tr>
<tr><td>Emissioni armoniche
Harmonics emissions
IEC 61000-3-2</td><td>Classe A
Class A</td></tr>
<tr><td>Emissioni di fluttuazioni di tensione/flicker
Voltage fluctuation/flicker emissions
IEC 61000-3-3</td><td>Conforme
Compliant</td></tr>
</table>

Guida e dichiarazione del costruttore – IMMUNITÀ ELETTROMAGNETICA – PER TUTTI GLI APPARECCHI ED I SISTEMI ***Guidance and manufacturer's declaration – ELECTROMAGNETIC IMMUNITY – FOR ALL EQUIPMENT AND SYSTEMS***			
Il T-ONE REHAB è previsto per funzionare nell'ambiente elettromagnetico sotto specificato. Il cliente o l'utilizzatore di T-ONE REHAB deve garantire che esso venga usato in tale ambiente. *T-ONE REHAB is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.*			
Prova di immunità ***Immunity test***	**Livello di prova** ***Test level*** **IEC 60601**	**Livello di conformità** ***Compliance level***	**Ambiente elettromagnetico – Guida** ***Electromagnetic environment - guide***
Scarica elettrostatica (ESD) *Electrostatic discharge (ESD)* IEC 61000-4-2	±6kV; +8kV a contatto / *in contact* ±8kV; +15kV in aria / *on air*	±6kV; ±8kV; a contatto / *in contact* ±8kV; +15kV in aria / *on air*	I pavimenti devono essere in legno, calcestruzzo o in ceramica. Se i pavimenti sono ricoperti di materiale sintetico, l'umidità relativa dovrebbe essere almeno 30%. *Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.*
Transitori/treni elettrici veloci *Electrical fast transient/burst* IEC 61000-4-4	±2kV per le linee di alimentazione di potenza *for power supplies lines*	±2kV per le linee di alimentazione di potenza *for power supplies lines*	La qualità della tensione di rete dovrebbe essere quella di un tipico ambiente commerciale o ospedaliero. *Mains power quality should be that of a typical commercial or hospital environment*
Sovratensioni *Impluses* IEC 61000-4-5	±1kV linea – linea *line-line*	±1kV linea – linea *line-line*	La qualità della tensione di rete dovrebbe essere quella di un tipico ambiente commerciale o ospedaliero. *Mains power quality*

Guida e dichiarazione del costruttore – IMMUNITÀ ELETTROMAGNETICA – PER TUTTI GLI APPARECCHI ED I SISTEMI ***Guidance and manufacturer's declaration – ELECTROMAGNETIC IMMUNITY – FOR ALL EQUIPMENT AND SYSTEMS***			
Il T-ONE REHAB è previsto per funzionare nell'ambiente elettromagnetico sotto specificato. Il cliente o l'utilizzatore di T-ONE REHAB deve garantire che esso venga usato in tale ambiente. *T-ONE REHAB is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.*			
Prova di immunità ***Immunity test***	**Livello di prova** ***Test level*** **IEC 60601**	**Livello di conformità** ***Compliance level***	**Ambiente elettromagnetico – Guida** ***Electromagnetic environment - guide***
			should be that of a typical commercial or hospital environment
Buchi di tensione, brevi interruzioni e variazioni di tensione sulle linee di ingresso dell'alimentazione *Voltage dips, short interruptions and voltage variations on power supplì input lines* IEC 61000-4-11	<5% U_T (>95% buco in / *dips of* U_T) per / *for* 0,5 cicli / *cycles* <5% U_T (>95% buco in / *dips of* U_T) per / *for* 1 ciclo /*cycle* 70% U_T (30% buco in / *dips of* U_T) per / *for* 25 cicli / *cycles* <5% U_T (>95% buco in / *dips of* U_T) per / *for* 5s	<5% U_T (>95% buco in / *dips of* U_T) per / *for* 0,5 cicli / *cycles* <5% U_T (>95% buco in / *dips of* U_T) per / *for* 1 ciclo /*cycle* 70% U_T (30% buco in / *dips of* U_T) per / *for* 25 cicli / *cycles* <5% U_T (>95% buco in / *dips of* U_T) per / *for* 5s	La qualità della tensione di rete dovrebbe essere quella di un tipico ambiente commerciale o ospedaliero. Se l'utilizzatore di T-ONE REHAB richiede un funzionamento continuato anche durante l'interruzione della tensione di rete, si raccomanda di alimentare il T-ONE REHAB con un gruppo di continuità (UPS) o con batterie. *Main power quality should be that of a typical commercial or hospital environment. If the user of T-ONE REHAB requires continued operation during power mains interruptions, it is recommended tha T-ONE REHAB be powered from an uninterruptible power*

Guida e dichiarazione del costruttore – IMMUNITÀ ELETTROMAGNETICA – PER TUTTI GLI APPARECCHI ED I SISTEMI ***Guidance and manufacturer's declaration – ELECTROMAGNETIC IMMUNITY – FOR ALL EQUIPMENT AND SYSTEMS***			
Il T-ONE REHAB è previsto per funzionare nell'ambiente elettromagnetico sotto specificato. Il cliente o l'utilizzatore di T-ONE REHAB deve garantire che esso venga usato in tale ambiente. *T-ONE REHAB is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.*			
Prova di immunità ***Immunity test***	**Livello di prova** ***Test level*** **IEC 60601**	**Livello di conformità** ***Compliance level***	**Ambiente elettromagnetico – Guida** ***Electromagnetic environment - guide***
			supply or a battery.
Campo magnetico a frequenza di rete (50/60 Hz) *Power frequency (50/60 Hz) magnetic field* IEC 61000-4-8	30A/m	30A/m	I campi magnetici a frequenza di rete dovrebbero avere livelli caratteristici di una località tipica in ambiente commerciale o ospedaliero. *Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.*
Nota: U_T è la tensione di rete in c.a. prima dell'applicazione del livello di prova. *Note: U_T is the A.C. mains voltage prior to application of the test level.*			

Guida e dichiarazione del costruttore – IMMUNITÀ ELETTROMAGNETICA – PER GLI APPARECCHI ED I SISTEMI CHE NON SONO DI SOSTENTAMENTO DI FUNZIONI VITALI ***Guidance and manufacturer's declaration – ELECTROMAGNETIC IMMUNITY – FOR EQUIPMENT AND SYSTEMS THAT ARE NOT LIFE-SUPPORTING***			
Il T-ONE REHAB è previsto per funzionare nell'ambiente elettromagnetico sotto specificato. Il cliente o l'utilizzatore del T-ONE REHAB deve garantire che esso venga usato in tale ambiente. *T-ONE REHAB is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.*			
Prova di immunità	**Livello di prova**	**Livello di**	**Ambiente elettromagnetico –**

Guida e dichiarazione del costruttore – IMMUNITÀ ELETTROMAGNETICA – PER GLI APPARECCHI ED I SISTEMI CHE NON SONO DI SOSTENTAMENTO DI FUNZIONI VITALI
Guidance and manufacturer's declaration – ELECTROMAGNETIC IMMUNITY – FOR EQUIPMENT AND SYSTEMS THAT ARE NOT LIFE-SUPPORTING

Il T-ONE REHAB è previsto per funzionare nell'ambiente elettromagnetico sotto specificato. Il cliente o l'utilizzatore del T-ONE REHAB deve garantire che esso venga usato in tale ambiente.
T-ONE REHAB is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.

Immunity test	***Test level*** **IEC 60601**	**conformità** ***Conformity level***	**Guida** ***Electromagnetic environment - guide***
Gli apparecchi di comunicazione a RF portatili e mobili non dovrebbero essere usati vicino a nessuna parte del dispositivo, compresi i cavi, eccetto quando sono rispettate le distanze di separazione raccomandate, calcolate dall'equazione applicabile alla frequenza del trasmettitore. *Portable and mobile RF communications equipment should not be used near any part of the device (including cables) except when the recommended separation distance is respected. This distance is calculated from the equation applicable to the frequency of the transmitter.*			
			Distanza di separazione raccomandata – ***Recommended separation distance***
RF condotta *Conducted RF* IEC 61000-4-6	$3V_{eff}$ da 150kHz a 80MHz *from 150kHz to 80MHz* $6V_{eff}$ da 150kHz a 80MHz per banda ISM *in ISM band between 150kHz and 80MHz*	$3V_{eff}$ $6V_{eff}$	$d = 1.2\sqrt{P}$ $d = 2\sqrt{P}$ per banda ISM/ *for ISM band*
RF irradiata IEC 61000-4-3	3V/m da 80MHz a 2,7GHz *from 80MHz to 2,7GHz*	3V/m $[E_1]$ V/m	$d = 4\sqrt{P}$ da 80MHz a 800MHz/*from 80MHz to 800MHz* $d = 2.3\sqrt{P}$ da 800MHz a 2,7GHz/*from 800MHz to 2,7GHz*

Guida e dichiarazione del costruttore – IMMUNITÀ ELETTROMAGNETICA – PER GLI APPARECCHI ED I SISTEMI CHE NON SONO DI SOSTENTAMENTO DI FUNZIONI VITALI
Guidance and manufacturer's declaration – ELECTROMAGNETIC IMMUNITY – FOR EQUIPMENT AND SYSTEMS THAT ARE NOT LIFE-SUPPORTING

Il T-ONE REHAB è previsto per funzionare nell'ambiente elettromagnetico sotto specificato. Il cliente o l'utilizzatore del T-ONE REHAB deve garantire che esso venga usato in tale ambiente.
T-ONE REHAB is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.

RF irradiate per dispositivi di comunicazione radio	3V/m da 80 MHz a 6 GHz *from 80MHz to 6GHz*	3V/m [E_1] V/m	$d = 2\sqrt{P}$ da 80MHz a 6GHz / *from 80MHz to 6GHz*

ove P è la potenza massima nominale d'uscita del trasmettitore in Watt (W) secondo il costruttore del trasmettitore e *d* è la distanza di separazione raccomandata in metri (m).
Le intensità di campo dei trasmettitori a RF fissi, come determinato da un'indagine elettromagnetica[a] del sito potrebbe essere minore del livello di conformità in ciascun intervallo di frequenza[b]
Si può verificare interferenza in prossimità di apparecchi contrassegnati dal seguente simbolo:
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 symbol above.

Nota / *Note*

(1) A 80 MHz e 800 MHz; si applica l'intervallo di frequenza più alto / *At 80 MHz and 800 MHz At 80 MHz and 800 MHz, the higher frequency range applies.*

(2) Queste linee guida potrebbero non applicarsi in tutte le situazioni. La propagazione elettromagnetica è influenzata dall'assorbimento e dalla riflessione di strutture, oggetti e persone */ These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people*

a) Le intensità di campo per trasmettitori fissi come le stazioni base per radiotelefoni (cellulari e cordless) e radiomobili terrestri, apparecchi di radioamatori, trasmettitori radio in AM e FM e trasmettitori TV non possono essere previste teoricamente e con precisione. Per valutare un ambiente elettromagnetico causato da trasmettitori RF fissi, si dovrebbe considerare un'indagine elettromagnetica del sito. Se l'intensità di campo misurata nel luogo in cui si usa un T-ONE REHAB, supera il livello di conformità applicabile di cui sopra, si dovrebbe porre sotto osservazione il funzionamento normale del T-ONE REHAB. Se si notano prestazioni anormali, possono essere necessarie misure aggiuntive come un diverso orientamento o posizione del T-ONE REHAB. / *Field strengths from fixed RF 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*

Guida e dichiarazione del costruttore – IMMUNITÀ ELETTROMAGNETICA – PER GLI APPARECCHI ED I SISTEMI CHE NON SONO DI SOSTENTAMENTO DI FUNZIONI VITALI ***Guidance and manufacturer's declaration – ELECTROMAGNETIC IMMUNITY – FOR EQUIPMENT AND SYSTEMS THAT ARE NOT LIFE-SUPPORTING***
Il T-ONE REHAB è previsto per funzionare nell'ambiente elettromagnetico sotto specificato. Il cliente o l'utilizzatore del T-ONE REHAB deve garantire che esso venga usato in tale ambiente. *T-ONE REHAB is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.*
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 T-ONE REHAB is used exceeds the applicable RF compliance level above, T-ONE REHAB should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating T-ONE REHAB. b) L'intensità di campo nell'intervallo di frequenza da 150kHz a 80MHz dovrebbe essere minore di 3 V/m. */ Over the frequency range 150kHz to 80MHz, field strengths should be less than 3 V/m.*

Distanze di separazione raccomandate tra apparecchi di radiocomunicazione portatili e mobili per T-ONE REHAB che non sono di sostentamento delle funzioni vitali
Recommended separation distances between portable and mobile RF communications equipment for T-ONE REHAB that are not life-supporting

Il T-ONE REHAB è previsto per funzionare in un ambiente elettromagnetico in cui sono sotto controllo i disturbi irradiati RF. Il cliente o l'operatore del T-ONE REHAB possono contribuire a prevenire interferenze elettromagnetiche assicurando una distanza minima fra gli apparecchi di comunicazione mobili e portatili a RF (trasmettitori) e il T-ONE REHAB come sotto raccomandato, in relazione alla potenza di uscita massima degli apparecchi di radiocomunicazione.

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

Potenza di uscita massima del trasmettitore specificata (W) ***Rated maximum output power of transmitter (W)***	**Distanza di separazione alla frequenza del trasmettitore (m)**			
	$da\ 150kHz$ $a\ 800MHz$ $from\ 150kHz$ $to\ 800\ MHz$	$da\ 150kHz$ $a\ 800MHz$ (banda ISM) $from\ 150kHz$ $to\ 800\ MHz$ *(ISM band)*	$da\ 80MHz$ $a\ 800MHz$ $from\ 80MHz$ $to\ 800\ MHz$	$da\ 800MHz$ $a\ 6GHz$ (a RF wireless per dispositivi di comunicazione radio) $from\ 800MHz$ $to\ 6GHz$ *(RF wireless for radio communication devices)*
0,01	0,12	0,2	0,12	0,23
0,1	0,38	0,63	0,38	0,73
0,2	–	–	–	–
1	1,20	2,0	1,20	2,30
1,8	–	–	–	–
2	–	–	–	–
10	3,80	6,3	3,80	7,30
100	12,00	20	12,00	23,00

Per i trasmettitori con potenza nominale massima di uscita sopra non riportata, la distanza di separazione raccomandata *d* in metri (m) può essere calcolata usando l'equazione applicabile alla frequenza del trasmettitore, dove *P* è la potenza massima nominale d'uscita del trasmettitore in watt (W) secondo il fabbricante del trasmettitore.

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be determined 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

Distanze di separazione raccomandate tra apparecchi di radiocomunicazione portatili e mobili per T-ONE REHAB che non sono di sostentamento delle funzioni vitali ***Recommended separation distances between portable and mobile RF communications equipment for T-ONE REHAB that are not life-supporting***
the transmitter manufacturer.
Nota / Note *1)* A 80 MHz e 800 MHz, si applica l'intervallo della frequenza più alto / *At 80 MHz and 800 MHz the separation distance for the higher frequency range applies.* 2) Queste linee guida potrebbero non applicarsi in tutte le situazioni. La propagazione elettromagnetica è influenzata dall'assorbimento e dalla riflessione di strutture, oggetti e persone / *These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.*

I-TECH
MEDICAL DIVISION

I.A.C.E.R. S.r.l.
Via Enzo Ferrari 2 - 30037, Scorzè (VE) – Italy
Tel.: (+39) 041 540 13 56 | Email: iacer@iacer.it

www.itechmedicaldivision.com

Share Capital: € 1.000.000 fully paid-up
Tax Code / VAT Number: IT 00185480274
Certified email: iacer@pec.it | SDI: SUBM70N