Dear Customer!

In your hand you have CefarCompex's Practical Guide with specific information for every program in your stimulator.

The Practical Guide covers all the programs of CefarCompex's three rehab products Mi-Theta 600, Theta 500 and Rehab 400. Each program has a reference that shows if the program is available in your stimulator.

This information is easy to read and the purpose is to work as an extra support, if needed. You'll find the recommended indication and what effect the treatment will have on your patient. Read the guidelines for the recommended intensity level, and see suggested electrode placements on the fold out cover.

You could always find more information on CefarCompex's website: www.cefarcompex.com

Cefar and Compex, electrotherapy's two leading brands are uniting their energies to bring you the ultimate technology with one common goal: to support you in your everyday professional life.

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NMES

NMES (NeuroMuscular Electrical Stimulation) is used successfully both in medical rehabilitation as well as a complement to athletic training on all levels.

The goal of electrical muscle stimulation is to achieve contractions or vibrations in the muscles. Normal muscular activity is controlled by the central and peripheral nervous systems, which transmit electrical signals to the muscles. NMES works similarly but uses an external source (the stimulator) with electrodes attached to the skin for transmitting electrical impulses into the body. The impulses stimulate the nerves to send signals to a specifically targeted muscle, which reacts by contracting, just as it does with normal muscular activity.

Electrical muscle stimulation is suitable for all the muscles in the body. It can be used to strengthen muscles weakened by surgery, a fracture, etc., and improve mobility. It is also an excellent tool for stroke rehabilitation, helping patients in handgrip and gait training.

Electrical muscle stimulation for rehabilitation purposes should be tested by a physiotherapist or other caregiver for the best results.

TENS

TENS (Transcutaneous Electrical Nerve Stimulation) produces good results in acute and chronic pain conditions of many kinds. It is clinically proven and used daily by physiotherapists, other caregivers and top athletes around the world.

TENS activates the pain-inhibiting mechanisms of the nervous system. Electrical impulses from electrodes, placed on the skin over or near the painful area, stimulate the nerves to block the pain signals that are sent to the brain, and the pain is not perceived. The treatment's Burst TENS/Endorphinic stimulates the release of endorphins, the body's natural painkillers.

TENS is a safe treatment method and has, in contrast to oral painkillers and other pain relief methods, no side effects. It may be sufficient as the only treatment form, but it is also a valuable complement to other pharmacological and/or physical treatments.

General information

Electrodes

To receive maximum results from your stimulation, it is important to place the electrodes correctly. For muscle contractions, a precise placement on the motor point ensures maximum comfort and efficiency. On the fold outs of this guide you will find comprehensive illustrations of various electrode placements.

Before placing the electrodes on your body, be sure to always wash and dry the skin in order to ensure good conductivity. You should always place electrodes on healthy skin and not less than 3 cm or more than 30 cm apart from each other. The durability of the electrodes depends on how good the care and maintenance instructions are followed. Ensure that your patients always have their own personal electrodes.

Choose electrode size according to the size of the muscle, use small electrodes on smaller muscles and large electrodes on larger muscles. If the stimulation feels unpleasant, this could be a sign that the contact between the skin and the electrode is insufficient. The electrodes could be worn out and need to be replaced.

Note: Always be sure that the stimulation is turned off (energy level 0) before removing electrodes from the skin.

Stimulation energy – Intensity

For pain relief treatment with a stimulation frequency between 50-100 Hz, the ground rule is that the stimulation should be perceived stronger than the pain itself. Increase the intensity until you obtain a strong tingling sensation that is not painful.

For pain relief with a stimulation frequency between 2-10 Hz, the intensity shall be high enough to give visible muscle response. Note that the patient will feel the stimulation before there is an actual visible contraction!

For NMES and muscle stimulation, the objective for the therapist is to motivate the patient to tolerate his/her highest possible non-painful stimulation energy level. The higher the stimulation energy, the greater percentage of motor units recruited. In some cases, it could be beneficial to combine stimulation with voluntary contractions/co-contractions. Try to get a progression in the energies reached within a session as well as from one session to the next.

Body position

You will find an illustration of the recommended body position under the electrode placement illustration. The optimum position depends on the type of program and which body part you wish to stimulate. When you use massage programs such as Relaxing massage it is important that you are in a position were you can relax properly.

Combination of the 2+2 function and the Mi-Technology:

Please note that when you use the 2+2 function, the Mi-Scan function can still be used on channels 1 and 2, but is only available for the programs Endorphinic, Reinforcement and Disuse atrophy on channels 3 and 4. The functions Mi-Range, Mi-Tens and Mi-Action can not be used in this state.

For further information please see “List of programs” in the User manual.

Mi-Theta 600: Two Mi-sensors are included in the kit and provides the possibility of fully using the Mi-technology with Mi-Action, Mi-Range, Mi-Tens and Mi-Scan.

Theta 500: This device is Mi-ready. By purchasing two cables with Mi-sensors it is possible to take the advantage of the Mi-technology with Mi-Range, Mi-Tens and Mi-Scan.

Rehab 400: The Mi-technology is not available for this device.

COMMON TREATMENT

Rehabilitation

DISUSE ATROPHY	
When?	After a long period of immobilization or diminished movement, a normally innervated muscle suffers from a decrease in volume.
Why?	Slow twitch fibers (type I) are particularly affected by this disuse.
How?	By using frequencies creating tetanic contractions of the Type I fibers. In order to modify the program as the patient progresses, use level 1 for the first two weeks before changing into level 2 the subsequent weeks.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrode.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working. Try to gradually increase the energy level during a treatment session.
Option 2+2	If the patient experiences discomfort and pain during stimulation, the 2+2 function allows this program (ch 1+2) to be combined with a pain relief program (ch 3+4).

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DISUSE ATROPHY, LEVEL 1 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	35 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	7 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

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DISUSE ATROPHY, LEVEL 2 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	45 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	5 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

PREVENTION OF DISUSE ATROPHY	
When?	After surgery or a bone fracture, a limb or a section thereof is immobilized, the muscles of this part of the body suffer rapidly from disuse atrophy.
Why?	The rapid decrease of muscle volume is mainly due to a reflex inhibition phenomenon or a total absence of any type of exercise. It's important to note that this type of atrophy concentrates on the slow twitch muscle fibers (Type I).
How?	In order to compensate, NMES could reproduce a series of contractions comparable to the normal level of activity during a day. The treatment time of this program is relatively long and the program uses frequencies targeting the slow twitch muscle fibers.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	If the patient experiences discomfort and pain during stimulation, the 2+2 function allows this program (ch 1+2) to be combined with a pain relief program (ch 3+4).

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PREVENTION OF DISUSE ATROPHY, LEVEL 1 (54 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	30 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	3 s	1.5 s	1.5 s
Duration of phase	2 min	5 s	14 s	3 min
Duration of ramp-down	2 s	1.5 s	1.5 s	3 s

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PREVENTION OF DISUSE ATROPHY, LEVEL 2 (47 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	40 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	3 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	12 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

REINFORCEMENT	
When?	Muscular reinforcement is used for strengthening healthy muscles (with normal volume). Use on previously disuse atrophied muscles that have regained their volume.
Why?	To obtain increased strength and stability.
How?	By using frequencies creating tetanic contractions of the fast twitch muscle fibers (type II). Often used when rehabilitation is in progress and normal muscular volume is achieved by previous use of disuse atrophy programs. We recommend the use of level 1 for the first two weeks and level 2 for subsequent weeks.
Example	Strengthen lateral peroneal muscles to prevent sprains. Strengthen shoulder muscles to prevent shoulder dislocations.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working. Try to gradually increase the energy level during a treatment session.
Option 2+2	If the patient experiences discomfort and pain during stimulation, the 2+2 function allows this program (ch 1+2) to be combined with a pain relief program (ch 3+4).

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REINFORCEMENT, LEVEL 1 (20 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	75 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	4 s	10 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

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REINFORCEMENT, LEVEL 2 (20 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	85 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	4 s	8 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

NEURO REHAB (SLOW START)	
When?	NMES is an excellent complement to traditional physiotherapy for several neurological diagnostics like stroke. The treatment could be used passively, but preferably used actively in the training situation.
Why?	To aid facilitation and relearning of motor skills
How?	This program has a slow, 4 seconds ramp-up time of the contraction, and a long rest phase. Experience shows that this design of the program is more suitable for patients within this diagnose group.
Example	Increase function of a subluxated shoulder. Facilitate and increase function in lower arm - hand.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working. Try to gradually increase the energy level during a treatment session.
Option 2+2	If the patient experiences discomfort and pain during stimulation, the 2+2 function allows this program (ch 1+2) to be combined with a pain relief program (ch 3+4).

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NEURO REHAB (SLOW START), LEVEL 1 (20 MIN)				
	Warm-up	Contraction	Rest	Final recovery phase
Frequency	6 Hz	35 Hz	-	3 Hz
Duration of ramp-up	1.5 s	4 s	-	1.5 s
Duration of phase	2 min	5 s	15 s	3 min
Duration of ramp-down	2 s	2 s	-	3 s

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NEURO REHAB (SLOW START), LEVEL 2 (20 MIN)				
	Warm-up	Contraction	Rest	Final recovery phase
Frequency	6 Hz	45 Hz	-	3 Hz
Duration of ramp-up	1.5 s	4 s	-	1.5 s
Duration of phase	2 min	5 s	15 s	3 min
Duration of ramp-down	2 s	2 s	-	3 s

BACK-TRUNK/STABILIZATION	
When?	For patients with insufficiency in the back and trunk due to long term pain or a neurological disorder. This program suits well to combine with active movements.
Why?	To stabilize the trunk and back muscles. Increase the awareness and postural control.
How?	By stimulating the abdominal or lumbar muscle groups.
Example	Abdominal and/or lumbar stimulation to increase the awareness of pelvic motion. Increase stability and function in the lumbar/abdominal muscles.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working. Try to gradually increase the energy level during a treatment session.
Option 2+2	Yes.

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BACK-TRUNK/STABILIZATION (30 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	40 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	2 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	12 s	3 min
Duration of ramp-down	2 s	1 s	0.5 s	3 s

ATROPHY (MOD. FREQUENCY)	
When?	Use it on weak or immobilized muscles.
Why?	The program focuses on the Type I fibers to improve the stamina in the muscle.
How?	By modulating the frequency for a period of time that is equal to the contraction time, the contraction feels more comfortable. The contraction starts with lower freq and ends with the highest frequency.
Example	Increased strength for shoulder muscles by stimulation on the Rhomboid muscles. Post operative stimulation on Quadriceps, the medial vastus in particular.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working. Try to gradually increase the energy level during a treatment session.
Option 2+2	Yes.

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ATROPHY, MOD. FREQUENCY (30 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	25-40 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	2 s	0.5 s	1.5 s
Duration of phase	2 min	4 s	8 s	3 min
Duration of ramp-down	2 s	1 s	0.5 s	3 s

FORCE (MOD. FREQUENCY)	
When?	To maintain muscular strength during immobilization, or to increase muscular strength for a specific muscle/muscle group.
Why?	The program focuses on the Type II fibers to improve stamina in the muscle.
How?	By modulating the frequency for a period of time that is equal to the contraction time, the contraction feels more comfortable.
Example	Increased strength for hip abductors. Stimulation on Quadriceps, in case of immobilization.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working. Try to gradually increase the energy level during a treatment session.
Option 2+2	Yes.

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FORCE, MOD. FREQUENCY (30 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	35-60 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	3 s	0.5 s	1.5 s
Duration of phase	2 min	8 s	15 s	3 min
Duration of ramp-down	2 s	1 s	0.5 s	3 s

INCREASE CIRCULATION	
When?	As a preparation before, or as recovery after, muscular activity. Could be used to increase the circulation locally in the tissue/ muscle.
Why?	To increase the elimination of lactic acid and waste products and to reduce stiffness in the muscles.
How?	This program creates muscular vibrations in order to increase the blood flow to the muscles, increase resistance strength and recover capacity.
Example	Put big electrodes on large muscle groups, for example Quadriceps and Hamstrings.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working. Important to cause visible vibrations.
Option 2+2	Yes.

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INCREASE CIRCULATION (30 MIN)	
	Continuous stimulation
Frequency	8 Hz

MUSCLE LESION	
When?	If you have a more or less significant muscle lesion, this program could be used as a complement to the usual treatment (cold, compression etc). Mobilization of the limb must be allowed.
Why?	To facilitate the muscle fibers for a faster return to normal activity.
How?	The program is designed to ramp-up and stimulate the muscle gradually in order to prevent stress on the muscle fibers.
Example	Stimulation on the back of the thigh (hamstrings).
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	The higher the stimulation energy, the greater the numbers of muscular fibers (motor units) working. Try to gradually increase the energy level during a treatment session.
Option 2+2	Yes.

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MUSCLE LESION (30 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	40 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	6 s	1.5 s	1.5 s
Duration of phase	2 min	3 s	10 s	3 min
Duration of ramp-down	2 s	1.5 s	1.5 s	3 s

MOTOR POINT	
When?	This program (3 Hz continuous), combined with the use of a motor point pen, allows the user to determine the exact location of the motor point on each individual.
Why?	An electrode placed on the motor point ensures the most effective and comfortable stimulation.
How?	Connect the motor point pen to the red pin connector of the cable (see connections in the User manual). Connect the black pin connector to an electrode and place it on the skin. Put some gel on the skin area where you will search for the motor point and increase the intensity. The right spot is where you receive the strongest and most visible contraction. Mark out the spot with a fiber pen.

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MOTOR POINT (15 MIN)	
	Continuous stimulation
Frequency	3 Hz

Specific Rehabilitation

HIP PROSTHESIS	
When?	After orthopedic surgery of the hip. Use stimulation in addition to exercise and active physiotherapy.
Why?	It is common that the buttock muscles are affected with a loss of strength and reduced active stability of the hip. This could affect the ability of standing on one leg or walking.
How?	The sequences of low frequencies (warm up, active rest, recovery) are excluded in this program in order to not create a vibration phenomenon in the prosthesis material. The three levels are: Disuse atrophy level 1, level 2 and Reinforcement level 1 without low frequencies.
Example	Stimulation on the gluteus maximus and medius.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	The higher the stimulation energy, the greater the numbers of muscular fibers (motor units) working. Try to gradually increase the energy level during a treatment session.
Option 2+2	Yes.

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HIP PROSTHESIS, LEVEL 1 (30 MIN)				
	Warm-up	Contraction	Rest	Final recovery phase
Frequency	-	35 Hz	-	-
Duration of ramp-up	-	1.5 s	-	-
Duration of phase	-	6 s	6 s	-
Duration of ramp-down	-	0.75 s	-	-

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HIP PROSTHESIS, LEVEL 2 (30 MIN)				
	Warm-up	Contraction	Rest	Final recovery phase
Frequency	-	45 Hz	-	-
Duration of ramp-up	-	1.5 s	-	-
Duration of phase	-	6 s	6 s	-
Duration of ramp-down	-	0.75 s	-	-

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HIP PROSTHESIS, LEVEL 3 (15 MIN)				
	Warm-up	Contraction	Rest	Final recovery phase
Frequency	-	75 Hz	-	-
Duration of ramp-up	-	1.5 s	-	-
Duration of phase	-	4 s	11 s	-
Duration of ramp-down	-	0.75 s	-	-

PATELLAR SYNDROME

When?	Subluxation of the patella due to imbalance of the different muscular divisions of Quadriceps. After trauma of the knee joint and/or affected knee cartilage which could cause pain and/or reflex inhibition, leading to a state of disuse atrophy of the Quadriceps. Decreased stability of the knee.
Why?	Specific work on the Medial Vastus is possible while using electrical muscle stimulation. You could also alter the reflex inhibition by stimulating on the entire Quadriceps.
How?	The sequences of low frequencies (warm up, active rest, recovery) are excluded in this program in order to not create a vibration phenomenon, which could cause unwanted effects on the patella. The three levels are Disuse atrophy level 1, level 2 and Reinforcement level 1 without low frequencies.
Example	Specific stimulation on a part of Quadriceps (for example Medial Vastus) or on the entire Quadriceps.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	The higher the stimulation energy, the greater the numbers of muscular fibers (motor units) working. Try to gradually increase the energy level during a treatment session.
Option 2+2	Yes, but as 3+1 as ch 1+ch 2+ch 3 are used for patellar syndrome program.

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PATELLAR SYNDROME, LEVEL 1 = DISUSE ATROPHY, LEVEL 1 (30 MIN)				
	Warm-up	Contraction	Rest	Final recovery phase
Frequency	-	35 Hz	-	-
Duration of ramp-up	-	1.5 s	-	-
Duration of phase	-	6 s	6 s	-
Duration of ramp-down	-	0.75 s	-	-

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PATELLAR SYNDROME, LEVEL 2 = DISUSE ATROPHY, LEVEL 2 (30 MIN)				
	Warm-up	Contraction	Rest	Final recovery phase
Frequency	-	45 Hz	-	-
Duration of ramp-up	-	1.5 s	-	-
Duration of phase	-	6 s	6 s	-
Duration of ramp-down	-	0.75 s	-	-

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PATELLAR SYNDROME, LEVEL 3 = REINFORCEMENT LEVEL 1 (15 MIN)				
	Warm-up	Contraction	Rest	Final recovery phase
Frequency	-	75 Hz	-	-
Duration of ramp-up	-	1.5 s	-	-
Duration of phase	-	4 s	11 s	-
Duration of ramp-down	-	0.75 s	-	-

HEMIPLEGIA	
When?	As a complement together with traditional physiotherapy after a stroke. Used for aid facilitation, relearning of motor skills and also to reduce spasticity. If the patient has reduced perceptive ability (neglect), training of this function also can be integrated into the treatment.
Why?	Patients recovering from stroke have a dual problem. First to “find“ the muscle due to poor capability to centrally send out the impulse. Secondly, an inactivity that results in muscle atrophy
How?	The treatment could be used passively, but preferably used actively in the training situation. This program has a slow, 4 seconds ramp-up time of the contraction, and a long rest phase. The experience shows that this design of the program is more suitable for patients within this diagnose group.
Example	Improve gait and dorsal flexion of the ankle. Reduce spasticity and increase function by stimulating the antagonist.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	The higher the stimulation energy, the greater the number of muscular fibers (motor units) working. Try to gradually increase the energy level during a treatment session.
Option 2+2	Yes.

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HEMIPLEGIA, LEVEL 1 (20 MIN)				
	Warm-up	Contraction	Rest	Final recovery phase
Frequency	6 Hz	40 Hz	-	3 Hz
Duration of ramp-up	1.5 s	4 s	-	1.5 s
Duration of phase	2 min	10 s	20 s	3 min
Duration of ramp-down	2 s	2 s	-	3 s

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HEMIPLEGIA, LEVEL 2 (20 MIN)				
	Warm-up	Contraction	Rest	Final recovery phase
Frequency	6 Hz	45 Hz	-	3 Hz
Duration of ramp-up	1.5 s	4 s	-	1.5 s
Duration of phase	2 min	10 s	20 s	3 min
Duration of ramp-down	2 s	2 s	-	3 s

ROTATOR CUFF	
When?	Disturbed range of motion, shoulder tendopathies and pain around the shoulder.
Why?	To increase the muscular function and neuro motor reeducation of the rotator cuff.
How?	Increase function in external rotation of the shoulder. Centralize and depress the humeral head. You can combine training with active movements.
Example	Stimulation on Supraspinal, Infraspinal, Teres minor and/or Deltoid muscles.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working. Important to cause visible vibrations.
Option 2+2	Yes.

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

ROTATOR CUFF, LEVEL 1 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	35 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	7 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

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ROTATOR CUFF, LEVEL 2 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	45 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	5 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

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ROTATOR CUFF, LEVEL 3 (20 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	75 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	4 s	10 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

ACL	
When?	After rupture of the Anterior Cruciate Ligament (ACL). This is one of the most frequent accidents in sport traumatology. For postoperative stimulation or as a conservative treatment.
Why?	To achieve active stability of the knee joint, with a sufficient function in the muscles surrounding the joint.
How?	The ACL program is specifically designed for this treatment by implementing an offset co-contraction session. Stimulation begins with Hamstrings (ch 1 and ch 2). While they are contracted the stimulation continues on the Quadriceps (ch 3 and ch 4), preventing any risk of an anterior drawer.
Example	Postoperative treatment. As rehabilitation to return to sporting activities, stimulation on Hamstrings and Quadriceps
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	The higher the stimulation energy, the greater the number of muscular fibers (motor units) working. Try to gradually increase the energy level during a treatment session.
Option 2+2	No. The 2+2 function is not available on this program since all four channels are in use.

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ACL (25 MIN)			
	1st contraction (ch 1+2) Hamstrings	2nd contraction (ch 1+2+3+4) Hamstrings+Quadriceps	Active rest
Frequency	40 Hz	40 Hz	4 Hz
Duration of ramp-up	1.5 s	3 s	0.5 s
Duration of phase	3 s	6 s	8 s
Duration of ramp-down	0 s	0.75 s	0.5 s

CARDIO TRAINING	
When?	For patients with reduced capacity to move and walk due to chronic heart failure.
Why?	Electrical muscle stimulation on large muscle groups could increase the muscular oxidative capacities and represents a mild form of physical training.
How?	Stimulation on calf and Quadriceps muscles, 1 hour 5 times a week.
Example	Bilateral stimulation on Quadriceps and Gastrocnemius
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working. Important to cause visible vibrations.
Option 2+2	Yes.

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CARDIO TRAINING (60 MIN)				
	Warm-up	Contraction	Rest	Final recovery phase
Frequency	-	10 Hz	-	-
Duration of ramp-up	-	2 s	-	-
Duration of phase	-	20 s	20 s	-
Duration of ramp-down	-	1 s	-	-

Pain relief

TENS 100 HZ OR 80 HZ	
When?	TENS is the first choice for acute and long-term pain, both neurogenic and nociceptive. Good results are observed, above all when the pain originates in joints, the skeleton, muscles, skin, viscera or nervous system.
Why?	For an acute pain you need pain relief to take part in daily activities and avoid enter a vicious circle. For chronic pain you need a way to handle your daily life. TENS has no side effects and is easy to use.
How?	TENS utilises the nervous system's own pain relief mechanisms and is based on the Gate control theory. This theory states that stimulating A-ßeta-fibres, the sensory nerve fibres that conduct pressure, touch and vibration, inhibits impulse transfer in the pain pathways. *Frequency:* 80 or 100 Hz. *Pulsewidth:* appropriate to the sensivity of the treated area and the patient. You can choose between 100 Hz: level 1 - 30 µs (very sensitive), level 2 - 50 µs, level 3 - 70 µs or 80 Hz: 180 µs (normal).
Example	Neck pain, shoulder pain, elbow pain, rheumatic pain, fractured rib, lumbago, menstrual pain, phantom limb pain, hip pain and osteoarthritic pain.
Electrodes	As a rule, the electrodes should be placed on or near the painful area, or over an area segmentally related to the painful area. See Position of the electrodes. It is important to ensure that the patient has normal sensory of touch in the area where the electrodes are placed.
Intensity	The stimulation should give a strong, but pleasant paraesthesia – tingling. Adjust the energy level during the treatment, because this is one of the key factors for the effectiveness of the treatment.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

TENS			
Frequency	Level	Pulse width	Treatment time
100 Hz	1	30 µs	20 min
100 Hz	2	50 µs	20 min
100 Hz	3	70 µs	20 min
80 Hz	-	180 µs	30 min

FREQUENCY MODULATED TENS	
When?	TENS is the first choice for acute and long-term pain, both neurogenic and nociceptive. Good results are observed, above all when the pain originates in joints, the skeleton, muscles, skin, viscera or nervous system.
Why?	For an acute pain you need pain relief to take part in daily activities and avoid enter a vicious circle. For chronic pain you need a way to handle your daily life. TENS has no side effects and is easy to use.
How?	TENS utilises the nervous system's own pain relief mechanisms and is based on the Gate control theory. This theory states that stimulating A-ßeta-fibres, the sensory nerve fibres that conduct pressure, touch and vibration, inhibits impulse transfer in the pain pathways. To avoid adaption, Frequency modulated TENS have a continuous variation of the stimulation frequency. Pulsewidth: appropriate to the sensitivity of the treated area and the patient. In Mi-Theta 600 you can choose between level 1 - 30 µs (very sensitive), level 2 - 50 µs, level 3 - 70 µs (not so sensitive).
Example	Neck pain, shoulder pain, elbow pain, rheumatic pain, lumbago, menstrual pain, phantom limb pain, hip pain and osteoarthritic pain.
Electrodes	As a rule, the electrodes should be placed on or near the painful area, or over an area segmentally related to the painful area. See Position of the electrodes. It is important to ensure that the patient has normal sensory of touch in the area where the electrodes are placed.
Intensity	The stimulation should give a strong, but pleasant paraesthesia – tingling. Adjust the energy level during the treatment, because this is one of the key factors for the effectiveness of the treatment.
Option 2+2	Yes.

☑ Mi-Theta600 ☐ Theta500 ☐ Rehab400

FREQUENCY MODULATED TENS				
Frequency	Level	Pulse width	Modulation time	Treatment time
50-150 Hz	1	30 µs	2 s	20 min
50-150 Hz	2	50 µs	2 s	20 min
50-150 Hz	3	70 µs	2 s	20 min

☐ Mi-Theta600 ☑ Theta500 ☑ Rehab400

FREQUENCY MODULATED TENS			
Frequency	Pulse width	Modulation time	Treatment time
50-150 Hz	50 µs	2 s	20 min

PULSE WIDTH MODULATED TENS	
When?	TENS is the first choice for acute and long-term pain, both neurogenic and nociceptive. Good results are observed above all when the pain originates in joints, the skeleton, muscles, skin, viscera or nervous system. Pulsewidth modulated TENS also gives a massage effect on muscles like the Trapezius.
Why?	For an acute pain you need pain relief to take part in daily activities and avoid enter a vicious circle. For chronic pain you need a way to handle your daily life. TENS has no side effects and is easy to use.
How?	TENS utilises the nervous system's own pain relief mechanisms and is based on the Gate control theory. This theory states that stimulating A-ßeta-fibres, the sensory nerve fibres that conduct pressure, touch and vibration, inhibits impulse transfer in the pain pathways. Pulsewidth modulated TENS is a type of stimulation where the pulse width varies continuously. This creates an undulating sensation which can be more pleasant than a constant pulse width.
Example	Neck pain, shoulder pain, trapezius pain, elbow pain, rheumatic pain, lumbago, menstrual pain, phantom limb pain, hip pain and osteoarthritic pain.
Electrodes	As a rule, the electrodes should be placed on or near the painful area, or over an area segmentally related to the painful area. See Position of the electrodes. It is important to ensure that the patient has normal sensory of touch in the area where the electrodes are placed.
Intensity	The stimulation should give a strong, but pleasant paraesthesia – tingling. Adjust the energy level during the treatment, because this is one of the key factors for the effectiveness of the treatment.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

PULSE WIDTH MODULATED TENS			
Frequency	Pulse width	Modulation time	Treatment time
80 Hz	70-180 µs	2 s	30 min

BURST TENS/ENDORPHINIC	
When?	The treatments Burst TENS/Endorphinic are usually most effective for radiating (projected) pain in the arms and legs (rhizopathy), for conditions with reduced or changed sensory of touch, for deep muscular pain or when the post-treatment of TENS is too short.
Why?	For an acute pain you need pain relief to take part in daily activities and not enter a vicious circle. For chronic pain you need a way to handle your daily life. Burst TENS/Endorphinic have no side effects and are easy to use.
How?	Burst TENS/Endorphinic utilises the nervous system's own pain relief mechanisms and alleviates pain by stimulating muscles to release the body´s own morphine-like substances, endorphins from hypothalamus. The muscle twitches also increase the local blood circulation. *Frequency:* 1-5 Hz.
Example	Mononeuropathy, central pain, cervical rhizopathy, sciatica and knee pain.
Electrodes	Place the electrodes on a muscle in the painful area so a visible contraction occurs, or on acupuncture points in the painful area. See Position of the electrodes.
Intensity	The stimulation should feel pleasant and give visible muscle twitches. Remember that the patient often feels the stimulation before contractions become visible. Visible muscle twitches are the key factor for the effectiveness of the treatment.
Option 2+2	Yes. If the patient experience discomfort during stimulation, the 2+2 function allows this program (ch 1+2) to be combined with a TENS program (ch 3+4) to produce the muscular twitches more quickly and more comfortably.

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BURST TENS		
Frequency	Pulse width	Treatment time
2 Hz (2 pulse trains per second with an internal frequency of 80 Hz)	180 µs	20 min

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ENDORPHINIC		
Frequency	Pulse width	Treatment time
5 Hz	200 µs	20 min

DECONTRACTION	
When?	This type of treatment gives a reduction in the muscular tension of certain muscles and can also be used as a pretreatment to facilitate manipulations.
Why?	To obtain a reduction in the muscular tension.
How?	Studies have revealed that muscular twitches produced by a very low frequency (1 Hz) effectively reduces the muscle tension of the muscles stimulated.
Example	Torticollis, lumbago.
Electrodes	Electrodes positioned according to the muscles where you want to reduce tension. See Position of the electrodes.
Intensity	The stimulation should feel pleasant and give visible muscle twitches. Remember that the patient often feels the stimulation before contractions become visible. Visible muscle twitches are the key factor for effectiveness of the treatment.
Option 2+2	Yes. If the patient experience discomfort during stimulation, the 2+2 function allows this program (ch 1+2) to be combined with a TENS program (ch 3+4) to produce the muscular twitches more quickly and more comfortably.

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DECONTRACTION	
Frequency	Treatment time
1 Hz	20 min

MIXED TENS	
When?	TENS is the first choice for acute and long-term pain, both neurogenic and nociceptive. Good results are observed above all when the pain originates in joints, the skeleton, muscles, skin, viscera or nervous system. Mixed TENS is also called Han-stimulation. Stimulation frequencies switch every three seconds, giving a combination of 80 Hz and 2 Hz stimulation, which can offer a more effective treatment.
Why?	For an acute pain you need pain relief to take part in daily activities and avoid enter a vicious circle. For chronic pain you need a way to handle your daily life. TENS has no side effects and is easy to use.
How?	Mixed TENS utilises the nervous system's own pain relief mechanisms and is based on the Gate control theory (see TENS) and also on the release of the body´s own morphine-like substances, endorphins (see Burst TENS).
Example	Neck pain, shoulder pain, lumbago, hip pain and thigh pain.
Electrodes	Place the electrodes on a muscle in the painful area so that a visible contraction occurs. See Position of the electrodes.
Intensity	The stimulation should give both a strong, but pleasant paraesthesia – tingling and as well visible muscle twitches. Note: This program has separate intensity levels. Start to adjust the energy level for 80 Hz to a tingling sensation, then again for 2 Hz in order to have visible muscle twitches.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

MIXED TENS		
Frequency	Pulse width	Treatment time
80 Hz 3 s / 2 Hz 3 s	180 µs	30 min

MUSCLE PAIN	
When?	For all kinds of muscle pain, but the most common are pain from muscle tensions in the neck and shoulder area.
Why?	For pain relief.
How?	The stimulation inhibits impulse transfer in the pain pathways (Gate control).
Electrodes	The electrodes should be placed in the painful area, preferably over tender points. See Position of the electrodes. Find the right electrode position with very slight changes of the electrodes. The stimulation should be perceived stronger than the pain itself.
Intensity	Strong, tingling, undulating sensation, without being painful.
Option 2+2	Yes.

☑ Mi-Theta600 ☑ Theta500 ☐ Rehab400

MUSCLE PAIN			
Frequency	Pulse width	Modulation time	Treatment time
70 Hz	80-200 µs	2 s	30 min

JOINT PAIN	
When?	Joint pain is a highly prevalent condition and most common areas are shoulders and knees.
Why?	For pain relief.
How?	The stimulation inhibits impulse transfer in the pain pathways (Gate control).
Electrodes	The electrodes should be placed in the painful area. See Position of the electrodes. Find the right electrode position with very slight changes of the electrodes. The stimulation should be perceived stronger than the pain itself
Intensity	Strong, tingling, undulating sensation, without being painful
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

JOINT PAIN			
Frequency	Pulse width	Modulation time	Treatment time
60 Hz	60-150 µs	2 s	30 min

FRACTURE PAIN	
When?	All fractures are more or less painful. Few non-surgical conditions are more painful than rib fractures. These patients need an effective pain relief that prevent complications such as pulmonary complications or thrombosis.
Why?	For pain relief.
How?	The stimulation inhibits impulse transfer in the pain pathways (Gate control).
Electrodes	The electrodes should surround the painful area. See Position of the electrodes. Find the right electrode position with very slight changes of the electrodes. The stimulation should be perceived stronger than the pain itself.
Intensity	Strong, tingling sensation, without being painful.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

FRACTURE PAIN			
Frequency	Pulse width	Modulation time	Treatment time
70 Hz	170 µs	2 s	30 min

Specific Pain relief

KNEE PAIN	
When?	There are many conditions and activities that can cause injuries and knee pain e.g. work and sport activities. Knee pain can also be caused by underlying medical conditions such as osteoarthritis, rheumatoid arthritis and chondromalacia.
Why?	For pain relief.
How?	The stimulation inhibits impulse transfer in the pain pathways (Gate control). In this program the pulse width varies continuously. This causes an undulating sensation that can be more pleasant than a stimulation with a constant pulse width.
Electrodes	The electrodes should be placed on each side of the joint space to make knee flexion easier. See Position of the electrodes. It is important to ensure that the patient has normal sensory of touch in the area where the electrodes are placed.
Intensity	The stimulation should give a strong, tingling, undulating sensation, without being painful. It is important that the energy level is adjusted during the treatment, because this is one of the key factors for the effectiveness of the treatment.
Option 2+2	Yes.

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KNEE PAIN			
Frequency	Pulse width	Modulation time	Treatment time
80 Hz	75-180 µs	2 s	30 min

TRAPEZIUS PAIN	
When?	Trapezius muscle pain may result from e.g. heavy or repetitive lifting, overuse, poor or awkward postures, non-ergonomic work stations, but also underlying medical conditions such as arthritis and cervical disc disease.
Why?	For pain relief.
How?	The stimulation inhibits impulse transfer in the pain pathways (Gate control). In this program the pulse width varies continuously. This causes an undulating sensation which gives a massage effect on the Trapezius muscle.
Electrodes	The electrodes should be placed in the painful area, preferably over tender points. See Position of the electrodes. Find the right electrode position with very slight changes of the electrodes. It is important to ensure that the patient has normal sensory of touch in the area where the electrodes are placed.
Intensity	The stimulation should give a strong, tingling, undulating sensation, without being painful. It is important that the energy level is adjusted during the treatment, because this is one of the key factors for the effectiveness of the treatment.
Option 2+2	Yes.

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TRAPEZIUS PAIN			
Frequency	Pulse width	Modulation time	Treatment time
60 Hz	80-200 µs	3 s	30 min

SHOULDER PAIN	
When?	Shoulder pain may result from e.g. heavy or repetitive lifting, sports injuries and underlying medical conditions such as arthritis, tendinopathy and impingement.
Why?	For pain relief.
How?	The stimulation inhibits impulse transfer in the pain pathways (Gate control). In this program the pulse width varies continuously. This causes an undulating sensation which gives a massage effect on the muscles.
Electrodes	One electrode should be positioned on the shoulder above the acromion and the other electrode(s) placed on the Deltoid muscle.
Intensity	The stimulation should give a strong, tingling, undulating sensation, without being painful. It is important that the energy level is adjusted during the treatment, because this is one of the key factors for the effectiveness of the treatment.
Option 2+2	Yes.

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SHOULDER PAIN			
Frequency	Pulse width	Modulation time	Treatment time
80 Hz	75-180 µs	3 s	30 min

CERVICAL PAIN LO	
When?	Cervical/neck pain often result from chronic contractions of the Levator scapulae and/or superior Trapezius and is due to e.g. non-ergonomic work positions.
Why?	For pain relief and increased circulation.
How?	The stimulation alleviates pain by stimulating muscles to release the body´s own morphine-like substances, endorphins. The muscle twitches also increase the local blood circulation.
Electrodes	The position of the electrode depends on the location of the pain, if it is unilateral or bilateral. An electrode is placed on the most painful point that can be found by palpation. One or two electrodes are placed on the cervical paraverthebral muscles. See Position of electrodes.
Intensity	The stimulation should feel pleasant and give visible muscle twitches. Remember that the patient often feels the stimulation before contractions become visible. Visible muscle twitches are the key factor for the effectiveness of the treatment.
Option 2+2	Yes.

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CERVICAL PAIN LO		
Frequency	Pulse width	Treatment time
5 Hz	250 µs	20 min

CERVICAL PAIN HI	
When?	Cervical/neck pain often result from chronic contractions of the Levator scapulae and/or superior Trapezius and is due to e.g. non-ergonomic work positions.
Why?	For pain relief.
How?	The stimulation inhibits impulse transfer in the pain pathways (Gate control). In this program the pulse width varies continuously. This causes an undulating sensation which gives a massage effect on the muscles.
Electrodes	The electrodes should be placed in the painful area, preferably over tender points. See Position of the electrodes. Find the right electrode position with very slight changes of the electrodes.
Intensity	The stimulation should give a strong, tingling, undulating sensation, without being painful. It is important that the energy level is adjusted during the treatment, because this is one of the key factors for the effectiveness of the treatment.
Option 2+2	Yes.

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

CERVICAL PAIN HI			
Frequency	Pulse width	Modulation time	Treatment time
80 Hz	60-160 µs	2 s	30 min

THORACIC BACK PAIN	
When?	Thoracic back pain often result from chronic contractions of the dorsal paravertebral muscles (Erector spinae) and is due to e.g. degeneration or positions in which the muscles of the spinal columna remain under tension for long periods of time.
Why?	For pain relief and increased circulation.
How?	The stimulation alleviates pain by stimulating muscles to release the body´s own morphine-like substances, endorphins. The muscle twitches also increase the local blood circulation.
Electrodes	Preferably use two stimulation channels. Place one electrode on a tender point and the other electrode of the same channel on Erector spinae; above or below the first electrode depending on whether the pain irradiates toward the cervical region or the lumbar region. See Position of the electrodes.
Intensity	The stimulation should feel pleasant and give visible muscle twitches. Remember that the patient often feels the stimulation before contractions become visible. Visible muscle twitches are the key factor for the effectiveness of the treatment.
Option 2+2	Yes.

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THORACIC BACK PAIN		
Frequency	Pulse width	Treatment time
5 Hz	250 µs	20 min

LOWER BACK PAIN	
When?	Lower back pain often results from chronically contracted lumbar paravertebral muscles.
Why?	For pain relief and increased circulation.
How?	The stimulation alleviates pain by stimulating muscles to release the body´s own morphine-like substances, endorphins. The muscle twitches also increase the local blood circulation.
Electrodes	Preferably use two stimulation channels. Place one electrode on a tender point and the other electrode of the same channel on Erector spinae; above or below the first electrode depending on whether the pain irradiates toward the cervical region or the lumbar region. See Position of the electrodes.
Intensity	The stimulation should feel pleasant and give visible muscle twitches. Remember that the patient often feels the stimulation before contractions become visible. Visible muscle twitches are the key factor for the effectiveness of the treatment.
Option 2+2	Yes. If the patient experiences discomfort during stimulation, the 2+2 function allows this program (ch 1+2) to be combined with a TENS program (ch 3+4) to produce the muscular twitches more quickly and more comfortably.

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LOWER BACK PAIN		
Frequency	Pulse width	Treatment time
5 Hz	250 µs	20 min

LOWER BACK MUSCLE PAIN	
When?	Lower back muscle pain is one of the most common reasons for which patients seek medical attention. This program is recommended to shorten recovery time and as symptomatic therapy.
Why?	For pain relief.
How?	The stimulation inhibits impulse transfer in the pain pathways (Gate control). To avoid adaption, this program has a continuous variation of the stimulation frequency.
Electrodes	As a rule, the electrodes should be placed on or near the painful area, or over an area segmentally related to the painful area. See Position of the electrodes. It is important to ensure that the patient has normal sensory of touch in the area where the electrodes are placed.
Intensity	The stimulation should give a strong, tingling sensation, without being painful. It is important that the energy level is adjusted during the treatment, because this is one of the key factors for the effectiveness of the treatment.
Option 2+2	Yes.

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LOWER BACK MUSCLE PAIN			
Frequency	Pulse width	Modulation time	Treatment time
40-100 Hz	250 µs	3 s	30 min

LUMBOSCIATICA	
When?	Patients suffering from lumbosciatica present lumbar pain that often originates from chronic contractions of the paravertebral muscles. In addition, involvement of the spinal nerveroot leads to irrradiation of pain a greater or lesser distance along the path of the sciatic nerve and, in some cases, one or other of its branches (common perineal or tibial).
Why?	For pain relief and increased circulation.
How?	The stimulation alleviates pain by stimulating muscles to release the body´s own morphine-like substances, endorphins. The muscle twitches also increase the local blood circulation.
Electrodes	Two electrodes are placed over the sciatic nerve root exit sites (L4-L5, L5-S1). Two other electrodes are placed on the path of the sciatic nerve: one of the lower part of the buttock and the other on the posterior face of the thigh. See Position of the electrodes.
Intensity	The stimulation should feel pleasant and give muscle twitches, if possible visible (or at least palpable). Remember that the patient often feels the stimulation before contractions become visible.
Option 2+2	Yes. If the patient experience discomfort during stimulation, the 2+2 function allows this program (ch 1+2) to be combined with a TENS program (ch 3+4) to produce the muscular twitches more quickly and more comfortably.

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LUMBOSCIATICA		
Frequency	Pulse width	Treatment time
5 Hz	250 µs	20 min

LUMBAGO	
When?	Lumbago is principally the result of a sharp and intense contraction of the lower back muscles (lumbar region).
Why?	To obtain a reduction in the muscular tension.
How?	Muscular twitches produced by a very low frequency (1 Hz) reduce the muscle tension during rest of the muscles stimulated.
Electrodes	Electrodes positioned according to the lower back muscle where you want to reduce tension. See Position of the electrodes.
Intensity	The stimulation should feel pleasant and give muscle twitches, if possible visible (or at least palpable). Remember that the patient often feels the stimulation before contractions become visible.
Option 2+2	Yes. If the patient experiences discomfort during stimulation, the 2+2 function allows this program (ch 1+2) to be combined with a TENS program (ch 3+4) to produce the muscular twitches more quickly and more comfortably.

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LUMBAGO		
Frequency	Pulse width	Treatment time
1 Hz	250 µs	20 min

EPICONDYLITIS	
When?	Epicondylitis is a tendinopathy and may result from e.g. repetitive gripping of objects and sports such as tennis and golf.
Why?	For pain relief.
How?	The stimulation inhibits impulse transfer in the pain pathways (Gate control). To avoid adaption, this program has a continuous variation of the stimulation frequency.
Electrodes	The electrodes should be placed on each side of the elbow. See Position of the electrodes. It is important to ensure that the patient has normal sensory of touch in the area where the electrodes are placed.
Intensity	The stimulation should give a strong, tingling sensation, without being painful. It is important that the energy level is adjusted during the treatment, because this is one of the key factors for the effectiveness of the treatment.
Option 2+2	Yes.

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EPICONDYLITIS			
Frequency	Pulse width	Modulation time	Treatment time
50-150 Hz	50 µs	2 s	20 min

TORTICOLLIS	
When?	A person with torticollis feels a sharp pain in the neck, often accompanied by a considerable reduction of the mobility of the cervical region.
Why?	To obtain a reduction in the muscular tension.
How?	Muscular twitches produced by a very low frequency (1 Hz) reduce the muscle tension at rest of the muscles stimulated.
Electrodes	Electrodes positioned according to the muscle where you want to reduce tension. See Position of the electrodes.
Intensity	The stimulation should feel pleasant and give visible muscle twitches. Remember that the patient often feels the stimulation before contractions become visible. Visible muscle twitches are the key factor for effectiveness of the treatment.
Option 2+2	Yes. If the patient experiences discomfort during stimulation, the 2+2 function allows this program (ch 1+2) to be combined with a TENS program (ch 3+4) to produce the muscular twitches more quickly and more comfortably.

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TORTICOLLIS		
Frequency	Pulse width	Treatment time
1 Hz	250 µs	20 min

ARTHRALGIA	
When?	Arthralgia is pain in or affecting a joint. The causes of arthralgia are varied and range from degenerative and destructive processes such as osteoarthritis and sports injuries.
Why?	For pain relief.
How?	The stimulation inhibits impulse transfer in the pain pathways (Gate control). To avoid adaption, this program has a continuous variation of the stimulation frequency.
Electrodes	The electrodes should be placed on each side of the elbow. See Position of the electrodes. It is important to ensure that the patient has normal sensory of touch in the area where the electrodes are placed.
Intensity	The stimulation should give a strong, tingling sensation, without being painful. It is important that the energy level is adjusted during the treatment, because this is one of the key factors for the effectiveness of the treatment.
Option 2+2	Yes.

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ARTHRALGIA			
Frequency	Pulse width	Modulation time	Treatment time
50-150 Hz	50 µs	2 s	20 min

Vascular

HEAVY LEGS	
When?	For use when a swelling of the feet and ankles occur together with a feeling of the legs being very heavy. Neither varicose veins nor organic injury can be observed.
Why?	Muscle contractions will compress the deep veins of the legs and eject the venous blood upwards. This will help to eliminate the edema and re-oxygenate the tissue. The stimulation will also help to overcome the tension and tendency to cramp.
How?	The program will automatically progress through three treatment sequences. Starting with 7 Hz, which allows hyper-oxygenation and an increase in the venous return of the blood. Next sequence, with 5 Hz, helps to achieve an endorphin effect. The treatment ends with 3 Hz and a muscular relaxation phase. A position lying on the back with legs raised is preferred.
Electrodes	Electrodes positioned on the calf muscles (Gastrocnemius). As indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the numbers of muscular fibers (motor units) working.
Option 2+2	Yes.

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HEAVY LEGS (21 MIN)			
	1st sequence	2nd sequence	3rd sequence
Frequency	7 Hz	5 Hz	3 Hz
Duration of ramp-up	1.5 s	1 s	1 s
Duration of phase	7 min	7 min	7 min
Duration of ramp-down	0.5 s	0.5 s	6 s

VENOUS INSUFFICIENCY 1	
When?	In a stage when there is a venous insufficiency without oedema.
Why?	To achieve maximum drainage of the veins and combat the stasis.
How?	The program consists of short tetanic contractions separated by long active pauses to increase the blood flow. Place the patient comfortably in a lying down position.
Electrodes	Electrodes positioned on the calf muscles (Gastrocnemius) and on the poplietal nerve. As indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the numbers of muscular fibers (motor units) working.
Option 2+2	Yes.

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VENOUS INSUFFICIENCY 1 (21 MIN)		
	Contraction	Active rest
Frequency	50 Hz	8 Hz
Duration of ramp-up	1.5 s	1 s
Duration of phase	4 s	21 s
Duration of ramp-down	1.5 s	1 s

VENOUS INSUFFICIENCY 2	
When?	When there is a venous insufficiency with oedema.
Why?	To drain the deep veins and transport the fluid upwards, without the risk of aggravating the oedema.
How?	The first stage of the program transports the fluid towards the thigh by a contraction of the leg muscle. Then, in the second stage, the contraction of the thigh muscles transports the blood further upwards as long as the leg muscles remains contracted in order to prevent a backflow.
Electrodes	Electrodes for channels 1 and 2 on the calf muscles (Gastrocnemius) and on the poplietal nerve. For channel 3, place electrodes on Quadriceps. For channel 4, place electrodes on Hamstrings. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	No. The 2+2 function is not available on this program since all four channels are in use.

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VENOUS INSUFFICIENCY 2 (21 MIN)			
	1stContraction (ch 1+2)	2ndContraction (ch 1+2+3+4)	Rest
Frequency	50 Hz	50 Hz	0 Hz
Duration of ramp-up	1.5 s	1.5 s	0 s
Duration of phase	3 s	3 s	19 s
Duration of ramp-down	0 s	1.5 s	0 s

ARTERIAL INSUFFICIENCY 1	
When?	When there is an arterial insufficiency of the lower limbs. The severity of the disorder is classified into four stages. Treat with this program in stage 1 and/or 2. In the first two stages there is pain in the legs after walking a certain distance. The pain makes the patients stop, then after a recovery period, the pain is gone and the patient could start to walk again.
Why?	The muscle fibers suffer from a shortage of oxygen when an effort is made due to a chronic reduction of the arterial flow. Low frequency stimulation acts on the capacity of the fibers to use the oxygen, improves the tolerance and increases the walking range.
How?	Periods of low frequency (9 Hz) altered with 3 Hz. This stimulation avoids tetanization and considerable fatigue.
Electrodes	Electrodes on the calf muscles (Gastrocnemius) and on the poplietal nerve. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

ARTERIAL INSUFFICIENCY 1 (14 MIN)		
	Contraction	Active rest
Frequency	9 Hz	3 Hz
Duration of ramp-up	1 s	1 s
Duration of phase	15 s	15 s
Duration of ramp-down	1 s	1 s

ARTERIAL INSUFFICIENCY 2	
When?	When there is arterial insufficiency of the lower limbs. The severity of the disorder is classified into four stages. Treat with this program in stage 3. In stage 3 there is pain in the legs also in rest. The blood flow is so reduced that the tissues suffer from constant hypoxia.
Why?	The muscle fibers suffer from a shortage of oxygen when an effort is made due to a chronic reduction of the arterial flow. Low frequency stimulation acts on the capacity of the fibers to use the oxygen, improves the tolerance and increase the walking range.
How?	Alternating periods of low frequency activity (7Hz) altered with periods of 2 Hz. This stimulation avoids tetanization and considerable fatigue.
Electrodes	Electrodes on the calf muscles (Gastrocnemius) and on the poplietal nerve. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

ARTERIAL INSUFFICIENCY 2 (14 MIN)		
	Contraction	Active rest
Frequency	7 Hz	2 Hz
Duration of ramp-up	1 s	1 s
Duration of phase	15 s	15 s
Duration of ramp-down	1 s	1 s

CRAMP PREVENTION	
When?	For cramps in the calves, which can occur spontaneously, at rest or following prolonged muscular effort.
Why?	The cramp phenomenon can partly be a result of an imbalance in blood circulation and a slowing of cellular exchanges in the muscles.
How?	The program consists of two sequences. First, 8 Hz to increase the blood flow and develop the capillaries; secondly 3 Hz to relax muscle tone and give the patient a feeling of well being. Sequence 1 and 2 repeats four times.
Electrodes	Place electrodes on the calf muscles (Gastrocnemius) and on the poplietal nerve. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

CRAMP PREVENTION (*40 MIN)		
	1st sequence	2nd sequence
Frequency	8 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s
Duration of phase	8 min	2 min
Duration of ramp-down	1.5 s	1.5 s

** 1st and 2nd sequence loop 4 times*

CAPILLARIZATION	
When?	To make the muscle fibers more resistant to fatigue.
Why?	The capillarization allows a decreased production of lactic acid and creates a larger area of exchange and distribution of oxygen and metabolites.
How?	The program consists of continuous stimulation of 8 Hz, which has shown to have the maximum increase in blood flow.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

CAPILLARIZATION (25 MIN)	
	Continuous stimulation
Frequency	8 Hz
Duration of ramp-up	1.5 s
Duration of phase	25 min
Duration of ramp-down	1.5 s

SPECIFIC TREATMENT

Agonist - Antagonist

ATHROPHY/REINFORCEMENT	
When?	Dynamic work of a limb in order to increase the range of movement. To decrease spasticity and tonus in a muscle and at the same time strengthen the antagonist.
Why?	This program enables activity in the whole range of movement by mobilizing one limb segment first in one direction and then in the other. For reducing tone, this contraction sequence is effective since it stretches the spastic muscle. Stimulating the antagonist muscle also inhibits the tone in the agonist by the reciprocal inhibition reflex.
How?	There are four different programs: ***Atrophy 1 and Reinforcement 1***. These programs have contractions with identical duration for the agonist and antagonist. ***Atrophy 2 and Reinforcement 2***. These programs have contractions with twice the duration for the antagonist compared to the agonist. The frequencies of the atrophy programs focus on Type I fibers, and reinforcement on Type II fibers.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Sufficient intensity in this case must be used in order to obtain mobilization up to the maximum range of movement.
Option 2+2	No. The 2+2 function is not available in this program since all four channels are in use.
Note	Ch 1+2 alternate with ch 3+4.

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

ATROPHY 1 (21 MIN)				
	Sequence 1 Ago	Sequence 1 Antago	Sequence 2 Ago	Sequence 2 Antago
Frequency	35 Hz	0 Hz	0 Hz	35 Hz
Duration of ramp-up	1.5 s	0 s	0 s	1.5 s
Duration of phase	6 s	6 s	6 s	6 s
Duration of ramp-down	0.75 s	0 s	0 s	0.75 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

ATROPHY 2 (21 MIN)				
	Sequence 1 Ago	Sequence 1 Antago	Sequence 2 Ago	Sequence 2 Antago
Frequency	35 Hz	0 Hz	0 Hz	35 Hz
Duration of ramp-up	1.5 s	0 s	0 s	1.5 s
Duration of phase	8 s	8 s	4 s	8 s
Duration of ramp-down	0.75 s	0 s	0 s	0.75 s

☑ Mi-Theta600 ☐ Theta500 ☐ Rehab400

REINFORCEMENT 1 (16 MIN)				
	Sequence 1 Ago	Sequence 1 Antago	Sequence 2 Ago	Sequence 2 Antago
Frequency	70 Hz	4 Hz	4 Hz	70 Hz
Duration of ramp-up	1.5 s	0.5 s	0.5 s	1.5 s
Duration of phase	4 s	3 s	3 s	4 s
Duration of ramp-down	0.75 s	0.5 s	0.5 s	0.75 s

☑ Mi-Theta600 ☐ Theta500 ☐ Rehab400

REINFORCEMENT 2 (17 MIN)				
	Sequence 1 Ago	Sequence 1 Antago	Sequence 2 Ago	Sequence 2 Antago
Frequency	70 Hz	4 Hz	70 Hz	4 Hz
Duration of ramp-up	1.5 s	0.5 s	1.5 s	0.5 s
Duration of phase	6 s	4 s	3 s	3 s
Duration of ramp-down	0.75 s	0.5 s	0.75 s	0.5 s

Spasticity

HEMIPLEGIC FOOT	
When?	After a stroke a so called drop foot pattern is very common. It is due to increased tonus of the calf muscle and/or paralysis of the flexor muscles of the foot. This program is **not** recommended if: a) the stimulation creates a spasm reflex in the leg/foot b) the spasticity in the calf muscle is considerably strong. Try a program that inhibits the tonus as a preparation.
Why?	This program stimulates the anterior part of the lower leg. It creates a contraction in the swing phase of the gait, preventing the foot from dropping.
How?	Put one electrode under the Fibula head at the passage of the Peroneal nerve. Depending of the desired position of the foot, place the other electrode on Anterior Tibialis or on the Peroneus muscle. The stimulation is triggered, which means that you manually start the stimulation. Increase the current for the first contraction. To trigger the stimulation, push the + button shortly on ch 1 for the next contraction.
Electrodes	Put one electrode under the fibula head at the passage of the Peroneal nerve. Depending of the desired position of the foot, place the other electrode on Anterior Tibialis or on the Peroneus muscle. See Position of the electrodes.
Intensity	Sufficient intensity in this case must be used in order to obtain a contraction that prevents the foot from dropping in the swing phase of gait.
Option 2+2	No.

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

HEMIPLEGIC FOOT (13 MIN, TRIGGERED)	
Frequency	50 Hz
Duration of ramp-up	0.5 s
Duration of phase	1.5 s
Duration of ramp-down	0.25 s

SPASTICITY	
When?	In varying degrees of increased muscular tonus, mainly in the antigravity muscles. Spasticity is due to a lesion of the central nervous system. In time spasticity could lead to contracture and a reduction in range of movement.
Why?	NMES of a muscle antagonist to a spastic muscle makes it possible to reduce the spasticity by inhibition of the motor neurons of the spastic muscle via the reciprocal inhibition reflex.
How?	This program has a very long and gradual ramp-up in order to avoid a stretch reflex on the spastic muscle. No active rest with low freq stimulation between contractions is used. The stimulation is triggered, which means that you manually start the stimulation. Increase the current for the first contraction. To trigger the next contraction, push shortly the + on the button on the connected channels.
Electrodes	Place the electrodes on the antagonist of the spastic muscle to be treated. The stimulation acts not on the spastic muscle but on its antagonist. See Position of the electrodes.
Intensity	Sufficient intensity in this case must be used in order to obtain a contraction that creates movement to the maximum range of motion, thus causing maximum stretch of the spastic muscle.
Option 2+2	Yes.

☑ Mi-Theta600 ☐ Theta500 ☐ Rehab400

SPASTICITY (21 MIN, TRIGGERED)		
	Contraction	Rest
Frequency	35 Hz	0 Hz
Duration of ramp-up	4.5 s	0 s
Duration of phase	5 s	5 s
Duration of ramp-down	3 s	0 s

SHOULDER SUBLUXATION	
When?	A problem frequently encountered in hemiplegic patients is subdislocation of the paretic or paralyzed shoulder. The subdislocated shoulder is often also painful.
Why?	Stimulation of the Deltoid and Supraspinatus muscles is used as prevention or treatment for atrophy. There is also evidence that the treatment leads to a re-centering of the humeral head in the glenoid cavity. Secondarily this reduces the pain.
How?	This program has a contraction period followed by relaxation without active rest.
Electrodes	Place one electrode on the Deltoid and one on the Supraspinatus. Put a large electrode over the Acromion. See Position of the electrodes.
Intensity	Gradually increase the intensity until maximum tolerable level is reached. Sufficient intensity in this case must be used in order to obtain a contraction that creates a visible decrease the gap between Humerus and Acromion and centers the Humeral head in the Glenoidal cavity.
Option 2+2	Yes. If the patient experience discomfort during stimulation, the 2+2 function allows this program (ch 1+2) to be combined with a TENS program (ch 3+4) to produce the contractions more comfortably.

☑ Mi-Theta900 ☐ Theta500 ☐ Rehab400

SHOULDER SUBLUXATION (25 MIN)		
	Contraction	Rest
Frequency	40 Hz	0 Hz
Duration of ramp-up	3 s	0 s
Duration of phase	8 s	8 s
Duration of ramp-down	1.5 s	0 s

Haemophilia

HAEMOPHILIA DISUSE ATROPHY/REINFORCEMENT	
When?	Patients with Haemophilia often have a limited possibility of voluntary activity and for those with a varying severity of haemarthrosis (intra-articular bleeding), NMES could be an alternative.
Why?	To avoid that an intra-articular bleeding (haemarthrosis) results in a disuse athrophy and secondarily reduced protection of the joint, which makes the joint more vulnerable for further bleedings.
How?	These programs have very gradual increases in the stimulation. By avoiding sudden applications, the risk of haemorrage can therefore be limited as far as possible. These programs therefore always use frequencies above 25 Hz and ramp-up times longer than 4.5 sec. Choose a Disuse atrophy program initially, followed by a Reinforcement program.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Gradually increase the intensity until maximum tolerable level is reached. The first and second session will help to accustom the patient to the method while increasing the work load after a few sessions, generally after a week.
Option 2+2	Yes.

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

HAEMOPHILIA, DISUSE ATROPHY, LEVEL 1 (25 MIN)		
	Contraction	Rest
Frequency	40 Hz	0 Hz
Duration of ramp-up	6 s	0 s
Duration of phase	3 s	10 s
Duration of ramp-down	1.5 s	0 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

HAEMOPHILIA, DISUSE ATROPHY, LEVEL 2 (32 MIN)		
	Contraction	Rest
Frequency	45 Hz	0 Hz
Duration of ramp-up	6 s	0 s
Duration of phase	5 s	9 s
Duration of ramp-down	1.5 s	0 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

HAEMOPHILIA, REINFORCEMENT, LEVEL 1 (15 MIN)		
	Contraction	Rest
Frequency	70 Hz	0 Hz
Duration of ramp-up	6 s	0 s
Duration of phase	3 s	10 s
Duration of ramp-down	1.5 s	0 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

HAEMOPHILIA, REINFORCEMENT, LEVEL 2 (20 MIN)		
	Contraction	Rest
Frequency	80 Hz	0 Hz
Duration of ramp-up	6 s	0 s
Duration of phase	3 s	15 s
Duration of ramp-down	1.5 s	0 s

Aesthetic

TONING	
Indication	To be used initially in order to tone up and prepare the muscles before more intensive firming work. This type of training session is of moderate intensity, making it suitable for everyone, and does not cause muscle soreness.
Effects	To tone the muscles.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

TONING, LEVEL 1 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	18 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	10 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

TONING, LEVEL 2 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	18 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	9 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

TONING, LEVEL 3 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	18 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	8 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

FIRMING	
Indication	To be used as the main treatment for muscle firming. Firming programs represent exercise of medium intensity, and are aimed to improve muscular density without causing muscle soreness.
Effects	To regain muscle firmness and restore the support function of the muscles.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

FIRMING, LEVEL 1 (22 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	22 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	1 s	1.5 s
Duration of phase	2 min	8 s	5 s	3 min
Duration of ramp-down	2 s	0.75 s	1 s	3 s

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

FIRMING, LEVEL 2 (22 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	24 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5s	1.5 s	1 s	1.5 s
Duration of phase	2 min	8 s	5 s	3 min
Duration of ramp-down	2 s	0.75 s	1 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

FIRMING, LEVEL 3 (24 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	25 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	0.75 s	1 s	1.5 s
Duration of phase	2 min	8 s	4 s	3 min
Duration of ramp-down	2 s	0.75 s	1 s	3 s

SHAPING	
Indication	To be used when the firming phase has been completed.
Effects	To define and sculpt the body when the muscles are already firm.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

SHAPING, LEVEL 1 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	40 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	10 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

SHAPING, LEVEL 2 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	40 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	9 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

SHAPING, LEVEL 3 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	40 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	8 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

REFINEMENT	
Indication	To be used on the waist muscles after firming of the abdomen.
Effects	To work specifically on the waist.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

REFINEMENT, LEVEL 1 (13 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	30 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	5 s	0.5 s	1.5 s
Duration of phase	2 min	10 s	6 s	3 min
Duration of ramp-down	2 s	1.5 s	0.5 s	3 s

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

REFINEMENT, LEVEL 2 (15 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	30 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	5 s	0.5 s	1.5 s
Duration of phase	2 min	10 s	6 s	3 min
Duration of ramp-down	2 s	1.5 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

REFINEMENT, LEVEL 3 (17 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	30 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	5 s	0.5 s	1.5 s
Duration of phase	2 min	10 s	6 s	3 min
Duration of ramp-down	2 s	1.5 s	0.5 s	3 s

ABS	
Indication	A special program designed for strengthening and firming the abdominal muscles.
Effects	Encourage slimming of the waist by improving abdominal muscular support.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy.
Option 2+2	Yes.

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

ABS, LEVEL 1 (28 MIN)					
	Warm-up	Contraction 1-50	Contraction 51-60	Active rest*	Final recovery phase
Frequency	6 Hz	20 Hz	30 Hz		3 Hz
Duration of ramp-up	1.5 s	3 s	3.5 s		1.5 s
Duration of phase	2 min	6 s	7 s		3 min
Duration of ramp-down	2 s	1.5 s	1.5 s		3 s

** Active rest: Frequency modulated 4-8 Hz alternating on the four channels.*

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

ABS, LEVEL 2 (28 MIN)					
	Warm-up	Contraction 1-50	Contraction 51-60	Active rest*	Final recovery phase
Frequency	6 Hz	22 Hz	30 Hz		3 Hz
Duration of ramp-up	1.5 s	3 s	3.5 s		1.5 s
Duration of phase	2 min	6 s	7 s		3 min
Duration of ramp-down	2 s	1.5 s	1.5 s		3 s

** Active rest: Frequency modulated 4-8 Hz alternating on the four channels.*

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

ABS, LEVEL 3 (28 MIN)					
	Warm-up	Contraction 1-50	Contraction 51-60	Active rest*	Final recovery phase
Frequency	6 Hz	24 Hz	30 Hz		3 Hz
Duration of ramp-up	1.5 s	3 s	3.5 s		1.5 s
Duration of phase	2 min	6 s	7 s		3 min
Duration of ramp-down	2 s	1.5 s	1.5 s		3 s

** Active rest: Frequency modulated 4-8 Hz alternating on the four channels.*

BUTTOCKS	
Indication	A special program designed for strengthening and firming the gluteal muscles.
Effects	Improving the muscular support of the gluteal muscles.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy.
Option 2+2	Yes.

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

BUTTOCKS, LEVEL 1 (27 MIN)					
	Warm-up	Contraction 1-50	Contraction 51-60	Active rest*	Final recovery phase
Frequency	6 Hz	20 Hz	40 Hz		3 Hz
Duration of ramp-up	1.5 s	3 s	1.5 s		1.5 s
Duration of phase	2 min	6 s	6 s		3 min
Duration of ramp-down	2 s	1.5 s	0.75 s		3 s

** Active rest: Frequency modulated 4-8 Hz alternating on the four channels.*

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

BUTTOCKS, LEVEL 2 (28 MIN)					
	Warm-up	Contraction 1-50	Contraction 51-60	Active rest*	Final recovery phase
Frequency	6 Hz	22 Hz	40 Hz		3 Hz
Duration of ramp-up	1.5 s	3 s	1.5 s		1.5 s
Duration of phase	2 min	6 s	6 s		3 min
Duration of ramp-down	2 s	1.5 s	0.75 s		3 s

** Active rest: Frequency modulated 4-8 Hz alternating on the four channels.*

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

BUTTOCKS, LEVEL 3 (28 MIN)					
	Warm-up	Contraction 1-50	Contraction 51-60	Active rest*	Final recovery phase
Frequency	6 Hz	24 Hz	40 Hz		3Hz
Duration of ramp-up	1.5 s	3 s	1.5 s		1.5 s
Duration of phase	2 min	6 s	6 s		3 min
Duration of ramp-down	2 s	1.5 s	0.75 s		3 s

** Active rest: Frequency modulated 4-8 Hz alternating on the four channels.*

ELASTICITY	
Indication	To be used as a complement to the Firming and Shaping programs.
Effects	To improve the circulation and skin elasticity.
Electrodes	Electrodes positioned as indicated according to the muscle to be stimulated. See Position of the electrodes.
Intensity	Stimulation energy sufficient to provoke strong muscle twitches
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

ELASTICITY, LEVEL 1 (12 MIN)						
	1st Sequence	2nd Sequence	3rd Sequence	4th Sequence	5th Sequence	6th Sequence
Frequency	5 Hz	7 Hz	9 Hz	6 Hz	3 Hz	1 Hz
Duration of phase	2 min	2 min	2 min	2 min	2 min	2 min

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

ELASTICITY, LEVEL 2 (15 MIN)						
	1st Sequence	2nd Sequence	3rd Sequence	4th Sequence	5th Sequence	6th Sequence
Frequency	5 Hz	7 Hz	9 Hz	6 Hz	3 Hz	1 Hz
Duration of phase	2 min	3 min	2 min	3 min	2 min	3 min

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

ELASTICITY, LEVEL 3 (18 MIN)						
	1st Sequence	2nd Sequence	3rd Sequence	4th Sequence	5th Sequence	6th Sequence
Frequency	5 Hz	7 Hz	9 Hz	6 Hz	3 Hz	1 Hz
Duration of phase	3 min	3 min	3 min	3 min	3 min	3 min

CONDITIONING

Sport

POTENTIATION	
Indication	For optimum muscle preparation immediately before competition. Carry out the session not more than 10 minutes prior to the start.
Effects	To increase the contraction speed and to gain power. Enables you to use less nervous effort to attain maximum strength.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes. For potentiation, on the key muscles involved in the discipline practiced.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

POTENTIATION (3 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	1 Hz	7 peaks*	1 Hz	1Hz
Duration of ramp-up	1.5 s	0 s	0 s	1.5 s
Duration of phase	30 s	7 s	10 s	20 s
Duration of ramp-down	2 s	0 s	0 s	3 s

** Contraction peak Hz: 1) 2-10 2) 2-15 3) 2-20 4) 2-25 5) 2-35 6) 2-45 7) 2-55 8) 2-65 9) 2-75*

ENDURANCE	
Indication	For athletes who wish to improve their performance in long duration sporting events. Recommended use is one session three times a week.
Effects	This program improves the oxidative capacity (aerobic capacity) in the stimulated muscles.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes. For endurance, on the key muscles involved in the discipline practiced.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

ENDURANCE, LEVEL 1 (55 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	10 Hz	3 Hz	3 Hz
Duration of ramp-up	1.5 s	0.5 s	0 s	1.5 s
Duration of phase	5 min	8 s	2 s	10 min
Duration of ramp-down	2 s	0.5 s	0 s	3 s

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

ENDURANCE, LEVEL 2 (55 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	12 Hz	3 Hz	3 Hz
Duration of ramp-up	1.5 s	0.5 s	0 s	1.5 s
Duration of phase	5 min	8 s	2 s	10 min
Duration of ramp-down	2 s	0.5 s	0 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

ENDURANCE, LEVEL 3 (55 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	14 Hz	3 Hz	3 Hz
Duration of ramp-up	1.5 s	0.5 s	0 s	1.5 s
Duration of phase	5 min	8 s	2 s	10 min
Duration of ramp-down	2 s	0.5 s	0 s	3 s

RESISTANCE	
Indication	For competitive athletes who wish to increase their capacity to sustain intense and prolonged effort. Recommended use is one session three times a week.
Effects	This program improves the performance thanks to better muscular resistance to fatigue for exercises of the lactic anaerobic type.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes. For endurance, on the key muscles involved in the discipline practiced.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

RESISTANCE, LEVEL 1 (27 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	50 Hz	5 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	5 min	7 s	7 s	10 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

RESISTANCE, LEVEL 2 (28 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	55 Hz	6H z	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	5 min	8 s	7 s	10 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

RESISTANCE, LEVEL 3 (28 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	60 Hz	7 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	5 min	8 s	6 s	10 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

STRENGTH	
Indication	For competitive athletes who practice a discipline that requires strength and speed. Recommended use is three times a week in order to improve the power.
Effects	This program increases the maximum strength and the rate of muscular contractions. Integrate this program into your voluntary training program.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes. To increase maximum strength, on the key muscles involved in the discipline practiced.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

STRENGTH, LEVEL 1 (33 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	75 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	5 min	4 s	19 s	10 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

STRENGTH, LEVEL 2 (35 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	83 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	5 min	4 s	23 s	10 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

STRENGTH, LEVEL 3 (38 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	90 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	5 min	4 s	27 s	10 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

EXPLOSIVE STRENGTH	
Indication	For athletes who practice a discipline in which explosive strength is an important factor in performance. To increase the capacity for instantaneous maximum force. Recommended use is three times a week.
Effects	This program increases the speed at which the level of strength is attained and improves the efficiency of explosive actions like jumping, sprinting etc.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

EXPLOSIVE STRENGTH, LEVEL 1 (32 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	104 Hz	1 Hz	3 Hz
Duration of ramp-up	1.5 s	0.75 s	0.5 s	1.5 s
Duration of phase	5 min	3 s	28 s	10 min
Duration of ramp-down	2 s	0.5 s	0.5 s	3 s

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

EXPLOSIVE STRENGTH, LEVEL 2 (32 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	108 Hz	1 Hz	3 Hz
Duration of ramp-up	1.5 s	0.75 s	0.5 s	1.5 s
Duration of phase	5 min	3 s	29 s	10 min
Duration of ramp-down	2 s	0.5 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

EXPLOSIVE STRENGTH, LEVEL 3 (34 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	111 Hz	1 Hz	3 Hz
Duration of ramp-up	1.5 s	0.75 s	0.5 s	1.5 s
Duration of phase	5 min	3 s	32 s	10 min
Duration of ramp-down	2 s	0.5 s	0.5 s	3 s

HYPERTROPHY	
Indication	For body building enthusiasts and athletes who want to increase their muscle mass. Combine this program with the voluntary training program. Recommended use is three to five sessions a week.
Effects	This program increases the volume of the stimulated muscles and improves the muscle resistance.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes. This program could be applied to several muscle groups at the same time.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

HYPERTROPHY, LEVEL 1 (31 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	45 Hz	8 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0 s	1.5 s
Duration of phase	5 min	4 s	8 s	10 min
Duration of ramp-down	2 s	1 s	0 s	3 s

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

HYPERTROPHY, LEVEL 2 (32 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	50 Hz	9 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0 s	1.5 s
Duration of phase	5 min	5 s	7 s	10 min
Duration of ramp-down	2 s	1 s	0 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

HYPERTROPHY, LEVEL 3 (33 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	55 Hz	10 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0 s	1.5 s
Duration of phase	5 min	6 s	6 s	10 min
Duration of ramp-down	2 s	1 s	0 s	3 s

REGENERATION	
Indication	To be used the day after a competition as recovery training. Also known as the “day-after program”. It works as a complement for the so-called restoration training which therefore could be less intensive.
Effects	The program has 6 stimulation sequences that follow on automatically. You will enhance an analgesic effect through the endorphin release and an increase in blood flow encouraging oxygenation and drainage. It is a form of light anaerobic training with slight tetanic contractions that are not tiring but reactivates the proprioceptive pathways.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes. This program should be applied to the key muscles for the discipline being practiced.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

REGENERATION (30 MIN)						
	1st Sequence	2nd Sequence	3rd Sequence	4th Sequence	5th Sequence	6th Sequence
Frequency	5 Hz	8 Hz	100 Hz	12 Hz	8 Hz	1 Hz
Effect	Analgesic effect	Increased blood flow	Contractions to restore muscular sensation	Activation of the oxidative metabolism	Increased blood flow	Relaxing effect

LOWER BACK REINFORCEMENT	
Indication	The muscles of the lower back play an important role in protecting the lower back region. Certain sport activities, such as rowing, require specific training of the lower back muscles. Recommended use is three sessions a week.
Effects	Improved active stability and quality of contractions of the lower back region. This program makes it possible to exercise these muscles in an isolated and intense manner to maintain and increase the strength of the lower back muscles.
Electrodes	Place electrodes on the paravertebral muscles in the lumbar region. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

LOWER BACK REINFORCEMENT, LEVEL 1 (33 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	40 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	5 min	5 s	10 s	10 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

LOWER BACK REINFORCEMENT, LEVEL 2 (35 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	45 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	5 min	6 s	9 s	10 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

LOWER BACK REINFORCEMENT, LEVEL 3 (36 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	50 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	5 min	7 s	8 s	10 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

CORE STABILIZATION	
Indication	The abdominal muscles have either primary or secondary importance for all sport activities. To increase and/or maintain the neuromuscular control and stabilization of the trunk is crucial to achieve an efficient transmission of forces in any complex motion. Recommended use is three sessions a week.
Effects	Increased strength and endurance of the trunk muscles. Could be used together with, or as a complement to dynamic active exercises.
Electrodes	Place electrodes on the paravertebral muscles in the lumbar region. Combine with electrodes on the abdominal muscles. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

CORE STABILIZATION, LEVEL 1 (33 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	40 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	5 min	5 s	10 s	10 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

CORE STABILIZATON, LEVEL 2 (35 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	45 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	5 min	6 s	9 s	10 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

CORE STABILIZATON, LEVEL 3 (36 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	5 Hz	50 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	5 min	7 s	8 s	10 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

ACTIVE RECOVERY	
Indication	To improve and accelerate the muscle recovery after an intensive exercise. Use this program within three hours after a session of intensive training or after a competition. A second session about six hours after the end of the activity can increase the effectiveness.
Effects	Marked increase in blood flow. Accelerates the elimination of waste from the muscular contraction. A relaxing and endorphinic effect.
Electrodes	The demand on a very precise electrode placement is less strong for the recovery programs. Place electrodes on big muscle groups that have been most active during the activity. See Position of the electrodes.
Intensity	Increase the stimulation energy progressively until distinct, visible muscle twitches are obtained.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

ACTIVE RECOVERY (24 MIN)					
	1st Sequence	2nd Sequence	3rd Sequence	4th Sequence	5th Sequence
Frequency	9 Hz	8 Hz	7 Hz	6 Hz	5 Hz
Time	2 min	2 min	2 min	3 min	3 min
	6th Sequence	7th Sequence	8th Sequence		
Frequency	4 Hz	3 Hz	2 Hz		
Time	3 min	3 min	3 min		

RECOVERY PLUS	
Indication	To promote muscle recovery after intense physical activity that has led to temporary muscle failure. Use this program within three hours after a session of intensive training or after a competition. A second session about six hours after the end of the activity can increase the effectiveness.
Effects	Increases the blood flow and fights pain. Promotes muscular relaxation. Increases the ability to regain muscular capacity after training or competition.
Electrodes	The demand on a very precise electrode placement is less strong for the recovery programs. Place electrodes on big muscle groups that have been most active during the activity. See Position of the electrodes.
Intensity	Increase the stimulation energy progressively until distinct, visible muscle twitches are obtained.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

RECOVERY PLUS (25 MIN)					
	1st Sequence	2nd Sequence	3rd Sequence	4th Sequence	5th Sequence
Frequency	2 Hz	4 Hz	6 Hz	5 Hz	4 Hz
Time	2 min	2 min	4 min	4 min	4 min
	6th Sequence	7th Sequence	8th Sequence		
Frequency	3 Hz	2 Hz	1 Hz		
Time	3 min	3 min	3 min		

Fitness

MUSCLE BUILDING	
Indication	To improve the strength, volume and tone in general in the muscles. Particularly recommended before using the Muscle definition program. This program could be an ideal complement to voluntary indoor training. Recommended use is three to five sessions a week.
Effects	This program improves the muscle trophism and gives a balanced increase of muscular tone and volume.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

MUSCLE BUILDING, LEVEL 1 (23 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	40 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	5 s	10 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

MUSCLE BUILDING, LEVEL 2 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	45 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	9 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

MUSCLE BUILDING, LEVEL 3 (26 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	50 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	7 s	8 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

MUSCLE DEFINITION	
Indication	To be used after the muscle building program. For a person who wants very firm muscles but without a great muscle increase. This program could be an ideal complement to voluntary indoor training. Recommended use is three to five sessions a week.
Effects	Increased muscle tone without a significant volume increase. Firms the muscles.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the number of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

MUSCLE DEFINITION, LEVEL 1 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	15 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	3 s	0.5 s	1.5 s
Duration of phase	2 min	5 s	9 s	3 min
Duration of ramp-down	2 s	1.5 s	0.5 s	3 s

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

MUSCLE DEFINITION, LEVEL 2 (26 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	17 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	3 s	0.5 s	1.5 s
Duration of phase	2 min	6 s	8 s	3 min
Duration of ramp-down	2 s	1.5 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

MUSCLE DEFINITION, LEVEL 3 (28 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	19 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	3 s	0.5 s	1.5 s
Duration of phase	2 min	7 s	7 s	3 min
Duration of ramp-down	2 s	1.5 s	0.5 s	3 s

POWER	
Indication	For fitness enthusiasts who want to improve their muscular strength, an important quality for many physical activities. This program could be an ideal complement to voluntary indoor training. Recommended use is three sessions a week.
Effects	Improved contractile capacities of the muscular fibers. Improved muscular strength with a slight increase in volume.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes.
Intensity	Maximum tolerable stimulation energy, which is one of the key factors for the effectiveness of the treatment. The higher the stimulation energy, the greater the numbers of muscular fibers (motor units) working.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

POWER, LEVEL 1 (22 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	65 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	4 s	18 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☑ Theta500 ☐ Rehab400

POWER, LEVEL 2 (23 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	70 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	4 s	20 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

POWER, LEVEL 3 (25 MIN)				
	Warm-up	Contraction	Active rest	Final recovery phase
Frequency	6 Hz	75 Hz	4 Hz	3 Hz
Duration of ramp-up	1.5 s	1.5 s	0.5 s	1.5 s
Duration of phase	2 min	4 s	22 s	3 min
Duration of ramp-down	2 s	0.75 s	0.5 s	3 s

Massage

TONING MASSAGE	
Indication	To prepare the muscles in an ideal manner before a physical activity that is “one-time” or irregularly performed. The program consists of sequences altering with vibrations or contractions.
Effects	Activation of blood circulation. For recovery of the muscular contractile parts. The program has an invigorating effect.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes.
Intensity	Increase the stimulation energy progressively until distinct, visible muscle twitches/contractions are obtained. Make sure that the stimulation energy is sufficient in order to impose significant muscle contractions.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

TONING MASSAGE (29 MIN)					
	1st Sequence	2nd Sequence	3rd Sequence	4th Sequence	5th Sequence
Vibrations with Freq. Modulation 1-8 Hz	→		→		→
Contraction / Relaxation		10 reps →		8 reps →	
	6th Sequence	7th Sequence	8th Sequence	9th Sequence	
Vibrations with Freq. Modulation 1-8 Hz		→		→	
Contraction / Relaxation	7 reps →		6 reps →		

RELAXING MASSAGE	
Indication	Enables a very effective decontraction of the muscle due to the comfortable vibrations that increase the circulation and help the muscles to relax. Eliminates uncomfortable sensations after an increase in muscular tone. The program consists of sequences with vibrations. For every day use or when necessary.
Effects	A decrease in muscular tension. To promote the elimination of muscular toxins. The program gives an effect of well being and relaxation.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes.
Intensity	Increase the stimulation energy progressively until a distinct vibration with visible muscle twitches is obtained.
Option 2+2	Yes.

☑ Mi-Theta800 ☑ Theta500 ☑ Rehab400

RELAXING MASSAGE2 (21 MIN)			
	1st Sequence	2nd Sequence	3rd Sequence
Frequency	7 Hz	5 Hz	3 Hz
Time	7 min	7 min	7 min

REVIVING MASSAGE

Indication	This program helps you to get rid of the sensation of heaviness or fatigue of the lower back or the feet and legs. The program consists of sequences with vibrations. For an every day use or when necessary.
Effects	Creates an increase in blood flow in the treated region which also improves the tissue oxygenation. Promotes the elimination of muscular toxins.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes.
Intensity	Increase the stimulation energy progressively until a distinct vibration with visible muscle twitches is obtained.
Option 2+2	Yes.

☑ Mi-Theta600 ☑ Theta500 ☐ Rehab400

REVIVING MASSAGE (23 MIN)						
	1st Sequence	2nd Sequence	3rd Sequence	4th Sequence	5th Sequence	6th Sequence
Frequency	2 Hz	4 Hz	6 Hz	8 Hz	6 Hz	4 Hz
Time	2 min	2 min	2 min	2 min	2 min	2 min
	7th Sequence	8th Sequence	9th Sequence	10th Sequence	11th Sequence	12th Sequence
Frequency	2Hz	2Hz	6Hz	8Hz	Freq. mod. 2-8 Hz	Freq. mod. 2-8 Hz
Time	2 min	2 min	2 min	2 min	2 min	30 s

ANTI-STRESS MASSAGE	
Indication	This program could be used for relaxation and well being after activity or stressful situations. Enables a very effective decontraction of the muscle due to the comfortable vibrations that increase the circulation and help the muscles to relax. The program consists of sequences with vibrations. For an every day use or when necessary.
Effects	Creates an increase in blood flow in the treated region which also improves the tissue oxygenation. Promotes the elimination of muscular toxins and gives a comfortable relaxation to the muscles.
Electrodes	Depending on the muscle being stimulated, follow the recommended placement. See Position of the electrodes.
Intensity	Increase the stimulation energy progressively until a distinct vibration with visible muscle twitches is obtained.
Option 2+2	Yes.

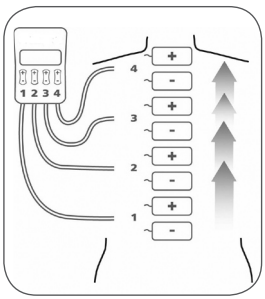
☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

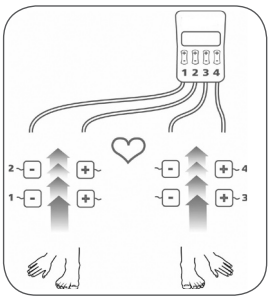
ANTI-STRESSMASSAGE (21 MIN)						
	1st Sequence	2nd Sequence	3rd Sequence	4th Sequence	5th Sequence	6th Sequence
				These 3 sequences loop 5 times		
Frequency	3 Hz	2 Hz	1 Hz	Freq. mod. 1-6 Hz	Freq. mod. 1-3 Hz	1 Hz
Time	2 min	1 min	30 s	40 s	30 s	30 s
	7th Sequence	8th Sequence	9th Sequence	10th Sequence	11th Sequence	12th Sequence
	These 4 sequences loop 2 times					
Frequency	Freq. mod. 1-6 Hz	1 Hz	Freq. mod. 1-3 Hz	1 Hz	1 Hz	1 Hz Intensity decrease
Time	90 s	30 s	90 s	30 s	30 s	

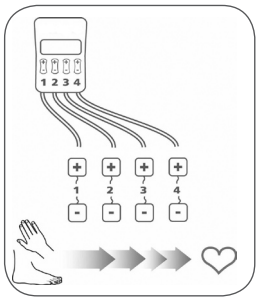
UNDULATED MASSAGE 1	
Indication	For use in order to eliminate the feeling of heavy legs or uncomfortable body tensions. The program consists of sequences with vibrations. For an every day use or when necessary.
Effects	This program produces a pleasant wavelike effect which increases the circulation and activates the lymphatic systems. In some of the sequences the stimulation is alternated between the four channels. First channel one is activated, then channel 2 and so on.
Electrodes	To benefit the most from the circulatory effects, use all 4 channels and place the 8 electrodes so that the contractions work in the direction towards the heart. Depending on the muscles being stimulated, follow the recommended placement. See special recommendations, below.
Intensity	Increase the stimulation energy progressively until a distinct vibration with visible muscle twitches is obtained.
Option 2+2	No. The 2+2 function is not available in this program since all four channels are in use.

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

UNDULATED MASSAGE 1 (17 MIN)				
	1st Sequence All 4 channels	2nd Sequence Activating Channels 1-2-3-4	3rd Sequence Activating Channels 1-2-3-4	4th Sequence Activating Channels 1-2-3-4
		Repeats x 6	Repeats x 6	Repeats x 6
Frequency	6 Hz	6 Hz	1 Hz	6 Hz
Time	2 min	24 s	24 s	24 s
	5th Sequence Activating Channels 1-2-3-4	6th Sequence Activating Channels 1-2-3-4	7th Sequence Activating Channels 1-2-3-4	8th Sequence All 4 channels
	Repeats x 6	Repeats x 6	Repeats x 6	
Frequency	1 Hz	6 Hz	1 Hz	2 Hz
Time	24 s	24 s	24 s	1 min







UNDULATED MASSAGE 2	
Indication	For use in order to eliminate the feeling of muscular discomfort and to reduce body tensions. The program consists of sequences with vibrations in combination with pain relief. For an every day use or when necessary.
Effects	This program produces a pleasant wavelike effect which increases the circulation and activates the lymphatic systems. In some of the sequences the stimulation is alternated between the four channels. First channel one is activated, then channel 2 and so on.
Electrodes	To benefit the most from the circulatory effects, use all 4 channels and place the 8 electrodes so that the contractions work in the direction towards the heart. Depending on the muscles being stimulated, follow the recommended placement. See special recommendations on previous page.
Intensity	Increase the stimulation energy progressively until a distinct vibration with visible muscle twitches is obtained. Please note that for the pain relief sequence (100 Hz) the intensity has to be readjusted so a clear tingling sensation is perceived.
Option 2+2	No. The 2+2 function is not available in this program since all four channels are in use.

☑ Mi-Theta800 ☐ Theta500 ☐ Rehab400

UNDULATED MASSAGE 2 (17 MIN)				
	1st Sequence All 4 channels	2nd Sequence All 4 channels	3rd Sequence Activating Channels 1-2-3-4	4th Sequence Activating Channels 1-2-3-4
			Sequence 3 and 4 loop 6 times	
			Repeats x 4	Repeats x 3
Frequency	4 Hz	100 Hz	Mod. 4-8 Hz	100 Hz
Time	1 min	1 min	32 s	40 s