

Muscle Training 4CH

Program ID – mode: NMES02 – Auto repeat

Strengthening of antagonistic muscles with optional warming up and cooling down stages.

Indication: Muscle training

Body region: Upper extremities
Lower extremities
Trunk

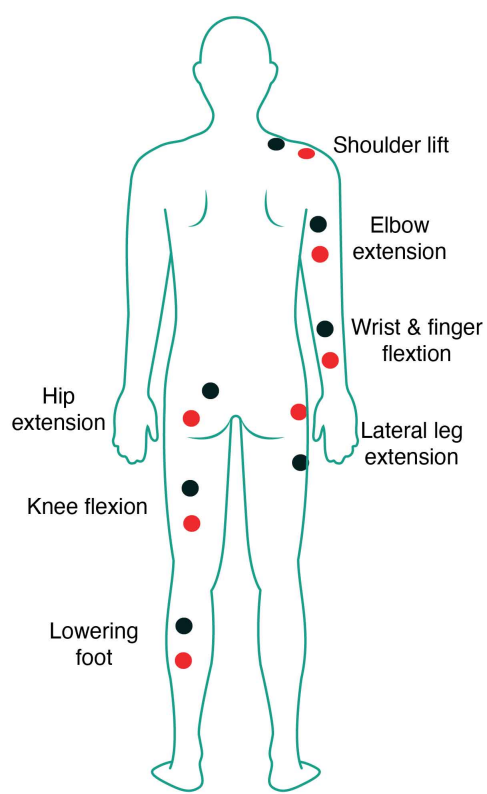
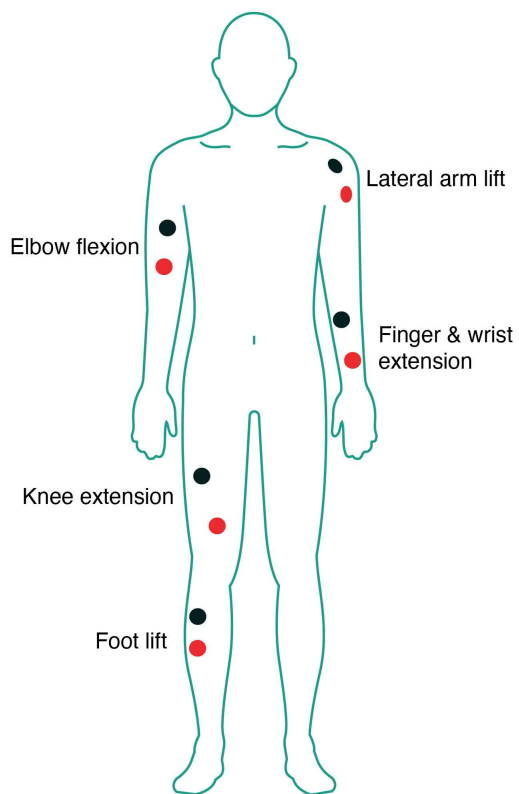
Required stimulation cable: 5 channel cable

Channels: Channel 1, Channel 2, Channel 3, Channel 4

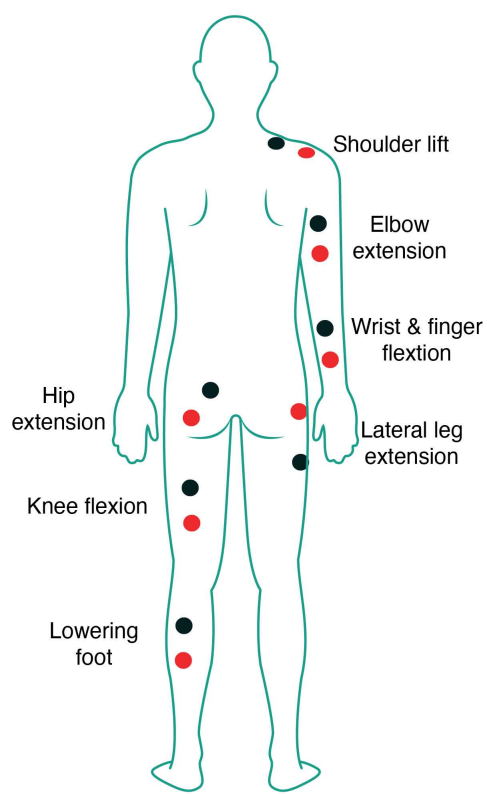
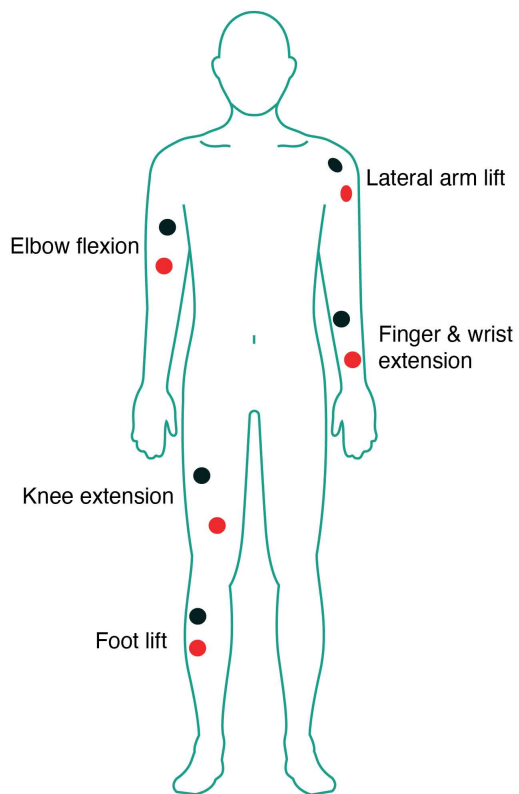
Solo mode allowed:¹ No

Placement of electrodes and stimulator

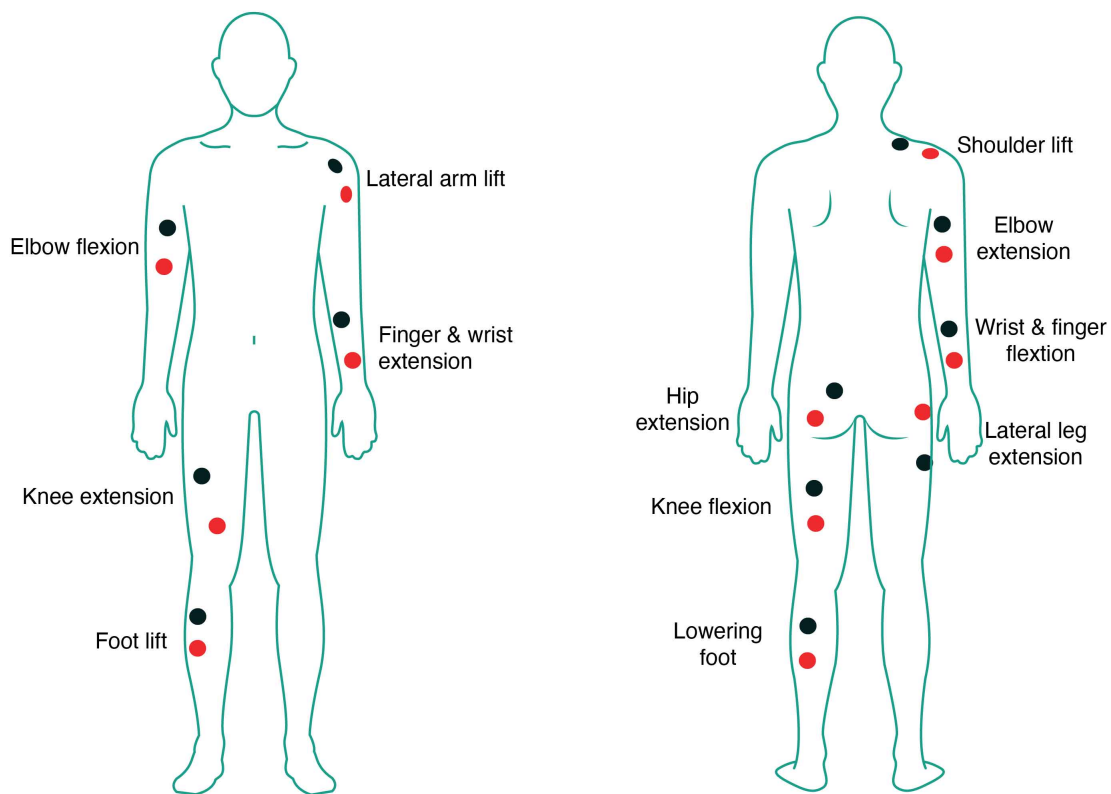
Channel	Description	Electrode description
1	agonist 1	bipolar, square ≥ 2" x 2" (5cm x 5cm)
2	antagonist 1	bipolar, square ≥ 2" x 2" (5cm x 5cm)
3	agonist 2	bipolar, square ≥ 2" x 2" (5cm x 5cm)
4	antagonist 2	bipolar, square ≥ 2" x 2" (5cm x 5cm)



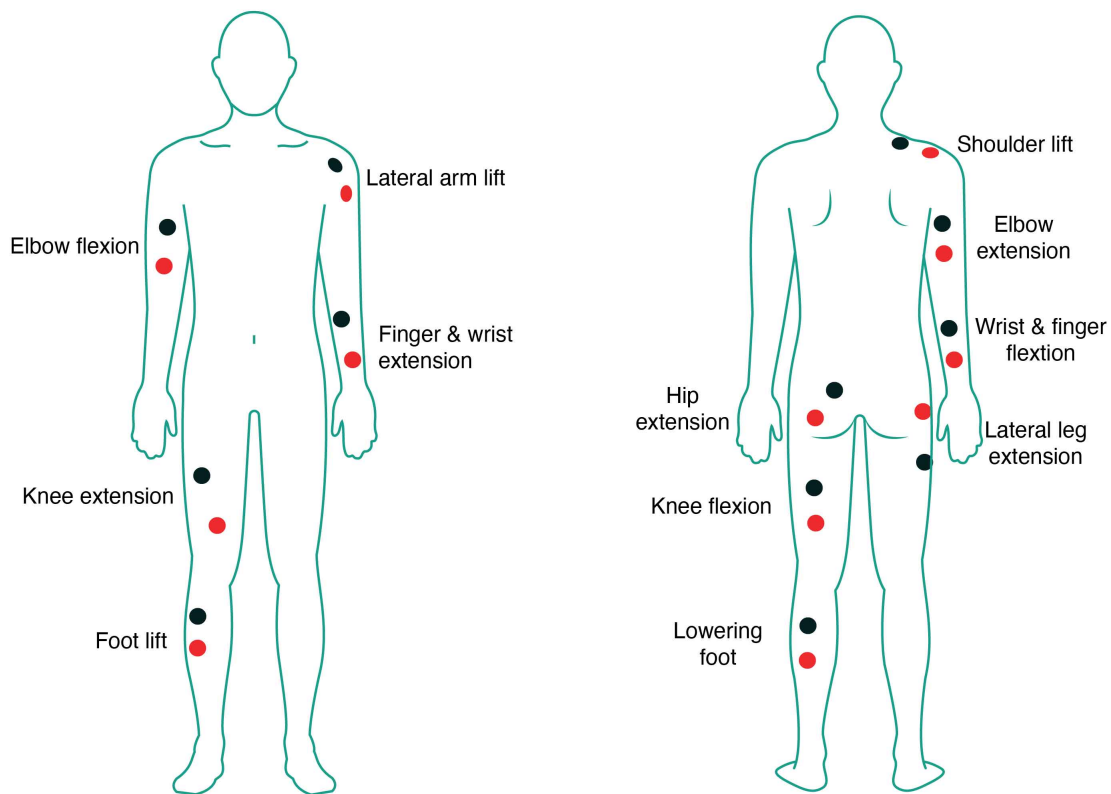
Electrode placement: channel 1 – agonist 1



Electrode placement: channel 2 – antagonist 1



Electrode placement: channel 3 – agonist 2



Electrode placement: channel 4 – antagonist 2

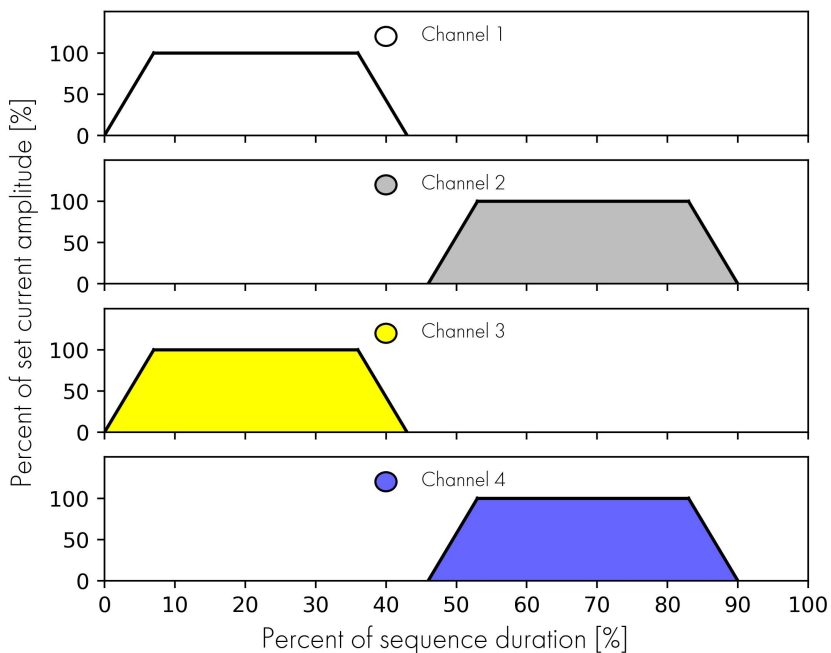
Channel settings for stimulation stages

Warm-up:

Total duration		05:00:000 (min:sec:msec)			
Sequence duration		n.a.			
Sequence mode²		Auto repeat			
Show intensity wizard		No			
Channels	Max. amperage	Pulse width	Frequency	Pulse form	Channel mode ³
1	50.0 mA	300 µs	10.0 Hz	Biphasic	Always on
2	50.0 mA	300 µs	10.0 Hz	Biphasic	Always on
3	50.0 mA	300 µs	10.0 Hz	Biphasic	Always on
4	50.0 mA	300 µs	10.0 Hz	Biphasic	Always on

Training:

Total duration		30:00:000 (min:sec:msec)			
Sequence duration		00:28:000 (min:sec:msec)			
Sequence mode²		Auto repeat			
Show intensity wizard		Yes			
Channels	Max. amperage	Pulse width	Frequency	Pulse form	Channel mode ³
1	100.0 mA	300 µs	50.0 Hz	Biphasic	Sequential
2	100.0 mA	300 µs	50.0 Hz	Biphasic	Sequential
3	100.0 mA	300 µs	50.0 Hz	Biphasic	Sequential
4	100.0 mA	300 µs	50.0 Hz	Biphasic	Sequential



Activation of the stimulation channels for training

Cool-down:

Total duration		05:00:000 (min:sec:msec)			
Sequence duration		n.a.			
Sequence mode²		Auto repeat			
Show intensity wizard		No			
Channels	Max. amperage	Pulse width	Frequency	Pulse form	Channel mode ³
1	50.0 mA	300 µs	3.0 Hz	Biphasic	Always on
2	50.0 mA	300 µs	3.0 Hz	Biphasic	Always on
3	50.0 mA	300 µs	3.0 Hz	Biphasic	Always on
4	50.0 mA	300 µs	3.0 Hz	Biphasic	Always on



¹Settings

Solo mode:

Allows a program to run independently without a smartphone connection once the program has been started in the app and the electrode placement is completed. By activating the SOLO mode, the app disconnects from the stimulator. The stimulator runs and controls the program solo (without the app). The user can simultaneously increase/decrease the stimulation intensity of all active channels with the PLUS and MINUS keys on the stimulator's keypad or end the program by pressing STOP.

Intensity wizard:

The intensity wizard is displayed before the start of a program stage in order to preset and test the intensity of each individual channel in advance.

²Sequence mode

Auto repeat:

The stimulation sequence is automatically repeated for the duration of the program stage.

Motion triggered with threshold:

The stimulator is attached to the arm or leg depending on the program. For cyclical activities such as cycling or arm cranking, the current movement status is determined as a percentage of the cycle using the integrated sensor. The stimulation is controlled depending on the value determined and can be activated in up to three phases per active channel.

Motion triggered cyclic:

The stimulation sequence is triggered when the inclination angle exceeds or falls below a predetermined threshold value. The stimulator is placed on an arm or leg to measure the inclination angle with a built-in sensor.

Manually triggered:

The stimulation sequence is manually triggered by the operator using the Stim2Go app.

³Channel modes

Sequential:

The stimulation pattern consists of repeated stimulation sequences which are activated depending on the sequence mode. The stimulation sequences consist of one to three phases and have a predetermined duration in most programs. The duration of the stimulation sequence of cyclic motion-triggered programs is not fixed because it depends on the speed of the cyclic movement.

Always on:

The stimulation of the channel is permanently active. Stimulation sequences are not relevant.