

# TU2 – TENS QUICK GUIDE

## TENS – for pain relief and improved circulation

1. **Conventional TENS** (high frequency) – for pain relief
2. **Acupuncture like TENS** (low frequency) -- For localised pain and stimulation of trigger points. To elicit strong, phasic, muscle contractions at sites myotomally related to the pain. Latent pain relief, useful for muscle re-education, trigger points, muscle spasm, and chronic pain.
3. **Burst TENS** (combined 1 and 2)
4. **Modulated TENS**

## EMS or NMES.

For muscle stimulation to induce the following: muscle re-education (for weak or poorly controlled muscles), increased contraction, increased blood and lymphatic flow, to increase muscle strength, to reduce muscle spasm, to accelerate tissue healing, to reduce swelling. – has an on / off mode in the muscle contraction, to prevent fatigue and to maximize muscle strength.

Thus, preset programs combining TENS and NMES will have combinations of all the above effects.

PRESET PROGRAMS	CHANNEL	PULSE WIDTH (uS)	FREQUENCY (Hz)	MODULATION	USE
P1	L=R	80	110	Constant	Acute pain
P2	L=R	250	2	Constant	Chronic Pain, Acupuncture
P3	L	80	110	Constant	Acute pain
P3	R	250	2	Constant	Chronic Pain, Acupuncture
P4	L=R	150	100	3 seconds	EMS
P4	L=R	100	2	3 seconds	Chronic Pain, Acupuncture
P5	L	150/200	100/2	3 seconds	EMS, Chronic pain
P5	R	80	110	Constant	EMS
P6	L=R	180	100	Burst	EMS
P7	L=R	60-100	110	Modulated	EMS
P8	L=R	80	2-100	Modulated	EMS, Chronic pain
P9	L=R	75	3363	Burst	EMS
P10	L=R	150	100	Modulated	EMS

In addition there are **10 user programs (U1-U10)** that are all able to have their parameters changed and locked in by the practitioner. If desired, the practitioner can display just the one program for the client to use and block the others from view

# TU4 – TENS QUICK GUIDE

- **42 preset programs all combining TENS (pain relief) and NMES** (muscle stimulation to assist with inducing muscle contraction; increased blood and lymphatic circulation; increased strength; decrease in swelling / oedema; decreased muscle spasm; accelerating tissue healing). **NB** – The exception is program 20 (P20) which is TENS only.
- The 42 preset programs are all ‘stepped’ with a ‘preparatory’ phase, (1 – 6 minutes), a ‘work’ phase, (alternating between wave 1 and 2), then a ‘stop’ phase (1 – 6 minutes). This allows an easing into the muscular contraction and a build up to the desired effect with a gentle easing down.
- The wave table in your extended booklet largely describes the benefit of each setting.
  - **P1** = Relaxation (muscle relaxation, reduction in spasm, improvement of blood and lymph flow).
  - **P2 - P5** = muscle contraction (mild) with increased circulation.
  - **P6 – P19** = Improve muscle tone (reduce muscle atrophy), improve circulation.
  - **P20** = TENS ONLY. Pain relief (immediate and short term), reduces muscle spasm.
  - **P21 – P34** = EMS, strong, phasic, muscle contractions of varying durations. For increased muscle strength, reduction in muscle spasm, increased circulation.
  - **P35 – P38** = To improve circulation and accelerate tissue healing.
  - **P39 – P42** = To increase muscle strength (sustained contraction), to improve circulation and muscle tone, to improve oedema.

## Wave 1 and Wave 2

During the work phase the current alternates repeatedly between wave 1 and wave 2 until the rest or stop phase.