



Electrical Muscle Stimulation (EMS) uses electrical impulses, also known as electrical signals or pulses, electrical impulses, also known as electrical signals or pulses. These impulses are typically low-level and mimic the body's natural electrical signals that instruct muscles to contract.

EMS is a widely used technology in sports and rehabilitation applications, offering numerous benefits for athletes and individuals recovering from injuries. EMS involves the use of electrical impulses to stimulate muscle contractions, aiding in muscle development, performance enhancement, and recovery. Here is a summary of EMS in sports and rehabilitation applications:

Sports Performance Enhancement:

- **Strength Development:** EMS can supplement traditional strength training by providing additional muscle contractions. This helps athletes build muscle mass and strength, enhancing their overall performance.
- **Endurance Improvement:** EMS can target both fast-twitch and slow-twitch muscle fibres, improving endurance and stamina, which is crucial for sports like long-distance running and cycling.
- **Speed and Power Enhancement:** Athletes can use EMS to specifically target muscles involved in speed and explosive movements, such as sprinting and jumping, resulting in improved performance.

Rehabilitation and Injury Recovery:

- **Muscle Rehabilitation:** EMS is effective in muscle rehabilitation following injuries or surgery. It helps prevent muscle atrophy, maintains muscle tone, and facilitates the healing process.
- **Pain Management:** EMS can help alleviate pain and reduce muscle spasms, providing relief to individuals recovering from various injuries, including strains, sprains, and overuse injuries.
- **Improved Range of Motion:** EMS can be used to enhance joint mobility and flexibility, aiding in the recovery of patients with musculoskeletal injuries.

Muscle Activation and Recovery:

- Pre-Exercise Warm-Up: EMS can be used as part of a warm-up routine to activate specific muscle groups, ensuring they are ready for optimal performance during training or competition.
- Post-Exercise Recovery: EMS can assist in muscle relaxation, reducing muscle soreness and promoting quicker recovery after intense workouts or competitions.
- Blood Circulation: EMS can stimulate blood circulation, delivering oxygen and nutrients to muscles more efficiently, which aids in recovery and reduces the risk of muscle cramps and fatigue.

IFT

Interferential Therapy (IFT) is a therapeutic modality used in physical therapy and pain management. It involves the application of low-frequency electrical currents to alleviate pain, reduce inflammation, and promote tissue healing.

IFT utilizes the principle of interference, where two medium-frequency electrical currents with slightly different frequencies are delivered into the affected tissue where they intersect and create a low-frequency beat frequency.

Low frequency nerve stimulation is known to be physiologically effective (as with TENS and NMES) and this is the key to IFT intervention. Unlike TENS however, which delivers intermittent pulses to stimulate surface nerves and block the pain signal, IFT delivers continuous stimulation deep into the affected tissue by using a 4000Hz carrier wave to overcome the skin impedance.

IFT is believed to work through the stimulation of parasympathetic nerve fibres, resulting in enhanced blood flow and the reduction of edema. Additionally, it involves passing currents through cell membranes, with the specific current patterns varying depending on the tissue being treated. By using specific frequencies within a defined range, IFT can stimulate different systems in the body, promoting increased blood circulation. This, in turn, accelerates the healing process.

Injury Prevention:

- Muscle Balance: EMS can be used to correct muscle imbalances, reducing the risk of injury due to overcompensation or weak muscles.
- Improved Proprioception: EMS can enhance proprioception (awareness of one's body position), helping athletes maintain better control and stability, thus reducing the risk of injuries related to poor coordination.

Microcurrent

Microcurrent therapy is an emerging technology with applications in sports and rehabilitation. This therapy involves the use of low-level electrical currents, typically in the microampere range, to stimulate tissue healing, reduce pain, and enhance overall recovery.

Microcurrent stimulation delivers tiny electrical impulses that mirror the body's own natural bio-electrical field. The stimulation is believed to have an impact on ATP (adenosine triphosphate) production in cells, primarily by influencing cellular metabolism and energy production. In most cases, treatment is virtually sub-sensory, with just a slight electrical tingling sensation.

Microcurrent has a number of applications:

Pain Relief: Effective in alleviating acute and chronic pain associated with sports injuries, muscle strains, and musculoskeletal conditions by promoting endorphin release, the body's natural painkillers.

Tissue Healing and Recovery:

Enhanced Healing: Microcurrent therapy can accelerate the body's natural healing processes by promoting cellular regeneration, tissue repair, and the formation of collagen and elastin. This makes it valuable in post-injury rehabilitation.

Muscle Rehabilitation and Function:

Muscle Re-education: Microcurrent therapy aids in muscle re-education, making it beneficial for athletes recovering from muscle injuries or surgeries. It can help restore proper muscle function and coordination.

Improved Range of Motion: By reducing muscle spasms and enhancing flexibility, microcurrent therapy can enhance an athlete's range of motion, enabling better performance and reducing the risk of future injuries.

Inflammation Reduction:

Anti-Inflammatory Effects: Microcurrent therapy has anti-inflammatory properties and can reduce swelling and edema, which are common in sports injuries.

Form

Active Muscle Recovery

Form is a smart active recovery tool that uses electrical muscle stimulation to improve post-workout recovery.

Form removes the complexity of EMS treatment, providing the benefits of active recovery without causing further fatigue.

-  Developed alongside professional athletes
-  Smart electrodes automatically configure programme parameters
-  Bespoke treatment settings per muscle group
-  Effective muscle recovery in just 20 minutes.



Elicits muscle contractions



Promotes blood flow



Reduces muscle tension



Provides pain relief



Accelerates recovery

Treatment comparison

There are many benefits to using Form over other active recovery methods.



Form



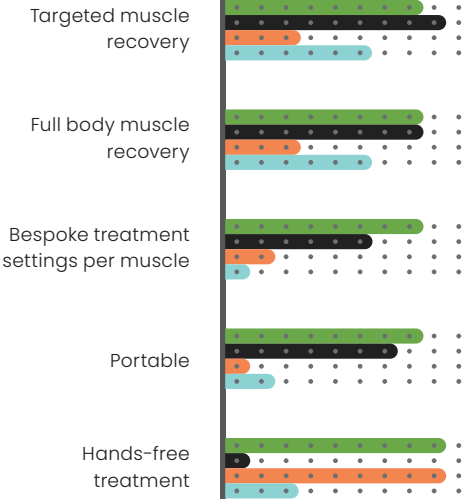
Massage gun



Compression boots



Foam roller



Unifit

Fitness, recovery and pain relief

Modern electrotherapy using the latest in TENS, EMS and Massage technology for fitness, recovery and pain relief.

Device Features:

- Dual-channel device
- Improved user interface
- Rechargeable battery
- Advanced muscle mass mode for large muscle mass
- Preset and manual programmes with adjustable treatment times
- 66 programmes



TENS

- Treat chronic, muscular and skeletal pain



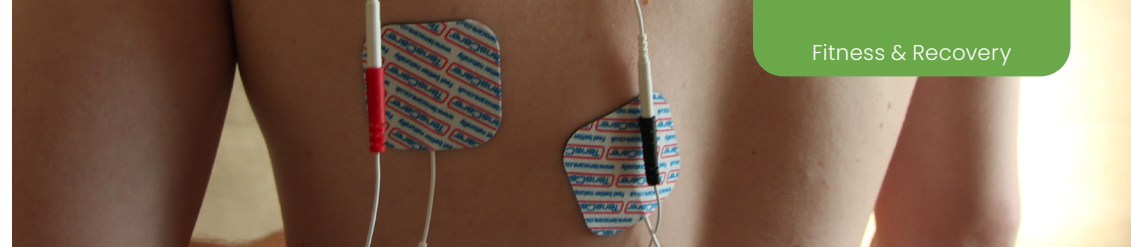
Massage

- Relieve muscle stiffness, aches and pains
- Encourage blood flow and improve muscle recovery



EMS

- Improve muscle strength, bulk and performance
- Muscle rehabilitation
- Prevent muscle atrophy post injury



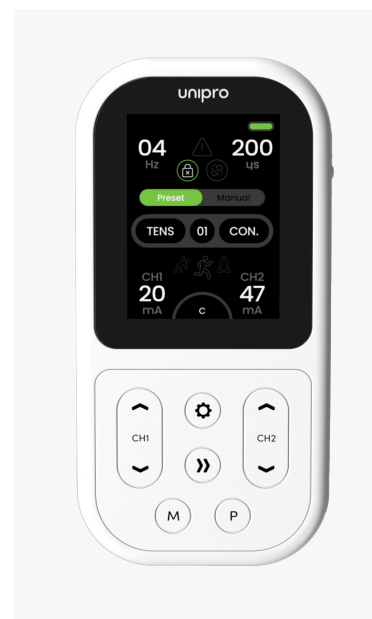
Unipro

Physiotherapy & Rehabilitation

Unipro is a multimodality electrotherapy device that combines: TENS, EMS, Microcurrent & Interferential Therapy.

Device Features:

- Dual-channel device
- Multilingual user interface
- Rechargeable battery
- Advanced muscle mass mode for large muscle mass
- Asynchronous EMS stimulation
- 2 and 4 pole IFT stimulation
- Preset and manual programmes with adjustable treatment times
- Suitable for use at home and in clinics
- 70 programmes



TENS

- Treat chronic, muscular and skeletal pain



EMS

- Improve muscle strength, bulk and performance
- Muscle rehabilitation
- Prevent muscle atrophy post injury



IFT

- Effective and comfortable pain relief
- Stimulate deeply situated muscle tissue
- Reduce inflammation
- Assist tissue repair and promote healing



MIC

- Promote ATP production in cells
- Increases blood flow and induce healing

Sports TENS 2

Sports TENS is a multimodality electrotherapy unit that combines TENS, EMS and Massage technology. Ideal for use at home or on the go.



TENS

- Treat chronic, muscular and skeletal pain



EMS

- Improve muscle strength, bulk and performance
- Muscle rehabilitation
- Prevent muscle atrophy post injury



Massage

- Relieve muscle stiffness, aches and pains
- Encourage blood flow and improve muscle recovery

Device Features:

- Dual-channel device
- Rechargeable battery
- Preset and manual programmes with adjustable treatment times
- 55 programmes

Perfect EMS

Perfect EMS is designed specifically for muscle training, conditioning and rehabilitation, as well as providing effective pain relief.



Dedicated EMS programmes for different types of muscle training, including:

- Muscle warm up
- Endurance training
- Power training
- Enhance definition and bulk



Adjustable TENS programmes for personalised and effective pain relief.

Device Features:

- Dual-channel device
- Preset and manual programmes with adjustable treatment times
- 10 programmes



For effective, non-invasive treatment of injured soft tissues.

Shockwave therapy is an evidence-based, effective treatment that is primarily used in the treatment of these common musculoskeletal conditions:

- Calcific Tendonitis of the shoulder
- Adhesive capsulitis
- Tennis Elbow (Lateral Epicondylitis)
- Medial Epicondylitis (Golfer's Elbow)
- Upper and lower extremity tendinopathies
- Greater trochanteric pain syndrome
- Patellar tendinopathy
- Avascular necrosis of femoral head
- Osteoarthritis of the knee
- Non-union of long bone fracture
- Medial tibial stress syndrome (shin splints)
- Plantar fasciopathy

Shockwave

Shockwave Therapy is a non-invasive therapy that uses acoustic waves to treat various Musculoskeletal conditions.

It can relieve pain and promote healing of injured tendons, ligaments, and other soft tissues.

It stimulates the metabolism, enhances blood circulation, and accelerates the healing process, allowing damaged tissues to regenerate and recover.



Device Features:

- Compressor-free ballistic radial shockwave with electromagnetic generator
- Foot switch control
- 7 adjustable preset programmes
- 30 preset treatment recommendations with guided illustrations
- 7" colour LCD touch screen
- Carry case included