

EMG PRO

PORTABLE BIOFEEDBACK
AND ELECTROTHERAPY



EMG PRO

Richmar's EMG Pro is a single channel, portable electrotherapy device with EMG Biofeedback, EMG Triggered Stim, TENS and NMES. Each mode has preset and customizable programs, designed to help with various components of muscle rehabilitation - including pain management, muscle strengthening and training, muscle relaxation and re-education, as well as urinary incontinence and pelvic floor health. The EMG Pro is a valuable rehabilitation tool that can be used across patient populations, from orthopedic and sports rehab, to treating patients with neuralgic impairment. This is an innovative and multifaceted rehab training device, designed to benefit both patients and clinicians. **It is an all-in-one tool for a wide variety of treatments that can be used in clinics, at home, or on the go.**

The EMG Pro offers two modes of operation: Patient Mode and Therapist Mode.

- **In Patient Mode**, a therapist can set prescribed programs for a patient to perform at home. Certain functions of the device are locked, so the patient can only access the prescribed treatment methods.
- **In Therapist Mode**, all treatment protocols are available to be used in a clinic setting.

EVIDENCE BASED PROTOCOLS!

This device was developed by top modality researchers with evidence based preset protocols to guide and assist clinicians in treatment and offer versatile, comprehensive rehabilitation therapies.

Improve neuromuscular control, decrease pain, increase function and improve therapeutic effectiveness with Richmar's EMG Pro.

EMG

- Enhance a patient's therapeutic exercise and functional activities with real-time feedback on muscle performance.
- Facilitates increased muscle recruitment when treating weak, inhibited muscles.
- Inhibits muscle activation when treating overactive muscles.
- Creates a positive feedback loop and improved neuromuscular control.
- Muscle Strength Grading Scale to help patients reach their therapeutic targets.

EMG Triggered Electrical Stimulation (ETS)

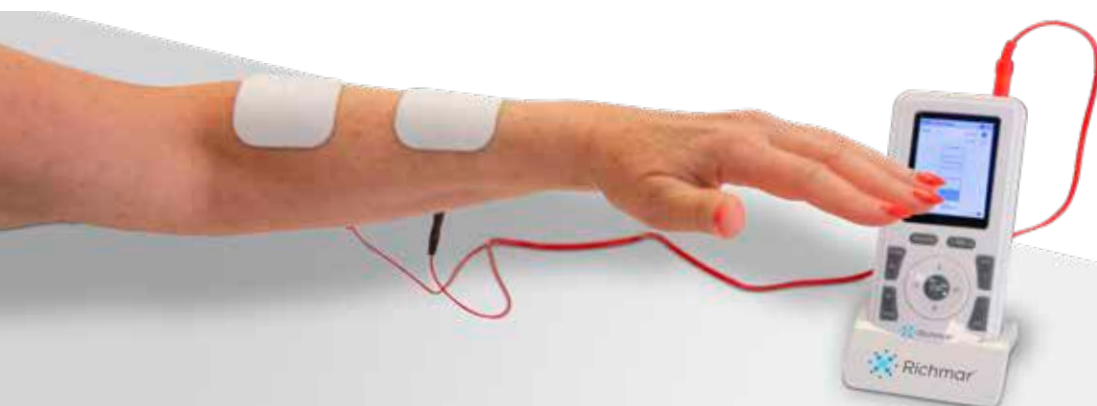
- EMG Triggered Stim offers the best of both worlds by providing immediate biofeedback on muscle performance with the added benefit of electrical stimulation.
- The electrical stimulation is activated by the patient reaching their threshold of voluntary contraction.
- If a patient can only go through a portion of the requested range of motion, the electrical stimulation can be set to assist them through the remainder of the motion.

NMES

- Includes evidence based preset protocols for muscle re-education, strength augmentation, and fast and slow twitch muscle training.
- Effectively stimulate weak, inhibited muscles to improve neuromuscular control and strength when added to a volitional training program.

TENS

- Includes evidence based preset protocols for pain management, including sensory and motor TENS, mixed frequency TENS, as well as protocols to prevent habituation.



FEATURES

- Biofeedback allows patients to see their muscle activation levels in real-time via bar or line graph.
- Auditory and visual biofeedback
- Four Modes: EMG, ETS, TENS, NMES
- Over 30 evidence based present protocols to choose from, including:
 - 17 Incontinence Protocols
 - 10 preset protocols for pain management.
 - 7 present protocols for muscle re-education
- Muscle Strength Grading Scale
- Training and assessment data can be stored and saved or deleted as needed for a single patient up to 31 times.
- Optional computer software to record and store data for multiple patients.
- User friendly interface with colored matrix display
- Light weight, portability is perfect for Athletic Trainers, Sports Rehab or Occupational Therapists
- Soft shell carrying case
- 3 Year Warranty
- Rx Only



THE EMG PRO INCLUDES:

EMG Pro Device
Reference Lead Wires (Black)
Channel Lead Wires (Red)
(1) 3" x 5" MicroBlock Electrodes, 2/pk
(2) 2" x 2" MicroBlock Electrodes, 4/pk
(4) AA Batteries
USB
Device Stand
Device Carrying Case
User Manual

ORDER DETAILS:

DQEMG	EMG Pro
DQEMGP	EMG Pro + Probes
EMG-VP	EMG Pro Vaginal Probe
EMG-RP	EMG Pro Rectal Probe
EMG-RLW	EMG Reference Lead Wire
EMG-CLW	EMG Channel Lead Wire
400-852-MIC	3" x 5" Microblock Electrodes (2/pk)
400-877-MIC	2" x 2" Microblock Electrodes (4/pk)
EMG-USB	EMG USB Cable
EMG-STAND	EMG Device Stand
EMGCC	EMG Carrying Case

FUN FACT!

The EMG Pro was trialed and is currently used by some of the country's top, nationally recognized rehab facilities and women's health clinics.

TECHNICAL SPECIFICATIONS

- **Power Supply:** DC 6V, (4) AA Batteries
- **Device Dimensions:** 5.47" x 2.68" x 1.3"
- **Weight:** 156 G
- **Vaginal Probe Dimensions:** 1.08" x 2.9"
- **Rectal Probe Dimensions:** 1.12" x 5.09"

EMG

- **EMG Range:** 0 to 2000 μ V RMS (continuous)
- **Sensitivity:** 0.1 μ V RMS
- **Accuracy:** 10% of μ V reading or 2 μ V at 180 Hz, max value
- **Selectable Band Pass Filter -3db Bandwidth**
 - a. Wide: 20Hz to 500Hz
 - b. Narrow: 100 Hz to 500 Hz
- **Notch Filter:** 50 Hz -33 dbs (0.1% accuracy)
- **Common Mode Rejection Ratio:** 130 dbs Minimum @ 50 Hz
- **Work/Rest Period:** 2 - 99 seconds
- **Number of Trials:** 1 - 99

ETS

- **Program Time:** 1 - 99 minutes
- **Threshold:** 0 - 2000 μ V
- **Filter:** Wide/Narrow
- **Biofeedback:** Above/Below/Continue/OFF
- **Work/Rest Time:** 2 - 99 seconds
- **Number of Trials:** 2 - 99
- **Threshold:** Auto/Manual

- **Frequency:** 2 - 120Hz
- **Pulse Width:** 50 - 450 μ s
- **Ramp Time:** 0.1 - 9.9 seconds

NMES

- **Amplitude:** 0 - 100 mA at 500 Ohm load (Actual mA tends to be less due to electrode impedance.)
- **Type:** Constant current
- **Waveform:** Symmetrical Biphasic
- **Pulse Width:** 50 - 450 μ s
- **Pulse Rate:** 2 - 120Hz
- **Work/Rest Period:** 2 - 99 seconds
- **Time:** 1 - 99 minutes
- **Ramp Time:** 0.1 - 9.9 seconds
- Preset and customizable treatment programs.
- Automatic output shut off with detection of open electrode above 1 mA.

TENS

- **Amplitude:** 0 - 100 mA at 500 Ohm load (actual mA tends to be less due to electrode impedance.)
- **Type:** Constant Current
- **Waveform:** Symmetrical Biphasic
- **Pulse Width:** 50 - 450 μ s
- **Pulse Rate:** 2 - 100Hz
- **Time:** 1 - 99 minutes
- Preset and customizable treatment programs.
- Automatic output shut off with detection of open electrode above 1 mA.

