

EMGPRO
PORTABLE BIOFEEDBACK AND
ELECTROTHERAPY FOR WOMENS HEALTH

# **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 includes two distinguishing probe electrodes, making it in an all-in-one incontinence and pelvic floor health device. It can be used in the treatment of urinary incontinence and other pelvic floor health therapies and is designed to stimulate muscles through a vaginal or rectal probe. The probes consist of two electrodes in the form of conductive plates on each side. These probes are meant for multiuse on a single patient and their ergonomic design ensures easy application and comfort during use.

# 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 look 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**

- 17 evidence based present protocols for incontinence.
- Distinguishing vaginal and rectal probes.
- 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.
- 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 in combination with the probe electrodes can assist in the treatment of:

- Incontinence
- Pelvic floor pain
- · Pelvic floor muscle strengthening
- Urge incontinence
- Stress incontinence
- Overactive bladder
- Prolapse



## 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 Stand
Device Carrying Case
User Manual

## **ORDER DETAILS:**

DQEMGEMG ProDQEMGPEMG Pro + ProbesEMG-VPEMG Pro Vaginal ProbeEMG-RPEMG Pro Rectal ProbeEMG-RLWEMG Reference Lead WireEMG-CLWEMG 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



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 μV RMS (continuous)

• **Sensitivity:** 0.1 µV RMS

• Accuracy: 10% of μV reading or 2 μV 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  $\mu$ V

Filter: Wide/Narrow

Biofeedback: Above/Below/Continue/OFF

• Work/Rest Time: 2 - 99 seconds

Number of Trials: 2 - 99Threshold: Auto/Manual

Frequency: 2 - 120Hz
Pulse Width: 50 - 450 µs
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 μs
 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 µs
 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.



