MES 9000

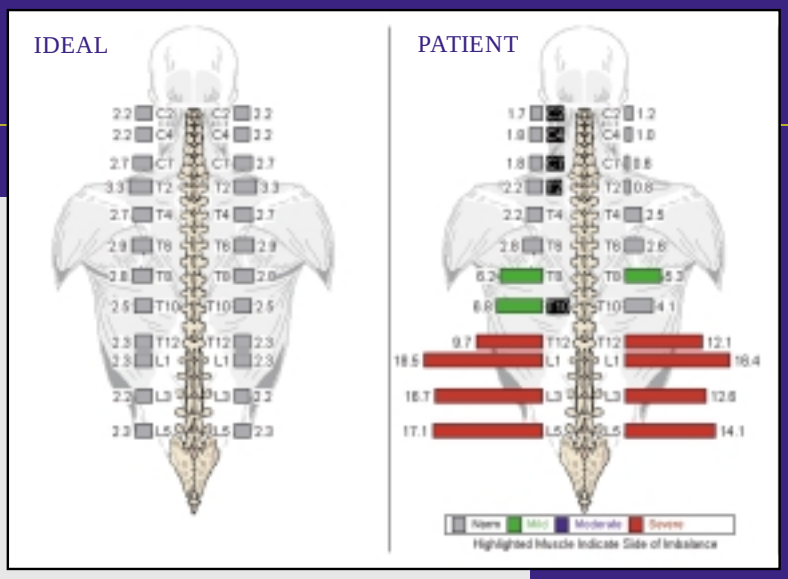
MUSCULOSKELETAL EVALUATION SYSTEM

The new MES 9000. Now you can completely and objectively evaluate and document Dynamic Range of Motion, Static and Dynamic EMG and Muscle Testing – All with one system. Patient education, evaluation and objective documentation of Medical Necessity of Treatment has never been easier.

DYNAMIC RANGE OF MOTION • SURFACE ELECTROMYOGRAPHY • MUSCLE TESTING

NOROMED *A Division of Myotronics-Noromed, Inc.*

Leading in Musculoskeletal Evaluation Technologies For Over 30 years



With the MES 9000 you have the flexibility to customize the system to fit your current needs – with the assurance that you can add additional modalities in the future, at a fraction of the cost of independent stand alone units!

DYNAMIC RANGE OF MOTION

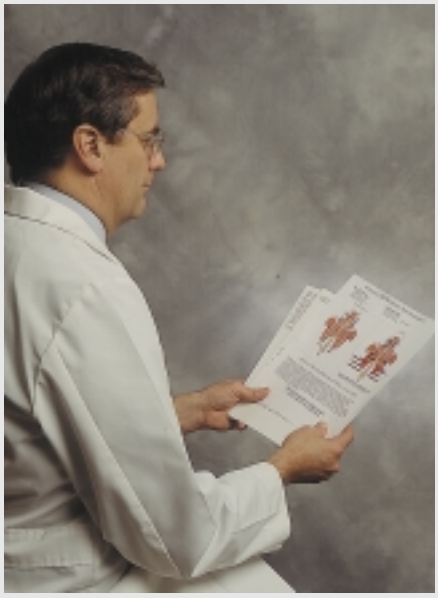
- Light weight Dynamic ROM sensors are quickly and simply affixed to the patient by means of Velcro straps – no need to manually hold the sensors in place during testing.
- AMA ROM Protocols for cervical, thoracic, lumbar and upper and lower extremities are pre-programmed.
- Automatically computes impairment rating based on AMA Guides.
- Printed reports with full color graphics for documentation and patient education.

STATIC EMG

- Static EMG can be taken in the seated or standing position.
- Graphics for cervical, facial and extremities are included.
- Normative data reports can be printed in full color and composites of up to 16 recordings can be printed on a single page.

DYNAMIC EMG

- Frequency spectral analysis and probability amplitude distribution analysis for online or later examination.
- Simultaneous recording of EMG and Dynamic ROM.



MUSCLE TESTING

- Real time strength testing quickly and easily.
- Voice prompt instructions simplify testing.
- Produce strength graphs and comparison reports to document status, efficacy and maximum medical improvement.

SYSTEM WIDE

- Full color reports, charts and graphs for patient education, diagnostic aids and insurance / legal documentation.
- Split screen capability permits newly captured data to be displayed alongside past data – an exclusive patient education and evaluation tool.

APPLICATIONS

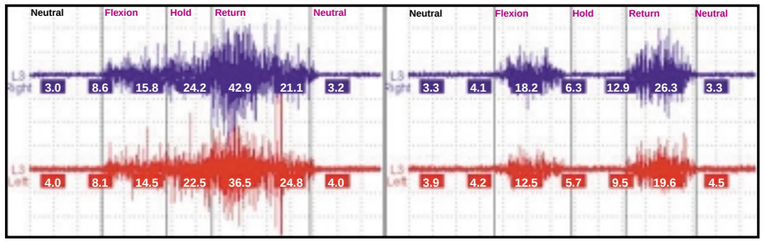
- **Objective Documentation of Medical Necessity of Treatment**
- **Patient Education and Retention**
- **Outcome Assessment**
- **Impairment Rating**
- **Personal Injury Evaluation**
- **Functional Assessment**

The MES 9000

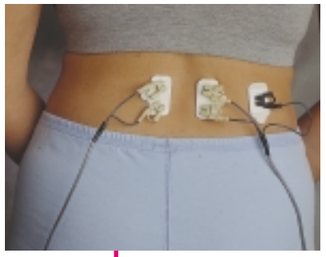
DYNAMIC EMG

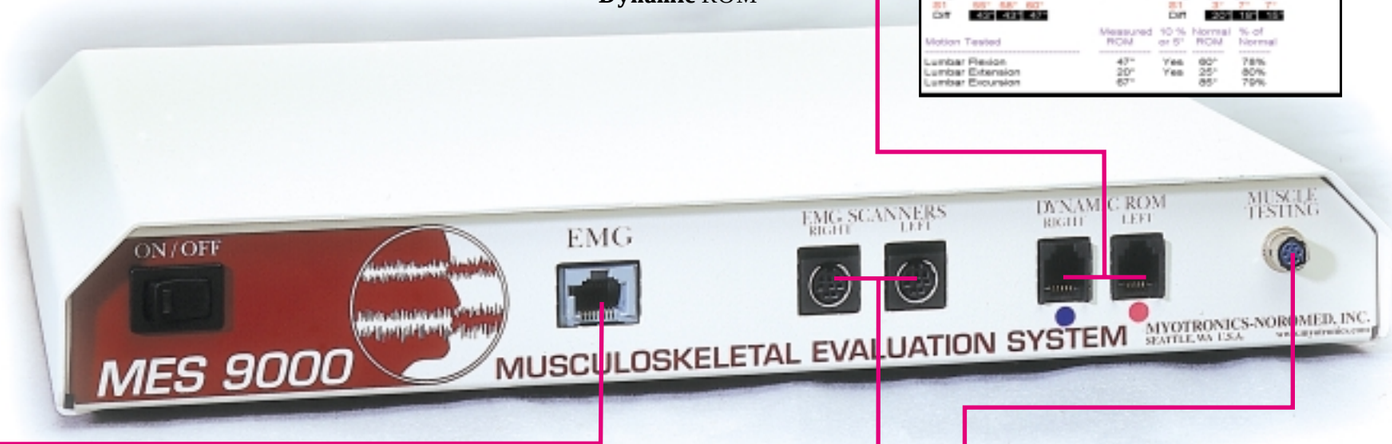
Up to eight channels of EMG can be monitored and recorded simultaneously, either as raw or integrated data. The system simplifies recording of multiple muscle groups to facilitate assessment and case documentation. The powerful and user friendly software includes an in-depth range of established EMG protocols and analysis for muscle re-education, relaxation training and assessment. The clinician may also add custom protocols - quickly and simply.

The MES 9000 incorporates advanced features such as simultaneous recording of EMG & ROM and frequency Spectral Analysis, used for the study of muscle fatigue.

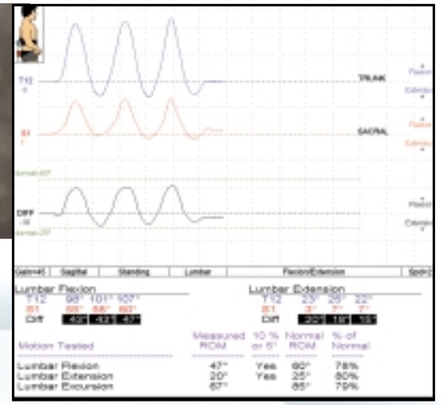


Unique **Split Screen** feature shows Patient's dynamic EMG Vs Ideal.





Recording of Lumbar **Dynamic** ROM



DYNAMIC ROM

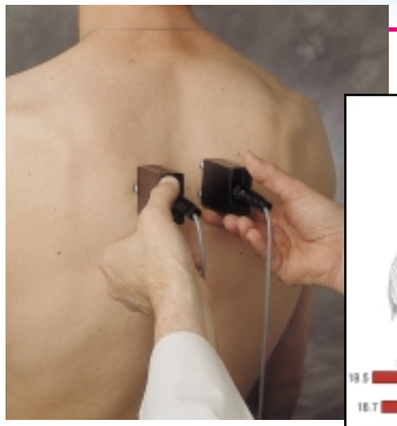
The MES 9000 offers a dual inclinometer system for real-time documentation of range of motion of the spine and extremities. Sensors, quickly applied with Velcro straps, allows the clinician to monitor the patient – not manage the sensors. As a clinical and educational tool, the dynamic range of motion (DROM) display enables the clinician and patient to observe **the quality and quantity of motion** throughout the tested range. The patient can make unrestricted multiple repetitions of the tested motion and up to 60 seconds of data is recorded while ROM data is automatically analyzed, displayed and compared to normative AMA ROM data. Replay the data in slow motion for closer examination and patient education. Data can be stored for future reference and analysis and reports can be printed in full color. Protocols for AMA recommended ROM tests (full spine and extremities) and for outcome assessment and impairment rating are pre-programmed. Additional protocols can be added by user.

STATIC EMG

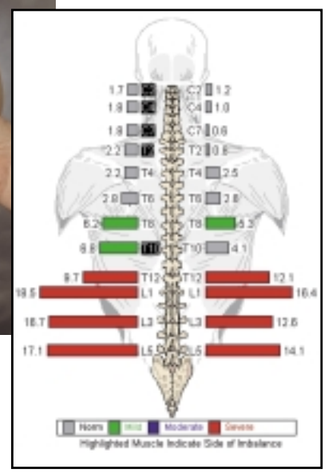
Utilizing the reusable handheld scanners, the EMG scanning option is ideal for quickly evaluating paraspinal and other muscles. The versatility of the MES 9000 allows for static scanning studies in the seated or standing position, giving you the flexibility to monitor the patient as symptoms dictate. Utilize full color printouts to provide a powerful tool for graphic documentation of treatment progress, patient education and patient retention.

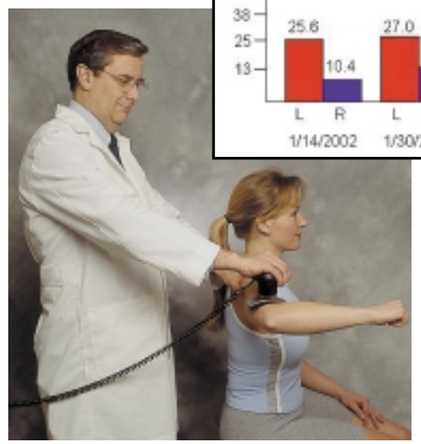
"The Noromed system is the perfect system for monitoring paraspinal muscle activity."

Dr. William Kneebone
Pleasant Hill, CA

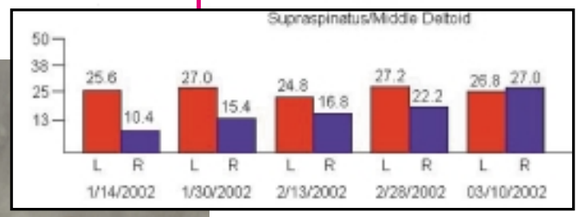


Paraspinal EMG Evaluation





Muscle Strength Evaluation



COMPUTERIZED MUSCLE TESTING

The MES 9000 Muscle Tester offers computerized muscle testing at its best. It brings science to what once was an art. Perform real time strength testing quickly and easily, all fully documented by the software.

The MES Muscle Tester produces strength graphs and comparison reports to document status, treatment efficacy and maximum medical improvement.

ONE SYSTEM DOES IT ALL

Now you can have all of these capabilities in one compact system. Surface EMG, range of motion and muscle testing – may be purchased separately or in any combination. The modular design of the MES 9000 allows you to purchase any combination of modules and expand as your practice grows. The MES 9000 --- the modular system that enables you to do a complete, integrated evaluation with objective documentation that supports your diagnosis.

Dynamic ROM of Upper Extremities

Cervical Dynamic ROM

Thoracic Dynamic ROM

Dynamic ROM of Lower Extremities

Lumbar Dynamic ROM

Computerized Muscle Testing

Static EMG

Dynamic EMG

Simultaneous Recording of EMG and DROM

BEFORE YOU BUY....

Quality of signal is critical to differentiate between muscle activity and noise. An EMG signal is of no clinical value if it contains so much electrical "noise" that you can't discern between muscle activity and noise. Noromed EMG products, with their unique signal processing circuitry, are known for their accuracy and clarity – giving you the finest clinical data available.

Here's what customers have to say:

"Over the past 2 decades, I have used a variety of EMG products from various manufacturers. I can confidently say that Noromed offers the best in EMG hardware and software. I have been using Noromed's EMG technology on literally thousands of patient's since the early 90's. The integrity and the quality of the data and the ease of use is phenomenal. And because of this, nearly all the tracings in my book, "Introduction to Surface EMG (Aspen Publishers)", were collected using it."

Dr. Jeffrey R. Cram
Nevada City, CA

"In my eleven years of practice I have used SEMG, ROM and muscle testing devices from four manufacturers. I have found Noromed's products to serve my needs far better than any other. Noromed's innovative technologies, customer service , and CE courses are nothing less than exceptional."

Dr. Matthew Stockstad
Asheville, NC

"After eighteen years in practice I have used a wide array of computerized ROM, Dynamic SEMG and Muscle Testing devices. Having dealt with this great diversity of equipment, I have also been exposed to many manufacturers as well as their technical support groups. No other company provides the solicitous continuing support as Myotronics-Noromed, Inc."

Dr. Anthony Marsh
West New York, NJ

"Over the past year, our office has performed over 570 dynamic ROM and SEMG evaluations with Noromed equipment. The credible objectivity it provides is invaluable."

Dr. Mark G. Hooper
Wilson, NC

SPECIFICATIONS

DYNAMIC ROM

Sensors: Integrated fast responding fluid filled capacitors. Range of angular measurement: 360º. Linearity error over the range of 360º: Average of 0.6º, Maximum 3.0º Reproducibility error: 0.3º.

EMG

Channels: 2-8. EMG monitoring range: 0-1024µV. Bandpass filter: 15-500 Hz. Notch filter: 60(50) Hz. Noise level: .2µV or less. Common mode rejection: 110 db. No. of Help screens: 135. EMG sweep display: Up to 8 min. Screen displays: Bar graph, moving line graph. Input impedance: 44 Meg Ohm. Modes: Redraw (replay), Work / Rest, raw EMG, integrated (processed) EMG. Feedback modes: auditory feedback. Ability to convert raw to integrated EMG. Isolated inputs.

MUSCLE TESTING

Load cell capacity: Compression (MT) 0-300 by 0.2 pounds.

Caution: Federal law restricts this device to sale by, or on the order of, a practitioner licensed by law of the state in which he / she practices.

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