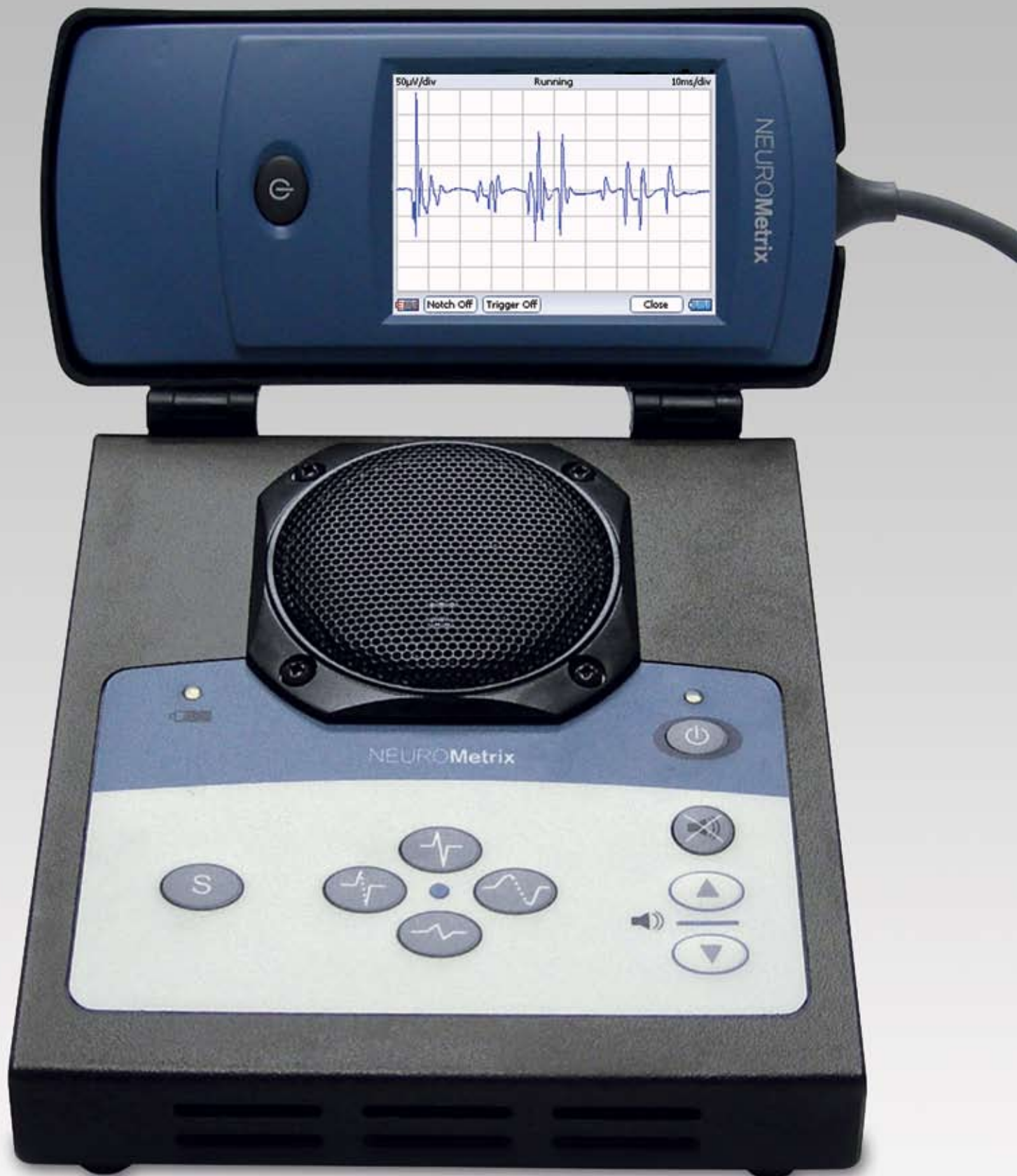


**ADVANCE™**  
NCS/EMG System

**EMG Module**  
for Needle Electromyography



ADVANCE Device

Trigger Mode

High Resolution LCD  
320 x 220

3" Speaker

Charge Indicator

Gain Up

Start/Stop

Timebase Up

Gain Down

Timebase Down

Speaker  
Mute/Unmute

Volume



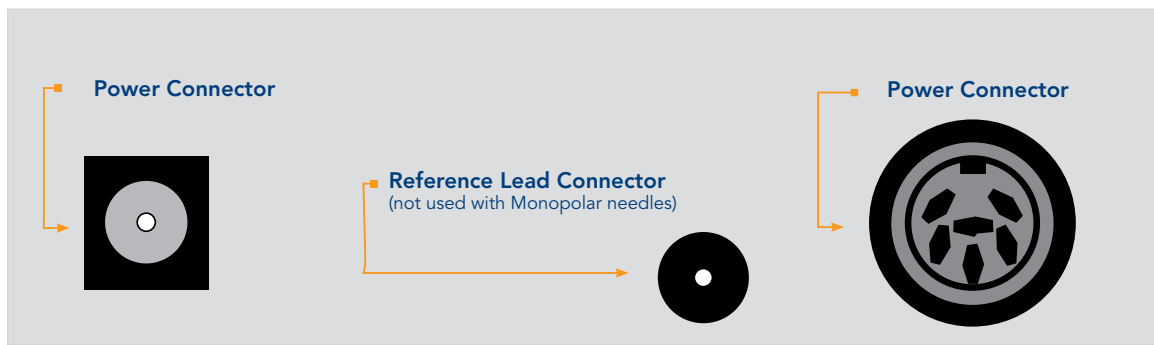
## Features

- EMG module interfaces with ADVANCE Device
- Easy access control panel
- Integrated speaker with premium sound
- Landscape mode for wide screen viewing
- Trigger Mode to capture motor unit action potentials
- Spontaneous activity, volitional activity
- Bluetooth® wireless communication



## Connections and Supplies

### Back of EMG Module ▼



### Accessories and Supplies for EMG Module ▼

PART #	ACCESSORY
EM-G25	EMG Concentric Needle, disposable, 25mm, 30 guage, 25 per box
EM-G40	EMG Concentric Needle, disposable, 40mm, 26 guage, 25 per box
EM-G50	EMG Concentric Needle, disposable, 50mm, 26 guage, 25 per box
EM-GRE	Disposable Tab Electrode, 100 per box
EM-GNC	EMG Cable, 1.25m, 5 Pin DIN
EM-GRC	EMG Reference Electrode Cable, 1.0m

The ADVANCE EMG Module is optimized for use with Concentric needle electrodes. However, Monopolar electrodes may be used via adapter. Contact your NeuroMetrix representative for information.

## Needle EMG Module Technical Specifications

EMG MODULE	SPECIFICATIONS
<b>AUDIO</b>	
Speaker	4 Ω
Power	3.2W
Filter	4 pole low pass set to 1.5 kHz
<b>DATA STORAGE</b>	
Flash	128 kb min
EPROM	4 kb min
SPRAM	4 kb min
<b>COMMUNICATION</b>	
Communication	Bluetooth®
Maximum Communication Distance	10 feet
Throughput	200 kbs typical
<b>BATTERY</b>	
Type	Rechargeable Lithium Ion
Battery Protection	Re-settable fuse
AP/APG Equipment	Not AP or APG applicable
Water Resistance	IEC 529 IPX0 Not protected from ingress of liquids
Power Source	AC adapter manufactured by Ault Inc. PN MW128RA0503-B01 (US), -F01 (Worldwide)
AC Adapter Classification	BF applied part, IEC 60601-1
<b>EMG MODULE ANALOG FRONT END</b>	
<b>SPECIFICATIONS</b>	
Common Mode Rejection Ratio	90 dB min
Noise	<2.5 μV rms
Frequency Response	
Low Pass (-3 dB)	5 kHz
High Pass (-6 dB)	2 or 16 Hz, selectable
Differential Input Voltage Range	50 μV to 30 mV p-p
Gain	100x – 10,000x
A/D Resolution	16 bit
Sampling Frequency	10 kHz
Measurement Accuracy	± 4% typical
Channels	1

