SIERRA® Summit™

EMG • NCS • EP • ULTRASOUND

SYMBIOTIC DEVICES

CADWELL®

FUSING FORM AND FUNCTION

Cadwell® Sierra® Summit™ with ultrasound, a completely integrated electrodiagnostic and imaging solution.
Perform an ultrasound without switching machines or even applications.

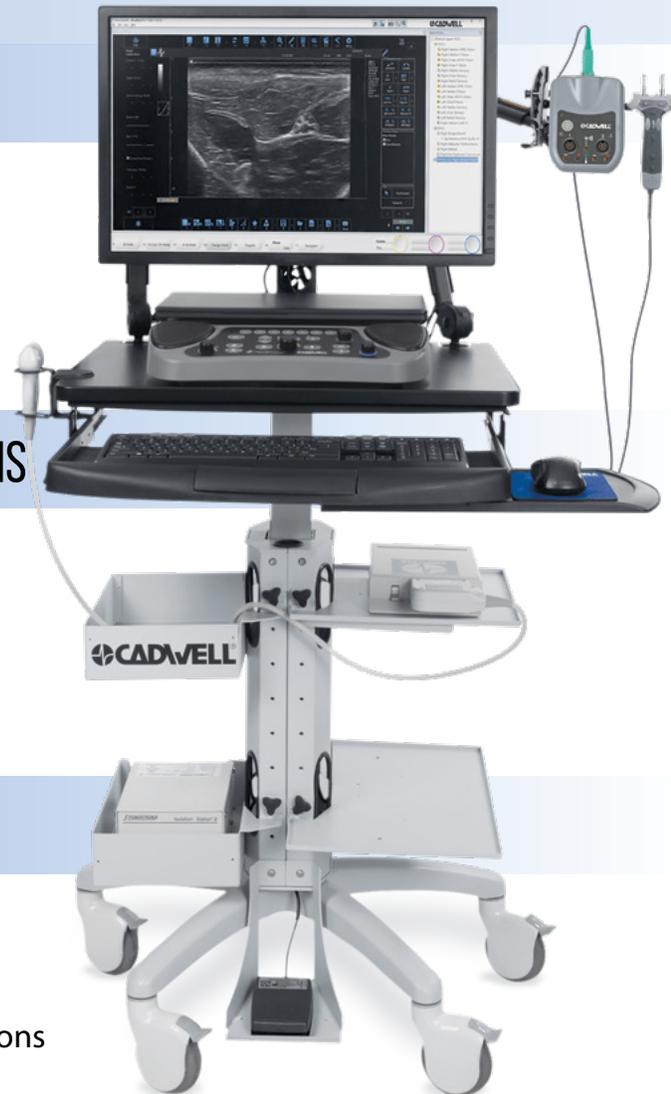## COMPLEMENT YOUR ELECTRODIAGNOSTIC TESTING

- Confirm electrodiagnostic findings
- Detect early stage nerve damage
- Provide insight into muscle functionality
- See how movement effects the nerve
- Study the nerve along its entire course

IMPROVE YOUR DIAGNOSIS AND TREATMENT DECISIONS

- Improve accuracy and specificity of a diagnosis
- Identify the site of involvement and origin of compression
- Determine the need and expected outcomes of surgery
- Detect additional evidence: cysts, lipomas, compressions, entrapments, tumors, traumas and causes of lesions

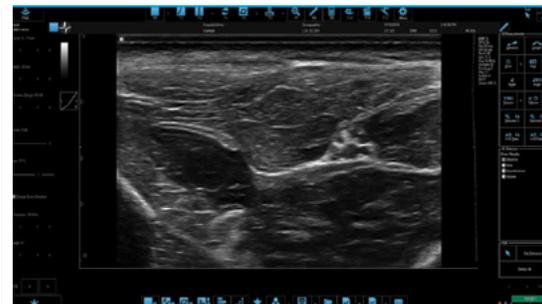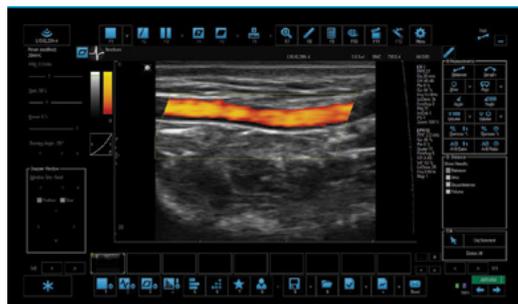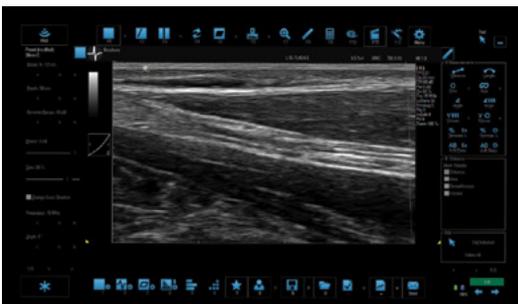## AUGMENT YOUR NEEDLE GUIDANCE AND INJECTIONS

- Ensure the needle is inserted in the correct muscle
- See the location of the needle within the muscle
- Measure muscle functionality pre- and post-injection
- Simultaneously hear, see and stimulate for accurate injections

B Mode: Median Nerve Long Axis

Needle Injection with PDI Doppler

B Mode: Median Nerve Cross-Section

INTEGRATED ULTRASOUND

Full integration makes real-time imaging a natural part of the electrodiagnostic workflow.

Integrated EMG Cart
The features and ergonomics of Cadwell's new EMG Cart were designed to seamlessly combine EMG and Ultrasound into an integrated examination.

The cart conveniently accommodates ultrasound probes and gel alongside EMG supplies and accessories.

Integrated EMG and Ultrasound Controls
Easily adjust focus, frequency, depth, power, gain, grayscale modes and playback directly from the Sierra® Base Unit.

Integrated Reports
Include ultrasound images and measurements in your EMG report, and store everything in the same locations.

Integrated Settings
Pre-define ultrasound structures in the Sierra Summit with specific image presets. Save time with labeling. Improve clarity of specific structures.

Integrated Workflow
Switch between ultrasound and EMG or NCS with the push of a button. Include ultrasound sites in your NCS and EMG study lists.

Concurrent Use
Use ultrasound simultaneously with any NCS or EMG protocol. Hear, see, and stim for more accurate injections and needle guidance. Combine imaging with any nerve study and create a new and unique protocol.

Ultrasound Options

Two ultrasound hardware solutions with a variety of probes make the Sierra® Summit EMG with integrated ultrasound affordable, flexible and functional.

	MicrUs	**SmartUs**
Description	Pocket-sized, point of care, digital, black and white ultrasound diagnostic system	Color, doppler, digital, portable ultrasound diagnostic system
Modes	B, M, B+M, 4B, B+B, Spatial Compound, Trapezoid Imaging, B-Steer, Zoom	B, B+B, 4B, M, B+M, B-steer, Color Doppler, Power Doppler (PDI), Directional Power Doppler (DPDI), Continuous Wave (CW) Spectral Doppler, Pulsed Wave (PW) Spectral Doppler, High Pulse Repetition Frequency (HPRF), Duplex (B+PW/CW), Triplex (B+Color Doppler+PW/CW)
Measurements	Brightness (B): distance, length, area, circumference, volume, angle, stenosis % Motion (M): distance, time, velocity, heart rate, stenosis %	B-mode and M-mode: same as MicrUS PW-CW Spectral Doppler: velocity, PG, PR, RI, etc. PW Doppler automatic tracing and calculations
Probes/ Transducers	6.0 - 15.0 MHz Linear, 25mm 5.0 - 12.0 MHz Linear, 40 mm Wide bandwidth, multifrequency Automatic transducer recognition 2 > 31 cm scanning depth	2-5 MHz Curvilinear, Convex, 60mm 7.5 - 15.0 MHz Linear, 40mm 7.5 - 15 MHz Linear, 25mm (Small footprint) Wide bandwidth, multifrequency Automatic transducer recognition
Imaging	Automatically adjust US image size to screen resolution. Full motion and full-size real-time US. Imaging up to 120 fps. Zoom from 60 - 600% in all modes	
Save Formats	AVI, JPG, BMP, PNG, TIF, XLSX, DCM, TPD, TVD	
Software	Echo Wave II (32/64-bit Windows)	
Connections	USB 2.0/3.0 power cable	12V power adapter
Dimensions	4.2W x 4.1D x 0.8H (inches); 0.44 lb 106W x 105D x 21H (mm); 0.2 kg	6.5W x 8.2D x 2.5H (inches); 4 lbs 165W x 210D x 62H (mm); 1.8 kg

✦ **CADWELL**®

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