

# Cascade<sup>®</sup> IONMAX<sup>®</sup>

INNOVATIVE IONM SOLUTIONS



Surgeries are inherently risky, especially those that involve the brain, spinal cord or nerves. Intraoperative neurophysiological monitoring (IONM) is performed during many different types of surgeries to reduce the risk of devastating, irreversible neurological deficits, such as muscle weakness, loss of sensation, hearing loss and impairment of essential bodily functions.

IONM involves multi-modal recording of electrical potentials from the nervous system during operations to detect adverse changes, enable corrective action, and offer surgical guidance.

**CADWELL'S NEW CASCADE® IOMAX™**

**WITH SURGICAL STUDIO SOFTWARE,**

the culmination of nearly two decades of  
innovation, experience and investment,

**IS THE FUTURE OF IONM.**



**CADWELL®**

Helping you help others

# Cascade<sup>®</sup> IONMAX<sup>®</sup>

*A comprehensive solution for patient-centered IONM care.*



## Surgeon

Embrace adjunct technologies to optimize your patient's outcome



## Administration

Protect the hospital's investment by choosing durable equipment with quality service and support



## Patient



## Neurophysiologist

Feel at ease with intuitive software and purpose-built IONM hardware



## IT

Choose secure and efficient access to clinical data



*The modular design of Cascade® IOMAX™ lets users tailor each IONM setup to the specific requirements of different surgeries.*

**Cortical Module.** Designed for recording and stimulating at or near the patient's head, provides 16 recording channels, TCS-9 for dynamic monitoring of transcortical MEPs, and Low Current, Auditory and Visual Stimulation.

**Limb Module.** Designed for recording and stimulating the arms and legs with eight recording channels, 5 paired E-Stim outputs, SpO<sub>2</sub> and Heart Rate.

IOMAX systems are scalable from eight to 48 channels.

- Use the Cortical Module solo
- Combine the Cortical Module with one to four Limb Modules
- Use one or two Limb Modules independently

**Base Module.** Provides power and communication via a single SafeT Cable to the OR table, and allows Trigger In/Out interfacing with third-party devices.

**LCSwap.** Comprehensive switch matrix solution for direct cortical stimulation. Twelve outputs can be independently assigned as anode or cathode; it also includes two paired outputs for hand-held probes.



***IOMAX™ is a compact, robust system designed to withstand daily use and the environmental hazards of the operating room.***

**SafeT™ Cables**  
Waterproof and completely interchangeable between Modules with color-coded quick-release metal connectors.



Cortical and Limb Modules are drop tested and waterproof.



Mount Modules to the OR table with rail brackets and clamps. Easily insert and remove electrodes with the Quick Adapt.



**SpO<sub>2</sub>**  
Measure pulse oximetry and heart rate from up to four limbs.



**Pelican™**  
**carry-on case**  
TSA-approved lock. Sturdy and secure. Accommodates up to a 48-channel IOMAX system.

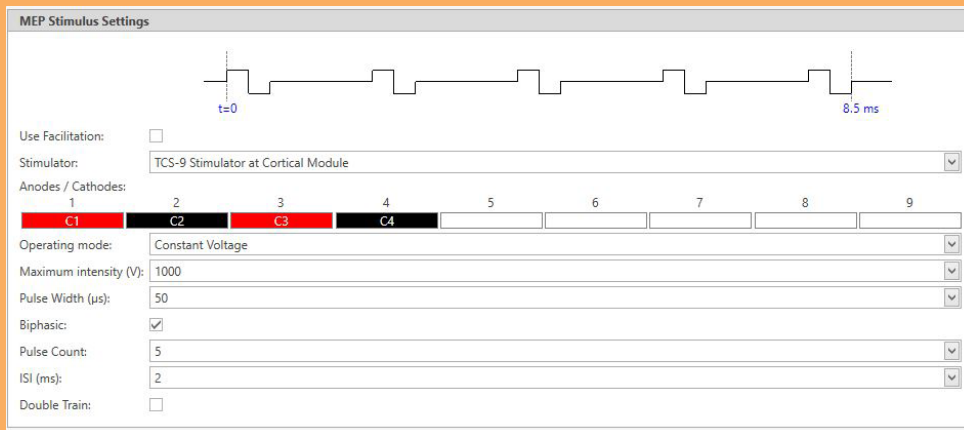
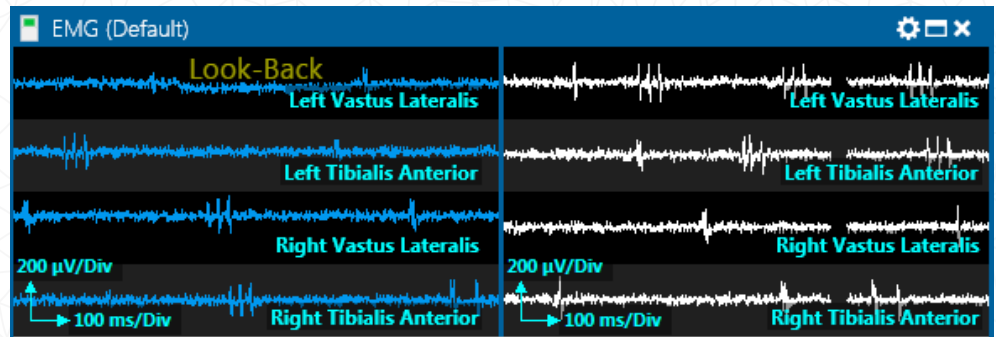


# SURGICAL STUDIO

**Cascade® Surgical Studio software offers an intuitive user interface.**

## Streamline your workflow

- Switch users during a case without interrupting data acquisition
- Share and manage case data and resources across your organization
- Maximize trace windows on the fly
- View live and saved data side-by-side



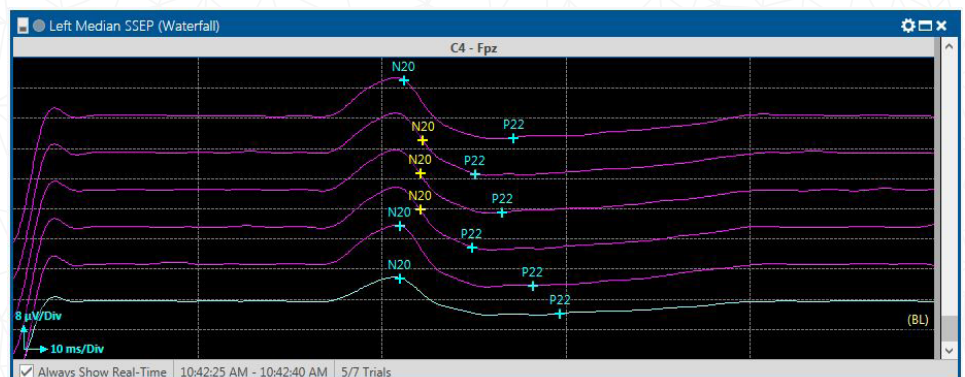
## Deliver clinical excellence

- Achieve quick and intuitive direct cortical stimulation with strips, grids, and/or probes using the software-driven switch matrix
- Measure vital signs with heart rate and SpO<sub>2</sub> from up to four limbs
- Use TCS-9 dynamic montaging to achieve optimized MEP results for each patient

## Capture critical information

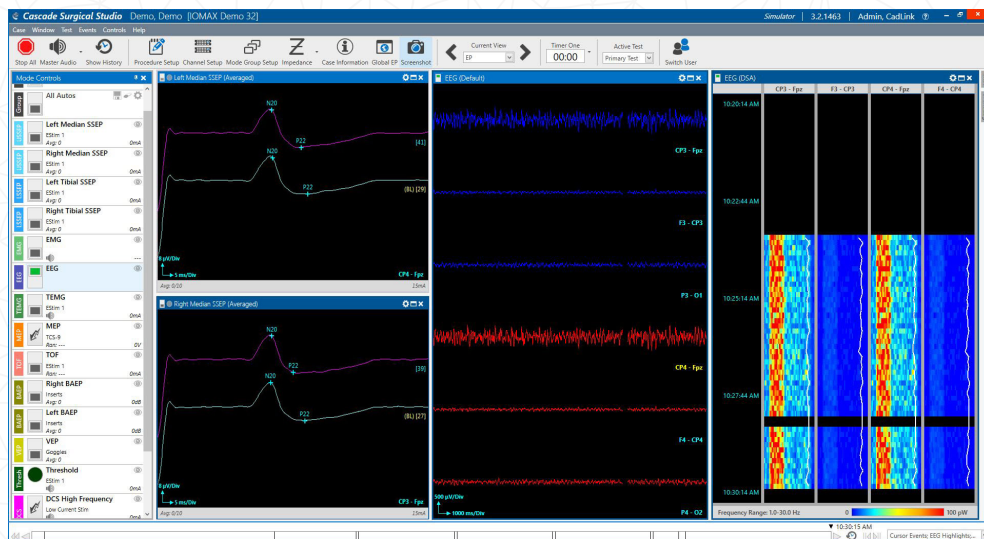


- Auto-save screenshots with every Event Log entry
- Save only important EMG data
- Set up color-changing cursor alerts



## Monitor all modalities

- SSEP, EMG, MEP, DCS, TOF, BAEP, EEG, VEP, DWave, etc.
- All modalities on the same screen running together
- Integrated bovie detection
- Same inputs with different channel settings per mode run simultaneously



### Screenshots

Select Screenshots to Include:

Include	Events
<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	Incision
<input checked="" type="checkbox"/>	Screenshot
<input checked="" type="checkbox"/>	Exposure
<input checked="" type="checkbox"/>	SSEPs stable
<input checked="" type="checkbox"/>	Closing

Preview:

The preview shows a smaller version of the Cascade Surgical Studio interface, specifically the 'Left Median SSEP (Averaged)' panel, which is highlighted as the selected screenshot.

## Strengthen documentation

- Standardize demographic data collection
- Enter comments just by typing
- Customize Word®-based report templates
- Choose whether to save the Chat log
- Automatically document remote reviewer connections
- Choose screenshots to include in reports

## Stay connected

- Remote monitoring and integrated chat are powerful tools for communication with colleagues during surgery.
- Surgical Studio lets you create a custom surgeon's view, and you can easily drag a window onto a second monitor.
- Set up CadLink™ information management to automatically interface with EMR or HIS to import patient demographics and export results and reports.



We are dedicated to developing industry-leading IONM solutions to help you help your patients.

## THE CADWELL STORY

John Cadwell, BSEE, MD, saw a need for innovative and reliable neurophysiology instruments during his residency at the University of Washington School of Medicine.

John combined his experience in electrical engineering and medicine to design the world's first microprocessor-controlled EMG instrument. Together with his brother, Carl Cadwell, DDS, John formed Cadwell Laboratories in 1979.

In the 1980s, Cadwell Laboratories developed the best-selling 5200A EMG and the Spectrum 32 EEG. In the 1990s, Cadwell's Sierra took over the EMG line and Cadwell introduced Cascade IONM and Easy EEG. In the 2000s, Cadwell developed the industry's best integrated report generator and Easy PSG.

Lately, we have expanded our headquarters and opened offices in China, Singapore and the Netherlands. Our global sales and support teams help physicians and medical centers worldwide help their patients.

Today, our brands include Arc EEG, LTM and ICU cEEG; Cascade® IONM; Sierra® EMG and EP with integrated ultrasound; Easy® PSG and CadLink™ data management.

We're officially Cadwell Industries, Inc. now, and we are still passionate about enabling quality, informed outcomes for your patient care.

**Cadwell is staying true to its mission: to help you help others.**

*Cadwell has a strong history of supporting customers. Please discuss service, support, warranty and training information with your sales manager or distributor.*



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