

# NEURO DIAGNOSTICS

Quality Healthcare Products

A grayscale photograph of a person with a backpack standing on a rocky ledge, looking out over a vast valley. In the distance, a large dam is visible, and the valley is surrounded by steep, forested mountains. The sky is overcast.

the brain is a muscle that can  
**move the world.**

Stephen King

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ant neuro  
inspiring technology



## nëo™ Simplified Cerebral Function Monitoring

nëo™ is the newest, most easy to use, cerebral function monitor (CFM) solution available to busy NICUs. nëo™ is designed to account for NICU workflows – from electrode application, to monitoring, event annotation and review. The nëo CFM easily integrates into the NICU's neonatal brain monitoring protocols.

- Selectable from a single, 2 channel recording, or up to 8 referential aEEG/EEG channels
- Easy to read Greyscale feature for aEEG
- Online graphical and numeric Burst Suppression Ratio (BSR) and Inter-Burst-Interval (IBI)
- Streamlined setup to initiate monitoring or review sessions
- Easy exporting of data and screenshots at any time
- Quick access to pre-defined and custom annotations



# Arc Apollo+™

## Arc Apollo+ Ambulatory EEG



### Bolster your EEG fleet with Apollo+

As patient volumes fluctuate, Apollo+ amplifiers can be redeployed to meet your diverse needs with inpatient and at-home EEG monitoring.

Clinical EEG, EMU, and Ambulatory EEG patients can move freely with onboard rechargeable batteries, continuous data acquisition, and continuous impedance checking.

### Use Cases Include:



At-Home  
Ambulatory  
EEG with Video



Clinical  
EEG



NICU  
Monitoring



ER & ICU  
Monitoring



Epilepsy  
Monitoring

### Configurations are Flexible

- Compact, lightweight, and rugged systems with continuous impedance checking and EEG storage rates up to 2000Hz per channel
- Up to 72 Hours of Recording Time
- Drop-tested and IP-22 Water Resistant
- Compatible with Arc Photic Stimulator, Patient Event Switch, and Patient Voice Event Microphone
- Ambulatory system is compatible with Q-Video Mobile 3 with HD video and auto-switching infrared
- Carts, fixed room, and accessory mounting options
- IP camera switching
- Multiple ambulatory configurations to meet new CPT code requirements

**Arc Essentia EEG**



**The unique hardware design of Arc Essentia ensures high quality EEG signals, even in noisy environments.** Its rugged and water-resistant design will withstand the use and abuse of real-life clinical practice. The compact design of the Remote Input Headbox with secure cable connectors ensures convenient setup, recording integrity, and patient comfort. Plug and play IP or USB cameras synchronize video with EEG data. A USB cord powers and connects the Arc Photic Stimulator for operation through the software.

**Use Cases Include:**



Clinical EEG



NICU Monitoring



ER & ICU Monitoring



Epilepsy Monitoring

**Clinical and Inpatient Cases**

Monitor smartly and switch cameras on the fly with IP camera switching on any of the acquisition, review, or Sentinel Monitoring stations. Monitor and remotely control the studies of multiple patients from one computer.

**Arc USB Photic Stimulator**

Enable 1-60Hz of visual stimulation during clinical EEG studies. Configure a clinical EEG system with the Arc Photic Stimulator hard-wired in a room or mounted to any of our EEG-compatible carts.

**Patient Event Switch**

Patients, nurses, or family can mark activity in the software with the Clinical Patient Event Switch.



## Arc Zenith High Channel Count Extracranial & Intracranial EEG & Cortical Stimulation

**Arc Zenith will change the way you monitor epilepsy. Offering high channel count extracranial and intracranial EEG, cortical stimulation, and smart Zenect connectors.** Arc Zenith is a robust intracranial and extracranial EEG solution that lets you capture up to 288 channels at 1 MHz sampling with onboard data capture and battery. It offers a fully integrated switch matrix for convenient cortical stimulation. Zenith's rugged design is drop-tested and water-resistant.

### Arc software's smart tools let you:

- Streamline electrode layout with automated input mapping
- Select any input as ground and any other input as the recording reference
- Automatically identify electrodes with the patented Zenect<sup>™</sup> magnetic smart electrode connectors
- Remotely monitor and control the software; control and switch cameras

### Simplify your EMU setup

- Create montages including all electrodes with one click
- Streamline electrode layout with automated input mapping (patent pending)
- Control integrated switch matrix stimulation in the software
- Auto-identify electrodes in the Arc software with the patented Zenect<sup>™</sup> magnetic smart electrode connectors

### Synchronize voice events with clinical activity in the study data with the Patient Voice Event Microphone

Never lose a paper patient event log again. The patient voice event button automatically records and stores the patient's voice in real time, and synchronizes it with the EEG.



**A Simple Platform for Clinical EEG, Long-Term Monitoring & Epilepsy Monitoring. The powerful features and tools of Arc EEG Software will change the way you perform EEG tests.**

- Integrated room automation connects to lights, TV, and notification systems
- Supports all Arc amplifiers: Essentia, Apollo+ 32-channel, Apollo+ 64-channel, and Zenith high-channel count EEG with direct cortical stimulation
- Improved channel mapping and montaging
- Control on/off on specific inputs to manage system resources
- Schedule appointments directly in recording dashboard

**Arc EEG Software Features:**



Anonymize Studies For Research & Teaching



Switch users without a study interruption



Custom Patient Information Fields



Export & Share Data with Viewer



Support Specialized Laplacian Montages



Superimpose Traces For Comparison



Align EEG Traces



Calibrate The Screen



Import Cadwell Easy III EEG Records For Review



Customize Report Templates & Create Narratives Quickly in CadReport



## Sierra Summit EMG NCS EP Ultrasound

### Reliability & Efficiency for EMG, NCS, EP & Ultrasounds.

**Cadwell offers cutting-edge neurodiagnostics with forward-thinking hardware and innovative software.** The Sierra Summit is the brainchild of 40 years of research and development at Cadwell. We have responded to feature requests, new electrodiagnostic (EDX) technology, and broader learning to bring you one of our most dynamic pieces of neurophysiology diagnostic equipment. In 2018, Cadwell became the first EMG company to offer fully integrated ultrasound.

Today, Cadwell is working in tandem with some of the world's leading EDX physicians and teaching hospitals. We're leading the charge in neurodiagnostic technology capabilities in EMG, nerve conduction, evoked potentials, ultrasound, and chemodenervation. The Sierra Summit is a powerful tool for all of your neurodiagnostic monitoring.

*\*Ultrasound option not available for sale in Canada.*



### Cadwell uses the highest quality components to deliver durable and reliable neurodiagnostics

- Test fixtures and electrode tester for instant hardware diagnostics
- Machined aluminum knobs and raised buttons rated for 100k+ uses
- Electrode connectors rated for 100k+ connections
- Industrial cables with locking aluminum connectors

## Sierra Summit Software

### Sierra Software's Smart & Flexible User Interface can Improve your Workflow and Expand your Capabilities



**See it how you want to.** Custom views give you full control of displays, colors, tables, and test protocols. User-defined roles mean that you get your unique settings every time, even if one's acquisition preferences are different than another's review settings.



**Total control over how it sounds.** Audio is important in EMG, and we aced it. Our two HD-quality speakers are loud with instant signal processing. Use the Audio Equalizer to customize your audio so EMG activity sounds familiar.



**Use it how you want to.** Customize your workflow with user-defined studies and tests that can be adjusted on the fly.

**Flexible and Clear Results Tables.** Display various parameters for clinical applications and research with advanced reference limits, comparisons, and on-the-fly editing.

**Glowing and Hold Max.** Previous responses fade into the background for easy comparison. Hold Max automatically selects the supramaximal response.

**Improve Button | FI.** Reduces shock artifact, flattens the baseline and improves accuracy.

**Anatomy Navigator.** Quickly filter the muscle list by clicking on an anatomical region or double-click to have commonly tested muscles from that region populate your muscle scoring table.

# Cascade<sup>®</sup> IOMAX<sup>®</sup>



## Cascade IOMAX IONM

### Designed to Withstand the Environmental Hazards of the Operating Room

The modular design of Cascade IOMAX allows users to tailor their IONM setup to the specific requirements of each surgery. The comprehensive design of the IOMAX with Cascade Surgical Studio software provides seamless multi-modality monitoring, captures critical information, delivers clinical excellence and strengthens documentation.

Flexible channel configurations cover the needs of every procedure type, from ENT and orthopedic spine, to more complex neurosurgery cases. Cortical and Limb Modules are waterproof and drop-tested with durable rubber bumpers.

Cascade IOMAX is a rugged, module based, IONM system. This robust and flexible solution is ideal for hospitals and services using a minimum of three modules, a higher channel count, interchangeable cables, and new extension pods for the Cortical Module.



The IOMAX Limb Module is designed for recording and stimulating the arms and legs



The new IOMAX 32-channel amplifier records EEG and direct cortical SSEPs



LCSwap is a comprehensive switch matrix solution for direct cortical stimulation



## Cascade Surgical Studio Software

Cascade Surgical Studio (CSS) is an intuitive and thoughtful IONM software interface that allows you to streamline your workflow, deliver clinical excellence, capture critical information, monitor all modalities, strengthen documentation, and stay connected.

### Streamline Your IONM Workflow

- View live and saved data side-by-side, and never miss critical information
- Switch users during a case and apply settings without interrupting data acquisition
- Seamlessly share and manage data and resources across your organization
- Maximize trace windows on the fly
- View live and saved data side-by-side

### Capture Critical IONM Information

- Automatically capture screenshots with every User Event entry
- Save the previous 30 seconds of EMG with Store Buffer

### Deliver Clinical Excellence in the OR

- 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 SpO2 from up to four limbs

### Monitor All Modalities in the OR

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

### Strengthen IONM 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

### 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. The top monitor on the IOMAX cart swivels for surgeon view.
- Set up CadLink™ information management to automatically interface with EMR or HIS to import patient demographics and export results and reports.
- Automatically document remote reviewer connections

### Optimize quality IONM management

- Standardize procedure setups
- Control access to data and PHI
- Demonstrate competency with CadX simulator
- Automatically remove data from the local recording system with CadLink
- Track case involvement, and apply user preferences



## CADX Software

### Simulate realistic IONM data to demonstrate anesthesia, technical effects and surgical effects with CadX Surgical Simulator

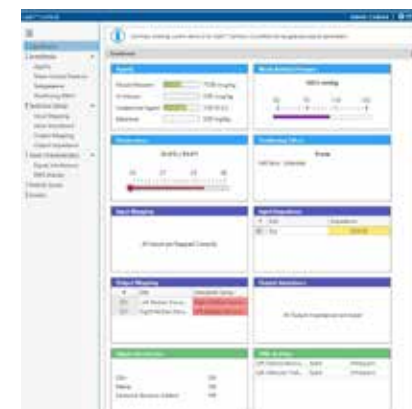
CadX lets you manipulate the patient control panel to create real-world scenarios for demonstration or assessment purposes.

Simulate realistic data demonstrating anesthesia, technical setup, trace characteristics, surgical effects, pedicle screw, and scripts.

Finally, there's a comprehensive tool to train or teach using the same procedure setups and software functions that are used in the operating room.



### Manipulate the CadX patient control panel to replicate real-world surgical scenarios for demonstration and assessment purposes





## Easy III Sleep



### Record 54+ channels with crystal clear signals for full overnight PSG studies

Record crystal clear signals, protect your equipment, ensure recording integrity and provide patient convenience during in-lab sleep studies with the Easy III amplifier and remote input box.

#### 32-Channel Easy III PSG Amplifier and Remote Input Box

Cadwell's Easy III 32-channel high-quality PSG amplifier with integrated DC channels stays safely mounted to the wall or night stand. Easy III provides 4kHz sampling rate and bedside impedance checks. A color-coded Remote Input Box simplifies the connection of electrodes and sensors.

#### Cadwell EasyNet Patient Modules

Place your signals at the amplifier or on the patient with up to 12 EasyNet® Patient Modules for nasal pressure, oximetry, body position or limb movement actigraphy. Easy III PSG software can be installed on, either computers supplied by Cadwell, or computers managed and maintained by your hospital's IT department.



# ApneaTRAK<sup>®</sup>

## ApneaTrak Sleep Apnea Testing Devices



**Seamlessly Integrate Home Sleep Apnea Testing Devices in your Sleep Program. The new generation of ApneaTrak brings thoughtful design to help your patients confidently and comfortably complete their testing.**

### What do you need to know about ApneaTrak HSAT?

- ApneaTrak® records respiratory waveforms, giving you visibility to the data behind the diagnosis.
- ApneaTrak can record up to three nights on each charge.
- Body position, effort, snoring, airflow, and oximetry are built directly into the device.
- Each study can be configured to start automatically, helping to prevent patient error.
- ApneaTrak cannot be accidentally turned off during a study.
- Rechargeable, built-in batteries, cannot be dislodged (securing study data), and they reduce waste and replacement costs.
- Easy® III software streamlines sleep diagnostic testing by supporting both Easy III PSG and ApneaTrak HSAT solutions.
- Set up is simple with color-coded connections, anatomical imagery, and patient instructional videos and guides.
- Non-proprietary connectors let you use the accessories you and your patients prefer for effort belts, airflow cannulae, thermistor sensors, snore sensors, and oximeters.
- We support ApneaTrak with a variety of reusable and disposable sensors.

## Easy Ambulatory 2

**Expand your diagnostic reach to hospital beds and patients' homes and run a complete Type 2 sleep study anywhere with Easy Ambulatory 2**

The Easy<sup>®</sup> Ambulatory 2 solution utilizes Easy III PSG, the same software as our clinical PSG and HSAT, systems with flexible workspace configurations, montages and customizable reports to capture Type 2 unattended sleep studies. Download ambulatory data for review on an Easy III workstation via an Ethernet cable.

### **Integrated Sleep Software**

Download data to an Easy III system via Ethernet cable, then access all stored patient data from anywhere via Citrix. Initialize, record, score and review both HSAT, ambulatory PSG, and PSG, performing all of your sleep diagnostics using one efficient software platform and workflow.

### **The Easy Ambulatory 2 Hardware**

Easy Ambulatory 2 is composed of a recorder, battery pack, the 32-channel color-coded amplifier, respiratory belts, accessories and EasyNet<sup>®</sup> modules for nasal pressure and snoring, oximetry, body position and limb movement. The compact 32-channel amplifier is color-coded and comes with a wearable pouch.

It is small enough to be portable and provide patient comfort, and, it is powerful enough to collect accurate, reliable, PSG data. Easy Ambulatory 2 can also be configured for EEG.





## Easy III PSG Software

Streamline your sleep diagnostic testing with integrated PSG and HSAT. Initialize, record, score and review both HSAT and PSG, performing all of your sleep diagnostics using one efficient software platform and workflow.

Easy III PSG's role-based personalized software behaves the way you want, and it can be modified on the fly.

- Simultaneously monitor live and recorded video to improve patient care during the study.
- Synchronized montages and reports mean you don't need to copy files to every station.
- Build your workspace across multiple monitors, or consolidate to a single monitor display.
- Monitor your way, anywhere. Access all stored patient data and live recordings from anywhere via Citrix. Build physician worklists so you know which studies you've already done and which studies need to be completed.





## SERVICE & SUPPORT

Novus Medical's best in class Customer Service and Clinical Support, have received extensive training on the Neuro Diagnostic products and are ready to answer any of your questions.

Technical support is provided by our highly qualified and knowledgeable Technicians

**For more information or to order a sample:**

[www.novusmedical.ca](http://www.novusmedical.ca) | [info@novusmedical.ca](mailto:info@novusmedical.ca)

# ADDITIONAL PRODUCTS FROM NOVUS MEDICAL INC.



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Ventilation**



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**Telehealth**

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