



Brain activity plays an important role in patients' outcomes in neurocritical care, epilepsy monitoring and clinical settings.

EEG is the only real-time brain function parameter. It is an ideal method for detecting clinical and subclinical seizures, monitoring treatments, and detecting abnormalities at a reversible stage.

Monitoring your patients with Arc EEG gives you the tools to help make physiologically sound and timely clinical decisions and prevent neurological complications, especially in neonates and children.

We are passionate about helping you diagnose and monitor the brain.



CADWELL[®]
Helping you help others

Arc Essentia® and Arc Alterna™ systems offer simple operation, reliable hardware, intuitive Arc software and secure CadLink™ data management.

The robust Arc EEG design ensures high quality signals in clinical and ambulatory practice, and cerebral monitoring in the ICU, EMU and outpatient clinics.

The rugged and water-resistant design of the Essentia amplifier will withstand the use and abuse of real-life clinical practice. The Essentia meets the latest Third Edition standards of testing.

Alterna ambulatory with Q-Video Mobile captures quality EEG and synchronized digital video with a compact recorder, 32-channel amplifier and automatic infrared lighting.



Essentia E3	Essentia E1	Alterna	AMPLIFIER SPECS
✓	✓	✓	32 channels of EEG, 7 active/reference pairs
✓	✓		Electrode Continuity Check
✓	✓		Non-proprietary USB power and communications cable
✓	✓		250 and 500 Hz Storage Rates
✓			1000 and 2000 Hz Storage Rates
✓	✓	✓	Supports USB Photic
✓			Continuous Impedance
✓			Supports USB Oximetry
		✓	Supports Q-Video Mobile camera with infrared

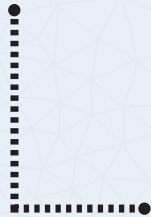
Multimodal Configurations

Combine Arc with Sierra® Summit™ or Cascade® IOMAX™ to create a multi-modality system.



..... The lightweight Point of Care Cart is ideal for clinical use with a laptop computer.

The robust T2 Cart accommodates a desktop or all-in-one computer, a printer and a UPS.



ACCESSORIES



Remote Input Headbox

Compact box with color-coded inputs and secure cable connectors provides patient convenience and recording integrity.



Photic Stimulator

Rates from 1 - 60 Hz. USB connection.

Cameras

Variety of USB, IP and HD cameras available. IR illuminator. Wall, ceiling or arm mount.

Oximetry Sensor

USB connection. Available for the Essentia E3 amplifier in select markets.

Articulating and flexible arms

Patient Event Button



Small Footprint Configurations

In the space-critical ICU, choose the lean Pole Cart or wall-mount the entire system and remotely monitor your patient from any Arc review station.



Compact ambulatory EEG system with up to four days of clinical and at-home recording.

- 32-channel color-coded inputs
- Push button microphone records EEG-synchronized verbal diary entries

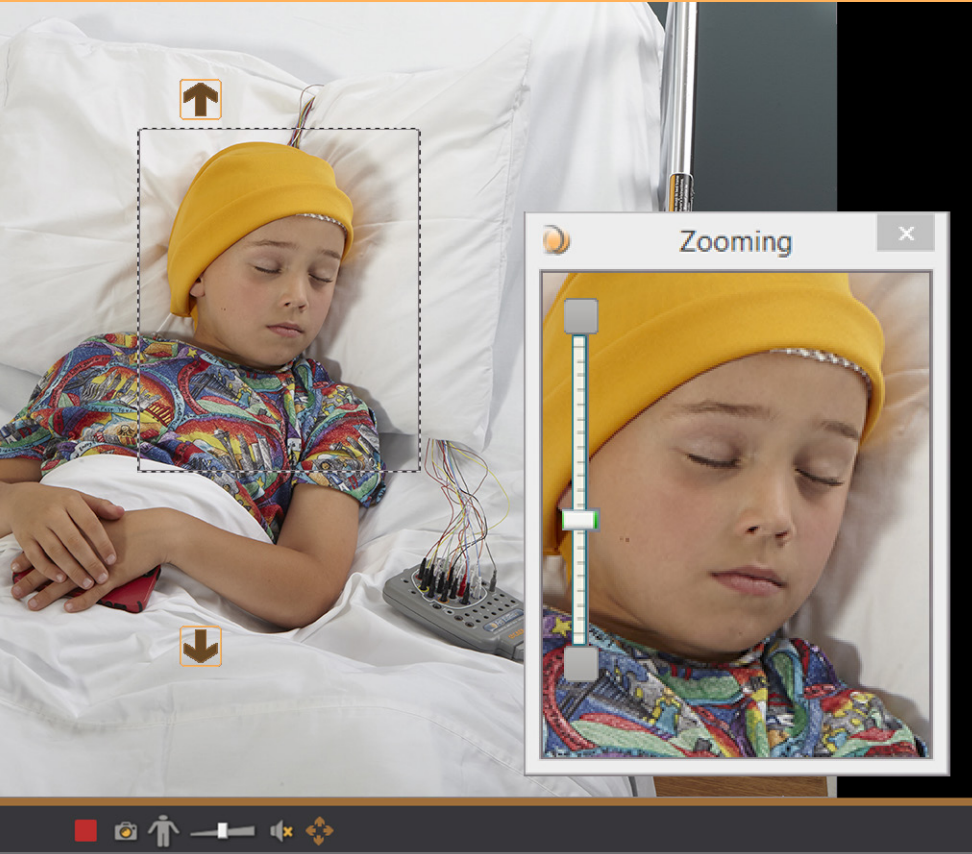
OPTIONS

- Photic stimulator
- Q-Video Mobile 2 with built-in automatic-switching infrared illuminator captures and synchronizes video with EEG both day and night



SMARTER TOOLS

SAVE CRITICAL TIME: Begin a study in just one click on the start menu and enter patient information later.



CAPTURE IMPORTANT INFORMATION

- Detect subtle movements in Q-Video
- Use integrated camera pan, tilt and zoom
- Highlight video and superimpose traces over a transparent video
- Display video in a separate window or monitor
- Add video screen captures and trace images to reports

REVIEW IN RECORD TIME

- Monitor live and review simultaneously
- Monitor on one or multiple monitors
- View up to 100 pages at once then click to zoom to one page to inspect events
- Automatically shade reviewed pages
- Highlight leaves entire record intact and lets you jump between marked areas
- Review and export just highlighted data

FEATURES

- Anonymize studies
- Switch users without interrupting a study
- Create custom fields for patient information
- Export and share data with Viewer
- Support specialized Laplacian montages
- Import Cadwell Easy® III EEG records for review
- Customize report templates and create narratives quickly in CadReport
- Align EEG traces, calibrate the screen and superimpose traces for comparison
- And much more!

CUSTOMIZE

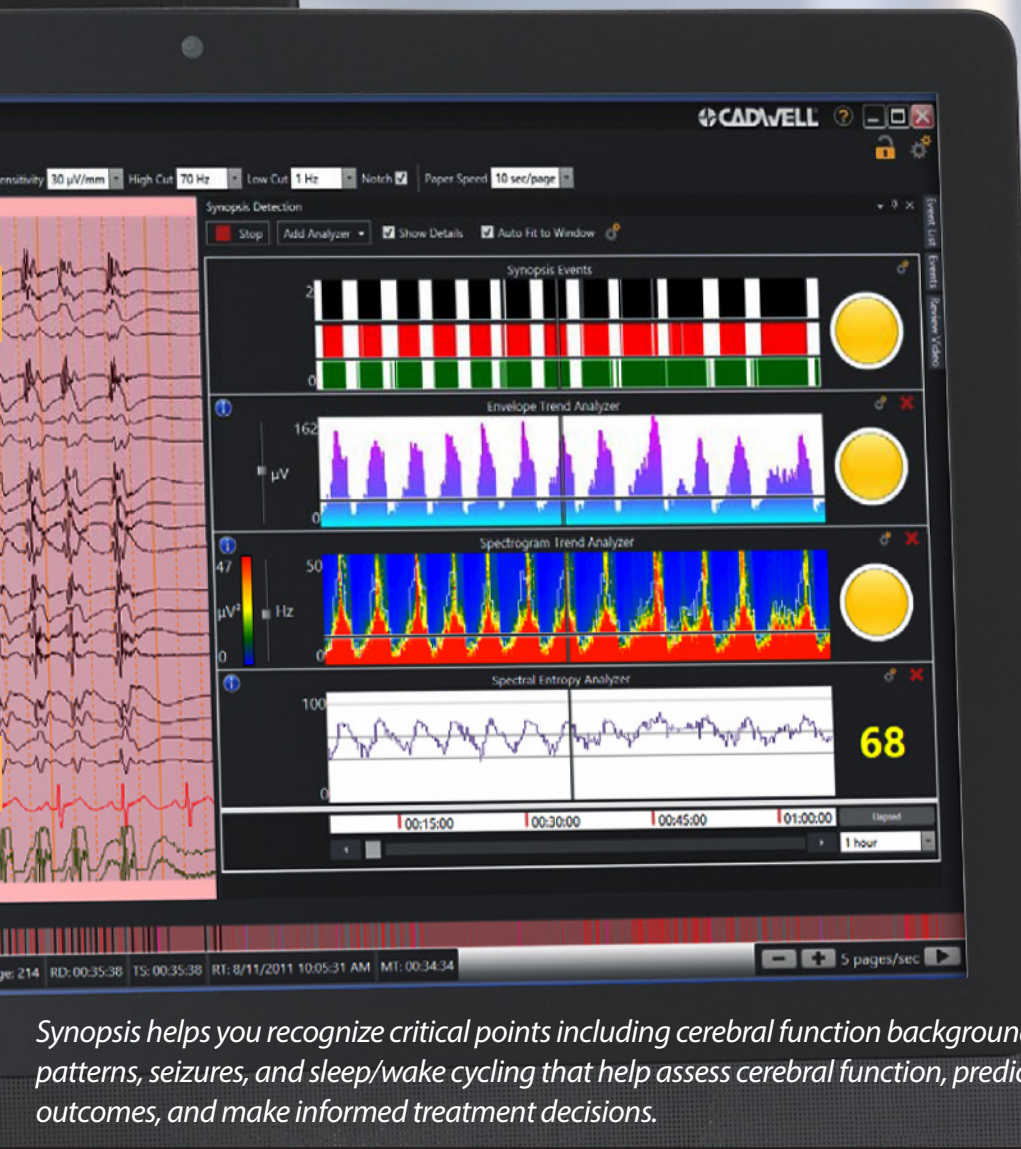
Study Types • Montages
Views • Windows
Displays • Hot keys
Event Buttons
Report Templates



MONITOR YOUR WAY, ANYWHERE

Technologists can monitor the study and control the software remotely. Access custom user settings, study types and patient data. Video controls allow pan, tilt and zoom of the camera from within the application.





Synopsis helps you recognize critical points including cerebral function background patterns, seizures, and sleep/wake cycling that help assess cerebral function, predict outcomes, and make informed treatment decisions.

AEEG • ALPHA:DELTA • AMPLITUDE ASYMMETRY • BAND POWER • ENVELOPE TREND • SPECTOGRAM • SPECTRAL ENTROPY TREND

Trends Package

- Use Seizure View to see seizure-marked data by quickly truncating the file, or filter out seizure-marked data and view all unmarked EEG data.
- Add a Trends Window with 7 unique trends and customize analysis without any impact on automated event detection.

Seizure Detection Package

- Includes Trends Package
- Detection Window lets you set thresholds for seizure and event activity and then automatically detects the events and marks the data.



Controlled access of secure and safe information

Fail-Safe Data Streaming

Enable EEG remote monitoring, store and stream clinical data, clear data from recording stations and protect against network failures.

Secure Data and Communication

Safe, efficient and encrypted data transfer with no shared folders. HIPAA compliant.

Simple Setup

Quick Server updates and automatic client updates. Updates are independent of recording software, eliminating the risk of clinical downtime.

OPTIONS

CadSchedule

Eliminate redundancy and error. Schedule tests, visits, patients, rooms and providers from any CadLink PC. The appointment will auto-populate the Arc home screen.

HL7 Support

Import patient information from HIS/EMR into CadLink. Export results and reports back to the EMR.

Auto-Archiving

Automatically archive data according to predefined criteria to ensure short-term storage never gets full. Set up automatic status e-mail notifications.



We are dedicated to helping you help others by developing innovative, user-friendly EEG solutions.

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 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 introduced Easy PSG.

Lately, we have expanded our headquarters and opened offices in China and Singapore. 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.

Cadwell is staying true to its mission: helping 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.



Cadwell Industries, Inc.
909 N. Kellogg St. · Kennewick, WA 99336
(800) 245-3001 · +1 (509) 735-6481 ph · +1 (509) 783-6503 fax
www.cadwell.com · info@cadwell.com

VISIT WWW.ESTORE.CADWELL.COM
FOR ALL OF YOUR ELECTRODES, ACCESSORIES AND CONSUMABLE SUPPLIES

E3	E1	
✓	✓	32 channels of EEG, 7 active/reference pairs
✓	✓	Electrode Continuity Check
✓	✓	Non-proprietary USB power and communications cable
✓	✓	250 and 500 Hz Storage Rates
✓		1000 and 2000 Hz Storage Rates
✓	✓	Supports USB Photic
✓		Continuous Impedance
✓		Supports USB Oximetry

Software Options

Satellite View™, Highlights View, Video Recording Software, Remote Acquisition Control, Synopsis Trends and Seizure Detection, Auto-Archive, HL7 Interface, Scheduler

Hardware Options

Remote Input Box, IP or USB Camera, Photic Stimulator, Pulse Oximeter, Patient Event Button, various PCs and carts, and electrodes and supplies

SOFTWARE FEATURES	BENEFITS	VALUES
Easy Patient Setup	Streamlined patient setup lets you start recording before entering patient information.	Start a study fast if a patient is seizing.
Intuitive Software	Easy to use with minimal training.	Easily train new users.
Continuous Impedance Check	Software instantly alerts users if an electrode exceeds the user-defined impedance range.	Have peace of mind and good data results in a cleaner recording.
Electrode Continuity Check	Check the quality of any given electrode.	Save time by eliminating the guesswork of electrode prep versus electrode quality.
Synopsis Trends and Seizure Detection	Simplify EEG analysis.	View seizure-marked or unmarked EEG data; view Trends and customize analysis; set thresholds to automatically detect and mark seizure and event activity.
Event Windows	Add a window to the recording view that is associated with a specific event.	When an event of the type specified is triggered during a recording, the event button light turns yellow and the acknowledge button appears. Users can be aware when specific events occur during the recording.
CadLink™ Database	Connect data and settings across all Arc PCs for synchronized data, remote review, and custom user settings.	Use remote live control to change the acquisition remotely, or use remote live view to monitor the study without affecting acquisition. And customize user-based settings.
Custom Study Types	Create recording start buttons to match test types and workflows.	Streamline the user experience with customized studies on all Arc systems.
Custom User-Based Settings	Each user can tailor their settings and access them on any Arc PC.	Provide a familiar experience for each user during acquisition and review.
Custom Fields	Users can create custom fields for patient information.	Help users tell the complete patient story for reports.
Custom Required Fields	Administrators can mandate fields that need to be filled out before closing a study.	Help establish consistency in patient information.

SOFTWARE FEATURES	BENEFITS	VALUES
Edit Views	Add windows to views or adjust their position on the fly. The software works for you versus you working for the software.	Improve the quality and speed of data view and review. Give users the flexibility to look at data how they want with one click.
Satellite View™	View up to 100 pages of EEG on one screen.	View full duration, repetition and frequency of activity bursts.
Highlights	Highlight data segments and adjust highlight boundaries to view more event context.	Improve review speed and efficiency.
Copy Highlights	Copy snippets of data out of a recording for review.	Showcase events for quick review and presentations.
Copy Records Anonymously	Copy data without patient information.	Creates HIPAA compliant copies of recordings for studies and reports.
Copy Record with Viewer	Create a copy of recording that can be viewed on any PC.	Provide recordings to patients that can be read on any PC.
CadReports	Reports pull data from the study into Word®-based report generator.	Create and edit report templates with study data and digital signatures.
Video Recording Software	Playback synchronized video and EEG with fine-tuned mouse control.	Allow fine-tuned playback to help identify and view events. Use digital zoom to review seizures and events. Display video behind EEG for robust view of EEG and video.
Integrated Camera Controls	Control camera within Arc software.	Control pan, tilt and zoom within Arc. Faster response and no third-party controls.
Associate Documents	Allows users to attach any digital file to the patient record.	Consolidate patient forms, insurance, questionnaires, etc.
Track Log In/Out	Administratively track users' log ins and log outs.	Log changes in technicians during a long recording without pausing study.
CadSchedule	Assign patient information, documents and equipment; and create work lists.	Streamline work flow by scheduling technicians, equipment and patients.
Multi-Modality	Run Arc on the same PC as Sierra or Cascade in on a stationary or cart-based system.	Combine Arc with other Cadwell systems for one powerful unit.
Auto Archive	Set parameters to automatically save data to the archived location.	Eliminates manual archiving steps and helps IT ensure short-term storage does not get full.
Streaming Data	Automatically streams data to the CadLink Server.	Eliminate the need to copy the entire record after acquisition is completed. This will reduce the time and size of data transfers.

HARDWARE FEATURES	BENEFITS	VALUES
Storage Rate 250 – 500 Hz; 1000 – 2000 Hz	Higher storage rates for EEG data are available with the E3 amplifier.	Increase storage rates for EMU, LTM or ICU.
Well-Designed Hardware	32 channels with seven active and reference pairs. Its rugged case with fortified rubber corners protects amplifier from damage.	Ensure longevity of hardware through the daily wear and tear of a hospital or home environment.
Remote Input Box	Compact color-coded design with secure cable connectors.	Ensure convenient setup, recording integrity and patient comfort.
USB Accessories	Plug and play USB Amplifier, photic stimulator, oximetry sensor and cameras.	Simplify connections. USB-based cables eliminate IP conflict issues that arise with Ethernet-based technology.
Electrodes	Purchase all electrode needs from Cadwell's Consumables and Neurodiagnostic Supplies catalog.	Everything you need in one place.
Computer Options	Choose from a variety of computers	Arc software is installed and ready to use.
Carts: POC, Pole or T2	Choose from a variety of carts.	Pick the features you want in a portable system.

Arc Essentia[®]
EEG

YOUR COMPLETE BRAIN HEALTH MONITOR FOR LTM AND ICU



THE E3 IS POWERFUL

- Remote live control enables a technician to control the study from outside the ICU and remote live view enables neurologists to review the study without affecting acquisition
- Continuous impedance checking and electrode continuity checking give you peace of mind and help you take care of your patients
- CadLink™ database connects PCs to synchronized data, remote review, and custom user settings for technologists and physicians



WE ARE DEDICATED TO HELPING YOU HELP YOUR PATIENTS BY DEVELOPING INNOVATIVE, USER-FRIENDLY EEG SOLUTIONS.



Arc Synopsis™

SIMPLIFY EEG ANALYSIS: AEEG • ALPHA:DELTA • AMPLITUDE ASYMMETRY BAND POWER • ENVELOPE TREND • SPECTROGRAM • SPECTRAL ENTROPY TREND

Recognize critical points in the EEG including seizures, cerebral function background patterns, sleep/wake cycling and burst rate that help assess cerebral function, predict outcomes, and make informed treatment decisions. Synopsis package options includes Trends and Seizure Detection.

Trends Package

Use Seizure View to see seizure marked data by quickly truncating the file, or filter out seizure-marked data and view all unmarked EEG data.

Add a Trends Window and customize analysis without any impact on automated event detection.

Seizure Detection Package

Includes Trends Package

Detection Window lets you set thresholds for seizure and event activity and then automatically detects the events and marks the data.



VISIT WWW.ESTORE.CADWELL.COM

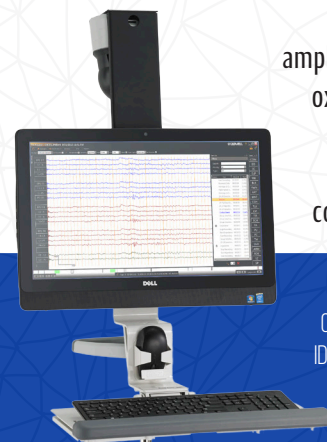
FOR ALL OF YOUR ELECTRODES, ACCESSORIES AND CONSUMABLE SUPPLIES

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

ARC SOFTWARE CAN SAVE YOU TIME

- Intuitive software requires little training for new users
- Streamlined patient setup means a study can be started quickly
- Improve review speed and efficiency using data Highlights and Satellite View™, with up to 100 pages of EEG on one screen
- Assign patient information, documents and equipment in CadSchedule to create worklists and streamline workflow
- Allows fine-tuned playback of video synchronized with EEG to help view and identify events with video recording software

HARDWARE FEATURES AND OPTIONS ARE CONVENIENT AND EASY TO USE



The 32-channel amplifier, integrated oximetry monitor and accessories connect to the computer via USB

THE LEAN POLE CART OR WALL MOUNTS ARE IDEAL SOLUTIONS FOR A SMALL FOOTPRINT IN THE ICU



The compact design of remote input boxes with secure cable connectors ensures convenient patient setup and recording integrity