e3 Easy® III EEG
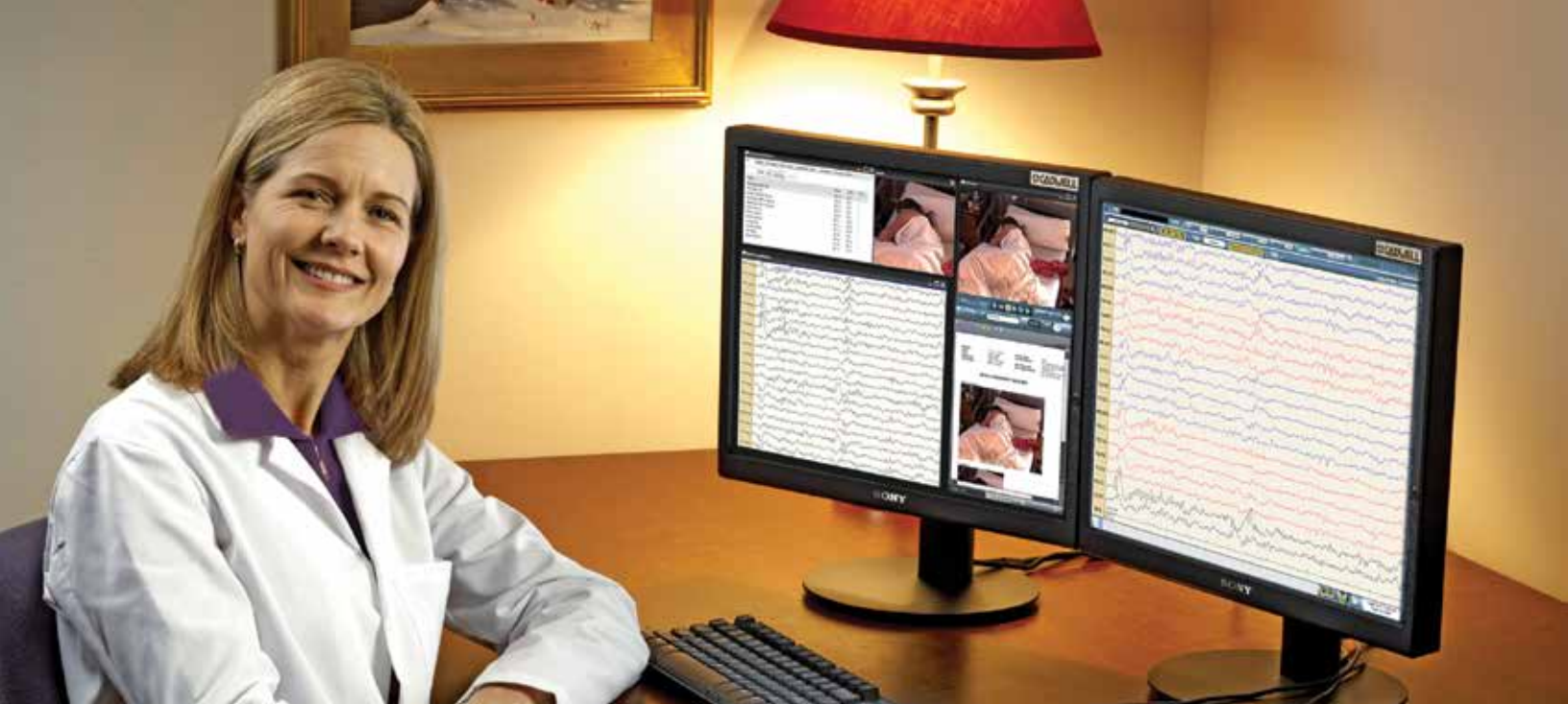
Advancing medical technology to help you, help others.

Experience The Cadwell Difference – Since 1979

The benefits of owning a Cadwell system are numerous. Our development team understands and delivers what you need. Everyone at Cadwell stands behind our products and we all have the same goal - to keep you as a loyal, devoted customer long into the future.

Innovative Neurodiagnostic Instruments

John Cadwell, BSEE, MD designed the first microprocessor controlled EMG instrument. In 1979 he and his brother Carl, DDS, formed Cadwell Laboratories, Inc. and began selling their device. Since then, Cadwell has been a leader in the development and manufacture of innovative and reliable instruments for neurophysiology. Many of these instruments have been providing decades of service to their owners.

Numerous patents are held by Cadwell, including those for magnetic stimulators, cable shielding designs, neural network analysis of EEG and database designs. Today, still located in Kennewick, Washington, John and Carl continue ownership of the company and come to work everyday to develop and market products ranging from EMG to EEG to PSG to IONM instrumentation and more. Cadwell has a firm hold of its identity and a dedicated focus on neurophysiology.

Advancing medical technology to help you, help others.

Easy® III - the New Standard of Excellence for Clinical EEG, LTM and cEEG monitoring for Critical Care patients

Cadwell's new Easy III includes a broad range of powerful features to meet all of your EEG monitoring needs. The quality and reliability you expect from Cadwell are built into each instrument at our Kennewick, Washington factory.

With a system optimally designed for each testing environment - fixed in-lab systems, portable cart, laptop and ambulatory configurations - Easy III provides a comprehensive solution for the contemporary neurodiagnostic laboratory.

Easy® III EEG

Easy III EEG System Highlights

• Customizable user interface

• Advanced amplifier design

• MPEG-4 video with proprietary Q-Video® technology

• Integrated scheduler/calendar

• Powerful remote monitoring capabilities

• Rapid montage setup and editing on-the-fly

• Real time spike detection option with auditory and visual notifications

• Continuous EEG Monitoring for critical care patients

• Ambulatory recording configurations, including video

• Creative workflow and file management features

• User access audit trails

• Flexible report generator using Microsoft® Word®

• Optional HL7 interface module

• Unsurpassed product reliability and after sale support

• Clinical database to review patient population details and record access information

ICU/ER Configuration
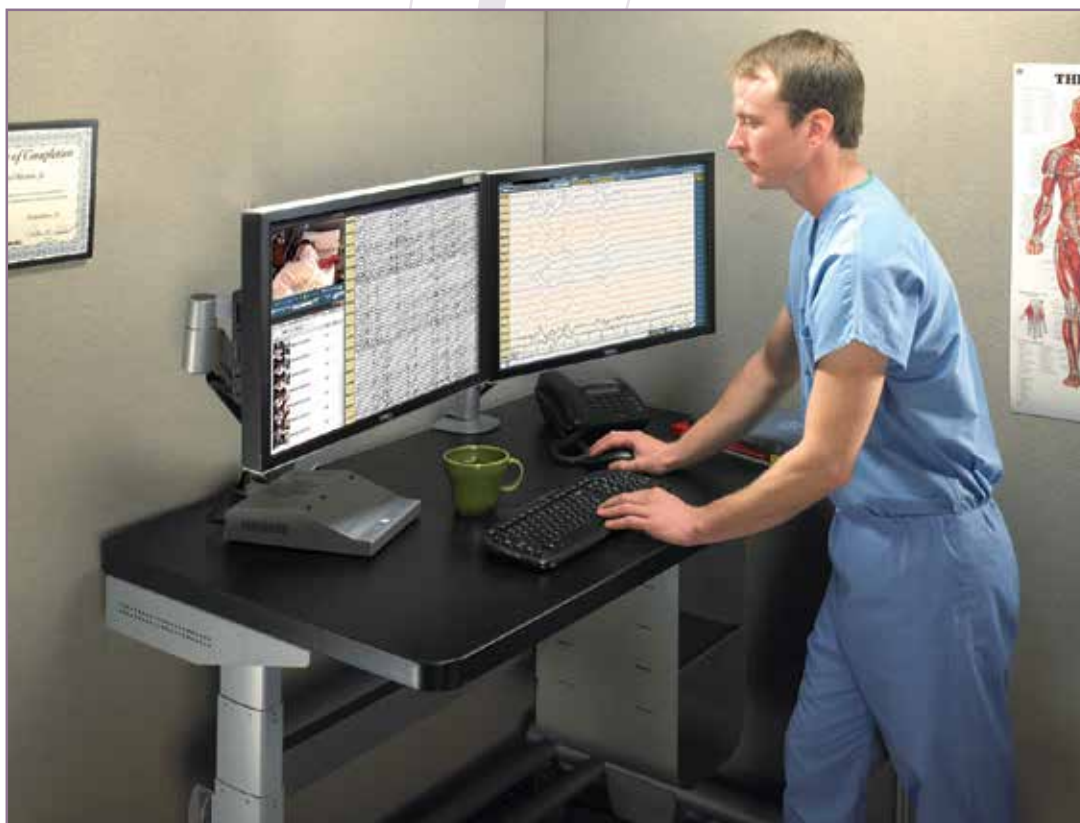
Dual monitor configurations increase efficiency during data collection and review.

Customizable User Interface

One of Easy III's most creative and useful features is the ability to create a variety of different views, or ways of displaying data. Various montages, waveform characteristics, epoch sizes, and other parameters can be assigned for each view. The user is able to quickly change the way information is displayed in order to provide a different perspective and rapidly respond to testing needs.

Cadwell's Satellite View™ compresses up to 100 epochs of data into a single window. This provides an overview of a segment of the study and is particularly useful in identifying bursts of activity or repetitive events. In addition to having a number of view options, the user also has the ability to open specific windows for video, event detection, notations or other information, and place them conveniently on the screen or on a second monitor at any time during data acquisition or review.
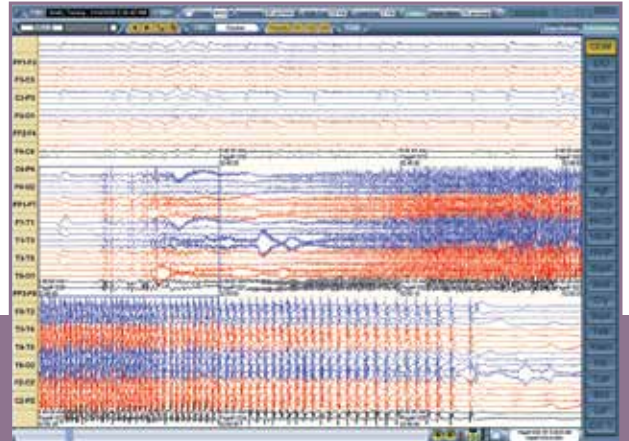
Satellite View™

Faster, More Intuitive Software

Easy III's interactive user interface makes data acquisition simple, and easy for new employees to learn. Intuitive commands on the acquisition screen accomplish common tasks such as sensitivity, filter and montage changes with a single click. Other commands mark events, measure impedance, perform calibration and record key information.

Beginning a study couldn't be easier. Simply click on the name of the patient to be tested, then begin recording. Demographic information on a new patient may be manually entered at any time, or entered automatically through the patient scheduler. A simple click on a recording channel allows the user to re-reference, change sensitivity, filters, or other waveform characteristics. Changes are readily made for groups of electrodes or all electrodes simultaneously.

Making annotations to the record is quicker than ever. Simply choose from predefined comments and place them on the record in the desired location. For a longer comment or one requiring further explanation, just open a dialog box and begin typing. Other readily accessible and intuitive commands are available to change montages, epoch size, or to enter bookmarks into the record for quick reference at a later time.

Advanced Amplifier Design

The Easy III was designed with the needs of both the technologist and the patient clearly in mind. Cadwell's compact remote input boxes provide patient comfort as well as convenience in patient hookup and preparation. Molded connector ports with secure cable connectors ensure recording integrity. Easy III amplifiers incorporate the latest developments in amplifier design and signal processing to provide unprecedented performance. The basic 46 channel Easy III amplifier includes 32 AC inputs, 12 EasyNet® channels, 1 ambient IR light channel and 1 ambient light channel. For studies requiring more recording channels, it is expandable in increments of 32 channels to a total of to 128 AC and 8 DC recording channels. Additional channels can be added for oximetry, heart rate and other parameters.

Amplifier with
remote input box

Powerful and Time-Saving Features For LTM

Rapid montage setup and editing on-the-fly

Montages can be edited or created "on-the fly." Easy III's intuitive montage editor makes it simple and fast. Easy III allows you to set up an unlimited number of montages and change them at will to accommodate grids, strips and other montage requirements.

MPEG-4 video with Cadwell's proprietary Q-Video® technology

Easy III's MPEG-4 video compression provides crystal clear video precisely synchronized with patient data. Video resolution and audio settings can be adjusted by the user as necessary to create the desired results.

Using a unique technology developed by the engineers at Cadwell, movement can be depicted with color so that clinical and neurological events are more easily identified and correlated. The user can toggle between standard video and Q-Video as necessary for optimal viewing.
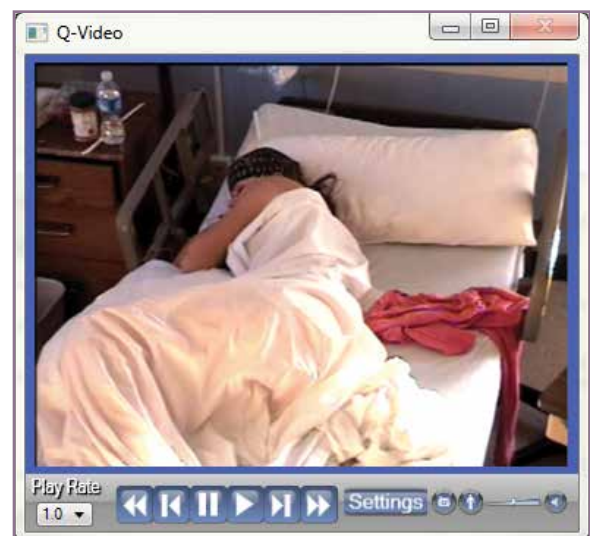
Convenient remote monitoring capabilities

Easy III takes full advantage of the latest technology in data transmission, networking and remote access. Multiple Easy III users can view the same record during data collection or review over the network. Digital IP cameras allow the user to control the camera from anywhere on the network. Patient data and video can also be reviewed from the physician's office, home or other remote location using a secure VPN.

Home   Hospital   Clinic
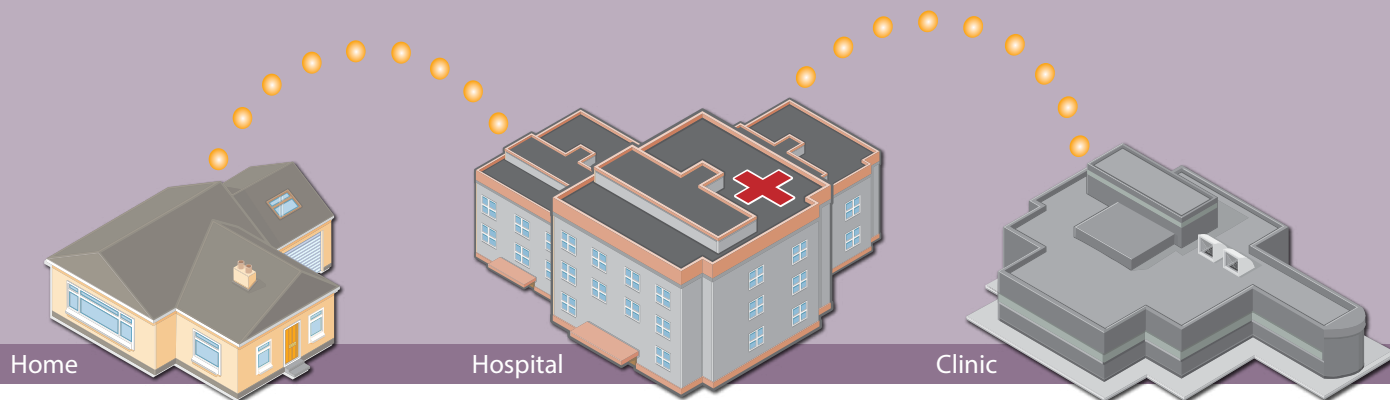
Advanced Spike and Seizure Detection Technology

Unsurpassed spike and seizure detection sensitivity combined with an exceptionally low false-positive rate result in both better patient care and increased efficiency with Persyst software. Post hoc spike and seizure detection can also be performed and graphical seizure review software is available to assist with seizure identification and analysis.

Easy Sentinel Nurse Monitoring Station

The Easy Sentinel Nurse Monitoring Station is designed specifically to allow clinical staff to monitor up to 6 patients undergoing Easy III EEG recordings on the same network. The Sentinel software will provide live streaming video, patient button press notifications, and spike event notifications. Notifications include message prompting and audible alerts that can be customized by the user.

Advanced Record Editor

Patient data files and video can be "pruned" using Easy III's creative editing tool. Detected events, comments, bookmarks, patient inputs and other important data can be selected and saved automatically. Other data of interest can be specified by the user, allowing unnecessary data to be discarded. Video and patient data can be edited either individually or simultaneously.
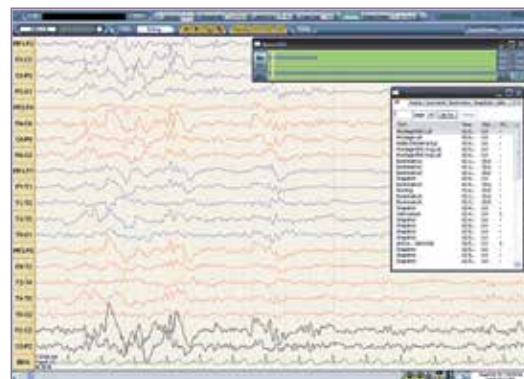
Continuous EEG Monitoring For Critical Care Patients

Easy III includes many important options to make continuous EEG monitoring in the ICU or other critical care environment practical and cost effective. EEG trends and monitoring displays are provided by Persyst Development Corporation EEG monitoring and trending software. Adaptive artifact rejection uses sophisticated algorithms to detect artifacts. A contaminated channel that might affect a trend is dynamically removed to preserve the accuracy of the trend display. Easy III's comprehensive array of EEG monitoring components with Persyst software options provide a powerful platform for the EMU, ICU, and NICU including:

- State-of-the-art Persyst EEG asymmetry trends and notification.
- Alpha/Delta ratios and Relative Alpha Variability trends for detecting the presence of ischemic changes.
- Burst suppression trending.
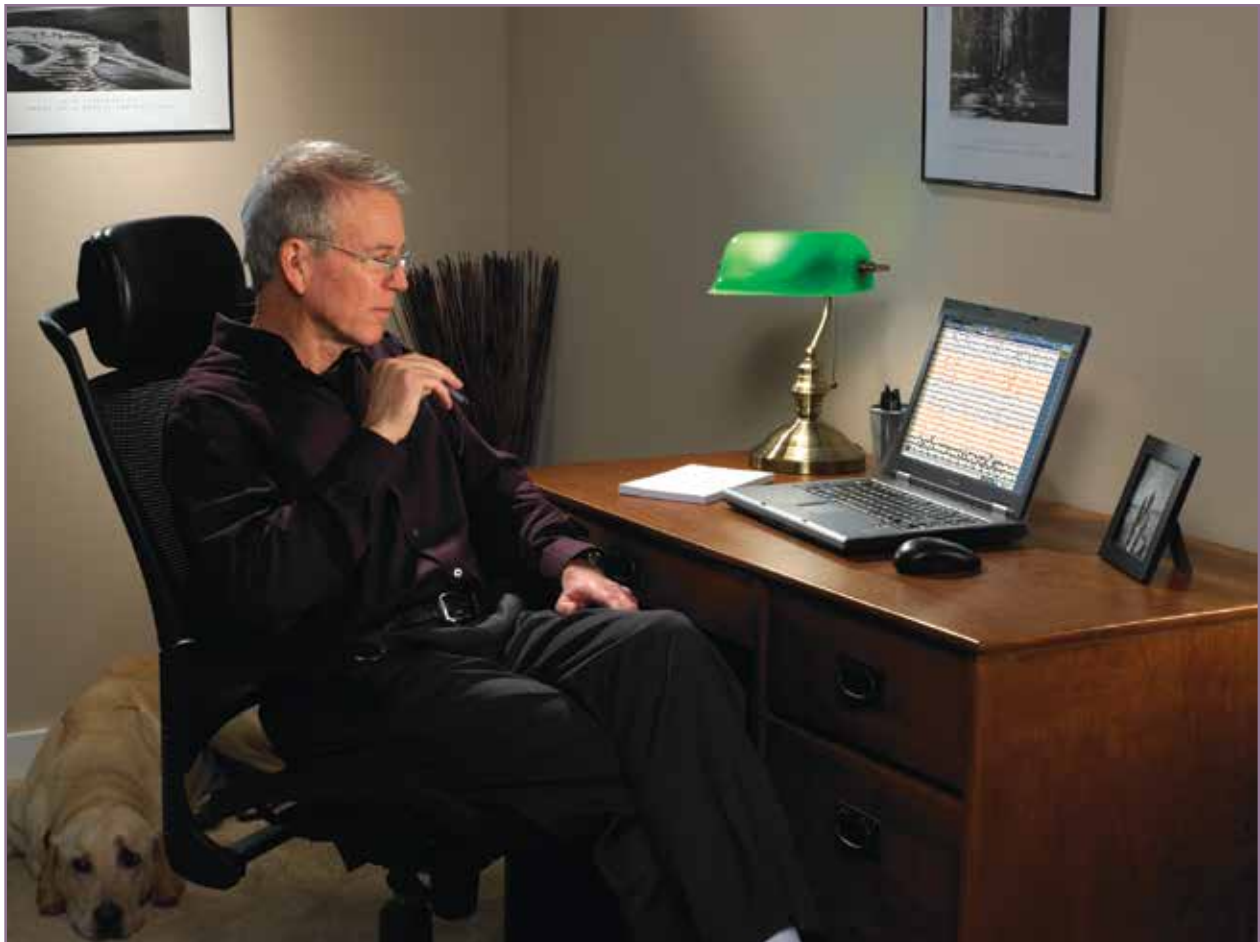
Remotely review records to save time

Ambulatory Recordings

Data collected with Cadwell's Easy Ambulatory System are indistinguishable from those collected in the laboratory. Easy ambulatory products use the same software and information management tools as other Easy systems; data are downloaded to an Easy workstation for analysis using a standard network connection. The Easy Ambulatory amplifier weighs only 5 ounces, and the recorder with batteries weighs just 1.7 pounds. Cadwell's Q-Video® Mobile™ option allows video recording of the patient during Ambulatory EEG studies.

Easy III's spike and seizure review option does the arduous task of categorizing and sorting spikes detected during the recording. Spikes that share similar location and shape are automatically grouped for rapid identification and analysis. Patient voice events can be easily added to the record with Cadwell's voice event microphone. Physicians can play back patient voice events during review.

Voice Event Microphone

Recorder with battery pack
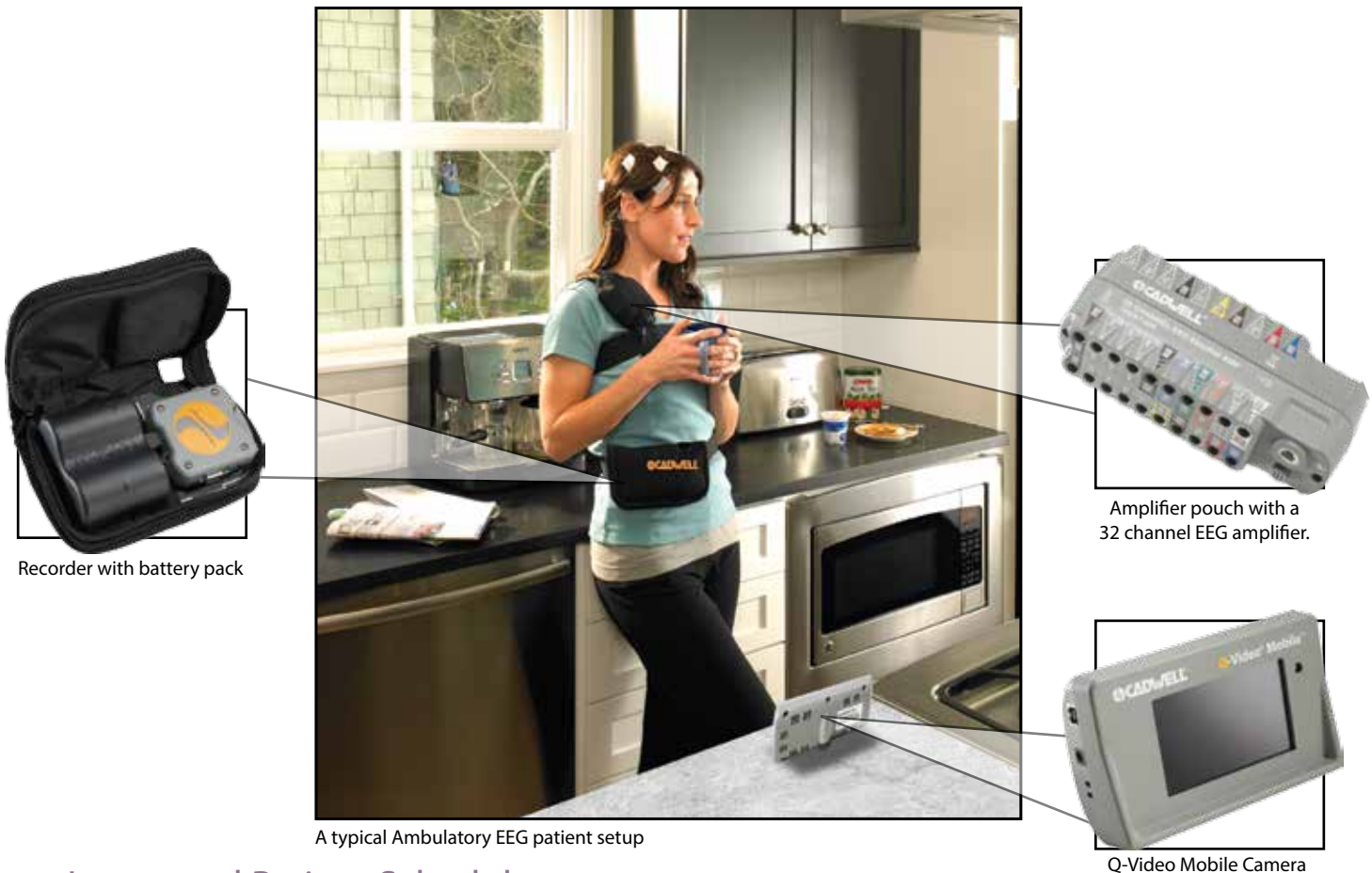
A typical Ambulatory EEG patient setup

Amplifier pouch with a 32 channel EEG amplifier.

Q-Video Mobile Camera

Integrated Patient Scheduler

Laboratory workflow, personnel, equipment and facility requirements are conveniently managed using Easy III's patient and resource scheduler. Scheduled procedures can be viewed by physician, technician, equipment or location. Daily, weekly and monthly views are readily accessible.

Creative Workflow and File Management Features

At the heart of the Easy III information management system is an automatically synchronized database. This innovative feature provides the user with immediate access to all patient and test information from any authorized computer on the network. Test and patient information can be easily and quickly accessed by patient name, date recorded, type of study, test status or other criteria. Data can be readily sorted by date range, referring physician, technician, or other parameters for management reports. Specific records can be quickly sorted by viewing record status. Records that are ready for physician review have "Ready to Read" status. Records that are actively recording have "Recording" status.

Management Control of System Changes and File Access

As each user logs onto the system, predetermined privileges for that user are invoked. The system administrator can grant or limit access for each user to view patient information, delete or edit files, change system settings, or conduct other functions which the laboratory wishes to manage. All access to patient data is logged as required for HIPAA compliance.

Flexible Report Generator using Microsoft Word

Designed for speed and flexibility, Easy III reports are fully customizable. The user can choose from a selection of standard report formats, or create his or her own. Report templates can be edited to provide the specific information desired. The Easy III report generator can be accessed from the data acquisition screen or anywhere on the network, and is available to rapidly create your choice of reports at any time during acquisition, at the end of the study or at a later time. Easy III reports are saved in Microsoft® Word® for easy editing.

Cadwell Customer Support

Cadwell is focused on making you a satisfied, loyal customer for years to come. Our telephone support is second to none. We answer every call during business hours with a real person. Our in-house employee technicians are trained professionals. Our web-based support program allows our technicians to troubleshoot real time – as if they were in your office. Our flexible support programs will meet your specific needs. Just ask.

Supplies and Accessories - www.estore.cadwell.com

The flexible design of Cadwell's amplifiers and software allows the use of almost all standard electrodes and accessories. Cadwell offers a comprehensive line of consumables for neurological monitoring, including cEEG, PSG, Clinical and Ambulatory EEG. Items can be purchased via estore.cadwell.com or by calling us.

EEG Color Coded Input Box

EEG Color Coded Electrodes

10/20 BraiNet® Template

Limb Movement Module

SpO$_2$ Module

CADWELL®

909 N. Kellogg St. · Kennewick, WA 99336
(800) 245-3001 · (509) 735-6481 ph · (509) 783-6503 fx
www.cadwell.com · info@cadwell.com

PN# 100840-937-EEG Rev. 03