**Prescription Label and Disclaimer**

This software may only be purchased by a medical doctor, hospital or clinical practice for use by a trained EEG technician or neurologist.

All warranties of any kind are hereby disclaimed, express or implied, regarding the accuracy, sufficiency or suitability of this software, including all warranties of fitness for a particular purpose, for example, for clinical applications. The person utilizing this software has the sole responsibility for inspecting and making correct use of the results and images provided by this software. Any decisions taken on the basis of results provided by this software are at the risk and liability of the person utilizing the program. Persyst Development Corporation assumes no liability as a result of the use or application of this software.

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Hardware/Software Requirements
Pentium 4 or better, Windows 2000, Windows XP, or Windows Vista, 512 MB RAM (1024 or more recommended), mouse, support for at least 16-bit color depth, approximately 100 MB of free disk space.
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Getting Started

Installation

The Persyst EEG software is installed from the CD, DVD or USB drive provided in your software kit. From the installation screen, select “Install the EEG Suite.” Next, select “New Installation” or “Upgrade” as appropriate, and follow the instructions.

Unlocking and Registration

The Persyst EEG software installs in fully-functional 30-day trial mode. Immediately after installing your purchased software, launch the registration from the Trial Screen and email it to support@Persyst.com. This will ensure uninterrupted use of your Persyst EEG software.

Training

Do this as soon as you have installed and registered your software! Schedule your training with one of Persyst’s expert clinical application specialists to ensure you get the most from your Persyst EEG software. Contact Persyst at 866.327.8334 (toll free), 928.708.0705 or email support@Persyst.com.

Software Support Plan

Your Persyst EEG software is classified as a prescription label medical device. Keep your software, training and support up to date with Persyst Software Support. Contact Persyst at 866.327.8334 (toll free) or 928.708.0705 to find out how to stay current.
Software Support Plan

The Persyst Software Support Plan provides access to software upgrades and live, Web-based training on software that is classified by the FDA as a prescription label medical device. This is important because the Persyst EEG software continues to advance the capabilities of the clinicians who use it, and facilities need to maintain training for their clinical teams regardless of staffing changes and growth. In addition to keeping up to date with the latest advancements in cEEG technology, your EEG instrumentation and their file formats continue to advance and change. The Persyst Software Support Plan is the best way to keep you, your staff and your equipment on top of these changes.

Bring Your Existing Persyst EEG Software Up to the Current Standard

Your lab may be equipped with individual Persyst EEG software components from the previous generation. If so, you can achieve tremendous gains in simplicity, diagnostic power and value by upgrading your existing software to one of the three discount packs.

Please contact Persyst Development Corporation at 928.708.0705 or sales@Persyst.com for details and a custom quote for your facility.
Persyst Product Catalog

You no longer need to choose between simplicity and power. Don’t become accustomed to settling for anything less.

An old Japanese proverb says, “If you sit on a stone for three years, you will get used to it.” Have you become used to seizure detection that is far less sensitive than needed, and marks far too many false positives to be truly useful? Have you become used to off-line continuous EEG monitoring of your critically-ill patients, because the on-line seizure detection and trending tools are either too simple to be useful, or too complex to be usable? Have you become used to frequent problems with recording quality and inaccurate trending?

Persyst Development Corporation, the largest provider of EEG software worldwide, has developed a set of solutions that are powerful and easy to use.
Persyst Ambulatory Pack

Everything you need to quickly and accurately determine the presence of electrographic seizures and inter-ictal spikes in your ambulatory EEG recordings. Fast.

Persyst Comprehensive EEG Monitoring Pack

The fusion of simplicity and power. Unparalleled cEEG trending and seizure detection accuracy for the EMU, ICU and NICU. Unprecedented advancements in seizure detection, trending and artifact rejection have been designed to speak the language of EEG to everyone on your clinical team with a clarity and simplicity never before possible.

Persyst Comprehensive EEG Review Pack

The EEG review companion to the Comprehensive EEG Monitoring Pack: Use this to review trends, seizure detections and spike detections.

Persyst Advanced EEG Suite

The most advanced suite of EEG monitoring, spike and seizure detection, EEG review and advanced analysis tools ever assembled. This package includes everything in the packages above, plus AutoLearn, Insight II, Prism and the Persyst Universal EEG Database II.
The Persyst Ambulatory Pack

Everything you need to quickly and accurately determine the presence of electrographic seizures and inter-ictal spikes in your ambulatory EEG recordings. Fast.
Diagnosing the Problem with Current Ambulatory EEG Scanning Technology

Ambulatory recordings are particularly challenging for several reasons. Patient activities mean that artifact is often more of an issue than with inpatient recordings. Challenging recording environments can make detection of electrographic seizures and inter-ictal spikes especially difficult. With nearly 9,000 pages of EEG every 24 hours, effective and accurate review can be a difficult, resource-intensive task.

Spikes are an Important Part of Ambulatory Review

A patient experiencing electrographic seizures may not have them during the ambulatory EEG recording. This makes detecting the presence of inter-ictal spikes an important part of ambulatory EEG review, as well. However, the tremendous amount of EEG recorded can make this a daunting task.

The Prescription

The Ambulatory Pack equipped with Reveal Rosetta is the most accurate seizure detection ever created. The highest sensitivity of any automated seizure detector means effective scanning of your ambulatory recordings. The lowest false positive rate of any seizure detector means that you can go directly to seizure candidates within the recording more quickly and effectively than ever before possible.

Reveal Rosetta is designed to provide the highest level of accuracy in a wide variety of recording environments, and for patients as young as one month of age. This means no switching between seizure detectors from EMU, to the ICU, to ambulatory recordings. In short, this provides the greatest degree of simplicity and power for everyone on your clinical staff.
Rapid Review of Spike Events

SpikeReview performs the arduous task of categorizing and sorting all of the spikes detected during the recording for you. A simple Review Wizard then steps you through spikes that share similar location and shape. If there are groups of events that are not epileptiform, or are caused by artifact, they are deleted as a group with a single click. The result: Instead of picking your way through thousands of pages of EEG, you are presented with a handful of pre-sorted, averaged groups for your review. For you this means fast and efficient review of inter-ictal spikes.

Universal Appeal

The EEG Suite contains the most-used spike and seizure detector worldwide. Reveal Rosetta raises the bar to bring the most accurate seizure detector available to your ambulatory EEG review. In addition, you also get the ability to read and scan recordings made on virtually any EEG system—more file formats than any other review program available anywhere (see the Persyst website for a full list). So, when your patients bring a previously recorded EEG for your review, you’re fully equipped to review it.

- Reveal Rosetta offers unmatched seizure detection accuracy for your ambulatory patients.
- Adaptive Artifact Rejection offers unmatched accuracy.
- SpikeReview offers the highest yield of recognized inter-ictal spikes and the fastest review.
Persyst Clinical Application Support is Here to Make it Happen

Expert support for clinical applications is available live via Persyst’s secure, in-house Web conferencing server. Any question about the application of the Ambulatory Pack can be answered with live, hands-on assistance from our expert clinical applications specialists.

Enhance the Capabilities of Your Ambulatory Pack by Adding Persyst Insight II

Add Insight II to your Ambulatory Pack at a significant discount: This adds digital video review*, the Persyst Universal EEG Database II, and event-based archiving to streamline your workflow. Insight II also adds convenient voltage and frequency mapping and measurement tools.

* For supported file formats—contact Persyst for details.
The Persyst Comprehensive EEG Monitoring Pack

The New Standard for Continuous EEG Monitoring

The Fusion of Simplicity and Power

Unparalleled cEEG trending and seizure detection accuracy for the EMU, ICU and NICU.

Unprecedented advancements in seizure detection, trending and artifact rejection have been designed to speak the language of EEG to everyone on your clinical team with a clarity and simplicity never before possible.
Automated Seizure Detection with Expert-Level Performance is Now a Reality

Persyst introduces Reveal Rosetta: Groundbreaking technology that offers the most accurate seizure detection ever created. And, not only for the epilepsy monitoring unit (inpatient and ambulatory), but for the intensive care unit, as well—and it is effective for adults to patients as young as one month of age.

Reveal Rosetta provides you with one consistent seizure detector that provides expert-level detection for the EMU and the ICU. This provides you with seizure detection that combines consistency, simplicity and power for your clinical team.

Unified EEG Trending for Virtually Any Clinical Application is Now a Reality

Diagnosing the Problem with Current EEG Trending Technology

Existing EEG trending relies on the years-old technology of basic FFT frequency analysis for spectrograms and power trends, and basic amplitude measures for aEEG trending. While often helpful, these trends can be complicated to read and are susceptible to significant inaccuracies in the presence of artifact. Also, the technology limitations often require a degree of prior knowledge about the EEG changes that you are interested in finding. This could make choosing the best trend panel very difficult.
The Prescription

MagicMarker Bedside displays a picture of what is happening in the underlying EEG with clarity never before possible. Persyst Adaptive Artifact Rejection means that the picture is accurate, as well. Effective, automated artifact rejection means changes in the EEG trend are caused by changes in the patient’s EEG—not from changes in the patient’s room or changes in the electrode signal quality.

The Comprehensive EEG Monitoring Pack is for Everywhere You Monitor and Review Continuous EEG—Because Consistency is Important for Your Staff and Your Patients

How we display continuous EEG monitoring is as important as the technology behind it. That’s why the MagicMarker Bedside interface was developed in close consultation with emergency response personnel, nursing, critical care physicians, EEG technicians and neurologists. The result is a user interface that can speak the language of EEG to everyone on your clinical team.

MagicMarker Bedside comes equipped with a pre-configured Comprehensive EEG Monitoring Trend—powerful enough for detection and review of seizures, EEG changes associated with ischemia, and titration of medically-induced coma. This trend is the one to use when you don’t know what to expect during the course of cEEG monitoring.

If you wish, MagicMarker trends can be fully customized. The largest and most comprehensive array of trending tools available anywhere is built right into the software.

The most important feature is this: MagicMarker Bedside brings the most advanced EEG monitoring technology ever developed into a simple, unified display that’s designed to be easy to use by everyone on your clinical team:
• Reveal Rosetta offers unmatched seizure detection accuracy for both your EMU and ICU patients.
• Adaptive Artifact Rejection offers unmatched accuracy.
• On-line Bad Electrode Detection offers unmatched recording quality.
• Rhythmic Run Detection and Display (R²D²) offers unmatched seizure display and review.
• Regional and Hemispheric Asymmetry Indices and Spectrograms offer unmatched detection and notification of EEG asymmetries.
• Single Panel Trending for virtually any clinical EEG application offers unmatched flexibility.
• Integrated Graphical Email Notifications and built-in Internet output for Web-based review offers unmatched remote monitoring capability.

Persyst Clinical Application Support is Here to Make Effective cEEG Monitoring a Reality at Your Facility

Expert support for clinical applications is available live via Persyst’s secure, in-house Web conferencing server. Any question about the application of the Comprehensive EEG Monitoring Pack can be answered with live, hands-on assistance from our expert clinical applications specialists.

Enhance the Capabilities of Your Comprehensive EEG Monitoring or Review Pack by Adding Insight II

Add Insight II to your Comprehensive EEG monitoring, or review, Pack at a significant discount: This adds digital video review*, the Persyst Universal EEG Database II, and event-based archiving to streamline your workflow. Insight II also adds convenient voltage and frequency mapping and measurement tools.

* For supported file formats—contact Persyst for details.
The Persyst Advanced EEG Suite

_The Ultimate Package for the Clinician and the Researcher_

Everything you need to monitor, detect and analyze EEG for virtually any clinical or research application.
Whether you are working in a university medical center or a top research facility, the Advanced EEG Suite provides the most comprehensive array of monitoring, detection, review and analysis tools ever assembled within a unified platform. The Advanced EEG Suite is equipped with everything that is in the Ambulatory Pack and the Comprehensive EEG Monitoring Pack—and much more. This package adds AutoLearn patient-dependent seizure detection, Insight II universal EEG review with NeoPrism advanced voltage and frequency analysis tools, and the Persyst Universal EEG Database II. This package provides the full range of Persyst EEG solutions to handle the entire suite of clinical EEG applications.

**The Lab That Does It All: Meet the EEG Suite That Does It All**

Large healthcare facilities may offer everything from ambulatory EEG, to continuous EEG monitoring in the EMU, ICU, NICU and more, to advanced clinical EEG research. Does this describe your facility? If so, the Advanced EEG Suite is for you. By providing the full power of the entire EEG Suite, you are equipped for virtually any EEG application.

**The Persyst Advanced EEG Suite Provides a Full Range of Solutions**

- **Reveal Rosetta:** The most accurate seizure detector available, it is designed to provide expert-level performance in both the EMU and ICU, from adults to patients as young as one month of age. This detector features the highest sensitivity and the lowest false positive rate of any seizure detector available for recordings up to 4,096 channels.

- **MagicMarker Bedside:** The easy-to-use, touch-screen compatible solution for monitoring continuous EEG in the EMU and ICU. Seamless integration with Reveal Rosetta provides a simple, consistent user experience for your entire clinical staff. On-line Bad Electrode Detection and Adaptive Artifact Rejection provides the highest quality trending data available.

- **MagicMarker Advanced:** Fully integrated with Insight II, use MagicMarker Advanced to explore virtually any analysis you can imagine, and easily apply it to test your hypothesis. Any trend created is available for use in MagicMarker
Bedside by your clinical staff. MagicMarker Advanced provides the most comprehensive toolkit of frequency and voltage analysis tools ever assembled within a single platform.

- **AutoLearn patient-dependent seizure detection**: Mark any waveform of interest, and a neural-network based detector is created in less than a second for on-line or off-line detection. AutoLearn supports incremental learning, so you can improve its sensitivity and selectivity.

- **Insight II EEG Review and advanced analysis**: Read virtually any EEG file format, archive EEG and video, and perform advanced frequency and voltage analysis just by right-clicking on the EEG waveforms.

- **Universal EEG Database II**: Do you have multiple EEG formats, multiple network locations or multiple clinical and research workflows? Or, all of the above? The Persyst Universal EEG Database II is the solution. List all of your recording formats and locations in a single display. Perform custom searches and select user-defined filters to list only the EEG recordings of interest. Whether run from a single desktop, or installed on a central SQL file server, the Persyst Universal EEG Database II is equipped to run efficiently in the widest range of applications.

**Clinical Application Support Puts the Entire Persyst Advanced EEG Suite Within Your Grasp**

Expert support for clinical applications is available live via Persyst’s secure, in-house Web conferencing server. Any question about the application of any Advanced EEG Suite tool can be answered with live, hands-on assistance from our expert clinical applications specialists.

*The Advanced EEG Suite includes the most comprehensive array of EEG review, detection and analysis tools available—all fully integrated to streamline your workflow. Contact Persyst to consult with one of our clinical applications specialists for any questions or for a hands-on guided tour of the Advanced EEG Suite.*
Future-Proof Your cEEG Monitoring

Here Are Some of the Leading Technologies Available Only With the Persyst Comprehensive EEG Monitoring Pack and the Persyst Advanced EEG Suite

Reveal Rosetta has reached a milestone by achieving the highest seizure detection sensitivity and the lowest false positive rate—creating the first seizure detector that performs at near-expert performance in real-world conditions. And, not just with perfectly clean recordings and classic temporal seizures, but across the widest range of recording environments, clinical applications and seizure morphologies. In other words, Reveal Rosetta is designed to perform when and where you need it most. It has been designed for both the epilepsy monitoring unit and the intensive care unit, for patients as young as one month of age. This provides you with seizure detection that provides consistency, simplicity and power for your clinical team.

MagicMarker Bedside has been developed in consultation with neurologists, technicians and non-EEG clinical staff to be user-friendly for your entire clinical team for monitoring and review. By integrating Reveal Rosetta with the Comprehensive EEG Monitoring trend panel, you have a consistent, easy-to-use platform for checking your epilepsy monitoring unit and intensive care unit patients.

MagicMarker Advanced is fully integrated with Insight II EEG review, and provides a suite of advanced review, analysis and research tools for the advanced EEG’er.

ClearTrend: Adaptive Artifact Rejection uses sophisticated neural-network algorithms to detect most artifact. Any bad channel that will affect the MagicMarker trend is dynamically removed to preserve the accuracy of the trend display. This means more accurate trends that are easier to interpret, and notification thresholds that are easier to set.
**ElectroDx:** Using ClearTrend technology to recognize artifact, ElectroDx detects bad channels on-the-fly and alerts clinicians with a simple, easy-to-read display—regardless of the cause of artifact.

**Rhythmic Run Detection and Display (R²D²):** Bridges the gap between seizure detection and review with a technology called “seizureprints.” Like fingerprints and voiceprints, a seizureprint provides a graphical representation of a seizure’s evolution, so that the clinician can visualize the morphology, spatial distribution and frequency of seizure activity at a glance. Seizure review is improved with a bird’s-eye view never before possible. Because R²D² is highly resistant to artifact, and because it is easy to read, the information provided by seizureprints is greatly improved over current text-based seizure indications.

**Comprehensive EEG Monitoring with Single-Panel Trending:** No more searching for the appropriate trend panel for different clinical applications. Rhythmic Run Detection and Display (R²D²), EEG Asymmetry Indices, Suppression Ratios and aEEG provide a single effective trend panel for most clinical applications.

**Regional and Hemispheric Asymmetry Indices:** Rather than relying on a-priori knowledge of where frequency changes associated with ischemic changes or seizures will occur, the EEG Asymmetry Index (EASI) looks for asymmetries between homologous electrodes in any frequency band. Combined with Adaptive Artifact Rejection (AAR), EASI provides a simple, powerful and flexible indication of any regional or hemispheric change in EEG activity—with unparalleled accuracy.

**Regional and Hemispheric Asymmetry Spectrograms:** Taking EASI technology another step, Relative EEG Asymmetry (REASI) Spectrograms provide a simple indication of the frequency and region/hemisphere of EEG asymmetry. Combined with Adaptive Artifact Rejection (AAR), REASI Spectrograms provide unparalleled sensitivity and accuracy.

**MagicMarker Email:** When thresholds are exceeded, MagicMarker can email you with the notification, including images of the trend and EEG waveforms at the time the thresholds were exceeded. Plain-language seizure notifications and EEG asymmetry trends make threshold setting simple and powerful, while ClearTrend adaptive artifact rejection minimizes false positive notifications.
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Need Help?
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