

PERSYST 14 REV.B MARKETING RELEASE NOTES

About Persyst 14 Features and Updates

Persyst 14 introduces a powerful new set of features including a brand new Seizure Detector written from the ground up, new ways to quantify the extent of change in EEG over time, trending for heart rate and physiological data, and overall optimizations for ease of use, based on feedback from thousands of customers (Thank you!).

Persyst 14 Rev.B (2020.04.27) has new features and updates.

New Seizure Detector

- Higher sensitivity with 10x fewer false positives than the previous Seizure Detector at the same sensitivity level.
- Lower latency where Seizure notifications are raised more than a factor of two earlier than the previous detector.
- The ability to change the Seizure detection and Seizure notification thresholds (sensitivity) during active processing.
- Seizure detection sensitivity settings can be patient specific.

Versus Baseline Trend

- Change over time displayed in terms of statistical variation, measured in Z-Scores, in the EEG data relative to baseline values.
- Baseline values can be user defined or automatic.
- Baseline Trends carry across multiple segments and files.

Heart Rate Trend

- ECG signals obtained as part of the EEG recording.
- Continuous heart rate trends displayed alongside qEEG and seizure detection trends.
- Easy assessment of heart rate changes associated with events such as seizures.

Physiological Trends

- Enhanced ability to trend physiological data from multiple device inputs.
- View physiological trends alongside qEEG and seizure detection trends.
- Available with Moberg and Natus Neuroworks systems.
- Trend physiological data including:



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- o Pressure (BP/PbtO2/CPP/ICP), measured in mm of Hg
- o Heart Rate (HR), measured in beats per minute
- o RR Interval (RR), measured in time (portions of seconds)
- o Pulse Oximetry (PR), measured in beats per minute
- o Temperature, measured in Celsius or Fahrenheit
- Oxygen Saturation (SpO2/SaO2/ SvJO2/NIRS), measured as %
- o Perfusion, measured in ml/100g/min

Standalone Persyst Database Program

- Persyst Database is now standalone, independent of the Persyst application window.
- The Persyst Database window now also stays open when an EEG study is launched.
- Quickly open additional EEG studies as needed.
- Work across data formats as a Universal Reader.

Enhancements to EEG Review, Analysis and Video

- Added flexibility to the Montage Favorites.
- Option to quickly add multiple EEG System Montages to the Persyst Montages.
- Pan EEG waveforms by clicking and dragging.
- The "HFO display" no longer requires a research license.
- Overlay (butterfly plot) of all traces for all events now available for visualization alongside Voltage Plot of spikes.
- Search for and filter on comments in the comment list using any string of text.
- Persyst comments are now automatically saved to the OEM list.
- Optimized video performance for limited network bandwidth.
- Expanded video capability and options, including:
 - New controls within the video window for adjusting speed.
 - o Adds ability to assign hotkeys for video controls.
 - o Adds option to only clip video when archiving.
 - Adds ability to retain video player size and location when Persyst is closed and reopened.

Audible Notifications & Printing

- Simplified implementation of audible notifications.
- Improved sound notification so that it only plays once per event.
- Added automatic default of print dialog to print the current page.
- Added option to remove patient and file names from header of printed pages.



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Installation, Logging and Diagnostics

- Persyst Diagnostic Service now provides a method of uploading log files automatically to Persyst to provide diagnostic data on how Persyst is running.
- Simplified installation process for shared settings.

Other features and improvements:

- Improved installation process on various OEMs using the DeploySettings tool.
- Addressed an issue where the number of spikes in the comment list now reflects the level of sensitivity the user adjusted to in the EEG page.
- Spike Index Tool now has the option to only count spikes included in the Final Report in Spike Review.
- Increased efficiency of handling high sampling rate recordings.
- Optimized Trend performance now with caching always turned on
- Increased ease at which the user can distinguish Trend values by adding tick marks within the vertical scale.