

Product Release Notes

Product: PONEMAH Physiology Platform
Model: P3 Plus
Version: 4.80
Build: J02910 (CD Build)
Date: April, 2008

Product Release Notes for PONEMAH Physiology Platform version 4.80 indicate revisions made to the Ponemah core application since release of Ponemah version 4.70. For information regarding changes to the software from previous versions, please refer to the Release Notes folder located on the version 4.80 CD. Product Release Notes indicate only revisions to application contents that are part of CD Part #J02910 – Build Version 4.80.

Product Release Notes for Ponemah do not include information regarding revisions of the Analysis Modules. Information regarding revisions of the Analysis Modules is indicated in separate Product Release Notes.

Notice for organizations that must comply with FDA's Good Laboratory Practices (GLP) and 21 CFR Part 11 Electronic Records; Electronic Signatures: Ponemah Versions may contain **Preview Features**. These **Preview Features** are listed in the Product Release Notes table under the column, "Type of Change". A **Preview Feature** indicates that enhancements have been made to the program, but have not been validated. Instead, Data Sciences International (DSI) has opted to delay complete validation until receiving comments from customers regarding use of these features. Further validation of these features will be performed in later releases of the platform. There may be additional **Preview Features** that had been documented in previously released versions that are not documented here. These features are not available unless manually enabled by the user. If documentation is needed regarding these features, please contact the Technical Support Group at DSI.

Reference #	Type of Change	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
Ponemah Core - General		
N/A	N	<p>Integrated the Dataquest conversion utility into Ponemah. Additional features have been added to streamline the conversion process. Upon conversion of files, Ponemah will automatically create the Protocol, Raw and Review files for the user without any intervention. If events are used in Dataquest, Ponemah will bring those events into the protocol and mark the data in the corresponding locations.</p> <p>This feature is also controlled through the Data Security Option (see the Data Security Section for additional information).</p>
2761	F	<p>When configuring a data set name for an acquisition or replay with ODBC as the only output (text files disabled), previously collected acquisitions/replays are not displayed in the Data Set Name dialog because the default "Save as Type" is set to DER. This has been updated so that the Data Set Name can be saved as a RAW, DER, XLS, and MDB for Acquisition. Also, files for the Data Set Name in Replay can saved as MDB, RAW, DER, XLS.</p>
N/A	E	<p>Changed the default setting for the ODBC interface to Excel. It was previously not defaulted to any value.</p>
N/A	E	<p>Disabled the setting "Rescale Graphs on Double-Click" from the Application Configuration, Review menu. Previously, this was enabled by default.</p>
N/A	E	<p>Added buttons to access the Derived Parameters and Analysis Attributes from the Channel Input Setup menu. These were previously available through the right click option only.</p>
2614	F	<p>Ponemah would appear to not be responding if the graph type was changed while a large review file was opened and the graph was compressed to show all data in the graph screen. The graph page would eventually change to the correct type. This depended on how long it took to load the data on the graph page prior to switching to the new type of graph.</p>
2637	F	<p>When changing cycle times in Data Storage Scheduler, the AM/PM selection would default to AM regardless of its previous setting. This has been corrected to maintain the current setting when modifying the cycle times.</p>
2741	F	<p>Deleting a file through Data Manager with a path of 85 or more characters could cause Ponemah close. This has been updated to handle the Windows maximum path length (255 characters).</p>

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		Description
2743	F	No data was listed in the TimeAmp tab/table of the ODBC file when a Time/Amplitude measurement was performed through measure (in Replay mode). This occurred if the user did not have text files being created along with the ODBC output. This has been corrected to allow this information to be added to the ODBC file when the disable text files option has been selected (default setting for versions 4.60 and 4.70).
2744	F	Changes to the Low and High calibration values in the Sample tab were not being saved in the protocol. This only affected the ACQ16 EPP acquisition unit. This has been corrected to save changes in the protocol.
2748	F	If an input was changed on a Graph Page, the Load Page on the Print RAW Data Setup and Load Graph Page on the Recorder configuration were not updated properly. The user would need to refresh the view by exiting the PPP3 Setup dialog. This has been corrected to immediately update the windows with any change to the inputs.
2749	F	Digital Displays were disabled when loading a protocol in version 4.70 even though the displays were previously saved in the protocol. This has been corrected to preserve the saved display configuration.
2763	F	Added the ability to convert the selected mapped drive letter to a UNC (Universal Naming Convention) when setting up data paths in the Application Configuration dialog (under Options).
2765	F	When in Advanced View mode in the Graph Setup menu, could not click in the High box to edit the value for the Y axis. The Tab key could be used to modify the setting. This has been updated to allow the user to click in the box to modify.
2767	F	Ponemah would become nonresponsive if Data Manager was used to move data and the user did not have rights to delete files. This has been updated to allow files to be moved with or without delete access assigned to the user.
2769	E	Changed the column header in Data Reduction from "Event Time" to "Elapsed Time" to better reflect column information.
2781	F	Transmitter calibration values were not saved in the experimental log file in version 4.70. Previous versions, prior to the change in acquisition structure (7700), contain this information. This has been corrected.

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2783	F	<p>A conflict with the Measurement Computing software versions may have resulted in the sync capability not functioning. A specific version of the Measurement Computing software is needed as well as a specific BIOS version if using Dell Optiplex series computers (may be applicable to other PC manufacturers). For more information, reference Technical Bulletin TB0010 or consult DSI Customer Support.</p>
Data Review		
N/A	N	<p>Added Batch Template Analysis which can be applied to the entire data set or across defined Parser Segments of the data set. Once started, Batch Template analysis will analyze all valid channels without requiring any user interaction, and is capable of being started immediately after the Review file has been loaded. Previously, template analysis was performed on one channel at a time.</p> <p>Prior to starting a Template Batch Analysis, the user has the option of using each individual channel's Match Range settings or overriding all settings with global Match Range settings. The Data Range, Cycles to Analyze and Match Method will be selectable and applied globally to each channel.</p>
N/A	N	<p>Added a Group mode to the Data Parser Function. When using Group Parser mode, the graph pages, the derived parameter list, and the data reduction list will include the breadth of all parsed data regardless of the specific time points associated with each group. Rules may be applied to one or any animal group and can be based on events specific to that group. Additionally, clicking on the graph page for a specific group will show only those parser segments associated with that group.</p>
N/A	E	<p>Added the ability to show/hide the change markers in the Review graph page.</p>
N/A	E	<p>Added the ability to "unzoom" the last scaling change to the graph page.</p>
N/A	E	<p>Added the hardware label that was associated with the channel during acquisition to the Channel Input Setup in Review (for example, the channel label entered in the 7700 signal conditioner dialog).</p>
2511	F	<p>The Data Parser configuration was able to be accessed from the P3 Setup menu even if the user did not have rights to modify features. This has been corrected by providing a security bit for the Parser Configuration</p>

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2580	F	If the print tab was selected in review with no default printer available, the Printer Dialog could not be closed. The Review file could be closed but this resulted in the system locking up upon immediately attempting to acquire data.
2757	F	If a complex was selected into the template library that had an extremely long PR interval, using this template could result in an incorrect association between a P wave and an R wave of the following cycle. The analysis was based on the interval of the template cycle and would therefore search for a P wave ignoring any QRS complexes in between. This has been rectified to stop searching for a P wave when an R was is detected.
2759	F	If data is highlighted due to selecting a parsed segment, then focus is shifted to another window, clicking back on the highlighted data lines will result in Ponemah closing.
2762	F	Specific rules could not be configured such that if the starting time occurred after an event, that event would not be used to calculate the ending time. The rule would look farther in the data to find the next event. If no event existed, no segment would be placed.
2776	F	Clicking on the graph page label (Y axis information) to the left of the axis did not select that axis. Only clicking inside the axis (waveform data) would bring focus to that channel. This has been updated to allow focus on an axis by clicking on the area containing the Y axis information.
2777	F	If clicking on the derived data to synchronize graph pages, the template graph page would shift all the way to the right of the graph page if multiple signals were present in the template window. This has been corrected so that the template graph page does not attempt to synchronize with the derived data.
2786	F	An incorrect time notation was displayed for Parser Segments in the Individual Segments tab. A “:” was displayed prior to the millisecond instead of a “.” being displayed (Example, 00:06:09:000 updated to 00:06:09.000)

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2789	F	<p>An error occurred when creating a review file during a save. This would result in the original file posting an error that an invalid format existed when reopening. To generate the original Review file again, the user would need to replay the data.</p> <p>The following sequence will recreate the error:</p> <ol style="list-style-type: none"> 1. Load a review file 2. Modify something in P3 Setup (add / remove a graph page) 3. Save derived data 4. From the "Recent Review Files" list, load another review file 5. P3 will ask "Changes Made to <filename>.RVW Save Changes?" - Answer Yes. 6. Load the original review file 7. An error will appear "Invalid RVW file format"
2801	F	<p>If a marks section was saved with the same name as an existing marks section and the option to save derived data was disabled, Ponemah would warn the user about overwriting derived data then overwrite the experimental log. For text files, this action resulted in a log file that does not match the corresponding derived files. For ODBC files, this action would overwrite the existing file with an ODBC file containing only the log information, erasing the previous derived data.</p> <p>Added a warning message to alert users to the ramifications of performing this function without saving the derived data.</p>
2802	F	<p>If a marks section was saved with the same name as an existing marks section, answering "Yes" to overwriting the marks section, but answering "No" to overwriting the derived files would result in the previously existing Marks section being deleted and no marks section being saved. Information for these sections would not be listed in the Open Marks Section dialog. This has been corrected so that the marks section name still exists in the Marks Section dialog.</p>
2803	F	<p>Ponemah would become nonresponsive if a Template library was bound to a channel and used to analyze data where the sample rate used to collect the data in the Template library did not match the sample rate of the data being collected. This has been updated to post a message stating that Template Analysis can not be done because channel x has not set up a valid template library. Additionally, Ponemah will no longer become nonresponsive if this action occurs.</p>

Reference #	Type of Change	Key: N = New Feature; E = Enhancement; F = Fix Description
2809	F	<p>An error message would be posted when saving a Marks section using special characters ('<', '>', '{', '}', and ' '). These characters have been added to the list of invalid characters and a message will post stating that the character cannot be used when saving a Marks section.</p> <p>The list of invalid characters is listed below. /\ ? * ~ \ " ! @ % ^ < { & > } </p>
2817	F	<p>If an older review file had a channel set to an analysis module that was not review capable, upgrading the analysis module to a review capable version would result in that review file encountering errors when opened. This has been corrected to allow the new analysis module to be utilized properly by Review.</p>
2821	F	<p>A cycle could not be matched to a Template cycle (using Template analysis) if a neighboring mark existed within the desired match region. For example, if a Q mark was placed within the P wave, attempting to match the cycle with a template would not work. This has been updated to correctly move the neighboring mark outside of the match region and then properly place the correct marks based on the template cycle.</p>
2834	F	<p>Selecting a trace other than the first trace and resizing the window resulted in the first trace having focus (automatically selected). This has been corrected to maintain focus on the channel that was selected prior to resizing the graph page.</p>
2837	F	<p>If channels were disabled prior to performing a Review, these disabled channels were maintained in the Ponemah memory. If a new Review file was generated from an acquisition or replay it would use the settings saved from the previous file (disabled channels), causing the file to be corrupted. This occurred when the analysis modules had a different number of Marks per cycle.</p>
2840	F	<p>With Data Reduction configured for Parser Segments, clicking on a parser segment to synchronize data resulted in the first column of data in the Data Reduction file to be hidden (data shifted in the spreadsheet). This has been updated to display data starting on the left hand side of the spreadsheet.</p>
2841	F	<p>If a Data Reduction segment (set to Parser Segment or Time) spanned a data break, the calculated values were only reported for data up to the first data break. Data after the first break was ignored and not used in the calculations. To alert users that the data spans a break (or breaks), Data Reduction will report X's for values over the specified segment duration.</p>

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2843	F	If a review file was opened excluding channels that had previous template matches, saving a Marks Section would result in the disabled channels losing their match information. This has been corrected to save previous match information.
2855	F	If a template graph page is configured and populated with a cycle from the appropriate channel, adding a cycle to the template graph page from another channel will result in the derived data disappearing. This has been updated to properly synchronize the derived data when the template library has changed.
Study Protocol Option		
N/A	N	<p>Automation scripts have been added to Study. This functionality allows Laboratory Information Management Systems (LIMS) to generate CSV files which can be imported into Study to automatically create or modify a study. This includes creating the number of days for the study, number of animals on study, number of workups and so forth.</p> <p>The following Automation Types are currently available:</p> <ul style="list-style-type: none"> • Tox Pre Dose – Imports subjects and Genders to a Tox Pre Dose day • Tox Post Dose – Assigns a Subject Info string to an existing Subject and assigns the subject and a dose to a Dose Day • Non Tox Protocol Parser – Scans the assigned Protocols and adds the P3 Group Names as subjects to the existing Study Groups • Non Tox Dose Assigner – Adds the specified subjects to the specified Dose Days while assigning them the specified doses. • Subject Importer – Imports a list of Subjects and related Info to the Subjects List.
N/A	N	Added the ability to select specific channels for Review prior opening a file (Non-Tox study).
N/A	N	Added a Summary/Report table that allows specific Runs (Marks Sections) from Review, Acquisition or Replay sessions to be associated with a specific animal. Additionally, Data Reduction information will also be listed for each animal based on the run selected.
N/A	N	Added the ability to annotate the runs in the Previous Runs list view. These notes are saved and may be edited.
N/A	N	Added the ability to switch between Subject Info and Subject ID in the Run Study menu for a Non-Tox setup.

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N/A	N	Added additional information to the Run Study dialog for a Tox setup. Subject Info is also displayed along with Subject ID.
N/A	N	If a Study was created in an older version of the software, the Study can be loaded into the current version of the software and modifications will automatically be made to accommodate the Study. If a Study created in a newer version of the software is loaded on a workstation with an older version of the software, Ponemah will inform the user and not load the Study.
2597	F	Accessing the Hardware menu from the Run Study dialog allowed access to the rest of the Ponemah menus (outside of Study). Accessing combinations of these menus outside of Study would result in Ponemah closing. This has been corrected by not allowing access to Ponemah menus outside of Study when accessing the hardware menu from the Run Study dialog.
2704	F	Performing an on demand binary sync in Study did not update the log file with this information. This has been corrected to add the on demand binary sync to the log file.
2750	F	If a study existed in a previous version (4.30 or 4.40) and the workstation was upgraded to version 4.50 or later, deleting the Study in the earlier version would result in version 4.50 or later closing when opening the Manage Studies dialog.
2772	F	<p>If a Study was created using a name starting with numerals, Ponemah would post the following error: StudyManager: Error!(.\StudyDatabase.cpp : Line 2887) Line 1: Incorrect syntax near '1308'.</p> <p>Study has been updated to allow Study names to begin with numerals.</p>
2773	F	<p>If backing up a study that contains a very large amount of data, Study would display the following error message: StudyManager: Error (.StudyDatabase.cpp:Line 2675) Line 1: Incorrect Syntax '2100'</p> <p>This was due to a default time set in the software. If studies were not backed up in this specified amount of time, Study assumed there was an issue and would then stop the backup and post the error. This has been fixed by not specifying a time limit on how fast data should be moved.</p>
2782	F	If subjects were added to Groups in the Study Setup dialog with blank subjects for some groups (only Non-Tox), existing the Study Setup menu and re-entering would cause the subjects to shift up such that the first group was not blank. This only occurred if the first subject was blank when existing the dialog.

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2784	F	Previously, there was no check to keep users from entering the same animal number in two different Study Groups. A check has been added so that an animal number can only exist in one Group within a Study.
2804	F	Exporting Group Summaries from the Summary Report Option only listed “Females” for the gender (when “All” was selected) in the mdb generated table. This has been corrected to list “All Subjects” under the Gender column for each animal.
2805	F	Within a Tox Study setup, selecting Male or Female for the gender may have caused the program to become unresponsive when attempting to export the Group summary. This has been corrected.
2806	F	Exporting Group summaries produced Access files (.mdb) even though Excel was selected as the desired ODBC output. This has been corrected to produce the correct file format based on the ODBC configuration.
2807	F	Ponemah would become unresponsive/close if attempting to open Summary with a study that contained more than 90 animals. The Study option does not have a limit on the number of animals that can be collected. However, Summary is limited to 90 animals. This has been updated to post a message stating that too many subjects exist and will then close Summary.
2845	F	<p>When Ponemah is started, the application begins to search for other Ponemah workstations in order to populate the Network Study list. This could appear to be an unwanted behavior on the corporate network. This has been updated to not search for workstations upon starting Ponemah.</p> <p>Additionally, settings for the search characteristics have been added to the Miscellaneous tab in the Application Configuration menu. An auto search can be manually selected as well as preventing users from performing a manual search in the Study Setup and Edit Primary Workstation List menus.</p>
Video Option		
2738	F	When attempting to view a video file in review, the WMV file had to be in the same location that it was acquired. If the RAW, RVW, and WMV's files were copied to a different location, the P3Player would close when accessed. This has been updated to post a dialog allowing the user to browse for the WMV file if it is not located.

Reference #	Type of Change	Key: N = New Feature; E = Enhancement; F = Fix Description
2739	F	If a review file had video files associated with it, and the file was parsed and saved, the resulting parsed review file would not have any video files associated with it. This has been corrected to parse and save video files associated with the newly parsed review file.
2754	F	If the system time setting had "Automatically adjust clock for daylight saving changes" enabled, the synchronization for video in review would be one hour off. This has been corrected to properly handle the automatic clock adjustment. However, it is recommended that this function be disabled when using OpenART.
2780	F	An issue may have occurred where the cameras saved in a protocol were not correctly indexing when data was collected. This resulted in an error message stating that no video files were associated with that group. This has been corrected to correctly index camera configurations.
JET (Jacketed External Telemetry)		
N/A	N	JET Respiration allows the user to measure respiratory rate and volume along with biopotentials or ECGs. The respiratory configuration is available on 3ETA and 6ETA devices that have a DIFF harness connected. The configurations are as follows: <ul style="list-style-type: none"> • 3ETA-DIFF-RIP • 6ETA-DIFF-DIFF-RIP • 6ETA-DIFF-RIP-DIFF • 6ETA-ECG-VLEAD-RIP
N/A	N	Additional sample rates of 100Hz and 50Hz have been added to the Primary sampling group.
Vivometrics		
2862	F	Calibration information from the Vivometrics' devices was not added to the log file. The device ID and calibration information have been added to the log file.
Data Security Option (DSO)		
N/A	N	Added the ability to sign a file that was not previously signed. In earlier versions, if a file was not closed as expected (power failure, for example), subsequent review sessions would not be able to create signed files for the derived data. This has been updated to allow the user to manually sign files that were not previously signed. The reason for signing will be listed as "Initial Signature" in the Verify menu.
N/A	N	Parsed files were not signed in previous versions. Upon parsing and saving a new Review file, the software will automatically sign the file as "Parsed" which can be viewed in the Verify menu.

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N/A	N	When converting Dataquest files, the resulting files generated will automatically be signed with the reason: Converted. Previously, the converted files were not signed.
2766	E	Increased the number of users permitted on a secure system from 99 to 400.
7700 Signal Conditioners		
N/A	E	<p>Added the additional functionality to the Low and High Cal menus.</p> <p>Measure Settings: provides user control over how data is sampled and recorded for the Low and High Cal values.</p> <ul style="list-style-type: none"> • Current – Will record the value at the end of the interval specified in the Time column. After selecting the Measure button, the software will utilize the following number of seconds entered in the Time column to determine the end point for calibration and will record the last data point when the time interval is completed. • Maximum - Will record the maximum value over the interval specified in the Time field. After selecting the Measure button, the software will utilize the following number of seconds entered in the Time column to determine this value. • Minimum - Will record the minimum value over the interval specified in the Time field. After selecting the Measure button, the software will utilize the following number of seconds entered in the Time column to determine this value. • Average - Will record the average value over the interval specified in the Time field. After selecting the Measure button, the software will utilize the following number of seconds entered in the Time column to determine this value. • Time - Number of seconds used to define the interval over which the calibration value for the Maximum, Minimum, or Average will be sampled.