SoftMax Pro

Data Acquisition and Analysis Software

Release Notes

Version 7.2
March 2023

MOLECULAR DEVICES

This document is provided to customers who have purchased Molecular Devices equipment, software, reagents, and consumables to use in the operation of such Molecular Devices equipment, software, reagents, and consumables. This document is copyright protected and any reproduction of this document, in whole or any part, is strictly prohibited, except as Molecular Devices may authorize in writing.

Software that may be described in this document is furnished under a non-transferrable license. It is against the law to copy, modify, or distribute the software on any medium, except as specifically allowed in the license agreement. Furthermore, the license agreement may prohibit the software from being disassembled, reverse engineered, or decompiled for any purpose.

Portions of this document may make reference to other manufacturers and/or their products, which may contain parts whose names are registered as trademarks and/or function as trademarks of their respective owners. Any such usage is intended only to designate those manufacturers' products as supplied by Molecular Devices for incorporation into its equipment and does not imply any right and/or license to use or permit others to use such manufacturers' and/or their product names as trademarks.

Each product is shipped with documentation stating specifications and other technical information. Molecular Devices products are warranted to meet the stated specifications. Molecular Devices makes no other warranties or representations express or implied, including but not limited to, the fitness of this product for any particular purpose and assumes no responsibility or contingent liability, including indirect or consequential damages, for any use to which the purchaser may put the equipment described herein, or for any adverse circumstances arising therefrom. The sole obligation of Molecular Devices and the customer's sole remedy are limited to repair or replacement of the product in the event that the product fails to do as warranted.

For research use only. Not for use in diagnostic procedures.

The trademarks mentioned herein are the property of Molecular Devices, LLC or their respective owners. These trademarks may not be used in any type of promotion or advertising without the prior written permission of Molecular Devices, LLC.

Patents: http://www.moleculardevices.com/patents

Product manufactured by Molecular Devices, LLC.
3860 N. First Street, San Jose, California, 95134, United States of America.
Molecular Devices, LLC is ISO 9001 registered.
©2023 Molecular Devices, LLC.
All rights reserved.

Contents

Chapter 1: General Information **6**

Computer Requirements SoftMax Pro Software - Standard Edition 6

Scalability SoftMax Pro GxP Software Suite 7

Requirements SoftMax Pro Software - GxP Edition Multi Computer Setup 8

Requirements SoftMax Pro Software - GxP Edition Single Computer Setup 9

Required Computer Settings 10

Obtaining Support 10

Chapter 2: Summary **12**

Chapter 3: New in SoftMax Pro Software 7.2 ..... **14**

Formula Updates 14

Added a Checksum Value to Validation Plate Protocol Formulas 17

Design of Experiment 17

Curve Fits 17

Template Import and Export as .xml 18

Added Global Curve Fitting 18

Added Support for Microsoft SQL Server 2019 18

Added Support for Windows 11 18

Added Support for the SpectraMax Mini 18

Graph Annotations 19

Custom Export Formats Via xslt 19

Improved Performance 19

GxP Edition - Authentication 19

GxP Edition - New Username Change Message 19

Protocol Tab Updates 20

Automation Port Configurable 20

GxP Edition - Set In Progress Permission 20

Link Graph Data Point to Row in Group Table 20

Added 64-Bit Platform Support 20

GxP Edition - Audit Trail Comment Upon Document Status Change 20

Historical Raw Data Saved Upon Overwrite 20

Chapter 4: Issues Addressed in SoftMax Pro Software 7.2 ..... **22**

Standard Edition - Audit Trail Note Dialog Should Not Display 22

GxP Edition - Expand/Collapse Section Error 22

SpectraMax iD3 - Mixed-Mode Kinetic Workflows Cause Error 22
Settings Change Causes 'Instrument Busy' Error 22
Following Plot Deletion, Calculation Results Are Invalid 22
Formula Function InterpolatedMax Does Not Handle NaN Values 22
Renaming a Plot Does Not Update Parameter Initialization Formula Reference 22
Comment for Custom Reduction Formula Not Retained or Persisted 22
Complex Graphs Error 23
Recalculate Now Icon Issue 23
GxP Edition - System Audit Trail for Imported Documents Not Chronological 23
GxP Edition - Cannot Change the Sequence of the Sections in the Navigation Tree 23
GxP Admin Portal - Publisher Typo 23
SpectraMax ABS Plus & SpectraMax Plus384 - Wrong Command for Water Constant 23
GxP Edition - System Audit Trail Report Performance 23
ScanLater User Interface 23
Cubic Spline x Interpolation Returns NaN 23
SpectraMax L - Firmware Update 24
End Time Reduction 24
GxP Edition - Update From v7.1.1 to v7.1.2 License Activation Causes Error 24
Removed Memory Leak 24
Options Dialog Saves Calculation Changes On Cancel 24
GxP Edition - API - Document ID Displays in Audit Trail 24
Accessor !AvgReadTemperature May Return Wrong Value 24
GxP Edition - Updated Software Dependencies 24
Editing ParmXCovar Formulas Causes Error 24
StakMax - Start In File Path Length Issue 25
Function For Fieller Confidence Interval With the Same Parameter Returns Wrong Value 25
GxP Edition - Document Changes Via API Correctly Display in System Audit Trail 25
SpectraMax iD5 - Settings Window Size Issue 25
Updated Protocols 26
Frame Size Changes In Note Sections During Recovery 26
GxP Edition - Cannot Add More Than 524 Users to a Project 26
Corrected and Enhanced .xml Features 27
GxP Edition - Function Editor and Graphing Permissions Enhanced 27
GxP Edition - Document Changed Event Description Clarified 27
SpectraMax ABS Plus - Speed Read With Multiple Wavelengths Error 27
Enhanced Print Functionality 28

Cuvette Set !TimeRun Formula Error 28
Conversion of Floating Point Numbers to Strings 28
Formula Editor Syntax Check Error 28
Extended Services Password Limit 28
SpectraMax Mini - Protocols Corrupted 29
Updated Instrument User Guides 29
SpectraMax Mini - Read With Drawer Open Error 29
Included Protocols for the ABS2 Validation Plate 29
SpectraMax iD3 and SpectraMax iD5 - Information Dialog Issue 29
Plate Name Does Not Import Correctly 29
Text Entry Causes Performance Delay 29
GxP Edition - Database Backup Tool Version Number 29
Error During Update If Config.json File is Open 29
Document Audit Trail Font Size 30

Chapter 5: Known Issues in SoftMax Pro Software 7.2 32

Print Preview is Blank 32
Potential Calculation Result Differences 32
Document Backward Compatibility Message 32

Chapter 1: General Information

The SoftMax Pro Software controls Molecular Devices spectrophotometers and absorbance, luminescence, and fluorescence microplate readers and detection platforms.

The software provides extensive data calculation and analysis capabilities under a Good Manufacturing Practices (GMP), Good Laboratory Practices (GLP) work environment for pharmaceutical, biotechnology, academic, hospital, and government customers.

The software includes over 160 assay protocols to speed life science research and drug discovery assay development and screening. You can customize experiment protocols, analyze and display data, and create meaningful reports. The straightforward yet powerful programming capabilities of the SoftMax Pro Software can further enhance specialized data collection and analysis needs through custom assay development.

The SoftMax Pro Software is widely integrated with industry-leading robotics systems.

Computer Requirements SoftMax Pro Software - Standard Edition

You should install the SoftMax Pro Software on the computer before you set up the instrument. Please be aware that some updates to the SoftMax Pro Software require a purchase.

You can install the SoftMax Pro Software - Standard edition on a computer with the following system specifications.

SoftMax Pro Software - Standard Edition

Item	Minimum
Operating system	Windows 11 Professional or 10 Professional or Windows Enterprise, 64-bit
Processor	Intel Core i5 with 8 or more cores or equivalent
Memory	16 GB RAM
Storage	50 GB of available space, or more

Ports

For the typical installation, the SoftMax Pro Software requires exclusive access to ports 1947, 8099, and 9000. Please verify with your IT department that there are no conflicts for these ports with other applications. Conflicts may prevent you from running the software.

Scalability SoftMax Pro GxP Software Suite

The SoftMax Pro GxP Software Suite scales with the size of your laboratory environment. Depending on the size of your implementation, you can install the interdependent SoftMax Pro GxP Software Suite components on multiple networked computers. For the smallest of implementations, it is possible to install the components on a single computer. You should consult with your Molecular Devices representative and your network administrators to plan and scale your implementation according to your requirements.

SoftMax Pro GxP Software Suite components:

- **SoftMax Pro GxP Software**: The SoftMax Pro GxP Software (client) controls the microplate reader for data acquisition and statistical data analysis. These computers must have access to the dedicated server on which you install the GxP Admin Software.
- **GxP Admin Portal Software**: The GxP Admin Portal Software is the user interface that you use to interact with the GxP Admin Software. These computers must have access to the dedicated server on which you install the GxP Admin Software.
- **GxP Admin Software**: The GxP Admin Software (server) is the database and security back-end application that you install on a dedicated, centrally located server with a static IP address. This server must be accessible to all computers that run the GxP Admin Portal Software and the SoftMax Pro GxP Software.

When you use the multi computer installation, all service for the SoftMax Pro GxP Software Suite components must have the same version number after the installation or an update to the software.

The GxP Admin Software has no user interface. On the computer running the GxP Admin Software, open the Windows Services dialog and select the GXP_AU_DATA service, the GXP_AU_WEB service, GXP_AU_REPORT service, and the GXP_AU_ADCLIENT service. The version number displays in the Description field.

On the computer running the SoftMax Pro GxP Software, open the Windows Services dialog and select the GXP_AU_DATA service and GXP_AU_WEB service. The version number displays in the Description field.

Requirements SoftMax Pro Software - GxP Edition Multi Computer Setup

Server Computer for GxP Admin Software

Item	Required
Operating system	Windows Server 2019 or Windows Server 2016 Or for a 5 or fewer client setup (all 64-bit): Windows 11 Enterprise or Windows 10 Enterprise Windows 11 Pro or Windows 10 Pro
Processor	Intel Core i5 with 8 or more cores or equivalent
Memory	16 GB RAM
Storage	50 GB of available space, or more
Database	Microsoft SQL Express or Microsoft SQL Server 2019 or Microsoft SQL Server 2017
Additional software	Windows PowerShell 5.1 must be 64-bit and able to execute scripts
Domain Name Service (DNS)	Configured DNS must be active for all computers participating in the multi computer setup

SoftMax Pro GxP Software and GxP Admin Portal Software Computer

Item	Required
Operating system	Windows 11 Enterprise or 10 Enterprise, Windows 11 Pro or 10 Pro (all 64-bit)
Processor	Intel Core i5 with 8 or more cores or equivalent
Memory	16 GB RAM (minimum 8 GB to install)
Storage	50 GB of available space, or more (Disable File and Folder Compression)
Additional software	Windows PowerShell 5.1 must be 64-bit and able to execute scripts

Note: If you intend to use Active Directory Single Sign On, your network infrastructure must support Active Directory.

Ports

For the typical multi-computer installation, network communication from the computers running the SoftMax Pro GxP Software to the server running the GxP Admin Software require unidirectional communication on TCP ports 8210 and 8211. The GxP Admin Software binds TCP ports 1433 (default SQL, can be customized static port), 8210, 8211, 8220, 8230, and UDP port 1434 (default SQL, may not be required). SoftMax Pro GxP Software binds TCP ports 1947, 8099, 8210, 8211, and 9000. Firewall rules and/or Router Access Control Lists may be required to support the application suite. Customization of some network ports are possible but some applications that also require these ports may be incompatible with the SoftMax Pro GxP Software Suite.

Backup

The multi computer setup assumes that your company network has standard backup and recovery procedures in place for the SQL database.

Requirements SoftMax Pro Software - GxP Edition Single Computer Setup

Note: If you intend to use Windows Credentials login mode users that use Active Directory or if you need a larger database, you can use the multi computer setup installation steps to install all SoftMax Pro GxP Software Suite components on one computer. Contact Molecular Devices support for assistance.

For the single computer setup, you install all the SoftMax Pro GxP Software Suite components on a computer with the following specifications.

Note: You must have Admin rights on the computer.

SoftMax Pro GxP Software Suite - Single Computer Setup

Item	Required
Operating system	Windows 11 Enterprise or 10 Enterprise or Windows 11 Pro or 10 Pro (all 64-bit)
Processor	Intel Core i5 processor or higher w/ 8 or more cores (min. 4 cores to install)
Memory	16 GB RAM (minimum 8 GB to install)
Storage	50 GB of available space (File and Folder Compression must be disabled)
Network card	Configured and enabled
Database	Microsoft SQL Express will be installed by the wizard (10 GB storage limit)
Additional software	Windows PowerShell 5.1 must be 64-bit and able to execute scripts

Note: For a new installation, the computer cannot have Microsoft SQL installed. For a new installation, the SoftMax Pro 7.2 GxP Single Computer Setup Installation Wizard installs a SQL Express database. When you update from GxP Admin Software version 3.x, the existing SQL Express database content is retained.

Windows 10/11 Home edition and Mobile edition are not supported.

Ports

For the typical single-computer installations, the SoftMax Pro GxP Software Suite binds TCP ports 1947, 8099, 8210, 8211, 8229, 8230, 9000, and UDP port 1434. Firewalls rules may be required to allow localhost network communication. Some applications requiring these ports may be incompatible with the SoftMax Pro GxP Software Suite.

Required Computer Settings

Note: Disable your anti-virus program before you install the software. Anti-virus programs can interfere with the installation process. If your computer hibernates or turns off during data acquisition, the transfer of data from the instrument to the software can be interrupted.

To prevent data loss, turn off all sleep and hibernation settings for the hard disk, the CPU, and the USB ports.

To define computer settings in the Windows Control Panel:

1. Open **Control Panel**.
2. Click **Hardware and Sound**.
3. Under **Power Options**, click **Change When the Computer Sleeps**.
4. Click **Change advanced power settings**.
5. In the Power Options dialog, set **Hard disk > Turn Off Hard Disk After** to **Never**.
6. Set **Sleep > Sleep After** to **Never**.
7. Set **Sleep > Hibernate After** to **Never**.
8. Set **USB Settings > USB Selective Suspend Setting** to **Disabled**.
9. Click **OK**.

Decimal Symbol Must be a Period

For the SoftMax Pro Software to parse or execute calculations, the regional options for the computer must use the period symbol (“.”) for the decimal symbol. This can be an issue if the Region and Language setting for the computer is something other than English.

To set custom regional settings, go to **Control Panel > Clock and Region**.

Obtaining Support

Molecular Devices is a leading worldwide manufacturer and distributor of analytical instrumentation, software, and reagents. We are committed to the quality of our products and to fully supporting our customers with the highest level of technical service.

Our Support website, support.moleculardevices.com, has a link to the Knowledge Base, which contains technical notes, software upgrades, safety data sheets, and other resources. If you still need assistance after consulting the Knowledge Base, you can submit a request to Molecular Devices Technical Support.

You can contact your local representative or Molecular Devices Technical Support at 800-635-5577 x 1815 (North America only) or +1 408-747-1700.
In Europe call +44 (0) 118 944 8000.

To find regional support contact information, visit www.moleculardevices.com/contact.

Chapter 2: Summary

The features and solutions in these Release Notes are designed to assure software continuity. We recommend the proper business risk and data integrity assessments of any new or improved functionality that support end user business processes.

In addition to the new features and issues addressed in this update, this update also synchronizes the version numbers between the SoftMax Pro Software - Standard edition and the components in the SoftMax Pro GxP Software Suite at 7.2.

SoftMax Pro Software - Standard Edition

For the SoftMax Pro Software - Standard edition update and installation instructions, see the *SoftMax Pro Data Acquisition and Analysis Software - Standard Edition and MiniMax Imaging Edition - Installation Guide*.

SoftMax Pro Software - GxP Edition

For the SoftMax Pro Software - GxP Edition update and installation instructions, see:

- *SoftMax Pro Data Acquisition and Analysis Software - GxP Edition - Installation Guide for the Multi Computer Setup*
- *SoftMax Pro Data Acquisition and Analysis Software - GxP Edition - Installation Guide for the Single Computer Setup*

Additional Documentation

For details, see the following documents:

- *SoftMax Pro Data Acquisition and Analysis Software User Guide*
- *GxP Admin Portal Software User Guide*
- The application online help

Chapter 3: New in SoftMax Pro Software 7.2

Formula Updates

There are many new operators. The *SoftMax Pro Data Acquisition and Analysis Software Formula Reference Guide* and the Formula Reference application help have been updated to reflect the changes.

Statistical Functions

The following have been added to the Statistical Functions.

GeometricMean

GeometricMean(Parameter)

Returns the geometric mean of a list or array of numbers.

Tracking ID: SCD-844

DixonQMarkOutlier

DixonQMarkOutlier(data,p)

Returns the data array with an outlier replaced by MakeErr(139), which displays as “Outlier”. Valid percentages are 90%, 95%, and 99%, and the number of data values should be in the range 3 to 30.

Tracking ID: SCD-2540

DixonQOutlierIndex

DixonQMarkOutlier(data,p)

Returns the index of an outlier in the data. Valid percentages are 90%, 95%, and 99%, and the number of data values should be in the range 3 to 30.

Tracking ID: SCD-2540

DixonQPercentagePoint

DixonQPercentagePoint(p,N)

Returns the percentage point (critical value) for the Dixon’s Q outlier test, with percentage p for N samples. Valid percentages are 90%, 95%, and 99%, and N should be in the range 3 to 30.

Tracking ID: SCD-2540

PairedtStatAndProb

PairedtStatAndProb(data1,data2)

Applies the paired t-test to two data arrays, which should be of the same size. The t-statistic and probability are returned as an array of two numbers.

UnpairedtStatAndProb

UnpairedtStatAndProb (data1,data2)

Applies the unpaired t-test to two data arrays. The t-statistic and probability are returned as an array of two numbers.

Graph Functions

The following have been added to the Graph functions.

CurveSimilarity

CurveSimilarity(PlotName1,PlotName2)

Returns the curve similarity for the specified plots. The calculation is as described in: Faya, P., Rauk, A.P., Griffiths, K.L., Parekh, B. (2020). A curve similarity approach to parallelism testing in bioassay. Journal of Biopharmaceutical Statistics. 30(4), 721-733.

It is defined only for plots for which an EC50/IC50 value can be calculated.

Tracking ID: SCD-1502

FunctionSelector

FunctionSelector(PlotName)

Returns the function selector corresponding the curve fit used for the specified plot. See FunctionSelector on page 16.

Tracking ID: SCD-2254

Parm_RatioCI

Replace _ with either A, B, C, D, or G.

Parm_RatioCI(PlotName1,PlotName2,alpha)

Returns the confidence interval of the ratio of the parameter for the plots you specify, using a profile likelihood method (PlotName1 corresponds to the numerator in the ratio). The significance for the confidence interval is specified by alpha.

Array Functions

The following have been added to the Array functions. This category was previously named Other Functions.

CyclicRedundancyCheck32

CyclicRedundancyCheck32(Parameter)

Returns the cyclic redundancy check value for an array of numbers, using the CRC-32 algorithm.

ItemCountIf

ItemCountIf(Parameter)

Returns the count of true items in an array of booleans.

ItemCountIf((1 & -1 & 2)>0)

LastArray

Tracking ID: SCD-1531

LastArray(Parameter)

Reports the last array in a list of arrays. The returned values can be numbers, text, or Booleans.

LastArray(!WellLm1)

LastItem

Tracking ID: SCD-1531

LastItem(Parameter)

Reports the last item in a list or array of numbers

For example, the last OD in a Kinetic run, the last OD in a Spectrum scan, the last value in a column of numbers.

LastItem(!CombinedPlot)

RankedIndices

RankedIndices(Parameter)

Takes an array of numbers as its parameter, and returns an array of the indices that each item would have when sorted in ascending order.

MakeArray

MakeArray(N,value)

Returns an array with N items, each item having the specified value. This can be used to create a group column in which each row contains an array of the same value.

MakeArray(ItemCount(Well),!SampleDescriptor)

Tracking ID: SCD-810

Explicit Curve Fit Functions

The following has been added to the Explicit Curve Fit functions.

FunctionSelector

FunctionSelector(key)

Returns a whole number you can use as a selector for a standard curve fit function identified by a text key from the following list: LINEAR, QUADRATIC, CUBIC, QUARTIC, SEMILOG, LOGLOG, 4P, 5P, EXP, RH, 2PEXP, BIEXP, BIRH, 2SITECOMP, GAUSSIAN, BC, 5PALT, RHL, POWER, GOMPERTZ. The key is not case sensitive. See FunctionSelector on page 15.

3D Curve Fit Functions

The following has been added to the 3D Curve Fit functions.

RegressionMetrics3D

RegressionMetrics3D(data, functionFormula,parameters)

Given data, a function, and parameter values, returns a list of numbers: the sum-of-squared errors, degrees of freedom, and coefficient of determination (R2).

Plate Data Accessors

The following has been added to the Plate Data Accessor.

!AllReducedPlots

Returns an array list of the reduced array values from all wells in a Plate section or all cuvettes in a Cuvette Set section.

Tracking ID: SCD-1501

Added a Checksum Value to Validation Plate Protocol Formulas

Tracking ID: SCD-563

Added the CyclicalRedundancyCheck32 to perform checksuming calculations on a set of data. This is used to validate that a set of data is the same for two separate instances.

Design of Experiment

Tracking ID: SCD-813, 814, 815

Added a Design dialog to assign sample concentrations to a graph based on design of experiment theory. You specify whether the design is optimal or an optimized geometric (dilution) series. You specify the graph and plot (chosen from the current experiment section) to use as the basis for the design.

Added a Design tab in the Curve Fit Settings dialog to specify the optimization settings to associate with either the graph (global fit) or each plot (independent fits) when used as the basis for a design in the template editor.

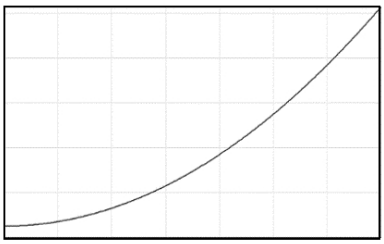
Curve Fits

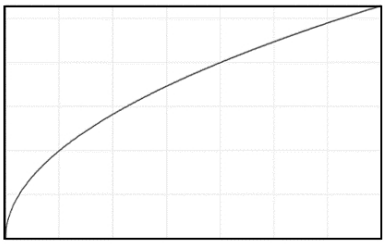
Tracking ID: SCD-853, 2246

The following curve fits have been added.

Power

The **Power** curve fit is a three-parameter power function.





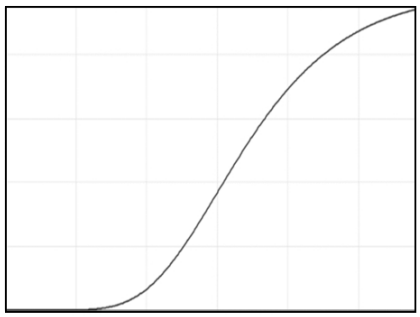
$$y = A + Bx^C$$

A = Intercept (C > 0)

The upper and lower curves are for C > 1 and 0 < C < 1 respectively.

Gompertz

A **Gompertz** function is typically used to model cellular growth kinetics.



$$y = Aexp\left(-exp\left(1 + \frac{B(C-x)}{A}\right)\right)$$

A = Upper Asymptote

B = Maximum Specific Growth Rate * e

C = Lag Time (intercept on x-axis of tangent through the inflection point)

Template Import and Export as .xml

Tracking ID: SCD-1685

Added the ability to export plate map and read settings to a .xml format that can then be imported back into the SoftMax Pro software as a template.

Added Global Curve Fitting

Tracking ID: SCD-1868

Added Global(Shared) curve fits to graphs and the graph legend. Global curve fits require at least one shared parameter.

Added Support for Microsoft SQL Server 2019

Tracking ID: SCD-2015

Added support for Microsoft SQL Server version 2019.

Added Support for Windows 11

Tracking ID: SCD-2193

Added support for the Windows 11 operating system.

Added Support for the SpectraMax Mini

Tracking ID: SCD-2402

SoftMax Pro Software - Standard edition software installation now includes support for the SpectraMax® Mini Multi-Mode Microplate Reader which previously required the installation of a plugin application.

Graph Annotations

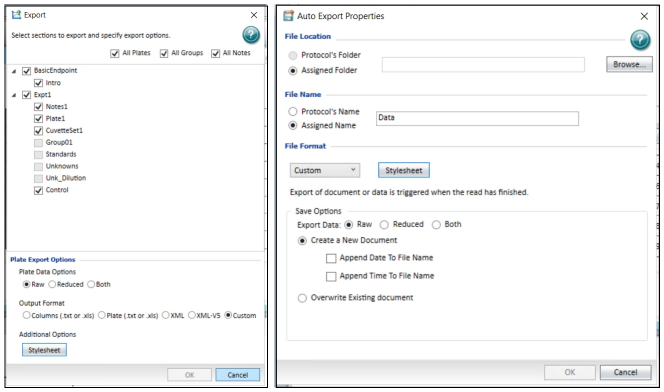
Tracking ID: SCD-2418, 2689

You can now add text, image, and shape annotations to a graph in Graph sections.

Custom Export Formats Via xslt

Tracking ID: SCD-2424

Added the ability to create custom .xslt stylesheets that enable you to export data that contains the data you specify in the format you specify. This feature requires a knowledge of xslt programming and is available from the Export dialog and the Auto Export Properties dialog.



Improved Performance

Tracking ID: SCD-2438, 2808

Improved the performance of the loading and saving of documents by optimizing the GxP Admin Software.

GxP Edition - Authentication

Tracking ID: SCD-2460, 2547

Many areas that previously required only a password to authenticate the event, now require both the username and password for authentication.

Some examples:

- Signing statements
- Changing document status

GxP Edition - New Username Change Message

Tracking ID: SCD-2462

The New User page and the Edit User page in the GxP Admin Portal Software now displays a message to inform you that all existing System Audit Trail events for a user will change to display the new username if you change the username.

Protocol Tab Updates

Tracking ID: SCD-2501, 2502

The Protocol tab Community section has been updated. The Protocol Home Page icon now has a drop-down menu that provides:

- A link to the Molecular Devices Protocol Library (replaces the Export for Sharing icon)
- A link to the SpectraTest Validation Protocols.

The computer must have access to the internet.

Automation Port Configurable

Tracking ID: SCD-2526

The Automation Port can now be configured from the SoftMax Pro Options dialog (accessible from the Application menu) to prevent conflicts with the default port number 9000.

GxP Edition - Set In Progress Permission

Tracking ID: SCD-2549, 2622

A new permission has been added to allow users to set a document with the status Approved back to the In Progress status.

Link Graph Data Point to Row in Group Table

Tracking ID: SCD-2551

Added the ability to right-click on a data point in a scatter graph and select Highlight Data Source to highlight the sample in the Group section that corresponds to the data point.

Added 64-Bit Platform Support

Tracking ID: SCD-2581, 2543, 2541

SoftMax Pro runs as a 64-bit process. Compatibility confirmed for all instruments.

GxP Edition - Audit Trail Comment Upon Document Status Change

Tracking ID: SCD-2584

You must now enter an Audit Trail comment when you change the status of a document.

Historical Raw Data Saved Upon Overwrite

Tracking ID: SCD-2637

When you choose to overwrite exiting data in a Plate section, the software now saves the historical data to a new Historical Raw Data Overview dialog.

Chapter 4: Issues Addressed in SoftMax Pro Software 7.2

Standard Edition - Audit Trail Note Dialog Should Not Display

Tracking ID: SCD-617

The Audit Trail Note dialog no longer displays when you mask a well using the SoftMax Pro Software - Standard edition. It continues to display correctly for the SoftMax Pro Software - GxP edition.

GxP Edition - Expand/Collapse Section Error

Tracking ID: SCD-637

Corrected an error that displayed when you expanded or collapsed all sections in a document from the icons on the View tab.

SpectraMax iD3 - Mixed-Mode Kinetic Workflows Cause Error

Tracking ID: SCD-694

Corrected an issue that caused an error with the SpectraMax® iD3 Multi-Mode Microplate Reader instrument doing a mixed mode absorbance and kinetic read using a workflow.

Settings Change Causes 'Instrument Busy' Error

Tracking ID: SCD-800

For the SpectraMax iD3 Multi-Mode Microplate Reader, SpectraMax® iD5 Multi-Mode Microplate Reader, FilterMax™ F5 Multi-Mode Microplate Reader, and SpectraMax® Paradigm® Multi-Mode Microplate Reader if you change the settings for a Plate section during a read, the *Instrument Is Busy* error no longer displays.

Following Plot Deletion, Calculation Results Are Invalid

Tracking ID: SCD-843

Corrected an issue that caused the results to be invalid if you deleted a plot from a graph.

Formula Function InterpolatedMax Does Not Handle NaN Values

Tracking ID: SCD-873

Corrected the InterpolatedMax function to properly handle NaN values.

Renaming a Plot Does Not Update Parameter Initialization Formula Reference

Tracking ID: SCD-874

Corrected an issue that occurred where a parameter initialization did not update in a referenced plot when you renamed another plot in the same graph.

Comment for Custom Reduction Formula Not Retained or Persisted

Tracking ID: SCD-939

Corrected an issue that caused comments entered for a custom reduction formula to not be retained or persisted.

Complex Graphs Error

Tracking ID: SCD-1062

Corrected an issue that caused an error when you set the data source for the Y-axis to large negative numbers.

Recalculate Now Icon Issue

Tracking ID: SCD-1260

Corrected an issue that caused post reduction group blank subtraction to not recalculate when the Recalculate Now icon was clicked.

GxP Edition - System Audit Trail for Imported Documents Not Chronological

Tracking ID: SCD-1262

The System Audit Trail for imported document now displays in chronological order.

GxP Edition - Cannot Change the Sequence of the Sections in the Navigation Tree

Tracking ID: SCD-1266

Corrected an issue that prevented you from changing the sequence of the sections in the Navigation Tree for the SoftMax Pro Software - GxP edition.

GxP Admin Portal - Publisher Typo

Tracking ID: SCD-1353

The Publisher for the GxP Admin Portal Software now displays Molecular Devices, LLC.

SpectraMax ABS Plus & SpectraMax Plus384 - Wrong Command for Water Constant

Tracking ID: SCD-1372

For the SpectraMax® ABS Microplate Spectrophotometer and the SpectraMax® ABS Plus Microplate Spectrophotometer, when you set the Water Constant by invoking the F900 and F1000 filters directly, you now get the correct values.

GxP Edition - System Audit Trail Report Performance

Tracking ID: SCD-1494, 2745

Corrected an issue that prevented the generation of System Audit Trail reports that contained large amounts of events.

ScanLater User Interface

Tracking ID: SCD-1508

Corrected issues with the ScanLater user interface.

Cubic Spline x Interpolation Returns NaN

Tracking ID: SCD-1512

Cubic Spline x Interpolation returns the correct value.

SpectraMax L - Firmware Update

Tracking ID: SCD-1684

Updated the SoftMax Pro Software to correctly operate the firmware for the SpectraMax® L Luminescence Microplate Reader.

End Time Reduction

Tracking ID: SCD-1726

Corrected an issue in kinetic assays where the end time in Reduction could not be fixed in the protocol. After reading, the end time would always automatically change to 600 seconds.

GxP Edition - Update From v7.1.1 to v7.1.2 License Activation Causes Error

Tracking ID: SCD-1763

Corrected an error that occurred during the licensing of the SoftMax Pro GxP Software after updating the GxP Edition from version 7.1.1 to version 7.1.2.

Removed Memory Leak

Tracking ID: SCD-1867

Corrected a memory leak that caused a warning that the audit trail was corrupted when using the bulk import feature.

Options Dialog Saves Calculation Changes On Cancel

Tracking ID: SCD-1869

From the Application menu, the SoftMax Pro Options dialog no longer saves changes made on the Calculations tab when you click Cancel.

GxP Edition - API - Document ID Displays in Audit Trail

Tracking ID: SCD-1873

Corrected an issue that caused the document ID to display in the document audit trail instead of the document name and path when the software was used in Automation mode.

Accessor !AvgReadTemperature May Return Wrong Value

Tracking ID: SCD-1968

Corrected an issue where the accessor !AveReadTemperature returned the incorrect value when the first well was not read.

GxP Edition - Updated Software Dependencies

Tracking ID: SCD-2014

Updated the dependencies related to the GxP Admin Portal Software and the GxP Admin Software to address potential security issues.

Editing ParmXCovar Formulas Causes Error

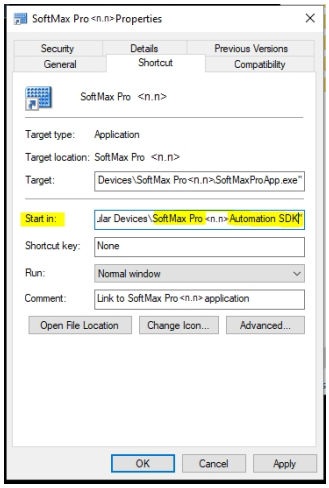
Tracking ID: SCD-2111

Corrected an issue where the ParmXCovar function did not handle a case of failed fit caused by empty data when you edited a formula.

StakMax - Start In File Path Length Issue

Tracking ID: SCD-2202

Corrected an issue that caused the StakMax software to not work if the Start In file path was too long.



Function For Fieller Confidence Interval With the Same Parameter Returns Wrong Value

Tracking ID: SCD-2377

Formulas such as ParmBRatioFiellerCI(Plot1@Graph1,Plot1@Graph1,0.05) now correctly return 1&1 for interval, since it is just the ratio of the parameter to itself.

GxP Edition - Document Changes Via API Correctly Display in System Audit Trail

Tracking ID: SCD-2413

Document changes created via the API display correctly in the System Audit Trail.

SpectraMax iD5 - Settings Window Size Issue

Tracking ID: SCD-2443

Corrected the display size of the Settings dialog for the SpectraMax iD5 Multi-Mode Microplate Reader because the last entry was previously cut off.

Updated Protocols

Tracking ID: SCD-2528 & 2761

The following protocols have been updated in the Protocol Library:

- SpectraMax ABS Spectra Test ABS1_V2.spr
- SpectraMax ABSPlus SpectraTest ABS1.spr
- BCA.spr
- CatchPoint SSE (ABS M2-M5e).spr
- CatchPoint SSE (i3x i3).spr
- CatchPoint SSE (iD3 iD5).spr
- CatchPoint SSE (Paradigm).spr
- Dual Luciferase Reporter Assay (FlexStation).spr
- ELISA HRP & TMB.spr
- GenScript cPass sVNT.spr
- Melamine ELISA.spr
- MitoXpress Xtra.spr
- MycoAlert Mycoplasma.spr
- RIDASCREEN Gliadin competitive.spr
- ValitaTiter (i3x i3).spr
- ValitaTiter (iD5).spr
- ValitaTiter (M5 M5e Flex3).spr
- ValitaTiter (Paradigm).spr

Frame Size Changes In Note Sections During Recovery

Tracking ID: SCD-2535

Corrected an issue when the text in a Note section spans the entire width of a frame and you switch to a different section in the document, the text in the Note section moves out of the frame and the frame size changes.

GxP Edition - Cannot Add More Than 524 Users to a Project

Tracking ID: SCD-2557

Corrected the Project user limit so that more than 524 users can now be assigned to a Project.

Corrected and Enhanced .xml Features

Tracking ID: SCD-2564

Corrected several issues related to the export of a document to the .xml output including:

- SCD-2571, 2572, 2602: Added additional document details to the exported .xml including read time, instrument name, cartridge name, shake settings, automix settings, PMT optics (read height), dark adapt, settling time, carriage speed, and other items.
- SCD-2563: Added Note section and Group section information to the exported data.
- Corrected the Read Order display (row and column were switched).
- SCD-2608, 2609: Can successfully export data from Cuvette Set sections to .xml.
- SCD-2608, 2609: Corrected an issue that prevented the export of Cuvette Set section data export to .xml -v7 format. Cuvette Set section data can also be exported to .txt and .xls formats.
- SCD-2705: Improved support for AutoExport to use v7 format.

Tracking ID: SCD-2618

To represent the hierarchical structure and to keep real underlying raw data, the structure of the new xml format was changed. This also resembles the data structure inside the software.

Each Plate section has only one real raw data, only one read settings, and read information.

Each Plate section has at least one representation (Plate Clone). In the new xml structure, the plate clone is a child section of the Plate section. The first plate clone is not obviously visible in software - it is just a Plate section. It has the same name as the parent Plate section, but it's exported/visible raw data are dependent on the reduction/template/display settings.

Each further plate clone is also part of the parent Plate section but has the name visible in the software.

GxP Edition - Function Editor and Graphing Permissions Enhanced

Tracking ID: SCD-2585

Corrected how the Function Editor permission corresponds to the Edit Graphs, Summaries, and Reductions permission to appropriately restrict activities and to properly log events in the System Audit Trail.

GxP Edition - Document Changed Event Description Clarified

Tracking ID: SCD-2598

When you changed a document but did not save the changes, the System Audit Trail recorded "*User discarded changes to the document.*" which was misleading.

The System Audit Trail now records "*User did not save changes in the document.*"

SpectraMax ABS Plus - Speed Read With Multiple Wavelengths Error

Tracking ID: SCD-2601

Speed read with multiple wavelengths on the SpectraMax ABS Plus Microplate Spectrophotometer and the SpectraMax Plus 384 Microplate Spectrophotometer causes the value for the second wavelength to be #ERR.

Speed read now automatically turn off the calibrate feature, so that speed read works as expected.

Enhanced Print Functionality

Tracking ID: SCD-2606

(SCD-1824) When you print a document as a .pdf, the data in Note sections and Groups sections can now be selected as text in the printed output file which allows you to parse or copy the text to a .txt format.

(SCD-1984) You now have the option to include the document audit trail with the document printout. If you select to include the document audit trail, you can choose to have the document audit trail print in the beginning of the printout or at the end of the printout.

The Printing Options dialog now has a check box.

- Select the Do Not Print Audit Trail check box to not print the audit trail with the document printout. Leave clear to print the audit trail with the document printout.

If you leave the Do Not Print Audit Trail check box clear, a second check box displays.

- Select the Print Audit Trail in the End of Document check box to print the audit trail at the end of the document printout. Leave clear to print the audit trail in the beginning of the document printout.

(SCD-1992) The data in Plate sections and Cuvette Set sections could not be selected as text in the printed output file which prevented users from parsing or copying the text to a .txt format.

(SCD-2062) You now have the option whether or not to print the instrument settings and reduction settings (legends) with the document printout. The Printing Options dialog now has a check box.

- Select the Plate and Cuvette Set Sections Include Legends check box to print the instrument settings and reduction settings with the document printout. Leave clear to not print the instrument settings and reduction settings with the document printout.

Cuvette Set !TimeRun Formula Error

Tracking ID: SCD-2635

Documents that contained a Cuvette Set section in which the !TimeRun formula was used for a cuvette that was not in the A1 position, could not be opened.

Conversion of Floating Point Numbers to Strings

Tracking ID: SCD-2668

A recent change in the Microsoft standard C++ library changed the rule for rounding numbers that are floating point ties. To preserve the previous behavior, the standard C library is now used.

Formula Editor Syntax Check Error

Tracking ID: SCD-2711

The Formula Editor dialog incorrectly displayed a syntax error when a valid group column formula was entered.

Extended Services Password Limit

Tracking ID: SCD-2717

The default services password has been extended to 22 characters.

SpectraMax Mini - Protocols Corrupted

Tracking ID: SCD-2718

Corrected an issue where the protocols designed for the SpectraMax Mini displayed an error message that they were corrupted.

Updated Instrument User Guides

Tracking ID: SCD-2763

Updated the instrument user guides located in the following folder:

C\Program Data\Molecular Devices\User Guides

SpectraMax Mini - Read With Drawer Open Error

Tracking ID: SCD-2908

Corrected an error that occurred when a read was started on a SpectraMax Mini when the plate drawer was open.

Included Protocols for the ABS2 Validation Plate

Tracking ID: SCD-2923

Added the protocols for the SpectraTest ABS2 Validation Plate in the Protocol Library. These previously had to be added by the user.

SpectraMax iD3 and SpectraMax iD5 - Information Dialog Issue

Tracking ID: SCD-2924

The Information dialog displays correctly when the icon on the Operations tab is clicked.

Plate Name Does Not Import Correctly

Tracking ID: SCD-3031

Corrected an issue where Plate data did not correctly interpreted the µ symbol.

Text Entry Causes Performance Delay

Tracking ID: SCD-3041

Improved the software performance in workflows that previously had delays during text entry.

GxP Edition - Database Backup Tool Version Number

Tracking ID: SCD-3045

Corrected the version number that displays in the SoftMax Pro Database Backup tool that is optionally used to backup the SoftMax Pro GxP Software Suite database in single computer installations.

Error During Update If Config.json File is Open

Tracking ID: SCD-3056

Corrected issue that caused an error that displayed during a software update if the config.json file was open.

Document Audit Trail Font Size

Tracking ID: SCD-3077

Document audit trails that contain more than 250 entries automatically display and print with a font size of 9 instead of the standard font size 12 for less scrolling and less paper when printed.

Chapter 5: Known Issues in SoftMax Pro Software 7.2

Print Preview is Blank

Tracking ID: SCD-2937

Due to an update in the Microsoft software, print preview displays as blank.

To correct this issue, run the following command from an elevated command prompt:

reg add "HKLM\SOFTWARE\Microsoft\.NETFramework\Windows Presentation Foundation\XPSAllowedTypes" /v "DisableDec2022Patch" /t REG_SZ /d "*" /reg:64

Potential Calculation Result Differences

With the update to support the 64-bit platform, there is the potential that calculation results may differ from what was calculated using a 32-bit platform.

If there are differences, they are not statistically significant. They affect floating point decimal numbers eight or more decimal places to the right.

Document Backward Compatibility Message

If you create a document in version 7.2 and attempt to open the document in version 7.1.x, the message *Document <name> does not exist* may display. The document exists but cannot be opened in the previous version.

Contact Us

Phone: +1-800-635-5577
Web: moleculardevices.com
Email: info@moldev.com

Visit our website for a current listing of worldwide distributors.

The trademarks used herein are the property of Molecular Devices, LLC or their respective owners. Specifications subject to change without notice. Patents: www.moleculardevices.com/patents
FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES

©2023 Molecular Devices, LLC.
All rights reserved.
Version 7.2