SoftMax® Pro

Data Acquisition and Analysis Software

Version 7.0.1

Release Notes

MOLECULAR DEVICES

SoftMax Pro Software, Version 7.0.1
November 2016

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

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

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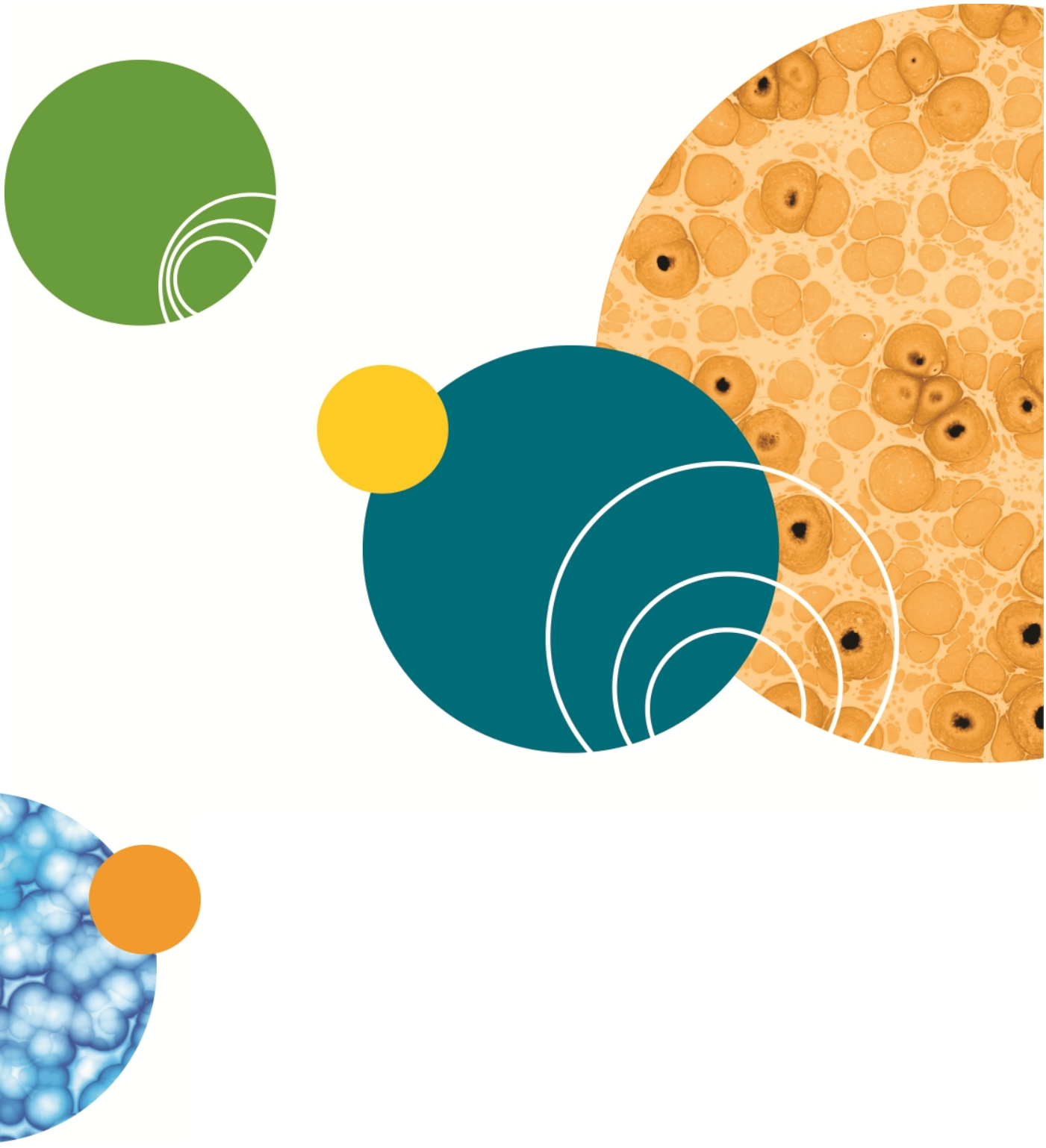
Molecular Devices, LLC is ISO 9001 registered.

Contents



Chapter 1: SoftMax Pro Software General Information

SoftMax® Pro Data Acquisition and Analysis Software controls Molecular Devices® spectrophotometers and absorbance, luminescence, and fluorescence microplate readers and detection platforms. For a complete list of the instruments supported by this release of the SoftMax Pro Software, see Supported Instruments on page 11.

Over 120 assay protocols are included in the software to speed life science research and drug discovery assay development and screening. Researchers 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.

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

SoftMax Pro Software 7.0.1 is available for a PC-compatible computer using a Windows 7 (SP1), Windows 8, or Windows 10 operating system.

This chapter contains the following topics:

Computer System Requirements

SoftMax Pro Software version 7.0.1 can be installed on a computer with the following system specifications.

Table 1-1: Minimum and Recommended Requirements

Item	Minimum	Recommended
Processor	Single-core, 2 GHz or faster	Quad core or faster
Operating system (SoftMax Pro Software requires the Professional Edition of the operating systems listed.)	Windows 7 (SP1 or newer), 32-bit or 64-bit (x86 or x64) and .NET Framework 4.6 (.NET Framework 4.6 is installed automatically by the SoftMax Pro Software installer if required.)	Windows 7 (SP1 or newer), 32-bit or 64-bit (x86 or x64), Windows 8, 32-bit or 64-bit (x86 or x64), or Windows 10, 32-bit or 64-bit (x86 or x64) The **SoftMax Pro MiniMax Imaging Edition** must be installed on a 64-bit operating system.
Data connection	RS-232 serial port or USB 2.0 port Network port (depending on the instrument)	USB 2.0 ports For instruments that require an RS-232 serial port, you can use a USB 2.0 port with a Keyspan USB-to-serial adapter. Keyspan USB-to-serial adapters have been field tested and given approval by Molecular Devices. Network port
Memory	2 GB RAM	4 GB RAM If running on a virtual machine, Molecular Devices recommends a minimum of 6 GB RAM. For automation, Molecular Devices recommends a minimum of 8 GB RAM.
Hard drive	500 MB of available space	1 GB of available space, or more
Graphics display	Graphics display adapter 1024 x 768 or higher-resolution display	32-bit graphics display with 256 MB video RAM 1280 x 1024 or higher-resolution display
Software activation	Internet connection or external USB drive	Internet connection or external USB drive

Note: Installing and using the SoftMax Pro Software on the Windows XP operating system is no longer supported. The software is neither tested nor validated on Windows XP.

To prevent data loss, turn off all sleep and hibernation settings for the hard disk, the CPU, and the USB ports. Also, disable automatic Windows Updates. You can update Windows manually when the instrument is not being used by the software. You can set these options in Windows Control Panel. See Required Computer Settings on page 8.

The SpectraMax MiniMax 300 Imaging Cytometer is shipped with a computer that meets greater minimum computer system specifications than those required for the standard installation of the SoftMax Pro Software. See Optimizing Image Acquisition.

Installing the SoftMax Pro Software

Note: Molecular Devices recommends that you disable your anti-virus program before installing the SoftMax Pro Software, as it might interfere with the installation process.

1. Make sure that all connected instruments are powered off.
2. Start the installation program.
   - If you downloaded the software installation, double-click the **SoftMaxPro7.0.1Setup.exe** file to start the installation program.
   - If you are installing from a USB flash drive, insert the SoftMax Pro Software flash drive into a USB port, and then navigate to the flash drive and double-click **SoftMaxPro7.0.1Setup.exe**.
3. Select the edition of the SoftMax Pro Software that you need to install.
   - The **SoftMax Pro Standard Edition** supports most Molecular Devices microplate readers. This edition does not support the SpectraMax MiniMax 300 Imaging Cytometer.
   - The **SoftMax Pro MiniMax Imaging Edition** must be installed to support the features of the SpectraMax MiniMax 300 Imaging Cytometer. This edition requires a 64-bit operating system.

   Note: You must have the correct license for the edition of the software that you need to install.
4. Follow the on-screen instructions to finish installing the software.

   Note: SoftMax Pro Software Version 7.0.1 installation includes the QuickSync Tool for use with the SpectraMax® iD3 Multi-Mode Microplate Reader. For more information, see the *SpectraMax iD3 Multi-Mode Microplate Reader User Guide.*
5. Before starting the software, power on the connected instruments.

Note: If you have anti-virus programs installed, Molecular Devices recommends that you add the SafeNet HASP License Manager Service (hasplms.exe) to the list of trusted applications.

Required Computer Settings

Allowing your computer to hibernate or turn off during data acquisition can interrupt the transfer of data from the instrument to the software and result in data loss.

To prevent data loss, turn off all sleep and hibernation settings for the hard disk, the CPU, and the USB ports. Also, disable automatic Windows Updates. You can update Windows manually when the instrument is not being used by the software.

You can set these options in 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**.
10. Return to the home screen of **Control Panel**.
11. Click **System and Security**.
12. Under **Windows Update**, click **Turn automatic updating on or off**.
13. Under **Important Updates**, make sure that **Install updates automatically** is not selected. Select one of the other options.
14. Click **OK**.
15. Close **Control Panel**.

Decimal Symbol Must be a Period

For the SoftMax Pro Software to properly 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 > Regional and Language**.

Manually Installing USB Drivers in Windows 7

For some Windows 7, 64-bit operating system installations, automatic installation of the USB instrument driver for some instruments does not occur due to elevated security settings.

If the SoftMax Pro Software cannot connect to your instrument after installing the software, try shutting down the software and then restarting Windows.

If restarting Windows does not permit access to the instrument, then do the following steps to install the driver:

1. Open **Control Panel**.
2. Click **Hardware and Sound**.
3. Under **Devices and Printers**, click **Device Manager**.
4. In **Device Manager**, double-click the unknown device with the yellow warning icon.
5. Click the **Driver** tab and then click **Update Driver**.
6. Click **Browse my computer for driver software**.
7. Click **Browse** and select the SoftMax Pro Software installation folder.

   The default installation path is:

   C:\Program Files (x86)\Molecular Devices\SoftMax Pro 7.0.1.
8. In the Windows Security warning, click **Install this driver software anyway**.

Uninstalling SoftMax Pro Software

Before uninstalling the program, make sure to back up your data and saved files to a folder outside of the SoftMax Pro Software folder.

1. Click **Start > Control Panel**.
2. Click **Programs and Features**.
3. In the list that is displayed, click **SoftMax Pro 7.0.1**.
4. Click **Uninstall** or **Remove**.
5. Follow the on-screen instructions to finish uninstalling the program.

Note: This is the recommended method of removing SoftMax Pro Software from a Windows-based computer since it also removes related information from the Windows Registry.

Starting the Software

To start the software under normal conditions, wait for the connected instrument to complete its start-up sequence, and then double-click the **SoftMax Pro 7.0.1** icon on your desktop to start the program. To start the program from the Windows Start menu, click **Start > All Programs > Molecular Devices > SoftMax Pro 7.0.1 > SoftMax Pro 7.0.1**.

Note: When connecting to the SpectraMax i3x and i3 Multi-Mode Detection Platforms, the SpectraMax Paradigm Multi-Mode Microplate Reader, or the FilterMax F3 and F5 Multi-Mode Microplate Readers for the first time, the latest firmware updates automatically install as needed.

Note: You can start the SoftMax Pro Software with or without an attached instrument. When no instrument is attached you cannot acquire data. To do operations that require data you must open an existing data file.

Registering the Software

The software product key is included with the SoftMax Pro Software package. The instrument serial number is located on a label affixed to the rear of the instrument.

Activating Your Software License

If your license is inactive or is ready to expire, then the **Software License Activation** dialog is displayed when you start the SoftMax Pro Software.

If the software is already running, click the **Help** tab in the ribbon and then click **Software License**.

The **Software License Activation** dialog lists the current status for each of the available licenses. For information about the features of your license or to obtain a new license key, contact your Molecular Devices representative.

To activate your SoftMax Pro Software license, click **Activate** to open the **Activate Online** dialog.

- If you have access to the internet, type the **Product Key** in the field, click **Activate Online**, and then follow the on-screen instructions to activate your license.
- If you do not have access to the internet, then click **Activate Offline** and follow the on-screen instructions to activate your license.

  To activate offline, you need your product key, a computer that has access to the internet, and a USB drive for transferring files between the computers.

  On the Internet-enabled computer, go to:
  https://smplicensing.moleculardevices.com

  Follow the on-screen instructions to activate your license.

Supported Instruments

User guides for each of the supported instruments are installed during the SoftMax Pro Software installation. You can view these user guides from the Windows Start menu at **Start > All Programs > Molecular Devices > SoftMax Pro 7.0.1 > Hardware User Guides**.

This release of the SoftMax Pro Software supports the following instruments:

- SpectraMax® iD3 Multi-Mode Microplate Reader
- SpectraMax® i3x Multi-Mode Detection Platform
- SpectraMax® i3 Multi-Mode Detection Platform
- SpectraMax® Paradigm® Multi-Mode Microplate Reader
- VersaMax™ Microplate Reader
- SpectraMax® Plus 384 Absorbance Microplate Reader
- SpectraMax® M5 and M5e Multi-Mode Microplate Readers
- SpectraMax® M4 Multi-Mode Microplate Reader
- SpectraMax® M3 Multi-Mode Microplate Reader
- SpectraMax® M2 and M2e Multi-Mode Microplate Readers

- SpectraMax® 340PC 384 Absorbance Microplate Reader
- SpectraMax® 190 Absorbance Microplate Reader
- Gemini™ XPS Microplate Reader
- Gemini™ EM Microplate Reader
- FlexStation® 3 Multi-Mode Microplate Reader
- FilterMax™ F5 Multi-Mode Microplate Reader
- FilterMax™ F3 Multi-Mode Microplate Reader
- DTX 800 and DTX 880 Multi-Mode Microplate Readers
- Vmax® Kinetic Microplate Reader
- EMax® Endpoint Microplate Reader
- EMax® Plus Microplate Reader
- StakMax® Microplate Handling System

A detection cartridge contains its own independent light source, optics, and electrical components needed to do specific read modes for specific applications. The read capabilities of the SpectraMax i3x Instrument can be upgraded with user-installable detection cartridges. The SpectraMax Paradigm Multi-Mode Microplate Reader requires detection cartridges to do reads.

Frequently Asked Questions

Can I install SoftMax Pro Software v7.0.1 on a computer that has SoftMax Pro Software v6.5.1 or earlier installed?

Yes. SoftMax Pro Software v7.0.1 is installed independently of SoftMax Pro Software v6.5.1 or earlier and will not interfere with the operation of a previously installed version. This means, you can install two different versions on the same computer.

Note: Only one version of the software can be connected to an instrument at a time.

Can I open SoftMax Pro Software 6.5.1 or earlier protocol and data files in SoftMax Pro Software v7.0.1?

SoftMax Pro Software v7.0.1 uses the same file formats as v6.x: *.spr and *.sprx for protocol files and *.sda and *.sdax for data files. You can open SoftMax Pro Software v5.x files (*.pda, *.eda, *.ppr, and *.epr) directly in SoftMax Pro Software v7.0.1. In the Open dialog, you choose the target file types and SoftMax Pro Software v7.0.1 displays files you can open. You cannot, however, save files to the SoftMax Pro Software v5.x file format, nor can you open SoftMax Pro Software 7.0.1 files in SoftMax Pro Software v5.x.

Can I use the same formula (syntax) in SoftMax Pro Software v7.0.1 as SoftMax Pro Software v6.5.1 or earlier?

Yes. SoftMax Pro Software v7.0.1 uses the same formula syntax as SoftMax Pro Software v6.x and v5.x.

Can I run SoftMax Pro Software v7.0.1 on Apple MacOS?

Yes. SoftMax Pro Software v7.0.1 can be run on a virtual machine running Windows and a third-party tool such as VMWare Fusion. SoftMax Pro Software v7.0.1 cannot, however, run natively on the MacOS.

Can I use SoftMax Pro Software v7.0.1 without activation?

SoftMax Pro Software v7.0.1 can be used for 14 days after installation, and then it must be activated. You can activate up to four (4) different computers with a standard product key. Other multiple license and site licence product keys are also available.

Obtaining Support

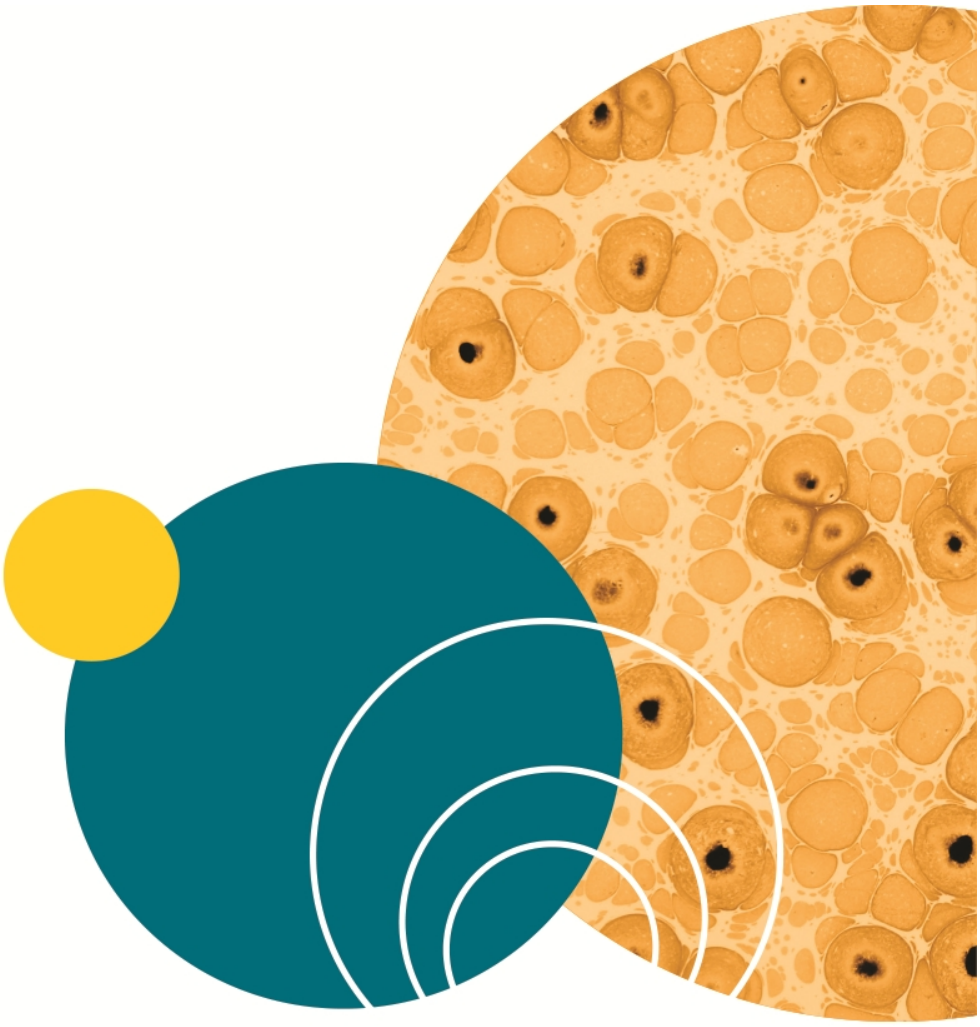
Molecular Devices is a leading worldwide manufacturer and distributor of analytical instrumentation, software, and reagents. We are committed to the quality of our products and to fully supporting our customers with the highest possible level of technical service.

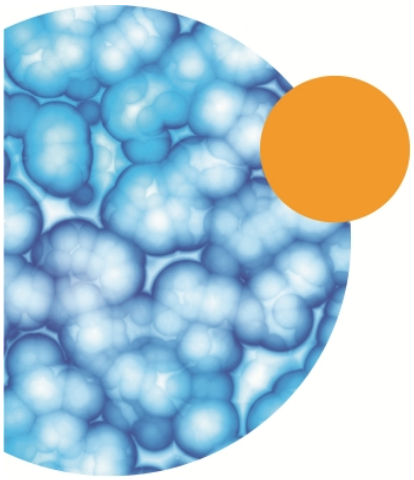
Our support web site, www.moleculardevices.com/support, has a link to the Knowledge Base with technical notes, software upgrades, safety data sheets, and other resources. If you do not find the answers you are seeking, follow the links to the Technical Support Service Request Form to send an email message to a pool of technical support representatives.

You can contact your local representative or contact Molecular Devices Technical Support by telephone at 800-635-5577 (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.

Please have your instrument serial number or Work Order number and your software version number available when you call.





Chapter 2: SoftMax Pro Software Version 7.0.1: Software Release Notes

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SoftMax® Pro Data Acquisition and Analysis Software version 7.0.1 is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 7.0, the last general release of the SoftMax Pro Software.

To obtain a copy of the release notes for versions older than 7.0, contact technical support. See Obtaining Support on page 13.

New in SoftMax Pro Software v7.0.1

The following new feature is included in SoftMax Pro Software version 7.0.1.

Support for the SpectraMax iD3 Reader

The SpectraMax® iD3 Multi-Mode Microplate Reader provides a touch screen interface for integrated instrument control, data display, and the ability to export results for statistical data analysis.

The monochromator-based instrument supports three read modes:

- UV and Visible Absorbance (ABS)
- Fluorescence Intensity (FL)
- Luminescence (LUM)

Optional integration of the instrument with a computer enables you to export data over your intranet or via a USB flash drive in an Excel format for further analysis.

You can operate the instrument via the SoftMax Pro Software to collect data from one or more microplates and store the data in a single file, using the same or different instrument settings for different microplates. Assays that require a read in two or more read modes or read types can be combined in a single experiment and run with a single command in the SoftMax Pro Software, by defining separate microplate reads and enabling Auto Read.

For information on the acquisition and analysis capabilities of the SoftMax Pro Software, see the *SoftMax Pro User Guide*.

Note: When you operate the instrument via a computer running the SoftMax Pro Software, the instrument touch screen is disabled.

Issues Addressed in SoftMax Pro Software v7.0.1

The following issues were addressed in SoftMax Pro Software version 7.0.1.

Cannot Auto Save Data in NTFS Folders That Do Not Have Delete or Modify Permissions

Tracking ID: 20362

In the Auto Save Properties dialog, assigning a folder with deny delete Windows NTFS permissions for a file location resulted in an error message reporting that the file path either does not exist or cannot be accessed by the current user.

Resolution:

The software will allow the user to assign the folder if the user is part of a network user group, the user has delete or modify permissions for the selected folder, and the folder is local or on a network. The software will not allow the user to assign the folder if using a local user account on a computer that is not part of a domain or using a domain account for network access (for example, by mapping a drive using a domain account).

Impact of fix:

This fix has no impact on current workflow or data.

The Software Cannot Start Without Prerequisite Redistributable Software

Tracking ID: 20372

If the SoftMax Pro Software version 7.0 is installed on a computer that already has "Microsoft Visual C++ 2015 Redistributable (x64) – 14.0.23026" installed, the SoftMax Pro Software installer does not install the prerequisite version of the redistributable "Microsoft Visual C++ 2015 Redistributable (x86) – 14.0.23026". In this case, the SoftMax Pro Software version 7.0 cannot start.

Resolution:

The SoftMax Pro Software version 7.0.1 installer installs the appropriate versions of the prerequisite redistributable software.

Impact of fix:

This fix has no impact on current workflow or data.

Chapter 3: SoftMax Pro Software Version 7.0: Software Release Notes

SoftMax Pro Data Acquisition and Analysis Software version 7.0 is a major release. The following is a summary of the changes incorporated in this revision as compared to version 6.5.1, the last general release of the SoftMax Pro Software.

To obtain a copy of the release notes for versions older than 7.0, contact technical support. See Obtaining Support on page 13.

New in SoftMax Pro Software v7.0

The following new features are included in SoftMax Pro Software version 7.0.

Support for the FlexStation 3 Reader

The FlexStation® 3 Multi-Mode Microplate Reader combines the performance of a dual-monochromator, multi-mode microplate reader and an integrated 8-channel or 16-channel pipettor into one compact bench-top reader. This integrated system provides a multi-detection platform capable of increasing liquid-handling throughput and flexibility for biochemical-based and cell-based assays. The system is equally amenable to agonist and antagonist assay formats. Combining fluid transfer with multi-detection optics provides a microplate reader capable of doing a broad span of applications for the drug discovery and research environments.

The dual monochromators in the FlexStation 3 reader let you target the optimal assay excitation and emission wavelengths, while eliminating the need to change expensive band pass filters between experiments.

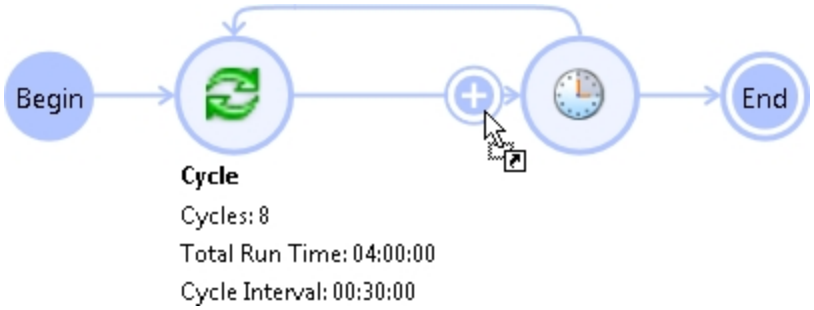
For most read modes, endpoint, kinetic, multi-point well-scan, and spectrum microplate applications plus the dedicated flex read type can be set up and run with the SoftMax Pro Software.

Some improvements have been made since version 5.x of the software. For example, the spectrum and well scan read types can include liquid handling in a version 7.x protocol. For more information on the improvements that were made, contact technical support. See Obtaining Support on page 13.

Workflow Editor

The **Workflow** view provides you with a drag-and-drop workflow editor and tools to run and monitor a workflow. In Workflow view you can define a workflow using the defined **Plate** sections and instrument settings to run multitask kinetic reads that last hours or days.

Drag tasks from the menu on the left to the timeline on the right.



Define repeated tasks by placing the tasks in a defined **Cycle** task.

Tip: You can gather data over long periods of time by using a Kinetic read type and then defining the Timing settings to acquire a single point with each read.

Note: Place only Kinetic reads within a cycle. Using other read types causes the software to overwrite the previously acquired data in the Plate section. You can place an Endpoint, Well Scan, Spectrum, or Flex read before or after a cycle to preserve the acquired data.

Discontinuous Kinetics

To stop and restart a Kinetic read while the **Plate** section is being read, click the **Interrupt** button to pause the read, and then click the **Append** button to continue the Kinetic read from where it left off. When you interrupt a read, the instrument finishes reading all the selected wells in the microplate and then waits for user input before continuing. This type of discontinuous kinetic read can help with acquisition development.

After a Kinetic read ends successfully, you can read the same **Plate** section again and append the data to the data that already exists in the **Plate** section by clicking the **Append** button.

Note: If you stop a Kinetic read before it completes, you cannot restart the read or append data to the read. To use these features, you must either let the read finish on its own or click **Interrupt** to pause the read.

New Protocols

The following protocols have been added to the installed software.

- **Aequorin GPCR_FlexStation3**

  Location: **Cell Signaling & Transport** and **Molecular Devices Reagents > Cell Signaling & Transport**

  This protocol is designed to facilitate the acquisition and analysis of data for "flash" type luminescent GPCR assays using aequorin as a Ca++ reporter. When using the FlexStation 3 reader to do these assays, cells are generally plated in a white, clear-bottomed microplate (can be allowed to attach and grow overnight), and then test compounds and controls are dispensed into the assay plate using the integrated pipettor in the FlexStation 3 reader.

- **Calcium Assay**

  Location: **Cell Signaling & Transport** and **Molecular Devices Reagents > Cell Signaling & Transport**

  Use this protocol to detect and analyze data for Molecular Devices FLIPR Calcium Assays. This protocol is suitable for the SpectraMax i3x Instrument with the Injector Cartridge.

- **Membrane Potential**

  Location: **Cell Signaling & Transport** and **Molecular Devices Reagents > Cell Signaling & Transport**

  This protocol is designed for using the Molecular Devices FLIPR Membrane Potential Assay in the FlexStation 3 reader.

- **FlexStation 3 ABS1**

  Location: **Reader Validation-Plate Abs**

  This protocol is designed for using the SpectraTest ABS1 Absorbance Validation Plate with the FlexStation 3 reader.

- **FlexStation 3 FL1**

  Location: **Reader Validation-Plate Fl**

  This protocol is designed for using the SpectraTest FL1 Fluorescence Validation Plate with the FlexStation 3 reader.

- **FlexStation 3 LM1**

  Location: **Reader Validation-Plate Lum**

  This protocol is designed for using the SpectraTest LM1 Luminescence Validation Plate with the FlexStation 3 reader.

- **F3 or DTX800 Instrument**

  Location: **Reader Validation-Plate Multi-Mode > FilterMax or DTX**

  This protocol is designed for using the Multi-Mode Validation Plate with the FilterMax F3 Multi-Mode Microplate Reader or the DTX 800 Multi-Mode Microplate Reader.

- **F5 or DTX880 Instrument**

  Location: **Reader Validation-Plate Multi-Mode > FilterMax or DTX**

  This protocol is designed for using the Multi-Mode Validation Plate with the FilterMax F5 Multi-Mode Microplate Reader or the DTX 880 Multi-Mode Microplate Reader.

- **LUM ALPHA Cartridges**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax i3(x)**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax i3x or SpectraMax i3 Instrument and a Glow Luminescence (LUM) Detection Cartridge or AlphaScreen Detection Cartridge.

- **TRF FPOL HTRF Cartridges**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax i3(x)**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax i3x or SpectraMax i3 Instrument and a Time Resolved Fluorescence (TRF-EUSA) Detection Cartridge, Fluorescence Polarization (FP) Detection Cartridge, or Cisbio HTRF Detection Cartridge.

- **ABS-MONO Cartridge**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax Paradigm**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax Paradigm Instrument and an Absorbance Detection Cartridge.

- **FI-CFP-YFP Cartridge**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax Paradigm**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax Paradigm Instrument and a Fluorescence Intensity (FI) (CFP-YFP) Detection Cartridge.

- **FI-COFL Cartridge**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax Paradigm**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax Paradigm Instrument and a Fluorescence Intensity (FI) (coum-fluor) Detection Cartridge.

- **FI-Cy3Cy5 Cartridge**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax Paradigm**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax Paradigm Instrument and a Fluorescence Intensity (FI) (Cy3-Cy5) Detection Cartridge.

- **FI-FLRH Cartridge**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax Paradigm**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax Paradigm Instrument and a Fluorescence Intensity (FI) (fluor-rhod) Detection Cartridge.

- **G-BLAZER Cartridge**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax Paradigm**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax Paradigm Instrument and a Fluorescence Intensity (FI) GeneBLAzer Detection Cartridge.

- **LUM ALPHA Cartridge**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax Paradigm**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax Paradigm Instrument and a Glow Luminescence (LUM) Detection Cartridge or AlphaScreen Detection Cartridge.

- **MULTI Cartridge**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax Paradigm**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax Paradigm Instrument and a Multi-Mode (MULTI) Detection Cartridge.

- **MULTI-TOX Label Blue Cartridge**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax Paradigm**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax Paradigm Instrument and a Fluorescence Intensity Dual Label (FI-DL) (MultiTox-Fluor) Detection Cartridge and the AFC (amino-fluorocoumarin) label.

- **MULTI-TOX Label Green Cartridge**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax Paradigm**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax Paradigm Instrument and a Fluorescence Intensity Dual Label (FI-DL) (MultiTox-Fluor) Detection Cartridge and the R110 (rhodamine 110) label.

- **TRF FPOL HTRF Cartridges**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax Paradigm**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax Paradigm Instrument and a Time Resolved Fluorescence (TRF-EUSA) Detection Cartridge, Fluorescence Polarization (FP) Detection Cartridge, or Cisbio HTRF Detection Cartridge.

- **TUNE Cartridge**

  Location: **Reader Validation-Plate Multi-Mode > SpectraMax Paradigm**

  This protocol is designed for using the Multi-Mode Validation Plate with the SpectraMax Paradigm Instrument and a Tunable Wavelength (TUNE) Detection Cartridge.

New Formula Functions

The following formula functions have been added to the installed software.

For a full description of the formula functions in the software, see the *SoftMax Pro Software Formula Reference Guide*.

ANOVAFStatAndProb

ANOVAFStatAndProb((x1~x2~...~xN)&(y1~y2~...~yN))

Does standard ANOVA analysis on data specified as an array list of numbers. The format for the data is group1&group2&...&groupK, where each group is a list of numbers x1~x2~...~xN.

The returned value is an array of two numbers: the F-value and its associated probability.

Under the null hypothesis that all groups have the same mean, the F-value is an F-statistic with numerator degrees of freedom = (number of groups - 1) and denominator degrees of freedom = (number of data - number of groups).

For example:

ANOVAFStatAndProb((1~2~3)&(4~5~6))

InterpolatedXData

InterpolatedXData(Parameter)

Takes one parameter, a list of number arrays, and returns an array of interpolated numbers. Each interpolated number is the average of the corresponding input values. The result is equivalent to using the **Average** function.

Example: InterpolatedXData(!A1Lm1XVals~!A1Lm2XVals)

InterpolatedYData

InterpolatedYData(ParameterX,ParameterY)

Takes two parameters, two lists of number arrays of the same size (X and Y), and returns a list of number arrays, with each array containing interpolated Y values.

Example: InterpolatedYData(!A1Lm1XVals~!A1Lm2XVals,!A1Lm1~!A1Lm2)

Returns the interpolated values for both wavelengths Lm1 and Lm2.

InterpolatedYDataAtXPoints

InterpolatedYDataAtXPoints(ParameterX,ParameterY,ParameterZ)

Takes three parameters: an array of numbers X, array of numbers Y, and an array of x-interpolation points. Returns an array containing interpolated Y-values at the specified interpolation points.

Example: InterpolatedYDataAtXPoints(!A1Lm1XVals,!A1Lm1,InterpolatedXData (!A1Lm1XVals~!A1Lm2XVals))

Returns the interpolated values for wavelength Lm1.

LocalTimeNumeric

LocalTimeNumeric(Parameter)

Returns an array of numbers encoding the local time and date:

- Seconds
- Minutes
- Hours
- Day of the month (1 to 31)
- Month (1 to 12)
- Year
- Day of the week (1 to 7)
- Day of the year (1 to 366)
- Daylight saving time in use (0 or 1)

Example: LocalTimeNumeric(!A1Lm1TimeOrigin@Plate1)

See !TimeOrigin on page 24.

UTCTimeNumeric

UTCTimeNumeric(Parameter)

Returns an array of numbers encoding the universal coordinated time (UTC) and date:

- Seconds
- Minutes
- Hours
- Day of the month (1 to 31)
- Month (1 to 12)
- Year
- Day of the week (1 to 7)
- Day of the year (1 to 366)
- Daylight saving time in use (0 or 1)

LocalTimeText

LocalTimeText(Parameter)

Returns a text string of the local time and date.

New Formula Accessors

The following accessors have been added to the installed software.

For a full description of the formula accessors in the software, see the *SoftMax Pro Software Formula Reference Guide*.

!TransferRate

!TransferRate1, !TransferRate2, !TransferRate3

!WellTransferRate1, !WellTransferRate2, !WellTransferRate3

For the FlexStation 3 reader only.

Returns the transfer rate in microliters per second for the corresponding compound transfer used with a Plate section.

!TransferTime

!TransferTime1, !TransferTime2, !TransferTime3

!WellTransferTime1, !WellTransferTime2, !WellTransferTime3

For the FlexStation 3 reader only.

Returns the time points for the corresponding compound transfer used with a Plate section.

!TransferVolume

!TransferVolume1, !TransferVolume2, !TransferVolume3

!WellTransferVolume1, !WellTransferVolume2, !WellTransferVolume3

For the FlexStation 3 reader only.

Returns the volume in microliters for the corresponding compound transfer used with a Plate section.

!TimeOrigin

!LmXTimeOrigin

!A1LmXTimeOrigin

!WellTimeOrigin

For a kinetic data set for the specified wavelength, this accessor returns the number of seconds since the beginning of time when the first measurement was recorded. The beginning of time is not specified. Generally, this accessor is used to determine the difference in time between two measurements, allowing different data sets to reference a common time origin.

!AllTimeOrigins

!LmXAllTimeOrigins

For a kinetic data set for the specified wavelength, this accessor returns as an array the time origins for all wells in a plate.

New Automation Command

The following automation command has been added to the installed software.

For a full description of the automation commands in the software, see the *SoftMax Pro Software Automation API Reference Guide*.

AppendData

```
Int32 AppendData()
```

Purpose

Reads the current **Plate** section and appends the new data to the existing data.

If the current section is not a **Plate** section, then the next **Plate** section is read.

Parameters

None

Modifications Made to SoftMax Pro Software v7.0

The following modifications were made to SoftMax Pro Software version 7.0.

Time Alignment Reduction

The **Time Alignment** option in the **Reduction** dialog was formerly known as **Interpolate Raw Data**. It now also includes the **Interpolate Wells** option that was previously an export-only option in the SoftMax Pro Software v5.x.

For FlexStation Instrument data, each data value is logged with its own read time. The SoftMax Pro Software can align the time points by **Wavelength** or by **Well** and interpolate the data against a single time point.

- Select the **Time Alignment** check box and then click **Wavelength** so that you can do wavelength combination calculations correctly. For example, you can take a ratio of two different wavelengths (Lm1/Lm2) in a single well that have been read at two different time points. The **Wavelength** option is available only when two or more wavelengths are present in the data.

  With **Wavelength** selected, the SoftMax Pro Software uses quadratic interpolation to calculate the interpolated values. This results in the loss of one point at each end of the plot. Before starting the calculation, the software determines the starting point by averaging the initial data points of the separate wavelengths. For example, if the first data points of the two wavelengths have time values of 0.3 and 0.5 seconds, the software averages these data points and uses 0.4 seconds as its initial point for interpolation.
- Select the **Time Alignment** check box and then click **Well** to normalize the kinetic read times of the wells in the column against the read time of the first well in the column.

  Injection occurs at the same time in all the wells of a column, but each of the wells is read sequentially. So, each well is read at a different time point during the reaction from the injection. With **Well** selected, the data in the wells are interpolated against the time point of the read of the first well.

Other Modifications

The following minor modifications were made to the software for this release:

- The **View** tab in the ribbon contains a new section called **Expand/Collapse Sections**. Click an option to **Collapse All Sections** or to **Expand All Sections** in the workspace.
- The **Temperature**, **Shake**, and **Open / Close** buttons were moved from the **Home** tab to the **Operations** tab in the ribbon.
- The **Shake** option has a new keyboard shortcut. Hold down the **F8** key to shake the microplate in the chamber. Release the key to stop the shake operation.

  The **Shake** option is now available for the SpectraMax i3x, SpectraMax i3, and SpectraMax Paradigm Instruments. The shake operation does a linear mode, medium intensity shake of the microplate in these instruments.
- The **Show Hide group table columns** dialog now has **Hide All** and **Show All** buttons.
- The curve fit selection list has been enhanced to provide more information to help with the selection. These selections are shown in the **Fit** list in the toolbar at the top of the **Graph** section. You can filter the list of curve fits by selecting a category from the **Category** list.

Protocol Modifications

Some of the protocols in the **Protocol Library** have been moved or duplicated in other folders.

- The **IMAP** folder has been removed, and all the IMAP protocols have been added to the **Fluorescence Polarization** folder. The IMAP protocols are also available in the **Molecular Devices Reagents > IMAP Kinase Assays** folder.

- Subfolders have been added to the **Molecular Devices Reagents** folder, and the protocols in the folder have been redistributed into these subfolders.
  - **Cardiotoxicity**
    EarlyTox Cardiotoxicity (Advanced)
    EarlyTox Cardiotoxicity (Advanced-cartridge)
    EarlyTox Cardiotoxicity (Basic)
    EarlyTox Cardiotoxicity (Basic -cartridge)
  - **Cell Signaling & Transport**
    Calcium assay (FlexStation)
    CatchPoint cAMP
    Membrane Potential
    Neurotransmitter Transporter Uptake
    QBT Fatty Acid Uptake
  - **Cell Viability**
    EarlyTox Cell Integrity
    EarlyTox Glutathione
    EarlyTox Live Cell
    EarlyTox Live Dead
    EarlyTox NucView 488
    EarlyTox R110
  - **DNA Quantitation**
    SpectraMax Quant AccuBlue HiRange dsDNA
    SpectraMax Quant AccuBlue Pico dsDNA
    SpectraMax Quant AccuClear Nano dsDNA
  - **IMAP Kinase Assays**
    IMAP Evaluation Demo Kit
    IMAP FP FAM (cartridge)
    IMAP FP FAM
    IMAP FP TAMRA
    IMAP TR-FRET FAM
    IMAP TR-FRET TAMRA
  - **Reporter Assays**
    SpectraMax Glo Steady-Luc Reporter Assay
  - **Western Blot**
    ScanLater Western Blot Mini Membrane
    ScanLater Western Blot
- The **Western Blot** folder has been removed, and all the Western Blot protocols have been added to the **Molecular Devices Reagents > Western Blot** folder.

The following protocols have been modified.

- **Fungitell Vmean**
  Location: **Associates of Cape Cod**
  The settings were updated to make them compatible with the M series readers.
- **Glucatell Onset Time**
  Location: **Associates of Cape Cod**
  The settings were updated to make them compatible with the M series readers.
- **Glucatell Vmean**
  Location: **Associates of Cape Cod**
  The settings were updated to make them compatible with the M series readers.
- **Pyrochrome Kinetic**
  Location: **Associates of Cape Cod**
  The settings were updated to make them compatible with the M series readers.
- **Alamar Blue Cell Viability**
  Location: **Cell Growth & Viability**
  The settings were updated to make them compatible with the M series readers.
- **CellTiter-Blue Fluorescence**
  Location: **Cell Growth & Viability**
  The settings were updated to make them compatible with the M series readers.
- **EarlyTox Cell Integrity**
  Location: **Cell Growth & Viability**
  The settings were updated to make them compatible with the M series readers.
- **EarlyTox Gluthathione**
  Location: **Cell Growth & Viability**
  The settings were updated to make them compatible with the M series readers.
- **EarlyTox Live Cell**
  Location: **Cell Growth & Viability**
  The settings were updated to make them compatible with the M series readers.
- **EarlyTox Live Dead**
  Location: **Cell Growth & Viability**
  The settings were updated to make them compatible with the M series readers.
- **EarlyTox NucView**
  Location: **Cell Growth & Viability**
  The settings were updated to make them compatible with the M series readers.
- **EarlyTox R110**
  Location: **Cell Growth & Viability**
  The settings were updated to make them compatible with the M series readers.

- **190 ABS1**

  Location: **Reader Validation-Plate Abs**

  In the **Results** section under **Baseline Noise Tests (Kinetic)**, the formula was corrected for **Data points within reduction limits** by changing **Col11** to **DataCheck**. This summary formula serves a display purpose only and has no impact on the Pass/Fail outcome.

  A reminder about recertification was added.
- **340PC 384 ABS1**

  Location: **Reader Validation-Plate Abs**

  A reminder about recertification was added.
- **M2 M2e M3 M4 M5 M5e ABS1**

  Location: **Reader Validation-Plate Abs**

  A reminder about recertification was added.
- **Plus 384 ABS1**

  Location: **Reader Validation-Plate Abs**

  A reminder about recertification was added.
- **SpectraMax i3(x) SpectaTest ABS1**

  Location: **Reader Validation-Plate Abs**

  A reminder about recertification was added.
- **VersaMax ABS1**

  Location: **Reader Validation-Plate Abs**

  A reminder about recertification was added.
- **Gemini EM FL1**

  Location: **Reader Validation-Plate Fl**

  A reminder about recertification was added.
- **Gemini XPS FL1**

  Location: **Reader Validation-Plate Fl**

  A reminder about recertification was added.
- **M2 SpectraTest FL1**

  Location: **Reader Validation-Plate Fl**

  A reminder about recertification was added.
- **M2e SpectraTest FL1**

  Location: **Reader Validation-Plate Fl**

  A reminder about recertification was added.
- **M3 M4 M5 M5e SpectraTest FL1**

  Location: **Reader Validation-Plate Fl**

  A reminder about recertification was added.
- **SpectraMax i3(x) SpectaTest FL1**

  Location: **Reader Validation-Plate Fl**

  A reminder about recertification was added.

- **M3 M4 M5 M5e SpectraTest LM1**

  Location: **Reader Validation-Plate Lum**

  A reminder about recertification was added.
- **SpectraDrop Abs DNA Quant** and **SpectraDrop Abs RNA Quant**

  Location: **SpectraDrop Micro-Volume Microplate**

  The originally named **SpectraDrop Abs DNA RNA Quant** has been split into separate DNA and RNA protocols.
- **SpectraDrop Abs DNA Quant (cartridge)** and **SpectraDrop Abs RNA Quant (cartridge)**

  Location: **SpectraDrop Micro-Volume Microplate**

  The originally named **SpectraDrop Abs DNA RNA Quant (cartridge)** has been split into separate DNA and RNA protocols.

Modified Automation Commands

The following automation command have been modified in the installed software.

For a full description of the automation commands in the software, see the *SoftMax Pro Software Automation API Reference Guide*.

CloseDrawer

```
Int32 CloseDrawer()
Int32 CloseDrawer(String drawerType)
```

Purpose

Closes the specified drawer on the instrument.

For most instruments, this command closes the microplate drawer.

Parameters

The CloseDrawer parameters are recognized by the FlexStation 3 reader only. For all other instruments, the parameters are ignored and can be omitted.

drawerType

Type: String

Must be one of the following strings:

- “Assay Plate Drawer” [default]
- "Compound Plate Drawer”
- “Tips Drawer”

These values are not case sensitive.

Note: The *drawerType* parameter is required for the FlexStation 3 reader, since it has three drawers. If the parameter is omitted, then the assay plate drawer is closed.

GetDrawerStatus

```
Int32 GetDrawerStatus()
Int32 GetDrawerStatus(String drawerType)
```

Purpose

Returns the state of the specified drawer on the instrument.

For most instruments, this command returns the state of the microplate drawer.

Parameters

The GetDrawerStatus parameters are recognized by the FlexStation 3 reader only. For all other instruments, the parameters are ignored and can be omitted.

drawerType

Type: String

Must be one of the following strings:

- “Assay Plate Drawer” [default]
- "Compound Plate Drawer”
- “Tips Drawer”

These values are not case sensitive.

Note: The *drawerType* parameter is required for the FlexStation 3 reader, since it has three drawers. If the parameter is omitted, then the status of the assay plate drawer is returned.

OpenDrawer

```
Int32 OpenDrawer()
Int32 OpenDrawer(String drawerType)
OpenDrawer(Int32 xPosition, Int32 yPosition, Bool locked)
```

Purpose

Opens the specified drawer on the instrument.

For most instruments, this command opens the microplate drawer.

Note: For instruments with temperature control, the microplate drawer cannot be opened while the incubator is on.

Parameters for FlexStation 3 Readers

The OpenDrawer *drawerType* parameter is recognized by the FlexStation 3 reader only. For all other instruments, the parameters are ignored and can be omitted.

drawerType

Type: String

Must be one of the following strings:

- “Assay Plate Drawer” [default]
- "Compound Plate Drawer”
- “Tips Drawer”

These values are not case sensitive.

Note: The *drawerType* parameter is required for the FlexStation 3 reader, since it has three drawers. If the parameter is omitted, then the assay plate drawer is opened.

Parameters for SpectraMax i3x, SpectraMax i3, SpectraMax Paradigm, and FilterMax Instruments

The OpenDrawer xPosition, yPosition, and locked parameters are recognized by the SpectraMax i3x, SpectraMax i3, SpectraMax Paradigm, and FilterMax Instruments only.

For all other instruments, these parameters are ignored and can be omitted.

xPosition

Type: Int32

This parameter defines the left-right offset for the position of the open microplate drawer.

- Range for the SpectraMax i3x, SpectraMax i3 Instruments: 0 to 2900
- Range for the SpectraMax Paradigm Instrument: 0 to 2950
- Range for the FilterMax Instruments: 0 to 2950

yPosition

Type: Int32

This parameter defines the front-rear offset for the position of the open microplate drawer.

- Range for the SpectraMax i3x, SpectraMax i3 Instruments: 5200 to 6900
- Range for the SpectraMax Paradigm Instrument: 5200 to 6900
- Range for the FilterMax Instruments: 5200 to 6900

locked

Type: Bool

When this parameter is true, the microplate is held in a fixed position to allow operations such as dispensing.

Issues Addressed in SoftMax Pro Software v7.0

The following issues were addressed in SoftMax Pro Software version 7.0.

The Last Line of a Notes Section Does not Print

Tracking ID: 4762

If a Notes section has a long description, the last line of text might get cut off when printed.

Other tracking references: FB4561, FB4880, and FB4910

Resolution:

If a line of text does not fit on a page when printing a Notes section, then the text is printed on the next page. In addition, a reference line has been added to the Note section display that indicates page breaks.

Impact of fix:

This fix has no impact on current workflow or data.

The Estimated Minimum Kinetic Interval is Incorrect for the Fluorescence Polarization (FP) (Rhodamine) Detection Cartridge in a SpectraMax i3 Instrument

Tracking ID: 16073

When running a read using a Fluorescence Polarization (FP) (Rhodamine) Detection Cartridge in a SpectraMax i3 Instrument, the actual read time can be up to twice as long as the estimated minimum kinetic interval in the **Settings** dialog.

Other tracking reference: FB4685

Resolution:

The minimum kinetic interval is more accurately estimated in the **Settings** dialog.

Impact of fix:

This fix has no impact on current workflow or data.

The Software Cannot Open a File Created in a Previous Version that Contains an Invalid Character

Tracking ID: 18298

When attempting to open a file that was created by a previous version of the software, if the file contains an invalid character, then an error message is displayed, and the file does not open.

Planned Resolution:

A file created by an earlier version of the software can be opened, even when the file contains an invalid character.

Impact of fix:

This fix has no impact on current workflow or data.

Cannot Save GxP Data in NTFS Folders That Do Not Have Delete or Modify Permissions

Tracking ID: 18493

If NTFS folders do not have delete or modify permissions, then the SoftMax Pro GxP Software cannot save data files in these folders.

Other tracking reference: FB4888

Resolution:

The SoftMax Pro GxP Software can save data files in NTFS folders that do not have delete or change permissions. The user is not able to modify the data after it has been saved.

Impact of fix:

This fix has no impact on current workflow or data.

If the Software is Connected to a FilterMax F3 Reader in Simulation Mode, the points in a Well Scan are Displayed Outside of the Well

Tracking ID: 18533

In the **Settings** dialog, the points in a Well Scan are displayed outside of the boundary for the well when the software is connected to a FilterMax F3 Multi-Mode Microplate Reader in simulation mode.

Other tracking reference: FB4911

Resolution:

The points in a Well Scan are displayed within the boundary for the well in the **Settings** dialog, even when the software is connected to a FilterMax F3 Multi-Mode Microplate Reader in simulation mode.

Impact of fix:

This fix has no impact on current workflow or data.

Part of the GxP Audit Trail Text is Missing when Printed

Tracking ID: 19026

When printing a GxP audit trail, sometimes part of the information is missing. This generally happens when the audit trail spans more than one page and the **Print Quality** setting in the **Printing Options** dialog is set to a higher quality than **Draft**.

Other tracking references: 19872 and FB4880

Resolution:

The entire contents of the GxP audit trail prints properly for all print qualities.

Impact of fix:

This fix has no impact on current workflow or data.

Blurry Images Acquired Using a SpectraMax MiniMax Cytometer

Tracking ID: 19436

After doing a fluorescence read using a SpectraMax i3x Instrument with a SpectraMax MiniMax Cytometer, the acquired Min and Max images in the **Settings** dialog appear blurry with a focus adjustment outside of the range 100 to 140.

Other tracking reference: FB4993

Resolution:

The acquired Min and Max images in the **Settings** dialog are not blurry after doing a fluorescence read using a SpectraMax i3x Instrument with a SpectraMax MiniMax Cytometer.

Impact of fix:

This fix has no impact on current workflow or data.

The StakMax Software Interface Does Not Display

Tracking ID: 19438

The StakMax Software interface is not displayed when opened, and it must be closed using Windows Task Manager.

When running the SoftMax Pro Software connected to the StakMax Microplate Handling System in simulation mode, and error message is displayed saying that the instrument cannot be connected.

Other tracking references: 18744 and FB4991

Resolution:

The StakMax Software interface is displayed when opened and runs without error, even when the SoftMax Pro Software is connected to the StakMax Microplate Handling System in simulation mode.

Impact of fix:

This fix has no impact on current workflow or data.

Printing Error When Printing a Large GxP Audit Trail

Tracking ID: 20021

When printing a very large GxP audit trail, the software stop running unexpectedly and the audit trail is not printed.

Other tracking reference: FB5053

Resolution:

The GxP audit trail prints successfully regardless of the size of the audit trail.

Impact of fix:

This fix has no impact on current workflow or data.

Known Issues in SoftMax Pro Software v7.0

The following known issues exist in SoftMax Pro Software v7.0.

Some 384-well plate display options have not been implemented

Tracking ID: FB2463

The 384-well plate-specific display options vertical, rotated, and interleaved have not been implemented.

Planned Resolution:

Implementing support for these display options is in the product backlog for future implementation.

Cannot export cuvette sets

Tracking ID: FB2494

The means to export cuvette sets has not been implemented.

Planned Resolution:

Implementing cuvette-set export is in the product backlog for future implementation.

The Threshold reduced data display is not available

Tracking ID: FB2497

The Threshold reduced data display option has not been implemented. The color map display options can be used to get similar results.

Planned Resolution:

Implementing the Threshold reduced data display option is in the product backlog for future implementation.

The Ranged reduced data display is not available

Tracking ID: FB2498

The Ranged reduced data display option has not been implemented. The color map display options can be used to get similar results.

Planned Resolution:

Implementing the Ranged reduced data display option is in the product backlog for future implementation.

Importing raw data has not been implemented

Tracking ID: FB2521

The means to import data into a Plate section has not been implemented.

Planned Resolution:

Importing data into a Plate section is in the product backlog for future implementation.

The Decimal Symbol of the Regional and Language Options settings has to be set to the period symbol (“.”) regardless of the language setting

Tracking ID: FB2727

When the language setting on a computer is set to a language other than English, the decimal symbol can be set to a symbol other than the period symbol, generally the comma symbol (“,”). If this happens, parsing or calculations might not be executed correctly in the SoftMax Pro Software. To have the software work properly, the user must customize the computer’s regional options to use the period symbol (“.”) for the decimal symbol.

Planned Resolution:

Allowing the comma symbol (“,”) for the decimal symbol is in the product backlog for future implementation.

Auto Print not available

Tracking ID: FB2768

The means to print automatically after a read completes has not been implemented.

Planned Resolution:

Implementing Auto Print is in the product backlog for future implementation.

Displaying a cuvette set as a 96-well plate is not available

Tracking ID: FB2770

The means to display a cuvette set as a 96-well plate has not been implemented.

Planned Resolution:

Implementing the means to display a cuvette set as a 96-well plate is in the product backlog for future implementation.

Raw data does not display in 1000s

Tracking ID: FB2771

The option to display raw data in 1000s has not been implemented. Raw data is displayed in scientific-notation by default, reducing the need to also display the data in 1000s.

Planned Resolution:

Implementing the option to display raw data in 1000s is in the product backlog for future implementation.

Detection cartridges removed from a SpectraMax Paradigm instrument display as available in the Settings dialog

Tracking ID: 2863

If a detection cartridge is removed from the SpectraMax Paradigm instrument while the SoftMax Pro Software is running, the list of available detection cartridges in the Settings dialog continues to display the removed detection cartridges as available in the instrument. This can be resolved by closing and restarting the SoftMax Pro Software.

Planned Resolution:

Displaying available detection cartridges in real time is in the product backlog for future implementation.

Exporting templates in XML format is not supported

Tracking ID: 4076

Templates cannot be exported to XML format.

Some automation partners who rely on XML format might need to use a text format instead.

Planned Resolution:

This issue has been noted and is in the product backlog for future resolution.

Software Slows when Group Tables Have More Than 200 Rows

Tracking ID: 4743

If a file contains a Group table that has more than 200 rows, the software can start to run more slowly and can slow down the performance of the computer.

Planned Resolution:

To prevent slow performance create group tables with fewer than 200 rows.

Improving the performance of the software for files with large Group tables is in the product backlog for future development.

Different Values are Displayed in v5.x Than in v6.x and v7.x for the Same File in the LambdaMax Column

Tracking ID: 4848

After opening the same file in SoftMax Pro Software v5.x and v6.x or 7.x, v5.x of the software displays a different value in the LambdaMax column than is displayed in v6.x and v7.x.

Planned Resolution:

None.

Inversions of cubic and particularly cubic spline functions can be ambiguous. In such cases v6.x and v7.x find the calibrating point for which the y-value is closest to that being inverted, and then finds the solution x closest to the x-value of that point. This is not the algorithm used in v5.x, but tends to give more reasonable back calculations of standard concentrations.

In such cases, v5.x might differ from v6.x and v7.x.

Reduced Kinetic Plot is Displayed Incorrectly when Group Blanks are Applied After reduction

Tracking ID: 6533

With group blanks applied after reduction, the slope of the reduced Kinetic Plot is displayed incorrectly in the graph.

Planned Resolution:

Displaying the slope of the Kinetic Plots correctly when group blanks are applied after reduction is in the product backlog for future development.

Raw value accessors return data in an unexpected numerical order for well scan data in the SpectraMax Paradigm instrument

Tracking ID: 7345

When using a raw value accessor in a formula for SpectraMax Paradigm instrument well scan data, the numbers are returned in the order top-to-bottom and then left-to-right. They should be returned left-to-right and then top-to-bottom.

Resolution:

Normalizing the numerical order for well scan data display is in the product backlog for future development.

Import From v5.x Changes the micron symbol to a lower-case m

Tracking ID: 10022

After importing from a v5.x file, the font changes the µ symbol to a lower-case m. This can cause confusion in measurements. For example, 300 µL is imported as 300 mL.

Planned Resolution:

Improving font detection during a legacy-file import is in the product backlog for future development.

Cannot Detect More Than One SpectraMax i3 or SpectraMax Paradigm Instrument

Tracking ID: 12461

With more than one SpectraMax i3 or SpectraMax Paradigm instrument connected to the same computer, the SoftMax Pro Software can detect only one of the instruments.

There are two methods to work around this issue:

- Power up only the instrument that you want to have the SoftMax Pro Software detect and leave all other instruments powered down.
- Select each instrument using separately installed versions of the SoftMax Pro Software. This method requires that the older version of the software supports the instrument that you want to detect.

Planned Resolution:

Detecting more than one SpectraMax i3 or SpectraMax Paradigm instrument connected to the same computer is in the product backlog for future development.

The Estimated Minimum and Maximum Object Size Settings Do Not Include the Smallest and Largest Objects in an Acquired Image

Tracking ID: 12497

For Cell Proliferation and Marker Expression analysis types in the Image Analysis Settings, the size estimate sometimes generates a minimum object size that is larger than the smallest object in the acquired image, or a maximum object size that is smaller than the largest object.

To work around this issue, manually type values in the fields:

- To include objects smaller than the estimated minimum, type a smaller value in the minimum size field.
- To include objects larger than the estimated maximum, type a larger value in the maximum size field.

The full size range that can be available for analysis in the SoftMax Pro Software is 0 µm to 5-million µm. Molecular Devices recommends that you do not use a maximum object size of less than 8 µm.

Planned Resolution:

Improved estimation of minimum and maximum object sizes for an acquired image is in the product backlog for future development.

In an Acquired Image, Objects within a Large Contiguous Ring Object are Included as Part of the Ring

Tracking ID: 12498

If an image has a large object, such as a group of confluent cells, that forms a contiguous ring, then all other objects, such as cells or colonies, inside that ring are linked together with that larger object. This can lead to anomalous results if you are looking at cell proliferation or growth into an area that is surrounded by confluent cells.

To work around this issue, you can export the acquired image to a different analysis tool.

Planned Resolution:

Detecting smaller objects within a large contiguous ring object is in the product backlog for future development.

Entering a Maximum Object Width to Include Objects Less Than Three Pixels Wide Can Generate Erroneous Data

Tracking ID: 12499

For a Cell Count image analysis, entering a maximum object width that includes objects that are less than three pixels wide can drastically change the thresholding and object segmentation. This can have an effect on the object measurements and introduce error into the data.

Molecular Devices recommends that you do not use a maximum object size of less than 8 µm.

Planned Resolution:

Reducing erroneous data from entering an object size that is too small for the camera resolution is in the product backlog for future development.

Selected Objects are Sometimes Eliminated from the Analysis When Using the Set Range by Clicking on Objects Feature

Tracking ID: 12500

The size and intensity estimates generated by the software after using the **Set Range by Clicking on Objects** feature sometimes eliminates objects that were clicked.

To work around this issue, manually type values in the fields after you finish clicking on objects in the images until you get the desired results.

Planned Resolution:

Improved estimation of size and intensity values when using the **Set Range by Clicking on Objects** feature is in the product backlog for future development.

No Notification is Provided if the .NET Framework Installation Fails

Tracking ID: 13116

If the SoftMax Pro Software installation fails to properly install the .NET framework, then the software cannot run, and no notification is provided when a user tries to start the software.

Planned Resolution:

Detecting and generating a message for a failed .NET installation is in the product backlog for future development.

Group Table Data Generated in v4.x and then Saved in v5.x Displays Incorrectly in v6.x or v7.x

Tracking ID: 14147

If a group table populated by arrays and lists was saved in the SoftMax Pro Software v4.x and then converted in v5.x, the table is empty when opened in v6.x or v7.x. If the table data is regenerated and then saved in 6.x or v7.x, then after reopening the file, the table is reconfigured and some data are missing.

Planned Resolution:

Correctly displaying table data generated in earlier versions of the SoftMax Pro Software is in the product backlog for future development.

Unsupported File Extension in an Automation Script Fails to Save Data

Tracking ID: 15312

Using an unsupported file extension in the **SaveAs** command in automation mode fails to save the acquired data without a notification of the error condition. Other conditions that might lead to this type of failure could be a full hard drive or a lost connection to the directory where the data is to be saved.

This condition is also found when running a StakMax script that has an unsupported file extension in the **Save Document As** or the **Save Document As with Barcode** command.

Note: The StakMax Software uses the file extensions for SoftMax Pro Software version 5.x and earlier (.pda or .eda). To use a script with version 6.x, you must edit the file name in the path statement to use the appropriate version 6.x file extension (.sda or .sdax) before adding the command to the script.

Planned Resolution:

More efficient handling of file-save errors in automation scripts is in the product backlog for future development.

The StakMax Instrument Stops in an Automated Read

Tracking ID: 16389

When running the StakMax instrument in automation mode, the instrument sometimes stops running during a multiple-microplate read.

As a workaround, use the SoftMax Pro Software version 5.x to run the automated read, and then open the v5.x data files in v6.x to analyze the data.

Planned Resolution:

Completing uninterrupted automated reads with the StakMax instrument is in the product backlog for future development.

The Updated Firmware Version is not Displayed After a Firmware Update

Tracking ID: 16455

After updating the firmware for a FilterMax instrument, the new firmware version is not displayed in the **Instrument Information** dialog.

Planned Resolution:

Displaying the new firmware version immediately after updating the firmware for a FilterMax instrument is in the product backlog for future development.

The Driver for the StakMax Instrument is not Installed on Windows 8.1

Tracking ID: 16457

Attempting to connect to the StakMax Instrument from the software installed on Windows 8.1 fails. This is due to the driver for the StakMax Instrument not being installed with the software.

Planned Resolution:

Installing the driver for the StakMax Instrument in Windows 8.1 is in the product backlog for future development.

Transmitted Light Images are not Displayed in the Settings Dialog After First Acquiring Fluorescence Images

Tracking ID: 16644

After acquiring the Max and Min images for fluorescence, selecting transmitted light in addition to the fluorescence wavelengths and then attempting to acquire the Max and Min images for transmitted light and fluorescence displays only the fluorescence images.

A workaround for this issue is to close and re-open the settings dialog, and then acquire the Max and Min images for all the selected wavelengths, including transmitted light.

Planned Resolution:

Displaying the Max and Min images for all the selected wavelengths is in the product backlog for future development.

Configuring Settings from the Plate Helper for a SpectraMax i3 Instrument with the Cartridge Drawer Open Generates an Object Reference Error

Tracking ID: 16653

With the cartridge drawer open on a SpectraMax i3 Instrument, clicking **Configure your acquisition settings** in the **Plate Helper** generates an **Object reference not set to an instance of an object** error message.

Planned Resolution:

Improving error handling for an open cartridge drawer is in the product backlog for future development.

Cannot Paste a Copied Template From One Document to Another in Vertical Tab Group View

Tracking ID: 16667

With the program window in **Vertical Tab Group** view, copying a template from a **Plate** section in one document and then attempting to paste the template into a **Plate** section in a different document results in the paste operation failing.

Planned Resolution:

Successfully pasting a copied template from one document to another in **Vertical Tab Group** view is in the product backlog for future development.

The Software Stops Unexpectedly When Closing a Western Blot Data File Where the File Path is No Longer Available

Tracking ID: 16904

If the file path for a Western Blot data file becomes unavailable, closing the document causes the software to stop unexpectedly.

Planned Resolution:

Closing a Western Blot data file that has an unavailable file path without causing the software to stop is in the product backlog for future development.

The Syntax Helper in the Formula Editor is not Displayed Properly in Windows 8.1

Tracking ID: 18371

When you type in the **Formula Editor** with the **Syntax Helper** enabled, context menus appear below your entry to help you with the correct syntax for your formula. In Windows 8.1 set to tablet layout, the context menus are displayed incorrectly in the software.

A workaround for this issue is to use the standard layout.

Another workaround is to change the "handedness" of the context menus for your tablet layout. See http://www.askvg.com/how-to-change-menu-position-from-left-to-right-in-windows-vista/.

Planned Resolution:

Improving the format of the **Syntax Helper** in tablet layout is in the product backlog for future development.

Cuvette Air Calibration for the SpectraMax Plus 384 Microplate Reader Starts at 200 nm

Tracking ID: 18682

For the SpectraMax Plus 384 microplate reader, the air calibration routine for a cuvette starts at 200 nm, instead of 190 nm.

Planned Resolution:

Starting the cuvette air calibration at 190 nm for the SpectraMax Plus 384 microplate reader is in the product backlog for future development.

Reduced Value Displays #ERR for v5.x FlexStation Data File

Tracking ID: 19452

After opening a v5.x file with acquired data from an incomplete read on FlexStation 3 reader, the reduced data displays as #ERR.

Planned Resolution:

The software development team has determined the cause of this issue, and is investigating a resolution that will not compromise data integrity.

Some systems might freeze or display incorrectly if using an out-of-date display driver

Tracking ID: 032869

This issue was found to exist with the Intel G41 Express Chipset 8.15.10.1749; 6-May-2009 display driver.

This issue can be resolved by upgrading the user's computer to the latest version of the display driver.

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