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SoftMax® Pro Microplate Data Acquisition and Analysis Software controls Molecular Devices® spectrophotometers, absorbance, luminescence, and fluorescence microplate readers, and the SpectraMax® Paradigm® Multi-Mode Detection Platform. For a complete list of the instruments supported by this release of the SoftMax Pro Software, see [Supported Instruments on page 13](#).

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.

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 6 is available for a PC-compatible computer using the Windows 7 or Windows 8 operating system.

This chapter contains the following topics:

- [Computer System Requirements on page 6](#)
- [Installing the SoftMax Pro Software on page 8](#)
- [Uninstalling SoftMax Pro Software on page 12](#)
- [Starting the Software on page 12](#)
- [Registering the Software on page 13](#)
- [Supported Instruments on page 13](#)
- [Frequently Asked Questions on page 14](#)

Computer System Requirements

The SoftMax Pro Software version 6 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	Windows 7, 32-bit or 64-bit (x86 or x64) and .NET Framework 4.0 (.NET Framework 4.0 is installed automatically by the SoftMax Pro Software installer if necessary.)	Windows 7, 32-bit or 64-bit (x86 or x64) or Windows 8, 32-bit or 64-bit (x86 or x64)
Data connection	USB 2.0 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 disk	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 installation and activation	CD/DVD drive Internet connection or external USB drive	CD/DVD drive Internet connection

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 9](#).

If you need to install the **SoftMax Pro MiniMax Imaging Edition**, see [Imaging Cytometer Computer System Specifications on page 7](#).



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.

Imaging Cytometer Computer System Specifications

The SpectraMax MiniMax Imaging Cytometer is shipped with a computer that meets greater minimum computer system specifications than those required for the standard installation.

Table 1-2: Minimum Computer System Requirements for the SpectraMax MiniMax Imaging Cytometer

Item	Requirement
Processor	Intel Xeon E5, 2.7 GHz, 8 cores or more
Operating system	Windows 7, 64-bit (x64) or Windows 8, 64-bit (x64)
Data connection	2 or more USB 3.0 ports and 2 or more USB 2.0 or later ports
Memory	16 GB or more DDR3 SDRAM at 1600 MHz
Hard disk	500 GB or larger, 7200 RPM or faster hard disk with a 32 MB or more buffer
Graphics display	512 MB nVIDIA graphics display 1280 x 1024 or higher-resolution display
Software installation and activation	CD/DVD drive Internet connection or external USB drive

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 9](#).

Installing the SoftMax Pro Software



Note: Molecular Devices recommends that you disable your anti-virus program before installing 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 **SoftMaxPro6.4.0.2Setup.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 **SoftMaxPro6.4.0.2Setup.exe**.
 - If you are installing from a CD, insert the SoftMax Pro Software CD into the CD-ROM drive. If the installation program does not automatically start, navigate to your CD-ROM drive and double-click **SoftMaxPro6.4.0.2Setup.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 Imaging Cytometer.
 - The **SoftMax Pro MiniMax Imaging Edition** must be installed to run the SpectraMax MiniMax Imaging Cytometer. This edition requires a Windows 7 or Windows 8, 64-bit operating system.
 - The **SoftMax Pro GxP Edition** supports using the software in a regulated environment. This edition does not support the SpectraMax MiniMax Imaging Cytometer.



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.
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**.

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:
8. In the Windows Security warning, click **Install this driver software anyway**.

Granting TCP/IP Access to MDC File Server

When using the SoftMax Pro GxP Software with MDC File Server in a Windows 7, 64-bit operating system, the Windows Firewall sometimes prevents user access to MDC File Server through TCP/IP.

To grant user access through TCP/IP, create a new inbound rule and a new outbound rule in the Windows Firewall Advanced Settings.

Accessing Windows Firewall Advanced Settings

1. Open **Control Panel**.
2. Click **System and Security**.
3. Click **Windows Firewall**.
4. In the left pane, click **Advanced settings** to open the **Windows Firewall with Advanced Security** dialog.

Creating a New Inbound Rule

1. In left pane of the **Windows Firewall with Advanced Security** dialog, click **Inbound Rules**.
2. In the right pane, click **New Rule**.
3. In the **New Inbound Rule Wizard**, click **Port**.
4. Click **Next**.
5. Click **TCP**.
6. Click **Specify local ports**.
7. Type **9001** in the field.
8. Click **Next**.
9. Complete the rest of the wizard based on your network configuration and access rules defined by your system administrator.

Creating a New Outbound Rule

1. In left pane of the **Windows Firewall with Advanced Security** dialog, click **Outbound Rules**.
2. In the right pane, click **New Rule**.
3. In the **New Outbound Rule Wizard**, click **Port**.
4. Click **Next**.
5. Click **TCP**.
6. Click **Specify local ports**.
7. Type **9001** in the field.
8. Click **Next**.
9. Complete the rest of the wizard based on your network configuration and access rules defined by your system administrator.

Uninstalling SoftMax Pro Software

Before uninstalling the program, make sure to backup 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 6.4**.
To uninstall the GxP edition, click **SoftMax Pro 6.4 GxP**.
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 6.4** 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 6.4 > SoftMax Pro 6.4**.

For the GxP edition, double-click the **SoftMax Pro 6.4 GxP** icon or click **Start > All Programs > Molecular Devices > SoftMax Pro 6.4 GxP > SoftMax Pro 6.4 GxP**.

If you are using the SoftMax Pro GxP Software, you are prompted to log on before you can continue. Type your administrator-assigned user ID and your password, and then click **Log On**.



Note: When connecting to the SpectraMax i3 Multi-Mode Detection Platform, the SpectraMax Paradigm Multi-Mode Detection Platform, 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 CD package. The instrument serial number is located on a label affixed to the rear of the instrument.

Activating Your Software License

When you first start the SoftMax Pro Software, the **Software License Activation** dialog is displayed. If you are running a trial version of the software, click the **Help** tab in the ribbon and then click **Software License**.

To activate your SoftMax Pro Software license:

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

To activate offline, you need your Product Key, a computer with internet connectivity, and a USB drive for transferring files between the computers.

On the Internet-enabled computer, go to:

<https://smplicensing.moleculardevices.com>

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 6.4 > Hardware User Guides**.

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

- SpectraMax® i3 Multi-Mode Detection Platform
- SpectraMax® Paradigm® Multi-Mode Detection Platform
- VersaMax™ ELISA 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 Fluorescence Microplate Reader
- Gemini™ EM Fluorescence 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 ELISA Microplate Reader
- EMax® Endpoint ELISA 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 i3 Instrument can be upgraded with user-installable detection cartridges. The SpectraMax Paradigm Multi-Mode Detection Platform requires detection cartridges to do reads.

Frequently Asked Questions

Can I install SoftMax Pro Software v6 on a computer that has SoftMax Pro Software v5.4 or earlier installed?

Yes. SoftMax Pro Software v6 is installed independently of SoftMax Pro Software v5.4 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 v5.x protocol and data files in SoftMax Pro Software v6?

SoftMax Pro Software v6 uses new file formats: *.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 v6. In the Open dialog, you choose the target file types and SoftMax Pro Software v6 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 6.0 files in SoftMax Pro Software v5.x.

Can I use the same formula (syntax) in SoftMax Pro Software v6 as SoftMax Pro Software v5.x?

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

Can I run SoftMax Pro Software v6 on Apple MacOS?

Yes. SoftMax Pro Software v6 can be run on a virtual machine running Windows and a third-party tool such as VMWare Fusion. SoftMax Pro Software v6 cannot, however, run natively on the MacOS.

Can I use SoftMax Pro Software v6 without activation?

SoftMax Pro Software v6 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.

SoftMax Pro GxP Software does not have a trial period, and must be activated before it can be used.

Chapter 2: SoftMax Pro Software Version 6.4.0.2 Software Release Notes

The SoftMax® Pro Microplate Data Acquisition and Analysis Software version 6.4.0.2 is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 6.4.0.1, the previous release of the SoftMax Pro Software.



Note: The version 6.4.0.2 minor release retains version 6.4 in the title bar and the About dialog in the program.

Issue Addressed in SoftMax Pro Software v6.4.0.2

The following issue was addressed in SoftMax Pro Software version 6.4.0.2.

The Software Installs, but Does Not Run in Windows 8.1

Tracking ID: 16077

After installing the software in Windows 8.1, the software did not run.

Resolution:

The software installs and runs in Windows 8.1.

Impact of fix:

This fix has no impact on current workflow or data.

Chapter 3: SoftMax Pro Software Version 6.4.0.1

Software Release Notes

The SoftMax® Pro Microplate Data Acquisition and Analysis Software version 6.4.0.1 is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 6.4, the previous release of the SoftMax Pro Software.



Note: The version 6.4.0.1 minor release retains version 6.4 in the title bar and the About dialog in the program.

New in SoftMax Pro Software v6.4.0.1

The following new feature was included in SoftMax Pro Software version 6.4.0.1.

Support for the EMax Plus Microplate Reader

This version of the SoftMax Pro Software adds support for the EMax® Plus Microplate Reader.

The EMax® Plus Microplate Reader is a filter-based absorbance microplate reader, with eight standard filters for a wide range of applications. The instrument can read standard 96-well microplates.

The instrument has a built-in read mode for visible absorbance (ABS) measurements.

Endpoint and kinetic microplate applications can be set up and run with the SoftMax Pro Software.

Chapter 4: SoftMax Pro Software Version 6.4 Software Release Notes

The SoftMax® Pro Microplate Data Acquisition and Analysis Software version 6.4 is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 6.3.1, the previous release of the SoftMax Pro Software.

- [New in SoftMax Pro Software v6.4 on page 21](#)
- [Modifications Made to SoftMax Pro Software v6.4 on page 23](#)
- [Issues Addressed in SoftMax Pro Software v6.4 on page 25](#)
- [Known Issues in SoftMax Pro Software v6.4 on page 36](#)

New in SoftMax Pro Software v6.4

The following new features are included in SoftMax Pro Software version 6.4.

Multiple-Channel Acquisition With the SpectraMax MiniMax Imaging Cytometer

The SpectraMax® MiniMax™ Imaging Cytometer 300 is capable of acquiring image data using transmitted light and two fluorescent emissions during the same microplate read. In the SoftMax Pro Software **Settings** dialog, you can select the channels that you want to use for the acquisition. To do brightfield, transmitted-light imaging, you must install the SpectraMax i3 Platform Transmitted Light (TL) Detection Cartridge in the detection cartridge drawer.

Depending on the needs of your application, you can use one or more of the following analysis measurement parameters for your experiment:

- **Object Count** gives the total number of objects detected in the image. This measurement is not used for field analysis of confluent areas.
- **Field Count** gives the total number of confluent areas detected in the image. This measurement is not used for discrete object analysis.
- **Object Percentage** gives the percentage the objects detected in the image by classification. This measurement is not used for field analysis of confluent areas.
- **Covered Area** gives the combined area of all the objects or confluent areas detected in the image as a percentage of the entire image area.
- **Object Area** gives the average area of the objects detected in the image expressed in μm^2 . This measurement is not used for field analysis of confluent areas.
- **Field Area** gives the average area of the confluent areas detected in the image expressed in μm^2 . This measurement is not used for discrete object analysis.

- **Object Roundness** gives the average roundness of each object detected in the image. A shape factor of 1.00 is perfectly round, while a shape factor of 0.00 is not round at all. This measurement is not used for field analysis of confluent areas.
- **Field Roundness** gives the average roundness of each confluent area detected in the image. A shape factor of 1.00 is perfectly round, while a shape factor of 0.00 is not round at all. This measurement is not used for discrete object analysis.
- **Object Average Intensity** gives the average fluorescent signal intensity of the objects detected in the image. This measurement is not used for field analysis of confluent areas. This measurement is not used for transmitted light (TL).
- **Field Average Intensity** gives the average fluorescent signal intensity of the confluent areas detected in the image. This measurement is not used for discrete object analysis. This measurement is not used for transmitted light (TL).
- **Object Intensity** gives the average total fluorescent signal intensity of the objects detected in the image. This measurement is not used for field analysis of confluent areas. This measurement is not used for transmitted light (TL).
- **Field Intensity** gives the average total fluorescent signal intensity of the confluent areas detected in the image. This measurement is not used for discrete object analysis. This measurement is not used for transmitted light (TL).
- **Total Intensity** gives the combined total fluorescent signal intensity of the objects or confluent areas detected in the image expressed in million intensity counts. This measurement is not used for transmitted light (TL).

The selected measurements are dynamically added to the data reduction list that you can use to view data in the **Plate** section or to add to a **Group** section for further analysis.

For more information, see the SoftMax Pro Software application help or user guide.

Create Duplicate Sections in the Navigation Tree

You can right-click an experiment or section in the **Navigation Tree** to duplicate the section or experiment.

When you duplicate an **Experiment**, all sections in the experiment are duplicated in a new experiment, but without data. When you duplicate a **Notes** or **Graph** section, an exact duplicate is made of the section. When you duplicate a **Group** section, a new group is created with the same properties as the original section. When you duplicate a **Plate** section, the new section contains all the settings from the original section, but without data.

New Protocols

The following protocols have been added to the installed software.

Data Analysis

- **Parallelism Test**

In this new protocol, Fieller's theorem is used in an equivalence test for parallelism of two ELISA dose/response curves.

The parallelism test illustrated in this protocol can serve a number of purposes. However, the method would not be appropriate for evaluating parallelism in an assay validation study. For guidance, consult the relevant regulatory or other authorities.

- **t-Test**

This protocol uses Welch's t-Test to determine if the means of two groups are statistically different. It differs from Student's t-test in that the variances of the populations are not assumed to be equal.

Modifications Made to SoftMax Pro Software v6.4

The following modifications were made to SoftMax Pro Software version 6.4.

Export Spectral Optimizer Data for the SpectraMax i3 Instrument

After running the Spectral Optimizer for a read with the SpectraMax i3 Instrument, you can copy the raw data or save it to a text file. This option is available only when using the Monochromator of the SpectraMax i3 Instrument.

Right-click on the image to display the shortcut menu. You can select from the following options:

- **Copy Raw Data** copies the data in tab-delimited format that can be pasted into a spreadsheet or text editor.
- **Save Raw Data to Disk** saves the data into a text file in tab-delimited format.

For more information, see the SoftMax Pro Software application help or user guide.

Protocol Modifications

The following protocols have been modified.

Reader Validation-Plate FI

- Gemini EM FL1

The **Cert Info** instructions were modified to emphasize that the plate certification date must be enclosed in double quotes. In **Data Point Diagnostics**, the formula for **PMTSens Result** was corrected from 0.05 to 0.1.

- Gemini XPS FL1

The **Cert Info** instructions were modified to emphasize that the plate certification date must be enclosed in double quotes. In **Data Point Diagnostics**, the formula for **PMTSens Result** was corrected from 0.05 to 0.1.

- M2 SpectraTest FL1

The **Cert Info** instructions were modified to emphasize that the plate certification date must be enclosed in double quotes.

- M2e SpectraTest FL1

The **Cert Info** instructions were modified to emphasize that the plate certification date must be enclosed in double quotes. In **Data Point Diagnostics**, the formula for **PMTSens Result** was corrected from 0.05 to 0.1.

- M3 M4 M5 M5e SpectraTest FL1

The **Cert Info** instructions were modified to emphasize that the plate certification date must be enclosed in double quotes. In **Data Point Diagnostics**, the formula for **PMTSens Result** was corrected from 0.05 to 0.1.

Issues Addressed in SoftMax Pro Software v6.4

The following issues were addressed in SoftMax Pro Software version 6.4.

The Software Fails to Detect When a SpectraMax i3 Instrument Goes Offline

Tracking ID: 10347

If a connected SpectraMax i3 Instrument loses its connection to the computer, such as by switching the power off or unplugging the USB cord, the software indicated that the instrument was still connected. Attempting a read generated the error **Instrument is busy**.

Resolution:

If a connected SpectraMax i3 Instrument goes offline, the software detects and indicates this condition.

Impact of fix:

This fix has no impact on current workflow or data.

Rounded Values in Plate Sections and Group Sections Sometimes do not Match

Tracking ID: 10387

Similar values in a **Plate** section and a **Group** section are sometimes displayed differently due to differing methods of rounding floating-point values.

Resolution:

Plate sections and a **Group** sections now use the same rounding method, so that displayed values match.

The calculations done by the SoftMax Pro Software use 64-bit double-precision real numbers (15+ digits of precision) as defined by IEEE standard 754 for binary floating-point arithmetic. Computations always use the maximum available precision. Rounding occurs only as required for display formatting purposes, or in the evaluation of a formula in which the **Round** operator is used.

Impact of fix:

This fix has no impact on current workflow or data.

The Settings Dialog Accepts an Incorrect Minimum Kinetic Interval

Tracking ID: 12673

When setting up a multi-wavelength kinetic read for the SpectraMax i3 Instrument, the **Settings** dialog allows a minimum kinetic interval that is less than the required interval for the read. An error message is displayed when trying to read the microplate.

Resolution:

The minimum kinetic interval is calculated and displayed correctly in the **Settings** dialog for multiple-wavelength kinetic experiments on a SpectraMax i3 Instrument.

Impact of fix:

This fix has no impact on current workflow or data.

An Imaging Read Retains "More Settings" From the Settings of a Different Read Mode

Tracking ID: 12761

If the settings for a **Plate** section were created for a read mode that includes the **More Settings** category, and then the settings were modified to an Imaging read for the same **Plate** section, the settings from the **More Settings** category (such as **Read Order**) were retained for the Imaging read. This can cause erroneous or incomplete data acquisition for the Imaging read if the retained settings are incompatible with an Imaging read.

Resolution:

The **More Settings** options are reset to default values when switching to Imaging read mode in the **Settings** dialog.

Impact of fix:

This fix has no impact on current workflow or data.

A New Experiment with Cuvettes Does Not Assign Groups to the Cuvettes and Retains the Data From the Original Experiment

Tracking ID: 13113

If a data file contains an Experiment with a **Cuvette Set** section, when you create a new Experiment, the new Experiment contains an identical **Cuvette Set** section. However, the cuvettes in the new Experiment are not assigned to groups, and the group table contains data from the original Experiment.

Resolution:

Cuvette Experiments are duplicated with properly assigned groups and no data.

Impact of fix:

This fix has no impact on current workflow or data.

Group Blanks in a Cuvette Set Section are not Applied When the Blank is After the Twelfth Cuvette

Tracking ID: 13114

If a group blank was defined after the twelfth cuvette in a **Cuvette Set**, the group blank was not applied to the data reduction.

Resolution:

Group blanks are applied for cuvettes regardless of where the group blank is positioned in the section.

Impact of fix:

This fix has no impact on current workflow or data.

Using Identical Sample Names Except for Case Causes the Program to Close Unexpectedly

Tracking ID: 13219

Certain actions can sometimes cause the program to close unexpectedly if a SoftMax Pro Software file has identical sample names except for the upper-case and lower-case letter usage. These actions can include exporting data or opening a **Group** section that contains these sample names.

Resolution:

If sample names are otherwise identical except for the upper-case and lower-case letter usage, then these sample names are considered unique, and not identical. The data for these sample names are calculated separately.

Impact of fix:

This fix has no impact on current workflow or data.

IndexListFor() Results are Off by One When Used in a Group Table

Tracking ID: 13656

Using IndexListFor() for a column formula in a group table generates values starting with zero (0) instead of one (1).

Resolution:

IndexListFor() results start with one (1).



Note: The IndexListFor function should be applied to arrays only. To generate a group column of sample indices, use the Index function.

Impact of fix:

This fix has no impact on current workflow or data.

An Exception Error Occurs When the Mid() Function References a Character Outside of the Length of the Input String

Tracking ID: 13673

If a parameter in the Mid() function referenced a character that was outside of the length of the input string, the software generated an exception error. For example, in Mid("ABC",4,1), the function tried to find the fourth letter in the string.

Resolution:

An out-of range value for the Mid() function returns an empty string.

Impact of fix:

This fix has no impact on current workflow or data.

In the GxP edition, Data Cannot be Exported After the File is Signed

Tracking ID: 13879

After a SoftMax Pro GxP Software data file is signed, the data could not be exported.

Resolution:

Exporting data from a signed SoftMax Pro GxP Software data file is allowed with the proper user permissions.

Impact of fix:

This fix has no impact on current workflow or data.

GxP Data Files from v5.x with Extended ASCII Characters in the Audit Trail Cannot Be Opened

Tracking ID: 13986

Trying to open a SoftMax Pro GxP Software data file that contains extended ASCII characters in the audit trail generates an error message stating that the audit trail has been tampered with.

Resolution:

A SoftMax Pro GxP Software data file with extended ASCII characters in the audit trail can be opened by the software.

Impact of fix:

This fix has no impact on current workflow or data.

Long File Paths are Truncated in the Footer when an Experiment is Printed

Tracking ID: 14030

When printing an experiment, if the entire file path and file name of the data file is longer than 50 characters, the file path and name is truncated in the footer.

Resolution:

Long file paths wrap to the next line in the footer when printing an experiment.

Impact of fix:

This fix has no impact on current workflow or data.

Cannot Open Files with Upper-Case Letters in the File extension

Tracking ID: 14032

If a SoftMax Pro Software file had one or more upper-case letters in its file extension, the file could not be opened by the software.

Resolution:

The software can open all valid SoftMax Pro Software files regardless of the case of the file extension.

Impact of fix:

This fix has no impact on current workflow or data.

Inconsistent Result are Returned When a Curve Fit with an Array-Based Weighting Formula is Used With a Single-Number Data Value

Tracking ID: 14049

Use of a curve fit weighting where the weighting formula is an array but the data value is a single number can produce inconsistent results.

For example, after saving a file that used custom weighting in a 4-Parameter curve fit, reopening the file displayed different relative potency and C values.

Resolution:

If a curve fit refers to a group column of single values for the y-data, but refers to a column of arrays for the weighting, the first value in the weighting array for each sample is used. However if the group samples are distributed over multiple plate sections, the software does not guarantee the ordering of sample values.

In SoftMax Pro Software v6.4 the order is lexicographical by plate name, so that consistent results are obtained. However, this mismatch between y-data and weights should be avoided since it is ambiguous.

Impact of fix:

This fix has no impact on current workflow or data.

A Custom Wavelength Reduction Formula Dependent on the Kinetic Reduction Causes the Software to Become Unresponsive

Tracking ID: 14302

The software became unresponsive when a custom wavelength reduction formula was dependent on the kinetic reduction.

Resolution:

This circular reference is detected and reported to the user.

Impact of fix:

This fix has no impact on current workflow or data.

Protocol File Cannot Open if NthArray Formula Has a Parameter with a Negative Value

Tracking ID: 14309

If a protocol file had a negative value referenced in the NthArray formula, an error condition occurred where the file could not be opened.

Resolution:

The software can open a data file that contains out-of-range formula values.

Impact of fix:

This fix has no impact on current workflow or data.

The Save As Dialog Does Not Display the Original File Name When Saving a v5.x File

Tracking ID: 14557

After opening a SoftMax Pro Software v5.x file and then electing to save the file in v6.x format, the **Save As** dialog did not display the original file name in the **File name** field.

Resolution:

The original file name is displayed in the **Save As** dialog when saving v5.x files in v6.x format.

Impact of fix:

This fix has no impact on current workflow or data.

Imported Data From a v5.x File is Labeled as Read on an Incorrect Date

Tracking ID: 14630

After opening a SoftMax Pro Software v5.x file that contained imported data, the Read Information displayed a read date that was in the future.

Resolution:

Imported data is labeled with the correct date after opening a SoftMax Pro Software v5.x file.

Impact of fix:

This fix has no impact on current workflow or data.

Exported Graphs get Cut Off when the System Font Size is Set to Medium or Large

Tracking ID: 14725

An exported graph from a **Graph** section was cut off on the right if the system font size was set to medium or large.

Resolution:

Exported graphs scale to fit the image size when the system font size is set to medium or large.

Impact of fix:

This fix has no impact on current workflow or data.

Group Blanks are Incorrectly Subtracted in Some Cases

Tracking ID: 14836

If there were multiple groups with blanks in the same plate and post-reduction blank subtraction was specified, the blanks were incorrectly subtracted.

Resolution:

When there are multiple groups with blanks in the same plate and post-reduction blank subtraction is specified, blanks are subtracted from well values in the corresponding group.

Impact of fix:

This fix has no impact on current workflow or data.


The Software Installation Does Not Always Associate .tif Files with the ImageJ Software


Tracking ID: 14851

By design, the SoftMax Pro Software associates the .tif file type with the ImageJ Software during installation, when possible. The SoftMax Pro Software depended on this file association to view and analyze a Western Blot membrane image in the ImageJ Software. Some computers prevented the installation from changing the previously established association of .tif files.

Resolution:

This release of the software introduces an alternative method to view and analyze a Western Blot membrane image in the ImageJ Software.

To view the membrane image in the ImageJ software, click  in the toolbar at the top of the section and then click **ImageJ Editor**.

To view the membrane image in your selected image-analysis tool, click  in the toolbar at the top of the section and then click **External Image Editor**. This option is available only if you have .tif files associated with a program other than ImageJ software. The icon used for this tool changes depending on the selected image-analysis tool.

Impact of fix:

This fix has no impact on current workflow or data.

Custom Formulas in a Plate Section do not Update When the Name of the Plate Section Changes

Tracking ID: 14855

When a custom formula referred to the data in the same **Plate** section as the formula, if the **Plate** section was renamed, then the formula did not update properly to refer to the data in the **Plate** section.

Also, when a custom formula referred to the data in the same **Plate** section as the formula, if the **Plate** section was duplicated, then the formula referred to the data in the original **Plate** section instead of the duplicate.

This was due to the software retaining the scope (@Plate) in the formula, even when the formula referred to the section in which it resided.

Resolution:

When a formula refers to the data in the same section as the formula, the software removes extraneous scope information from the formula to create a relative path to the data.

For example, if the formula **!Lm1@Plate1** is in the section named **Plate1**, then the scope is removed from the formula and simplified to **!Lm1** so that it will always refer to itself.

However, if the formula **!Lm1@Plate2** is in the section named **Plate1**, then the scope is retained as **!Lm1@Plate2** so that it will always refer to the section named **Plate2**.

Impact of fix:

This fix has no impact on current workflow or data.

Opening a v5.x Luminescence File Changes Excitation Cutoff From Auto to Off

Tracking ID: 14872

If a SoftMax Pro Software v5.x file had a luminescence experiment with the excitation cutoff filter set to **Auto**, when the file was opened in v6.x, the excitation cutoff filter was changed to **Off**.

Resolution:

The excitation cutoff filter setting is retained when the software opens a v5.x file.

Impact of fix:

This fix has no impact on current workflow or data.

NthArray() Results are Off by One

Tracking ID: 14877

Using NthArray() generated incorrect values that were off by one. For example, if the function was expected to return the first row of an array list, it would instead return the second.

Resolution:

The NthArray() function returns the correct values.

Impact of fix:

This fix has no impact on current workflow or data.

Summary Formulas are not Displayed When a Template is Pasted into Another Plate Section

Tracking ID: 15070

Copying a template from a **Plate** section that has summary formulas and then pasting the template into another **Plate** section fails to display the summary formulas in the second **Plate** section.

Resolution:

A pasted template replaces a previously defined template in a **Plate** section, and displays summary formulas when applicable.

Impact of fix:

This fix has no impact on current workflow or data.

The Plate Blank in Legend is not Updated When a Template is Pasted into a Plate With an Existing Template

Tracking ID: 15239

Copying a template from a **Plate** section that has a plate blank in the legend and then pasting the template into a **Plate** section that already has a template defined fails to update the plate blank value in the second **Plate** section.

Resolution:

A pasted template replaces a previously defined template in a **Plate** section, and updates the plate blank value in the legend.

Impact of fix:

This fix has no impact on current workflow or data.

The Value Returned for %Covered is for the Entire Well When ROI is Defined

Tracking ID: 15276

After defining a region of interest (ROI) for an Imaging read, the value returned for %Covered was for the full well image instead of just the ROI.

Resolution:

If a region of interest (ROI) is defined, %Covered is limited to the ROI.

Impact of fix:

This fix has no impact on current workflow or data.

Known Issues in SoftMax Pro Software v6.4

The following known issues exist in SoftMax Pro Software v6.4.

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.

Recovery of Multiple Untitled Files Gives All the Untitled Files the Same Name

Tracking ID: 15465

If the SoftMax Pro Software experiences an unexpected application interruption, then when the SoftMax Pro Software restarts, it lists the files that are available for recovery. If two or more untitled files are recovered, then all the files are opened with the name **Untitled1**.

Planned Resolution:

Incrementing file names for recovered untitled files is in the product backlog for future development.

Known Issues in Previous Releases of SoftMax Pro Software 6

For the known issues reported in the release notes for previous releases, see the following topics:

- [Known Issues in SoftMax Pro Software v6.3.1 on page 42](#)
- [Known Issues in SoftMax Pro Software v6.3 on page 64](#)
- [Known Issues in SoftMax Pro Software v6.2.2 on page 84](#)
- [Known Issues in SoftMax Pro Software v6.2.1 on page 89](#)
- [Known Issues in SoftMax Pro Software v6.2 on page 108](#)
- [Known Issues in SoftMax Pro Software v6.1 on page 131](#)
- [Known Issues in SoftMax Pro Software v6.0 on page 139](#)

Chapter 5: SoftMax Pro Software Version 6.3.1 Software Release Notes

The SoftMax® Pro Microplate Data Acquisition and Analysis Software version 6.3.1 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 6.3, the last general release of the SoftMax Pro Software.

- [New in SoftMax Pro Software v6.3.1 on page 39](#)
- [Modifications Made to SoftMax Pro Software v6.3.1 on page 41](#)
- [Issues Addressed in SoftMax Pro Software v6.3.1 on page 41](#)
- [Known Issues in SoftMax Pro Software v6.3.1 on page 42](#)

New in SoftMax Pro Software v6.3.1

The following new features are included in SoftMax Pro Software version 6.3.1.

Support for the ScanLater Western Blot (WB) Detection Cartridge

The ScanLater™ Western Blot (WB) Detection Cartridge enables time-resolved fluorescence read mode for Western Blot membranes.

The Molecular Devices ScanLater™ Western Blot Assay Kit is a novel system for protein analysis that is incorporated into a SpectraMax® Paradigm® or SpectraMax® i3 Multi-Mode Detection Platform. Membranes are incubated with Eu-chelate labeled secondary antibodies or streptavidin that bind specifically to the target protein-specific primary antibody. Europium has a long fluorescence lifetime, on the order of 1 msec, and detection is done in Time Resolved Fluorescence (TRF) mode which significantly reduces background from auto-fluorescence or other sources of short lifetime emissions. The membranes are placed into a microplate reader where they are scanned with the ScanLater Western Blot (WB) Detection Cartridge.

After scanning a membrane for Western Blot data, the data are displayed in the SoftMax Pro Software as an image. You can use the image tools in the **Plate** section to zoom, crop, colorize, and adjust the intensity of the image. You can also select a region of interest (ROI) and rescan the membrane at a higher resolution.

Western Blot membrane data are saved as a TIFF image that can be analyzed by the image-analysis tool of your choice. The SoftMax Pro Software comes with an installed version of the ImageJ software from U.S. National Institute of Health (NIH).

For more information, see the SoftMax Pro Software application help or user guide.

New Protocols

The following protocols have been added to the installed software.

Reader Validation-Plate Abs

- SpectraMax i3 SpectraTest ABS1

This new protocol contains guidelines and instrument settings for validation of the SpectraMax® i3 Multi-Mode Detection Platform using the SpectraTest® ABS1 Absorbance Validation Plate.

Reader Validation-Plate FI

- SpectraMax i3 SpectraTest FL1

This new protocol contains guidelines and instrument settings for validation of the SpectraMax® i3 Multi-Mode Detection Platform using the SpectraTest® FL1 Fluorescence Validation Plate.

Reader Validation-Plate Lum

- SpectraMax i3 SpectraTest LM1

This new protocol contains guidelines and instrument settings for validation of the SpectraMax® i3 Multi-Mode Detection Platform using the SpectraTest® LM1 Luminescence Validation Plate.

Western Blot

- ScanLater Membrane Holder ROI

This new protocol contains guidelines and instrument settings for acquiring Western Blot data from a ScanLater Membrane Holder using a ScanLater Western Blot (WB) Detection Cartridge in either a SpectraMax Paradigm Instrument or a SpectraMax i3 Instrument. The protocol is optimized for use with the ScanLater Western Blot Assay Kit.

- ScanLater Mini Membrane ROI

This new protocol contains guidelines and instrument settings for acquiring Western Blot data from a ScanLater Membrane Holder using a ScanLater Western Blot (WB) Detection Cartridge in either a SpectraMax Paradigm Instrument or a SpectraMax i3 Instrument. The protocol is optimized for use with the ScanLater Western Blot Assay Kit.

Modifications Made to SoftMax Pro Software v6.3.1

The following modifications were made to SoftMax Pro Software version 6.3.1.

More Settings in the Plate Editor

Settings for the well depth, the microplate height with a lid, and the length and width of a microplate are now included in the **Plate Editor** to more accurately define the dimensions of a microplate for the SpectraMax i3 Multi-Mode Detection Platform, the SpectraMax Paradigm Multi-Mode Detection Platform, and the FilterMax F3 and F5 Multi-Mode Microplate Readers.

For more information, see the SoftMax Pro Software application help or user guide.

Issues Addressed in SoftMax Pro Software v6.3.1

The following issues were addressed in SoftMax Pro Software version 6.3.1.

Graphs get Cut Off when the System Font Size is Set to Medium or Large

Tracking ID: 12173

The graph in a **Graph** section was cut off on the right if the system font size was set to medium or large.

Resolution:

Graphs scale properly to be visible when the system font size is set to medium or large.

Impact of fix:

This fix has no impact on current workflow or data.

Running an Excel Workflow on a 384-Well Microplate Generates Errors

Tracking ID: 14034

An Excel workflow that runs data acquisition on a 384-well microplate and then writes the data to Excel generated data-parsing errors.

Resolution:

Running an Excel workflow on a 384-well microplate writes the data to Excel without generating data parsing errors.

Impact of fix:

This fix has no impact on current workflow or data.

The Luminescence Wavelength Setting Gets Changed After Opening a File From a Previous Version

Tracking ID: 14347

If a file was created in a previous version of the SoftMax Pro Software for a luminescence read on the SpectraMax Paradigm Instrument with the emission wavelength set to **All**, when the file was opened with version 6.3, the wavelength setting was changed to a fixed wavelength.

Resolution:

Opening a file for a luminescence read does not change the emission wavelength settings.

Impact of fix:

This fix has no impact on current workflow or data.

Known Issues in SoftMax Pro Software v6.3.1

The following known issues exist in SoftMax Pro Software v6.3.1.

The Settings Dialog Accepts an Incorrect Minimum Kinetic Interval

Tracking ID: 12673

When setting up a multi-wavelength kinetic read for the SpectraMax i3 Instrument, the **Settings** dialog allows a minimum kinetic interval that is less than the required interval for the read. An error message is displayed when trying to read the microplate.

Resolution:

This issue was addressed in version 6.4. See [The Settings Dialog Accepts an Incorrect Minimum Kinetic Interval on page 26](#).

An Imaging Read Retains "More Settings" From the Settings of a Different Read Mode

Tracking ID: 12761

If the settings for a **Plate** section were created for a read mode that includes the **More Settings** category, and then the settings were modified to an Imaging read for the same **Plate** section, the settings from the **More Settings** category (such as **Read Order**) are retained for the Imaging read. This can cause erroneous or incomplete data acquisition for the Imaging read if the retained settings are incompatible with an Imaging read.

Resolution:

This issue was addressed in version 6.4. See [An Imaging Read Retains "More Settings" From the Settings of a Different Read Mode on page 26](#).

The Group Blank Information Does Not Print With a Group Section

Tracking ID: 12762

When group blank information is displayed in a **Group** section, the group blank information is not included in a print out of the **Group** section.

Planned Resolution:

Printing group blank information with a **Group** section is in the product backlog for future development.

A New Experiment with Cuvettes Does Not Assign Groups to the Cuvettes and Retains the Data From the Original Experiment

Tracking ID: 13113

If a data file contains an Experiment with a **Cuvette Set** section, when you create a new Experiment, the new Experiment contains an identical **Cuvette Set** section. However, the cuvettes in the new Experiment are not assigned to groups, and the group table contains data from the original Experiment.

Resolution:

This issue was addressed in version 6.4. See [A New Experiment with Cuvettes Does Not Assign Groups to the Cuvettes and Retains the Data From the Original Experiment](#) on page 26.

Group Blanks in a Cuvette Set Section are not Applied When the Blank is After the Twelfth Cuvette

Tracking ID: 13114

If a group blank is defined after the twelfth cuvette in a **Cuvette Set**, the group blank is not applied to the data reduction.

Resolution:

This issue was addressed in version 6.4. See [Group Blanks in a Cuvette Set Section are not Applied When the Blank is After the Twelfth Cuvette](#) on page 27.

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.

Product Activation Fails if the Trial License Did Not Install

Tracking ID: 13483

If computer security issues prevent the trial license from installing properly, the full software license cannot be activated.

Planned Resolution:

Ensuring the ability to activate the installed software is in the product backlog for future development.

IndexListFor() Results are Off by One When Used in a Group Table

Tracking ID: 13656

Using IndexForList() for a column formula in a group table generates values starting with zero (0) instead of one (1).

Resolution:

This issue was addressed in version 6.4. See [IndexListFor\(\) Results are Off by One When Used in a Group Table](#) on page 27.

An Exception Error Occurs When the Mid() Function References a Character Outside of the Length of the Input String

Tracking ID: 13673

If a parameter in the Mid() function references a character that is outside of the length of the input string, the software generates an exception error. For example, in Mid("ABC",4,1), the function tries to find the fourth letter in the string.

Resolution:

This issue was addressed in version 6.4. See [An Exception Error Occurs When the Mid\(\) Function References a Character Outside of the Length of the Input String](#) on page 28.

In the GxP edition, Data Cannot be Exported After the File is Signed

Tracking ID: 13879

After a SoftMax Pro GxP Software data file is signed, the data cannot be exported.

Resolution:

This issue was addressed in version 6.4. See [In the GxP edition, Data Cannot be Exported After the File is Signed](#) on page 28.

GxP Data Files from v5.x with Extended ASCII Characters in the Audit Trail Cannot Be Opened

Tracking ID: 13986

Trying to open a SoftMax Pro GxP Software data file that contains extended ASCII characters in the audit trail generates an error message stating that the audit trail has been tampered with.

Planned Resolution:

This issue was addressed in version 6.4. See [GxP Data Files from v5.x with Extended ASCII Characters in the Audit Trail Cannot Be Opened](#) on page 28.

Cannot Open Files with Upper-Case Letters in the File extension

Tracking ID: 14032

If a SoftMax Pro Software file has one or more upper-case letters in its file extension, the file cannot be opened by the software.

Resolution:

This issue was addressed in version 6.4. See [Cannot Open Files with Upper-Case Letters in the File extension](#) on page 29.

In a 4-Parameter Curve Fit with Custom Weighting, the Relative Potency and C values Change after Saving and Reopening the File

Tracking ID: 14049

After saving a file that uses custom weighting in a 4-Parameter curve fit, reopening the file displays different relative potency and C values.

Resolution:

This issue was addressed in version 6.4. See [Inconsistent Results are Returned When a Curve Fit with an Array-Based Weighting Formula is Used With a Single-Number Data Value](#) on page 30.

Group Table Data Generated in v4.x and then Saved in v5.x Displays incorrectly in v6.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. If the table data is regenerated and then saved in 6.x, after reopening the file, the table is reconfigured and some data is missing.

Planned Resolution:

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

Protocol File Cannot Open if NthArray Formula Has a Parameter with a Negative Value

Tracking ID: 14309

If a protocol file has a negative value referenced in the NthArray formula, an error condition occurs where the file cannot be opened.

Resolution:

This issue was addressed in version 6.4. See [Protocol File Cannot Open if NthArray Formula Has a Parameter with a Negative Value](#) on page 31.

The Save As Dialog Does Not Display the Original File Name When Saving a v5.x File

Tracking ID: 14557

After opening a SoftMax Pro Software v5.x file and then electing to save the file in v6.x format, the **Save As** dialog does not display the original file name in the **File name** field.

Resolution:

This issue was addressed in version 6.4. See [The Save As Dialog Does Not Display the Original File Name When Saving a v5.x File](#) on page 31.

Imported Data From a v5.x File is Labeled as Read on an Incorrect Date

Tracking ID: 14630

After opening a SoftMax Pro Software v5.x file that contains imported data, the Read Information displays a read date that is in the future.

Resolution:

This issue was addressed in version 6.4. See [Imported Data From a v5.x File is Labeled as Read on an Incorrect Date](#) on page 32.

The Splash Screen Takes too Long to be Displayed When the Software Starts

Tracking ID: 14821

After starting the program on some computers, the splash screen takes several seconds to be displayed. This delay sometimes causes users to try to start the software again.

Planned Resolution:

Decreasing the amount of time that it takes to display the splash screen when starting the software is in the product backlog for future development.

The Group Blank is Incorrectly Subtracted from Data in a v5.x File

Tracking ID: 14836

After opening a SoftMax Pro Software v5.x file that contains a group blank reduction, the group blank is subtracted incorrectly from the data.

Resolution:

This issue was addressed in version 6.4. See [Group Blanks are Incorrectly Subtracted in Some Cases on page 32](#).

The Software Installation Does Not Always Associate .tif Files with the ImageJ Software

Tracking ID: 14851

By design, the SoftMax Pro Software associates the .tif file type with the ImageJ Software during installation. The SoftMax Pro Software depends on this file association to view and analyze a Western Blot membrane image in the ImageJ Software. Some computers prevent the installation from changing the previously established association of .tif files.

Resolution:

This issue was addressed in version 6.4. See [The Software Installation Does Not Always Associate .tif Files with the ImageJ Software on page 33](#).

The Display Settings for a Western Blot Read Do Not Get Copied to a New Plate Section

Tracking ID: 14854

If the display settings (**LUT**, **Subtract**, **Invert**, **Log**) are changed for acquired Western Blot data in a **Plate** section before the data is saved, when a new **Plate** section is created, these settings are reset to default values in the new section.

If the data is saved before the new **Plate** section is created, the settings are copied to the new section as expected.

Planned Resolution:

Copying the Western Blot display settings to a new **Plate** section before the data is saved is in the product backlog for future development.

Known Issues in Previous Releases of SoftMax Pro Software 6

For the known issues reported in the release notes for previous releases, see the following topics:

- [Known Issues in SoftMax Pro Software v6.3 on page 64](#)
- [Known Issues in SoftMax Pro Software v6.2.2 on page 84](#)
- [Known Issues in SoftMax Pro Software v6.2.1 on page 89](#)
- [Known Issues in SoftMax Pro Software v6.2 on page 108](#)
- [Known Issues in SoftMax Pro Software v6.1 on page 131](#)
- [Known Issues in SoftMax Pro Software v6.0 on page 139](#)

Chapter 6: SoftMax Pro Software Version 6.3 Software Release Notes

The SoftMax® Pro Microplate Data Acquisition and Analysis Software version 6.3 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 6.2.2, the last general release of the SoftMax Pro Software.

- [New in SoftMax Pro Software v6.3 on page 49](#)
- [Modifications Made to SoftMax Pro Software v6.3 on page 53](#)
- [Issues Addressed in SoftMax Pro Software v6.3 on page 55](#)
- [Known Issues in SoftMax Pro Software v6.3 on page 64](#)

New in SoftMax Pro Software v6.3

The following new features are included in SoftMax Pro Software version 6.3.

Support for the SpectraMax i3 Multi-Mode Detection Platform

The SpectraMax® i3 Multi-Mode Detection Platform from Molecular Devices® is a monochromator-based, multi-mode detection platform.

The built-in read modes include:

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

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

The read capabilities of the SpectraMax i3 Instrument can be upgraded with user-installable detection cartridges.

The SpectraMax® MiniMax™ Imaging Cytometer adds imaging capability to the SpectraMax i3 Instrument to visually inspect your sample and to run cell-based assays at cellular or whole-cell resolution. See [Support for the SpectraMax MiniMax Imaging Cytometer on page 50](#).

Support for the SpectraMax MiniMax Imaging Cytometer

The SpectraMax® MiniMax™ Imaging Cytometer adds imaging capability to the SpectraMax i3 Instrument to visually inspect your sample and to run cell-based assays at cellular or whole-cell resolution. The cytometer uses solid-state illumination, a digital camera, a 4x objective lens, laser auto-focus, and auto-exposure to capture fluorescent or label-free images of a sample at the bottom of the microplate wells. The cytometer supports 96-well and 384-well, flat-bottom, clear-bottom microplates.

To do brightfield, transmitted-light imaging, you must install the SpectraMax i3 Platform Transmitted Light (TL) Detection Cartridge in the detection cartridge drawer.

Optimizing Your Computer for Image Acquisition

Acquiring images requires a large portion of computer memory and resources. Make sure that your computer meets the requirements in the [Imaging Cytometer Computer System Specifications on page 7](#).

Before starting an image acquisition, you must save the data file in a location with enough capacity for the image files. When you create a data file for an imaging experiment or a Western Blot experiment, the SoftMax Pro Software creates a folder with the same name as the data file. See the SoftMax Pro Software application help or user guide.

Each acquired image file for an Imaging mode read can be larger than 2 megabytes. Acquiring the image of a single site in each well of a 96-well microplate can generate 300 megabytes of image data. A 384-well microplate can generate 1 gigabyte of image data. Acquiring images of multiple sites increases the data-storage requirement. Molecular Devices recommends that you employ a data management system.

For best results, save your imaging data file on a secondary internal hard drive. You can use an external hard drive, but this can slow the data acquisition and is not recommended.



Note: To prevent data loss, do not save your imaging data file on a USB flash drive or to a network location. These methods are not supported by Molecular Devices.

Before starting an image acquisition, minimize the demands on computer memory and resources by turning off all other programs. When the SoftMax Pro Software has limited access to computer memory and resources, image acquisition can take a long time. In some cases, images of some of the wells can be lost.

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 9](#).

Molecular Devices recommends that you use Auto Save with imaging data for saving to text files only. If you use Auto Save to save multiple imaging data files, each new data file is saved without the related folders required for saving images and analysis results.

New Curve Fits

The following curve fits have been added to the installed software.

- Brain Cousens

This function is a generalization of the four-parameter logistic (corresponding to $G=0$) that can be used as a hormesis model for dose-response data. For example, an inhibitor curve shows an enhanced response over a low-dose range.

- 5P Alternate

This is a re-parameterization of the standard five-parameter logistic, such that parameters B and C have the same interpretation as in the case of the four-parameter logistic. In particular, the EC50 value is given by C.

New Automation Features

New API Commands

- GetGroupNameAssignments

Returns the group name assignments of the currently selected plate section.

- GetInstrumentStatus

Returns the status of the currently connected instrument.

- GetTemperature

Returns the incubator temperature of the currently connected instrument.

Multi-Threaded Event Handling

Automation events are now received by the automation client on a separate thread from the thread that handles command submission.

Excel VBA Macro Support

The SoftMax Pro Software Automation API can be accessed from Excel Visual Basic by using a tool called Excel-DNA. To learn more, go to <http://exceldna.codeplex.com/>.

SoftMax Pro Excel Workflows

The SoftMax Pro Excel workflows are designed to expand the industry-leading handling of Plate Format Data by the SoftMax Pro Software with Excel-based handling of List Format Data. You can use SoftMax Pro Excel workflows to run discontinuous kinetic reads, multiplexed reads, kinetic well scan reads, and temperature-triggered reads.

The SoftMax Pro Automation SDK is the underlying mechanism used by SoftMax Pro Excel workflows to access SoftMax Pro Software functionality. If you want to write your own workflows, you need to be familiar with the available Automation Commands. See the *SoftMax Pro Software Automation API Reference Guide*.

New Protocols

The following protocols have been added to the installed software.

ELISA-Endpoint

- Quantiferon-TB

This new protocol contains guidelines and instrument settings to be used with the Quantiferon-TB Gold In Tube Kit. This protocol is suitable for readers capable of measuring OD at 450 nm and 620 nm.

Cell Growth & Viability

- MTS Cell Proliferation

This new protocol contains guidelines and instrument settings for a colorimetric absorbance assay for determining the number of viable cells in proliferation or chemosensitivity assays. This protocol designed to be used with Promega products G5421, G5430, G5440, G1111, and G1112.

SpectraDrop Micro-Volume Microplates

- SpectraDrop DNA RNA Quant with Stnds

This new protocol contains guidelines and instrument settings for quantitation of DNA and RNA using a Molecular Devices SpectraDrop micro-volume microplate. This protocol is suitable for readers capable of absorbance reads.

- SpectraDrop Protein Quant with Stnds

This new protocol contains guidelines and instrument settings for quantitation of protein using a Molecular Devices SpectraDrop micro-volume microplate. This protocol is suitable for readers capable of absorbance reads (excluding the FilterMax instruments).

Modifications Made to SoftMax Pro Software v6.3

The following modifications were made to SoftMax Pro Software version 6.3.

Plate Height Warning Option

To prevent damage to the SpectraMax i3 Multi-Mode Detection Platform, the Plate Height Warning is displayed as a reminder to make sure that the Plate Height for the microplate is defined correctly. The SoftMax Pro Options dialog contains a setting to prevent the Plate Height Warning from automatically being displayed when you start a read. The Plate Height Warning automatically opens when you start a read if this check box is cleared.

Plate Eject After Read Option

The SoftMax Pro Options dialog contains a setting to prevent the microplate drawer from automatically opening after you finish a read. When this check box is cleared, the microplate drawer opens after a read completes. When this check box is selected, the microplate drawer remains closed after a read completes.

SoftMax Pro GxP Software Modifications

The following modifications were made to the SoftMax Pro GxP Software:

- Plate sections and Cuvette Set sections display information about the user who done a read.
- Plate sections and Cuvette Set sections display information about the user who done a paste operation.

Protocol Modifications

The following protocols have been modified.

Reader Validation-Cuvette Abs

- M Series Hellma
This protocol was modified to correct the Photometric Accuracy specification (.006 to .005) and to correct the formula for Photometric Precision acceptability.
- Plus Hellma
This protocol was modified to correct the Photometric Accuracy specification (.006 to .005) and to correct the formula for Photometric Precision acceptability.

SpectraDrop Micro-Volume Microplates

All protocols originally written for the MicroMax Low-Volume Plate have been renamed and moved to the SpectraDrop Micro-Volume Microplates folder.

- **SpectraDrop Abs DNA Quant**

This protocol was renamed from MicroMax Abs DNA Quant. It was also modified to correct the concentration calculation with dilution factor.

- **SpectraDrop Abs DNA Quant (Paradigm)**

This protocol was renamed from MicroMax Abs DNA Quant (Paradigm). It was also modified to correct the concentration calculation with dilution factor.

- **SpectraDrop Fluor DNA Quant**

This protocol was renamed from MicroMax Fluor DNA Quant. It was also modified to correct the concentration calculation with dilution factor.

- **SpectraDrop Fluor DNA Quant (FilterMax)**

This protocol was renamed from MicroMax Fluor DNA Quant (FilterMax). It was also modified to correct the concentration calculation with dilution factor.

- **SpectraDrop Fluor DNA Quant (Paradigm)**

This protocol was renamed from MicroMax Fluor DNA Quant (Paradigm). It was also modified to correct the concentration calculation with dilution factor.

TR-FRET

- **HTRF Assay Optimization (M5e)**

This protocol was renamed from HTRF Assay Optimization.

- **HTRF Standard Assay Europium (M5e)**

This protocol was renamed from HTRF Standard Assay Europium.

- **HTRF Standard Assay Terbium (M5e)**

This protocol was renamed from HTRF Standard Assay Terbium.

Issues Addressed in SoftMax Pro Software v6.3

The following issues were addressed in SoftMax Pro Software version 6.3.

Right-Clicking Selected Text in a Notes Section Makes the Text Show as Deselected

Tracking ID: 4764

After selecting text in a Notes section and then right-clicking the selected text, the highlighting disappeared making the text show as deselected. Clicking an item in the context menu restored the highlighting of the selected text.

The text was still selected, but the visual appearance made it look deselected. For example, after clicking Copy in the context menu, the text that was selected was copied to the Clipboard.

Resolution:

The text remains highlighted after right-clicking to visually indicate that it is still selected.

Impact of fix:

This fix has no impact on current workflow or data.

The settings return to defaults after moving a Tunable Wavelength (TUNE) Detection Cartridge or Multi-Mode (MULTI) Detection Cartridge between the top and bottom drawer in a SpectraMax Paradigm instrument while the Settings dialog is open

Tracking ID: 8901

With the Settings dialog open, moving a Tunable Wavelength (TUNE) Detection Cartridge or Multi-Mode (MULTI) Detection Cartridge between the top and bottom drawers on a SpectraMax Paradigm instrument reset the settings to their defaults.

Resolution:

Setting definitions are retained regardless of the detection cartridge position. If a detection cartridge is in the incorrect drawer when the Settings dialog is displayed, then a message is displayed.

Impact of fix:

This fix has no impact on current workflow or data.

In the SoftMax Pro GxP Software, Opening an Autosave-Generated File Opened the File with the Same Name as the Original File

Tracking ID: 9281

After using Autosave to generate a data file with a different name from the originating data file, opening the Autosave-generated file indicated that a different file with the same name as the originating file had opened.

For example, If you had a file named Original.sdx and then used Autosave to generate a file named Data1.sdx, after you opened the Data1.sdx file, the software indicated that a file named Original.sdx was opened with the Autosaved data included.

Resolution:

After using Autosave to generate a data file with a different name from the originating data file, opening the Autosave-generated file indicates that a file with the same name as the autosaved file has opened.

For example, If you have a file named Original.sdx and then use Autosave to generate a file named Data1.sdx, after you open the Data1.sdx file, the software indicates that a file named Data1.sdx was opened with the Autosaved data included.

Impact of fix:

This fix has no impact on current workflow or data.

Issuing the SetInstrument Command Through the Automation Interface When No Data File or Protocol File is Active in the Workspace Generates an Error Message

Tracking ID: 9283

When there is no active data file or protocol file in the software workspace, using the automation interface to send a SetInstrument command generated an error message.

This could happen when the What's New tab is active in the workspace.

Resolution:

Issuing the SetInstrument command does not generate an error whether or not a data file or protocol file is active in the workspace.

Impact of fix:

This fix has no impact on current workflow or data.

When the PathCheck Technology is not Applied to a reduction, Erroneous Values are Displayed in Some Wells

Tracking ID: 9683

When the PathCheck® Pathlength Measurement Technology was not applied during a reduction, some wells contained “Path?” instead of the correct numerical value.

Resolution:

When the PathCheck Technology is not applied during a reduction, all wells display their correct values.

Impact of fix:

This fix has no impact on current workflow or data.

Using the InterpX Function with a Point-to-Point Curve Fit Gives an Incorrect Value

Tracking ID: 9921

In a graph with a Point-to-Point curve fit sometimes gave the wrong value for the InterpX function.

Resolution:

Using the InterpX function with a Point-to-Point curve fit gives the correct value.

Impact of fix:

This fix has no impact on current workflow or data.

When Running a Long-Term, High-Throughput Read, the Software Reports Running Out of Memory

Tracking ID: 9956

Running a high-throughput read over multiple days caused the software to report an out-of-memory condition.

Resolution:

A high-throughput run of 1000 microplates completes without incident.

Impact of fix:

This fix has no impact on current workflow or data.

Duplicate CommandComplete Events are Published by the Automation Server when ErrorEvents are Thrown Before Command Completion

Tracking ID: 9973

When an ErrorEvent occurs before CommandCompletion while using the automation interface, duplicate CommandComplete events were published.

Resolution:

Single CommandComplete events are published by the automation server for when ErrorEvents are thrown before CommandCompletion.

Impact of fix:

This fix has no impact on current workflow or data.

Duplicate InstrumentStatus Events are Generated

Tracking ID: 9975

When the instrument status changed, two InstrumentStatus events were generated without a corresponding duplicate status change. For example, two consecutive Busy events were often generated.

Resolution:

InstrumentStatus events are generated only once after each status change.

Impact of fix:

This fix has no impact on current workflow or data.

Duplicate Error Events are Generated for the SelectNextPlateSection Command

Tracking ID: 9977

When the automation command SelectNextPlateSection() fails because there are no mo

Resolution:

When the automation command SelectNextPlateSection() fails because there are no more plate sections, the automation server publishes one Error event.

Impact of fix:

This fix has no impact on current workflow or data.

A Communication Error When the Automation Server is Trying to Publish Causes the Software to Close Unexpectedly

Tracking ID: 9979

When the automation server tried to publish an event and a communication error occurred, the software closed unexpectedly.

Resolution:

Communication errors when the automation server tries to publish an event do not cause the software to close unexpectedly.

Impact of fix:

This fix has no impact on current workflow or data.

When the SelectSection Command Targets a Section That Does Not Exist, the Automation Interface Becomes Unresponsive

Tracking ID: 9981

When the Section targeted by the SelectSection command did not exist in the experiment, the automation interface became unresponsive.

Resolution:

An Error event is published when the SelectSection command targets a section that does not exist.

Impact of fix:

This fix has no impact on current workflow or data.

The SetTemperature Command Accepts Invalid Values

Tracking ID: 9983

When a temperature value that is out-of-range for the instrument was passed to the SetTemperature command, the value was accepted.

Resolution:

Out-of-range temperature values are rejected by the SetTemperature automation command which generates Error events when they are detected.

Impact of fix:

This fix has no impact on current workflow or data.

The SaveAs() Automation Command Does Not Overwrite Data Files

Tracking ID: 9987

When the SaveAs automation command tries to overwrite an .sda file it fails and publishes an Error event.

Resolution:

When the SaveAs automation command tries to overwrite an .sda file it succeeds.

Impact of fix:

This fix has no impact on current workflow or data.

Cannot Use The Temperature Control on a SpectraMax Paradigm Instrument After an EEPROM Update

Tracking ID: 10221

After performing an EEPROM update on an older SpectraMax Paradigm instrument, the temperature control was no longer functional.

Resolution:

Temperature control is functional after updating the EEPROM on a SpectraMax Paradigm instrument.

Impact of fix:

This fix has no impact on current workflow or data.

An Exception Occurs When Exporting Data Acquired by the Tunable Wavelength (TUNE) Detection Cartridge

Tracking ID: 10227

Trying to export data that was acquired using a Tunable Wavelength (TUNE) Detection Cartridge caused the software to publish an exception.

Resolution:

Data acquired using a Tunable Wavelength (TUNE) Detection Cartridge can be exported successfully.

Impact of fix:

This fix has no impact on current workflow or data.

For FilterMax Instruments, the GetDrawerStatus Command Returns the Incorrect Status

Tracking ID: 10311

After issuing a GetDrawerStatus automation command for a FilterMax instrument, the returned status did not always match the actual drawer status.

Resolution:

The GetDrawerStatus automation command returns the correct status of the drawer for FilterMax instruments.

Impact of fix:

This fix has no impact on current workflow or data.

MakeErr Result Displays “Ranged” in Wells That Should Display “Masked”

Tracking ID: 10362

The MakeErr result that should display as “Masked” in microplate wells displayed “Ranged” instead.

Resolution:

The “Masked” result displays properly.

Impact of fix:

This fix has no impact on current workflow or data.

The Plate Legend Displays Incorrect Information for an AlphaScreen Read After Saving, Closing, and Re-Opening the File

Tracking ID: 10746

After saving, closing, and re-opening a file that uses the AlphaScreen read mode, the file displayed incorrect information in the legend of the Plate section.

Resolution:

The legend of the Plate section displays the correct Information for an AlphaScreen read after saving, closing, and re-opening the file.

Impact of fix:

This fix has no impact on current workflow or data.

A Newly Created Unknowns Group Table Shows Errors

Tracking ID: 10995

After creating a new group in the Template Editor for Unknowns, the Group table displayed errors in the Results column.

Resolution:

The Results column of the group table is displayed empty after creating a new Unknowns group.

Impact of fix:

This fix has no impact on current workflow or data.

For the SoftMax Pro GxP Software, No Audit Point is Generated for Instrument Calibration

Tracking ID: 11048

After performing an instrument calibration using the SoftMax Pro GxP Software. no audit point was generated for the calibration.

Resolution:

The SoftMax Pro GxP Software creates an audit point after a user does an instrument calibration.

Impact of fix:

This fix has no impact on current workflow or data.

The Formula System is Case-Sensitive

Tracking ID: 11086

The string comparison of formulas in the formula system were case-sensitive.

Resolution:

Formulas are no longer case-sensitive.

Impact of fix:

This fix has no impact on current workflow or data.

Trying to Save a Converted Protocol File as a New Data File, the Save As Dialog Displays the Original Data File Name

Tracking ID: 11195

When a saved data file is saved as a protocol file and then the protocol file is opened and saved as a new data file, the software tries to save the new data file with the same name as the original data file.

Resolution:

After opening a protocol file that was converted from an existing data file, trying to save it as a new data file displays no file name in the Save As dialog, requiring the user to type a name for the file.

Impact of fix:

This fix has no impact on current workflow or data.

Restarting the Software After Issuing a CloseDocument or CloseAllDocuments Automation Command the Software Opens in Data Recovery Mode

Tracking ID: 11301

After issuing the CloseDocument or CloseAllDocuments automation command, the automatically generated recovery files were not removed causing the software to incorrectly open in data recovery mode.

Resolution:

After issuing the CloseDocument or CloseAllDocuments automation command, the automatically generated recovery files are removed letting the software open normally.

Impact of fix:

This fix has no impact on current workflow or data.

In the SoftMax Pro GxP Software, Issuing a FileOpen Automation Command Fails After a Successful Logon

Tracking ID: 12302

When running the SoftMax Pro GxP Software in automation mode and successfully logging on with the Logon command, issuing a FileOpen command failed to open the target file.

Resolution:

When running the SoftMax Pro GxP Software in automation mode, the FileOpen command succeeds if a Logon command has been successful, but fails if no user is logged on.

Impact of fix:

This fix has no impact on current workflow or data.

Cannot Import Some Data Files Acquired with SoftMax Pro Software v5.2

Tracking ID: 12484

Trying to import data acquired with SoftMax Pro Software v5.x sometimes fails with the message, "This file cannot be opened because it contains read settings for an instrument model that is not supported."

This was due to an issue in v5.2 that incorrectly identified the instrument used to acquire the data. This issue was resolved for later versions of the software.

Resolution:

Data acquired with SoftMax Pro Software v5.2 can be imported, provided that the actual instrument that was used to acquire the data is supported in v6.x.

Impact of fix:

This fix has no impact on current workflow or data.

Known Issues in SoftMax Pro Software v6.3

The following known issues exist in SoftMax Pro Software v6.3.

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.

Planned Resolution:

Improving page-end detection during printing 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 μ L is imported as 300 mL.

Planned Resolution:

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

Covered Area and Expression in Image measurements are Incorrect for a Region of Interest That Spans a Single Row or Column of Sites

Tracking ID: 12340

After selecting a region of interest that covers area in only one row or column of a multi-site acquisition, the Covered Area and Expression in Image measurements are incorrect.

For example, in a 4-site acquisition, selecting a region of interest that covers only the area in two of the sites across a row or column generates incorrect data for the Covered Area and Expression in Image measurements.

Planned Resolution:

Generating accurate data for a region of interest that includes only the area in one row or column of a multi-site acquisition 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.

Known Issues in Previous Releases of SoftMax Pro Software 6

For the known issues reported in the release notes for previous releases, see the following topics:

- [Known Issues in SoftMax Pro Software v6.2.2 on page 84](#)
- [Known Issues in SoftMax Pro Software v6.2.1 on page 89](#)
- [Known Issues in SoftMax Pro Software v6.2 on page 108](#)
- [Known Issues in SoftMax Pro Software v6.1 on page 131](#)
- [Known Issues in SoftMax Pro Software v6.0 on page 139](#)

Chapter 7: SoftMax Pro Software Version 6.2.2 Software Release Notes

The SoftMax® Pro Microplate Data Acquisition and Analysis Software version 6.2.2 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 6.2.1, the last general release of the SoftMax Pro Software.

- [New in SoftMax Pro Software v6.2.2 on page 69](#)
- [Modifications Made to SoftMax Pro Software v6.2.2 on page 72](#)
- [Issues Addressed in SoftMax Pro Software v6.2.2 on page 73](#)
- [Known Issues in SoftMax Pro Software v6.2.2 on page 84](#)

New in SoftMax Pro Software v6.2.2

The following new features are included in SoftMax Pro Software version 6.2.2.

Support for GxP Features

The SoftMax® Pro GxP Microplate Data Compliance Software extends the SoftMax Pro Software into regulated laboratories working under GMP, GLP, and 21 CFR Part 11 guidelines for secure electronic records. SoftMax Pro GxP Software provides a method for electronically signing data files, and also automatically maintains a document-based audit trail for electronic records. This audit trail preserves user actions and modifications for review even after microplate data is collected and analyzed.

This version of the software is compatible with the GxP Admin Software versions 2.x, letting SoftMax Pro GxP Software version 5.x users continue to use their current User Accounts file after upgrading to SoftMax Pro GxP Software version 6.2.2. Also, SoftMax Pro GxP Software version 6.2.2 can open the *.epr and *.eda files generated in SoftMax Pro GxP Software versions 4.x and 5.x.

The following topics summarize the GxP-related changes incorporated in this revision as compared to SoftMax Pro GxP Software version 5.4.x, the last release of the SoftMax Pro Software with GxP support.

- [New GxP Audit Points, see page 70](#)
- [New Statements Dialog, see page 70](#)
- [Changed Permission Controls on page 70](#)
- [Other GxP Enhancements on page 71](#)

New GxP Audit Points

The following new audit points have been added to the GxP audit trail:

- Cloning a Plate section
- Logging off with the software still running
- Logging on after logging off with the software still running
- Saving data through the AutoSave feature
- Selecting a user accounts database
- Moving a Group column
- Changing AutoRead settings

New Statements Dialog

Statements are now in a separate dialog instead of being displayed as a section in the experiment. You can access the Statements dialog from the GxP tab in the ribbon or by clicking the statements status button in the upper-right corner of the work area.

Changed Permission Controls

The following changes were made to the user permissions that can be set with the GxP Admin Software:

- The permission to create a new Notes section is now controlled with the Edit Notes Text permission.
- The permission to change the appearance of Notes text is now controlled with the Edit Notes Text permission.
- The permission to delete a cuvette from a Cuvette Set section is now controlled with the Overwrite Plate/Cuvette Data permission.
- The permission to paste samples in the template editor is no longer controlled with the Edit Sample and Group permission. It is still controlled with the Assign Plate Layouts and Add/Delete Groups permissions.
- The permission to copy and paste a plate template is no longer controlled with the Add/Delete Groups permission. It is still controlled with the Assign Plate Layouts permission.
- The permission to delete an experiment is no longer controlled with the Save Data Files permission. However, disabling the Save Data Files permission prevents the user from saving a changed file.

Other GxP Enhancements

The following modifications were made to GxP features:

- The Audit Trail reports the time of day of a Guest log on.
- The name of the new section is included in the audit point when a user creates a new section.
- The audit point for starting or stopping a read includes details about the instrument, including the installed cartridges in a SpectraMax Paradigm instrument and the installed filter slides in a FilterMax instrument.
- Column names are included in the audit point for editing Group settings.
- Column names are included in the audit point for pasting a plate template.
- More details have been added to the audit point for editing a plate template.
- The audit point for creating a statement no longer contains an Experiment name.
- The Account Information dialog lists the number of days left for offline-file availability.
- A user defined with no permissions can log on and then view and print files like a Guest log on.
- Adding, modifying, signing, and removing signatures for statements can be done through the automation interface.

New Protocols

The following protocols have been added to the installed software.

MicroMax Low Volume Plate

- Fluorescent DNA Quant (FilterMax)
This new protocol contains guidelines and instrument settings for fluorescent quantitation of DNA using the μ Max low-volume plate on FilterMax readers.
- Fluorescent DNA Quant (Paradigm)
This new protocol contains guidelines and instrument settings for fluorescent quantitation of DNA using the μ Max low-volume plate on the SpectraMax Paradigm reader.
- Fluorescent DNA Quant
This new protocol contains guidelines and instrument settings for fluorescent quantitation of DNA using the μ Max low-volume plate on SpectraMax M-series and Gemini readers with fluorescence detection mode.

Trending

A Trending folder has been added that contains protocols designed to work with LabSpeed Data Management Software for extracting desired data. The following protocols are included in this folder:

- Control Charting - Levey-Jennings
- Trending - Curve Fit Parameters
- Trending - EC50
- Trending - IC50
- Trending - LLD
- Trending - LOQ and LLD
- Trending - LOQ
- Trending - Relative Potency
- Trending - Sample and Assay Evaluation
- Trending - Signal Window (SW)
- Trending - ULD

Modifications Made to SoftMax Pro Software v6.2.2

The following modifications were made to SoftMax Pro Software version 6.2.2.

Protocol Modifications

The following protocols have been modified.

MicroMax Low Volume Plate

- MicroMax DNA Quantitation (Paradigm)

This protocol was revised to clarify the relationship between spacer height and sample volume. Text was added about the Concentration Factor and a reminder in the group tables.

- MicroMax DNA Quantitation

This protocol was revised to clarify the relationship between spacer height and sample volume. Text was added about the Concentration Factor and a reminder in the group tables.

Paradigm Protocols

- HTRF Assay Optimization (Paradigm)

This protocol was revised to increase the number of pulses to 30, as recommended by Cisbio and our applications team. The protocol was renamed to add “(Paradigm)” to the end of the name.

- HTRF Reader Control (Paradigm)

This protocol was revised to increase the number of pulses to 30, as recommended by Cisbio and our applications team. The protocol was renamed to add “(Paradigm)” to the end of the name.

- HTRF Standard Assay (Paradigm)

This protocol was revised to increase the number of pulses to 30, as recommended by Cisbio and our applications team. The protocol was renamed to add “(Paradigm)” to the end of the name.

Issues Addressed in SoftMax Pro Software v6.2.2

The following issues were addressed in SoftMax Pro Software version 6.2.2.

Minimum kinetic interval might be larger than necessary

Tracking ID: 3924

If the number of flashes was modified in the Settings dialog, the minimum kinetic interval might not have changed, even though the instrument timing had an effect on this parameter.

Resolution:

The calculation method for estimating the minimum kinetic interval has been adjusted to render a more accurate estimate of the interval.

Impact of fix:

Kinetic protocols that were written in an older version of the SoftMax Pro Software might need to be updated to correct the kinetic interval. Otherwise, This fix has no impact on current workflow or data.

Reduced data or data with blanks applied are pasted as raw data from the copied plate

Tracking ID: 4783

After copying data from a plate with reduced data or data with blanks applied, the raw data were pasted instead of the reduced or blanked data.

Resolution:

Pasted data match the copied data from the plate section.

Impact of fix:

If you are using automated scripts that expect copying of only raw data, these scripts might need to be updated to match the new behavior. Otherwise, This fix has no impact on current workflow or data.

For the FilterMax instrument, the minimum kinetic interval is sometimes underestimated

Tracking ID: 4809

When setting up a kinetic read for a FilterMax instrument, sometimes the minimum kinetic interval was underestimated.

Resolution:

The calculation method for estimating the minimum kinetic interval has been adjusted to render a more accurate estimate of the interval.

Impact of fix:

Kinetic protocols for a FilterMax instrument that were written in an older version of the SoftMax Pro Software might need to be updated to correct the kinetic interval. Otherwise, This fix has no impact on current workflow or data.

In some cases, only a partial set of data is pasted into Excel from a copied plate or cuvette set

Tracking ID: 5825

After copying data from a plate or cuvette set, the data pasted into Excel contained only part of the data from the plate or cuvette set in some cases.

Resolution:

All displayed data from the copied plate or cuvette set section are pasted into Excel.

Impact of fix:

This fix has no impact on current workflow or data.

New plots do not match the experiment, group, x-axis, and y-axis to the currently selected plot

Tracking ID: 5827

Adding a new plot in the Plot Editor dialog reset the experiment, group, x-axis, and y-axis instead of matching the currently selected plot.

Resolution:

New plots duplicate the attributes from the selected plot.

Impact of fix:

This fix has no impact on current workflow or data.

Locked Notes sections can be edited in GxP version

Tracking ID: 6125

After locking a Notes section and then saving, closing, and opening the data file, the previously locked Notes section was editable.

Resolution:

Notes sections cannot be edited until after they are unlocked.

Impact of fix:

This fix has no impact on current workflow or data.

A GxP data file is accepted as valid after it is hacked and changed outside of the SoftMax Pro GxP Software

Tracking ID: 6126

After a data file is hacked and changed, the software did not detect that changes were made to the data file and accepted the data file as valid.

Resolution:

Detected changes are recorded in the Audit Trail. Users are notified of the changes each time the data file is opened.

Impact of fix:

If data files are changed outside of the software, the data and file are no longer considered valid. When the software and data files are used properly, This fix has no impact on current workflow or data.

For the Vmax Instrument, the shaking time was not properly factored in for the minimum kinetic interval

Tracking ID: 6504

When calculating the minimum kinetic interval for the Vmax instrument, the software did not properly factor in the shaking time.

Resolution:

Shaking time is included in the minimum kinetic interval calculation.

Impact of fix:

This fix has no impact on current workflow or data.

AutoSave with Overwrite File selected incorrectly overwrites older data files

Tracking ID: 6523

When using Overwrite File during an AutoSave, the software overwrote a previously saved file that had the same name.

Resolution:

After the first read completes in a protocol, AutoSave creates a new data file. While this data file is still open, AutoSave overwrites the data file on each subsequent save if Overwrite File is set.

Impact of fix:

This fix has no impact on current workflow or data.

Reduction settings are not retained when the Template Editor is opened and closed or when that document saved, closed, and reopened

Tracking ID: 6816

After editing the End Time in the Reduction dialog, the setting reverted to the previous End Time setting after opening and closing the Template Editor or after saving the file and then closing and opening it.

Resolution:

All settings made in the Reduction dialog are retained after the Template Editor is opened and closed, and after the file is saved, closed, and reopened.

Impact of fix:

This fix has no impact on current workflow or data.

Incorrect default integration time for the HTRF detection cartridge

Tracking ID: 7111

For the SpectraMax Paradigm instrument, the default integration time for the HTRF detection cartridge was set to 0.2 instead of 0.5.

Resolution:

The default integration time for the HTRF detection cartridge is set to 0.5.

Impact of fix:

This fix has no impact on current workflow or data.

Error message is displayed regarding plate depth when reading Costar 1536-well plate using a SpectraMaxParadigm instrument

Tracking ID: 7210

When trying to read a Costar 1536-well plate with a SpectraMax Paradigm instrument, an error message was displayed indicating that the current microplate definition is invalid due to well depth.

Resolution:

The plate definitions for the Costar 1536, the 1536 Well Standard clrbtm, and the Corning 1536 (3728) are set to 10.4 mm to match the specifications of the manufacturers. The error message no longer is displayed.

Impact of fix:

This fix has no impact on current workflow or data.

Changes not saved when using Save As to overwrite the current file

Tracking ID: 7623

After making changes to a file and then using Save As to save the data in the same file, the changes were not saved. Closing the file prompted the user to save the file again, so changes were not lost unless the user clicked No.

Resolution:

The software overwrites the open file when saving changes using the Save As feature.

Impact of fix:

This fix has no impact on current workflow or data.

Reduced line is not displayed in zoomed well when kinetic reduction is set to Slope

Tracking ID: 7733

After zooming a well in a kinetic plate with the reduction set to Slope and then clicking Show Reduced, the reduced line did not display in the zoomed well.

Resolution:

The reduced line is displayed in the zoomed well when the reduction is set to Slope.

Impact of fix:

This fix has no impact on current workflow or data.

No validation check for maximum kinetic interval

Tracking ID: 8124

A kinetic read could be created that had a longer maximum kinetic interval than is permitted by the instrument firmware with no indication to the user that the interval was out of range.

Resolution:

If the kinetic interval in a kinetic read is set to a value above the maximum permitted by the instrument, the error condition is indicated in the Settings dialog.

Impact of fix:

This fix has no impact on current workflow or data.

Custom read height value is not duplicated in a new plate section

Tracking ID: 8215

After setting a custom read height for a plate and then creating a new plate section, the read height value in the new plate section was set to the default read height instead of the custom value from the selected plate section.

Resolution:

When creating a new plate section, the new plate section has the same read height value as the selected plate section.

Impact of fix:

This fix has no impact on current workflow or data.

Cutting group columns does not place cut columns on clipboard after previous copy of group columns

Tracking ID: 8273

After copying and pasting group columns, performing a cut-and-paste pastes the previously copied group columns instead of the more recently cut group columns.

Resolution:

Copy and cutting group columns places the copied or cut group columns on the Windows clipboard so that the last item copied or cut can be pasted.

Impact of fix:

This fix has no impact on current workflow or data.

The program closes unexpectedly when a single bracket or parenthesis is used in the column name in the Group Settings dialog

Tracking ID: 8298

In the Group Setting dialog, typing a single bracket "[" or parenthesis "(" in a column name caused the program to close unexpectedly.

Resolution:

Typing a single bracket or parenthesis in a group column name does not cause the program to close unexpectedly.

Impact of fix:

This fix has no impact on current workflow or data.

The column headers do not line up with their columns after exporting a Group table containing a Sample Descriptor column with units

Tracking ID: 8656

After exporting a group table that contains a Sample Descriptor column with units, the column headers did not align properly with their columns.

Resolution:

Column headers in the export file align with their respective columns.

Impact of fix:

This fix has no impact on current workflow or data.

Pre-reduction calculations are not applied to the exported data from a cloned plate

Tracking ID: 8791

After cloning a plate section and adding a plate blank to the cloned plate, the exported data from the cloned plate match the data from the original plate instead of the cloned plate.

Resolution:

Data from original plates and cloned plates are exported independently so that the exported data match the data displayed in each plate.

Impact of fix:

This fix has no impact on current workflow or data.

In Automation mode, protocol files cannot be saved as protocol files

Tracking ID: 8842

When using the Save As feature in Automation mode, only data files were permitted to be saved. Protocol files could not be saved as protocol files in Automation mode.

Resolution:

Both data files and protocol files can be saved in Automation mode.

Impact of fix:

If you are using the Save As command in automated scripts, these scripts might need to be updated to include the desired file extension in the file name. Otherwise, This fix has no impact on current workflow or data.

Pasting summaries that were copied from a closed file pastes non-summary information

Tracking ID: 8879

After copying summaries from a file and then closing the file, the software permits pasting summaries in the Notes section of a different file, but the pasted information is not from the copied summaries.

Resolution:

After closing a file that contained copied summaries, pasting is disabled in the Notes section until a different item is copied to the clipboard.

Impact of fix:

This fix has no impact on current workflow or data.

In some cases, the software does not detect a connected instrument

Tracking ID: 8895

On computers with multiple devices connected to COM ports, the software failed to detect a connected instrument after opening the Instrument Connection dialog.

Resolution:

The COM port polling method was changed to ensure that all COM ports are checked for a connected instrument.

Impact of fix:

This fix has no impact on current workflow or data.

Vmax and EMax instruments share filter configurations when they should be independent

Tracking ID: 8914

Adding, changing or removing filters in a Vmax instrument had an effect on the filter configuration for an EMax instrument. Similarly, changes made to the filter configuration of an EMax instrument had an effect on the filter configuration of a Vmax instrument.

Resolution:

Filter configurations for Vmax and EMax instruments are saved independently.

Impact of fix:

This fix has no impact on current workflow or data.

The software displays an exception message when importing a plate type from a file that does not match the expected file format

Tracking ID: 8929

Trying to import a plate type from a file that does not match the expected format caused an exception message to display.

Resolution:

The exception message no longer is displayed.

Impact of fix:

This fix has no impact on current workflow or data.

Protocol file names are truncated after the first period when the name contains more than one period

Tracking ID: 8930

After saving a protocol file with a name that has more than one period, the protocol is displayed in the Protocol Library with the name ending before the first period.

Resolution:

Periods in protocol file names are included in the protocol name.

Impact of fix:

This fix has no impact on current workflow or data.

In a SpectraMax Paradigm instrument, only partial well scan data are displayed in each well for an interrupted read

Tracking ID: 8932

After interrupting a well scan read on a SpectraMax Paradigm instrument and then closing and opening the data file, each of the wells displayed only part of the collected data for that well.

Resolution:

All collected data are displayed in each well where the data were collected.

Impact of fix:

Data files with partial well scan reads on a SpectraMax Paradigm instrument from an earlier version of the software might have incorrect data for each well. Otherwise, This fix has no impact on current workflow or data.

The software fails to start if Internet Explorer version 8 or earlier is set to offline mode

Tracking ID: 9001

If the computer has Internet Explorer version 8 or earlier set to offline mode and then the user tries to start the SoftMax Pro Software, an error message is displayed and the software fails to start.

Resolution:

On startup, the software detects if Internet Explorer version 8 or earlier is set to offline mode. If so, the software opens without error.

Impact of fix:

This fix has no impact on current workflow or data.

The NewDocument command in the automation interface does not open the default protocol

Tracking ID: 9095

After issuing the NewDocument command through the automation interface, the new document that opens in the software did not contain the values and information from the default protocol.

Resolution:

The default protocol opens in the software after issuing the NewDocument command through the automation interface.

Impact of fix:

This fix has no impact on current workflow or data.

The program sometimes closes unexpectedly when string concatenation of lists of strings is used in a formula

Tracking ID: 9187

When a formula used string concatenation of lists of strings, the result were displayed blank. When the software tried to recalculate formulas (such as by the user clicking Recalculate or through automatic recalculation), this sometimes caused the program to close unexpectedly.

Resolution:

The results are displayed properly for formulas that use string concatenation of lists of strings. Recalculation does not cause the program to close unexpectedly.

Impact of fix:

This fix has no impact on current workflow or data.

The software displays an exception message when the linked file for an image in a Notes section is deleted or renamed

Tracking ID: 9244

If an image was placed in a Notes section and then the linked image file was deleted or renamed, then when the protocol or data file tried to verify the link (such as when the file was opened or the software automatically refreshed the user interface), the software displayed error messages and an exception message.

Resolution:

If a linked image file is renamed or deleted, the Notes section is displayed in the protocol or data file without displaying the linked image. The software does not display an error message or exception message.

Impact of fix:

This fix has no impact on current workflow or data.

Known Issues in SoftMax Pro Software v6.2.2

The following known issues exist in SoftMax Pro Software v6.2.2.

For the SpectraMax Paradigm instrument, the minimum kinetic interval is sometimes estimated incorrectly, with an occasional data point outside of the reduction limit

Tracking ID: 8873

When setting up a kinetic protocol for a SpectraMax Paradigm instrument, sometimes the software incorrectly estimates the minimum kinetic interval. Depending on the reduction settings, data points might occur outside of the limit.

Planned Resolution:

More accurate kinetic interval estimation is in the product backlog for future development.

The settings return to defaults after moving a Tunable Wavelength (TUNE) Detection Cartridge or Multi-Mode (MULTI) Detection Cartridge between the top and bottom drawer in a SpectraMax Paradigm instrument while the Settings dialog is open

Tracking ID: 8901

With the Settings dialog open, moving a Tunable Wavelength (TUNE) Detection Cartridge or Multi-Mode (MULTI) Detection Cartridge between the top and bottom drawers on a SpectraMax Paradigm instrument resets the settings to their defaults.

Planned Resolution:

This issue was addressed in version 6.3. See [The settings return to defaults after moving a Tunable Wavelength \(TUNE\) Detection Cartridge or Multi-Mode \(MULTI\) Detection Cartridge between the top and bottom drawer in a SpectraMax Paradigm instrument while the Settings dialog is open](#) on page 55.

The system pauses and stops reading microplates after running multiple microplates with the StakMax Microplate Handling System

Tracking ID: 9282

While running multiple plates with the StakMax Microplate Handling System, the system sometimes pauses indefinitely during the process. To continue with the read, the user must click **Terminate** in the automation mode dialog, use the Task Manager to close the StakMax Software, restart the StakMax Software, and then resume the read.

Planned Resolution:

Preventing the system from pausing during a multiple-microplate read with the StakMax Microplate Handling System is in the product backlog for future development.

Known Issues in Previous Releases of SoftMax Pro Software 6

For the known issues reported in the release notes for previous releases, see the following topics:

- [Known Issues in SoftMax Pro Software v6.2.1 on page 89](#)
- [Known Issues in SoftMax Pro Software v6.2 on page 108](#)
- [Known Issues in SoftMax Pro Software v6.1 on page 131](#)
- [Known Issues in SoftMax Pro Software v6.0 on page 139](#)

Chapter 8: SoftMax Pro Software Version 6.2.1 Software Release Notes

The SoftMax® Pro Microplate Data Acquisition and Analysis Software version 6.2.1 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 6.2, the last general release of the SoftMax Pro Software.

- [Modifications Made to SoftMax Pro Software v6.2.1 on page 87](#)
- [Issues Addressed in SoftMax Pro Software v6.2.1 on page 87](#)
- [Known Issues in SoftMax Pro Software v6.2.1 on page 89](#)

Modifications Made to SoftMax Pro Software v6.2.1

The following modifications were made to SoftMax Pro Software version 6.2.1.

Protocol Modifications

The following protocol has been modified.

340PC 384 ABS1

In the **Reader Validation-Plate Abs** folder, the **Data Point Diagnostic** section of this protocol was modified to correct the expected numbers for the **Check of Stray Light Part 1**, **Check of Stray Light Part 2**, and **Check of Wavelength Accuracy** formulas.

Issues Addressed in SoftMax Pro Software v6.2.1

The following issues were addressed in SoftMax Pro Software version 6.2.1.

Incorrect assignment of measurement values while running circular well scan with the Tunable Wavelength (TUNE) Detection Cartridge

Tracking ID: 7223

The software displayed the incorrect measurement values after using the Tunable Wavelength (TUNE) Detection Cartridge to do a well scan read on a microplate with circular wells.

Resolution:

The software displays the correct measurement values.

Impact of fix:

This fix has no impact on current workflow or data.

Removing a detection cartridge from a SpectraMax Paradigm instrument can cause the program to close unexpectedly

Tracking ID: 7395

With a SpectraMax Paradigm instrument connected and an available detection cartridge set up for an active Plate section, subsequently removing the detection cartridge can cause the program to close unexpectedly after clicking **Refresh** on the **Operations** tab in the ribbon, clicking the Plate section again, and then clicking **Settings**.

Resolution:

The software displays a message informing the user that the detection cartridge is no longer available.

Impact of fix:

This fix has no impact on current workflow or data.

Incorrect measurement values returned while running well scan in on-the-fly mode and an excitation wavelength less than 400 nm with the Tunable Wavelength (TUNE) Detection Cartridge

Tracking ID: 7411

The software displayed incorrect measurement values after using the Tunable Wavelength (TUNE) Detection Cartridge to do FL or TRF well scan reads in on-the-fly mode and an excitation wavelength less than 400 nm.

Resolution:

A firmware update is required so that the software can display the correct measurement values. The firmware updates automatically after installing the new version of the software and then connecting to the SpectraMax Paradigm instrument.

Impact of fix:

This fix has no impact on current workflow or data.

Known Issues in SoftMax Pro Software v6.2.1

The following known issues exist in SoftMax Pro Software v6.2.1.

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.

Known Issues in Previous Releases of SoftMax Pro Software 6

For the known issues reported in the release notes for previous releases, see the following topics:

- [Known Issues in SoftMax Pro Software v6.2 on page 108](#)
- [Known Issues in SoftMax Pro Software v6.1 on page 131](#)
- [Known Issues in SoftMax Pro Software v6.0 on page 139](#)

Chapter 9: SoftMax Pro Software Version 6.2

Software Release Notes

The SoftMax® Pro Microplate Data Acquisition and Analysis Software version 6.2 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 6.1, the last general release of the SoftMax Pro Software.

- [New in SoftMax Pro Software v6.2 on page 91](#)
- [Modifications Made to SoftMax Pro Software v6.2 on page 93](#)
- [Issues Addressed in SoftMax Pro Software v6.2 on page 94](#)
- [Known Issues in SoftMax Pro Software v6.2 on page 108](#)

New in SoftMax Pro Software v6.2

The following new features are included in SoftMax Pro Software version 6.2.

Plate Setup Helper

The new Plate Setup Helper starts by default each time you open a new SoftMax Pro Software file. It visually guides you through the tasks available in the software to setup a microplate to acquire data. To complete a task, click its button. After you complete a task the settings for the task are saved, and you return to the helper to select a different task. If desired, you can prevent the Plate Setup Helper from automatically starting each time you open a new file.

Print to PDF

With the new save as PDF and print to PDF features, you can save the contents of the currently selected file in PDF format.

- To save as a PDF file, select **Save As PDF** from the **Application** menu.
- To print to a PDF file, use the **Print** dialog to select the **Molecular Devices (PDF Writer)** as your printer.

With either option, only the sections selected for printing are saved in PDF format.

Well Scan Optimized for Round or Square Wells

In the Plate Editor, you can define the shape of the wells of a microplate as either round or square letting the SpectraMax Paradigm and FilterMax instruments return Well Scan data based on the shape of the well.

New Protocols

The following protocols have been added to the installed software.

ADP Quest DiscoverX

In the **Binding and Enzymology** folder, this protocol is designed to facilitate assay optimization for ADP Quest assays from DiscoverX. This protocol can be used with all Gemini and SpectraMax M-series readers with Fluorescence detection mode capability.

Kinetic NAD(P)H Assay with PathCheck

In the **Binding and Enzymology** folder, this protocol is intended for enzyme assays that involve NAD(P)H absorbance measurements and require pathlength normalization. This protocol can be used with all Molecular Devices readers with Absorbance detection mode capability and PathCheck Pathlength Measurement Technology.

ADP Quest DiscoverX (Paradigm)

In the **Paradigm Protocols** folder, this protocol is designed to facilitate assay optimization for ADP Quest assays from DiscoverX. This protocol can be used with the SpectraMax Paradigm instrument with the Tunable Wavelength (TUNE) Detection Cartridge or Multi-Mode (MULTI) Detection Cartridge installed.

Kinetic NAD(P)H with PathCheck (Paradigm)

In the **Paradigm Protocols** folder, this protocol is intended for enzyme assays that involve NAD(P)H absorbance measurements and require pathlength normalization. This protocol can be used with the SpectraMax Paradigm instrument with the Absorbance Detection Cartridge installed.

Delfia TRF (Paradigm)

In the **Paradigm Protocols** folder, this protocol contains default settings for Delfia or other Europium-based time-resolved fluorescence (TRF) assays. This protocol can be used with the SpectraMax Paradigm instrument with the Tunable Wavelength (TUNE) Detection Cartridge, Multi-Mode (MULTI) Detection Cartridge, or Time Resolved Fluorescence (TRF) Detection Cartridge installed.

Endpoint Paradigm ABS-MONO

In the **Paradigm Protocols** and **Basics** folders, a basic endpoint protocol has been included for use with the SpectraMax Paradigm instrument with the Absorbance Detection Cartridge installed.

Endpoint Paradigm TUNE

In the **Paradigm Protocols** and **Basics** folders, a basic endpoint protocol has been included for use with the SpectraMax Paradigm instrument with the Tunable Wavelength (TUNE) Detection Cartridge installed.

DC Protein Assay

In the **Protein Quant** folder, this protocol is designed to be used with the Bio-Rad DC Protein Assay. This protocol can be used with all Molecular Devices readers with absorbance detection mode capability.

Modifications Made to SoftMax Pro Software v6.2

The following modifications were made to SoftMax Pro Software version 6.2.

Sample Descriptor Values Retained in Series Dialog

The Series dialog now retains the Sample Descriptor settings for previously assigned wells.

Top Installed Detection Cartridges are Labeled

The SoftMax Pro Software indicates whether SpectraMax Paradigm detection cartridges are installed in the top drawer or the bottom drawer. In the previous version the software indicated when the detection cartridges was installed in the bottom drawer only.

Readers with Old Firmware are Detected

Connected VersaMax and SpectraMax 190 instruments with older firmware versions can now be detected by the software. Older versions of other supported instruments can also be detected.

Read Height Values are Displayed

For the SpectraMaxParadigm and FilterMax instruments that support adjustable read height, the set or optimized read height is displayed in the Settings Information and can be set in the PMT and Optics settings in the Settings dialog.

Protocol Modifications

The following protocols have been modified.

IMAP Evaluation Demo Kit

In the **IMAP** folder, this protocol was modified to correct the Group blank subtraction to **Before Reduction**.

MicroMax DNA Quantitation (Paradigm)

In the **MicroMax Low Volume Plate** folder, this protocol was created to combine and replace the **Paradigm 24well DNA quantitation** and the **Paradigm 64well DNA quantitation** protocols.

MicroMax DNA Quantitation

In the **MicroMax Low Volume Plate** folder, this protocol was created to combine and replace the **24well DNA quantitation** and the **64well DNA quantitation** protocols.

PicoGreen Fluorescence

In the **Nucleic Acids** folder, this protocol was modified to change the emission wavelength from 540 nm to 525 nm.

PathCheck-Kinetic

In the **Basics** folder, the Pathlength plate settings were corrected in this protocol and the instructions were updated to include the option of incorporating an extinction coefficient into the calculations. This protocol was renamed to replace the **Kinetic-PathCheck** protocol.

Issues Addressed in SoftMax Pro Software v6.2

The following issues were addressed in SoftMax Pro Software version 6.2.

Incorrect Instrument Status Displayed During Endpoint Calibration and Read

Tracking ID: 4769

In some cases, the software displayed the incorrect instrument status during Endpoint and Kinetic calibration and read.

Resolution:

The software correctly indicates whether the instrument is calibrating or reading.

Impact of fix:

This fix has no impact on current workflow or data.

Confidence Interval is displayed after Confidence Interval is Turned Off

Tracking ID: 4771

After the Calculate confidence intervals check box was cleared in the Curve Fit settings the Confidence Interval was displayed for the reference plot in a global fit.

Resolution:

The Confidence Interval no longer is displayed when it has been turned off.

Impact of fix:

This fix has no impact on current workflow or data.

Incorrect Character Deleted with Backspace in Timing Setting

Tracking ID: 4807

In the Settings dialog Timing settings, pressing backspace with the cursor in the interval field deleted a character other than the character immediately to the right of the cursor.

Resolution:

Pressing backspace in the interval field deletes the expected characters.

Impact of fix:

This fix has no impact on current workflow or data.

Icons in the Plate Section Toolbar Show as Available when Disabled

Tracking ID: 4815

In the toolbar at the top of a Plate section, some of the buttons looked like they were functional when their function was not available.

Resolution:

New icons for the disabled state of the buttons more clearly indicate that they are not functional when their function is not available.

Impact of fix:

This fix has no impact on current workflow or data.

Stopping a Read Pauses and Restarts the Read

Tracking ID: 4819

Clicking the Stop button during a read using a SpectraMax Paradigm or FilterMax instrument paused the read and restarted it after the Time Out message was dismissed.

Resolution:

Clicking stop during a read stops and does not restart the read.

Impact of fix:

This fix has no impact on current workflow or data.

Autoscale Does Not Readjust for Masked Wells

Tracking ID: 4833

After masking wells, the remaining wells did not readjust autoscale to place the highest data point near the top.

Resolution:

Masking wells refreshes the plate autoscale.

Impact of fix:

This fix has no impact on current workflow or data.

Incorrect Graph Plotting for Connect Points with Log Scale

Tracking ID: 4839

The graph plotting did not display connected points correctly when log scale was selected.

Resolution:

Connected points are displayed correctly.

Impact of fix:

This fix has no impact on current workflow or data.

Image Pasted in a Text Frame Disappears

Tracking ID: 4840

In a Notes section, after pasting an image into a text frame that contains no text, the image disappeared.

Resolution:

Pasted images remain as pasted in a text frame.

Impact of fix:

This fix has no impact on current workflow or data.

Some Font Selections Cause the Graph Appearance Dialog to Close Unexpectedly

Tracking ID: 4842

Selecting a font that does not contain defined styles for bold, italic, and regular caused the Graph Appearance dialog to close unexpectedly.

Resolution:

Fonts that do not contain defined styles for bold, italic, and regular can no longer be selected in the Graph Appearance dialog.

Impact of fix:

This fix has no impact on current workflow or data.

Using !WellPathlength Displays a value in Masked Wells

Tracking ID: 4849

Masking failed when the formula !WellPathlength was used.

Resolution:

Masked wells are displayed as Masked in a group table.

Impact of fix:

This fix has no impact on current workflow or data.

Custom Formulas are Displayed when Disabled

Tracking ID: 4850

In the Plot Editor dialog, custom input formulas were displayed as active when the previously defined custom input formulas were disabled.

Resolution:

When a custom formula is not selected as the input, it is displayed as gray and inactive.

Impact of fix:

This fix has no impact on current workflow or data.

Incorrect Well Scan Data Returned for !WellLm1

Tracking ID: 5182

When using the !WellLm1 formula for well scan data, incorrect data was returned.

Resolution:

When the !WellLm1 formula is used with Well Scan data, the complete raw data is returned in a list.

Impact of fix:

This fix has no impact on current workflow or data.

No Error Given in Automation for Invalid Section Name

Tracking ID: 5184

When SelectSection was called in an automation script with a section name that did not exist, the script seemed to run successfully and no error message was displayed.

Resolution:

If an invalid section name is passed in, the script returns an error stating that the section name does not exist.

Impact of fix:

Scripts that use SelectSection with an invalid section name that were created for an earlier version of SoftMax Pro Software 6 might return an error message.

Calling Dispose() In an Automation Script Sometime Crashes the SoftMax Pro Software

Tracking ID: 5185

While automation commands were in the queue, calling Dispose() caused the SoftMax Pro Software to crash.

Resolution:

The software does not crash as the result of calling the Dispose() command.

Impact of fix:

This fix has no impact on current workflow or data.

Plate Blank not Applied in New Experiment

Tracking ID: 5212

In a new experiment, the plate blank was not applied to acquired data unless the Plate Editor dialog was first opened and then closed.

Resolution:

Plate blank is applied immediately upon acquisition of data.

Impact of fix:

This fix has no impact on current workflow or data.

Custom Reduction Permits Custom Display Settings

Tracking ID: 5249

Custom reductions included data display settings that had no effect on the data display.

Resolution:

Data display options has been removed from the Custom Plate Reduction dialogs.

Impact of fix:

This fix has no impact on current workflow or data.

Custom Formula in Graph Section Can Crash the Program

Tracking ID: 5731

A complex custom formula in a graph section could lock the program and cause it to crash.

Resolution:

Custom formulas no longer cause the program to crash.

Impact of fix:

This fix has no impact on current workflow or data.

No Visual Indicator of Reduced Value for Custom Spectrum Reduction

Tracking ID: 5780

In a Plate section, no visual indicator of reduced value is displayed for custom spectrum reduction.

Resolution:

If the display is set to Reduced for custom spectrum reduction, a visual indicator is displayed.

Impact of fix:

This fix has no impact on current workflow or data.

Autoscale is not Displayed Automatically and can Sometimes Cause the Program to Close Unexpectedly

Tracking ID: 5820

Sometimes, a graph did not automatically autoscale, and changing an autoscale setting could cause the program to close unexpectedly.

Resolution:

Autoscale is automatic and no longer causes the program to close unexpectedly.

Impact of fix:

This fix has no impact on current workflow or data.

Pathcheck Filter Wavelength is not Imported Correctly from a Version 5.x File

Tracking ID: 5944

When importing from a version 5.x file with Pathcheck filters, the filter wavelength did not import correctly as 900F and 1000F.

Resolution:

The instrument settings accepts wavelength entries 900F and 1000F and displays those settings in the plate legend.

Impact of fix:

This fix has no impact on current workflow or data.

Plate Clone Reductions are Copied Incorrectly into a New Experiment

Tracking ID: 5984

When a new experiment was created from an experiment with defined reductions in the plate clones, the plate clones in the new experiment had the default reductions.

Resolution:

Plate clones in a new experiment have reduction settings identical to those in the original experiment.

Impact of fix:

Plate clones in experiments that were created with an earlier version of SoftMax Pro Software 6 might have reductions that differ from the original plates in the experiment.

Luminescence Kinetic Permits Incorrect Interval Setting

Tracking ID: 5985

When Calibrate is selected for a Luminescence Kinetic read, an incorrect timing interval can be entered in the instrument settings.

Resolution:

Time for calibration has been added to the permitted minimum kinetic interval when Calibration is selected.

Impact of fix:

This fix has no impact on current workflow or data.

Extra Spaces are Displayed in !WellLm1 Column

Tracking ID: 6114

Extra spaces are displayed in a Group table with formula !WellLm1.

Resolution:

The group table is single-spaced.

Impact of fix:

Data files that were created using an earlier version of SoftMax Pro Software 6 might be displayed with the extra line spaces.

Selected Section does not Get Focus when Multiple Documents are Displayed in Comparison View

Tracking ID: 6116

When more than one document was displayed in Comparison view, clicking a Plate section in the navigation tree did not give the Plate section focus.

Resolution:

Clicking a Plate section gives the focus to that Plate section.

Impact of fix:

This fix has no impact on current workflow or data.

Graph Legend does not Scroll into View

Tracking ID: 6141

Expanding a graph legend did not scroll the graph legend into view.

Resolution:

A graph legend that is expanded in a Graph section automatically scrolls into view.

Impact of fix:

This fix has no impact on current workflow or data.

Performing Cuvette Reference Read with Hardware Buttons can Crash the Software

Tracking ID: 6170

Pressing the Ref button on the front panel of the instrument and then pressing the Read button on the instrument could sometimes crash the SoftMax Pro Software.

Resolution:

Pressing the hardware controls no longer crashes the software.

Impact of fix:

This fix has no impact on current workflow or data.

Trying to Save to a Location Where no Permission Exists can Cause a Program Exception

Tracking ID: 6171

When the save location for a file is in a directory where the current user does not have write permission, trying to save the file could cause a program exception.

Resolution:

If a previously-used default folder is unavailable, the Save As dialog defaults to the current user's Documents folder.

Impact of fix:

This fix has no impact on current workflow or data.

The Vmax Reader is Sometimes Detected as an EMax Reader

Tracking ID: 6282

The Vmax reader was intermittently detected as an EMax reader.

Resolution:

The Vmax reader is always recognized as a Vmax reader.

Impact of fix:

This fix has no impact on current workflow or data.

Long File Path in Protocol Manager can cause Program Exception

Tracking ID: 6284

When a Protocol Manager folder had sub-folders that were longer than the permitted character limit, a program exception occurred.

Resolution:

If a path is longer than the system permits, the path is ignored.

Impact of fix:

This fix has no impact on current workflow or data.

NullBetween Returns Incorrect Value

Tracking ID: 6314

When an array was defined using NullBetween or NullOutside with start index 1, the result was incorrect.

Resolution:

The correct values are returned.

Impact of fix:

This fix has no impact on current workflow or data.

Pressing CTRL+Z to Undo a Font Change can Cause the Program to Close Unexpectedly

Tracking ID: 6315

Changing the font of text and then pressing CTRL+Z to undo the font change could cause the program to close unexpectedly.

Resolution:

Using CTRL+Z to undo a font change no longer cause the program to close unexpectedly.

Impact of fix:

This fix has no impact on current workflow or data.

The 3D Graph Window is Hidden Behind Other Windows

Tracking ID: 6389

When the 3D graph is displayed and the focus moves to a different program, when returning to the SoftMax Pro Software the 3D graph was hidden behind the other windows.

Resolution:

When the 3D Graph window is open, it always displays on top of the SoftMax Pro Software window.

Impact of fix:

This fix has no impact on current workflow or data.

Incorrect Curve-Fit Choices are Displayed in the Curve Fit Menu for Global Fit

Tracking ID: 6423

When using a Global Fit (PLA), some of the curve-fit choices in the Curve Fit menu were not relevant for a Global Fit.

Resolution:

Incorrect curve-fit choices no longer are displayed in the Curve Fit menu.

Impact of fix:

This fix has no impact on current workflow or data.

Temperature Information is displayed in Plate Legend for FilterMaxF3 Instrument

Tracking ID: 6439

After reading a microplate with a FilterMax F3 instrument, the plate legend listed the temperature as 0. This instrument does not have temperature control.

Resolution:

Temperature information no longer is displayed in the plate legend for the FilterMaxF3 instrument.

Impact of fix:

This fix has no impact on current workflow or data.

Running an Automation Script with AutoRead enabled Causes the Program to Close Unexpectedly

Tracking ID: 6440

With AutoRead turned on in the program, running an automation script caused the program to close unexpectedly.

Resolution:

When the program is in automation mode, AutoRead is disabled.

Impact of fix:

To run an AutoRead for an experiment that was previous run in automation mode, AutoRead must be manually enabled.

Wavelength Settings do not Persist When Switching Between Read Types

Tracking ID: 6470

When switching between EndPoint, Kinetic, and Well Scan read types in the settings dialog, edited Wavelength settings were reset to the default values.

Resolution:

After editing wavelength settings in the Settings dialog, switching between EndPoint, Kinetic, and Well Scan read types retains the specified wavelength settings.

Impact of fix:

This fix has no impact on current workflow or data.

For Some Instruments, the Last Date Calibrated in the Calibration Dialog is Displayed as Unknown

Tracking ID: 6471

In the Calibration dialog, the Last Date Calibrated was displayed as Unknown for some instruments.

Resolution:

The Calibration dialog correctly displays the Last Date Calibrated for all instruments that can be calibrated using the SoftMax Pro Software.

Impact of fix:

This fix has no impact on current workflow or data.

If Operator with a Boolean Array Returns an Incorrect Result

Tracking ID: 6488

The If operator gives incorrect results when its second and third parameters are arrays of booleans.

Resolution:

A correct result is returned.

Use of the If operator is unnecessary with boolean result parameters. The first parameter, or the condition, can be used directly.

Impact of fix:

This fix has no impact on current workflow or data.

Clipboard is Cleared After Pasting Group Table Columns

Tracking ID: 6507

After copying Group table columns and pasting that data into a different Group table, the clipboard was cleared preventing the means to paste the data into a different Group table.

Resolution:

The data from copied Group table columns remains on the clipboard for multiple pasting operations.

Impact of fix:

This fix has no impact on current workflow or data.

Trying to Open the Program When it is Open by a Different User Crashes the Program

Tracking ID: 6538

When a user leaves the SoftMax Pro Software open and logs off, and then a different user logs on to the same computer and tries to open the program, the program crashes.

Resolution:

The program is prevented from being opened by two different users on the same computer. Instead, an error message is displayed for the second instance.

Impact of fix:

This fix has no impact on current workflow or data.

Group Blanks are Incorrectly Applied by Default Before Reduction for Well Scan Reads

Tracking ID: 6570

The reduction settings for Group Blank Options incorrectly defaulted to Before Reduction when a microplate was configured for a Well Scan read type.

Resolution:

The reduction settings for Group Blank Options default to After Reduction when a microplate is configured for a Well Scan read type.

Impact of fix:

This fix has no impact on current workflow or data.

GetAutosaveState Always Returns ON in the Automation Interface

Tracking ID: 6591

Sending the GetAutosaveState command always returned the state as ON in the automation interface, even when the active document had AutoSave disabled.

Resolution:

Sending the GetAutosaveState command returns the current AutoSave setting for the active document. If there is no active document the result will be 0, or Off.

Impact of fix:

This fix has no impact on current workflow or data.

Sample Script for GetFormulaResult Returns Incorrect Results in Automation Interface

Tracking ID: 6593

Running the sample script for the GetFormulaResult command returned incorrect results.

Resolution:

The GetFormulaResult sample script has been edited so that the correct results are returned.

Impact of fix:

This fix has no impact on current workflow or data.

Known Issues in SoftMax Pro Software v6.2

The following known issues exist in SoftMax Pro Software v6.2.

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 Versions 5.x and 6.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, each version of the software displays a different value in the LambdaMax column.

Planned Resolution:

None.

Inversions of cubic and particularly cubic spline functions can be ambiguous. In such cases version 6.x finds 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 version 5.x, but tends to give more reasonable back calculations of standard concentrations.

So version 6.x and version 5.x might differ in such cases.

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.

Known Issues in Previous Releases of SoftMax Pro Software 6

For the known issues reported in the release notes for previous releases, see the following topics:

- [Known Issues in SoftMax Pro Software v6.1 on page 131](#)
- [Known Issues in SoftMax Pro Software v6.0 on page 139](#)

Chapter 10: SoftMax Pro Software Version 6.1 Software Release Notes

The SoftMax® Pro Microplate Data Acquisition and Analysis Software version 6.1 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 6.0, the last general release of the SoftMax Pro Software.

- [New in SoftMax Pro Software v6.1 on page 111](#)
- [Modifications Made to SoftMax Pro Software v6.1 on page 115](#)
- [Issues Addressed in SoftMax Pro Software v6.1 on page 116](#)
- [Known Issues in SoftMax Pro Software v6.1 on page 131](#)

New in SoftMax Pro Software v6.1

The following new features are included in SoftMax Pro Software version 6.1.

More Supported Instruments

The following instruments are now also supported:

- VersaMax™ ELISA Microplate Reader
- SpectraMax® 340PC 384 Absorbance Microplate Reader
- SpectraMax® 190 Absorbance Microplate Reader
- Gemini™ XPS Fluorescence Microplate Reader
- Gemini™ EM Fluorescence 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 ELISA Microplate Reader
- EMax® Endpoint ELISA Microplate Reader

Tunable Wavelength (TUNE) Detection Cartridge Support

The Tunable Wavelength (TUNE) Detection Cartridge is now supported for the SpectraMax® Paradigm® Multi-Mode Detection Platform. Previously, SoftMax Pro Software version 6.0 required an updater to support the Tunable Wavelength (TUNE) Detection Cartridge.

StakMax Microplate Handling System Support

The StakMax® Microplate Handling System is now supported.

More Microplate Formats

1536-well microplates are now supported for the SpectraMax Paradigm Multi-Mode Detection Platform and the FilterMax F3 and F5 Multi-Mode Microplate Readers.

The μ Max™ Low Volume Microplate is supported in the 24-well and 64-well formats. Support includes plate definitions and “MicroMax” protocols created specifically for The μ Max Low Volume Microplates.

Three-Dimensional Graphs

Users can view a three-dimensional graphical representation of reduced plate data.

Protocol Sharing

The new Protocol Home Page feature gives users access the SoftMax Pro Software community web site for sharing protocols, exchanging tips and tricks, and networking with other experienced users. Users can export protocols to a special format designed for uploading protocols for sharing.

To access this SoftMax Pro Software community web site, you must have internet access on your computer.

Integrated Web Browser

The **What's New** tab in the document area contains a built-in web browser to keep you informed of new or updated products and to give you access to the technical support knowledge base.

Live Mini-Graphs and Tables in Notes

Live images of graph or table sections can be inserted in a Note section. After changes are made to a section, the images of that section are updated in the Note section.

New Curve Fit

A new Gaussian curve fit has been added to the software.

New Statistical Function

The FirstZero function has been added to the formula editor to get sub-nanometer resolution of a spectral peak by locating the zero point in the derivative spectrum. Given an array of y-values (first parameter) and an array of corresponding x-values with the same number of elements, the FirstZero function returns the first x-value at which the interpolated y-value is zero.

New Protocols

The following protocols have been added to the installed software.

Cell Growth and Viability

- Alamar Blue Cell Viability.spr

FilterMax Reader Protocols

Protocols have been added to support the various read modes of the FilterMax F3 and F5 Multi-Mode Microplate Readers.

- F3 Basic Endpoint.spr
- F5 Basic Endpoint.spr

SpectraMax Paradigm Platform Protocols

Protocols have been added to support various detection cartridges for the SpectraMax Paradigm Multi-Mode Detection Platform.

- FP Rhodamine.spr
- LanthaScreen.spr

MicroMax Low Volume Microplate Protocols

New protocols have been added to support the 24-well and 64-well formats of the μ Max Low Volume Microplate.

- 24well DNA quantitation.spr
- 64well DNA quantitation.spr
- Paradigm 24well DNA quantitation.spr
- Paradigm 64well DNA quantitation.spr

SpectraTest Validation Plate Protocols

The SpectraTest® ABS1 Absorbance Validation Plate protocols for the SpectraMax 190 and SpectraMax 340PC 384 readers have been adapted from the SoftMax Pro Software version 5.4 protocols.

- 190 ABS1.spr
- 340PC 384 ABS1.spr

A single protocol for the SpectraTest ABS1 Absorbance Validation Plate protocol for the VersaMax reader has been created that combines the three separate protocols from SoftMax Pro Software version 5.4.

- VersaMax ABS1.spr

The SpectraTest® FL1 Fluorescence Validation Plate protocols for the Gemini™ EM and XPS Fluorescence Microplate Readers have been adapted from the SoftMax Pro Software version 5.4 protocols.

- Gemini EM FL1.spr
- Gemini XPS FL1.spr

Modifications Made to SoftMax Pro Software v6.1

The following modifications were made to SoftMax Pro Software version 6.1.

Protocol Modifications

The following protocols have been modified.

Nucleic Acids

- PicoGreen Fluorescence.spr

The emission wavelength was corrected from 540 nm to 525 nm.

SpectraMax Paradigm Platform Protocols

- AlphaScreen 384 HTS.spr

The Intro notes section and experiment title were edited for clarity. Error bars were added to the graph.

- BRET2.spr

The Intro notes section and experiment title were edited for clarity.

- GeneBLAzer.spr

The Intro notes section and experiment title were edited for clarity.

- HTRF Assay Optimization.spr

This protocol replaces the HTRF.spr protocol that was in SoftMax Pro Software version 6.0. It has a revised Intro notes section with updated group table calculations to match Cisbio preferred methods.

- HTRF Standard Assay Terbium.spr

This protocol replaces the HTRF.spr protocol that was in SoftMax Pro Software version 6.0. It has a revised Intro notes section with updated group table calculations to match Cisbio preferred methods.

- HTRF Standard Assay.spr

This protocol replaces the HTRF.spr protocol that was in SoftMax Pro Software version 6.0. It has a revised Intro notes section with updated group table calculations to match Cisbio preferred methods.

- IMAP FP FAM.spr

The Intro notes section and experiment title were edited for clarity.

- MultiTox-Fluor.spr

The Intro notes section and experiment title were edited for clarity.

TR-FRET

- HTRF Assay Optimization.spr

This protocol replaces the HTRF_Competitive.spr, HTRF_Immunoassay.spr, and HTRF_Protease.spr protocols that were in SoftMax Pro Software version 6.0. It has a revised Intro notes section with updated group table calculations to match Cisbio preferred methods.

- HTRF Reader Control.spr

This protocol replaces the HTRF_ReaderControl.spr protocol that was in SoftMax Pro Software version 6.0. It has a revised Intro notes section with updated group table calculations to match Cisbio preferred methods. The plate layout was revised to match Cisbio's Reader Control Kit plate layout as shown in the product insert.

- HTRF Standard Assay Terbium.spr

This protocol replaces the HTRF_TerbiumCryptate.spr protocol that was in SoftMax Pro Software version 6.0. It has a revised Intro notes section with updated group table calculations to match Cisbio preferred methods.

- HTRF Standard Assay.spr

This protocol replaces the HTRF.spr protocol that was in SoftMax Pro Software version 6.0. It has a revised Intro notes section with updated group table calculations to match Cisbio preferred methods.

Issues Addressed in SoftMax Pro Software v6.1

The following issues were addressed in SoftMax Pro Software version 6.1.

Support for the StakMax Microplate Handling System has not been implemented

Tracking ID: 2344

The StakMax® Microplate Handling System was not supported in the previous release. Automated protocols that require the use of the StakMax Microplate Handling System could not be run.

Resolution:

The StakMax Microplate Handling System is now supported.

Impact of fix:

This fix has no impact on current workflow or data.

G Factor is not visible in the reduction legend when Anisotropy display mode is selected

Tracking ID: 3231

When Anisotropy display mode was selected, the reduction legend did not display G Factor.

Resolution:

G Factor is now visible in the legend.

Impact of fix:

This fix has no impact on current workflow or data.

Masked wells are not cleared when a data file is saved as a protocol and then re-loaded

Tracking ID: 3413

If wells were masked in the data file, and then the data file was saved as a protocol file, when that protocol file is re-opened, the wells are still masked.

Resolution:

Masked wells are now cleared when a data file is saved as a protocol.

Impact of fix:

If users have previously saved protocols with masked wells, then the protocols need to be saved again to remove the masking.

This fix has no other impact on current workflow or data.

Cannot delete a copy of the Sample column in the group table

Tracking ID: 3418

After pasting a copy of a Sample column, the pasted copy of the column could not be deleted.

Resolution:

Copies of columns can be deleted.

Impact of fix:

This fix has no impact on current workflow or data.

Graph axis intervals are inconsistent

Tracking ID: 3438

For some data sets, the intervals between axis tick marks on a graph were not multiples of 2, 5, or 10 making the axis seem to scale improperly.

Resolution:

Scaling changed to always show axis tick mark labels in multiples of 2, 5, or 10.

Impact of fix:

This fix has no impact on current workflow or data.

Interlaced Reading is an available for option for the Well Scan read type on a SpectraMax Paradigm instrument

Tracking ID: 3456

The SpectraMax Paradigm instrument does not permit performing an interlaced read with a Well Scan read type. This option was incorrectly available through the user interface.

Resolution:

This option is no longer available in the user interface.

Impact of fix:

This fix has no impact on current workflow or data.

Error when disconnecting from a flash drive after saving or opening a file

Tracking ID: 3464

If the last-used file was on a flash drive, and the flash drive was removed, starting the program displays a **Drive cannot be found** message.

Resolution:

If the SoftMax Pro Software cannot locate the drive that contains the last-used file when the program is started, then a pre-defined default location is selected.

Impact of fix:

This fix has no impact on current workflow or data.

Error when modifying instrument settings after a plate read has been triggered by AutoRead

Tracking ID: 3466

Changing settings to a plate that is being read can cause an error condition.

Resolution:

Modification of instrument settings while a plate is being read is no longer permitted.

Impact of fix:

This fix has no impact on current workflow or data.

The software hangs while trying to connect to an instrument

Tracking ID: 3477

With some hardware configurations involving 3G cards (Huawei Mobile Connect) or virtual serial ports (RIM Blackberry Virtual Serial Port), the software tries to retrieve a response, and does not receive one.

Resolution:

A software time out was added for these devices.

Impact of fix:

This fix has no impact on current workflow or data.

Color map legend is not displayed after a plate read completes

Tracking ID: 3486

When **Color Map** display mode is selected in the display options dialog before a read, the color map legend is not display after a plate is read.

Resolution:

The color map legend now is displayed.

Impact of fix:

This fix has no impact on current workflow or data.

Reduction settings are reset after saving and loading a file

Tracking ID: 3547

In some cases, the Min and Max RFU values are reset after a file was saved and re-opened.

Resolution:

The values are no longer reset when the file is saved and re-opened.

Impact of fix:

This fix has no impact on current workflow or data.

Unexpected pause during automated read on the SpectraMax Paradigm instrument

Tracking ID: 3602

If **Show Pre-Read Optimization Options** is selected in the **Settings** dialog, the **Pre-Read Optimization Options** dialog is displayed even when reads are executing through an automation script causing the software to pause and wait for user intervention.

Resolution:

The **Pre-Read Optimization Options** dialog no longer is displayed while in automation mode.

Impact of fix:

This fix has no impact on current workflow or data.

Sample descriptors are not imported properly when importing a template

Tracking ID: 3683

When importing a template with multiple sample descriptors, some sample descriptors do not import properly.

Resolution:

Sample descriptors are now properly imported.

Impact of fix:

This fix has no impact on current workflow or data.

Application crashes when importing a template containing unsupported group types

Tracking ID: 3705

When importing a plate template that has a group type other than **Standards**, **Controls**, or **Custom**, the program crashes.

Resolution:

When trying to import a plate template with an unsupported group type, an error message is displayed. This condition no longer causes the program to crash.

Impact of fix:

This fix has no impact on current workflow or data.

Error occurs when changing a group name through the right-click context menu in the template editor

Tracking ID: 3708

In the template editor, selecting a group and then right-clicking to open the Edit Group dialog can cause an error condition after changing the name of the group and closing the dialog.

Resolution:

This scenario no longer causes an error condition. The group name can be successfully changed using this method.

Impact of fix:

This fix has no impact on current workflow or data.

Summary formula does not automatically recalculate when it is copied between experiments

Tracking ID: 3723

After pasting a copy of a summary formula into a different experiment, the pasted copy of the summary formula does not recalculate properly.

Resolution:

Summary formulas recalculate after pasting.

Impact of fix:

This fix has no impact on current workflow or data.

Prompt to save is not displayed when closing a data file after masking wells

Tracking ID: 3733

After masking wells and then closing the file, the software does not prompt the user to save the file.

Resolution:

Masking wells causes the software to prompt the user to save the file when the file is closed.

Impact of fix:

This fix has no impact on current workflow or data.

Name and serial number of Tunable Wavelength (TUNE) Detection Cartridge is not displayed in settings summary

Tracking ID: 3789

When using a Tunable Wavelength (TUNE) Detection Cartridge, the name and serial number of the detection cartridge is not displayed in the settings summary.

Resolution:

The name and serial number of the detection cartridge now is displayed.

Impact of fix:

This fix has no impact on current workflow or data.

Help file crashes if a user right-clicks and selects “Properties”

Tracking ID: 3853

Right clicking in a help topic and selecting Properties causes the help file to crash. In some cases, the program also crashes.

Resolution:

The help topic properties display properly without causing the help or program to crash.

Impact of fix:

This fix has no impact on current workflow or data.

Error state in Timing category of the Settings dialog for Absorbance Kinetic read type is not retained

Tracking ID: 3866

In the **Timing** category of the **Settings** dialog for an Absorbance Kinetic read type, if an interval that is less than the minimum was selected and then a different category was viewed, then the error state of the **Timing** category disappeared.

Resolution:

The error message stays on the screen as long as the error state exists.

Impact of fix:

This fix has no impact on current workflow or data.

An assigned Group Blank resets to the incorrect reduction step after a template is modified

Tracking ID: 3889

When a Group Blank is assigned, the default setting in the Reduction dialog should be Before Reduction, but after modifying the template it changes to After Reduction.

Resolution:

After making template modifications, the group blank reduction option stays as it was before the modifications were made to the template.

Impact of fix:

This fix has no impact on current workflow or data.

Minimum kinetic interval calculation for TRF read mode is incorrect

Tracking ID: 3930

Many minor elements of the algorithm did not correlate to the instrument mechanics, which could cause inaccuracy.

Resolution:

Modifications were made that have an effect on the calculation of the minimum kinetic interval for TRF and FP.

Impact of fix:

Protocols that were created with SoftMax Pro version 6.0 might not satisfy the minimum kinetic interval (rare).

This fix has no other impact on current workflow or data.

Pasting a copied template with an existing group name that uses a different case creates separate groups with the same name

Tracking ID: 3954

Multiple groups with the same name cannot exist within the SoftMax Pro. Using copy and paste let users to do this if the group names used different cases.

Resolution:

Group names are no longer case sensitive. For example, **Standard** and **standard** are now the same group.

Impact of fix:

This fix has no impact on current workflow or data.

Application crashes if the instrument gets disconnected and an autoread starts

Tracking ID: 3964

If the instrument was disconnected and an autoread started, the program would crash.

Resolution:

The program no longer crashes if the instrument is disconnected and an autoread starts.

Impact of fix:

This fix has no impact on current workflow or data.

Append title commands in automation system permit duplicate section names to be created

Tracking ID: 3971

When running a script containing multiple commands Name Section and Append barcode, if the barcode was missing or not read, the “base” name was appended instead of the barcode. If this happened more than once, then duplicate names would be generated.

Resolution:

If a duplicate name is going to be created, the software appends a number (1, 2, 3,...) to the end of the plate name.

Impact of fix:

This fix has no impact on current workflow or data.

Quick access toolbar does not save and reload correctly

Tracking ID: 3976

If the quick access toolbar in the ribbon was modified, the modification did not persist after the program was closed and restarted.

Resolution:

The modifications are now saved when the program closes, and the modifications persist when the program restarts.

Impact of fix:

This fix has no impact on current workflow or data.

Prompt to save is not displayed when closing a data file after resizing a column in a group table

Tracking ID: 3991

After resizing a column in a group table and then closing the file, the software does not prompt the user to save the file.

Resolution:

Resizing a column in a group table causes the software to prompt the user to save the file when the file is closed.

Impact of fix:

This fix has no impact on current workflow or data.

Automation command “SaveAs” does not check that the same document is currently open

Tracking ID: 3993

When an automation script issued the **SaveAs** command using the name of a file that was currently open in the SoftMax Pro Software, the automation data would overwrite the data in the file.

Resolution:

If an automation script issues the **SaveAs** command using the name of a file that is currently open in the SoftMax Pro Software automation API returns an error code and does not overwrite the data in the file.

Impact of fix:

This fix has no impact on current workflow or data.

Automation command “SetTitle” does not update the referenced formulas

Tracking ID: 3994

If an automation script issues the **SetTitle** command, referenced formulas are not updated.

Resolution:

Formulas are now refreshed after updating referenced formulas.

Impact of fix:

This fix has no impact on current workflow or data.

Exported text data cannot be parsed by automation systems

Tracking ID: 3996

The text export format in the SoftMax Pro Software version 6.0 is not structured in a way that can easily be parsed through a utility.

Resolution:

The export format was changed such that it could be parsed by a utility.

Impact of fix:

Automation scripts that were written with the SoftMax Pro Software version 6.0 might need to be modified to work the SoftMax Pro Software version 6.1 data.

This fix has no other impact on current workflow or data.

Error state in Timing category of the Settings dialog is not displayed if Shake is selected when the interval is too short for the Shake operation

Tracking ID: 3999

In the **Timing** category of the **Settings** dialog, if the minimum interval was selected when **Shake** was not enabled, and then **Shake** was enabled in the **Shake** category, then the expected error state of the **Timing** category was not displayed, and the settings could be saved.

Resolution:

The error message is displayed and stays on the screen as long as the error state exists.

Impact of fix:

This fix has no impact on current workflow or data.

Interlaced Reading is an available for option for the AlphaScreen kinetic read type on a SpectraMax Paradigm instrument

Tracking ID: 4013

The SpectraMax Paradigm instrument does not permit performing an interlaced read with an AlphaScreen Detection Cartridge and the kinetic read type. This option was incorrectly available through the user interface.

Resolution:

This option is no longer available in the user interface.

Impact of fix:

This fix has no impact on current workflow or data.

AutoScale does not place the highest data point at or near the top of the well

Tracking ID: 4025

After data acquisition completed, the plate display did not scale to place the highest data point at or near the top of the well.

Resolution:

After data acquisition completes, the plate display scales to make the highest data point the maximum y-axis value in all wells.

Impact of fix:

This fix has no impact on current workflow or data.

Chat window is not displayed the entire content of the response

Tracking ID: 4041

The entire response for the connected system was not displayed in the remote chat window.

Resolution:

Full responses now are displayed in the remote chat window.

Impact of fix:

This fix has no impact on current workflow or data.

Application crashes when a document is closed during an autosave

Tracking ID: 4045

If a document was closed when an autosave operation was being done on the document, the application sometimes crashed.

Resolution:

The application no longer crashes when a document is closed while an autosave operation is being done on the document.

Impact of fix:

This fix has no impact on current workflow or data.

Stopping a read while reading a Fluorescence Intensity Spectrum read type with the Tunable Wavelength (TUNE) Detection Cartridge freezes the application

Tracking ID: 4050

When using the Tunable Wavelength (TUNE) Detection Cartridge in Fluorescence Intensity mode using a Spectrum read type, the application froze if the **Stop** button was clicked while the plate was being read.

Resolution:

The application no longer freezes when using the Tunable Wavelength (TUNE) Detection Cartridge in Fluorescence Intensity mode using a Spectrum read type and the **Stop** button is clicked while the plate is being read.

Impact of fix:

This fix has no impact on current workflow or data.

Calibrate dialog can be closed during calibration by clicking on the red X in the upper corner of the dialog

Tracking ID: 4053

While a calibration was in progress, the **Calibration** dialog could be closed by clicking the red **X** in the upper-right-corner of the dialog. This did not stop the calibration in progress.

Resolution:

The red **X** has been removed from the **Calibration** dialog.

Impact of fix:

This fix has no impact on current workflow or data.

Application crashes when opening a document from the file system directly after installation completes

Tracking ID: 4055

Immediately after installing and launching the program, double-clicking a previously saved data file caused the application to crash.

Resolution:

The application no longer crashes when double-clicking a previously saved data file.

Impact of fix:

This fix has no impact on current workflow or data.

AutoSave default path points to an incorrect location

Tracking ID: 4058

The AutoSave path listed the default save location as **C:\Documents and Settings\All Users\Application Data\Molecular Devices\SMP6\Log**, which is hidden to many users.

Resolution:

The default path was changed to **Documents\SoftMax Pro** or **My Documents\SoftMax Pro**, depending on the operating system.

Impact of fix:

Data files from the SoftMax Pro Software version 6.0 might need to be updated to a new path.

This fix has no other impact on current workflow or data.

Cancel button in Auto Save dialog does not cancel changes made in the dialog

Tracking ID: 4061

After making changes in the **Auto Save** dialog and then clicking **Cancel**, the changes were retained.

Resolution:

After making changes in the **Auto Save** dialog and then clicking **Cancel**, the changes are no longer retained.

Impact of fix:

This fix has no impact on current workflow or data.

One or more points can be incorrectly missing in a graph when a referenced group table column contains a masked value

Tracking ID: 4071

A data point that was referencing a calculation containing masked values was missing on the graph.

Resolution:

All unmasked data points are displayed in a graph.

Impact of fix:

This fix has no impact on current workflow or data.

Multiple plates are written to a non-.sda file during an autosave

Tracking ID: 4074

When autosaving to a file format other than .sda from a document that has similar plate names (for example, **Plate1** and **Plate10**), the autosaved data contained data from both plates.

Resolution:

Autosaved data in formats other than .sda now save the data for only one plate at a time regardless of the plate names.

Impact of fix:

This fix has no impact on current workflow or data.

Known Issues in SoftMax Pro Software v6.1

The following known issues exist in SoftMax Pro Software v6.1.

Minimum kinetic interval might be larger than necessary

Tracking ID: 3924

If the number of flashes is modified in the **Settings** dialog, the minimum kinetic interval might not change, even though the instrument timing had an effect on this parameter.

Planned Resolution:

This issue was addressed in version 6.2.2. See [Minimum kinetic interval might be larger than necessary on page 73](#).

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.

Known Issues in Previous Releases of SoftMax Pro Software 6

For the known issues reported in the release notes for the previous release, see the following topic:

- [Known Issues in SoftMax Pro Software v6.0 on page 139](#)

Chapter 11: SoftMax Pro Software Version 6.0

Software Release Notes

The SoftMax® Pro Microplate Data Acquisition and Analysis Software version 6.0 update is a major release. The following is a summary of the changes incorporated in this revision as compared to version 5.4.3, the last general release of the SoftMax Pro Software.

- [New in SoftMax Pro Software v6.0 on page 133](#)
- [Modifications Made to SoftMax Pro Software v6.0 on page 137](#)
- [Known Issues in SoftMax Pro Software v6.0 on page 139](#)

New in SoftMax Pro Software v6.0

The following new features are included in SoftMax Pro Software version 6.0.

Enhanced User Interface

The software application has been redesigned from the ground up with the focus on improving the user interface. The following are some of the key improvements:

- **Template Editor:** The Template Editor dialog has been redesigned to make the layout more intuitive and consistent with user workflow.
- **Reduction Dialog:** The Reduction Dialog has been redesigned to display the order in which calculations are applied to data.
- **Microsoft Office 2007 Ribbon interface:** The Ribbon helps you to quickly find the commands that you need to complete a task. Commands are organized in logical groups, which are collected together under tabs.
- **Context-sensitive help:** The software application now has context-sensitive help. Users can go directly to the relevant page in the SoftMax Pro Software application help from various dialogs.
- **Right-click shortcuts:** Right-click context menus now exist throughout the software application.
- **Navigation Tree:** The Navigation Tree view displays all sections within a document and lets you navigate to a specific section by clicking the section name.

Syntax Helper for Formula Writing

The new Syntax Helper in the Formula Editor dialog displays available accessors, operators, and function names as well as their parameter data types as a user types the starting characters.

SpectraMax Paradigm Instrument Support

SpectraMax® Paradigm® Multi-Mode Detection Platform and its detection cartridges are supported. For information on the supported detection cartridges, see the SoftMax Pro Software application help or user guide.

Plate Cloning

The Plate Cloning feature lets you create multiple sets of sub-Plate sections within a Plate section and apply template (Group) assignments and reduction calculations unique to that sub-Plate section. This lets you do multiple calculations or reductions on one set of raw data and prevents the need to copy raw data from one Plate section to a different Plate section to apply and view different groups and reduction calculations.

New Curve Fits and Fitting Options

New curve fitting formulas have been added.

- Rectangular Hyperbola
- 2-Parameter Exponential
- Bi-exponential
- Bi-rectangular Hyperbola
- Two-site competition

For linear fits, parameters can be fixed at specified values. For non-linear fits, an initial (seed) value can be specified for each parameter, or parameters can be set as a fixed value.

Users can choose a different curve fit for each plot and can calculate parameter dependencies.

A new T-Distribution confidence interval method has been added that is based on the T-profile function.

Detailed Curve Fit Report

Curve Fit equation, parameter values, standard error, and confidence interval are all shown in the graph legend in the Graph section. When applicable, EC50 is shown.

Export to Excel

Plate data and (group) template assignments can be exported to Excel in the *.xls format, as well as to text and XML formats.

Data Recovery

The software application automatically saves the unsaved data files every five minutes and recovers those files if it encounters sudden system or application failure.

Improved Plate and Cuvette Display

Plate and cuvette data now auto-scales during and after acquisition. The display of well scan data is now in color, instead of grayscale.

Redesigned Template Editor

The Template Editor dialog has been redesigned to make the layout more intuitive and consistent with user workflow. A second sample descriptor is now available. Users can choose the color for a group instead of having the color pre-selected.

For a series, users can now choose the number of replicates in the X and Y directions, permitting 2x2 blocks, for example. Users can assign a series in reverse order.

The Template editor has more intuitive copying and pasting of template sections within the template editor, and of entire templates outside of the template editor.

Enhanced Group Table Features

The mouse can be used to drag and drop columns. Users can view all columns in a wide group table by dragging the scroll bars.

More Export Features

Users now have the option to export raw plate data, reduced plate data, or both, and can choose individual sections to export instead of just all plates, or all groups.

Enhancements to Printing

A print preview is now available. In the printed output, group tables are now paginated along row boundaries.

New Protocols

The following protocols have been added to the installed software.

- Derivative spectra.spr

The protocol uses the new plate clone feature to permit multiple reductions and displays with a single data set.

The displays include:

- Standard spectral display (OD, RFU, RLU)
- First derivative of the original spectrum
- Second derivative of the original spectrum

- Equilibrium Binding.spr

The protocol uses the Rectangular hyperbola curve fit to estimate directly total binding and dissociation constant (K_d) without the need to transform the data.

- Kinetic with smoothing.spr

The protocol uses a 5-point, second-order Savitzky-Golay filter to produce a smoothed data set. The smoothing function requires data points that are equally spaced.

- AlphaScreen 384 HTS.spr

This protocol contains default settings suitable for detecting AlphaScreen and AlphaLISA assays on the SpectraMax Paradigm instrument using the ALPHA-384 HTS Detection Cartridge.

- BRET2.spr

This protocol contains default settings suitable for BRET2 assays on the SpectraMax Paradigm instrument using the Dual Color Luminescence (LUM-BRET2) Detection Cartridge.

- GeneBLAzer.spr

This protocol contains default settings suitable for detecting GeneBLAzer assays on the SpectraMax Paradigm microplate reader using the GeneBLAzer Detection Cartridge. This cartridge was designed to be used with Invitrogen's GeneBLAzer assays.

- HTRF.spr

This protocol contains default settings suitable for detecting HTRF assays with Europium cryptate on the SpectraMax Paradigm instrument using the HTRF Detection Cartridge.

- IMAP FP FAM.spr

This protocol is designed to simplify data acquisition and analysis of fluorescence polarization (FP) data in conjunction with a SpectraMax Paradigm instrument with the Fluorescence Polarization (FP-FLUO) Detection Cartridge.

- MultiTox-Fluor.spr

This protocol contains default settings suitable for detecting MultiTox-Fluor assays on the SpectraMax Paradigm instrument using the MultiTox-Fluor Detection Cartridge. This cartridge was designed to be used with Promega's MultiTox-Fluor cell viability assay.

More protocols are available for downloading. For more information about available downloads, contact Molecular Devices customer support.

Other Improvements

- Setting header and footer information in the printed output.
- Comparing sections within a document in the Comparison view.
- Comparing documents using the Vertical or Horizontal Tab groups.
- Zooming in and out of a document or section using the slider bar in the lower-right corner.
- Zooming within the graph body, both in the Zoomed Well dialog and a Graph section.
- Scrolling with the mouse wheel in the Document view.
- Selecting from a list of recently opened documents.
- Setting precision and output format for formula results.
- Selectively showing and hiding columns in the Group section.
- New formulas for first and second derivatives and data smoothing.

Modifications Made to SoftMax Pro Software v6.0

The following modifications were made to SoftMax Pro Software version 6.0.

License Management

The SoftMax Pro Software v6.0 license requires activation within 14 days after installation. Both Online and Offline activations are available.

Automation (Robotic) Interface

The automation interface (technology) has been changed from Windows Messaging to the Microsoft .NET-based assembly. Sample codes and scripts are included in the SoftMax Pro Software v6 installer.

The *SoftMax Pro Automation API Reference Guide* and *SoftMax Pro Automation Sample Application* are available from the Windows Start menu at **Start > All Programs > Molecular Devices > SoftMax Pro 6.0 > Automation SDK**.

Protocol Manager

Multiple protocol locations or folder paths can be assigned, and protocol files from those locations can be viewed in a single drop-down list.

Group Blank Subtraction

Group blank behavior is now flexible. Group blanks can be either subtracted from raw data, like plate blanks, or after post-reduction calculations as in the SoftMax Pro Software v5.4.2. This can simplify Fluorescence Polarization protocols.

Curve Fits

The mathematical libraries used for curve fitting have been upgraded, which might create different results from previous versions. Internal testing has shown that the changes are statistically insignificant.

In the case of the Exponential fit, previous versions had an option to choose a “linearized” method. This option is no longer available.

Formula Editor

Formulas are now case sensitive. In previous versions, including v5.x, formulas were not case sensitive.

AutoSave

AutoSave settings are now saved with each document.

Pre-Read Plate Blanking Option for Absorbance Reads

The Pre-Read Plate blanking option for absorbance reads has been removed from the software application to minimize confusion. It is no longer needed to correct for well-to-well variability in currently available UV plates.

Settings

Minimum kinetic interval calculations are now more accurate.

Instrument Connection

Users can now view and refresh the list of connected instruments.

Simulated Data

New, more realistic data is now acquired while in simulation mode.

Protocols

All protocols are now in the *.spr (SoftMax Pro Software v6 Protocol) format.

The following protocol files were updated:

- Michaelis Menten
Parameters are now estimated directly using the rectangular hyperbola curve fit.
- Fluorescence Polarization
All fluorescence polarization protocols were greatly simplified by using the new group blank feature.

For more complete information about the changes made to a specific protocol, see the revision information in the Note section of the protocol.

Other Modifications

- Data entry for PathCheck plate background constants has been moved from the Instrument Settings dialog to the Reduction dialog.
- AutoRead settings have been moved from the Instrument Settings dialog to a centralized dialog that you can access from the Operations tab. Only one delay value is permitted for all plates.
- The FP display modes Polarization and Anisotropy have been moved from the Display dialog to the Reduction dialog.
- The Kinetic “Peak” reduction has been renamed to “Maximum.”
- If a file contains plate settings that are incompatible with the currently-selected instrument, the file cannot be opened.

Known Issues in SoftMax Pro Software v6.0

The following known issues exist in SoftMax Pro Software v6.0.

Support for the StakMax Microplate Handling System has not been implemented

Tracking ID: 2344

The StakMax® Microplate Handling System is not supported in this release. Automated protocols that require the use of the StakMax Microplate Handling System cannot be run.

Planned Resolution:

This issue was addressed in version 6.1. See [Support for the StakMax Microplate Handling System has not been implemented on page 116](#).

Some 384-well plate display options have not been implemented

Tracking ID: 2463

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.

The bar graph option has not been implemented

Tracking ID: 2491

The means to create or display a bar graph has not been implemented. If a user opens a 5.x file that has a bar graph, the bar graph will be converted to a scatter graph in the v6 file. The 5.x file is not changed, so the bar graph can still be viewed using the 5.x version of the SoftMax Pro Software.

Planned Resolution:

Implementing bar graphs is in the product backlog for future implementation.

Cannot export cuvette sets

Tracking ID: 2494

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: 2497

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: 2498

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: 2521

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.

Pasting Kinetic, Spectrum, or Well Scan data into the SoftMax Pro Software v6 from external applications is not supported

Tracking ID: 2726

The means to paste plate data from an external application is supported only for the Endpoint read type.

Planned Resolution:

Pasting Kinetic, Spectrum, and Well Scan data 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: 2727

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: 2768

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.

Duplicating sections is not available

Tracking ID: 2769

The menu option to duplicate the selected section has not been implemented. This can be done by creating a new experiment or a new section.

Resolution:

This issue was addressed in the SoftMax Pro Software v6.4 release. See [Create Duplicate Sections in the Navigation Tree on page 22](#).

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

Tracking ID: 2770

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: 2771

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.

Notes sections might be split across pages when printing

Tracking ID: 032198

If text or a formula is located at the bottom of a printed page, the top half of the text might be displayed on the first page, and the bottom half of the text might be displayed on the second page. This can be resolved by adjusting the position of the text or formula in the notes section.

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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