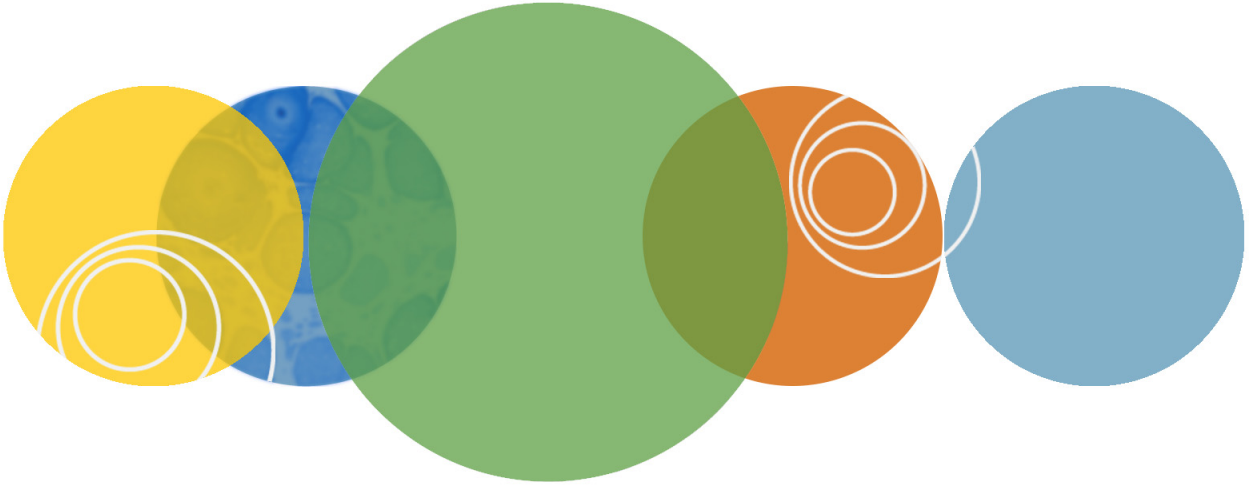

ScreenWorks® System Control Software

Release Notes

MOLECULAR DEVICES

v4.2
March 2017

Product manufactured by Molecular Devices, LLC.

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Molecular Devices, LLC is ISO 9001 registered.

Contents

ScreenWorks System Control Software General Information

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Introduction

ScreenWorks® System Control Software controls Molecular Devices FLIPR® Tetra High Throughput Cellular Screening System.

The following topics are included in this chapter:

Computer System Requirements

Supported Operating Systems

- Windows XP Professional, 32-bit
- Windows 7, 32-bit and 64-bit
- Windows 10, 32-bit and 64-bit

For data analysis usage, ScreenWorks Software version 4.2 can be installed on a computer with the following minimum system specifications.

Hardware

- 3.4 GHz or faster processor
- 2 GB SDRAM or more
- 160 GB or more of available hard disk space
- 1024 x 768 or higher-resolution display
- DVD-CDRW Drive

Installing ScreenWorks Software

As of version 3.1, the installer automatically uninstalls the old software version as long as it is same major release (3.1 to 3.2). If you are replacing ScreenWorks Software version 3.2, with version 4.0 or newer, manually uninstall the software. See Uninstalling ScreenWorks Software on page 10.

1. Double-click the **ScreenWorks_4_2_x.exe** ScreenWorks Software installation file. A Welcome to the ScreenWorks Setup Wizard dialog is displayed.
2. Click **Next**.
3. In the **License Agreement** dialog box, select **I accept the terms of the license agreement**, and click **Next**.
4. In the **Online/Offline Mode** dialog, designate the default mode in which you want the software to start.
   - In **Online**, ScreenWorks Software automatically looks for a connected instrument when the software is started.
   - In **Offline**, ScreenWorks Software does not automatically look for a connected instrument.

   Refer to Online vs. Offline on page 11 for further details.
5. Click **Next**.
6. In the **Destination Folder** dialog, the **Install ScreenWorks 4.2 to** field displays the default installation directory. To change the installation directory, click **Change**, navigate to the desired directory, then click **OK**.
7. Click **Next**.
8. In the **Select Program Folder** dialog, leave the displayed default **Program Folder** settings. Select **Anyone who uses this computer** to make ScreenWorks Software available to all users on the FLIPR® Tetra System host computer, then click **Next**.
9. In the **Configuring the ScreenWorks installation** dialog, if you want to make any changes, click **Back** to go to the previous screen, otherwise click **Next** to start the installation.
10. When the installation is complete, the **Completing the installation process** dialog appears. Click **Finish** to exit the wizard.
11. Restart your computer before using the software update.

Activating the ScreenWorks Peak Pro License

The ScreenWorks® Peak Pro functionality is license-protected. The software license activation enables the Peak Pro functionality any time after the trial period expires.

Note: There is a one time 14-day Peak Pro trial usage option in the Help menu. When the trial period expires, the Peak Detection functionality disappears, and the Help menu trial option is inactive. The rest of the ScreenWorks Software version 4.2 remains functional.

To activate the ScreenWorks Peak Pro software license:

1. Start the ScreenWorks Software application.
2. Click the **Help** Tab.
3. Click **Software License**.
4. If you have not started the available 14-day Peak Pro trial, the option to start the 14-day Peak Pro trial, or enter the product key appears. Click **Yes**.

   If the trial has expired, only the option to provide a software license product key appears.
5. If you have internet connectivity, type the provided **Product Key** in the field and click **Activate Online**, and then follow the on-screen instructions.
6. If you do not have Internet connectivity, click **Activate Offline** and follow the on-screen instructions. Activate Off line requires the following:
   - Your product key
   - A separate computer with Internet connectivity
   - A USB drive for transferring files between the computers.

Uninstalling ScreenWorks Software

1. Click **Start > Control Panel** and double-click on **Add or Remove Programs** from the Windows **Control Panel** dialog.
2. Find **ScreenWorks** in the list of currently installed programs and click **Remove** to initiate the uninstall process.
3. When prompted to **Uninstall** ScreenWorks, click **Next**.
4. In the **Configuring the ScreenWorks installation** dialog, click **Next**.
5. When the installation is complete, the **Completing the installation process** dialog appears. Click **Finish** to exit the wizard.

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 **ScreenWorks** icon on your desktop to start the program. To start the program from the Windows Start menu, click **Start > All Programs > Molecular Devices > ScreenWorks4.2**

Note: You can start the ScreenWorks Software with or without an attached instrument. When no instrument is attached you cannot acquire data. To perform operations that require data you must be able to open an existing data file.

Online vs. Offline

The software has two start-up modes:

- Offline (Desktop)
- Online (Instrument)

The default start-up mode is determined during software installation in the **Online/Offline** dialog.

Once the software is open, you can switch modes by selecting **Go Online** or **Go Offline** from the **Instrument** menu.

Note: Switching modes once the software is opened does not change the software startup mode chosen at the time of installation. To change the default startup mode the ScreenWorks Software must be reinstalled.

Online (Instrument) Mode

When launched in this mode, ScreenWorks Software checks for instrument connections. If no connections are sensed, you are notified. You may then either check the connections and attempt to connect again, or choose to run the software in Offline mode.

If you create a protocol in Online mode, only the current instrument settings are allowed. Protocols created in Offline mode with hardware settings that do not match current hardware settings are flagged. You must change the hardware settings to match those in the protocol in order to run it.

When ScreenWorks Software is launched in Online mode and connects to the instrument, the default installation configuration file is overwritten using the current instrument settings and plate library information.

If you are running in Online mode and then switch to Offline mode, the instrument setup configuration will be the last Online configuration.

Note: To be able to select any configuration to generate protocols, you must install the software in Offline (desktop) mode.

Offline (Desktop) Mode

When ScreenWorks Software is launched in Offline mode, you are enabled to configure the following hardware options:

- Camera Type
- Excitation Wavelengths
- Emission Wavelengths
- Pipettor (automatically selects matching tip washer type)
- Cell suspension
- TETRAcycler™ (automatically sets bar code reader status)

Note: Regardless of the start-up mode, pipettor head and tip washer type must always match. If the TETRAcycler is installed, it is assumed the bar code reader is also connected.

ScreenWorks System Control Software Version 4.2 Release Notes

2

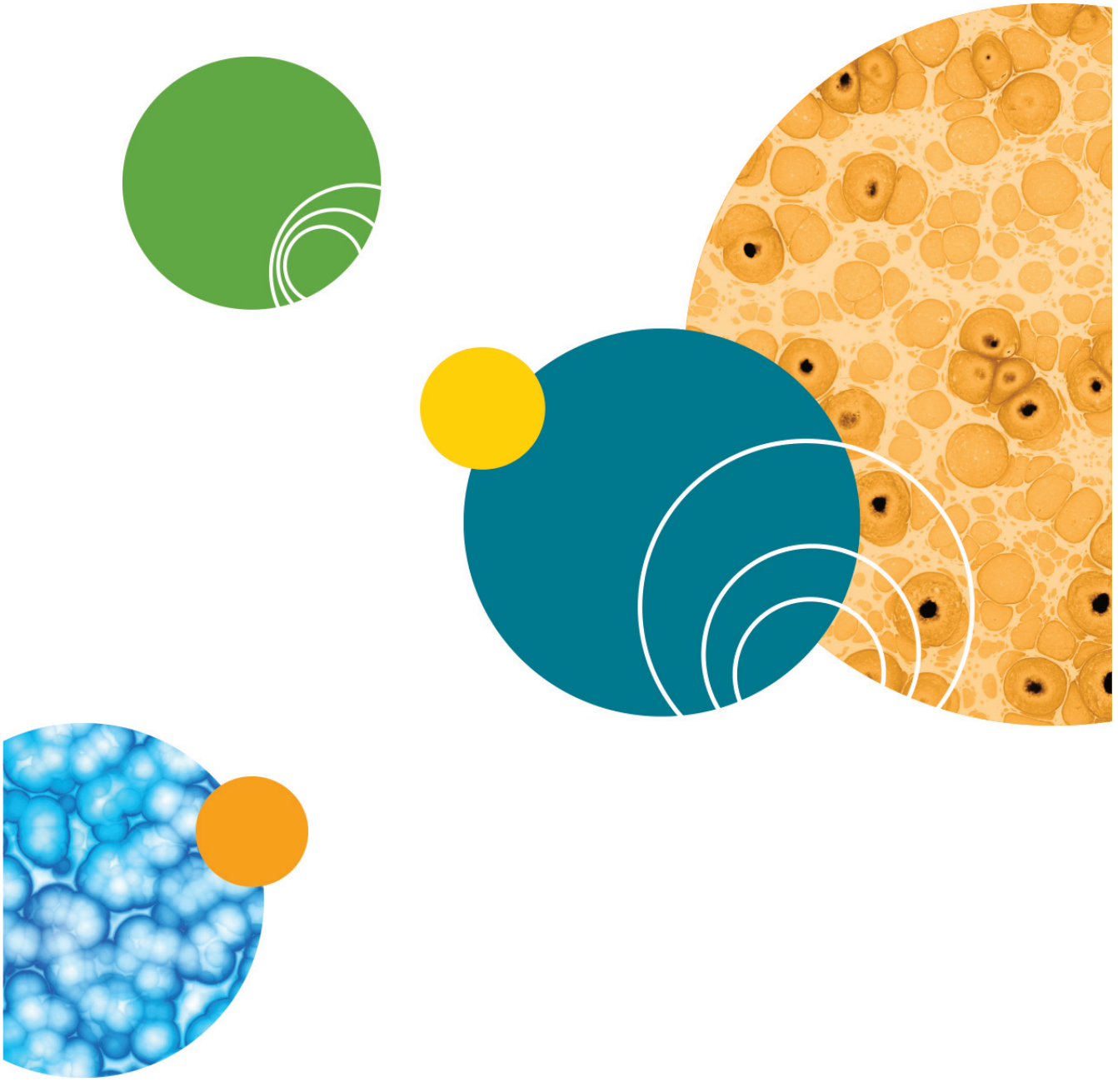
Introduction

The ScreenWorks® System Control Software version 4.2 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 4.1, the last general release of the ScreenWorks System Control Software.

Modified in ScreenWorks Software v4.2

Faster Data Processing

Faster plate data processing, which significantly reduces the processing time of long runs with high-density plates.



ScreenWorks System Control Software Version 4.1 Release Notes

3

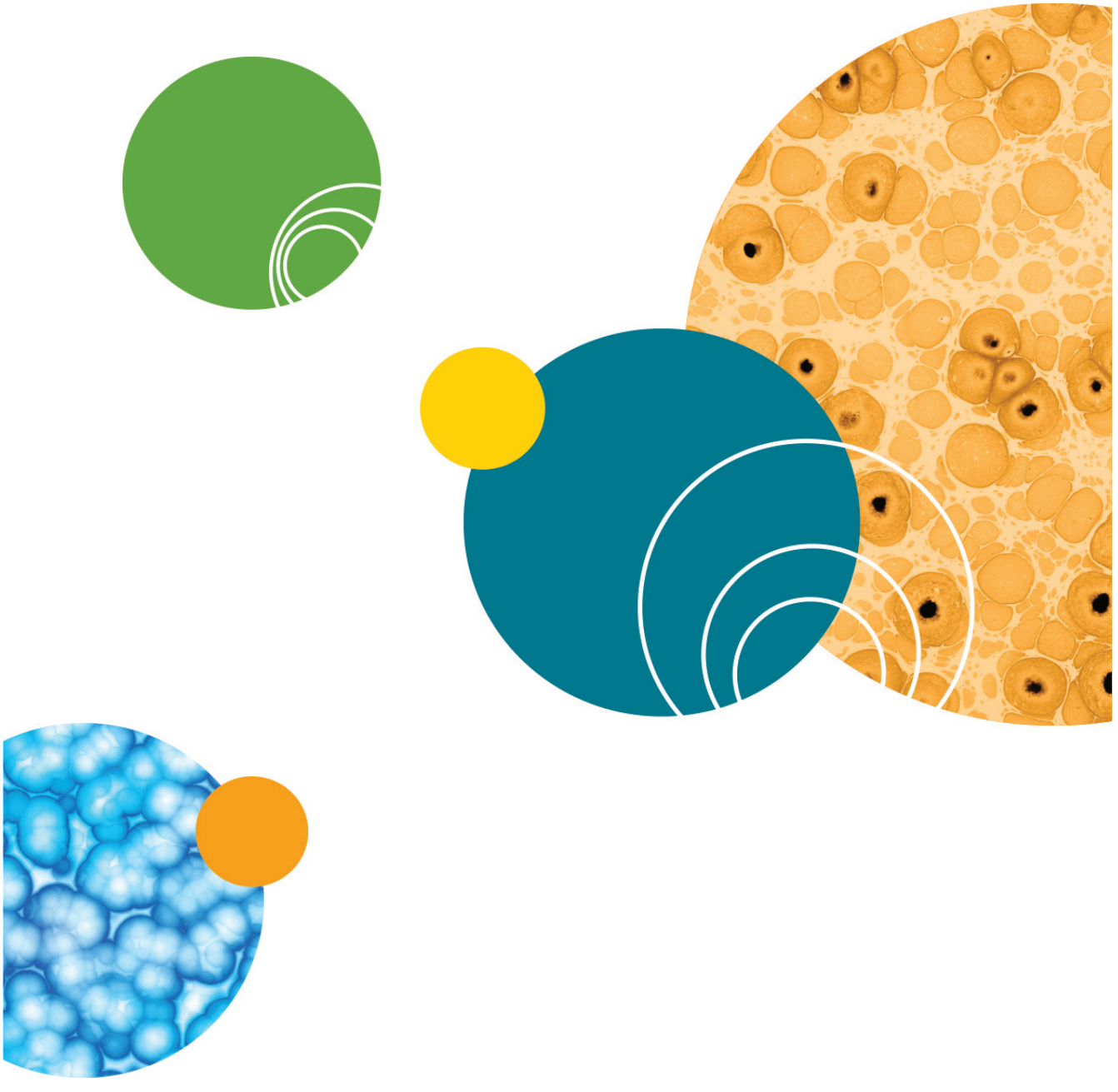
Introduction

The ScreenWorks® System Control Software version 4.1 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 4.0.1, the last general release of the ScreenWorks System Control Software.

New in ScreenWorks Software v4.1

Windows 10 Operating System Support

Adds software support for Windows 10 (32 and 64 bit) operating system.



ScreenWorks System Control Software Version 4.0.1 Release Notes

4

Introduction

The ScreenWorks® System Control Software version 4.0.1 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 4.0, the last general release of the ScreenWorks System Control Software.

- Issues Addressed in Version 4.0.1

Issues Addressed in Version 4.0.1

1536 Pin Tool Protocol Causes Dispense Parameter Error

Tracking ID: FB4917

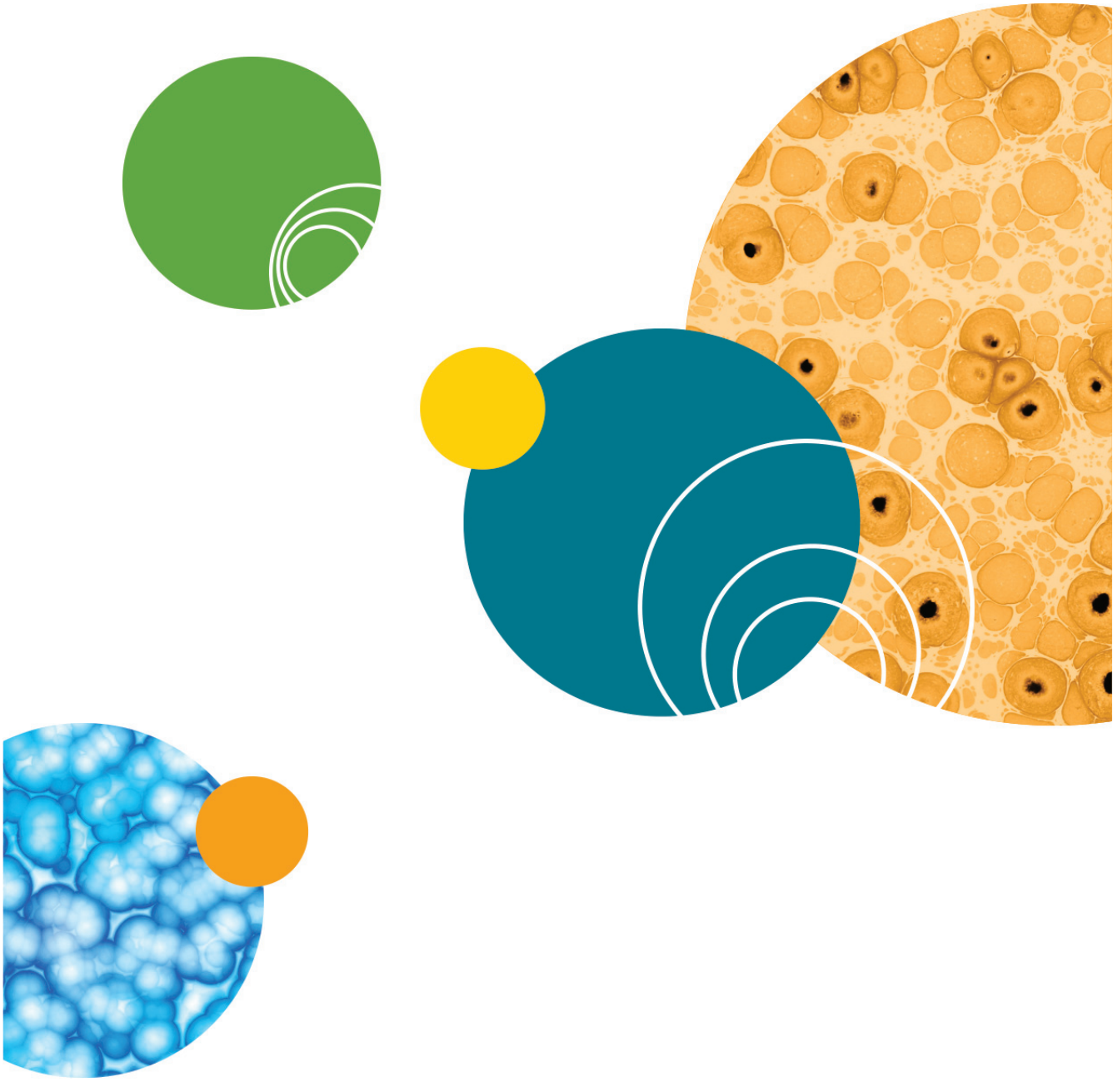
When running a 1536 Pin Tool protocol, an error message that the parameter is invalid is displayed.

Resolution:

This is corrected in version 4.0.1.

Impact of fix:

This fix has no impact on data.



ScreenWorks System Control Software Version 4.0 Release Notes

5

Introduction

The ScreenWorks® System Control Software version 4.0 update is a major release. The following is a summary of the changes incorporated in this revision as compared to version 3.2, the last general release of the ScreenWorks System Control Software.

- New in ScreenWorks Software v4.0
- Modifications Made to ScreenWorks Software v4.0
- Issues Addressed in Version 4.0
- Known Issues

New in ScreenWorks Software v4.0

340 and 385 LED Modules Support

Support for two new ultraviolet spectrum LED modules is available. The 340 Module provides the 335-345 nm spectrum, and the 388 Module provides the 380-390 nm spectrum.

LED Module Temperature Detection and Reporting

Alert message appears when an LED module high temperature threshold is exceeded. LED modules high temperature thresholds range between 46 °C to 65 °C depending on module.

Excitation LED Calibration

The 340 Module LED requires a one time excitation calibration. To facilitate this calibration, the **Excitation LED Calibration** button has been added to the **Calibration** dialog.

Diagnostic Mode in Yellow Plate Signal Test

The Diagnostic button functionality, now visible in the Yellow Plate Signal Test dialog, is only for Molecular Devices Technical Support diagnostic services. If you click the button you will be prompted for a User Name and a User Password.

Modifications Made to ScreenWorks Software v4.0

ScreenWorks Peak Pro Software Trial and License

Help > Software License replaces the pop-up dialog so that you can start a 14-day trial period, or activate the software license product key.

Version 4.0 Software Installs Parallel with Version 3.x Software on an Analysis PC

Both ScreenWorks Software version 4.0 and ScreenWorks Software version 3.x. can be installed on a single PC, but only for offline analysis usage.

Removed ChangedOptics Option from Instrument Menu

Detecting when the lower front door opens and closes, replaces the **Instrument > ChangeOptics** requirement.

Open and Close Lower Front Door Process Changed

Opening and closing the lower front door no longer requires a reset of the instrument when the optical components are changed. When the lower front door closes, a message appears about updating optics.

Calibration Dialog Changes

A status list box replaces the drop-down list. The status list box includes **Excitation/Emission Wavelength** status for **Flat-Field Calibration** and **LED Calibration**, either **Done** or **NotDone**.

Yellow Plate Signal Test Dialog Defaults to Flat-Field Calibration Settings

Formerly, the **Yellow Plate Signal Test** dialog defaulted to the settings of whichever protocol was open. The default flat-field calibration settings offer a better baseline.

Save As Protocol File Version 3.1 and 3.0

Software version 4.0 Data Files and Protocol Files are not backward compatible. You can specify **File > Save As** for **Data Files Version 3.1 & 3.0 (*.fmd)**, and **Protocol File Version 3.1 & 3.0 (*.fmp)** to later open in

the earlier versions of the software, but software version 3.2 and newer functionality will be excluded.

Issues Addressed in Version 4.0

Tetra Automation Returns Incorrect Instrument Status

Tracking ID: FB3207

During an automation operation of Tetra+, the outer door was closed for the removal of the plate from the instrument to the landing pad. The status command reported incorrectly that the door was open after a 402 plate handling error. The door was actually closed. Error message was out of synch with the instrument status.

Resolution:

Refreshing the real-time status more frequently.

Impact of fix:

This fix has no impact on data.

Asks to Overwrite With a New File

Tracking ID: FB3267

In Windows 7, when saving a new protocol by modifying an existing file name, the new file name would not be recognized.The **Save As > Save** message “<File name> already exists. Do you want to replace it?” appeared. Clicking **Yes**, did not overwrite the existing file. The newly named file was saved.

Resolution:

Now recognizes the new file name, and no erroneous prompt to overwrite the existing file appears.

Impact of fix:

This fix has no impact on data.

Reduction Type List Empty After Peak Pro Trial License Expiration

Tracking ID: FB3272

When the Peak Pro license expires, none of the **Kinetic Reduction Configuration >Reduction Type** values are available, even the existing default types (average, sum, max, min). They also are missing from **Export File > Statistics** and **Export File > Group Statistics** default values.

Resolution:

The default list of **Kinetic Reduction Configuration >Reduction Type** values now appear, as do the **Export File > Statistics** and **Export File > Group Statistics** default values.

Impact of fix:

This fix has no impact on data.

Miscalculating the Average Ratio Graph

Tracking ID: FB3273

Average Ratio Graph is incorrect due to a miscalculation. Instead of the average ratio, the numerators were averaged, and then the denominators were averaged, and then the ratio between them was calculated.

Resolution:

The graph calculation is fixed.

Impact of fix:

This fix has no impact on data.

Known Issues

During Long Interval Read Time Settings, Between Read Commands, Data Acquisition Reads Quicker Than Set

Tracking ID: FB3172

During long interval read time settings, intermittently, data acquisition reads occur faster than the designated interval time.

Workaround:

Include additional reads to compensate for the incorrect shortened time intervals between reads.

Auto Print Does not Print Details Graph Without Group Definition on the Plate

Tracking ID: FB3276

When no group is defined in the plate, the traces in the Details Graph are missing.

Workaround:

Define a group.