SPECTROFLO VERSION 3.0.3 RELEASE NOTES

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OVERVIEW

SpectroFlo 3.0.3 is a patch release to address several issues discovered in version 3.0.1. It also facilitates a fluidics hardware design change required to allow for negative minimum sample flow rate for flow rate calibration in service mode.

Software installation instructions are included at the end of this document.

IMPROVED FEATURES & DEFECT FIXES

Unable to Export/Import Some Rare Experiments: In some rare scenarios, experiments generated in version 2.2.x that contained 1 or more improperly saved empty tubes could not be imported/exported. Version 3.0.3 ignores improperly saved tubes allowing for the experiment to still be used.

Unable to do Live Unmixing: In some very rare scenarios when one of the user settings in the whole application is corrupt, no user account can perform live unmixing until after the corrupted user setting is deleted from the user setting library. This defect is now fixed.

SpectroFlo Data Backup Failure: If any of the experiments in SpectroFlo is corrupted, the All SpectroFlo Data backup procedure cannot be completed, preventing SpectroFlo data from being backed up. In this new version, corrupted experiments are now ignored and the backup procedure can be completed.

Spectral Plots are not Rendered Correctly if the Size of the Plot is too Small: When the height of a spectrum plot is decreased to less than 128 pixels, the spectral profile is not proportionally amplified which results in the displayed spectral profile to be different from the one displayed in version 2.2.x. This defect has been fixed.

User Settings Cannot be Deleted after Upgrading to 3.0: If any experiment in the whole application has corrupted tubes, no user settings or worksheet templates can be deleted in library after upgrading to 3.0. This defect has been fixed.

Relaxed the Range of Sample Flow Rate for Low Flow Rate Calibration: The lower limit of sample flow rate is relaxed to allow for service engineers to input a negative value into the field for the calibration of low flow rate. This was done to address a recent hardware design change.
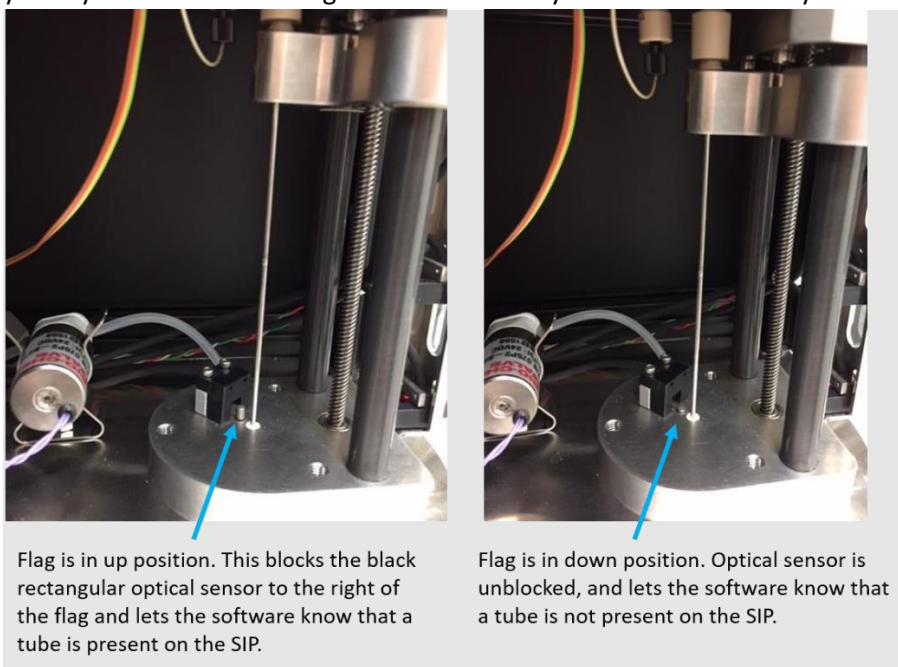
KNOWN SOFTWARE DEFECTS

- **Post-Acquisition Unmixing File Size Constraint:** We recommend only unmixing multicolor FCS files that contain fewer than 10,000,000 total events. Files that are bigger than 10,000,000 events may take a long time to unmix.
- **Events to Display & Live Unmixing:** If you want to display a lot of events (e.g., 1,000,000) while live unmixing a tube, the software will become very slow. We recommend reducing your events to display to 50,000 events or less when live unmixing your data. After the acquisition is finished, you can display 5-100% of your recorded events without any negative performance effects.
- **Auto-Scaling of Axes for Unmixed Files:** Auto-scaling of plot axes (found in Plot Properties) does not always apply properly for an unmixed tube. You may need to toggle to Manual Scale and then back to Auto Axis Scale to get the scaling to update and apply correctly.
- **Limitation for the Name of User Defined Keyword:** "Name" cannot be used as the key of a user defined keyword. The software will not prevent users from doing so. However, if users define

such a keyword and this keyword is added in the statistics table, batch analysis cannot be completed due to a conflict with a reserved string used in the statistics table of SpectroFlo.

- **Inconsistent Format of Displayed Week in Exported Use Time File:** When Exporting the use time log by week, the week number for weeks 1-12 is displayed with an incorrect format in Excel by default.
- **Disabled Laser Delay UI**: In some rare scenarios the Laser Delay fields are not selectable from the Instrument Control Window. They are always accessible if the Instrument Control Window is floated.
- **Data Maintenance App and SpectroFlo can be Opened at the Same Time:** In some rare scenarios, both the Data Maintenance App and SpectroFlo can be opened at the same time. When this happens, please close one program before proceeding.

KNOWN HARDWARE DEFECTS

- **Automatic SIT Flush:** SIT flush does not always occur automatically between sample tubes. Occasionally, the mechanical flag that blocks and unblocks the tube sensor gets stuck in the tube present position. If you do not hear a SIT flush after unloading your tube, open the SIT door and check the position of the flag. If it is stuck in the up position when no tube is present, press the flag down. The SIT flush will then execute. If you notice a lot of salt buildup around the flag, let your Cytek Field Service Engineer know so they can clean it out for you.

Flag is in up position. This blocks the black rectangular optical sensor to the right of the flag and lets the software know that a tube is present on the SIP.

Flag is in down position. Optical sensor is unblocked, and lets the software know that a tube is not present on the SIP.

DATA BACKUP AND SOFTWARE INSTALLATION INSTRUCTIONS

Before upgrading your system to SpectroFlo v3.0.3, we recommend to first back up your data. This way, if anything goes wrong during the installation process, you can always revert back to the backup files. For a video overview of the SpectroFlo Data Maintenance tool, please visit https://cytekbio.com/blogs/resources/tagged/video-tutorials and look for the "Data Maintenance" tutorial video.
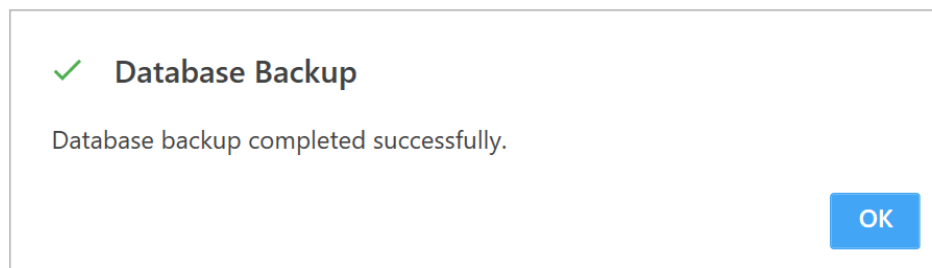
Backing Up Your Data

1. Open the SpectroFlo Data Maintenance tool.
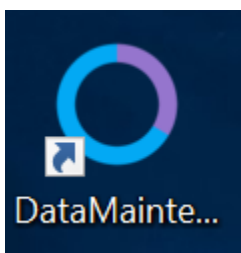
2. Click the "Backup" button. Select a folder to export the backup ZIP file to and click OK. Depending how much data is in your software, this backup could take some time.
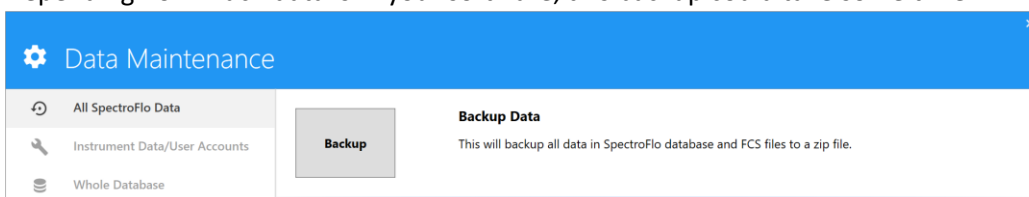

3. A message will appear when the backup has completed. Click "OK".

Now that you've backed up your system, continue with the software upgrade instructions that follow.
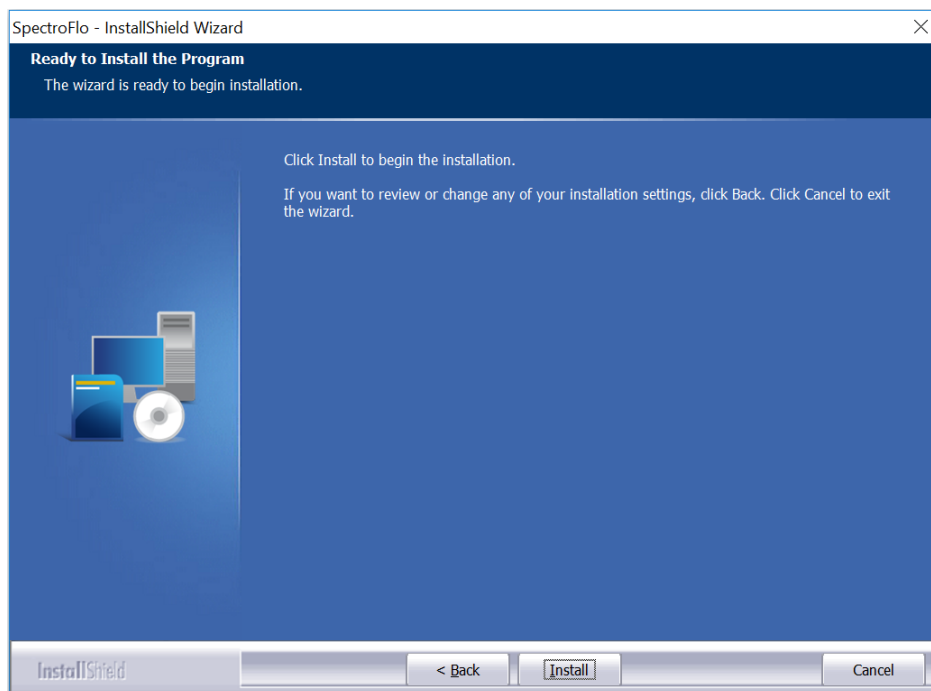
Upgrading SpectroFlo from 2.2.x, 3.0.0 or 3.0.1 to 3.0.3

1. Download setup package and make sure the installer is run with a Windows account with administrative rights.
2. Start the installer. Note: this screen may not show if your PC's user account control setting is set to "Never notify". If it appears, click "Yes".
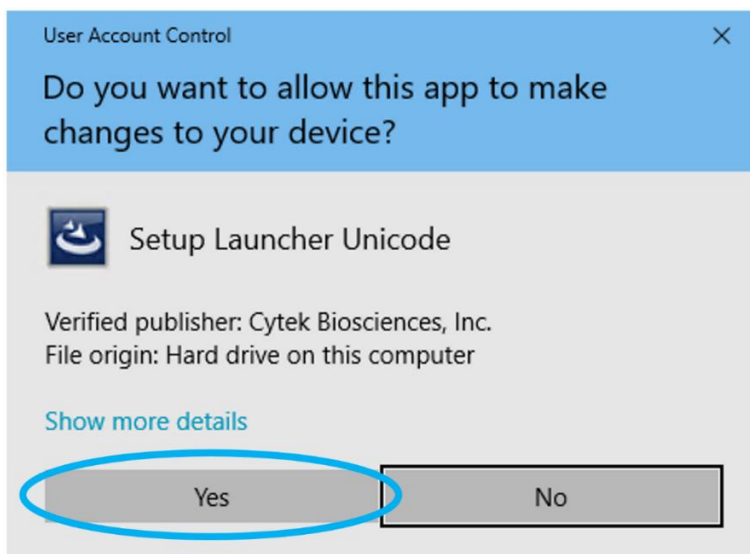
3. Confirm the version and then click "Next" to continue.
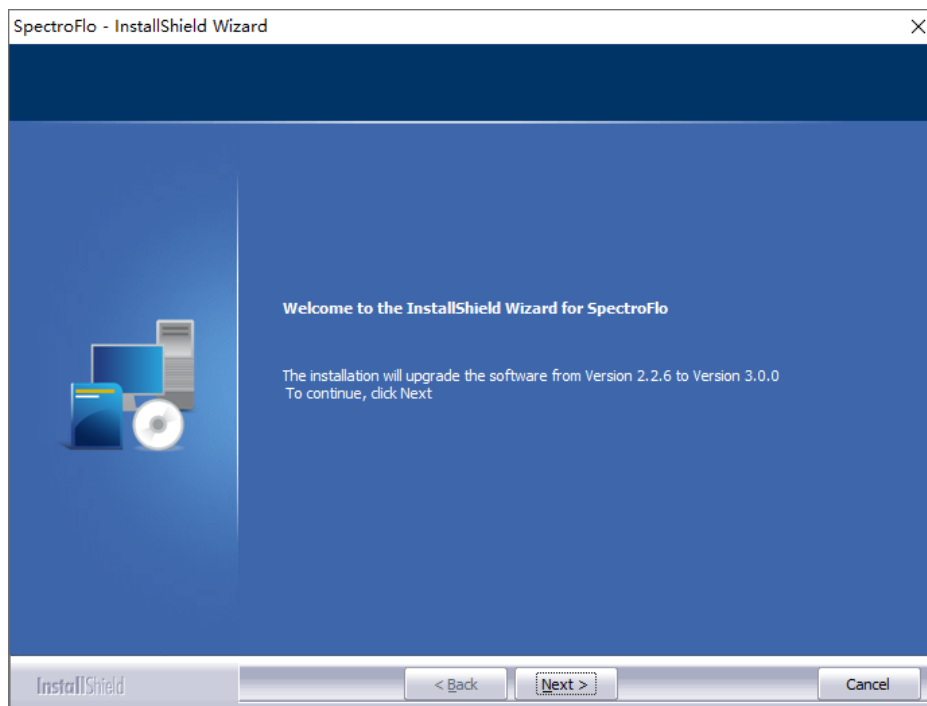
4. Click "Install" to begin the installation.

5. Click "Finish" to finish the installation.
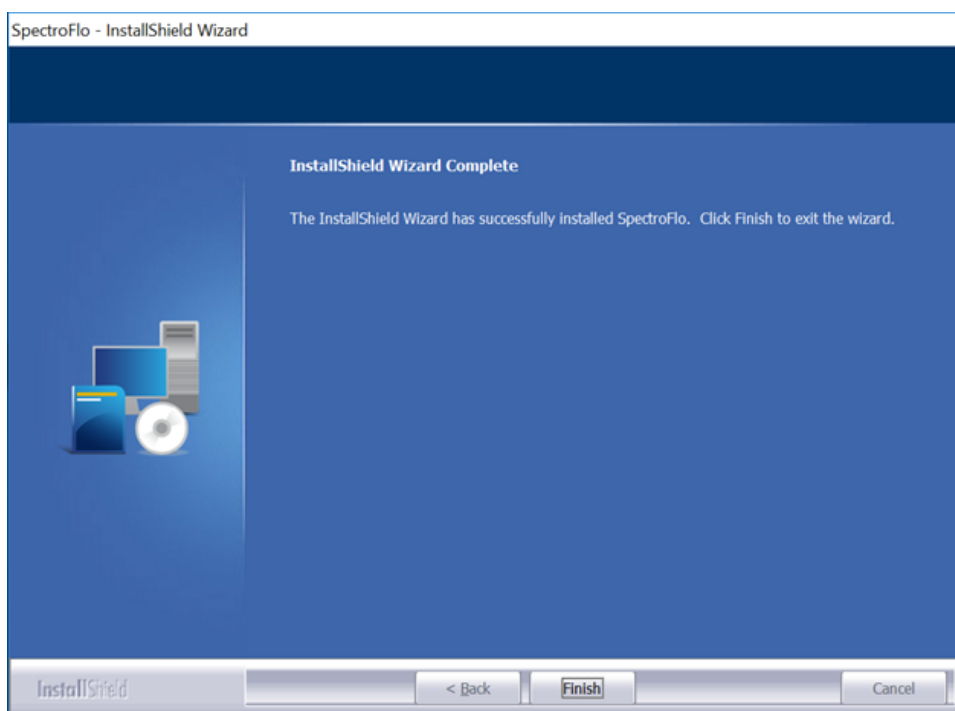
Installing SpectroFlo 3.0.3 on a New PC

1. Download setup package and make sure the installer is run with a Windows account with administrative rights.
2. Start the installer. Note: this screen may not show if your PC's user account control setting is set to "Never notify". If it appears, click "Yes".
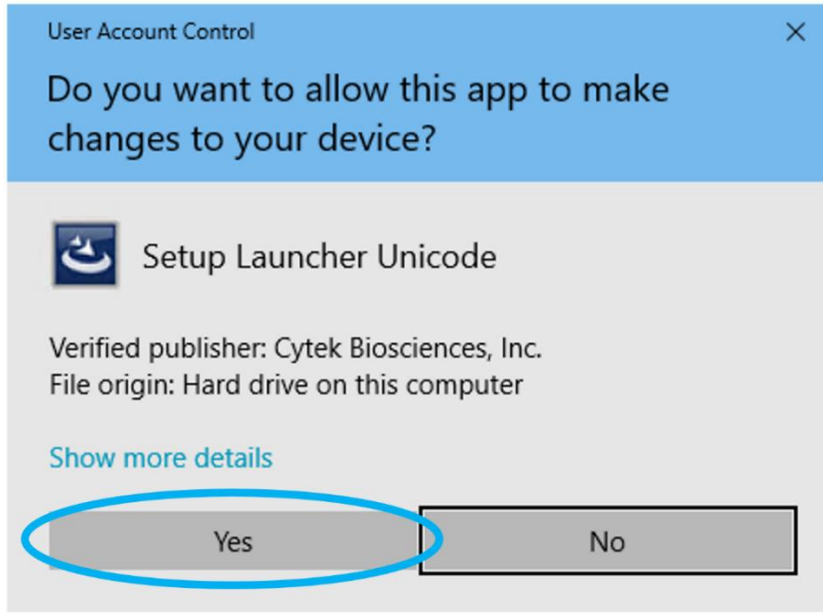
3. Click the "Install" to install Microsoft SQL Server 2016 Express RTM.
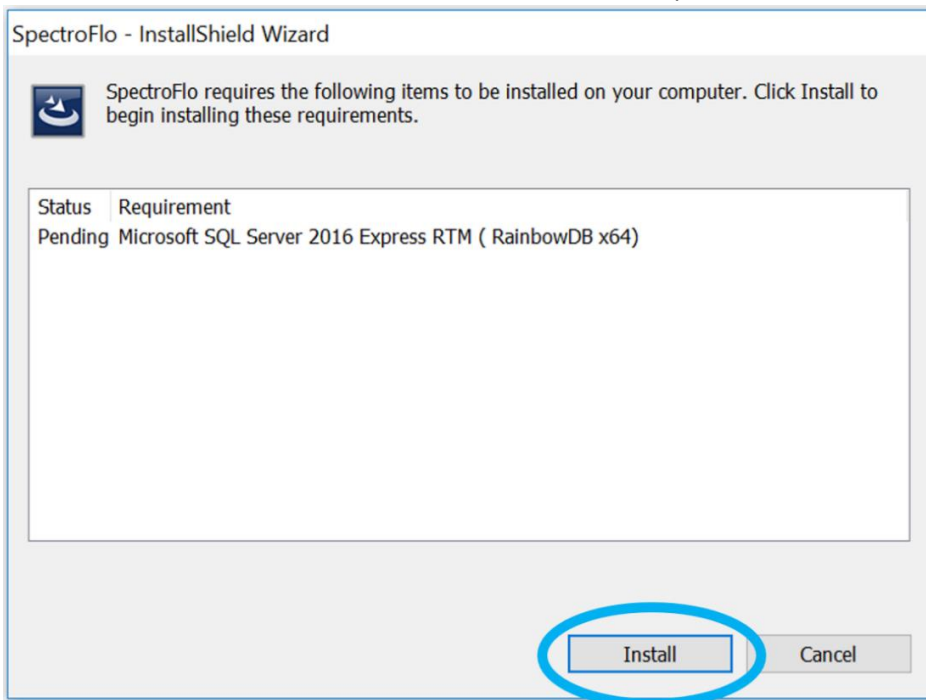
4. Select "I accept the terms of the license agreement" radio button, and then click "Next".
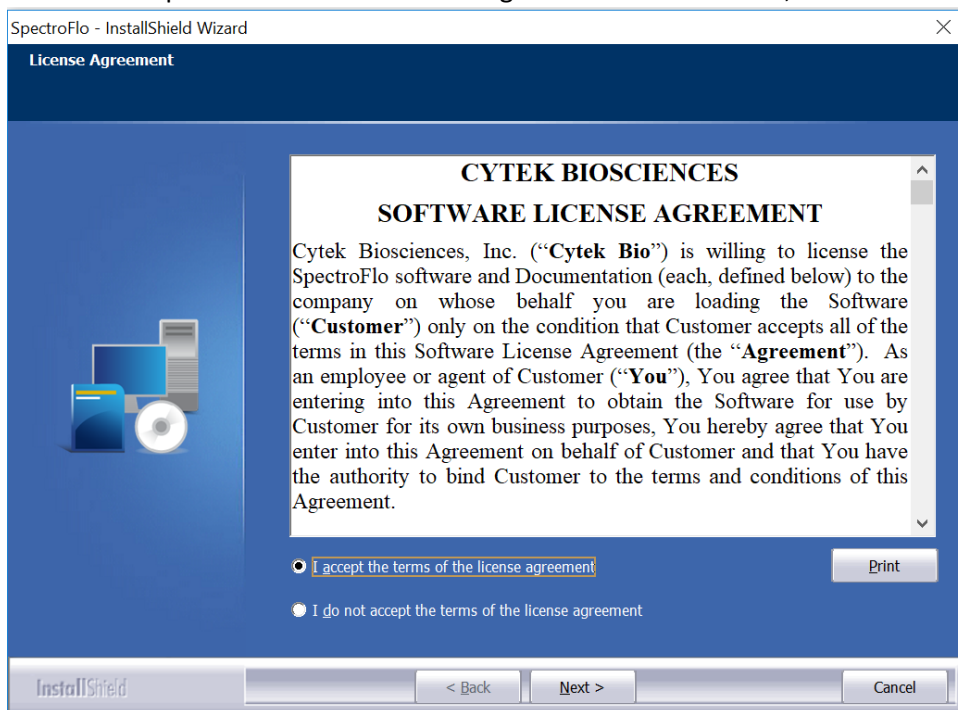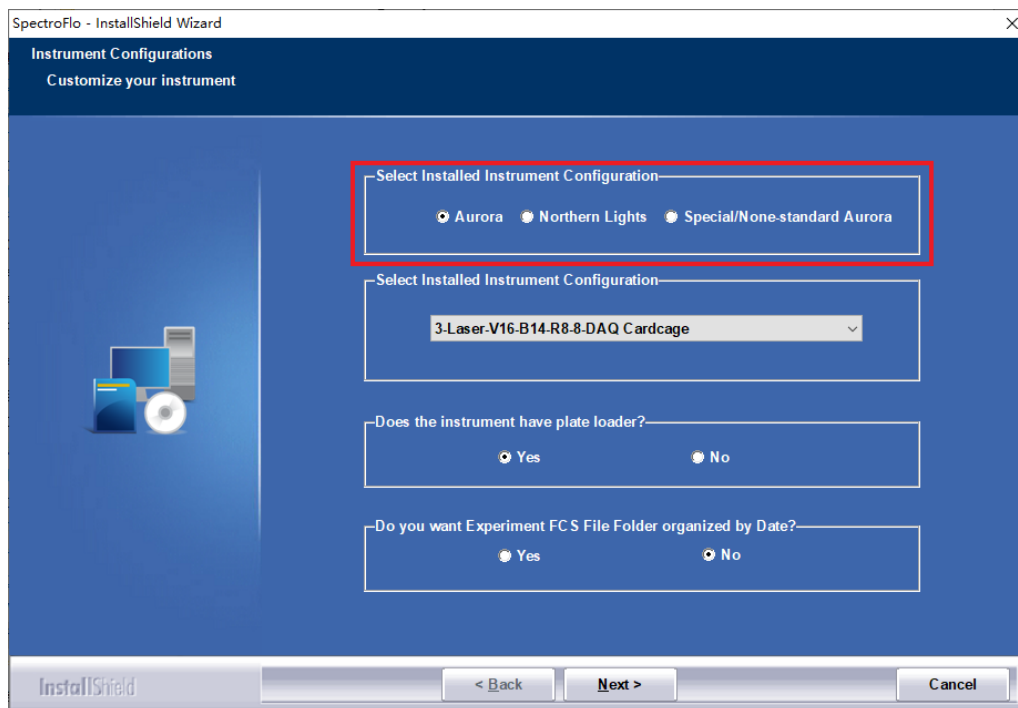
5. Click the "Next" to continue.
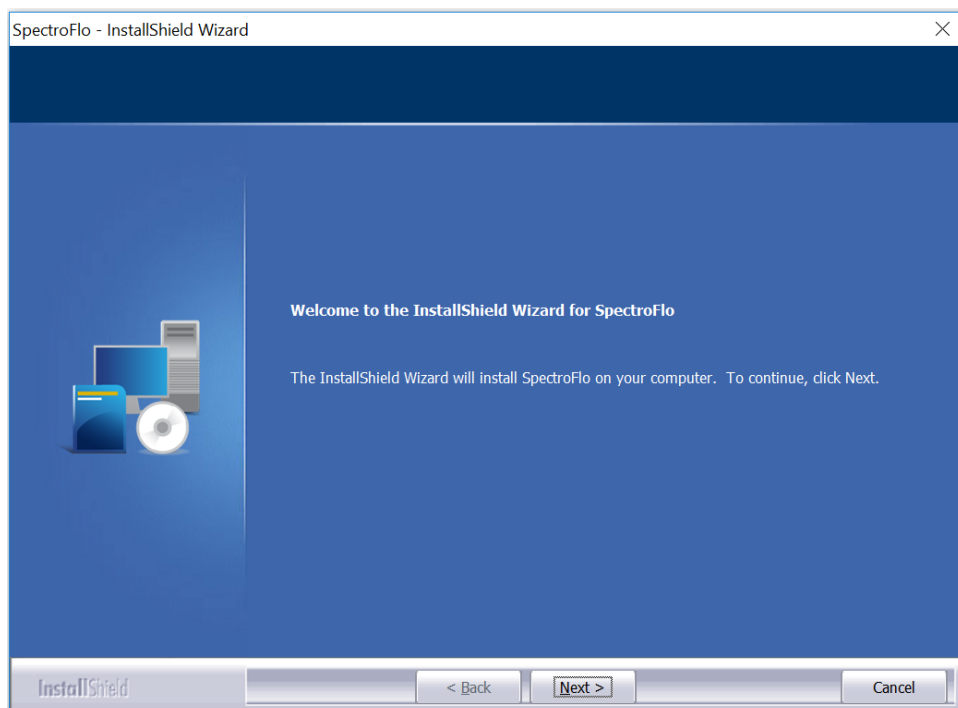
6. Select the instrument type that is "Northern Lights" or "Aurora" or "Special/None-standard Aurora".

7. Select the configuration for your installed instrument.

   For Aurora:

   For Northern Lights:

For Special/None-standard Aurora:

8. Choose "Yes" if there is a plate loader. Otherwise select "No".
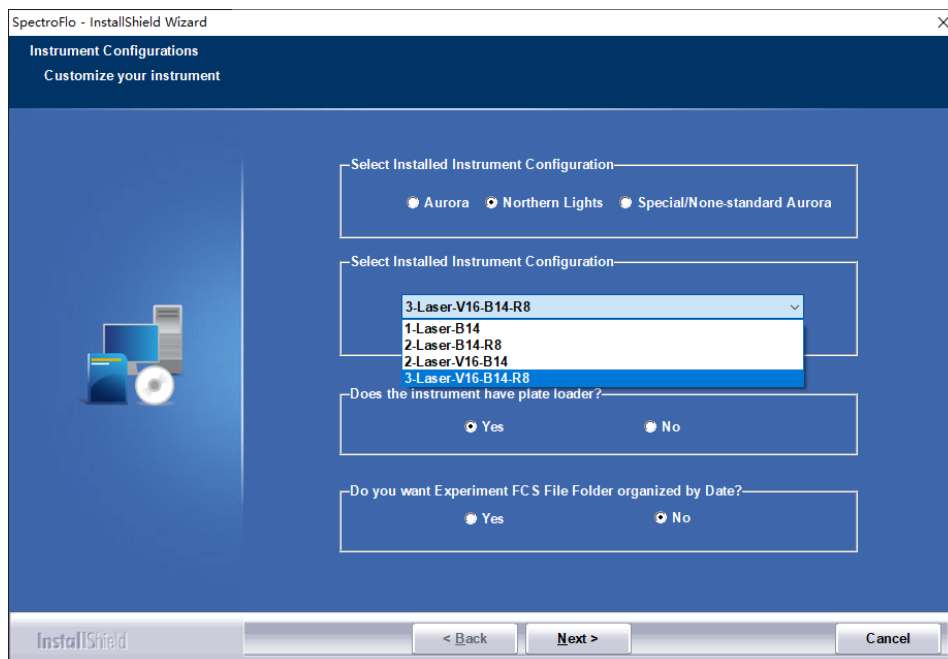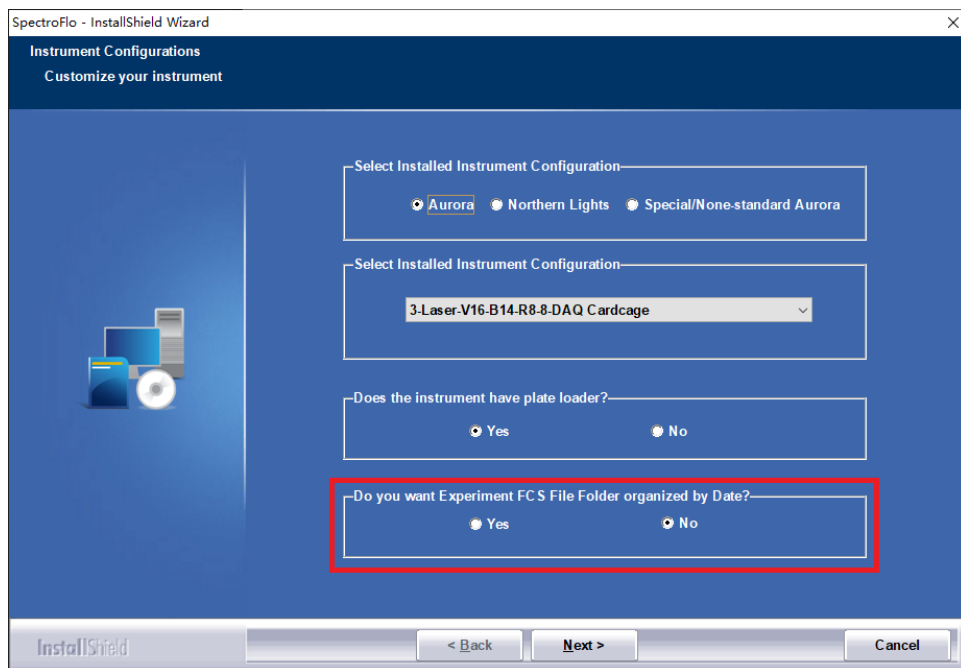
9. Choose "No" if you don't want experiment FCS file folders are automatically organized by date. Otherwise select "Yes". Then click "Next".

10. Click "Install" to begin the installation.
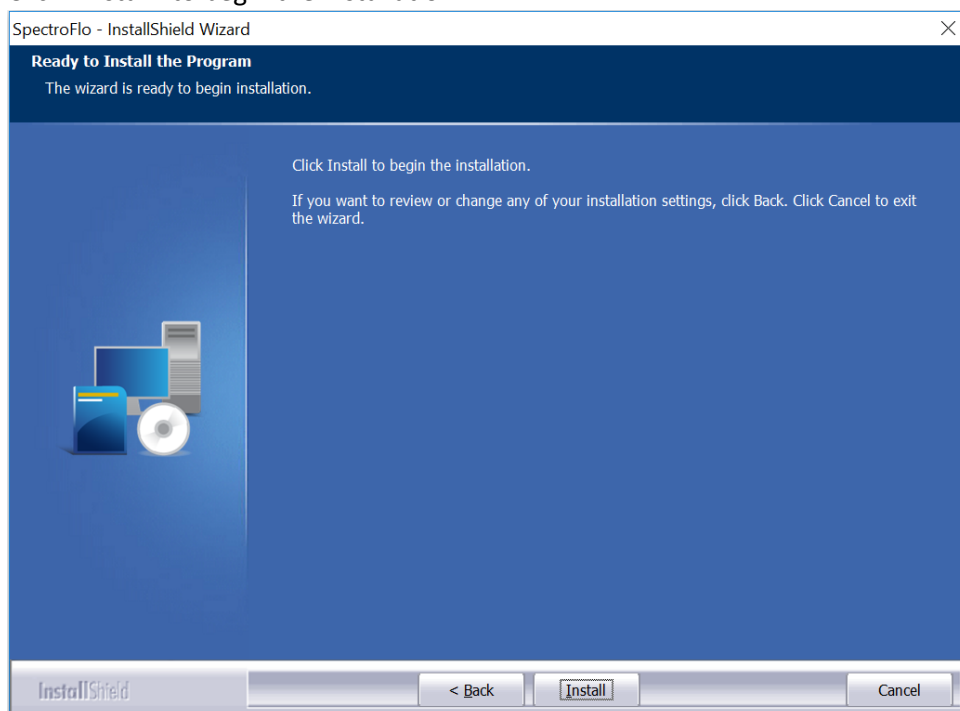
11. Click "Finish" to finish the installation.
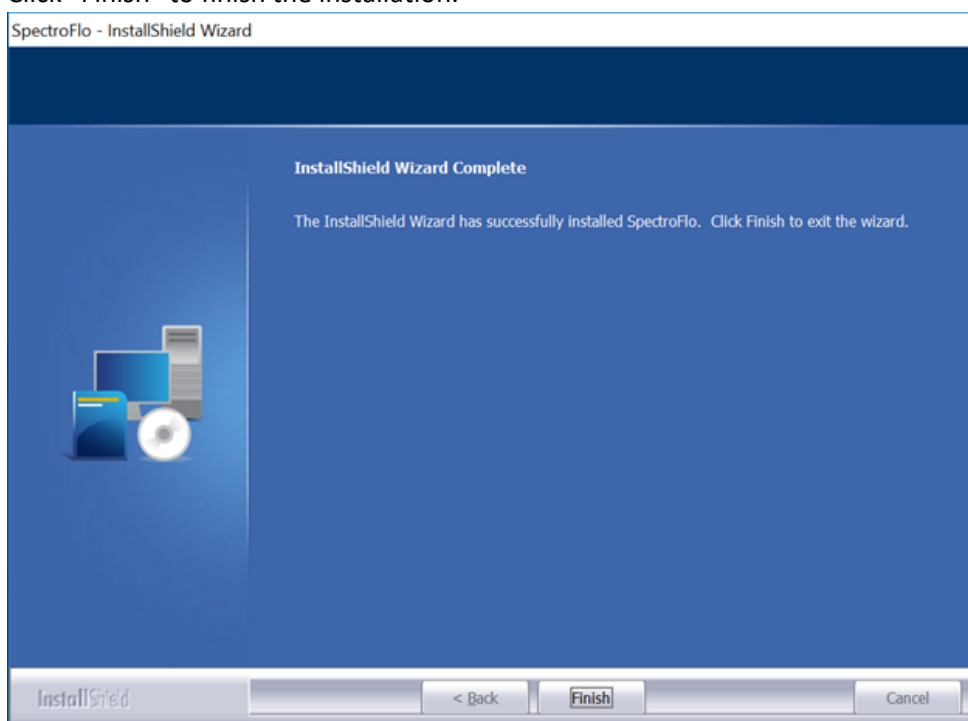
Installing SpectroFlo on a PC Inside a Network

Step 1: Remove security policies around the devices needed to run the cytometer
There are 2 devices that are needed. One is a port that controls the fluidics, and another is a USB needed for data acquisition.

1. Find the fluidics port:
   a. Open Windows 10 Device Manager:
   b. Open Ports: see list of Ports
   c. Disconnect the USB cable that goes from the instrument to the computer (there is only one cable going from the instrument to the computer, that is the one you need to disconnect)
   d. As soon as you disconnect, you will see one of the Ports originally listed disappear (it varies across systems, it can be COM 3 or COM 6, for example). That is how you identify the first port for which you need to allow user access.
2. Next, you need to identify the second device:
   a. Still under Windows 10 Device Manager, go to Universal Serial Bus Controller: in there, find Cytek Aurora DAQ. This is the other device you need to allow user access.
   b. Once user access has been allowed for these 2 devices, open SpectroFlo software, login as Admin, turn on the cytometer and see if you can connect to the cytometer.

Step 2: If step 1 fails, and you still cannot connect the cytometer, please try removing the computer from the network and running it as a local machine. Ideally, we would like to login the computer as we originally did, <u>User Name: Aurora User, Password: Welcome#1</u>. Also, please make sure that you login to SpectroFlo as Admin.

Step 3: If step 2 fails, then we would like to get a log file that will allow us to see what prevented the connection. The log file can be found under C:\CytekbioExport\ApplicationLog_MM YYYY.txt. If there are several of these log files, please copy the latest one and send it to Cytek for assistance.

Have Questions? Comments? Want to work with us? Visit us at www.cytekbio.com.