SpectroFlo® Video Tutorials Guide

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New and Updated Videos for v2.2

SpectroFlo v2.2 introduced several new features including reference control QC tools, bubble and clog detection, and more. Read the SpectroFlo v2.2 Release Notes for the full details. The videos below highlight the new features in v2.2. To watch the full suite of SpectroFlo video tutorials, watch our playlist on YouTube.

- **Reference Control QC Tools:** Learn how the new Reference Control QC tools work, and how to use them in your experiment acquisition.

- **Bubble & Clog Detection:** Learn how to enable bubble and clog detection and see how the software communicates bubble and clog events to the user.

- **Re-Using Reference Controls**: Learn how to store and re-use reference controls in the QC & Setup module, and in the Acquisition module.

- **Boolean Gates: AND, OR, NOT**: Learn how to create AND, OR, and NOT boolean gates.

- **New Preferences in v2.2**: Learn about the new preferences to skip fluidics boost, enable clog and bubble detection, and auto-export use time.

- **Editing Plot Properties**: Learn about all the plot editing features available in SpectroFlo's Plot Properties menu.

- **How to Calibrate Sample Line Depth for Different Plate Types**: Learn how to use the CalSIT routine to calibrate the sample line depth for 96-well U-bottom, V-bottom, and Flat bottom plates. Also, see what happens when CalSIT isn't set correctly and how it impacts acquisition flow rates.

- **Keeping Your Flow Cell Clean**: The flow cell is arguably one of the most important parts of the flow cytometer. Learn our recommendations on how to keep yours clean between users and across days.

- **Worksheet Tools**: Watch the updated video to see the new staged quadrant gate.

- **Shutting Down the Cytometer**: Watch the updated video to see the new 4 tube shutdown routine.

- **User Management**: Watch the updated video to see the new use time auto-export feature.

- **Creating and Using Keywords**: Watch the updated video to learn about the new automatic keyword updates through the Library module.

SpectroFlo For Beginners

If you are new to SpectroFlo and to your Cytek® Aurora or Northern Lights cytometer, watch these videos to quickly get up to speed on the basics.

- **SpectroFlo Overview Video**: Get a quick overview of SpectroFlo software. You will learn how to navigate the main software modules and understand their functions.

- **System Startup and QC**: Learn how to start up the instrument and complete daily QC.

- **Create and Unmix an Experiment in SpectroFlo**: Learn how to create an experiment from scratch in SpectroFlo, and how to record and unmix your samples.

- **Live Unmixing vs Unmix, Save & Open**: Learn the difference between Live Unmixing and the Unmix, Save & Open buttons in SpectroFlo's unmixing workflow.

- **Extracting Autofluorescence**: Learn how to extract autofluorescence as a parameter.

- **Shutting Down the Cytometer**: Learn how to shut down the cytometer at the end of the day.

SpectroFlo Video Tutorials by Software Module

Once you've mastered the beginner SpectroFlo videos, explore the many other features available throughout the SpectroFlo modules:

QC & Setup

- **System Startup and QC**: Learn how to start up the instrument and complete daily QC.

- **Re-Using Reference Controls**: Learn how to store and re-use reference controls.

- **Reference Control QC Tools:** Learn how the new Reference Control QC tools work, and how to use them in your experiment acquisition.

Acquisition

- **Create and Unmix an Experiment in SpectroFlo**: Learn how to create an experiment from scratch in SpectroFlo, and how to record and unmix your samples.

- **Live Unmixing vs Unmix, Save & Open**: Learn the difference between Live Unmixing and the Unmix, Save & Open buttons in SpectroFlo's unmixing workflow.

- **Extracting Autofluorescence**: Learn how to extract autofluorescence as a parameter.

- **Changing CytekAssaySetting**: Learn how to adjust CytekAssaySetting gains when reference controls are off scale.

- **Volumetric Counting**: Learn how to use the volumetric counting feature.

- **Worksheet Tools**: Learn how to use all of the worksheet tools in SpectroFlo to create your data analysis templates.

- **Boolean Gates: AND, OR, NOT**: Learn how to create AND, OR, and NOT boolean gates.

- **Editing Plot Properties**: Learn about all the plot editing features available in SpectroFlo's Plot Properties menu.

- **Batch Analysis**: Learn how to batch process FCS files to efficiently export statistics and worksheet plots.

- **Create Experiment Templates**: Learn how to create an experiment template.

- **Cytometer Menu**: Learn how to use the different fluidic functions in the cytometer menu such as calibrate SIT, SIT flush, clean flow cell, and more.

- **Cytek Loader Tutorial**: Get an overview of how to use the plate loader and understand the sample acquisition workflow.

- **Plate Calibration:** Learn how to adjust the plate calibration values for the 96-well plates used in your lab.

- **Bubble & Clog Detection:** Learn how to enable bubble and clog detection and see how the software communicates bubble and clog events to the user.

- **How to Calibrate Sample Line Depth for Different Plate Types**: Learn how to use the CalSIT routine to calibrate the sample line depth for 96-well U-bottom, V-bottom, and Flat bottom plates. Also, see what happens when CalSIT isn't set correctly and how it impacts acquisition flow rates.

- **Export FCS Files in 18 or 22 Bit Format**: Learn how to export data from SpectroFlo in 18 bit and in 22 bit formats.

- **Importing & Exporting Experiments**: Learn out to import and export experiments in and out of SpectroFlo software.

- **Restoring Default Settings and Worksheets**: Learn how to undo modifications to the system defined worksheets (e.g. Default Raw Worksheet) and system defined user settings (e.g. CytekAssaySetting).

- **Lot & Label Specific Unmixing**: Learn how to enable or disable Lot & Label Specific Unmixing, and learn how it works.

- **Group Specific Unstained Controls**: Learn how to add group specific unstained controls to your experiments.

- **Adjusting Compensation**: Learn how to adjust the spillover matrix and how to copy and paste the matrix to other tubes.

- **Sharing User Settings & Worksheets**: Learn how to share user settings and worksheets across users.

- **Merge FCS Files**: Learn how to merge multiple FCS files into one.

Extra Tools

- **Extra Tools Menu**: Learn how to use the Spectral Unmixing and Virtual Filters tools.

Library

- **Adding Fluorescent Tags**: Learn how to add fluorescent tags.

- **Changing Bead Lots**: Learn how to change the QC bead lot file.

- **Creating and Using Keywords**: Learn what keywords are, how to create keywords and add them to your FCS files, and how to automatically update keywords in your experiment templates.

Preferences

- **Preferences:** Learn about all the customizable preferences for SpectroFlo.

- **New Preferences in v2.2**: Learn about the new preferences to skip fluidics boost, enable clog and bubble detection, and auto-export use time.

Users

- **User Management**: Watch the updated video to see the new use time auto-export feature.

Help

- **The Help Module**: Learn about the information and resources that exist in the Help module.

Maintenance Video Tutorials

If you are responsible for taking care of your Aurora or Northern Lights cytometer, then these videos are for you. Learn how to keep your instrument clean, maintain it, and back up data.

- **Data Maintenance**: Learn how to export and backup your data using SpectroFlo and using the Data Maintenance Utility.

- **Keeping Your Flow Cell Clean**: The flow cell is arguably one of the most important parts of the flow cytometer. Learn our recommendations on how to keep yours clean between users and across days.

- **Performing a Long Clean**: Learn how to perform a long clean to thoroughly flush out your cytometer's fluidic lines once a month.

- **Replacing the Sample Line**: If the sample line gets bent or clogged, learn how to replace it.

- **Cleaning the Tube Sensor Flag:** If you have a Cytek service contract, the field service engineer will take care of this for you. But if you don't, you'll want to learn how to clean the tube sensor flag to remove salt build up.

Have Questions or Suggestions?

We're always looking for ways to improve. Reach out to your TAS or contact us at sales@cytekbio.com.