

NF PROFESSION V2 SOFTWARE GUIDE

CONTENTS

1 Launching the Software
2 Software Screen
3 Cytometer Controls
3.1 NanoAnalyzer Power Control5
3.2 Sheath Flow Control6
3.3 Sample Information and Settings7
3.4 Acquisition Control
3.5 Laser Control
3.6 Detector Settings9
3.7 Sample Flow Control10
4 Plot Area11
4.1 Event Burst Trace Settings12
4.2 Peak Histogram Settings13
4.3 Dot Plot Settings13
4.4 Size Distributions Settings16
5 Status Bar
6 Workspace Toolbar19
6.1 Detector Configuration19
6.2 Baseline Adjustment (Signal Processing Control)20
6.3 Threshold Adjustment21
6.4 Data Display Settings22
6.5 Histogram Gating22
6.6 Histogram Axis Units23

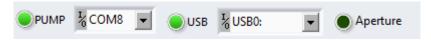
6.7 Trigger Channel Selection	23
6.8 Save Data	24
6.9 CCD Camera Power Control	24
6.10 CCD Camera Settings	24
6.11 Save CCD Camera Image	25
6.12 Gating Options	25
6.13 Set Concentration Standard	26
6.14 Set Size Standard	26
6.15 Set Blank Control	27
6.16 Analysis Report (PDF Generation)	27
7 Channel Information	28
8 Gate Information	29
9 Image Amplification Window	30
9.1 Data & His	30
9.2 Scatter Plot	31
9.3 Size His	32

1 LAUNCHING THE SOFTWARE

Double click the Source of the second second

To indicate that the NanoAnalyzer is correctly connected to the software:

- 1. Two beeps will sound from the NanoAnalyzer.
- 2. The green lights for PUMP and USB in the **Status Bar** (section 6) will be illuminated.



2 SOFTWARE SCREEN



- 1. Navigation Bar Provides access to acquisition and analysis modes.
 - a. Upon launch, the software will default to acquisition mode.
- CCD Camera Window Real-time image of the flow cell, including the laser and sample injection capillary.
- 3. Cytometer Controls Section 3. Allows control over data acquisition.
- 4. Plot Area Section 4. Shows sample burst traces, histograms and dot plots.
- 5. Status Bar Section 5. NanoAnalyzer connection and aperture status.
- **6.** Workspace Toolbar Section 6. Allows configuration of settings for data acquisition and analysis.
- 7. Channel Information Section 7. Information for each detection channel.
- 8. Gate Information Section 9. Information for each gated population.

3 CYTOMETER CONTROLS

1	 Start Up Manual Operation Shut Down
2	Sheath Flow Normal
3	File Path D:\Data Samp. Inf. 250 nm Std FL SiNPs Dilution Factor 1
4	 ● View ● Time to Record ● Buffer ■ 60 Sec
5	Laser Control
6	SPCM SS Decay 0.2% PMT 0
7	Sample FlowUnloadAuto SamplingBoosting131.2KPaSampling SET1.0KPaSampling0.1KPaMove10Step-0+0Step

- 1. NanoAnalyzer Power Control Section 3.1.
- 2. Sheath Flow Control Section 3.2.
- 3. Sample Information and Settings Section 3.3.
- 4. Acquisition Control Section 3.4.
- 5. Laser Control Section 3.5.
- 6. Detector Settings Section 3.6.
- 7. Sample Flow Control Section 3.7.

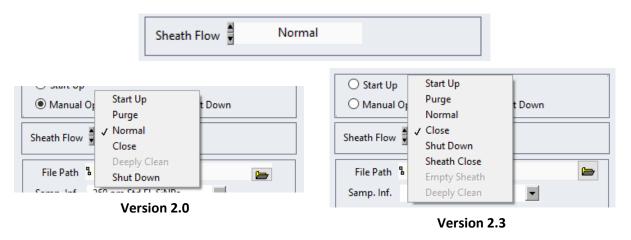
3.1 NanoAnalyzer Power Control

🔿 Start Up	
Manual Operation	◯ Shut Down

Three different modes are accessible through the NF Profession V2 software.

- 1. Start Up Launches system, CCD camera, lasers and air pump.
- 2. Manual Operation Used for data acquisition.
- 3. Shut Down Turns off lasers and detectors to allow software and instrument shut down.

3.2 Sheath Flow Control



Note: in NF Profession, select the text to open the drop-down menu. Selecting the arrows will scroll through the menu.

Drop-down menu of Sheath Flow modes:

- 1. Start Up Initializes the fluidics system, used in daily start-up procedure.
 - Once selected, procedure takes roughly 4 minutes, and cannot be cancelled.
- 2. Purge Flushes the fluidics system with sheath fluid.
 - Once selected, procedure takes roughly 3 minutes, and cannot be cancelled.
- **3.** Normal Indicates the fluidics system is primed for sample stream focussing. Used for sample acquisition.
- 4. Close Indicates the fluidics system is closed.
- 5. Shut Down Deep cleaning of the fluidics system, used in daily shut-down procedure.
 - Once selected, procedure takes 4-8 minutes, and cannot be cancelled.
- 6. Sheath Close Indicates that the sheath flow is closed, but not the waste flow.

When a Start Up, Purge, or Shut Down procedure is initiated, a timer will appear on the right-hand side of the box showing how many seconds it has left to run.



3.3 Sample Information and Settings

File Path	ፄ D:∖D	ata			C-	*
Samp. Inf.	250 r	nm Std FL	SiNPs	•		
Dilution Fa	ctor	1	File	No.	1	

File path: A new folder named with today's date is automatically generated in the file path shown above.

- The default file path is D:\Data.
- All data and CCD images from today will be saved in this folder.

Samp. Inf.: Drop down list to load recommended laser and detector settings.

- To open this drop down, select the arrow.
- By selecting the text and typing in the box, the recording can be assigned a name.
 - This will not change the laser or detector settings.
 - This name will automatically be used when saving the file.

File Path	LD:\Data	
Samp. Inf.	250 nm Std FL SiNPs	•
Dilution Fa	250 nm Std FL SiNPs 200 nm Std FL PS	1
	68-155 S16M-Exo	
View	Labelled Exo	.II Events
○ Time	155-850 S17M-MV Labelled MVs	Events

Dilution factor: The dilution factor applied to the sample before analysis. This is factored into concentration calculations. E.g. for a 1:100 dilution, enter 100.

File No.: Defined by the software at start-up. File number begins at "1" and increments with each recording.

• The File No. can be manually altered if necessary.

3.4 Acquisition Control

• View	Limited All Events
◯ Time to Record	300 Events
O Buffer	60 Sec
Buffer 367	

There are three modes within the acquisition control:

- 1. View Aperture open. View particles passing the laser in real time.
 - a. By default, View shows the most recent 300 particles recorded in the dot plot and histograms.
 - b. To change this, change the number to the right of the selection panel.
- 2. Time to Record Aperture open. Records the particles passing the laser in a defined time frame.
 - a. The default is 60 seconds (120 x 500 ms), this can be changed using the box to the right.
- **3.** Buffer Aperture closed. Holds the last recording in the plot area, allowing it to be saved in a different location or format.
 - a. Moving to the analysis tab, or selecting View will remove the recording from memory, so ensure that the recording is saved before leaving this mode.

3.5 Laser Control

Laser Control	
🔵 불 20 / 50 mW 48	8 💿 🛔 20 / 100 mW 638
Move 2 🚆 10 um	L 0 R 0 um

The green button next to each laser indicates whether the laser is on or off.

The value for blue (488 nm) laser power is set by the **Samp. Inf.** setting. The red (638 nm) laser should be set to 20 mW.

The focus of the laser can be adjusted by changing the horizontal position of the laser focusing lens, left [L button] or right [R button]. The 0 button sets the current position of the focusing lens to 0 μ m.

- The default step distance is set at 10 μ m.
- Refer to the NanoAnalyzer User Guide section on alignment for more information on laser focus adjustment.

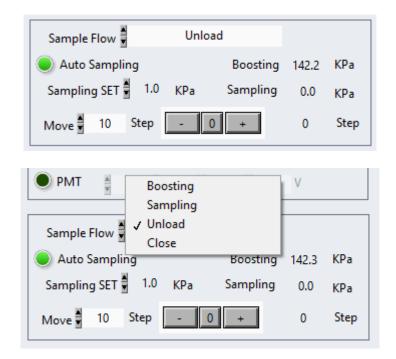
3.6 Detector Settings



Once Manual Operation mode has been selected, the detector settings allow modulation of detector parameters:

- The SPCM detectors can be turned on (indicated by the illuminated green button)
 - This is automatic when switching to Manual Operation in later versions.
- The SS Decay is set by the **Samp. Inf.** settings, but can be changed manually to 0.2%, 2%, 10%, or 100%.
 - \circ The SS Decay is an attenuation factor, to avoid detector saturation.
- PMT voltage control is redundant for newer NanoAnalyzer models, as PMTs are not installed.

3.7 Sample Flow Control



Note: in NF Profession, select the text to open the drop-down menu. Selecting the arrows will scroll through the menu.

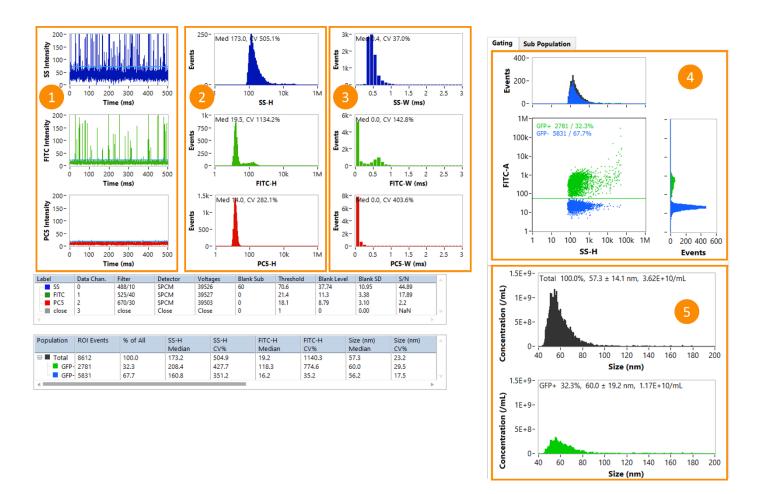
Sample Flow modes:

- 1. Boosting Loads the sample tube and injects the sample into the flow cell at high pressure.
- 2. Sampling Injects the sample into the flow cell at low pressure. Used for sample acquisition.
- **3.** Unload Unloads the sample tube.
- 4. Close Closes the air pump and keeps the loading bay in its current position.

Auto Sampling should be switched on (green button illuminated) for sample analysis, with the sampling pressure set to 1.0 kPa.

- Sampling pressure can be set to the right of **Sampling SET**.
 - This should always be between 0.3 and 1.5 kPa, 1.0kPa recommended.
- The with **Auto Sampling** switched on, **Step** count is automatically adjusted by the system to maintain correct pressure.
- The pressure beside **Boosting** and **Sampling** show the current pressure achieved.

4 PLOT AREA

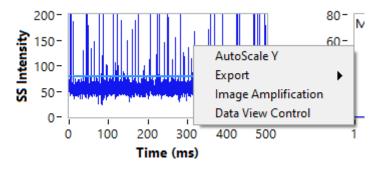


- **1.** Event Burst Trace Settings Section 4.1. Real-time burst traces for each detection channel as particles pass through the laser beam.
- Peak Height/Area Histograms Section 4.2. Accumulated histogram of peak height/area for each detection channel.
 - a. To switch between height and area units, use the **Histogram axis units** button.
- **3.** Peak Width Histograms Section 4.2. Accumulated histogram of peak width for each detection channel.
- **4.** Dot Plot Section 4.3. Bivariate dot plot of two selected channels, including histograms for both channels.
- **5. Size Distributions** Section 4.4. Size distribution histograms of total population and each gated population.

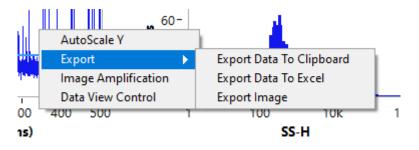
4.1 Event Burst Trace Settings

The event burst trace displays a dynamic discrete 500ms window of live data during acquisition or a static 500ms window of record data in analysis mode.

Right clicking an event burst trace brings up a list of options.



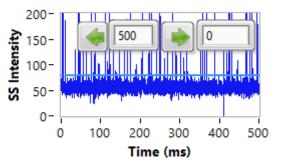
- AutoScale Y Automatically set the upper limit of the y-axis to match the data.
 - This is not recommended, as often the automatic scale will not allow for clear visualisation of the baseline.
- **Export** Allows the event burst trace recordings to be exported as a data file or image.
 - Export Data to Clipboard copies the data to the PC clipboard.
 - Export Data to Excel creates an Excel spreadsheet containing the data.
 - Export Image saves an image of the event burst trace.



- **Image Amplification** Opens the image amplification window, allowing for export of high-resolution images of the event burst trace.
 - See Section 9 Image Amplification Window.
- Data View Control Brings up controls for moving through the event burst trace.
 - Click the right and left arrows to move through the recorded event burst trace.
 - \circ The left box (500) is the increment by which the arrows move the event burst trace.

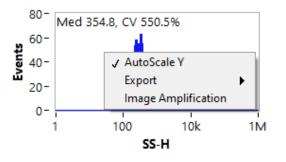


• The right box (default 0) is the time (in ms) at the start of the current 500 ms window.



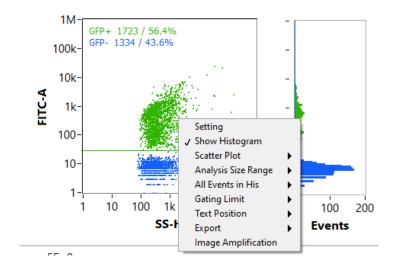
4.2 Peak Histogram Settings

Right clicking any of the peak histograms (either height/area or width) brings up a list of options. These are the same as the event burst trace options, minus the Data View Control.



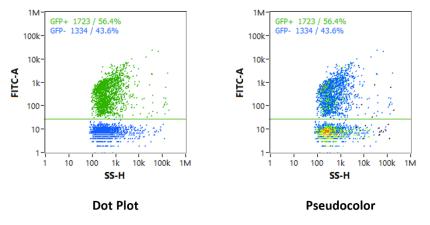
4.3 Dot Plot Settings

Right clicking the dot plot brings up a list of options.

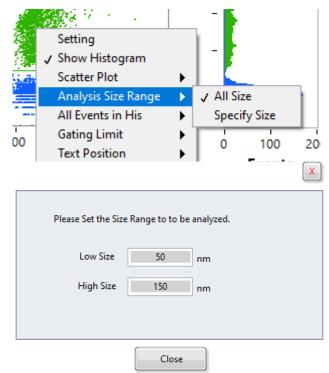


nanofcm

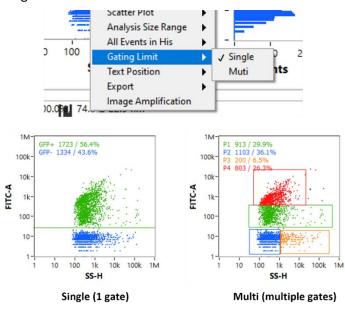
- **Setting** Brings up a settings panel to change the display settings of the dot plot.
 - If wanting to export an image of the dot plot, image amplification window (see Section 9 <u>Image Amplification Window</u>) gives more control over dot plot display settings and allows for higher resolution images.
- Show Histogram Toggle to show or hide the histograms surrounding the dot plot.
- Scatter Plot Change the display mode of the dot plot.
 - **Dot plot** Particles shown as dots, coloured by population.
 - **Pseudocolour** Particles shown as dots, coloured by density.



- Analysis Size Range Set the size range of particles to be included on the dot plot.
 - All size Plot all particles on the dot plot.
 - **Specify size** Input lower and upper bounds on size to be displayed on the dot plot.



- All Events in His Choose whether to show or hide the total population within the histograms surrounding the dot plot.
- Gating limit Set the limit for number of gates applied to the dot plot.
 - Single Only one gate can be set.
 - Multi Multiple gates can be set. To remove gates set in Multi mode, change the gating limit back to single.
 - Note: On some software versions, this is simply a toggle option labelled 'Multi Gating'.



- Text Position Changes the position of the population name texts within the dot plot.
- Export Allows the event burst trace recordings to be exported as a CSV file or image.
 - Export Data to Clipboard copies the dot plot data to the PC clipboard.
 - Export Data to Excel creates an Excel spreadsheet containing the dot plot data.
 - Export Scatter Plot saves an image of the dot plot.
 - Export Scatter Plot His saves an image of the dot plot and surrounding histograms.

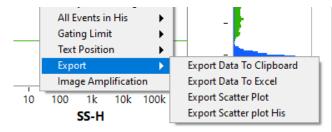
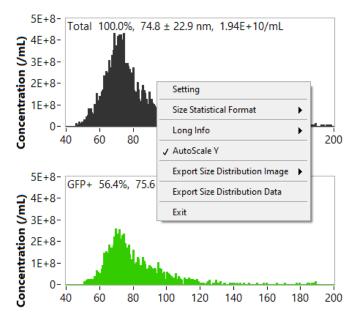


 Image Amplification – Opens the image amplification window (see Section 5 Image Amplification Window).

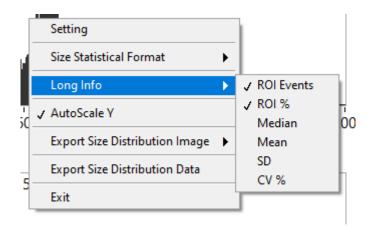
4.4 Size Distributions Settings

Right clicking the dot plot brings up a list of options. Some are the same as the event burst trace or dot plot options, while some are different.



- Setting Brings up a settings panel to change the display settings of the size distributions.
 - The image amplification window (see Section 9 <u>Image Amplification Window</u>) gives more control over size distribution display settings.
- Size Statistical Format Choose statistical information to be shown above the distributions.
 - **Short** Displays name, percent of total, mean ± SD, and concentration.
 - Long Displays custom statistics.
- Long Info Choose the statistical information to display when Long is selected as the Size Statistical Format.
 - **ROI events** Number of events within the population.
 - **ROI%** % of total events within the population.
 - Median, mean, SD Median, mean, SD size, respectively.
 - **CV%** CV (coefficient of variance) of size.

nanofcm



- AutoScale Y Automatically set the upper limit of the y-axis to match the data.
- **Export Size Distribution Image** Exports an image of the chosen size distribution.
 - This can be better achieved using the image amplification window (see Section 9 <u>Image Amplification Window</u>).
- **Export Size Distribution Data** Exports data from the size distributions.

5 STATUS BAR



The green lights for PUMP and USB should be illuminated once the NF Profession 2.0 software has been launched to show correct connection between the air pump, cytometer, and PC.

Ensure that the green light for Aperture is not on whilst Boosting samples.

- The aperture is used to protect the detectors from strong signals and boosting may result in detector saturation if opened.
- If switching the filter for fluorescent channel 2, ensure that the aperture is closed (light off) first.



6 WORKSPACE TOOLBAR



- 1. **Detector Configuration** Section 7.1.
- 2. Baseline Adjustment Section 7.2.
- 3. Threshold Adjustment Section 7.3.
- 4. Data Display Settings Section 7.4.
- 5. Histogram Gating Section 7.5.
- 6. Histogram Axis Units Section 7.6.
- 7. Trigger Channel Selection Section 7.7.
- 8. Save Data Section 7.8.

- 9. CCD Camera Power Control Section 7.9.
- 10. CCD Camera Settings Section 7.10.
- 11. Save CCD Camera Image Section 7.11.
- 12. Gating Options Section 7.12.
- 13. Set Concentration Standard Section 7.13.
- 14. Set Size Standard Section 7.14.
- 15. Set Blank Control Section 7.15.
- 16. Analysis Report (PDF Generation) Section 7.16.

6.1 Detector Configuration

CHAN



Select Detector Configuration to view and change detector settings.

- Click a Channel's Label, Filter, or Color to see a dropdown list of options.
- Changing a Label will automatically load a corresponding Filter and Color.
- Ensure the bandpass filters in the Detector Configuration match the bandpass filters in the NanoAnalyzer.



6.2 Baseline Adjustment (Signal Processing Control)

A Contraction		X
	SPCM Correction	
	Signal background adjustment	
	SS Sub 0 🗭 FITC Sub 0	•
	PC5 Sub 0 🖕 close Sub 0	•
	Close	

SPCM Correction is applied automatically in data analysis mode.

- Yellow = correction on; grey = correction off.
- Removing SPCM correction allows visualisation of the events as they were collected.
 - SPCM correction is applied to data using a dead-time-correction curve specific to each detector.

Signal background adjustment can be applied to reduce an elevated baseline in one of the detection channels (refer to the Data Analysis Guide for more information).

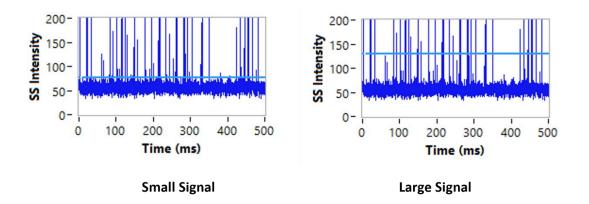
iofcm na

6.3 Threshold Adjustment

Peak Height T	Small Signal
N*SD+ Mean	Manual Setting
Peak Thre	shold=(N*SD+ Mean) of Blank
	N 3
	· ·
Peak Width	Threshold Wmin (ms) 0.3
Peak Width	Threshold Wmin (ms) 0.3
Peak Width	Threshold Wmin (ms) 0.3
Peak Width	Threshold Wmin (ms) 0.3
Peak Width	
Peak Width	Close
Peak Width	Close
Peak Width	Close

The threshold adjustment pop-up is used to set the thresholds of the detection channels. The threshold is the intensity value an event must exceed to be distinguished from the baseline. The top dropdown box contains three settings:

- **Small Signal** Automatically sets the threshold at mean + 3 St.Dev. of the baseline. ٠
- Large Signal Automatically sets the threshold at mean + 10 St.Dev. of the baseline. .
- User Defined Allows the user to manually set the thresholds, or choose a number of • standard deviations above the mean.



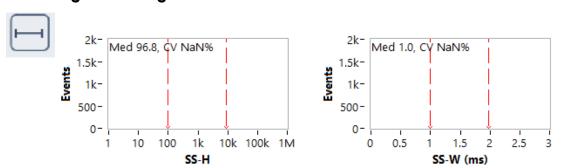
6.4 Data Display Settings

ľ

3		×	2
	Max of events 50000 # of His Bins 500 His Max AH 1000000 His min AH log 1 #	ROI Events ROI % Median Mean SD CV %	
	His Max W (ms) 3 Scale Type SI notation	Data Index (ms) 0 View Window (ms) 500 V	3
	Clo	ise	

The data display settings are used to change the parameters of the event burst trace and peak histograms.

- Area 1 controls the display parameters of the histograms.
- Area 2 allows selection of statistics to be displayed on the histograms.
- Area 3 controls the width and position of the event burst trace within a recording.
 - Data Index (ms) The start position of the event burst trace.
 - View Window (ms) The width of the event burst trace.



6.5 Histogram Gating

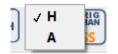
Brings up dashed red lines on the peak histograms to gate populations.

• Statistical values on the histogram include only the range within the red lines.



6.6 Histogram Axis Units



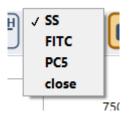


The x-axis of the plot area histograms can be set to height (H) or area (A). For accurate sizing, do not change this once the size standard has been set.

- **H** = signal height.
- **A** = signal area.

6.7 Trigger Channel Selection

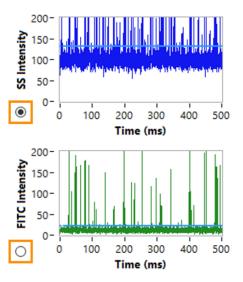




For an event to be recorded by the software, it must exceed threshold in the trigger channel.

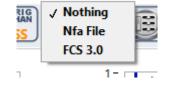
- SS, FITC, or PC5 can be selected as the trigger channel.
 - These names change if the channel name is changed.
- The default trigger channel is side scatter (SS).

In newer versions of the software, this button is absent, replaced by selection buttons next to the event burst traces in the plot area.



6.8 Save Data

ſ	L	I		1
L				
ι	_	_	_	,



After each acquisition, the user is automatically prompted to save as an NFA file.

- **NFA File** save a NFA file after changing sample information or re-save to another location.
- FCS 3.0 save the data as an FCS file (for analysis in other software). Only data surpassing the threshold is saved as an FCS, setting the threshold appropriately is therefore essential.

6.9 CCD Camera Power Control



Power control for the CCD camera.

• CCD camera is on by default at system startup.

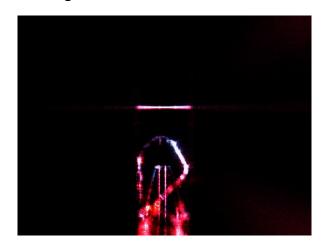
Camera MV-UB300#5546CC90-1	×	
Video Resolution Trigger Crosshairs Exposure Color Process LUT(Look Up Table) Mode	Device Graphic	
 Auto ● Manual Auto Brightness: 120 40 Threshold: 10 TimeRange: 0.0000 10000.000(GainRange: 1.000 15.000 Anti Flick ● 50HZ ○ 60HZ Set AE Window ○ Display AE Window 	= 160	
Manual Gain (multiple): 15.000 1.00 Time (ms): 100.000 1 1	15.00 1237.5	

Allows the user to change the settings of the CCD camera (not recommended).



6.11 Save CCD Camera Image





Select to save the current frame of the CCD camera as an image in today's data folder.

- The image can give information about the instrument's status (e.g. the image above shows a fibre in the flow cell, which must be removed before further sample acquisition).
 - Refer to the Cleaning Guide for more information.

6.12 Gating Options



Various options for gating sample populations and sub-populations on the dot plot:

- Line Separate two populations.
- **Cross** Separate four populations.
- **Square** Isolate one population.
- **Circle** Isolate one population.
- **Polygon** Isolate one population.

By default, only one gate can be set at a time, but this can be changed (see Section 4.3 <u>Dot Plot</u> <u>Settings</u>).

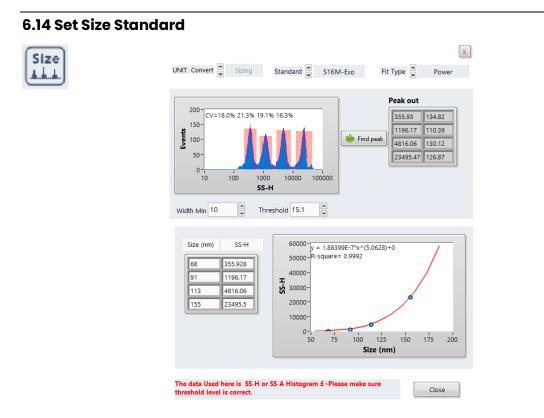


6.13 Set Concentration Standard

Count STD			X
	Please Check the Concent Standard beads.	tration and the Ev	ent of
	STD Concentration	2.00E+10	Particles/mL
	Dilution Factor	100	
	Particle Events	6474	
	Note: The counting result at different times do not e		indard sample obtained
		Close	

Enter information on the QC concentration standards to calculate the concentration of other samples.

• Refer to section 3.4 Setting the Concentration and Size Standards in the NanoAnalyzer User Guide for more information.



Set either the S16M-Exo or S17M-MV size standards to calculate the size of particles in other samples.

• Refer to section 3.4 Setting the Concentration and Size Standards in the NanoAnalyzer User Guide for more information.



6.15 Set Blank Control

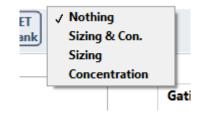


Allows particles in the buffer blank to be subtracted from sample measurements.

• Refer to Section 6.6 Data Analysis Summary in the NanoAnalyzer User Guide for more information.

6.16 Analysis Report (PDF Generation)





PDFs detailing particle size, concentration, or both, can be generated.

• Refer to Section 6.4 Exporting Data in the NanoAnalyzer User Guide for more information.



7 CHANNEL INFORMATION

1	2	3	4	5	6	7	8	9	10
Label	Data Chan.	Filter	Detector	Voltages	Blank Sub	Threshold	Blank Level	Blank SD	S/N
SS SS	0	488/10	SPCM	39526	0	126.7	95.62	10.37	50
FITC	1	525/40	SPCM	39527	0	27.1	15.47	3.89	50.81
PC5	2	670/30	SPCM	39503	0	18.8	9.16	3.22	2.78
close	3	close	Close	Close	0	1	0	0.00	NaN

Information on the instrument parameters for each channel. In each column, left to right:

- **1.** Label Channel name and colour.
 - To change: right click table > Label & Color. Change switch from RAW to customer, then enter names and colours to the right.
- 2. Data Chan. Channel number.
- 3. Filter Installed bandpass filter.
- **4. Detector** Detector type (SPCM = single photon counting module).
- 5. Voltages Detector voltages. Cannot be changed.
- 6. Blank Sub Event burst trace subtraction (see Section 6.2 Baseline Adjustment).
- 7. Threshold See Section 6.3 Threshold Adjustment.
- 8. Blank level Mean intensity of background.
- 9. Blank SD SD of background intensity.
- **10.** S/N Signal to noise ratio. Calculated from blank level and blank SD.

8 GATE INFORMATION

1	2	3	4	5	6	7	8	9
Population	ROI Events	% of All	SS-H Median	SS-H CV%	FITC-H Median	FITC-H CV%	Size (nm) Median	Size (nm) CV%
🖃 🔳 Total	5953	100.0	310.1	330.4	36.6	134.3	68.8	13.7
GFP-	4193	70.4	304.3	351.2	44.9	130.8	68.6	13.8
GFP-	1760	29.6	326.0	265.2	23.3	25.2	69.5	13.2

Information on the whole sample and gated populations within the sample (see Section 7.12 <u>Gating</u> <u>Options</u>). In each column, left to right:

- **1. Population** Population name and colour.
 - To change: right click table > Name & Color. Enter names and colours in the pop-up to the right of the table.
 - b. To reset names: right click the table > Initialisation Name.
 - c. To reset colours: right click the table > Initialisation Color.
- 2. ROI Events Number of events in each region of interest (population).
- **3.** % of All % of total particles in each population.

In columns 4-9..., statistical data about each population is displayed:

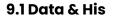
- To change the displayed channels (below, left), right click the table > Channel. Select the channels whose statistics will be displayed.
- To change the statistics displayed (below, right), right click the table > Statistical Info. Select the statistics which will be displayed for each channel.

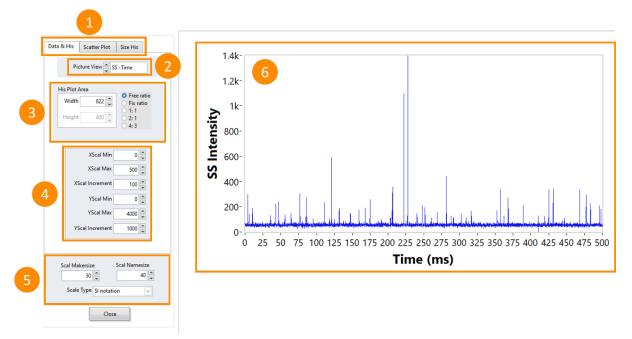
9 IMAGE AMPLIFICATION WINDOW

The image amplification window is used to export high resolution images of the event burst traces, peak histograms, dot plots, and gated size distributions. It is accessed by right clicking the event burst trace, peak histogram, or dot plot and selecting Image Amplification.

The navigation bar (top left) consists of three options:

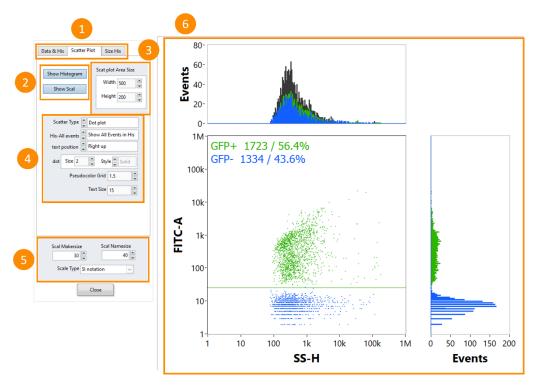
- Data & His Section 9.1. High resolution images of the event burst trace or peak histograms.
- Scatter Plot Section 9.2. High resolution image of the dot plot.
- Size His Section 9.3. High resolution image of the size distributions.





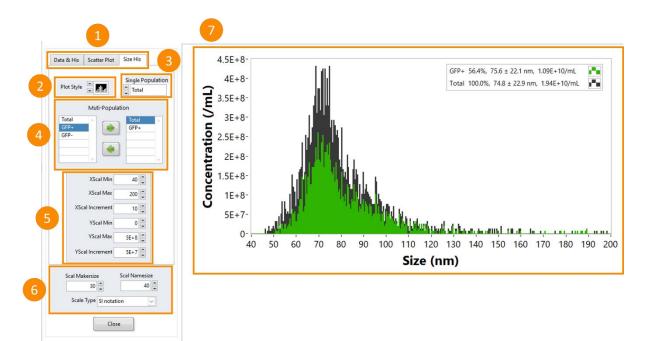
- 1. Navigation Bar.
- 2. Picture View Select image source (event burst trace or peak histogram).
- 3. His Plot Area Change the size and aspect ratio of the image.
- 4. Axis Settings Change the range and increment of the axes.
- 5. Label Settings Change the size and notation of axis labels.
- 6. Image Preview Preview of the high resolution image. Right click > Export Image to save.

9.2 Scatter Plot



- 1. Navigation Bar.
- 2. Histogram Settings Toggles to show/hide the histograms and their scales.
- 3. Scat Plot Area Size Change the size and aspect ratio of the image.
- 4. Dot Plot Settings Change the display settings of the dot plot.
 - a. Scatter Type Dot plot or pseudocolor.
 - **b.** His-All Events Show/hide the total population in the histograms.
 - c. Text Position Change the position of the population text within the dot plot.
 - d. Dot Change the size and shape of dots.
 - e. Pseudocolor Grid Change the sensitivity of the pseudocolor density colouring.
 - f. Text size Change the size of the population text within the dot plot.
- 5. Label Settings Change the size and notation of axis labels.
- 6. Image Preview Preview of the high resolution image. Right click > Export Image to save.

9.3 Size His



- 1. Navigation Bar.
- 2. Plot Style Choose from multiple bar chart or line chart styles.
- 3. Single Population Selection Select a single population to display its size distribution.
- 4. Multiple Population Selection Using the green arrows, add (top) or remove (bottom) populations from the image. The left list is all populations, while the right list is populations shown in the image.
- 5. Axis Settings Change the range and increment of the axes.
- 6. Label Settings Change the size and notation of axis labels.
- 7. Image Preview Preview of the high resolution image. Right click > Export Image to save.

SS-H CV%		FITC-H Median	FIT CV	С-Н %	Size (nm) Median	FITC-H Median	FITC-H CV%		Size (nm) Median
266.4 252.0	С	hannel	Þ	SS-A FITC-A		998 9 Channel	421 Q	1	76.4 79.3
551.0		tatistical Info	•	PC5-A		Statistical Info	Þ	√ Med Mea	
		ame & Color		close-A ✓ SS-H ✓ FITC-H		 Name & Color		✓ CV%	
		iitialization Name				Initialization Name		SD	
		itialization Color		PC5-H close-H		Initialization Co	olor	I	
	Ь	cit		✓ Size (nm))	Exit			