ZELLMECHANIK DRESDEN

AcCellerator Troubleshooting

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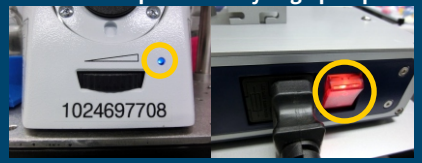
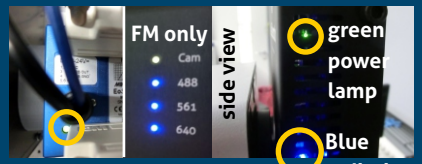
Missing Power?

Here you can see if a device is powered:

microscope syringe pump



camera LED



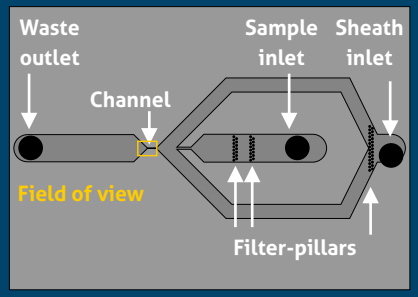
Software only runs with plugged dongle.

LED off? Connected to camera? Connected to power?

Finding the channel

Overview of *FlicXX* and inlets

This is the micro-structure of the *FlicXX*. Yellow square = Area in „Overview"

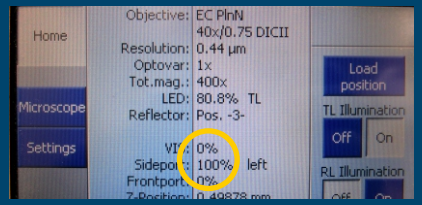


Try to find any egdge, focus and move stage in X and Y to the channel.

Dark Image?

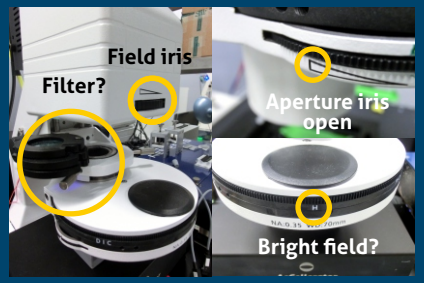
Is the image in the Overview window too dark or do you see low contrast? Check the following steps:

1. Microscope set to 100% side port transmission?

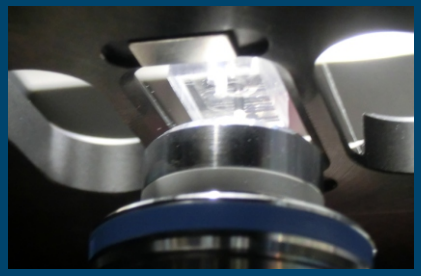


Example for Zeiss Z1

2. Aperture open? Condenser set to bright field (H)? No filters in?



3. Objectiv fixed in position? Distance to *FlicXX* approximately 0.5 mm?

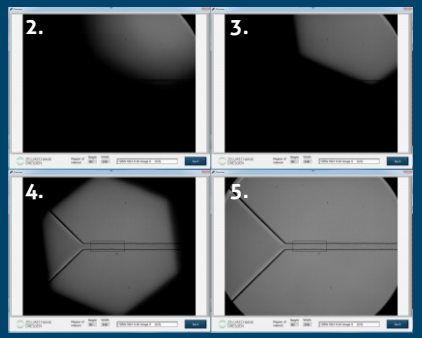


4. No liquid on the *FlicXX*? No obstacles in the light path?

Köhler Illumination

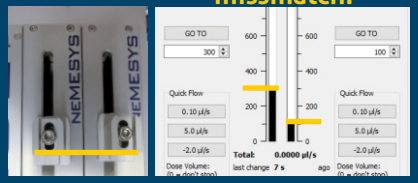
Image still to dark? Köhler! See also microscope manual

1. Open field iris completely. Image gets brighter?
2. Close field iris until image gets darker
3. Move condenser to focus iris edges
4. Center iris
5. Open iris just until edges disappear

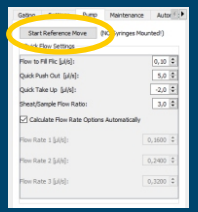


Syringe piston holder = Level in the software?

missmatch!



If position of syringe piston holders don't match levels in software, do a Reference Move to recalibrate.



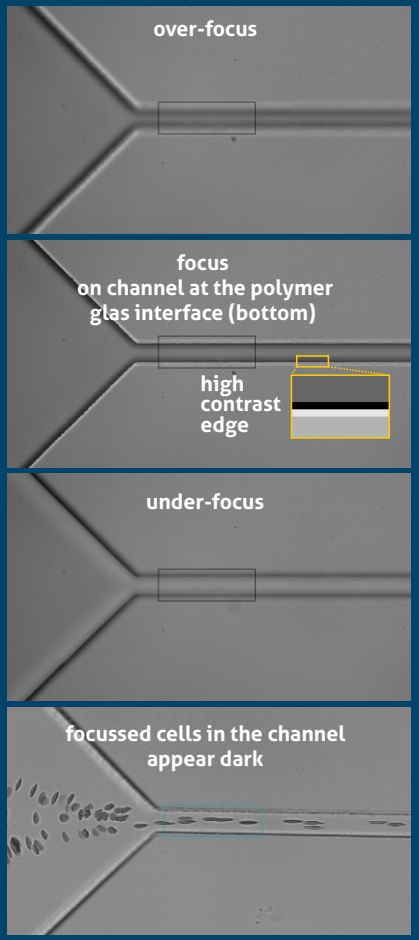
Cells not centered in channel?

Stop measurement.
Check for obstacles (dirt / debris) at channel entrance.
Check if sheath-flow/sample-flow ratio is 3:1.

READ THE SAFETY INSTRUCTIONS

Finding Focus

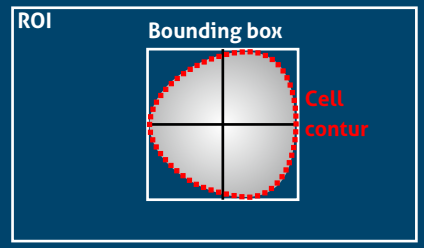
The right focus is characterized by a high contrast. The channel wall will appear in deep black. The adjacent polymer will show a white stripe.



Cells pass channel in the center, not at bottom. So the focus has to be slightly increased. Cell always need to appear darker than the surrounding area.

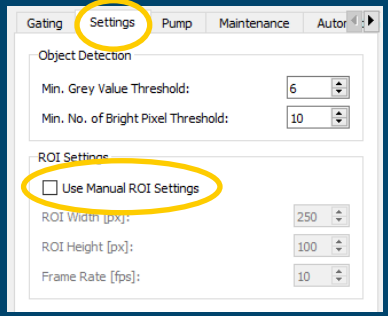
Gating cells

You can edit the settings for cells sizes to be ignored during measurement. Cell size is determined by a box. Edit min and max size or the ratio between X and Y extension of the cell.



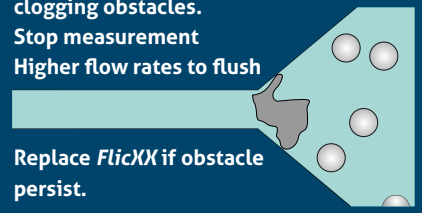
Camera settings

In expert mode you can edit the frame rate and the ROI size when changing from automatic to manual recording.



No cells in channel

Check channel entrance for clogging obstacles.
Stop measurement
Higher flow rates to flush



Replace *FlicXX* if obstacle persist.

Further instructions on zellmechanik.com and in the manual
Call for support +49 351 41884430