



MACSQuant® Instrument short instructions

# Start-up, shutdown and instrument monitoring

# Instrument start-up

## Switch on the instrument

- 1 Switch on the instrument to turn it into stand-by mode.
- 2 Touch the touchscreen to power up the MACSQuantify™ Software.
- 3 A login window will appear.

#### Login

- 1 Enter user name and password.
- 2 Click Login.



**Note:** After login, the instrument is in data analysis mode. Data acquisition is not yet possible. Prime the instrument before proceeding.

## Prime the instrument

- 1 To prime the instrument (power up the lasers, activate fluidics), click on the Main instrument control button at the upper right of the window and select Acquisition mode.
- 2 Wait for the optical bench to warm up, which requires at least 30 minutes.

**Note:** While the instrument warms up, it is recommended to perform a **flush cycle** followed by a **clean program**.

## Lock the screen

The current user can lock the screen to prevent other users from accessing the instrument.

**Note:** To deactivate the **Lock** function, refer to the Chapter **The Administrator** in the MACSQuantify user manual.

1 Click on the user name at the upper right hand side of the screen.



- 2 From the drop-down menu, select Lock screen.
- 3 To unlock, enter your password.



4 Click Unlock.

## Shutting the instrument down

Before switching off the instrument, shut down the system. By default, automatic shutdown after a certain idle time is enabled to maximize diode lifetime. Administrators can change the automatic shutdown settings under Edit > Options (default) > Timers > Standby Timer.

- 1 To shut down manually, click the Main instrument control button at the upper right side.
- 2 Select **Instrument off**. After a seven-minute washing procedure, the instrument is in stand-by mode.
- 3 Touch the touchscreen to start the instrument again. To shut down completely, switch off the main switch at the lower right side of the instrument.

## The Instrument status bar



The current status ( ) of the instrument is displayed in the Instrument Status bar. The status indicator changes its color depending on the current status. The Clear button ( ) deletes the current data from the plot. The status of the current acquisition is shown in detail ( ). At the far right, the Rinse button ( ) and the Start button ( ) are located. They may be inactive (grayed out) during certain processes.

- Right-click on Rinse for the options Clean or Flush. Refer to the Instrument manual for details.
- Right-click on Start to access the options Skip (skip to the next sample in line) or Pause.

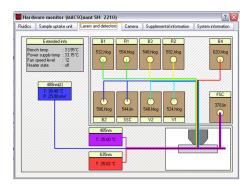
## The Instrument status indicator

Green	The instrument is in <b>Acquisition mode</b> and ready for measurement.
Yellow	Cleaning and priming in progress. The instrument is not available for measurement. If buffer or waste bottle needs to be changed, the respective information will appear in the status bar.
Orange	The instrument is in <b>Data analysis mode</b> . Set the instrument to <b>Acquisition</b> for measurement.
Grey	The instrument is initializing and not available for any measurement.
Blue	The instrument is processing a sample.
Red	Error alert.

#### Lasers and detectors

The lasers and detectors tab displays the status of the optical bench. It is possible to monitor the status of each laser fluorescence channel. The temperature, fan speed, PMT voltage, and annotated path of each laser is shown. A status overview of the optical bench is schematically represented. The bench temperature is kept between 33 °C and 37 °C. Therefore the fan speed is regulated automatically depending on the ambient room temperature and internal temperature of the MACSQuant Instrument. Please note that the temperature for the lasers should be between 10 °C and 45 °C. In case of errors, please contact Miltenyi Biotec Technical Support.

To access the hardware monitor, go to **View > Hardware**.



**Figure 1**: Example: Real-time Hardware monitor of the MACSQuant 10 Analyzer optical bench.

## Are you in need of additional assistance?

Visit www.miltenyibiotec.com/local to find your nearest Miltenyi Biotec contact.

