“MRC Beam Stabilization” - Software for communication and visualization

Essential functions

- Live display of all relevant signals
- Clear user interface to operate the beam stabilization system
- Additional functions for setting parameters

System requirements

Interfaces

USB 2.0 or higher, RS-232, Ethernet

Supported operating systems

Windows 7 and 10, 32bit / Windows 10, 64 bit

Linux Ubuntu (tar archive, Debian package)

Description

The Beam Stabilization “*Compact*” is a stand-alone system that does not require a computer or software. However, it can be equipped with a USB, RS232 or Ethernet interface.

When purchasing a system with an interface, the "MRC Beam Stabilization" software is provided free of charge. It provides a graphical user interface to control the system and to display the positions, intensities and piezo voltages in clearly arranged diagrams. Various parameters of the control loop can also be set in the software.

The firmware of the controller uses an open serial protocol, which also allows to communicate with the beam stabilization using own software.

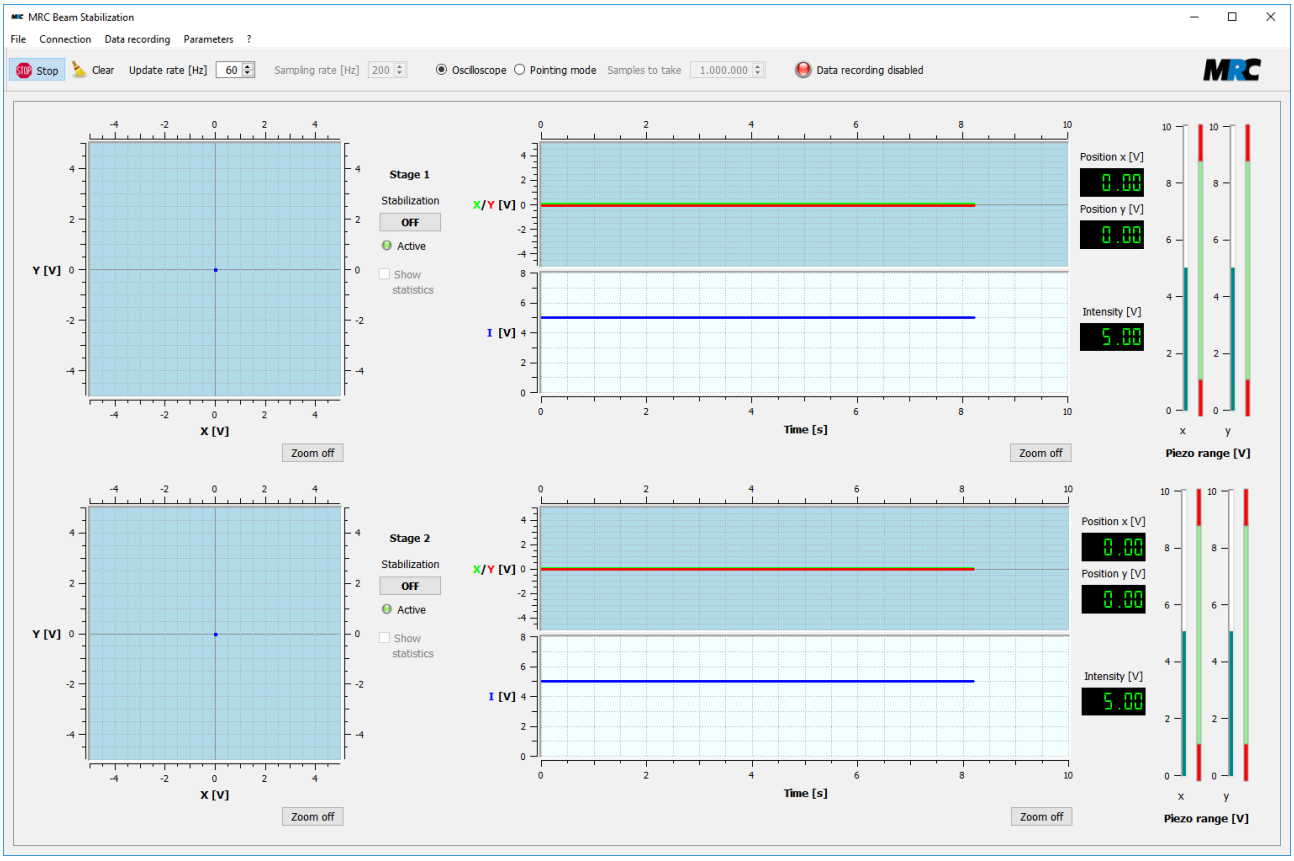

Figure 1: Main window for visualization of signals and remote control of the system

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Functions

for all *Compact* systems

- Start and stop of the control loop
- Indication whether the stabilization is active
- x/y plots for the positions on all detectors
- Position and intensity-time diagrams
- Display of the voltages applied to the piezos
- Setting of the data acquisition rate
- Simple statistics display of the beam pointing
- Setting of P-factors for both control stages
- Data recording for offline analysis
- Extension for multiple systems

for systems with integrated adjust-in electronics

- Set & Hold (holding the current positions)
- Adjust-in (variation of the position on the detectors)

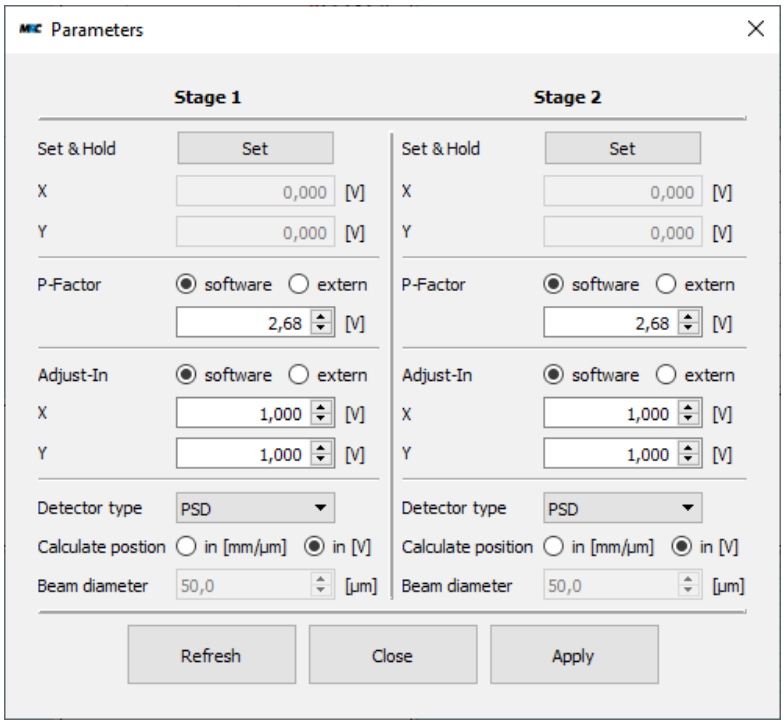

Figure 2: Dialog for setting parameters

Further information can be found in the detailed user manual. If you are interested, we will be happy to send you the communication protocol.

Contact

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