

CSU/2: Software quick start

This is a quick start guide how to remotely operate the CSU 2 (control and supply unit) with the CSU 2 software. Before using the software the CSU 2 has to be connected to the iMOXS and the computer, please see “CSU operation instruction quick start.pdf” for the proper cabling and “Network configuration and USB 2 LAN adapter.pdf” for network configuration.

Attention: Before using the CSU 2 software to remotely control an instrument equipped with an X-ray tube make sure to take appropriate safety precautions!

1. Start the CSU2.exe:

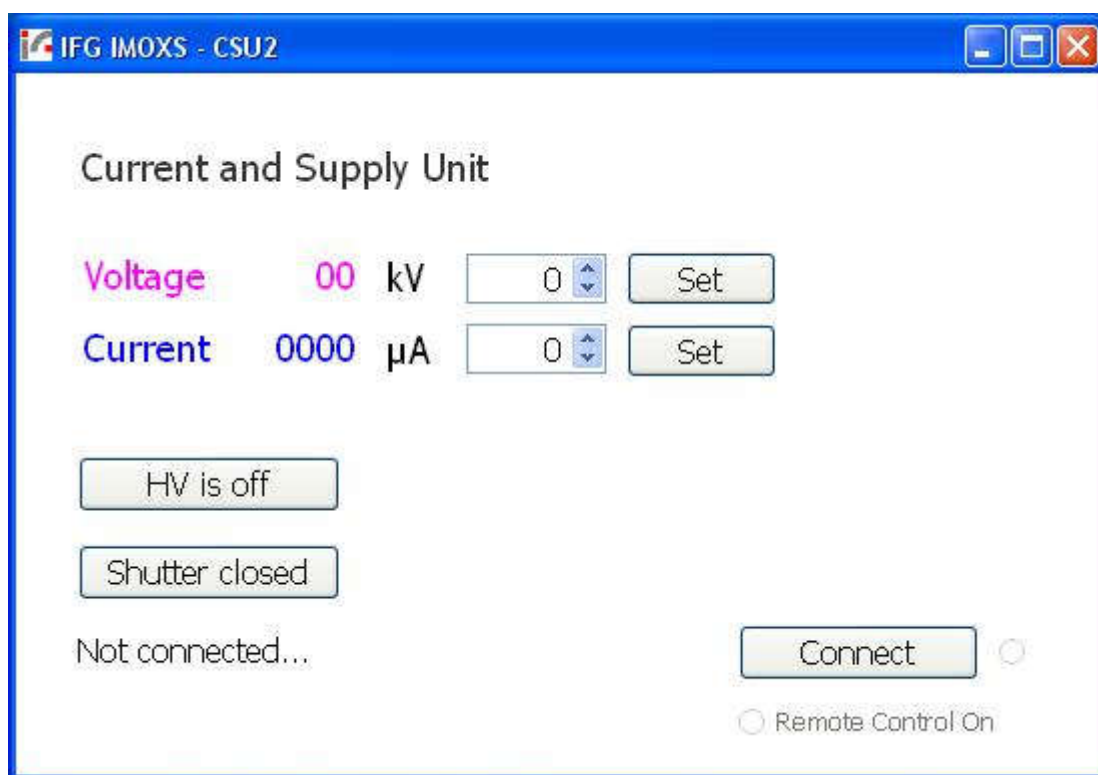


Fig. 1: Starting window of the CSU2.exe.

- Press “connect” in the lower right corner, which leads to:

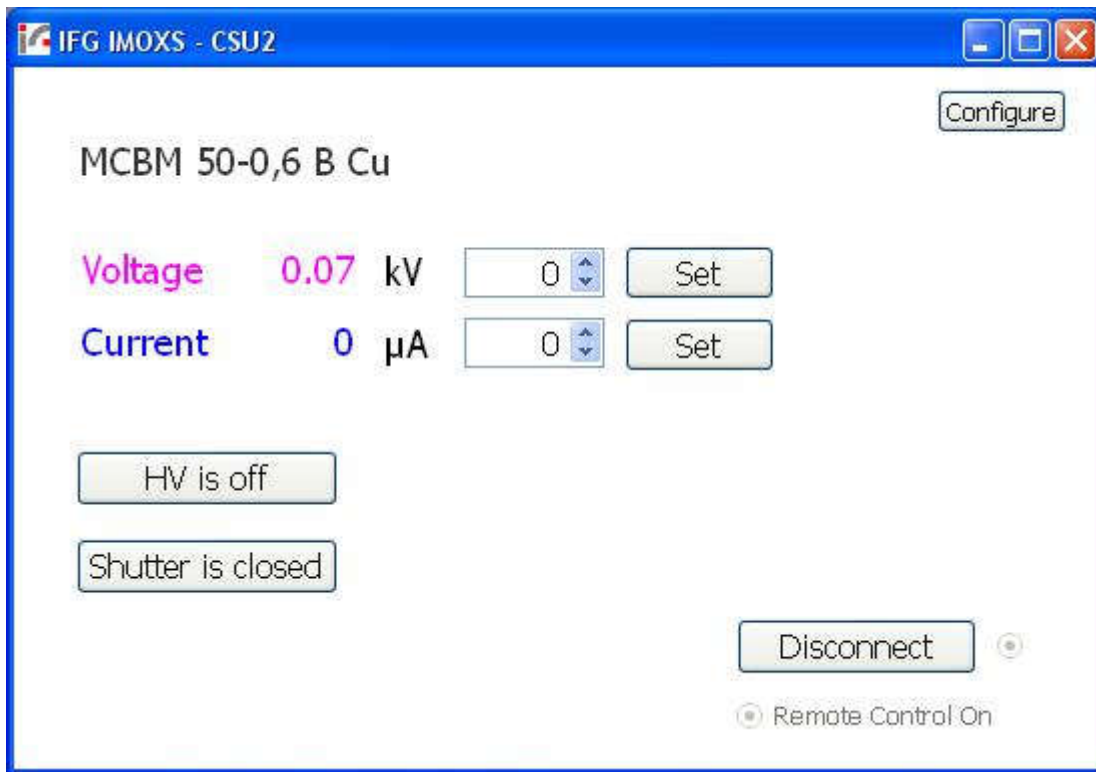


Fig. 2: The connection to the CSU 2 is successful if the “connect” button is now “disconnect”.

- In case the CSU software is used with the system for the first time it is required to use “Configure” to set the right X-ray tube that is used in your iMOXS (MCBM 50-0,6 B Cu in **Fig. 2**).

Attention: Make sure the right type of X-ray tube is chosen, wrong selections may lead to damages to your X-ray tube!

The correct type of X-ray tube is chosen in the “Configure” menu (**Fig. 3**). Additionally the serial number of the tube may be changed (not recommended), as well as the last time the tube was warmed up. **Attention:** Setting the warm-up time is not recommended, wrong settings may lead to damages to the X-ray tube! Return to the main menu with the “Main” button.

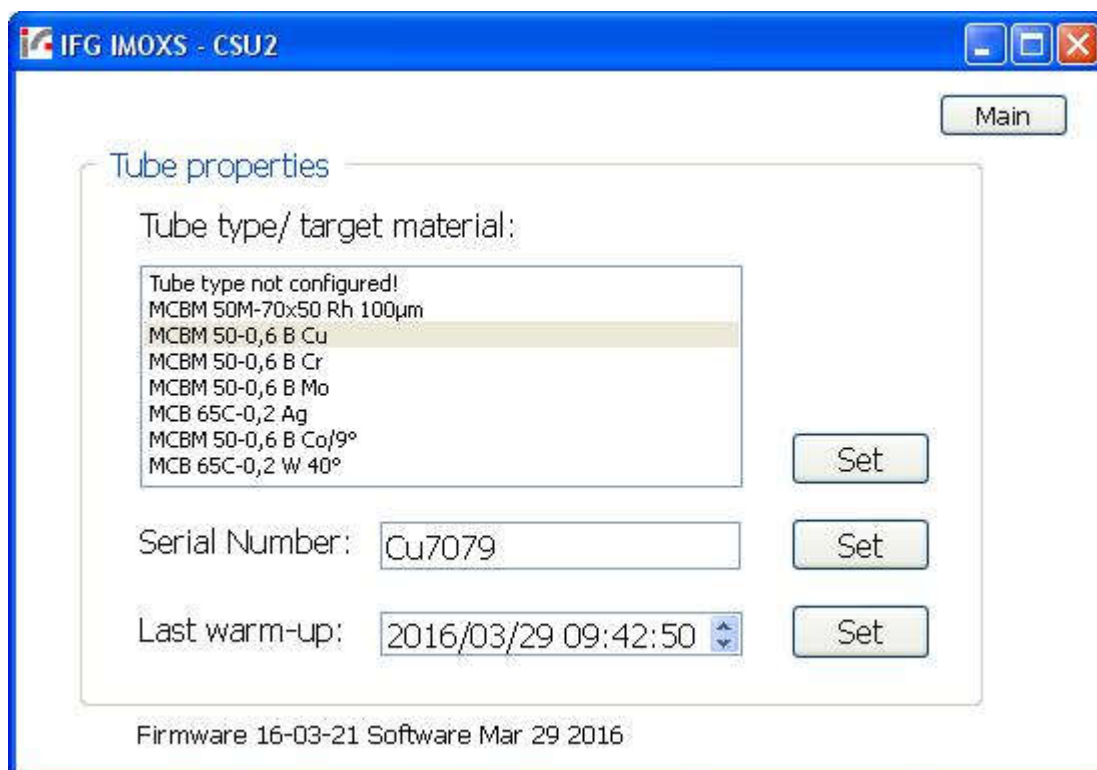


Fig. 3: Configuration menu to set the type of X-ray tube, as well as serial number and warm-up time. Please make sure the right type of X-ray is chosen, changing the serial number and especially warm-up time are not recommended!

4. The high voltage (HV) can be switched on by clicking on the button "HV is off". This leads to a warm-up, whose length depends on when the X-ray tube was last warmed up.

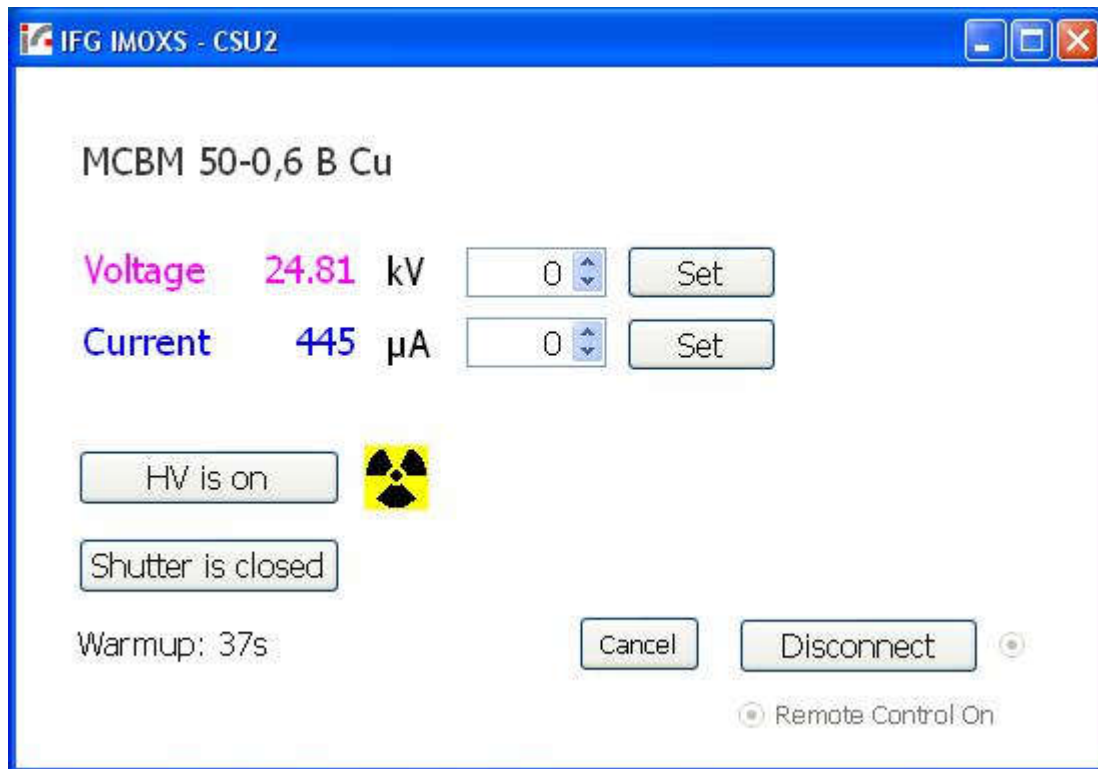


Fig. 4: After switching on the high voltage (HV) an automatic warm-up is executed.

5. Following the automatic warm-up procedure the X-ray tube is fully operational. The voltage as well as the current can be chosen within the limits of the X-ray tube. The maximum power of the X-ray tubes is 30 W. For details about the maximum ratings for a specific X-ray tube check the data sheet provided by the manufacturer.

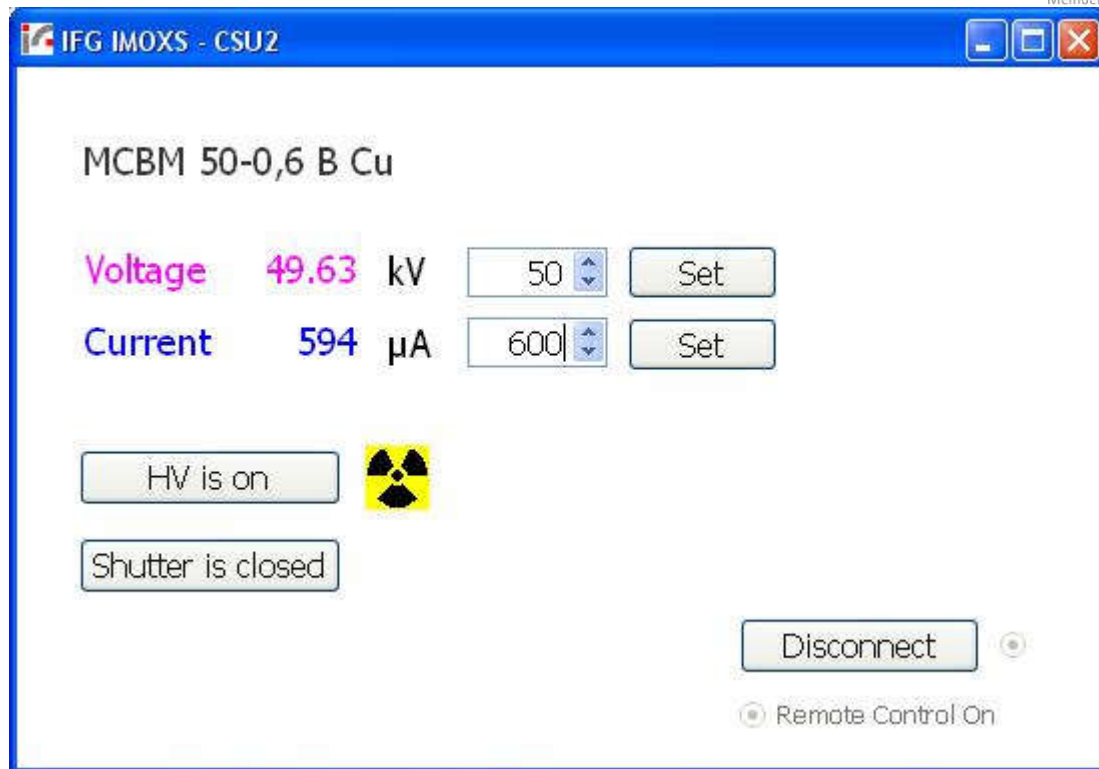
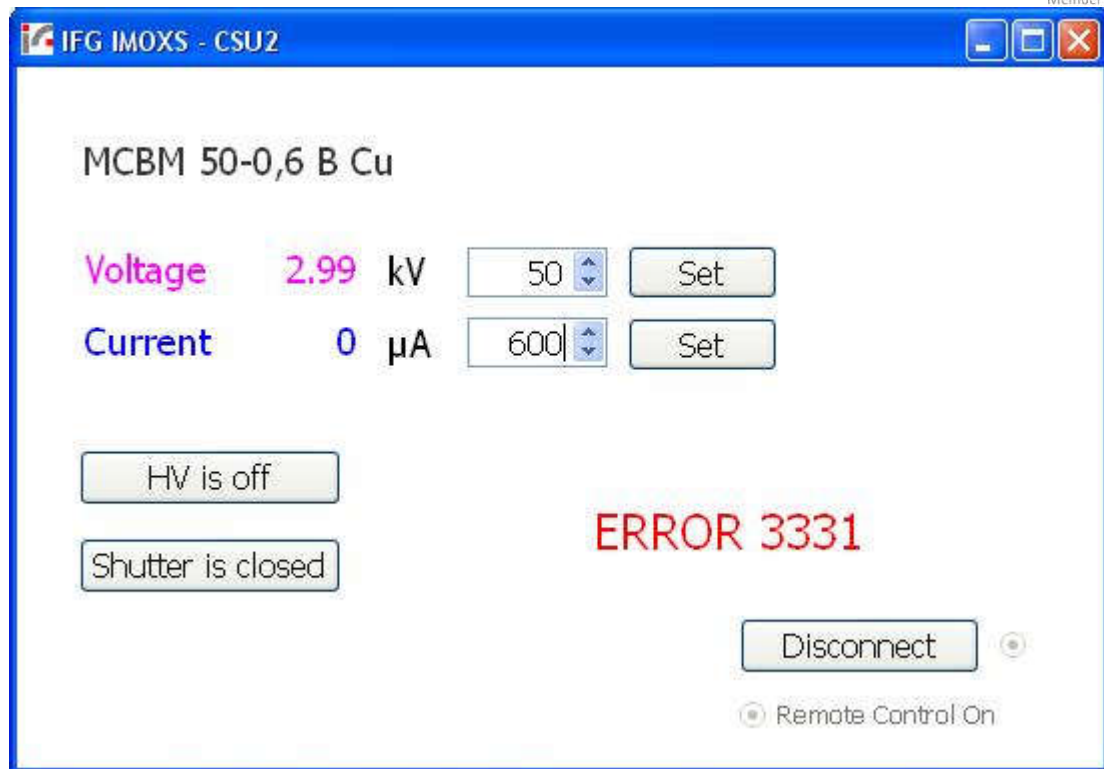


Fig. 5: With the respective “Set” buttons the selected voltage and current can be set.

6. Before opening the shutter by clicking “Shutter is closed” **make sure all safety precautions are taken!**
7. To change the voltage and current while operating simply enter the desired value and press “Set”. Keep in mind that at low acceleration voltages the maximum current is lower and 30 W cannot be reached.
8. Errors: In case something goes wrong the CSU unit will give you error codes, for explanation see the last page “Implemented commands CSU2.pdf”. For example if the filament cable is removed error 3331 will occur, which results in a complete shutdown of the instrument (HV and current are switched off) and requires a complete reboot (safety key turned off and on again):



9. For further questions or remarks feel free to contact me: menzel@ifg-adlershof, or +49/(0)30 – 63926500.