

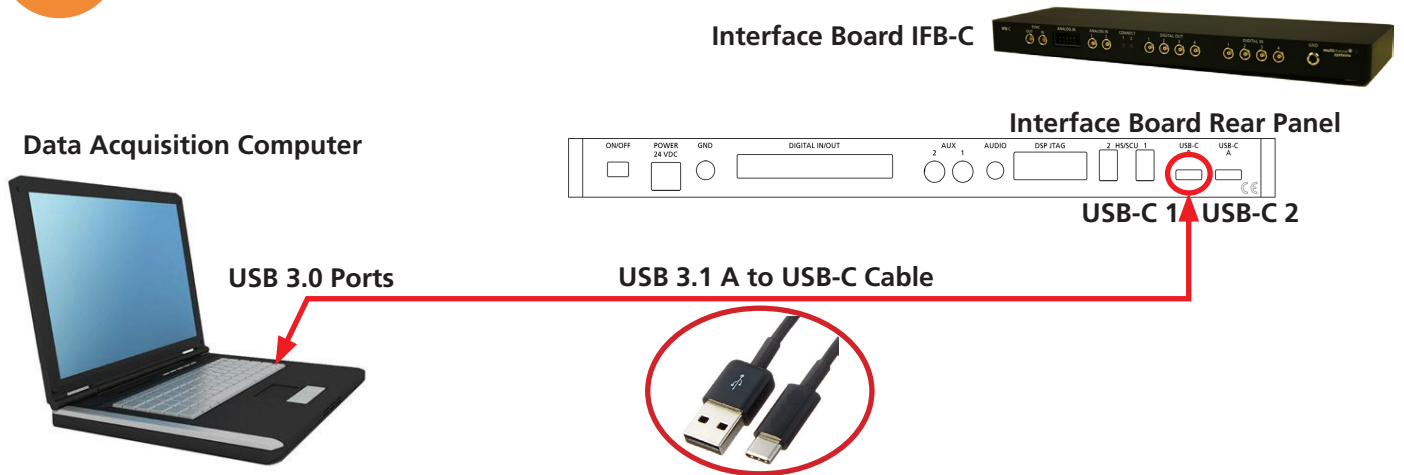


ME2100-Mini-System: Installation Guide

- Setting up a ME2100-Mini-System
- For more information:
 - Manuals on the provided USB stick
 - https://www.multichannelsystems.com/sites/multichannelsystems.com/files/documents/manuals/ME2100-Mini-System_Manual.pdf

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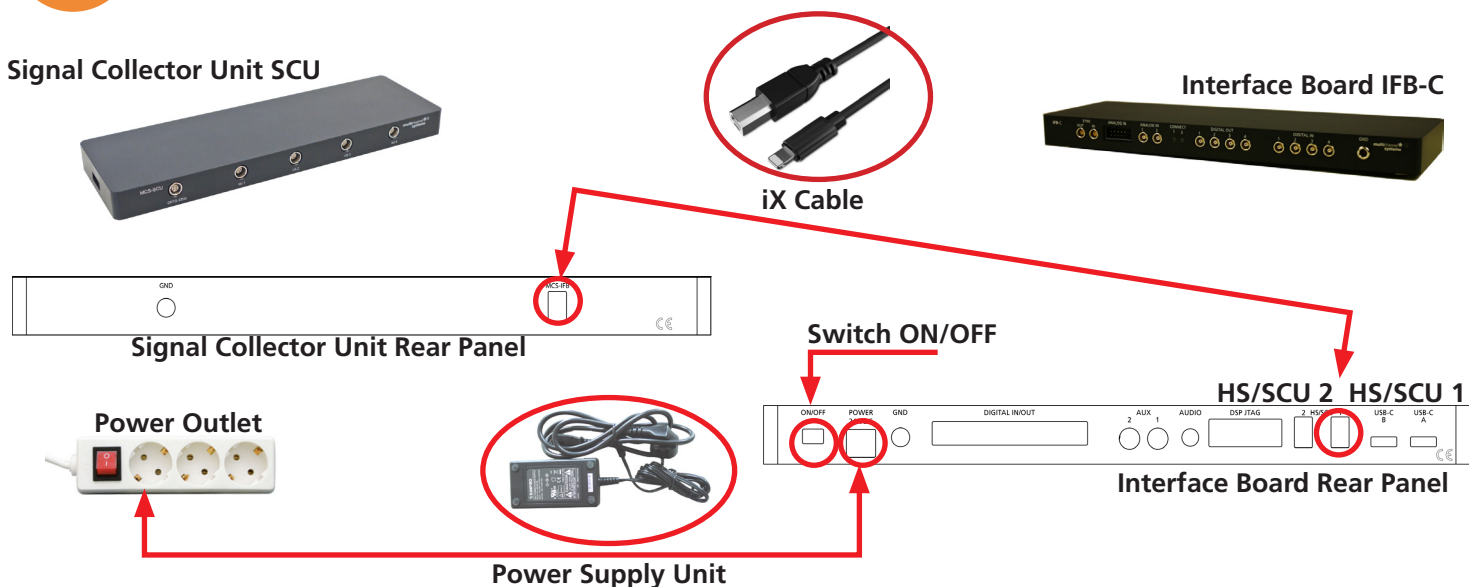
Connection to the Data Acquisition Computer



1. Setup and start the data acquisition computer. The data acquisition program Multi Channel Experimenter should be installed (icon on the desktop). If the icon is not on the desktop, please find the Multi Channel Experimenter on the provided USB stick (Software\Multi Channel Suite\Multi Channel Experimenter.exe).
2. Connect the interface board IFB-C with an USB cable type C to the USB 3.0 port of the computer. Important: Please use an USB 3.0 port (blue)!
 - 2a: If only one headstage will be connected, use the USB-C connector labelled with USB-C 1 on the rear panel of the interface board.
 - 2b: In case you have two signal collector units (SCU), also use USB-C 2 for the second connection. Do not use a hub, but connect the interface board directly to the computer!

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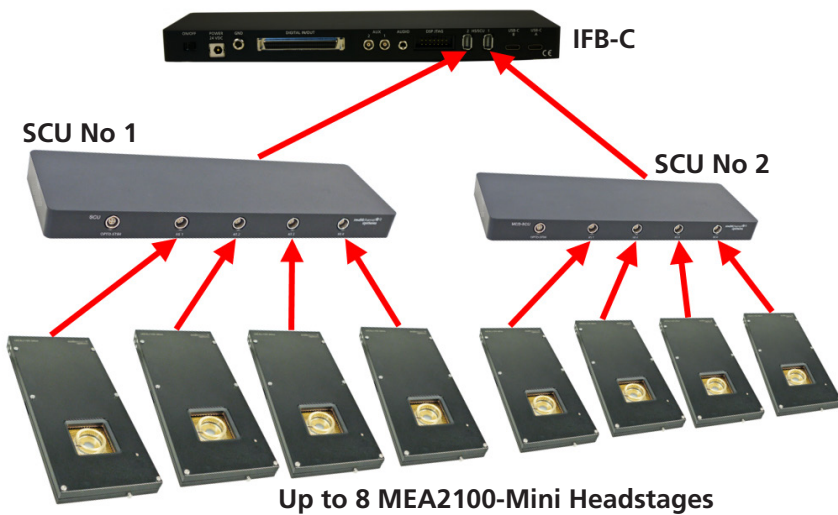
Connection between SCU(s) and IFB-C



1. Connect the interface board to the signal collector unit SCU with the iX industrial (type B) cable.
 - 1a: If only one SCU is connected, please use the connector labelled with HS/SCU 1.
 - 1b: For an optional second SCU, use the HS/SCU 2 connector.
2. Connect the interface board IFB-C with the power supply cable to the power outlet. Do not switch on the interface board (I/O on the rear panel) until connecting the SCU(s) and headstage(s).
3. For optimal grounding, connect the IFB-C interface board, all periphery devices and the computer to the same power outlet.

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Connection between SCU(s) and Headstage(s)

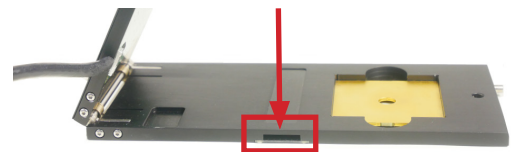


Connect up to eight MEA2100-Mini headstages via provided cable with Lemo connector to up to two SCU signal collector unit(s). The Lemo connector is not symmetrically. There is a red dot as a marker on the Lemo connector.

-> **The red dot on the Lemo connector of the cable of MEA2100-Mini headstage must face upwards! Don't twist the Lemo connector in the socket.**

-> **Do not mistake the headstage inputs (HS1 to HS4) with the Opto Stim input!**

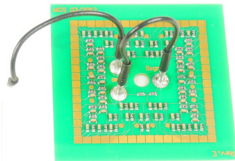
Connect the Temperature Controller TC02 to the connector on the side panel if necessary.



Connector for Temperature Controller TC02

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Noise Test of the System via Test Model Probe



Test Model Probe: The provided test model probe is used for testing the noise level and the functionality of the MEA2100-Mini-System. Please insert the test model probe and connect the cables. The ground cable has to be connected to the MEA2100-Mini headstage.

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Multi Channel Experimenter Software

Multi Channel Suite Software

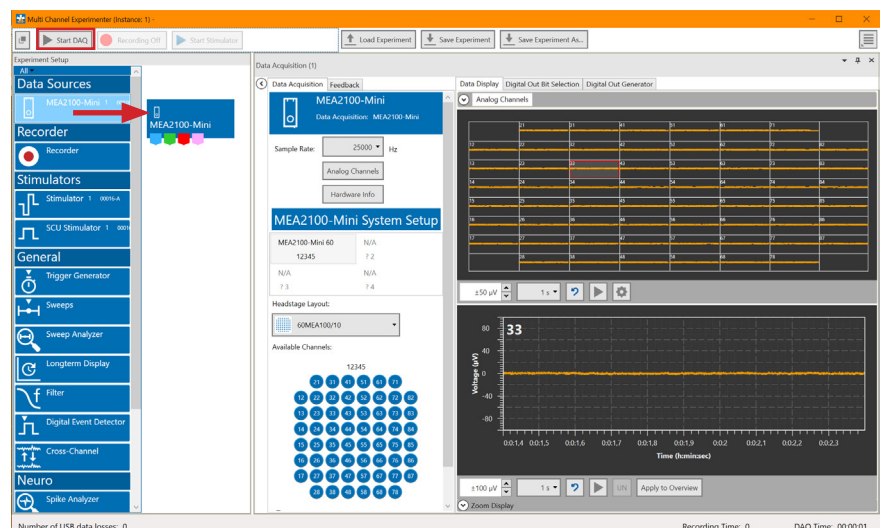
The Multi Channel Suite software consists of three independent software modules, provided on the USB stick. Multi Channel Experimenter is for online recording with different devices of Multi Channel Systems MCS GmbH. Multi Channel Analyzer is for offline analysis of files generated with the Multi Channel Experimenter online tool. Multi Channel DataManager is for data export, enabling further analysis with Python, Matlab or other applications.

First Test of the MEA2100-Mini-Headstage with the Test Model Probe

- Open Multi Channel Experimenter.
- Drag the data source to main window.
- Doubleclick the data source to open the channel display.
- Click "Start DAQ". You should see a noise level of 10 μV on all channels.

Multi Channel Experimenter Software

For more information please read the Multi Channel Experimenter manual and install the software. Please follow the link. <https://www.multichannelsystems.com/software/multi-channel-experimenter>



In Case You Experience any Problems

1. Consult the manuals provided on the included USB stick or online: www.multichannelsystems.com/downloads/documentation.
2. If you do not find help in the manuals, please do not hesitate to contact our support team via:
 - Email: support@multichannelsystems.com
 - Our support form at <http://www.multichannelsystems.com/service/support>
3. In order to keep your software up-to-date and stay tuned to all MCS news, please subscribe to our newsletter via our web site ("Subscribe Newsletter").

We hope that your setup was successful and you can now start your experiments.

We wish you great progress with your research and are happy to help you with any further questions!

Your MCS team



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