

Bedrock SMxx

Quick start guide for Bedrock SMxx line of acoustic measuring instruments (including the Bedrock SM30, SM50 and SM90)



Quick start guide

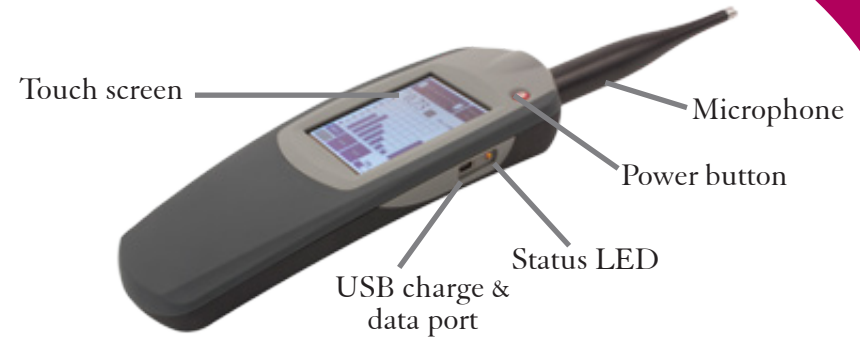


This Quick Start Guide is intended to help you get started with your Bedrock SMxx acoustic measuring instrument as quickly as possible.

For a description of the various modules and functions of the Bedrock SMxx, please refer to the full manual. The manual is included as a PDF file on the flashdrive bundled with your SMxx. The latest version of the manual is also available through our website:

www.bedrock-audio.com/support

SMxx components



The SMxx is shipped in a carrying case with the following components and accessories: The SMxx analyzer, the microphone, USB charger with international adapters (EU, UK, US, AU), USB cable, carrying cord (lanyard), spherical foam windscreen, calibration certificate, and a flashdrive containing the full manual as well as other documentation, test signals and software tools.

Further information and support

All Bedrock SMxx acoustic measuring instruments feature a wide variety of modules, some of which implement the most advanced and innovative measurement methods that are currently on the market. A description of all of these methods is far beyond the scope of this guide.

If you run into issues or questions when using the Bedrock SMxx, we recommend that you first consult the full manual. Online resources, from our website as well as third-party sources, may also be helpful towards understanding the principles behind the measuring methods implemented by the SMxx.

For the latest update of the manual, as well as a variety of tools and resources for use with your Bedrock SMxx, please go to our website:

www.bedrock-audio.com/support

You will also find our contact details for your support questions and warranty claims on our website. We frequently publish firmware updates, which you can easily install yourself and which add new modules and functions to your device. These updates are available free of charge.

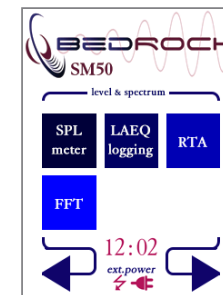
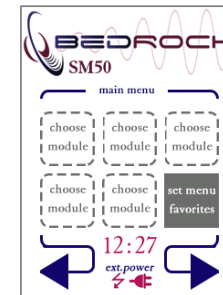


If the instrument “hangs,” becomes unresponsive or generates error messages, try keeping the red power button pressed for 10 seconds. This forces the device to power down, after which you can completely restart the device. If the problem persists, get in touch for support.

Using the main menu

When you first start your Bedrock SMxx, you will see a brief animation after which you will end up in the main menu. To return to the main menu, from any module, simply find the “home” button (🏠) that is always on the top right of your screen.

The main menu consists of multiple screens (depending on your device type). To find the module that you need, navigate through the available screens by pressing the blue arrows at the bottom. The first screen of the menu can be filled with your own favorites; it will be empty when you first use your SMxx analyzer. Press “set menu favorites” to add shortcuts to any module.



Performing measurements

The microphone supplied with the SMxx is an omnidirectional microphone complying with either IEC-61672 Class 2 (Bedrock SM30, SM50) or Class 1 (SM90). The SMxx can also be used with other 48V phantom powered microphones, but when connecting a different microphone, always consult the full manual for guidance on required checks and calibration.

The exact procedure for performing measurements with the SMxx depends on the specific method (and module) that you are using. The procedures for a speech intelligibility measurement (STIPA or Full STI) are different from a reverberation time measurement (RT60), which is again different from a sound level measurement. Some methods require the use of an external test signal source, such as the Bedrock BTB65 TalkBox (sold separately). Please consult the full manual for further guidance.

We recommend that you adopt the following procedures during any kind of acoustic measurement:

- If you are working in a high-noise environment, make sure to use earplugs or earmuffs
- While measuring, point the SMxx (and in particular its microphone) away from large objects, and away from your own body. It may be convenient to mount the SMxx on a tripod.
- Use the supplied foam windscreen when measuring outdoors. If you intend to measure in very windy environments, consider purchasing a larger windscreen.

Charging and using USB for data

The SMxx features an internal rechargeable high-capacity battery. The battery will typically last for 5 to 8 hours of continuous use, depending on the device settings. A full recharge cycle usually takes 4-5 hours; the device automatically stops charging when full. We recommend that you always complete the full charge cycle (LED stops blinking and burns green continuously).



Always use the supplied USB charger and USB cable for recharging your SMxx. USB ports on PC's and Macs can be used to power the SMxx, but the available current is usually insufficient to simultaneously charge the battery. Note that the vast majority of support calls related to power and charging are due to the use of inferior third-party cables.

The USB port is also used for data transfer between the SMxx and your computer. If you connect the SMxx to a computer, a dialog window will appear on the touch screen, asking you whether you want to start data transfer with the PC. If you choose to exchange data, then the SMxx can not be accessed through its display anymore. If you continue without data exchange, then the device remains operational and is powered through USB.

The SMxx presents itself to computers as a “mass storage device,” similar to flash drives and external harddrives. You can retrieve data from stored measurements by simply copying them from the device. Firmware updates can also be installed, by copying update packages to the designated location on the SMxx file system. Please refer to the full manual for details.

Safety precautions

The SMxx is a sophisticated measuring instrument that should be used, maintained and stored with care:

- Do not expose the SMxx or any of its components to liquids or moisture
- Use the supplied carrying cord to protect it from accidentally being dropped
- Do not use in any environment or atmosphere that may contain flammable or explosive materials
- Protect against heat, high temperatures and flames
- Do not leave the device unattended for long periods of time while operating
- Do not recharge the device when it is inside a closed container. Switch off before storage.



The XLR connector on top of the SMxx provides 48V phantom power. Connecting equipment or microphones not designed for 48V phantom power to the SMxx will result in permanent damage to this equipment and possibly to the SMxx itself.



The SMxx is charged and powered through USB. The voltage provided to the USB connector must never exceed 5.5V. Only use the supplied charger, other chargers and PC USB ports may not supply sufficient current for recharging.



The supplied charger is designed for worldwide operation on any AC source (100V-240V). Use with the appropriate adapter for your region. Do not use if wet, cracked or broken.

Factory calibration and warranty

Your SMxx was thoroughly inspected and calibrated before leaving the Bedrock Audio factory. The calibration certificate is included with your instrument. As any acoustic measuring instrument, the SMxx needs to be factory-recalibrated periodically. Our recommended maximum calibration interval is 2 years.

The SMxx is covered through the manufacturer's worldwide warranty programme for 24 months from the date of purchase. This warranty programme covers all defects, except for those resulting from accidents, misuse (including improper electrical connections) and improper maintenance. Explicitly excluded from warranty are normal wear and tear, scratches on the LCD screen, cracks from falling or dropping, damage from improper electrical connections, water damage, and incorrectly executed touch calibrations.

Please direct your warranty claims to: warranty@bedrock-audio.com
Bedrock Audio BV
Ampereweg 18
2627 BG DELFT
THE NETHERLANDS

Contains NiMH batteries.
Remove battery pack before
disposing of this device.



Bedrock products are distributed globally through a network of specialized distributors and resellers. For an up-to-date list of resellers in your region, please refer to our website www.bedrock-audio.com