SM4BAT
Quick Start

Welcome to Wildlife Acoustics.

This Quick Start video is designed to get you up and recording with the Song Meter SM4BAT FS bioacoustics recorder within minutes.

I've just taken delivery of an SM4BAT recorder. I'll open the box and I see a printed manual and Quick Start Checklist. On the reverse side of the checklist is a description of Kaleidoscope Pro software. Once you've made recordings with the Song Meter, Kaleidoscope Pro is an excellent way to analyze and manage those recordings.

I'll take the SM4BAT out of the box to get it ready for recording. The SM4BAT can run on internal or external power. I'll open the security cover and then open the front panel to expose the battery compartment. I'll insert four D-cell batteries. Make sure the batteries are inserted with the correct polarity.

I'll close up the battery compartment and insert an SD memory card. SD memory cards come in a variety of storage capacities and there are two memory card slots on the SM4BAT to extend available recording time.

I'll set the power switch to internal and the SM4BAT boots up.

It's not usually a requirement but it's also not a bad idea to initialize the memory card. I'll scroll to the Utilities menu and press the right arrow button to enter Utilities. I'll scroll down to Format All Cards and confirm the operation. This will initialize all memory cards currently inserted into the recorder.

It's also not a requirement for basic operation but I am going to set the location of the SM4BAT. Metadata is written to the recording files describing the date, time, and location of when and where those recordings were made. Also, if you want to use a recording schedule that references sunset and sunrise times, the SM4BAT does need to have accurate date and location.

Date, time, and location can be manually entered under the Settings menu. For this video I'm going to use the available GPS Accessory to do the work for me. Before I use the GPS Accessory I'll scroll down in the Location menu to the Timezone UTC setting. The Timezone UTC must be set before the GPS accessory is connected. GPS time is based on the Universal Time Coordinated

standard. I'm currently on the East Coast of the United States during daylight savings time, which is four hours behind the UTC. So I'll set the UTC to minus four hours. Now I'll connect the GPS Accessory. The GPS Accessory acquires the satellite signal, and programs the date, time, and location into the SM4BAT. I can now disconnect the GPS Accessory and the SM4BAT will remember those settings.

Next, I'll connect the SMM-U2 ultrasonic microphone. The SMM-U2 ships with a five meter cable. You can also extend the length with ten and fifty meter extension cables, up to 100 meters.

Before I press the Schedule Start button I'll press the Check Status button. The front panel display of the Song Meter shows the Date and Time. The next line shows the currently installed Firmware version. You can check the Wildlife Acoustics web site to make sure you have the latest firmware update installed. The display shows that the SMM-U2 microphone is connected.

The third line shows the two memory card slots. You can see there is an empty 32 GB card in slot A and no memory card installed into slot B.

The fourth line shows the current Battery Voltage and Internal Temperature of the SM4BAT.

The SM4BAT can be programmed with daily or advanced recording schedules. There are also three available Quick Start schedules. From the factory, the default Quick Start schedule is Record Always.

I'll press the Schedule Start button and the SM4BAT goes into Record-Armed mode. The front panel display shows the date. The next line indicates that the record schedule is currently running. The third line shows the next recording will be to the memory card in slot A. The start and stop times of the record schedule are displayed. You can see that the SM4BAT is currently set for Continuous Recording. And the number on the right displays how many new record files have been created since the SM4BAT was last powered on. The last line shows either that the recorder is armed and waiting to record or has been triggered and is currently recording. On the right is the selected Sample Rate of 256 kHz.

When the recorder is armed but not actually recording the front panel LED will blink red. If the SM4BAT senses an ultrasonic signal it will go into Triggered Record mode and the front panel LED will blink green to indicate a recording is in progress. When the ultrasonic signal is no longer present the SM4BAT will stop recording and go back to Record-Armed mode, where it will wait for the next ultrasonic trigger.

Video Script

I'll press the Schedule Stop button to stop the recording schedule and it's that simple. The SD memory card can now be used to export the recording files to a computer for analysis. If I want to use a different recording schedule I can select one from the Quick Start menu. Besides the Record-Always mode there are two other Quick Start schedules based on sunset and sunrise times. If I want to customize a Daily Recording Schedule or create an Advanced recording schedule I also have those options. All that's left to do is deploy the SM4 and press the Schedule Start button.

The SM4BAT is a sophisticated device and has many customizable functions. It's a good idea to read through the User Guide. Also, Wildlife Acoustics has published a series of videos that explain all the features of the recorder in detail. In the mean-time, it's taken about five minutes to get the Song Meter SM4BAT FS out of the box and ready to deploy.

Thank you for watching.