



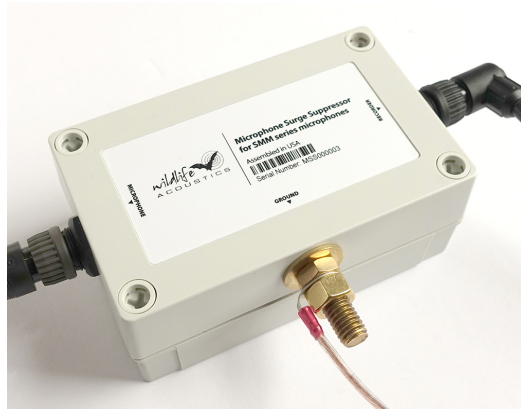
Song Meter Surge Suppressor

Overview

The Song Meter Surge Suppressor protects SM4, SM4BAT, SM3, and SM3BAT recorders from power surges due to electrostatic discharge or electrical storm activity that could travel down the microphone cable and damage the recorder.

NOTE: The suppressor is not designed to protect against a direct lightning strike.

The Surge Suppressor is installed between a microphone cable and the recorder and includes a grounding lug which is connected to a good earth ground. This ensures that an electric surge travelling down the microphone cable is shunted to ground before damaging the recorder. This accessory should be used wherever microphones are mounted at height.



Each Kit Includes:

Surge suppressor (White box with three cable connectors)

Connector cable (3 meter cable, 5 conductors, L-shape plug at one end, straight plug with ferrite at other end)

1 Ferrite (to be connected to microphone cable)

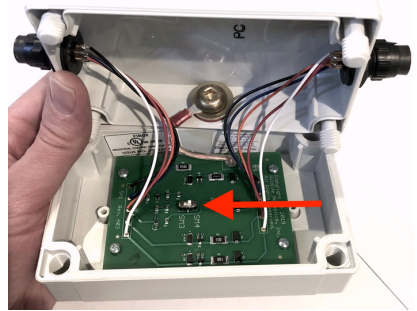
1 Zip tie (to secure ferrite)

Installation and Use

Select Recorder Type

The suppressor is shipped ready to be used with SM4 or SM4BAT recorders. To use with an SM3 or SM3BAT recorder:

1. Loosen the 4 Philips screws at the corners of the enclosure.
2. Open the enclosure by folding the lid like the cover of a book towards the grounding lug with the two large bolts.
3. In the center of the circuit board flip the switch to "SM3"
4. Close the lid and retighten the screws until snug.



NOTE: Overtightening the plastic enclosure screws can damage the threads.

Mount Enclosure

The enclosure should be secured to prevent movement in wind. A zip tie can be used to secure it to a structure. There are also four mounting holes directly under the lid screws. The lid must be removed to access them. They are .18" in diameter and accept a size 8 or smaller screw. The screw should have a flat head, such as pan-head. A tapered screw like a wood screw or drywall screw tends to tear through the plastic and ruin the mounting hole. The wall of plastic is not thick so take care not to overtighten.

Attach Ferrite to Microphone Cable

The included snap-on ferrite must be connected to the microphone cable, as close to the microphone as possible.

1. Loop the cable through and snap the ferrite shut. A zip tie is included for further securing the ferrite. The image shows the ferrite as installed.



Attach Cables

The Surge Suppressor kit includes a cable that runs from the suppressor to the recorder.

1. Each connector cable is shipped with a snap-on ferrite to meet standards limiting electromagnetic emissions and protecting against electrostatic discharge. Connect the L-shaped plug to the surge protector. Connect the straight plug to the recorder. This will insure the ferrite near the end of the cable is as close to the recorder as possible.

The connections on the surge suppressor are labeled for the microphone connection and recorder connection. To attach a cable:

1. Align and seat the cable onto the correct port. Turn the grey locking ring (black on older SM3 cables) clockwise \cup firmly until it locks into place.

NOTE: Reversing the cable connections to the surge protector will not damage the microphone or recorder. If reversed, the recorder will show that no microphone is attached on the Check Status Screen and no recordings will be made.

Connect to Ground

1. Use a 12 gauge or thicker wire less than 2m in length to connect the suppressor to earth ground. Loop the wire and tighten it in between the two nuts on the grounding lug. The wrench size is 9/16" or 14mm. You need only loosen the outer most nut.
2. Connect the other end of the wire to the metal frame of a grounded tower structure with an electrically strong (low resistance) connection.
3. If you are using external power, the ground/negative side of the power should be connected to an earth ground as well. This will prevent electrical surges from entering from the power supply side.

NOTE: Use the available SMM-U2 Grounding Bracket to also protect the microphone from static damage. This will provide an additional layer of protection for the recorder as well.

Specifications

Length: 5.1" (130mm)

Width: 3.1" (79mm)

Depth: 2.0" (51mm)

Enclosure: Waterproof polycarbonate housing

Testing Certification: IEC 61000-4-5 at 1kV (Level 2)

Recorder Compatibility: SM3, SM3BAT, SM4, and SM4BAT
