ETSInc. SM3-RM Monitoring Station Instructions

The SM3-RM is a single channel, one way “listen only” rack mounted base station for use with any ETS SM1 series microphone. The SM3-RM can be used independently or with a CCTV system. The SM3-RM also easily connects to recording equipment such as DVRs, and audio recorders. Note the audio input / output signals of the SM3-RM are “line level” (0dbm).

SM1 Microphone Placement.
Locate the SM1 microphone near the area of interest in the room to be monitored. If the entire room is to be monitored, locate the SM1 in the middle of the room. Do not mount the microphone near air conditioning vents, light fixtures or electrical equipment. The SM1 should be placed at least 5 feet away from the subject(s) to be monitored. The SM1 is still useable in the range of 15-25 feet but is dependent on the level of background noise in the areas. Experimentation in the environment will determine what distances work best.

SM1 Mounting
To flush mount the SM1 on ceilings or walls, cut a 2 ¼” by 2 ¾“ hole in the wall or ceiling tile to allow room for the circuit board and mount the SM1 to the surface with screws. For surface mounting, purchase the **ETS** SM1-LE omni-directional microphone or use a single gang electrical box.

Cable Run
Run a 22 gauge, stranded, two conductor shielded cable between the SM3-RM amplifier and the SM1 microphone. Keep the cable run distance under 1,000 feet and away from AC power sources, light fixtures and electrical equipment. *See Figure 1 for connection diagram.*

SM3-RM Recorder switch
If the SM3-RM kit will be used with a recorder of some type, place the recorder switch in the “IN” (DOWN) position. In this position, both live audio and playback audio can be heard through the SM3-RMs internal speaker. In stand alone applications where there is no recorder or no need to playback recordings, place the recorder switch in the “OUT” (UP) position. The switch can also be used a mute switch when no recorder is connected.

SM3-RM Headphone jack
Plug in a set of 3.5mm stereo headphones for private listening. The internal speaker of the SM3-RM will be automatically disabled until the headphones are unplugged.

Adjusting the SM1 Gain
The SM1 output level is set by selecting the desired volume range and adjusting the gain control.

The “Volume Range” jumper should be set to the “LO” position when using the SM1 with IP cameras that utilize “microphone inputs” also know as “Mic. Level” inputs. This sets the maximum gain of the SM1’s pre-amp to x14. The jumper should be placed in the “HI” position when using IP cameras with “Line level” inputs of DVRs and IP cameras. This sets the maximum gain of the SM1’s pre-amp to x196.

The SM1 is shipped with the gain set at midrange. If the sound on the SM3-RM is distorted, rotate the control towards the – mark (counter-clockwise). If the volume at the SM3-RM is too low, rotate the control towards the + mark (clockwise).

Setting the SM1 Hi-Cut/Lo-Cut Jumpers
The normal frequency response of the SM1-W microphone is 500-13Khz. When both jumpered “in”, The “HI Cut” and “Lo Cut” filters set the SM1’s frequency response to 900-6Khz. Enabling one or both of the filters is useful when background noise needs to be further reduced and intelligibility of speech emphasized. We recommend experimenting with the jumper settings to achieve the best acoustic result for your application.

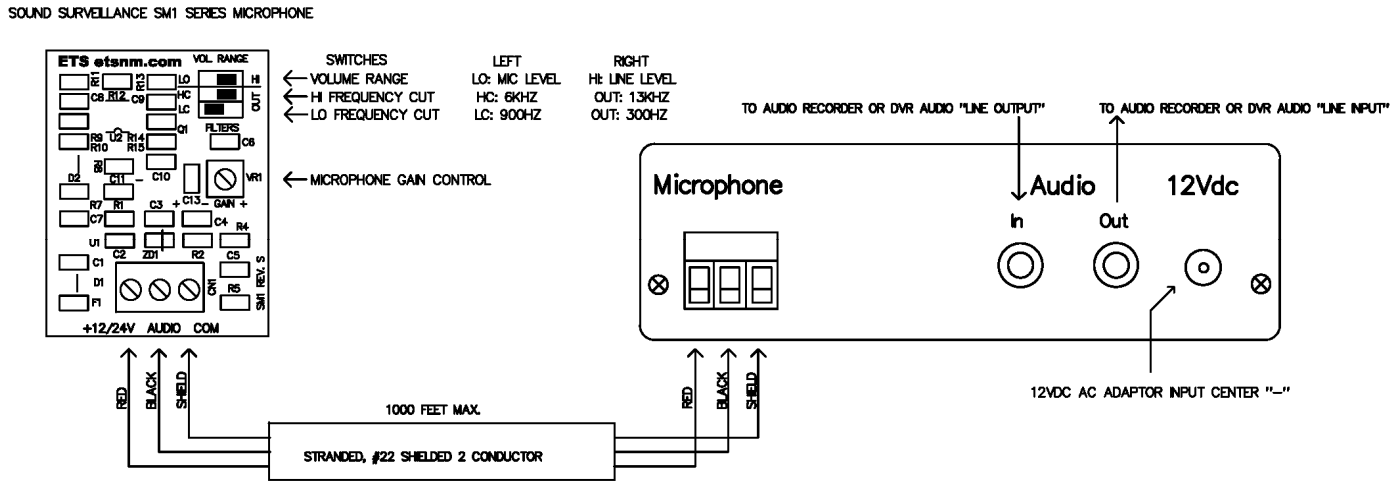

Figure 1.

Caution

It may be against the law to install this microphone kit in certain environments. It may also be against the law to record conversations of the person(s) being monitored without their knowledge. It is the responsibility of the installation company and end-user to determine if the application of this product is legal. These laws vary from state to state. If you are not informed on these matters, consult a qualified attorney or contact the appropriate state agency. A sticker is provided with this kit for the applications where notification must be posted.

Warranty

All ETS products carry a one year parts and labor warranty. This warranty does not cover damages as a result of misuse, improper handling of the unit or exposure to extreme temperatures or moisture. At its discretion, ETS reserves the right to repair or replace this unit under the conditions of the warranty. If you experience problems with your equipment call ETS at: 505-888-3923 to obtain a return authorization number. Equipment requiring repair beyond the warranty period or units that have been damaged or are not covered under the warranty can be repaired by ETS for a minimal cost under most conditions.

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by
ETS Inc.