

The SMEA-1P is a single channel, one way Interface box designed to be used with ETS PM1 series microphones (or any other powered or unpowered balanced output, professional audio microphone) and Power Over Ethernet IP cameras. It provides a convenient way of supplying power to the microphone by tapping power off the camera's PoE connection. The SMEA-1P also features installer friendly termination of the cable runs and a standard RCA or 3.5mm audio output connector. The SMEA-1P's output can be connected to a "microphone" or "line" level input of a PoE IP camera.

PM1 Microphone Placement

Locate the PM1 microphone as close as possible to the area of interest in the space to be monitored. If a large area is to be monitored, locate the PM1 in the middle of the room. Do not mount the microphone near air conditioning vents, light fixtures or electrical equipment. The PM1 should be placed as close as possible to the subject(s) to be monitored. The PM1 is still useable at distances of up to 25 feet but is dependent on the level of background noise in the area.

Experimentation in the environment will determine what distances work best.

SMEA-1P location and power

The SMEA-1P interface box is designed to be located any place along the IP camera CAT5 cable run. It must be located in between the IP camera and the router or switcher as shown in figure 1.

NOTES-

1. The IP camera MUST be connected or the SMEA-1P will not power up.
2. The SMEA-1P will not work with non-PoE IP cameras.

Cable Run

Run a 22 gauge, stranded, two conductor shielded cable between the SMEA-1P interface and the PM1 microphone. Keep the cable run distance under 300 feet and away from AC power sources, light fixtures and electrical equipment. See *Figure 1 for connection diagram*.

Mounting

The PM1 can be surface or flush mounted on ceilings or walls. For flush mounting, cut a 2 $\frac{1}{4}$ " by 2 $\frac{3}{4}$ " hole in the wall or ceiling tile to allow room for the circuit board and mount the PM1 to the surface with screws.

SMEA-1P Mode switch: The SMEA-1P supports Both Modes A and B of IEEE802.3af POE. The SMEA-1P is pre-set for the most common use of the "end point" POE IEEE802.3af standard (mode A). If the power LED does not illuminate in this position, try the mode B position (mid span).

SMEA-1P Gain Adjustment

This control sets the gain on the pre-amplifier. For ETS PM1 series microphones and electret powered Professional microphones a mid-range setting should be adequate. For dynamic microphones, the control may have to be set more clockwise, since this type of microphone is less sensitive than a powered, electret type microphone.

SMEA-1P Level Adjustment

This control sets the volume of signal at the audio output jack. If your camera features a 'line level' audio input, start with this control mid-ranged. If the volume is too loud or distorted, turn it down or if to faint, turn it clockwise. If your camera features a 'microphone input' turn this control nearly all the way down. Then, use the gain control for best results.

Setting the SMEQ-1 Equalizer levels

Setting an equalizer for the desired overall sound is a subjective topic. Experimenting with the controls is the best way to learn and achieve good results. We recommend using headphones to evaluate the sound quality. Start with setting all controls to the mid-point (flat= no gain or cut). We suggest you do this when the desired sound source is present (people talking, being interviewed, etc.) Adjust each control clockwise and counter clockwise to get a feel for how each band affects the overall sound. Keep in mind that the human voice resides in the 1Khz-6Khz range. To focus on this band the Bass and Treble controls can all be turned down (more counter clockwise). The Middle control can then be adjusted more clockwise or for best sound clarity and intelligibility.

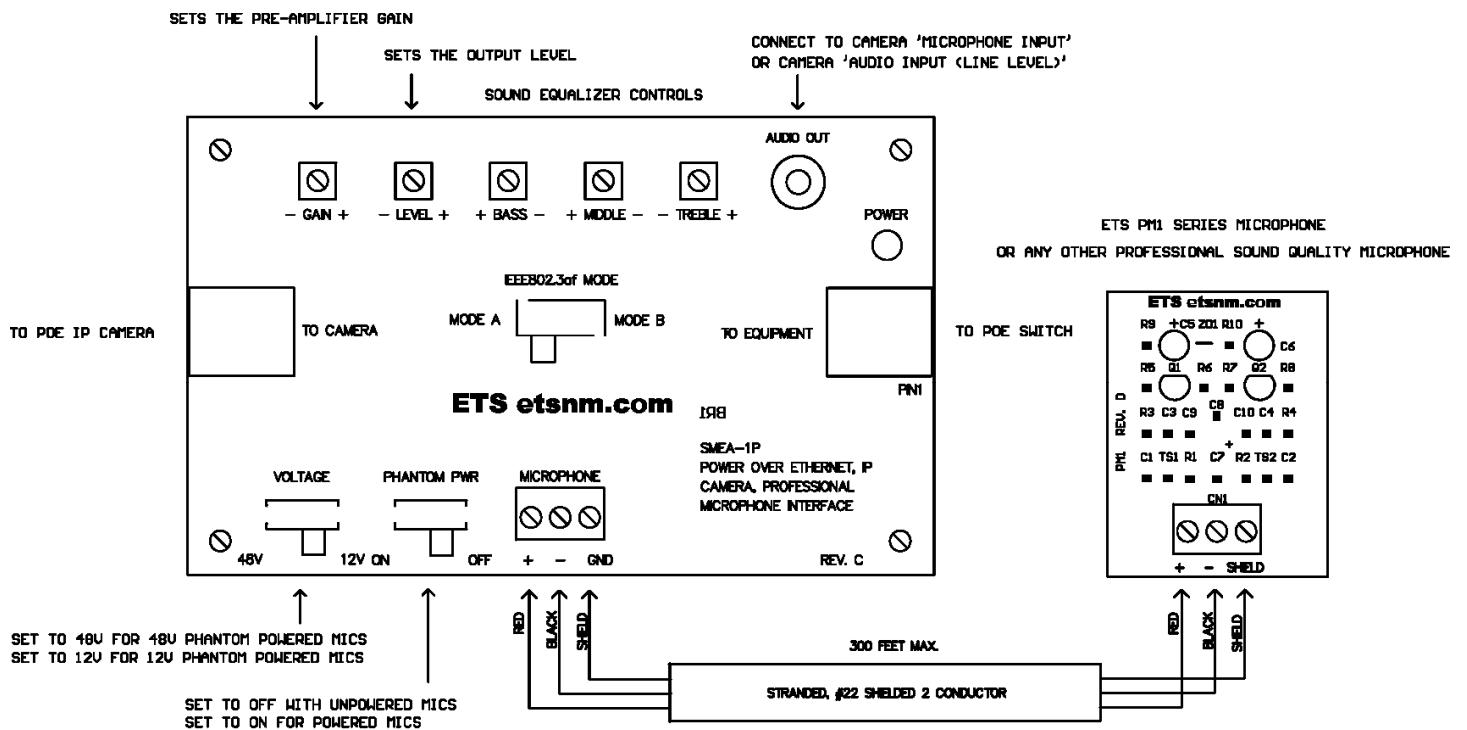


Figure 1.

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.