

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

Note-the SMEA-1 is compatible with all ETS Sound Surveillance microphones or Louroe microphones only. Traditional phantom powered microphones like the Crown PZM11 will not operate with the SMEA-1.

SM1 Microphone Placement

Locate the SM1 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 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 area. Experimentation in the environment will determine what distances work best.

SMEA-1 location and power

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

NOTES-

1. The I/P camera MUST be connected and operating before the SMEA-1's power indicator will illuminate.
2. The SMEA-1 will not work with standard I/P cameras.

Cable Run

Run a 22 gauge, stranded, two conductor shielded cable between the SMEA-1 interface 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.*

Mounting

The SM1 can be surface or flush mounted on ceilings or walls. For flush mounting, 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.

Adjusting the SM1 "gain" and SMEA-1 "level" controls

If the SM5-EA will be plugged into a "microphone level" input of an I/P camera, set the SM1 gain slightly clockwise (or 1/8 of a full turn) from full counter-clockwise. Then use the "level control" on the SMEA-1 to set a volume that produces an acceptable audio level at the head end.

If the SM5-EA will be used with a "line level" input, turn the gain control of the SM1 to 3/4 full clockwise and adjust the level control on the SMEA-1 to produce the clearest audio level at the head end.

Setting the SM1 Jumpers

The SM1 microphone has jumper selectable treble boost and limiter circuits. The treble boost circuit when jumpered in, emphasizes the high frequency sounds that the microphone picks up. This is useful for improving the sound quality in environments where people are talking quietly or whispering. The limiter circuit, when jumpered in, automatically reduces the SM1's output during loud sound intervals. This eliminates the need for the listener to reduce the volume control on the amplifier when sounds get louder.

SMEA-1 Mode switch: The SMEA-1 supports Both Modes A and B of IEEE802.3af POE. The SMEA-1 is pre-configured 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).

