

The SM5 is a single channel, one way pre-amplified microphone “listen in” surveillance kit designed to be used with Power Over Ethernet I/P cameras. It provides a convenient way of supplying power to the SM1 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. Note the audio output signal of the kit is “line level” (0dbm).

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. The microphone gets its power off POE I/P cameras only. The kit 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. For surface mounting, purchase the SM1S surface mount adapter or use a single gang electrical box.

Adjusting the SM1 Gain

Start with a midrange setting of the gain control on the SM1. Adjust the control + or – for maximum clarity. If the sound at the amplifier is distorted, rotate the control towards the – mark (counter- clockwise). If the volume at the amplifier is too low, rotate the control towards the + mark (clockwise).

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.

Setting the SMEA-1 Jumpers

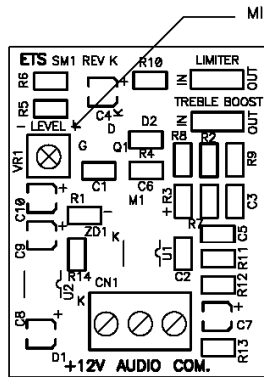
Jumpers are available for setting the power input voltage range and to select which wires to tap power off of the CAT5, POE cable run. Before connecting the SMEA-1 it is highly recommended that you contact the camera manufacturer and ETS technical support to confirm the jumpers are set correctly.

Power jumper: If the camera power is in the range of 12 to 18VDC, select the 12-18V position. If the camera power is in the range of 24-50Vdc, select the 24-50Vdc position.

Power tap jumpers: The SMEA-1 is pre-configured for the most common POE standards. Pins 4 and 5 are strapped to “+” and pins 7 and 8 are strapped to “-“. Double check settings against the camera type before you power up the camera. Failure to do so, may result in a damaged camera or video server. Again, contact the camera manufacturer or ETS technical support if in doubt.

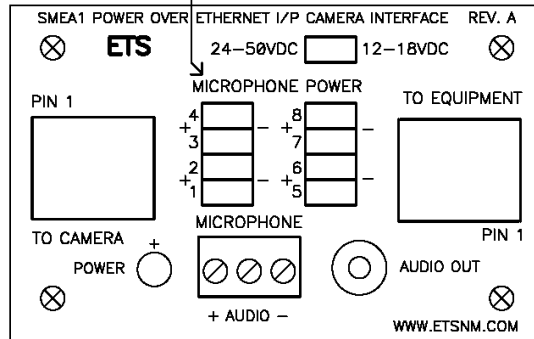
WARNING! USE EXTREME CAUTION IF YOU NEED TO CHANGE THESE JUMPER SETTINGS. BE SURE YOU KNOW EXACTLY WHAT YOU ARE DOING BEFORE ATTEMPTING TO MOVE JUMPERS TO PREVENT DAMAGE TO THE I/P CAMERA AND / OR SERVER. SEE TEXT IN INSTRUCTIONS ABOVE.

SOUND SURVEILLANCE SERIES MICROPHONE



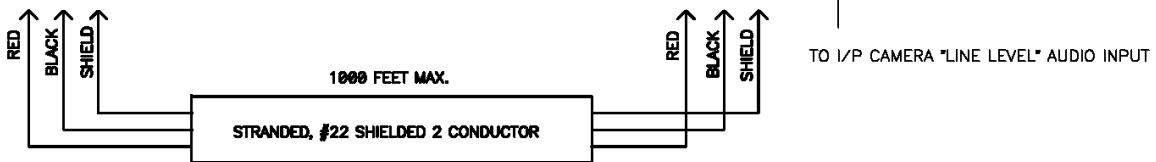
MICROPHONE GAIN CONTROL

CATS CABLE POWER TAPS I/P CAMERA VOLTAGE RANGE SELECT
SELECTING JUMPERS.



TO CAMERA

TO VIDEO SERVER



THE SMEA-1 IS COMPATIBLE WITH 4 PAIR 10BASE-T and 100BASE-TX SYSTEMS.
THE SMEA-1 IS SHIPPED WITH PINS 4 AND 5 WIRED FOR "+"
AND PINS 7 AND 8 WIRED FOR "-" (THE MOST COMMON STANDARD)

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.

Made in the USA
by
ETS Inc.