

The SMA1-LPEA-C5 is a single channel, two way audio Interface box designed to be used with ETS speaker / microphones and Power Over Ethernet I/P cameras. It contains a 2.5Watt speaker power amplifier to drive a 70v speaker and an ETS microphone interface. The SMA1-LPEA-C5 also features installer friendly termination of the cable runs and a standard RCA or 3.5mm audio output connectors. The SMA1-LPEA-C5 can be connected to a “microphone” or “line” level input, and “line level” output of a POE I/P camera.

**SMA1-LPEA-C5 location and power**

The SMA1-LPEA-C5 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 SMA1-LPEA-C5’s power indicator will illuminate.
2. The SMA1-LPEA-C5 will not work with standard I/P cameras.

**CAT5 Speaker / Microphone Cable Run**

Run a standard CAT5 cable to the ETS Speaker / microphone (up to 1000’ maximum) and make terminations on BOTH ends as follows on the RJ45 jack:

Pair 1	1	CALL SW
	2	CALL SW
Pair 2	3	SPEAKER (70V) +
	4	SPEAKER (70V) –
Pair 3	5	MICROPHONE +
	6	MICROPHONE –
Pair 4	7	+12V (MICROPHONE)
	8	COM (MICROPHONE)

**Adjusting the microphone “gain” and SMA1-LPEA-C5 “level” controls (audio output)**

If the SMA1-LPEA-C5 will be plugged into a “microphone level” input of an I/P camera, set the microphone gain slightly clockwise (or 1/8 of a full turn) from full counter-clockwise. Then use the “level control” on the SMA1-LPEA-C5 to set a volume that produces an acceptable audio level at the head end.

If the SMA1-LPEA-C5 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 SMA1-LPEA-C5 to produce the clearest audio level at the head end.

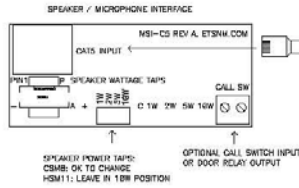
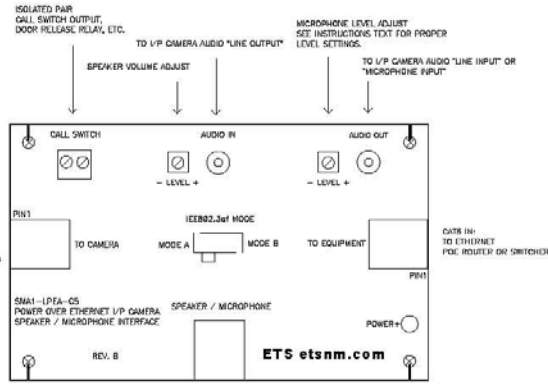
**Adjusting the speaker volume**

Adjust the audio input level for an acceptable volume level on the connected 70v speaker / microphone.

**SMA1-LPEA-C5 Mode switch:** The SMA1-LPEA-C5 supports Both Modes A and B of IEEE802.3af POE. The SMA1-LPEA-C5 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).

**IMPORTANT**  
INSTALL WIRES IN RJ45 PLUG IN THE FOLLOWING ORDER  
DO NOT WIRE AS A STANDARD ETHERNET CABLE!!!

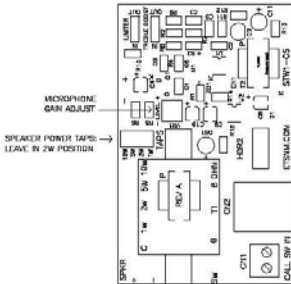
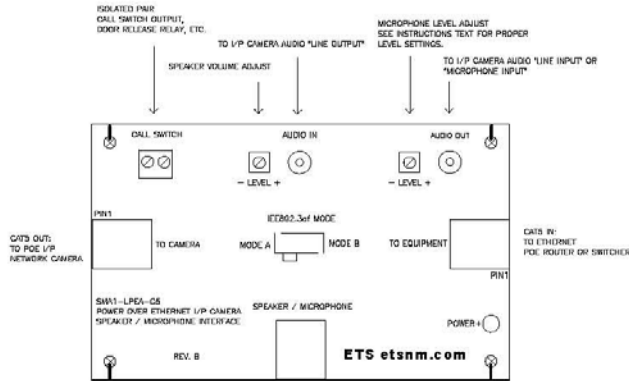
- PAIR 1 < 1 CALL SW
- PAIR 2 < 2 CALL SW
- PAIR 2 < 3 SPEAKER (70V) +
- PAIR 2 < 4 SPEAKER (70V) -
- PAIR 3 < 5 MICROPHONE +
- PAIR 3 < 6 MICROPHONE -
- PAIR 4 < 7 +12V (MICROPHONE)
- PAIR 4 < 8 COM (MICROPHONE)



CONNECTIONS TO MSI-C5 (CSM8 AND HSM11)

**IMPORTANT**  
INSTALL WIRES IN RJ45 PLUG IN THE FOLLOWING ORDER  
DO NOT WIRE AS A STANDARD ETHERNET CABLE!!!

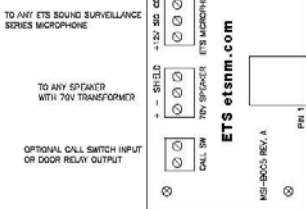
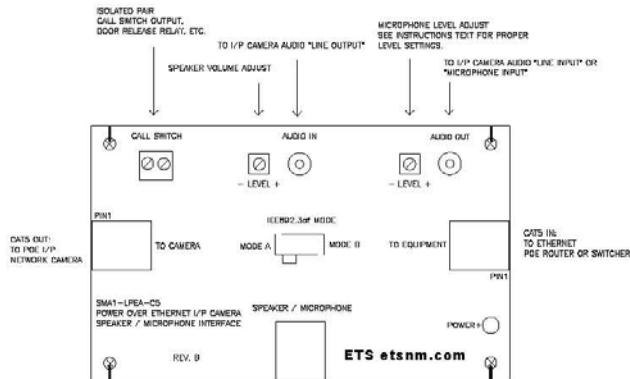
- PAIR 1 < 1 CALL SW
- PAIR 2 < 2 CALL SW
- PAIR 2 < 3 SPEAKER (70V) +
- PAIR 2 < 4 SPEAKER (70V) -
- PAIR 3 < 5 MICROPHONE +
- PAIR 3 < 6 MICROPHONE -
- PAIR 4 < 7 +12V (MICROPHONE)
- PAIR 4 < 8 COM (MICROPHONE)



CONNECTIONS TO STW1-XX-C5

**IMPORTANT**  
INSTALL WIRES IN RJ45 PLUG IN THE FOLLOWING ORDER  
DO NOT WIRE AS A STANDARD ETHERNET CABLE!!!

- PAIR 1 < 1 CALL SW
- PAIR 2 < 2 CALL SW
- PAIR 2 < 3 SPEAKER (70V) +
- PAIR 2 < 4 SPEAKER (70V) -
- PAIR 3 < 5 MICROPHONE +
- PAIR 3 < 6 MICROPHONE -
- PAIR 4 < 7 +12V (MICROPHONE)
- PAIR 4 < 8 COM (MICROPHONE)



CONNECTIONS TO MSI-BOC5 (SEPARATE MICROPHONE AND SPEAKER)

## **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.**