

The SMA1-LPEA is a single channel, two way audio Interface box designed to be used with ETS speaker / microphones (OR separated speakers and pre-amplified microphones) and Power Over Ethernet IP cameras. It contains a 2.5Watt speaker power amplifier to drive a 70v speaker and an ETS microphone interface. The SMA1-LPEA also features installer friendly termination of the cable runs and a standard RCA or 3.5mm audio output connectors. The SMA1-LPEA can be connected to a “microphone” or “line” level input, and “line level” output of a POE IP camera. **Note- this equipment is intended for use with camera or VMS software that has a PTT (push to talk) half duplex option for two way audio. If your software does not support this mode you may get acoustical howling feedback.**

SMA1-LPEA location and power

The SMA1-LPEA 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.

NOTE- The IP camera MUST be connected and operating before the SMA1-LPEA's power indicator will illuminate.

Microphone / Speaker Placement.

Locate the speaker and microphone near the area of interest in the space to be monitored. If a large area is to be monitored, locate the speaker and microphone in the middle of the space if possible. Avoid mounting the speaker and microphone near air conditioning vents, light fixtures or electrical equipment. The speaker and microphone should be placed as close to the subject(s) as possible. 5 to 10 feet is ideal. The speaker and microphone are useable at up to 25 feet in public address applications but is dependent on the level of background noise in the area. Experimentation in the environment will determine what distances work best.

Microphone and Speaker Cable Runs

Recommended cable is: 2 each 22 gauge, stranded, two conductor shielded cables (one for the microphone and the other for the speaker) between the SMA1 amplifier / interface and the speaker and microphone. Keep the cable run distances under 500 feet (70v speakers only) and away from AC power sources, light fixtures and electrical equipment. **If you are using an 8 Ohm speaker, 100 feet is the maximum suggested distance with #22 cable.** *Make connections as shown in the drawing below.*

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

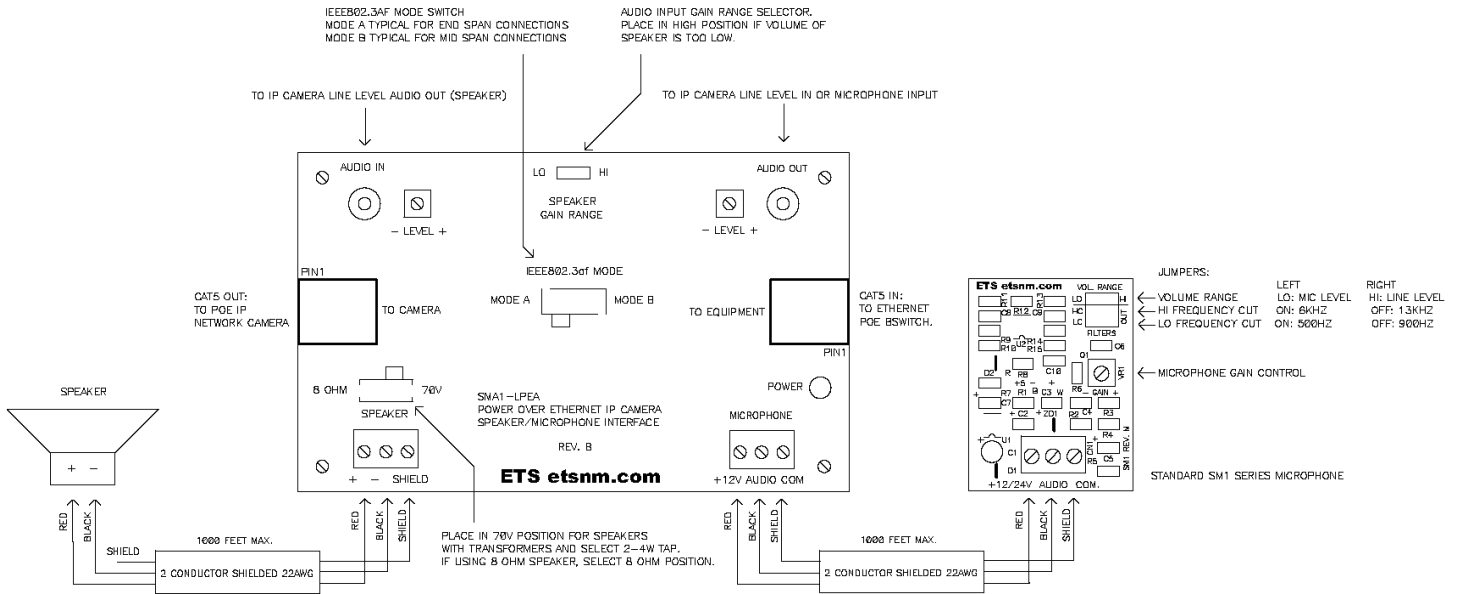
If the SMA1-LPEA will be plugged into a “microphone level” input of an IP camera, set the microphone gain slightly clockwise (or 1/4 of a full turn) from full counter-clockwise. Then use the “level control” on the SMA1-LPEA to set a volume that produces an acceptable audio level at the head end.

If the SMA1-LPEA will be used with a “line level” input, turn the gain control of the SMA1 to 3/4 full clockwise and adjust the level control on the SMA1-LPEA 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. If a decent amount of volume cannot be achieved, place speaker gain range switch in the “High” position.

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



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.