

The CAT5x4 interface was designed to send ETS microphone audio signals (or any line level signal) down existing or new CAT5 (Ethernet) cables. It is especially useful when a group of up to 4 microphones will be located far away from receiving equipment (DVRs, etc) and it is more cost effective to run 1 CAT5 cable rather than 4 separate cables for each microphone.

**SM1 Microphone Placements**

Locate the SM1 microphones as close as possible to the areas of interest in the spaces to be monitored. If large areas are to be monitored, locate the SM1s in the middle of the rooms. Do not mount the microphones 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 SM1s are still useable in the range of 15-25 feet but is dependent on the level of background noise in the areas. Experimentation in the environment will determine what distances work best.

**CAT5X4 location and power**

Locate One CAT5x4 at each end of the CAT5 cable run. If using ETS microphones, The CAT5x4 at the microphone end of the cable MUST have an AC adaptor plugged into it. The equipment side CAT5x4 does not need to be powered by an AC adaptor. If using the CAT5x4 RCA inputs and outputs to send other types of line level signals down the CAT5 cable, AC adaptors are not required on either CAT5x4 interface.

**Cable Runs**

Run 22 gauge, stranded, two conductor shielded cables between the CAT5x4 interface and the SM1 microphones and from the CAT5x4 interface to ETS base stations. Keep the microphone and CAT5 main cable run lengths under 1,000 feet and away from AC power sources, light fixtures and electrical equipment. *See Figure 1 for connection diagram.*

*Note- do not wire the CAT5 connectors as standard Ethernet cables. Follow the wiring order shown in the connection diagram on the following page.*

**Caution**

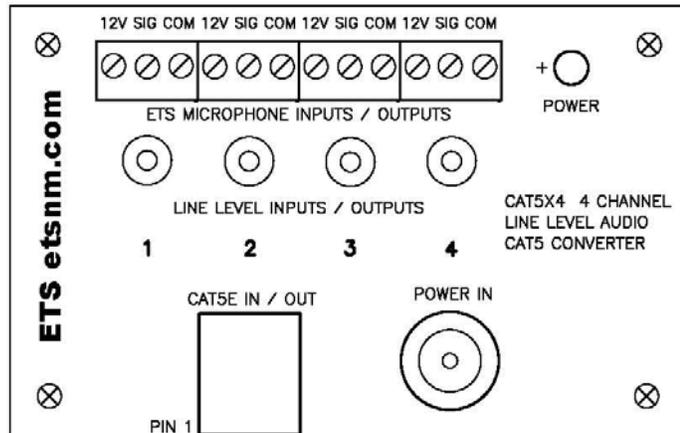
It may be against the law to install this microphone kit in certain environments. It may also be against the law to record conversations of the person(s) being monitored without their knowledge. It is the responsibility of the installation company and end-user to determine if the application of this 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.

TO ETS BASE STATION MICROPHONE INPUTS. 12V CONNECTIONS NOT REQUIRED. USE 22AWG SHIELDED 2 CONDUCTOR OR COAX (RG158 OR EQUIVALENT).

TO DVR OR OTHER EQUIPMENT. LINE LEVEL INPUTS



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

- PAIR 1 < 1 MICROPHONE 1+ (BROWN)
- 2 MICROPHONE 1- (WHITE/BROWN)
- PAIR 2 < 3 MICROPHONE 2+ (GREEN)
- 4 MICROPHONE 2- (WHITE/GREEN)
- PAIR 3 < 5 MICROPHONE 3+ (BLUE)
- 6 MICROPHONE 3- (WHITE/BLUE)
- PAIR 4 < 7 MICROPHONE 4+ (ORANGE)
- 8 MICROPHONE 4- (WHITE/ORANGE)

AC ADAPTOR NOT REQUIRED ON EQUIPMENT SIDE!

CAT5E CABLE 1000' MAXIMUM

AC ADAPTOR REQUIRED ON MICROPHONE SIDE ONLY!

SOUND SURVEILLANCE SERIES MICROPHONE

