# **ETSInc.** PM1-LL Series Microphone Instructions

The ETS PM1-LL series microphones are designed as a higher performance and lower cost substitute for the Crown PZM-11 phantom powered microphone.

# **Microphone Placement**

Locate the PM1-LL Microphone near the area of interest in the room to be monitored. If the entire room is to be monitored, locate the PM1-LL in the middle of the room. Do not mount the microphone near air conditioning vents, light fixtures or electrical equipment. The PM1-LL should be placed as close as possible to the subject(s) to be monitored. The PM1-LL is still useable at distances of up to 25 feet but is dependent on the quality of the camera / encoder and the level of background noise in the area. Experimentation in the environment will determine what distances work best.

# Cable Run

Run a 22 gauge, stranded, two conductor shielded cable between the PM1-LL microphone and the monitoring device. Keep the cable run distance under 1000 feet in Line Level mode and under 500 feet in Mic Level Mode. Keep the cable run and away from AC power sources, light fixtures and electrical equipment.

# Adjusting the Lo-Cut and Hi-cut filters

The PM1-LL high and low frequency response can be trimmed to reduce background noise. If you are primarily interested in capturing conversations and want to reduce air conditioning and other noises, rotate both controls (hi-cut and lo-cut) to 3⁄4 full clockwise. The low cut filter has more on an effect on reducing background noise. Some experimentation may be required to achieve the best results for a given environment.

# Adjusting the PM1-LL Gain

The PM1-LL is shipped with the Volume set at midrange. If the sound at the "head end" is distorted, rotate the control counter-clockwise If the volume at the "head end" is too low, rotate the control clockwise.

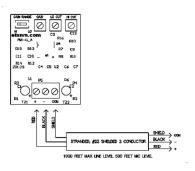


Figure 1. Cable connections

# 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.

