

The PMI-4 is a 4 channel professional microphone DVR, IP camera or recorder, pre-amplifier and interface designed for use in acoustically difficult and sound quality critical environments such as interrogation and court rooms. The PMI-4 is designed to be used with balanced output, microphone level phantom powered or dynamic microphones.

Microphone Placements

Locate the microphones as close as possible to the area of interest in the space to be monitored. Do not mount the microphones near air conditioning vents, light fixtures or electrical equipment. Most microphones operate optimally 3-5 feet away from the subject(s) to be monitored. Microphones are still useable in the range of 15-25 feet but it is dependent on the level of background noise in the area. Experimentation in the environment will determine what distances work best.

PMI-4 location and power

The PMI-4 interface box is designed to be placed near the DVR, I/P camera, PC or recorder. Once all settings are made, the interface can be located out of view. All controls are recessed to reduce the possibility of accidental “bumping” of settings. The PMI-4 requires a 120VAC power source within 3 feet of its location. If this is not possible in your application, you can splice in up to 100 feet of 18 awg, 2 conductor cable to extend the distance between the AC power source and the PMI-4.

Microphone Cable Runs

Run professional grade microphone type cables (preferred) or a 22 gauge, stranded, two conductor shielded cables between the PMI-4 module and the microphones. Keep the cable run distances at or under 500 feet and away from AC power sources, light fixtures and electrical equipment.

Microphone inputs

Connect the microphones per the wiring diagram in figure 1.

Phantom power Switches

If you are using phantom powered microphones such as the ETS PCCM-1 or PM1 series microphones, turn the phantom power switches on and select the appropriate phantom power switch Voltage (12v or 48v) with the other switches. If you are using dynamic microphones, turn the phantom power switches off.

Microphone preamp gain

If you are using Phantom powered microphones, set these controls typically at $\frac{1}{4}$ turn from full counter-clockwise. If you are using dynamic microphones, set these controls to $\frac{3}{4}$ from full counter-clockwise.

Setting the PMI-4 Tone Controls (EQ)

Setting an equalizer for the desired overall sound is a subjective topic. We recommend using headphones to evaluate the sound quality. Start with setting all controls to the mid-point (flat= no gain or cut). We suggest you do this when the desired sound source is present (people taking, being interviewed, etc.) Adjust each control clockwise and counter clockwise to get a feel for how each band affects the overall sound. Keep in mind that the human voice resides predominately in the mid range. A typical setting for voice capture applications would be to place Bass in full counter-clockwise, Middle at $\frac{3}{4}$ full clockwise and Treble at $\frac{1}{2}$ clockwise.

Audio outputs

The PMI-4 features a “line level” audio outputs. they can be connected to any microphone or line level input of another device

Level outputs

Adjust these controls for minimal distortion and sufficient amplitude on your end device. A good starting point is to set the controls half-way on. If you need to run the audio outputs into a microphone level inputs of another device, you should set this control to $\frac{1}{8}$ of a turn from full counter-clockwise and adjust the microphone gain control to bring the signal to a low enough level to prevent distortion.

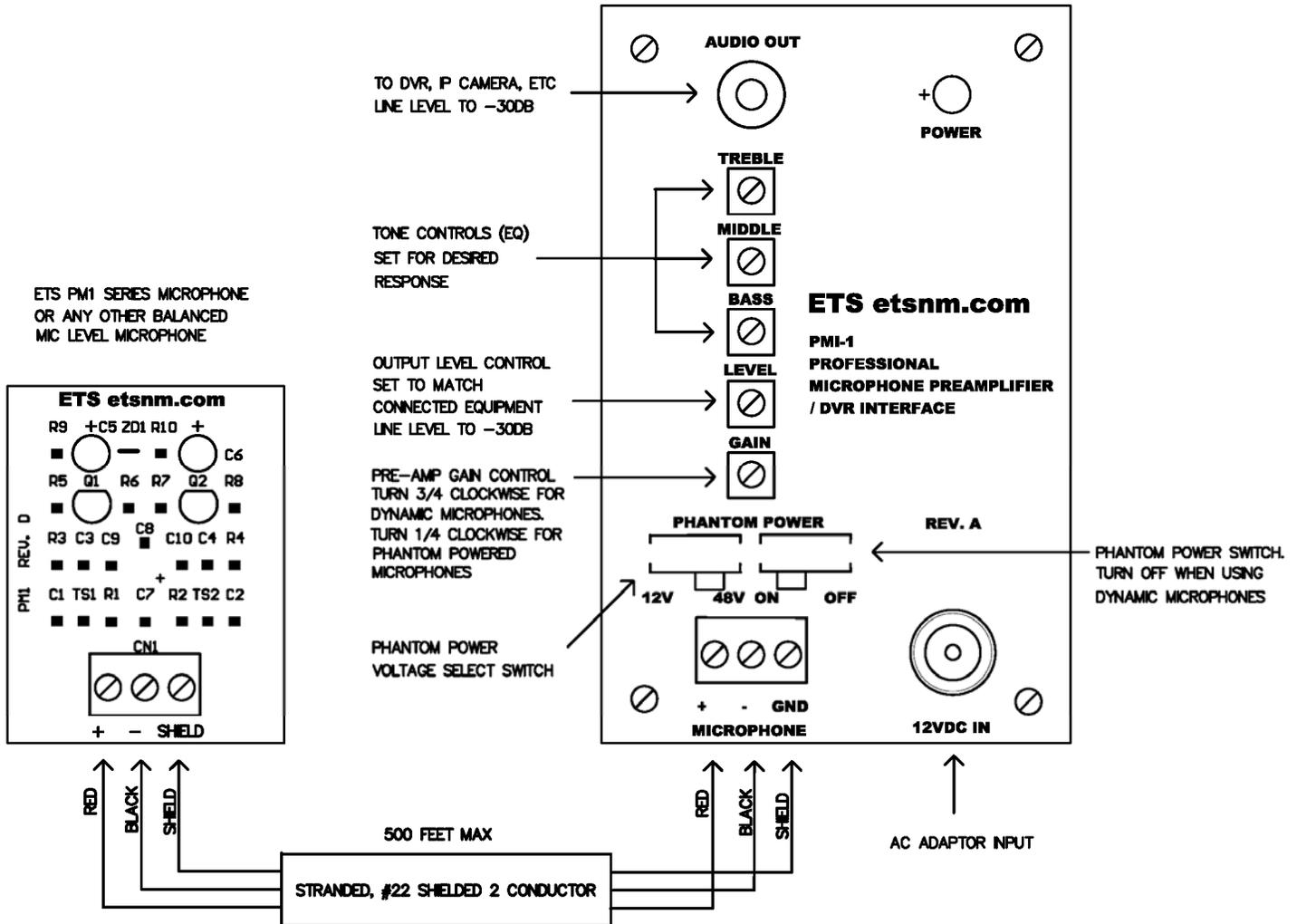


Figure 1.

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.