

# **HPM1-LL Microphone Instructions**

The HPM1-LL ia a High performance, Omni-directional, pre-amplified piezo-electric hydrophone for acoustic pickup in liquids up to 150' maximum depth. –10C to 85C operating temperature range. Can be hung by its cord or mounted in a 7/8" hole

### **HPM1-LL Microphone Mounting**

The HPM1-LL Can be hung by its cord or mounted in a 7/8" hole. The hydrophone comes with a sealing O-ring and locknut. Do not mount the hydrophone on a surface that will pick up unwanted vibrations such as outboard motors, ROV motors etc.

#### Cable Run

The HPM1-LL can be up t000 feet away from the receiving device, recorder, etc. Custom cable lengths of water proof cable can be ordered for the Hydrophone. When ordering specify HPM1-LL-XXFT where XX = length of cable in feet. You can also splice to the cable above the water line using any quality shielded #22 gauge 2 conductor shielded cable. See *Figure 1 for connection diagram*.

#### Wire Connections

Inside the cable are three conductors. The red wire is 12-24vdc, the black wire is the audio signal and the shield is the common for both. These connections are directly compatible with ETS interface equipment. The figure below shows the connections made to an ETS brand SMEA-1 IP camera interface.

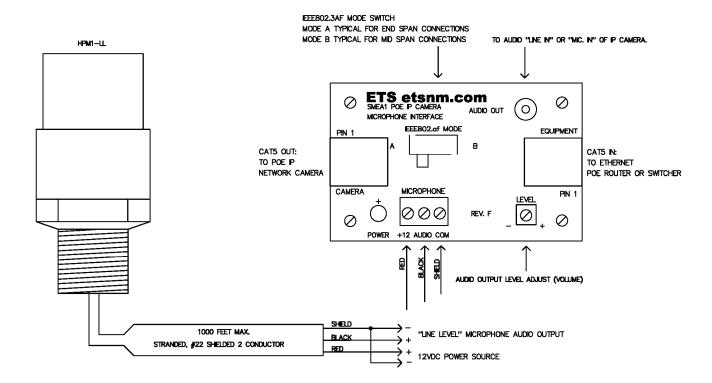


Figure 1.

#### 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.

