

# PZ-2LA

## Pressure Zone room monitoring Microphone with line level output and AC power adapter.

### DESCRIPTION

The Omnicron PZ-2LA Pressure Zone Microphone® is designed for meeting and conference recording. So that it does not draw attention, it looks like a switch, not a microphone. It has its own power supply and can be used with recorders which do not provide power for external microphones.

Like other Pressure Zone Microphones, the PZ-2LA uses a miniature mic capsule mounted near a sound reflecting plate. In this zone, direct sound from the source combines in phase at all frequencies with reflected sound. The benefits are many: 6 dB more sensitivity, 6 dB less noise, a wide smooth frequency response free of phase interference, excellent clarity, and consistent pickup anywhere around the microphone.

A built-in amplifier provides a high level output. Power for the amplifier is provided by an AC power adapter which is supplied with the PZ-2LA microphone. The high level output permits longer cable runs than possible with a standard microphone.

### INSTALLATION

The PZ-2LA comes pre-wired for use with recorders that have a 3.5mm "AUX" (auxiliary) input jack. It is supplied with a 6' cable that plugs into a supplied junction box.

The junction box has an AC adapter which plugs into 120VAC to power the unit, and a 6' cable to connect audio output from the microphone to your recorder. Follow the directions supplied with your recorder for recording with the PZ-2LA microphone.

If the microphone is located more than 12' from your recorder, standard RJ-11 telephone extension cables can be used. One twenty five foot (25') extension cable is supplied with each PZ-2LA microphone.



### CUSTOM INSTALLATION

After removing the plastic housing, the microphone can be installed in a ceiling or wall using a standard electrical outlet box.

Internal connections to the PZ-2LA electronics are as follows:

1. Power from the 12VDC AC power adapter connects to INPUT terminals #1 & #2.
2. Audio output connections are made at OUTPUT terminals #2 and #3.
3. If the audio output is connected to equipment that has a balanced input circuit with a separate ground connection, the ground connects to OUTPUT terminal #1.

### NOTES

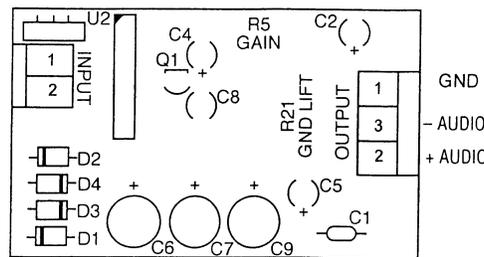
The PZ-2LA can also be powered by an external AC or DC source between 8 and 24 volts. Connect it to the electronics circuit board at INPUT screw terminals #1 and #2. A balanced audio output is available at OUTPUT screw terminals #2 and #3. The recommended minimum load impedance is 1000 ohms.

If the microphone is mounted to a grounded enclosure, ground loops could occur that would cause hum. If hum is present when the PZ-2LA housing is connected to ground, remove the resistor labeled GND LIFT on the printed circuit board (see schematic below).

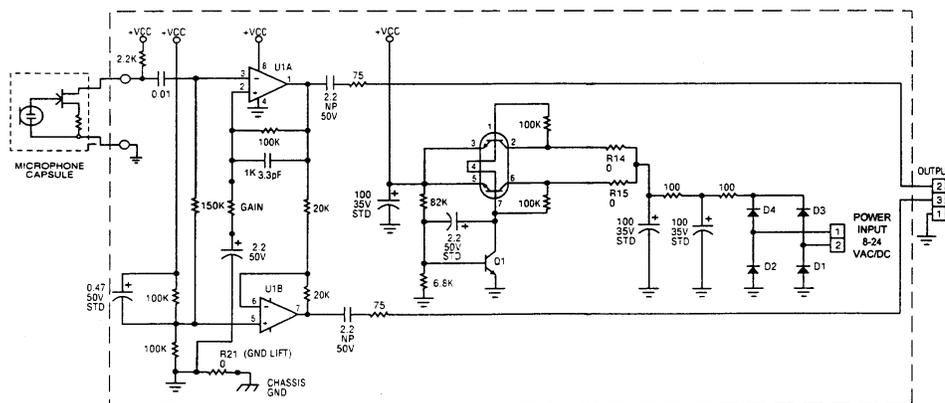
The microphone is factory set to handle sound levels up to 110 dB without excessive distortion. If the sound at the mic will exceed 110 dB, increase the value of the plug-in resistor (labeled Gain) for more headroom. To increase the gain, replacing the 1K ohm resistor with a 390 ohm resistor will provide 12 dB more gain with a corresponding decrease in headroom.

### MICROPHONE SPECIFICATIONS

**Element:** Pressure Zone Electret Condenser • **Frequency Response:** 80-20,000 Hz • **S/N Ratio:** 68 dB • **Polar Pattern:** Hemispherical • **Impedance:** 75 ohms • **Output Level:** 1.4 V/Pa (+3 dB re 1 V/Pa) • **Maximum SPL:** 100 dB 3% THD • **Equivalent Noise Level:** Less than 26 dB, A weighted • **Power:** supplied by an external 120VAC to 12VDC adapter, or 8-24 VAC/DC, 4 ma • **Dimensions:** 2" x 3" x 4 3/4" • **Net Weight:** 6 oz without cable • **Color:** Microphone and Cable are Ivory • **Warranty:** Limited 1 year parts & labor.



PZ-2LA Circuit board layout (top)



PZ-2LA Schematic diagram

### SERVICE

If the unit fails to work, recheck all your connections as described in the Installation Section. Assistance is also available from your place of purchase or from Omnicron. If service is required, return it to Omnicron at the address shown below. Please refer to the warranty statement for warranty details.

*PZM® and Pressure Zone Microphone® are registered trademarks of Crown International, Inc. The PZM® microphone used in the PZ-2LA is manufactured by Crown International, Inc.*

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