

# Instruction Sheet

## Series IV Sound Level Microphone (Part No. 720A5101)

### Introduction

The Series IV Sound Level Microphone can perform unattended monitoring of noise, such as building activities, construction, traffic, and mining operations. It is now possible to combine noise and vibration monitoring on the same unit, making the Minimate Pro4™ or Minimate Pro6™ a cost effective and flexible monitor for these applications. The microphone ships with a microphone stand and windscreen.

The Instantel Sound Level Microphone meets the requirements for IEC Class 1, which includes A and C weighted specifications. It has a measuring range from 30 to 140 dB with a fast or slow response. It is also capable of recording the unfiltered response in one of two ranges, +/- 25 Pa or +/- 100 Pa. The record mode can be set to Manual trigger, Waveform (records up to 9000 seconds once a preset trigger level has been exceeded), Histogram (with intervals from 2 seconds to 1 hour) or Histogram-Combo (Compliance mode only, this combines histogram and waveform monitoring at the same time).

In the Blastware® Advanced Mode setup, it can also trigger and record unfiltered sound clips up to 90 seconds long. The resulting data file can then be played back in the Blastware Advanced Mode to help determine the source, or it can be further processed, including third octave frequency analysis.

The microphone connects directly to the overpressure channel of the Minimate Pro4 or Minimate Pro6. For additional flexibility, the Minimate Pro6 is capable of monitoring two Sound Level Microphones at the same time using the Blastware Advanced mode. These microphones can be connected directly to the unit or using an extension cable up to 75 meters (250 feet) long.

### Package Contents

This kit contains one Instantel Microphone (Part No. 720A5101), microphone stand, microphone windscreen and this instruction sheet.

### Tools and Materials Required

- Instantel® Series IV, Minimate Pro4 or Minimate Pro6 monitor
- Instantel Sound Level Microphone (Part No. 720A5101)
- Optional Adapters, Splitters, or Extension Cables as required
- Instantel® Blastware® Compliance or Advanced Module Software

### Physical Installation

1. Locate the Instantel Microphone in the desired location.
2. Point the Microphone in the direction of the sound or noise source.
3. Connect the Microphone cable to the monitor as shown in Figure 1.
4. Start recording.
5. The sound level data will appear on channel 1 or 4 depending on which connector you use.

**NOTE:** The sensor check function only works in Compliance Mode.



Sound Level Microphone

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### Monitor Setup:

Refer to the table below to determine which range and setup mode best suits the application.

### Specifications and Software Mode Table:

Specifications	Compliance Mode	Advanced Mode (Optional)
Weighting	A-Weight and C-Weight	Unfiltered
Frequency Range	Up to 20 kHz	Up to 20 kHz
Response	Fast 125 ms, Slow 1 s	N/A
Sensitivity	N/A	0.0038 V/Pa (Normal), 0.12 V/Pa (Sensitive)
Resolution	0.05 dB (display limit 0.1dB)	0.03 Pa (Normal), 0.89 mPa (Sensitive)
Range	Automatic	+/- 100 Pa (Normal), +/- 25 Pa (Sensitive)
Trigger Levels	33 dB - 140 dB	0.448 - 100 Pa (Normal), 0.04 Pa - 25 Pa (Sensitive)
Temperature Range	-10° to 50°C (14° to 122°F)	-10° to 50°C (14° to 122°F)
Sample Rate	1024 sps Recommended	64 Ksps Recommended
Cable Length	6 ft. (2 m)	6 ft. (2 m)
Maximum Amplitude	160 dB	160 dB

### Compliance Mode Setup

1. Start the Blastware Compliance Module Software.
2. Select the *Unit Menu, Setup*, and then the *Compliance Setup* option, or select the *Compliance Setup* icon from the toolbar.
3. Select Sound Level Microphone *A-Weight* or *C-Weight*.
4. Set the desired *Trigger Level*.
5. Select the appropriate *Response: Fast (125 ms)* or *Slow (1 s)*.
6. When complete, transfer the compliance settings to the monitor by selecting the *Send to Unit* button at the bottom of the dialog window.

### Advanced Mode Setup (Optional Blastware® Module)

1. Start the Blastware Advanced Module Software.
2. Select the *Unit Menu, Setup*, and then the *Advanced Setup* option, or select the *Advanced Setup* icon from the toolbar.
3. For Channel 1 or 4, select the range you want to monitor in, *Sensitive* or *Normal*.
4. Set the desired *Trigger Level*.
5. When complete, transfer the advanced settings to the monitor by selecting the *Send to Unit* button at the bottom of the dialog window.

**NOTE:** The sensitivity will automatically be filled in.

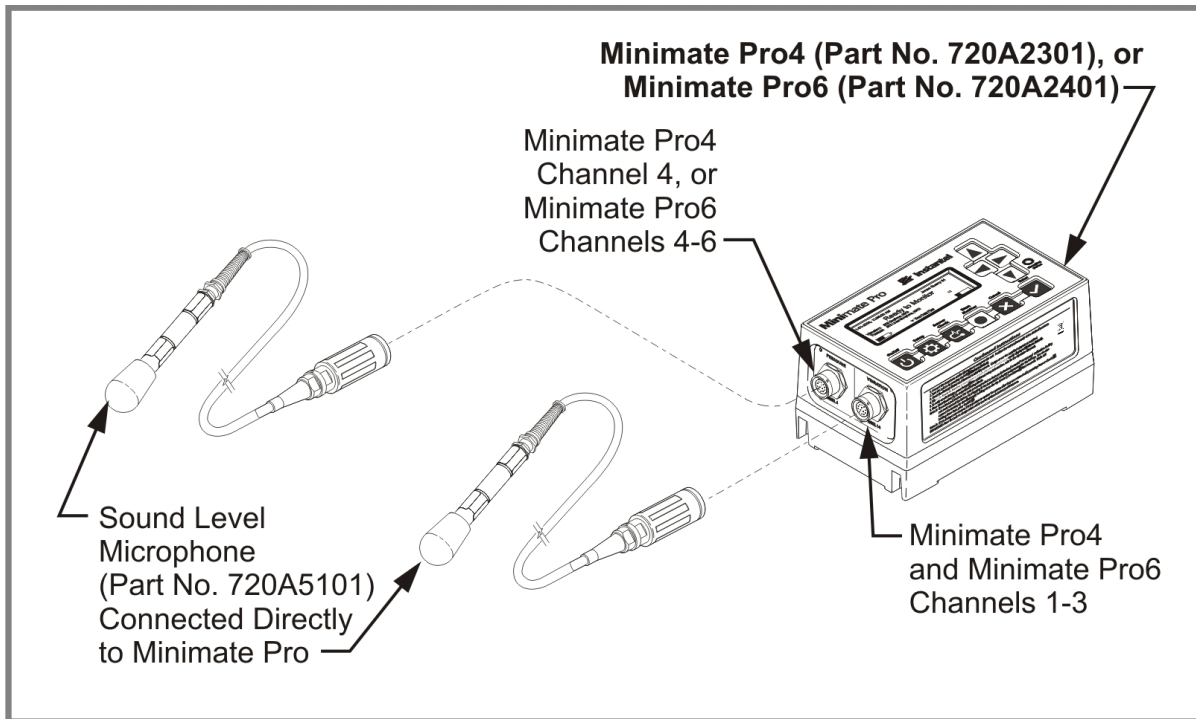


Figure 1

## Warranty

All InstanTEL®, a division of Xmark, products come with a one-year warranty. Series III monitors (Blastmate III™, Minimate Blaster™, and Minimate Plus™), Series IV monitors (Minimate Pro4™ and Minimate Pro6™) and sensors will have the warranty extended for a second year if they are returned to the InstanTEL factory for service and calibration within 30 days of the 'Next Calibration' date printed on the calibration label located on the product.

If within a period of one year from the date of shipment to a customer the instrument fails to perform in accordance with InstanTEL's published specifications and the operator's manual, due to a defect in materials or workmanship, it will be repaired or replaced at InstanTEL's option, free of charge. This warranty is void if the equipment has been dismantled, altered or abused in any way. This warranty is nontransferable.

The above warranty does not include any implied warranty of functionality for a particular purpose. InstanTEL assumes no responsibility for damages of any description resulting from the operation or use of its products. Since it is impossible to anticipate all of the conditions under which its products will be used either by themselves or in conjunction with other products, InstanTEL cannot accept responsibility for the results unless it has entered into a contract for services which clearly define such an extension of responsibility and liability. Any shipments returned directly to InstanTEL must have our prior approval and all packages must display the Return of Material Authorization (RMA) Number issued by InstanTEL. Shipping charges to InstanTEL's plant will be paid by the customer and those for return to the customer will be paid by InstanTEL.

To protect your warranty, you must complete and return a Warranty Registration Certificate, or complete the online Warranty Registration Form, within ten days of purchase. Units will be assumed out of warranty if there is no warranty card on file at InstanTEL. Retain this portion and the proof of purchase for your records.

## EC Warning

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.



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980-720005-000 Rev 04 - Product Specifications are Subject to Change

The World's Most Trusted Vibration Monitors