

Specification Sheet

Micromate Plus™ Sound Level Microphone

The Sound Level Microphone for the Micromate Plus monitoring unit, automates sound/noise monitoring from building activities, construction, traffic, and mining operations. It can simultaneously record with a geophone and air overpressure microphone on the Micromate Plus, making it a cost effective and flexible device for these applications. The Sound Level Microphone is not tied to a specific base unit, and can easily be switched out when calibration is required to avoid unit downtime. This two channel microphone also records audio clips that help identify the source of the the sound/noise.

Range of Applications

- Construction
- Dynamic Compaction
- Sound/Noise
- Blasting
- Civil Projects
- Remote Access
- Demolitions
- Underground Mines
- Environmental
- Pile Driving
- Oil & Gas
- Heavy Transportation
- Quarries
- Tunnels & Subways

Measuring Capabilities

- IEC 61672 Class 1, including A and C weighted specifications.
- Measuring range from 30 dB to 140 dB with a Fast or Slow response.
- Measures in decibels and audio clips
- Choose between four record modes:
 - Manual trigger: continuous, indefinite recording packaged into files of 60 seconds
 - Waveform: 2 to 90 seconds, plus up to a maximum of 10 seconds pre-trigger
 - Histogram: 2 seconds to 3600 seconds (1 hour) at 1-second intervals
 - Histogram-Combo: records both Histogram and Waveform simultaneously



Specifications

Response Standard	IEC 61672 Class 1
Frequency Weighting	A-Weight or C-Weight
Response	Fast (125 ms) or Slow (1 s)
Frequency Range	Up to 20 kHz
Amplitude Range	30 dB to 140 dB max 160 dB
Trigger Levels	33 dB to 140 dB
Sample Rate - Measurement	50 kS/s
Sample Rate - Audio Channel	8192 S/s
Audio Format	.mp3
Resolution	0.05 dB (display limit 0.1dB)
Temperature Range	-20 ° to 55 °C (-4 ° to 131 °F)
Humidity	Up to 95% RH, non-condensing

Product Information

Length	19.6 cm (7.7 in)
Diameter (End)	2.3 cm (0.9 in)
Weight	351.1 g (0.8 lb)
Cable Length	2 m (6.6 ft)
Cable Length Extensions	10 m (32.8 ft), 30 m (98.4 ft), 75 m (246.1 ft)
Maximum Cable Length	77 m (252.6 ft)
Type	Indoor/Outdoor
Connector Pins	6
Connector End	Green
Calibration	Annual
Supports Field Calibration	
Supports Remote Sensor Check	

Warranty

InstanTel products come with a limited one-year warranty against defects in materials or workmanship unless otherwise stated. The warranty begins on the date of shipment from the InstanTel factory to the customer and is subject to certain exclusions and conditions as stated below. Monitoring units 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 under normal use and operating conditions, it will be repaired or replaced at the sole discretion of InstanTel free of charge. Components subject to fair wear and tear in regular use, as solely determined by InstanTel, are excluded from this coverage. This warranty will not apply if the damage or malfunction occurs due to (i) adjustments, additions, alternations, abuse, misuse or tampering of the instrument; (ii) instrument operation or use contrary to the operating instructions; (iii) power fluctuations; or (iv) any other cause not within the cause or control of InstanTel. If inspection by InstanTel fails to disclose any defect covered by this limited equipment warranty, the instrument will be repaired or replaced at customer's expense and InstanTel's regular service charges will apply. This warranty is non-transferable.

Any shipments returned directly to InstanTel must have prior approval, and all packages must display the Return of Material Authorization (RMA) number issued by InstanTel. Shipping charges to InstanTel's factory will be paid by the customer and return shipment 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. Products will be assumed out of warranty if no warranty card is on file at InstanTel. Retain this warranty statement and the proof of purchase for your records.

Except for the foregoing limited equipment warranty, InstanTel makes no other warranties and hereby disclaims and excludes all other warranties, whether statutory, express or implied, whether arising under law or equity or custom or usage, including any implied warranty of merchantability, fitness for a particular purpose, non-infringement, satisfactory quality, or quiet enjoyment, and any warranty that the product supplied may not be compromised, or that the product will in all cases provide the function for which it is intended.

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.