

Configure
Your System
for Defensible
Data



Compliance Standard

Chart Title *

Custom Chart

Chart Type *

Logarithmic

X-Start (Hz) *

2

X-End (Hz) *

250

Y-Start (mm/s) *

0.1

Y-End (mm/s) *

100

Limits ☐ Add limit names to Title

Name *

Building A

Line 1 2 10 4 19.05

Line Type *

Solid

×

Line 2 4 19.05 15 19.05

Line Type *

Solid

×

Line 3 15 19.05 40 50.8

Line Type *

Solid

×

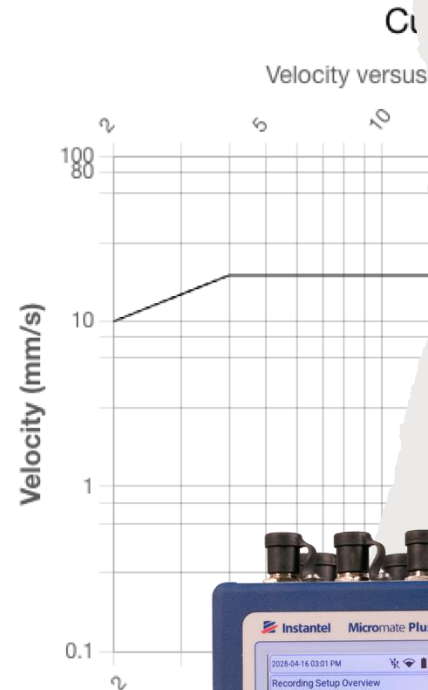
Line 4 40 50.8 250 50.8

Line Type *

Solid

×

+ ADD



Configuration Matters

- Configure correctly to capture meaningful measurements
- Avoid false alarms and missed events by using the right settings
- Strengthen compliance and credibility through proper configuration

Prevent most “bad data” problems at the start.

- Pre-configured industry-standard settings for regulatory compliance
- Customizable compliance graphs in Vision //
- Automatic synchronization of compliance settings to monitoring devices

Define Monitoring Objectives

- Identify the activity being monitored, such as blasting, pile driving, or demolition
- Determine what needs protection, including structures, utilities, and people
- Select the applicable standards and limits, such as ISEE, DIN, or project-specific requirements

Match configuration to your monitoring objectives.

- Monitor pile driving and other continuous vibration sources in real time using Live Data.
- Select from built-in compliance standards, including ISEE and DIN



General 2 Location 3 Users

ng B

End Date (optional)
yyyy-mm-dd

Compliance Report Method *

- Zero Crossing Frequency
- Fast Fourier Transform (FFT)
- ZC-PPV with FFT-Dominant Frequency

Pressure Units

Pa

Sound Level Microphone

Linear Microphone

Consider Report Parameters

- Select the vibration parameters to report, including PPV, frequency, and air overpressure
- Appropriate sampling rate for data
- Frequency range aligned with standards and structure type

Avoid “one-size-fits-all” settings – over-filtering or under sampling = lost information.

- Select from Zero Crossing (ZC) Frequency, Fast Fourier Transform (FFT), or ZC-PPV with FFT for compliance graph plotting
- Sample rates of up to 4,096 s/s





Consider Triggers and Thresholds

- Set trigger levels appropriately to avoid excessive events
Triggers set too low → excessive events
- Avoid missed critical events by ensuring trigger levels are not set too high
- Establish alarm levels based on the monitoring distance and activity being measured

Start with conservative trigger and alarm settings, then refine them using real monitoring data.

- Configure pre-trigger recording from 0.25 up to 1 second increments, and then 1 to 10 second increments
- **Set alarms and warnings based on the compliance curve** (can also be fixed values defined in the project settings or device settings)



Date & Time



Automatic Date and Time ☒

2026-02-11

02:23 PM

Select Time Zone

(UTC-05:00)America/New York

24-hour Format ☐

Daylight Savings ☒

Sensor
Check



Setup



Start
Monitor



Cancel



Consider Time and Synchronization

- Confirm date, time, and time zone
- Account for daylight saving time during long-term monitoring

Incorrect timestamps can compromise report validity and data comparisons.

- Automatic date, time, and daylight saving time configuration
- Synchronized timestamps on events and reports



Instantel Micromate Plus

11:13 AM Sensor Check

Failed 2026-02-11 11:11:47 AM

Geophone	Tran	Vert	Long
Frequency	7	0	7
Angle	0	-89	0
Result	Pass	Fail (2)	Pass
Microphones	Sound Level	Linear	
Result	N/C	Pass	

Start Sensor Check

Consider Sensor Orientation and Channels

- Confirm sensor orientation and channel mapping
- Use sensor checks to confirm operation, not calibration
- Utilize only calibrated sensors for compliant, defensible data

Misaligned or mislabeled axes can lead to incorrect data interpretation. Always verify sensor orientation using the geophone arrow.

- Built-in sensor check validates sensor health and levelling before monitoring begins
- Only the sensors require calibration and can be interchanged between units to keep monitoring operations running
- Access a worldwide network of calibration facilities



HIDE AUDIO PLAYER

POST EVENT NOTES

Device Info

Model	Micromate Plus ISEE
Firmware Version	1.2.10
Unit Serial Number	WU10014D20260115T
Geophone Serial Number	WG0002
Linear Microphone Serial Number	WL1006
Sound Level Microphone Serial Number	WS1006
Geophone Calibration	June 30, 2025
Linear Microphone Calibration	October 20, 202
Sound Level Microphone Calibration	October 20, 202
Event File Name	WU10014D20260115T



Consider the Environment

- Identify and account for noise from nearby traffic or machinery
- Measure background vibration levels from site equipment, such as generators

Adjustments may be required after the first monitoring period.

- Automatically records both sound level (dB) and audio clips to help identify noise sources
- Set trigger levels above the ambient noise floor
- Microphone wind screens and stands available for environmental protection
- Geophone spikes and wall mounts for secure installation, with optional epoxy waterproofing (geophones can also be buried/ sandbagged)

Consider an Early Review

- Review initial data and refine trigger settings as needed
- Verify event relevance and signal clarity
- Confirm monitoring objectives are being met

Do not set and forget – review early to optimize results.

- Live Data enables real-time monitoring of events
- Automated warnings and alerts support rapid response
- Stakeholders notified immediately when thresholds are exceeded



Ensuring data defensibility requires a continuous commitment to excellence, sustained by an infrastructure of verified and reliable data products.

