

# OBSI Software

## Measurement of Tire/Pavement Noise Using the On-Board Sound Intensity (OBSI) Method

The *Soft dB OBSI* Software is the first turn-key solution for the measurement of On-Board Sound Intensity (OBSI) Method (AASHTO Designation: TP 76-10). This software is used both for real-time acquisition and processing, and post-processing of recorded files.

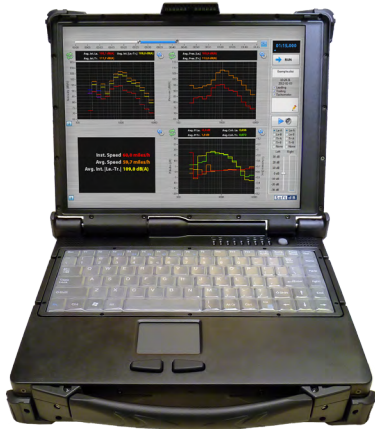
### Features:

- Versatile Customizable Interface:  
Time History, 1/3 Octave Spectrum, FFT Spectrum, Numerical Display.
- Extensive Data Processing:  
Intensity, Pressure, PI Index, Coherence, Vehicle Speed, Travel Distance.
- 1 or 2 Sound-Intensity Probe Configurations (Leading and/or Trailing Edge Probe)
- Tachometer Input
- Real-Time and Post-Processing Audio Feedback

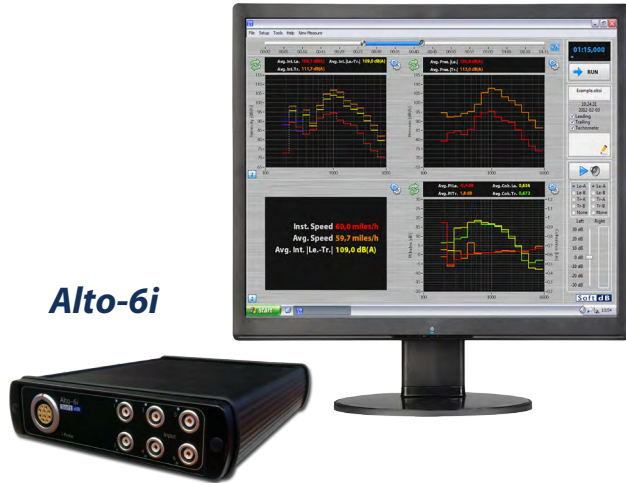
**Efficient, versatile, and easy to use, with the OBSI software you're in the fast lane!**



## Conductor



## Alto-6i



### Inputs and Signal Processing

Compatible Hardware	Conductor, Alto-6 and Alto-Lite
Standards	AASHTO TP 76-10 , ANSI S1.9 and IEC 61043
Intensity probes	Leading edge and/or Trailing edge
Tachometer	YES (not required)
Data	Intensity, Pressure, PI Index, Coherence – Vehicle Speed, Vehicle Displacement
Spectra	1/3 Octave (ANSI S1.11 – IEC 1260) and FFT (Hanning window, 66% overlap)
Freq. Weight	A and Z (IEC 61672)
Phase Match	Can be enhanced using a PI residual calibrator (embedded function using GRAS 51AB)
PI Residual	Class 1 for processor (IEC 1043)
Freq. Range	400Hz to 5kHz (AASHTO TP 76-10) – Can be extended down to 200Hz
Data Interval	1/8 s
Environment	Measurements are normalized to ambient air density
Calibration	Pressure amplitude, Phase match
Text Annotation	Text annotations can be added to each file for documentation
Audio Playback	Real-Time or post-recording, Gain -30 to +30dB, signal selection from leading or trailing edge probe
Display	2 to 4 Display Area (Time History, 1/3 octave spectrum, FFT spectrum, Numerical display)
Export	Excel compatible *.txt file

**Standard Reference Test Tire** (ASTM F2493) can be purchased from **Michelin** [www.michelin.com](http://www.michelin.com)

**OBSI wheel fixture** can be purchased from **Illingworth & Rodkin, Inc.** [www.illingworthrodkin.com](http://www.illingworthrodkin.com)