

AVEC, Inc.

Acoustical and Vibrations Engineering Consultants



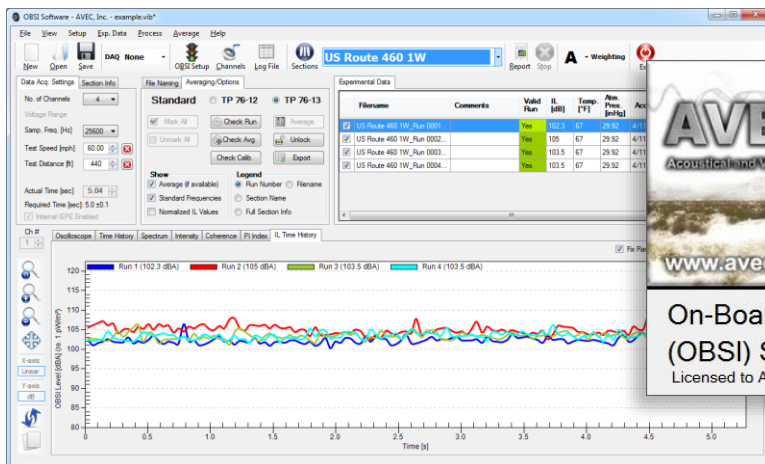
www.avec-engineering.com

ON-BOARD SOUND INTENSITY (OBSI) SYSTEM



AVEC, Inc. offers an **On-Board Sound Intensity (OBSI)** system that conforms to the latest AASHTO standard.

Our OBSI software, designed with ease of use as the main priority, is the core of the system. Its layout and functionality reduce user interaction during the test, and thus help minimize test time. Features like instant run validation, multi-section testing, and automated report generation provide a hassle-free user experience that maximizes productivity.



On-Board Sound Intensity (OBSI) Software
Licensed to AVEC, Inc.

Version 2.00
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AVEC, INC. OBSI SYSTEM

Turn-key Solution

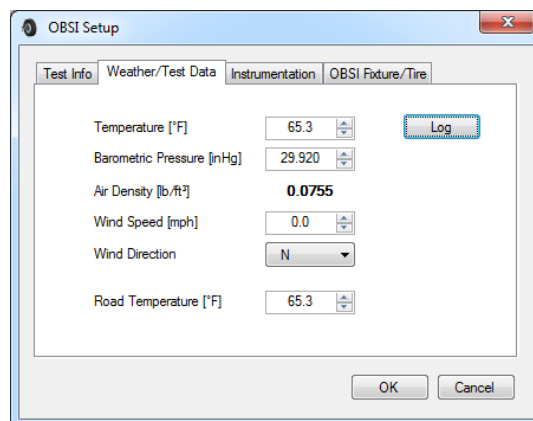
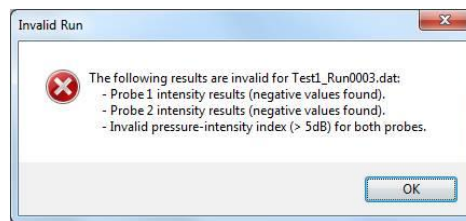
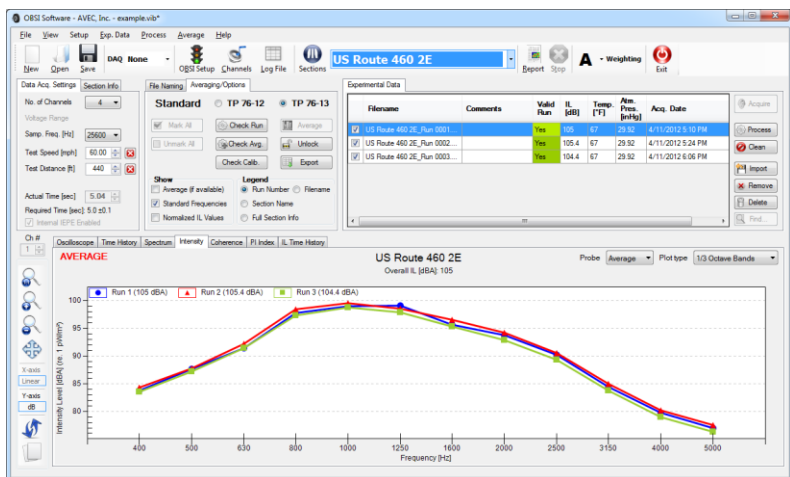
- **Our turn-key solution includes:**
 - AVEC's OBSI Software with USB remote for easy software control.
 - AVEC's OBSI Fixture with cable management system.
 - Two (2) GRAS 1/2" Intensity Probes (4 microphones).
 - NI data acquisition system (USB, 4 channels).
 - GRAS sound level calibrator.
 - Semi-rugged laptop PC (with OBSI software pre-installed).
 - GPS module (Garmin with custom USB interface).
 - Plastic carrying case for OBSI system and laptop.
 - Wind screens and cables for intensity probes.
- **Optional items include:**
 - Laptop car mount and DC/AC converter.
 - Standard tire and wheel hub.



*GRAS, Garmin and National Instruments are registered trademarks of GRAS, Garmin and National Instruments, respectively.

OBSI Software

- **AVEC's OBSI Software** main features include:
 - Intuitive user interface optimized for testing multiple road sections.
 - Processing and analysis according to latest AASHTO Standard.
 - Instantaneous feedback about validity of runs.
 - Automated report generation (Microsoft Word®)
 - Figures and results can be easily exported (Excel®, Word®, etc.).
 - USB remote for easy software control during testing.
 - Perpetual license (no need for annual renewal).
- Other software features include:
 - Data acquisition, processing, analysis, and report using same software.
 - Intensity levels can be viewed as a function of time or distance.
 - Automated file naming facilitates data acquisition during test.
 - Automated microphone calibration procedure.
 - Most settings can be modified for research purposes.
 - Intensity levels available in narrowband and 1/3rd Octave bands.



Ch #	Channel ID/Name	Sens. [mV/Pa]	External Gain	Serial #
1	Fwd Probe, Inboard (IP1-I)	25	1	123456
2	Fwd Probe, Outboard (IP1-O)	25	1	123457
3	Aft Probe, Inboard (IP2-I)	25	1	123458
4	Aft Probe, Outboard (IP2-O)	25	1	123459

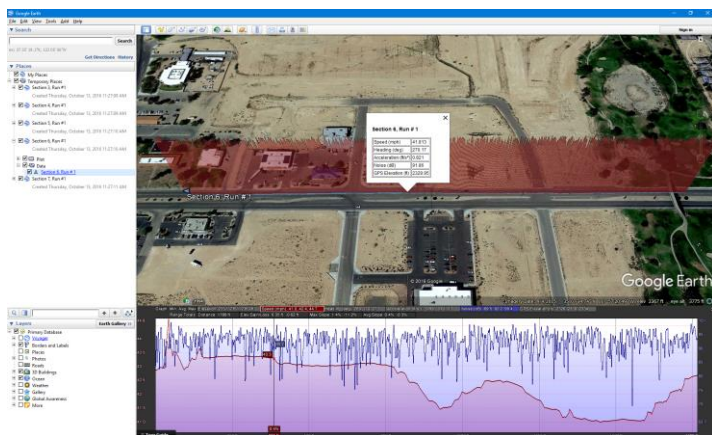
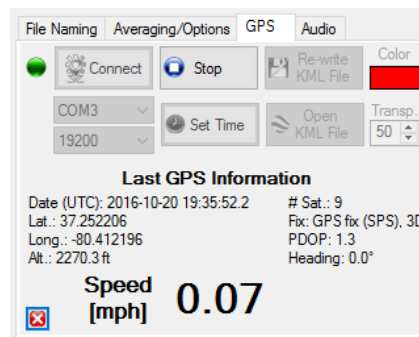
Set Selected Channels
Sensitivity: 1.000 [Set]
Gain: 1 [Set]
Calibration
Calibrator Level [dB]: 94
[Calibrate] [Use Nominal]

*Excel and Word are registered trademarks of Microsoft Corporation

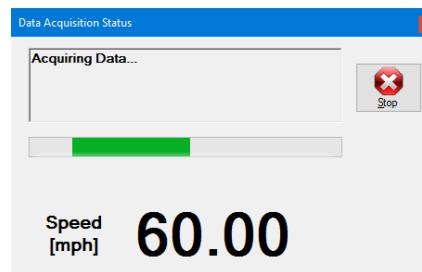
AVEC, INC. OBSI SYSTEM

GPS Module

- AVEC's turn-key system includes a GPS unit that, among other features, allows the user to:
 - Visualize the vehicle speed during testing and data acquisition,
 - Visualize noise measurement results for single or multiple test sites using Google Earth®.



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Other Options and Services

- Besides the complete turn-key solution, AVEC offers:
 - Individual OBSI components (i.e. to upgrade an existing system),
 - Additional instrumentation for vibration measurements, vehicle interior noise, or tachometer synchronization.
 - Software integration with customer's existing hardware,
 - System rental/lease (hardware and/or software), and
 - OBSI measurement services.
- Please contact us with your requirements and we will provide you with more information on the different options available.

Contact Information

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