MENTOR AUTOMOTIVE
Automotive Audio Bus® (A²B)
Bus Monitor PRO System

A²B Technology
The Automotive Audio Bus (A²B) technology, developed by Analog Devices, is a signal distribution system targeted at automotive audio applications. Unlike existing bus systems for automotive use such as MOST and Ethernet AVB, the A²B bus is dedicated to transporting digital audio, is significantly lightweight and has a less complex bus topology.

A²B Bus Monitor PRO System
The A²B Bus Monitor PRO system consists of a hardware device and easy-to-use, host-based application software. The monitor is a compact yet versatile USB 2.0 device that enables non-intrusive, real-time monitoring of A²B-based network traffic. The included host application software is used to command and control the device, while also helping to intuitively visualize the various components of the traffic on the A²B network.

A²B Bus Monitor PRO Hardware
The A²B Bus Monitor hardware is a single-unit device with a variety of connectivity options to easily attach to, and monitor, an A²B based network. With a small form-factor, the dongle affords portability and enables usage in multiple environments — from development on an engineer’s bench to extended in-vehicle testing.

The A²B Bus Monitor PRO is specially designed for in-vehicle test scenarios. Specific features of this product include; support for automotive power & ignition (use in-car power cable accessory), limited CAN triggering, on-board storage to record data from extended test drives and autonomous operation mode. For on-bench use, the included host PC application allows easy control, and configuration, of the monitoring process.

In-car Experience

Product Features:
- Passive bus monitoring and data capture
- Access to all A²B network traffic: Audio, I²C, GPIO
- Support for automotive power and ignition
- Versatile trigger mechanisms
- On-board microSD slot to capture data from extended drive tests
- Compact, single device solution for use in engineering workbench and in-car scenarios
- Support for Windows & Linux platforms

Benefits:
- Gain deeper insight into network behavior
- Improve debugging via visibility into, and correlation to, system events
- Quick analysis by visual indication of per-channel audio traffic

The A²B Bus Monitor PRO hardware is a compact and powerful device to easily monitor and capture a variety of audio and control data.
The Bus Monitor PRO device supports a variety of interfaces:

- USB
- Ethernet
- Multi-I/O (for GPIO, CAN, TDM etc.)
- Mechanical Trigger
- microSD Card
- Tri-colored LEDs

**A²B Bus Monitor Software Application**

The bus monitor software application is an easy to use, graphical tool to setup, control and visualize the A²B traffic. In addition to monitoring streaming audio, deep visibility into the A²B discovery process is possible with time-stamped information for the various commands. The tool also allows select node and slot level control for access to the A²B network data in both USB and Ethernet streaming. A powerful, graphical log viewer provides the ability to align audio behavior with corresponding, individual, I2C messages, providing unprecedented visibility into the A²B network behavior.

In addition, the ability to import a session (.ses) file from the A²B Analyzer software application, helps dramatically reduce the setup time, and improves comprehension, by automatically loading useful network information such as custom node names and stream names.

### **Bus Monitor PRO In-Vehicle Use**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor all A²B network traffic</td>
<td></td>
</tr>
<tr>
<td>Operation Mode</td>
<td>Controlled &amp; Autonomous</td>
</tr>
<tr>
<td>Power</td>
<td>USB &amp; External 12V</td>
</tr>
<tr>
<td>Streaming &amp; Storage</td>
<td>USB, Ethernet, microSD</td>
</tr>
<tr>
<td>Triggering</td>
<td>Push Button &amp; S/W (Limited)</td>
</tr>
<tr>
<td>Dimension (L x W x D)</td>
<td>112 x 86 x 39 mm</td>
</tr>
<tr>
<td>Ordering info. / part number</td>
<td>A²B Bus Monitor PRO (272053)</td>
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<td></td>
<td>In-Car Power Supply Cable (275265)</td>
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