An Axiometrix Solutions Brand

APx525 audio analyzer with DIO, HDMI2+eARC, DSIO, and Bluetooth Duo modules

What's New: APx500 version 9.0 July 2024

This document looks at the new and improved features in the latest release of the APx500 software for all models of APx Series audio analyzers.

For more information, please contact your local Audio Precision sales partner, or visit the AP website at ap.com for datasheets, technical content, and software downloads.

Introduction to APx500 version 9.0

APx500 software version 9.0 enhancements:

- Support for multiple simultaneous driver Impedance measurements in Loudspeaker Production Test and Impedance/Thiele-Small measurements
- Enhanced control options for the Fast Sweep stimulus.
- Noise level and ratio results now available for Stepped Frequency and Stepped Level sweeps, along with other general improvements, fixes and enhancements to improve software performance and functionality.

Multiple Simultaneous Driver Impedance Measurements

Up to eight drivers can now be configured for impedance testing using the Loudspeaker Test or Impedance/Thiele-Small measurements.

- **Driver Support**: Depending on the number of available physical analog input channels, up to 8 drivers can be tested simultaneously. The channels required per driver depend on the measurement configuration.

Measurement Test Configuration	Input Channels per Driver
Impedance Measurements	
Vdrvr Only (Zgen)	1
Vdrvr and Vsense	2
Vsense Only	1
Loudspeaker Production Test Measurements (impedance & acoustic)	
Vdrvr and Vsense	3
Vsense Only	2

Fast Sweep Enhancements

Fast Sweep now has controls to optimize the transient, discard, and steady state time when configuring a measurement. This allows you to customize a measurement for a DUT to minimize the time needed to get results without sacrificing accuracy.

You now have three options for Fast Sweep signal configuration:

- You can use the default sweep time, which is initially set to the fastest time for the measurement to run using the default transition, discard, and measure times.
- You can edit the time in the Sweep Time field to increase the sweep time for the measurements. This will increase frequency resolution at the expense of time but can be valuable in some circumstances.
- You can check the Auto checkbox to the right of the Sweep Time field to automatically set the sweep time based on custom transition, discard, and measure selections for cycles and time. The frequency at which the measurement switches over from using cycles to using time is also shown.