The APx1701 Transducer Test Interface

What's New:
APx500 version 4.3
June 2016

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, knowledge base articles, and software downloads.

INTRODUCTION TO APx500 VERSION 4.3

APx 4.3 is a major release that brings software support for the APx1701 Transducer Test Interface.

THE APx1701 TRANSDUCER TEST INTERFACE

The APx1701 Transducer Test Interface is an APx accessory device with both input and output features. The APx1701 is primarily designed to drive loudspeakers and headphones with a dedicated power amplifier in acoustic testing, to measure loudspeaker impedance curves, and to accommodate and power both measurement microphones and microphones under test. Its functions are integrated with the APx500 measurement software and an attached APx analyzer, which are required for operation.

Signal Path Setup

The APx1701 shows up in the APx500 user interface as additional Signal Path Setup Input/Output choices, named "Transducer Interface."

Output Settings include a fixed 20 dB gain, optional amplifier On/Off switching, a parasitic resistance entry field, and a fixed output range feature.

Input Settings include microphone input selection, microphone power switching, and current sense channel selection for impedance measurements.

TEDS calibration

The APx1701 has the ability to read Transducer Electronic Data Sheet (TEDS) information from a TEDS-enabled measurement microphone. APx500 can use this data for microphone calibration, and can display the data in the new TEDS Measurement.

Global Vmax

Project Global Vmax output protection has been modified to include APx1701 output level protection settings.

Sequence steps

APx1701 Input, Output and TEDS calibration steps have been added to the Sequencer.

TEDS MEASUREMENT

A new TEDS Measurement provides a tabular display of the TEDS data available from a selected microphone. This data can be optionally exported to a file.