



APx585 with HDMI

The world's only HDMI and Blu-ray audio test solution.



Ideal For Testing :

- HDMI RECEIVERS
- BLU-RAY PLAYERS
- HDMI TVs
- DOLBY / DTS TEST
- SET-TOP BOXES
- GAMES CONSOLES
- MULTIMEDIA PCs
- HDMI CHIPSETS

HDMI Key Features

- HDMI 1.3A Source and Sink
- HDMI audio Layout 0 or 1
- Generates linear PCM audio on up to 8 channels at 44.1, 48, 88.2, 96, 176.4, and 192 kHz up to 24 bit
- Generates lossless formats such as dts-HD Master Audio at 48, 96 and 192 kHz, 24 bit
- Generates compressed formats such as Dolby Digital and dts Digital Surround
- Generates and displays E-EDID values
- Generates a video test signal at all HDMI standard resolutions, color depths (incl. deep color), and refresh rates
- Auxiliary interfaces for third party video test equipment
- Full support for HDCP encryption on source and sink
- Bit-for-bit verification of digital data reproduction

The APx585 is a dedicated 8 channel audio analyzer that combines a next generation user interface with AP's legendary commitment to performance. With the APx HDMI option, engineers can now measure HDMI audio quality and audio format compatibility on devices such as surround sound receivers, set-top boxes, HD TVs, and DVD & Blu-ray Disc™ players.

Fast HDMI audio measurement

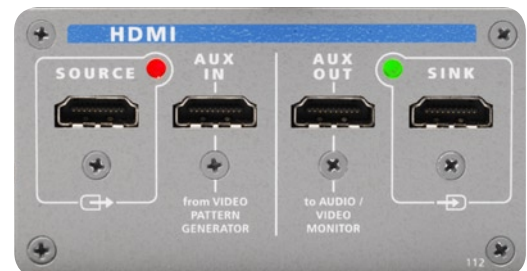
The APx HDMI option provides connections for source and sink devices as well as an auxiliary video input and a monitor output. On the input (HDMI Sink) the APx will accept an HDMI signal and analyze the audio content. All standard audio measurements are available including level, SNR, distortion, phase, crosstalk, group delay and others.

Generated video formats and HDCP encryption can be toggled to test for effect on embedded audio. Multiple signal paths can be defined to test all input and output variations (HDMI input to speaker output; SPDIF input to HDMI output etc.).

Verifying Dolby & dts encoded audio

In addition to generating linear / PCM audio streams, APx can stream lossless formats (such as dts-HD Master Audio™) and compressed formats (such as Dolby Digital™ and dts Digital Surround™) using the APx's file playback function. This feature makes it easy to troubleshoot component compatibility and downsampling / downmixing / transcoding issues.

Streaming of .wav, .ac3, .dts, and .cpt over the SPDIF, TOSLINK, and AES/EBU digital outputs is also supported.



APx HDMI module

Easy Blu-ray & DVD player test

Blu-ray Disc players supports extremely high-resolution audio and can accommodate a variety of downmix requirements. To test these players, AP has the world's only Blu-ray Disc with high-resolution versions of a wide selection of audio test signals in the same formats as the APx generator. AP's DVD-01 has the same tones (though only up to 96 kHz) for traditional DVD players.

Video and third party support

The APx HDMI option has a basic video generator. The user can generate a single color video test signal and control the resolution (up to 1080p), the color of the image, and the color depth (including deep color).

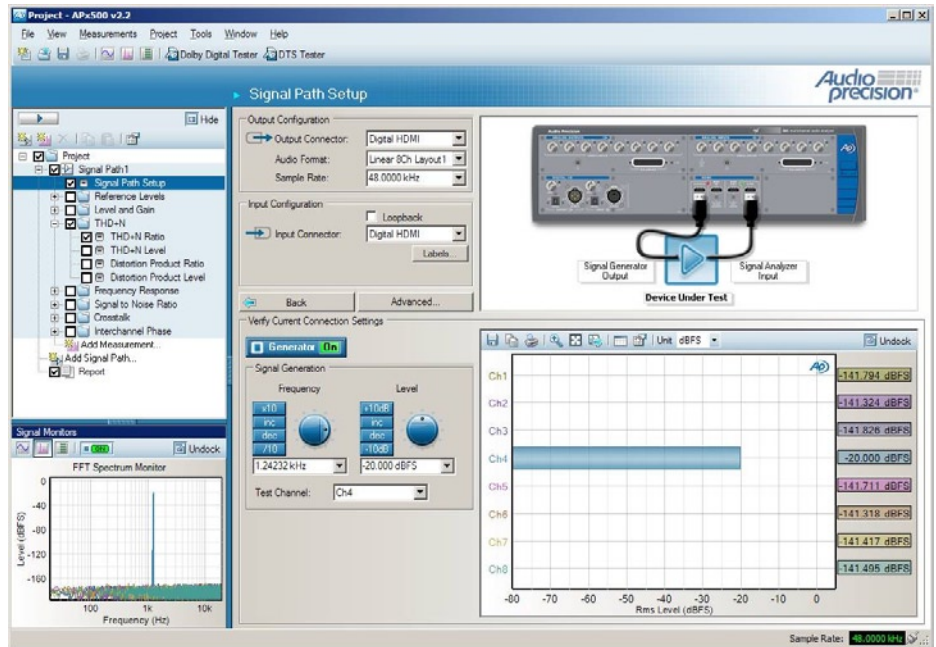
Use of third party video pattern generators is supported by the "Pass External Video Through" option. When an external video signal is provided, APx combines it with the audio stream from the APx's generator and outputs a single audio/video stream.

The system also forwards E-EDID and CEC data transparently between the device under test and any device connected to AUX IN.

The APx itself does not analyze video; however, all signals delivered to the sink are mirrored to the AUX OUT monitor connector. This allows the user to send the video signal to an external video analyzer or monitor the signal on a display.



Winner of
**Pro Audio Review's
 Hot Gear Award 2008**
 and
**Test & Measurement World's
 Best in Test 2007**



APx500 Measurement Software

APx585 Audio Analyzer Key Specifications

SYSTEM PERFORMANCE

Residual THD+N (20 kHz BW)
 -103 dB + 1.4 µV

GENERATOR PERFORMANCE

- Sine Frequency Range
5 Hz to 80.1 kHz
- Frequency Accuracy
3 ppm
- IMD Test Signals
SMPTE, MOD, DFD
- Maximum Amplitude (balanced)
14.4 Vrms
- Amplitude Accuracy
±0.05 dB
- Flatness (20 Hz–20 kHz)
±0.008 dB
- Analog Output Configurations
unbalanced & balanced
- Digital Output Sampling Rate
22 kHz–192 kHz
- Dolby / dts Generator
Yes

ANALYZER PERFORMANCE

- Maximum Rated Input Voltage
110 Vrms (bal/unbal)
- Maximum Bandwidth
>90 kHz
- IMD Measurement Capability
SMPTE, MOD, DFD
- Amplitude Accuracy (1 kHz)
±0.05 dB
- Amplitude Flatness (20 Hz–20 kHz)
±0.008 dB
- Residual Input Noise (20 kHz BW)
1.3 µV
- Individual Harmonic Analyzer
d2–d10
- Max FFT Length
1024K points
- DC Voltage Measurement
Yes



Accredited by A2LA
 under ISO/IEC: 17025
 for equipment calibration



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