

APx555 | AUDIO ANALYZER

High-performance, modular 2-channel audio analyzer



KEY FEATURES

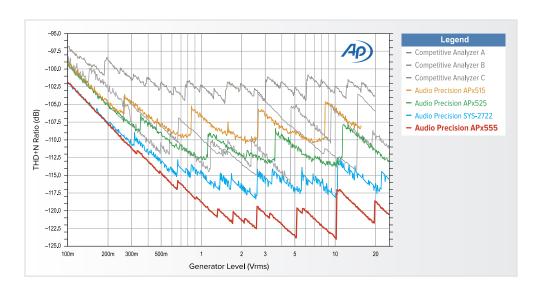
- Industry-best analog performance
- Residual THD+N:
 -120 dB (typical)
- Over 1 MHz bandwidth @ 24 bits on two channels
- Signal generation up to 204 kHz and 26 Vrms
- 1.2 M point FFTs
- Use Sequence Mode or new Bench Mode for ultimate flexibility and control
- Support for the complete range of APx digital I/O options, including 32-bit digital serial I/O
- AES/SPDIF advanced digital I/O
- Jitter generation and analysis
- Advanced Master Clock for Reference, Sync and Trigger
- Dual analog notch filters

The New Standard – the highest performance and most versatile audio analyzer ever made.

A culmination of 30 years' experience making test equipment recognized as the standard of the audio industry, the APx555 is an analyzer without compromise. It combines the best analog performance we have ever delivered with complete support for all APx digital I/O options and fast, intuitive measurement software.

Unprecedented Performance

With a typical residual THD+N of -120 dB and over 1 MHz bandwidth, the APx555 surpasses the analog performance of all other audio analyzers, including a 5 dB improvement compared to our 2700 Series analyzer. This performance is supported by 1.2 million point FFT resolution.



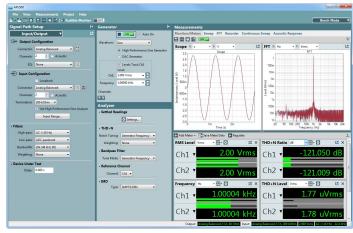
The chart above shows the residual THD+N of several current audio analyzers as a function of generator level; lower values are better. The red trace at the bottom is the APx555; the blue trace above that is the SYS-2722, and the green trace is the APx525.

Multi-mode UI

APx500 measurement software allows the APx555—and all other APx analyzers—to adapt to the needs and preferences of audio designers, engineers and technicians.

Sequence Mode provides complete, code-free automation of pre-defined measurement sequences to enable fast and reliable results.

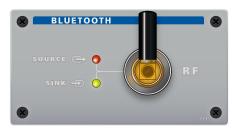
Bench Mode provides the real-time interface approach of the 2700 Series, allowing rapid understanding of relationships between stimulus and results. Waveforms, FFTs and meters for virtually any parameter can identify important interactions, ideal for experienced users.



APx500 Bench Mode, showing live meters and monitors for waveforms, FFT, RMS levels, frequency and THD+N.



HDMI + ARC







 $The APx\ platform\ incorporates\ a\ modular\ architecture\ enabling\ configuration\ for\ a\ variety\ of\ digital\ I/O\ options.$

Unmatched Flexibility

The APx555 supports the complete range of APx digital I/O options, ensuring compatibility with a wide array of audio formats and devices.

- Digital Serial I²S, TDM, multi-line support
- Bluetooth® mSBC, A2DP, SBC, CVSD, aptX, HFP 1.6, AVRCP
- HDMI+ARC source, sink & monitor (including metadata)
- PDM one-bit audio generation & analysis (including PSRR and DSD)
- Advanced Digital AES/SPDIF/Optical

KEY SPECIFICATIONS

SYSTEM PERFORMANCE

Residual THD+N (22 kHz BW)

-117 dB +1.0 μV

Typically < -120 dB (1 kHz, 2.0 V)

GENERATOR PERFORMANCE

Sine Frequency Range

0.001 Hz - 80 kHz, DAC

5 Hz - 204 kHz, Analog

Frequency Accuracy

3 ppm, DAC

0.35%, Analog (10 Hz to 100 kHz)

IMD Test Signals

SMPTE & MOD, DFD, DIM

Maximum Amplitude

26.66 Vrms bal, 13.33 Vrms unbal

(10 Hz to 100 kHz)

Amplitude Accuracy (1 kHz)

±0.03 dB (+15° C to +30° C)

Flatness (5 Hz - 20 kHz)

±0.008 dB

Analog Output Configurations

Unbalanced, balanced or CMTST

Digital Output Sampling Rate

22 kS/s to 216 kS/s

Dolby / DTS Generator

Yes (file-based)

ANALYZER PERFORMANCE

Maximum Rated Input Voltage 300 Vrms (bal)

160 Vrms (unbal)

Maximum Bandwidth

> 1 MHz

IMD Measurement Capability
SMPTE & MOD, DFD, DIM
Amplitude Accuracy (1 kHz)
±0.03 dB (+15° C to +30° C)
Amplitude Flatness (10 Hz - 20 kHz)
±0.008 dB
Residual Input Noise (22 kHz BW)
≤ 1.0 µVrms
Individual Harmonic Analyzer
H2-H10
Maximum FFT Length
1248K points
DC Voltage Measurement
Yes



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

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