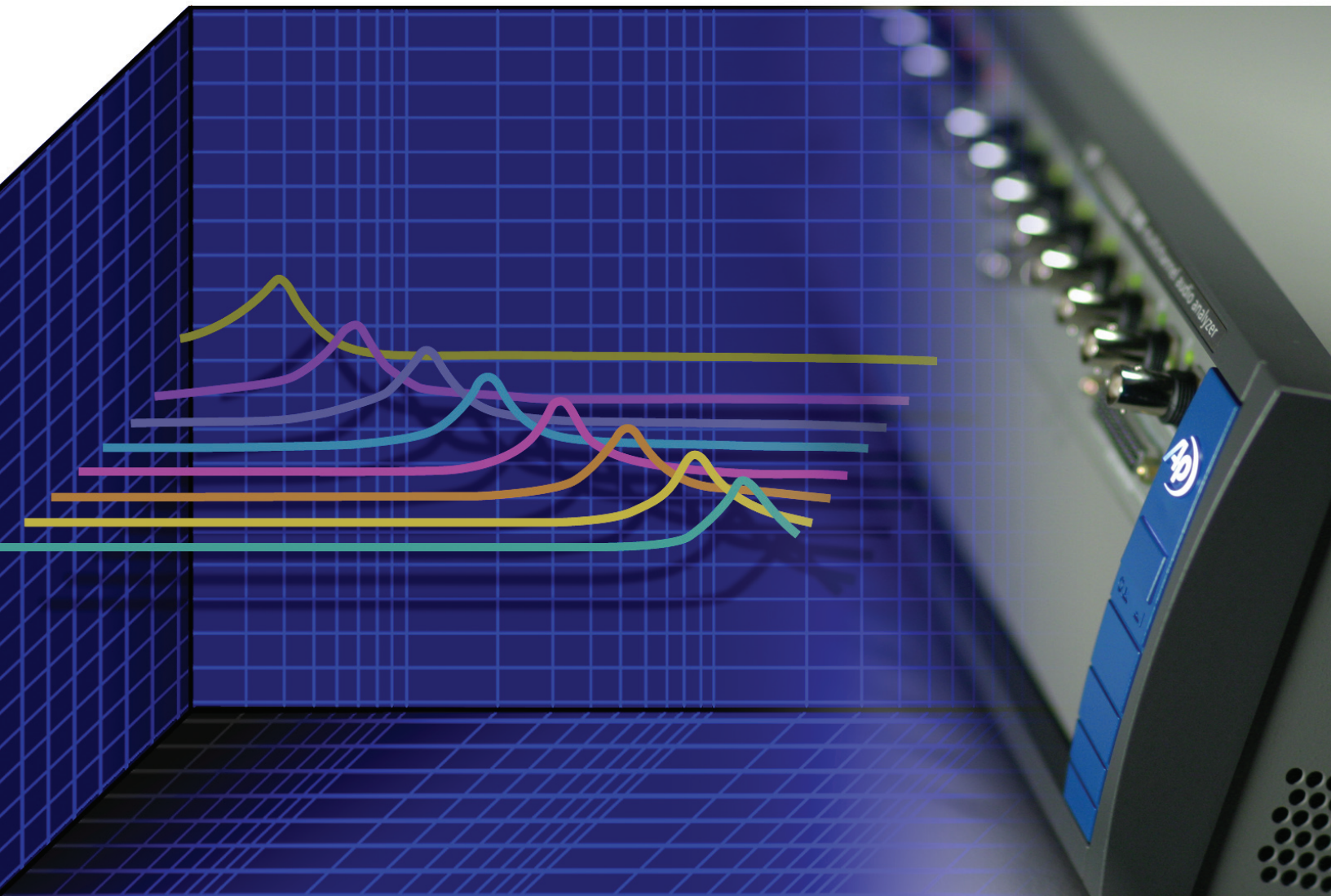# Audio Precision

APX585 | Rethinking Audio Test

Time is money.

Nowhere is this more true than in consumer audio. Product development cycles are shrinking while the number of audio channels is growing. Collaboration during development cycles is critical. And there's no time to learn a complex new instrument.

The APx585 is the first audio analyzer specifically designed to get you to market faster. It's the first to offer 8 simultaneous test channels. And it's amazing what it allows engineers, even those with little audio experience, to do. Like take measurements within 30 minutes of unpacking the box. Or use the integrated report facility to send information easily to team members and management. You can also automate test sequences without writing a line of code. It's a huge competitive advantage in a highly competitive industry.

The first real 8-channel audio analyzer. For analog and digital I/O.

For multichannel amplifiers and surround sound systems, test and measurement has finally caught up. The APx585 is the world's first dedicated audio analyzer to offer

8 simultaneous channels of analog balanced and unbalanced I/O, which means faster setup and faster testing. There's also digital electrical and digital optical I/O. The 585's Signal Path Setup view provides a graphical display to quickly verify connections and signal presence for each channel, a real time-saver when you're dealing with eight channels of I/O.
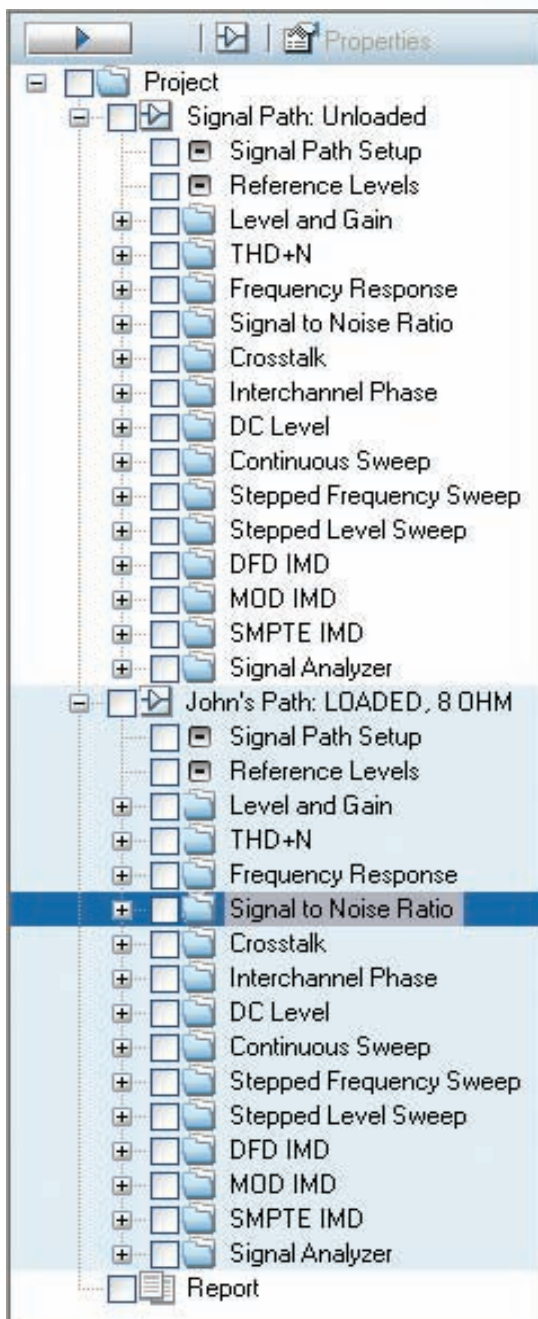
Open the box and take measurements right away. Really.

Making a frequency response measurement is as simple as selecting the measurement, then clicking "Start." Settings such as frequency range and voltage level are conveniently located next to the display of test results, so it's easy to make changes and run the test again. It's the same for other measurements such as THD+N, signal to noise ratio, crosstalk and many others. No lost time studying the complexities of audio measurement or audio analyzers. No more hours going through the manual just to get started. With the APx585, you get right to the work of testing your product.

It's all made possible by the Navigator, a key piece of the 585's APx500 measurement software. The Navigator is a familiar tree control view that presents all the measurements by name. You can go from a frequency response measurement to THD+N with one click.

easy to use

Make measurements in an automated sequence— no programming required.

Selecting a variety of different measurements and running them sequentially can also be done using the Navigator. Just check the boxes next to the measurements you want to make, then click the Run button at the top of the Navigator panel. The sequence is run automatically without writing a line of code. It's easy to make changes to your measurement settings and repeat the whole sequence. Working with a whole set of critical measurements has never been faster or more productive.

When you run a sequence, you can set pass/fail limits to gauge performance. The 585 gives you lots of options for creating limits. Draw them right on a display of the measurement results, as shown below. Or map measurement results into the limit grid to become editable limit curves. Create your own custom limit curves by specifying numeric values as upper or lower limits at different frequencies. Measurements are marked with "pass" or "fail" icons in the Navigator, and measurements that exceed limits are flagged in the generated report.

You can also use the Navigator to run multiple sequences of measurements on different signal paths. Select a combination of analog and digital signal paths, define values for settings such as voltage level, select the measurements on each path, and click the Run button.
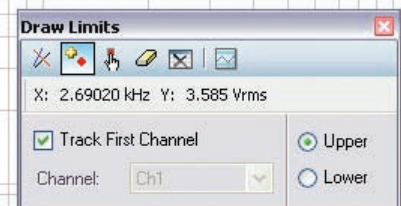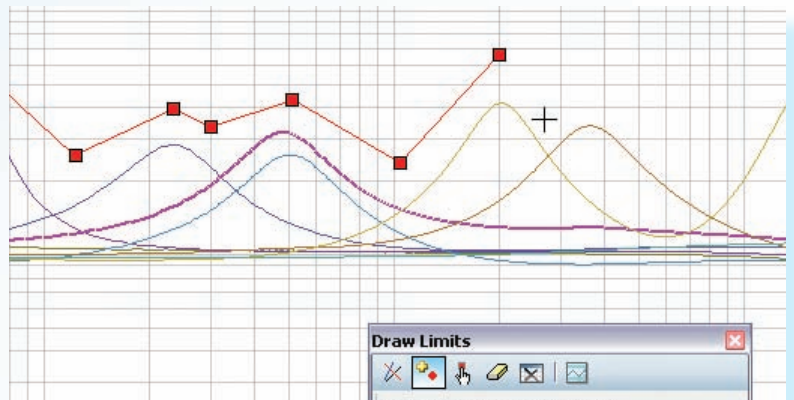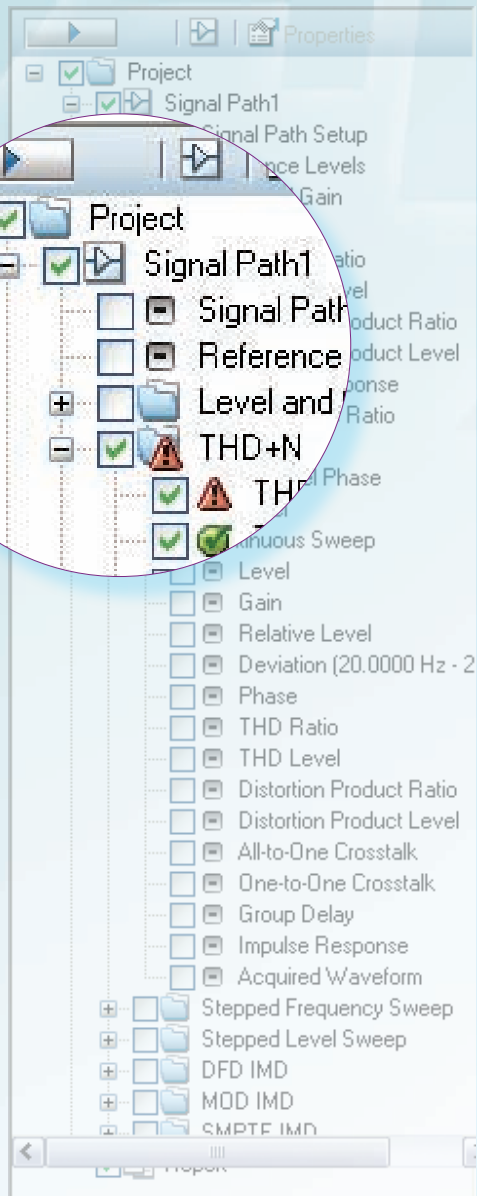
Time to share the results? No problem.

The 585 has your report ready. It's built in—and it's generated automatically every time you run a sequence. The report includes the parameters for each test setup, and a graphical display as well as numeric test results. Each channel and each test are flagged if a limit was exceeded. Reports are generated in HTML format, are exportable to other formats, and can be customized with your company's logo.
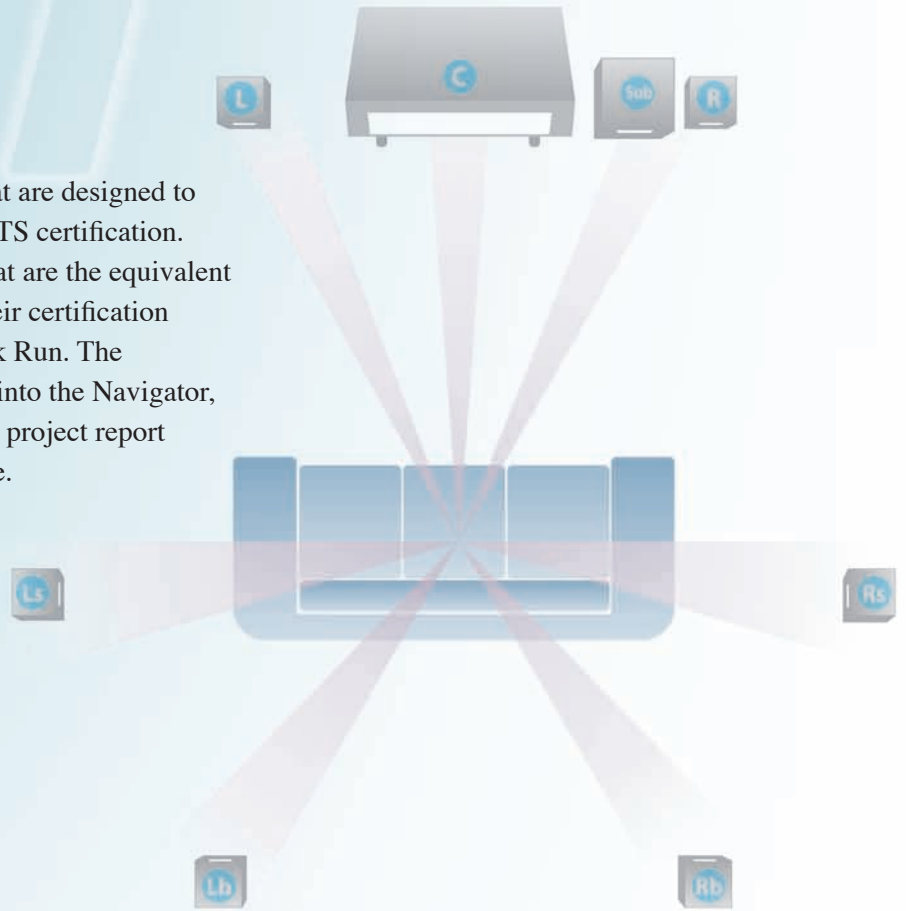
Save whole projects to share with colleagues—around the office or around the world.
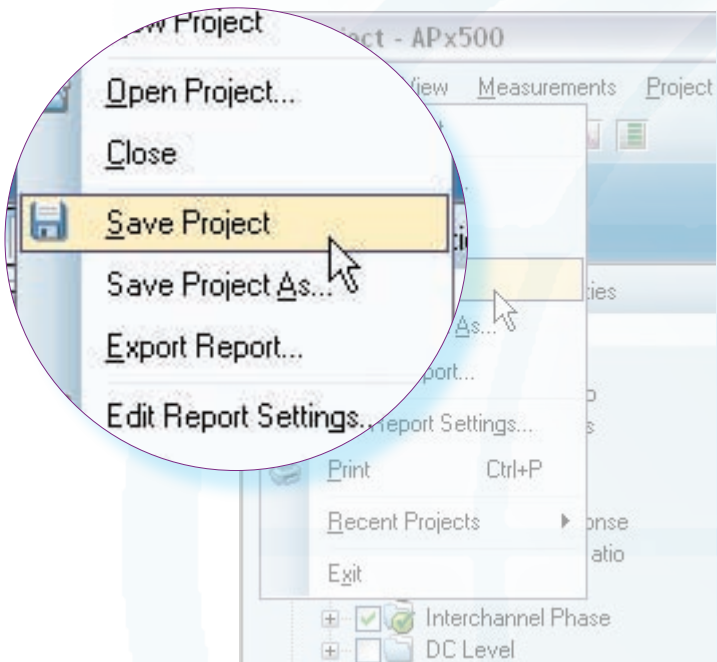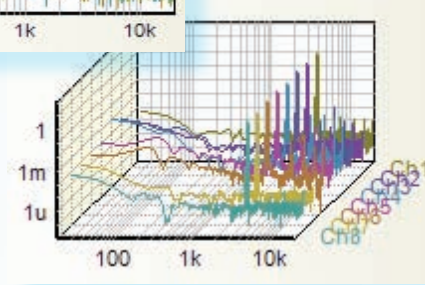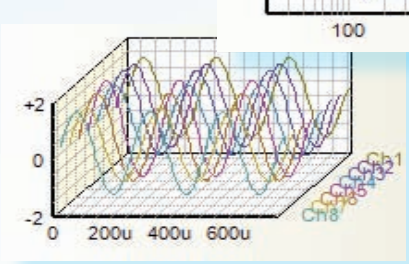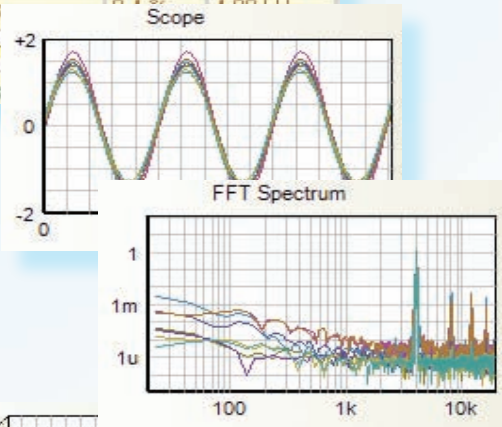
Collaboration is essential when you're testing products under development. The 585 makes it easy to review and analyze test results with team members wherever they are. Information about signal paths, measurements, settings, limits and sequences can all be saved in a single project file. When the project file is distributed to other team members and loaded into their APx585, the Navigator is configured with everything to make the identical measurements. Or your co-worker can run your entire automated test sequence immediately.

**Dolby and DTS testing.
Two APx585 projects that set
you up for success.**

The 585 comes with two projects that are designed to
assess your readiness for Dolby and DTS certification.
The projects use 585 measurements that are the equivalent
of those used by Dolby and DTS in their certification
procedures. Load the projects and click Run. The
settings and measurements are loaded into the Navigator,
the automated sequence is run, and the project report
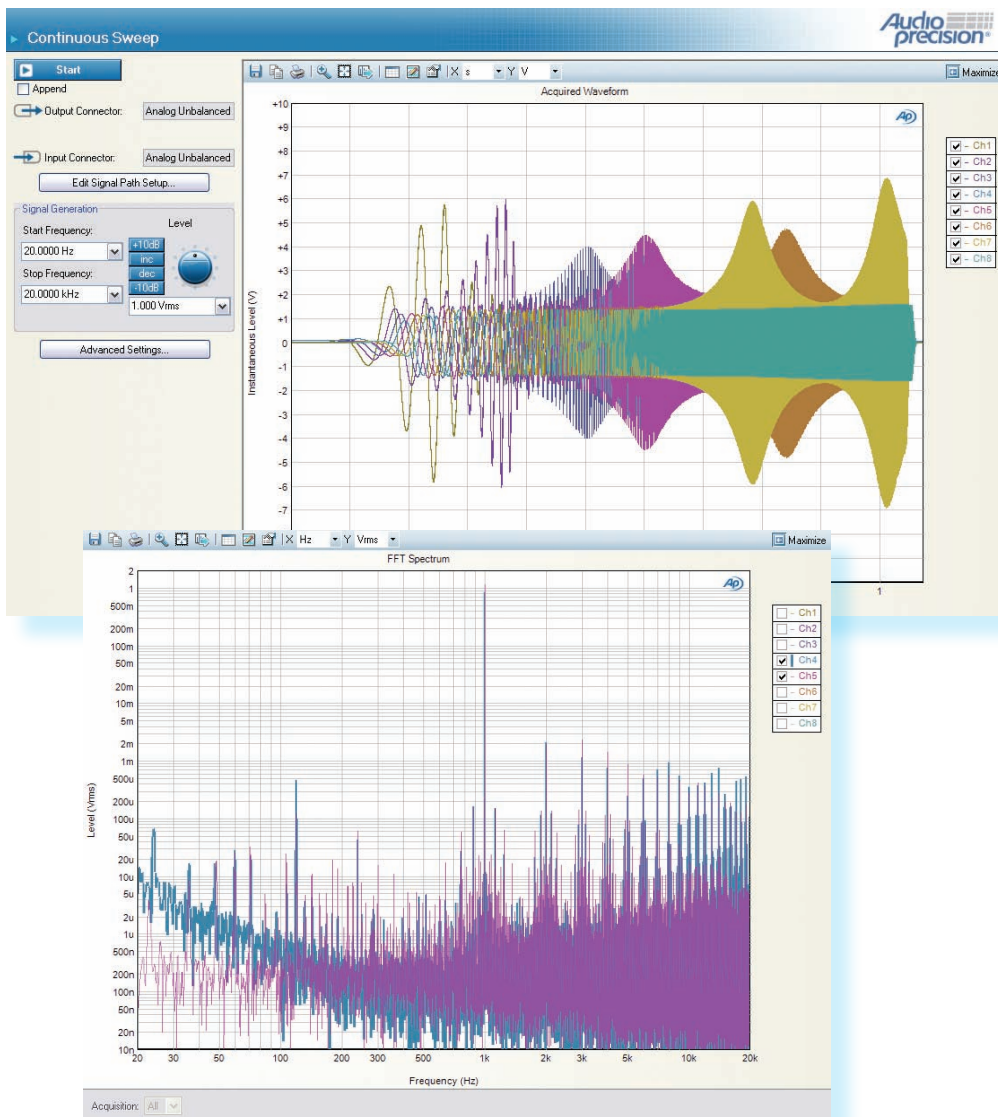documents your product's performance.

**New tools.
Real-time signal monitors, patent-pending sweep
method, high-resolution FFT.**

The 585 shows up work-ready with a wide array of
innovative measurement tools: standard meters and stepped
sweeps are joined by real-time input signal monitors, a
powerful new sweep method and a general-purpose FFT
analyzer.

The input Signal Monitors provide an FFT spectrum
view, a real-time oscilloscope view, and level, THD+N
and frequency meter readings—for
all 8 channels! All of these views can
be continuously monitored while the
APx585 is occupied performing other
measurements.

The 585's new patent-pending sweep
method is called *continuous sweep*,
and it provides amazing performance

improvements. Run a 1-second sweep through your device under test and after a few seconds of processing it produces 14 graphed results, all displayed in the 585's measurement Selector. Click on any of these thumbnails to see a full-screen presentation of frequency response, phase response, THD, individual distortion products, crosstalk, group delay, impulse response, and more.

The new FFT tool gives you quick and easy access to both time domain (Scope) and frequency domain (FFT Spectrum) views with an FFT acquisition variable up to over 1 million points.
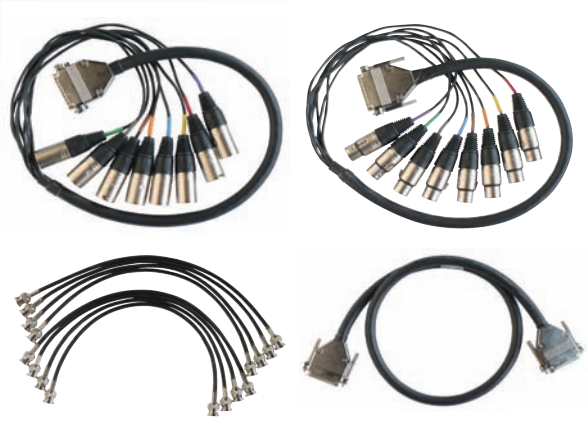
There's also a complete family of intermodulation (IMD) measurements, including standard DFD, MOD and SMPTE.

Accessories for your APx585.

The 585 is the fastest, most efficient solution available for testing switch-mode power amplifiers such as class D. You can enhance its performance with the APx581, an 8-channel switch-mode measurement filter. It controls high slew-rate signals and the out-of-band noise common in switch-mode power amplifier outputs.

Working with 8 simultaneous channels and multiple signal paths can make cabling a problem. The CAB-585 cable kit provides a full set of cables, qualified by Audio Precision to assure performance and harnessed and color-coded to keep connections straight.

You can also purchase a two-year extended warranty, which includes an annual factory adjustment by Audio Precision to keep your APx585 running at peak performance.

Just the specs. ▼

- Analog channel count: simultaneous 8 output and 8 input.

- Digital channel count: 2 output and 2 input.

- Maximum digital I/O sample rate: 192 kHz.

- System bandwidth: dc to >80 kHz.

- –102 dB residual THD+N, 1.3 µV residual input noise.

- Generator range: 2.5 µV to 14.4 V balanced, 5 Hz to 80 kHz.

- 3 ppm frequency accuracy.

- Analyzer range: 0 to 110 V.

- dc measurement capability.

- Standard USB-2 interface to host computer.

A detailed list of specifications is available in the APx585 Specifications booklet. Just ask your Audio Precision representative.

▲ cable kit
CAB-585

▲ 8-channel switch-mode filter
APx581

● rack mounting kit
RAK-585

● two-year extended warranty
EWP2-585

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