COMPLETE ELECTROACOUSTIC
Test & Measurement Solutions



Simplify your R&D and production, cut costs, and boost efficiency with our one-stop, fully integrated test and measurement solutions.

AXIOMETRIX SOLUTIONS | AP | GRAS

Simplify your R&D and production, cut costs, and boost efficiency

With analyzers from Audio Precision（AP）and acoustic sensors and fixtures from GRAS, Axiometrix Solutions provides one-stop, fully integrated solutions for the characterization of electro-acoustic devices including:

- **Loudspeakers**
- **Microphones**
- **Headphones and Headsets**
- **Smart Speakers & Devices**
- **Hearing Aids, Hearables, & Personal Sound Amplification Peripherals**



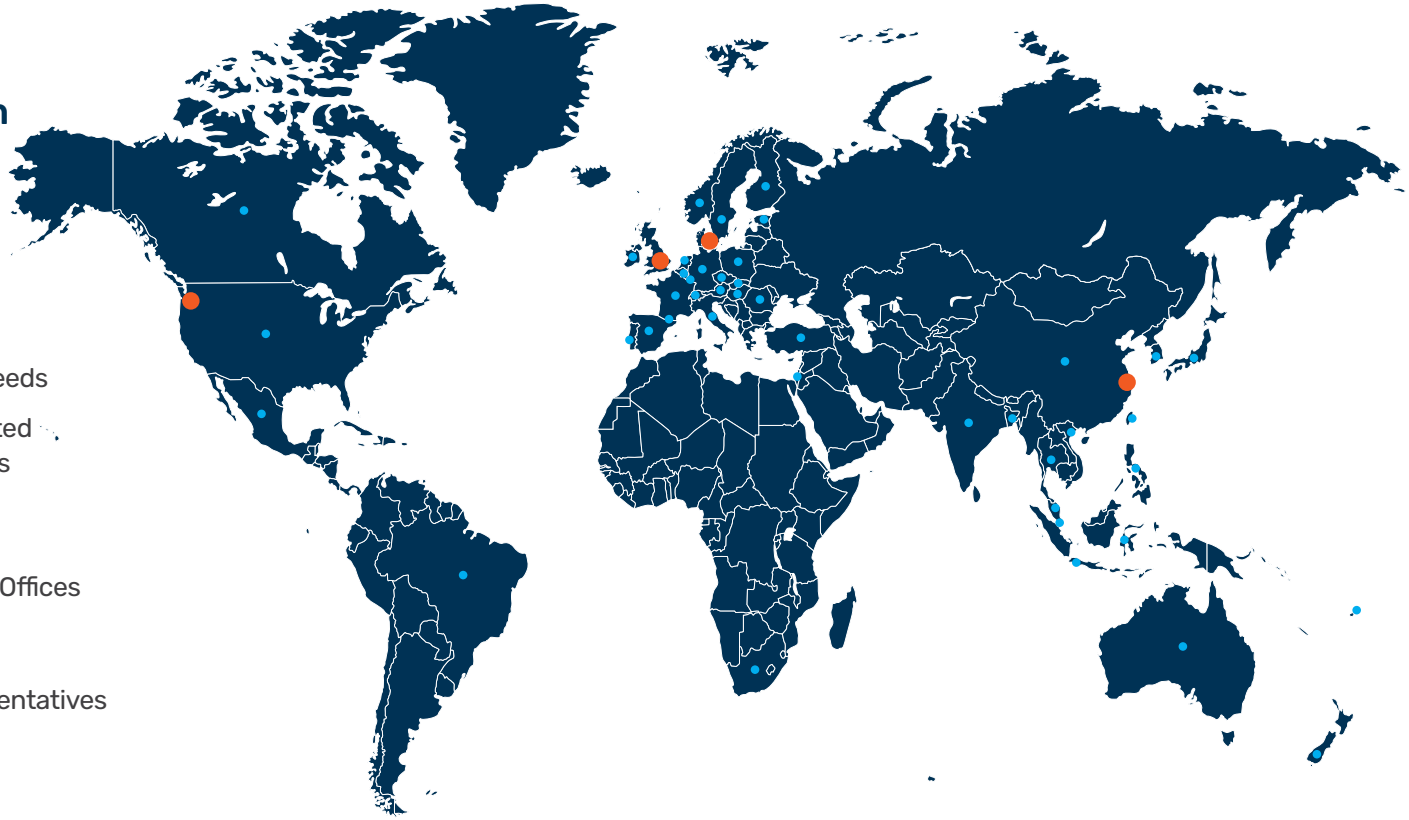
AXIOMETRIX SOLUTIONS combines decades of expertise in electrical, audio, and acoustic test and measurement, data acquisition solutions, and measurement analytics to deliver a broad range of solutions for today's audio quality and noise-and-vibration problems.

AUDIO PRECISION (AP) is the recognized standard in audio test and measurement, providing the preeminent solutions for analog and digital audio measurements, as well as electro-acoustic testing. Since 1984, AP's analyzers have helped engineers to design and manufacture innovative solutions ranging from semiconductor devices to consumer, automotive, and professional audio products.

GRAS Sound & Vibration (GRAS), founded by Gunnar Rasmussen - inventor of the measurement microphone - is the leader in measurement microphone innovation since 1994. Supplying the highest-performing and widest range of acoustic sensors, ear simulators, mouth simulators, and other electro-acoustic test and measurement peripherals.

Your unique advantages with Axiometrix Solutions:

- Technical support staff across the globe
- Service and calibration facilities in every major geography
- Single solutions provider for all your electro-acoustic test & measurement needs
- The only supplier with ISO17025 accredited calibration of both sensors and analyzers



AP and GRAS Headquarters and Main Offices

AP and GRAS Distributors and Representatives

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Focus on innovation, not integration

A turn-key test and measurement solution can help you avoid hidden expenses from managing multiple suppliers and eliminates the risk of downtime from mismatched tools. With seamless operations from start to finish, our all-in-one solutions help you focus on innovation, not integration.





Up and running
in 5 minutes

Sourcing your test systems from one vendor saves money and mitigates risk by reducing both setup time and the number of potential error sources. Thanks to its built-in features, the APx517 Audio Analyzer lets you simplify your signal chain significantly. Investing in a complete, all-in-one solution (APx517 + GRAS microphone or test fixture) means you can be up and running in 5 minutes.



APX517 main features:

- 2 x microphone input with built-in mic power supply
- Mono power amplifier unit
- 2-channel headphone amplifier
- 1 x digital I/O module (e.g. Bluetooth, PDM, HDMI, eARC, etc.)
- Integrated, dual-channel (Vsense, Vdriver) Kelvin impedance measurement for power and headphone amplifier

Loudspeaker Testing



A loudspeaker only sounds as good as it has been tested to sound. Axiometrix Solutions offers complete, one-stop solutions to test every kind of loudspeaker or audio devices with integrated loudspeakers on parameters such as:

- **Frequency response**
- **Sensitivity**
- **Input voltage/power**
- **Impulse response**
- **Impedance and Thiele-Small parameters**
- **Directivity（Polar Plot）**
- **Distortion**
- **Rub n buzz**
- **CSD / Waterfall plots**
- **Hiss-noise（e.g. Power Supply and BT circuits）**
- **Phase**

Unique advantages:

Completely integrated solution from one company with:

- Open loop measurement support
- Built-in Digital I/O available（e.g. Bluetooth, HDMI, etc.）
- Complete, all in one solution: APx517 + GRAS microphone means you can be up and running in 5 minutes



APx517: Integrated power and headphone amplifier with current sensor for impedance measurement.

APx500 Software

Create and automate complex test sequences that include user prompts, limits, and calls to external applications, directly in the graphical user interface（GUI）, or use the available API to program your test sequences.

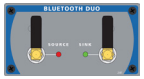


APx1701

The APx1701 Transducer Test Interface integrates instrument-grade amplifiers and microphone power supplies to provide clear insight into the behavior of electroacoustic devices. Shown here with an APx525 analyzer. APx1701 adds electro-acoustic testing capabilities to any APx analyzer.

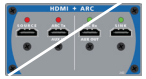


APx1701 + APx525 analyzer on top



Bluetooth Duo

Bluetooth Duo allows APx audio analyzers to connect to any Bluetooth audio device both for sending and receiving audio, supporting a wide range of BT audio codecs and profiles.



HDMI2

The APx HDMI2 module lets engineers measure HDMI (with support for both ARC and eARC) audio quality and audio format compatibility on consumer audio devices.



APx517

Integrated acoustic test system complete with audio analyzer, power amplifier, headphone amplifier, and microphone power supply, along with an array of digital interface options such as Bluetooth or HDMI, among others.

For more details, please see page 23.



GRAS 46AE



GRAS 46BE



GRAS 40PM



GRAS 42AG

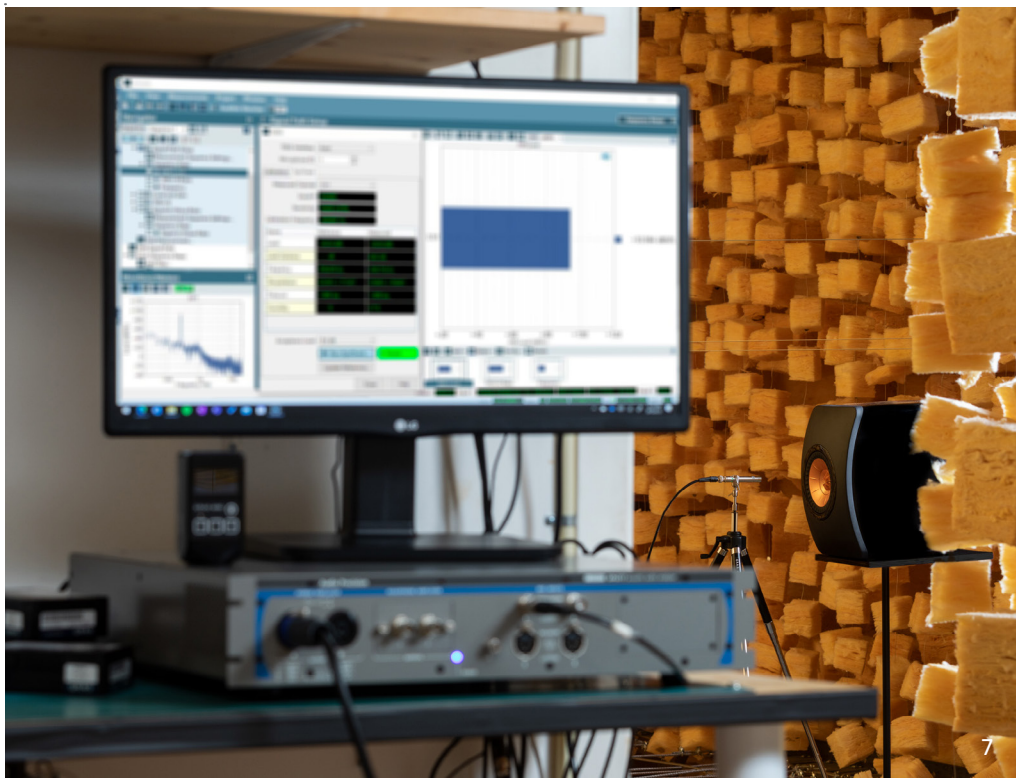


GRAS 12Bx



GRAS AL0030

For product details, please see page 22.



Headphone and **Headset** Testing

With all your tools from one provider, you can focus on innovation, not managing vendor relationships or integration issues. Axiometrix Solutions offers the market's most complete line of couplers, ear simulators, pinnae and other fixtures for testing head worn audio devices.

Axiometrix Solutions test systems cover all test scenarios and measurements, including:

- **Frequency response（FFT or Octave Analysis）**
- **Sensitivity**
- **Averaging of multiple freq responses**
- **Passive and Active Noise Cancellation**
- **Hiss-noise（e.g.: ANC and BT circuits）**
- **Impedance**
- **Headset´s microphone performance**
- **Speech Quality and Intelligibility**
- **Left/Right Tracking**
- **Crosstalk**
- **Comparison to Target Curve**
- **THD**
- **Level and Distortion**
- **Rub n Buzz**
- **Phase**



Axiometrix Solutions test systems cover all headphone and headset designs:

- Circum-aural
- Supra-aural
- Earphones
- In-ear
- Open-ear
- Bluetooth



APx500 software w. GRAS 45CC test fixture and APx517 analyzer with Bluetooth Duo option.

Unique Advantages - APx517 BT-DUO

- Integrated power and headphone amplifier with current sensor for impedance measurement
- Complete, all-in-one solution（APx517 + GRAS test fixture）that works straight out of the box.
- Bluetooth Duo: Bluetooth Source and Sink Interface - simultaneous analog and digital measurement.



An APx1701 coupled with an APx525 analyzer. APx1701 adds electro-acoustic testing capabilities to any APx analyzer.



GRAS 46BE



GRAS 40PM



GRAS 42AG



GRAS pinnae



GRAS 12Bx



GRAS 43AG



GRAS 43AC



GRAS 43AA



GRAS 44AA



GRAS 44AB



GRAS 45CA



GRAS Pinnae



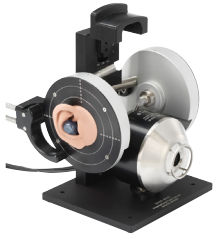
GRAS 45CC



With Headset



With Headphone



With In-ear

For product details, please see page 22.



GRAS RA0404



GRAS RA0402



GRAS RA0045



GRAS AL0030



GRAS KEMAR



GRAS Pinnae
We have the market's largest selection of pinnae for both KEMAR and other GRAS test fixtures such as 45CA, 45CC and 43AG.



GRAS 43BB - ear simulator kit. A low-noise version of the famous "711 coupler" that can be used to test devices down to 10.5 dBA SPL. Can be used with a variety of KEMAR and other GRAS test fixtures.

Microphone Testing

Whether intended for use in a controlled studio or a dynamic live setting, we offer a completely integrated, turn-key test solution for microphones. You can be up and running in 5 minutes and covered on all measurements and test scenarios, including:

- **Frequency Response**
- **Sensitivity**
- **Directivity**
- **Polar Pattern**
- **Distortion（THD, IMD）**
- **Signal to Noise Ration（SNR）**
- **Noise Floor**
- **Upper Dynamic Range Limit**
- **Output Impedance**



APx500 Software

Create and automate complex test sequences that include user prompts, limits, and calls to external applications, directly in the graphical user interface（GUI）, or use the available API to program your test sequences.





APx517

Integrated acoustic test system complete with audio analyzer, power amplifier, headphone amplifier, and microphone power supply, along with an array of digital interface options and Bluetooth or HDMI2 test capabilities.



APx1701

The APx1701 Transducer Test Interface integrates instrument-grade amplifiers and microphone power supplies to provide clear insight into the behavior of electroacoustic devices. Shown here with an APx525 analyzer with HDMI2. APx1701 adds electro-acoustic testing capabilities to any APx analyzer.





GRAS 46AE



GRAS 46BE



GRAS 42AG



GRAS 44AA



GRAS 44AB



GRAS 12Bx



GRAS AL0030

For product details, please see page 22.

Microphone Power Modules: You'll need these if your analyzer doesn´t have built-in microphone power supplies in their inputs. The 12Bx power module series provides integrated TEDS support and is competitively priced for production test applications. This portfolio comprises 6 different models with 1, 2, and 4-channel CCP and LEMO power modules.





MEMS Microphone Testing

Axiometrix Solutions offers completely integrated testing solutions for MEMS microphones and arrays, testing on parameters like:

- **Frequency Response**
- **Phase**
- **Sensitivity**
- **Signal to Noise Ratio**
- **THD**
- **Acoustic Overload Point**
- **Directivity**
- **Polarity**
- **Testing bare microphones - APx analyzer provides master clock**
- **Microphone Arrays - APx can act as slave clock**
- **Margin testing using programmable Vdd supply**



Unique Advantages

- Direct connectivity to any device with a PDM input or output.
- Multichannel 16 input PDM module available.
- Acoustically silent remote POD for PDM MEMS microphone test in anechoic chamber.
- Simultaneous digital an analog input for digital MEMS microphone characterization referred to analog reference microphone.
- Digital Serial I/O (DSIO) module available to test digital MEMS microphone with other interfaces such as I2S and TDM.
- Jitter tests and jitter impairments for tolerance testing
- Power supply rejection testing capability

APx500 Software

Create and automate complex test sequences that include user prompts, limits, and calls to external applications, directly in the graphical user interface (GUI), or use the available API to program your test sequences.



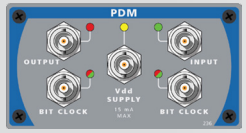
APx517

Integrated acoustic test system complete with audio analyzer, power amplifier, headphone amplifier, and microphone power supply, along with an array of digital interface options.



PDM

The PDM provides features that are especially useful during the development phase of a new product, including jitter tests and jitter impairments for tolerance testing, as well as power supply rejection test. The combination of the PDM and the PDM 16 makes a very comprehensive solution for PDM test.

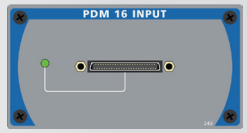


PDM 16

The APx PDM 16 option has all the functionality needed for comprehensive MEMS microphone output measurements and is integrated into a fully-featured APx audio analyzer, enabling quick connection and sophisticated testing.

For situations where both input and output PDM capability is needed, the PDM module can be used in conjunction with the PDM 16 to provide two channels of PDM output and up to 16 channels of PDM input.







GRAS 42AG

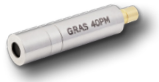
A Class1 portable, battery-operated multifunction sound calibrator. It provides both 94- and 114-dB level reference at 250 or 1000 Hz.



GRAS 46AE / GRAS 46BE

For general acoustic diagnostics, the ½" 46AE and the ¼" 46BE set the standard for modern measurement microphones.

GRAS 40PM



GRAS AL0030





12Bx

The 12Bx power module series provides integrated TEDS support and comprises 1, 2 and 4-channel CCP and LEMO power modules.



GRAS 44AA/AB

A mouth simulator, available with or without an internal power amplifier.

Smart Speaker and **Speakerphone** Testing

A turn-key test solution from Axiometrix Solutions offers tests on parameters like:

- **Frequency response**
- **Sensitivity**
- **Input voltage/power**
- **Impulse response**
- **Impedance and Thiele-Small parameters**
- **Directivity (Polar Plot)**
- **Distortion**
- **Rub n buzz**
- **CSD / Waterfall plots**
- **Hiss-noise (e.g. AND and BT circuits)**



Unique advantages:

Completely integrated solution from one company with:

- Open loop measurement support
- Bluetooth interface
- HDMI connection
- Complete, all in one solution (APx517 + GRAS microphone) means you can be up and running in 5 minutes





GRAS 46AE



GRAS 46BE



GRAS 40PM



GRAS 42AG



GRAS 44AA



GRAS 44AB



GRAS 12Bx



GRAS AL0030

For product details, please see page 22.

APx500 Software

Create and automate complex test sequences that include user prompts, limits, and calls to external applications, directly in the graphical user interface (GUI), or use the available API to program your test sequences.



APx500 Flex

The APx500 Flex audio analyzer - comprised of APx500 measurement software and an APx500 Flex Key - allows you to select the ASIO-capable audio interface of your choice to use along with AP's versatile and powerful APx audio measurement software.

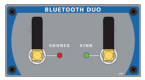


APx1701

The APx1701 Transducer Test Interface integrates instrument-grade amplifiers and microphone power supplies to provide clear insight into the behavior of electroacoustic devices. Shown here with an APx525 analyzer. APx1701 adds electro-acoustic testing capabilities to any APx analyzer.



APx1701 + APx525 analyzer on top



Bluetooth Duo

Bluetooth Duo offers a range of new audio codecs, new operational features in the supported profiles, and faster connection times.



HDMI2

The APx HDMI2 module lets engineers measure HDMI audio quality and audio format compatibility on consumer audio devices.



APx517

Integrated acoustic test system complete with audio analyzer, power amplifier, headphone amplifier, and microphone power supply, along with an array of digital interface options such as Bluetooth or HDMI, among others

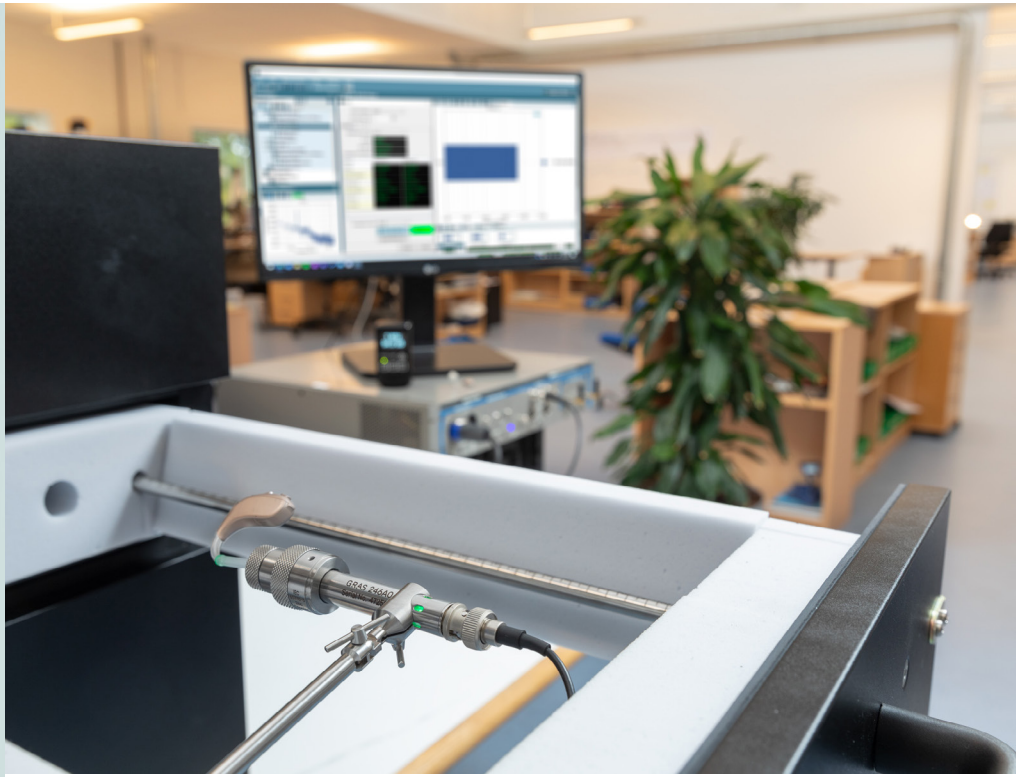
For more details, please see page 23.

Hearing Aid Testing

Axiometrix Solutions has the only all-in-one solution that provides complete test of hearing aids to ANSI S3.22 and IEC 60118 standards on the market. By choosing a one-stop test and measurement system, you'll ensure precise and repeatable data from measurements and test scenarios such as:

- OSPL90 Frequency Response
- Full-on Gain Frequency Response
- Basic Frequency Response
- THD
- Equivalent Input Noise
- Steady State Input Output
- Attack and Release
- Intermodulation Distortion
- Battery Current
- SPLIV Curve
- Equivalent Test Loop Sensitivity
- HFA MASL







APx511

The APx511 Hearing Instrument Audio Analyzer is designed to meet the needs of hearing instrument manufacturers, providing the specific measurements and I/O required for hearing instrument production test. The integrated acoustic test system, APx517, is also well suited for the task, as is the APx1701 Transducer Test Interface when coupled with an analyzer like the APx525. All AP test systems are designed to run with the APx500 software.



APx1701 and APx525 analyzer



APx517

For more details, please see page 23.

KEMAR
- A Hearing Aid Testing Standard
KEMAR is designed to replicate the acoustic properties of an average human head and torso, making it ideal for hearing aid testing applications.







GRAS 46AE



GRAS 46BE



RA0038
2cc coupler



GRAS 42AG



GRAS 43AG



GRAS 43AB



GRAS 43AC



GRAS 44AA



GRAS 44AB



GRAS 12Bx



GRAS AL0030



GRAS 45CC



GRAS 45CA



GRAS Pinna

For product details, please see page 22.

Hearing Protection Testing

Axiometrix Solutions is actively involved in developing and setting the standards for hearing protection device testing. We offer two complete solutions for integrated hearing protection testing. Both are based on AP analyzers and software coupled with GRAS test fixtures:

No matter if you are testing earplugs, earmuffs, or active or passive hearing protectors, Axiometrix Solutions has you covered with:

- **Massive/closed design and construction**
- **High self-insertion loss (45CA: 60 dB, 45CB: 65 dB)**
- **Nth Octave Spectrum Analysis**
- **Measurements up to 193 dB**
- **Option to fit low-noise ear simulators for measurements down to 10.5 dB**
- **Long, rubber lined ear canal ideal for ear plug testing**
- **Heated ear canal for realistic testing**





GRAS 45CB
45CB follows the ANSI S12.42 standard (Methods For The Measurement Of Insertion Loss Of Hearing Protection Devices In Continuous Or Impulsive Noise Using Microphone-In-Real-Ear Or Acoustic Test Fixture Procedures).

GRAS 45CA
45CA is made according to the ISO 4869-3 standard (Hearing protectors. Part 3: Measurement of insertion loss of ear-muff type protectors using an acoustic test fixture).







APx500 Flex

The APx500 Flex audio analyzer - comprised of APx500 measurement software and an APx500 Flex Key - allows you to select the ASIO-capable audio interface of your choice to use along with AP's versatile and powerful APx audio measurement software.





APx517

Integrated acoustic test system complete with audio analyzer, power amplifier, headphone amplifier, and microphone power supply, along with an array of digital interface options such as Bluetooth or HDMI, among others.

APx500 Software and the APx517 Analyzer

APx audio analyzers use a common software platform, making tests and results easier to share. All settings for a test are saved in a single project file, making it easy to replicate test setups between R&D and production facilities anywhere in the world.



GRAS 67SB Blast Probe



GRAS 42AG



Axiometrix Solutions
software and peripherals

APx software is designed for ease of use and to save time and money. APx audio analyzers use a common software platform that makes tests and results easier to share. All test settings are saved in a single project file, for simple test setup replication between R&D and production facilities.



APx500 Flex

The APx500 Flex audio analyzer—comprised of APx500 measurement software and an APx500 Flex Key—allows you to select an ASIO-capable audio interface of your choice to use along with AP's versatile and powerful APx500 audio measurement software. Start with the measurement options you need now, with the freedom to add additional measurements as your test requirements evolve. The APx500 Flex brings AP innovations such as one-click measurements, code-free automation and sophisticated reporting to off-the-shelf audio interface hardware solutions. Software licensing for APx500 Flex is facilitated by the APx500 Flex Key so it is possible to move your measurement licenses from one computer to another simply by moving your APx500 Flex Key.



APx500

APx500 Measurement Software is the most advanced audio measurement interface available. Complex procedures that include user prompts, limits, and calls to external applications can be created directly in the GUI, saving time and money while ensuring painless updates over time and no development is required. Create custom interfaces and application-to-application automation using the comprehensive APx API. Extensive documentation and examples are provided for Visual Basic.NET, C#, MATLAB, LabVIEW, and Python. Projects and automation can be shared with other APx units anywhere in the world.

AP offers a wide range of options tailored to specific applications, including:

> Electro-acoustic testing（R&D or Production）
> Speech Intelligibility: ABC-MRT measurement
> Speech Intelligibility: STI measurement

Peripherals

Signal Chain Acoustic Calibration: In order to perform reliable electroacoustic measurements, it is fundamental to adjust your signal chain for the specific reference microphone´s sensitivity and changes that can be introduced by other elements conforming the signal chain (preamplifier, cable, signal conditioner etc). The GRAS 42AG Multi-function Sound Calibrator is a Class1 portable, battery-operated sound source for calibration and check of microphones and sound level meters. It provides both 94- and 114-dB level reference at 250 or 1000 Hz.





+48V Phantom Power for GRAS Microphones: All GRAS CCP microphone sets can also be powered with +48V Phantom Power Supply with the use of an adapter like GRAS AG0003 XLR-BNC adapter.

Microphone Power Modules: You'll need these if your analyzer doesn´t have built-in microphone power supplies in their inputs. The 12Bx power module series provides integrated TEDS support and is competitively priced for production test applications. This portfolio comprises 6 different models with 1, 2, and 4-channel CCP and LEMO power modules.



GRAS AL0030 – A portable acoustic test chamber that provides a flexible platform for testing small acoustic devices in a repeatable and reliable way, shielded from background noise.



Selected Product Details

GRAS 40PM & GRAS 40PM-1

EQset™ Miniature Production Line Microphones

The 40PM & 40PM-1 are designed for production line testing. Thanks to the revolutionary EQset technology, these 1/4" microphones have a very small sensitivity deviation and the frequency response is very tight and flat, which makes post compensation and linearity un-necessary.

GRAS 43AA

Ear Simulator Kit According to IEC 60318-1

43AA is a complete test jig for acoustical measurements on telephone handsets and earphones in accordance with:

- IEC 60318-1 (60318) Electroacoustics—Simulators of human head and ear—Part 1: Ear simulator for the calibration of supra-aural and circumaural earphones,
- ITU-T Recommendation P.57 (08/96) Series P: Telephone transmission quality, Objective measuring apparatus: Artificial ears.

43AA also complies with IEC 60318-2 (1999) (withdrawn and now incorporated into 60318-1).

GRAS 43AB

1/2" 2cc Coupler Kit According to IEC 60318-5

43AB is a complete test jig for acoustical measurements on hearing aids in accordance with IEC 60318-5 (60126) and ANSI S3.7-1995 on insert type hearing aids in accordance with:

- IEC 60318-5 (60126) IEC reference coupler for the measurement of hearing aids using earphones coupled to the ear by means of ear inserts.
- ANSI S3.7-1995 American National Standard for Coupler Calibration of Earphones.

GRAS 43AC

Ear Simulator Kit According to IEC 60318-4

43AC is a complete test jig for acoustical measurements on earphones coupled to the ear by inserts such as tubes and ear moulds in accordance with:

- IEC 60318-4 (former 60711) Occluded-ear simulator for the measurement of earphones coupled to the ear by ear inserts.
- ITU-T Recommendations P.57 (08/96) Series P: Telephone transmission quality, Objective measuring apparatus: Artificial ears.

GRAS 44AA & 44AB

Mouth Simulators

A sound source, which simulates the acoustic field close to the human mouth and complies with the standards IEEE 269, 661 and ITU-T Rec. P51.

For testing telephone mouthpieces as well as other microphones. At the mouth reference point (MRP), which is 25 mm from the detachable lip ring, the minimum-continuous signal it can produce in 1/3-octave bands is 100 dB re. 20 µPa in the frequency range 100 Hz to 10 kHz.
44AA's loudspeaker accepts an external signal either directly or via its own built-in power amplifier.
44AB's loudspeaker accepts a signal from an external power amplifier directly via the BNC input.

GRAS 45CC

Headphone Test Fixture

45CC is a a flexible platform for dual-channel testing of headphones and headsets. It is available in a variety of configurations: IEC 60318-1 or IEC 60318-4 ear simulators; baseplates, artificial ear simulators or human-like pinae; and all are IEEE 1451.4 TEDS v. 1.0 compliant. An optional ITU-T P.51 mouth simulator extends testing to headsets. It can be adjusted very precisely to support different headphone/headset designs and sizes for high accuracy and repeatability.

GRAS 46AE

1/2" CCP Free-field Standard Microphone Set

46AE is a 1/2" free-field general-purpose high-sensitivity microphone set with built-in TEDS and BNC connector.

GRAS 46BE

1/4" CCP Free-field Standard Microphone Set, Wide Frequency

46BE is a 1/4" Constant Current Power CCP free-field microphone set for measuring high sound pressure levels at high frequencies. It is terminated with a 10/32 UNC Microdot female connector and has TEDS.

A high-temperature version is available, 46BE-HT.

GRAS 67SB Blast Probe

Blast Probe Microphone

The 67SB Blast Probe is designed as a reference microphone for impulse measurements according to the ANSI S12.42 standard.

The 1/8" reference microphone inside it is ideally suited for capturing impulsive signals with a very fine time resolution. This microphone has an upper limit of 174 dB in the dynamic range.

GRAS RA0038

1/2" 2cc Coupler IEC 60318-5

An IEC 60318-5 (60126) 2cc coupler which complies with the requirements of:

- IEC 60318-5 (60126) IEC reference coupler for the measurement of hearing aids using earphones coupled to the ear by means of ear inserts.
- ANSI S3.7-1995 American National Standard for Coupler Calibration of Earphones.

It is used with a 40AG 1/2" microphone and a 26AS preamplifier, which is a 1/4" very short preamplifier with 3 m integrated cable supplied with an adapter for 1/2" microphones. RA0038 is also part of the 43AB 2cc Coupler Kit.

GRAS RA0402 & GRAS RA0404

RA0402 Prepolarized Ear Simulator / RA0404 Prepolarized Hi-Res Ear Simulator

RA0402 and RA0404 are high-frequency versions of the standardized 60318-4 ear simulator (RA0045), which has gained wide acceptance as the preferred tool for measurements with simulation of the acoustic load presented by the human ear. Below 10 kHz, the standardized ear simulator does a good job. However, above 10 kHz, the steep resonance at 13.5 kHz dominates.

In RA0402 this resonance is damped and the useful frequency range is extended to 20 kHz.

In RA0404 this resonance is damped and, in combination with the use of a 1/4" microphone, the useful frequency range is extended to 50 kHz.

RA0402 and RA0404 comply with IEC60318-4 and are fully backward compatible as their acoustic transfer impedance is within the tolerance band specified by IEC60318-4. From 10 to 20 kHz the transfer impedance is within ± 2.2 dB for both ear simulators, resulting in improved repeatability. In RA0404 the transfer impedance from 20 kHz to 50 kHz is within ± 3.2 dB.

Both RA0402 and RA0404 have a built-in prepolarized microphone for use with CCP preamplifiers.

APx1701

The APx1701 Transducer Test Interface is primarily designed for electroacoustic testing. The system drives loudspeakers and headphones with dedicated power amplifiers, enables impedance measurements, and provides power to measurement microphones and microphones under test. Its functions are integrated with the APx500 audio measurement software and a connected APx analyzer. It requires a B Series or legacy APx analyzer and is supported by APx500 audio measurement software version 4.3 or later.

APx517

The APx517B is an all-in-one system, complete with an audio analyzer, power amplifier, headphone amplifier, and microphone power supply, along with the ability to add an optional digital interface. If testing digital devices—for example Bluetooth headphones or an HDMI soundbar—then the digital module capability of the APx517B will be key. Also, for a production line that sees a range of different devices, the incredibly fast setup or reconfiguration capability of the APx517B should be of great benefit.

APx511

The APx511 Hearing Instrument Audio Analyzer is designed to meet the needs of hearing instrument manufacturers, providing the specific measurements and I/O required for hearing instrument production test. The integrated acoustic test system, APx517, is also well suited for the task, as is the APx1701 Transducer Test Interface when coupled with an analyzer like the APx525. All AP test systems are designed to run with the APx500 software.

APx525 - Analyzer

The B Series APx525 ships with two channels of analog I/O and our Digital Interface Option (DIO) with AES/ SPDIF digital inputs and outputs, and includes ASIO capability. If you need more than that, APx525 is ready with a full range of choices, from additional channels of analog to a chip-level digital serial interface (DSIO), HDMI+ARC, PDM (Pulse Density Modulation) or Bluetooth® wireless technology with built-in radio.



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