System One

System One, the computer-based audio tester that started it all, is available today in improved, final versions. The analog version SYS-22A is still popular with many users for general purpose automated analog audio test applications not requiring System Two performance.

The +DSP (SYS-222), Dual Domain (SYS-322) and all "G" Versions (IEEE-488 GPIB) are recommended only for existing users and applications.

System One is used daily worldwide, by thousands of design and test engineers and technicians at manufacturing firms; by unskilled operators at test stations and by maintenance engineers. Now shipped with Audio Precision's **APWIN** software, it is also available with its original S1.exe DOS-based software, or with a **GPIB** IEEE-488 interface. It rapidly and easily tests performance of prototypes and designs, or does manufacturing testing from board to system level and verifies performance of virtually any audio device.

Three basic System One configurations are available:

SYS-22 (A or G)

System One analog domain test set: generates and analyzes all signals via analog hardware. Key analog generator specifications include distortion residual specification of -106 dB and flatness of ±0.03 dB over a 20 kHz bandwidth. Analog analyzer specs feature residual noise of less than 1.5 microvolt (-114 dBu), flatness of ±0.03 dB, and analyzer THD+N of -100 dB (0.001%). Measures **amplitude**, **level**, **ratio**, **crosstalk**, **bandpass amplitude**, **frequency**, **phase**, **THD+N**, and optionally **IMD** and **wow & flutter**.

SYS-222 (A or G)

System One+DSP analog domain test set with all the capability of the SYS-22, plus DSP modules for generation and analysis of **multitone signals** (**FASTTEST**®), **FFT spectrum analysis**, **waveform display**, **MLS** (maximum length sequence) quasi-anechoic acoustic testing, and individual harmonic analysis.

SYS-322 (A or G)

System One Dual Domain test set: also DSP-equipped, includes all SYS-222 capability plus **digital domain generation and analysis** via **digital inputs and outputs** in the AES/EBU (balanced and unbalanced) and consumer (coaxial and optical) formats, plus parallel and general purpose serial I/O.

With dual domain architecture, the analog hardware generator and analog hardware analyzer for analog domain devices are separate and independent from DSP modules which stimulate and analyze digital domain devices.

"A" versions include APWIN software, manuals, interface card & cable.

"G" versions operate from user-developed GPIB programs.

Internal Options

System One's architecture is internally modular. This permits configuration to your exact needs at the time of purchase, and later upgrades as needs change. Three major internal analog domain options may be fitted to any of the first three basic configurations.

- The **BUR** option adds analog domain generation of burst sine waves with controllable burst duration, interval, and lower amplitude between bursts, plus squarewaves to 20 kHz, analog random and pseudorandom white and pink noise, and bandpass filtered pink noise.
- The **IMD** option analyzes analog domain devices for intermodulation distortion to the SMPTE/DIN, CCIF (twin tone or difference tone) and DIM/TIM(dynamic/transient intermodulation distortion) standards.
- The **W&F** option measures wow and flutter to the IEC/DIN, NAB, JIS, and scrape flutter standards, weighted or unweighted.

System One GPIB – System One "G" versions include an IEEE Std 488.1 GPIB port to control all settings and acquire measurements for all GPIB versions of the System One, SWR-2122 switchers, and DCX-127 Multifunction Module. C and Basic sample code and utility programs for DOS are provided on diskette. Instrument software drivers for current versions of National Instruments LabWindows/CVI and LabView support the Dual Domain analog and digital features, *FAST*TRIG DSP multitone measurements, the SWR-2122 switchers, and the DCX-127 Multifunction Module.