



AE Techron's 3110 is a tightly integrated, modular waveform generation system that gives the user the ability to create custom testing programs and routines that are flexible and easy to use.

Simple Yet Powerful

The 3110's SWG software is a simple yet powerful waveform creator. Its intuitive interface makes it easy to create waveform segments and then build a "wave generation playlist" using your touch-screen or computer keyboard. Each segment in the playlist can be generated independently, or you can run the playlist sequentially as a complete test routine.

SWG software loads into your favorite browser on any Windows 7/8-based computer, making it easy to install and use. Plus, because it is PC-based, the SWG software allows you to take advantage of the large, high-resolution displays and the ample storage space available on most PCs. Data export to other applications is also quick and easy using common PC data formats.

Amazing Range and Flexibility

The 3110 features a high-performance signal processing engine with an on-chip ARM processor and flexible FPGA-based DSP controlling a high-speed, 18-bit ar-



The 3110 Waveform Generator and a 7224 amplifier form the basic SWG System



3110 Audio Bandwidth Standards Waveform Generator

Features

- Touch and/or keyboard interface
- PC-based full documenting display
- Very short learning curve
- Library of standard test routines
- Very easy to program and save complex, multi-step, custom tests
- 1 MHz sine wave
- 1µS full scale rise-time Arb

bitrary waveform generator and parallel 1-MHz sine-wave generator. This combination of hardware gives the 3110 the ability to produce an amazing range of waveforms including AC, DC, drop outs, DC with high-frequency AC ripple, surges with rise or fall times as fast as 3µS, and sine waves of up to 1 MHz.

AE Techron's World-Recognized Amplifiers

AE Techron's 7000-Series amplifiers, which are used in the system for signal amplification, have been recognized throughout the EMC test industry as reliable, accurate producers of audio bandwidth signals. They can be configured to provide from 1 kW up to 20 kW, from <100 mV up to 600Vpk, from <10 mA up to 800Apk, and from DC to 300 kHz. 7000-Series amplifiers can be used individually or combined into multi-amp systems for increased voltage or current output.

Intelligent Integration

The SWG software monitors the status of both the amplifier and the 3110 Waveform Generator. Because the SOA of all AE Techron 7000- Series amplifiers is preprogrammed into SWG, the amplifiers are protected from actions that could be unsafe to the amplifier or the user. Meanwhile, the SWG software monitors and verifies that the waveform produced by the 3110 matches the waveform requested, so you can devote your time to the equipment under test, not the test equipment.



BUILD A TEST

Quickly add waveform segments and define parameters using the 3110's SWG software. The intuitive "Wave Generation Playlist" display makes it easy to have your test up and running in no time.

BUILD A SYSTEM

Other 7000 Series amplifiers can be used in place of the 7224 for increased voltage or current output. Multiple amplifiers can be used in Series or Parallel configurations for additional voltage or current output.



3110 Audio-Bandwidth Waveform Generator

Technical Details - Hardware

- Output channels:** 1
- Output Voltage:** 10 Vpk-pk
- Signal Generation:**
 - DAC:**
 - 18 bit
 - 1µs full scale (includes settling time)
 - 0 – 50 kHz any wave form
 - Sine:** 1 MHz
 - 4 bit
 - 400 Msps
 - 0.01 Hz Frequency Resolution or better
 - 0.002° Phase Granularity
 - Amplitude:**
 - 76µV resolution
 - Frequency:**
 - Stability: ±50 ppm
 - Accuracy: ±0.1%

Technical Highlights – Software

- Wave forms supported:**
 - Sine, DC, Saw tooth, Square, Triangle, Repeat, Trigger
- Wave form modifiers:**
 - Frequency:**
 - Single Frequency
 - Swept – Linear, Log, Stepped
 - Amplitude:**
 - Single amplitude
 - Swept – Linear, Log, Exponential, Stepped
- Waveform Segment Limits:**
 - Min Time duration:** 10 µS
 - Max Time duration:** Unlimited
 - Contents:**
 - 1 Basic Waveform with modifiers per segment
- Standards Limits:**
 - Number of segments:** Unlimited
 - Playback:**
 - As as linked series
 - As randomly accessed segments