Generation II Stereo Simulator

A sonically advanced stereo simulator for production, film, and broadcast applications.

The Generation II Stereo Simulator from Studio Technologies creates a convincing stereo image from a mono audio source. The fully mono-compatible signal simulates space without reverberation by using random, non-recursive filter techniques. The simulated stereo is created by generating two incoherent signals from one source; simulating stereo perception at the ears of the listener.

The name, Generation II, reflects the experience that Studio Technologies brings to this product. The Generation II builds on the technology used in the successful AN-2 Stereo Simulator and ISS Integrated Simulator System. Hundreds of these units are in use at recording studios, broadcast stations, and film studios around the world.

Applications

The Generation II is intended for use in post production, film, and broadcast applications. Post production applications abound as monaural audio sources require enhancement for stereo or multi-channel formats. It's ideal for converting mono film tracks to a fuller, more contemporary "stereo" sound for broadcast or theatre use. The unit is perfectly suited for television on-air and production use.

Two Operating Modes

The Generation II features two operating modes. The Music mode provides stereo simulation over the entire audio range. This mode provides the most dramatic spatial effect. The Music & Voice mode utilizes a specialized filter to give enhanced simulation to all frequencies except those in the voice band. This ensures that voices won't sound "hollow" or over processed, giving an excellent stereo "feel," while maintaining voice centering. Of course, the simulated stereo produced in both modes is completely mono compatible.

Use the Generation II On-Air

A number of features incorporated into the Generation II provide the performance characteristics required for on-air broadcast use. The incoming power is not controlled through a switch, ensuring continuous operation. All controls are laid out to be tamper resistant.

The operating mode, Music or Music & Voice, can be controlled using a front panel switch or set internally. The stereo intensity adjustment can be made using a front panel control or internally set to prevent unauthorized changes.

Features

- Electronically balanced input and output circuitry
- Adjustable stereo intensity control
- Dual operating modes
- Effective simulation while maintaining integrity of voice signals
- Mono-compatible output
- Dual LED metering
- Tamper-resistant controls
- Single rack space mounting

Nuts and Bolts

The Generation II is simple to install and use. The unit mounts in one standard rack space. Input and output signals are interfaced using 3-conductor XLR-type connectors. The input and output levels are switch selectable for nominal 0, +4, or +8dBu operation. Simply set the desired operating mode and adjust the stereo intensity control for the desired great sound.

Generation II Specifications

Input Level:	0, +4, or +8dBu, switch selectable (0dBu=0.7746V)
Input Impedance:	25k ohms, electronically balanced, provision made for optional load resistor
Output Level:	0, +4, or +8dBu, switch selectable
Output Impedance:	100 ohms, electronically balanced
Maximum Output Level:	+26dBu into 10k ohms +24dBu into 600 ohms
Frequency Response:	$\pm$0.1dB, 20Hz to 20kHz (no simulation added)
Distortion (THD):	0.40% (20Hz to 20kHz)
Signal to Noise Ratio:	76dB

Metering:	Dual 3-section LED type, switch selectable to monitor input or output levels
Input Connector:	XLR-type female, pin 2 hot
Output Connectors:	XLR-type male, pin 2 hot
AC Mains Requirement:	115/230V $\pm$10%, switch selectable, 50/60Hz, 10 watts
AC Mains Connector:	3-conductor, IEC 320-style
Dimensions:	19.00 inches wide (48.3cm) 1.73 inches high (4.4cm) 7.00 inches deep (17.8cm) (1 standard rack space)
Weight:	4.2 pounds (1.9kg)

Specifications subject to change without notice.