

# FM STEREO GENERATOR WITH MPX AES

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OUTPUTS

TX1; 2.40dB

TX2: 2.40dB

Pilot: 9.0%

SCA1: +3.0dB

SCA2: +3.0dB



## SG-192

take it digital - all the way from your inputs to your transmitter



The new SG-192 is the first standalone FM stereo generator capable of passing full AES MPX composite baseband to the exciter, including RDS and SCA up to 80kHz, and is equipped with an intelligent stereo multipath controller that helps mitigate the effects of multipath-induced receiver blending. The SG-192 can be used for translator or repeater applications and is compatible with any audio processor.

The SG-192 FM stereo generator complements Wheatstone's audio processing line and can provide stereo generation for third-party audio processors that lack a stereo generator or are installed in a location where their stereo generator cannot be used.

The SG-192 offers Wheatstone's exclusive stereo multipath controller, which helps mitigate the effects of multipath-induced stereo receiver blending in the absence of clean reception. Audio interfaces for the exciter include the legacy composite analog signal (2 separate outputs are available) or Wheatstone's baseband192 AES digital composite baseband output for compatible exciters. A dedicated 10MHz synchronizing input is useful for single frequency networks, translators, and repeater applications.

Inputs can be traditional analog or AES—plus the SG-192 is WheatNet-IP compatible so it can accept IP audio inputs from the WheatNet-IP Intelligent Network.

The new SG-192 can be added at the studio or the transmitter site, depending on the STL in use, and comes with a highly oversampled, low distortion composite clipper. A sharp front panel OLED display makes adjustments easy and the front panel headphone output allows confidence monitoring of the stereo generator's input signals.

#### Wheatstone baseband192

The SG-192 is equipped with Wheatstone® baseband192 technology, the only digital MPX technology that samples the entire multiplex spectrum at 192kHz in order to include the FM composite signal as well as RDS and SCA subcarriers up to 80kHz. Digitally mixing RDS and SCA signals to the composite baseband eliminates the noise problems created by analog technology; this translates to a lower noise floor and less crosstalk between subcarriers.

A single AES/EBU cable between the SG-192 and a modern solid-state FM transmitter carries the entire digital baseband signal, eliminating the need for stereo multiplexing in the exciter and doing away with the resulting signal overshoot and loudness tradeoffs associated with it.



#### **Exclusive Multipath Control**

Exclusive to the Wheatstone line of audio processors, including the SG-192 stereo generator, is our unique Stereo Multipath Controller. A single user control sets its algorithm for market and terrain-specific multipath environments and helps mitigate the audible effects of receiver-induced stereo blending due to adverse reception conditions. The result is a clearer stereo experience for listeners—often accompanied by the perception of an increased coverage area.

#### WheatNet-IP Compatible

The WheatNet-IP interface makes it possible to control the SG-192 from anywhere in the IP audio network, making it just as flexible as WheatNet-IP surfaces and controllers!

#### **Recommended Applications:**

FM Single frequency networks Translators or repeaters

- Dedicated 10MHz GPS clock input
- Highly oversampled composite clipper
- Exclusive stereo multipath controller technology for enhanced stereo reception
- Wheatstone® baseband192 built in for composite AES link to transmitter
- Ethernet-based remote control via 100BaseT Ethernet and rear panel RJ45
- Front panel headphone jack
- AES3 digital input accepts 32kHz 96kHz
- Precision FM stereo MPX generator with pilot and SCA protection filters
- GUI software interface, for easy setup and control
- WheatNet-IP compatible



### SG-192 GUI Software

The SG-192 has a GUI suite that makes complete control a snap. All you need is a Windows PC.

Specifications and features subject to change without notice.



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