# **Inovonics** 708 Performance and value in an FM Stereo Generator

# AN ECONOMICAL DIGITAL-SYNTHESIS FM STEREO GENERATOR

Inovonics' 708 is the latest generation in a proven line of "basic" FM Stereo Generators, boasting features and performance usually found in products costing significantly more. It includes accurate front-panel metering for easy setup, adjustable pre-pilot composite processing, and internal combining for RDS/RBDS and SCA subcarriers.

New digital synthesis techniques and linearphase filtering ensure outstanding performance, and a clean output spectrum protects low-injection digital and analog subcarriers.

If your fundamental need is for a simple, yet fully-featured "basic" FM Stereo Generator, our 708 deserves your careful consideration.







• Digital synthesis of the stereo pilot and multiplex signals assures optimum stereo separation and drift-free operation.

• Accurate front-panel metering facilitates setup and aids the proper adjustment of subcarrier injection levels.

• The 708 provides independent metering and internal combining for SCA or RDS/RBDS subcarriers.

• Easy to set up and easy to use, the 708 utilizes "generic" components throughout for ease in servicing, anywhere in the world.

### FREQUENCY RESPONSE

±0.5dB, 20Hz-16kHz.

#### STEREO SEPARATION

>60dB (typically 65-70dB), 50Hz-15kHz.

#### NOISE

Better than 75dB below 100% modulation in baseband and subcarrier; "digital" noise components above 54kHz are –70dB or better.

#### DISTORTION

<0.15% THD in baseband and subcarrier at 95% modulation.

#### CROSSTALK (M/S or S/M)

"Nonlinear" crosstalk is better than –50dB, 50Hz-15kHz; "linear" crosstalk is better than –45dB with pre-emphasis switched off.

# STEREO PILOT

19kHz, ±1Hz; level may be adjusted between 6% and 12%, relative to 100% modulation. <1% THD in pilot signal.

0

L+R L-R

R



Rear view

### PROGRAM LINE INPUTS (Left and Right)

Active-balanced, bridging; accept limited program audio levels between –15dBu and +15dBu, corresponding to 100% modulation.

#### SUBCARRIER INPUTS

Two unbalanced inputs accommodate SCA or RDS/RBDS subcarriers at levels between –20dBu and 0dBu for nominal 5-10% injection.

#### PRIMARY LOW-PASS FILTERING

7-pole, phase-corrected, active-elliptic filter with proprietary overshoot compensation (defeatable). –60dB or better at 19kHz and above.

#### **PRE-EMPHASIS**

May be jumpered for 75µs or 50µs characteristics; may be defeated by front-panel switch.

#### COMPOSITE PROCESSING

A composite clipper acts on the multiplex signal prior to injection of the stereo pilot and any auxiliary subcarriers. Clipping is adjustable between 0dB and 3dB.

#### **COMPOSITE OUTPUT**

Unbalanced output with 75-ohm source impedance. 100%-modulation level is adjustable between 1V p-p and 8V p-p.

#### DIGITAL SYNTHESIS SAMPLING RATE

608kHz (16X subcarrier oversampling).

# POWER REQUIREMENT

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PILOT SUB 1 SUB 2

105-130VAC or 210-255VAC, 50/60Hz; 10W.

SIZE AND SHIPPING WEIGHT 1<sup>3</sup>/<sub>4</sub>"H x 19"W x 6"D (1U); 7 lbs.

