

Inovonics 716

The DAVID-II - FM simplified

A PRACTICAL AND SENSIBLE SOLUTION TO THE FM AIR-CHAIN DILEMMA

In 1992 Inovonics introduced the first DAVID (as in David vs. Goliath) to meet basic FM air-chain broadcast needs. DAVID-II is Inovonics' second-generation processor/generator in the DAVID line. DAVID-II has been specifically engineered to yield the dense, "hot" sound demanded by contemporary music programmers.

DAVID-II has earned an international reputation for great value and outstanding performance. It has proven competitive with far more complex and costly alternatives in markets of all sizes. We invite you to try our simple "giant killer." DAVID-II will surprise you.



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Features & Specifications

- Digital synthesis of the composite multiplex signal for best stereo separation and stable operation.
- Processing employs feedforward pulse-width-modulation (PWM) for a full, smooth and bright sound without artifacts.
- Built-in composite processor maximizes modulation density. Internal combining for SCA or RDS subcarriers.
- Very easy to set-up and use. Generic, readily-available components for worldwide servicing ease.

FREQUENCY RESPONSE

±0.5dB, 20Hz-15kHz

STEREO SEPARATION

>55dB, 50Hz-15kHz (typically 60-70dB)

NOISE

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

DISTORTION

<0.5%THD in baseband and subcarrier at 95% modulation with processing engaged.

CROSSTALK (M/S or S/M)

Nonlinear crosstalk is better than -50dB, 50Hz-15kHz. Linear crosstalk (through processing and filters) is better than -40dB.

STEREO PILOT

19kHz, ±1Hz; adjustable between 6% and 12% relative to 100% modulation.

PROGRAM LINE INPUTS (L/R)

Active-balanced, bridging; accept program audio levels between -15dBu and +15dBu.

SUBCARRIER INPUT

Unbalanced input for SCA or RDS subcarriers at levels between -20dBu and 0dBu for nominal 5-10% injection.



Rear view

LOW-PASS FILTERING

7-pole, phase-corrected, active-elliptic LPF with proprietary overshoot compensation.

PRE-EMPHASIS

75µs or 50µs with jumper selection.

GATED AGC

±10dB capture range with slow (0.5dB/sec.) correction for long-term input level variations.

COMPRESSOR/LIMITER

Fast peak limiter with secondary "platform" for dynamic range compression. Independent high frequency limiter protects the pre-emphasis characteristic.

COMPOSITE PROCESSING

0dB to 3dB adjustable clipping of the baseband prior to pilot and subcarrier insertion.

COMPOSITE OUTPUT

75-ohm, unbalanced; variable between 1V p-p and 8V p-p, corresponding to 100% modulation.

SAMPLING RATE

608kHz (16X subcarrier oversampling)

POWER REQUIREMENTS

105-130VAC or 210-255VAC, 50/60Hz; 15W

SIZE AND SHIPPING WEIGHT

1- 3/4"H x 19"W x 7"D (1U); 7 lbs.