INOmini 514 FM Multiplex Decoder



Inovonics' INOmini 514 is a standalone decoder for FM-stereo multiplex signals. It accepts a demodulated FM-baseband input and decodes the signal to discrete left and right channel audio. The recovered stereo program is available as a professional line-level balanced output, and also as an AES digital audio signal.

Local alarm 'tallies' and selectable de-emphasis curves make the INOmini 514 an essential tool for professional applications wherever a stereo-baseband signal needs to be decoded and monitored.





Rear Panel

FEATURE HIGHLIGHTS

- Decodes Composite/MPX signal into L/R audio.
- Analog L/R and AES-digital program line outputs.
- Accurate front-panel metering.
- Front-panel alarms with rear-panel 'tallies' for program Audio Loss (silence sense) and stereo Pilot Loss (stereo/mono status).
- Conforms to the worldwide FM 'pilot-tone' system; selectable 75μs/ 50μs de-emphasis.

SPECIFICATIONS

Multiplex (MPX) Input: Unbalanced/bridging (BNC); 10k input impedance; requires 0.5V p-p minimum signal

L/R Analog Line Outputs: Active-balanced (XLR), 200-ohm source impedance; +4dBu output at '0dB' on front-panel meter

AES Digital Output: Transformer-balanced (XLR), 44.1kHz sampling rate; –6dBFS output at '0dB' on front-panel meter

Headphone Jack: 3.5mm (TRS) for low-Z or high-Z phones, fixed listening level

Program Audio De-Emphasis: 75μ s/50 μ s, selected with push-on jumpers under the top cover

Audio Frequency Response: Follows selected de-emphasis characteristic ±0.5dB, 20Hz to 15kHz

Noise: (SNR re: ±75kHz deviation) MONO: >69dB analog; >72dB, AESdigital.

STEREO: >65dB analog; >65dB AESdigital.

Distortion: ≤0.05% THD, 20Hz to 15kHz (analog/digital)

Stereo Separation: >50dB 20Hz to 15kHz (analog/digital)

Forced-Mono Operation: Enabled with a push-on jumper under the top cover.

Alarm Tallies: Individual open-collector NPN transistor outputs for Program Audio Loss (either/both channels) and Pilot Loss (stereo/mono indicator)

Power Requirement: 12VDC at 230mA.

Mounting Options: An optional rack adapter accepts up to three INOmini modules in a 1U, 19-inch rack space, or the 514 may easily be fastened to any convenient surface with two small screws.

Size and Weight: 1.6"H x 5.5"W x 5.5"D; 4 lbs. shipping weight.

