



DESCRIPTION

The Belar DSD-1A is a precision FM Stereo decoder. It produces a 48 kHz AES/EBU digital stereo audio data stream by digitally demodulating analog stereo composite signals. The DSD-1A also provides balanced analog Left, Right, L + R, and L - R outputs at rear-panel XLR connectors.

The DSD-1A features two front-panel peak level indicators to maintain proper transmission levels. The user-adjustable ACTIVITY LED monitors composite activity, while the fixed OVERLOAD LED warns of possible overload. A third LED indicates the presence of the stereo pilot.

The DSD-1A is suitable for applications that require digital format stereo audio, or precision analog left and right stereo audio derived from an analog stereo signal. Such applications include: obtaining a digital input for use with digital FM exciters, demodulating composite STL's for AM stereo, obtaining digital audio for digital transmission of house monitor signals, etc.

SPECIFICATIONS:

Input Level 2.8V- 5.7V P-P composite
Input Impedance 100 k Ω , unbalanced,
BNC connector

Outputs:

Digital, Left and Right AES/EBU, 48 kHz
Analog Left, Right, L+R, L - R:

Audio Active 50 Ω Balanced Output
Level: +10 dBm into 600 Ω , XLR connector
De-emphasis flat, 50 or 75 μ sec (selectable)

Separation

Left to Right 80 dB, 10 Hz to 15 kHz
Right to Left 80 dB, 10 Hz to 15 kHz

Crosstalk:

L + R to L - R (analog matrix) 80 dB min
L - R to L + R (analog matrix) 80 dB min
L + R to L - R (digital, direct) 90 dB min
L - R to L + R (digital, direct) 90 dB min
SCA to L + R 90 dB min
SCA to L - R 90 dB min
SCA Interference 90 dB min

Analog Audio Output Specifications

Frequency Response,

Left and Right . . . $\pm$ 0.05 dB flat, 50 to 15 kHz
 $\pm$ 0.25 dB de-emphasized

Signal-to-Noise Ratio

Left and Right(de-emphasized) 90 dB

Harmonic Distortion < 0.01%
50 Hz to 15 kHz

Intermodulation Distortion < 0.01%
(SMPTE)

Power 15 watts, 100-240 VAC, 50-60 Hz

Specifications are subject to change without prior notice.



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