

# ADX-1101

## Analog audio de-embedder

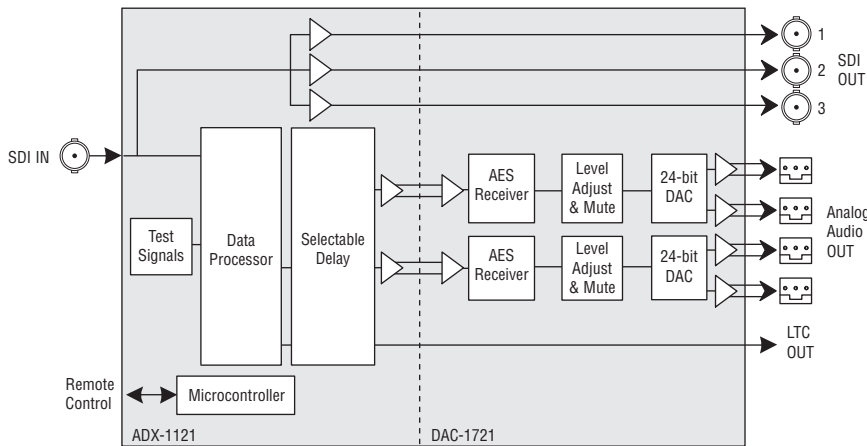


The ADX-1101 is a high-quality, high performance analog audio de-embedder designed to extract two analog audio stereo signals from a single SDI signal. The ADX-1101 comprises a DAC-1721 card (AES to analog audio converter) and an ADX-1121 card (2 AES De-Embedder). The two cards are bundled via a special connector panel that allows direct analog audio de-embedding without requiring any AES connections, in addition to optimize the slot usage.

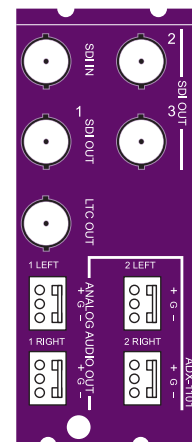
The de-embedding process of the ADX-1101 includes automatic 525/625 detection, output audio silence generation upon loss of SDI input, automatic equalization for up to 350 meters of Belden 1694A cable at 270Mbps and LTC de-embedding. The audio processing includes 24-bit digital to analog conversion and individual mute and level adjustment for every channel.

### KEY FEATURES AND BENEFITS

- › SDI input with up to 350 m automatic cable equalization
- › 3 reclocked SDI outputs
- › Auto-detects 525/625 line format
- › Outputs 2 analog audio stereo signals
- › Selectable routing of groups to audio pairs
- › Left/right channel swappable
- › Selectable audio delay (up to 6 fields)
- › 24-bit digital to analog audio conversion
- › 0 dBFS selectable (0 to +24 dBu)
- › -96 to +12 dB audio level adjustment (by 0.5 dB steps)
- › Audio and video signal presence detection and remote reporting
- › Remote configuration and control
- › Built-in audio test signal



ADX-1101 Functional Block Diagram



ADX-1101-DRP

## TECHNICAL SPECIFICATIONS

### VIDEO INPUT

Video signal: SMPTE 259M-C (270 Mbps)  
SMPTE 272M-C (embedded audio)  
Cable length: Up to 350 m of Belden 1694A  
Return loss: >15 dB 5 MHz to 270 MHz

### LTC OUTPUT

Signal: Reconstructed LTC from sampled input to embedder  
Impedance: <55 ohm source for Hi-Z termination  
Level: 1.0 Vp-p

### VIDEO OUTPUT

Video signal: SMPTE-259M-C (270 Mbps)  
Return loss: >15 dB up to 270 MHz  
Jitter: <0.2 UI p-p (wideband)

### AUDIO OUTPUTS (2)

Signal: Balanced analog audio  
Impedance: <50 ohm  
Maximum level: 24 dBu / 600 ohm

### LTC PROCESSING

Latency: 8 video lines \*  
LTC delay: None or tracking of audio delay  
Test signals: Audio - 1kHz tone (R steady, L pulsed)

### PROCESSING PERFORMANCE

Signal path: 10-bit video / 20/24-bit audio  
Sampling: 48 kHz  
SNR: >116 dB (a weighted)  
Distortion: <-96 dB  
Crosstalk: <-100 dB (20 Hz to 20 kHz)  
Freq. response: ±0.2 dB (20 Hz to 20 kHz)  
De-emphasis: ±0.3 dB (50-15 ms)  
Video delay: 500 ns  
Audio delay: 1.3 ms - up to 6 video fields (one field steps)  
Tone generator: 1 kHz sine wave interrupted on left channel (250 ms / 3 s)

### ELECTRICAL

Power: 9.3 W

\* Combined embedding and extraction, applicable to combination of AMX-1101 and ADX-1101

## ORDERING INFORMATION

### Densité 2 frame

ADX-1101-BDL Analog audio de-embedder (comprises one ADX-1121 card and one DAC-1721 card)  
ADX-1101-DRP Double rear connector panel

### Remote control

iControl, iControl Solo, RCP-200

### Densité 3 frame

ADX-1101-BDL-3RU Analog audio de-embedder (comprises one ADX-1121 card and one DAC-1721 card) (including 3RU adaptor)  
ADX-1101-DRP-3RU Double rear connector panel (including 3RU adaptor)