

ADX-1121/1141

2/4 AES de-embedder

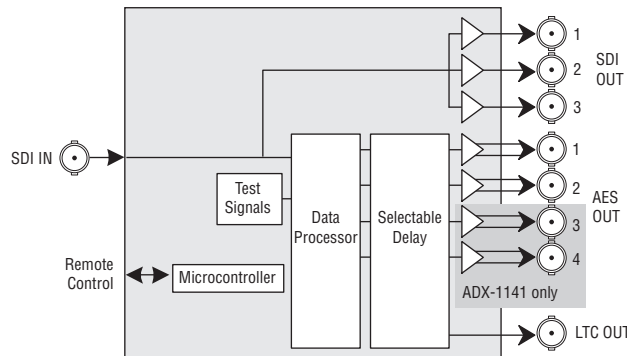


The ADX-1121/1141 are high-quality de-embedders designed to handle up to four AES 24-bit 48 kHz digital audio signals from a single SDI (SMPTE 259M) signal. The ADX-1121/1141 will output audio silence with a loss of the SDI input. A delay of up to 6 fields can be added to the audio. The ADX-1121/1141 have built-in audio tone, test signals and automatic 525/625 input detection. The ADX-1121/1141 provide automatic equalization for up to 350 meters of Belden 1694A cable at 270 Mbps.

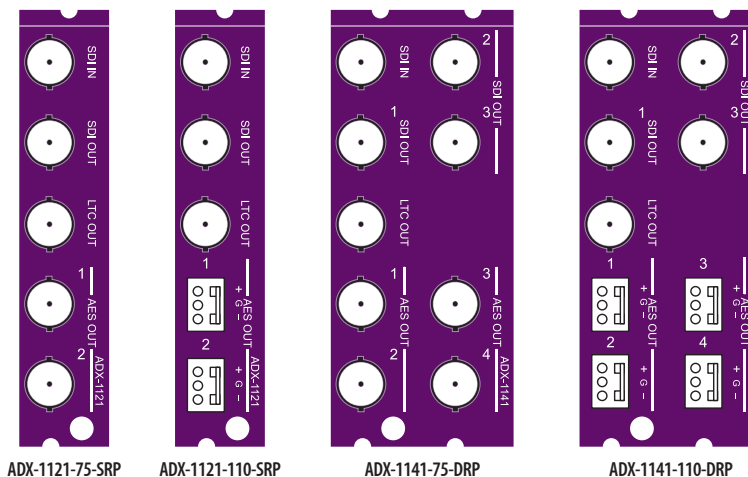
In addition, these modules support signal presence detection and remote reporting. A Linear Time Code (LTC) output is provided. The audio signals can be extracted from either the HANC area of the SDI signal according to SMPTE 272M or cascade slots of the active data area. When extracting from cascade slots, ADX-1121/1141 cards can extract digital audio signals in blocks of 2/4 AES pairs to a total of 48 AES pairs.

KEY FEATURES AND BENEFITS

- SDI input with up to 350 m automatic cable equalization
- Auto-detects 525/625 line format
- Outputs 2 or 4 AES signals
- Selectable audio delay up to 6 fields
- Supports 20/24-bit embedded audio
- All audio outputs are co-phased
- Left/right channel swappable
- Selectable routing of groups to audio AES pairs
- Dolby E compatible
- Audio and video signal presence detection and remote reporting
- Remote configuration and control
- Built-in audio test signal
- Selection of cascade slot to allow up to 48 cascaded AES pairs (no video)



ADX-1141 Functional Block Diagram



ADX-1121-75-SRP

ADX-1121-110-SRP

ADX-1141-75-DRP

ADX-1141-110-DRP

TECHNICAL SPECIFICATIONS

VIDEO INPUT

Video signal: SMPTE 259M-C (270 Mbps)
 SMPTE 272M-C (embedded audio)
 Sampled LTC conforms with SMPTE 291M

Cable Length: Up to 350 m of Belden 1694A

Return Loss: >15 dB 5 MHz to 270 MHz

AUDIO AES-3id OUTPUT

Signal: AES-3id (SMPTE 276M)

Level: 1.0 Vp-p ±10 %

Impedance: 75 ohm unbalanced

Return loss: >25 dB 100 kHz to 6.2 MHz

AUDIO AES3 OUTPUT

Signal: AES3

Level: 3.5 Vp-p ±10 %

Impedance: 110 ohm balanced

AUDIO AES SIGNAL

Sampling rate: 48 kHz synchronous

Bits: 20 or 24-bit

LTC SIGNAL

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

Return loss: >15 dB up to 270 MHz

Jitter: <0.2 UI p-p (wideband)

PROCESSING PERFORMANCE

Signal path: 10-bit video/20/24-bit audio

Video delay: 500 ns

AUDIO PROCESSING

Delay: 650 µs audio insertion delay *

Audio delay: Up to 6 video fields (one field steps)

LTC PROCESSING

Latency: 8 video lines *

LTC delay: None or tracking of audio delay

Test signals: Audio - 1 kHz tone (R steady, L pulsed)
 -18 dBFS (EBU R68-1995)

ELECTRICAL

Power: 5 W

* Combined embedding and extraction applicable to combinations of AMX-1121/1141, ADX-1121/1141

ORDERING INFORMATION

Densité 2 frame

ADX-1121 2 AES digital audio de-embedder

ADX-1121-75-SRP Single rear connector panel for un-balanced AES-3id outputs

ADX-1121-110-SRP Single rear connector panel for balanced AES3 outputs

ADX-1141 4 AES digital audio de-embedder

ADX-1141-75-DRP Double rear connector panel for un-balanced AES-3id outputs

ADX-1141-110-DRP Double rear connector panel for balanced AES3 outputs

Densité 3 frame

ADX-1121-3RU 2 AES digital audio de-embedder (including 3RU adaptor)

ADX-1121-75-SRP -3RU Single rear connector panel for un-balanced AES-3id outputs (including 3RU adaptor)

ADX-1121-110-SRP -3RU Single rear connector panel for balanced AES3 outputs (including 3RU adaptor)

ADX-1141-3RU 4 AES digital audio de-embedder (including 3RU adaptor)

ADX-1141-75-DRP -3RU Double rear connector panel for un-balanced AES-3id outputs (including 3RU adaptor)

ADX-1141-110-DRP -3RU Double rear connector panel for balanced AES3 outputs (including 3RU adaptor)

Remote control

iControl, iControl Solo, RCP-200