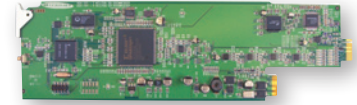


ADX-1842/1852 4 AES HD/SD De-embedder



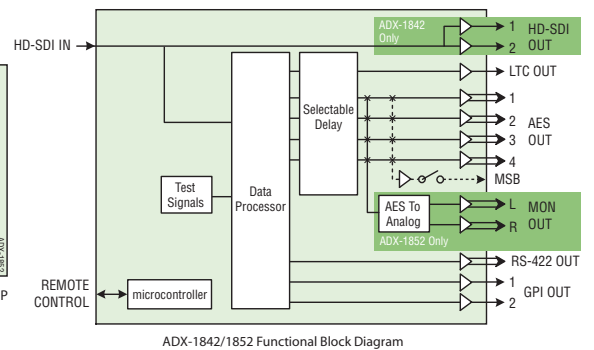
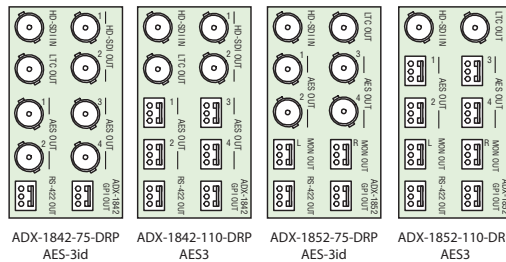
The ADX-1842 is a high-quality de-embedder designed to extract up to four AES 24-bit 48kHz digital audio signals from a single HD/SD serial digital video signal. A unique feature is its ability to extract time code, a serial RS-422 data signal and two GPI status signals from the video signal. The module supports signal presence detection, remote reporting, and local or

remote configuration and control, and features a built-in audio tone test signal. The ADX-1852 has all of the features of the ADX-1842, excluding the HD/SD-SDI loop through outputs, and it provides an analog audio monitor output for one selectable stereo pair of signals.

Key Features and Benefits

- ⊕ HD-SDI or SDI input
- ⊕ Auto EQ for up to 110/250m
- ⊕ Automatic detection of video input format
- ⊕ Two pass through HD-SDI/SDI video outputs
- ⊕ 110Ω balanced or 75Ω unbalanced input
- ⊕ Selectable audio delay of up to 3 frames
- ⊕ 24-bit digital audio de-embedding
- ⊕ Audio silence output on loss of video input
- ⊕ Left/right channels swappable
- ⊕ Selectable routing of AES
- ⊕ Co-phased audio outputs
- ⊕ Dolby-E compatible
- ⊕ MSB compliant
- ⊕ Monitor output for non-PCM signals
- ⊕ LTC output translated from ATC data or DVITC
- ⊕ RS422 serial data output
- ⊕ Two opto-isolated GPI outputs

Resolutions	Formats
1920 x 1080	59.94i, 50i, 29.97p, 25p, 24p, 23.98p, 29.97 pfsf, 25pfsf, 24pfsf, 23.98pfsf
1280 x 720	59.94p, 50p
525	59.94i
625	50i



Technical Specifications

VIDEO INPUT

VIDEO SIGNAL: HD/SD-SDI SMPTE 292M/SMPTE 259M (see list of supported formats below)
 Embedded audio as per SMPTE 299M/SMPTE 272M
 Embedded ATC/DVITC as per SMPTE RP 188/SMPTE 266M
 Embedded RS-422 & GPI as per SMPTE 291M (with proprietary Type-1 DID)
CABLE LENGTH: up to 110m/250m of Belden 1694A
RETURN LOSS: > 15 dB, 5 MHz to 1.5 GHz/270MHz

AUDIO AES-3ID OUTPUT

SIGNAL: AES-3id (SMPTE 276M)
LEVEL: 1.0 Vp-p ±10%
IMPEDANCE: 75 Ω unbalanced

AUDIO AES3 OUTPUT

SIGNAL: AES3
LEVEL: 3.0 Vp-p ±10%
IMPEDANCE: 110 Ω balanced

ANALOG AUDIO OUTPUT (ADX-1851 ONLY)

QUANTIZING: 24 bits
LEVEL, 0 DBFS: +18 dBu, ±6dB (1dB steps)

IMPEDANCE: 50 Ω
SNR: > 92 dB (A weighting)
THD: < 0,01%
DYNAMIC RANGE: > 92 dB
CROSSTALK: < 90 dB (20 Hz to 20 kHz)

AUDIO AES SIGNAL

SAMPLING RATE: 48kHz synchronous

LTC SIGNAL OUTPUT

SIGNAL: Reconstructed LTC from ATC/DVITC
IMPEDANCE: < 55 Ω source, unbalanced 1kΩ load
LEVEL: 1.0 Vp-p

RS-422 SIGNAL OUTPUT

SIGNAL: RS-422
RATE: Reconstruction of signal input to embedder (38,400 or 115,200 bauds)

GPI SIGNAL OUTPUT (2)

SIGNAL: Opto-isolated, common emitter
FORWARD VOLTAGE: 30V max
REVERSE VOLTAGE: 5V max
RATE: DC- to 250 Hz

VIDEO OUTPUT (INPUT ACTIVE LOOP-THROUGH)

VIDEO SIGNAL: HD/SD-SDI SMPTE 292M/SMPTE 259M

RETURN LOSS: > 15 dB up to 1.5 GHz/270MHz dB

WIDEBAND JITTER: as per SMPTE-259M and 292M

PROCESSING PERFORMANCE

SIGNAL PATH: 10-bit video / 24-bit audio
AUDIO PROCESSING DELAY: 875 μs (combined embedding and extraction*)
AUDIO DELAY: Up to 3 video frames(1/2 frame steps)
ATC/DVITC DELAY: None, 1, 2, or 3 frames before translation to LTC
RS-422 PROCESSING DELAY: 500 μs max. (combined embedding and extraction*)
GPI PROCESSING DELAY: 4 video lines (combined embedding and extraction*)
TEST SIGNALS: Audio: 1 kHz tone (R steady, L pulsed) -18dBFS (EBU R49, R68)
 LTC: 10 second loop starting at 23:59:00:00
POWER: 9.5 W
 *NOTE: APPLICABLE TO COMBINATIONS OF THIS CARD AND AMX-1842/1852

Ordering Information

ADX-1842	4 AES HD/SD De-embedder	ADX-1852-110-DRP	Double Rear Connector Panel (110 Ω)
Choose one of the following rear connector panels:		Densité, Densité 2	
ADX-1842-75-DRP	Double Rear Connector Panel (75 Ω)	Housing Frame:	
ADX-1842-110-DRP	Double Rear Connector Panel (110 Ω)	Remote Control:	
ADX-1852	HD AES De-embedder w/Analog Audio Monitor	iControl	Remote Control and Monitoring
Choose one of the following rear connector panels:		iControl Solo	Stand-alone Remote Control Software
ADX-1852-75-DRP	Double Rear Connector Panel (75 Ω)	RCP-100	Remote Control Panel

