

AMX-1842

4 AES HD/SD embedder

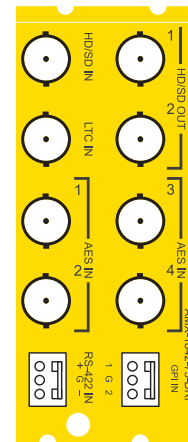
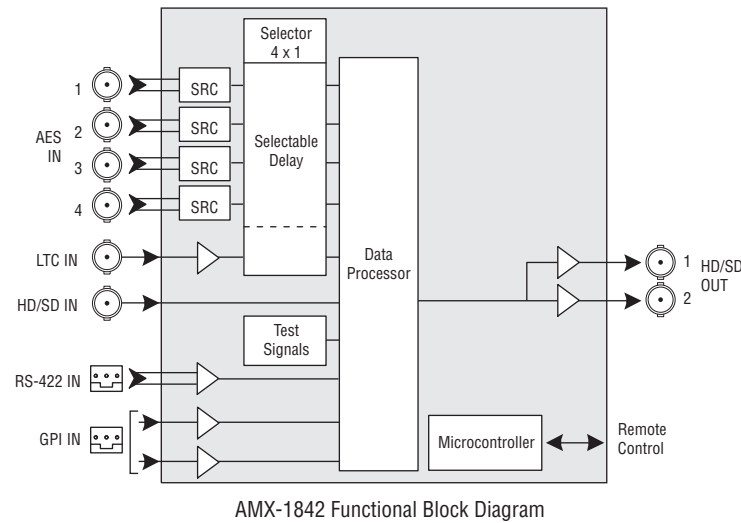


The AMX-1842 is a high-quality embedder which embeds up to four AES 24-bit 48kHz digital audio signals into a single HD/SD serial digital video signal. It includes audio and video signal presence detection and reporting, and local or remote configuration and control. A unique feature is its ability

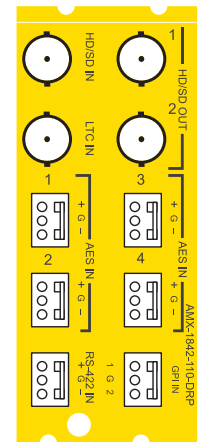
to embed Time Code, a serial RS-422 data signal and two GPI status signals into the video signal. The card has built-in audio tone, Time Code and video color bar test signals.

KEY FEATURES AND BENEFITS

- › HD-SDI or SDI input
- › Automatic EQ for up to 110/250 m
- › Automatic detection of video input format
- › Continuity of embedded audio on loss of video input
- › 110 ohm balanced or 75 ohm unbalanced input
- › Input SRC to handle asynchronous audio
- › Audio channel gain selectable
- › Audio group insertion/bypass/delete
- › Selectable audio delay of up to 3 frames
- › Automatic mute on AES error
- › Selectable routing of AES signals
- › Left/right channels swappable
- › Dolby-E compatible
- › 24-bit digital audio embedding
- › Linear Time Code (LTC) embedding
- › RS-422 input for embedding as ANC data
- › GPI inputs for embedding as ANC data



AMX-1842-75-DRP



AMX-1842-110-DRP

Resolutions	Formats
HD-SDI formats	
1920 x 1080	59.94i, 50i, 29.97p, 25p, 24p, 23.98p, 29.97psf, 25psf, 24psf, 23.98psf
1280 x 720	59.94p, 50p
SD-SDI formats	
525	59.94i
625	50i

TECHNICAL SPECIFICATIONS

VIDEO INPUT

Video signal: HD/SD-SDI SMPTE 292M / SMPTE 259M-C
 Cable length: Up to 110/250 m of Belden 1694A
 Return loss: >15 dB, 5 MHz to 1.485 GHz

AUDIO AES-3id INPUT

Signal: AES-3id (SMPTE 276M)
 Level: 0.2 to 2.0 Vp-p
 Impedance: 75 ohm unbalanced
 Cable length: >400 m

AUDIO AES3 INPUT

Signal: AES3
 Level: 0.2 to 7.0 Vp-p
 Impedance: 110 ohm balanced
 Cable length: >200 m

AUDIO AES SIGNALS

Sampling rate: 48 kHz synchronous or asynchronous
 Dolby-E rate: 48 kHz synchronous
 Bits: 24-bit

LTC SIGNAL

Signal: LTC per SMPTE 12M
 Impedance: <10 kohm (bridging 600 ohm) unbalanced
 Level: 0.2 to 5 Vp-p

VIDEO OUTPUT

Video signal: HD/SD-SDI (SMPTE 292M / SMPTE 259M-C)
 Audio embedded per SMPTE 299M / SMPTE 272M
 LTC embedded as ATC/DVITC (SMPTE RP188/SMPTE 266M)
 RS-422 and two GPIs embedded as ANC data per SMPTE 291M (Proprietary type 1 DID)
 Return loss: >15 dB up to 1.485 GHz
 Wideband jitter: as per SMPTE-259M-C and 292M

ANC SERIAL DATA INPUT

Signal: RS-422
 Level: 200 mVp-p (min)
 Rate: 38.400 or 115.200 Bd

ANC GENERAL PURPOSE INTERFACE (GPI) INPUT

Signal (2): Contact closure (opto-isolated), common ground
 Level: True = 0 to 0.8 V (max.)
 Maximum input voltage = ± 5.5 V
 Rate: DC to 250 Hz

PROCESSING PERFORMANCE

Signal path: 10-bit video / 24-bit audio
 Audio latency: 875 μ s (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 latency: 500 μ s max. (combined embedding and extraction *)
 GPI latency: 4 video lines (combined embedding and extraction *)
 Test signals: Audio: 1 kHz tone (R steady, L pulsed) -18 dBFS (EBU R49, R68)
 LTC: 10 s loop starting at 23:59:00:00

RS-422

Latency: max 500 μ s *

GPI

Latency: 4 video lines *
 Test signals: Video - color bars 100 %
 Audio - 1 kHz tone (R steady, L pulsed) -18 dBFS (EBU R49, R68)
 LTC - 10 s loop starting at 23:59:00:00

ELECTRICAL

Power: 6 W

* Applicable to combinations of this card and ADX-1842/1852

ORDERING INFORMATION

Densité 2 frame

AMX-1842 4 AES HD/SD embedder
 AMX-1842-75-DRP Double rear connector panel, 75 ohm
 AMX-1842-110-DRP Double rear connector panel, 110 ohm

Densité 3 frame

AMX-1842-3RU 4 AES HD/SD embedder (including 3RU adaptor)
 AMX-1842-75-DRP-3RU Double rear connector panel, 75 ohm (including 3RU adaptor)
 AMX-1842-110-DRP-3RU Double rear connector panel, 110 ohm (including 3RU adaptor)

Remote control

iControl, iControl Solo, RCP-200