

BALBOX Analogue Audio Embedder



FEATURES

- Embedding of analogue audio into SDI
- Standard XLR audio connectors
- User selectable EDH processing
- Erase or Append operation
- 20 /24bit capability
- Audio Mute function
- Integral mains supply

The *BALBOX* AAEM010 enables embedding of two mono analogue audio (or a stereo pair) into a 270Mb/s serial digital video signal.

The AAEM010 is completely self-contained and incorporates high quality audio analogue to digital converters.

Conversion is locked to the SDI data rate ensuring synchronous operation.

An analogue audio pair only requires half an audio group. The unused half is nevertheless embedded with the AAEM010 to ensure compatibility with extractors which cannot handle half audio groups. BAL's proprietary interface, the 'A-Link', allows daisy-chaining of multiple units to fill both halves of each audio group. A maximum of eight audio pairs may be embedded in this way.

The AAEM010 complements the SAEM010 which provides embedding of AES/EBU digital audio into SDI, and is fully compatible with the *BALBOX* range of extractors.

The AAEM010 will find application in temporary and small installations, and also where space is at a premium, such as in OB trucks. It is possible to combine a number of *BALBOX* units using a simple 1U tray – the *BOXRACK*.

The unit is housed in a robust steel case and has an integral mains power supply (universal 90 to 250Vac range) with filtered IEC power connector for safe and reliable installation.

SPECIFICATION – AAEM010

INPUTS

Digital Video Input

Input signal: SDI – 270Mb/s to SMPTE RP259M, EBU Tech 3267
Input connector / impedance: BNC, 75ohm terminating.
Return loss: >15 dB, 10 MHz to 270 MHz
Input equalization: up to 250m of Belden 8281 or similar
Line standard: 625/50 or 525/60 automatically selected

Analogue Audio Inputs

Inputs: 2 mono audio or 1 stereo pair, electronically balanced
Connectors: 2, XLR style sockets with retention clips
Input level for Full Scale: +24dBu
AD conversion: 24-bit, 48kHz, locked to SDI input

A-Link

Input: Unbalanced digital audio – from another AAEM010
Connector: BNC

OUTPUTS

Digital Video Output

Output: SDI – 270Mb/s with audio embedded to SMPTE RP272M-A
No of outputs: 1
Output connector / impedance: BNC, 75 ohm
Output return loss: >15 dB, 10 MHz to 270 MHz

A-Link

Output: Unbalanced digital audio – to another AAEM010
Connector: BNC

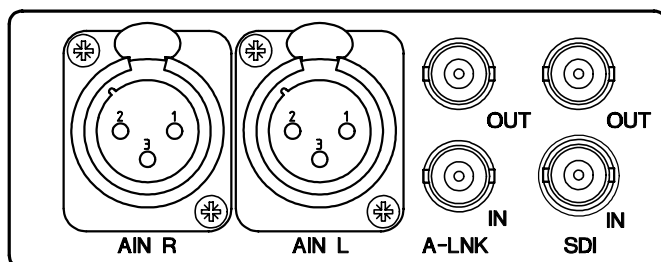
CONTROLS and INDICATORS

Group select: Rotary switch to select groups 1-4
DIL switch: MUTE
ERASE or APPEND audio packets
20 or 24-bit operation
EDH, no EDH insertion
EMBED or THROUGH operation
LED indication: Presence / Absence of SDI input

INSTALLATION DATA

Package: Standard *BALBOX* housing, with 75 ohm BNC, and XLR sockets
184 x 103 x 42.4mm
Weight: 850g.
Mains supply: 90 – 250Vac
Consumption: <10VA

Refer to *BALBOX* data sheet for information on 1U tray –**BOXRACK**



Rear Connections

ORDER CODE

AAEM010
BOXRACK

DESCRIPTION

Standalone Analogue Audio Embedder.
Tray to hold 4 *BALBOXES* in 1U 19" rack
