

BALBOX Analogue Audio Extractor



FEATURES

- Extracts and converts one stereo pair
- User selection of extracted signal
- Re-clocked SDI output
- Handles 20/24-bit synchronous audio
- Standard XLR-style audio connectors
- User selectable 18/24dBuFS analogue levels
- Audio mute function
- Integral mains power supply

The *BALBOX* AAEX010 allows extraction (de-embedding) and conversion of one AES/EBU signal from the eight potentially embedded within the ancillary data space of an SDI signal. The converted signal will typically be a stereo pair, but could also be two mono signals.

A re-clocked SDI output allows the cascading of a number of AAEX010 units which would allow extraction and conversion of more audio channels.

The audio to be extracted is selected by a rotary switch, and a warning LED indicates if the selected audio is not present. A switch is provided to allow the user to mute the audio outputs.

The AES/EBU audio which is to be extracted must be synchronous with the video and sampled at 48kHz. The AAEX010 will handle both 20 and 24-bit audio.

The SDI input has automatic cable equalisation for up to 250m of Belden 8281 cable, or similar.

The AAEX010 is complemented by the *BALBOX* digital and analogue audio embedders, and is compatible with audio embedders and extractors in the *BAL DRX* range of modular interfaces.

The unit has an integrated mains power supply (universal 90 to 250Vac range) with filtered IEC connector for safe and reliable installation.

The AAEX010 is housed in a robust steel case, and may be combined with other *BALBOX* units in a simple 1U tray.

SPECIFICATION – AAEX010

INPUT

Input signal: 270 Mb/s serial NRZI to SMPTE RP259M and EBU Tech 3267 with digital audio embedded to SMPTE 272M-AC (synchronous audio at 48kHz)
Impedance: 75ohm
Return loss: >15dB, 10MHz to 270MHz
Input equalisation: automatic up to 250m of Belden 8281 cable or similar

SDI OUTPUT

Output: 270 Mb/s serial NRZI to SMPTE RP259M and EBU Tech 3267
Impedance: 75ohm
Return loss: >15dB, 10MHz to 270MHz
Output level: 800mVp-p +/-20mV across 75ohm termination

ANALOGUE AUDIO OUTPUTS

Number of outputs: Two (one for each mono or half of the stereo pair within the selected AES/EBU signal)
Output: Electronically balanced
Impedance: <75ohm
Output level: 18/24dBuFS – user selectable
THD: <0.007%
Noise: <-74dBu (idle channel)
Output Connectors: XLR-style male

CONTROLS

AES audio mute: DIP switch (position 1)
Analogue output level: DIP switch (position 2)
Audio selection: Rotary switch, positions 0-7, selecting groups 1-4 and analogue outputs 1-8

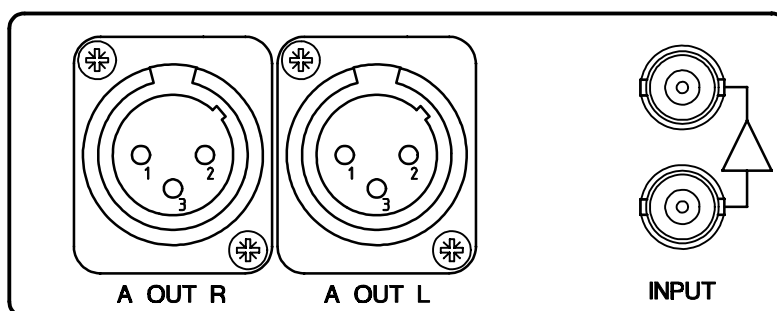
INDICATORS

Tri-colour status LED:
Red: no SDI input
Orange: SDI present – no embedded audio detected
Green: SDI present – embedded audio detected

INSTALLATION DATA

Package: Standard *BALBOX* housing, with two 'XLR' male and two 75ohm BNC connectors
184 x 103 x 42.4mm.
Weight: 950g.
Mains supply: 90 – 250Vac
Consumption: <10VA

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



Rear Connectors

ORDER CODE

AAEX010
BOXRACK

DESCRIPTION

BALBOX Analogue Audio Extractor
Tray to hold up to 4 *BALBOXes* in 1U 19" rack.