

BALBOX Digital and Analogue Audio Extractor



FEATURES

- **Extracts both AES/EBU signals from the group**
 - **Provides analogue output of one selectable stereo pair**
 - **Re-clocked SDI output**
 - **Handles 20/24-bit synchronous audio**
 - **Audio mute function**
 - **User selectable 18/24dBuFS analogue levels**
 - **Integral mains power supply**
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The *BALBOX* AAEX015 allows extraction (de-embedding) of both AES/EBU signals from any one of the four groups available within the serial component video ancillary data space. In addition the AAEX015 provides the user with one stereo pair (or two mono channels) selectable from the extracted group.

A re-clocked SDI output allows the cascading of a number of AAEX015 units to extract audio from other groups within the same SDI signal, or provide digital to analogue conversion of the second AES/EBU signal within the selected group.

The group to be extracted and the AES/EBU to be converted is selected by a rotary switch, and a warning LED indicates if the selected group is not present. A switch is provided to allow the user to mute the two AES/EBU outputs.

The AES/EBU audio which is to be extracted must be synchronous with the video and sampled at 48kHz. The AAEX015 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 AAEX015 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 AAEX015 is housed in a robust steel case, and may be combined with other *BALBOX* units in a simple 1U tray.

SPECIFICATION – AAEX015

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

AES/EBU DIGITAL AUDIO OUTPUTS

Number of outputs: Two (one for each AES/EBU signal within the extracted group)
Output: Balanced AES/EBU
Impedance: 110ohm
Output level: 3Vp-p +/-10% across 110ohm

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)

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

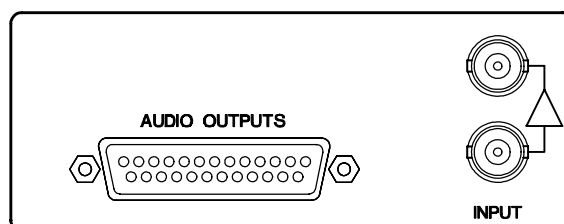
INDICATORS

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 one 'D25' female 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

AAEX015

AAEX015BC01

BOXRACK

DESCRIPTION

BALBOX Digital and Analogue Audio Extractor
Breakout cable, with 4 x XLR plugs on 1 metre cables
Tray to hold up to 4 *BALBOXes* in 1U 19" rack.
