

## BALBOX Serial Video to Composite with Analogue Audio Extractor



### FEATURES

- **Converts SDI to Composite Video**
- **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* SCAA010 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 SCAA010 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 SCAA010 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 SCAA010 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 SCAA010 is housed in a robust steel case, and may be combined with other *BALBOX* units in a simple 1U tray.

# SPECIFICATION – SCAA010

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## 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)  
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  
Output level: 800mVp-p +/-20mV across 75ohm termination

## COMPOSITE OUTPUT

Output: 625/50 PAL or 525/60 NTSC automatic switching  
Output level: 1.0Vp-p +/-7mV across 75ohm termination  
Frequency Response: +/-0.25dB to 5.5MHz

## 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

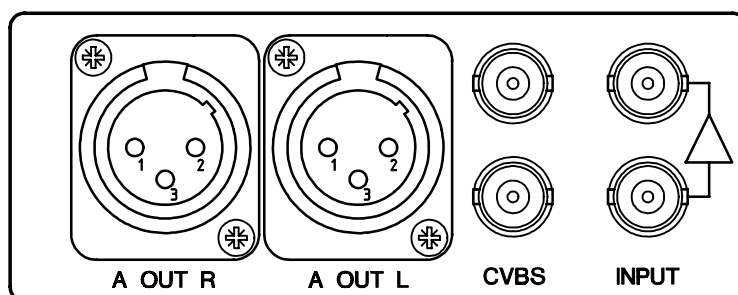
## INDICATORS

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**

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## **ORDER CODE**

**SCAA010**  
**BOXRACK**

## **DESCRIPTION**

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

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