
BALBOX AES/EBU Digital Audio Embedder



FEATURES

- **Embedding of AES/EBU digital audio into SDI**
 - **Embeds one full group**
 - **User selectable EDH processing**
 - **Standard XLR audio connectors**
 - **Erase or Append operation**
 - **20 /24bit capability**
 - **Audio Mute function**
 - **Integral mains supply**
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The *BALBOX* SAEM010 enables embedding of two AES/EBU digital audio signals (equivalent to two stereo pairs) into a 270Mb/s serial digital video signal.

The SAEM010 will fill any one of the four possible groups available in the SDI signal. By cascading up to four SAEM010 units it is possible to embed up to eight AES/EBU signals.

The unit can 'overwrite' existing embedded audio or it can 'append' audio, and the user may select whether the audio will be formatted as 20-bit or 24-bit, to permit greater compatibility with equipment which does not handle extended data packets.

The user can select to process and output EDH or remove EDH from the output SDI signal.

The AES/EBU sources must be synchronous with the SDI.

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

The SAEM010 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 – SAEM010

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

Digital Audio Inputs

Inputs: 2, AES/EBU, 20/24bit, 48kHz synchronous
Connectors: 2, XLR style sockets with retention clips
Impedance: 110ohm, balanced

OUTPUT

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

CONTROLS and INDICATORS

Group select:

DIL switch:

Rotary switch to select groups 1-4

MUTE

ERASE or APPEND audio packets

20 or 24-bit operation

EDH, no EDH insertion

Red – no SDI input

Orange – SDI present but no AES/EBU inputs

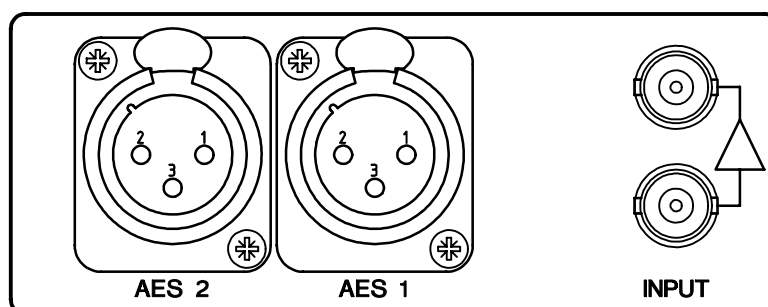
Green – SDI and AES/EBU inputs present

LED tri-colour indication:

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 Connectors

ORDER CODE

SAEM010

BOXRACK

DESCRIPTION

Standalone AES/EBU Digital Audio Embedder.

Tray to hold 4 *BALBOXES* in 1U 19" rack
