

BALBOX Composite and Analogue Audio to Serial Converter with Embedded Audio



FEATURES

- Analogue composite to SDI conversion
- 3 serial outputs
- Automatic PAL/NTSC operation
- Adaptive video decoding
- VITS pass facility
- Embedding of analogue audio into SDI
- 20 / 24bit capability
- Standard XLR audio connectors
- Integral mains supply

The CAEM010 provides a convenient solution for converting an analogue composite video and an analogue stereo audio signal into a component serial digital signal with audio embedded within the SDI.

The unit provides all-digital decoding of analogue PAL/NTSC to SDI with automatic 625/525 sensing. Adaptive video decoding is employed for optimum performance.

Two balanced mono analogue audio (or a stereo pair) signals are input through standard XLR connectors for conversion and embedding into the 270Mb/s serial digital video signal. Conversion at 48kHz is locked to the SDI data rate ensuring synchronous operation.

As an analogue audio pair requires only half an audio group within the SDI, the other half group is embedded as silence to ensure widest compatibility with extractors.

Flexibility in operating modes is provided through an easily accessible switch. These allow the user to choose VBI and audio processing modes.

Applications include temporary and small installations, and wherever 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 – CAEM010

INPUT CHARACTERISTICS

Video Analogue Inputs

Input signal:	Analogue composite: PAL or NTSC
Line standard:	625/50 or 525/60 automatically detected
Level:	1.0Vp-p nom. terminated
Input impedance:	75 ohm
Input connector:	1 x BNC

Audio Analogue Inputs

Input signal:	2 balanced mono audio or 1 stereo pair
Connectors:	2, XLR style sockets
Input level for Full Scale:	+18dBu
A to D conversion:	24-bit, 48kHz, sampling locked to video

OUTPUT CHARACTERISTICS

Output signal:	10 bit 4:2:2 component 270 Mb/s NRZI serial digital video with audio embedded to SMPTE RP272M-A
Signal amplitude:	800 mV +/-10%
Output impedance:	75 ohm
Output return loss:	>15 dB, 5 MHz to 270 MHz
No of outputs / connectors:	3 x BNC

CONTROLS

User control of VITS / VBI processing and group selection by DIP Switch and Rotary Hexadecimal Switch

INDICATORS

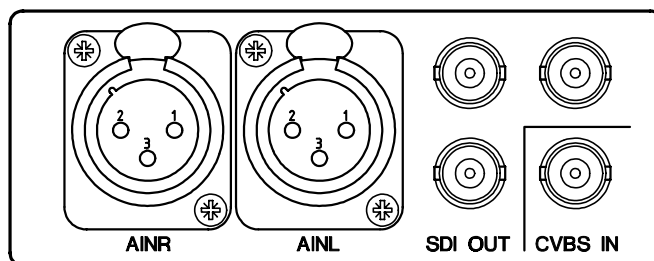
LED 1:	Green	PAL/625
	Yellow	NTSC/525
	Red	No input
LED 2:	Green	Colour lock
	Red	Colour error

INSTALLATION DATA

Package:	Standard <i>BALBOX</i> housing, with six 75ohm BNC signal connectors 184 x 103 x 42.4mm.
Weight:	950g.
Mains supply:	90 – 250Vac
Consumption:	<15VA

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

Rear Connectors



ORDER CODE

CAEM010

BOXRACK

DESCRIPTION

BALBOX Composite Video and Analogue Audio to Serial with Embedded Audio Converter.

Tray to hold up to 4 *BALBOXes* in 1U 19" rack.
