



2EB22

Dual 4 channel digital audio embedder

A Synapse ® product

Synapse

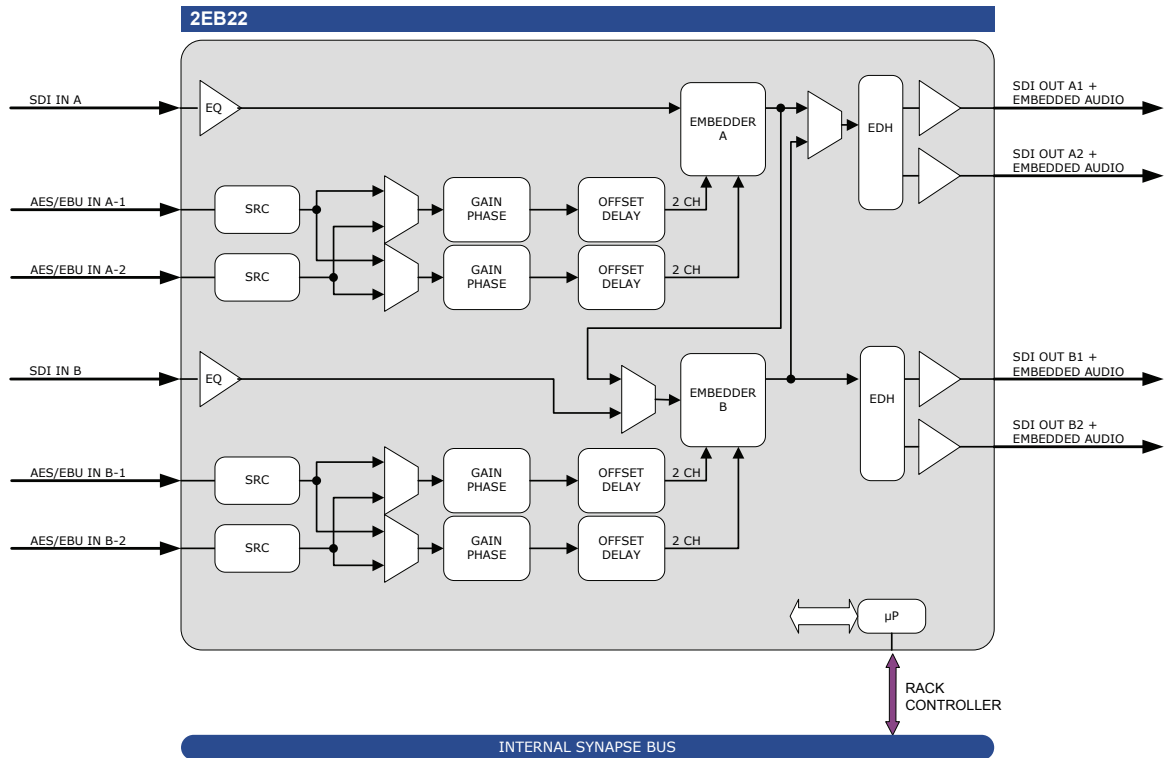


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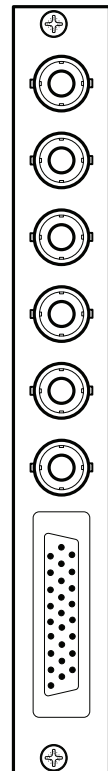
Block schematic & I/O panel



- SDI INPUT A (OPTIONAL FIBER INPUT)
- SDI OUTPUT A-1 EMBEDDED
- SDI OUTPUT A-2 EMBEDDED (OPTIONAL FIBER OR CVBS OUTPUT)
- SDI INPUT B (OPTIONAL FIBER INPUT)
- SDI OUTPUT B-1 EMBEDDED
- SDI OUTPUT B-2 EMBEDDED (OPTIONAL FIBER OR CVBS OUTPUT)
- BALANCED DIGITAL AUDIO INPUT

For fiber connectivity see www.axon.tv

BPL12



Features

The 2EB22 contains two fully independent digital audio embedders. This card allows for 36 embedders in 4 Rack Units, and has its counterpart in the mirror image 2DB22. The AES/EBU inputs can handle sample rates between 32 and 96 kHz. This SRC can be by-passed for Dolby E or other transparent applications.

- 2 x 2 AES/EBU inputs
- Sample rate converter
- 110 Ohm balanced digital audio inputs on sub-D
- 2 x 2 embedded SDI output
- Single channel mode for embedding 4 x AES/EBU signals on a single SDI
- Audio level and phase control
- Append and overwrite modes
- Individual audio channel delay up to 2600ms in 1 ms intervals
- SRC on AES inputs with transparent (bypass) mode
- Locks to SDI input
- Full control and status monitoring through the front panel of the SFR04/SFRO8/SFR18 frame and the Ethernet port (ACP)
- Optional 2 fiber inputs (replacing 2 SDI inputs) or 2 fiber outputs (replacing 2 SDI outputs) on I/O panel
- Optional 2 CVBS outputs (replacing 2 SDI outputs)

Applications

- Generic multi channel digital audio embedding
- 2 group (4 x AES/EBU) embedding
- High density applications as in OB-Trucks

Ordering information

Module:

- **2EB22:** Dual 4 channel digital audio embedder

Standard I/O:

- **BPL12_2EB22:** I/O panel for 2EB22

Fiber outputs:

- **BPL12T2_FC/PC_2EB22:** I/O panel for 2EB22 with 2 fiber transmitters on FC/PC
- **BPL12T2_SC_2EB22:** I/O panel for 2EB22 with 2 fiber transmitters on SC

Fiber inputs:

- **BPL12R2_FC/PC_2EB22:** I/O panel for 2EB22 with 2 fiber receivers on FC/PC
- **BPL12R2_SC_2EB22:** I/O panel for 2EB22 with 2 fiber receivers on SC

CVBS outputs:

- **BPL12C2_2EB22:** I/O panel for 2EB22 with 2 CVBS output

Specifications

Serial Video Input

Standard	625/50 or 525/59.94 SMPTE 259M-C (270Mb/s) with SMPTE 272M embedded audio
Number of Inputs	2 (1 per channel)
Equalization	Automatic to 300m @ 270Mb/s with Belden 1694A or equivalent cable
Return Loss	> 15dB up to 270MHz

SD Serial Video Output

Standard	625/50 or 525/59.94 SMPTE 259M-C (270Mb/s) with SMPTE 272M embedded audio
Number of Outputs	4 (2 per channel)
Signal Level	800mV nominal
DC Offset	0V \pm 0.5V
Rise/Fall Time	800ps nominal
Overshoot	< 10% of amplitude
Return Loss	> 15dB up to 270MHz

AES Input

Inputs	4 (2 per channel)
Connector	26 pins female Sub-D (balanced)
Standard	AES-1992 for balanced synchronous or asynchronous PCM/AES
Input Level	2V to 7V for balanced operation
Coupling	Transformer
Impedance	110 Ohms
Sampling Frequency	32kHz to 96kHz or 48kHz locked to video SRC=off

Miscellaneous

Weight	Approx. 250g
Operating Temperature	0° C to +50° C
Dimensions	137 x 296 x 20 mm (HxWxD)

Electrical

Voltage	+24V to +30V
Power	7 Watts