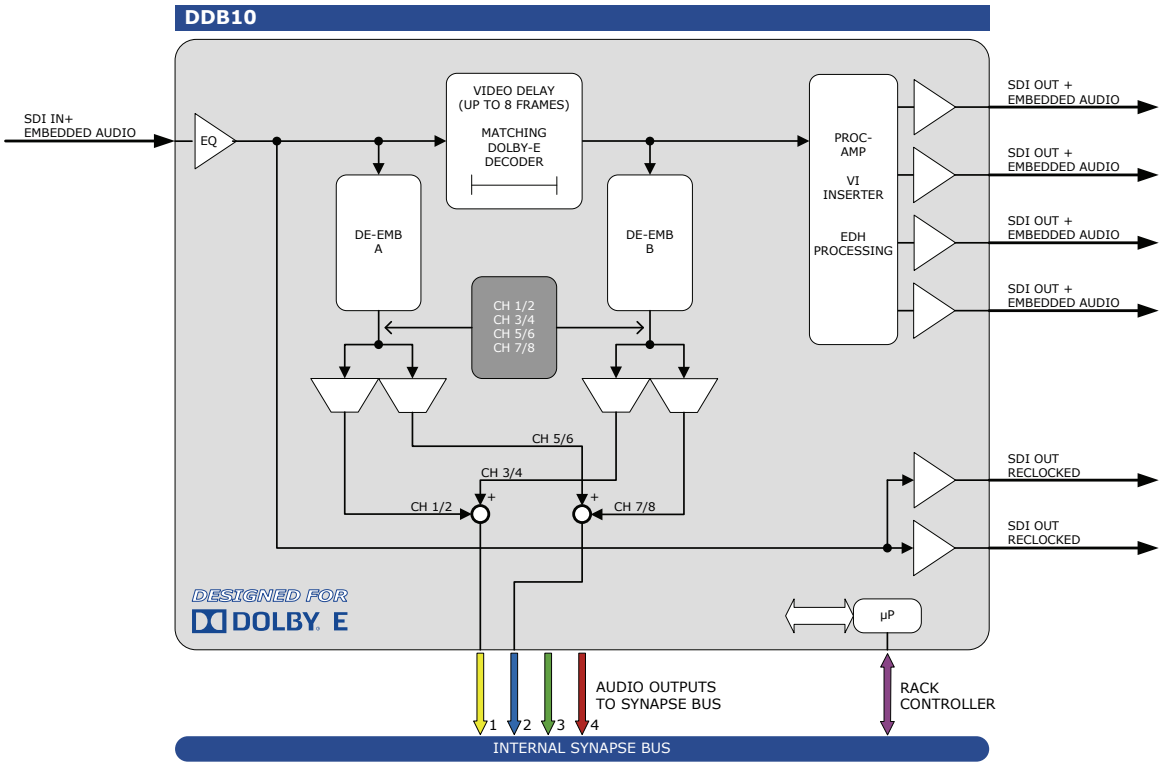
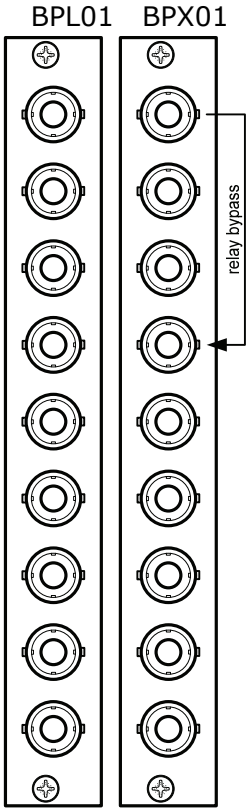
DDB10

SD Dolby E de-embedder

A Synapse ® product

Block schematic & I/O panel





SDI INPUT (OPTIONAL FIBER INPUT)

SDI RECLOCKED OUTPUT 1

SDI RECLOCKED OUTPUT 2

SDI PROCESSED OUTPUT 1 (OPTIONAL FIBER OR CVBS OUTPUT)

SDI PROCESSED OUTPUT 2

SDI PROCESSED OUTPUT 3

SDI PROCESSED OUTPUT 4

For fiber connectivity see www.axon.tv

Features

The DDB10 is a master card especially designed to be used in combination with the Synapse Dolby E decoder the DBD08. The propagation delay of the SDI is matched to the Dolby E decoder card to 1 frame. The nice touch to this card is that there is a full de-embedder block before and after the delay. This ensures a matched audio delay for Dolby E and PCM that both can be sent to the ADD-ON bus. The unit has fixed dual channel selection criteria so that the Dolby E stream can not be taken apart and corrupted.

- De-embedder master card designed for Dolby E
- Unique PCM and Dolby E transparency
- Automatic Dolby E propagation delay compensation
- Compatible with 2 PCM and 2 Dolby E streams
- VLI insertion
- EDH detection and processing
- Locks to SDI input
- Full control and status monitoring through the front panel of the SFR04/SFR08/SFR18 frame and the Ethernet port (ACP)
- Optional 1 fiber input (replacing 1 SDI input) or 1 fiber output (replacing 1 SDI output) on I/O panel
- Optional 1 CVBS output (replacing 1 SDI output) on I/O panel

Complementary card to:
- DBD08

Applications

- Dolby E de-embedding with PCM and Dolby E latency compensation

Ordering information

Master:
- **DDB10:** SD Dolby E de-embedder (master card)

Standard I/O:
- **BPL01_DDB10:** I/O panel for DDB10
- **BPX01_DDB10:** I/O panel for DDB10 with relay bypass

Fiber outputs:
- **BPL01T_FC/PC_DDB10:** I/O panel for DDB10 with fiber transmitter on FC/PC
- **BPL01T_SC_DDB10:** I/O panel for DDB10 with fiber transmitter on SC

Fiber inputs:
- **BPL01R_FC/PC_DDB10:** I/O panel for DDB10 with fiber receiver on FC/PC
- **BPL01R_SC_DDB10:** I/O panel for DDB10 with fiber receiver on SC

CVBS output:
- **BPL01C_DDB10:** I/O panel for DDB10 with 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	1
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	2 reclocked 4 processed
Signal Level	800mV nominal
DC Offset	0V ±0.5V
Rise/Fall Time	800ps nominal
Overshoot	< 10% of amplitude
Return Loss	> 15dB up to 270MHz

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