



**2AI48**

**Dual AES/EBU backup switcher with integrity checking**

**A Synapse® product**

*Synapse*

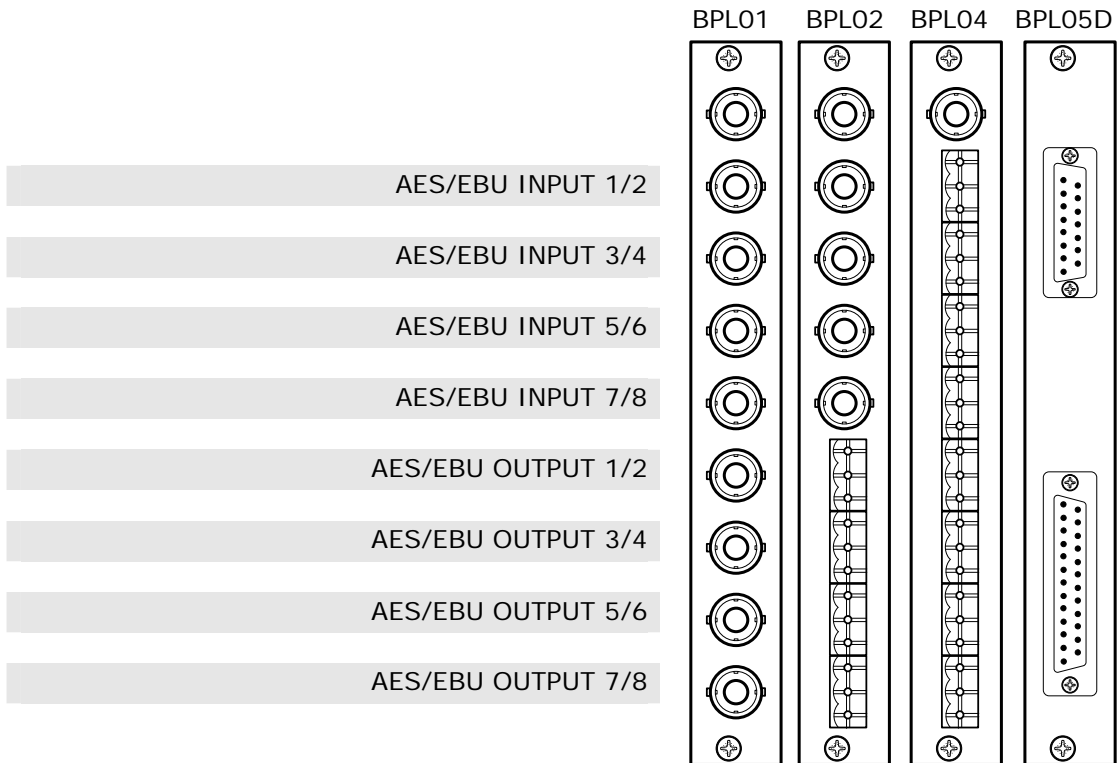
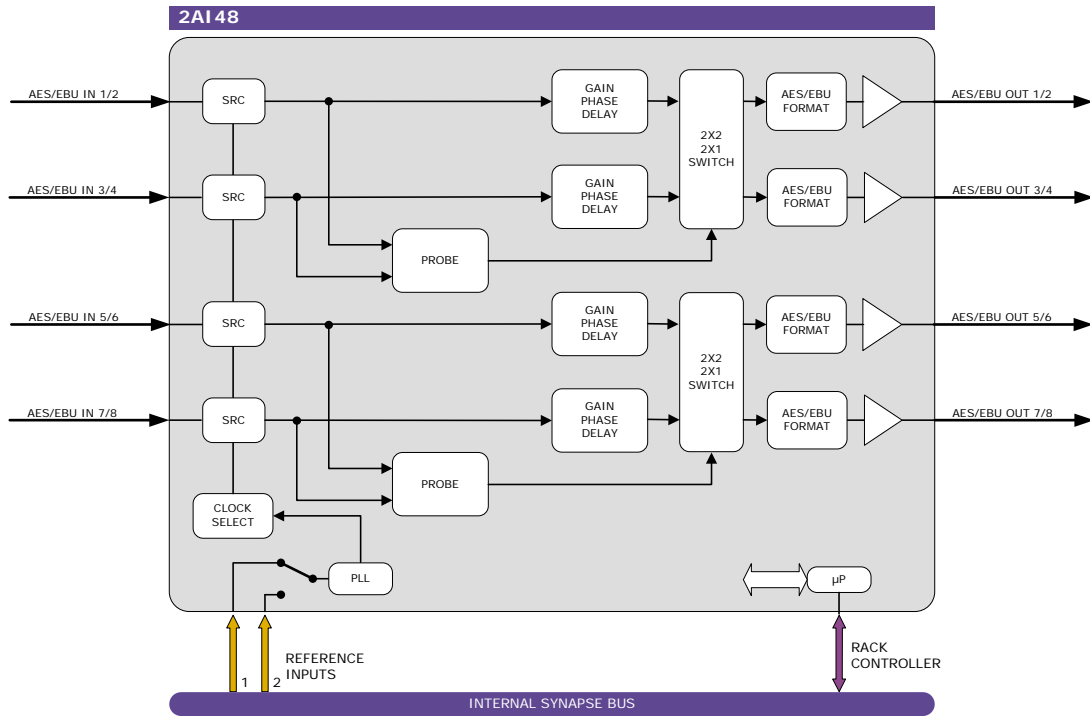


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Block schematic & I/O panel



### Features

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The 2A148 is a dual AES/EBU back-up switcher. It contains 2 completely individual paths with main and backup inputs. The unit can be triggered by our ACP control protocol or automatically by several input triggers.

These triggers are loss of input, audio silence, clipping and CRC errors.

- 2x1 or 2x2 function
- Automatic backup triggered by:
  - Loss of input (carrier detect)
  - Silence with threshold and time adjustment
  - Audio Clip with time adjustment
  - CRC errors
- AES/EBU inputs with optional SRC (32 to 192kHz sampling)
- 48kHz sample clock locked to: B&B ref or word clock ref.
- 48kHz sample clock in free running mode
- Available with 110 Ohms (phoenix or sub-D) or 75 Ohms (BNC) AES/EBU in- and outputs
- Adjustable audio gain (in 0.25dB) and phase (0-180 deg)
- Adjustable audio delay offset up to 1300ms in 1ms increments
- Full control and status monitoring through the front panel of the SFR04/SFR08/SFR18 frame and the Ethernet port (ACP)

### Applications

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- High density AES/EBU backup switching in lines areas

### Ordering information

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**Module:**

- **2A148:** Dual AES/EBU backup switcher with integrity checking

**Standard I/O:**

- **BPL01\_2A148:** I/O panel for 2A148 with unbalanced AES/EBU in and out
- **BPL02\_2A148:** I/O panel for 2A148 with unbalanced AES/EBU in and balanced AES/EBU out
- **BPL04\_2A148:** I/O panel for 2A148 with balanced AES/EBU in and balanced AES/EBU out
- **BPL05D\_2A148:** I/O panel for 2A148 with balanced AES/EBU in and balanced AES/EBU out on sub-D

**Specifications**

**AES Audio Input**

<b>Connector Standard</b>	BNC, Screw terminal or female sub-D (balanced) AES-1992 for balanced synchronous or asynchronous PCM/AES, SMPTE 276M for single ended synchronous or asynchronous PCM/AES
<b>Number of Inputs</b>	4
<b>Sampling Rate</b>	32 kHz to 192 kHz Synchronous 48 kHz in Master/ADD-On mode
<b>Resolution</b>	24 bits when AES inputs selected
<b>Minimum Input/Output Delay</b>	1 ms
<b>Impedance</b>	110 Ohms or 75 Ohms
<b>Level</b>	0.2V to 1V nom for BNC, 2V to 7V for balanced operation

**AES Audio Output**

<b>Number of Outputs</b>	4
<b>Connector</b>	BNC, Screw terminal or female sub-D (balanced)
<b>Resolution</b>	24 bits
<b>Sampling Rate</b>	48KHz synchronous
<b>Minimum Input/Output Delay</b>	2.5ms
<b>Maximum Input/Output Delay</b>	1300 ms

**Reference Video Input**

<b>Standard</b>	PAL (ITU624-4), NTSC (SMPTE 170M) Word clock 48k square-wave
<b>Number of Inputs</b>	2 on SFR18, 2 on SFR08, 1 on SFR04
<b>Connector</b>	BNC
<b>Signal Level</b>	1V nominal
<b>Impedance</b>	75 Ohms
<b>Return Loss</b>	> 25dB to 10MHz

**Miscellaneous**

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

**Electrical**

<b>Voltage</b>	+24V to +30V
<b>Power</b>	<4 Watts