



DAC20

4 channel analog audio output ADD-ON card

A Synapse® product

Synapse

**ADD-ON
Card**

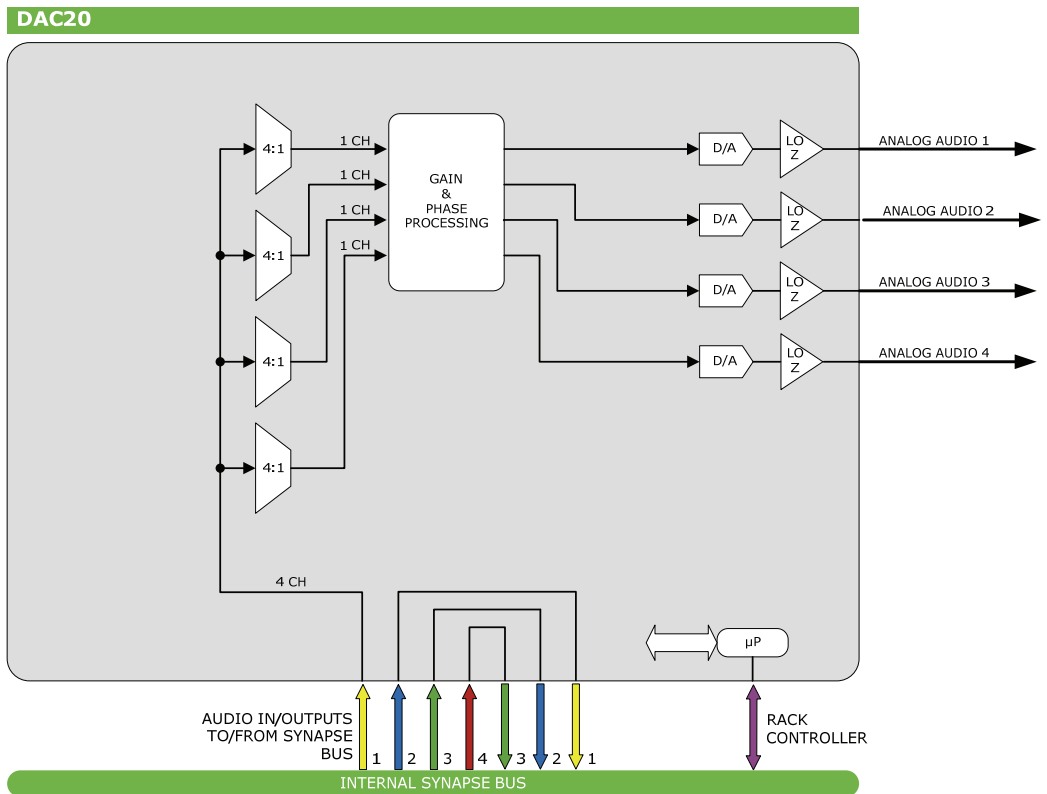
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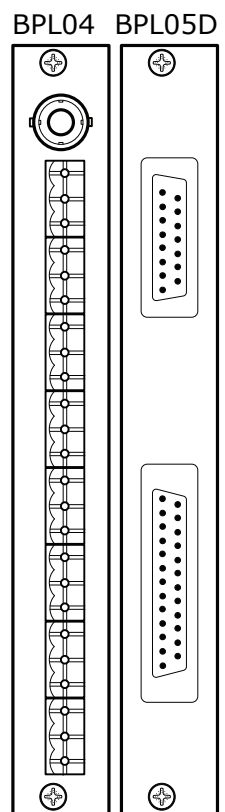
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AUDIO D/A CONVERSION

Block schematic & Connector panel



- ANALOG OUTPUT 1
- ANALOG OUTPUT 2
- ANALOG OUTPUT 3
- ANALOG OUTPUT 4



Features

The DAC20 is an ADD-ON module with analog audio outputs. It has no stand alone function, but is entirely designed to function as an ADD-ON card to the Synapse master cards. The master card is positioned to the left of the DAC20 and is required to have a de-embedding function. Cards that have a de-embedding function are the SDB20, SDB10, SAV10, SFS12/22, HFS12, SAS30, SAS10 etc. These cards can be recognized by a yellow arrow pointing outward the block schematic

- 24-bit audio D/A conversion
- 48k sampling locked to Master Card
- Phoenix or sub-D output connectors
- Adjustable audio gain (in 0.25dB steps) and phase (0-180 deg)
- Analog reference levels adjustable for 12, 15, 18 and 24dBu (software)
- Input channel swapping
- Clip indication
- Full control and status monitoring through the front panel of the SFR04/SFR08/SFR18 frame and the Ethernet port (ACP)

Complementary card to:

- SFS12, HFS12
- SDB10, SDB20, HDB20
- SCV12, SAM10
- All de-embedding master cards

Applications

The DAC20 is a generic analog audio ADD-ON card for dedicated Synapse master cards that have a de-embedding function.

Ordering information

Module:

- **DAC20:** 4 channel analog audio output Synapse ADD-ON card

Standard I/O:

- **BPL04_DAC20:** I/O panel for DAC20 with analog audio out
- **BPL05D_DAC20:** I/O panel for DAC20 with analog audio out on sub-D

Specifications

Analog Audio Output

Type	Balanced analog audio
Number of Outputs	4
Connector	removable terminal strips or female sub-D
Impedance	50 Ohms balanced
Signal Level	0dB FS => 12dBu, 15dBu, 18dBu or 24dBu
Frequency Response	< ±0.05dB (20Hz to 20kHz)
Gain Mismatch	< 0.25 dB @997Hz, -20dBFS Multi channel
Dynamic Range	>100 dB @ -60dBFS
THD+N	< 92dB @ 1kHz, -1dBFS
Crosstalk	< -100dB (20Hz to 20kHz)
DC Offset	< ±30mV
Dynamic range	> 97dB @-60dBFS

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	<8 Watts