

DATASHEET

DAC-1721 Dual AES to Analog Audio Converter

Space-saving, modular platform for advanced signal processing.

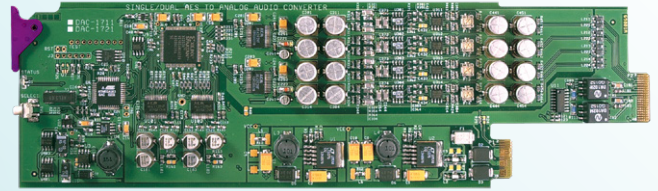
The DAC-1721 from Grass Valley® is high-quality, 24-bit, digital to analog audio converter which allows conversion of two AES digital signal into two stereo analog audio signals.

The DAC-1721 is a dual input converter card. The input sampling

rates can be up to 100 kHz, including 32 kHz, 44.1 kHz, 48 kHz and 96 kHz. An internal digital EBU tone generator facilitates alignment of audio levels. All analog audio output levels may be set individually. A digital 50/15 µs de-emphasis stage may be selected manually

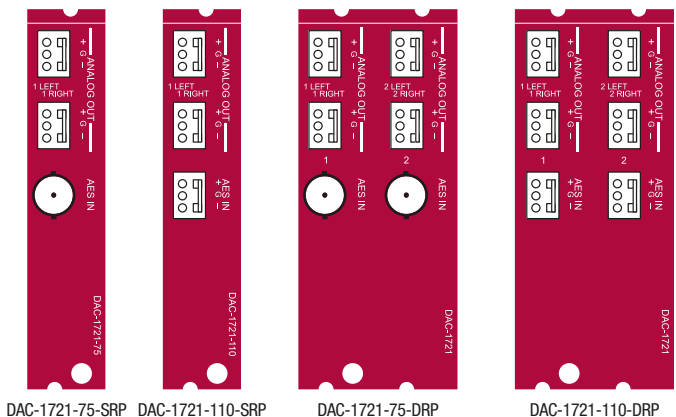
or automatically according to the channel status. Input status is also available indicating input audio signal presence or overload.

The DAC-1721 is compatible with both AES3 and AES-3id digital audio standards.



Key Features

- Single or dual AES3, AES-3id or S/PDIF digital input(s)
- Single or dual stereo analog audio outputs
- 0 dBFS programmable analog (+15, 16, 18, 20, 21, 22, 24 and 28 dBu) level mapping
- 24-bit D/A conversion
- 32 to 96 kHz sampling rates
- -96 to +12 dB level adjustment (by 0.5 dB steps) per channel
- Adjustable presence and overload threshold
- Internal EBU tone generator
- Digital 50/15 µs de-emphasis selectable



Specifications

Input

Signal: AES3

Level: 0.2 to 7 V_{p-p}

Termination: 110Ω balanced

Return loss: >15 dB up to 12 MHz

AES-3id (S/PDIF compatible)

Signal: AES-3id (SMPTE ST 276)

Level: 0.2 to 5.0 V_{p-p}

Termination: 75Ω unbalanced

Return loss: >15 dB up to 12 MHz

Outputs (2)

Signal: Balanced analog audio

Impedance: <50Ω

Maximum level: 24 dBu / 600Ω

Processing Performance

Quantization: 24 bits

Sampling:

– 20 to 50 kHz (128X over-sampling)

– 50 to 100 kHz (64X over-sampling)

0 dBfs: +15, 16, 18, 20, 21, 22, 24 and 28 dBu

SNR: >116 dB (A weighted)

Distortion: <-96 dB

Crosstalk: <-100 dB (20 Hz to 20 kHz)

Freq. response: ±0.2 dB (20 Hz to 20 kHz)

De-emphasis: ±0.3 dB (50/15 μs)

Latency: 32/FS (670 μs at 48 kHz)

Tone generator: 1 kHz sine wave interrupted on left channel (250 ms / 3s)

Electrical

Power: 4.3W

Ordering

Densité 2 frame

DAC-1721

DAC-1721-75-SRP

DAC-1721-110-SRP

DAC-1721-75-DRP

DAC-1721-110-DRP

Remote control

Densité 3 frame

DAC-1721-3RU

DAC-1721-75-SRP-3RU

DAC-1721-110-SRP-3RU

DAC-1721-75-DRP-3RU

DAC-1721-110-DRP-3RU

GV Orbit, iControl, iControl Solo

Description

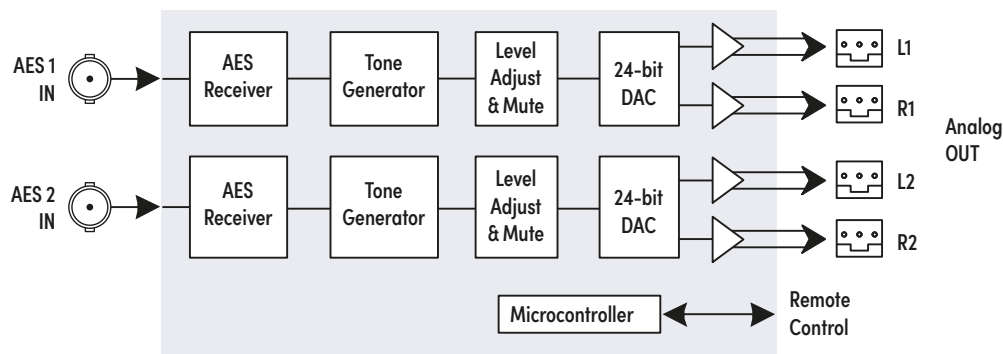
Dual AES to analog audio converter

Single rear connector panel, 75Ω

Single rear connector panel, 110Ω

Double rear connector panel, 75Ω

Double rear connector panel, 110Ω



DAC-1721 Functional Block Diagram

This product may be protected by one or more patents. For further information, please visit: www.grassvalley.com/patents

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