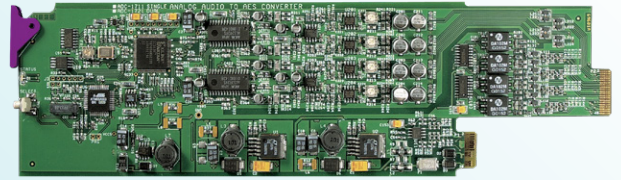


DATASHEET

ADC-1722 Dual Analog Audio to AES Converter



Space-saving, modular platform for advanced signal processing.

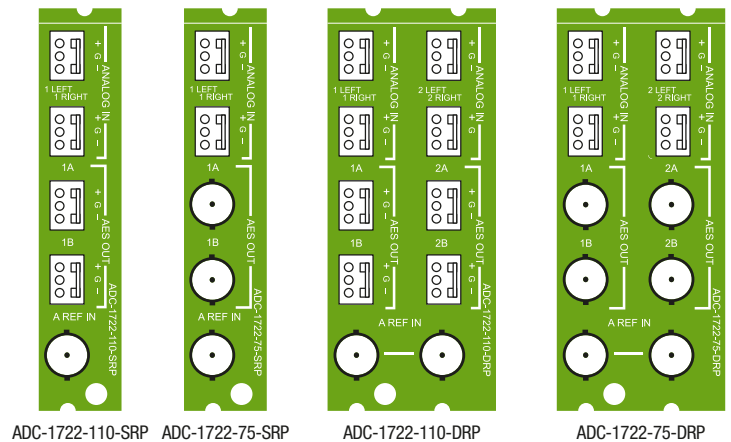
The ADC-1722 from Grass Valley® is a high-quality, 24-bit, analog to digital audio converter which allows conversion of two stereo analog audio channel into two AES type digital signals.

Sampling rates can be set to 32, 48 or 96 kHz by an internal clock or an external reference signal. An internal digital EBU tone generator facilitates alignment of audio levels.

User-defined channel identification data may be encoded in the AES status bits. An input audio signal status is also available indicating input signal silence or overload. The ADC-1722 is compatible with both AES3 and AES-3id digital audio standards.

Key Features

- Single or dual stereo channel use (select proper rear)
- 1 external reference input (Word Clock or AES3-id DARS)
- 2 AES outputs per stereo channel
- Balanced AES3 or unbalanced AES3-id outputs
- 24-bit A to D conversion (16, 20 or 24 bits output word length)
- 32, 48 and 96 kHz sampling rates
- -96 to +12 dB of gain adjustment (by 0.5 dB steps)
- 0 dBFS programmable analog (0 to +28 dBu, 1 dB steps) level mapping
- Internal EBU tone generator
- Adjustable silence detection threshold
- Overload detection and reporting



Specifications

Inputs

Signal: Balanced analog stereo audio

Impedance: >12k Ω

Reference: Word Clock or AES-3id

Impedance: 75 Ω

Outputs

AES3:

- Level: 4 Vp-p
- Impedance: 110 Ω balanced
- Jitter: 0.011 UI peak (50 Hz to 100 kHz)

AES-3id (SMPTE 276M):

- Level: 1.0 Vp-p
- Impedance: 75 Ω unbalanced
- Jitter: 0.011 UI peak (50 Hz to 100 kHz)

Processing Performance

Quantization: 24 bits

Sampling: 3, 2, 48, 96 kHz

SNR: >113 dB (a weighted)

0 dBFS: 0 to +28 dBu (1 dB step)

Distortion: < -100 dB (0.001 %)

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

Freq. response: \pm 0.1 dB (20 Hz to 20 kHz)

Latency: 810 μ s at 48 kHz

Tone generator: -18 dBFS 1 kHz sine wave interrupted on left channel (250 ms/3s) EBU R49

Miscellaneous

Signal presence threshold: From -72 to -54 dBFS (6 dB steps)

Silence detect delay: From 0 to 255s (1s steps)

Electrical

Power: 5W



Ordering

Densité 2 Frame

ADC-1722

ADC-1722-75-SRP

ADC-1722-110-SRP

ADC-1722-75-DRP

ADC-1722-110-DRP

Densité 3 Frame

ADC-1722-3RU

ADC-1722-75-SRP-3RU

ADC-1722-110-SRP-3RU

ADC-1722-75-DRP-3RU

ADC-1722-110-DRP-3RU

Description

Dual analog audio to AES converter

Single rear connector panel, 75 Ω

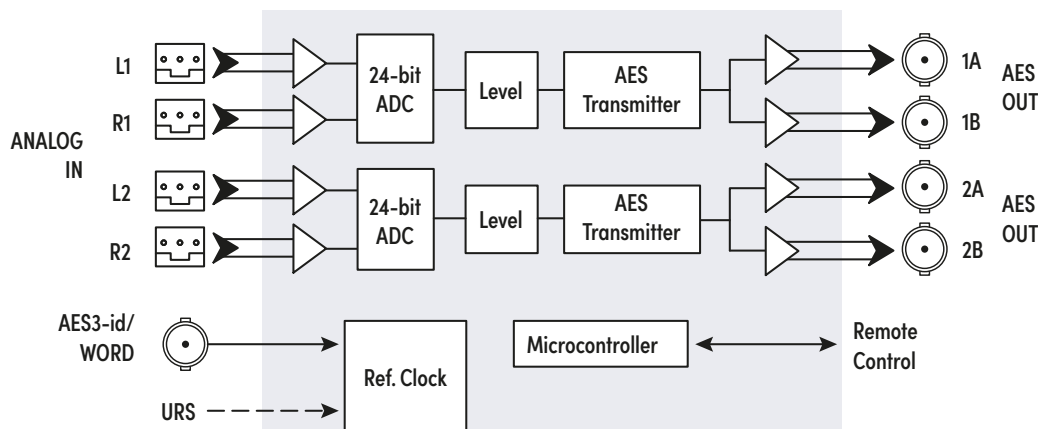
Single rear connector panel, 110 Ω

Double rear connector panel, 75 Ω

Double rear connector panel, 110 Ω

Remote Control

GV Orbit, iControl, iControl Solo



ADC-1722 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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