

Dual Stereo ADC.



FEATURES

- 32, 44.1, 48kHz sampling
- Selectable 24/20-bit conversion
- AES & Video references
- Variable delay to 1.25s in 1ms steps
- Test tone

This multipurpose ADC module uses a DSP processor to provide a high level of flexibility with regard to user options and settings including audio delay, input level adjustment and test tone generation. 24 bit or 20 bit conversion is link selectable. The selection of 20 bit conversion sets the 4 LSBs of the 24 bit audio sample in the output AES streams to zeros. An analogue video reference input allows the AES outputs to be made 'clock synchronous' with the video frame rate (single frame for 625 systems, five frames for 525 systems).

Alternatively the AES outputs can be synchronised to an external AES reference. This has the additional benefit of aligning the AES block sequence. A variable delay from 0 – 1.25s can be set from the front panel or remotely from Viewfind DART. Resolution is in 1ms steps. All standard sampling rates are supported.

Technical Specification

Digital Audio Inputs

Number	2 channel pairs (4 mono inputs)
Max input	14dBu to 28dBu in 1dBu steps: 0dBFS
Input impedance	20K ohm
Input format	Balanced (screw terminal collectors)
Common mode rejection	>70dB (20Hz—20kHz)

Digital Audio Outputs

Number	2 AES channel pairs
Format options	AES3-1992 or AES3id-1995
Impedance options	75 ohm unbalanced BNC or 110 ohm balanced screw terminal
Cable drive length	Up to 250m

References

Analogue Video (48kHz sampling only)

Signal	NTSC/PAL 1V p-p composite colour black
Connector	BNC
Input impedance	75 ohm or Hi-Z (link selectable)

Digital AES

Signal	AES3-1992 or AES3id-1995
Input impedance	110 ohm / 75 ohm or Hi-Z (link selectable)
Sampling frequency	32, 44.1, 48kHz

Conversion (quoted performance values are typical)

Conversion rates	32, 44.1, 48kHz (96kHz special option)
Resolution	24-bit (DSP quantises down to 20- bit - link selectable)
Dynamic range	114dB (IEC-A)
THD+N	< -90dB (-1dBFS, 20Hz-20kHz, IEC A)
Freq. Response	20Hz to 20kHz -0.1dB (0dBu input)
Test tone	997Hz at -18dBFS (per channel pair selectable)
Minimum throughput delay	1.0ms
Adjustable fixed delay	0-1250ms (all channels ganged)

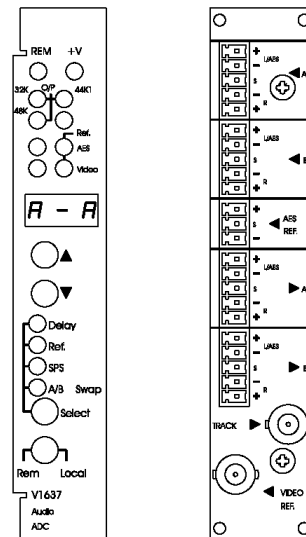
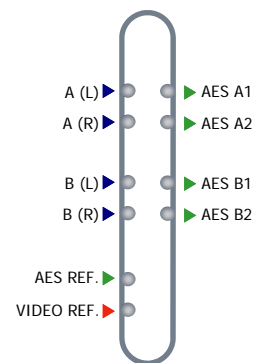
Ordering Information

V1637	Dual Stereo ADC
V16AR3P	3RU (balanced)
V16AR3M	3RU (unbalanced)
V16AR1P	1RU (balanced)
V16AR1M	1RU (unbalanced)

Note: Special versions of the rear module are available on request.

V1637

ADC - 24 Bit



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