

C AD 3320(1) D

SERIES 3000

MiniModules

Dual Analog Audio to AES Converter

Description

The C AD 3320 D is a dual channel audio A/D converter designed primarily for broadcast and professional applications. The module accepts 2 x analog stereo pair inputs and converts these into 2 x 24 bit AES3 digital audio outputs. Sampling rates of 32KHz, 44.1KHz, 48KHz or 96KHz can be selected. The converter can be locked to external video reference, external AES reference or internal reference. Also provides an Internal audio test

tone generator and transformer coupled (isolated) AES outputs. Full scale ranging is selectable for analog inputs. The module has a built in micro-controller with local controls, status and alarm indicators and well as internal flash ram for storing setups. Remote control and status monitoring is possible when used with a controller option and LYNX control software.

Key Features

2 separate channels of 24 bit audio A/D conversion (stereo)

Balanced audio inputs and transformer coupled balanced AES outputs (AES3)

Selectable sample rates (32KHz, 44.1KHz, 48KHz, 96KHz)

External video reference, external AES reference or internal reference capability

Adjustable full-scale audio level presets of 12, 15 or 18dBu. (EUR version) or 20, 22 or 24dBu (US version)

Integrated test tone generator

Input presence detection

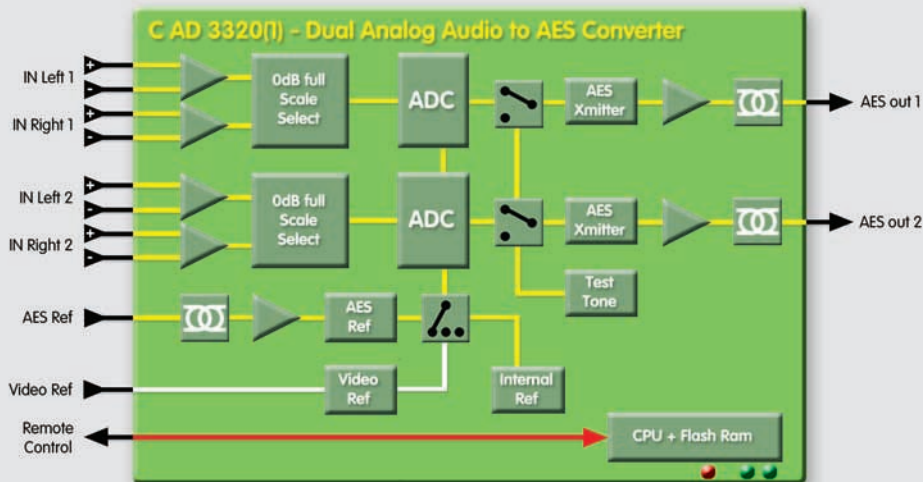
Overload detection

Local DIP-switches and LED's for control and status monitoring.

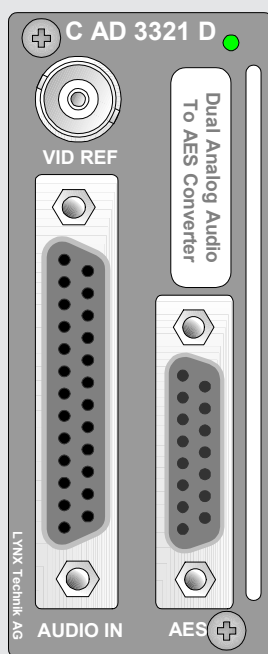
Microprocessor controlled.

Flash Ram storage for settings

Remote control interface.



Actual Size



CONVERSION

conversion

Dual Analog Audio to AES Converter

This module is part of the 3000 series of MiniModules, which offer high quality and flexibility in a very small form factor ideal for applications where space is at a premium. The modules can be used either stand alone using the optional power supply brick or

as part of a tightly integrated space saving system where up to 10 MiniModules can be mounted using the optional R FR 3005 rack frame, with optional expansion for redundant power and remote control using one of the LYNX controllers and control software.

Specifications

Audio Inputs

Analog Inputs	2 x balanced stereo inputs
Impedance	15 KOhm
Connection type	Sub D 25 pin female
Max input level	24 dBu
0dB Full Scale Level*	C AD 3320 D = Selectable 12dBu, 15dBu, 18dBu C AD 3321 D = Selectable 20dBu, 22dBu, 24dBu

Reference Inputs

Video Reference	Blackburst video input, 75 Ohm BNC connection
AES reference	Transformer coupled AES reference input. 110 Ohm balanced input on Sub D connection

Outputs

Signal	2 x balanced AES3 outputs (one outputs per channel). Transformer coupled (isolated)
Connection	Sub D 15 pin female
Impedance	110 Ohm
Level	4 V p-p

Performance

Sampling	Selectable, 32KHz, 44KHz, 48KHz or 96 KHz
Quantisation	24 bits
Noise Floor	< -90 dBu (A-weighted)
Distortion	< 0.005% (20 Hz to 20 KHz)
Frequency Response	+/- 0.1dB (20 Hz to 20 KHz)
Crosstalk	< 90dB (20 Hz to 20 KHz)

Electrical Specifications

Operating Voltage	+ 5VDC
Power Consumption	4 W
Connection	DC input via 5 pin locking bayonet connector
Safety	IEC 950/ EN 60950/VDE 0805/UL1950

Mechanical

Size	85.5mm x 35.3mm x 38.7mm + connectors
Weight	250g

Ambient

Temperature	5°C to 35°C. Maintaining specifications -20°C to +70°C storage
Humidity	Max 80% non condensing

* NOTE

Please order the correct version. The full scale range presets are different for the two primary market areas:

C AD 3320 D = European Markets

C AD 3321 D = US Markets

Options

Power Supply Options

R PS 3001 E	External power brick - wall plug style. (Europe)
R PS 3001 U	External power brick - wall plug style (USA)
R PS 3001-3	In-line power supply - suitable for all regions
R PS 3004	In-line supply for 4 MiniModules - suitable for all regions

Mounting Solutions

R FR 3000	Wall mounting brackets for individual MiniModules (5 sets)
R FR 3004	Wall mount for 4 MiniModules
R FR 3005	19" rear rack mount plate for 10 MiniModules
R FR 3010	Central power supply and control chassis
R PS 5010	Redundant power supply for R FR 3010

Adapter Cables

R PS C 15	DC power and control extension cable (1.5m)
R PS C 25	DC Power and control extension cable (2.5m)
R AC F25-8	SubD 25 > 8 x female XLR audio adapter cable (1m)
R AC MF15-4	SubD 15 > 2 x male XLR and 2 x female XLR (1m)

Controllers

R CT 3000	Service Adapter and control software for single modules
R CT 5020	Rack Controller and control software
R CT 5010	Rack Bus Expander
R CT 5030	Master Controller

Note.

Local dip switches allow for basic set up and configuration, which is suitable for most applications. Access to extended feature set s requires the use of a controller option or the RCT 3000 Service Adaptor and control software.