

IQAAD00

4 Channel Audio Analog to Digital Converter

NEW

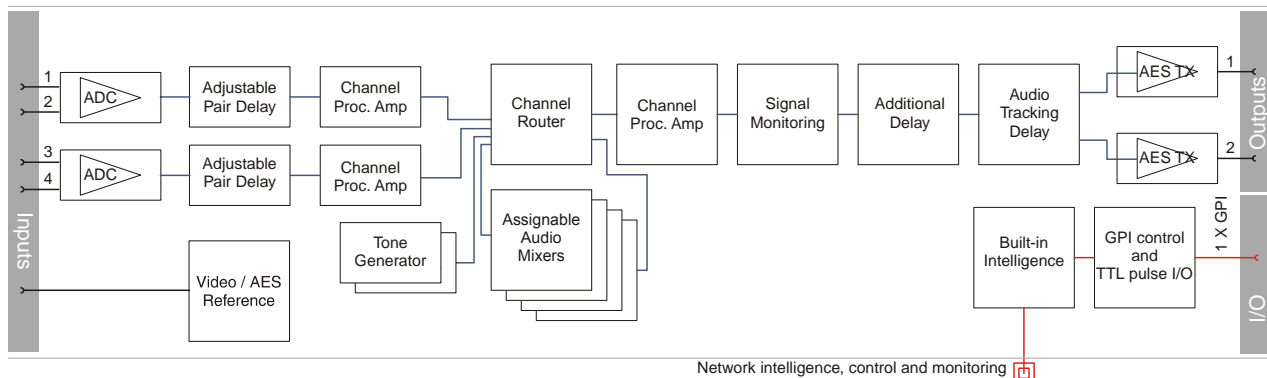
The IQAAD00 converts two analog stereo pairs, or four analog mono channels into two AES/EBU digital audio streams. Each analog input is sampled at 48 kHz with 20-bit resolution. Sampling can be free-running, locked to a reference video signal or 48kHz AES/EBU digital audio stream. Video standard is automatically determined. The IQAAD00 also provides proc. amp control, channel routing and mixing, up to 0.5 s of tracking audio delay and additional fixed delay of up to 3 s adjustable in 1 ms steps.

Does this module suit your application?

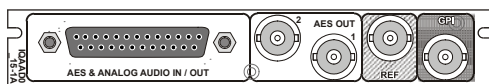
- Converts four analog audio channels into two AES/EBU digital audio streams
- Firewall for processed PCM audio to provide a continuous output
- Channel-level (Sub-frame) routing
- 4 off 4 channel assignable audio mixers
- Flexible audio delay including per pair fixed delay, common fixed delay and tracking delay
- Variable audio delay of up to 0.5s which seamlessly tracks an external video delay via RollTrack / GPI inputs
- Audio proc-amp (gain, mute, polarity))
- RollCall control and monitoring compatible

Why should you choose this module?

- Converts four analog audio channels into two AES/EBU digital audio streams, useful in multi-lingual systems
- Will lock to video and AES/EBU digital audio references
- Balanced or unbalanced output configurations enables use in all environments
- A comprehensive audio conversion solution with firewall, proc. amp, audio shuffling and delay

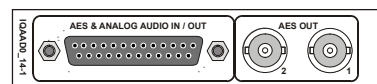


Order codes for IQH3A/1A enclosures



IQAAD0015-1A Analog Audio ADC. 4 balanced analog audio inputs, 2 balanced and unbalanced AES/EBU outputs, 1 GPI

Order codes for other enclosures



IQAAD0014-1 Analog Audio ADC. 4 balanced analog audio inputs, 2 balanced and unbalanced AES/EBU outputs

For more details on enclosure types please refer to the Frames/Enclosures section

Inputs & Outputs

Signal Inputs

Analog Audio 4 Channels (2 Stereo Pairs)
 Video / AES Reference Composite video / AES/EBU (BNC)

Signal Outputs

Unbalanced digital audio 2 x AES/EBU (BNC)
 Balanced digital audio 2 x AES/EBU (25 Way D-Type)
 Standards AES3 - 1992

Control Interface

GPI 1x Closing contact I/O interface (BNC)

IQAAD00

4 Channel Audio Analog to Digital Converter

Card Edge & RollCall Controls

Card Edge Controls

NONE

Card Edge Indicators

Reference Present

CPU running / Power..... One green LED, flashing = OK

RollCall Functions

Audio Controls

Set line up level +20 to -20 dBu in 1 dB steps

Set headroom 4 to 24 dB in 1 dB steps

Set audio detector thresholds

High/low levels, silence, overload,
time delay

Audio input delay..... Up to 1.5 s additional delay in 1
ms steps

Input side control proc. - audio gain and polarity
Independent Gain, Mute, Polarity
control over input channels. +18
dB to -18 dB in 0.1 dB steps.

Channel routing Output channels routed from
analog pairs 1 & 2, test tone and
silence

Output side control proc. - gain and polarity
Independent Gain, Mute, &
Polarity control over output
channels. +18 dB to -18 dB in 0.1
dB steps.

Global delay offset..... up to +1.5 s in 1 ms steps,
common to all processed audio.

Variable audio delay control source
Up to 0.5 s from RollTrack + GPI

Tone frequency, amplitude & Ident

2-channel tone generator. 100 Hz
to 15 kHz in 100 Hz steps.

Tone Setup:

Frequency..... 100 Hz to 15 kHz in 100 Hz steps

Channel Ident 0.5 s interruption every 2 s

Other Controls

Preset Unit..... Returns settings to factory
defaults

User Memories Name, clear, save and read 8 user
memories

GPI/O set-up May be attached to any memory
function/polarity

Reference Select Free Run, AES/EBU or Video
PAL/NTSC

Reporting (* also Logged)

Audio Silence, High Level, Low Level, Overflow
For processed audio channels
only

No reference..... *No reference present

Reference error..... AES reference sample rate not 48
kHz

RollTrack Input

Delay RollTrack + fixed

RollTrack Output

Delay Current audio delay

Reference state Ref Lost, Ref Present, Ref error
[error: AES reference sample rate
not 48 kHz]

GPI High, Low, Inactive

Specifications

Analog Audio Input (Balanced)

Analog Input Impedance..... 10 k ohms

Frequency Response..... 20 Hz to 20 kHz (± 0.1 dB)

Distortion (THD+N) Better than -95 dB, 1kHz@ -
1 dBFS

Dynamic range > 106 dB

Max input level..... +24 dBu

Digital Audio Output (Balanced)

Connector/Format 25 W D

Level..... 3 V p-p typical into 110 Ohms

Digital Audio Output (Unbalanced)

Connector/Format BNC

Level..... 1 V p-p typical into 75 Ohms

Reference

Reference Return Loss Better than -35 dB to 5.8 MHz

Reference Input Level 1 V p-p ± 3 dB

Analog Reference Input Standard
48 kHz AES/EBU, 625/525 line

Power Consumption

Module Power Consumption

6 W max.