

IQDLY00

8 Channel AES/EBU Audio Synchronizer, Delay and Shuffler Module

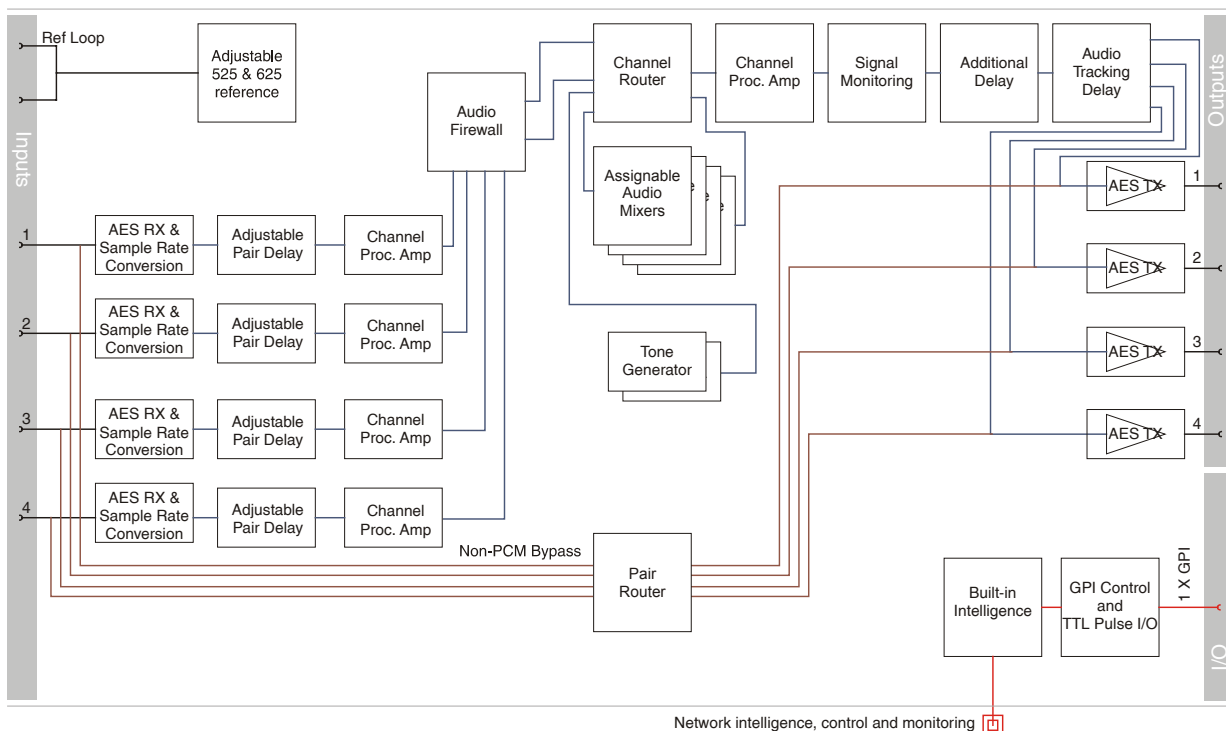
The IQDLY00/01 provides synchronization, tracking or preset audio delay, proc. amp control and channel level routing for up to four AES streams. In short it is a complete AES processing solution in one package. Audio can be synchronized to a video reference, tracked to a video synchronizer, or synchronized to an audio reference. Tracking delay control is available via RollTrack or TTL signal. Bypass paths allow for the passing of non-PCM audio such as Dolby E.

Does this module suit your application?

- 4 x balanced or unbalanced AES paths
- Synchronizes AES inputs
- Proc. amp control of audio channels
- Flexible preset and tracking delay
- Channel-level shuffling
- 4 off assignable 4 input mixers
- References to video or AES signals
- Professional standard 48kHz operation, sample rate converts non-48kHz signals
- Firewall for processed PCM audio to provide a continuous output regardless of input
- Passes non-PCM AES signals including Dolby E
- Pair-level Dolby E routing

Why should you choose this module?

- A complete AES solution in one module for all common 48kHz audio signal tasks
- Firewall function makes this an ideal first unit in a signal chain
- Channel-level manipulation and mixing allows detailed control of audio material
- Tracking capability allows the audio to follow a video synchronizer

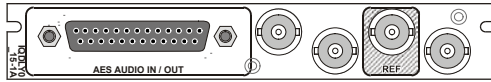


Block diagram for IQDLY0006-2A shown

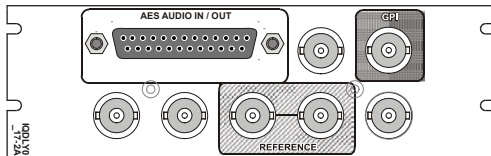
IQDLY00

8 Channel AES/EBU Audio Synchronizer, Delay and Shuffler Module

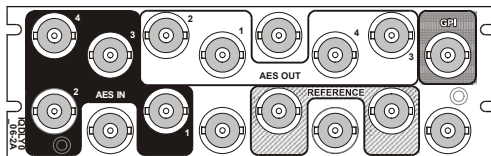
Order codes for IQH3A enclosures



IQDLY0115-1A 8 channel AES Audio Synchronizer, Delay and Shuffler Module . Balanced AES connection via 25 way D type. 4 AES inputs, 4 AES outputs, AES/Video reference

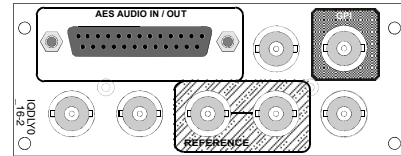


IQDLY0117-2A 8 channel AES Audio Synchronizer, Delay and Shuffler Module . Balanced AES connection via 25 way D type. 4 AES inputs, 4 AES outputs, AES/Video reference and 1 x GPI

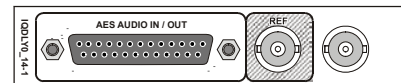


IQDLY0006-2A 8 channel AES Audio Synchronizer, Delay and Shuffler Module . Unbalanced AES connection via BNC. 4 AES inputs, 4 AES outputs, AES/Video reference and 1 x GPI

Order codes for other enclosures



IQDLY0116-2 8 channel AES Audio Synchronizer, Delay and Shuffler Module . Balanced AES connection via 25 way D type. 4 AES inputs, 4 AES outputs, AES/Video reference and 1 x GPI



IQDLY0114-1 8 channel AES Audio Synchronizer, Delay and Shuffler Module . Balanced AES connection via 25 way D type. 4 AES inputs, 4 AES outputs, AES/Video reference

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

Inputs & Outputs

Signal Inputs

- Video / AES Reference Composite video / AES/EBU (BNC)
- Unbalanced digital audio 4 x AES/EBU, AC3, Dolby E (BNC)
- Balanced digital audio 4 x AES/EBU, AC3, Dolby E (25 Way D-Type)

Signal Outputs

- Unbalanced digital audio..... 4 x AES/EBU, AC3, Dolby E (BNC)
- Balanced digital audio 4 x AES/EBU, AC3, Dolby E (25 Way D-Type)

Control Interface

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

Controls

Card Edge Controls

NONE

Card Edge Indicators

- AES Input Present 1 x LED per pair
- Reference Loss
- CPU running / Power..... One green LED, flashing = OK

RollCall Functions

Audio Controls

- Set headroom 4 to 24 dB in 1 dB steps
- Set audio detector thresholds
High and low levels, time delay
- Input audio 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 input channels. +18 dB to -18 dB in 0.1 dB steps.
- Channel routing Output channels routed from AES pairs 1 to 4, test tone and silence
- Output side control proc. - gain and polarity
Independent Gain, Mute, & Polarity control over AES 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

IQDLY00

8 Channel AES/EBU Audio Synchronizer, Delay and Shuffler Module

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

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

Default Audio Output Silence

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

Reporting (* also Logged)

No reference *No reference present

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

RollTrack Input

Delay Audio delay – Fixed, RollTrack + fixed

RollTrack Output

Delay Current audio delay

Reference state Ref Lost, Ref Present, Ref Error

External AES Audio state Pair Present/Lost

GPI state Low, High, Inactive

Specifications

Reference Return Loss Better than -35 dB to 5.8 MHz

Reference Input Level 1 V p-p \pm 3 dB

THD+N < -117 dB @ 700 Hz (24 bits) AES to AES

Impedance 75 Ohms

Output Sampling 48 kHz frame locked to 48 kHz
AES/EBU Reference in AES lock mode

Digital Audio Input (Balanced)

Connector/Format 25 W D

Sample Frequency 25 – 96 kHz (48 kHz for Reference)

Input Cable Length >150 m of AES3 cable

Impedance 110 Ohms

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

Digital Audio Input (Unbalanced)

Connector/Format BNC

Sample Frequency 25 – 96 kHz (48 kHz for Reference)

Input Cable Length >500 m of RG59 cable

Power Consumption

Module Power Consumption
8.5 W