

AES/EBU Reference

The IQBDAR provides up to 8 AES/EBU audio reference outputs at 48 kHz. The output audio clock may free-run, or be locked to either video black or an AES/EBU audio input.

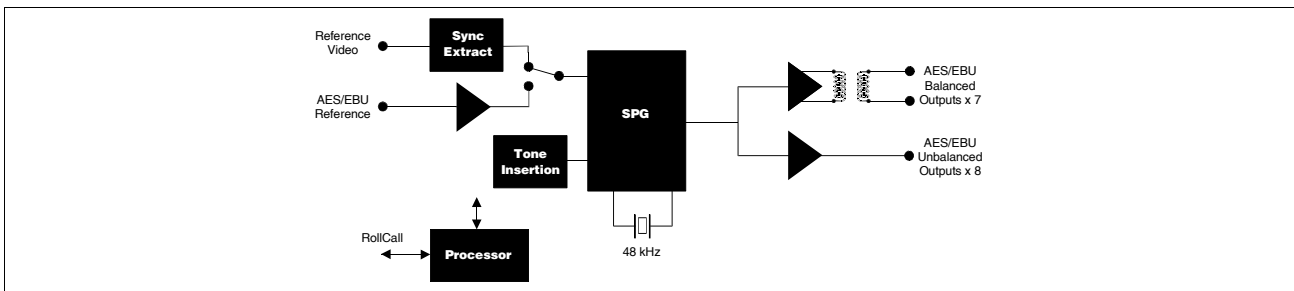
Does this module suit your application?

- 7 transformer-coupled balanced AES 48 kHz reference outputs
- Optional 8 transformerless unbalanced outputs
- Free-run or locking to video black or AES/EBU audio
- Grade I reference option
- Silence, pulse or various tones available, any combination assignable to either the left or right outputs
- Independent left and right tone level adjust, 0 to -20 dBFS
- AES reference can be received from up to 150 m of AES cable for balanced input or up to 500 m of RG59B cable for unbalanced input
- Automatic 525 or 625 line video input detection

- RollCall™ control
- Output channel status monitoring
- 20 or 24-bit sample word length, user selectable
- 4 memory locations for storage and recall of selected parameters

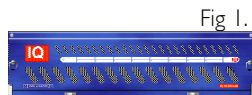
Why should you choose this module?

- Industry standard AES 11, 48 kHz, reference for all broadcast needs
- High quality 20 or 24-bit digital audio reference to check alignment of digital audio systems
- Provides a range of test signals for all common needs including silence, pulse and various tones
- Can free-run, or lock to video or AES/EBU audio references



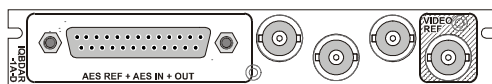
Code 'A' Order Codes

IQH3A-E-O, IQH3A-E-P,
IQH3A-N-O, IQH3A-N-P

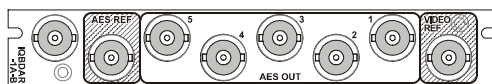


Although IQ modules are interchangeable between enclosures, their rear panels are enclosure specific. Code 'A' order codes must be used when installing modules in the IQH3A enclosure shown in Fig 1. Non 'A' order codes relate to all other Snell & Wilcox IQ modular enclosures. Please take time to ensure that the compatible order code is selected to match the chosen enclosure.

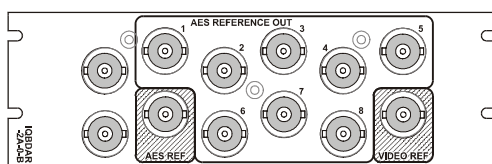
Order codes for IQH3A enclosures (Code 'A')



IQBDAR-1A-0-D Digital Audio Reference. Balanced. 7 outputs.

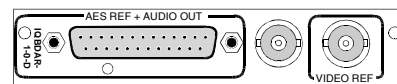


IQBDAR-1A-B Digital Audio Reference. Unbalanced. 5 outputs.

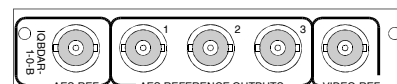


IQBDAR-2A-0-B Digital Audio Reference. Unbalanced. 8 outputs.

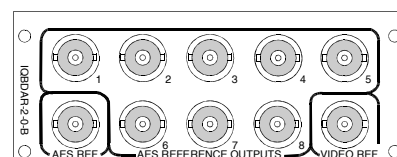
Order codes for other enclosures



IQBDAR-1-0-D Digital Audio Reference. Balanced. 7 outputs.



IQBDAR-1-0-B Digital Audio Reference. Unbalanced. 3 outputs.



IQBDAR-2-0-B Digital Audio Reference. Unbalanced. 8 outputs.

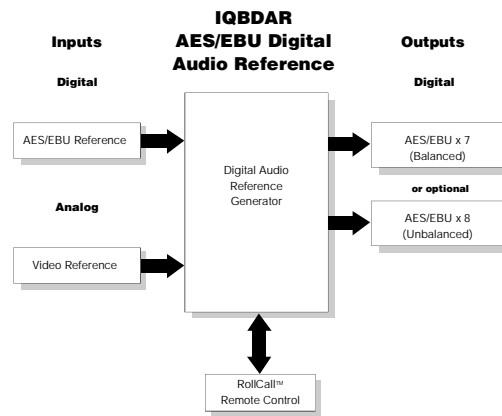
Inputs & Outputs

Signal Inputs

Digital Audio Reference.....	Balanced AES/EBU 48 kHz via 25-Way D-type(-D) Unbalanced AES/EBU 48 kHz via BNC (-B)
Video Reference.....	525/625 Black Burst Video via BNC
Standards.....	AES3-1992

Signal Outputs

Digital Audio.....	7 x Channel Pairs Balanced AES/EBU 48 kHz via 25-Way D-type(-D) 8 x Channel Pairs Unbalanced AES/EBU 48 kHz via BNC (-B)
Standards.....	AES3-1992



Card Edge & RollCall Functions

Card Edge Controls (also available via RollCall)

Lock Select.....	Free-run, Lock to Video, Lock to AES audio
Mono Frequency Select.....	16 frequencies from 93.75 Hz to 22.5 kHz
Independent Left & Right Tone Style	Sinusoidal or 1.5 kHz pulse, 85 ms wide at 1 second intervals, or just digital silence
Mono Tone Level Adjust.....	0dBu to -20dBu ± 0.3 dB in 1dBu Steps
Sample Word Length.....	20-bits or 24-bits, Auxiliary bits used for main audio

Functions Available via RollCall™ Only

Input Lock Detect.....	Detects presence of audio and video inputs
Channel Status Monitor.....	Monitors Output Channel Status
Channel Status Editor.....	Origin and Destination editor
Left & Right Tone Level Adjust	0dBu to -20dBu ± 0.3 dB in 1dBu Steps
Left & Right Frequency Select	Full range of frequencies from 93.75 Hz to 23.8125 kHz in 93.75 Hz steps
User Memories.....	4

Specifications

Input Cable Length (-D).....	>150 m of AES3 cable Balanced 110 Ohms
Input Cable Length (-B).....	>500 m of RG59 cable Unbalanced 75 Ohms
Video Reference.....	Standard level ± 6 dB into 75 Ohms
Output Channel Pairs (-D).....	7 Balanced 3 Vpk to pk typ. into 110 Ohms
Output Channel Pairs (-B).....	8 Unbalanced 1 V typical into 75 Ohms
Free Run Stability.....	± 10 ppm
Optional Grade 1 Crystal.....	± 1 ppm max w.r.t. nominal frequency at +25°C

AES Reference Input Frequency Pull-In Range	± 2 Hz @ 48 kHz
Locking.....	Conforms to AES11 1997 specification
Sampling.....	48 kHz frame locked to 48 kHz AES/EBU Reference, 48 kHz frame locked to PAL video reference, 48 kHz frame locked to every 5th frame of an NTSC video reference (Conforms to AES11 - 1997 spec)

Power Consumption

Module Power Consumption.....	2.9W max
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