Installation Manual

4XD2A

8-Channel Digital-to-Analog Converter, with HI/VI-N support

Warranty information can be found at www.odyssey-products.com





The 4XD2A converter is a low-cost D-to-A for Cinema. It converts 5.1 audio, and provides support and routing for HI/VI-N signals.

The unit can also be used as a 7.1 converter, in situations where HI/VI is not a concern.



INPUTS:

- 4XAES DB25-Female, with the "DMA8" input pinout, accepting channels 1-8, and 15/16.
- RJ45 input, channels 1-8.
- RJ45 input, channels 15/16.

(The input RJ45's are in parallel to the DB25 input.)

Digital HI/VI output:

• Single RJ45 carries HI/VI on pair 4 (pin-equivalent to Sony transmitters, Odyssey HIVIRJ breakouts, and others.)

Analog OUTPUTS:

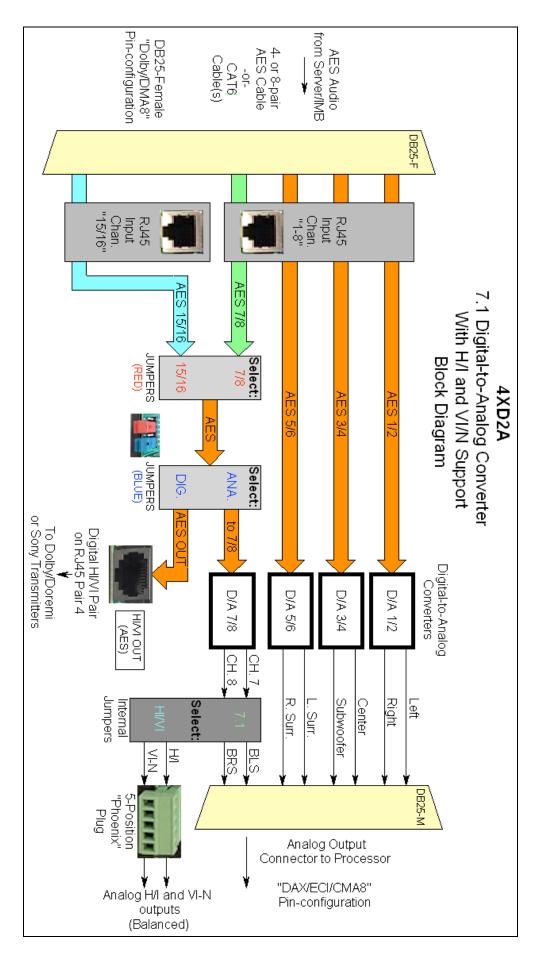
- DB25-Male, with the "DMA8/ECI-60/DAX-602" pinout. Balanced outputs for 5.1 audio, with HI/VI, or 7.1 audio with no ANALOG HI/VI support.
- 5-position, 3.81mm Phoenix plug for HI and VI-N (balanced outputs)

HI/VI Routing:

- Jumpers are available for selecting AES channels 7/8 or 15/16 for HI/VI.
- Other jumpers select between Digital or Analog HI/VI output.

Other settings (Not shown):

Other jumpers are available (internally) to select standard "5.1 plus HI/VI" or "7.1" modes.



Configuring the HI/VI jumpers

Jumpers accessible from the back of the unit are used for routing HI/VI signals.

- The red jumpers select between AES PAIR 4 (channels 7/8) and AES Pair 8 (channels 15/16).
- The blue jumpers route the selected AES Pair either directly out of the unit as AES, or through the internal D-to-A circuitry, and then output as analog signals.



AES Pair 4 / Channels 7/8 are routed directly to the "HIVI OUT" RJ45 connector.



AES Pair 8 / Channels 15/16 are routed directly to the "HIVI OUT" RJ45 connector.



AES Pair 4 / Channels 7/8 are converted to analog signals, and routed to the "Analog HI/VI" pluggable connector.

FACTORY DEFAULT





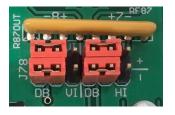
AES Pair 8 / Channels 15/16 are converted to analog signals, and routed to the "Analog HI/VI" pluggable connector.



Other jumper settings

Other jumpers are available (internally) for routing channels 7/8 to the main DB25 output, instead of the HI/VI output plug, for a 7.1 audio configuration.

This mostly eliminates any HI/VI processing, except in special circumstances. Call Mark at Odyssey for information about these special jumper settings.



The 4XD2A ships with the following accessories:

- 15V DC wall power supply, with universal voltage input, and interchangeable plug adapters.
- Four 10-32 thread rack screws, with two external tooth lock washers.

Input and Output connectors:

Digital Audio Input Connector, "AES IN"

DB25-Female (on the chassis), "Dolby/DMA8/4XAES" Pin-configuration

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AES Pair	Plus (+)	Minus (-)	Ground (shield)	
AES Pair 1 (Channels 1 and 2)	DB25- 14	DB25- 2		
AES Pair 2 (Channels 3 and 4)	DB25- 3	DB25- 16	DB25 pins	
AES Pair 3 (Channels 5 and 6)	DB25- 17	DB25- 5	1, 4, 18, 7	
AES Pair 4 (Channels 7 and 8)	DB25- 6	DB25- 19	20, 9, 23, 12	
AES Pair 8 (Chans. 15 and 16)	DB25- 25	DB25- 13		

RJ45 "1-8" RJ45 "15/16"

AES Pair	Plus (+)	Minus (-)	AES Pair	Plus (+)	Minus (-)
AES Pair 1 (Chan. 1 and 2)	1	2	-	n/c	n/c
AES Pair 2 (Chan. 3 and 4)	3	6	-	n/c	n/c
AES Pair 3 (Chan. 5 and 6)	4	5	-	n/c	n/c
AES Pair 4 (Chan. 7 and 8)	7	8	AES Pair 8 (Chan. 15 and 16)	7	8

(NOTE: The "AES IN" RJ45 connectors are in parallel with the "AES IN" DB25 connector.)

Balanced Analog Audio Output Connector, "ANALOG OUTPUT" DB25-Male (on the chassis), "DMA8/ECI-60/DAX-602" Pin-configuration

Output Channel	Plus (+)	Minus (-)	Ground (shield)
Channel 1 / Left Channel	DB25- 14	DB25- 1	
Channel 2 / Right Channel	DB25- 17	DB25- 6	DB25 pins
Channel 3 / Center Channel	DB25- 20	DB25- 8	9, 10, 11
Channel 4 / Subwoofer Channel	DB25- 24	DB25- 12	13, 22, 23
Channel 5 / Left Surr. Channel	DB25- 15	DB25- 4	
Channel 6 / Right Surr. Channel	DB25- 2	DB25- 3	
Channel 7 / Back Left Surround	DB25- 18	DB25- 7	
Channel 8 / Back Right Surround	DB25- 16	DB25- 5	

RJ45 "HI/VI OUT (AES)"

AES Pair	Plus (+)	Minus (-)
-	n/c	n/c
-	n/c	n/c
-	n/c	n/c
AES Pair 8 (Chan. 15 and 16)	7	8

Analog "HI / VI" output

Plug-able "Phoenix terminal	Plus (+)	Minus (-)
Hearing Impaired	"+"	"_"
Visual Narration	"+"	"_"
Audio Ground	"G"	