Installation Manual for the
Odyssey Products

16RJ-7.1-DSDY/**TRM**

Dual RJ45-to-DB25 converter board,
With 7.1 surround routing,
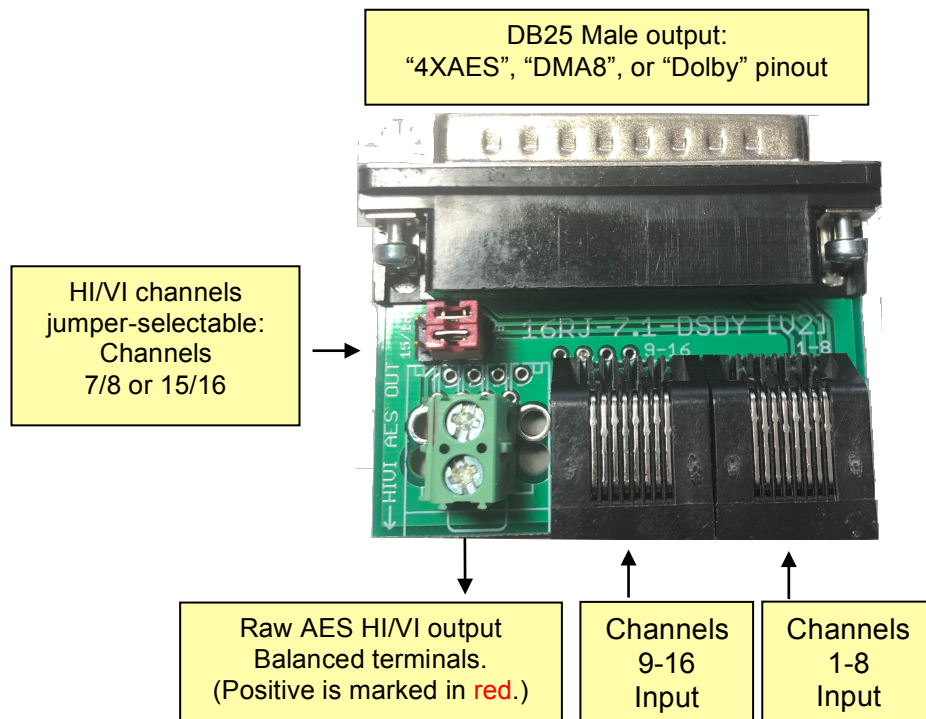## And HI/VI **Terminal** breakouts

Issue 7/19

Odyssey

Odyssey Products Model 16RJ-7.1-DSDY/TRM

Dual RJ45-to-DB25 converter with 7.1 surround routing, and HI/VI breakout on screw terminals.

This board is installed at the cinema processor, and performs the following functions:

- **It routes the digital AES audio from the industry-standard RJ45 connectors, to the** "4XAES / DMA8 / Dolby" **DB25 pin configuration used by many cinema processors.**
- **It physically routes the "7.1" surrounds (AES channels 11/12) to channels 7/8 going into the cinema processor.**
- **It provides a two-position screw terminal output for the HI/VI channels, jumper-selectable for channels 7/8 or 15/16. (NOTE**: The output is AES digital audio, NOT analog.)
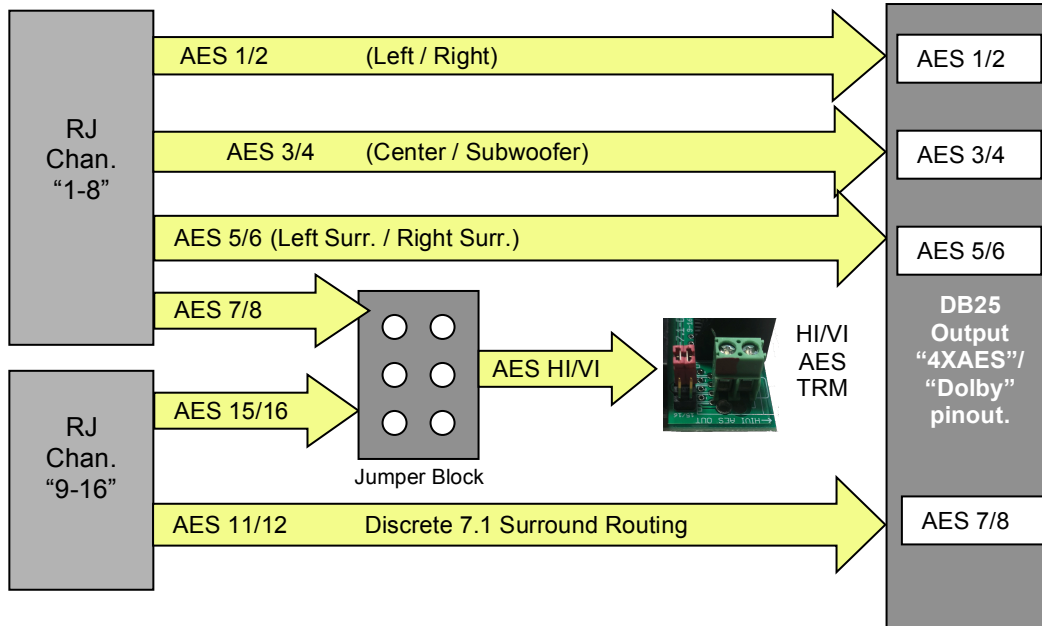

DB25 Male output:
"4XAES", "DMA8", or "Dolby" pinout

HI/VI channels
jumper-selectable:
Channels
7/8 or 15/16

Raw AES HI/VI output
Balanced terminals.
(Positive is marked in red.)

Channels
9-16
Input

Channels
1-8
Input

This board is pin compatible with the following processors with the "4XAES", "DMA8", or "Dolby"
D-sub pin-configuration:

- **Dolby   CP750**
- **Dolby   CP650 (equipped with Odyssey "AES" -series digital input boards)**
- **USL   JSD-80D**
- **USL   JSD-60D**
- **QSC   DCP-100, -200, -300 (Input 1-8 connector)**
- **Datasat   AP20   (Input 1-8 connector)**
- **Enpar Audio   DCP800D**
- **D/A converters, such as the DMA8, DMA8Plus, ECI-60, DAX-602, and Gefen Pro II scaler.**
- **Others.**

16RJ-7.1-DSDY-TRM Channel Routing Block Diagram

RJ45
Inputs

DB25 male output to cinema processor
(Such as CP750 and other devices with
the "4XAES/DMA8" pin-configuration)

RJ
Chan.
"1-8"

AES 1/2   (Left / Right) → AES 1/2

AES 3/4   (Center / Subwoofer) → AES 3/4

AES 5/6 (Left Surr. / Right Surr.) → AES 5/6

AES 7/8 →

Jumper Block

→ AES HI/VI →

HI/VI
AES
TRM

DB25
Output
"4XAES"/
"Dolby"
pinout.

RJ
Chan.
"9-16"

AES 15/16 →

AES 11/12   Discrete 7.1 Surround Routing → AES 7/8

Input Connectors

Output Connector

RJ45 "1-8"pins	Digital Audio Channels
1	AES channels 1/2 +
2	AES channels 1/2 -
3	AES channels 3/4 +
4	AES channels 5/6 +
5	AES channels 5/6 -
6	AES channels 3/4 -
7	AES channels 7/8 +
8	AES channels 7/8 -

RJ45 "9-16" pins	Digital Audio Channels
1	AES channels 9/10 +
2	AES channels 9/10 -
3	AES channels 11/12 +
4	AES channels 13/14 +
5	AES channels 13/14 -
6	AES channels 11/12 -
7	AES channels 15/16 +
8	AES channels 15/16 -

NOTE: channels 9,10,13,14 are not
processed by the 16RJ-7.1-DSDY board

DB25 Male "DMA8" pinout	Digital Audio Channels (going into the processor)
14	AES channel 1/2 +
2	AES channel 1/2 -
3	AES channel 3/4 +
16	AES channel 3/4 -
17	AES channel 5/6 +
5	AES channel 5/6 -
6	AES channel 7/8 +
19	AES channel 7/8 -
Dsub frame	CP750 chassis ground

HI/VI AES Output TRM

\+   -

Wiring a "coax" RCA cable to the terminal block:

Center Pin = HI/VI (+) (Red/Left terminal)
Shield   = HI/VI (-) (Right terminal)