

Crystal Vision

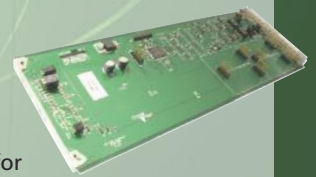
Digital Audio Distribution Amplifiers

The DADA208, DADA208N and DADA208D make up Crystal Vision's Indigo digital audio distribution amplifier range. Ideal for use in all broadcast areas where AES signals need to be distributed, the three dual DADAs offer an impressive number of different options including reclocked and non-reclocked outputs, BNC and D-Type connections, impedance conversion and the ability to incorporate delays. All have two stereo feeds in and up to four outputs of each channel, or can alternatively be configured to have one input and up to eight outputs. Modules sized just 100mm x 266mm mean 12 boards – 24 DAs – can be fitted in a 2U frame. All have both GPI and board edge indication of input present. The DADAs can be used with seven different frame rear modules to obtain just the output configuration you need. The RM03 rear module can be used for D-Type based 110 ohm AES, while for BNC based 75 ohm AES you have the choice of the RM01, RM02 and RM16. The RM12, RM13 and RM21, meanwhile, allow impedance conversion.

- Dual digital audio distribution amplifiers, available in three versions
- Configure as either two stereo inputs with four outputs per channel, or one input with eight outputs
- Reclocking and non-reclocking versions, to suit all applications and budgets
- Selection of rear modules for 110 ohm and 75 ohm AES, as well as impedance conversion
- DADA208D includes selectable delay of up to one second
- Space-saving: 100mm x 266mm modules allow 12 distribution amplifiers – 24 channels – in 2U (six in 1U and two in desk top box)
- Board edge control

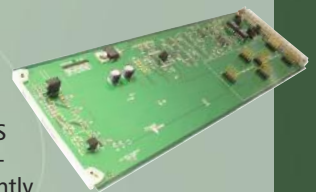
DADA208

The DADA208 is a dual digital audio distribution amplifier with reclocked outputs. It should be used for high protection requirements and can correct unstable AES inputs.



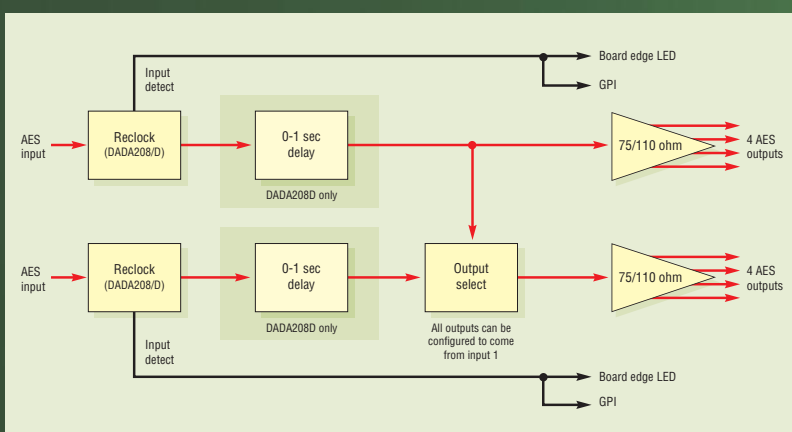
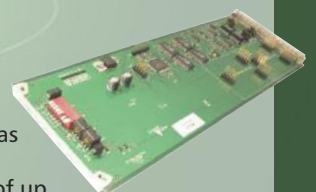
DADA208N

The DADA208N should be used for applications where the quality of the AES input is known. It offers non-reclocked outputs for a slightly lower price than the DADA208 and, with its zero delay, is particularly ideal for distributing Word Clock reference.



DADA208D

The DADA208D doubles as both a distribution amplifier and an audio delay line. It has reclocked outputs and includes a selectable delay of up to one second at 48kHz making it ideal for matching delays in video processing equipment unable to pass embedded audio, such as certain ARCs and DVEs. With an independent delay adjust on each channel, the delay is selectable by a combination of DIP and rotary switches in one video field steps from 0-51 fields (625 line) or 0-61 fields (525 line).



SPECIFICATION

MECHANICAL

Standard Crystal Vision modules 266mm x 100mm
 Weight: 140g (DADA208 and DADA208N); 150g (DADA208D)
 Power consumption: 0.6 Watts (DADA208); 0.8 Watts (DADA208N); 2.1 Watts (DADA208D)

AUDIO INPUTS

Two AES stereo pairs. 110 ohm (balanced) D-Type or 75 ohm (unbalanced) BNC

Set by on-board jumper links to 75 ohm, 110 ohm or high impedance for multiple units on a single feed
 28.4kHz to 100kHz input with (DADA208/D only) reclocking

AUDIO OUTPUTS

Maximum of eight reclocked AES outputs with DADA208/D and eight non-reclocked AES outputs with DADA208N

Can be used with RM01, RM02, RM03, RM12, RM13, RM16 and RM21 frame rear modules depending on impedance and outputs required (see Ordering Information for full details)

Rear modules with 75 ohm BNC outputs (RM01, RM02, RM13, RM16 and RM21) require OPAES-75 output module to be fitted to DADA

Rear modules with 110 ohm D-Type (RM03 and RM12) outputs require OPAES-110 output module to be fitted to DADA

Outputs 1-4 always from input 1. Outputs 5-8 selectable by link (DADA208/N) or board edge switch (DADA208D) to come from either input 1 or input 2

In DADA208D input to output delay is selectable from board edge in one video field steps from 0-51 fields (625 line) or 0-61 fields (525 line)

LED INDICATION OF:

Power supplies okay
 AES inputs present

GPI OUTPUT LEVELS

Electrically: Open collector transistors 30V, 330 ohm current limit resistors. Pulled up to +5V through 22 kohm

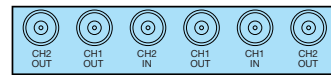
GPI OUTPUTS

Two GPI inputs indicate AES input not present for each channel

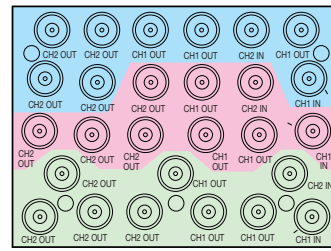
LOCAL CONTROL

Board edge control of functions

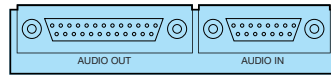
REAR MODULE CONNECTIONS



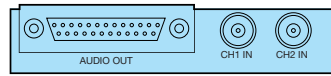
RM01



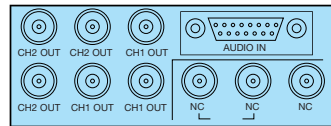
RM02



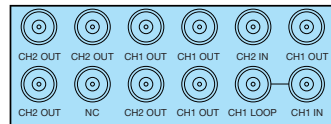
RM03



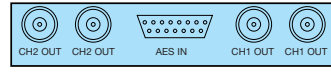
RM12



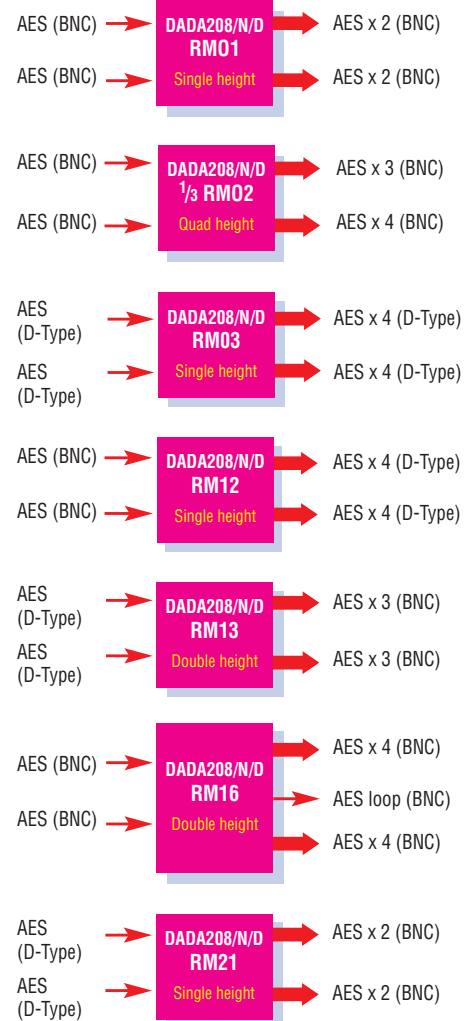
RM13



RM16



RM21



NB. Can be configured so all outputs come from single input

ORDERING INFORMATION

| | | | |
|-------------|--|------|--|
| DADA208 | Digital audio distribution amplifier with eight reclocked outputs | RM02 | Four slot frame rear module. One rear module used for three DADA, allowing nine DADA in 2U. Gives access to two 75 ohm AES (BNC) inputs and three 75 ohm AES (BNC) outputs of the first channel and four of the second |
| DADA208N | Digital audio distribution amplifier with eight non-reclocked outputs | RM03 | Single slot frame rear module. Allows maximum number of DADA in frame (12 in 2U, six in 1U, two in desk top box). Gives access to two 110 ohm AES (D-Type) inputs and four 110 ohm AES (D-Type) outputs of each channel |
| DADA208D | Digital audio distribution amplifier with eight reclocked outputs and selectable delay | RM12 | Single slot frame rear module. Allows maximum number of DADA in frame (12 in 2U, six in 1U, two in desk top box). Used for impedance conversion. Gives access to two 75 ohm AES (BNC) inputs and four 110 ohm AES (D-Type) outputs of each channel |
| OPAES-75 | 75 ohm AES output module | RM13 | Two slot frame rear module. Allows six DADA in 2U, three in 1U and one in desk top box. Used for impedance conversion. Gives access to two 110 ohm AES (D-Type) inputs and three 75 ohm AES (BNC) outputs of each channel |
| OPAES-110 | 110 ohm AES output module | RM16 | Two slot frame rear module. Allows six DADA in 2U, three in 1U and one in desk top box. Gives access to two 75 ohm AES (BNC) inputs and four 75 ohm AES (BNC) outputs of each channel with an AES (BNC) loop-through of the first |
| OP-WDCLK | For TTL level word clock distribution when used with DADA208N | RM21 | Single slot frame rear module. Allows maximum number of DADA in frame (12 in 2U, six in 1U, two in desk top box). Used for impedance conversion. Gives access to two 110 ohm AES (D-Type) inputs and two 75 ohm AES (BNC) outputs of each channel |
| Indigo 2AE | 2U frame with active front panel featuring smart CPU and integrated control panel for up to 12 Crystal Vision modules | | |
| Indigo 2SE | 2U frame with active front panel featuring smart CPU for up to 12 Crystal Vision modules | | |
| Indigo 1AE | 1U frame with active front panel featuring smart CPU and integrated control panel for up to six Crystal Vision modules. Power supply redundancy available with Indigo 1AE-DP | | |
| Indigo 1SE | 1U frame with active front panel featuring smart CPU for up to six Crystal Vision modules. Power supply redundancy available with Indigo 1SE-DP | | |
| Indigo DT | Desk top box with passive front panel for up to two Crystal Vision modules | | |
| Indigo DTSE | Desk top box with active front panel featuring smart CPU for up to two Crystal Vision modules | | |
| RM01 | Single slot frame rear module. Allows maximum number of DADA in frame (12 in 2U, six in 1U, two in desk top box). Gives access to two 75 ohm AES (BNC) inputs and two 75 ohm AES (BNC) outputs of each channel | | |

Performance and features are subject to change. Figures given are typical measured values. DADA0517