

EU declaration of conformity

We certify that this apparatus conforms to the requirements of the EMC and Low Voltage Directives. Emissions EN 55103-1, susceptibility EN 55103-2 and safety EN 60950-1 2002.

29 September 2008



Warranty

The ISIS Group warrants this unit against defects in materials and workmanship for a period of one year from the date of shipment. At its option, the company will repair or replace products that prove to be defective during the warranty period, provided they are returned to the company with advance notification and with freight prepaid. ISIS Group's policy states that all repairs are only conducted by an authorized representative of the company. As a result any unauthorized repair or attempted repair will automatically void the warranty.

When a distributor supplies the company's products, that distributor should be approached initially if there are any warranty problems.

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MiniBloxTM

**4262D 3G HD-SD AES audio
de-embedder**

*Extracts four balanced AES audio streams from any
two groups within a 270Mb/s SDI signal*

User Manual

Latest information available at:

**www.isis-group.com
www.miniblox.com**

MiniBlox™ - solutions in a box

General description

The 4262D 3G-HD-SD quad AES audio de-embedder extracts four AES audio streams (8 audio channels) from the ancillary data space of an SDI signal and provides broadcast quality balanced AES audio outputs. Audio can be extracted from any two embedded audio groups. Two units can be cascaded to enable de-embedding from all four available groups (16 audio channels). The unit automatically detects whether the SDI input is 3G, HD or 270Mb/s SD SDI. There is automatic input cable equalization and two re-clocked SDI outputs are provided. The unit requires an external power supply or a rack mounting frame. A 1RU frame is available which takes up to 5 units and a 2RU that takes up to 14. Audio XLR breakout cables and external power supplies are also available.



Key 4262D features

- Automatic 3G, HD, or SD SDI standard detection
- Extracts four balanced AES audio streams from any two groups
- LEDs show group status and input signal presence
- Automatic input cable equalization
- 2 re-clocked SDI outputs
- Locking connector for power supply
- Compact and rugged design
- Optional XLR breakout cable
- Optional external power supply
- Optional rack mounting frames with central power supplies
- Extremely compact and rugged design

Specifications

Video input

3G	SMPTE 424M & 424M-AB (2.97 & 2.967Gb/s) 1080p 60/59.94/50
HD	SMPTE 259M (1.485 & 1.435Gb/s) 1080i 60/59.94/50 1080p/pfs 30/29.97/25/24/23.98 720p 60/59.94/50/30/29.97/25/24/23.98
SD	SMPTE 259M-C (270Mb/s) 525i 59.94 625i 50
Connector	75Ω BNC
Return loss	>15dB to 1.5GHz >10dB 1.5 to 2.97GHz
Cable equalization	3G to 100m, HD to 160m, SD to 200m (Belden 1694A)

Video output

Standards	As input
Format	As input
Number	2
Connector	75Ω BNC
Jitter	<0.2ui peak-to-peak
Return loss	>15dB to 1.5GHz >10dB 1.5 to 2.97GHz

Audio output

Outputs	Balanced AES
Number	4
Sample Rate	48KHz
Connector	15-pin female sub-D
Output level	3.5v p-p ±5%
Impedance	110Ω

Audio de-embedding

Standard	SMPTE 299M and 272M-C
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Power

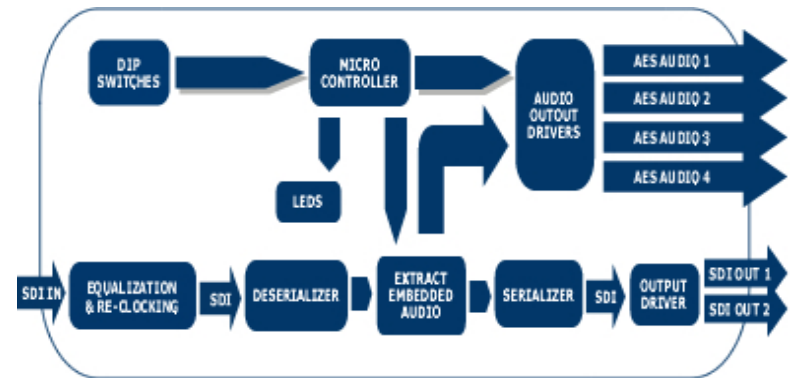
Voltage	6-12V DC
Current	810mA @ 6V
Power connector	Locking 2.5mm jack connector (center +v)

Other

LEDs	Show power, signal presence & group status
Temperature range	5°C to 40°C
Dimensions	3 1/4" x 2 1/2" x 1 1/8" (excluding connectors)
Weight	9oz

We reserve the right to change technical specifications without prior notice.

Functional block diagram



Installation and operation

The 4262D is simple to use and install.

- Set the dipswitches by referring to the table and description below or the table on the rear of the unit.
- Connect breakout cable (when this option has been ordered).
- Connect a valid SDI input and analog audio outputs. See the audio output section for connecting to the AES breakout cable or to a 15-pin male sub-D connector (not supplied).
- Connect SDI outputs (if required).
- Apply power to the unit either via the locking power connector from the external power supply or 1RU rack frame, or by sliding into the 2RU rack mounting frame with central power supplies.
- On power-up the unit will perform a short (3 second) self test. The group LEDs will flash while this is in progress.
- The signal LED will be green when there is power and a valid SDI signal present or red when there is power but no valid SDI signal.
- Two group LEDs will light corresponding to the groups selected by the dipswitches (default on delivery groups 1&2). The LED will be green if the unit is receiving a valid video signal and successfully de-embedding audio from that group. The LED will otherwise be red.
- The switch settings can be altered while the unit is powered and the changes are implemented immediately.
- The mounting bracket supplied can be used to install the unit. The bracket should first be fixed vertically to any surface. The MiniBlox can then be lowered onto the dovetail part of the bracket with the front endplate uppermost to retain it.

Switch settings

Switch 1	Group for audio outputs A1 & A2	
Switch 2	Group for audio outputs A3 & A4	
Switch 3	DS1	DS2
Switch 4-6	Not used	

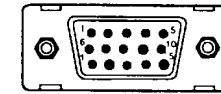
- Switches 1 & 2 are used to select the groups from which audio is extracted. Toggling switches 1 & 2 cycles between the available groups. Switch 1 selects the group for outputs A1 & A2. Switch 2 selects the group for outputs A3 & A4. The groups selected are indicated by the 4 LEDs. The group selections are stored in memory and are therefore retained even if the unit has been powered down.
- Switch 3 selects whether audio is extracted from data stream one or two when there is a 3G SMPTE 425M level B SDI input present.
- Switches 4 to 6 are not used.

Audio outputs

When used with the optional XLR breakout cable, outputs are as shown below.

XLR	Output
OUT A1	First group selected - Pair 1
OUT A2	First group selected - Pair 2
OUT A3	Second group selected - Pair 1
OUT A4	Second group selected - Pair 2

The pin out of the HD-15 connector is as shown below:



HD-15 connector viewed looking in to pins of plug

Pin	Output	Balanced
1	Second group selected - Pair 2	+
2	Second group selected - Pair 1	Screen
3	First group selected - Pair 2	+
4	First group selected - Pair 1	Screen
5	Not used	n/a
6	Second group selected - Pair 2	-
7	Second group selected - Pair 1	+
8	First group selected - Pair 2	-
9	First group selected - Pair 1	+
10	Not used	n/a
11	Second group selected - Pair 2	Screen
12	Second group selected - Pair 1	-
13	First group selected - Pair 2	Screen
14	First group selected - Pair 1	-
15	Not used	n/a