

Specification

Video input	
3G	SMPTE 424M & 425M-AB (2.97 & 2.967Gb/s) 1080p50/59.94/60
HD	SMPTE 292M (1.485 & 1.435Gb/s) 1080i 60/59.94/50 1080p/psf 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) 625i 50 525i 59.94
Number	1
Connector	75Ω BNC
Return loss	>15dB to 1.5GHz >10dB 1.5 to 2.97GHz
Cable equalisation	3G to 100m, HD to 160m, SD to 200m (Belden 1694A)
Video outputs	
Standards	As input
Format	As input
Number	2
Connectors	75Ω BNCs
Jitter	<0.2ui peak-to-peak
Return loss	>15dB to 1.5GHz >10dB 1.5 to 2.97GHz
De-embedding	
Standards	SMPTE 299M & 272M-C
Audio outputs	
Outputs	Balanced analogue audio
Number	2 stereo pairs
Connector	Female 15pin sub-D (optional XLR breakout cable)
Impedance	<50Ω
Output level	Adjustable 0dBFS = +12 to +24dBu
Maximum level	+24dBu into 10kΩ

Electrical	
Voltage	6-12VDC
Power	<5W
Connector	Locking 2.5mm jack (centre +ve)
Safety	EN60950
Control	
Setup	6 way dipswitch
LEDs	Power, input presence & group status
Other	
Size (mm)	63.5 x 84 x 30 plus connectors
Weight	200g
Temperature	5°C to 40°C
Humidity	80% max (non condensing)

Options	
SCA15SD-X00	Audio cable HDD15 to 4M XLRs
4006	Desktop power supply with IEC inlet
4010	1U rack mounting frame for up to 5 units including PSU
4020	2U rack mounting frame for up to 14 units & single or dual PSUs
4021	Power supply for 4020 2U frame



User Guide

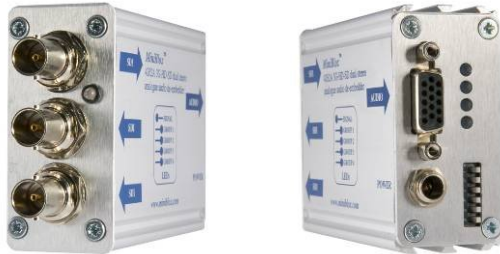
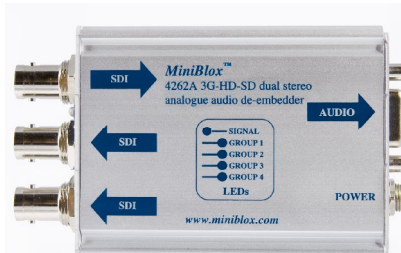


4262A 3G-HD-SD dual stereo analogue audio de-embedder

Extracts two balanced analogue audio stereo pairs from any group within an SDI signal

www.miniblox.com

DTL Broadcast Ltd, Johnson's Estate, Silverdale Road, Hayes, Middlesex, UB3 3BA, UK
 Phone: +44 (0) 20 8813 5200 Fax: +44 (0) 20 8813 5022
 Internet: www.dtl-broadcast.com support@dtl-broadcast.com



EU declaration of conformity

We certify that this apparatus conforms to the requirements of the EMC and Low Voltage Directives. Emissions EN55103-1, susceptibility EN55103-2 and safety EN60950-1 2002.

29 September 2008



Warranty

DTL Broadcast Ltd 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. Repairs may only be conducted by an authorised representative of the company. As a result any unauthorised 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.

The company makes no other warranties, express or implied, as to the merchantability, fitness for a particular purpose, or otherwise. The company's liability for any cause, including breach of contract, breach of warranty, or negligence, with respect to products sold by it, is limited to repair or replacement by the company, at its sole discretion. This remedy is exclusive. In no event shall the company be liable for any incidental or consequential damages, including loss of profits.

Audio outputs

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

XLR	Output
OUT A1	Pair 1 - Left
OUT A2	Pair 1 - Right
OUT A3	Pair 2 - Left
OUT A4	Pair 2 - Right

The pin out of the 15 way sub-D connector is as shown below:



15 way sub-D connector viewed looking in to pins of plug

Pin	Output	Signal
1	Pair 2 - Right	+
2	Pair 2 - Left	Screen
3	Pair 1 - Right	+
4	Pair 1 - Left	Screen
5	Not used	NA
6	Pair 2 - Right	-
7	Pair 2 - Left	+
8	Pair 1 - Right	-
9	Pair 1 - Left	+
10	Not used	NA
11	Pair 2 - Right	Screen
12	Pair 2 - Left	-
13	Pair 1 - Right	Screen
14	Pair 1 - Left	-
15	Not used	NA

DTL MiniBlox™ - solutions in a box

General description

The 4262A 3G-HD-SD dual stereo analogue audio de-embedder extracts two balanced stereo analogue audio pairs from any group in the ancillary data space of an SDI signal and provides broadcast quality analogue audio outputs. Audio conversion employs high quality 24-bit DACs. Adjustable full scale output levels meet all international standards. Units can be cascaded to enable de-embedding from all four available groups (16 audio channels).

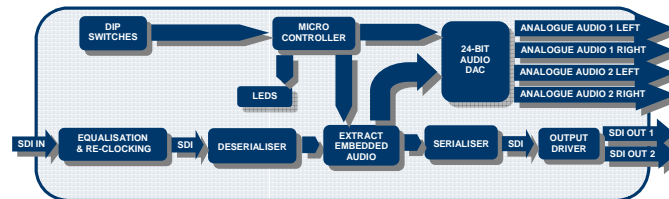
The unit automatically detects whether the SDI input is 3G, HD or 270Mb/s SD SDI. There is automatic input cable equalisation and two re-clocked SDI outputs are provided.

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 2U one that takes up to 14. Audio XLR breakout cables and external power supplies are also available.

Key features

- Automatic 3G, HD, or SD SDI standard detection
- Extracts two balanced analogue audio stereo pairs from any group
- High quality 24 bit audio DAC
- Adjustable full scale output levels to meet all international standards
- LEDs show group status and input signal presence
- Automatic input cable equalisation
- 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

Functional block diagram



Installation and operation

The unit 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 analogue audio outputs. See the audio output section on page 6 for connecting to the XLR 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 1U rack frame, or by sliding into the 2U 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.
- One of the group LEDs will light corresponding to the group selected by the switches. This LED will be green if the unit is receiving a valid video signal and successfully de-embedding audio. The LED will otherwise be red.
- The switch settings can be altered whilst 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	2	Switch	OFF	ON
Group 1	OFF	OFF	3	18dBu	24dBu
Group 2	OFF	ON	4 *	Custom level	
Group 3	ON	OFF	5	DS1	DS2
Group 4	ON	ON	6	Set custom level	
* Overrides switch 3 and selects custom level					

Switches 1 & 2 select the group from which audio packets are extracted.

Switch 3 selects between analogue output levels of 18dBu and 24dBu (when switch 4 is in the OFF position).

Switch 4 over-rides the switch 3 setting and selects the custom level. This is 20dBu on delivery but can be altered (see below).

Switch 5 selects whether audio is extracted from data stream one or two when there is a 3G SMPTE 425M level B SDI input present.

Switch 6 is used to set custom analogue output levels. If switch 6 is left on for more than six seconds the unit will enter custom level select mode – all group LEDs will flash red while the unit is in this mode. Refer to the next section for selecting custom levels.

Custom level select mode

To meet all international analogue audio full scale output levels the unit has a custom analogue output level select mode. In this mode it is possible to select any output level between <12dBu and 24dBu in 0.5dBu increments. The default value of the custom level on delivery is 20dBu. Once the value of the custom level is altered it will remain stored in memory until changed again.

To set the analogue output level:-

- Activate switch 6, once this has been on for more than six seconds the unit will enter custom level select mode. This can be verified by all four group LEDs on the front of the box flashing red.
- Switch 1-5 will now set the expected analogue output level as per the table below.
- To exit the custom level select mode deactivate switch 6, the value on switches 1-5 will be stored in memory. It will be necessary to reset switches 1-5 to the desired settings for normal use.

Switch 1	Switch 2	Switch 3	Switch 4	Switch 5	Level dBu
0	0	1	1	1	12
0	1	0	0	0	12.5
0	1	0	0	1	13
0	1	0	1	0	13.5
0	1	0	1	1	14
0	1	1	0	0	14.5
0	1	1	0	1	15
0	1	1	1	0	15.5
0	1	1	1	1	16
1	0	0	0	0	16.5
1	0	0	0	1	17
1	0	0	1	0	17.5
1	0	0	1	1	18
1	0	1	0	0	18.5
1	0	1	0	1	19
1	0	1	1	0	19.5
1	0	1	1	1	20
1	1	0	0	0	20.5
1	1	0	0	1	21
1	1	0	1	0	21.5
1	1	0	1	1	22
1	1	1	0	0	22.5
1	1	1	0	1	23
1	1	1	1	0	23.5
1	1	1	1	1	24