

### ***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.

2 February 2004



### ***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.

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.

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***MiniBlox™***

**4462DU SDI unbalanced AES-EBU audio  
de-embedder**

*Extracts two unbalanced AES-EBU digital audio streams  
from any group within a 270Mb/s 525/625 SDI signal*

**User Manual**

**Latest information available at:  
[www.isis-group.com](http://www.isis-group.com)  
[www.miniblox.com](http://www.miniblox.com)**

## ***Specifications***

### ***SDI input***

Standards	SMPTE 259M 270Mb/s 525/625 SDI
Connector	75Ω BNC
Signal level	800mV p-p ±10% (terminated)
Return loss	>15dB 5-270MHz
Cable equalization	Up to 150m automatic (Belden 8281)

### ***SDI output***

Standards	SMPTE 259M 270Mb/s 525/625 SDI
Connector	75Ω BNC
Signal level	1V p-p ±10% (terminated)
DC offset	±100mV
Return loss	>15dB 5-270MHz

### ***AES-EBU output***

Standard	Unbalanced AES-EBU AES3id , SMPTE 276M
Number	2
Type	Transformer-coupled
Connector	75Ω BNC
Termination	Unbalanced 75Ω
Level	1.5V p-p ± 5%
Sample rate	48KHz (synchronized to video)

### ***Audio de-embedding***

Standard	SMPTE 272M
Resolution	20 or 24 bit

### ***Power***

Voltage	6-12V DC
Current	500mA
Power connector	Locking 2.5mm jack connector (center +v)

### ***Other***

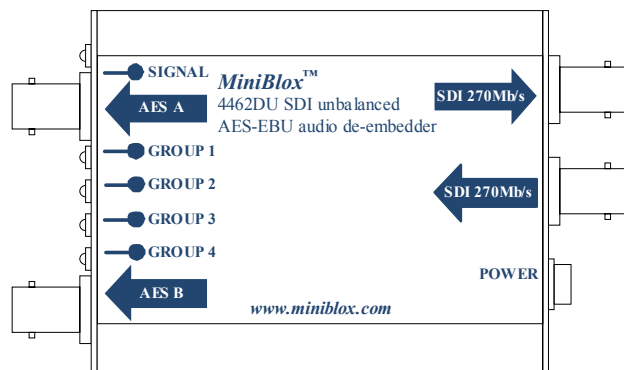
LEDs	Show power, signal presence & de-embedding status
Temperature range	0°C to 45°C
Dimensions	3 1/4" x 2 1/2" x 1 1/8" (excluding connectors)
Weight	9oz

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

## ***MiniBlox™ - solutions in a box***

### ***General description***

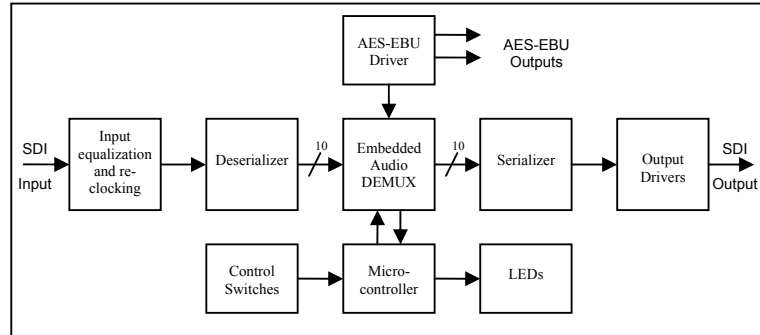
The 4462DU SDI unbalanced AES-EBU audio de-embedder extracts two digital stereo audio streams from any group in the ancillary data space of a 270Mb SDI stream. De-embedding conforms to SMPTE 272M and allows audio to be extracted from any of the four groups. There is automatic input cable equalisation and a re-clocked SDI output. The unit is housed in an extremely compact and rugged aluminum case and is suitable for both field and studio applications.



### ***4462DU Main features***

- Extracts two unbalanced AES-EBU streams from any group
- 20 or 24 bit de-embedding
- LEDs show group status and input signal presence
- Automatic input cable equalization up to 150m
- Re-clocked SDI output
- Extremely compact and rugged design
- Locking connector for PSU

## Functional block diagram



## Installation and operation

The 4462DU 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 a valid 270Mb/s SDI input.
- Connect SDI and AES-EBU outputs.
- Apply power to the 4462DU unit either via the locking power connector from the 4000 external power supply or by sliding into the 1RU or 2RU rack mounting frame with central power supplies. An alternative power source can be used to power the unit as long as the input power is within the range stated in the specifications.
- On power-up the 4462DU 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 270Mb/s SDI signal present or red when there is power but no 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 from the selected 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 4-800MB mounting bracket can be used to install a MiniBlox 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	Not Used	
Group 2	OFF	ON	4	Not Used	
Group 3	ON	OFF	5	Not Used	
Group 4	ON	ON	6	625 lines	525 lines

- Switches 1 & 2 set the group from which audio packets are to be extracted.
- Switches 3 to 5 are not used.
- Switch 6 sets the video standard. For correct operation of the unit this must match the format of the SDI input.