LYNX
TECHNIK AG
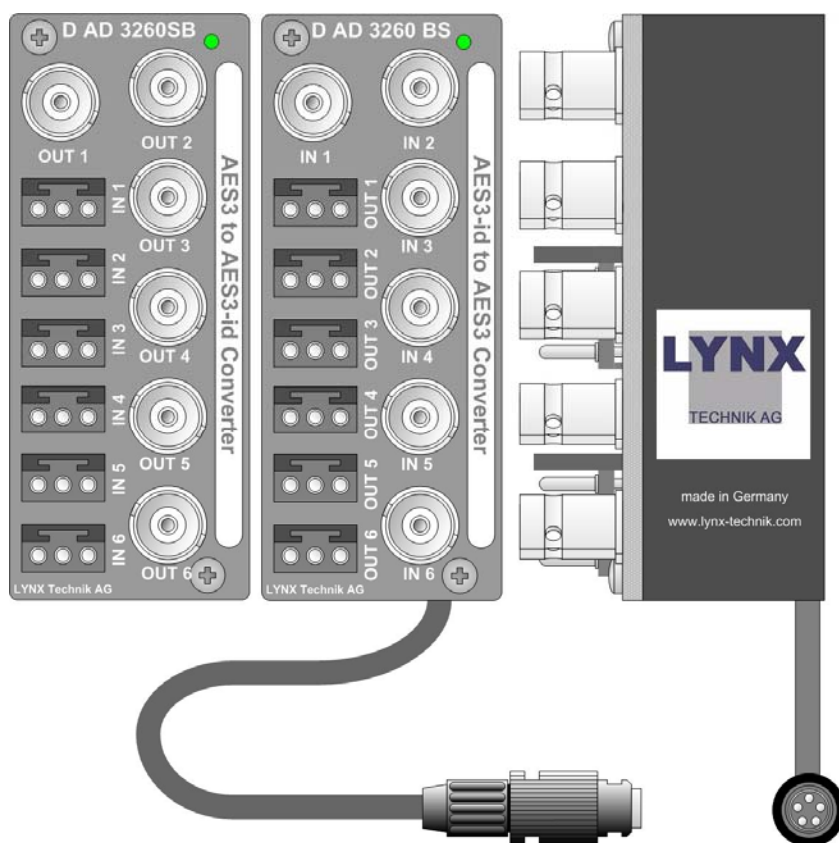
Reference Manual

D AD 3260 BS - 6 x AES3-id to AES3 converter
D AD 3260 SB - 6 x AES3 to AES3-id converter

Series 3000 MiniModules

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In order to obtain service under this warranty, customer must notify LYNX Technik of the defect before expiration of the warranty period and make suitable arrangements for the performance of service. Customer shall be responsible for packaging and shipping the defective product to the service center designated by LYNX Technik, with shipping charges prepaid. LYNX Technik shall pay for the return of the product to the customer if the shipment is within the country which the LYNX Technik service center is located. Customer shall be responsible for payment of all shipping charges, duties, taxes and any other charges for products returned to any other locations.

This warranty shall not apply to any defect, failure, or damage caused by improper use or improper or inadequate maintenance and care. LYNX Technik shall not be obligated to furnish service under this warranty a) to repair damage resulting from attempts by personnel other than LYNX Technik representatives to install, repair or service the product; b) to repair damage resulting from improper use or connection to incompatible equipment; c) to repair any damage or malfunction caused by the use of non LYNX Technik supplies; or d) to service a product which has been modified or integrated with other products when the effect of such modification or integration increases the time or difficulty servicing the product.

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Regulatory information

Europe

Declaration of Conformity

We   LYNX Technik AG
                Sandstrasse 7
                D-64404 Bickenbach
                Germany
Declare under our sole responsibility that the product

TYPE: D AD 3260 SB, D AD 3260 BS

To which this declaration relates is in conformity with the following standards (Environments E1-E3):
EN 55103-1   /1996
EN 55103-2   /1996
EN 60950   /2001
Following the provisions of 89/336/EEC and 73/23/EEC directives.

Winfried Deckelmann

Weiterstadt, March 2006

Place and date of issue   *Legal Signature*

USA

FCC 47 Part 15

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to the part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense

Contents

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Getting Started

Packaging

The shipping carton and packaging materials provide protection for the module during transit. Please retain the shipping cartons in case subsequent shipping of the product becomes necessary.

Product Description

The D AD 3260 BS is a high quality AES3-id (unbalanced 75 Ohm) to AES 3 (balanced 110 Ohm), the D AD 3260 SB a AES3 to AES3-id converter designed primarily for broadcast and professional applications.

D AD 3260 BS: 6 Channels of digital unbalanced Audio (AES3-id) on 75 Ohm BNC connectors are converted to digital balanced Audio (AES3) on 110 Ohm Weco screw terminal style connections. Conversion is active providing 4Vpp (nom.) output level.

D AD 3260 SB: 6 Channels of digital balanced Audio (AES3) on 110 Ohm Weco screw terminal style connections are converted to digital unbalanced Audio (AES3-id) on 75 Ohm BNC connectors. Conversion is active providing 1Vpp (nom.) output level.

The D AD 3260 is part of the 3000 series of MiniModules, which offer high quality, modularity and flexibility in a very small form factor ideal for applications where space is at a premium.

The modules can be used either stand alone using the optional power supply brick, or as part of a tightly integrated space saving system where up to 10 MiniModules can be mounted utilizing the optional LYNX R FR 3005 / 3010 rack housing. This includes integrated power supply and optional remote control interfaces.

Module Layout

Figure 2 shows the physical layout of the D AD 3260 MiniModule.

If the module is being used in a stand alone application then the optional power supply (R PS 3001 E, R PS 3001 U, R PS 3001-3 or R PS 3004) is required to power the module (not shown)
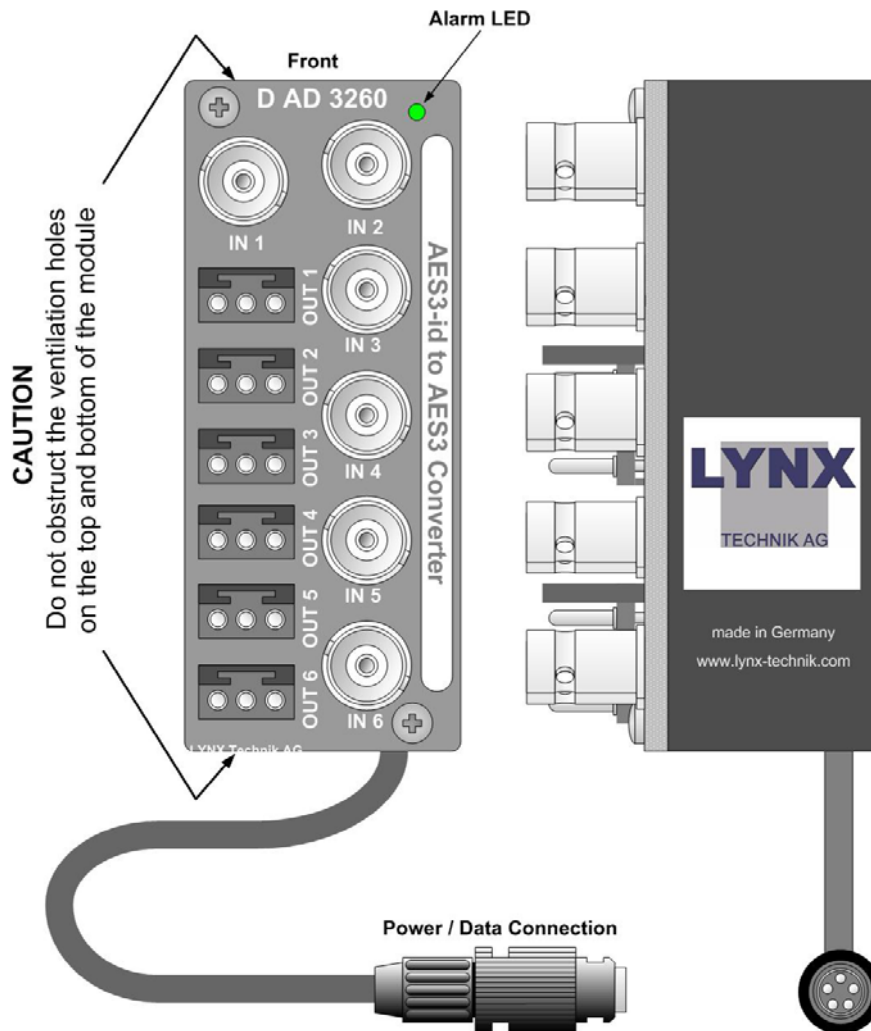

Figure 2 – Module Layout

Connections

Audio Input Connections

The D AD3260 MiniModule is configured with standard 75 Ohm BNC connectors for the AES3-id Audio connections. Connection is self-explanatory. We recommend the use of high quality audio cable to reduce the risk of interference or errors due to excessive cable attenuation.

Note. Due to the compact design of the module it will be necessary to use a connection tool to secure the BNC video connectors to the module.

Audio Output Connections

The D AD 3260 MiniModule is configured for Weco type audio connections for the balanced AES3 audio. These connectors should be wired in accordance with the table below. Please use high quality screened cable to prevent the introduction of noise and interference to the audio signals (twisted pair suitable for balanced digital audio signals).

Audio Connections (balanced)

Weco 3 pin male connector
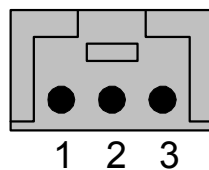
Pin Number	Connection
1	Positive (+)
2	GND
3	Negative (-)

Weco male connector
on module
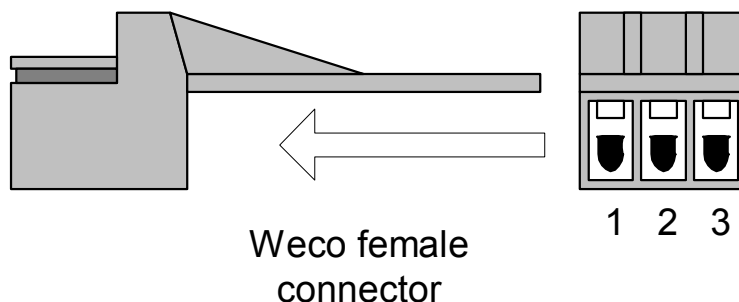
Weco female
connector

Power Connections

If using the module in a stand-alone application use the separate R PS 1 E (for Europe), R PS 1 U (USA) power brick option, the desk power supply R PS 3001-3 or the R PS 3004 desk power supply for 4 Minimodules

DC Power Connector

The MiniModule has a captive power lead fitted to the module, with a male 5 pin locking bayonet connector. This connection provides DC power and also data connectivity to the module. Connector wiring is shown below.

Male Connector
(view looking into connector from front)
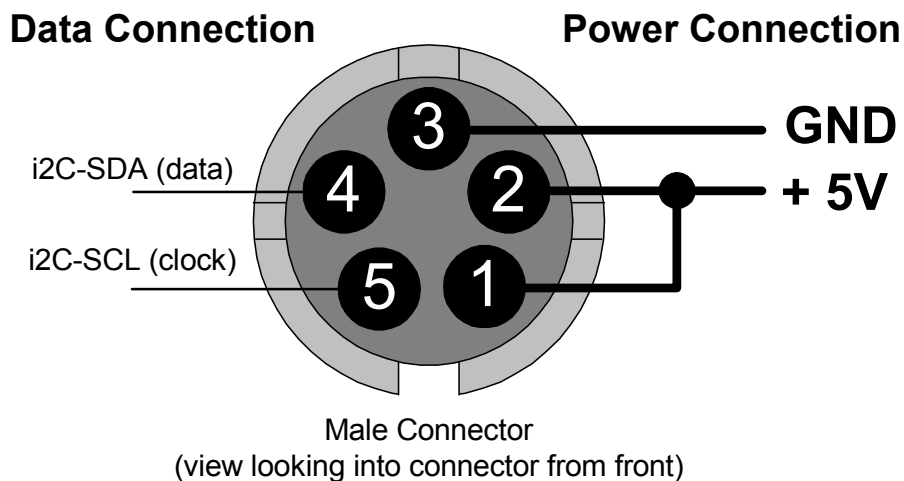
Caution

Only use the optional LYNX R PS power modules. Ensure the 5-pin power connector is locked securely in place.

Installation
Mechanical
Stand Alone Operation

The D AD 3260 MiniModule can be used in a stand alone application. There are two options for the use of the module in this way.

a) Using the R FR 3005 Rack Frame 1 option. This allows up to any 10 of the MiniModules to be secured onto a rack frame assembly for 19 inch rack mounting. This keeps the modules secured, organized and out of the way. The R PS 3001 power brick option or the R FR 3010 option is required to power each module. Please refer to the R FR 3005 Reference Manual supplied with this option for more details.

b) Single Use. The MiniModule can be powered independently with the R PS 3001 option and used in any location where this functionality is required.

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Caution. Care needs to be taken when using the module in this way, as it is not physically secured. Keep the module away from the floor to avoid the risk of someone stepping or tripping on the unit, and locate the unit away from excessive sources of heat and any sources or moisture.

If using more than one MiniModule in any installation, the R FR 3005/3010 Rack frame combination is highly recommended.

Multiple Units

Most applications will require more than one MiniModule, which can include any of the available Series 3000 MiniModule product range. There are two options for mounting multiple units.

a) Using the R FR 3005 Rack Frame option. This allows up to any 10 of the MiniModules to be secured onto a rack frame assembly for 19 inch rack mounting. The R PS 3001 power brick option or the R FR 3010 option is required to power each module. Please refer to the R FR 3005 Reference Manual for more details.

b) Using the R FR 3010 Rack frame extension option. Can be combined with the R FR 3005 Rack frame option. Each module plugs into a connection bus, which provides common power for all modules. (no R PS external power supplies are needed). Remote control and status monitoring of all modules is possible with the addition of the R CT 5020 rack controller and R CT 5030 master controller options. Please refer to the respective reference manuals for these options for details of mechanical installation.

The very small size and density of the MiniModules combined with the available rack frame options allows the addition of a complex and custom signal distribution system without taking any additional front rack space. The rack frames are designed for installation in the back of 19-inch racks where there is normally plenty of available space. Ideal for mobile truck installations and facility expansions where space is at a premium.

Electrical Installation.

Stand Alone Operation

The MiniModule requires the R PS 3001 power brick option for stand-alone operation. Three versions are available: R PS 3001 E for European markets, R PS 3001 U for the US markets or the desk power supply R PS 3001-3. Please ensure you have the correct power option for your region. The connection to the module is made with a small 5-pin connector, which has a twist bayonet securing system. Please make sure the connection is solid and locked in place. A strain relief is included within the module to prevent excessive strain on the connection.

Signal connections should be made with care, please ensure connections are correct and compatible equipment is feeding / receiving the signals from the module or damage can result.

Caution. Only use the optional Lynx R PS 1 power modules. Ensure the 5-pin power connector is locked securely in place.

Caution. Care needs to be taken when using the module in this way, if it is not physically secured. Keep the module away from the floor to avoid the risk of someone stepping or tripping on the unit, and locate the unit away from excessive sources of heat and any sources or moisture.

Multiple Units

When installing multiple MiniModule units it is recommended you use the R FR 3005 Rack Frame 1 and / or R FR 3010 Rack Frame 2 options. Please refer to the documentation supplied with these options for details on electrical installation.

Settings and Control

No settings are necessary for this module

Alarm/LED Status Indicators

The D AD 3020 module has one front LED which indicates that the right supply voltage is applied.

Specifications *(D AD3260 BS)*

Inputs	
Signal	6 x AES balanced transformer isolated inputs
Input Impedance	110 Ohms
Connection	WECO
Return Loss	<25dB (32KHz to 100KHz)
Outputs	
Signal	6 x AES 3-id unbalanced transformer isolated outputs
Output Impedance	75 Ohms
Connection	BNC
Output Level	1.0v p-p (nominal)
Electrical Specifications	
Operating Voltage	+ 5VDC
Power Consumption	3.0 VA
Connection	DC input via 5 pin locking bayonet connector
Safety	IEC 60950/ EN 60950/VDE 0805
Mechanical	
Size	85.5mm x 35.3mm x 27mm + connectors
Weight	150g
Ambient	
Temperature	5°C to 35°C Maintaining specifications -0°C to +50°C Operating
Humidity	Max 80% non condensing
Supplied Accessories	
Documentation	D AD 3260 Reference Manual and quick reference guide

Specifications *(D AD3260 SB)*

Inputs

Signal	6 x AES 3-id unbalanced transformer isolated inputs
Input Impedance	75 Ohms
Connection	BNC
Return Loss	<25dB (32KHz to 100KHz)

Outputs

Signal	6 x AES 3 balanced transformer isolated outputs
Output Impedance	110 Ohms
Connection	Weco
Output Level	4.0v p-p (nominal)

Electrical Specifications

Operating Voltage	+ 5VDC
Power Consumption	3.0 VA
Connection	DC input via 5 pin locking bayonet connector
Safety	IEC 950/ EN 60950/VDE 0805

Mechanical

Size	85.5mm x 35.3mm x 27mm + connectors
Weight	150g

Ambient

Temperature	5°C to 35°C Maintaining specifications -0°C to +50°C Operating
Humidity	Max 80% non condensing

Supplied Accessories

Documentation	D AD 3260 Reference Manual and quick reference guide

Available Options

Below is a list of available options for the D AD 3260 MiniModule. Please refer to product brochures or our web site for more detailed information.

Model	Description
R PS 3001 E	External brick power supply module for Series 3000 MiniModules. European market version. 100-240 VAC input, +5V DC output.
R PS 3001 U	External brick power supply module for Series 3000 MiniModules. USA market version. 110-240 VAC input, +5V DC output.
R PS 3001-3	External desk power supply module for Series 3000 MiniModules. 110-240 VAC input, +5V DC output.
R FR 3004	Mounting Support for 4 MiniModules
R FR 3005	Rack Frame 1. This is a basic 19 inch rack mountable frame which can accommodate 10 MiniModules with power bricks R PS 1 or can be extended with the R FR 3010.
R FR 3010	Rack Frame 2. This is a card cage with integrated central power supply, optional redundant power supply and optional controller, which can accommodate 10 MiniModules. Can be combined with R FR 3005
R PS C15	1.5m cable extension to connect one MiniModule to R FR 3010
R PS C25	2.5m cable extension to connect one MiniModule to R FR 3010
R PS 3010	Redundant power supply for the R FR 3010 card cage

Parts List

Due to the very dense design and high level of integration there are no user serviceable electronic assemblies within the D AD 3260 module.

D AD 3260 SB Mini Module (complete)
Description   AES3-id to AES3 Converter
Model Number   D AD 3260 SB
Part Number   5.155.003.290

D AD 3260 SB Mini Module (complete)
Description   AES3 to AES3-id Converter
Model Number   D AD 3260 BS
Part Number   5.155.003.291

Service

If you are experiencing problems, or have questions concerning your D AD 3020 MiniModule please contact your local distributor for assistance.

We offer a fixed cost service exchange program for defective Series 3000 MiniModules out of Warranty. Please contact your distributor or check our web site for details on this program.

More detailed information and product updates may be available on our web site:

www.lynx-technik.com

You will also find links to contact us directly for assistance.

Contact Information

Please contact your local distributor; this is your local and fastest method for obtaining support and sales information.

LYNX Technik can be contacted directly using the information below.

Address	LYNX Technik AG
	Brunnenweg 3
	64331 Weiterstadt
	Germany.
Website	www.lynx-technik.com
E-Mail	info@lynx-technik.com

LYNX Technik manufactures a complete range of high quality modular products for broadcast and Professional markets, please contact your local representative or visit our web site for more product information.

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