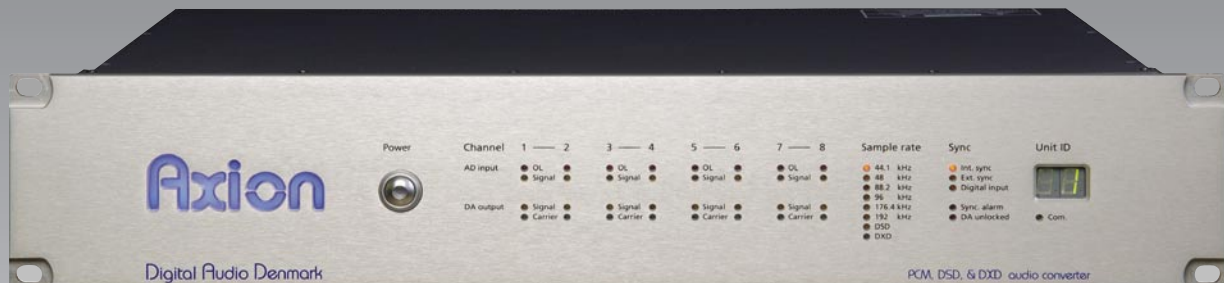


Axion

PCM, DSD, and DXD audio converter



DSD
Direct Stream Digital

SUPER AUDIO CD

DXD
Digital eXtreme Definition

Axion is one of the most advanced and sonic transparent audio converters yet developed.

Axion offers 8 channels of A/D and D/A conversion in PCM up-to 192 kHz, DSD and DXD at a sample-rate of 352.8 kHz.

High resolution DSD/DXD is generated from a 5 bit delta sigma modulator signal. PCM conversion is implemented using a dual converter principle.

Axion covers applications for mastering, music recording and monitoring in PCM, DSD and DXD.

Key Features:

- 8 channel PCM, DSD, and DXD audio converter
- PCM sample-rates: 44.1kHz, 48kHz, 88.2kHz, 96 kHz, 176.4kHz, and 192kHz
- DSD sample-rates: 2.8224 Mhz and 5.6448 Mhz (64 fs and 128 fs)
- DXD sample-rates: 352.8 kHz
- 7 slots for optional DADI/O expansion modules
- PCM audio interfaces: 4 channel D/A, AES/EBU, S/PDIF, TDIF, ADAT, and PT Mix 24
- DSD audio interfaces: 4 channel D/A, SDIF3, MADI
- DXD audio interfaces: 4 channel D/A, 8 channel in one MADI link
- Remote controlled via RS422

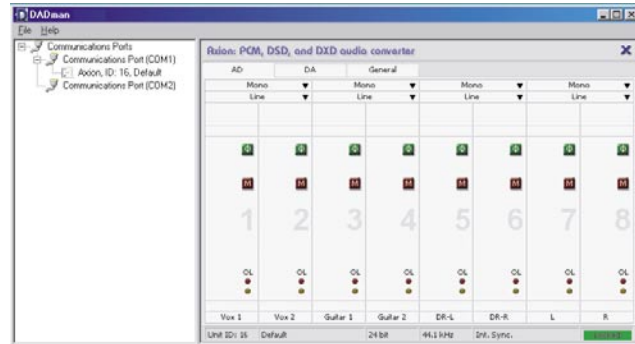
AXION - TECHNICAL SPECIFICATIONS

DADman remote control PC program:

Axion is controlled via the DADman remote control program for PC. By using DADman up-to 256 different Digital Audio Denmark audio converters can be operated and supervised from one PC. DADman communicates via the PC Com ports, or virtual Com ports.

DADman serves also as a tool for managing the set-up of more converters and storing the individual setting for easy set-up and configuration. DADman can assign a window for each converter detected, and assign a unit ID label, which is read out at the led display at the converter front panel.

For connecting the RS-422 port at the Axion to a standard PC a variety of interface converter boxes are available i.e. RS-232 to RS-422, USB to one or more RS-422 ports, or ethernet to RS-422.



Digital eXtreme Definition

To bridge the studio technology of today towards the essential DSD/SA-CD format, a new processing format Digital eXtreme Definition has been developed. DXD is a high sampling rate and multi-bit processing format, that preserves the audio quality of DSD in terms of pulse response and

bandwidth compared to conventional PCM at e.g. 192kHz sampling. DXD is an open proprietary format and up-to 8 channels can be interfaces in one MAD1 link. The resolution of DXD is 24 bit with a sample-rate of 352.8kHz.

A/D CONVERSION, LINE INPUT

PCM resolution	24 bit
PCM sample-rates	44.1, 48, 88.2, 96, 176.4, 192 kHz
DSD sample-rates	2.8224 & 5.6448 MHz (64 & 128 fs)
DXD sample-rates	24 bit at 352.8 kHz
Dither	Psycho acoustic, 16,18, 20 bit
Dynamic range (A), PCM	> 121 dB
Dynamic range (A), DSD, DXD	> 118 dB
THD+N (A)	< -115 dBfs
Cross talk	< -120 dB
Input impedance	> 15 k Ohm
Max. input level	+12 to 30 dBu, adjustable
Connectors	XLR (pin 2 hot)
Processing delay	< 1.0 ms

D/A CONVERSION, LINE OUTPUT (Optional)

PCM resolution	24 bit
PCM sample-rates	44.1, 48, 88.2, 96, 176.4, 192 kHz
DSD sample-rates	2.8224 & 5.6448 MHz (64 & 128 fs)
DXD sample-rate	24 bit at 352.8 kHz
Dynamic range (A)	> 117 dB
THD+N (A)	< -105 dB
Cross talk	< -120 dB
Output impedance	< 40 Ohm
Max. output level	+12 to 27 dBu, adjustable
Connectors	XLR (pin 2 hot)
Processing delay	< 1.0 ms

FREQUENCY RESPONSE A/D AND /D/A

Fs 44.1kHz,	20-20 kHz:	±0.1dB
Fs 48kHz,	20-21.5 kHz:	±0.1dB
Fs 88.2kHz,	20-39 kHz:	±0.1dB
Fs 96kHz,	20-40 kHz	±0.1dB
Fs 176.4kHz,	20-40 kHz	±0.1dB
Fs 192kHz,	20-40 kHz	±0.1dB
Fs DSD 64 fs	20-28 kHz	±0.1dB
Fs DSD 128 fs	20-35 kHz	±0.1dB
Fs DXD	20-40 kHz	±0.1dB

DIGITAL AUDIO INPUTS AND OUTPUTS

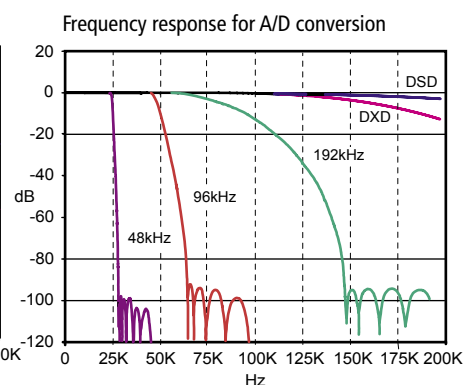
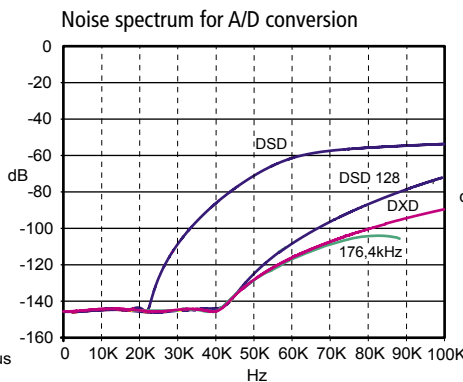
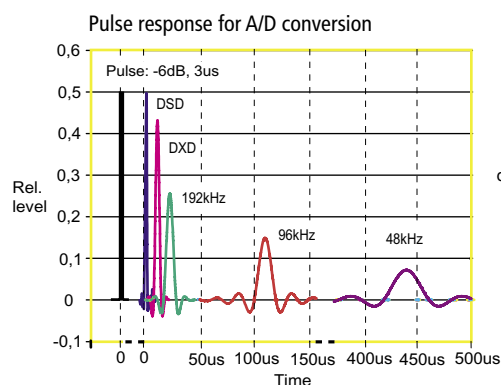
Expansion modules 7 slots for DADI/O modules

SYNCHRONISATION

AES11	XLR, 44.1 to 96 kHz
Word clock sync in/out	BNC, 44.1 to 48kHz
Super clock sync in/out	BNC, 11.2896 to 12.288 Mhz
Selection for double speed	44.1 to 48kHz/88.2 to 96kHz
Video sync in	PAL, NTSC, SECAM

GENERAL

Control interface:	RS-422 (up to 100 meter)
EMC, complies with:	EN 50082, and EN 50022
Operating temperature:	+5 to 45 °C
Dimensions (w,h,d):	19", 2U, 285 mm
Weight:	5,8 kg
Mains voltage:	90 - 260 VAC
Power consumption:	Max. 45 Watts



Digital Audio Denmark

Digital Audio Denmark a/s. PO Box 141. DK 2630 Taastrup. Tel. (+45) 72 20 35 55. Fax. (+45) 72 20 35 50.
E-mail: info@digitalaudio.dk [Http://www.digitalaudio.dk](http://www.digitalaudio.dk)