



AX Center Thunderbolt 3, DANTE, MADI and ADAT 2 slot Modular Analogue & Digital Audio Interface



Introduction.

AX Center is an extremely capable multi-channel audio converter and digital audio interface, which is ideal in a sound studio as a pristine and versatile audio centre piece for recording and monitor control applications both in stereo and immersive studio configurations as well as a routing a processing interface for live music applications.

AX Center has a native 2x8 channel analogue section providing two selectable Mic/Instrument inputs, two stereo headphone outputs and two set of stereo monitor outputs. The DAD routing engine provides a 1006x1112 matrix where all inputs and outputs can be patched in any combination. In addition, a 512x64 channel summing processor and a 1024 filter SPQ equalizer is also available. Two slots are available for optional expansion cards.

Features

- 2 microphone, line and instrument inputs
- 2 stereo headphone outputs
- 2 stereo monitor outputs
- Thunderbolt 3 I/O (256 channels at 48 & 96 kHz)
- Dante AoIP I/O (256 channels at 48 kHz, 128 channels at 96kHz)
- MADI I/O (64 channels at 48 kHz)
- ADAT I/O (16 channels)/SPDIF (2 channels)
- Up to 256x256 channels I/O via optional cards
- Up to 256x256 DADLink channels or 128x128 MADI channels at 48 kHz via SFP modules
- 512x64 channel PRO | MON monitor control
- Speaker EQ 128 channel w 16 filters and channel delay up-to 1s
- Control | Pack for Playback Redundancy and Show Control
- 28bit floating point processing
- Apple macOS and Windows compatible DADman control software
- Apple macOS Core Audio and Windows ASIO compatible Thunderbolt audio drivers
- Avid Eucon™ enabled devices via DADman
- Control via Ethernet or Thunderbolt connection
- Word Clock I/O, VBB input
- 15W power on each Thunderbolt 3 port
- 2 slots for expansion cards
- SKU: AXCNTR-BASE

Options and Accessories

Cards:	CARD-L8, CARD-M8, CARD-DA8, CARD-2SDI, CARD-8AES, CARD-2MADI, CARD-2MADI-SQ, CARD-DANTE, CARD-RAVENNA	Modules:	MOD-SFP-1300-LZ (DADLink) MOD-SFP-1300-LD (MADI) MOD-SFP-COAX (MADI)
		Controllers:	MOM-BASE. JUNIOR-BASE



Specifications

Analogue formats

PCM (DXD)
sample rates: 44.1, 48, 88.2, 96, 176.4,
192, 352.8, 384 kHz
Modulator format: 32 x oversampling,
32 bit PCM
DSD resolution: 64FS and 128FS

Headphone output

Dynamic range: > 120 dB
THD+N(A): < -100 dB@-3dB FS
Cross talk: < 110 dB
Headphone
impedance: 18 to 600 Ohm
Output impedance: < 1 Ohm
Max output level: Adjustable from -80 dBu to
19 dBu in steps of 0.1 dB
Conversion Latency @96 kHz: w/ high-res filter 450us
w/ short-delay 150us

Analogue Monitor output

Dynamic range: > 128 dB
THD+N(A): < -115 dB@-3dB FS
Cross talk: < 115 dB
Max output level: Adjustable from -60 dBu to
24 dBu in steps of 0.1 dB
Conversion Latency: 450us@96 kHz

Microphone and Instrument input

Dynamic range: > 124 dB
THD+N(A): < -115 dB@-3dB FS
Cross talk: < 115 dB
Input Impedance: 2 k Ohm (Mic),
> 1M Ohm (Inst)
Microphone input
gain range/accuracy: -21 to 100 dB,
in steps of 0.1 dB
Microphone Eqv.
input noise (A): < -131 dB
Conversion Latency: 350us@96 kHz

Digital I/O and Synchronisation

Digital I/O formats/ Supported
sample rate: Dante™ IP audio and ADAT/SMUX
44.1 up to 192 kHz
S/PDIF 2ch. input on ADAT
44.1 up to 96 kHz
Thunderbolt 3 and MADI
44.1 up to 384 kHz
DADLink up 44.1 to 384 kHz

Latency: Internal system delay 7 samples, can
be set between 3 and 31 samples,
All outputs are time and phase
aligned
DADLink: 28bit floating point format
Latency zero samples.

Synchronisation:
Word Clock, Video Black Burst,
Dante, ADAT and MADI

Network interface:
1000BASE-T, RJ45 connector,
4-pair connection

Thunderbolt 3 Interface:
2 x USB-C type connectors,
supporting link functionality and
15w power on each port

Electrical Specifications

Max rating mains: 90 W
Input voltage: 90 – 260 VAC
100 – 240 VAC Nominal,
47 – 63 Hz
Mains fuse: Mounted in IEC connector
1 A, T1AH/250V
Mains connector: IEC 60309
Power consumption: Digital section 15W
DAD I/O Options max 30w
Thunderbolt power
max 2x15W

Weight and Environmental

Weight: 3.2 kg / 7.1 lbs.
Measures: 19" rack mount, 1RU/4.44cm
Chassis depth, 32 cm / 12.6"
Body width, 43.5 cm / 17.2"
Operating
Temperature: 0 – 45 °C / 32 – 113°F
Humidity: 20 to 85%, non-condensing
EMC Compliance: CISPR 32:2015, CISPR
32:2015/AMD1:2019, CISPR 35:2016, IEC 61000-3-
2:2018, IEC 61000-3-2:2018/AMD1:2020, IEC 61000-
3-3:2013, IEC 61000-3-2:2013/AMD1:2017, IEC
ICES-003, AS/NZS CISPR 32
FCC part 15, Subpart B
Safety Compliance: IEC 62368-1: 2018