AURORA 16

Lynx STUDIO TECHNOLOGY

world-class analog to digital and digital to analog conversion

Chosen by professional studios around the world, Aurora converters from Lynx offer pristine, open audio for virtually any PC or Mac audio production application.

The Aurora 16 AD/DA converter provides world-class analog to digital and digital to analog conversion in a compact one-rack space format. With sample rates up to 192 kHz, Aurora offers wide, open, uncompressed and unequalized audio for studios, mastering facilities, remote recording, broadcast and production. Lynx's exclusive SynchroLock™ word clock offers extreme jitter reduction, providing clean digital audio signals for Aurora and other digital devices in the studio.

Aurora avoids some of the limitations that other pro level converters have. Aurora does not have a noisy fan, does not lose channel count at higher sample rates and does not require costly analog and digital modules to achieve the unit's full channel count.Aurora can be used virtually with any audio content. Equalization and limiting functions, which can color or alter the sound, have not been added. Lynx's design provides accurate conversion, clear clean audio, wide imaging – the sound you put into Aurora is the sound that you get out of Aurora.

Several interfaces allow Aurora to be used in a number of different configurations. The LT-TB offers Thunderbolt™ connectivity for Mac or PC computers. LT-HD allows Aurora to be recognized by and controlled from an Avid® ProTools|HD®, HD Native or HDX system. USB 2.0 access is easy using the LT-USB, for 8 channels of 192 kHz I/O or 16 channels at 96 kHz. 16 channels of ADAT Lightpipe I/O is made available with the LT-ADAT. LT-MADI allows up to four Aurora converters to send and receive up to 64 MADI channels. And Lynx AES16 and AES16e allow connection to a wide range of Windows and Macintosh computers.

The Aurora 16 was nominated for a TEC award in 2005. Aurora with LT-HD was nominated for a 2007 TEC award.

Aurora converters are preconfigured for three voltages. Aurora 115 volt models are available in the US, Canada, Mexico and Brazil. The 100 volt models are available in Japan only. 230 volt units are available throughout the rest of the world through authorized distributors and retailers.

- Simultaneous 16 Channel Analog I/O and 16 Channel AES/EBU I/O
- 24 Bit / 192 kHz Mastering Quality A/D and D/A conversion
- 192 kHz AES/EBU I/O Supporting Single and Dual Wire Modes
- Single Rack Space Configuration
- Extensive Remote Control Capability via Lynx AES16, LT cards and MIDI
- On-board 32 Channel Digital Mixer Provides Flexible I/O Routing
- Word clock I/O with Lynx SynchroLock™ Sample Clock Technology
- Digital I/O DB-25 connectors follow Yamaha pinout protocol
- Analog I/O DB-25 connectors follow Tascam pinout protocol
- RoHS compliant
- Available in 100V, 115V and 230V models

AURORA 16 VT

Expanding its line of Aurora 192 kHz AD/DA converters, Lynx Studio Technology also offers the Aurora 16-VT Variable Trim model. Aurora 16-VT allows users to manually set the analog input and output levels within a range of +8.5 dBu to +24 dBu. 32 miniature trim pots are mounted on the primary circuit board to allow the adjustments.The VT model is for studios, that require the ability to manually set the levels for optimum performance. The Aurora 16-VT provides this capability, while preserving Aurora's other features, specifications and signature transparent sound.

SPECIFICATIONS

ANALOG I/O

Aurora 16	Sixteen inputs and sixteen outputs
Type	Electronically balanced or unbalanced,
Level	+4 dBu nominal / +20 dBu max. or
	-10 dBV nominal / +6 dBV max

INPUT IMPEDANCE

Balanced mode:	24k Ω
Unbalanced mode:	12k Ω

OUTPUT IMPEDANCE

Balanced mode:	100 Ω
Unbalanced mode:	50 Ω
Output Drive	600 Ω impedance, 0.2 μF capacitance
A/D and D/A Type	24-bit multi-level, delta-sigma

ANALOG IN PERFORMANCE

Frequency Response	20 Hz - 20 kHz, +0/-0.1 dB
Dynamic Range	117 dB, A-weighted
Channel Crosstalk	-120 dB maximum, 1 kHz signal, -1 dBFS
THD + N	-108 dB (0.0004%) @ -1 DBFS
	-104 dB (0.0006%) @ -6 DBFS
	1 kHz signal, 22 Hz - 22 kHz BW

ANALOG OUT PERFORMANCE

Frequency Response	20 Hz - 20 kHz, +0/-0.1 dB
Dynamic Range	117 dB, A-weighted
Channel Crosstalk	-120 dB max., 1 kHz signal, -1 dBFS
THD + N	-107 dB (0.00045%) @ -1 DBFS
	-106 dB (0.00050%) @ -6 DBFS
	1 kHz signal, 22 Hz - 22 kHz BW

DIGITAL I/O

Number / Type

Aurora 16	16 inputs and 16 outputs
24 bit AES/EBU	format, transformer coupled

Channels

Aurora 16	16 in/out in single-wire mode
	8 in/out in dual-wire mode

SAMPLE RATES

All standard rates and variable rates up to
192 kHz in both single-wire and dual-wire modes

ON-BOARD DIGITAL MIXER (via AES16/AES16e/LT-USB)

Type	Hardware-based, low latency
Routing	Ability to route any input to any
	or multiple outputs
Mixing	Up to 16 input or playback signals
	mixed to any output, 40-bit precision

CONNECTIONS

Digital I/O Ports

25-pin female D-sub connectors
Port A: channels 1-8 I/O
Port B: channels 9-16 I/O
Yamaha pinout standard

CONNECTIONS (cont.)

Analog I/O Ports

25-pin female D-sub connectors.
Analog In 1-8
Analog In 9-16
Analog Out 1-8
Analog Out 9-16
Tascam pinout standard

EXTERNAL CLOCK

75-ohm BNC word clock input and output

MIDI

One input and one output. For control and progamming only.
5-pin female DIN connectors

Remote Control Options

Function

Controls all I/O, levels, monitoring, routing

Method

Using AES16/AES16e or MIDI

GENERAL

AC Power

100 / 115 / 230 VAC, 70 watts

Size

1.75” H x 19” W x 9” D

Shipping Weight

12 pounds

Certifications

CE and FCC Class B EMI, CE Product Safety

LSLOT™ EXPANSION PORT

Compatibility

Supports Lynx LSlot expansion cards

Channels

Up to 16 input and 16 output simultaneously
at up to 192 kHz sample rate

OPTIONAL INTERFACE CARDS FOR LSLOT

LT-ADAT

Provides 16-channel at 48 kHz, 8-channel at 96 kHz,
4-channel at 192 kHz ADAT Optical I/O

LT-HD

Provides interface for Avid®
ProTools | HD® , HD Native, HDX systems

LT-MADI

Provides up to 64 MADI I/O channels

LT-USB

Provides up to 16 I/O channels, USB 2.0

LT-TB

Provides up to 32 I/O channels per Aurora 16.
Six can be used on a single Thunderbolt port