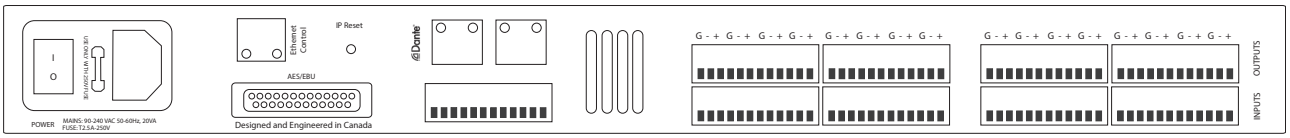
Neutrino Series

A winning combination of audio performance, ease of use and cost- effciency is offered by the popular Neutrino digital signal processors, comprising DHCP-enabled units available in four primary I/O model sizes.

- Product range designed around drag-and-drop simplicity, allowing users the ability to quickly configure the precise DSP system required by a customer
- Features a range of I/O combinations to maximise choice and reduce unnecessary spend, including 8x8, 8x16, 16x8 and 16x6 - all with individual terminal block connections to permit rapid installation
- Available factory-installed option cards include bi-directional Dante networking, AES/EBU digital audio via a DB25 connector, and eight channels of low-latency AEC
- Neutrino products can be controlled and programmed over Ethernet using the X-Designer software, which allows universal programming for third party devices
- Neutrino connects to a wide range of control interfaces, including: PC, MAC, IOS and Android GPIO custom I/O and third- party control systems such as Crestron and AMX

Engineer's Specification

Model versions shall provide eight (8) or sixteen (16) balanced analog mic/line inputs with 48V switchable Phantom power, alongside eight (8) or sixteen (16) balanced line outputs (models A0808, A0816, A1608, and A1616). Processing is through 24-bit A/D & D/A converters and 40-bit floating point DSP, with 48kHz sample rate. The front panel shall include a 2x24 backlit LCD display, switch and thumb wheel programming controls,power and network LEDs and input/output LED level indicators. Audio connections shall be accessed via rear panel 3. 5mm individual terminal block connectors. The connectorshall be 1000 Base-T RJ45 utilizing CAT6 cable. Available DSP components shall include (but not be limited to) various forms of: mixers, equalizers, filters, crossovers dynamics/ gain controls routers, room combiners, delays, remote controls, meters, and onboard logic. Ethernet communication shall be utilized for software control and configuration. The processor shall include a 4x2 General Purpose Input and Output connection (GPIO) for sending or receiving GPIO signals. All program memory shall be non-volatile and provide program security should power fail The processors shall be ETL marked and comply with UL/CSA/CE safety requirements, FCC emission requirements, and be compliant with the RoHS directive. Warranty shall be 2 years parts and labor. The DSP shall be the Neutrino Series



Rear panel view of the Neutrino A1616-ND, with Dante and AES/EBU/IO section.

Available Model Variants

	Base Model	With Dante	With AES/EBU	With AEC	With Dante & AES/EBU	With Dante & AEC
8x8 I/O	A0808	A0808-N	A0808-D		A0808-ND	
8x16 I/O	A0816	A0816-N				
16x8 I/O	A1608	A1608-N		A1608-AEC		A1608-AEC-N
16x16 I/O	A1616	A1616-N	A1616-D		A1616-ND	

Technical Specifications

Input impedance	>10k Ohms
Output impedance	50 Ohms
Maximum level	+20dBu
Mic/Line	Mic (+40dB gain)/Line (0dB)
Type	Electronically balanced w/ 48V Phantom power
Frequency response	+/-0.15dB (20 to 20kHz)
Dynamic range	110dB typ (unweighted)
CMRR	>50dB @ 1kHz
Crosstalk	<-110dB @ 1kHz
Distortion	0.002% (1kHz @ +4dBu)

Processor	40-bit Floating point
Sampling rate	48kHz
Analog converters	High-performance 24-bit
Propagation delay	3ms (AEC: 11ms)
Connectors	Phoenix Plug-in 3.5mm (included), RJ45 Ethernet, IEC power socket (For Dante models only) , DB-25 (AES/EBU for digital I/O models only)
Power	90-240 VAC (50-60Hz)
Dimensions	19"x1.75"x9" (483x44x229mm)
Rack mount	1RU, with vent between units
Weight	11lbs / 5kg
Warranty	2 years parts and labor

*Specifications subject to change