



## Neutrino A808-AEC, A1608-AEC, A0816-AEC

- **8x8, 16x8, 8x16 In-Out Configurations**
- **Same features and quality as the standard Neutrino Series**
- **Complies fully with G.167, P.340, and VDA (category 1).**
- **Up to 16 microphone channels are supported**
- **Works at 16kHz, 24kHz and 48kHz sampling frequency with excellent sound quality.**
- **Employs a robust and efficient adaptive algorithm.**
- **Provides superior and consistent single-talk echo reduction of 80 dB in any acoustic environments.**
- **Employs proprietary robust and effective double talk detector.**
- **Provides echo reduction of 30 dB or more during double-talk periods.**
- **Instant full convergence to 80 dB echo reduction in 100 milliseconds or less. Rate of adaptation is fast enough to allow excellent performance even with moving microphones and moving users.**

Acoustic echo is inevitable whenever a loudspeaker is placed near a microphone in a full-duplex communication application. This is the case in speaker-phones, audio and video conferencing, desktop communication, and many other communication scenarios. In all those and similar communication scenarios, the voice from the loudspeaker is inevitably picked by the microphone and transmitted back to the remote speaker. This makes the remote speaker hear his/her own voice distorted and delayed by the communication channel, which is known as echo. The longer the channel delay, the more annoying the echo becomes until it makes natural conversation impossible and decreases the perceived quality of the communication service. It is therefore absolutely necessary to avoid transmitting back the echo picked by the microphone.

AEC echo cancelling algorithm is included on top of the DSP modules existing in the standard Neutrino Series.





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### Specifications

#### Inputs and Outputs

Input Impedance:	>10k Ohms
Output Impedance:	50 Ohms
Maximum Level:	+20dBu
Type:	Electronically balanced

#### Audio Performance

Frequency Response:	+/- 0.1dB (20 to 30kHz)
Dynamic Range:	110dB typ (unweighted)
CMMR:	> 100dB (50 to 10kHz)
Crosstalk:	< -100dB
Distortion:	0.002% (1kHz @ +4dBu)

#### Digital Audio Performance

Processor:	40-bit
Sampling Rate:	48kHz
Analog Converters:	High Performance 24-bit

#### Front Panel Controls

Display:	2 x 24 Character Backlit LCD
Signal LEDs:	1 per channel
Status LED:	Data
Buttons:	Menu Controls
Dial Encoder:	Embedded Thumb Wheel

#### Connectors

Analog Inputs:	Phoenix Plug-in 3.81 mm
Analog Outputs:	Phoenix Plug-in 3.81 mm
Ethernet:	Standard CAT-5
Power:	Standard IEC Socket

#### General

Power:	90-240 VAC (50-60Hz)
Dimensions:	19"x1.75"x9" (483x44x229 mm)
Weight:	11 lbs / 5 kg

#### Notes:

- Specifications subject to change without notice
- This product incorporates echo and noise cancellation technology licensed from DSP Algorithms ([www.dspalgorithms.com](http://www.dspalgorithms.com))