

DATA SHEET





#### **PRODUCT HIGHLIGHTS**

- Four-position output level switch per channel pair
- +24, +18, and +4dBu line-level, or mic-level outputs
- Converts A-Net digital stream to 16 analog audio channels
- 16 balanced mic- or line-level outputs
- 48kHz, 24-bit D/A converters
- Unlimited splits and digital copies
- Optional SB4 System Bridge
- Cat-5e cable runs up to 500 feet (150 meters)

The AN-16/o v.4 Output Module is a 1U rack-mount 16-channel digital-toanalog converter for Pro16<sup>®</sup> digital snake and audio distribution systems. Digital audio is input on standard Cat-5e cable, via Aviom's A-Net<sup>®</sup> Pro16 digital audio transmission protocol, and converted to analog using 24-bit, 48kHz converters. Sixteen balanced outputs are provided on the rear panel via multipin connectors.

When the AN-16/o v.4 Output Module is combined with a D800 or D800-Dante A-Net Distributor, users of the A360 Personal Mixer can take advantage of the Network Mix Back<sup>™</sup> feature that simplifies the connection of wireless in-ear systems.

The AN-16/o v.4 features rugged DB25 multipin connectors for analog audio outputs, reducing set-up time and adding the security of a locking connection. All network connections utilize heavy duty locking connectors.

Designed to be compatible with a wide range of signal level requirements, each pair of channels has a four-position output level switch with settings for +24, +18, and +4dBu line-level, or mic-level output. Each channel features front-panel LEDs for signal present and clip.

Digital connections include A-Net In, A-Net Out, and A-Net Expansion. The A-Net Out jack provides a lossless digital split of the A-Net In audio data stream, while the A-Net Expansion jack allows two 16-channel A-Net streams to be combined onto a single Cat-5e cable.

The AN-16/o v.4 can be used with any Pro16 input module or console interface card, with no limit to the number of output modules in a single system.

The AN-16/o v.4 can be connected to a Pro64 $^{\mbox{\tiny @}}$  audio network by adding the ASI A-Net Systems Interface.

# AN-16/0 V.4 OUTPUT MODULE SPECIFICATIONS

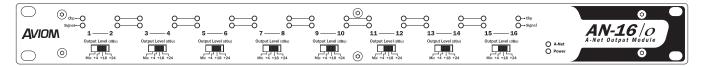
Audio Outputs	16 channels, balanced
	DB25 multipin connectors (2), analog pinout
	Impedance balanced outputs (Mic, +4dBu, and +18dBu); Differential output (+24dBu)
D/A Conversion	48kHz, 24-bit
Operating Levels	4-position switch, per channel pair
	+24, +18, and +4dBu line-level, or mic-level
Max. Output Level	+24dBu
Metering	LEDs; green: Signal Present; red: Clip; per channel
Output Impedance	226 ohms (+18dBu, +24dBu); 100 ohms (+4dBu, Mic)
Freq. Response	4Hz-22kHz +0.2dB/-3dB
THD +N	< 0.004%
Crosstalk	-90dB
Signal to Noise (unweighted)	92dB typical, A/D to D/A
	Measured from AN-16/i Input Module to AN-16/o v.4 Output Module

Bit Error Rate (BER)	10-12
Digital Connections	A-Net In: 1; A-Net Out: 1; A-Net Expansion: 1; Locking Cat-5 connectors
A-Net	A-Net Expansion allows 32 channels of audio to be transmitted over one Cat-5e cable when using two input modules and two output modules
	Uses unshielded Cat-5e UTP (or better) cable
Latency	0.620 msec (measured from analog input to analog output)
<b>Power Supply</b> Input Voltage Output Voltage Plug Size	External, DC, universal switching type 100-240 volts, 50/60Hz, 30VA 24 VDC, 0.5 amp 2 mm
Dimensions	19" (482.6 mm) wide x 5.75" (146 mm) deep; 1U high
Weight	6.8 lb. (3.08 kg)
Options	SB4 System Bridge; used to combine up to four A-Net streams for transmission over one Cat-5e cable
All Aviom products are designed and manufactured in the USA.	



# **FRONT PANEL FEATURES**

- LED Meters: Signal and Clip
- Output Levels: +24dBu, +18dBu, +4dBu, Mic



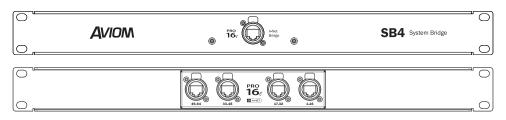
# **REAR PANEL FEATURES**

- DB25 multipin outputs
  A-Net Out
- A-Net In

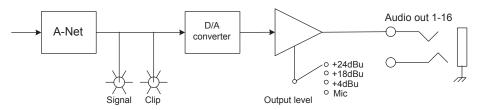
A-Net Expansion



## Optional SB4 System Bridge Four A-Net In, One A-Net Bridge Out



#### AN-16/o v.4 BLOCK DIAGRAM



#### **ARCHITECTURAL SPECIFICATION**

The Aviom AN-16/o v.4 shall provide sixteen channels of digital-to-analog conversion from signals transmitted digitally via an A-Net<sup>®</sup> network. It shall provide fullbandwidth, high-quality audio by employing the Aviom A-Net audio transmission protocol. It shall employ 24-bit D/A converters with a 48kHz sampling rate.

It shall have a frequency response from 4Hz to 22kHz, +0/-0.3dB or better, with total harmonic distortion no more than 0.003% at 1kHz with a +4dBu input signal. Maximum input level without clipping shall be +22dBu. Output level for each channel pair shall be selectable from a front-panel four-position switch, with settings of +24, +18, and +4dBu line-level, or mic-level. Output impedance shall be 430 ohms.

Front panel per-channel features shall include LED indicators for Signal and Clip. A front-panel power LED shall be provided.

Rear panel features shall include a detachable DC power cord. The unit shall be powered from an external universal power supply (input voltage 100 to 240VAC; output voltage 24VDC, 0.5 amps). It shall be UL and CE listed.

The rear panel shall have locking Cat-5 connectors for A-Net digital signal input and output, as well as for the A-Net Expansion connections.

The AN-16/o v.4 model shall employ two DB25 multipin connectors for the sixteen analog audio outputs.

Its dimensions shall be 19 inches wide, 9 inches deep, and 1U (1.75 inches) high. Its net weight shall be 6.8 pounds, and its steel chassis shall be finished in black. The unit shall be Aviom, Inc. model AN-16/o v.4.

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