

AMX NMX-ATC-N4321D

Audio over IP Transceiver with Dante and AES67

NMX-ATC-N4321D (AMX-N43T001), Stand Alone NMX-ATC-N4321D-C (AMX-N43T001C), Card





Overview

The AMX N4321D Audio-over-IP Transceiver is a powerful solution for connecting independent IP and analog audio networks. With support for Dante, AES67, and PCM audio-over-IP streams as well as balanced and unbalanced analog audio, the N4321D can bridge all the most popular audio networks. Whether the project requires converting from PCM to Dante, Dante to analog, analog to AES67, or nearly any other combination of these technologies, this transceiver makes it easy to integrate SVSI solutions with other audio networks.

Perfect for point-to-point or point-to-multi-point audio delivery, the N4321D provides audio matrix switching and distribution using the same control options as SVSI's Networked AV video switching and distribution solution. Additionally, an open API makes it compatible with any AMX or third-party controller on the market.

With two auto-sensing gigabit Ethernet ports, units can also be used to bridge low-latency multi-channel audio between separate networks. One Ethernet port is PoE+ for use with a PoE+ switch, eliminating the need for an external power supply.

Features

- Simplifies interoperability between SVSI and other IP audio networks
- Empowers powerful audio transcoding capabilities for conversion to and from Dante, AES67, streaming PCM and analog
- Two auto-sensing gigabit ethernet ports
- PoE+ Power eliminates the need for an external power supply and requires a single network cable
- An audio matrix with any number of inputs and outputs can be constructed
- UL2043 Plenum Space certification

Specifications

AUDIO	
Input	2-Channel user selectable balanced or unbalanced audio. 2-Channel Dante/AES67 audio 8-Channel PCM audio
Output	2-Channel balanced audio (1x 5-pin phoenix connector) 2-Channel Dante/AES67 audio 8-Channel PCM audio 2-Channel unbalanced audio (headphone jack)
Analog-To-Digital Conversation	16-bit 32 kHz, 44.1 kHz and 48 kHz
Phantom Power	48V on each of the input audio pins (L+, L-), 7mA per pin, or 14mA per channel

LATENCY	
Audio	20ms (excluding network propagation)

COMMUNICATIONS	
Ethernet	Multi-cast, unicast, IGMP v3, IPv6, layer-2 and layer-3 switch compatible.

PORTS	
+12V 2A	One 12 Volt DC power input
PO PoE+	8-wire RJ45 female. 10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch port. Provides both the network connection and the power to the Encoders and Decoders.
P1 DANTE	8-wire RJ45 female. 10/100 Mbps 10/100Base-T auto-sensing gigabit Ethernet switch port for Dante Audio
GPI	1-General purpose input.
RELAY	2-channel relay port.
AUDIO IN	5-pin terminal Phoenix connector which provides user- selectable balanced/ unbalanced input. Dedicated audio input.
AUDIO OUT	5-pin terminal Phoenix connector which provides user- selectable balanced audio output. Dedicated audio output.
HEADPHONE JACK	2-channel, unbalanced audio output

CONTROLS AND INDICATORS – FRONT PANEL	
RESET button	Recessed pushbutton. Press to initiate a 'warm restart' causing the processor to reset, but not lose power. A reset does NOT affect the current settings.
ID button	Recessed pushbutton. Press to send a notification out on the network to identify the unit (the notification causes a pop-up dialog in N-Able and N-Command). Holding the button for 30 seconds and releasing will cause the device to return to factory configuration.
POWER LED	On solid (green) when operating power is supplied (via PoE+ or local power supply). This activity is also shown by the PWR LED on the rear panel.
STATUS LED	On flashing (green) when there is software activity. This activity is also shown by the STAT LED on the rear panel.

CONTROLS AND INDICATORS – REAR PANEL	
PWR LED	Same as POWER LED described above.
STAT LED	Same as STATUS LED described above.
TX LED	On (green) when the unit is transmitting audio.
RX LED	On (green) when the unit is receiving audio.

POWER SUPPLY	
Power Supply, External, Not Included	2.0 Amp @ 12 Volts DC; 100-240 Volts AC power supply; Not included in shipment. NMX-ACC-N9312 (FGN9312)
Power over Ethernet (PoE+)	Can be powered via a PoE+ switch or other equipment with a PoE+ source. Conforms to IEEE 802.3at Class 4 (802.3at Type 2).
Note	For the unit to receive Power over Ethernet (PoE+), it must be connected to a switch or other equipment that has a PoE+ PSE (Power Sourcing Equipment) port. Warning: Do not run wiring that is connected to a PoE+ PSE port outside of the building where the PSE resides. It is for intrabuilding use only.

GENERAL	
Dimensions (LWH)	AMX-N43T001: 7.87" x 5" x 1.04" (200mm x 127.10mm x 26.60mm) AMX-N43T001C: 8.25" x 4.92" x 0.81" (209.55mm x 125.22mm x 20.64mm)
Product Weight	1.5 lbs (0.7 kg)
Shipping Weight	2.1 lbs (0.94 kg)
Mounting Options	Stand alone, surface mount, wall mount, or rack mount
	Surface and wall mounting requires (not included):
	• NMX-ACC-N9101 (FGN9101), Mounting Wings for SVSI N- Series Encoders and Decoders
	Rack mounting requires one of the following (not included):
	 NMX-ACC-N9102 (FGN9102), 1RU Rack Shelf for Two Side-by-Side for SVSI N-Series Encoders and Decoders
	• NMX-ACC-N9206 (FGN9206), 2RU Rack Mount Cage with Power for Six SVSI N-Series Card Units
Regulatory Compliance	FCC, CE, and UL (including 2043)
Recommended	• NMX-ACC-N9101 (FGN9101), Mounting Wings for SVSI N- Series
Accessories	Encoders and Decoders
	• NMX-ACC-N9102 (FGN9102), 1RU Rack Shelf for Two Side-by-Side SVSI
	N-Series Encoders and Decoders
	• NMX-ACC-N9206 (FGN9206), 2RU Rack Mount Cage with Power for Six
	SVSI N-Series Card Units

