




HARMAN NMX-ATC-N4321D-C Audio Transceiver Card User Guide

[Home](#) » [Harman](#) » HARMAN NMX-ATC-N4321D-C Audio Transceiver Card User Guide 

Contents

- [1 HARMAN NMX-ATC-N4321D-C Audio Transceiver Card](#)
- [2 Overview](#)
- [3 Installing the N4321D-C Encoder Card](#)
- [4 Attaching Signal and Control Cables](#)
- [5 RESET and ID Buttons](#)
- [6 Steps for IP address configuration](#)
- [7 Specifications](#)
- [8 Documents / Resources](#)
 - [8.1 References](#)
- [9 Related Posts](#)

HARMAN

HARMAN NMX-ATC-N4321D-C Audio Transceiver Card



Product Information

The NMX-ATC-N4321D-C Audio Transceiver Card is a component that can be installed into the N9206 Card

Frame. It is designed to encode and transmit audio signals over an AV network. The card has LED indicators, rear connectors for power and audio, as well as RESET and ID buttons for control.

Connector Description

- **External Power:** Connect a 12v regulated power supply (P/N N9312) to the unit's two-pin terminal block plug connector labeled 12V 2A.
- **PoE:** Connect the unit P0 port to an active, PoE-enabled network switch.
- **MIC/AUDIO IN:** Connect a line-level analog audio source to the Audio input terminal block plug connector for audio encoding.
- **AUDIO OUT:** Connect a line-level analog audio receiver to the Audio output terminal block plug connector for audio decoding.

Indicator LEDs

The N4321D-C Encoder Card has front and rear LEDs that indicate various states:

- **Front LEDs: POWER STATUS**
 - Green: Indicates that PoE/External power is applied.
- **Rear LEDs: POWER STAT, TX, RX**
 - Green: Indicates that PoE/External power is applied.
 - On flashing (green): Indicates software activity.
 - On: Indicates that TX audio function is enabled.
 - On: Indicates that RX audio function is enabled.

Product Usage Instructions

1. Ensure that the NMX-ATC-N4321D-C Audio Transceiver Card is securely mounted and connected to the switch before attaching any cables.
2. Disable the wireless adapter on your computer and connect it directly to the switch using a wired connection.
3. To install the N4321D-C Encoder Card into the N9206 Card Frame:
 - Gently slide the N4321D-C into the card cage slot, aligning it correctly with the guides and ensuring that the front LED indicators align with the holes in the cage faceplate.
 - Align the thumb screw onto the back plate before seating the N4321D-C into the cage.
 - Firmly seat the N4321D-C and tighten the thumb screw by hand to secure it.
 - Use the 2-pin Phoenix connector cable with ferrite core attached to connect the N4321D-C 12VDC input Phoenix connector to one of the N9206 six 12VDC outputs.
4. Attach the necessary cables to the Audio Transceiver according to the following guidelines:
 - Connect a 12v regulated power supply to the External Power connector.
 - Connect the P0 port to an active, PoE-enabled network switch using an appropriate cable.
 - Connect a line-level analog audio source to the MIC/AUDIO IN connector for audio encoding.
 - Connect a line-level analog audio receiver to the AUDIO OUT connector for audio decoding.
5. Once all cables are connected, check the LED indicators on the front and rear of the N4321D-C Encoder Card to ensure normal power-up.
6. If needed, use the RESET button to reset the Transcoder's CPU, and use the ID button to identify the unit in N-

Able or set the Encoder back to factory defaults.

7. To establish an IP address configuration:

- Open the Control Panel and navigate to Network and Internet Network and Sharing Center.
- Select Change adapter settings.
- Select the wired interface connected to your AV network.
- Click the Properties button.
- Scroll down and highlight the Internet Protocol Version 4 (TCP/IPv4) option.
- Click the Properties button.
- Enable the “Use the following IP address” option and enter the static IP address.

Overview

The SVSI NMX-ATC-N4321D Audio Transcoder with Dante is an audio-over-IP solution that sends and receives multichannel balanced or unbalanced audio over IP. The NMX-ATC-N4321D can receive analog audio input and convert that into network packets, allowing the user to switch and route the audio, just like data and voice. The balanced analog audio output receives an audio-over-IP stream and decodes to analog while preserving audio fidelity. The NMX-ATC-N4321D provides audio matrix switching and distribution using the same control options as SVSI's Networked AV video switching and distribution solution. One Ethernet port is PoE for use with a PoE switch, eliminating the need for an external power supply.

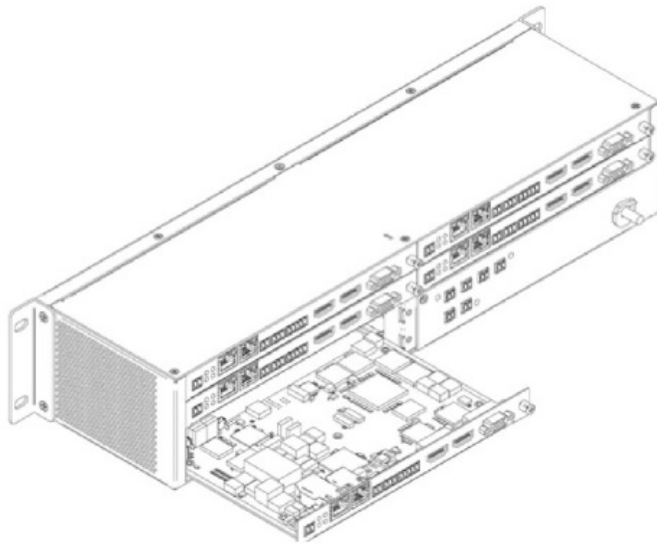


Installing the N4321D-C Encoder Card

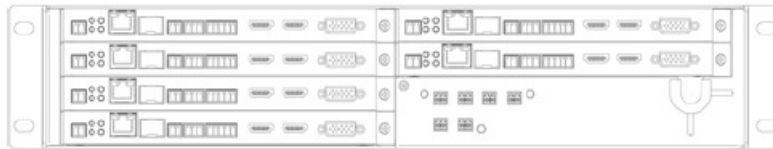
Follow the steps below to install your new N4321D-C Encoder into an existing N9206

Card Frame

1. Gently slide the N4321D -C into the card cage slot. Make sure the card is correctly aligned with the guides. The N4321D -C front LED indicators should align with the holes in the cage faceplate. See Fig. 2.



2. Align the thumb screw onto the back plate before seating the N4321D -C into the cage.
3. Firmly seat the N4321D -C and tighten the thumb screw by hand to secure the N4321D -C.
4. Use the 2-pin Phoenix connector cable with ferrite core attached to connect the N4321D-C 12VDC input Phoenix connector to one of the N9206 six 12VDC outputs.
5. Repeat these steps until all N4321D -C is appropriately installed. See Fig. 3.



6. Fully Populated N9206
7. For proper airflow, cover any unused card slots with faceplate blanks. Blanks are sold separately (part number NMX-ACC-N9210).
8. Make sure the N9206 power is plugged in for proper cooling. The POWER LED on the front of the N9206 should ALWAYS be on when cards are installed and powered on.

Attaching Signal and Control Cables

The following table explains how to attach cables to the Audio Transceiver. **IMPORTANT:** Audio Transceiver must be securely mounted and connected to the switch before attaching the remaining cables.

NOTE: Disable the wireless adapter on your computer (it must be hard-wired to the switch).

Basic Cabling Guidelines

The table shows LED states on initial power-up. If not normal, check connections.

Connector	Description
External Power	External Power Connect a 12v regulated power supply (P/N N9312) to the unit's two-pin terminal block plug connector labeled 12V 2A
P0 (PoE)	PoE Connect the unit P0 port to an active, PoE-enabled network switch.
MIC/AUDIO IN	Analog Audio Connection Connect to a line-level analog audio source to the Audio input terminal block plug connector for audio encoding.
AUDIOOUT	Analog Audio Connection Connect a line-level analog audio receiver to the Audio input terminal block plug connector for audio encoding.

Indicator LEDs	Normal power up	Indicates
Front LEDs		
POWER	Green	PoE/External power is applied.
STATUS	Green	On flashing (green) when there is software activity.
Rear LEDs		
POWER	Green	PoE/External power is applied.
STAT	Green	On flashing (green) when there is software activity.
TX	Green	On when TX audio function is enabled.
RX	Green	On when RX audio function is enabled.

RESET and ID Buttons

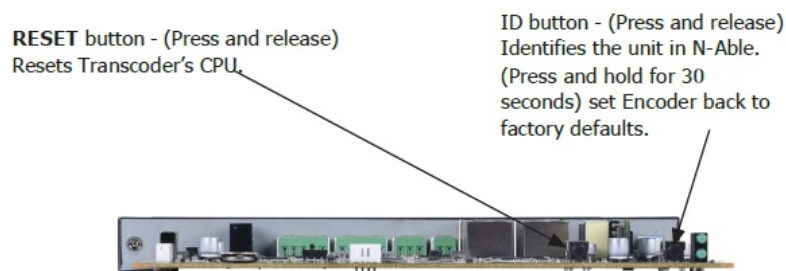


FIG. 4 BUTTONS LOCATED ON FRONT OF UNIT

Establishing Connection

N4321D-C Transcoders are shipped with DHCP as their default IP mode. The IP address is assigned

automatically based on the network DHCP server. If no DHCP server is found, the unit will use Auto IP mode instead (with a default IP address of 169.254. xxx. xxx). Before using your N4321D -C Encoder unit, it must be configured using the free N-Able device management software. However, you cannot configure units until they are in the same subnet as the host computer. The sample steps below show how the required changes (to the host computer's IP settings) are made in a Windows environment.

Steps for IP address configuration

From the Control Panel > Network and Internet dialog box, select Network and Sharing Center.

Select Change adapter settings

- Select the wired interface connected to your AV network.
- Click the Properties button.
- Scroll down in the list to the Internet Protocol Version 4 (TCP/IPv4) option. Highlight it and click the Properties button.
- Enable the Use the following IP address option, and enter the static IP address provided to you by your network administrator.

NOTE: If the computer does not need Internet access, enter a unique 169.254.xxx.xxx IP address with a 255.255.0.0 Subnet mask. Please contact your network administrator if unsure how to configure the existing interface. If the computer has a statically assigned IP address, click the Advanced button. Then click Add to enter a unique 169.254.xxx.xxx address with a subnet of 255.255.0.0.

Steps for Dante's IP address configuration

1. Use the host computer to download and install the latest version of Dante Controller:
PC Version – <https://my.audinate.com/support/downloads/dante-controller>
2. Attach your N4321D-C Encoder unit(s) to the managed network switch.
3. Connect the host computer to the same managed network switch.
4. Open the Dante Controller application.
5. Refer to the Dante Software and directions to configure the IP address. Steps for auto-discovering devices on the network:
6. Use the host computer to download and install the latest version of N-Able: PC Version – <http://www.amx.com/products/N-ABLE-C.asp>
7. Attach your N4321D-C Encoder unit(s) to the managed network switch.
8. Connect the host computer to the same managed network switch.
9. Open the N-Able application.

Note: If all devices do not appear automatically, click the Auto Discover button on the Unit Management tab. This issues a broadcast command that will discover all units.

Logging in Using N-Able Software

Once the host IP address is configured correctly, you can view all discovered units using the N-Able software. Access the N4321D -C Encoder units from the following tabs:

- Unit Management tab – N4000 Audio is listed in the Type field.
- Audio Matrix tab – N4321D-C Audio units are found on the SVSI Audio sub-tab of this screen.

You can access any of the main pages of the unit's GUI from this page. Double-click the unit's name (in one of the above lists) to view its Settings page. If prompted, enter the admin and password for the default username and password. Once logged in, you can change the username and password (using the options on the unit's Settings page).

NOTE: If you would like for N-Able to support auto-login to your units, make sure N-Able's Device Auto-login settings match the unit's username and password (by selecting N-Able > Settings from the N-Able toolbar).

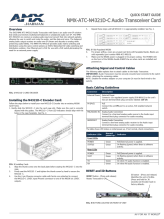
NOTE: N4321D-C Audio units can be configured to force HTTPS connections, so your web browser may give you a security warning.

Specifications






Product Specifications	
SKU Available:	AMX-N43T001C
Power Requirements:	PoE: Powered via a PoE switch or other equipment with a PoE source. Conforms to IEEE 802.3at Class 4 (802.3at Type 2). External: 2.0 amp @ 12 volts DC; 100-240 Volt AC power supply, P/N N9312 (Sold separately) or via N9206 Card Cage (Sold separately)
Dimensions:	20 cm x 12.7 cm x 2.7 cm (LxWxH)
Product Weight:	0.59 lbs (Approx. 0.27 kg)
Shipping Weight:	1.14 lbs (Approx. 0.52 kg)
Certifications:	FCC, CE, and UL
Environmental:	Temperature: 32° to 104°F (0° to 40°C) Humidity: 10% to 90% RH (non-condensing)
Installation	AMX N9206 Card Cage *
NOTE: *Card cage (part number FGN9206) required for rack mounting. The card cage accommodates six N-Series Encoder and Decoder cards (mix and match any series).	

© 2023 Harman. All rights reserved. SmartScale, NetLinx, Enova, AMX, AV FOR AN IT WORLD, HARMAN, and their respective logos are registered trademarks of HARMAN. Oracle, Java, and any other company or brand name referenced may be trademarks/registered trademarks of their respective companies. AMX does not assume responsibility for errors or omissions. AMX also reserves the right to alter specifications without prior notice. The AMX Warranty and Return Policy and related documents can be viewed/downloaded at www.amx.com. 3000 RESEARCH DRIVE, RICHARDSON, TX 75082 AMX.com | 800.222.0193 | 469.624.8000 | +1.469.624.7400 | fax 469.624.7153

Documents / Resources

	HARMAN NMX-ATC-N4321D-C Audio Transceiver Card [pdf] User Guide NMX-ATC-N4321D-C, N9206, NMX-ACC-N9210, NMX-ATC-N4321D-C Audio Transceiver Card, Audio Transceiver Card, Transceiver Card, Card
---	--

References

-  [AMX Audio Video Control Systems](#)
-  [AMX Audio Video Control Systems](#)
-  [AMX Audio Video Control Systems](#)
-  [Search Results | AMX Audio Video Control Systems](#)
-  [Download Dante Controller Software | Audinate](#)

[Manuals+.](#)