

# **AXI 22 AT D • Setup Guide**



This guide provides basic instructions for an experienced technician to install the AXI 22 AT D Decorator-Style Wallplate Audio Expansion Interface with Dante. For additional information and specifications, see the AXI 22 AT D product page at www.extron.com.

### Disconnect Power and Mount the AXI 22 AT D

Before beginning installation, disconnect power and turn off all devices that will be connected to the AXI 22 AT D. The AXI 22 AT D can be installed anywhere microphones or other sources are located. Select a suitable mounting location, then choose an appropriate mounting option (see the instructions provided with the chosen mounting option).

### **Rear Panel Connections**

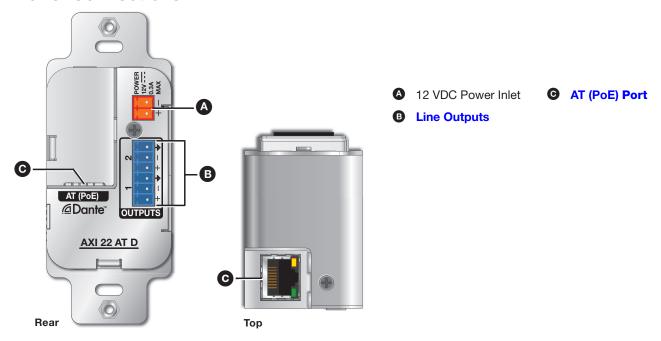


Figure 1. AXI 22 AT D Rear Panel

**12 VDC Power Inlet** – As an alternative to Power over Ethernet (PoE), the AXI 22 AT D can be powered with an optional 12 VDC power supply. Connect the power supply to the rear panel power inlet with a captive screw connector and plug the power cord into the IEC connector on the power supply (see wiring in figure 2 below). The power LEDs behind the front panel light steadily while the unit is booting, then turn off when the device is powered and operational. The rear panel AT (PoE) port activity lights also blink when the unit is operational.

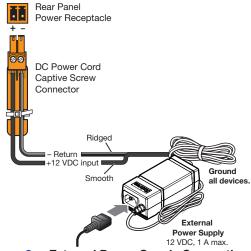
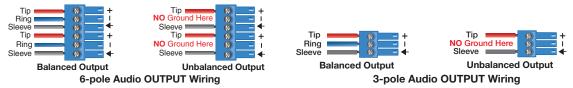


Figure 2. External Power Supply Connection

#### ATTENTION:

- Always use a power supply provided by or specified by Extron. Use of an unauthorized power supply voids all
  regulatory compliance certification and may cause damage to the supply and the end product.
- Utilisez toujours une source d'alimentation fournie par Extron. L'utilisation d'une source d'alimentation non autorisée annule toute conformité réglementaire et peut endommager la source d'alimentation ainsi que l'unité.
- Unless otherwise stated, the AC/DC adapters are not suitable for use in air handling spaces or in wall cavities.
   The power supply is to be located within the same vicinity as the Extron AV processing equipment in an ordinary location, Pollution Degree 2, secured to the equipment rack within the dedicated closet, podium, or desk.
- Sauf mention contraire, les adaptateurs AC/DC ne sont pas appropriés pour une utilisation dans les espaces d'aération ou dans les cavités murales. La source d'alimentation doit être située à proximité de l'équipement de traitement audiovisuel dans un endroit ordinaire, avec un degré 2 de pollution, fixé à un équipement de rack à l'intérieur d'un placard, d'une estrade, ou d'un bureau.
- The installation must always be in accordance with the applicable provisions of National Electrical Code ANSI/NFPA 70, article 725 and the Canadian Electrical Code part 1, section 16. The power supply shall not be permanently fixed to building structure or similar structure.
- Cette installation doit toujours être en accord avec les mesures qui s'applique au National Electrical Code ANSI/NFPA 70, article 725, et au Canadian Electrical Code, partie 1, section 16. La source d'alimentation ne devra pas être fixée de façon permanente à une structure de bâtiment ou à une structure similaire.
- **B** Line Outputs Use a 6-pole 3.5 mm captive screw connector to connect two balanced or unbalanced mono line level devices or one stereo device. Connect these mono or stereo line outputs directly to an amplifier, recorder, or other audio device. These outputs are listed as receivers on the Dante network (see **Dante Transmitters and Receivers** on page 6). Wire as shown below.



**ATTENTION:** For **unbalanced** audio outputs, connect the sleeves to the ground contact. **DO NOT** connect the sleeves to the negative (-) contacts.

**ATTENTION:** Pour l'audio asymétrique, connectez les manchons au contact au sol. Ne PAS connecter les manchons aux contacts négatifs (–).

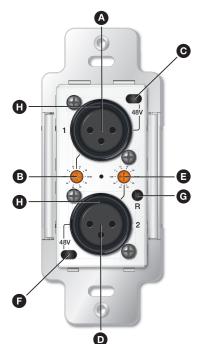
#### **NOTES:**

- Balanced or unbalanced stereo sources can be connected with 6-pole connectors.
- When using the 5-pole CSR adapter, connect it so the far left plug is inserted into the far left jack of the 6-pole input (see figure below).

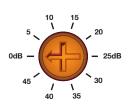


• AT (PoE) Port — Insert an Ethernet cable into this RJ-45 port to connect the AXI 22 AT D to a Dante network. This port supports Power over Ethernet (PoE), digital audio transport (AT), and communication with the Dante network for configuration via Dante Controller.

# **Front Panel Connections and Configuration**



NOTE: Remove the screw in the middle of the front panel to lift off the faceplate and expose the controls.



Position	Value	Position	Value		
0	0 dB	5	25 dB		
1	5 dB	6	30 dB		
2	10 dB	7	35 dB		
3	15 dB	8	40 dB		
4	20 dB	9	45 dB		

- A Mic/Line Input 1
- B Input 1 Gain Control
- Mic/Line Input 2
- Input 2 Gain Control
- Input 2 Phantom Power Switch
- Power LEDs

Figure 3. AXI 22 AT D AT Front Panel Controls and Gain Rotary Knob

- Mic/Line Input 1 One female XLR for balanced or unbalanced mic/line audio input.
- Input 1 Gain Control This 10-position rotary knob sets input 1 gain between 0 dB (default) and +45 dB in 5 dB steps.
- Input 1 Phantom Power Switch A recessed, two-position toggle switch sets +48 V phantom power on (right) and off (left) for input 1. To enable or disable phantom power, insert a small flat-headed screwdriver into the opening for the switch (near the upper-right corner of the faceplate) and slide the switch right or left. A green LED behind input 1 lights when phantom power is applied (the LED is visible through the top of input 1).
- Mic/Line Input 2 One female XLR for balanced or unbalanced mic/line audio input.
- **Input 2 Gain Control** This 10-position rotary knob sets input 2 gain between 0 dB (default) and +45 dB in 5 dB steps.
- Input 2 Phantom Power Switch A recessed, two-position toggle switch sets +48 V phantom power on (left) and off (right) for input 2. To enable or disable phantom power, insert a small flat-headed screwdriver into the opening for the switch (near the lower-left corner of the faceplate) and slide the switch right or left. A green LED behind input 2 lights when phantom power is applied (the LED is visible through the top of input 2).
- Reset Button Using a stylus or small screwdriver, press this button for 10 seconds and release to reset the unit to factory defaults. Dante settings such as device name, IP address, channel names, and sample rates are reset to defaults. Gain values and phantom power settings are not affected.
- 1 Power LEDs These orange LEDs are located behind the front panel and light when power is applied to the unit (visible through the top of the XLR inputs). The LEDs light while the AXI 22 AT D is booting up and turn off when boot-up is complete. They light steadily if no network connection is detected.

# Downloading and Installing Dante Controller Software

Dante Controller from Audinate is required to select and route audio across the Dante network and for limited configuration of the device. Install Dante Controller on a PC running Microsoft® Windows® 7 or newer. For full details about computer requirements, see the Dante Controller product page at www.extron.com.

- From the Extron home page (www.extron.com), click the Download tab to open the Download page.
- Under Software, on the left side of the page, select Dante Controller. The Dante Controller product page opens.
- Click the **Download** button and follow the on-screen instructions to complete the Dante Controller installation process.

**NOTE:** An Extron Insider account is required to download Dante Controller.

## **Creating a Physical Dante Network**

A physical network is required to share Dante audio channels among Dante-enabled devices like the AXI 22 AT D. Other devices capable of sending and receiving audio over a Dante network must be on the same physical network in order to communicate via Dante (see figure 4 below for an example of a physical Dante Network).

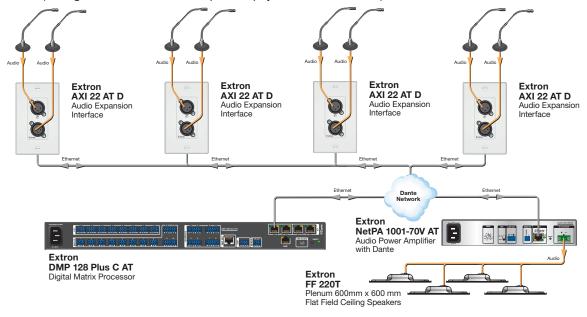


Figure 4. Physical Dante Network Diagram

## **Dante Network Setup**

Use a standard Ethernet cable to connect the AXI 22 AT D to a network via the AT (PoE) port (see **figure 1**, **6** on page 1) and power the device. Launch the Dante Controller program.

Dante Controller auto-discovers all Dante devices on the network and advertises itself to allow other Dante-enabled devices to communicate with it. The default name consists of the product name followed by a hyphen (AXI22D-) plus the last 6 digits of the unit MAC address (for example, AXI22D-0744b2). Multiple devices on the same network can present difficulty in identifying a specific device on the network. To avoid confusion, rename each device with a unique and meaningful identifier.

### **Renaming a Dante Device**

**NOTE:** It is essential that Dante devices are named immediately after they are connected to the Dante network and before audio subscriptions with other devices are established. Existing subscriptions (audio connections) are removed when a device is renamed.

- 1. Ensure that the host PC and a single AXI 22 AT D are connected to the same network.
- Open Dante Controller. The Dante Controller Network View screen opens. All Dante devices on the network are discovered and listed.
- 3. From the Device menu, select Device View.

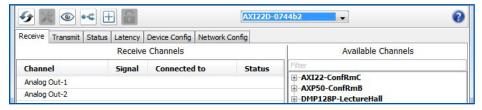


4. The Dante Controller - Device View dialog opens. Select the device from the (Select a Dante Device...) drop-down list.

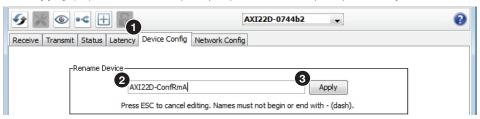


**NOTE:** If the AXI 22 AT D has not been renamed, its default name consists of the product name followed by a hyphen (AXI22D-) plus the last 6 digits of the unit MAC address (for example, AXI22D-Ø744b2).

The Device View dialog populates with the selected AXI 22 AT D information.



- 5. Click the **Device Config** tab (see 1) in the figure below) to open the device configuration page.
- 6. In the Rename Device panel, enter the new name of the device in the text field (2). Device names follow Domain Name System (DNS) hostname rules (refer to the Dante Controller section of the AXI 22 AT D User Guide for a full list of device name rules).
- 7. Click **Apply** (3). A confirmation prompt opens. Read the prompt carefully.



8. Click Yes to enter the new name, then close the Device Configuration dialog box.

The new name is written to the AXI 22 AT D. Repeat as necessary for all devices.

**NOTE:** After the AXI 22 AT D is renamed, it remains connected to the network. Subsequent devices should be connected one at a time and renamed before the next device is connected.

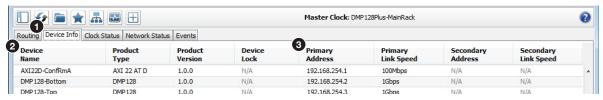
### **Finding a Dante Device IP Address**

To find the IP address of a Dante device, you need the name of the device (see Renaming a Dante Device on the previous page).

**NOTE:** If the AXI 22 AT D has not been renamed, its default name consists of the product name followed by a hyphen (AXI22D-) plus the last 6 digits of the unit MAC address (for example, AXI22D-0744b2).

- 1. Open Dante Controller.
- 2. On the Dante Controller Network View screen, click the **Device Info** tab (see 1 in the figure below).
- 3. On the Device Info page, locate the name of the AXI 22 AT D in the Device Name column (2). The IP address is in the Primary Address column (3).

In the example below, the IP address of the connected AXI 22 AT D is 192.168.254.1.



## **Dante Operation**

#### **Dante Transmitters and Receivers**

A Dante network is comprised of transmitters that output digital audio onto the Dante network and receivers that receive digital audio from the Dante network.

The AXI 22 AT D mic/line inputs are Dante transmitters because the analog audio input is converted into digital audio and transmitted onto the Dante network.

The AXI 22 AT D line outputs are Dante receivers because they receive digital audio from the Dante network and output that signal as analog audio.

### **Network View Layout**

Dante transmitters are listed horizontally across the top of the Network View window (see 1) in the figure to the right). Dante receivers are listed vertically on the left side of the window (2). Create a link in the connection matrix (3) to create a subscription and route audio from a Dante transmitter to a Dante receiver.

### **Routing Transmitters and Receivers**

- Click the + box next to the device with the desired Dante transmitters (AXI22D-ConfRmA in the example to the right). The available transmitters display horizontally (1).
- 2. Click the + box next to the device with the desired Dante receivers (DMP128Plus-LectureHall in the example to the right). The available receivers display vertically (2).
- 3. Click the intersection of the desired transmitter and receiver in the connection matrix (3).

**Example**: AXI22D-ConfRmA TableMic-Front is connected to DMP128P-LectureHall ConfRmA-FrontMic (shown to the right).

**NOTE:** Notice the clearly defined transmitter and receiver channel names to help manage connections.

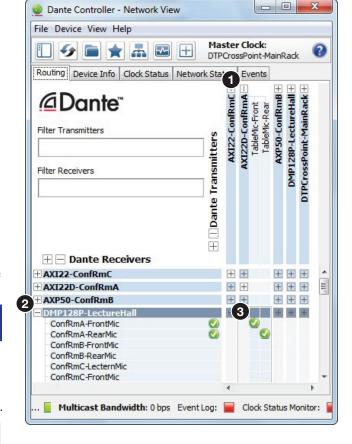
A green check mark at the intersection indicates the subscription is made. A check mark is also placed next to the receiver channel (if a green check mark does not appear, refer to the Dante Controller section of the AXI 22 AT D User Guide).

**NOTE:** A transmitter can transmit signal to multiple receivers, but a receiver can only receive signal from one transmitter

one transmitter.

4. Click the intersection again to disconnect the transmitter from the receiver.

Additional subscriptions between transmitters and receivers can be made or removed using steps 1 through 4 as shown above (for additional information on Dante Controller operation, see the AXI 22 AT D User Guide at www.extron.com).



Extron Headquarters +800.633.9876 Inside USA/6	Canada Only	Extron Europe +800.3987.6673 Inside Europe Only	Extron Asia +65.6383.4400 +65.6383.4664 FAX	Extron Japan +81.3.3511.7655 +81.3.3511.7656 FAX	Extron China +86.21.3760.1568 +86.21.3760.1566 FAX	Extron Middle East +971.4.299.1800 +971.4.299.1880 FAX	Extron Australia +61.8.8113.6800 +61.8.8351.2511 FAX	Extron India 1800.3070.3777 (Inside India Only)
Extron USA - West +1.714.491.1500 +1.714.491.1517 FAX	Extron USA - East +1.919.850.1000 +1.919.850.1001 FAX	+31.33.453.4040 +31.33.453.4050 FAX	+03.0303.4004 FAX	+01.3.3311.7030 FAX	+00.21.3700.1300 FAX	+971.4.299.1000 FAX		+91.80.3055.3777 +91.80.3055.3737 FAX