

AXI 22 AT D Plus and WPD 102 XLRM • Setup Guide

IMPORTANT NOTE:

Go to www.extron.com for the complete user guide, installation instructions, and specifications before connecting the product to the power source.



This guide provides basic instructions for an experienced technician to install the AXI 22 AT D Plus Wallplate Audio Expansion Interface with Dante® and the WPD 102 XLRM Audio Pass-Through Wallplate. For additional information and specifications, see the AXI 22 AT D Plus and WPD 100 AV Series product pages at www.extron.com.

Disconnect Power and Mount the AXI 22 AT D and WPD 102 XLRM

Before beginning installation, disconnect power and turn off all devices to be connected to the AXI 22 AT D Plus and WPD 102 XLRM. These devices can be installed anywhere microphones or other sources are located. Select a suitable mounting location, then choose an appropriate mounting option (see [Installing the AXI 22 AT D Plus and WPD 102 XLRM](#) on page 3).

For information about using Dante® Controller Software with the AXI 22 AT D Plus and WPD 102 XLRM, see [Dante Operation](#) on page 6.

Rear Panel Connections

- **12 VDC power inlet** (see figure 1) — As an alternative to Power over Ethernet (PoE), the AXI 22 AT D Plus 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 figure 1 for wiring).

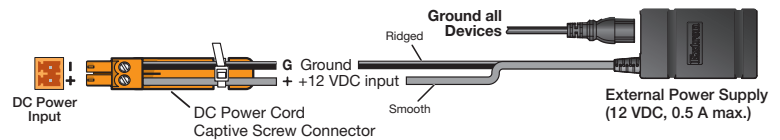


Figure 1. External Power Supply Connection

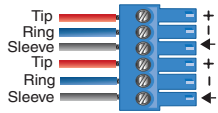
The amber power LEDs behind the front panel blink while the unit is booting. They turn off when the device is ready and connected to a network. If a network connection is not detected, the LEDs light steady until a network connection is achieved. The rear panel AT (PoE) port activity lights also blink when the unit is operational.

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.

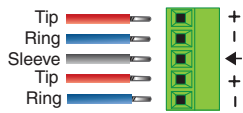
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- **Line Outputs** — Use the provided 6-pole 3.5 mm captive screw connector to connect directly to the AXI 22 AT D Plus panel. These outputs are listed as receivers on the Dante network (see [Dante Operation](#) on page 6). Wire as shown below.



Balanced Output
6-pole Audio OUTPUT Wiring

- **Line Inputs** — Use the provided 6 conductor shielded cable to connect directly to the WPD 102 XLRM panel. Since the WPD 102 XLRM only has a five contact terminals, twist the two sleeve conductors together and connect them to the single ground contact. Wire as shown below.



Balanced Output
5-pole Audio INPUT Wiring

- **RJ-45 AT (PoE) port** (see figure 2) — Insert an Ethernet cable into this RJ-45 port to connect the AXI 22 AT D Plus to a Dante network. This port supports Power over Ethernet (PoE), communication with DSP Configurator for configuration, digital audio transport (AT), and communication with the Dante/AES67 network for configuration via Dante Controller, which simultaneously transmits and receives a maximum of two Dante audio flows. Each audio flow can contain a maximum of two Dante audio channels (2-ch in x 2-ch out) each can be transported as either unicast or multicast data. The network speed of this port is 10/100 Mbps.

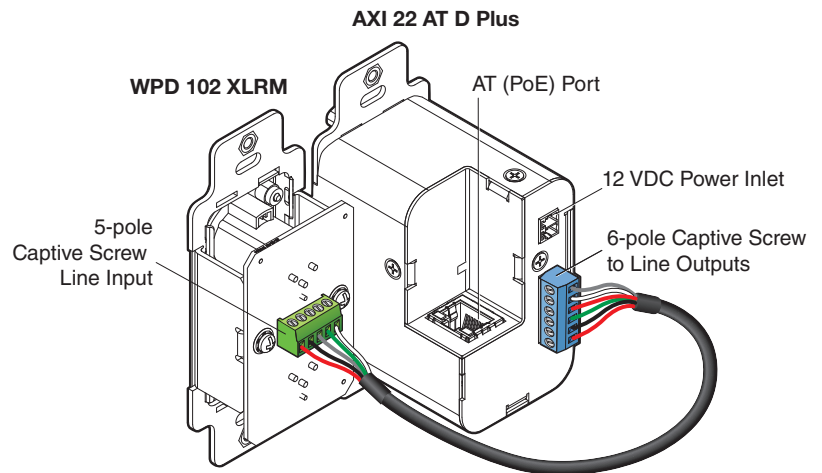


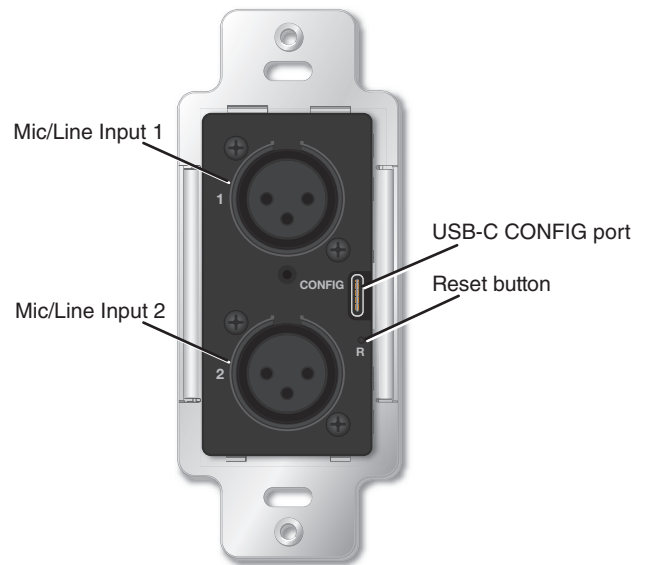
Figure 2. Line Inputs and Outputs

Front Panel Connections and Configuration

- **Mic/Line Input 1 and Mic/Line Input 2** — Two female XLR ports accept balanced or unbalanced mic/line audio signals.
- **LEDs visible through the top of the XLR ports** —
 - **Amber LEDs** light when power is provided. The LED blinks while the AXI 22 AT D Plus is booting up and is off when boot-up is complete. It lights steadily if there is no network connection.
 - **Green LEDs** light when +48 VDC phantom power is enabled.
- **USB-C CONFIG port** — Connect a PC to this port to configure the AXI 22 AT D Plus via DSP Configurator or update via Firmware Uploader.

NOTE: This USB-C port is accessed by removing the faceplate attached with the center screw.

- **Reset button** — Using a stylus or small pin, press this button for 10 seconds and release to reset the unit to factory Dante defaults. Dante settings such as device name, IP address, channel names, and sample rates are reset to defaults. Gain values, mute status, and phantom power settings are not affected.



Faceplate Removed

Figure 3. AXI 22 AT D Plus Front Panel

Installing the AXI 22 AT D Plus and WPD 102 XLRM

The AXI 22 AT D Plus and WPD 102 XLRM mount in a two-gang decorator-style wall plate, which can be attached to a two-gang mud ring (provided) or a two-gang wall box (not included).

To mount the products:

1. Using the mud ring as a guide, mark the edges and cut out the material within the marked area.
2. Insert the mud ring into the opening. Rotate and secure the locking arms with the supplied screws.
3. Connect the rear panel outputs and inputs, the Dante-enabled network cable, and power (see [figure 2](#) on page 2).
4. Install the devices into the wall box or mud ring and attach the wall plate. **Do not attach the AXI cover plate at this time.**
5. Connect the front panel inputs.
6. Connect the front panel outputs.
7. Start Dante Controller and route the input and output channels as desired (see [Dante Network Setup](#) on page 4 for information on Dante Controller Software).
8. Start DSP Configurator and connect to the AXI.
9. Adjust the gain controls as necessary.

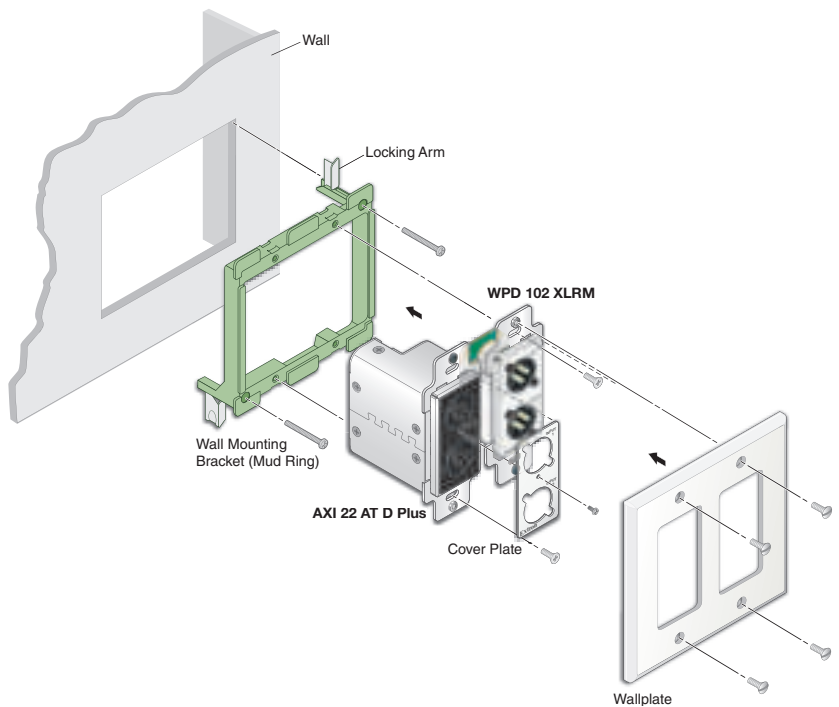


Figure 4. AXI 22 AT D Plus and WPD 102 XLRM Assembly

10. Disconnect the front panel connections, if necessary, and place the cover plate onto the front panel so that the two protruding input connectors fit through it. Secure the cover plate in place with the provided screw in the center.

Downloading and Installing DSP Configurator Software

The AXI 22 AT D Plus can be controlled with Extron DSP Configurator software using the USB or AT ports, or DataViewer using the USB port. Install DSP Configurator on a PC running on a PC running Microsoft® Windows® 10 or newer. For full details about computer requirements, see the DSP Configurator product page at www.extron.com.

NOTE: An Extron Insider account is required to download DSP Configurator.

1. At www.extron.com, hover over the **Download** tab. The Download window drops down.
2. Click the **DSP Configurator Software** link. The DSP Configurator Software page opens.
3. Click the **Download** button and follow the on-screen instructions to complete the DSP Configurator installation process.

See the *DSP Configurator Help File* in the software for detailed operating information.

Downloading and Installing Dante Controller Software

Dante Controller from Audinate is required to select and route digital inputs and outputs to connected Dante-compatible devices and for limited configuration of the device. Install Dante Controller on a PC running Microsoft Windows 10 or newer. For full details about computer requirements, see the Dante Controller product page at www.extron.com.

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

1. At www.extron.com, hover over the **Download** tab. The Download window drops down.
2. Click the **Dante Controller** link. The Dante Controller page opens.
3. Click the **Download** button and follow the on-screen instructions to complete the Dante Controller installation process.

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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 Plus. 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 5 for an example of a physical Dante Network).

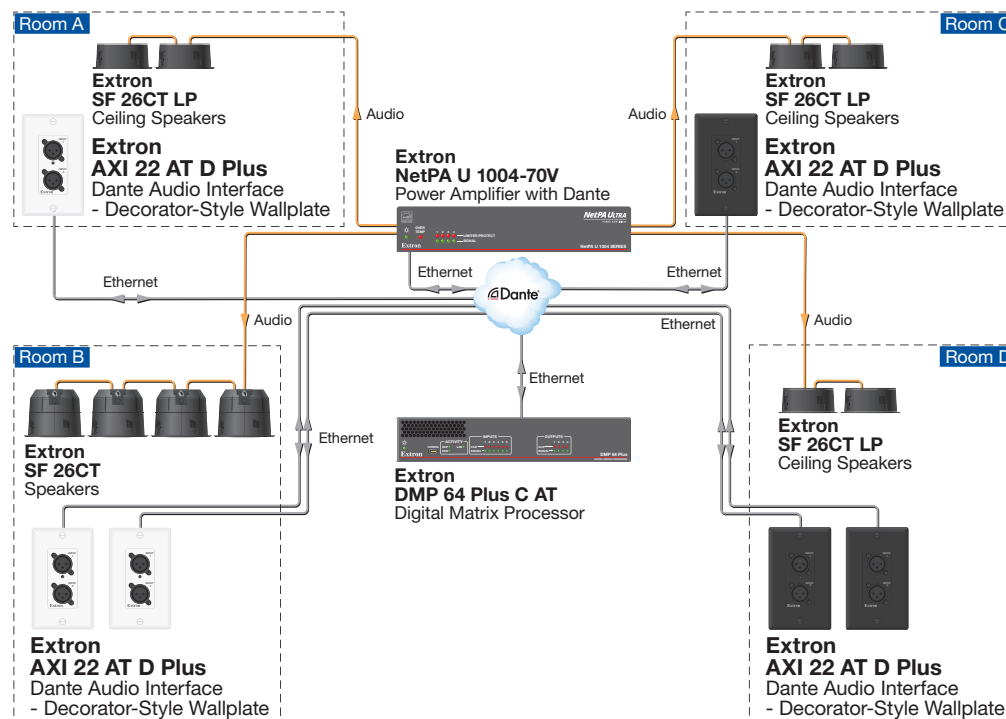


Figure 5. Dante Network Example

Dante Network Setup

Use a standard Ethernet cable to connect the AXI 22 AT D Plus to a network via the AT (PoE) port (see figure 2 on page 2) 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 (AXI22DP-) plus the last 6-digits of the unit MAC address (for example, AXI22DP-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 Plus are connected to the same network.
2. Open Dante Controller. The Dante Controller - Network View screen opens. All Dante devices on the network are discovered and listed.
3. From the Device list, select **Device View**.
4. The Dante Controller - Device View dialog opens. Select the device from the (**Select a Dante Device...**) drop-down list (see figure 6, 1).



Figure 6. Dante Controller - Device View dialog

NOTE: If the AXI 22 AT D Plus has not been renamed, the default name consists of the product name followed by a hyphen (AXI22DP-) plus the last 6-digits of the unit MAC address (for example, AXI22DP-0744b2).

The Device View dialog populates with the selected AXI 22 AT D Plus information. Identify the current device by causing its LEDs to flash, using the **Identify (eye)** button (see figure 7, ❶).



Figure 7. Device View Dialog Box

5. Click the **Device Config** tab (see figure 8, ❶) to open the device configuration page.



Figure 8. Device Configuration Tab

6. In the Rename Device panel, enter the new name of the device in the text field (❷). Device names follow Domain Name System (DNS) hostname rules (refer to the Dante Controller section of the *AXI 22 AT D Plus User Guide* for a full list of device name rules).
7. Click **Apply** (❸). 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 Plus. Repeat as necessary for all devices.

NOTE: After the AXI 22 AT D Plus is renamed, it can remain connected to the network. However, subsequent devices should be connected one at a time and must be renamed before the next device is connected.

Finding a Dante Device IP Address

To find the IP address of a Dante device, the name of the device is needed [Renaming a Dante Device](#) on page 4.

NOTE: If the AXI 22 AT D Plus has not been renamed, its default name consists of the product name followed by a hyphen (AXI22DP-) plus the last 6 digits of the unit MAC address (for example, AXI22DP-0744b2).

1. Open Dante Controller.
2. On the Dante Controller Network - View screen, click the **Device Info** tab (see figure 9, ❶).
3. On the Device Info page, locate the name of your AXI (❷). The IP address is in the Primary Address column (❸).

In figure 9, the IP address is 192.168.254.254.



Figure 9. Dante Controller Network - View

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 Plus 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 Plus line outputs are Dante receivers because the outputs 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 figure 10, ❶). Dante receivers are listed vertically on the left side of the window (❷).

Create a link in the connection matrix (❸) to create a subscription and route audio from a Dante transmitter to a Dante receiver.

Routing Transmitters and Receivers

1. Click the + box next to the device with the desired Dante transmitters. The available transmitters display horizontally (❶).
2. Click the + box next to the device with the desired Dante receivers. The available receivers display vertically (❷).
3. Click the intersection of the desired transmitter and receiver in the connection matrix (❸).

Example: Q3@Desk - IO is connected to Desk L@ConfRm - DSP.

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

A green check mark at the intersection of a transmit and receive channel indicates the subscription is active. 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 Plus User Guide*).

NOTE: A transmitter can transmit signal to multiple receivers, but a receiver can only receive signal from 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 Plus User Guide* at www.extron.com).



Figure 10. Dante Controller - Network View Screen

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the [Extron Safety and Regulatory Compliance Guide](#) on the Extron website.