

Crestron Avia® Digital Signal Processors

The Crestron® Avia® [DSP-860](#), [DSP-1280](#), [DSP-1281](#), [DSP-1282](#), and [DSP-1283](#) digital signal processors are functionally similar with varying capabilities. For simplicity within this guide, the term "DSP" is used except where noted.



In the Box

- 1 DSP-860, DSP-1280, DSP-1281, DSP-1282, or DSP-1283, Crestron Avia Digital Signal Processor

Additional Items

- 2 Bracket, Rack Ear, 1U (2032122)
- 1 Cable, Power, 6 ft 7 in. (2 m) (2001134)

DSP-860 Only

- 14 Connector, 3-Pin (2003575)

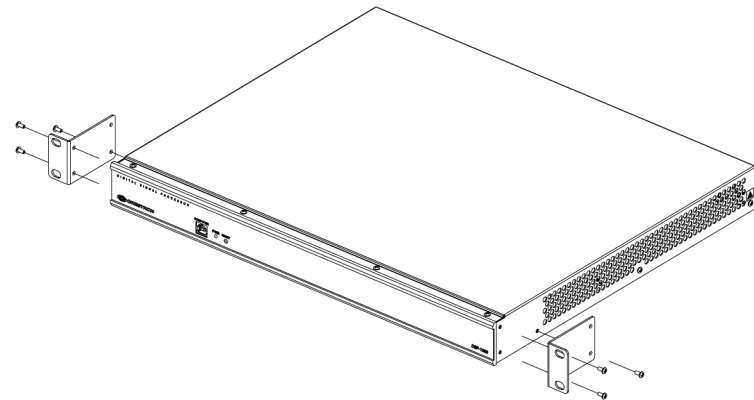
DSP-1280, DSP-1281, DSP-1282, and DSP-1283 Only

- 20 Connector, 3-Pin (2003575)



Install the DSP

The DSP occupies 1U of rack space. Use the three screws from the front part of each side panel, and a #1 or #2 Phillips screwdriver to attach the two included rack ears to the device, as shown in the following illustration. Then mount the device into the rack using four mounting screws (not included).



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Rack Mounting Safety Precautions

Elevated Operating Ambient Temperature: If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T_{ma}) specified by the manufacturer.

Reduced Airflow: Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.

Mechanical Loading: Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

Circuit Overloading: Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Reliable Earthing: Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g., use of power strips).

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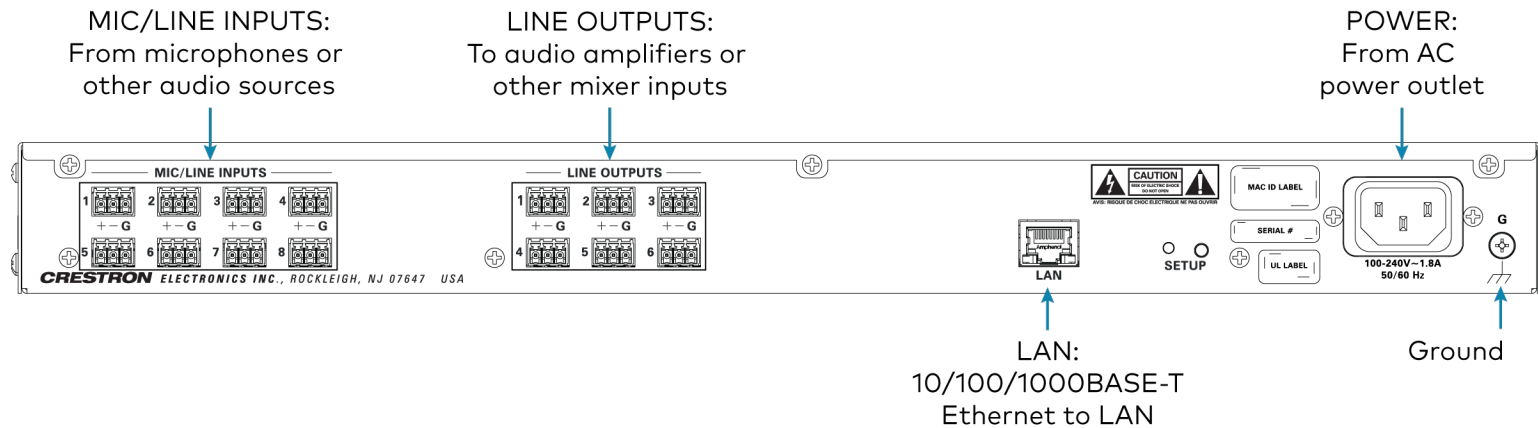


Connect the DSP

Connect the DSP as called out in the following illustrations. Connect power last.

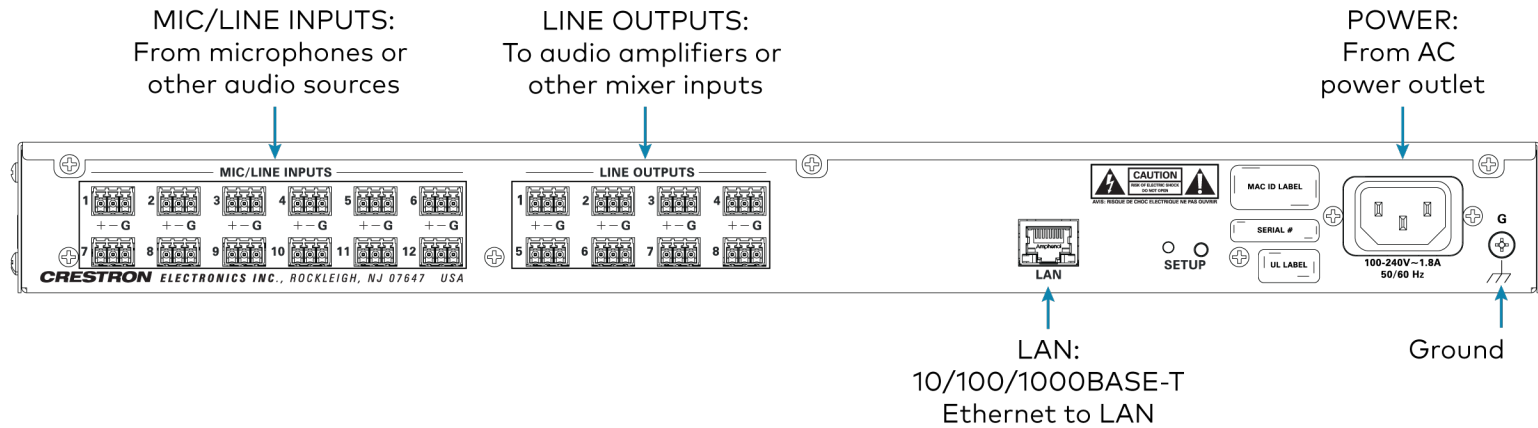
Rear Panel

DSP-860 Rear Panel

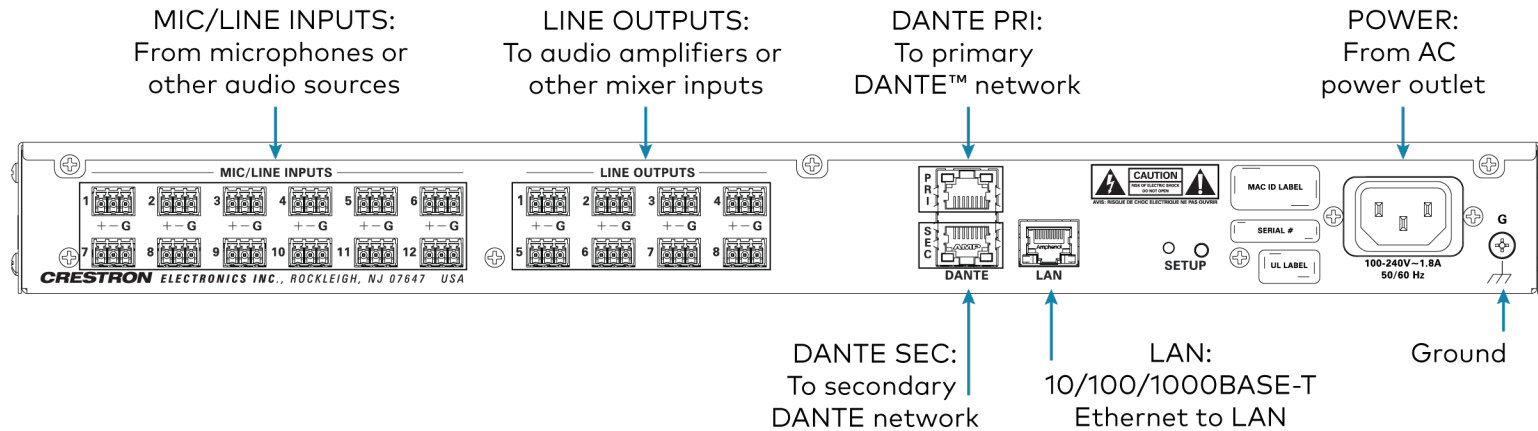


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DSP-1280 Rear Panel

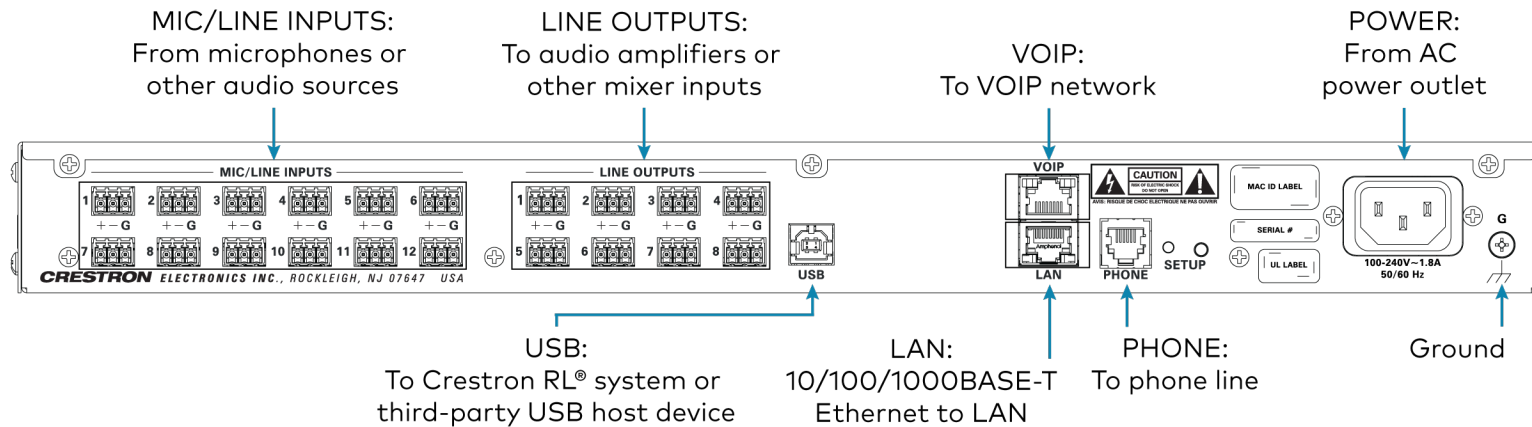


DSP-1281 Rear Panel

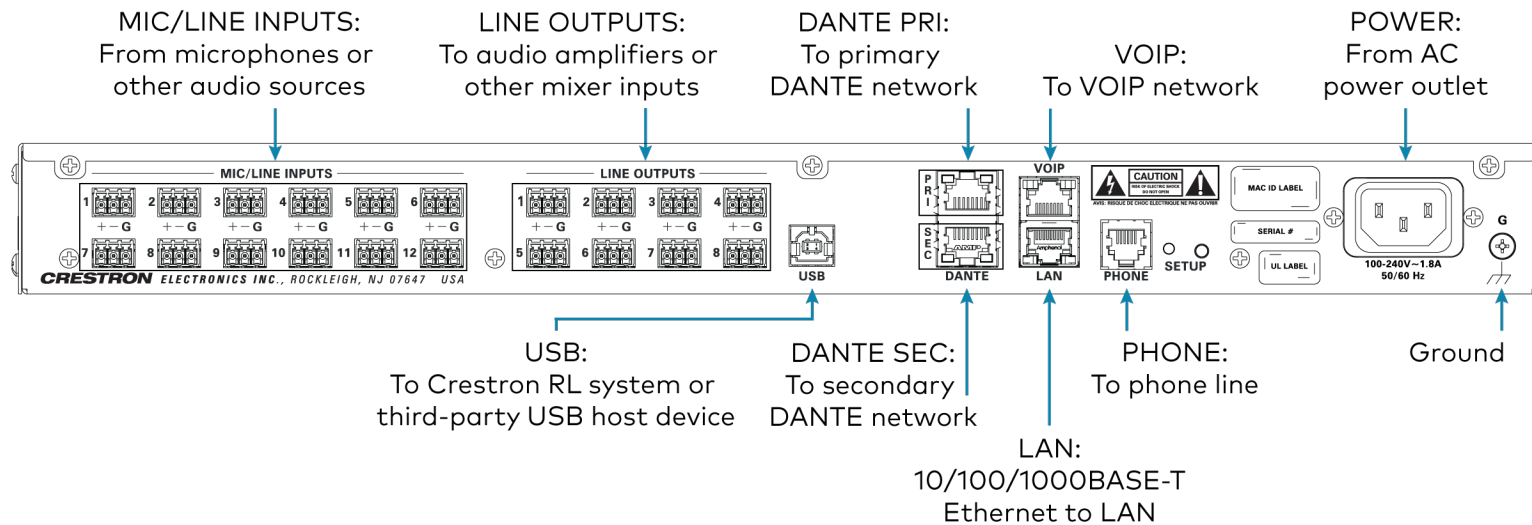


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DSP-1282 Rear Panel



DSP-1283 Rear Panel



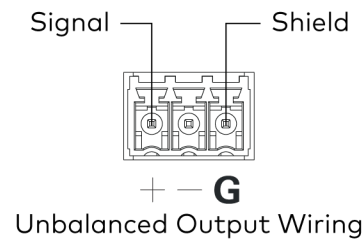
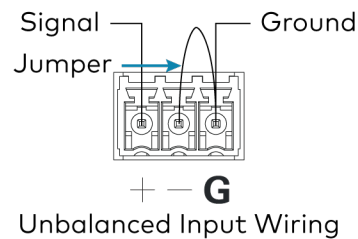
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NOTE: Ensure that the DSP and the computer running the Crestron Avia Audio tool are on the same subnet.

Observe the following when connecting devices equipped with Dante® network capability (DSP-1281 and DSP-1283):

- DANTE PRI ports should be connected to a gigabit switch serving the primary Dante network.
- (Optional) DANTE SEC ports should be connected to a gigabit switch serving the secondary Dante network.
- The primary Dante network should never mix with the secondary Dante network.

If unbalanced connections are required, refer to the following illustrations.



Electrical Connection:

"This product must be connected to an earthed mains socket-outlet."

Finland: "Laite on liitettävä suojamaadoituskoskettimilla varustettuun pistorasiaan."

Norway: "Apparatet må tilkoples jordet stikkontakt."

Sweden: "Apparaten skall anslutas till jordat uttag."

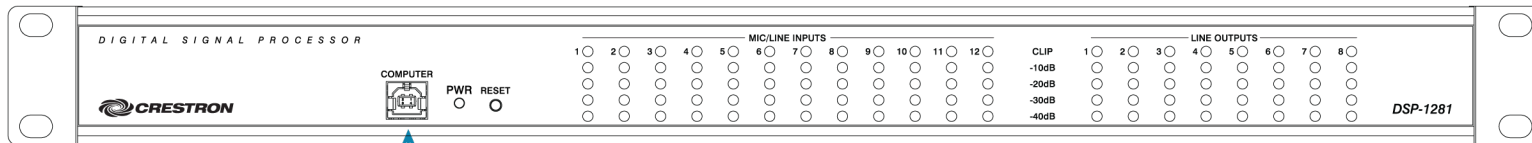
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Front Panel

CAUTION: When connecting a Windows® computer to the COMPUTER port for the first time, make sure the computer has a live connection to the Internet. For more information refer to Answer ID 5745 in the Online Help section of the Crestron website (support.crestron.com).

NOTE: The front panel COMPUTER port can be used to directly connect a computer running the Crestron Avia Audio tool, bypassing the LAN connection.

Front Panel (DSP-1281 Shown)



COMPUTER:
Direct computer connection to device

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Configure the Device

Create an Admin Account

When accessing the device for the first time, create an admin account using the Crestron Toolbox™ software.

To create an admin account:

1. Connect the device to a commonly accessible network.
2. Use the **Device Discovery Tool** in the Crestron Toolbox software to discover the device.
3. Select the device from the list that appears. A dialog box is displayed asking the user to create an admin account.
4. Enter a username and password for the admin account in the appropriate text fields.

CAUTION: Do not lose the username and password for the admin account, as the device must be reset to factory settings to regain access.

5. Click **OK** to confirm.

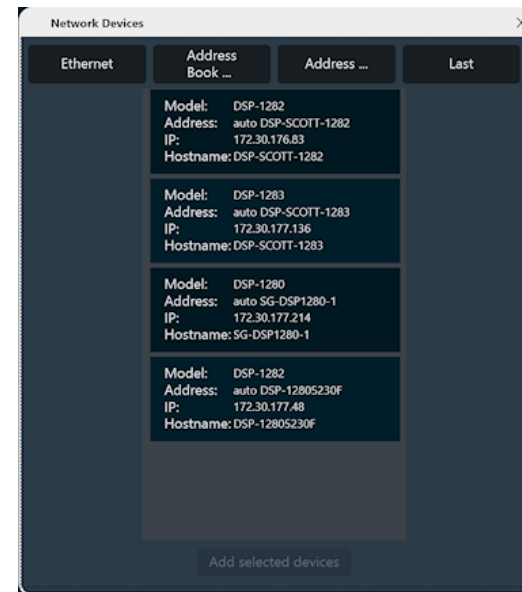


Connect to the Device

DSPs use the Crestron Avia Audio tool for configuration and operation. Download the Crestron Avia Audio tool from www.crestron.com/software.

Once the DSP is connected to the same subnet as the host PC running the Crestron Avia Audio tool, start the tool and do the following:

1. Click **Add New Network DSP** in the workspace on the left side of the window.
2. Click Ethernet to launch the Device Discovery function. A list of units found on the subnet is displayed.



NOTE: If a DSP is not listed, verify that all connections have been made and that all devices and the computer running the Crestron Avia Audio tool are on the same subnet.

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Operate the DSP

Apply Power

When power is applied to the DSP, the color of the PWR LED on the front panel indicates the following:

- Green - Normal operation
- Amber - Device is booting up
- Amber/Green (Cycling) - No network connection

Adjust Settings

Use the Crestron Avia Audio tool to control the device.

NOTE: When connecting the DSP via Ethernet, ensure the DSP and the computer are on the same subnet.

Monitor Input and Output Levels (DSP-1281 and DSP-1283 Only)

Use the front panel's analog VU meters to monitor input and output levels.

Reset the DSP

Press **RESET** on the front panel to restart the DSP.



Connect to Crestron XiO Cloud Service (Optional)

The Crestron XiO Cloud™ service allows supported Crestron devices across an enterprise to be managed and configured from one central and secure location in the cloud. Supported devices are preconfigured to connect to the service. Use of the service requires a registered Crestron XiO Cloud account.

NOTE: The device can be disconnected from the service using the **Cloud Services** tab in Crestron Toolbox software (**Functions > Device Info > Cloud Services**). For details, refer to the Crestron Toolbox help file.

To connect the device to the Crestron XiO Cloud service:

1. Record the MAC address and serial number labeled on the shipping box or rear panel of the device. The MAC address and serial number are required in order to add the device to the Crestron XiO Cloud environment.
2. Do either of the following:
 - For existing accounts, navigate to <https://portal.crestron.io>.
 - For new accounts, register at www.crestron.com/xiocloud.
3. Claim the device to the service as described in the [Crestron XiO Cloud Service User Guide](#) (Doc. 8214).

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Visit the Product Page

Scan the QR code to visit the product page.

DSP-860



www.crestron.com/model/6507123

DSP-1280



www.crestron.com/model/6506917

DSP-1281



www.crestron.com/model/6506918

DSP-1282



www.crestron.com/model/6506919

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Additional Information

Original Instructions

The U.S. English version of this document is the original instructions. All other languages are a translation of the original instructions.

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The product warranty can be found at www.crestron.com/warranty.

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