DM-NAX-8ZSA

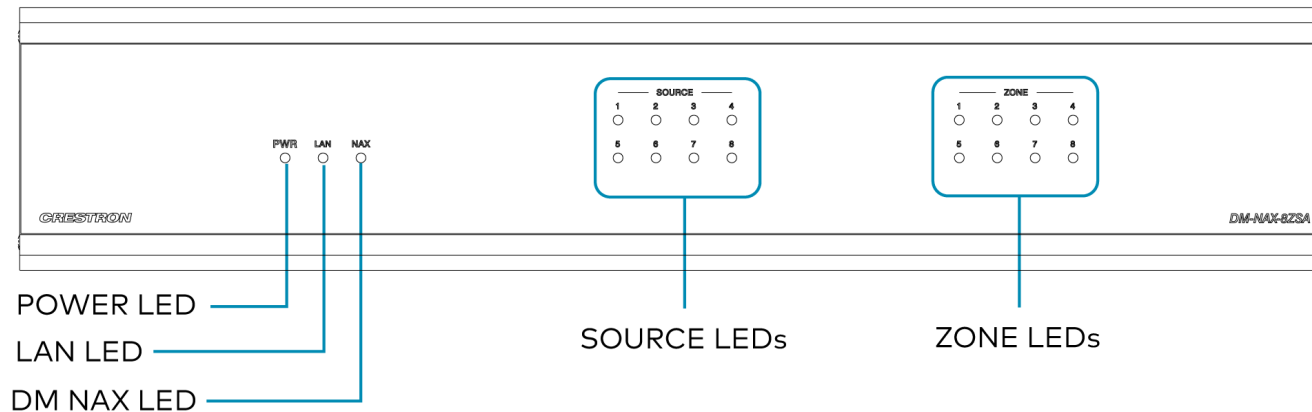## DM NAX™ 8-Zone Streaming Amplifier

The Crestron® DM-NAX-8ZSA is a next generation Audio-over-IP (AoIP) amplifier that puts Crestron multiroom audio distribution on the network. Streaming services are built-in with media player access available for each stereo amplified zone.

Front Panel

POWER LED

LAN LED

DM NAX LED

SOURCE LEDs

ZONE LEDs

📦 **In the Box**

1	DM-NAX-8ZSA

Additional Items

2	Bracket, Rack Ear, 2 RU (2053799)
1	Power Cord, approx. 6.5 ft (2 m) (2014835)
1	Cable, CAT6, RJ45-to-RJ-45, approx. 5 ft (1.5 m) (2036196)
16	Connector, 2-Pin (2012361)
2	Connector, 4-Pin (2003576)
3	Connector, 5-Pin (2003577)
6	Screw, 4B x 1/4 in., Pan Head, Phillips (2007195)

DM NAX™ 8-Zone Streaming Amplifier

⚙ Install the Device

Refer to the Safety Instructions (Doc. 6607) prior to installation.

The device can be placed on a table or installed in a rack.

Place on a Table

Place the device on a table or stack on top of another device.

Rack Installation

This device occupies 2 RU of rack space.

To install the included rack ears:

1. Use a #1 Phillips screwdriver to remove the three screws from each side of the front of the device as shown in the illustration.

2. Use the screwdriver and the six included 1/4 in. Phillips Pan Head screws to attach the included rack ears to the device.

DM-NAX-8ZSA

(2) Rack Ear
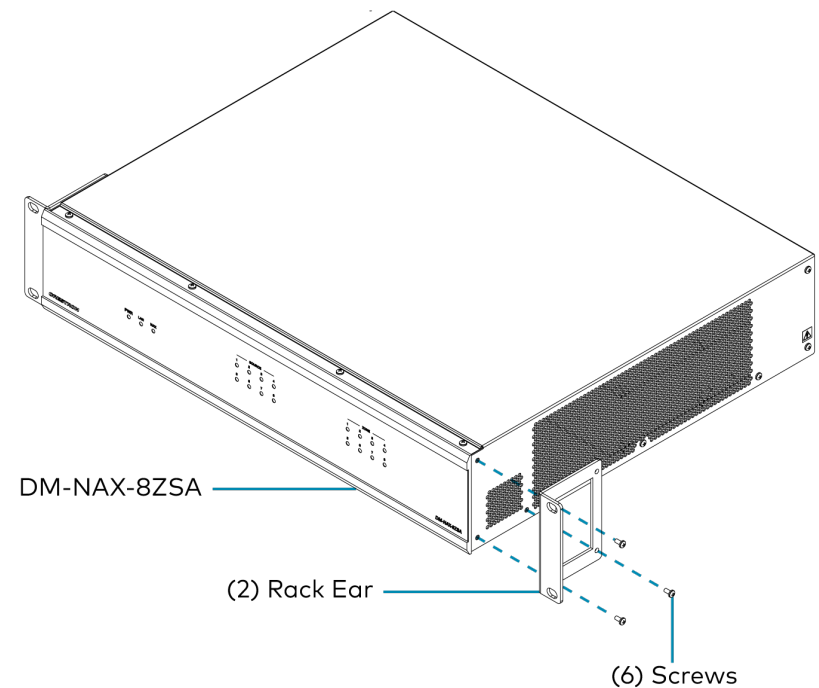
(6) Screws

3. Mount the device into the rack using four rack mounting screws (not included).

DM NAX™ 8-Zone Streaming Amplifier

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 (Tma) 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).

Connect the Device

Make the necessary connections as called out in the following illustration. Connect power last.
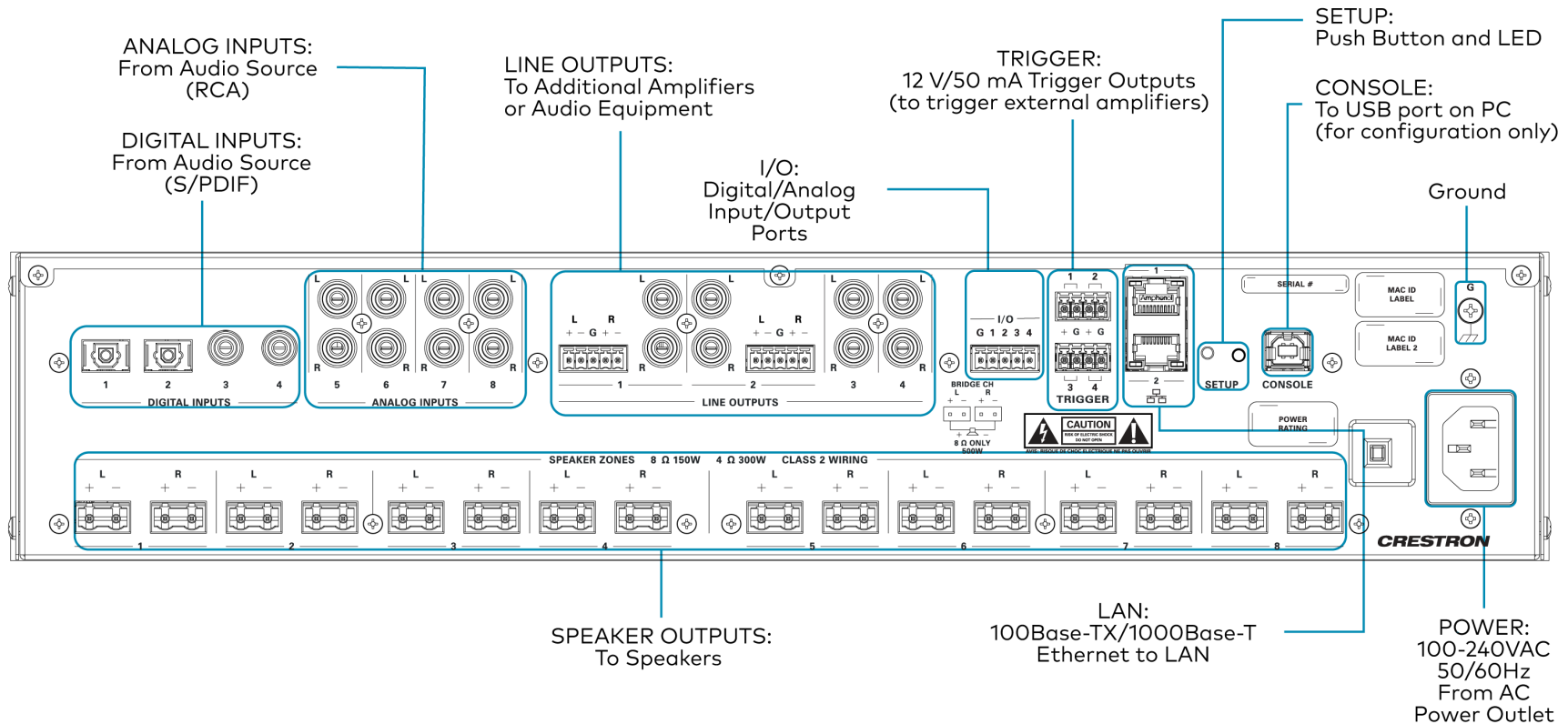
> **CAUTION:**
>
> - Keep the device unplugged until all of the input, network, output, and speaker wiring is complete.
> - Check the speaker cables for shorts and frayed wiring around the SPEAKER OUTPUTS connectors.

> **NOTE:**
>
> - Ensure that the unit is properly grounded by connecting the chassis ground lug to an earth ground (building steel).
> - To prevent overheating, do not operate this product in an area that exceeds the environmental temperature range listed in the product specifications.
> - Do not bundle power cords together with connection cables. Doing so can result in noise.

DM NAX™ 8-Zone Streaming Amplifier

Rear Panel

ANALOG INPUTS:
From Audio Source
(RCA)

DIGITAL INPUTS:
From Audio Source
(S/PDIF)

LINE OUTPUTS:
To Additional Amplifiers
or Audio Equipment

I/O:
Digital/Analog
Input/Output
Ports

TRIGGER:
12 V/50 mA Trigger Outputs
(to trigger external amplifiers)

SETUP:
Push Button and LED

CONSOLE:
To USB port on PC
(for configuration only)

Ground

SPEAKER OUTPUTS:
To Speakers

LAN:
100Base-TX/1000Base-T
Ethernet to LAN

POWER:
100-240VAC
50/60Hz
From AC
Power Outlet

DM NAX™ 8-Zone Streaming Amplifier

Digital Inputs

Refer to the following illustration when connecting digital audio sources.

Digital Source ———————— TOSLINK® Connector

Digital Source ———————— COAXIAL Connector

NOTE: Only 2-channel PCM digital audio is supported at the digital inputs.

Analog Inputs

Refer to the following illustration when connecting analog audio sources.

Stereo Source Left ———————— RCA Connector

Stereo Source Right ———————— RCA Connector

Speaker Connections

The speaker outputs can be wired conventionally or bridged together to deliver higher output power.

NOTE: The Line Outputs 1-4 mirror their respective Speaker Outputs 1-4. These outputs can feed another amplifier or an active subwoofer.

Conventional Wiring

Connect speakers to the DM-NAX-8ZSA as shown in the following illustration.
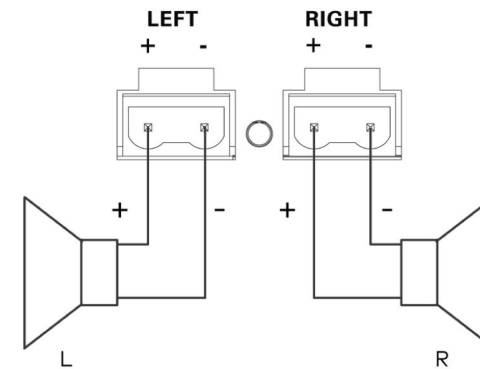
DM NAX™ 8-Zone Streaming Amplifier

Bridged Wiring

Connect speaker outputs as shown in the following illustration to deliver more power to the speakers (8 ohm speakers only).

> **NOTE:**
>
> - Before wiring the speakers for bridging, ensure that the device is configured for bridging using web UI, Crestron Home™ software, or a Crestron SIMPL program running on a control system.
> - Bridging can only be done between a left and a right output within the labeled zone.
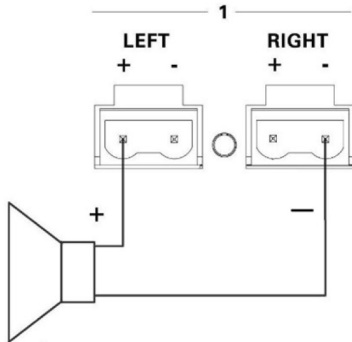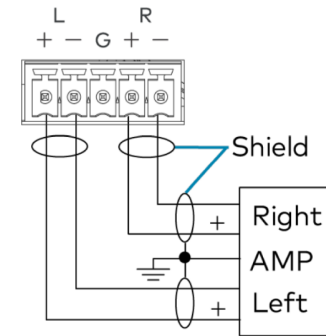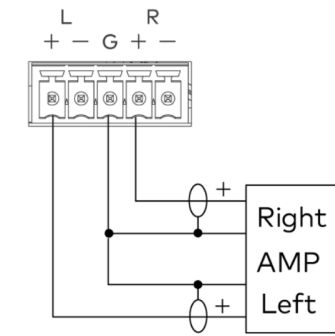

Balanced/Unbalanced Audio Output

Refer to the following table and illustration for analog audio output pin assignments and connection information.

Signal Name	Balanced Audio Output	Unbalanced Audio Output
+	L+	L+ Out
-	L–	Open
G	Shield/ground	Open
+	R+	R+ Out
-	R-	Open

Balanced Output   Unbalanced Output

Configure the Device

For detailed information on configuring the device, refer to DM NAX™ Product Manual (Doc. 9045).

DM NAX™ 8-Zone Streaming Amplifier

⚙ Apple® AirPlay® Setup

The DM-NAX-8ZSA supports AirPlay 2 and requires iOS 11.4 or later.

AirPlay can be enabled on any of the built-in media players on the DM-NAX-8ZSA.

To stream media from an iOS device to a speaker zone in your distributed audio system:

1. Ensure that the iOS device and DM-NAX-8ZSA are on the same network.
2. On the DM-NAX-8ZSA, enable AirPlay for the built-in media player you would like to stream to, either using the web UI or programming. For more information, refer to the DM NAX™ Product Manual (Doc. 9045).

> **NOTE:** If the control/media and Audio-over-IP network traffic is isolated between two network ports on the DM-NAX-8ZSA, AirPlay will use the port specified for the Control/Media traffic.

3. On your iOS device:
    a. Enable AirPlay
    b. From the list of available AirPlay destinations, select the DM-NAX-8ZSA zone you would like to stream to.

        The media player will play back audio to the selected zone(s).

> **NOTE:** By default, media players 1 - 8 route the audio signals to their respectively numbered speaker zones 1 - 8. If the user has not specified the speaker zone when Airplay streaming begins, the media player will automatically route to its default speaker zone. For example, the audio from the media player 5 will be routed to speaker zone 5.

After the AirPlay streaming begins, you will be able to control the volume of the streaming DM-NAX-8ZSA speaker zones directly from your iOS device.

DM NAX™ 8-Zone Streaming Amplifier

⚙ Spotify Connect™ Setup

The DM-NAX-8ZSA supports Spotify Connect.

To configure Spotify, use your phone, tablet or computer as a remote control for Spotify. Go to spotify.com/connect to learn how.

Spotify can be enabled on any of the built-in media players on the DM-NAX-8ZSA.

To stream media from a device to a speaker zone in your distributed audio system:

1. Ensure that the device and DM-NAX-8ZSA are on the same network.

2. On the DM-NAX-8ZSA, enable Spotify for the built-in media player you would like to stream to, either using the web UI or programming. For more information, refer to the DM NAX™ Product Manual (Doc. 9045).

   > **NOTE:** If the control/media and Audio-over-IP network traffic is isolated between two network ports on the DM-NAX-8ZSA, Spotify will use the port specified for the Control/Media traffic.

3. On your device:
   a. Enable Spotify
   b. From the list of available Spotify destinations, select the DM-NAX-8ZSA zone you would like to stream to.

   The media player will play back audio to the selected zone(s).

> **NOTE:** By default, media players 1 - 8 route the audio signals to their respectively numbered speaker zones 1 - 8. If the user has not specified the speaker zone when Spotify streaming begins, the media player will automatically route to its default speaker zone. For example, the audio from the media player 5 will be routed to speaker zone 5.

After the Spotify streaming begins, you will be able to control the volume of the streaming DM-NAX-8ZSA speaker zones directly from your device.

⏻ Reset

A network reset or factory restore may be performed when troubleshooting.

- Network Reset
   1. Ensure the device is powered on.
   2. Press and hold the SETUP button for up to 15 seconds until the SETUP LED flashes red.

      The device will reboot, and the default network settings will be reset, such as default Hostname, DHCP enabled, no static IP.

- Factory Restore
   1. Turn off the device by disconnecting the power cable from the device.
   2. Press and hold the SETUP button and then reconnect the power cable while still holding the SETUP button. Continue holding the SETUP button for up to 30 seconds until the SETUP LED flashes.

      The device will reboot, and all the factory default settings will be restored, such as Zone settings, names, multicast addressing, etc.

   > **CAUTION:** Performing a factory restore will clear all settings from the device configuration.

DM-NAX-8ZSA

DM NAX™ 8-Zone Streaming Amplifier

Observe the LED Indicators

Refer to the following table for information about the LED indicators on the device.

LED Indicator	Color	Meaning
PWR	Amber	Power is being applied to the device. The device is booting.
	White	Device is powered on with audio passing.
	Red	Device is in standby mode.
LAN	White	The device is powered on and has a valid IP address.
	Off	Device is not connected to a network or the IP address is invalid.
NAX	White	AoIP is ready to pass and the unit's PTP clock is synced.
	Off	No AoIP is passing to or from and/or PTP is not synced.
SOURCE 1-8	White	Signal is detected on the specified input/source.
	Red	There is clipping on an analog input or bitstream audio detected on a digital input.
	Off	There is no signal detected on the specified input/source.
ZONE 1-8	White	There is audio output on the indicated zone.
	Red	Clipping or a fault is detected on the zone output due to over current, over temperature, or low voltage.

LED Indicator	Color	Meaning
SETUP	Solid Red	The SETUP button is pressed.
	Blinking Red	A network reset or factory restore has been initiated via the adjacent SETUP button.

Legal Notice

Use of the Works with Apple badge means that an accessory has been designed to work specifically with the technology identified in the badge and has been certified by the developer to meet Apple performance standards.

Works with
Apple AirPlay

Visit the Product Page

Scan the QR code to visit the product page.

DM-NAX-8ZSA

www.crestron.com/model/6510878

DM NAX™ 8-Zone Streaming Amplifier

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.

Regulatory Model: M1845004

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