DM-NVX-350, DM-NVX-351, and DM-NVX-352

DM NVX® 4K60 4:4:4 HDR Network AV Encoders/Decoders

The Crestron® DM-NVX-350, DM-NVX-351, and DM-NVX-352 network AV encoders/decoders transport ultra high-definition 4K60 4:4:4 HDR video over standard Gigabit Ethernet.

In the Box

1 DM-NVX-350, DM-NVX-351, or DM-NVX-352 Network AV Encoder/Decoder

Additional Items

1 Power Pack, 24 VDC, 2.5 A, 100-240 VAC (2045873)
1 Power Cord, 5 ft 10 in. (1.78 m) (2042043)
1 Connector, 4-Pin (2003576)
2 Connector, 5-Pin (2003577)

Install the Device

The DM NVX® device can be mounted onto a flat surface or rack rail.

Mounting onto a Flat Surface

Using four mounting screws (not included), mount the device onto a flat surface such as a wall or the underside of a table.

NOTE: Fan ventilation holes are provided on five sides of the device. If the installation necessitates that another object be positioned flush against the ventilation holes on one side of the device, leave a minimum clearance of 2 inches of space on all other sides containing ventilation holes.

Wall Mounting (DM-NVX-352 Shown)

Wall

DM-NVX-352

(4) Mounting screws (not included)
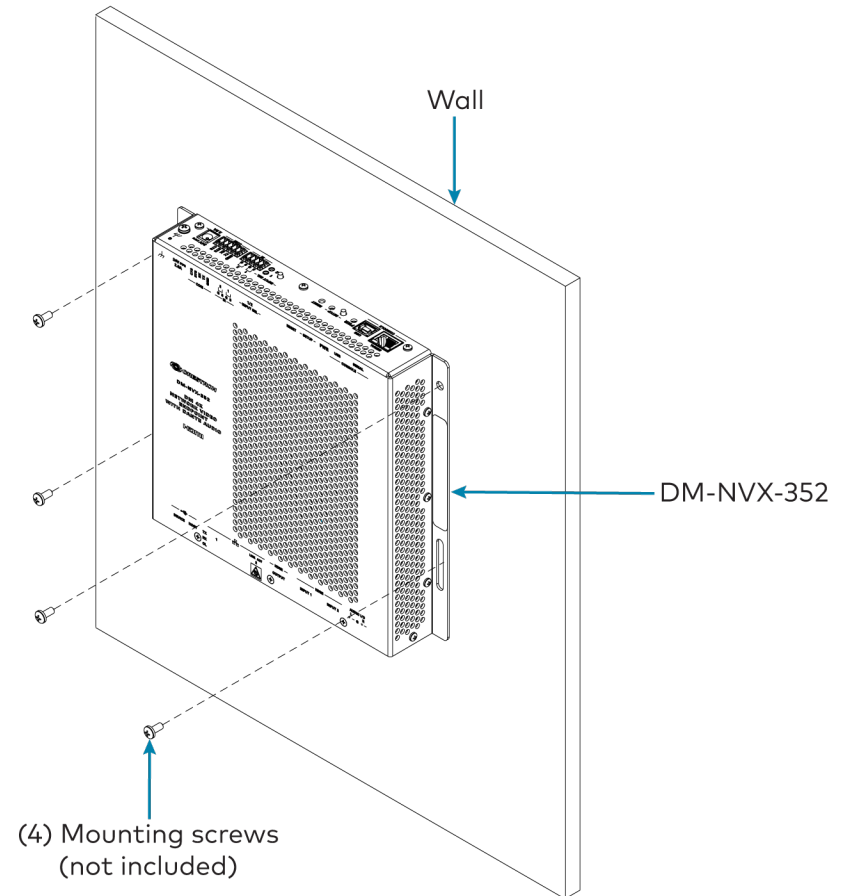
DM NVX® 4K60 4:4:4 HDR Network AV Encoders/Decoders

Mounting onto a Rack Rail

The device can be mounted onto a front or rear rack rail. To mount the device:

1. Position either the left or right mounting flange so that the holes align with the holes in the rack rail.
2. Secure the device to the rack rail using two rack mount screws (not included).

Rack Rail Mounting Example (DM-NVX-352 Shown)

DM-NVX-352

Rack rail

Rack mount screws (not included)

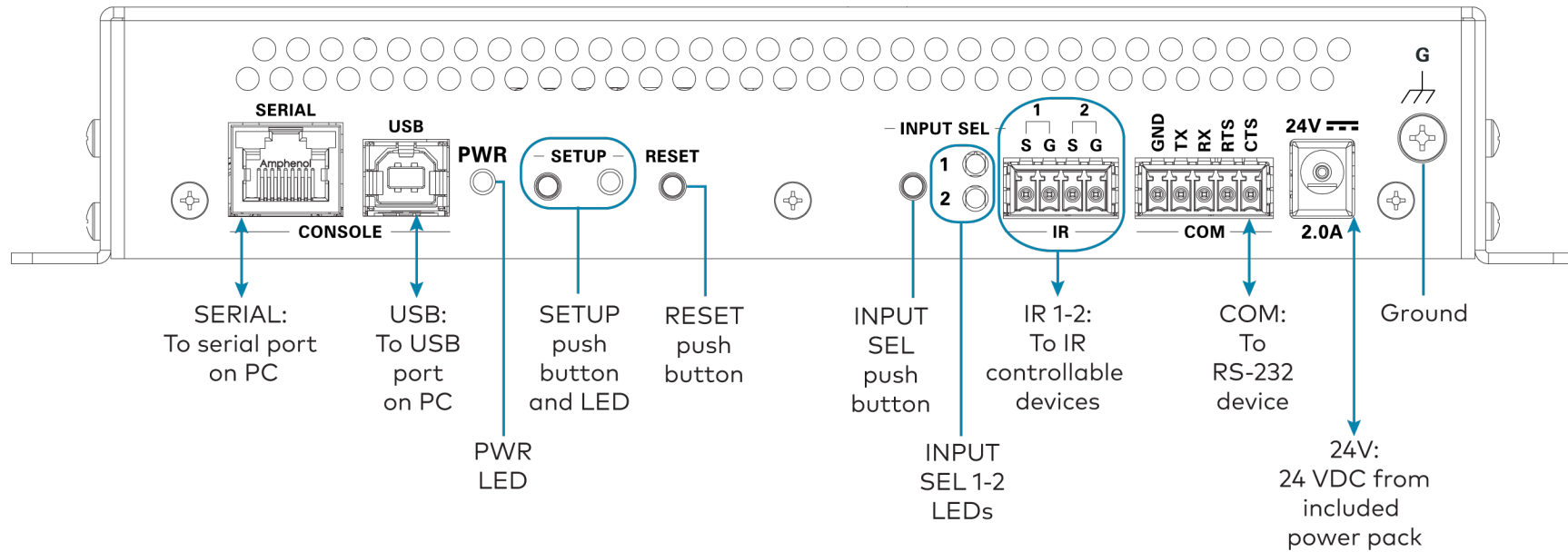Mounting flange
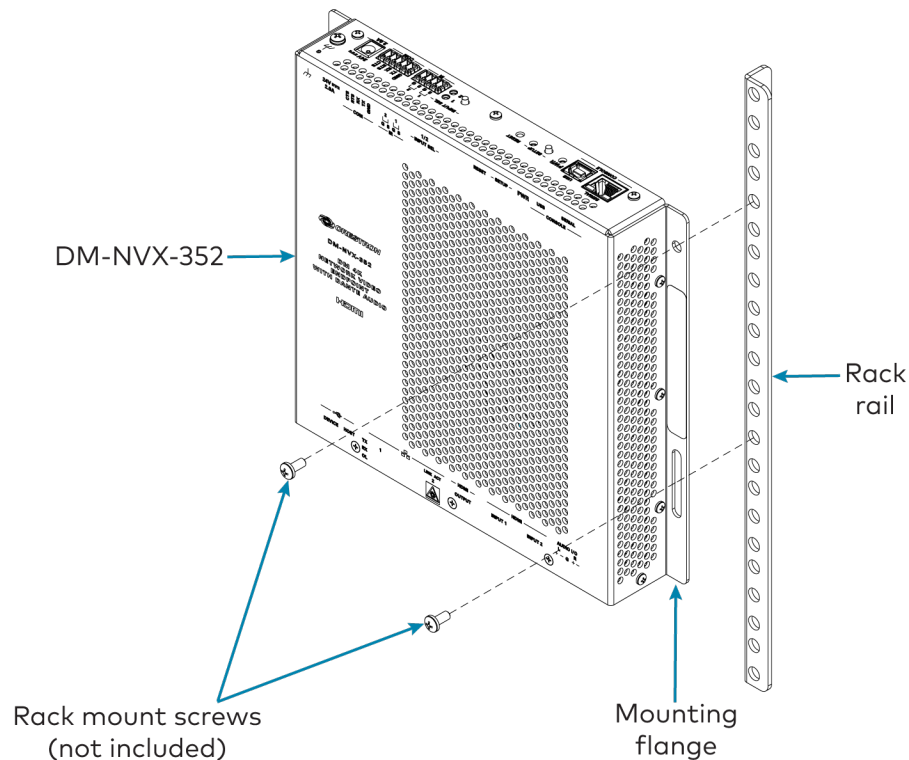
Connect the Device

Connect the device as required for the application.

NOTES:

- The device can be configured to use either the DEVICE port or the HOST port. Both ports cannot be used simultaneously.
- The DM-NVX-350 and DM-NVX-351 each provide three LAN (⊞) ports. LAN ports 1 and 2 are 100BASE-TX/1000BASE-T ports. LAN port 3 is an SFP port.
- The DM-NVX-352 provides two LAN ports. LAN port 1 is a 100BASE-TX/1000BASE-T port. LAN port 2 is an SFP port.
- An SFP port connects to a fiber-optic network using the appropriate Crestron SFP-1G Series transceiver module (sold separately). For information about installing a Crestron SFP-1G transceiver module, refer to the SFP-1G Series Installation Guide (Doc. 7979) at www.crestron.com/manuals.
- Only one LAN port at a time can be used as the primary LAN connection to a 1000BASE-T switch in order to stream network video. Any other LAN port can then be used for connection to a local network device or to another DM NVX device.
- The DM NVX device can be powered by the included power pack or can receive power over the LAN via LAN port 1, which is a powered device (PD) port. In order to receive power over the LAN, LAN port 1 must connect to the Crestron DM-PSU-ULTRA-MIDSPAN (sold separately) or to a UPOE (Universal Power Over Ethernet) switch or other Crestron approved third-party PSE (power sourcing equipment). For additional information, refer to Online Help Answer ID 5791.
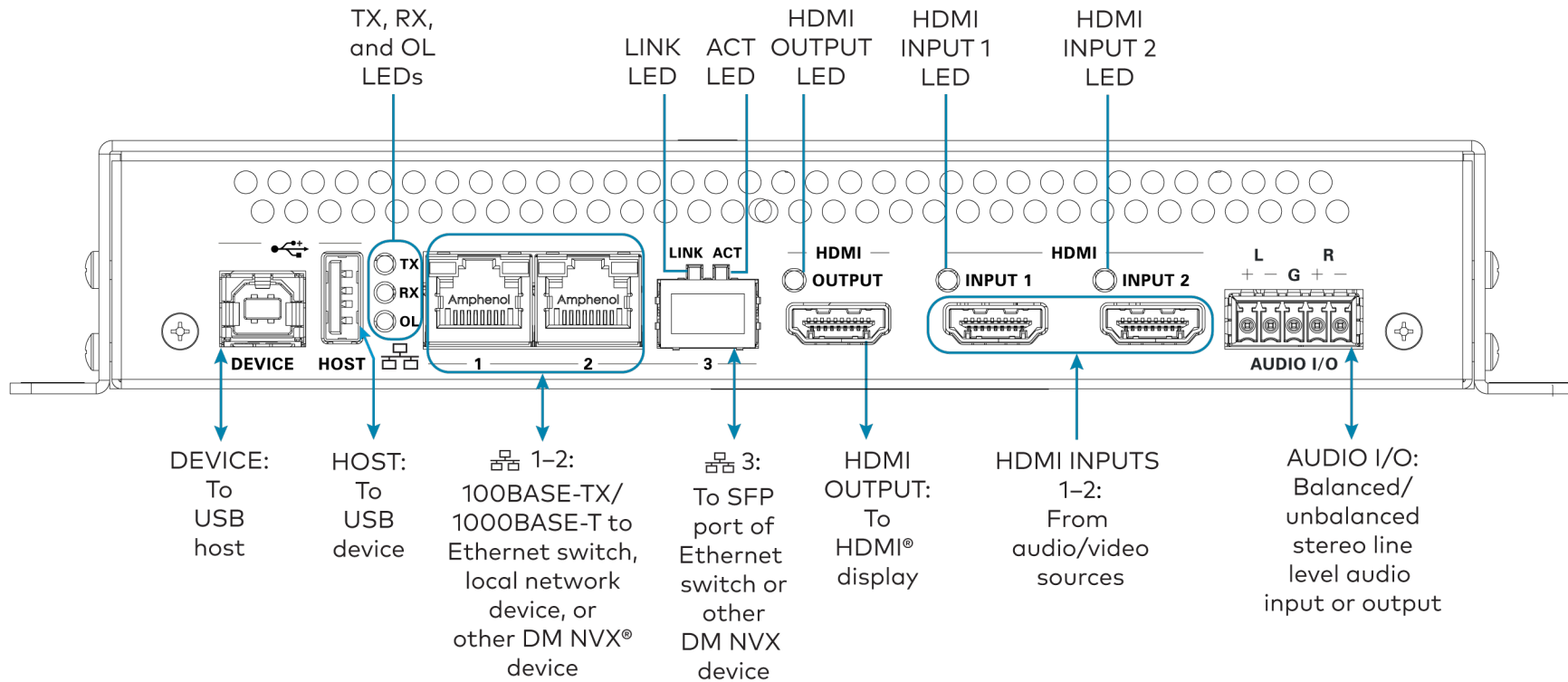
DM NVX® 4K60 4:4:4 HDR Network AV Encoders/Decoders

Front Panel Connections - DM-NVX-350, DM-NVX-351, and DM-NVX-352

SERIAL:
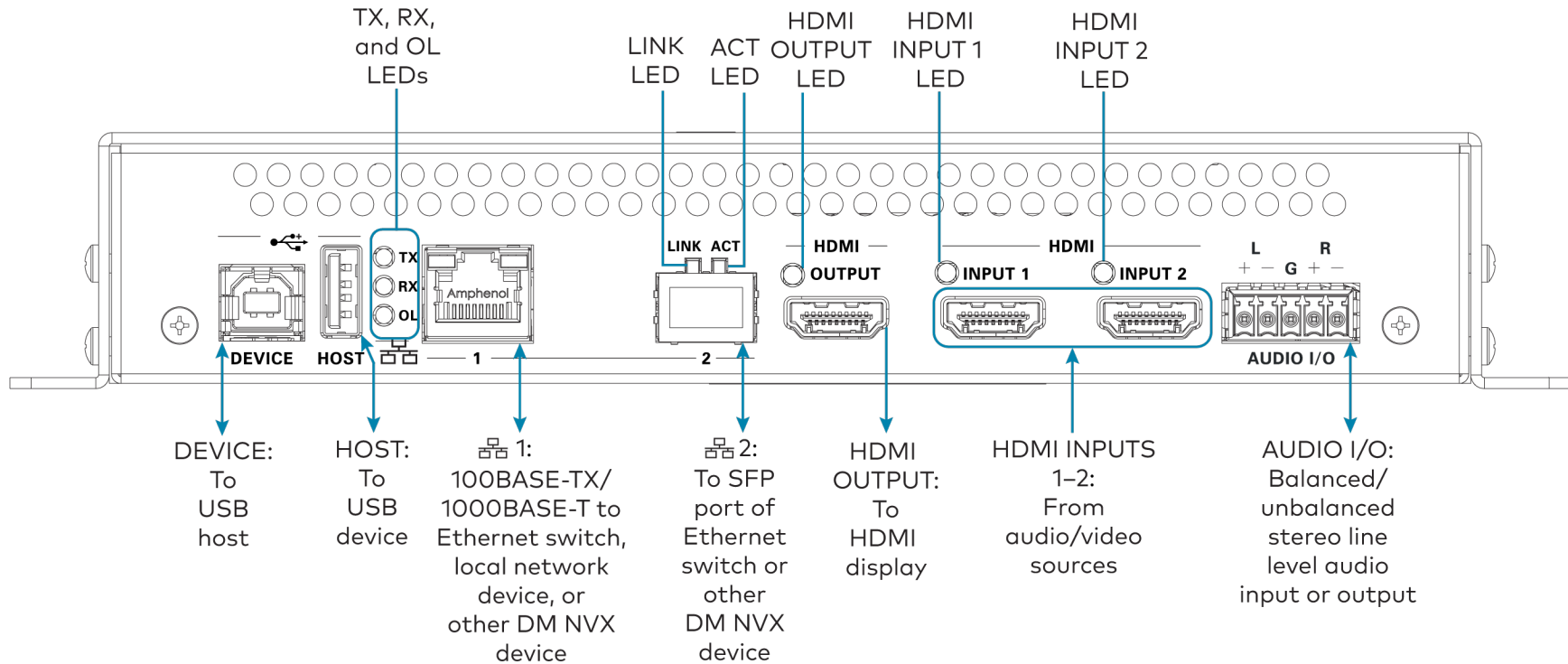To serial port
on PC

USB:
To USB
port
on PC

SETUP
push
button
and LED

RESET
push
button

INPUT
SEL
push
button

IR 1-2:
To IR
controllable
devices

COM:
To
RS-232
device

Ground

PWR
LED

INPUT
SEL 1-2
LEDs

24V:
24 VDC from
included
power pack

DM NVX® 4K60 4:4:4 HDR Network AV Encoders/Decoders

Rear Panel Connections - DM-NVX-350 and DM-NVX-351

TX, RX, and OL LEDs

LINK LED

ACT LED

HDMI OUTPUT LED

HDMI INPUT 1 LED

HDMI INPUT 2 LED

DEVICE: To USB host

HOST: To USB device

1–2: 100BASE-TX/ 1000BASE-T to Ethernet switch, local network device, or other DM NVX® device

3: To SFP port of Ethernet switch or other DM NVX device

HDMI OUTPUT: To HDMI® display

HDMI INPUTS 1–2: From audio/video sources

AUDIO I/O: Balanced/ unbalanced stereo line level audio input or output

DM NVX® 4K60 4:4:4 HDR Network AV Encoders/Decoders

Rear Panel Connections - DM-NVX-352

TX, RX, and OL LEDs

LINK LED

ACT LED

HDMI OUTPUT LED

HDMI INPUT 1 LED

HDMI INPUT 2 LED

DEVICE: To USB host

HOST: To USB device

1: 100BASE-TX/ 1000BASE-T to Ethernet switch, local network device, or other DM NVX device

2: To SFP port of Ethernet switch or other DM NVX device

HDMI OUTPUT: To HDMI display

HDMI INPUTS 1–2: From audio/video sources

AUDIO I/O: Balanced/ unbalanced stereo line level audio input or output
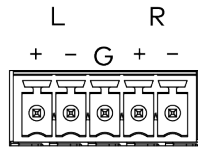
DM NVX® 4K60 4:4:4 HDR Network AV Encoders/Decoders

AUDIO I/O Connector Pin Assignments

The AUDIO I/O connector uses a 5-pin terminal block for balanced or unbalanced analog audio input or output.
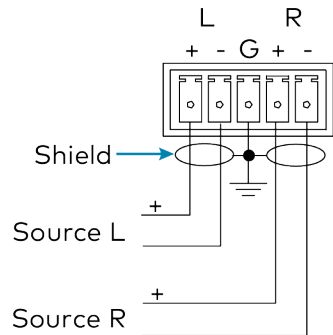
AUDIO I/O Connector

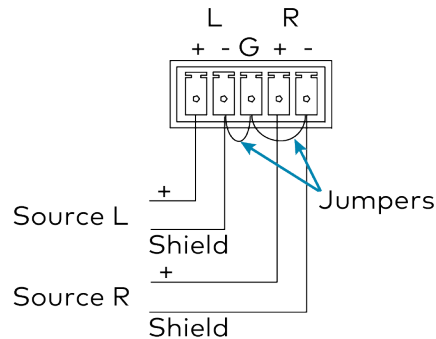## Balanced/Unbalanced Audio Input

Refer to the following table and diagrams for analog audio input pin assignments and connection information.

Signal Name	Balanced Audio Input	Unbalanced Audio Input
+	L+	L+ In
–	L–	L– Signal return, jumper to GND
G	Shield/ground	Ground
+	R+	R+ In
–	R–	R– Signal return, jumper to GND

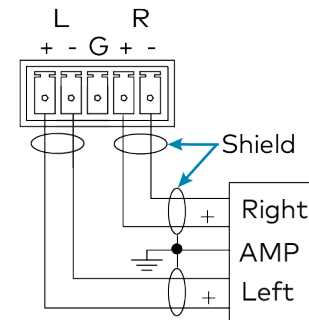**Balanced Input**

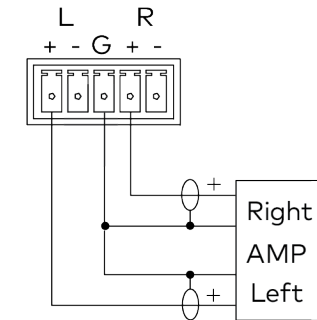**Unbalanced Input**

Balanced/Unbalanced Audio Output

Refer to the following table and diagrams 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	Common ground
+	R+	R+ Out
–	R–	Open

Balanced Output

Unbalanced Output

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LED Indicators

LED Indicator	Color	Meaning
PWR	Amber	Power is being applied to the device. The device is booting.
	Green	Power is being applied to the device. The device is operational.
SETUP	Red	The SETUP button is pressed.
INPUT SEL 1-2	Green	The corresponding input is selected.
	Amber	The corresponding input is detected but is not selected.
TX	Green	The device is in transmitter (encoder) mode
RX	Green	The device is in receiver (decoder) mode.
OL	Green	The device is online with a control system.
LAN 1	Green	An Ethernet link is established.
	Flashing amber	Data activity is occurring on the Ethernet link.
LAN 2 (DM-NVX-350 and DM-NVX-351 only)	Green	An Ethernet link is established.
	Flashing amber	Data activity is occurring on the Ethernet link.
LAN 2 LINK (DM-NVX-352 only)	Green	An Ethernet link is established.
LAN 2 ACT (DM-NVX-352 only)	Flashing green	Data activity is occurring on the Ethernet link.
LAN 3 LINK (DM-NVX-350 and DM-NVX-351 only)	Green	An Ethernet link is established.
LAN 3 ACT (DM-NVX-350 and DM-NVX-351 only)	Flashing green	Data activity is occurring on the Ethernet link

LED Indicators (Continued)

LED Indicator	Color	Meaning
HDMI OUTPUT	Green	An HDMI signal is being transmitted at the HDMI output.
HDMI INPUT 1-2	Green	An HDMI signal is detected at the corresponding HDMI input.

Upgrade the Firmware

Before using the device, upgrade the firmware. The latest firmware can be downloaded from the DM-NVX-350, DM-NVX-351, or DM-NVX-352 product page on the Crestron website (www.crestron.com).

Configure the Device

Configure the device using the web interface. To access the web interface, open a web browser and then go to the IP address of the device.

> NOTE: By default, the IP address of a DM NVX device is assigned by a DHCP server on the network. If a DHCP server does not exist on the network, the IP address defaults to a link-local address in the 169.254.*xxx.xxx* range (refer to RFC 3927 for detailed information about link-local addressing). To display the IP address on the connected display, press the SETUP button on the front panel of the device.

To log in to the web interface, enter the user name and password. The default user name and password are both *admin*.

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Connect to the Cloud

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.

To connect the device to the Crestron XiO Cloud service:

1. Record the MAC address and serial number that are 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:
   - If you have a Crestron XiO Cloud account, go to https://portal.crestron.io to access the Crestron XiO Cloud service.
   - If you do not have a Crestron XiO Cloud account, go to www.crestron.com/xiocloud to register for an account.

For detailed information about using the Crestron XiO Cloud service, refer to the Crestron XiO Cloud Service User Guide (Doc. 8214) at www.crestron.com/manuals.

Visit the Product Page

Scan the QR code to visit the product page.

DM-NVX-350

www.crestron.com/model/6508251

DM-NVX-351

www.crestron.com/model/6507493

DM-NVX-352

www.crestron.com/model/6508634

DM NVX® 4K60 4:4:4 HDR Network AV Encoders/Decoders

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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