

DM NVX Director™ Virtual Switching Appliance, 80 Endpoints



- *Network AV system configuration, management, and signal routing*
- *Compatible with Crestron® DM NVX® encoders and decoders*
- *Support of 80 endpoints in a single domain*
- *Fully scalable for a network of any size*
- *Intuitive web-based graphical user interface*
- *Full programmable control of virtual matrices and physical endpoints*
- *Automatic endpoint device discovery*
- *Multicast address control*
- *Credential management of DM NVX endpoints*
- *Custom naming and search tools*
- *Easy diagnostics and signal status display*
- *XML device map file import and export*
- *Built-in logging*
- *XiO Cloud® service support*
- *Four 1000BASE-T RJ-45 ports*
- *1 RU 19-inch rack mountable*
- *Universal 100-240V internal power supply*

The Crestron DM-NVX-DIR-80 is an enterprise-grade network appliance that facilitates configuration, control, and management of a large-scale AV network using [DM NVX®](#) encoder and decoder endpoints. The DM-NVX-DIR-80 virtually emulates the functionality of a traditional hardware-based DM® matrix switcher, routing high-quality 4K streaming AV signals throughout a room, building, or campus.

The DM-NVX-DIR-80 supports a maximum of 80 DM NVX endpoints. Multiple DM NVX Director™ network appliances can be deployed to handle corporate enterprise, university, government, military, medical, transportation, sports, entertainment, hospitality, gaming, and retail applications.

Simple and Flexible Configuration

The DM-NVX-DIR-80 automatically discovers up to 80 DM NVX endpoints on the network, and enables each endpoint to be assigned as a logical input or output within a single domain. The DM-NVX-DIR-80 routes inputs of DM NVX endpoints to outputs of DM NVX endpoints within the domain. Each DM-NVX-DIR-80 network appliance in a system functions as a separate domain.

NOTE: For information about DM NVX Director network appliances that support multiple domains, refer to the [DM-NVX-DIR-160](#) and [DM-NVX-DIR-ENT](#) product pages.

Easy Web-Based Setup and Control

The DM-NVX-DIR-80 provides an intuitive web-based user interface to facilitate system configuration, signal routing, and diagnostics of the complete AV network. Each domain and endpoint, as well as the inputs and outputs of each endpoint, can be designated with a user-friendly name. Navigating the entire system is easy using the search box to quickly find domains, endpoints, inputs, and outputs by name or address. A system overview screen is also provided, showing the video and audio signal status for every input and output in a graphical layout that is easy to view and navigate.

Multicast Address Control

A custom multicast range can optionally be assigned for DM NVX encoder and decoder endpoints within a domain. The custom multicast range is determined by the assignment of a starting multicast address, the number of multicast addresses assigned to each DM NVX endpoint, and the number of DM NVX endpoints assigned to a domain. Multicast address control is accomplished by using the web interface.

Credential Management of DM NVX Endpoints

Username and password credentials can be changed simultaneously for all DM NVX encoder and decoder endpoints within a domain. Alternatively, the username and password can be changed for only particular DM NVX endpoints within a domain. Username and password credential management is accomplished by using the web interface.

XiO Cloud® Service Support

The DM-NVX-DIR-80 is compatible with the Crestron XiO Cloud service, which is an IoT (Internet of Things) platform for remotely provisioning, monitoring, and managing Crestron devices across an enterprise or an entire client base. Built on the Microsoft® Azure® software platform and using industry-leading Azure IoT Hub technology, the XiO Cloud service enables installers and IT managers to deploy and manage thousands of devices in the amount of time it previously took to manage a single device. Unlike other virtual machine-based cloud solutions, Azure services provide unlimited scalability to suit the ever-growing needs of an enterprise. For more information, visit www.crestron.com/xiocloud.

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Specifications

Device Support

Endpoints: Supports 80 DM NVX devices, each configured as an encoder or decoder

Domains: Supports a single domain (all endpoints are grouped together as a single system)

Communications

Ethernet: 100/1000 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, SSL, TLS, SSH, IPv4, HTTPS web browser setup and control, Crestron 3-Series® or later control system integration

DM NVX (via Ethernet): HDCP 2.2, AES audio/video content encryption, RTP, RTSP, SDP, ONVIF, IGMPv2, IGMPv3, SMPTE 2022, FEC (Forward Error Correction)

Connectors

MGMT (front): (1) 8-pin RJ-45 connector, shielded, female; 100BASE-TX/1000BASE-T Ethernet port for hardware management

USB 2.0 (front): (2) USB Type A connectors, female, black; USB 2.0 host ports for factory use only

USB 3.0 (front): (2) USB Type A connectors, female, blue; USB 3.0 host ports for factory use only

Ethernet 1 – 4 (front): (2) 8-pin RJ-45 connectors, shielded, female; 100BASE-TX/1000BASE-T Ethernet ports for web browser, endpoint, and control traffic

100-240V~ 2-4A 50/60Hz (rear): (1) IEC 60320 C14 mains power inlet; Mates with removable power cord, included

Controls and Indicators

MSG: (1) Blue LED, identifies the device when the unit identification process is initiated

Ethernet 1 – 2: (2) Green LEDs, indicate Ethernet activity on the corresponding Ethernet port

DISK: (1) Yellow LED, indicates SSD (solid-state drive) activity

PWR: (1) Green LED, indicates the unit is powered on

RESET: (1) Recessed push button, initiates a hardware reset

Power Button: (1) Push button, initiates boot up or shutdown

MGMT: (1) Amber LED and (1) bicolor green/orange LED; indicates Ethernet activity, speed, and link status for the management Ethernet port

Ethernet 1 – 4: (1) Amber LED and (1) bicolor green/orange LED per each of (4) ports; each pair indicates Ethernet activity, speed, and link status for the corresponding Ethernet port

Power

Mains Power: 4 Amps @ 100-120 VAC, 50/60 Hz; 2 Amps @ 220-240 VAC, 50/60 Hz

Power Consumption: 35 Watts at 100% CPU usage and fan speed

Environmental

Operating Temperature: 50° to 95° F (10° to 35° C)

Operating Humidity: 8% to 90% RH (non-condensing)

Non-Operating Temperature: -40° to 158° F (-40° to 70° C)

Non-Operating Humidity: 5% to 95% RH (non-condensing)

Heat Dissipation: 119.4 BTU/hr

Construction

Chassis: Metal, black finish; vented front, rear, and sides; variable speed fan cooled

Mounting: Freestanding or 1 RU 19-inch rack-mountable (rack ears included)

Dimensions

Height: 1.72 in. (44 mm)

Width: 17.21 in. (437 mm) without rack ears; 19.00 in. (483 mm) with rack ears

Depth: 10.49 in. (267 mm) without rack ears

Weight

10 lb (4.54 kg)

Compliance

Regulatory Model: DM-XIO-DIR-80

UL® Listed for US and Canada, CE, IC, FCC Part 15 Class B digital device

Model

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Accessories

For a list of accessories, visit the [DM-NVX-DIR-80](#) product page.

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This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

The specific patents that cover Crestron products are listed online at patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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