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DigitalMedia™ XiO Director – Virtual Switching Appliance for 80 Endpoints

> Comprehensive network AV system configuration, management, and signal routing

> Emulates a traditional hardware-based matrix switcher

> Works with Crestron® DM® NVX encoders and decoders

> Supports 80 endpoints in a single domain

> Fully scalable for any sized network

> Intuitive web-based graphical user interface

> Ethernet control system interface

> Fully-programmable control of the virtual matrix and physical endpoints

> Automatic endpoint device discovery

> Custom naming and search tools

> Easy diagnostics and signal status display

> XML device map file import/export

> Built-in logging

> Four Gigabit Ethernet LAN ports

> Single-space 19" rack-mountable

> Universal 100-240V internal power supply

The DM® XiO Director, model DM-XIO-DIR-80, is an enterprise-grade network appliance that facilitates configuration, control, and management of a large-scale AV network. Using DM NVX encoder/decoders, Crestron® offers the industry's most versatile and scalable solution for distributing 4K60 4:4:4 HDR video over an IP network. The XiO Director provides a means for managing large networks of DM NVX devices, routing AV signals, and simplifying integration with one or more Crestron control systems.

Virtual DM® Switcher

The XiO Director virtually emulates the functionality of a traditional hardware-based DigitalMedia™ matrix switcher, routing high-quality 4K streaming AV signals throughout a room, building, or campus. The DM-XIO-DIR-80 model supports a total of 80 endpoint devices consisting of DM NVX encoders and decoders. Multiple XiO Director units can be deployed, with the ability to route signals between units just like hardware switchers [1], easily handling even the largest corporate enterprise, university, governmental, military, medical, transportation, sports, entertainment, hospitality, gaming, or retail application.

Simple, Flexible Configuration

System configuration could not be simpler. The XiO Director automatically discovers each DM NVX endpoint on the network, and allows each endpoint to be assigned as a logical input or output to the software-based matrix switcher. The XiO Director effectively eliminates the need for a physical switcher, providing the virtual equivalent running on the AV network.

Note: The DM-XIO-DIR-80 assigns all associated endpoints to a single "domain." A domain is a logical grouping of endpoints that operate together as a single switching entity. Each DM-XIO-DIR-80 in a system functions as a separate domain. Other XiO Director models, including the DM-XIO-DIR-160 and DM-XIO-DIR-ENT, can support multiple domains.

Refer to each model's spec sheet for more information and additional available features.

Easy Web-based Setup and Control

The XiO Director provides an intuitive web-based user interface to facilitate system configuration, signal routing, and comprehensive diagnostics of the complete AV network. Each domain and endpoint, as well as the inputs and outputs on each endpoint, can be designated with a user-friendly name. Navigating the entire system is easy using the search box [1] 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's easy to view and navigate.

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: 10/100/1000 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, SSL, TLS, SSH, IPv4 or IPv6, HTTPS web browser setup and control, Crestron 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 RJ45 connector, shielded, female; 10Base-T/100Base-TX/1000Base-T Ethernet port for hardware management

Front and Rear Panels

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

LAN 1 – 4 (front): (4) 8-pin RJ45 connectors, shielded, female; 10Base-T/100Base-TX/1000Base-T Ethernet ports for web browser, endpoint, and control traffic

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

Controls & Indicators

MSG: (1) Blue LED, identifies the device when "unit identification" is initiated
LAN 1 – 2: (2) Green LEDs, each indicates Ethernet activity on the corresponding LAN port
DISK: (1) Yellow LED, indicates SSD activity
PWR: (1) Green LED, indicates the unit is powered on
RESET: (1) Recessed pushbutton, initiates a hard reset
Power Button: (1) Pushbutton, initiates boot up or shutdown
MGMT: (1) Amber LED & (1) bi-color green/orange LED; indicates Ethernet activity, speed, and link status for the management LAN port
LAN 1 – 4: (1) Amber LED & (1) bi-color green/orange LED per each of (4) ports; each pair indicates Ethernet activity, speed, and link status for the corresponding LAN port

Power

Main Power: 4 Amps @ 100-120 Volts AC, 50/60 Hz;
2 Amps @ 220-240 Volts AC, 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

Compliance

IC, CE, FCC Part 15 Class B digital device

MODELS & ACCESSORIES

Available Models
DM-XIO-DIR-80: DigitalMedia™ XiO Director – Virtual Switching Appliance for 80 Endpoints

Available Accessories
DM-NVX Series: DigitalMedia™ 4K60 4:4:4 HDR Network AV Encoder/Decoders
DM-RPP-K24: DigitalMedia™ 24-Port Keystone Patch Panel
DM-CONN-ULTRA-RECP: DigitalMedia™ Ultra Keystone RJ45 Jack
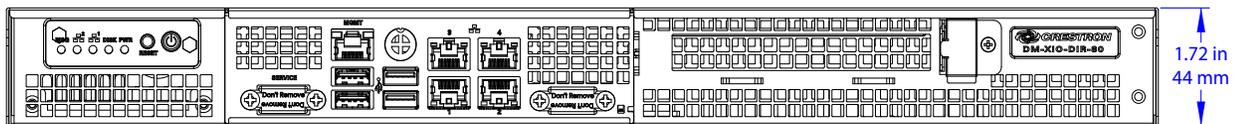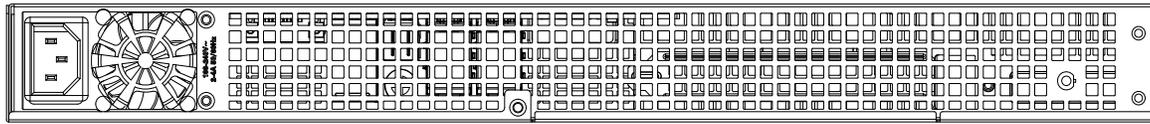**DM-CBL-ULTRA-PC:** DigitalMedia™ Ultra Patch Cables

Notes:

1. Search box navigation and the ability to route signals between units are future features that will be enabled via firmware update.

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

The specific patents that cover this and other Crestron products are listed online at https://www.crestron.com/legal/patents.

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

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10.49 in
267 mm

10.02 in
255 mm

17.21 in
437 mm

1.72 in
44 mm

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