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DM-XIO-DIR-ENT

DigitalMedia™

DigitalMedia™ XiO Director – Virtual Switching Appliance, Enterprise Version

- *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 1000 endpoints and 240 domains*
- *Enables grouping of endpoints in up to 240 independent subsystems*
- *Fully scalable for any sized network*
- *Intuitive web-based graphical user interface*
- *Ethernet control system interface*
- *Fully-programmable control of virtual matrices 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*
- *Six Gigabit Ethernet RJ45 LAN ports*
- *Six 1/10 Gigabit Ethernet SFP+ LAN ports*
- *Fiber optic connectivity via optional SFP or SFP+ transceivers*
- *Onboard 100-240V hot-swappable redundant power supplies*
- *Single-space 19" rack-mountable*

The DM® XiO Director, model DM-XIO-DIR-ENT, 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-ENT model supports a total of 1000 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 within a "domain." A domain is a logical grouping of endpoints that operate together as a single switching entity, allowing individual rooms and other subsystems to be arranged and controlled independently. It's like having multiple independent matrix switchers in a single rack space. The XiO Director effectively eliminates the need for physical switchers in every room, replacing them with the virtual equivalent running on the AV network.

Note: The DM-XIO-DIR-ENT supports a maximum of 240 domains. For larger systems, use multiple units.

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.

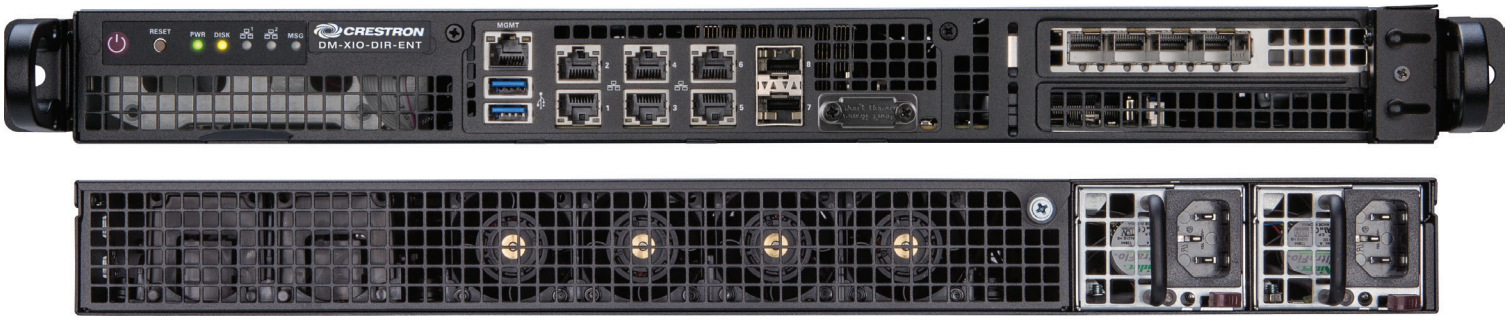
Copper or Fiber LAN Connectivity

The DM-XIO-DIR-ENT includes six 1000Base-T RJ45 LAN ports and six 10GBase-X SFP+ LAN ports. Connection to a Gigabit or 10 Gigabit fiber optic network is facilitated by inserting an appropriate SFP or SFP+ transceiver module (Crestron SFP-1G or SFP-10G series, sold separately) into any SFP+ port. A selection of modules is offered to accommodate various multimode and single-mode fiber types.

Redundant Power Supplies

Onboard dual redundant power supplies provide enhanced reliability for demanding applications. In the unlikely event of an individual power supply fault, the DM-XIO-DIR-ENT will continue to operate unhindered on only one functioning power supply. A modular, hot-swappable design allows either power supply to be replaced in seconds from the rear panel without powering down or rebooting the system. The DM-XIO-DIR-ENT ships complete with both power supply modules installed.

DM-XIO-DIR-ENT DigitalMedia™ XiO Director



Front and Rear Panels

SPECIFICATIONS

Device Support

Endpoints: Supports 1000 DM NVX devices, each configured as an encoder or decoder

Domains: Supports 240 domains (allows grouping of endpoints in up to 240 individual subsystems)

Communications

Ethernet: 10/100/1000 Mbps, 10 Gbps, 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

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

LAN 1 – 6 (front): (6) 8-pin RJ45 connectors, shielded, female; 10Base-T/100Base-TX/1000Base-T Ethernet ports for web browser, endpoint, and control traffic

LAN 7 – 12 (front): (6) SFP+ ports; 1000Base-X/10GBase-X Ethernet ports for web browser, endpoint, and control traffic;
Each port accepts one Crestron SFP-1G or SFP-10G series SFP/SFP+ transceiver module

100-240V~ 3-6A 50/60Hz (rear): (2) IEC 60320 C14 main power inlets; Each mates with a removable power cord, included

Controls & Indicators

Power Button: (1) Pushbutton, initiates boot up or shutdown
RESET: (1) Recessed pushbutton, initiates a hard reset
PWR: (1) Green LED, indicates the unit is powered on
DISK: (1) Yellow LED, indicates SSD activity
LAN 1 – 2: (2) Green LEDs, each indicates Ethernet activity on the corresponding LAN port
MSG: (1) Bi-color blue/red LED, blue identifies the device when “unit identification” is initiated, red indicates a power supply fault
MGMT: (1) Amber LED & (1) bi-color green/orange LED; indicates Ethernet activity, speed, and link status for the management LAN port
LAN 1 – 6: (1) Amber LED & (1) bi-color green/orange LED per each of (6) ports; each pair indicates Ethernet activity, speed, and link status for the corresponding LAN port
LAN 7 – 12: (2) Green LEDs per each of (6) ports; each pair indicates Ethernet activity and link status for the corresponding SFP+ port

Power

Main Power x2: 6 Amps @ 100-120 Volts AC, 50/60 Hz;
3 Amps @ 220-240 Volts AC, 50/60 Hz
Redundancy: (2) Hot-swappable power supply modules, unit continues to operate at full capacity on one functioning power supply module
Power Consumption: 140 Watts at 100% CPU usage and fan speed

Environmental

Operating Temperature: 32° to 104° F (0° to 40° 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: 477.7 BTU/hr

DM-XIO-DIR-ENT DigitalMedia™ XiO Director

Construction

Chassis: Metal, black finish, vented front and rear, variable speed fan cooled
Mounting: Freestanding or 1 RU 19-inch rack-mountable (includes rack mounting brackets for attachment to front and rear rack rails with 10-32 threaded screw holes or 3/8" (10 mm) square holes, adjustable for varying rack depths)

Dimensions

Height: 1.71 in (44 mm)
Width: 17.50 in (445 mm) without rack mounting brackets;
19.00 in (483 mm) with rack mounting brackets
Depth: 18.78 in (477 mm) without rack mounting brackets

Compliance

IC, CE, FCC Part 15 Class A digital device

MODELS & ACCESSORIES

Available Models

DM-XIO-DIR-ENT: DigitalMedia™ XiO Director – Virtual Switching Appliance, Enterprise Version

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
SFP-1G-SX: SFP Transceiver Module, Duplex Multimode Fiber, 850 nm
SFP-1G-LX: SFP Transceiver Module, Duplex Single-Mode Fiber, 1310 nm
SFP-1G-BX-U: SFP Transceiver Module, Simplex Single-Mode Fiber, 1310/1490 nm, Uplink
SFP-1G-BX-D: SFP Transceiver Module, Simplex Single-Mode Fiber, 1490/1310 nm, Downlink
SFP-10G-SR: SFP+ Transceiver Module, Duplex Multimode 850 nm
SFP-10G-BX-U: SFP+ Transceiver Module, Simplex Single-Mode Fiber, 1270/1330 nm, Uplink
SFP-10G-BX-D: SFP+ Transceiver Module, Simplex Single-Mode Fiber, 1330/1270 nm, Downlink

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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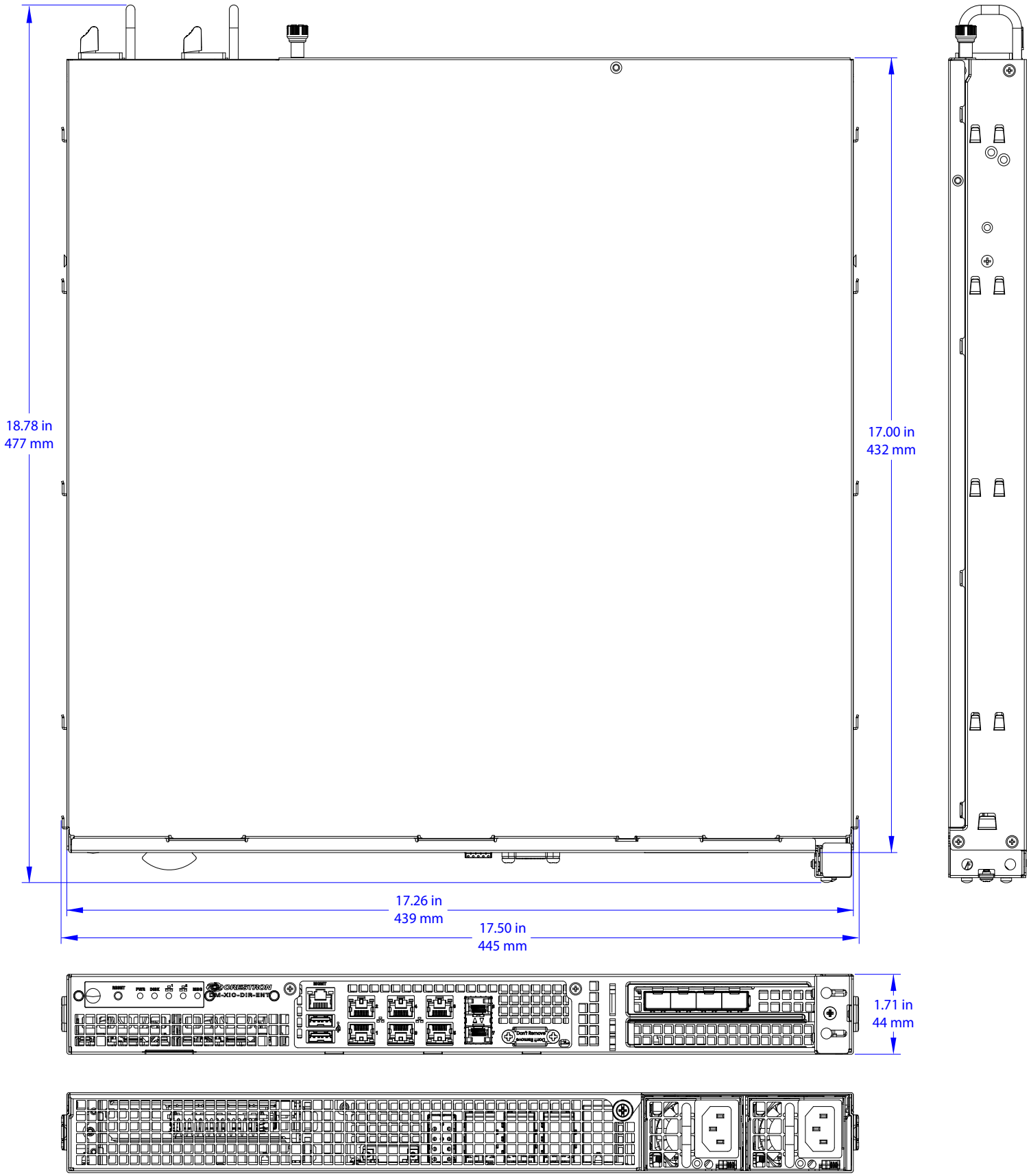

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