

# USB-EXT-DM

## USB over Ethernet Extender with Routing

- > Provides reliable, high-speed USB signal extension for any USB 1.1 or 2.0 device<sup>[2]</sup>
- > Enables USB signal routing under the control of a Crestron control system or DigitalMedia™ system<sup>[1]</sup>
- > Expands upon the USB-HID routing capabilities of a DigitalMedia™ system without additional wiring
- > Adds USB host or device ports to any DM® transmitter, receiver, or switcher
- > Also allows simple, point-to-point USB extension over CAT5e<sup>[3]</sup>
- > Transports USB over Ethernet or CAT5e at speeds up to 480 Mbps
- > USB host modules and device modules sold individually for maximum flexibility



The Crestron® USB over Ethernet Extender (USB-EXT-DM) provides the ability to connect USB peripherals at multiple locations throughout a home, business, or educational facility and route them to one or more different computers (or other hosts) anywhere in the building. The USB signals are transported over the local Ethernet network and managed through a Crestron control system.

As part of a Crestron DigitalMedia™ system, the USB-EXT-DM provides seamless routing of all types of USB signals alongside video and audio. From any room with a video display, you can switch between several different computers, media servers, and game consoles anywhere in the building and control each one using your mouse and keyboard, game controller, or electronic whiteboard.

The USB-EXT-DM expands on DigitalMedia's built-in USB HID routing abilities, adding enhanced USB connectivity to any DM® transmitter, receiver, or switcher without requiring any additional wiring. Installation is as simple as connecting a USB-EXT-DM module to the LAN port of a DM transmitter or receiver, or to a port on the local area network.<sup>[1]</sup> Two types of modules are available:

- **USB-EXT-DM-REMOTE** – Provides connectivity for up to four USB devices (keyboards, whiteboards, mobile devices, etc.) at one location
- **USB-EXT-DM-LOCAL** – Provides connectivity for a single USB host (computer, media server, codec, etc.)

The USB-EXT-DM provides compatibility with virtually any USB 1.1 or 2.0 device, including smartphones, tablets, media players, cameras, printers, flash drives, hard drives, hubs, and more.<sup>[2]</sup> So, in addition to controlling a computer with a mouse and keyboard, you can also sync your smartphone, upload photos, and share music and video files with that computer — all from clear across the building.

Without a control system or DigitalMedia system, USB-EXT-DM modules can be used to provide simple, point-to-point USB signal extension, either over an Ethernet LAN or a dedicated CAT5e wire.<sup>[3]</sup> At least one device module (USB-EXT-DM-REMOTE) and one host module (USB-EXT-DM-LOCAL) are required to form a working system. The modules are sold individually to accommodate any system configuration.

## SPECIFICATIONS

### Communications

**Ethernet:** 100Base-T or 1000Base-T, Layer 2

**Link Speed:** Up to 480 Mbps, dependent upon network speed and quality

**USB Device Support:** USB 1.1 and 2.0 compatible including isochronous devices<sup>[2]</sup>

### Connectors – USB-EXT-DM-LOCAL

**USB:** (1) USB Type B female (cable included);  
USB 2.0 device port for connection to the USB host computer, media server, game console, annotator, codec, etc.

**Link:** (1) 8-pin RJ45 female;  
Connects to an Ethernet network or directly to a USB-EXT-DM-REMOTE<sup>[3]</sup>

### Connectors – USB-EXT-DM-REMOTE

**USB:** (4) USB Type A female;  
USB 2.0 host ports for connection of USB mice, keyboards, whiteboards, game controllers, cameras, mobile devices, printers, flash drives, hard drives, hubs, and other USB devices<sup>[2]</sup>;

Available Power: 500 mA @ 5 Volts DC per port

**24V DC:** (1) 2.1 x 5.5 mm DC power connector;  
24 Volt DC power input;  
PW-2407WU power pack included

**Link:** (1) 8-pin RJ45 female;  
Connects to an Ethernet network or directly to a USB-EXT-DM-LOCAL<sup>[3]</sup>

### Controls & Indicators – USB-EXT-DM-LOCAL

**Power:** (1) Blue LED, indicates operating power supplied via the USB host

**Link:** (1) Green LED, indicates a valid link connection to a USB-EXT-DM-REMOTE

**Host:** (1) Green LED, indicates a valid connection to the USB host

**Activity:** (1) Amber LED, indicates data activity over the link connection

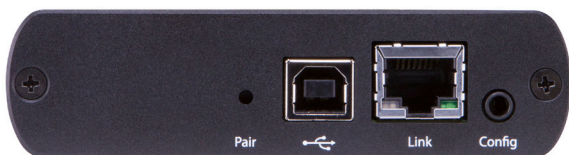
# USB-EXT-DM USB over Ethernet Extender with Routing



USB-EXT-DM-LOCAL – Front View



USB-EXT-DM-REMOTE – Front View



USB-EXT-DM-LOCAL – Rear View



USB-EXT-DM-REMOTE – Rear View

**Pair:** (1) Pushbutton, used to establish a connection with a USB-EXT-DM-REMOTE

## Controls & Indicators – USB-EXT-DM-REMOTE

**Power:** (1) Blue LED, indicates operating power supplied via the power pack

**Link:** (1) Green LED, indicates a valid link connection to a USB-EXT-DM-LOCAL

**Host:** (1) Green LED, indicates a valid connection to the USB host at the USB-EXT-DM-LOCAL

**Activity:** (1) Amber LED, indicates data activity over the link connection

**Pair:** (1) Pushbutton, used to establish a connection with a USB-EXT-DM-LOCAL

## Power Requirements

**USB-EXT-DM-LOCAL:** USB powered via the USB host interface

**USB-EXT-DM-REMOTE:** 0.75 Amps @ 24 Volts DC;  
100-240 Volts AC, 50/60 Hz power pack, model PW-2407WU included

## Environmental

**Temperature:** 32° to 122° F (0° to 50° C)

**Humidity:** 20% to 80% RH (non-condensing)

## Enclosure (Typical per Unit)

**Construction:** Black anodized aluminum

**Mounting:** Freestanding or surface mount (mounting bracket included)

## Dimensions (Typical per Unit)

**Height:** 1.02 in (26 mm)

**Width:** 3.94 in (100 mm)

**Depth:** 3.00 in (77 mm)

## MODELS & ACCESSORIES

### Available Models

**USB-EXT-DM-LOCAL:** USB over Ethernet Extender with Routing, Host Module

**USB-EXT-DM-REMOTE:** USB over Ethernet Extender with Routing, 4-Port Device Module

### Included Accessories

**PW-2407WU:** 24 Volt DC Power Pack  
(Qty. 1 included with USB-EXT-DM-REMOTE)

Notes:

1. All extender modules must be on the same layer 2 domain as the control system or DigitalMedia system. Follow accepted guidelines for proper installation and configuration of the local area network to ensure optimum performance.
2. The USB-EXT-DM is engineered to deliver maximum compatibility with the widest possible range of devices. Crestron does not guarantee that all USB devices or hosts are compatible with the USB-EXT-DM system.
3. For a direct link connection (not on a network) between the USB-EXT-DM-REMOTE and USB-EXT-DM-LOCAL, use high-quality CAT5e (or better) UTP or STP cable. The maximum cable length is 330 ft (100 m).

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 [www.crestron.com/salesreps](http://www.crestron.com/salesreps) or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

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