

QM-MD16X16

16x16 QuickMedia® Matrix Switcher

The QM-MD16X16 is a 16X16 QuickMedia matrix switcher designed to provide versatile routing of up to 16 inputs from QuickMedia Wall Plates and FlipTop Boxes to any of 16 QuickMedia Receivers. All signal routing is provided over inexpensive CAT5e type cable* via Crestron's exclusive QuickMedia transport, supporting the distribution of high-resolution RGB, video, stereo audio and microphone signals up to a total of 450 feet end-to-end. Audio breakaway capability allows audio signals to be routed independent of video signals.

Up to two QuickMedia Matrix Switchers, Distribution Centers, and Distribution Amplifiers may be cascaded in a given QuickMedia signal path* to support larger system configurations. For instance, a QM-MD16X16 may be used to expand the input capacity of a QM-MD7X2, or multiple QM Matrixes can be combined to support applications such as room-combining with numerous inputs and outputs.

Regardless of the configuration, complete system operation can be made transparent to the end-user with all signal routing occurring smoothly under the command of the MediaManager control system. Control and monitoring of the QM-MD16X16 is also possible independent of the control system using its front panel pushbuttons and LEDs. Customizable label strips are provided to easily designate inputs and outputs by name using Crestron Engraver software or standard 3/8" tape labels. For security, the front panel controls can be locked out.

Every QuickMedia port on the rear panel is accompanied by a Cresnet port with 24V DC power distribution built in to simplify termination of the QuickMedia and Cresnet wiring. A built-in Cresnet hub provides 4 isolated segments, each supporting 3000 feet of Cresnet cabling and approximately 20 Cresnet devices.

> *Simple, versatile QuickMedia signal routing*

> *16 x 16 crosspoint matrix switcher*

> *Audio breakaway capability*

> *Easy single-cable connections*

> *Built-in Cresnet hub/repeater*

> *Front panel controls*

> *2-space rack-mountable*

SPECIFICATIONS

Video

Switcher: 16X16 crosspoint matrix; routes any of (16) QM video input signals to any of (16) QM outputs

Gain: 0dB

Crosstalk: -59 dB @ 5MHz

-59 dB @ 10MHz

-58 dB @ 30MHz

-57 dB @ 100MHz

Audio

Switcher: 16X16 crosspoint matrix; routes any of (16) QM audio input signals to any of (16) QM outputs

Gain: 0dB

Connectors

QM-INPUT 1 - 16: (16) 8-wire RJ45 female and (16) 4-pin 3.5mm detachable



Connect to Cresnet and QM output ports of other QuickMedia devices via **CresCAT-QM cable***

QM-OUTPUT 1 - 16: (16) 8-wire RJ45 female and (16) 4-pin 3.5mm detachable terminal blocks comprising (16) QuickMedia output ports with Cresnet;

Connect to Cresnet and QM input ports of other QuickMedia devices via **CresCAT-QM cable***

24/G: (8) 2-pin 5mm detachable terminal blocks providing (1) power connector per every (4) Cresnet ports;

Receive 24 Volts DC from external Cresnet power supplies;

Maximum Load: 75 watts each

NET: (1) 4-pin 5mm detachable terminal block;

Cresnet slave port; connects to Cresnet control network

G: (1) 6-32 screw, chassis ground lug

Buttons & Indicators

PWR: (1) green LED, indicates 24 Volts DC power supplied from Cresnet control network via main NET connector

NET: (1) yellow LED, indicates communication with Cresnet system via the main NET port

AUDIO BREAK: (1) recessed pushbutton & red LED, enables audio breakaway in local mode, indicates audio breakaway in system mode

A: (1) pushbutton & red LED, selects audio routing in local mode when audio breakaway is enabled, selects audio routing view in system mode

V: (1) pushbutton & red LED, selects video routing in local mode when audio breakaway is enabled, selects video routing view in system mode

SYS: (1) pushbutton & red LED, activates Cresnet system control mode

LOCAL: (1) recessed pushbutton & red LED, activates local front panel control mode

ENTER: (1) pushbutton & red LED, implements routing set by IN and OUT buttons in local mode

INPUT 1 - 16: (16) pushbuttons & red LEDs, select inputs to be routed in local mode, select routing view for a given input in system mode

OUTPUT 1 - 16: (16) pushbuttons & red LEDs, select output destination(s) in local mode, select routing view for a given output in system mode

SETUP (rear): (1) miniature pushbutton & red LED, used for touch-settable ID (TSID)

Power Requirements

Cresnet Power Usage : 45 Watts (1.875 Amps @ 24 Volts DC)

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Environmental

Temperature: 41° to 104°F (5° to 40°C)

Humidity: 10% to 90% RH (non-condensing)

Heat Dissipation: 153 BTU per hour

Enclosure

Chassis: Steel, black matte powder coat finish, convection-cooled, vented top and sides

Faceplate: Extruded aluminum, black matte powder coat finish with polycarbonate label overlay

Mounting: Freestanding or 2U 19-inch rack-mountable (adhesive feet and rack ears included)

Dimensions

Height: 3.54 in (8.98 cm);

3.47 in (8.81 cm) without feet

Width: 17.03 in (43.24 cm);

19.0 in (48.26 cm) with ears

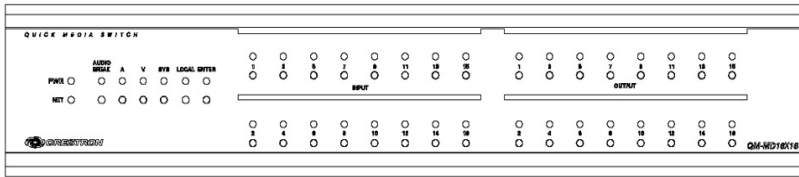
Depth: 10.42 in (26.47 cm)

Weight

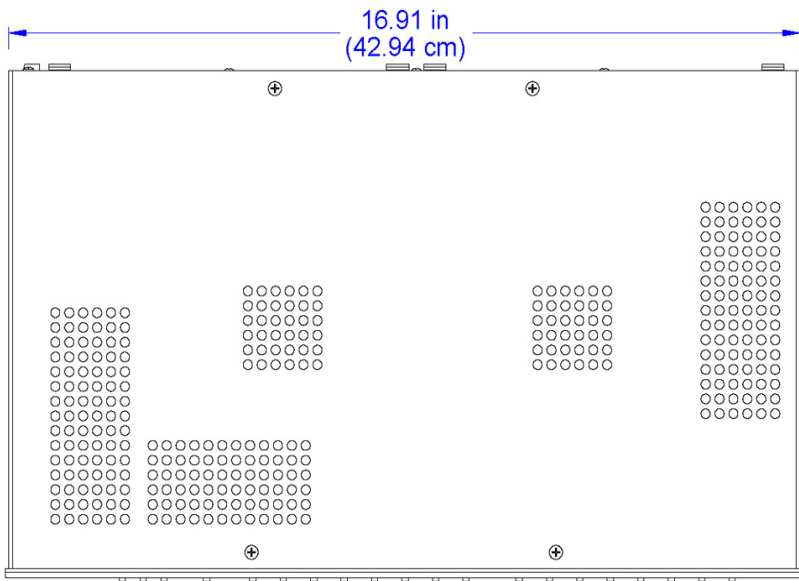
6.75 lb (3.07 kg)

** For QuickMedia wiring use CresCAT-QM, CresCAT-IM, or quality CAT5e/CAT6 cable with a delay skew of $\leq 15\text{nS}$ per 100m; the maximum aggregate cable length and delay skew between any QM transmitter (origination point) and QM receiver (endpoint) is 450 ft (137 m) and 22 nS; a maximum of two QM midpoint devices may be inserted in a given QM signal path; exceptions apply, refer to each respective product manual for full detail.*

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3.47 in
(8.82 cm)

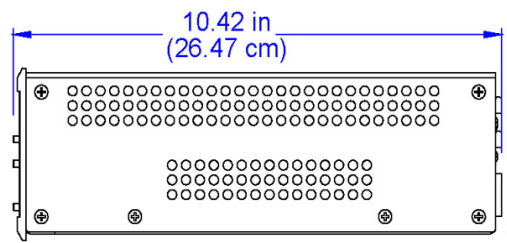
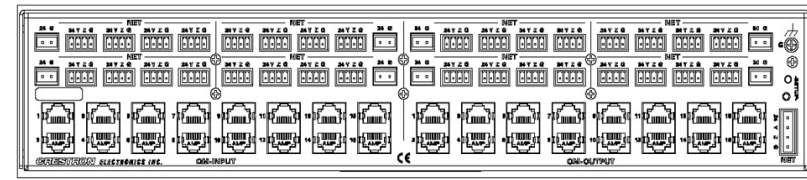


16.91 in
(42.94 cm)

10.03 in
(25.48 cm)



17.03 in
(43.25 cm)



10.42 in
(26.47 cm)

3.24 in
(8.23 cm)