# QM-RX

# QuickMedia® Receiver

The QM-RX is a QuickMedia® receiver designed to provide cost-effective RGB and video signal routing and control as part of a complete MediaManager AV presentation system. Using Crestron's exclusive QuickMedia transport, the QM-RX receives RGB and video signals over a single inexpensive CAT5e type cable\* from any QuickMedia Wall Plate, FlipTop Box, or Distribution Center.

Mounted at the projector or plasma display location, the QM-RX breaks out composite video, S-Video, and RGBHV signals to feed the respective inputs on the display device. All signal routing occurs automatically under the command of the control system based upon the input source type selected.

The QuickMedia transport supports the transmission of RGB signals with resolutions up to 1920 X 1200 pixels at 60Hz. Software-controllable frequency, bandwidth, and skew compensation adjustments are provided to maximize image quality over cable runs up to 450 feet long with up to 22 nS of delay skew.

The QM-RX includes one bidirectional RS-232 port and one IR/Serial port for control of the display device. A digital input port is also included to enable direct connection of a room occupancy sensor, power sensor, or any contact closure device.

Wiring for the QM-RX is extremely simple requiring just a single CresCAT®QM cable (sold separately). Complete MediaManager systems are easy to design, program and adjust from start to finish using Crestron SystemBuilder™ software.

- > QuickMedia Receiver
- > Composite, S-Video and RGB outputs
- > RS-232, IR, and digital in control ports
- > Optional power current sensor

### **SPECIFICATIONS**

#### <u>Video</u>

Signal Types: RGB and composite, S-Video, or component† video Video/HDTV Formats: NTSC or PAL, HDTV up to 1080i/1080p† RGB Formats: RGBHV, RGBS, or RGsB

Gain: 0dB (75 ohms terminated)

**Maximum Resolution:** 1920 x 1200 @ 60Hz (at unity gain) with maximum cable length of 450 feet and maximum compensation

**QM Cable Compensation:** 10-bit digitally controlled PEAK (bandwidth) and BOOST (frequency); 4-bit digitally controlled SKEW delay, 0 to 22 ns (independent for R/ Pr, G/Y, and B/Pb)

### **Connectors - Front Panel**

**QM**: (1) 8-wire RJ45 female, QuickMedia input port; Connects to QM output port of any QuickMedia device via CresCAT-QM or CRESCAT-IM cable\*

NET: (2) 4-pin 3.5mm detachable terminal blocks;

Cresnet ports (paralleled), Master/Slave selectable; Connect to Cresnet control network via CresCAT-QM or Cresnet cable



### Connectors - Rear Panel RGBHV: (1) DB15HD female, RGB(VGA)/component video† output; Formats: RGBHV, RGBS, RGsB, YPbPr; Output Level: 1 Vp-p nominal;

Sync Level: 5 Vp-p nominal; Output Impedance: 75 ohms; H/V Sync Impedance: 100 ohms S-VIDEO: (1) 4-pin mini DIN female, S-Video (Y/C) output; Output Level: 1.0 Vp-p (luma), 0.7 Vp-p (chroma); Output Impedance: 75 ohms VIDEO: (1) BNC female, composite video output; Output Level: 1.0 Vp-p; Output Impedance: 75 ohms G: 6-32 screw, chassis ground lug COM: (1) DB9 male, bidirectional RS-232 port; Up to 115.2k baud, hardware and software handshaking support IR: (1) 2-pin 3.5mm detachable terminal block; IR/Serial port; IR output up to 1.2 MHz; 1-way serial TTL/RS-232 (0-5 Volts) up to 9600 baud **INPUT 1:** (1) 2-pin 3.5mm detachable terminal block; Digital/contact closure input; Rated for 0-24 Volts DC, referenced to GND: Input Impedance: 2.2k ohms pulled up to 5 Volts DC; Logic Threshold: 2.5 Volts DC nominal with 1 Volt hysteresis band

### LED Indicators

PWR: (green) Indicates 24 Volts DC power supplied from Cresnet control network NET: (yellow) Indicates communication with Cresnet system SETUP: (red) Used for touch-settable ID (TSID)

### **Buttons**

SETUP: Used for touch-settable ID (TSID)



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### Power Requirements

Cresnet Power Usage: 8 Watts (0.33 Amp @ 24 Volts DC)

### **Environmental**

**Temperature:** 41° to 104°F (5° to 40°C) **Humidity:** 10% to 90% RH (non-condensing)

### Enclosure

**Chassis:** Steel, black matte powder coat finish **Mounting:** Free-standing, surface-mount, or pole-mount (adhesive feet and [4] "L" brackets included, MK-QM-RMCRX pole mount kit sold separately)

### **Dimensions**

Height: 1.71 in (4.34 cm) Width: 6.96 in (17.68 cm) Depth: 5.83 in (14.81 cm)

### <u>Weight</u>

1.1 lbs (0.5 kg)

\* For QuickMedia wiring use CresCAT-QM, CresCAT-IM, or quality CAT5e/ CAT6 cable with a delay skew of ≤15nS 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.

*† Component video or HDTV may require a suitable VGA-to-component adapter or breakout cable, not provided.* 

### Available Models

QM-RX: QuickMedia Receiver

#### **Available Accessories**

CBL-VGA-1.5: Crestron® Certified Computer VGA Interface Cable, 1.5 ft CBL-VGA-12: Crestron® Certified Computer VGA Interface Cable, 12 ft CBL-VGA-25: Crestron® Certified Computer VGA Interface Cable, 25 ft CBL-VGA-3: Crestron® Certified Computer VGA Interface Cable, 3 ft CBL-VGA-6: Crestron® Certified Computer VGA Interface Cable, 6 ft CNSP-XX: Custom Serial Interface Cable

**CNXRMCS:** TV Current Sensor

**CRESCAT-QM-NP-SP500:** QuickMedia® Cable, Low-skew CAT5e & Cresnet, non-plenum, 500 ft spool

**CRESCAT-QM-P-SP500:** QuickMedia® Cable, Low-skew CAT5e & Cresnet, plenum, 500 ft spool

IRP2: IR Emitter Probe

MK-QM-RMCRX: Pole Mount Bracket for QM-RX and QM-RMCRX-BA





