

Crestron **IM-RXV1 & IM-RXV3**
iMedia Receiver/Processor with Video

Operations & Installation Guide



This document was prepared and written by the Technical Documentation department at:



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Contents

iMedia Receiver/Processor with Video: IM-RXV1 & IM-RXV3	1
Introduction	1
Features and Functions	1
Applications.....	2
Specifications	4
Physical Description.....	5
Industry Compliance	10
Setup.....	11
Network Wiring.....	11
IM Wiring.....	11
Hardware Hookup	13
System Configuration	15
Earliest Version Software Requirements for the PC	15
iMedia Wizard Configuration.....	15
Uploading and Upgrading.....	16
Establishing Communication.....	16
Firmware	17
Problem Solving	18
Troubleshooting.....	18
Reference Documents.....	18
Further Inquiries	18
Future Updates	19
Return and Warranty Policies.....	20
Merchandise Returns / Repair Service	20
CRESTRON Limited Warranty.....	20

iMedia Receiver/Processor with Video: IM-RXV1 & IM-RXV3

Introduction

Features and Functions

- Simple, affordable solution for single-display multimedia presentation
- Models with one (IM-RXV1) or three (IM-RXV3) IM transmitter inputs available
- iMedia transport for fast and easy single-cable installation using CresCAT™-IM cable
- Supports XGA resolution up to 84 feet, and UXGA up to 34 feet over CresCAT-IM cable
- Receives and displays composite video signals
- Built-in LAN, RS-232, IR, relays and digital input control ports
- Built-in 20 Watt stereo amplifier and line-level outputs
- Complete setup in minutes using iMedia Wizard Software
- Built-in Web-server supports e-Control^{®2} and RoomView[®]

The iMedia Transport

The iMedia transport utilizes a single CAT5e* type cable to transmit computer RGB, video, and stereo audio signals to a single projector or plasma display. A typical XGA signal (1024 X 768 pixels at 60Hz) can be transmitted up to 84 feet using iMedia, while higher resolutions up to 1600 x 1200 can be handled over shorter distances. Composite video signals can be transmitted up to 218 feet. Audio is transmitted digitally at 20-bit, 48 kHz resolution. Control and power signals are also contained on the same wire, eliminating the need for separate control or power cables.

* For iMedia use CresCAT-IM cable, or quality CAT5e/CAT6 cable having a maximum delay skew of 15ns per 100m.

iMedia Receiver

Mounted at the projector or plasma display, the IM-RXV1 and IM-RXV3 receive the iMedia (IM) signal from up to three IM transmitters, breaking out the RGB, video,

audio, and control signals for connection to the display device. Adjustable bandwidth compensation is provided to maximize image quality over long cable runs.

Integrated Audio

The IM-RXV1 and IM-RXV3 include a built-in 20 watt stereo amplifier to drive a pair of 8 ohm speakers. Balanced line-level outputs are also provided to allow the audio signal to be connected directly to inputs on the display device or fed to a pair of powered speakers. Onboard digital signal processing affords adjustment of master volume, bass, treble and balance settings at setup.

Display Control

The IM-RXV1 and IM-RXV3 contain both IR and bidirectional RS-232 ports to enable full control of the display device. Two relay ports are also included for control of a projection screen or lift. In addition, the four digital input ports can accept the direct connection of room occupancy sensors and power sensors for enhanced automation and monitoring.

e-Control[®] 2 and RoomView[®]

Despite its simple design and low cost, the IM-RXV1 and IM-RXV3 support Crestron's powerful e-Control 2 XPanel and RoomView applications, delivering the industry's best help desk and resource management solution for any number of rooms equipped with iMedia.

Fast, Easy Setup

System setup takes mere minutes using iMedia Wizard software, providing easy start-to-finish configuration, adjustment, and documentation.

Applications

The IM-RXV1 and IM-RXV3 are part of the Crestron[®] iMedia line of network devices, room control systems and signal routing solutions. The line of iMedia devices includes receivers and transmitters. Consult the Crestron website for a complete and current listing of the iMedia product line.

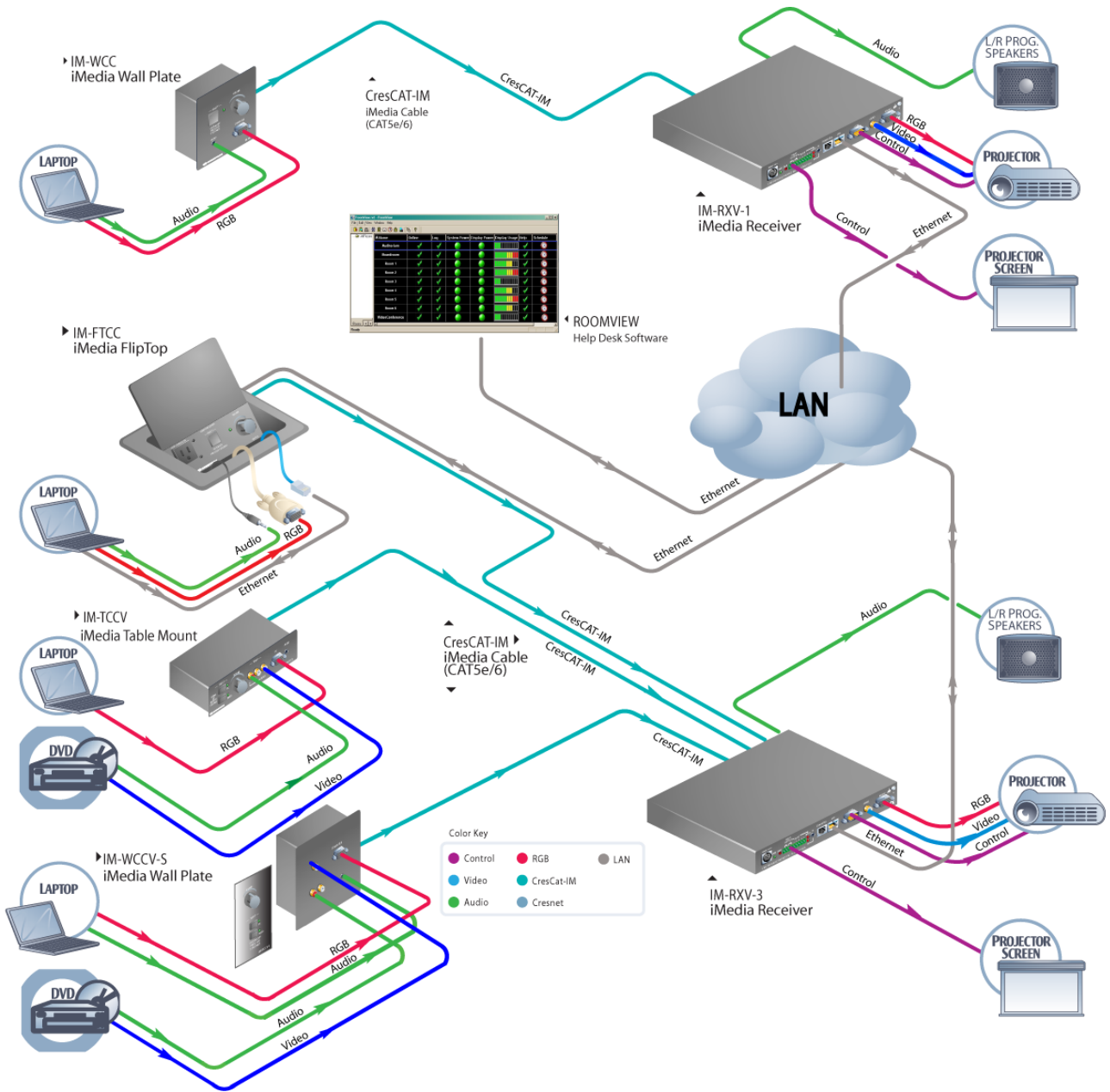
NOTE: The composite video output of the IM-RXV1 and IM-RXV3 are not enabled when using the iMedia transmitters without composite video inputs.

The IM-RXV1 and IM-RXV3 can be placed on a table or mounted to a surface using the included brackets. These receivers can also be mounted to a pipe using the optional pole mount kit MK-IM-RX.

NOTE: The IM-RXV1 and IM-RXV3 are not Cresnet[®] devices.

The IM-RXV1 and IM-RXV3 are part of a family of compatible iMedia devices, all capable of working together to put on simple to complex media presentations. The following diagram shows the interconnections.

Typical Two-Room Installation for Media Presentation



Specifications

Specifications for the IM-RXV1 & IM-RXV3 are listed in the following table.

IM-RXV1 & IM-RXV3 Specifications

SPECIFICATION	DETAILS
Outputs	
RGB	
Gain	0 dB (75 ohm termination)
Resolution	1024 x 768 @ 60Hz with maximum cable length of 84 feet, 1600 x 1200 @ 60Hz with maximum cable length of 34 feet; refer to "Video Resolution and Cable Length" on page 12 for other resolutions
Video	
Gain	0 dB (75 ohm termination)
Formats	480i (NTSC), 576i (PAL)
Audio (Line-Level)	
Output Level	4 V _{RMS} balanced, 2 V _{RMS} unbalanced
Output Impedance	200 ohms balanced, 100 ohms unbalanced
Frequency Response	20 Hz to 20 kHz ±0.5 dB
Signal-to-Noise Ratio	82 dB, 20 Hz to 20 kHz, A-weighted
Total Harmonic Distortion + Noise	0.05%, 20 Hz to 20 kHz
Speaker	
Output Power	10 Watts Per Channel (x2) into 8 ohms (minimum impedance)
Frequency Response	20 Hz to 20 kHz ±1 dB
Signal-to-Noise Ratio	80 dB, 20 Hz to 20 kHz, A-weighted
Total Harmonic Distortion + Noise	0.7%, 20 Hz to 20 kHz
Infrared/Serial	(1) mini-phone jack, IR/Serial port;
IR output	Up to 1.2 MHz
Relay	(2) Normally open, isolated relays;
Rating	2A, 50V AC/DC; MOV arc suppression across contacts
Inputs	
IM	IM-RXV1: (1) IM port connects to IM output of IM transmitter devices IM-RXV3: (3) IM ports connect to IM output of IM transmitter devices
Digital	(4) digital inputs; Rated for 0-24V DC, referenced to GND;
Input Impedance	2k ohms pulled up to 5V DC
Logic Threshold	2.5V DC nominal

(Continued on following page)

IM-RXV1 & IM-RXV3 Specifications (Continued)

SPECIFICATION	DETAILS
Communications	
Serial	(1) DB9, male, bidirectional RS-232 port; Up to 115.2k baud, hardware and software handshaking support for communication with serial devices
Console	(1) RJ-11 female, bidirectional RS-232 computer console port for connection to PC
Ethernet	(1) RJ-45 port for Ethernet communications
Audio	
A-D Conversion	20-bit, 48 kHz
Bass/Treble Gain Range	±12 dB
Ethernet	10/100 BaseT, static IP or DHCP/DNS, auto-negotiating, built-in Web server, supports Crestron e-Control 2, XPanel, and RoomView applications
Power Requirements	
External Power Supply (Included)	Input: 100-240 VAC @ 50-60 Hz Output: 54 Watts (3 Amps) @ 18 Volts DC
Environmental	
Temperature	41° to 104°F (5° to 40°C)
Humidity	10% to 90% RH (non-condensing)
Enclosure	Black metal; freestanding, surface mount using "L" brackets provided, or pole mount using optional pole mount kit (sold separately)
Dimensions (without brackets)	
Height	1.61 in (4.08 cm)
Width	8.75 in (22.23 cm)
Depth	7.69 in (19.53 cm)
Weight	1.75 lbs (0.80 kg)
Available Accessories	
MK-IM-RX	Pole mount kit
CNSP-XX	Custom serial interface cable
STIRP	IR probe
CNXRMCS	Current Sensor

Physical Description

This section provides information on the connections, controls, and indicators available on your IM-RXV1 and IM-RXV3.

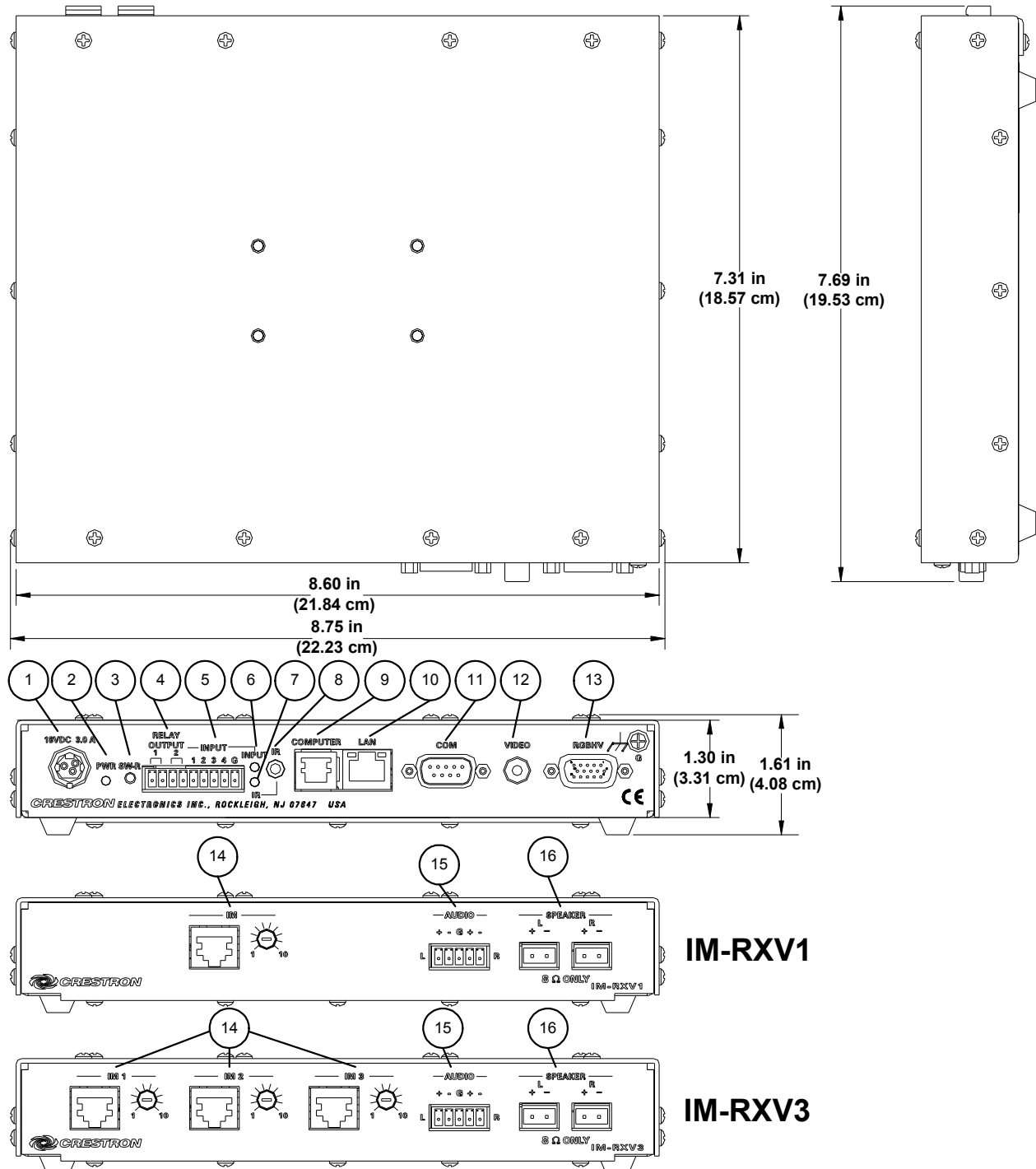
IM-RXV1 Physical Views (Front (L) and Rear (R))











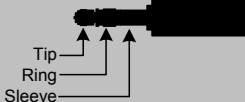

IM-RXV3 Physical Views (Front (L) and Rear (R))



IM-RXV1 & IM-RXV3 Overall Dimensions

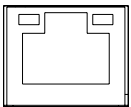
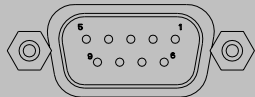



Connectors, Controls, & Indicators

#	CONNECTORS, CONTROLS, & INDICATORS	DESCRIPTION																
1	<p>POWER INPUT 18VDC 3.0 A</p> 	Power connector require 3.0 A @ 18 VDC from included power supply.																
2	<p>PWR LED PWR</p> 	Indicates power from the included power supply.																
3	<p>SOFTWARE RESET SW-R</p> 	Recessed below the front panel. Press this button while the system is running to restart the program.																
4	<p>RELAY OUTPUT</p> <p>RELAY OUTPUT 1 2</p> 	(2) Normally open isolated relays; rated to 2A, 50V (AC/DC) with MOV arc suppression across contacts for control of "real world" loads. A nine-pin terminal block interface connector is included.																
5	<p>INPUT</p> <p>— INPUT — 1 2 3 4 G</p> 	(4) Digital inputs. Connect to 24 VDC (max) logic output or contact closure from external devices. A five-pin terminal block interface connector is included.																
6	<p>INPUT LED INPUT</p> 	Indicates when an input signal is received on any of the four digital inputs.																
7	<p>IR LED IR</p> 	Indicates when an output signal is transmitted from the IR OUT port.																
8	<p>IR OUT IR</p> 	<p>(1) 3.5mm tip-ring-sleeve (TRS) mini-phone port enables infrared communications to other devices; Use Crestron Infrared Emitter Probe (part number STIRP, sold separately) for controlling infrared devices.</p>  <p>Tip: IR Data Out Ring: No Connection Sleeve: Ground</p>																
9	<p>COMPUTER PIN 1 — COMPUTER</p> 	<p>One 6-pin RJ-11 female, computer console port. Use with STCP-502 serial cable (not included).</p> <table border="1"> <thead> <tr> <th>PIN</th> <th>FUNCTION</th> <th>PIN</th> <th>FUNCTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CTS</td> <td>4</td> <td>TXD</td> </tr> <tr> <td>2</td> <td>GND</td> <td>5</td> <td>RTS</td> </tr> <tr> <td>3</td> <td>RXD</td> <td>6</td> <td>No Connect</td> </tr> </tbody> </table>	PIN	FUNCTION	PIN	FUNCTION	1	CTS	4	TXD	2	GND	5	RTS	3	RXD	6	No Connect
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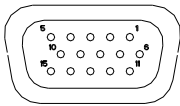
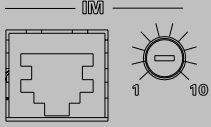
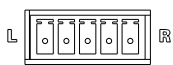
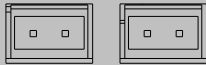
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Connectors, Controls, & Indicators (Continued)

#	CONNECTORS, CONTROLS, & INDICATORS	DESCRIPTION																														
10	<p>LAN LAN</p> 	<p>One 8-wire, RJ-45 female connector with two LED indicators. The green LED indicates link status while the yellow LED indicates Ethernet activity. The port supports 10BaseT/100BaseTX Ethernet communications.</p>																														
11	<p>COM COM</p> 	<p>(2) DB9, male, bidirectional RS-232 ports; Up to 115.2k baud with hardware and software handshaking support for communication with serial devices. Can also be used for modem communications. The following table lists the pin assignments of the serial ports.</p> <table border="1"> <thead> <tr> <th>PIN</th> <th>DIRECTION</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>To IM-RXV1/3</td> <td>(DCD) Data Carrier Detect</td> </tr> <tr> <td>2</td> <td>To IM-RXV1/3</td> <td>(RXD) Receive Data</td> </tr> <tr> <td>3</td> <td>From IM-RXV1/3</td> <td>(TXD) Transmit Data</td> </tr> <tr> <td>4</td> <td>From IM-RXV1/3</td> <td>(DTR) Data Terminal Ready</td> </tr> <tr> <td>5</td> <td>Common</td> <td>(GND) Ground</td> </tr> <tr> <td>6</td> <td>From IM-RXV1/3</td> <td>(DSR) Data Set Ready</td> </tr> <tr> <td>7</td> <td>From IM-RXV1/3</td> <td>(RTS) Request To Send</td> </tr> <tr> <td>8</td> <td>To IM-RXV1/3</td> <td>(CTS) Clear To Send</td> </tr> <tr> <td>9</td> <td>To IM-RXV1/3</td> <td>(RI) Ring Indicator</td> </tr> </tbody> </table>	PIN	DIRECTION	DESCRIPTION	1	To IM-RXV1/3	(DCD) Data Carrier Detect	2	To IM-RXV1/3	(RXD) Receive Data	3	From IM-RXV1/3	(TXD) Transmit Data	4	From IM-RXV1/3	(DTR) Data Terminal Ready	5	Common	(GND) Ground	6	From IM-RXV1/3	(DSR) Data Set Ready	7	From IM-RXV1/3	(RTS) Request To Send	8	To IM-RXV1/3	(CTS) Clear To Send	9	To IM-RXV1/3	(RI) Ring Indicator
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9	To IM-RXV1/3	(RI) Ring Indicator																														
12	<p>VIDEO VIDEO</p> 	<p>(1) RCA, female, composite video output. Displays composite video signal from composite source connected to IM transmitter.</p>																														

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Connectors, Controls, & Indicators (Continued)

#	CONNECTORS, CONTROLS, & INDICATORS	DESCRIPTION																																				
13	<p>RGBHV RGBHV</p> 	<p>(1) DB15HD, female, RGB output. Displays RGB signal from RGB source connected to IM transmitter.</p> <table border="1"> <thead> <tr> <th>PIN</th> <th>FUNCTION</th> <th>PIN</th> <th>FUNCTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Red Video</td> <td>9</td> <td>No Connect</td> </tr> <tr> <td>2</td> <td>Green Video</td> <td>10</td> <td>Ground</td> </tr> <tr> <td>3</td> <td>Blue Video</td> <td>11</td> <td>No Connect</td> </tr> <tr> <td>4</td> <td>Reserved</td> <td>12</td> <td>Monitor Sense 1</td> </tr> <tr> <td>5</td> <td>Ground</td> <td>13</td> <td>Horizontal Sync</td> </tr> <tr> <td>6</td> <td>Red Ground</td> <td>14</td> <td>Vertical Sync</td> </tr> <tr> <td>7</td> <td>Green Ground</td> <td>15</td> <td>Monitor Sense 2</td> </tr> <tr> <td>8</td> <td>Blue Ground</td> <td></td> <td></td> </tr> </tbody> </table>	PIN	FUNCTION	PIN	FUNCTION	1	Red Video	9	No Connect	2	Green Video	10	Ground	3	Blue Video	11	No Connect	4	Reserved	12	Monitor Sense 1	5	Ground	13	Horizontal Sync	6	Red Ground	14	Vertical Sync	7	Green Ground	15	Monitor Sense 2	8	Blue Ground		
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5	Ground	13	Horizontal Sync																																			
6	Red Ground	14	Vertical Sync																																			
7	Green Ground	15	Monitor Sense 2																																			
8	Blue Ground																																					
14	<p>IM INPUT & PEAKING CONTROL</p> 	<p>This eight-pin RJ-45 transport port (three on IM-RXV3) is the input connection of the iMedia cable. It carries audio and video signals over CresCAT-IM cable from an iMedia transmitter (such as the IM-FTCC-B, IM-TCC, or IM-WCC).</p> <p>The peaking control is used during setup for video cable length compensation. Refer to “iMedia Wizard Configuration” on page 15 for additional details.</p>																																				
15	<p>AUDIO OUT</p> 	<p>This 5-pin detachable terminal block audio output connector provides balanced/unbalanced line-level left and right audio for application to an external amplifier.</p>																																				
16	<p>SPEAKER OUT</p> 	<p>The left and right speaker connectors (two 2-pin detachable terminal block connectors, 5 mm spacing) provide 20 Watts of amplified audio (10 Watts per channel) into 8 Ω speakers.</p>																																				

Industry Compliance

As of the date of manufacture, the IM-RXV1 and IM-RXV3 have been tested and found to comply with specifications for CE marking and standards per EMC and Radiocommunications Compliance Labelling.



NOTE: These devices comply with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) these devices may not cause harmful interference, and (2) these devices must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
-

Setup

Network Wiring

When wiring an iMedia system, consider the following:

- Use Crestron Certified Wire.
- Use Crestron power supplies for Crestron equipment.

IM Wiring

Using a proprietary signal routing solution, RGBHV, composite video, audio, power and control signals are all transported using a single cable solution called iMedia.

The iMedia transport system port is capable of managing computer RGB, composite video, and audio signals simultaneously through one CresCAT-IM cable, simplifying installations.



Routing CresCAT-IM cable (low-skew CAT5e) is less expensive and a much simpler solution for the wiring of iMedia systems than routing multi-colored, multi-conductor coax cable. All Crestron products using the iMedia transport system are capable of sending and receiving iMedia signals via CresCAT-IM cable. Installation of any iMedia device is as simple as installing one iMedia cable from output to input. Installations are affordable, and fast.

Quantity and Packaging

- CRESCAT-IM-P-B500 is a low-skew CAT5e cable, plenum-rated, available in a 500 foot box
- CRESCAT-IM-P-SP500 is a low-skew CAT5e cable, plenum-rated, available in a 500 foot spool
- CRESCAT-IM-P-SP1000 is a low-skew CAT5e cable, plenum-rated, available in a 1000 foot spool

For more information on CresCAT and other wire products, visit the Crestron website (www.crestron.com/features/wire).

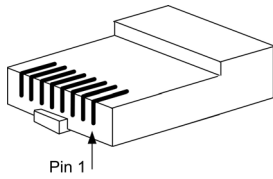
Pin Assignments

The pin assignment is based on the EIA/TIA 568B RJ-45 Jack standard.

Power is supplied to the IM transmitters via the audio circuit.

To determine which pin is number 1, hold the cable so that the end of the eight pin modular jack is facing you, with clip down and copper side up. When looking down at the copper connections, pin 1 is on the far right.

iMedia Pin Assignment

RJ-45 Male Connector	RJ-45 Pin Number	Wire Colors	iMedia Assignment RGB, Composite and Audio
	1	White/Orange	- RGB Red
	2	Orange	+ RGB Red
	3	White/Green	- RGB Green
	4	Blue	+ Audio/Power
	5	White/Blue	- Audio/Power
	6	Green	+ RGB Green
	7	White/Brown	- RGB Blue / Composite
	8	Brown	+ RGB Blue / Composite

NOTE: Power is supplied to pins 4 and 5 from the IM receivers.

Signal Selection

The RGB signal connected to the IM transmitter is delivered to the display device (e.g., projector) via the RGBHV output of an IM receiver. The composite video signal connected to the IM transmitter is delivered to the display device (e.g., projector) via the composite video output of an IM receiver. Each IM transmitter possesses a **SELECT** button (IM transmitters with video have two **SELECT** buttons) that activates an input. The receiver automatically routes the last activated input to the RGB or composite video output and deactivates any prior selection. In addition, the display's power and input selection commands can be controlled via the IR or COM port.

Video Resolution and Cable Length

The receiver can accomplish frequency compensation on each input to achieve correct operation. This compensation scheme is effective for CresCAT-IM cables as long as the maximum skew of 15 ns per 100 m is not exceeded.

NOTE: For proper operations and performance of every iMedia system, always use CresCAT-IM cable.

Maximum Resolution and Cable Length

RESOLUTION	REFRESH RATE (HZ)	PIXEL RATE (MHZ)	PIXEL TIME (NS)	MAX LENGTH (FEET)
VGA (640 X 480)	60	25.18	39.7	218.5
	72	31.50	31.7	174.6
	85	36.00	27.8	152.8
SVGA (800 X 600)	56	36.00	27.8	152.8
	72	50.00	20.0	110.0
	85	56.25	17.8	97.8
XGA (1024 X 768)	60	65.00	15.4	84.6
	70	75.00	13.3	73.3
	85	94.50	10.6	58.2

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Maximum Resolution and Cable Length (Continued)

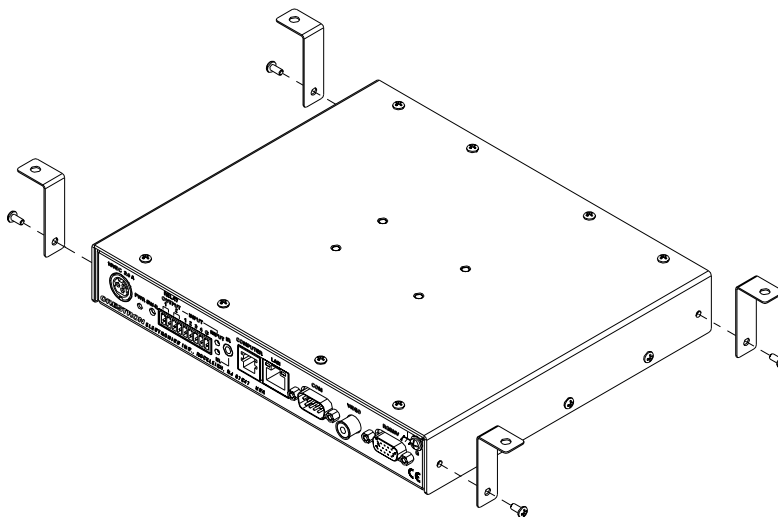
RESOLUTION	REFRESH RATE (HZ)	PIXEL RATE (MHZ)	PIXEL TIME (NS)	MAX LENGTH (FEET)
SXGA (1280 X 1024)	60	108.00	9.3	50.9
	75	135.00	7.4	40.7
	85	157.50	6.3	34.9
UXGA (1600 X 1200)	60	162.00	6.2	34.0
	70	189.00	5.3	29.1
	85	229.50	4.4	24.0
COMPOSITE VIDEO				218.5

Hardware Hookup**Mounting**

The IM-RXV1 & IM-RXV3 can be mounted to any surface using the included mounting brackets. These brackets must be installed prior to mounting. Complete the following procedure to attach the brackets to the unit. The only tool required is a #1 Phillips screwdriver.

To install the brackets:

1. There are screws that secure each side of the IM-RXV1 & IM-RXV3 top cover. Using a #1 Phillips screwdriver, remove the screws at each corner of the top cover. Refer to the diagram following step 3 for a detailed view.
2. Position a bracket so that its mounting hole aligns with the hole vacated by the screws in step 1.
3. Secure the bracket to the unit with a screw from step 1, as shown in the following diagram.

Ear Attachment

4. Repeat procedure (steps 1 through 3) for each remaining bracket.

NOTE: The MK-IM-RX mounting kit is also available for mounting the IM-RXV1 or IM-RXV3 to a pipe. Details can be found in the latest version of MK-IM-RX Installation Guide (Doc. 6451) which is available from the Crestron website (<http://www.crestron.com/manuals>).

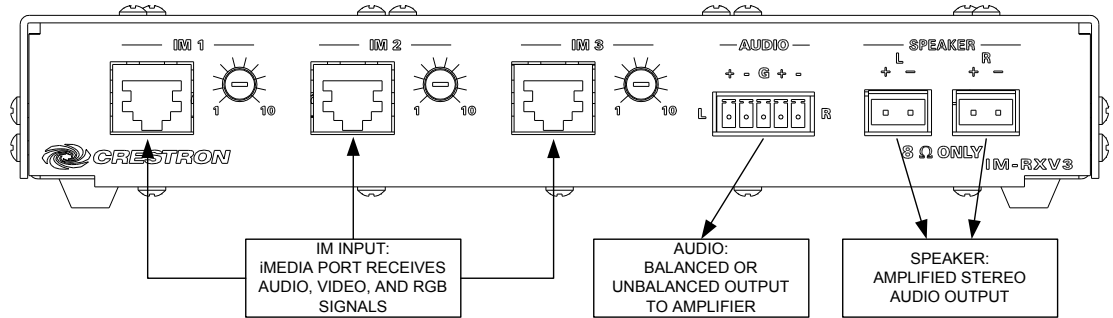
Connect the Device

Make the necessary connections as called out in the illustrations that follows this paragraph. Apply power after all connections have been made.

When making connections to the IM-RXV1 and IM-RXV3, consider the following:

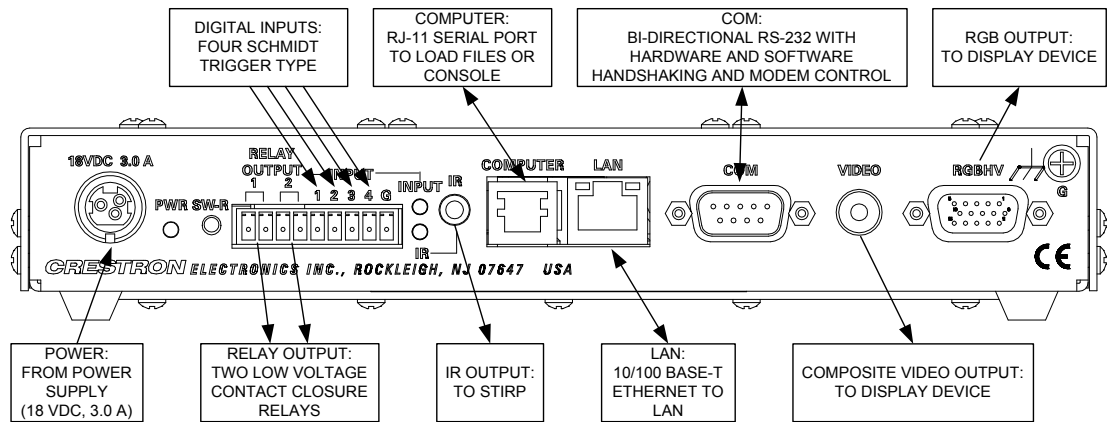
- Use Crestron power supplies for Crestron equipment.
- The included cable cannot be extended.

Hardware Connections (Front, IM-RXV3 shown)

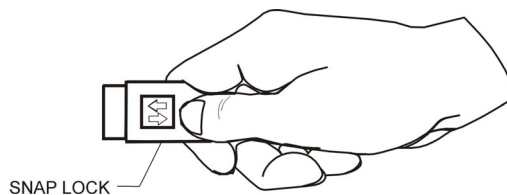


NOTE: For optimum performance, Crestron strongly recommends using CresCAT-IM cable, available from Crestron. Other high-quality/low skew CAT5e/CAT6 wiring may also be used with varying performance.

Hardware Connections (Rear)



NOTE: the power supply cable is equipped with a snap lock connector. Always disconnect the power cable by pulling back on the snap lock of the connector. Never pull the power cable by the cord.



System Configuration

Have a question or comment about Crestron software?

Answers to frequently asked questions (FAQs) can be viewed in the Online Help section of the Crestron website. To post a question or view questions you have submitted to Crestron's True Blue Support, log in at <http://support.crestron.com>. First-time users will need to establish a user account.

Earliest Version Software Requirements for the PC

NOTE: Crestron recommends that you use the latest software to take advantage of the most recently released features. The latest software is available from the Crestron website.

Crestron has developed an assortment of Windows®-based software tools to develop a Cresnet system. The following are the minimum recommended software versions for the PC:

Software

TASK	REQUIRED SOFTWARE VERSION
Simplified configuration with wizards for iMedia systems (optional but recommended).	iMedia Wizard; part of Crestron SystemBuilder™ version 3.0 or later with SystemBuilder Templates version 3.0 or later; Refer to software release notes or Crestron website for other required Crestron software packages.
Upload program and firmware.	Crestron Toolbox 1.02.18 or later.

iMedia Wizard Configuration

The iMedia Wizard is included with Crestron SystemBuilder and provides a quick method of configuring a custom iMedia system without prior programming knowledge. Once a system is configured, a test pattern can be sent to the projector to adjust the peaking level of each input. For additional details, download Crestron SystemBuilder from the Crestron website and examine the extensive help file.

NOTE: All configuration is completed within the iMedia wizard only. This system cannot be configured in SystemBuilder or SIMPL Windows.

Uploading and Upgrading

Crestron recommends using the latest programming software and that each device contains the latest firmware to take advantage of the most recently released features. However, before attempting to upload or upgrade, it is necessary to establish communication.

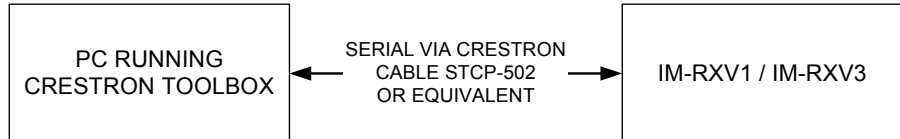
Establishing Communication


Use Crestron Toolbox for communicating with the IM-RXV1 and IM-RXV3; refer to the Crestron Toolbox help file for details. There are two methods of communication.

Direct Serial Communication

NOTE: Required for initial setup of Ethernet parameters.

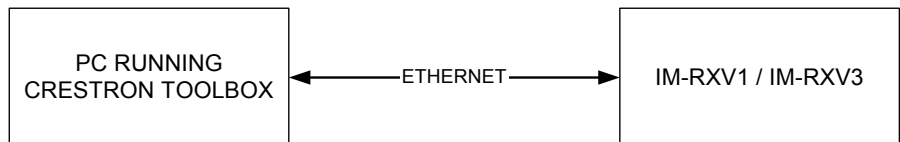
Direct Serial Communication




- The **COMPUTER** port on the IM-RXV1 and IM-RXV3 connects to the serial port on the PC via a serial cable (Crestron STCP-502 or equivalent).
- Use the Address Book in Crestron Toolbox to create an entry using the expected serial communication protocol (RS232, auto-detect baud rate, no parity, 8 data bits, 1 stop bit, XON/XOFF disabled, RTS/CTS enabled).
- Display the IM-RXV1 or IM-RXV3's "System Info" window (click the  icon); communications are confirmed when the device information is displayed.

TCP/IP Communication

Ethernet Communication



- Establish direct serial communication between IM-RXV1/IM-RXV3 and PC.
- Enter the IP address, IP mask, and default router of the IM-RXV1/IM-RXV3 via the Crestron Toolbox (**Functions | Ethernet Addressing**); otherwise enable DHCP.
- Confirm Ethernet connections between IM-RXV1/IM-RXV3 and PC. If connecting through a hub or router, use CAT5 straight through cables with 8-pin RJ-45 connectors. Alternatively, Use a CAT5 crossover cable to connect the two **LAN** ports directly, without using a hub or router.
- Use the Address Book in the Crestron Toolbox to create an entry for the IM-RXV1/IM-RXV3 with the IM-RXV1/IM-RXV3's TCP/IP communication parameters.

- Display the “System Info” window (click the  icon) and select the IM-RXV1/IM-RXV3 entry.

Firmware

Upgrade the IM-RXV1 and IM-RXV3 firmware via Crestron Toolbox.

- Establish communications with the IM-RXV1 or IM-RXV3 and display the “System Info” window.
- Select **Functions | Firmware...** to upgrade the firmware.

For details on upgrading firmware, refer to the Crestron Toolbox help file.

Problem Solving

Troubleshooting

The following table provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

IM-RXV1 and IM-RXV3 Troubleshooting

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
PWR LED does not illuminate.	Not receiving power.	Verify that the power supply cable and power supply connection to the AC are properly attached.
	Incorrect power supply.	Only use a Crestron power supply.
No video output displayed.	Incorrect cable connection.	Verify display device connection.
	Wrong input selected on transmitter.	Select correct input on transmitter.
Video from source is garbled or no output.	Incorrect cable connections.	Verify iMedia cable connections.
	Peak adjustment incorrect.	Readjust peak control.
Not controlling the display device.	Incorrect wiring.	Check wiring and connectors between the IM-RXV1/3 and the display device.

Reference Documents

The latest version of all documents mentioned within the guide can be obtained from the Crestron website (<http://www.crestron.com/manuals>). This link will provide a list of product manuals arranged in alphabetical order by model number.

List of Related Reference Documents

DOCUMENT TITLE
CNXRMCS Current Sensor for Room Solution Boxes
MK-IM-RX Pole Mount Kit for iMedia Receivers
STIRP Infrared Emitter

Further Inquiries

If you cannot locate specific information or have questions after reviewing this guide, please take advantage of Crestron's award winning customer service team by calling the Crestron corporate headquarters at 1-888-CRESTRON [1-888-273-7876].

For assistance in your local time zone, refer to the Crestron website (<http://www.crestron.com/>) for a listing of Crestron worldwide offices.

You can also log onto the online help section of the Crestron website to ask questions about Crestron products. First-time users will need to establish a user account to fully benefit from all available features.

Future Updates

As Crestron improves functions, adds new features, and extends the capabilities of the IM-RXV1 and IM-RXV3, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron website periodically for manual update availability and its relevance. Updates are identified as an “Addendum” in the Download column.

Return and Warranty Policies

Merchandise Returns / Repair Service

1. No merchandise may be returned for credit, exchange, or service without prior authorization from CRESTRON. To obtain warranty service for CRESTRON products, contact an authorized CRESTRON dealer. Only authorized CRESTRON dealers may contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number, and return address.
2. Products may be returned for credit, exchange, or service with a CRESTRON Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to CRESTRON, 6 Volvo Drive, Rockleigh, N.J. or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. CRESTRON reserves the right in its sole and absolute discretion to charge a 15% restocking fee, plus shipping costs, on any products returned with an RMA.
3. Return freight charges following repair of items under warranty shall be paid by CRESTRON, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

CRESTRON Limited Warranty

CRESTRON ELECTRONICS, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from CRESTRON, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/tilt heads and power supplies are covered for a period of one (1) year; touchscreen display and overlay components are covered for 90 days; batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from CRESTRON or an authorized CRESTRON dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

CRESTRON shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended, or if it has been subjected to misuse, accidental damage, modification, or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced, or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall CRESTRON be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. CRESTRON is not liable for any claim made by a third party or made by the purchaser for a third party.

CRESTRON shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, CRESTRON makes no other warranties, expressed or implied, nor authorizes any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supersedes all previous warranties.

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