

# CNXRMC

## CAT5 Room Solution Box

Crestron room solution boxes are designed to provide a convenient one-box signal interface solution for the connection and control of local room AV devices as part of a complete Crestron Home® AV distribution system. The CNXRMC is

specifically designed as a CAT5 video receiver and control interface, providing baseband outputs for composite, S-Video, and high-definition component video signals, plus a variety of IR and serial control ports. The compact CNXRMC normally installs at the display device (television, plasma, etc.) location and connects to the head end by just one CAT5E cable and one Cresnet cable (available as **CresCAT®**, sold separately). Crestron's CAT5 video distribution technology permits cable lengths up to 750 feet (500 feet for component video).

Crestron room solution boxes are designed to provide maximum flexibility through the use of CAT5 balanced technology. The CAT5 video input port on the CNXRMC receives up to four simultaneous signals based upon the selected head end source. For instance, a component signal utilizes the first, second, and third pairs to transmit the Y, Pb, and Pr components. Switching to an S-Video signal then utilizes just the first and second pairs to transmit S-Video's Y and C components. Composite utilizes only the first CAT5 pair. The fourth pair is ordinarily intended for digital audio.

Used with the **CNX-PVID8X3** or **CNX-PVID8X4** video distribution switchers, the CNXRMC automatically routes the incoming video signals to the appropriate inputs on the display device allowing the viewer to select any head end video source using a touchpanel, keypad, or handheld remote. Operation is transparent to the end-user with all switching occurring smoothly under the command of the control system. For most applications using the CNXRMC, the accompanying audio signal is distributed to room loudspeakers using a Crestron audio distribution processor and amplifier. However, a digital audio signal can be supported by the CNXRMC when fed from a CNX-PVID8X4 switcher.

To maximize the performance of video over CAT5, Crestron

employs adjustable video compensation on each of the three video pairs. The fourth pair, which is uncompensated, is optimized for digital audio but may also be suitable for composite video.

Control ports on the CNXRMC include four IR/serial ports and

one bi-directional RS-232 port, providing a powerful interface for control of numerous devices including video projectors, plasma displays, televisions, VCRs, DVD players, and more. A single digital input port is also provided to support the optional **CNXRMCS** TV current sensor, or any low-voltage contact closure device.

The CNXRMC functions as a slave device to any 2-Series control system communicating via the Cresnet control network.

Any of Crestron's touchpanels, keypads, and handheld remotes may be used to provide the user interface to control the CNXRMC and all connected devices. Adding an optional **CNXRMIRD** IR receiver affords cost-effective control from any Crestron or third-party universal IR remote.

## CAT5 Room Solution Box

### **SPECIFICATIONS**

#### **Video & Digital Audio**

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Signal Types: Component (YPbPr), S-Video (Y/C), or composite video; digital audio

Video/HDTV Formats: 480i (NTSC), 576i (PAL), 480p, 576p, 720p, 1080i

Digital Audio Format: S/PDIF coaxial

Bandwidth: 42MHz (CAT5) per pair

Crosstalk: -60dB

#### **Connectors**

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VIDEO IN: (1) 8-pin RJ45 female, shielded;  
CAT5 balanced video input port;  
Input Impedance: 100 ohms per pair;  
Connects to [CNX-PVID8X3](#), [CNX-PVID8X4](#)

VIDEO OUT A - F: (6) RCA female comprising (1) composite, (1) S-Video, and (1) HDTV/component video outputs;  
Output Impedance: 75 ohms;  
Output Level: 1 Vp-p nominal;

VIDEO OUT G: (1) RCA female, coaxial digital audio output;  
Output Impedance: 75 ohms;  
Output Level: 1 Vp-p nominal;

RS-232: (1) 6-pin RJ11 female;  
Bidirectional RS-232 COM port and computer console port;

IR IN: (1) 3.5 mm TRS mini-phone female;  
For connection of the [CNXRMIRD](#) IR receiver (sold separately);

IR OUT A - D: (4) 3.5mm mini-phone female;  
IR/Serial output ports;  
IR output up to 1.2 MHz;  
1-way serial TTL/RS-232 (0-5 Volts DC) up to 9600 baud;  
Connect to [STIRP](#)

SENS: (1) 2-pin 3.5mm detachable terminal block;  
Digital input port;  
Connects to [CNXRMCS](#)

NET: (1) 4-pin 3.5mm detachable terminal block;

#### **Controls & LED Indicators**

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VIDEO INPUT COMP 1 - 3: (3) screwdriver-adjustable pots for CAT5 video input compensation

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

NET: (1) yellow LED, indicates communication with Cresnet system

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

#### **Power Requirements**

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Cresnet Power Usage: 6 Watts (0.25 Amps @ 24 Volts DC)

#### **Environmental**

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Temperature: 41° to 122°F (5° to 50°C)  
Humidity: 10% to 90% RH (non-condensing)

#### **Enclosure**

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Black metal, surface mount box with (2) integral mounting flanges

#### **Dimensions**

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Height: 1.94 in (4.93 cm)  
Width: 7.48 in (19.00 cm)  
Depth: 5.22 in (13.26 cm)

#### **Weight**

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1.17 lbs (0.53 kg)

## CAT5 Room Solution Box

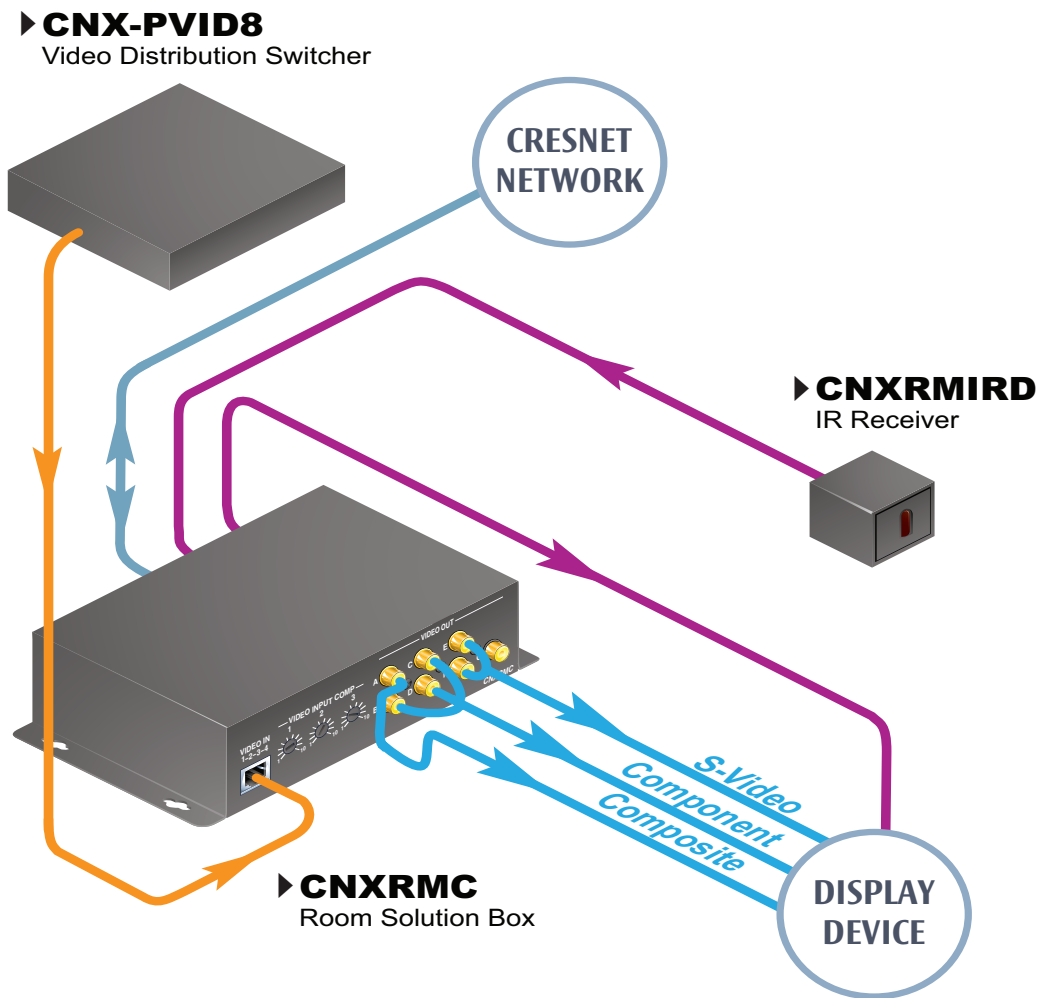
### ACCESSORIES

STIRP:

# CNXRMC

## CAT5 Room Solution Box

### Typical CNXRMC Connections



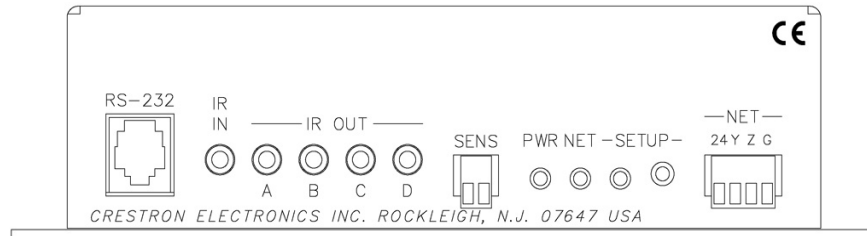
#### Color Key

- |         |         |       |
|---------|---------|-------|
| Control | Video   | Audio |
| CAT5E   | Cresnet | LAN   |
| RGB     | CresCAT |       |

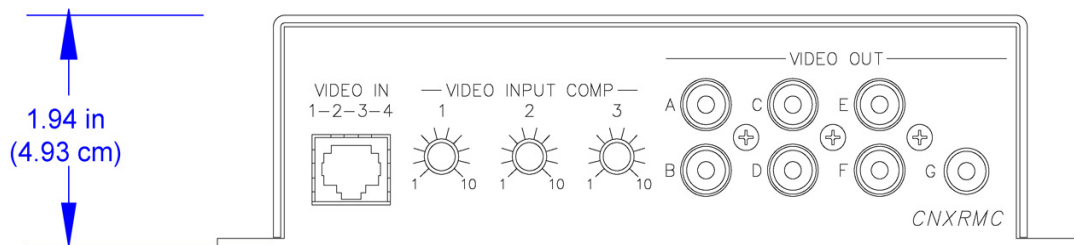
# CNXRMC

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