

HD Streaming Receiver & Room Controller 100

- > High-definition streaming media decoder
- > Compact, surface-mountable form factor fits in tight spaces
- > Provides a streaming receiver for DigitalMedia™ systems
- > Enables HD AV signal distribution over IP with no distance limitations
- > Supports streaming at resolutions up to 1080p60 and bitrates up to 25 Mbps
- > Decodes MPEG-1, MPEG-2, and H.264 video formats
- > Decodes WAV, MP2, MP3, and AAC stereo audio formats
- > Allows pass-through of Dolby Digital® 5.1 encoded audio^[1]
- > Includes HDMI® and analog audio outputs^[1]
- > Allows extraction of stereo 2-channel audio signals
- > Dynamic text and image overlay capability for branding and messaging
- > 10/100 Ethernet LAN port for streaming and control system integration
- > Enables device control via CEC, IR, and RS-232
- > Web-based setup
- > Powered via PoE or local power pack
- > 100-240V universal power pack included



The Crestron® DM-RMC-100-STR is a compact H.264 streaming decoder designed to receive high-definition AV signals over an IP network. It provides a perfect complement to any DigitalMedia™ switcher with a streaming output, and can also be used to add streaming input capability to other switchers and devices. By transporting all video, audio, control, and power signals through a single PoE LAN connection, the DM-RMC-100-STR delivers the perfect solution for applications where new or dedicated wiring cannot be installed. Its low-profile, surface-mountable design enables a discreet installation behind a flat-panel display, above a ceiling mounted projector, on an AV cart, or inside an equipment rack.

H.264 Streaming

High-performance H.264 streaming capability enables enterprise-wide distribution of HD content over a wired or wireless IP network. Streaming expands the capabilities of a DigitalMedia system to remove all distance limitations and facilitate high-definition AV signal routing from sources anywhere in the world. Streaming also allows for the utilization of existing network infrastructure to overcome situations where the installation of new or dedicated wiring may not be feasible.

The DM-RMC-100-STR decodes the streaming signal from a DM switcher, IP camera, or other streaming source, and outputs it as HDMI to feed the input of a display device, AV receiver, or switcher. Streaming signals with resolutions up to HD 1080p60 and bitrates up to 25 Mbps are supported. High-quality AAC audio decoding provides support for 2-channel stereo audio with full frequency response. The encoded video and audio can be received as an independent RTP stream or encapsulated in an MPEG-TS (MPEG-2 Transport Stream) container.

In addition to H.264 and AAC, the DM-RMC-100-STR can also decode MPEG-1 or MPEG-2 video, and MP3, MP2, or WAV stereo audio formats. Dolby Digital® 5.1 encoded audio can be passed through undecoded.^[1]

Audio Extracting

The DM-RMC-100-STR includes a balanced analog audio output, allowing stereo audio signals to be extracted from the streaming input and fed to an amplifier, sound bar, or a pair of amplified speakers. The output volume, bass, and treble are adjustable via a control system using a keypad, touch screen, handheld remote, or mobile device.^[1]

Device Controller

The DM-RMC-100-STR includes built-in RS-232 and IR control ports to allow for programmable control of the connected display and other devices. Additional control capability is afforded by harnessing the CEC (Consumer Electronics Control) signal embedded in HDMI. Via its Ethernet connection to the control system, the DM-RMC-100-STR provides a gateway for controlling the display device right through its HDMI connection, potentially eliminating the need for any dedicated serial cables or IR emitters.

Dynamic Text and Image Overlay

Image overlay capability enables organizations to brand their streaming content by overlaying a logo graphic onto the video image. Dynamic text is also supported to allow for labeling of the video, or to enable the display of instructions, schedules, alerts, and other messaging.

Web-Based Setup

Built-in Web pages facilitate setup of the DM-RMC-100-STR from a laptop, whether running standalone or connected to a DM switcher. Extensive setup, control, and monitoring of the device is also provided through integration with a Crestron control system.

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Low-Profile Installation

The DM-RMC-100-STR mounts conveniently to a wall, ceiling, or other flat surface. Its compact, surface-mountable form factor fits easily behind a flat panel display, above a ceiling-mounted projector, or inside an AV cart or other furniture. It can even be attached directly to a single rack rail in the back of an equipment cabinet. It can be powered using the wall mount power pack (included), or via PoE (Power over Ethernet) for a true one-wire solution. All connections and LED indicators are positioned on the top and bottom, ensuring optimal access and visibility for a clean, serviceable installation.

Please refer to the DigitalMedia Resources Webpage at <http://www.crestron.com/dmresources/> for additional design tools and reference documents.

SPECIFICATIONS

Streaming

Video Formats: MPEG-1, MPEG-2, H.264 (MPEG-4 part 10 AVC)
Audio Formats: WAV, MP2, MP3, AAC, Dolby Digital® (AC-3)^[1]
Bitrates: Up to 25 Mbps
H.264 Profiles: Baseline Profile (BP), Main Profile (MP), High Profile (HiP)
Streaming Protocols: RTP, RTSP, SDP, HLS, MPEG-DASH
Container: MPEG-2 transport stream (.ts) or none
Streaming Input Resolutions: Up to 1920x1080@60Hz (1080p60)

Video

Output Signal Types: HDMI® (DVI compatible)^[2]
Output Resolutions: Auto (follows streaming input), 640x480@60Hz, 720x480@30Hz interlaced (480i), 720x480@60Hz, 720x576@25Hz interlaced (576i), 720x576@50Hz, 800x600@60Hz, 848x480@60Hz, 1024x768@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz^[3], 1280x800@60Hz^[3], 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz^[3], 1400x1050@60Hz^[3], 1440x900@60Hz^[3], 1600x900@60Hz^[4], 1600x1200@60Hz, 1680x1050@60Hz^[3], 1920x1080@24Hz, 1920x1080@25Hz interlaced (1080i50), 1920x1080@30Hz interlaced (1080i60), 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1200@60Hz^[4]
Image Overlay Formats: PNG w/alpha channel, JPEG, BMP

Audio

Output Signal Types: HDMI, analog stereo
Digital Formats: 2-channel PCM, Dolby Digital^[1]
Analog Formats: Stereo 2-channel^[1]
Audio Adjustments: Volume: -80.0 to +20.0 dB, plus mute;
Bass: ±10.0 dB;
Treble: ±10.0 dB;
Delay: 0.0 to 100.0 ms

Communications

Ethernet: 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP, IEEE 802.3af and 802.3at Type 1 compliant
USB: supports loading of firmware via a USB mass storage device
RS-232: 2-way device control and monitoring up to 115.2k baud with hardware and software handshaking
IR/Serial: 1-way device control via infrared up to 1.1 MHz or serial TTL/RS-232 (0-5 Volts) up to 19.2k baud
HDMI: EDID, CEC

NOTE: Supports management of EDID; supports management of CEC between the connected HDMI device and a control system

Connectors

AUDIO L, R: (1) 5-pin 3.5 mm detachable terminal block; Balanced/unbalanced stereo line-level audio output^[1]; Output Impedance: 200 Ohms balanced, 100 Ohms unbalanced; Maximum Output Level: 4 Vrms balanced, 2 Vrms unbalanced
HDMI: (1) 19-pin Type A HDMI female; HDMI digital video/audio output; (DVI compatible)^[1]
USB: (1) USB Type A female; Supports USB mass storage devices for firmware update
LAN: (1) 8-pin RJ45 female; 10Base-T/100Base-TX Ethernet port, Power over Ethernet compliant
24VDC 0.75A: (1) 2.1 x 5.5 mm DC power connector; 24 Volt DC power input; PW-2407WU power pack included
COM: (1) 5-pin 3.5 mm detachable terminal block; Bidirectional RS-232 port; Up to 115.2k baud, hardware and software handshaking support
IR 1 – 2: (1) 4-pin 3.5 mm detachable terminal block comprising (2) IR/Serial ports; IR output up to 1.1 MHz; 1-way serial TTL/RS-232 (0-5 Volts) up to 19200 baud

Controls & Indicators

POWER: (1) Green LED, indicates operating power supplied via PoE or local power pack, flashes while booting
HDMI: (1) Green LED, indicates HDMI signal presence at the HDMI output
ONLINE: (1) Green LED, indicates connection to a control system via Ethernet
LAN PoE: (2) LEDs, green LED indicates Ethernet link status, amber LED indicates Ethernet activity
SETUP: (1) Red LED and (1) recessed pushbutton for Ethernet setup
RESET: (1) Recessed pushbutton for hardware reset

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Power Requirements

Power Pack: 0.75 Amps @ 24 Volts DC;
100-240 Volts AC, 50/60 Hz power pack, model PW-2407WU included

Power over Ethernet: IEEE 802.3at Type 1 (802.3af compatible) Class 0 (12.95 W) PoE Powered Device

Power Consumption: 5.76 Watts (typical)

Environmental

Temperature: 32° to 104° F (0° to 40° C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 19.7 BTU/Hr

Enclosure

Chassis: Metal, black finish, with (2) integral mounting flanges, vented sides
Mounting: Freestanding, surface mount, or attach to a single rack rail

Dimensions

Height: 5.38 in (137 mm)
Width: 6.20 in (158 mm)
Depth: 1.11 in (28 mm)

Weight

1.27 lb (575 g)

MODELS & ACCESSORIES

Available Models

DM-RMC-100-STR: HD Streaming Receiver & Room Controller 100

Included Accessories

PW-2407WU: Wall Mount Power Pack, 24VDC, 0.75A, 2.1mm, Universal (Qty. 1 included)

Available Accessories

CBL Series: Crestron® Certified Interface Cables
CNSP-XX: Custom Serial Interface Cable
IRP2: IR Emitter Probe w/Terminal Block Connector

Notes:

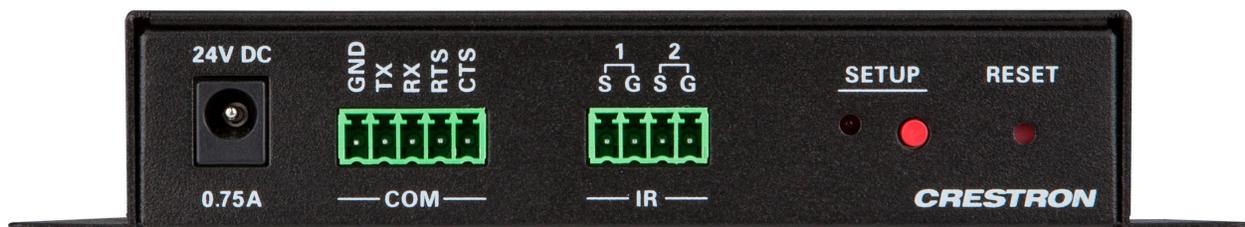
- Support for WAV, MP2, MP3, and AAC streaming audio formats is limited to 2-channel stereo signals. The DM-RMC-100-STR decodes these formats and outputs the signal as 2-channel PCM digital and stereo analog. Dolby Digital 5.1 streaming audio is passed through undecoded to the HDMI output. The analog audio output is not active when the DM-RMC-100-STR is receiving a Dolby Digital streaming audio signal.
- HDMI requires an appropriate adapter or interface cable to accommodate a DVI signal. **CBL-HD-DVI** interface cables are available separately.
- With or without reduced blanking.
- With reduced blanking only.

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 or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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Top View



Bottom View

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