



DM-RMC-4K-100-C-1G

Wall Plate 4K DigitalMedia 8G+[®]
Receiver and Room Controller 100

Supplemental Guide
Crestron Electronics, Inc.

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DM-RMC-4K-100-C-1G: Wall Plate 4K DigitalMedia 8G+[®] Receiver and Room Controller 100

Introduction

The Crestron[®] DM-RMC-4K-100-C-1G functions as a DigitalMedia 8G+[®] receiver and control interface, providing a single HDMI[®] output as well as RS-232 and IR control ports. In addition to DM 8G+[®] compatibility, the DM-RMC-4K-100-C-1G is also compatible with the HDBaseT[®] standard, allowing it to be connected directly to an HDBaseT certified source. For additional information about the DM-RMC-4K-100-C-1G, refer to the DM-RMC-4K-100-C-1G DO Guide (Doc. 7707) at www.crestron.com/manuals.

This guide provides information about the following:

- Physical description of the front and rear panels of the DM-RMC-4K-100-C-1G
- Communication of the DM-RMC-4K-100-C-1G with a control system
- HDCP 2.2 compliance
- Troubleshooting
- Pin assignments

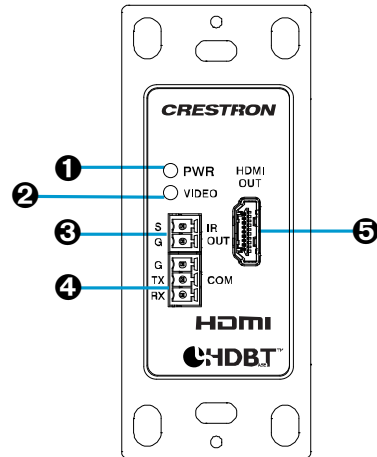
Physical Description

This section provides information about the connectors, controls, and indicators on the front and rear panels of the DM-RMC-4K-100-C-1G.

Front Panel

The following illustration shows the front panel of the DM-RMC-4K-100-C-1G.

DM-RMC-4K-100-C-1G Front Panel



- ❶ **PWR:** Green LED, indicates operating power supplied via PoDM or local power pack
- ❷ **VIDEO:** Green LED, indicates video signal presence at the HDMI output
- ❸ **IR OUT:** 2-pin 3.5 mm detachable terminal block comprising IR/serial port;*
IR output up to 1.1 MHz;
1-way serial TTL/RS-232 (0-5 volts) up to 19200 baud
- ❹ **COM:** 3-pin 3.5 mm detachable terminal block;
Bidirectional RS-232 port;*
Up to 115.2k baud, software handshaking support
- ❺ **HDMI OUT:** 19-pin Type A HDMI female;
HDMI digital video/audio output (DVI compatible)

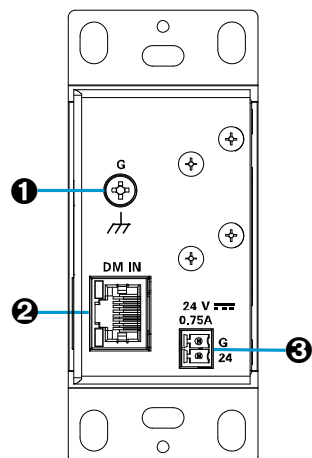
NOTE: The HDMI OUT port requires an appropriate adapter or interface cable to accommodate a DVI signal. The CBL-HD-DVI interface cable is available separately.

*The IR OUT and COM ports are not supported when the DM-RMC-4K-100-C-1G connects directly to a DM-TX-4K-100-C-1G; however, video will pass through properly. The IR OUT and COM ports are supported only when the DM-RMC-4K-100-C-1G connects to an Ethernet-enabled DigitalMedia™ transmitter or switcher that is addressable from a Crestron control system. When the DM-RMC-4K-100-C-1G connects to a DigitalMedia switcher, the switcher must be in Private Network Mode (PNM).

Rear Panel

The following illustration shows the rear panel of the DM-RMC-4K-100-C-1G.

DM-RMC-4K-100-C-1G Rear Panel



- ❶ **Ground** (⚡): 6-32 screw, chassis ground lug
- ❷ **DM IN:** 8-pin RJ-45 female, shielded, with two LEDs;
DM 8G+ input, HDBaseT standard compliant;
PoDM and HDBaseT PoE PD (Powered Device) port;
Connects to the DM 8G+ output of a DM® switcher, transmitter, or other DM device, or to an HDBaseT device via CAT5e, Crestron DM-CBL-8G, or Crestron DM-CBL-ULTRA cable;
Green LED indicates DM link status;
Solid amber LED indicates HDCP video;
Blinking amber LED indicates non-HDCP video

NOTE: Receiving PODM requires connection to a switcher or other equipment that has a PoDM PSE (Power Sourcing Equipment) port. Any wiring that is connected to a PoDM PSE port is for intrabuilding use only and should not be connected to a line that runs outside of the building in which the PSE is located.

NOTE: If the DM IN port connects directly to a DM-TX-4K-100-C-1G, simple pass-through of CEC is supported. If the DM IN port connects to an Ethernet-enabled DigitalMedia™ transmitter or switcher that supports CEC over HDBaseT connectivity, full management of CEC between the locally connected HDMI device and a control system is supported.

- ❸ **24 V 0.75A:** 2-pin 3.5 mm detachable terminal block;
24 Vdc power input;
Power pack included

For pin assignment information, refer to the Appendix on page 6.

Communication with a Control System

Unlike most DigitalMedia endpoints, the DM-RMC-4K-100-C-1G does not support an Ethernet-based CIP connection with a control system. In order to communicate with a control system, the DM-RMC-4K-100-C-1G must connect to a DigitalMedia switcher or transmitter that supports a CIP connection with the control system. The DigitalMedia switcher or transmitter communicates with the DM-RMC-4K-100-C-1G via a serial communications path in the DigitalMedia link.

HDCP 2.2 Compliance

The DM-RMC-4K-100-C-1G is compliant with HDCP 2.2. HDCP 2.2, commonly referred to as HDCP 2, is the next generation of HDCP (High-Definition Content Protection). Note the following about HDCP 2:

- Compared to HDCP 1, HDCP 2 brings a higher level of cryptographic protection to HDMI technology.
- HDCP 2 is **not** HDMI 2. It is possible to have a system built on HDCP 1 and HDMI 2, HDCP 2 and HDMI 1, or HDCP 2 and HDMI 2.
- Although not all 4K content requires HDCP 2, most 4K consumer video content does require HDCP 2.
- Any product that supports HDCP 2 also supports HDCP 1.
- HDCP matters only when the source demands HDCP. If the source demands HDCP 2, then every device in the signal path must support HDCP 2.
- There are no issues related to HDCP 2 and cabling—all cables are “compatible.”

Troubleshooting

The following table provides troubleshooting information. If further assistance is required, contact a Crestron customer service representative.

DM-RMC-4K-100-C-1G Troubleshooting

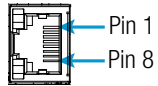
TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
The video is not being displayed, but the audio may be heard.	The HDCP settings of one or more DigitalMedia devices in the signal path do not support the HDCP level of the source.	Ensure that the HDCP settings of all DigitalMedia devices in the signal path support the HDCP level of the source.
	The display does not support the HDCP level of the source.	Ensure that the display supports the HDCP level of the source.
The video is intermittent.	The HDMI cable connections are faulty.	Verify that each end of the cable is connected properly.
The DM-RMC-4K-100-C-1G cannot establish a link to the device that is connected to the DM IN port. The DM link status LED is off.	The cable connections are faulty.	Verify that each end of the cable is connected properly. If necessary, check the cable terminations.
The DM-RMC-4K-100-C-1G does not remain powered on.	When the DM-RMC-4K-100-C-1G is not being powered by the included power pack, the DM IN port is not connected to a PoDM PSE port.	Ensure that the DM IN port is connected to a PoDM PSE port when not being powered by the included power pack.
The video flickers or drops when the DM-RMC-4K-100-C-1G is touched or when metal in the vicinity of the device is touched.	The DM-RMC-4K-100-C-1G is not properly grounded.	Ensure that the DM-RMC-4K-100-C-1G is properly grounded.

Appendix: Pin Assignments

This section provides information about pin designations and wiring for the following DM-RMC-4K-100-C-1G connectors:

- DM IN
- 24 V 0.75A to Power Pack

DM IN Wiring



PIN NUMBER	WIRE COLOR	PIN NUMBER	WIRE COLOR
1	Orange/White	5	Blue/White
2	Orange	6	Green
3	Green/White	7	Brown/White
4	Blue	8	Brown

24 V 0.75A to Power Pack Wiring



SIGNAL	LEAD COLOR
G	Black
24	Black with White Stripe

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