

DM-RMC-100-STR

HD Streaming Receiver and Room Controller 100

Supplemental Guide Crestron Electronics, Inc.

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

Introduction

The Crestron[®] DM-RMC-100-STR is an H.264 streaming decoder designed to receive high-definition AV signals over an IP network. The DM-RMC-100-STR decodes the H.264 streaming signal from a DigitalMedia[™] switcher, IP camera, or other streaming source, and then outputs an HDMI[®] signal to feed the input of a display device, AV receiver, or switcher. The web-based user interface of the DM-RMC-100-STR facilitates configuration of the DM-RMC-100-STR from a laptop. Extensive configuration, control, and monitoring of the DM-RMC-100-STR are also provided through integration with a Crestron control system.

This guide provides information about configuration of the DM-RMC-100-STR using the web-based user interface. For additional information, refer to the DM-RMC-100-STR DO Guide (Doc. 7651).

User Interface Overview

The user interface of the DM-RMC-100-STR consists of built-in web pages that allow configuration of stream, on-screen display, HDMI output, network, and device settings. In addition, information about the DM-RMC-100-STR as well as the connected display can be viewed.

Accessing the User Interface

The user interface is accessed from a web browser. To access the user interface, do either of the following:

- Open a web browser directly. Refer to "Opening a Web Browser Directly" on the following page for additional information.
- Open a web browser within the Crestron Toolbox[™] application. Refer to "Opening a Web Browser within the Crestron Toolbox Application" on the following page for additional information.

Opening a Web Browser Directly

To access the user interface by opening a web browser directly, do the following:

- 1. Find the IP address or host name of the DM-RMC-100-STR by doing either of the following, respectively:
 - To find the IP address, press the **SETUP** button on the device and note the IP address on the connected display. The IP address appears for 10 seconds.
 - To find the default host name, locate the label on the rear of the device or on a mounting flange of the device and note the host name.

NOTE: The default host name is DM-RMC-100-STR-*xxxxxxxxx*, where *xxxxxxxxxx* is the MAC address of the device.

NOTE: The host name can be changed. For additional information, refer to "Configuring Network Settings" on page 16.

- 2. Open a web browser.
- 3. Go to the IP address or host name of the DM-RMC-100-STR.

The user name and password dialog box opens, allowing login to the DM-RMC-100-STR. For login information, refer to "Logging In to the DM-RMC-100-STR" on the following page.

Opening a Web Browser within the Crestron Toolbox Application

To access the user interface by opening a web browser within the Crestron Toolbox application, do the following:

- 1. Open the Crestron Toolbox application.
- 2. From the Tools menu, select Device Discovery Tool.

NOTE: You can also access the Device Discovery Tool by clicking the Device Discovery Tool button (**h**) in the toolbar.

NOTE: The security software running on the computer may send a program alert regarding the attempt of the Crestron Toolbox application to connect to the network. Allow the connection so that the Device Discovery Tool can be used.

3. From the device list on the left-hand side of the screen, double-click **DM-RMC-100-STR**.

A browser window opens, and then the user name and password dialog box opens, allowing login to the DM-RMC-100-STR. For login information, refer to "Logging In to the DM-RMC-100-STR" on the following page.

Logging In to the DM-RMC-100-STR

The user name and password dialog box allows login to the DM-RMC-100-STR.

NOTE: Depending on the web browser being used, the user name and password dialog box may vary from the dialog box shown below.

User Name and Password Dialog Box

The server http://172.30.73.1 nassword	57:80 requires a use	ername and
Jassword.		
User Name:		
Password:		
Password:		

To log in to the DM-RMC-100-STR, do the following:

1. Enter the user name and password. The default user name is *admin*, and the default password is *admin*.

NOTE: The user name and password are case sensitive.

NOTE: For enhanced security, it is recommended that the default user name and password be changed. For information about changing the user name and password, refer to "Changing the User Name and Password" on page 18.

2. Click the button that allows login to the DM-RMC-100-STR. If the browser being used displays the same dialog box as the one shown above, click **Log In**.

The Status page, which is the home page of the user interface, opens. For information about navigating the user interface, refer to "Navigating the User Interface" on the following page.

Navigating the User Interface

The user interface provides a navigation bar and built-in web pages of the DM-RMC-100-STR.

Status	General		
Stream	Model	DM-RMC-100-STR	
On-Screen Display	Serial Number	23A55K000001	
HDMI Output	Firmware Version	6.0.44.1	
Network	Application Version	v1.0.5	
Device	IP ID	0	
	Controller		
	Network		
	Hostname	DM-RMC-100-STR-00107f36fc84	
	IP Address	172.30.73.157	
	Subnet Mask	255.255.252.0	
	Default Gateway	172.30.72.1	

DM-RMC-100-STR User Interface (Status Page Shown)

The navigation bar provides access to the web pages as follows:

- Clicking **Status** accesses the Status page, which provides general information about the DM-RMC-100-STR as well as network-related information. For additional information, refer to "Viewing DM-RMC-100-STR Status Information" on the following page.
- Clicking Stream accesses the Stream page, which allows configuration of the DM-RMC-100-STR as a streaming decoder. For additional information, refer to "Configuring Stream Settings" on page 6.
- Clicking **On-Screen Display** accesses the On-Screen Display page, which allows text or an image—or both—to be overlaid on the connected display. For additional information, refer to "Configuring On-Screen Display Settings" on page 11.
- Clicking **HDMI Output** accesses the HDMI Output page, which allows various settings, such as the output resolution, to be set. In addition, the output can be enabled or disabled. For additional information, refer to "Configuring HDMI Output Settings" on page 14.
- Clicking **Network** accesses the Network page, which allows network settings such as host name, domain name, and DHCP (Dynamic Host Configuration Protocol) mode to be set. For additional information, refer to "Configuring Network Settings" on page 16.
- Clicking **Device** accesses the Device page, which sets up connection to a control system, allows changes to user name and password settings, and controls various device functions. For additional information, refer to "Configuring Device Settings" on page 17.

Status and Configuration

The web-based user interface of the DM-RMC-100-STR displays status information and allows configuration of the following:

- Stream settings
- On-screen display settings
- HDMI output settings
- Network settings
- Device settings

Viewing DM-RMC-100-STR Status Information

General information, such as model name, serial number, and firmware version of the DM-RMC-100-STR, can be viewed. The current network settings, such as host name and IP address, can also be viewed.

To view status information, do the following: In the navigation bar, click **Status**. The Status page opens.

NOTE: The Status page opens after logging in to the DM-RMC-100-STR.

Sample Status Page

Ctatus			
Status	General		
Stream	Model	DM-RMC-100-STR	
On-Screen Display	Serial Number	23A55K000001	
HDMI Output	Firmware Version	6.0.44.1	
Network	Application Version	v1.0.5	
Device	IP ID	0	
	Controller		
	Network		
	Hostname	DM-RMC-100-STR-00107f36fc84	
	IP Address	172.30.73.157	
	Subnet Mask	255.255.252.0	
	Default Gateway	172.30.72.1	

The Status page displays the following information about the DM-RMC-100-STR:

- General information, which consists of the following:
 - o Model, which is DM-RMC-100-STR
 - o Serial Number
 - o Firmware Version

- o Application Version
- o IP ID
- o Controller
- Network-related information, which consists of the following:
 - o Host Name

NOTE: In the sample Status page shown on the previous page, the default host name is DM-RMC-100-STR-00107f36fc84, where 00:10:7f:36:fc:84 is the MAC address of the device.

- o IP Address
- o Subnet Mask
- o Default Gateway
- o MAC Address

Configuring Stream Settings

To configure stream settings, do the following:

1. In the navigation bar, click **Stream**. The Stream page opens.

Stream Page

Status	Initiation	Stream Location
Stream	By Receiver	
On Carrier	Custom Ports	Start Pause Stop
Un-Screen Display	Enable	
HDMI Output		
Network	Server	Stream Type
Device	554	MPEG-2 TS Encapsulated Independent RTP Stream
	Status	Detected Stream Type Detected Multicast Address
	Stream stopped	Unknown n/a
	Stream Ontions	Output Options
	Stream Options	Output Options
	Buffer	Resolution
	Medium (1000ms)	Auto (Recommended)
	Custom Buffer (ms)	Volume
	1000	-80 0 -80
	Statistics	Bass Treble
	Enable	-10 0 10 -10 0
	Dropped Packets	Delay
		0

2. Configure stream settings. Refer to the following table for stream configuration guidelines. In addition, refer to the Streaming Design Guide (Doc. 7610) at <u>www.crestron.com/manuals</u> for information about DigitalMedia streaming.

Stream Configuration Guidelines

CONFIGURATION ITEM	GUIDELINES
Initiation	Specifies the streaming method used to determine when the DM-RMC-100-STR is to begin streaming. In the Initiation drop-down list, select one of the following:
	 By Receiver: (Default setting) Specifies a unicast RTSP, HLS (HTTP Live Streaming), or MPEG DASH (Dynamic Adaptive Streaming over HTTP) stream. The DM-RMC-100-STR attempts to connect to the transmitting device whose address is specified in the Stream Location text box. The stream must be configured before the DM-RMC-100-STR can connect to the transmitting device. Refer to the documentation of the transmitting device for information about configuring the device. By Transmitter: Specifies a unicast UDP stream. The DM-RMC-100-STR waits for an incoming connection from a client. When the client connects, the initiation session parameters are exchanged and the stream begins. Multicast via RTSP: Specifies a multicast RTSP stream. The DM-RMC-100-STR attempts to connect to the transmitting device whose address is specified in the Stream Location text box. The stream must be configured before the DM-RMC-100-STR can connect to the transmitting device. Refer to the documentation of the transmitting device whose address is specified in the Stream Location text box. The stream must be configured before the DM-RMC-100-STR can connect to the transmitting device. Refer to the documentation of the transmitting device. Refer to the documentation of the transmitting device for information about configuring the device.
	 When the stream starts, the multicast address is displayed in the Detected Multicast Address field (read only). Multicast via UDP: Specifies a multicast UDP stream.
	The DM-RMC-100-STR begins streaming to the multicast IP address specified in the Stream Location text box.
Stream Location	 (Enabled only when Initiation is set to By Receiver, Multicast via RTSP, or Multicast via UDP) Enter the stream location using the standard scheme format: For By Receiver: When By Receiver specifies a unicast RTSP stream, enter the RTSP URL, for example: rtsp://streaming.server.com:544/path/to/file.sdp When By Receiver specifies an HLS stream, enter the HTTP URL, for example: http://hls.server.com:8080/stream.m3u8 When By Receiver specifies an MPEG DASH stream, enter the HTTP URL, for example:
	 http://localhost:1935/live/myStream/manifest.mpd For Multicast via RTSP, enter the RTSP URL, for example: rtsp://streaming.server.com:544/path/to/file.sdp
	decimal notation, for example: 225.1.1.1

(Continued on following page)

Stream Configuration Guidelines (Continued)

CONFIGURATION ITEM	GUIDELINES	
Stream Type	 Specifies the stream type. Click one of the following radio buttons: MPEG-2 TS Encapsulated: Allows the DM-RMC-100-STR to receive incoming MPEG-2 TS streams. Only one port number is consumed by the encapsulation. The default port number is 4570. Refer to the documentation of the transmitting device to verify that it can encapsulate the stream in MPEG-2 TS. Independent RTP Streams: (Default setting) Allows the DM-RMC-100-STR to stream the audio and video as separate RTP streams. Each RTP stream uses a different port. Refer to the documentation of the transmitting device to verify that this setting should be used. The Detected Stream Type field (read only) displays the stream type as MPEG-2 TS Encapsulated, Independent RTP Streams, or Unknown. 	
Custom Ports	 Enables or disables the assignment of custom port numbers for the selected Initiation method (By Receiver, By Transmitter, Multicast via RTSP, or Multicast via UDP). By default, the Enable check box is deselected. The default port numbers are as follows: For By Receiver, the default port numbers are as follows: If Stream Type is set to MPEG-2 TS Encapsulated, the default port number is 4570. If Stream Type is set to Independent RTP Streams, the default video port number is 49170 and the default audio port number is 49172. The audio port number is always the next even-numbered port number is 554. For Multicast via UDP, the default port number is 554. For Multicast via UDP, the default port number is 554. For Multicast via UDP, the default port number is 554. For Multicast via UDP, the default port number is 554. For Multicast via UDP, the default port numbers are as follows: If Stream Type is set to Independent RTP Streams, the default port number is 49170. If Stream Type is set to Independent RTP Streams, the default port number is 49170. If Stream Type is set to Independent RTP Streams, the default port number is 49170. If Stream Type is set to Independent RTP Streams, the default video port number is 49170. If Stream Type is set to Independent RTP Streams, the default port number is 49172. The audio port number is always the next even-numbered port number following the video port number. To change the port numbers, select the Custom Ports check box and do the following: For By Receiver, select the desired port number in the Server spin box. Valid values range from 1 to 65535. For By Transmitter, select the desired port number in the Video spin box. Valid values range from 1 to 65535. For Multicast via UDP, select the desired port number in the Video spin box. Valid values range from 1 to 65535. For Multicast via UDP, select the d	

(Continued on following page)

CONFIGURATION ITEM	GUIDELINES		
Stream Options, Buffer	Specifies the amount of time is before playout of the audio ar buffers absorb disturbances in In the Buffer drop-down list, s Minimal (<100ms latency) Small (100-500ms latency) Medium (1000ms) (Default Large (5000ms) Custom If Custom is selected, the Cu Click the up or down arrow to Available values range from 0	 in milliseconds that the device delays and video in the stream buffer. Larger in the stream but result in more latency. Select one of the following: i) t setting) stom Buffer (ms) spin box is enabled. i) select the desired custom buffer size. to 5000 milliseconds. 	
Statistics	Enables or disables statistics audio and video. By default, t To enable statistics, select the Packets fields (read only) disp To reset the statistics, click the If the Enable check box is not fields and the Reset Statistics .	for the number of dropped packets for he Enable check box is deselected. e Enable check box. The Dropped blay the statistics for audio and video. He Reset Statistics button. t selected, the Dropped Packets s button are disabled.	
Output Options, Resolution	Specifies the resolution of the drop-down list, select one of NOTE: In the following list, <i>R</i> Auto (Recommended) 640x480@60Hz 720x480@60Hz 720x480@60Hz 720x576@25Hz 720x576@50Hz 800x600@60Hz 848x480@60Hz 1024x768@60Hz 1280x720@50Hz 1280x768@60Hz 1280x768@60Hz 1280x768@60Hz 1280x800@60Hz 1280x800@60Hz 1280x960@60Hz 1280x1024@60Hz The default setting is Auto (Re	HDMI output. In the Resolution the following: <i>B</i> denotes <i>Reduced Blanking</i> . 1360x768@60Hz 1366x768@60Hz RB 1400x1050@60Hz RB 1400x1050@60Hz RB 1440x900@60Hz RB 1600x900@60Hz RB 1600x1200@60Hz RB 1600x1200@60Hz RB 1600x1050@60Hz RB 1920x1080@60Hz RB 1920x1080@25Hz 1920x1080@20Hz 1920x1080@20Hz 1920x1080@50Hz 1920x1080@60Hz 1920x1080@60Hz 1920x1200@60Hz RB	

(Continued on following page)

Stream Configuration Guidelines (Continued)

CONFIGURATION ITEM	GUIDELINES
Output Options, Volume	The Volume button toggles audio on and off. By default, the Volume button is enabled, showing three sound waves emanating from the speaker icon (••). Audio is not muted. To disable the Volume button, deselect the button. The three waves emanating from the speaker icon are removed (••) and audio is muted. To adjust the volume, drag the Volume slider to the left or to the right. The volume decreases in one-tenth decrements when the slider is dragged to the left and increases in one-tenth increments when the slider is dragged to the right. Values range from -80 to 20 decibels. The default setting is 0 .
Output Options, Bass	Adjusts the bass level of the audio. The bass level decreases in one-tenth decrements when the slider is dragged to the left and increases in one-tenth increments when the slider is dragged to the right. Values range from -10 to 10 decibels. The default setting is 0 .
Output Options, Treble	Adjusts the treble level of the audio. The treble level decreases in one-tenth decrements when the slider is dragged to the left and increases in one-tenth increments when the slider is dragged to the right. Values range from -10 to 10 decibels. The default setting is 0 .
Output Options, Delay	 Specifies the audio delay so that the audio is in sync with the video. To adjust the delay, use the Delay slider or the Delay spin box: To use the Delay slider, drag the slider to the left or to the right. The delay decreases when the slider is dragged to the left and increases when the slider is dragged to the right. Values range from 0 to 100 milliseconds. The default setting is 0. The value set by the Delay slider appears in the Delay spin box. To use the Delay spin box, select the desired value. Valid values range from 0 to 100 milliseconds. The value set by the Delay spin box adjusts the Delay slider to the corresponding value.

- 3. Use the transport buttons to control streaming as appropriate:
 - Begin streaming by selecting the **Start** button (>). The button starts blinking green every 500 milliseconds while the DM-RMC-100-STR sets up the stream. When the stream starts, the button becomes solid green. In addition, the **Status** field (read only) indicates that the stream started.
 - Pause streaming by selecting the **Pause** button (). The button starts blinking yellow every 500 milliseconds until the stream pauses. When the stream pauses, the button becomes solid yellow. In addition, the **Status** field (read only) indicates that the stream paused.
 - Stop streaming by selecting the **Stop** button (). The button starts blinking red every 500 milliseconds until the stream stops. When the stream stops, the button becomes solid red. In addition, the **Status** field (read only) indicates that the stream stopped.

Configuring On-Screen Display Settings

On-screen display settings can be configured to allow text or an image—or both—to be overlaid on the connected display. Text can be overlaid for purposes such as labeling the video or displaying instructions, schedules, or alerts. An image such as a logo graphic can be overlaid to allow branding of the streaming content.

To enter and configure text for on-screen display, refer to "Configuring Text Overlay Settings" below. To select and configure an image for on-screen display, refer to "Configuring Image Overlay Settings" on the following page.

Configuring Text Overlay Settings

To configure text overlay settings, do the following:

1. In the navigation bar, click **On-Screen Display**. The On-Screen Display page opens.

On-Screen Display Page - Text Overlay

Status	Text Overlay	Image Overlay	
Stream	Enabled Isabled	© Enabled	
On-Screen Display	Contract a first cost of the cost of the second	Image Path Type	
HDMI Output		Local CRemote	
Network	Text to display	Path	
Device		Browse	
	Location	Location	
	Upper Left •	Upper Left	
	х ү	х ү	
	0 0	0 0	
	Font Size		
	Custom		

- 2. In the **Text Overlay** section of the page, do the following:
 - a. Enable text overlay by clicking the **Enabled** radio button if it is not already selected. By default, the **Disabled** radio button is selected, preventing text from being overlaid for on-screen display.
 - b. In the Text to display text box, enter the desired text.
 - c. In the Location drop-down list, select one of the following options to position the text on the display device: Custom, Upper Left (default setting), Center Left, Lower Left, Upper Right, Center Right, or Lower Right.

If **Custom** is selected, enter the **X** (horizontal) and **Y** (vertical) coordinates in pixels to position the text on the display.

- d. In the Font Size drop-down list, select one of the following options:
 - Custom: (Default setting) Allows a custom point size to be set in the Font Size spin box
 - Small: Sets a fixed point size of 22

- Medium: Sets a fixed point size of 54
- Large: Sets a fixed point size of 108

If **Custom** is selected, select the desired point size in the **Font Size** spin box by clicking the up or down arrow until the desired point size is displayed. Valid values range from **0** to **300**. Click the **Set** button to save the setting.

NOTE: SIMPL programming allows the following additional text attributes to be set:

- Boldface
- Underline
- Italic
- Strikethrough
- Drop shadow
- Color
- Scrolling

Configuring Image Overlay Settings

The following image file formats can be uploaded to the DM-RMC-100-STR and then be overlaid on the display device:

- PNG with alpha channel
- JPEG
- BMP

To configure image overlay settings, do the following:

1. In the navigation bar, click **On-Screen Display**. The On-Screen Display page opens.

On-Screen Display Page-Image Overlay

Status	Text Overlay		Image Overlay	
Stream	Enabled	Disabled	© Enabled	Disabled
On-Screen Display			Image Path Type	
HDMI Output			Local	Remote
Network	Text to display		Path	
Device		Browse		
	Location		Location	
	Upper Left	•	Upper Left	
	X Y		x y	
	0	0	0	0
	Font Size			
	Custom			

- 2. In the **Image Overlay** section of the page, do the following:
 - a. Enable image overlay by clicking the **Enabled** radio button if it is not already selected. By default, the **Disabled** radio button is selected, preventing an image from being overlaid for on-screen display.
 - b. Specify the image path type by selecting the Local or Remote radio button:
 - If the image is located on the hard drive of the device from which the DM-RMC-STR-100 user interface is accessed, select **Local**.
 - If the image is located on a device other than the local hard drive, select **Remote**.
 - c. Specify the path to the image as follows:
 - If the image path type is set to Local, click the Browse... button, navigate to the desired image file, and then click Open. The image file is uploaded from the local device to the DM-RMC-100-STR. The filename appears in the Browse... box.
 - If the image path type is set to **Remote**, enter the URL (HTTP, HTTPS, or FTP), and then click the **Set** button.
 - d. In the Location drop-down list, select one of the following options to position the image on the display device: Custom, Upper Left (default setting), Center Left, Lower Left, Upper Right, Center Right, or Lower Right.

If **Custom** is selected, enter the X (horizontal) and Y (vertical) coordinates in pixels to position the image on the display.

NOTE: Using SIMPL programming, transparency can be set for the entire image. In addition, an image can be loaded dynamically.

Configuring HDMI Output Settings

The HDMI output can be enabled or disabled. In addition, output resolution, underscan percentage, and timeout settings can be configured. Information about the connected display device can also be viewed.

To configure HDMI output settings, do the following:

- 1. In the navigation bar, click HDMI Output. The HDMI Output page opens.
 - HDMI Output Page—Output Settings

Status	Output Settings	Connected Display
Stream	Enable Disable	Sink Detected
On-Screen Display		No
HDMI Output	Resolution	Transmitting
Network	Auto (Recommended)	No
Device	Underscan	Current Resolution
	0.0%	640x480x60p
	0 Set	Manufacturer
	Automatic Timeout	Name
	Enable Isable	
	Timeout	Serial Number

- Enable or disable the HDMI output by selecting the Enable or Disable radio button, respectively. By default, the Enable radio button is selected, allowing the output display to be turned on. If the Disable radio button is selected, the output display turns off.
- 3. In the **Resolution** drop-down list, select the desired resolution of the output display. The following settings are available:

Auto (Recommended) (Default setting)	1360x768@60Hz
640x480@60Hz	1366x768@60Hz
720x480i@30Hz	1366x768@60Hz Reduced Blanking
720x480@60Hz	1400x1050@60Hz
720x576i@25Hz	1400x1050@60Hz Reduced Blanking
720x576@50Hz	1440x900@60Hz
800x600@60Hz	1440x900@60Hz Reduced Blanking
848x480@60Hz	1600x900@60Hz Reduced Blanking
1024x768@60Hz	1600x1200@60Hz
1280x720@50Hz	1680x1050@60Hz
1280x720@60Hz	1680x1050@60Hz Reduced Blanking
1280x768@60Hz	1920x1080i@25Hz
1280x768@60Hz Reduced Blanking	1920x1080i@30Hz
1280x800@60Hz	1920x1080@24Hz
1280x800@60Hz Reduced Blanking	1920x1080@50Hz
1280x960@60Hz	1920x1080@60Hz
1280x1024@60Hz	1920x1200@60Hz Reduced Blanking

 In the Underscan drop-down list, select the desired underscan percentage. The underscan percentage reduces the size of the image, resulting in black bars around the image. Available values are Custom, 0.0% (default setting), 2.5%, 5.0%, and 7.5%. If **Custom** is selected, select the desired underscan percentage in the **Underscan** spin box by clicking the up or down arrow until the desired percentage is displayed. Valid values range from **0** to **10** in one-tenth intervals (for example, 0, 0.1, 0.2, 0.3, and so on). Click the **Set** button to save the setting.

5. Enable or disable automatic timeout by selecting the **Enable** or **Disable** radio button, respectively. By default, automatic timeout is disabled.

If automatic timeout is enabled, select one of the following options in the **Timeout** drop-down list: **Custom, 1 minute, 5 minutes** (default setting), **10 minutes,** or **15 minutes**.

If **Custom** is selected, select the desired automatic timeout value in the **Timeout** spin box by clicking the up or down arrow until the desired timeout value is displayed. Valid values range from **0** to **300** in one-tenth intervals (for example, 0, 0.1, 0.2, 0.3, and so on). Click the **Set** button to save the setting.

The HDMI Output page displays information about the connected display device in the **Connected Display** section of the page.

Status	Output Settings	Connected Display
Stream	Enable Oisable	Sink Detected
On-Screen Display		No
HDMI Output	Resolution	Transmitting
Network	Auto (Recommended)	No
Device	Underscan	Current Resolution
	0.0%	640x480x60p
	0 Set	Manufacturer
	Automatic Timeout	Name
	© Enable	
	Timeout	Serial Number

HDMI Output Page-Connected Display Information

As shown above, the following information is displayed:

- Sink Detected: Specifies whether the HDMI signal is detected by the connected display (Yes or No)
- **Transmitting:** Specifies whether the HDMI output is transmitting an HDMI signal to the connected display (**Yes** or **No**)
- Current Resolution: Specifies the current resolution of the connected display
- Manufacturer: Specifies the name of the manufacturer of the connected display
- Name: Specifies the model name of the connected display
- Serial Number: Specifies the serial number of the connected display

Configuring Network Settings

To configure network settings, do the following:

1. In the navigation bar, click **Network**. The Network page opens.

Network Page

CRESTRON			
Status Netw	ork		
Stream	Host Name	DM-RMC-100-STR-90ac3f061401	
On-Screen Display	-		
HDMI Output	Domain Name	crestron.com	
Network	DHCP	Obtain an IP address automatically	
Device		Use the following IP address	
	IP Address	172.30.73.157	
	Subnet Mask	255.255.252.0	
	Default Gateway	172.30.72.1	
	DNS Servers	192.168.200.134,192.168.200.242	
			Save Revert

2. Configure network settings. Refer to the following table for configuration guidelines.

Network Configuration Guidelines

CONFIGURATION ITEM	GUIDELINES		
Host Name	Specifies the host name that identifies the DM-RMC-100-STR on the network. The default host name is DM-RMC-100-STR- <i>xxxxxxxxx</i> , where <i>xxxxxxxxxxx</i> is the MAC address of the DM-RMC-100-STR. Overwrite the existing host name in the Host Name text box with the desired new host name. The host name is restricted to the letters <i>a</i> to <i>z</i> (not case sensitive), the digits <i>1</i> to <i>9</i> , and the hyphen.		
Domain Name	Specifies a domain name.		
DHCP	Specifies whether the IP address of the DM-RMC-100-STR is to be assigned by a DHCP (Dynamic Host Configuration Protocol) server. To set the IP address, click either of the following radio buttons:		
	• Obtain an IP address automatically: (Default setting) Allows the IP address of the DM-RMC-100-STR to be automatically assigned by a DHCP server on the local area network (LAN) for a predetermined period of time.		
	NOTE: If a DHCP server does not exist on the network and 45 seconds have elapsed since the DM-RMC-100-STR was powered on, the IP address defaults to a link-local address. Refer to RFC 3927 for information about link-local addressing		
	• Use the following IP address: Allows a static IP address to be set for the DM-RMC-100-STR as well as the subnet mask, default gateway, and DNS servers:		
	 IP address: Enter a unique IP address for the DM-RMC-100-STR. 		
	 Subnet Mask: Enter the subnet mask that is set on the network. 		
	 Default Gateway: Enter the IP address that is to be used as the network's gateway. 		
	 DNS Servers: Enter the IP address of one or more DNS servers. 		

- 3. Do either of the following:
 - To save the current entries, click the **Save** button. The DM-RMC-100-STR automatically reboots.
 - To revert to the previous settings without saving the current entries, click the **Revert** button.

Configuring Device Settings

Configuration and management of device settings consist of the following:

- Connecting the DM-RMC-100-STR to a control system
- Changing the user name and password
- Enabling or disabling LEDs on the DM-RMC-100-STR
- Upgrading firmware
- Restoring factory default settings
- Rebooting the DM-RMC-100-STR

Configuring Control System Connection Settings

To connect the DM-RMC-100-STR to a control system, do the following:

1. In the navigation bar, click **Device**. The Device page, which includes a **Control System Connection** section, opens.

Device Page—Control System Connection

Status	Control System Connection
Stream	IP Address or Host Name
On-Screen Display	
HDMI Output	IP ID
Network	•
Device	Status

- 2. In the **Control System Connection** section of the page, do the following:
 - a. In the **IP Address or Host Name** text box, enter the IP address or host name of the control system.
 - b. In the IP ID text box, enter the IP ID of the control system. Valid values range from 03 to FE in hexadecimal notation.
 - c. Do either of the following:
 - To save the current entries, click the Save button. A message appears, indicating that the DM-RMC-100-STR will reboot. Click OK to reboot the device.
 - To revert to the previous settings without saving the current entries, click the **Revert** button.

The **Status** field (read only) displays the connection status of the DM-RMC-100-STR to the control system as **Offline** or **Online**.

Changing the User Name and Password

To change the user name and password, do the following:

1. In the navigation bar, click **Device**. The **Device** page, which includes a **Credentials** section, opens.

Device Page – Credentials

Device	Status	
	Offline	
		Save Revert
	Credentials	
	Username	
	admin	
	Password	
	Confirm Password	
		Save Revert

2. In the Credentials section of the page, do the following:

NOTE: The user name and password are case sensitive.

- a. In the **Username** text box, enter the desired user name.
- b. In the **Password** text box, enter the desired password.
- c. In the **Confirm Password** text box, reenter the desired password to confirm the password.
- d. Do either of the following:
 - To save the current entries, click the **Save** button. A message appears, indicating that the credentials were saved successfully.
 - To revert to the previous settings without saving the current entries, click the **Revert** button.

Controlling the Display of the LEDs

The LEDs on the DM-RMC-100-STR can be enabled or disabled.

NOTE: When the LEDs are disabled, all LEDs—including the power and Ethernet LEDs—turn off. The DM-RMC-100-STR appears as though it is not powered on and functioning; however, the device remains powered on and continues to function.

To control the display of the LEDs, do the following:

1. In the navigation bar, click **Device**. The Device page, which includes a **Display** section, opens.



- 2. In the **Display** section of the page, do either of the following:
 - To enable the display of the LEDs, click the **Enabled** radio button if it is not already selected. By default, the LEDs are enabled.
 - To disable the display of the LEDs, click the **Disabled** radio button. Although the LEDs become disabled, the DM-RMC-100-STR continues to function.

Upgrading Firmware

Device Page-Firmware

To upgrade firmware of the DM-RMC-100-STR, do the following:

1. In the navigation bar, click **Device**. The Device page, which includes a **Firmware** section, opens.

del	DM-RMC-100-STR	
ial Number	23A55K000001	
nware Version	6.0.44.1	
lion		
Upload firmware file	Use service port	
rowse		

As shown above the **Firmware** section displays the following information about t

As shown above, the **Firmware** section displays the following information about the DM-RMC-100-STR:

- Model, which is **DM-RMC-100-STR**
- Serial Number
- Firmware Version
- 2. To upgrade the firmware, click the **Upload firmware file** radio button or the **Use service port** radio button:
 - If the **Upload firmware file** radio button is selected, do the following:
 - a. Click the **Browse...** button.
 - Locate and select the desired firmware file (*.img), and then click the **Open** button. The **Browse...** field displays the firmware filename.

- c. Click the **Load** button. A message appears, indicating that the DM-RMC-100-STR will reboot.
- d. Click OK to reboot the device.
- If the **Use service port** radio button is selected, do the following:
 - a. Insert a USB mass storage device containing the firmware file into the USB port of the DM-RMC-100-STR.
 - b. Click the **Load** button. A message appears, indicating that the DM-RMC-100-STR will reboot.
 - c. Click **OK** to reboot the device.

Restoring Factory Default Settings

To restore factory default settings, do the following:

1. In the navigation bar, click **Device**. The Device page, which includes a **Device Management** section, opens.

Device Page-Device Management, Restore

Device Management		
Restore	Reboot	
		· · · · · · · · · · · · · · · · · · ·

2. Click the **Restore** button. A message appears, indicating that all default settings will be restored and that the device will reboot.

NOTE: Clicking the **Restore** button restores all settings—including the network settings—to the factory default settings. If a static IP address is set, clicking the **Restore** button reverts the IP address to DHCP mode, which is the factory default IP address setting (refer to "Configuring Network Settings" on page 16).

3. Click **OK** to restore factory default settings and to reboot the device.

Rebooting the DM-RMC-100-STR

To reboot the DM-RMC-100-STR, do the following:

1. In the navigation bar, click **Device**. The Device page, which includes a **Device Management** section, opens.

Device Page-Device Management, Reboot

Device Management	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Restore	Reboot	

- 2. Click the **Reboot** button. A message appears, indicating that the device will reboot.
- 3. Click OK to reboot the device.

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Crestron Electronics, Inc. 15 Volvo Drive Rockleigh, NJ 07647 Tel: 888.CRESTRON Fax: 201.767.7576 www.crestron.com



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