The Digital Alert Systems Dasdec-2 connects to the MC1-UHD via serial RS-232 or the Comtrol® DeviceMaster® over Ethernet. For information on configuring a Comtrol DeviceMaster, refer to the openGear DeviceMaster Setup Sheet (Ross Part Number: MC1MKDR-100).
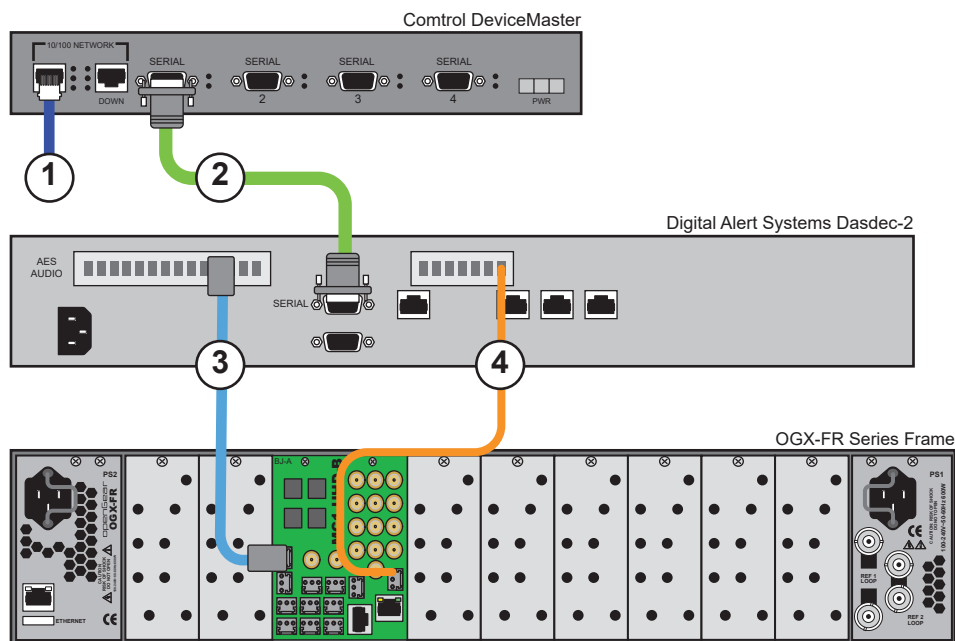
The Digital Alert Systems Dasdec-2 requires the following connections to the MC1-UHD:

1. Communications connection (Serial or TCP/IP via Comtrol DeviceMaster) to provide EAS crawl text.
2. EAS Voice Over connection using an GPI to signal MC1-UHD connection.
3. Audio connection to provide alert tones and/or TTS.

Overview

Figure 1 outlines the connections required when using the Digital Alert Systems Dasdec-2 to the MC1-UHD. Note that while **Figure 1** shows the MC1-UHD with the 8322AR-318D rear module, the 8322AR-319C rear module can also be used.

1. Connect the Comtrol DeviceMaster to your facility network.
2. Connect the Serial port on the Comtrol DeviceMaster to the Serial port on the Digital Alert Systems Dasdec-2.
3. Connect the audio output from the Digital Alert Systems Dasdec-2 to an AES port on the MC1-UHD.
4. Connect a GPIO port from the MC1-UHD to the Digital Alert Systems Dasdec-2.

Figure 1 *MC1-UHD to Digital Alert Systems Dasdec-2 Example Cabling Setup*

For More Information on...

- specific Digital Alert Systems Dasdec-2 cabling and pinouts, refer to the Dasdec-2 user guide.

Connecting the Comtrol DeviceMaster to the Dasdec-2

The Digital Alert Systems Dasdec-2 connects to the Comtrol DeviceMaster via an RS-232 serial port on the Dasdec-2 and any available serial port on the Comtrol DeviceMaster.

✱ You will need a DB-9 female to DB-9 female null modem cable. Ross Video does not supply this cable.
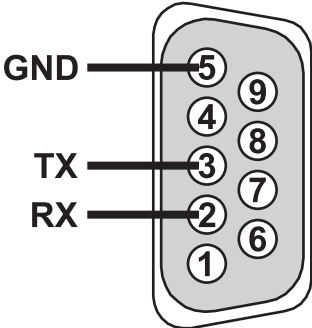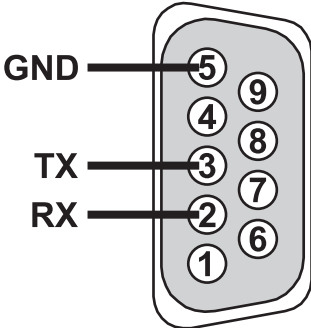
Refer to **Table 1** for the required serial RS-232 pinout designations.

Table 1 Dasdec-2 to Comtrol DeviceMaster Pinouts

Dasdec-2	Comtrol DeviceMaster
Pin 3 (Tx)	Pin 2 (Rx)
Pin 2 (Rx)	Pin 3 (Tx)
Pin 5 (GND)	Pin 5 (GND)

Refer to **Table 2** for pinout designations on each serial port.

Table 2 Dasdec-2 and Comtrol DeviceMaster Port Designations

Dasdec-2 (DB9 Male)	Comtrol DeviceMaster (DB9 Male)

Proceed to connect the MC1-UHD to the Digital Alert Systems Dasdec-2.

Connecting the Dasdec-2 to the MC1-UHD

There are two options for establishing communications between the MC1-UHD and the Digital Alert Systems Dasdec-2: TCP/IP or Serial. Both methods are described in this section.

TCP/IP Connection via a Comtrol DeviceMaster

The Digital Alert Systems Dasdec-2 connects to the MC1-UHD over TCP/IP using a Comtrol DeviceMaster. See **Figure 1**.

✱ You will need a DB-9 female to DB-9 female null modem cable. Ross Video does not supply this cable.

1. Connect the Digital Alert Systems Dasdec-2 to the Comtrol DeviceMaster via the Serial Com Port RS-232 on the Dasdec and an available serial port on the Comtrol DeviceMaster.

2. Ensure the MC1-UHD is connected to the same network as the Comtrol DeviceMaster for TCP/IP.

3. Proceed to "**To configure TCP/IP communications for EAS text crawl**".

Serial Connection

The Digital Alert Systems Dasdec-2 connects to the MC1-UHD via the Serial Com port (RS-232) on the Dasdec-2 and the SERIAL port (RJ45) on the MC1-UHD rear module.

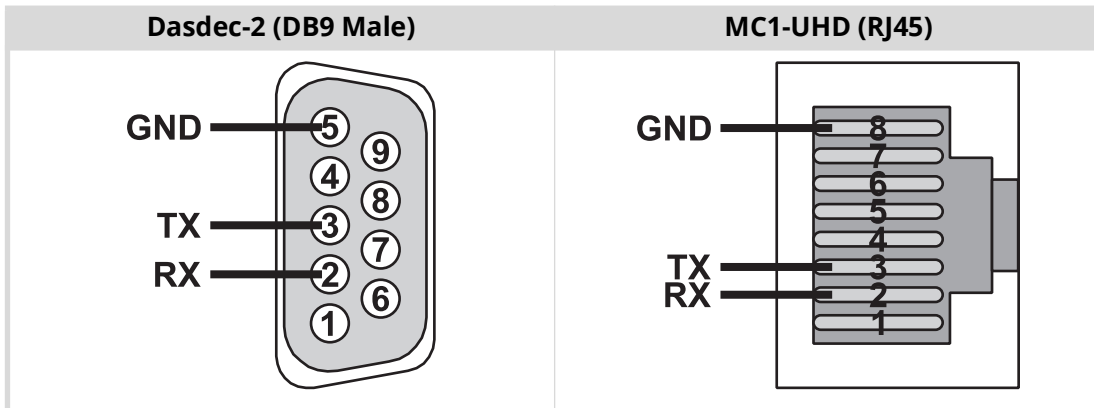ROSS

✶ You will need a DB-9 female to RJ45 serial cable.

1. Connect a DB-9 female to RJ45 cable from the Dasdec-2 to the MC1-UHD rear module. Refer to the **MC1-UHD User Guide** for port pinouts.

   a. Refer to **Table 1** for the required pinout designations.

Table 3 Dasdec-2 to MC1-UHD Pinouts

Dasdec-2 (Serial)	MC1-UHD (RS-232)
Pin 3 (Tx)	Pin 2 (Rx)
Pin 2 (Rx)	Pin 3 (Tx)
Pin 5 (GND)	Pin 8 (GND)

   b. Refer to **Table 2** for pinout designations on each port.

Table 4 Dasdec-2 and MC1-UHD Port Designations

Dasdec-2 (DB9 Male)	MC1-UHD (RJ45)

✶ Ross Video does not supply this cable.

2. Ensure the following settings are specified on the Digital Alert Systems Dasdec-2:

   a. Set the **SERIAL** port on the Dasdec-2 to **Sage Generic CG**.

   b. Refer to **Table 5** for additional Dasdec-2 serial settings.

Table 5 Serial Settings for the Dasdec-2

Setting	Value
Protocol	RS-232
Bit Rate	9600
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	None

3. Proceed to "**To configure serial communications for EAS text crawl**".

For More Information on...

• the serial pinouts of the MC1-UHD rear module, refer to the *MC1-UHD User Guide*.

• configuring your Dasdec-2, refer to its user documentation.

AES Audio Connection

The Digital Alert Systems Dasdec-2 provides an AES audio output on a DB9 connector. A breakout cable is required to adapt the AES output to connect to the MC1-UHD. Ross Video does not supply this cable.

To connect the AES audio to the MC1-UHD

1. Connect the DB9 connector on the breakout cable to the **AES AUDIO** port on the Dasdec-2.

2. Connect the other end of the breakout cable to an **AES** port on the MC1-UHD.

EAS Audio Voice Over Connection

To enable EAS Audio Voice Over, you will need to:

1. Connect the **GPO** (**RELAY**) port on Digital Alert Systems Dasdec-2 to the **GPI 1** port on the MC1-UHD rear module. Refer to the *MC1-UHD User Guide* for specific GPIO pinout information.

✦ Ross Video does not supply this cable.

2. Ensure that the Dasdec-2 **GPO** (**RELAY**) port is configured for **PTT Relay** programming.

3. Configure the **GPO** (**RELAY**) port on the Dasdec-2 for **EAS Audio Playout**.

Configure the MC1-UHD for EAS Text Crawls

Before configuring the MC1-UHD, ensure that it displays in the Tree View of DashBoard. Refer to the *MC1-UHD User Guide* for more details.

To configure TCP/IP communications for EAS text crawl

1. From the **Tree View**, expand the node for the MC1-UHD you want to access.

2. Select the **Configuration** node to display the interface in the right-half of DashBoard.

3. Select the **Config** tab.

4. Select the **Remote Control** tab.

5. Locate the **Sage EAS Char Gen** row in the Ethernet Port area of the tab.

6. From the **Role** menu, select **Client**.

7. From the **Protocol** menu, select **TCP**.

8. From the **IP Address** menu, specify the IP Address of the Comtrol DeviceMaster.

9. From the **Port** menu, specify the port number for the Comtrol DeviceMaster that is connected to the Dasdec-2. The default value is 8701.

10. Select the **Enabled** box.

11. Use the **Text Crawl Setup** options configure the text overlay. Refer to the *MC1-UHD User Guide*.

12. Confirm that the **Sage EAS Char Gen** port reports "Connected". If it does not, verify the Comtrol DeviceMaster setup.

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To configure serial communications for EAS text crawl

1. From the **Tree View**, expand the node for the MC1-UHD you want to access.
2. Select the **Configuration** node to display the interface in the right-half of DashBoard.
3. Select the **Config** tab.
4. Select the **Remote Control** tab.
5. Configure the Serial port as follows:

    a. Set the Port Type to RS-232.

    b. Set the Protocol to **Sage EAS Char Gen**.

    c. Set the serial settings as outlined in **Table 6**:

Table 6 Serial Settings for the MC1-UHD

Setting	Value
Protocol	RS-232
Bit Rate	9600
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	None

6. Select the **Port Enabled** box.
7. Verify that the serial settings are the same on the Dasdec-2.

Enabling EAS Audio Voice Over

This section outlines how to configure the MC1-UHD for EAS audio voice over support via GPIO.

To enable EAS audio voice over

1. From the **Configuration** interface in DashBoard select the **GPI/Tally** tab.
2. Locate the row for the MC1-UHD **GPI** port you connected to the **GPO** (**RELAY**) port on the Dasdec-2.
3. Set the **Function** to **GPI EAS Audio Over**.
4. Set the **Trigger/Tally Type** to **Level Low**.

Setting up the Audio Sources

This section outlines how to configure the embedded audio sources for the EAS audio transitions.

To set up the EAS sources

1. From the **Configuration** interface in DashBoard, select the **Remote Control** tab.
2. Locate the **SAGE EAS Char Gen** area of the tab.
3. Click **Source Setup**.
   The **Voice Over 2** dialog opens.
4. From the **Voice Over 2** dialog, configure the audio channels for the EAS alert tones.

For example, set Ch 1-2 to AES 1 Ch A and AES 1 Ch B respectively, and set Ch 3-4 to AES 1 Ch A and AES 1 Ch B respectively.

✶ Silence is embedded if the selected source is not present on the input video.

5. Close the **Voice Over 2** dialog.

To set the EAS duck level

1. In the **SAGE EAS Char Gen** area of the **Remote Control** tab, click **Audio Setup**.

   The **Voice Over Audio Setup** dialog opens.

2. Use the **Duck Level** slider to specify the amount (dB) to reduce the audio level on the Program bus during an EAS alert.

3. Use the **Gain** slider to apply a gain (in dB) to the Voice Over (EAS) channel.

Customizing the EAS Text Overlay

The MC1-UHD provides options for customizing the appearance of each Priority EAS message type.

To customize the EAS text overlay

1. From the **Configuration** interface in DashBoard select the **Remote Control** tab.

2. Locate the **SAGE EAS Char Gen** area of the tab.

3. Click **Text Crawl Setup**.

4. Use the **% From Top** option to adjust the vertical position of the EAS text overlay. Note that this setting is not applicable to the Emergency Alert (High Priority) categories as these messages are fixed to the top of the screen.

5. Use the **Text Size** option to adjust the font size of the text overlay from smallest (1) to largest (10). Note that actual text size is dependent on the video format.

6. Select a text color and/or background color for the text overlay using the provided fields. The EAS **Text Attributes** field reports an error when the text color and the background color match.

✶ When using very long EAS messages, the MC1-UHD may use a smaller font size and/or may disable transparency. The exact length depends on the characters used in the message (widths of each font character).

7. To apply a drop shadow to the text overlay, select the **Drop Shadow** box.

8. Use the **Pan Speed** slider to specify the speed of the EAS text crawl across the screen.

9. Use the **Repeat Count** field to specify the number of times to display the entire text crawl before taking it off air.

10. Use the **Maximum Duration** field to specify the number of seconds the EAS text crawl will display before it is taken off air.

11. Repeat for each **Priority** message type (High, Medium, Low) that you want to configure.

12. Close the **SAGE EAS** dialog.