

The Digital Alert Systems Dasdec-2 connects to the MC1-MK 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-MK:

- 1. Communications connection (Serial or TCP/IP via Comtrol DeviceMaster) to provide EAS crawl text.
- **2.** EAS Voice Over connection using an GPI to the MC1-MK.
- **3.** Analog or AES audio connection to provide alert tones and/or TTS.

Overview

Figure 1 outlines the required physical connections.

- 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 audio port on the MUX-8258. Note that **Figure 1** shows an MUX-8258-C.
- **4.** Connect a GPIO port on the MC1-MK to the Digital Alert Systems Dasdec-2.
- 5. Connect the key alpha video source to the SDI IN BNC on the MUX-8258.
- 6. Connect the SDI OUT BNC on the MUX-8258 to the KEY ALPHA IN BNC on the MC1-MK.

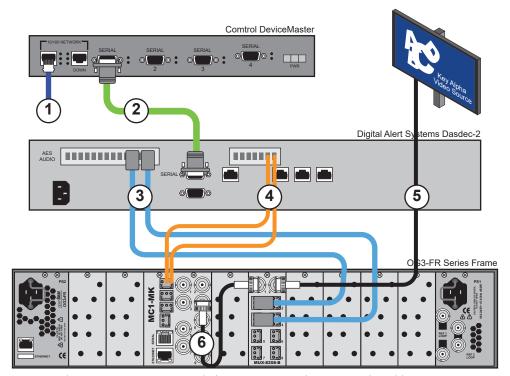


Figure 1 MC1-MK to Digital Alert Systems Dasdec-2 Example Cabling Setup



For More Information on...

• specific cabling requirements and pinouts, refer to the Dasdec-2 user documentation.

Connecting the Comtrol DeviceMaster to the Dasdec-2

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

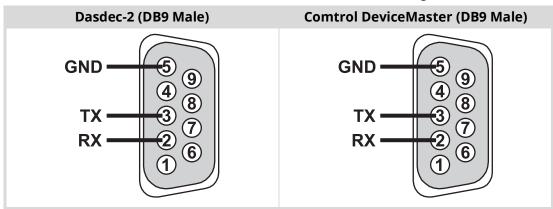
Refer to **Table 1** for the required Serial RS-232 pinout designations.

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



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

Connecting the Dasdec-2 to the MC1-MK

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

Serial Connection

The Digital Alert Systems Dasdec-2 connects to the MC1-MK via an available serial port (RS-232) on the Dasdec-2 and the SERIAL port (RJ45) on the MC1-MK rear module.

★ You will need a DB-9 female to RI45 cable. Ross Video does not supply this cable.

Refer to **Table 1** for the required Serial RS-232 pinout designations.

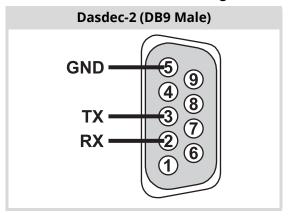


Table 3 Dasdec-2 to MC1-MK Pinouts

Dasdec-2 (Serial)	MC1-MK (RJ45 Port)
Pin 3 (Tx)	Pin 2 (Rx)
Pin 2 (Rx)	Pin 3 (Tx)
Pin 5 (GND)	Pin 8 (GND)

Refer to **Table 2** for pinout designations on the Dasdec-2 port.

Table 4 Dasdec-2 Serial Port Designations



For More Information on...

• the serial pinouts of the MC1-MK rear module, refer to the MC1-MK Installation Guide.

Configuring the Digital Alert Systems Dasdec-2 for Serial

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

- Set the **SERIAL** port on the Dasdec-2 to **Sage Generic CG**.
- Refer to **Table 5** for additional 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

For More Information on...

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



TCP/IP Connection via a Comtrol DeviceMaster

The Digital Alert Systems Dasdec-2 connects to the MC1-MK over TCP/IP using a Comtrol DeviceMaster.

- ★ 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 RS-232 serial port on the Dasdec-2 and an available serial port on the Comtrol DeviceMaster.
- 2. Connect the MC1-MK to the same network as the Comtrol DeviceMaster.

EAS Audio Voice Over Connection

This section outlines how to connect the Digital Alert Systems Dasdec-2 to the MC1-MK for an EAS audio voice over setup.

You will need to:

- 1. Connect the **GPO** (**RELAY**) port on the Digital Alert Systems Dasdec-2 to the **GPI 1** port on the MC1-MK rear module. Refer to the *MC1-MK Installation Guide* for 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.

MC1-MK Audio Connections

When connecting the MC1-MK-MK to the Digital Alert Systems Dasdec-2, you will also need one of the following openGear cards for audio:

- AES audio an MUX-8258-A is required
- Analog audio an MUX-8258-4C or MUX-8258-8C is required

Both methods are outlined in this section.

For More Information on...

• Dasdec-2 audio pinouts, refer to its user documentation.

AES Audio

The Digital Alert Systems Dasdec-2, when equipped with AES audio, provides AES outputs on a DB9 connector. A breakout cable is required to adapt these AES output for the MUX-8258-A.

- * Ross Video does not supply these cables.
- 1. Connect the breakout cable from the **AES AUDIO** port on the Dasdec-2 to the MUX-8258-A as shown in **Figure 2**.
- 2. Ensure that Dasdec-2 Audio Output is set to 48000 samples/second.

Analog Audio

The Dasdec-2 connects to the MUX-8258-C via two audio ports. You will need two XLR cables. Each cable must include an XLR-3F 3-pin female connector (to connect to the Dasdec-2) on one end, and one WECO $^{\text{TM}}$ 3-pin connector on the other (to connect to the MUX-8258-C rear module). Refer to the *MUX-8258 User Manual* for rear module pinout details.

★ Ross Video does not supply these cables.



- 1. Connect the XLR-3F cables to the Main/Alert Audio Out ports (L and R) on the Dasdec-2.
- Connect the other end of the each cable to the ANLG IN ports (1 and 2) on the MUX-8258-C rear module.

Connecting the MC1-MK to the MUX-8258

The MUX-8258 provides the embedded audio to the MC1-MK.

- 1. Connect an SDI video source to **SDI IN** (BNC 1) on the MUX-8258 rear module.
- 2. Connect the **SDI OUT** (BNC 2) on the MUX-8258 rear module to **KEY ALPHA IN** (BNC 4) on the MC1-MK rear module.

Configuring the MUX-8258

This section outlines how to configure the MUX-8258 for EAS audio.

- 1. From the Tree View in DashBoard, double-click the node for the card you want to configure.
- **2.** Select the **Setup** tab.
- Configure the menu items as per your facility requirements. Refer to the MUX-8258 Series User Guide for details.
- **4.** Select the **Embedded Outputs** tab.
 - a. Enable the Audio Groups and assign the Dasdec-2 audio to two or more channels as required.
 - **b.** Disable the Audio Groups and mute the channels that are not used.
- 5. Select the AES or Analog Inputs tab.
- **6.** Configure the **Delay** and **Gain** as required for AES audio or Analog Inputs 1 and 2.

Configuring the MC1-MK for EAS Crawl

This section outlines how to configure the MC1-MK to communicate with the Dasdec-2 via TCP/IP or serial. Both methods are described.

To configure the MC1-MK for text crawl over TCP/IP

- 1. From the **Tree View**, expand the node for the MC1-MK 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.
- 10. Select the **Enabled** box.

The Sage ENDEC Setup tab now displays in the Device View of DashBoard. This tab will be used to configure the text overlay.



11. Confirm that the Dasdec-2 reports "Connected". If it does not, verify the Comtrol DeviceMaster setup.

To configure serial communications for EAS text crawl

- **1.** From the **Tree View**, expand the node for the MC1-MK 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 Port Type to RS-232.
 - b. Set the Protocol to Sage EAS Char Gen.
 - **c.** Set the remaining fields to match the serial settings on the Dasdec-2.
- 6. Select the **Port Enabled** box.

The **Sage EAS Setup** tab now displays in the Device View of DashBoard.

Enabling EAS Audio Voice Over

This section outlines how to configure the **GPI** port on the MC1-MK rear module for EAS audio voice over support.

To enable EAS audio voice over

- 1. Select the **GPI/Tally** tab.
- 2. Locate the row for the MC1-MK **GPI** port you connected to the **GPO** (**RELAY**) port on the Dasdec-2.
- 3. Select GPI EAS Audio Over from the Function column.
- **4.** Select **Level** for the GPI from the **Trigger/Tally Type** column.
- **5.** Select **Low/Falling** for the GPI from the **Polarity** column.
- **6.** Select the **Audio** tab.
- 7. Select the **EAS** sub-tab.
- 8. Set the Embedded Audio Source to Key Alpha.
- 9. Assign the EAS audio channels to Group 1 (Ch 1 4 Sources).
- **10.** Set Groups 2, 3, and 4 to **Mute**.
- **★** You can configure up to 16 channels if you need EAS tones on more than 4 channels.
- **11.** Select the **Sage EAS Setup** tab.
- **12**. Set the **Gain** and **Duck Level** (dB) for the EAS audio as required.

Configuring the MUX-8258

Refer to the *MUX-8258 User Manual* for specific details on configuring your card.

To set up communications

- 1. From the **Tree View**, double-click the node for the MUX-8258 you want to configure.
- 2. Select the **Setup** tab and configure the menu items as per your facility requirements.
- 3. Select the **Embedded Outputs** tab.



- **4.** Perform one of the following:
 - MUX-8258-A and MUX-8258-B enable the AES channel that the Dasdec-2 outputs.
 - MUX-8258-4C and MUX-8258-8C enable up to two channels as the Dasdec-2 outputs two channels of analog audio.
- 5. Set all other channels to Mute.
- **6.** If you are using an MUX-8258-A or MUX-8258-B:
 - a. Select the AES Inputs tab.
 - **b.** Configure the **Delay** and **Gain** as required for the audio Inputs 1 and 2.
- 7. If you are using an MUX-8258-4C or MUX-8258-8C:
 - **a.** Select the **Analog Inputs** tab.
 - **b.** Configure the **Delay** and **Gain** as required for the audio Inputs 1 and 2.

Customizing the EAS Text Overlay

The MC1-MK provides an overlay that displays an EAS horizontal text crawl in real time. The overlay is automatically loaded into Logo 4 and associated with Keyer 4 of the MC1-MK. When EAS is enabled, do not use Logo 4 and Keyer 4 for any other purpose.

To customize the EAS text overlay

- 1. Select the **Configuration** node to display the interface in the right-half of DashBoard.
- 2. Select the SAGE EAS Setup tab.
- **★** If the EAS Setup tab is unavailable, verify that you have correctly installed your EAS device and it is communicating with the MC1-MK.
- **3.** From the **Preview** area, select the type of event message you want to customize. The following will occur once you select a category button:
- **★** For normal EAS operation, set the **Preview** to **OFF**.
 - The **EAS Setup** tab settings display the stored values for the selected category.
 - A test EAS message automatically displays on the Preset bus (the **Key 4** button is now lit on the Preset bus). This enables you to verify your changes to the EAS text overlay.
- **4.** Use the **% Top Row** 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-MK may use a smaller font size and/or may disable transparency. The exact length depends on the 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 set the speed of the EAS text crawl across the screen. The default is 2.
- **9.** Use the **Repeat Count** to set the number of times to display the entire text crawl before taking it off air. The default is 2.
- **10.** Repeat for each message category you want to configure.



