

# ELECTRONIC REVISION CONTROLLED

**"Unrivaled Customer Satisfaction"**

**ROSEN**  
AVIATION

## RosenView Briefing Controller



## Technical Manual

**Model 0300-412**

**Technical Manual, RosenView® Briefing Controller****© 2007–2014 by Rosen Aviation, LLC**

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## Contents

<b>1. INTRODUCTION.....</b>	<b>4</b>
1.1. Unpacking.....	4
1.2. Additional Product Information.....	4
<b>2. INSTALLATION DESCRIPTION.....</b>	<b>4</b>
2.1. Interface Connectors .....	5
2.2. RS-485 Data Bus Method Wiring Diagram .....	5
2.3. RS-232 Data Bus Method Wiring Diagram .....	6
2.4. Confirming Performance .....	7
2.4.1. Controller Setup Menu.....	8
<b>3. TECHNICAL REFERENCES AND SUPPORT .....</b>	<b>9</b>
3.1. Troubleshooting .....	9
3.2. Customer Support.....	9
3.3. DO-160E Qualifications .....	10
3.4. Specifications.....	10
<b>4. DEFINITIONS.....</b>	<b>10</b>
<b>5. REVISION HISTORY .....</b>	<b>11</b>

## 1. INTRODUCTION

This manual describes how to install the RosenView® Briefing Controller with your RosenView® LX or RosenView® MX (RosenView LX/MX) system onto your aircraft. It contains everything you need to know to wire the system and confirm that it is functioning correctly.

**Note:** Only trained and qualified personnel should perform Installation and service.

### 1.1. Unpacking

Parts shipped with the RosenView Briefing Controller

- Connector Kit (P/N **0300-022**)
- RosenView Briefing Controller Assembly

### 1.2. Additional Product Information

Product documentation and downloads for the [RosenView Briefing Controller](#) are available on the [Rosen Aviation](#) website.

- [Outline and Installation Drawing](#) (P/N **0300-412-CD**)
- [RosenView Briefing Controller User's Guide](#) (P/N **100825**)

Related drawings for the cabin information systems:

- [RosenView LX Outline and Installation Drawing](#) (P/N **0603-001-CD**)
- [RosenView MX Outline and Installation Drawing](#) (P/N **0603-003-CD**)

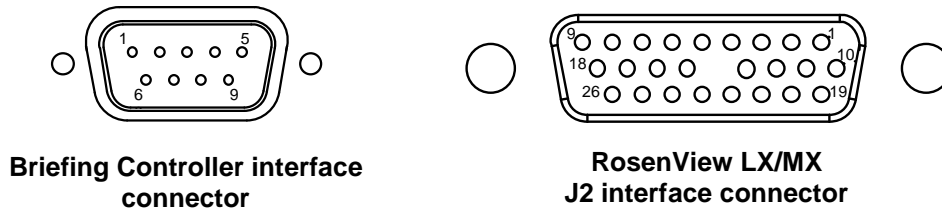
## 2. INSTALLATION DESCRIPTION

The RosenView Briefing Controller uses either RS-485 or RS-232 serial data buses to communicate with the RosenView LX/MX main unit. It will not work with both buses at the same time.

The data bus method you use depends upon the configuration of your RosenView LX/MX installation. If the RosenView LX/MX is being controlled by a cabin management system using RS-485, then you will need to connect the briefing controller using the RS-232 data bus method. If the RosenView LX/MX is not being connected to a cabin management system via RS-485, then connect the briefing controller using the RS-485 data bus method. The operation of the RosenView Briefing Controller is independent of the installation method used.

### 2.1. Interface Connectors

The controller connector connects to the RosenView LX/MX connector.



### 2.2. RS-485 Data Bus Method Wiring Diagram

To connect the Briefing Controller using an RS-485 bus, wire the pins as shown below. This figure is a partial view of the connector and shows only the pins used. For complete pinout information, see the Outline and Installation drawing (P/N **0300-412-CD**).

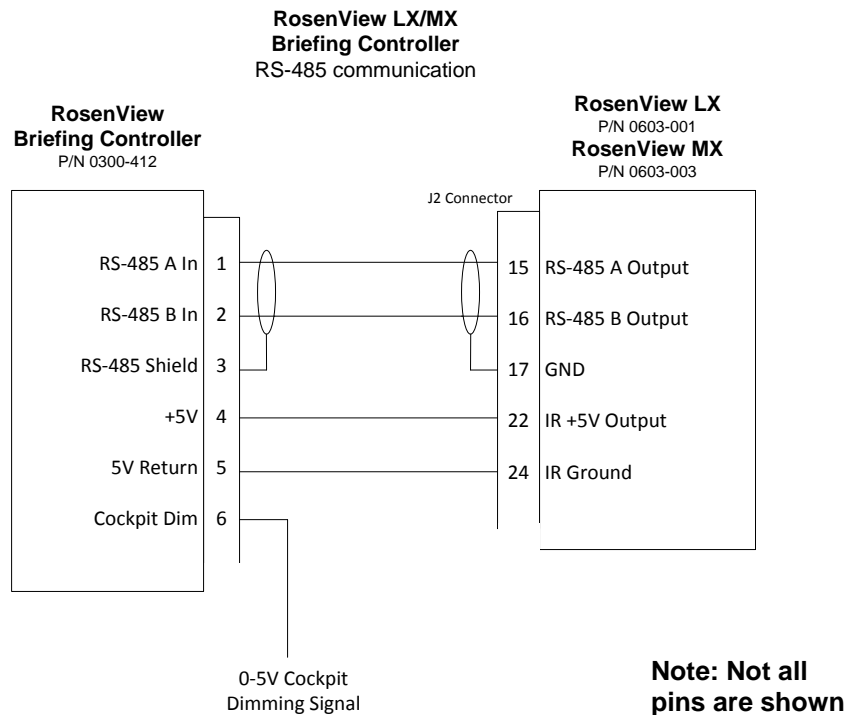


Figure 1 RS-485 bus pinout

### 2.3. RS-232 Data Bus Method Wiring Diagram

To connect the Briefing Controller using an RS-232 bus, wire the pins as shown below. This figure is a partial view of the connector and shows only the pins used. For complete pinout information, see the Outline and Installation drawing (P/N **0300-412-CD**).

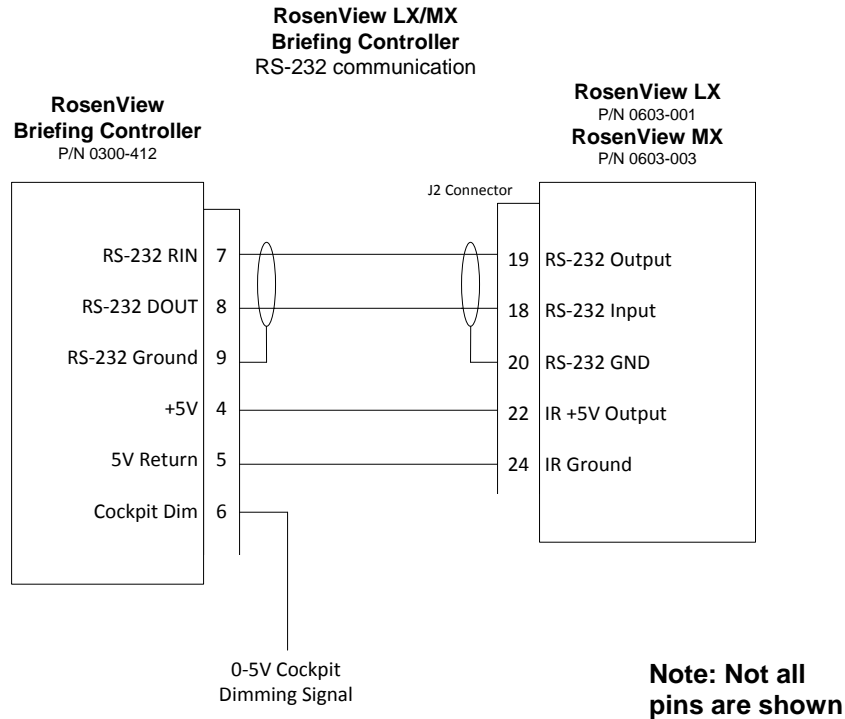
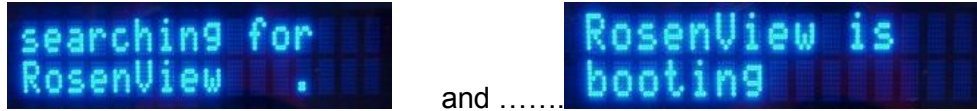


Figure 2 RS-232 bus pinout

## 2.4. Confirming Performance

1. Apply 28V DC power to the RosenView LX/MX to turn on the controller and confirm that it is operating properly.
2. Verify the controller display screen will light up and display the following messages during startup.



Allow a minute or two for the Briefing Controller to perform a self-test and the RosenView LX/MX to complete startup. After the RosenView LX/MX completes startup, the controller is ready to play a briefing.

**Note:** If the screen does not light up or the display **searching for RosenView** does not change, see the [Troubleshooting](#) section on page [9](#).



The briefing names that have been loaded into the RosenView LX/MX will display on the controller when the controller knob is turned.

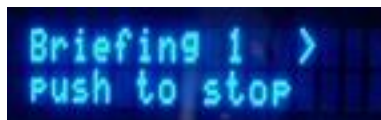
**Note:** The Briefing Controller does not come with briefings already installed. For information about how to load cabin briefings on the RosenView LX, see the RosenView LX Software Configuration Manual (P/N **100379**) that is bundled with the [RosenView LX](#) Configuration Tool. For the RosenView MX, use the web-based Configuration Tool:

<http://www.rosenaviation.com/products/RosenViewMXConfigTool.php>

3. Rotate the knob in either direction to select a briefing and push the knob to play the briefing.



Play is indicated by a repeating arrow sequence, as shown below.



4. When the briefing is finished, the display returns to the briefing selection screen.

You will see only briefings loaded into the RosenView LX/MX unless you have no briefings loaded and you will see **Briefing 1**.

### 2.4.1. Controller Setup Menu

Test the setup menu options to confirm that the controller is operational and set the desired brightness level.

Table 1 Briefing Controller setup options

Option	How it Works
<b>Brightness Adjust</b>	Sets the brightness level of the display — Level 1 (low) through Level 4 (high), or allows the cockpit dimming controls to adjust it automatically.
<b>Burn in mode</b>	Cycles through test patterns and alphanumeric characters to allow the detection of defective pixels.
<b>Comm status</b>	Displays which serial communications connection is active – RS-232 or RS-485.
<b>Reset RosenView</b>	Resets the RosenView LX/MX.

- To access the menu, turn the knob counterclockwise one setting past the last installed briefing to the **Setup menu**, as shown below, and push the knob.



- The screen displays **Brightness Adjust**. Push the knob to access the brightness adjustment options.
- The screen displays **Auto Adjust**. Push the knob and verify that the controller's screen brightness synchronizes with the aircraft's instrument brightness control.
- Push the knob again to leave the controller in auto-adjust mode and exit the setup menu, or use one of the four brightness levels to adjust the controller's display independent of the other controls.
  - To customize the screen brightness to a different level, turn the knob until the screen displays **Level 1 (low)** and push the knob. The screen will be at the darkest level, but still readable.
  - To select another brightness setting, turn the knob to a different level and push the knob. **Level 4 (high)** is at the brightest level.
  - To accept the brightness changes, push the knob. The screen displays **Auto Adjust**. Push the knob again to exit the setup menu, or turn the knob to test the other menu options.



Cycle power after a brightness adjustment to apply changes.



### 3. TECHNICAL REFERENCES AND SUPPORT



Always check the [RosenView Briefing Controller](#) product web page to ensure that you are working with the most current revision of technical documentation.

Table 2 Technical references

Product	Part Number	Location
Optional <a href="#">External Briefing Controllers</a>	0300-410, 0300-411, and 0300-412	<a href="http://www.rosenaviation.com">www.rosenaviation.com</a>
<a href="#">RosenView LX Outline and Installation Drawing</a>	0603-001-CD	<a href="http://www.rosenaviation.com">www.rosenaviation.com</a>
<a href="#">RosenView MX Outline and Installation Drawing</a>	0603-003-CD	<a href="http://www.rosenaviation.com">www.rosenaviation.com</a>
<i>RS-485 Network Message Definitions</i>	9002933	Contact Rosen Customer Support

#### 3.1. Troubleshooting

If the RosenView Briefing Controller does not function properly, refer to the following troubleshooting table for symptoms and possible solutions before contacting Rosen Customer Support.

**Note:** Use a multimeter to verify voltages. Check actual results against the requirements described in this manual.

Table 3 Troubleshooting tips and solutions

Problem	Possible Solutions
Screen is black	Verify that the RosenView LX/MX is receiving power and that the pinouts are correct.
The <b>searching for RosenView</b> display does not change	Verify that the pinouts are correct.
Brightness does not adjust	The unit ships in Auto Adjust mode. To turn off Auto Adjust, set a different brightness level (levels 1-4). If the brightness does not adjust automatically or manually, verify that the pinouts are correct.
A briefing number (1-16) instead of the briefing text appears on the screen	Confirm that briefings are loaded onto the RosenView LX/MX. See the technical manuals for instructions: <a href="#">RosenView LX</a> (P/N <b>100378</b> ) or <a href="#">RosenView MX</a> (P/N <b>106284</b> ).

#### 3.2. Customer Support

If you need assistance in configuring a RosenView Briefing Controller to work with the RosenView LX/MX, please contact Rosen Aviation at 541.342.3802 or 888.668.4955.

### 3.3. DO-160E Qualifications

The following table lists the criteria to which we test the RosenView Briefing Controller.

Table 4 DO-160E test criteria

Description	Section	Category
Temperature and Altitude	4.0	A1
Temperature Variation	5.0	C
Humidity	6.0	A
Operational Shocks & Crash Safety	7.0	B
Vibration	8.0	S, Curve B
Magnetic Effect	15.0	Z
Power Input	16.0	A/B
Voltage Spike	17.0	B
Audio Frequency Conducted Susceptibility – Power Inputs	18.0	Z
Induced Signal Susceptibility	19.0	AC
Radio Frequency Susceptibility (Radiated and Conducted)	20.0	TT
Emission of Radio Frequency Energy	21.0	M
Electrostatic Discharge (ESD)	25.0	A

### 3.4. Specifications

Product specifications are available on the [RosenView Briefing Controller Outline and Installation Drawing](#) (P/N **0300-412-CD**) and on the [Rosen Aviation](#) website.

## 4. DEFINITIONS

**P/N** Part Number

**RS-232** Standard for serial binary data interchange

**RS-485** Standard for allowing multiple devices to share a common set of serial data communication lines.

## 5. REVISION HISTORY



Revision E is limited to draft or prototype documents. Revisions I, O, Q, S, X and Z are not to be used.

Revision	Date	Revision Description	EC
A	06/01/07	New release	07199
B	07/09/07	Update DO-160 test criteria	07272
C	06/08/09	Section 2.4.1 add note to cycle power	09205
D	01/06/14	Add references to the RosenView MX cabin information system and related documentation; apply new template	14-0003