Backlight Replacement

Catalog Numbers 2711P-RL7C, 2711P-RL7C2, 2711P-RL10C, 2711P-RL10C2, 2711P-RL12C, 2711P-RL12C2, 2711P-RL15C

About This Publication

This document shows how to remove and replace the backlight for the 700, 1000, 1250, and 1500 versions of the PanelView Plus/PanelView Plus CE terminals. The 1250 High-bright terminals do not have a replaceable backlight.

Important User Information

Solid state equipment has operational characteristics differing from those of electromechanical equipment. Safety Guidelines for the Application, Installation and Maintenance of Solid State Controls (publication SGI-1.1 available from your local Rockwell Automation sales office or online at http://literature.rockwellautomation.com) describes some important differences between solid state equipment and hard-wired electromechanical devices. Because of this difference, and also because of the wide variety of uses for solid state equipment, all persons responsible for applying this equipment must satisfy themselves that each intended application of this equipment is acceptable.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

No patent liability is assumed by Rockwell Automation, Inc. with respect to use of information, circuits, equipment, or software described in this manual.

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Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

WARNING ⚠	Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.
IMPORTANT	Identifies information that is critical for successful application and understanding of the product.
ATTENTION ⚠	Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you to identify a hazard, avoid a hazard, and recognize the consequences.
SHOCK HAZARD ⚡	Labels may be on or inside the equipment, for example, a drive or motor, to alert people that dangerous voltage may be present.
BURN HAZARD ♨	Labels may be on or inside the equipment, for example, a drive or motor, to alert people that surfaces may reach dangerous temperatures.

Precautions

Disconnect power from the terminal before installing or replacing any components. Take care not to touch any of the exposed electronic components during installation.

ATTENTION	Disconnect all power from the terminal before installing or replacing any components. Failure to disconnect power may result in electrical shock or damage to the terminal.

ATTENTION	Work in a static free environment and wear a properly grounded electrostatic discharge (ESD) wristband.
	Be careful when touching any of the exposed electronic components to prevent damage from ESD.

Required Tools

These are the tools required to replace backlights for PanelView Plus and PanelView Plus CE terminals:

- #00, #1, and #2 Phillips screwdriver
- Electrostatic discharge (ESD) wristband

Remove Display Module Bezel

Follow these steps to remove the bezel.

1. Disconnect power from the terminal.

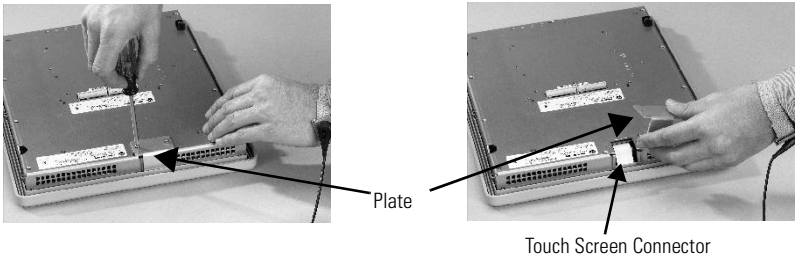2. Set the terminal, display side down, on a flat stable surface.

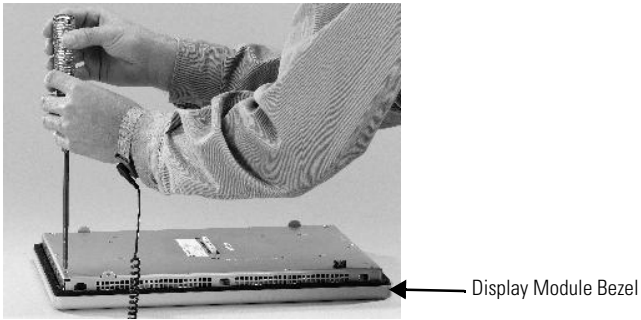| **ATTENTION**	Wear a properly grounded ESD wristband before touching any of the electronic components in the display module.
	Be careful when touching any of the exposed electronic components to prevent damage from ESD.

3. Remove the two screws that secure the small metal plate to the back of the display module only on touch screen terminals.
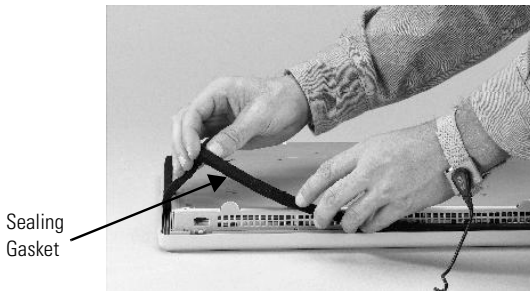
4. Disconnect the touch screen connector.

Plate

Touch Screen Connector

5. Remove the screws from the back of the display module.

The number of screws varies for each terminal type.

Display Module Bezel

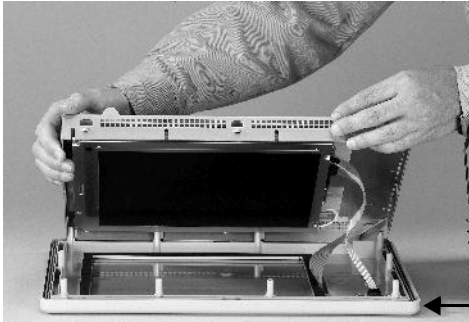**6.** Remove the sealing gasket.

Sealing Gasket

7. Lift the back of the display module away from the bezel.

IMPORTANT	The 700 series C display is not secured by screws and is only retained by a bracket. Use care not to drop the display once the bezel is removed.

Work on a clean, flat, stable surface to protect the display from debris, scratches and damage.

Display Module Bezel

8. Detach all connectors, maximum of three.

The number of connectors varies by model.
- IrDa connector, if present
- Function key connector
- Touch screen connector

9. Set bezel aside.

Replace Backlight

This section shows how to replace the backlight for the 700, 1000, 1250, and 1500 terminals.
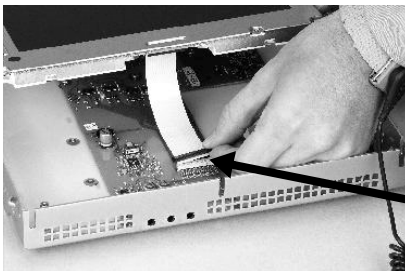
Backlights for PanelView Plus 700 to 1500 Displays

Use Cat. No.	For Display	Series	# of Backlights
2711P-RL7C	700	A and B	1
2711P-RL7C2		C	1
2711P-RL10C	1000	A	1
2711P-RL10C2		B and C	1
2711P-RL12C	1250	A and B	2
2711P-RL12C2		C	1
2711P-RL15C	1500	B	2

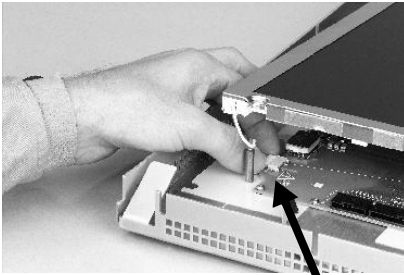Follow these steps to replace the backlight.

IMPORTANT	The 700 series C display is not secured by screws and is only retained by a bracket. Use care not to drop the display once the bezel is removed.

1. Remove the four screws that secure the display bracket for the 700 series C display.

2. Remove the four screws that secure the LCD display for all other displays.

3. Lift the LCD display and detach the display connector from the circuit board.

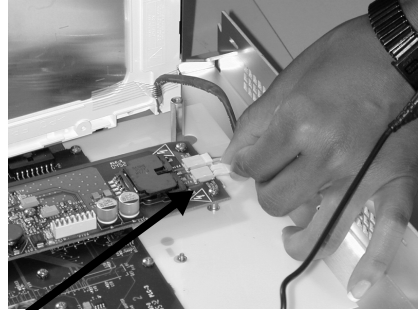   The location of the connector varies by model.

Display Connector

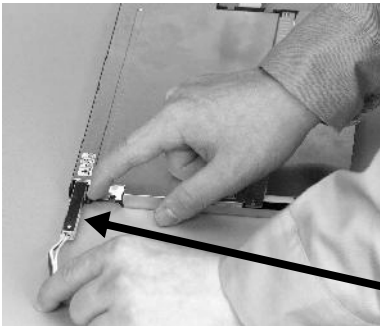**4.** Detach the backlight connectors from the circuit board.
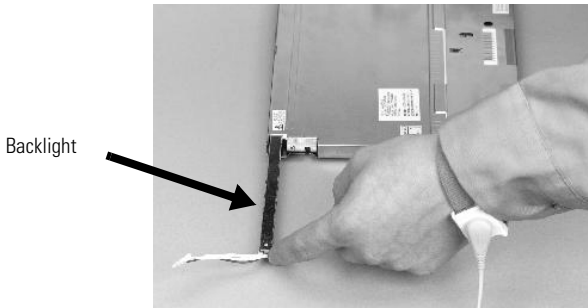

1250

Backlight
Connector

1500

For 700 and 1000 Terminals

Work on a clean, flat, stable surface to protect the display from debris, scratches, and damage.

5. Press the retaining tab that secures the backlight and then pull out the backlight.

Backlight
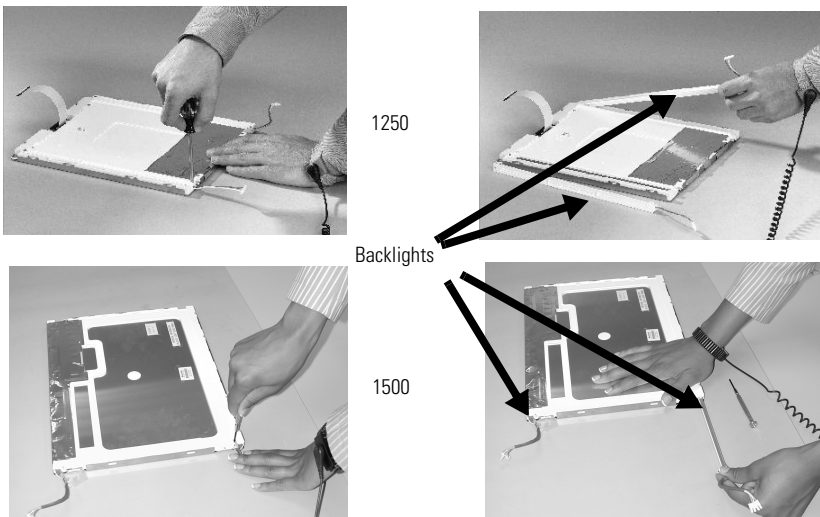Retaining Tab

6. Insert the new backlight.

Backlight

For 1250 and 1500 Terminals

Work on a clean, flat, stable surface to protect the display from debris, scratches, and damage.

7. Remove the screws that secure the backlights and then remove the backlights.

The two backlights for 1250 series A and B displays are each secured with two screws. The single backlight for 1250 series C displays is secured with one screw.

Remove the tape, then remove the backlights for the 1500 series B displays.

1250

Backlights

1500

8. Insert the new backlights and then secure each with the same screws from step 7 and torque to 0.117 Nm (1.04 lb-in).

9. Attach the LCD display connector to the circuit board (shown in step 3 on page 6).

10. Attach the backlight connector to the circuit board (shown in step 4 on page 7).

11. Secure the LCD display.

   a. Attach the display bracket then secure the display in the bracket for the 700 series C display.

   b. Attach the four screws for all other displays.

      Use the following chart to tighten the screws.

Screw Size	Torque
#4	0.68 Nm (6 lb-in)

12. Replace display module bezel.

   See Replace Display Module Bezel.

Backlight Disposal

IMPORTANT	The backlight in this product contains mercury. Dispose of the backlight per applicable laws.

Replace Display Module Bezel

Follow these steps to replace the bezel.

1. Make sure bezel is free of lint and marks before reattaching.

2. Attach the following connectors.

The number of connectors varies by model.
- IrDa connector (if present)
- Function key connector
- Touch screen connector

3. Place the back of the display module over the bezel.

Be careful not to pinch any of the cables. Allow the touch screen connector to extend out of the access opening.

4. Attach touch screen connector.

5. Replace the sealing gasket (shown in step 6 on page 4).

6. Attach screws that secure display module to bezel and tighten to a torque of 1.35…1.58 Nm (12…14 lb-in).

7. Attach the small metal plate to the back of the touch screen display module by using two screws (shown in step 3 on page 3).

8. Torque to 0.68 Nm (6 lb-in).

Notes:

Rockwell Automation Support

Rockwell Automation provides technical information on the Web to assist you in using its products. At http://support.rockwellautomation.com, you can find technical manuals, a knowledge base of FAQs, technical and application notes, sample code and links to software service packs, and a MySupport feature that you can customize to make the best use of these tools.

For an additional level of technical phone support for installation, configuration, and troubleshooting, we offer TechConnect Support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit http://support.rockwellautomation.com.

Installation Assistance

If you experience a problem with a hardware module within the first 24 hours of installation, please review the information that's contained in this manual. You can also contact a special Customer Support number for initial help in getting your module up and running.

United States	1.440.646.3223 Monday – Friday, 8am – 5pm EST
Outside United States	Please contact your local Rockwell Automation representative for any technical support issues.

New Product Satisfaction Return

Rockwell tests all of its products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning, it may need to be returned.

United States	Contact your distributor. You must provide a Customer Support case number (see phone number above to obtain one) to your distributor in order to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for return procedure.

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