Installation Instructions

Logic Module, Internal CompactFlash, and RAM

Catalog Numbers 2711P-R*xxxx*

Topic	Page
About the Components	1
Important User Information	2
Safety Precautions	3
About the Logic Module	3
Electrostatic discharge (ESD) wristband	5
Install or Replace RAM	7
Install or Replace the Internal CompactFlash	8
Marine Applications	11
Install a Logic Module	12
Replace a Logic Module	13
Additional Resources	14

About the Components

This document provides information on how to install these components:

- Logic module on a PanelView Plus or PanelView Plus CE device
- Memory (RAM and internal CompactFlash) in the logic module

For complete information on installing, wiring, and troubleshooting the terminals, refer to the publications listed under Additional Resources.

This document refers to FactoryTalk View ME software that was previously named RSView ME software.

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.

Reproduction of the contents of this manual, in whole or in part, without written permission of Rockwell Automation, Inc., is prohibited.

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 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.

Safety Precautions

Before installing or replacing components and modules, disconnect power from the terminal. During the installation, be careful not to touch any of the exposed electronic components.

SHOCK HAZARD



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



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

About the Logic Module

The logic module has these features:

- Status indicators
- Input power, DC or AC
- Ethernet port, serial port, two USB ports, CompactFlash card slot
- RAM and internal CompactFlash with firmware or operating system



Logic modules are available as separate catalog numbers for field installation and are shipped with or without memory installed. If RAM and internal CompactFlash are ordered separately, you must install these components before attaching the logic module to the display module.

PanelView Plus and PanelView Plus CE Logic Modules

Cat. No.	Description
PanelView Plus or PanelView Plus CE 700 to 1500 Logic Modules [1]	
2711P-RP	Logic module without flash/RAM memory, DC input
2711P-RPA	Logic module without flash/RAM memory, AC input[2]
2711P-RPD	Logic module without flash/RAM memory, isolated DC input[2]
PanelView Plus 700 to 1500 Logic Modules	
2711P-RP1	Logic module with 64 MB flash/64 MB RAM, DC input
2711P-RP1A	Logic module with 64 MB flash/64 MB RAM, AC input[2]
2711P-RP1D	Logic module with 64 MB flash/64 MB RAM, isolated DC input[2]
2711P-RP2	Logic module with 128 MB flash/128 MB RAM, DC input
2711P-RP2A	Logic module with 128 MB flash/128 MB RAM, AC input[2]
2711P-RP2D	Logic module with 128 MB flash/ 128 MB RAM, isolated DC input[2]
2711P-RP2DK	Conformal-coated logic module with 128 MB flash/128 MB RAM, isolated DC input
2711P-RP2K	Conformal-coated logic module with 128 MB flash/128 MB RAM, DC input
2711P-RP3	Logic module with 256 MB flash/256 MB RAM, DC input
2711P-RP3A	Logic module with 256 MB flash/256 MB RAM, AC input[2]
2711P-RP3D	Logic module, 256 MB flash/256 RAM, isolated DC input[2]
PanelView Plus CE 700 to 1500 Logic Modules	
2711P-RP6	PanelView Plus CE logic module with 128 MB flash/128 MB RAM, DC input
2711P-RP6A	PanelView Plus CE logic module with 128 MB flash/128 MB RAM, AC input[2]
2711P-RP6D	PanelView Plus CE logic module with 128 MB flash/128 MB RAM, isolated DC input[2]
2711P-RP6K	PanelView Plus CE conformal-coated logic module with 128 MB Flash/128 MB RAM, DC input
2711P-RP6DK	PanelView Plus CE conformal-coated logic module with 128 MB flash/128 MB RAM, isolated DC input
2711P-RP7	PanelView Plus CE logic module with 256 MB flash/256 MB RAM, DC input
2711P-RP7A	PanelView Plus CE logic module with 256 MB flash/256 MB RAM, AC input[2]
2711P-RP7D	PanelView Plus CE logic module with 256 MB flash/256 MB RAM, isolated DC input[2]

(1) These logic modules are compatible with any of the 2711P-RW*x* internal CompactFlash cards.

(2) These logic modules are approved for marine applications.

Required Tools

The following tools are required for installation:

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

Component Compatibility for PanelView Plus CE Terminals

It is important to match the series of the internal CompactFlash card with the correct series of the logic module and software version. The series of the CompactFlash determines the version of FactoryTalk View ME software and version of the operating system. The logic module is available with or without memory installed.

Logic Module Compatibility 6189-RP*x*, 6189-RPRHx, 6189-RPEH*x*, 2711P-RP*x*, 2711P-RP*x*, 2711P-RP6*x*, 2711P-RP7x	**Internal CompactFlash 6189-RW2, 6189-RW3, 6189-RW4, 2711P-RW6, 2711P-RW7, 2711P-RW8**	**FactoryTalk View ME and OS Software Version**
Series A: 6189-RP*x*H/A[1]	**Series B**: 6189-RW*x*/B	FactoryTalk View ME 3.0 Windows CE 3.0
Series B: 6189-RP*x*H/B	**Series C**: 6189-RW*x*/C	FactoryTalk View ME 3.10 Windows CE 4.1
Series B: 6189-RP*x*H/B **Series C**: 6189-RP*x*H/C **Series D**: 6189-RP*x*H/D **Series E**: 6189-RP*x*H*x*/E **Series F**: 2711P-RP*xx*/F[2] **Series G**: 2711P-RP*xxx*/G[2]	**Series D**: 6189-RW*x*/D **Series E**: 6189-RW*x*/E	FactoryTalk View ME 3.20 Windows CE 4.1
	Series F: 6189-RW*x*/F **Series G**: 6189-RW*x*/G **Series H:** 2711P-RW*x*/H	FactoryTalk View ME 4.0 Windows CE 4.1
	Series J: 2711P-RW*x*/J	FactoryTalk View ME 5.0 or 5.1 Windows CE 4.1

(1) When upgrading from FactoryTalk View ME software, version 3.0 to 3.10 or later, the Firmware Upgrade Kit is recommended.

(2) Series F and later logic modules work with PanelView Plus and PanelView Plus CE CompactFlash cards.

Component Compatibility for PanelView Plus Terminals

It is important that you match the series of the internal CompactFlash card with the correct series of the logic module and software version. The series of the CompactFlash determines the version of FactoryTalk View ME software. The logic module is available with or without memory installed.

Logic Module Compatibility 2711P-RP*x*, 2711P-RP1*x*, 2711P-RP2*x*, 2711P-RP3*x*	**Internal CompactFlash 2711P-RW1, 2711P-RW2, 2711P-RW3**	**FactoryTalk View ME Software Version**
Series A: 2711P-RP*x*/A[1]	**Series B**: 2711P-RW*x*/B	FactoryTalk View ME 3.0
Series B: 2711P-RP*x*/B	**Series C**: 2711P-RW*x*/C	FactoryTalk View ME 3.10
Series B: 2711P-RP*x*/B **Series C**: 2711P-RP*x*/C **Series D**: 2711P-RP*x*/D **Series E**: 2711P-RP*xx*/E **Series F**: 2711P-RP*xx*/F[2] **Series G**: 2711P-RP*xxx*/G[2]	**Series D**: 2711P-RW*x*/D **Series E**: 2711P-RW*x*/E	FactoryTalk View ME 3.20
	Series F: 2711P-RW*x*/F **Series G**: 2711P-RW*x*/G **Series H**: 2711P-RW*x*/H	FactoryTalk View ME 4.0
	Series J: 2711P-RW*x*/J	FactoryTalk View ME 5.0 or 5.1

(1) Series A logic modules are compatible with series B CompactFlash cards. When upgrading from FactoryTalk View ME software, version 3.0 to 3.10 or later, the Firmware Upgrade Kit is required.

(2) Series F and later logic modules work with PanelView Plus and PanelView Plus CE CompactFlash cards.

Compatibility After Upgrade

FactoryTalk View ME terminals are compatible with .MER applications that are the same or a previous revision. For example, FactoryTalk View ME 3.20 terminals can run .MER applications for FactoryTalk View ME software, versions 3.0, 3.10, and 3.20.

For PanelView Plus CE devices, the appropriate changes are made to the OS, from Windows CE software, version 3.0 to 4.1, when upgrading from FactoryTalk View ME software, version 3.0 to 3.10 or later.

Install or Replace RAM

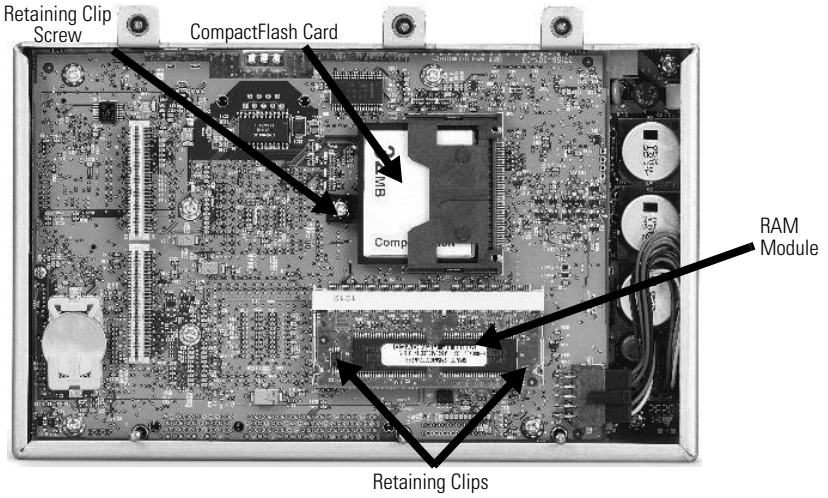
The logic module is available with or without RAM installed. If ordered separately, you must install the RAM before attaching the logic module to the display module.

RAM Memory Modules

Cat. No.	Description
2711P-RR64	64 MB SODIMM RAM for PanelView Plus and PanelView Plus CE terminals
2711P-RR128	128 MB SODIMM RAM for PanelView Plus and PanelView Plus CE terminals
2711P-RR128K	Conformal-coated 128 MB SODIMM RAM for PanelView Plus and PanelView Plus CE terminals
2711P-RR256	256 MB SODIMM RAM for PanelView Plus and PanelView Plus CE terminals

Follow these steps to install or replace RAM.

1. Turn the logic module over to expose the circuit board.
2. Locate the RAM module on the circuit board.
3. Pull the metal retaining clips away from the module and slide out the RAM module.
4. Insert the new RAM module at a 45° angle and snap down.



Install or Replace the Internal CompactFlash

The logic module is available with or without CompactFlash installed. If ordered separately, you must install the CompactFlash before attaching the logic module to the display module.

Internal CompactFlash

Cat. No.[1]	Description
2711P-RW1	64 MB internal CompactFlash with FactoryTalk View ME software for PanelView Plus logic modules
2711P-RW2	128 MB internal CompactFlash with FactoryTalk View ME software for PanelView Plus logic modules
2711P-RW3	256 MB internal CompactFlash with FactoryTalk View ME software for PanelView Plus logic modules
2711P-RW6	128 MB internal CompactFlash with FactoryTalk View ME software for PanelView Plus CE logic modules
2711P-RW7	256 MB internal CompactFlash with FactoryTalk View ME software for PanelView Plus CE logic modules
2711P-RW8	512 MB internal CompactFlash with FactoryTalk View ME software for PanelView Plus CE logic modules

(1) The 2711P-RP, 2711P-RPD, and 2711P-RPA logic modules are compatible with any of the internal CompactFlash options.

Follow these steps to replace the internal CompactFlash.

1. Turn the logic module over to expose the circuit board.
2. Unscrew and remove the retaining clip that secures the internal CompactFlash card.
3. Pull out the internal CompactFlash card.
4. Insert the new internal CompactFlash card.
5. Reattach the retaining clip.

Battery Precautions

WARNING



When you connect or disconnect the battery, an electrical arc can occur. This could cause an explosion in hazardous location installations. Be sure that power is removed or the area is nonhazardous before proceeding.

For safety information on the handling of lithium batteries, including handling and disposal of leaking batteries, see Guidelines for Handling Lithium Batteries, publication AG 5-4. Replace the battery only with the indicated catalog number.

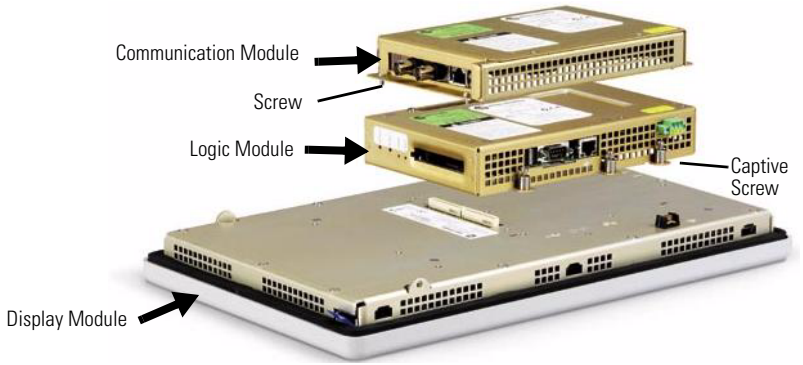
Do not dispose of battery in a fire or incinerator. Dispose of used batteries in accordance with local regulations.

Store batteries in a cool, dry environment. We recommend 25 °C (77 °F) with 40…60% relative humidity. You may store batteries for up to 30 days between -45…85 °C (-49…185 °F), such as during transportation. To avoid possible leakage, do not store batteries above 60 °C (140 °F) for more than 30 days.

Replace the Battery in PanelView Plus Terminals

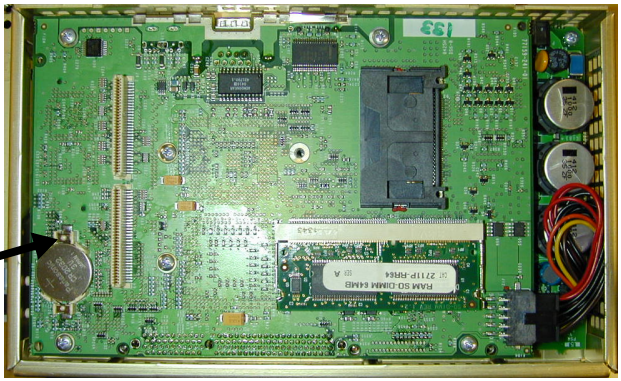
Follow these steps to replace the battery in the logic module of PanelView Plus or PanelView Plus CE terminals.

1. Disconnect power from the terminal.
2. Place the terminal, display side down, on a flat stable surface.
3. Detach the communication module, if attached, from the logic module by removing the four screws.
4. Loosen the six captive screws that attach the logic module to the display module.



5. Carefully lift the logic module away from the terminal and turn over to expose the circuit board.

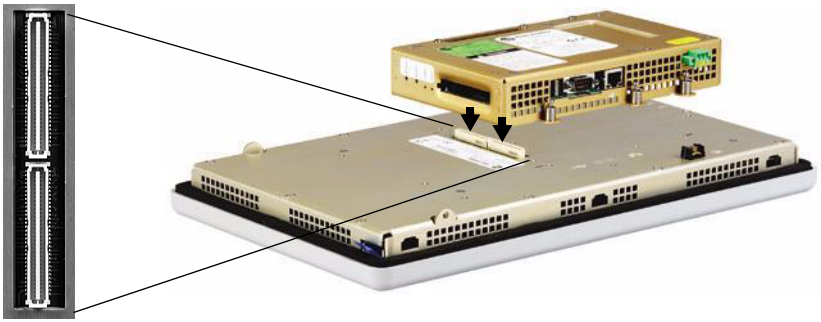
6. Locate the battery on the circuit board.



7. Remove the battery by lifting up the side of the battery.

8. Insert the new battery.

9. Reattach the logic module by aligning the two connectors on the bottom of the module with the connectors on the terminal.



10. Push down on the logic module until it is firmly seated.

11. Tighten the six captive screws that secure the logic module to a torque of 0.58 N•m (5…7 lb•in).

12. Reattach the communication module, if necessary, and tighten the four screws to a torque of 0.58 N•m (5…7 lb•in).

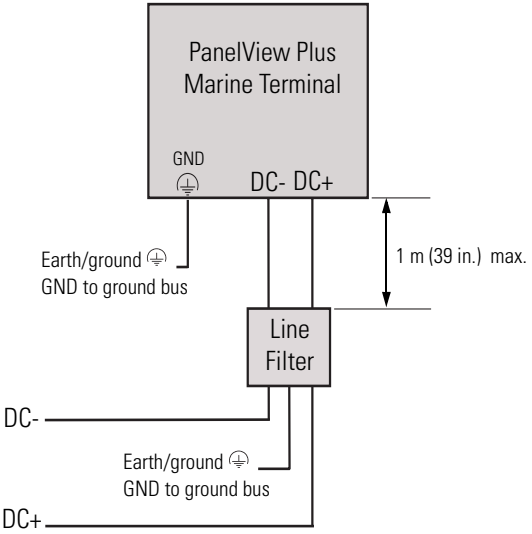
Ethernet Cable

Use Belden 7921A shielded Ethernet Category 5e cable according to TIA 568-B.1 and RJ45 connector according to IEC 60603-7 for compliance with Marine emissions limits and European Union 89/336/EEC EMC Directive.

The maximum cable length between the terminal's Ethernet port and a 10/100 Base-T port on an Ethernet hub (without repeaters or fiber) is 100 m (328 ft). For additional information, refer to the EtherNet/IP Media Planning and Installation Manual, publication ENET-IN001.

Marine Applications

Isolated DC logic modules require a line filter for use in marine applications. Use Corcom 6VW1 or equivalent filter type.



Install a Logic Module

If the display module and logic module are ordered as separate components, attach the logic module to the display module before panel installation.

1. Disconnect power from the terminal.

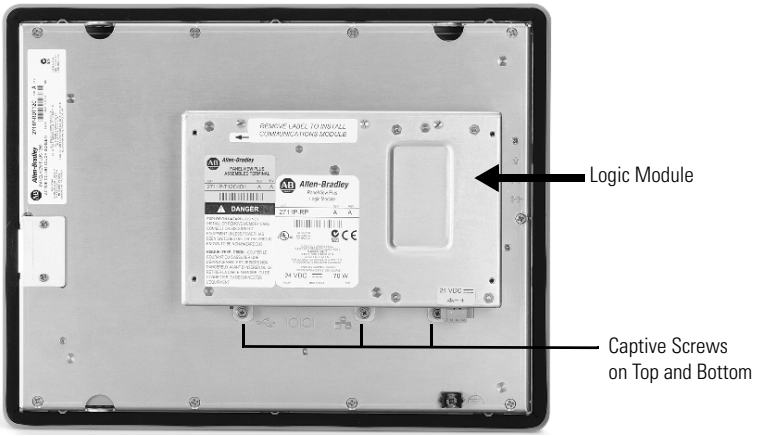
2. Set the display module of the terminal display-side down on a clean, flat, stable surface to avoid scratches.

3. Position the logic module over the back of the display module until the two connectors on the bottom of the logic module align with the connectors on the display module.



4. Push down on the logic module until firmly seated.

5. Tighten the six captive screws that secure the logic module to the display module to a torque of 0.58 N•m (5…7 lb•in).



Replace a Logic Module

Before replacing the logic module, you must remove the communication module, if attached. Remove the internal CompactFlash card and RAM from the logic module if you want to reuse the memory in the new logic module.

Follow these steps to replace the logic module.

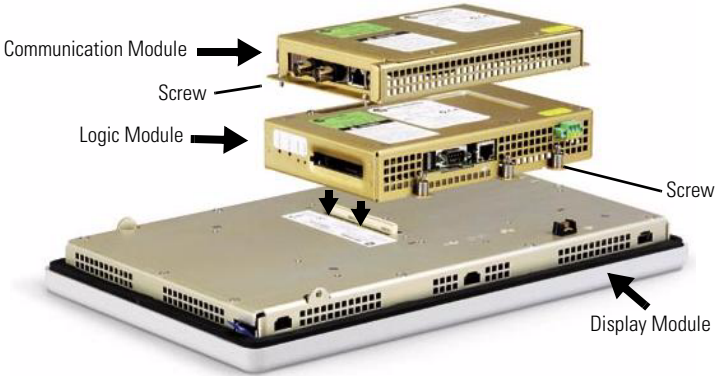
1. Disconnect power from the terminal.
2. Disconnect all power and communication cables.

WARNING



Do not connect or disconnect any communication cable with power applied to this device or any device on the network. An electrical arc could cause an explosion in hazardous location installations. Be sure that power is removed or the area is nonhazardous before proceeding.

3. Set the terminal display-side down on a clean, flat, stable surface to prevent scratches if the terminal is removed from a panel.
4. Remove the four screws that secure the communication module, if attached, to the logic module and carefully lift the communication module away from the logic module.



5. Loosen the six captive screws that secure the logic module.
6. Carefully lift the logic module away from the back of the display module.

7. If reusing the memory in the new logic module:
   - remove the RAM and CompactFlash from the logic module.
   - insert the RAM and CompactFlash in the new logic module.

   To verify component compatibility, refer to the tables on page 5 and 6.

8. Install the new or used logic module.

9. Install the communication module, if necessary.

Additional Resources

For additional information on the PanelView Plus and PanelView Plus CE terminals, refer to these publications.

Resource	Description
PanelView Plus User Manual, publication 2711P-UM001	Provides an overview of the PanelView Plus and PanelView Plus CE terminals and gives information on how to install, operate, configure, and troubleshoot these devices.
PanelView Plus Terminals and Display Modules Installation Instructions, publication 2711P-IN001	Provides specific guidelines and procedures on how to install PanelView Plus, PanelView Plus CE terminals, and display modules in a panel.
High-bright Display Modules Installation Instructions, publication 2711P-IN026	Provides specific guidelines and procedures on how to install a high-bright display module to a PanelView Plus or PanelView Plus CE terminal in outdoor environments.
Wiring and Grounding Guidelines for PanelView Plus Devices Technical Data, publication 2711P-TD001	Provides additional grounding and wiring guidelines for PanelView Plus and PanelView Plus CE terminals.

You can view or download publications at http://literature.rockwellautomation.com. To order paper copies of technical documentation, contact your local Rockwell Automation distributor or sales representative.

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 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 product up and running.

United States	1.440.646.3434 Monday – Friday, 8 a.m. – 5 p.m. EST
Outside United States	Please contact your local Rockwell Automation representative for any technical support issues.

New Product Satisfaction Return

Rockwell Automation 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 and needs to be returned, follow these procedures.

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 the return procedure.

PanelView Plus, PanelView Plus CE, RSView ME, FactoryTalk View, Allen-Bradley, Rockwell Automation, and TechConnect are trademarks of Rockwell Automation, Inc.

Trademarks not belonging to Rockwell Automation are property of their respective companies.

www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
Europe/Middle East/Africa: Rockwell Automation, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

Publication 2711P-IN004J-EN-P - September 2009 PN-54637

Supersedes Publication 2711P-IN004I-EN-P - September 2008

Copyright © 2009 Rockwell Automation, Inc. All rights . Printed in the U.S.A.