Allen-Bradley

POINT I/O and ArmorPOINT I/O EtherNet/IP Adapters

Firmware Revision: 5.017

Catalog Numbers 1734-AENT, 1738-AENT, 1734-AENTR, 1738-AENTR, Series B

About This Publication

These release notes for Firmware Revision 5.017 supplement the existing documentation supplied with your product. Read this document before using a POINT I/O™ or ArmorPOINT® I/O EtherNet/IP adapter.

ATTENTION: You must only use Series C, and above, POINT I/O modules with 1734-AENT and 1734-AENTR EtherNet/IP Adapters. Series A or Series B POINT I/O modules do not work with 1734-AENT and 1734-AENTR EtherNet/IP Adapters (does not apply to POINT Guard I/O™ modules).

ATTENTION: The Series B adapter requires an EDS file for RSLinx® and RSNetWorx™. Refer to EDS File on page 4 for more details.

The RSLogix 5000® software does not need to be updated as long as the adapter in the I/O configuration tree has electronic keying configured as “Compatible Keying”.

Before You Begin

Firmware Backward Compatibility

The 1734-AENT and 1738-AENT Add-on Profiles are compatible with RSLogix 5000 software version 17, or greater.

The 1734-AENT and 1738-AENT adapters can work with existing profiles in RSLogix 5000 software version 16 with compatible keying.

The 1734-AENTR and 1738-AENTR Add-on Profiles are compatible with RSLogix 5000 software version 17, or greater.

If you use the 1734-AENT, 1734-AENTR, 1738-AENT, or 1738-AENTR adapter with a 1756-ENBT or 1768-ENBT module, use the following required firmware revisions for these bridge modules:

- 1756-ENBT firmware revision 4.006 or greater
- 1768-ENBT firmware revision 2.003 or greater

The 1734-AENTR adapters will accept I/O connections with compatible electronic keying for the 1734-AENT. This allows the 1734-AENTR adapter to be used in a daisy-chain topology with the 1734-AENT Add-on Profile used for the 1734-AENTR.

The 1738-AENTR adapters will accept I/O connections with compatible electronic keying for the 1738-AENT. This allows the 1738-AENTR adapter to be used in a daisy-chain topology with the 1738-AENT Add-on Profile used for the 1738-AENTR.

Add-on Profiles can be downloaded from:
https://www.rockwellautomation.com/rockwellautomation/support/downloads.page

Firmware Revision History

Firmware Revision History for POINT I/O and ArmorPOINT I/O EtherNet/IP Adapters

Revision[1]	Description
4.002	First revision release
4.003	Second revision release
4.004	Third revision release
4.005	Fourth revision release
5.011	Fifth revision release (for 1734 adapters only)
5.012	Sixth revision release
5.013	Seventh revision release
5.014	Eighth revision release
5.015	Ninth revision release (for 1734 adapters only)
5.016	Tenth revision release
5.017	Eleventh revision release

(1) To upgrade to the latest firmware revision from Firmware Revisions 5.013 or older, follow the upgrade instructions on the Knowledgebase at http://www.rockwellautomation.com/support/ by searching Answer ID 1072442.

The following tables provide a list of enhancements, known anomalies, and corrected anomalies for the POINT I/O and ArmorPOINT I/O EtherNet/IP Adapter firmware revisions.

Enhancements

Enhancements for Series B

Enhancement	Description
Series B hardware	The Series B POINT I/O and ArmorPOINT I/O EtherNet/IP Adapter hardware has been redesigned to address component obsolescence.
EDS File	The product's EDS File is updated with the Series B major firmware revision and is embedded in the product's firmware. To access the EDS File: 1. Use RSNetWorx and select the appropriate adapter. 2. Right-click the adapter and select Re-Register Device… The EDS Wizard launches. 3. Select and use the Upload EDS file(s) from the device option. Version 2.59 or later of RSLinx is able to access and install the Adapter's EDS file as an alternative to using RSNetWorx.

IMPORTANT Before you update the firmware to revision 5.015, set the value of the thumbwheels to one of the following:

- 999 to use DHCP or static IP that is stored in nonvolatile memory
- 001...254 to use static IP

Enhancement for Firmware Revision 5.015

Enhancement	Description
Set chassis size using thumbwheels (1)	You can set the chassis size without a computer by using the thumbwheels on the adapter. For more information on how to set the chassis size by using the thumbwheels, refer to the following: • POINT I/O and ArmorPOINT I/O Dual Port EtherNet/IP Adapters User Manual, publication 1734-UM017 • POINT I/O EtherNet/IP Adapter Module User Manual, publication 1734-UM018

(1) This enhancement only applies to 1734 adapters.

Enhancements for Firmware Revision 5.014

Enhancement	Description
Support for ODVA EtherNet/IP Conformance Test Version 13	This enhancement supports the requirements for ODVA EtherNet/IP Conformance Test version 13.

Enhancements for Firmware Revision 5.011

Enhancement	Description
Enhanced rack connection support (1)	This rack connection enhancement supports configurable I/O assembly connection for 1734 digital, analog, and specialty modules.
Transport Class 3 connection support to 1734-4IOL module	The 1734 adapter now supports Transport Class 3 connection to the 4-Channel IO-Link Master Module (Catalog Number 1734-4IOL), which is a newly developed 1734 module that supports IO-Link technology.
QoS disable/enable through web page (2)	Quality of Service (QoS) can now be disabled and enabled through the web page, under Configuration > Services. The changes do not take effect until the adapter is reset or power cycled.

(1) This enhancement only applies to 1734 modules (digital, analog, and specialty), and does not apply to 1738 modules, 1734 guard modules, and the 1734-4IOL module.

(2) This enhancement only applies to the 1734-AENT and 1738-AENT adapters, and does not apply to 1734-AENTR and 1738-AENTR adapters.

Anomalies

Fixed Anomalies for Firmware Revision 5.017

Anomaly	Description
High Ethernet traffic causes modules to be unresponsive	Occasionally, under high traffic conditions, the Ethernet buffers are full and a mismatch in buffer count occurs, requiring a 1734-AENT, series B adapter power cycle.
Adapter goes offline after receiving several ARP probe packets from IP address 0.0.0.0	Adapter treats ARP probe packets from other MAC addresses as duplicate IP address when two consecutive ARP probes are received.

Fixed Anomalies for Firmware Revision 5.016

Anomaly	Description
Safety I/O module does not send data packet to controller	After removing and re-inserting the adapter Ethernet cable, the Safety I/O module on the backplane does not send data packets to the controller once the Ethernet connection has recovered from timeout. This anomaly is observed on Safety Output Connection when a large Safety Task period (greater than 250milliseconds) is used.

Fixed Anomalies for Firmware Revision 5.013

Anomaly	Description
Adapter does not respond to I/O connection request	The adapter does not respond to Forward open request that is sent with multiple TCP segments by a third-party controller.

Fixed Anomalies for Firmware Revision 5.012

Anomaly	Description
Program mode configuration changes are applied in RUN mode for certain modules	The adapter closes connections to an I/O module on the backplane after the I/O module replies with an error response to configuration changes. A new connection to the I/O module could not be established after the previous connection is closed. This anomaly only happens on certain I/O modules, including the 1734-8CFG and 1734-8CFGDLX modules. The change, which is provided at the adapter backplane application layer, closes the connection to an I/O module if its connection is not in RUN/IDLE state. It does not affect EtherNet/IP interface.
Safety connection would falsely timeout after adapter continuously runs	When the timeout interval (RPI x Connection Timeout Multiplier) is greater than 65.535 seconds on the EtherNet/IP interface, safety connections are falsely timed out for every 49.7 days of continuous run. This anomaly is observed on Safety modules when large RPI (greater than 80 milliseconds) is used.

Fixed Anomaly for Firmware Revision 4.005

Anomaly	Description
I/O connection between controller and 1734-8CFGDLX module unstable if module has enabled DeviceLogix™	When the DeviceLogix feature of a 1734-8CFGDLX module is enabled, the I/O connection between the module and controller becomes unstable and the following behaviors can be seen: • The module's Network LED randomly switches between flashing red and solid green. In RSLogix 5000 software, a 16#203 or 16#204 error is randomly displayed on the module's Add-on Profile and does not always coincide with the module's Network LED status. • The module's Module and Network LEDs display solid green while the adapter's POINTBus™ LED flashes red. The module is unusable even when the adapter's POINTBus LED changes to solid green briefly.

Fixed Anomaly for Firmware Revision 4.004

Anomaly	Description
Output data stops updating when the "Disable Automatic Output Processing To Reduce Task Overhead" function is selected in RSLogix 5000 ladder program	When the "Disable Automatic Output Processing To Reduce Task Overhead" function is selected, the controller sends the new output data with the same sequence count of each I/O packet. I/O packets with the same sequence count are ignored by the adapter and hence stops updating the module output data. With the enhancement, the module output data are always updated when "Disable Automatic Output Processing To Reduce Task Overhead" function is selected. This is consistent with Series A adapters.

Additional Resources

These documents contain additional information concerning related Rockwell Automation products.

Resource	Description
Pinout Guide for 1738 ArmorPOINT Adapters and Power Supplies Wiring Diagram, publication 1738-WD011.	Pinout guide wiring diagram for the ArmorPOINT I/O EtherNet/IP Adapter modules and power supplies.
1734 POINT I/O Dual-port EtherNet/IP Adapter Installation Instructions, publication 1734-IN041.	Installation instructions for installing the 1734 POINT I/O Dual-port EtherNet/IP Adapter.
1738 ArmorPOINT I/O Dual-port EtherNet/IP Adapter Installation Instructions, publication 1738-IN030.	Installation instructions for installing the 1738 ArmorPOINT I/O Dual-port EtherNet/IP Adapter.
1734 POINT I/O and 1738 ArmorPOINT I/O Dual-port EtherNet/IP Adapter User Manual, publication 1734-UM017.	1734 POINT I/O and 1738 ArmorPOINT I/O Dual-port EtherNet/IP adapters (1734-AENTR, Series B and 1738-AENTR, Series B) user manual. It also includes valuable information on how to replace an adapter.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-IN041.	More information on proper wiring and grounding techniques.
Product Certifications website, http://www.rockwellautomation.com/products/certification/	Provides declarations of conformity, certificates, and other certification details.

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

Rockwell Automation Support

Rockwell Automation provides technical information on the Web to assist you in using its products. At http://www.rockwellautomation.com/support/, 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://www.rockwellautomation.com/support/.

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 or Canada	1.440.646.3434
Outside United States or Canada	Use the Worldwide Locator at http://www.rockwellautomation.com/support/americas/phone_en.html, or contact your local Rockwell Automation representative.

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 (call the phone number above to obtain one) to your distributor to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for the return procedure.

Documentation Feedback

Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete this form, publication RA-DU002, available at http://www.rockwellautomation.com/literature/.

Rockwell Automation maintains current product environmental information on its website at http://www.rockwellautomation.com/rockwellautomation/about-us/sustainability-ethics/product-environmental-compliance.page.

Rockwell Otomasyon Ticaret A.Ş., Kar Plaza İş Merkezi E Blok Kat:6 34752 İçerenköy, İstanbul, Tel: +90 (216) 5698400

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 NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication 1734-RN017H-EN-E- March 2019

Supersedes publication 1734-RN017G-EN-E- March 2018