



PRODUCT NOTICE

Notice of Potential Product Concern

Rockwell Automation issues a Product Notice when it identifies a product(s) anomaly that may cause commercial or customer satisfaction concerns.

Allen-Bradley 1715 and AADvance T9000 Nuisance Soft Error Detection Faults

Reference: 2020-07-002

Date: July 2020

This Product Notice informs you of a potential anomaly that exists with the Allen-Bradley® 1715-AENTR, AADvance® T9110, and Eurocard T9120 products when used with select Digital Output Modules. Customers may experience spurious nuisance soft error detection (SED) errors in either the adapter / processor or the output module.

Product Identification –

The affected products are:

Processor Module / Adapter	Corresponding I/O Module
Allen-Bradley 1715-AENTR EtherNet/IP Adapter,	Allen-Bradley 1715-OB8DE Digital Output Module,
firmware versions through 3.002	all firmware versions
AADvance T9110 Processor Module, system	AADvance T9451 or AADvance Eurocard T9551
releases through 1.40	Digital Output Module, all system releases
AADvance Eurocard T9120 Processor Card,	AADvance T9451 or AADvance Eurocard T9551
system releases through 1.32	Digital Output Module, all system releases

The processor module / adapter may exhibit the anomaly, or the corresponding I/O module may exhibit the anomaly when used with a processor module / adapter using the listed firmware versions.

1715-AENTR users may use RSLinx to determine the module's firmware version. 1715-AENTR and AADvance users may use the AADvance 1715 Trusted Collection Tool to determine the processor's or adapter's firmware version.

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The AADvance 1715 Trusted Collection Tool may be downloaded from the Rockwell Automation Product Compatibility and Download Center -

- 1. Go to https://compatibility.rockwellautomation.com/Pages/MultiProductDownload.aspx?crumb=112.
- 2. Enter "AADvance" in the search . . . field.
- 3. Select the AADvance 1715 Trusted Collection Tool.
- 4. Select the most current version and click *Downloads* to start the download process.

Note – Current users of the AADvance 1715 Trusted Collection Tool are advised to verify they are using version 1.40.26 or later.

Instructions for the use of the AADvance 1715 Trusted Collection Tool may be found on the Rockwell Automation Knowledgebase, Document ID <u>IN37555</u>. The firmware version information for all products can be found in the resulting .CSV file.

- Description -

A potential anomaly exists with the Allen-Bradley 1715-AENTR, AADvance T9110, and Eurocard T9120 products. Customers may experience spurious nuisance soft error detection (SED) errors. For modules used in duplex mode, this is indicated by a red "Healthy" front panel indication and module Tags / Variables fault alarm. For 1715-OB8DE modules used in simplex mode, the error can only be observed using the System Health function of the AADvance 1715 Trusted Collection Tool. The image below shows an example System Health SED for the 1715-OB8DE module.

	Slot 4 type 1715-0B8DE serial number 84-1804-9451-7-50073 build K13 (2.003 3.001 and 3.002)
1	Release 3.001/3.002 FPGA firmware build 158
	Release 2.002/2.003/3.001/3.002 PSUP firmware build 162
1 1	For the latest release 3.002, hardware issue K is required, and firmware must be issue 11, 12 or 13
	A module FPGA is reporting a soft error fault
	01.E. 434E 0000E: 2.1 F 044000 04E4 3 E00001 3 1440 70 000 0 004 10 000

Similar diagnostic information is available from the System Health SED for other listed modules.

Customers can use the AADvance 1715 Trusted Collection Tool version 1.40.26 or later to view system health. SED related fault information can be identified. Download the latest collection tool from the PCDC as described in the Product Identification section of this notification.

Detailed SED fault response information is included in Appendix B for 1715 and in Appendix C for AADvance.

- Temporary Workarounds -

Affected modules **must** be power cycled within the Mean Time to Restore (MTTR).

Power cycle the processor / communication adapter modules one at a time <u>after</u> verifying there are not faults
present on the attached Ethernet network, making sure each module has fully powered up and qualified
before moving to the next module.

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Power cycle the I/O modules after verifying no channel faults criss-crossed between module pairs.

Power cycling the modules does not guarantee the system will not trip. However, if the system trips the system should go to the configured safe state if the system is designed per Rockwell Automation documentation and safety guidelines.

Nuisance SED errors may be reduced by updating AADvance products to system release 1.40.

If the fault occurs multiple times on the same module, the product should be returned for upgrade or replacement.

- Correction -

Correction requires a firmware update.

- For Allen-Bradley 1715-AENTER, update to firmware version 3.003 or later.
- For AADvance T9110 and Eurocard T9120, update to system release 1.41 or later.

When available, firmware may be downloaded and installed from the Rockwell Automation Product Compatibility and Download Center. A link has been made available on the Rockwell Automation Knowledgebase article for this notification, ID PN1520, if you would like to receive an email notification when firmware addressing this anomaly is available.

Important – Product hardware is not affected and may not be returned on this notification.

Requested Customer Action –

Rockwell Automation requests you take the following actions:

- Check if you have a product affected by this Product Notice. Refer to the Product Identification and Description sections of this document for product identification assistance.
- Sign up for email notification as described in the Correction section of this document.
- Until firmware addressing this anomaly is available for download and installation, refer to the Temporary Workarounds section of this document.
- If you need additional assistance, please contact Rockwell Automation Technical Support. See Appendix A for local telephone numbers. Customers without TechConnect contracts should reference this Product Notice when calling.
- Customers with TechConnect contracts may be able to <u>chat online</u> with support representatives. Reference this Product Notice when connected to a support engineer.

The most current version of this Product Notice is posted on the Rockwell Automation Support Center, http://www.rockwellautomation.com/knowledgebase, as ID number PN1520/1127099. Additional languages may also be available at the end of this article attached as downloadable PDF documents.



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If this Product Notice does not affect you because you do not have the products any longer, or if you are a Distributor, Rockwell Automation asks that you forward a copy of this notice, with any identifying documentation, immediately to the person or company that now has the product. We also ask that you contact Rockwell Automation Technical Support and provide the location of the affected units.

We appreciate your immediate cooperation. If you have any questions, please contact us.

Sincerely,

ROCKWELL AUTOMATION

You can register for Automatic Product Safety Advisories and Product Notices from Rockwell Automation by email. Go to the Support web page at http://www.rockwellautomation.com/support and click the *Visit the Technical Support Center* link. Sign in with your Tech Connect Account or free Rockwell Automation Member Account and you can subscribe to important product updates, including Product Safety Advisories and Product Notices.

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Appendix A Regional Technical Support Information

The following list can help you to contact the correct technical support center for your location. If your country is not listed, you can find a customer support number for your location by going to the Rockwell Automation Knowledgebase as https://rockwellautomation.custhelp.com. Click on *Contact Us* → *Phone*, and then enter your location information. If you have a TechConnectsm support contract, please use the telephone number supplied to you with the contract.

Region / Country	Phone Number () International Code		
Asia/Pacific	()		
Australia	1 800 762 593		
China	400 620 6620		
Hong Kong	+852 2887 4666		
India	1 800 2000 121		
Japan	03 3206 2785		
Korea	(82) 2 2188 4400		
Malaysia	1 800 80 4851		
New Zealand	0800 27 27 25		
Taiwan	080 902 0908		
Thailand	(66) 2936 1500		
Caribbean			
All Countries (English)	(1) 440 646 3223		
All Countries (Español)	(1) 440 646 3650		
Central America			
Argentina	800.666.0320		
Belize	(1) 440 646 3650		
Bolivia	(54) 800 10 0632		
Brazil	(55) 11 5189 9500		
Chile	800.53.0012		
Colombia	01.800.700.2107		
Costa Rica	0800.013.1215		
Ecuador	58.212.949.0611		
El Salvador	(52) 55 5246 2010		
Guatemala	1.800.288.0108		
Honduras	(52) 55 5246 2010		
Mexico	001.888.365.8677		
Nicaragua	(52) 55 5246 2010		
Panama	001.800.203.3475		
Paraguay	(54) 11 5554 4000		
Peru	0800.535.36		
Suriname	(1) 440 646 3650		
Uruguay	(54) 11 5554 4000		
Venezuela	800.1.00.3062		

Region / Country	Phone Number () International Code		
Europe	()		
Austria	(49) 211 41553 664		
Belgium	(32) 2 716 8411		
Czech Republic	(420) 28401 5911		
Denmark	(45) 43 466 006		
Finland	(358) 958 447 419		
France	(33) 825303132		
Germany	(49) 211 41553 664		
Hungary	(420) 28401 5911		
Ireland	(44) 01908 635245		
Italy (Brescia, Milano e Padova)	(39) 199 11 99 00		
Italy (Bologna,Firenze,Napoli, Roma e Torino)	(39) 199 11 99 22		
Morocco	(33) 825303132		
Netherlands	(31) 10 266 55 80		
Poland	(48) 22 32 60 707		
Portugal	(1) 440 646 3223		
Slovakia	(420) 284015911		
Spain	(34) 902 30 93 30		
Sweden	(46) 46 19 93 91		
Switzerland (German)	(41) 0844 84 84 11		
Switzerland (French)	(41) 0844 84 84 12		
Switzerland (Italian)	(41) 0844 84 84 13		
United Kingdom	(44) 01908 635245		
North America			
Canada	(1) 440-646-3223		
United States	(1) 440-646-3223		

If you have a TechConnect Contract, please use the telephone number supplied to you with the contract.



Appendix B 1715 Detailed SED Fault Response

		Module Configurations with SED Error Present / Detected			
		1715-AENTR	1715-OB8DE	1715-OB8DE	
			Duplex	Simplex	Duplex
	LED	Module Status	Flashing Red	Steady Green	Steady Green
		Redundancy Status	Steady Green	Steady Green	Steady Green
		Rack Status	Steady Green	Steady Red	Steady Red
AFNITO	Module Info	Major Fault	None	None	None
AENTR		Minor Fault	Recoverable	None	None
Module Indications	AOP tab	Internal State	Run Mode	Run Mode	Run Mode
indications	Input Tag	.ModAFault	1	0	0
		.ModBFault	0	0	0
		.GroupFault	0	0	0
	Annunciated in Studio 5000 Controller Organizer		No	No	No
	LED	Healthy	Steady Green	Steady Red	Steady Red
		Ready	Steady Green	Steady Green	Steady Green
	Module Info AOP tab	Major Fault	None	Recoverable	Recoverable
OB8DE		Minor Fault	None	Recoverable	None
Module		Internal State	Run Mode	Run Mode	Run Mode
Indications	Input Tag	.ModAFault	0	NA	1
		.ModBFault	0	NA	0
		.GroupFault	0	0	0
	Annunciated in Studio 5000 Controller Organizer		No	No	No



Appendix C AADvance Detailed SED Fault Response

			Module Configurations with SED Error Present / Detected		
			T9110 MP Duplex	T9451 DO Simplex	T9451 DO Duplex
		Healthy	Steady Red	Steady Green	Steady Green
	LED	Ready	Steady Green	Steady Green	Steady Green
		Run	Steady Green	Steady Green	Steady Green
		System Healthy	Steady Red	Steady Red	Steady Red
		System Health	FALSE	FALSE	FALSE
		Processor Module A Online	TRUE	TRUE	TRUE
T9110		Processor Module A Health	FALSE	TRUE	TRUE
Module	Cantuallan	Processor Module A Ready	TRUE	TRUE	TRUE
Indications	Controller Status	Processor Module B Online	TRUE	TRUE	TRUE
	Equipment View	Processor Module B Health	TRUE	TRUE	TRUE
		Processor Module B Ready	TRUE	TRUE	TRUE
		Processor Module C Online	TRUE	TRUE	TRUE
		Processor Module C Health	TRUE	TRUE	TRUE
		Processor Module C Ready	TRUE	TRUE	TRUE
	LED	Healthy	Steady Green	Steady Red	Steady Red
		Ready	Steady Green	Steady Green	Steady Green
		Run	Steady Green	Steady Green	Steady Green
	IO Module Status Equipment View	A Module Online Status	TRUE	TRUE	TRUE
T9451		A Module Health Status	TRUE	FALSE	FALSE
Module		A Module Ready Status	TRUE	TRUE	TRUE
Indications		A Module Run Status	TRUE	TRUE	TRUE
		A Module Shutdown Status	FALSE	FALSE	FALSE
		B Module Online Status	TRUE	FALSE	TRUE
		B Module Health Status	TRUE	FALSE	TRUE
		B Module Ready Status	TRUE	FALSE	TRUE
		B Module Run Status	TRUE	FALSE	TRUE
		B Module Shutdown Status	FALSE	FALSE	FALSE