

 **PRODUCT NOTICE**
Notice of Potential Product Concern

**Logix Controller Firmware Revisions 16 and 17,
Fault Recovery**

Reference: 2010-01-001

Date: January 2010

This Product Notice informs you about a potential product anomaly with Logix controllers that use firmware revisions 16 and 17 and fault recovery.

- Product Identification -

All Logix controllers with firmware revision 16.xx or 17.xx.

- Description -

The use of fault handlers can be defined at the controller and program scope levels. These fault handlers are typically used to handle major recoverable faults that can occur during runtime execution of an application due to programming errors. A typical example of this would be handling indirect addressing that has gone out of range; MyTag[index], where index is larger than the size of the array.

Faults can also be handled by the controller during pre-scan of the controller program on the transition to Run mode. Again, for example, the handling of indirect addressing that has gone out of range.

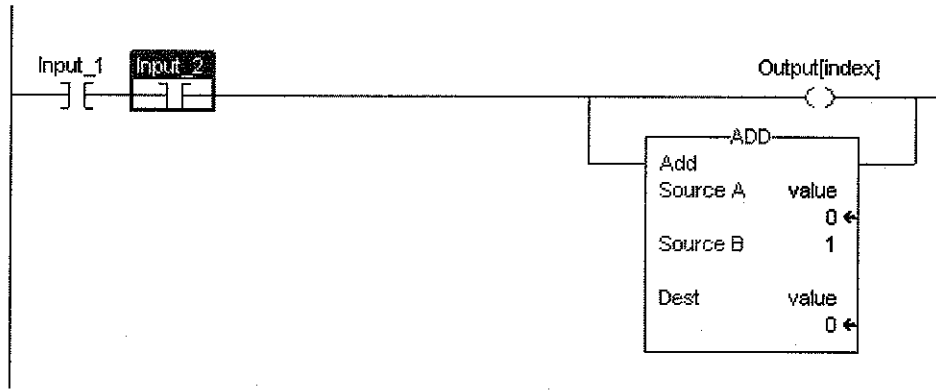
There is an anomaly when these methods attempt to handle a fault.

These are the possible ways the anomaly can manifest itself:

- The controller will experience a major non-recoverable fault. I/O goes to their configured safe state, and the user application is cleared from memory. At this point, a Code 1 Type 60 or 61 major recoverable fault will be logged in the controller. This requires you to redownload the application.
- Tag data corruption.
- Online saving or uploading failures.

LISTEN. THINK. SOLVE.

- Anomalous program execution. For example, if a rung is being scanned false and there is an instruction that has false execution, the fault handler executes so the remainder of the rung will scan true. In the example below, the OTE instruction has an index out of range. After returning from the fault handler, the ADD instruction will execute, even though the rung input conditions are false.



On redundancy systems **only**, when the fault handler or power-up handler contains an Add-On Instruction, the new primary controller may fault with a major non-recoverable fault on the second switch-over. These fault conditions can leave the redundancy system without a running primary controller.

- Temporary Workarounds -

- In a redundancy system, remove all Add-On Instructions from the fault handlers and power-up handler.
- Correct any code that could cause a major recoverable fault.
- Do not allow an indirect address to be out-of-range, even in pre-scan or post-scan.
- Do not clear major recoverable faults in the fault handlers.

- Correction -

These anomalies will be corrected in the firmware updates contained in Table 1 below. Firmware will be available before March 31, 2010.

These firmware revision updates include:

- version 16 standard for all controller types.
- version 16 standard redundancy bundles.
- version 16 enhanced redundancy bundles.
- version 17 standard for all controller types.

Table 1 – Logix Controller Firmware Updates

Controller	V16	V17
Logix Controllers	L55 –Version 16.22 L61 –Version 16.22 L62 –Version 16.22 L63 –Version 16.22 L64 –Version 16.22 L60M03SE – Version 16.22	L61 –Version 17.04 L62 –Version 17.04 L63 –Version 17.04 L64 –Version 17.04 L65 –Version 17.04 L60M03SE – Version 17.04
GuardLogix	L61S – Version 16.22 L62S – Version 16.22	L61S – Version 17.08 L62S – Version 17.08 L63S – Version 17.08
FlexLogix	L33 – Version 16.22 L34 – Version 16.22	N/A
1769 CompactLogix	L43 – Version 16.24 L45 – Version 16.24	L43 – Version 17.04 L45 – Version 17.04
1769 CompactLogix	L31 – Version 16.22 L32C – Version 16.22 L32E – Version 16.22 L35CR – Version 16.22 L35E – Version 16.22	1769-L2x Version 17.05 L31 – Version 17.05 L32C – Version 17.05 L32E – Version 17.05 L35CR – Version 17.05 L35E – Version 17.05
DriveLogix5730	Version 16.22	Version 17.04
SoftLogix 1769-L60	Version 16.04	N/A
1756-L6x Redundancy Standard	Version 16.57	N/A
1756-L6x Redundancy Enhanced	Version 16.61	N/A

- Requested Customer Action -

We request that you take the following actions:

- Check that you have product affected by this Product Notice. Refer to the Product Identification and Description sections of this document for identification help.
- Download and install the correct controller firmware updates, as shown above, as soon as possible.
- To receive an email notification when the firmware updates are available, click the 'Firmware Notification' link on the bottom of the Knowledgebase document.
- If you need additional technical help, contact your local technical support center. Appendix A contains contact numbers for technical support.

This Product Notice is posted on the Rockwell Automation Knowledgebase, <http://www.rockwellautomation.com/knowledgebase>, as ID number 66543.

If this Product Notice does not affect you because you do not have the products any longer, 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 Notifications from Rockwell Automation by email. Go to the Support web page at <http://support.rockwellautomation.com>. Under 'Self-Service Support Knowledgebase — Technical questions? Start here!', you can subscribe to important product updates, including Product Safety Advisories and Product Notices.

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 on <http://www.rockwellautomation.com/support/> under Phone Support / Email Support (located on the left edge of your screen)

Region / Country	Phone Number () International Code
Asia/Pacific	
Australia	1 800 809 929
China	(86 21) 6128 8888
Hong Kong	800 96 5575
India	1 800 3000 7635
Japan	00 44 2261 2142
Korea	0030 833 0004
Malaysia	1 800.80 4851
New Zealand	0800 27 27 25
Taiwan	0080 333 332
Thailand	001 800 611 2757
Caribbean	
All Countries	(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	(52) 55 5246 2010
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) 02104 960 664
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) 02104 960 664
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) 297 543543
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.