



# CompactLogix5320 and CompactLogix5330 Controllers

(Cat. No. 1769-L20 and 1769-L30)

### ATTENTION



#### Product Service Advisory - ACIG 2002-09-001

Deleting a tag while online can cause a communication lock up or controller failure. To prevent this from occurring, delete unused tags only while offline. *Do not* delete unused tags while online with the controller.

For more information, see “Restrictions“ on page 2.

This release note corresponds to major revision 8, minor revision 14 of the CompactLogix controller firmware. Use this firmware release with:

Software Product:	Compatible Version:
RSLogix 5000 programming software	8.02.00
RSLinx software	2.30.00 (build 47 or later)

## Known Anomaly

### IMPORTANT

When using RSLogix 5000 software to enable, disable, or remove input forces, the other inputs (the ones not being forced) associated *with that connection* may go to zero. The modified inputs stay at zero for approximately 1 RPI and then return to their proper state. If the connection is a module connection, all inputs from the module may go to zero. If the connection is a rack connection, all inputs from that rack may go to zero.

To avoid this issue, do not enable, disable, or remove forces on inputs when the affected controller is in Run mode.

## Restrictions

### **Product Service Advisory - ACIG 2002-09-001**

#### *Communication Lock-Up*

If you delete an unused tag while online, you might lose communication with the controller immediately or later in the execution of the project. If the failure occurs, the controller no longer communicates with the following devices:

- Workstations - For RSLogix 5000 users, if the lock-up occurs immediately, the software alerts you with a Communication error message and immediately goes offline. If the lock-up occurs after the software has been disconnected, you cannot go back online.
- HMI devices - HMI no longer affects the process and data is not updated.
- Other devices via Message (MSG) instructions - Message instruction errors; data is not exchanged between devices.
- All serial port communication - Communication fails over the serial port.

In addition to the alerts you may see from a specific device (e.g. RSLogix 5000 error message), the communication failure causes RSLinx to show a red X over the controller.

During the communication failure, the controller continues to communicate with and control the input and output devices (I/O) of your machine or process. If the controller is in Remote mode, you will not be able to change the Run/Program state. You must use the keyswitch to change the state.

#### *Controller Failure*

A second issue that may arise if you delete a tag while online is that the controller may become inoperative. The controller's OK LED turns solid red and any attempts to go online with the controller will fail.

#### *Temporary Workaround*

Delete unused tags only while offline. *Do not* delete unused tags while online with the controller. If you lose communication with the controller or the controller fails:

1. Cycle power to the controller.
2. Attempt to download the project to the controller. In most cases, the download is successful.
3. If the download fails, perform these additional actions:
  - a. Disconnect the battery.
  - b. Cycle power.
  - c. Reconnect the battery.
  - d. Download the project to the controller.

#### *Problem Correction*

The 10.13 revision of CompactLogix firmware corrects this restriction:

## Hold Last State and User-Defined Safe State Features

The CompactLogix5320 and CompactLogix5330 controllers do not support Hold Last State or User-Defined Safe State features.

- If an I/O module fails such that its communication to the controller is lost, or if any module is disconnected from the system bus while under power, the controller will go into the fault mode. All outputs turn off when the system bus or any module faults.
- When creating 1769 output modules, module-defined tags are automatically created for each module. These module-defined tags include configuration (C) data type members to enable alternate outputs, but these members are non-functional and should not be programmed. CompactLogix5320 and CompactLogix5330 controllers do not support these alternate outputs, as listed below:

For digital output modules:	For analog output modules:
<ul style="list-style-type: none"> <li>• ProgToFaultEn</li> <li>• ProgMode</li> <li>• ProgValue</li> <li>• FaultMode</li> <li>• FaultValue</li> </ul>	<ul style="list-style-type: none"> <li>• CHxProgToFaultEn</li> <li>• CHxProgMode</li> <li>• CHxFaultMode</li> </ul> <p>where CHx = the channel number</p>

## DH-485 Messaging Protocol on Logix5000 Serial Port

The Logix5000 controller's serial port now supports the ability to communicate using the DH-485 protocol. This extends the communications capabilities of the Logix5000 controllers and adds to the support of DF1 and User ASCII that was previously provided. By using a 1761-NET-AIC and the appropriate RS-232 cable (1756-CP3 or 1747-CP3), a Logix5000 controller can send and receive data on a DH-485 network with SLC controllers and PanelView displays.

While the DH-485 protocol can be used to send and receive messages, excessive traffic on the DH-485 network may make it impractical to connect to your Logix5000 controller with RSLogix 5000 programming software. In this case, program upload/download, monitoring and online editing of programs via DH-485 can be accomplished when the system is not running and the controllers are in Program mode.

The DH-485 network is not recommended for new applications using Logix5000 controllers. Logix5000 controllers should be used on DH-485 networks only when you wish to add these controllers to an existing DH-485 network. For new applications with Logix5000 controllers, DeviceNet, Ethernet, and ControlNet are the recommended networks.

# Installing CompactLogix EDS and ICON Files

With revision 8 CompactLogix controllers, you must install EDS and ICON files for these controllers in RSLinx to properly communicate with them. If you do not install these files, the CompactLogix controllers will be “Unrecognized Devices” in the Who Active screens in RSLinx and RSLogix 5000.

The EDS and ICON Files are located on the RSLogix 5000 version 8 Supplementary Materials CD-ROM, part number 9324-FSCD, dated 06.08.01.

1. If RSLinx is running, close it.
2. Place the RSLogix 5000 version 8 Supplementary Materials CD into the CD drive of your computer.
3. Access the EDS Hardware Installation Tool from the Start menu, following this path: Start—Programs—Rockwell Software—RSLinx-EDS Hardware Installation Tool.
4. The first screen in the tool gives you the options to Add, Remove, or Remove All. Click on Add.
5. Then from the next screen, click on “Register a directory of EDS files”. Browse for the following folder on you RSLogix5000 Supplementary Materials CD: Firmware Kits—V8.02.00—EDS Files. Click Next.
6. The Installation Test Results screen displays, showing a check mark next to each of the EDS files. Click Next.
7. The ICONs are displayed. Click Next.
8. The next screen asks if you would like to register the EDS files shown. Click Next.
9. The EDS and ICON file installation begins. A screen will notify you when installation is complete. Click Finish.
10. From the next screen, click Exit.

You have completed the installation of the files necessary to communicate with your version 8 CompactLogix controllers.

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