



20-COMM-C/Q ControlNet Adapter Firmware v3.001

This release note describes major revision 3, minor revision 1 of firmware for 20-COMM-C (coaxial media) and 20-COMM-Q (fiber media) ControlNet adapters.

Introduction

The following information is included in this document:

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Enhancements

This section describes the enhancements provided in this revision of firmware:

- Added support for accessing the additional ports (Ports 7 through 14) available in PowerFlex 750-Series drives.

Important: The CIP Parameter object (class ID = 0x0F) is not supported when the 20-COMM-C/Q adapter is connected to a PowerFlex 750-Series drive.

- Added support for Chinese, Japanese, and Korean languages when the 20-COMM-C/Q adapter is connected to a PowerFlex 750-Series drive.
- Changed the brand compatibility to allow the 20-COMM-C/Q adapter to operate when it is connected to a VTAC-brand drive.
- Added support for the 8-byte Get Scattered (service code 0x4D) and 8-byte Set Scattered (service code 0x4E) services for the passthrough DPI Parameter object (class ID 0x93). The following table shows the Instance number translations for accessing parameters of each port device:

Instances (Hex.)	(Dec.)	Device	Example	Description
0x0000 – 0x3FFF	0 – 16383	Host Drive	0	Class Attributes (Drive)
0x4000 – 0x43FF	16384 – 17407	Option Card	1	Drive Parameter 1 Attributes
0x4400 – 0x47FF	17408 – 18431	Port 1	2	Drive Parameter 2 Attributes
0x4800 – 0x4BFF	18432 – 19455	Port 2	⋮	⋮
0x4C00 – 0x4FFF	19456 – 20479	Port 3	16384	Class Attributes (Option Card)
0x5000 – 0x53FF	20480 – 21503	Port 4	16385	Option Card Parameter 1 Attributes
0x5400 – 0x57FF	21504 – 22527	Port 5	⋮	⋮
0x5800 – 0x5BFF	22528 – 23551	Port 6		
0x5C00 – 0x5FFF	23552 – 24575	Port 7		
0x6000 – 0x63FF	24576 – 25599	Port 8		
0x6400 – 0x67FF	25600 – 26623	Port 9		

Instances (Hex.)	(Dec.)	Device
0x6800 – 0x6BFF	26624 – 27647	Port 10
0x6C00 – 0x6FFF	27648 – 28671	Port 11
0x7000 – 0x73FF	28672 – 29695	Port 12
0x7400 – 0x77FF	29696 – 30719	Port 13
0x7800 – 0x7BFF	30720 – 31743	Port 14

The table below lists the parameters for the 8-byte Get_Attributes_Scattered and Set_Attributes_Scattered object-specific service:

Name	Data Type	Description
Scattered Parameters	STRUCT of	—
Parameter Number	DWORD	Parameter to read or write
Parameter Value	DWORD or REAL	Parameter value to read or write (zero when reading)

Important: The STRUCT may repeat up to 16 times in a single message.

- When using RSLogix 5000 v17 (or higher) and the drive-specific Add On Profile, added support for unscheduled I/O connections to add I/O online while the processor remains in the Run mode.

Corrected Anomalies

There are no anomalies corrected in this revision of firmware.

Determining Firmware Revision

This section describes procedures to determine the firmware revision of your 20-COMM-C/Q ControlNet adapter.

Using the LCD HIM (20-HIM-**)

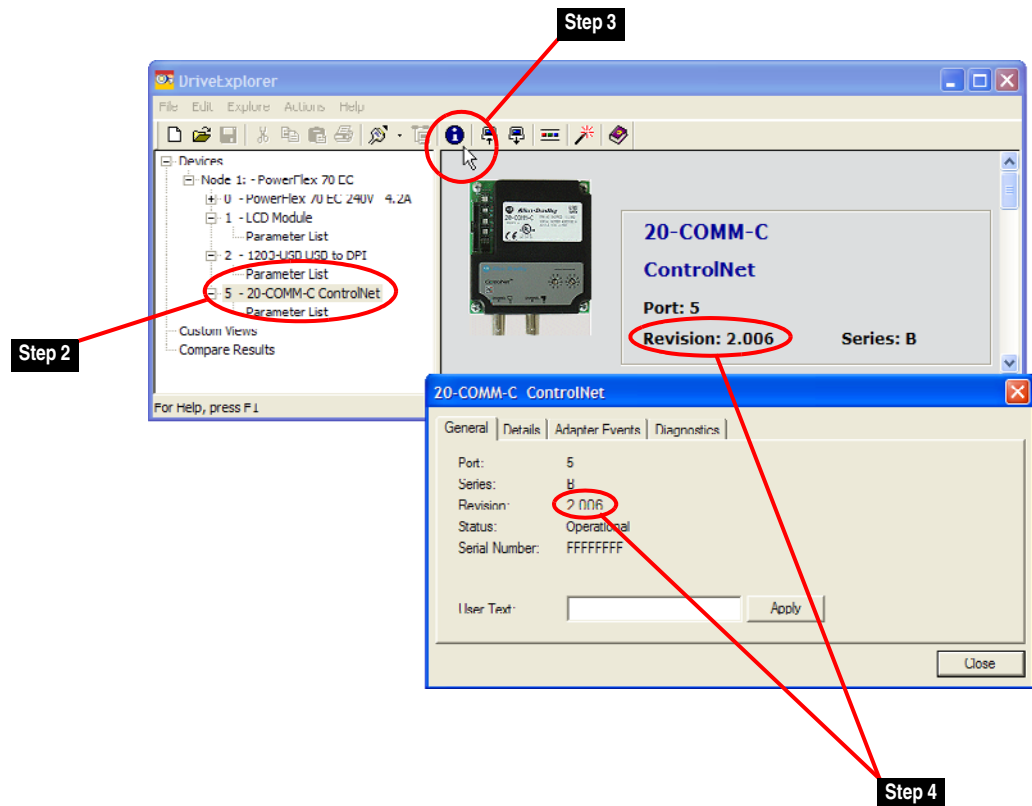
Step	Key(s)	Example Screens
1. In the main menu, press the Up Arrow or Down Arrow to scroll to Device Select .	▲ OR ▼	F-> Stopped Auto 0.00 Hz
2. Press Enter to enter your selection.	↵	Main Menu: Diagnostics Parameter Device Select
3. Press the Up Arrow or Down Arrow to scroll to the 20-COMM-C or 20-COMM-Q ControlNet adapter.	▲ OR ▼	Port 5 Device 20-COMM-C
4. Press Enter to select the ControlNet adapter. The main menu for the adapter will appear.	↵	Main Menu: Diagnostics Parameter Device Select
5. Press the Up Arrow or Down Arrow to scroll to Diagnostics .	▲ OR ▼	Port 5 Device 20-COMM-C
6. Press Enter to enter your selection.	↵	Diag: Prodct Ver FW Ver: 2.006 Series: B Date: 03/14/2007
7. Press the Up Arrow or Down Arrow to scroll to Device Version .	▲ OR ▼	
8. Press Enter to display the Product Data screen.	↵	
9. Press Enter again to display the adapter's firmware version.	↵	

Using DriveExplorer Lite/Full

1. Launch DriveExplorer and go online (via 1203-USB or 1203-SSS converter) with the drive that is connected to the adapter.
2. In the DriveExplorer treeview, click on the 20-COMM-C (or 20-COMM-Q) ControlNet adapter as shown in [Figure 1](#).
3. Click the information icon to display the adapter's Properties screen.
4. The "Revision:" field shows the present revision (for example, 2.006) of the adapter firmware.

► **TIP:** When clicking on the 20-COMM-C/Q adapter using version 5.01 or higher DriveExplorer Lite/Full, the adapter firmware revision is also shown in the right pane of the DriveExplorer window.

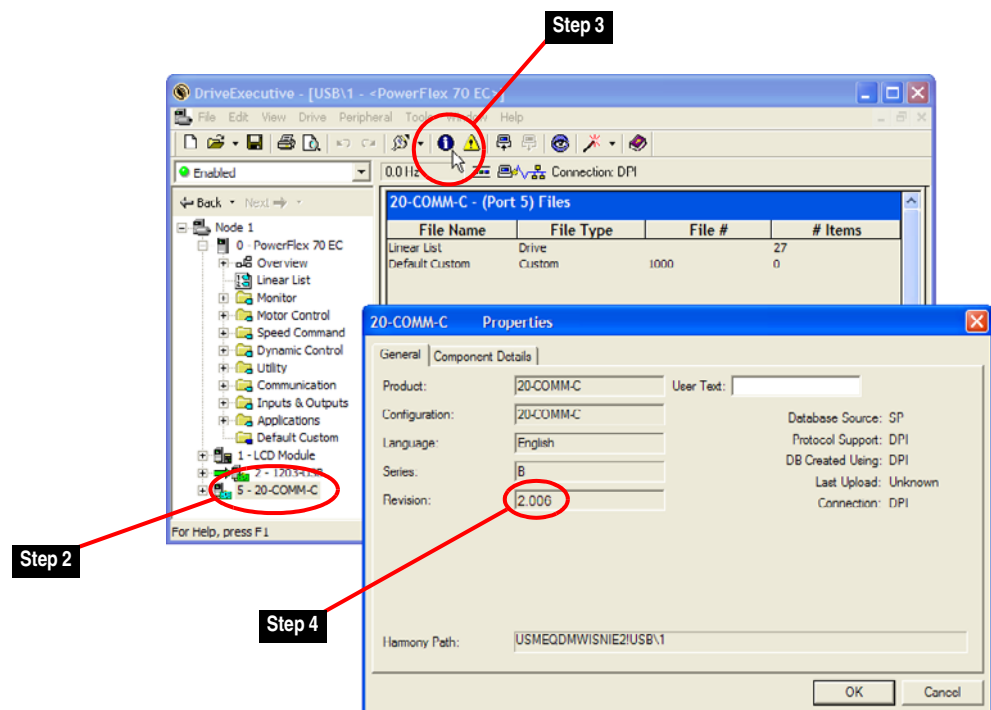
Figure 1 Information Icon in DriveExplorer Window



Using DriveExecutive

1. Launch DriveExecutive and go online with the drive that is connected to the adapter.
2. In the DriveExecutive treeview, click on the 20-COMM-C (or 20-COMM-Q) ControlNet adapter as shown in [Figure 2](#).
3. Click the information icon to display the adapter's Properties screen.
4. The "Revision:" field shows the present revision (for example, 2.006) of the adapter firmware.

Figure 2 Information Icon in DriveExecutive Window



Firmware Flashing

This section describes procedures to flash upgrade your adapter firmware. Flash kits for drives and communications adapters are provided on the Allen-Bradley Web Updates site located at <http://www.ab.com/support/abdrives/webupdate>.



ATTENTION: Risk of permanent equipment damage exists. Once a flash update has been started, do not remove power from the drive (or the 20-XCOMM-DC-BASE External Comms Kit, if used) until after the download has completed and the MOD status indicator on the adapter becomes FLASHING GREEN. If power is removed before this occurs, the adapter may be permanently damaged. An adapter that has been damaged in this way cannot be repaired.

Installing the Flash Kit

1. Install the flash kit utility from the Allen-Bradley Web Updates site for the 20-COMM-C/Q adapter. (This also automatically installs the latest version of the ControlFLASH utility on your computer.)
2. You are now ready to use DriveExplorer, DriveExecutive or ControlFLASH to update the adapter. Follow the instructions in the appropriate section below.

Using DriveExplorer Lite/Full

1. With the Flash Kit installed (see [Installing the Flash Kit](#)), launch DriveExplorer and go online (via a 1203-USB or 1203-SSS converter) with the drive that is connected to the adapter.
2. In the DriveExplorer treeview, click on the 20-COMM-C (or 20-COMM-Q) adapter. Then click the information icon as shown in [Figure 1](#) to display the adapter's Properties screen.
3. On the 20-COMM-C/Q Properties screen, click the Details tab.

Important: This update may cause the adapter parameters to revert to their default values. You may want to save your configuration using DriveExplorer or the HIM CopyCat feature before upgrading.

4. To start the flash update, click the **Flash Update...** button. Follow the screen prompts until the flash update procedure completes and displays the new firmware revision (v3.001).

Using DriveExecutive

1. With the Flash Kit installed (see [Installing the Flash Kit](#)), launch DriveExecutive and go online with the drive that is connected to the adapter.
2. In the DriveExecutive treeview, click on the 20-COMM-C (or 20-COMM-Q) adapter. Then click the information icon as shown in [Figure 2](#) to display the adapter's Properties screen.
3. On the 20-COMM-C/Q Properties screen, click the Component Details tab.

Important: This update may cause the adapter parameters to revert to their default values. You may want to save your configuration using DriveExecutive or the HIM CopyCat feature before upgrading.

4. To start the flash update, click the **Flash Update** button. Follow the screen prompts until the flash update procedure completes and displays the new firmware revision (v3.001).

Using ControlFLASH

1. With the Flash Kit installed (see [Installing the Flash Kit on page 5](#)), launch ControlFLASH by selecting **Start > (All) Programs > Flash Programming Tools > ControlFLASH**.
2. Choose the 20-COMM-C (or 20-COMM-Q) v3.001 update from the list of available updates.

Important: This update may cause the adapter parameters to revert to their default values. You may want to save your configuration using the HIM CopyCat feature, DriveExplorer or DriveExecutive before upgrading.

3. Follow the screen prompts until the flash procedure completes and displays the new firmware revision (v3.001).

Restrictions

No restrictions apply to this revision of firmware.

Compatible Revisions

To use this revision of firmware, update your system tools as follows:

Update this:	To this version or later:
DriveExplorer Lite/Full	4.01
DriveExecutive	3.01
PowerFlex 7-Class Drive	all versions compatible
LCD HIM	all versions compatible
RSLink Classic	2.43
RSNetWorx for ControlNet	5.11

Rockwell Automation Support

Rockwell Automation provides technical information on the web to assist you in using our products. At <http://support.rockwellautomation.com>, you can find technical manuals, a knowledge base of Frequently Asked Questions (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.

Rockwell Automation also provides complimentary phone support for drives, communication adapters, and peripherals. If you experience a problem with the adapter, please review the information in its User Manual. For further help in getting your adapter operational, contact a Customer Support representative:

United States	(1) 262.512.8176 Monday – Friday, 7am – 6pm CST
Outside United States	Please contact your local Rockwell Automation representative for any technical support issues.

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>.

Product Satisfaction Return

Rockwell Automation tests all 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:

United States	Please contact your distributor. You must provide a Customer Support case number (see 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 return procedure.

U.S. Allen-Bradley Drives Technical Support - Tel: (1) 262.512.8176, Fax: (1) 262.512.2222, Email: support@drives.ra.rockwell.com, Online: www.ab.com/support/abdrives

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