22-COMM-P Profibus Adapter Firmware v2.005

This release note describes major revision 2, minor revision 5 of firmware for 22-COMM-P Profibus adapters.

Important: For this adapter, firmware v2.004 does not exist and was intentionally skipped.

Introduction

The following information is included in this document:

Enhancements

There are no enhancements provided in this revision of firmware.

Corrected Anomalies

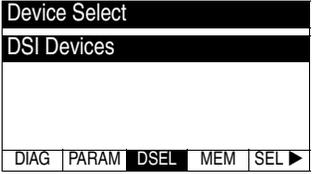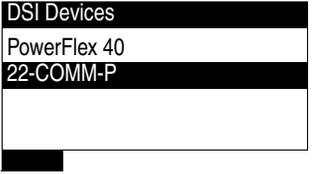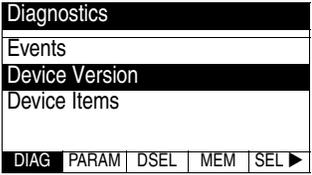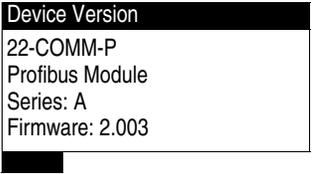This section describes the anomaly corrected in this revision of firmware:

- When the adapter is used with PowerFlex 400 drives and a 22-HIM-xx HIM, this firmware corrects for the HIM message "No Master Comm."

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Determining Firmware Revision

This section describes procedures to determine the firmware revision of your 22-COMM-P Profibus adapter.

Using the External LCD HIM (22-HIM-**)

| Step	Key(s)	Example Screens
1. Power up the drive. The **Parameters** menu for the <u>drive</u> will be displayed.		Parameters Groups Linear List Changed Params DIAG PARAM DSEL MEM SEL ▶
2. Press Sel key until the Device Select menu is displayed, and then press Enter.	**Sel** and ↵	Device Select DSI Devices DIAG PARAM DSEL MEM SEL ▶
3. Press Down Arrow to scroll to the **22-COMM-P** adapter, and then press Enter.	▼ and ↵	DSI Devices PowerFlex 40 22-COMM-P
4. Press Sel key until the Diagnostics menu is displayed. Press Down Arrow to scroll to **Device Version**, and then press Enter.	**Sel** ▼ and ↵	Diagnostics Events Device Version Device Items DIAG PARAM DSEL MEM SEL ▶
5. The present firmware version of the converter is shown on the Firmware line.		Device Version 22-COMM-P Profibus Module Series: A Firmware: 2.003
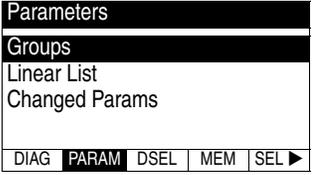
Using DriveExplorer Lite/Full

1. Launch DriveExplorer and go online (via 1203-USB or 22-SCM-232 converter) with the drive that is connected to the adapter.

2. In the DriveExplorer treeview, click on 22-COMM-P Profibus Module 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, 2.003) of the adapter firmware.

▶ **TIP:** When clicking on the 22-COMM-P 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

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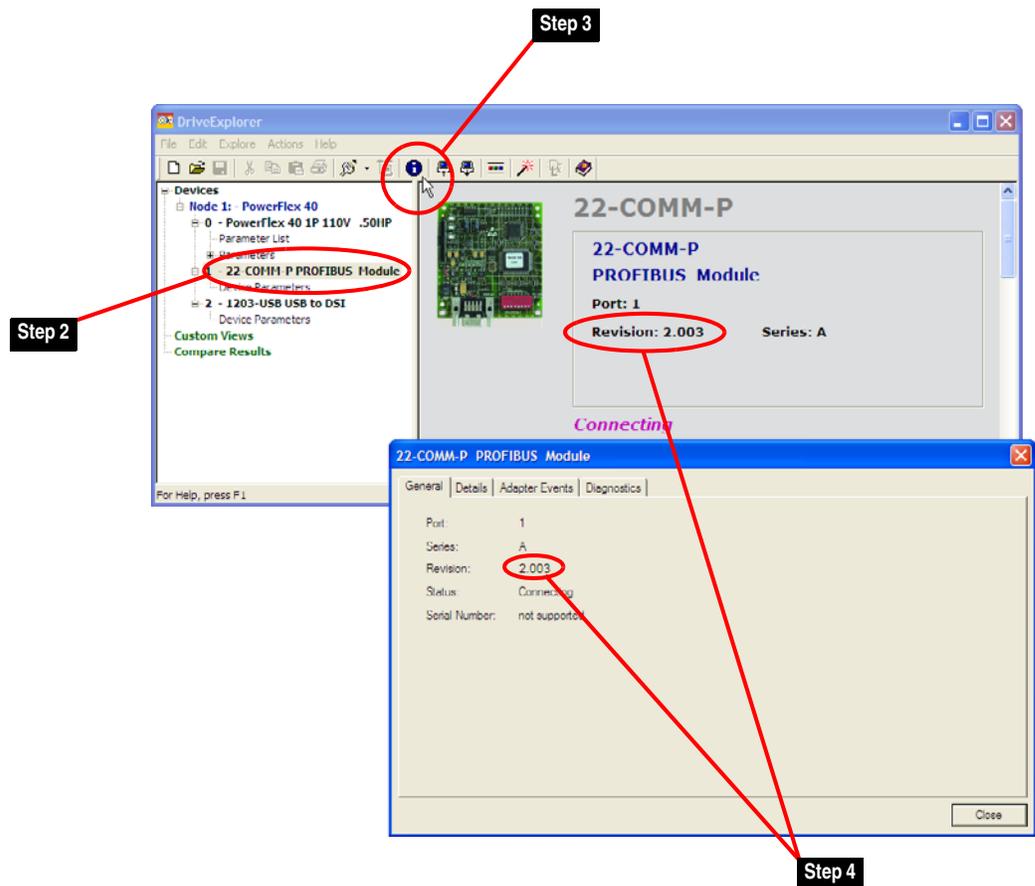
Using DriveExecutive

1. Launch DriveExecutive and go online with the drive that is connected to the adapter.

2. In the DriveExecutive treeview, click on 22-COMM-P 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, 2.003) of the adapter firmware.

Figure 2   Information Icon in DriveExecutive Window
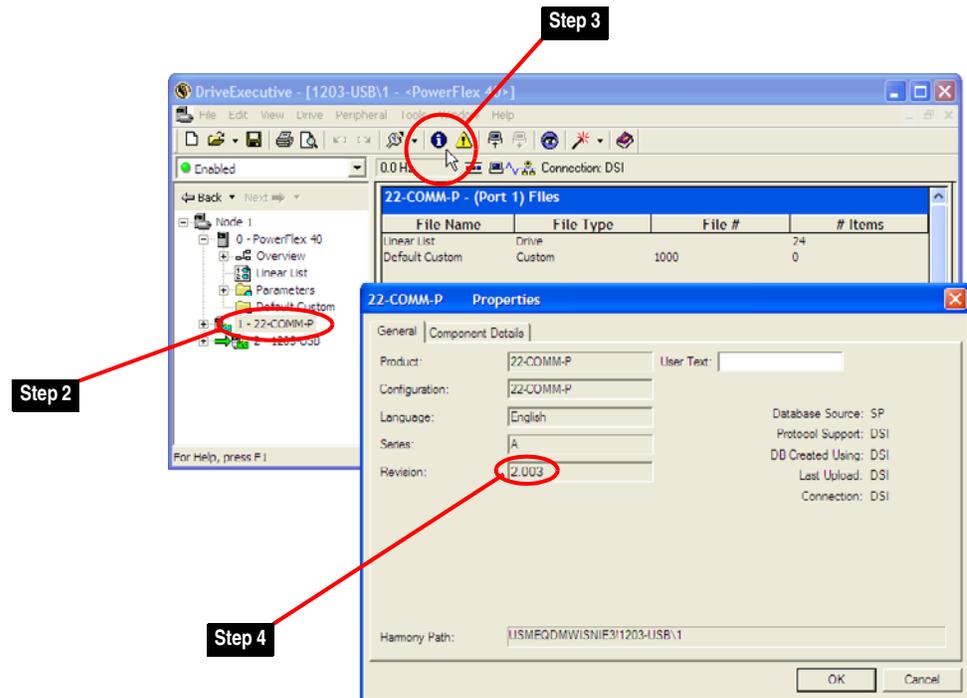
Firmware Flashing

This section describes procedures to flash upgrade your adapter firmware. Flash kits for drives, communications adapters, and peripherals are provided on the Allen-Bradley Web Updates site located at http://www.ab.com/support/abdrives/webupdate. Flashing can only be performed using a 1203-USB or 22-SCM-232 converter. For information about how to connect to your drive, please refer to the 1203-USB or 22-SCM-232 User Manual. They can be viewed/downloaded on the Literature Library web site located at www.literature.rockwellautomation.com.

> ⚠️ **ATTENTION:** Risk of permanent equipment damage exists. Once a flash update has been started, do not remove power from the drive (or the 22-XCOMM-DC-BASE External Comms Kit, if used) until after the download has completed and the adapter MOD status indicator starts 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 22-COMM-P adapter. (This also automatically installs the latest version of the ControlFLASH utility and deploys the firmware files for use with HyperTerminal on your computer.)

2. You are now ready to use DriveExplorer, DriveExecutive, ControlFLASH or HyperTerminal to update the adapter. Refer to the respective section below and follow the instructions.

Using DriveExplorer Lite/Full

1. With the Flash Kit installed (see Installing the Flash Kit), launch DriveExplorer and go online (via 1203-USB or 22-SCM-232 converter) with the drive that is connected to the adapter.

2. In the DriveExplorer treeview, click on 22-COMM-P Profibus Module. Then click the information icon as shown in Figure 1 to display the adapter's properties screen.

3. On the 22-COMM-P 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. Then select v2.005.xx from the list of available updates and click **Next >**. Follow the remaining screen prompts until the flash update procedure completes and displays the new firmware version (v2.005).

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 22-COMM-P. Then click the information icon as shown in Figure 2 to display the adapter's Properties screen.

3. On the 22-COMM-P 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.

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4. To start the flash update, click the **Flash Update…** button. Then select v2.005.xx from the list of available updates and click **Next >**. Follow the remaining screen prompts until the flash update procedure completes and displays the new firmware version (v2.005).

Using ControlFLASH

1. With the Flash Kit installed (see <u>Installing the Flash Kit on page 5</u>), launch ControlFLASH by selecting **Start > (All) Programs > Flash Programming Tools > ControlFLASH**.

2. On the ControlFLASH Welcome screen, click **Next >**.

3. Choose the 22-COMM-P from the list and click **Next >**.

    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.

4. Expand the treeview for the communication path you are using, and select the drive icon that represents the drive with the 22-COMM-P adapter you are updating. Then click **OK**.

5. With the Multiple Assemblies Found window displayed, select "Port X - 22-COMM-P" from the list and click **OK**.

6. With the Firmware Revision window displayed, select "2.005.xx" from the list of available updates and click **Next >**. Follow the remaining screen prompts until the flash procedure completes and displays the new firmware revision (v2.005).

Using HyperTerminal

1. Verify that adapter jumper J2 is set to Single Drive operating mode, and that adapter SW8 of the DIP switches is set to "1" (open = up).

2. With the Flash Kit installed (see <u>Installing the Flash Kit on page 5</u>), launch HyperTerminal and go online (via 1203-USB or 22-SCM-232 converter) with the powered drive that is connected to the adapter.

3. Press the **Enter** key until the main menu (<u>Figure 3</u>) appears.

    Figure 3   Main Menu

    ```
    Main Menu - Enter Number for Selection
    1> Display Setup Parameters
    2> Display Event Queue
    3> Flash Upgrade
    ```

4. In the main menu, press **3** to flash upgrade. Then press **Y** (for Yes) to update the flash code. The terminal program will start displaying the letter "C". This signals the XMODEM protocol that the download may proceed. You then have one minute to start the transfer. Press **CTRL-X** to cancel a started update.

> ⚠️ **ATTENTION:** Risk of injury or equipment damage exists. When you perform a flash update, the drive will fault if it is receiving control I/O from the adapter. Verify that the drive has stopped safely or is receiving control I/O from an alternate source before beginning a flash update.

5. Select **Transfer > Send File** to display the Send File screen (Figure 4).

6. Click **Browse** and navigate to the flash file located in:

    C:\ Program Files\ControlFLASH\0001\0079\8200

Figure 4   Send File Screen
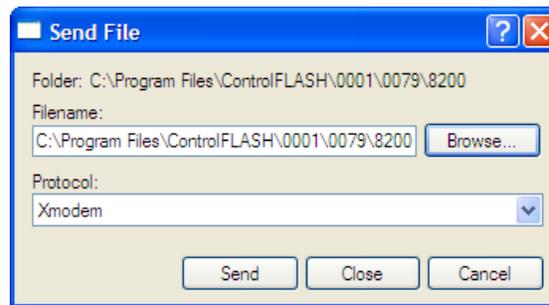
7. In the treeview, double-click on the "22-COMM-P_2_005_01_Boot.bin" file. This file name now appears in the Filename box in the Send File screen.

8. In the Protocol box, select "Xmodem."

9. Click **Send**. A dialog box appears and reports the progress of the update. When it is complete, the message "Flash Complete" appears. HyperTerminal also checks the new firmware in the module and resets the module.

    Important: Keep the device powered for 15 seconds after the operation has completed or until the adapter MOD status indicator starts flashing green.

10. Set adapter SW8 of the DIP switches to "0" (closed = down). Repeat steps 3 through 9 for the "22-COMM-P_2_005_01_App.bin" file. Press the **Enter** key to return to the main menu which should now show the new firmware revision of 2.005 followed by its build level.

11. Set adapter SW8 of the DIP switches to "1" (open = up) to return the adapter to its normal operating mode. Also, set adapter jumper J2 back to the desired Single or Multi-Drive operating mode position.

Restrictions

No restrictions apply to this revision of firmware.

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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 4-Class Drive	all versions compatible
External LCD HIM (22-HIM-**)	all versions compatible
RSLinx Classic	2.43

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	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.

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