



22-COMM-P Series B Profibus Adapter Firmware 4.001

This release note describes major revision 4, minor revision 1 of firmware for 22-COMM-P Series B Profibus adapters.

Important: Firmware revision 4.001 can only be downloaded to a 22-COMM-P Series B Profibus adapter and is not compatible with a 22-COMM-P Series A Profibus adapter. Conversely, firmware revision 2.005 or earlier is not compatible with a 22-COMM-P Series B Profibus adapter.

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.

- The redesigned and simplified circuit board provides better reliability.
- Added new setting “5” (Fault&ClrCmd) for **Parameters 9 - [Comm Fault Action]** and **10 - [Idle Fault Action]**. This new setting allows the adapter to zero bits 0...3 in the Logic Command word when a Profibus communication loss occurs.
- Added new **Parameter 25 - [DSI Loss Action]**. This parameter sets the action that the adapter will take for the Logic Status and Feedback words when the adapter detects that DSI communications have been disrupted. This parameter only applies when the adapter is operated in Single mode. The settings for this parameter include:
 - “0” (Hold Sts/Fbk) which holds the last data in the Logic Status and Feedback words prior to the fault.
 - “1” (Zero Sts/Fbk) which zeros the data in the Logic Status and Feedback words prior to the fault.

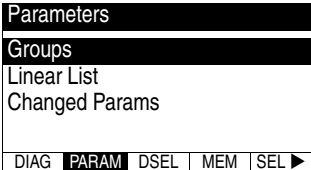
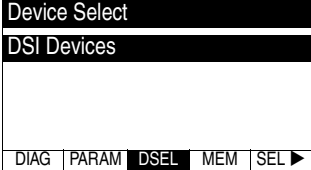
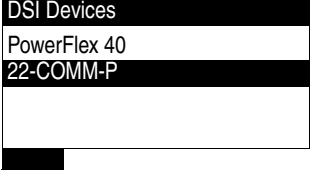
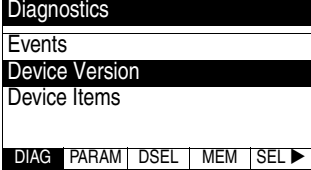
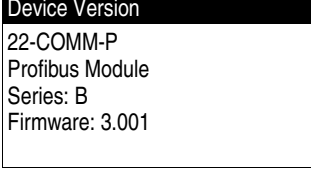
Corrected Anomalies

There are no anomalies corrected in this revision of firmware.

Determining Firmware Revision

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

Using the External 22-HIM-** LCD HIM

| Step | Example Screens |
|--|---|
| <p>1. Power up the drive. Then plug the external HIM into the bottom of the drive. The Parameters menu for the <u>drive</u> will be displayed.</p> |  |
| <p>2. Press SEL key once to display the Device Select menu.</p> |  |
| <p>3. Press ↵ (Enter) key to display the DSI Devices menu. Press ↓ Arrow to scroll to 22-COMM-P, and then press ↵ (Enter) key.</p> |  |
| <p>4. Press SEL key until the Diagnostics menu is displayed. Press ↓ Arrow to scroll to Device Version, and then press ↵ (Enter) key.</p> |  |
| <p>5. The present firmware revision of the adapter is shown on the Firmware line.</p> |  |

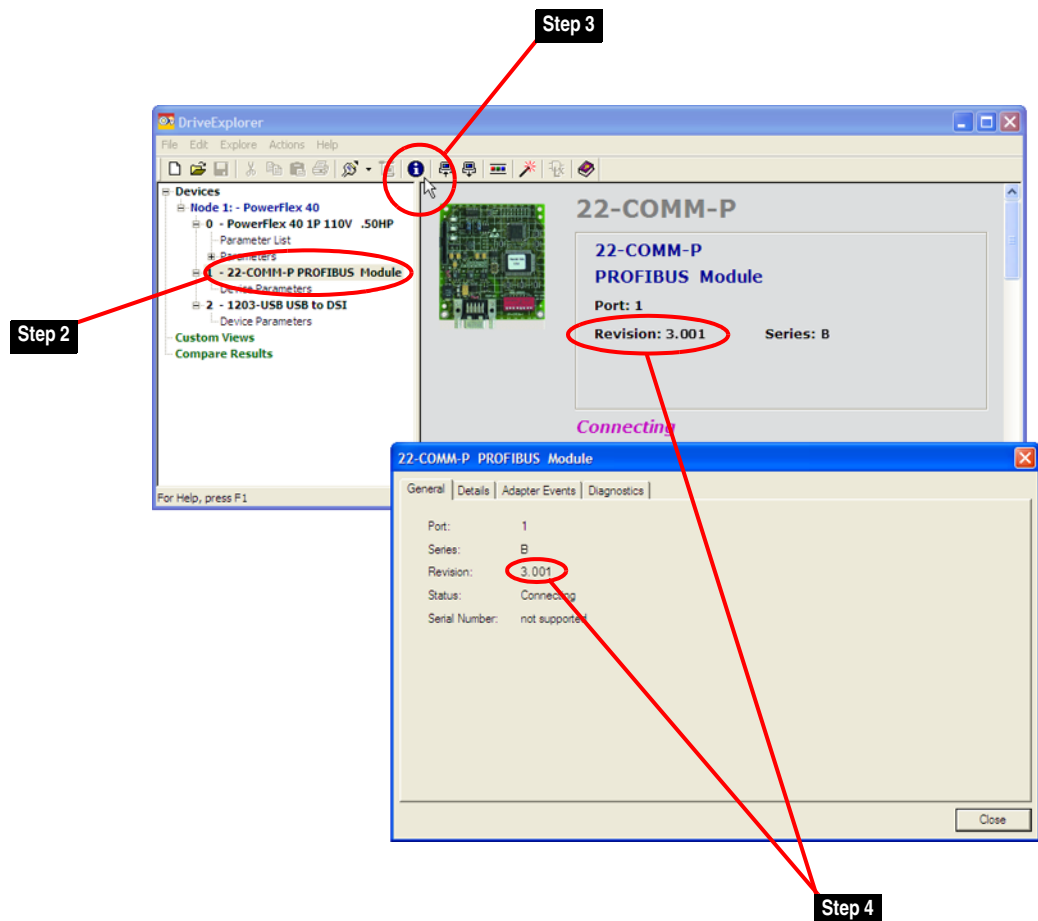
Using DriveExplorer Lite/Full

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, 3.001) 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.

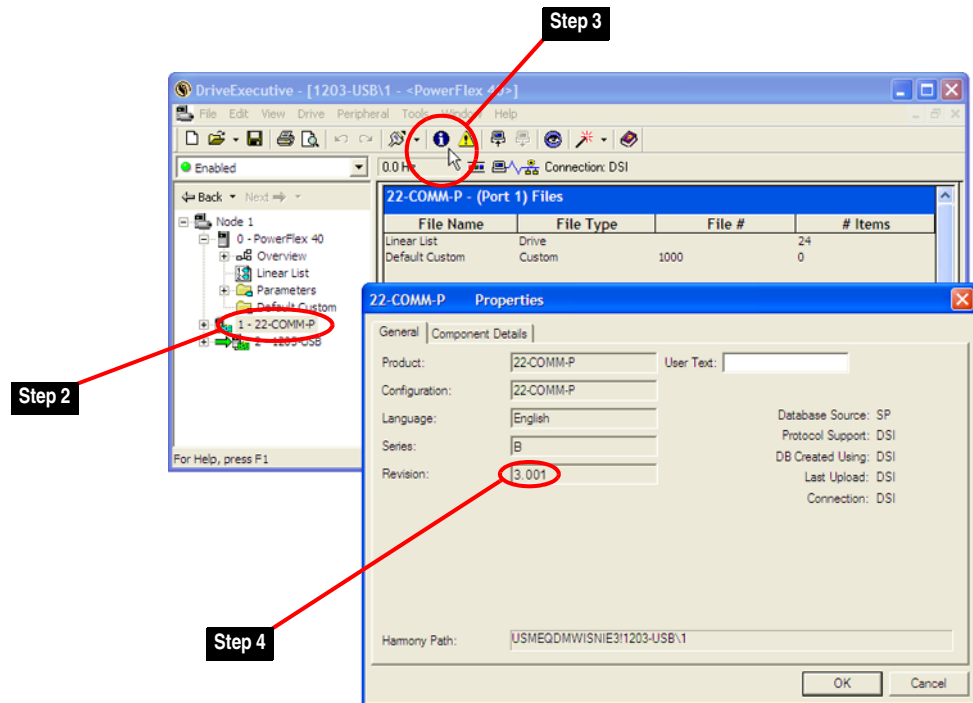
Figure 1 Information Icon in DriveExplorer Window



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, 3.001) of the adapter firmware.

Figure 2 Information Icon in DriveExecutive Window



Firmware Updating

This section describes procedures to update 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>. Updating can only be performed using a 1203-USB or 22-SCM-232 converter. For information about how to connect to your drive, see 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 an 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. Go to the Allen-Bradley Web Updates site at <http://www.ab.com/support/abdrives/webupdate> and install the flash kit for the 22-COMM-P adapter. (This also automatically installs the ControlFLASH software 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 to Update Firmware

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 updating.

4. To start the update, click the **Flash Update...** button. Then select "4.001.xx" from the list of available updates and click **Next >**. Follow the remaining screen prompts until the update procedure completes and displays the new firmware revision (4.001).

Using DriveExecutive to Update Firmware

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 adapter. 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 updating.

4. To start the update, click the **Flash Update** button. Then select the 22-COMM-P from the list of available devices and click **Next >**.

5. Select “4.001.xx” from the list of available updates and click **Next >**. Follow the remaining screen prompts until the update procedure completes and displays the new firmware revision (4.001).

Using ControlFLASH to Update Firmware

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. On the ControlFLASH Welcome screen, click **Next >**.
3. Choose the appropriate 22-COMM-P update from the list of available updates 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 updating.

4. Expand the treeview for the communication path you are using, and select the icon that represents the drive with the 22-COMM-P adapter you are updating. Then click **OK**.
5. If the Multiple Assemblies Found window is displayed, select “Port X - 22-COMM-P” from the list and click **OK**.
6. With the Firmware Revision window displayed, select “4.001.xx” from the list of available updates and click **Next >**. Follow the remaining screen prompts until the update procedure completes and displays the new firmware revision (4.001).

Using HyperTerminal to Update Firmware

1. Verify that adapter jumper J2 is set to “1X” (Single) operating mode, and that adapter SW8 of the DIP switches is set to “Up” (1 = open).
2. With the Flash Kit installed (see [Installing the Flash Kit on page 5](#)), 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 ([Figure 3](#)) 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 the number key that corresponds to the “22-COMM-P” in the list, and press **Y** (for Yes) to update the firmware. 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.

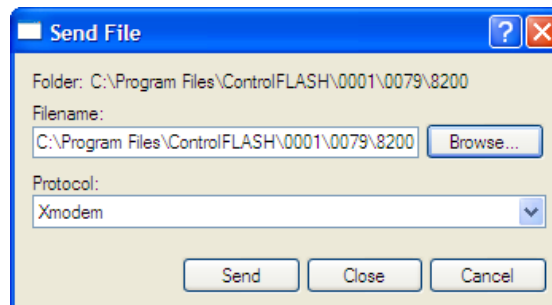


ATTENTION: Risk of injury or equipment damage exists. When you perform an update, the drive will fault if it is receiving control I/O from the adapter. Verify that the drive has stopped safely or is receiving control I/O from an alternate source before beginning an update.

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 Select File to Send window list, click on the “7657_22-COMM-P_4_001_04_Boot.bin” file. Then click **Open**. 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. Press any key to continue.

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



TIP: To cancel the firmware update at any time, press **CTRL-X**.

10. Set adapter SW8 of the DIP switches to “Down” (0 = closed). Repeat steps 3 through 9 for the “7657_22-COMM-P_4_001_04_App.bin” file. Press the **Enter** key to return to the main menu which should now show the new firmware revision of 4.001 followed by its build level.
11. Set adapter SW8 of the DIP switches to “Up” (1 = open) to return the adapter to its normal operating mode. Also, set adapter jumper J2 back to the desired “1X” (Single) or “5X” (Multi-Drive) operating mode position.

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 or later... |
|--------------------------------|--------------------------|
| DriveExplorer Lite/Full | 4.01 |
| DriveExecutive | 3.01 |
| PowerFlex 4-Class Drive | all revisions compatible |
| External LCD HIM (22-HIM-**)) | all revisions 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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