

INSTRUMENT FIRMWARE UPGRADE UTILITY USER'S GUIDE



The PSE Technology Instrument Firmware Upgrade Utility offers an automated, user friendly method to perform field upgrades to your instruments firmware. Both the instrument and software have been optimized to ensure that users can easily upgrade their instruments when new firmware versions become available. As an added benefit to our registered customers, we will attempt to notify you when new firmware versions become available.

This program uses the standard USB port to load the new firmware image file (Object Code) `XXYY_ZZ.pse` to the instruments internal flash memory. Where `XX` is the last two digits of the product model number, `YY` is the major firmware version, and `ZZ` is the minor firmware version number.

FIRMWARE UPGRADE UTILITY INSTALLATION

The program should automatically be installed on the computer when the Instrument Application Software and the associated USB drivers were installed. The installation can be verified by navigating to the short-cut within the Start Menu, `Start>Programs>PSE Technology>Firmware Update Utility`. If the program is not installed the user can install the program using the installation CD that came with the instrument.

USING THE FIRMWARE UPGRADE UTILITY INSTRUCTIONS

Use the short-cut within the Start Menu to execute the program. If everything is operating properly the following window will appear:

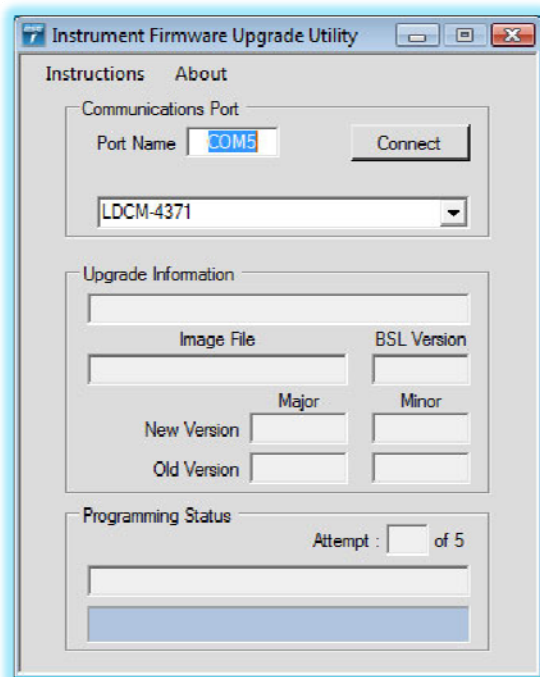


Figure 1 – PSE Firmware Upgrade Utility Screen

1. **Menu Options:** The top highlighted section contains two menu options, **Instructions** and **About**. Clicking on the **Instructions** menu item will display this user's guide in an Acrobat reader window. Clicking on the **About** menu item will display this programs about dialog box.
2. **Port Name:** Located at the top of the Communications Port subsection is the text box, Port Name. This is where the user identifies the communications port name that their specific computer has assigned to the attached PSE Technology Instrument. Enter the communications port name into the Port Name text box. Note, you must use the full port name in this text box (i.e. it must contain the COM letters and the associated port number). If you do not know the assigned port name, perform the following steps to identify the port number:
 - a. Ensure the instrument powered ON and attached to the computer USB port.
 - b. Open the Device Manager (located in "Control Panel\System" then select the "Hardware" tab and click "Device Manger") and select "View > Devices by Connection", the port name appears under the "Ports (Com & LPT)" as [Instrument Model] Device (COMx)". You should now see a window similar to the one shown below. Type your

specific port number preceded by the letters COM, COM7 as shown in the screen below, into the Port Name text box.

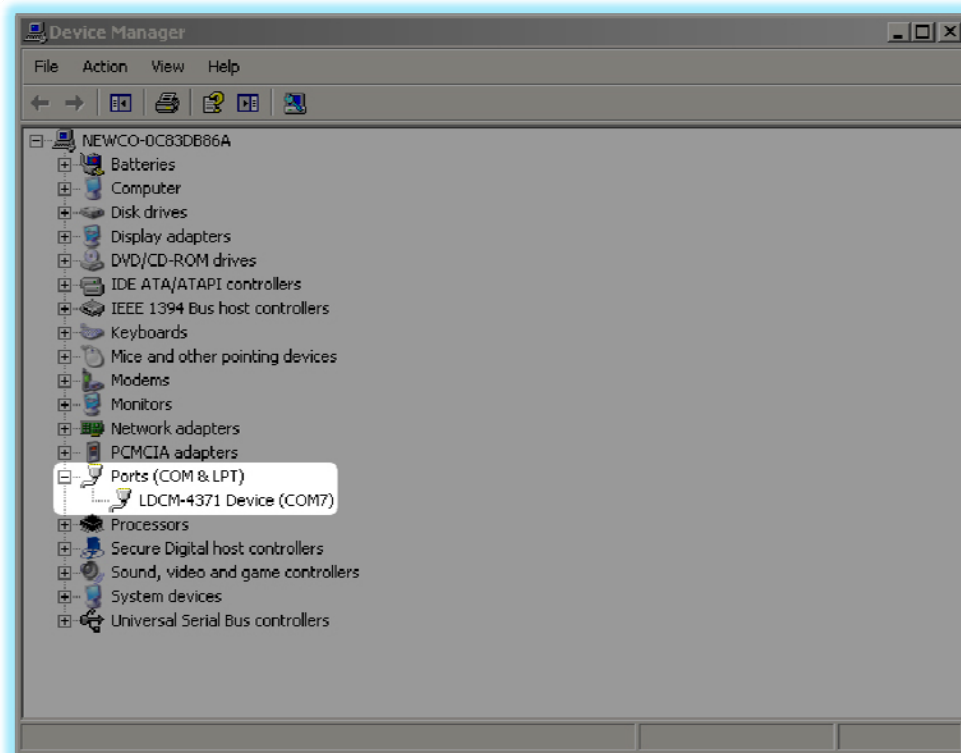


Figure 2 – Communications Port Name Identification Screen

- c. Once the appropriate COMx name has been entered into the Port Name text box, click on the Connect Button. Once the instrument is connected a standard windows file selection dialog box will be activated. Use the dialog box to navigate to the new image file that will be downloaded to the instrument.
3. **Instrument Model:** Located at the bottom of the Communications subsection is the Instrument Model drop down menu. This is where the user identifies the specific PSE Technology instrument model that will receive the firmware upgrade.
4. **Connect Button:** Located on the right-hand side of the Communications subsection is the Connect Button. Once the proper Port Name has been entered and the appropriate Instrument Model has been selected, the user can proceed by clicking on the Connect Button. This will bring up the traditional Windows Explorer file manager. Navigate to the new firmware image and click on the file. If everything is properly configured, this will automatically start the firmware upgrade process.
5. **Upgrade Information:** Once the new image file has been selected, the upgrade information section will be automatically populated with the appropriate upgrade details.

6. **Programming Status:** After the upgrade information has been populated, the new firmware image file will automatically begin downloading. As the download process proceeds the user will be informed of the status with both textual information and a status bar.
7. After the firmware upgrade process is complete, close out the PSE Instrument Firmware Upgrade Utility and power-cycle the instrument. The instrument will now be running with the newly installed firmware.

Although we have made many efforts to ensure this utility is error free and user friendly, you may experience unanticipated or unexpected behavior. This will be made apparent with pop-up warning message boxes explaining the cause of the failure. If you experience a problem during the download process, you will need to disconnect the instrument from the USB port and start the entire process over. If you are unable to troubleshoot a problem or are concerned about using this utility please contact us, we will be more than happy to help you.