MP150 Firmware Upgrade—Acq*Knowledge* 3.8.2 under Windows 2000 or XP

Before performing a Firmware Upgrade, make certain that no other users are connected to or using the MP150 you plan to upgrade. Any attempts to communicate with the MP150 via any user's Acq*Knowledge* software may affect the viability of the upgrade. Fluctuations in the power source during an upgrade may also affect the outcome.
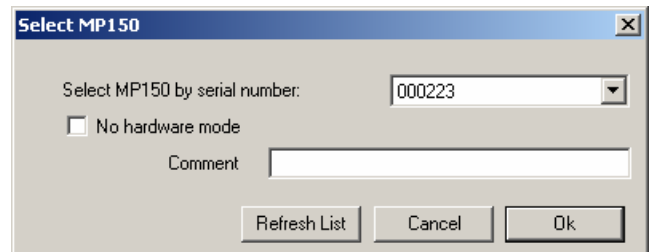
To use an MP150 with UDP communication on a network with a non-Windows DHCP server, you must use firmware 1.1.12 or greater for the MP unit to properly be assigned an IP address. This is also true for any DHCP system with non-Windows operating systems, such as Unix, Linux, Mac OS X, and other DHCP-aware devices.

- Acq*Knowledge* 3.9 uses MP menu > Update Firmware to update; see separate instructions.

MP150 Firmware Update Procedure

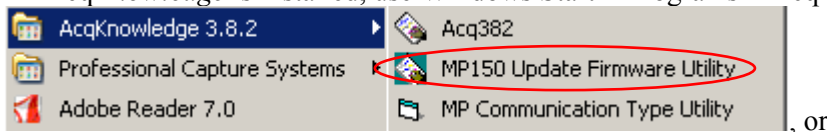1. If connected to more than one MP150, directly or remotely:
   a) Launch Acq*Knowledge* (v3.8.1 or greater) if it is not running.
   b) Click on **MP150 > Select MP150**.
   c) Select the serial number of the MP150 to be updated, make a note of it, and click OK.
2. **Exit (Ctrl-Q)** all BIOPAC applications running on your PC.
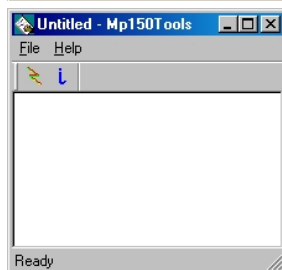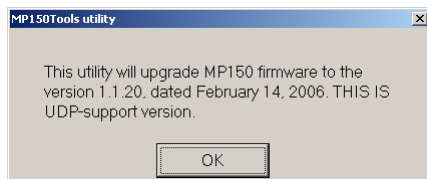3. Locate the update utility
   - Upgrade file: MP150Tools.zip   (login to download and then unzip the folder to access MP150Tools.exe)
   - or if Acq*Knowledge* is installed, use Windows Start > Programs > Acq*Knowledge* 3.8.x
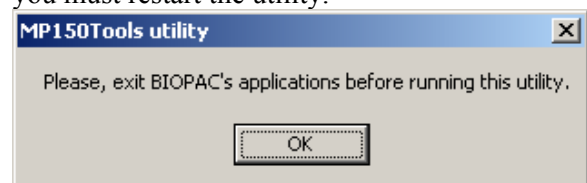
   , or
   - Browse to and open the **Acq*Knowledge* installation folder** (the default location is C:Program Files> BIOPAC Systems, Inc>Acq*Knowledge* 3.8.X), and then locate MP150Tools.exe in the folder.
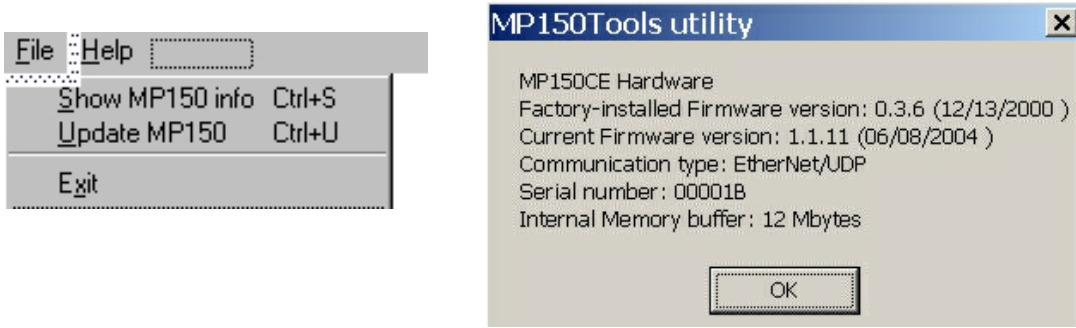4. Double-click **MP150Tools.exe** to run the utility.
5. An information dialog will be generated with the updated version of MP150 firmware that is going to be uploaded to the selected MP150. Click "OK" to generate the utility window:
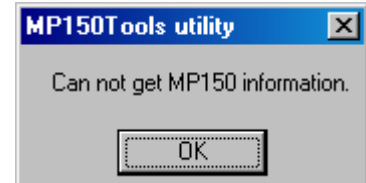
Note: If you did not exit all BIOPAC applications as required in Step 2, the following prompt will be generated. The utility will quit when you hit OK so you can exit all BIOPAC applications, then you must restart the utility.
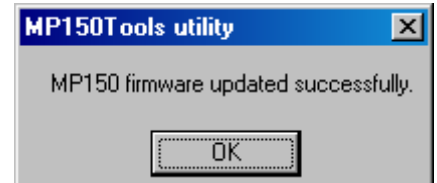
6. To confirm the MP150 selected for updating, click (or choose **File > Show MP150 info**) to generate an information dialog with the current MP150 firmware version and the Serial number of the selected MP150.

Note: If your computer is NOT (directly or remotely) connected to an MP150, an error message will be generated. Clicking on OK will exit the utility so you can connect an MP150 to your computer.

7. To begin the update procedure, click on the icon or (use **File>Update MP150**). The update process may take up to 10 seconds. During the update process, the *Activity* and *Busy* lights on the MP150 should be active as follows: BOTH ON for 3-5 seconds, then BOTH FLASH SIMULTANEOUSLY for 3-5 seconds, then a normal SET UP /SELF-TEST procedure.

8. When the firmware has been updated successfully, a confirmation prompt will be generated. Click OK.

Note: If the update could not be completed, an error message will be generated and, on the MP150 unit, the *Activity* light will be ON and the *Busy* light will be OFF. Click OK to exit the utility, and then power cycle the MP150 unit.

The MP150 will detect an incomplete upgrade or damaged firmware and will run on the factory-programmed firmware. If the Startup/Self-Test does not function normally after an upgrade error, use the Firmware Rollback Switch on the bottom of the MP150 unit.

9. Choose **File>Exit**.

10. Close Explorer.

The MP150 is delivered with a factory-programmed firmware version that is not affected by the upgrade procedure—you can always restore the original firmware with the Firmware Rollback Switch. The next time you launch Acq*Knowledge*, you can check the firmware version by clicking on **MP150 > About MP150** to generate an information dialog with the MP150 serial number and firmware version.

- If the firmware version is not as expected, repeat the Firmware Upgrade.

- If the MP150 fails to operate after downloading a new firmware revision, use the Firmware Rollback Switch on the bottom of the MP150 unit.