

### Updating Firmware on the Rabbit PLC in Endurance S-250 Control Panel Using the SHD Network Download Utility

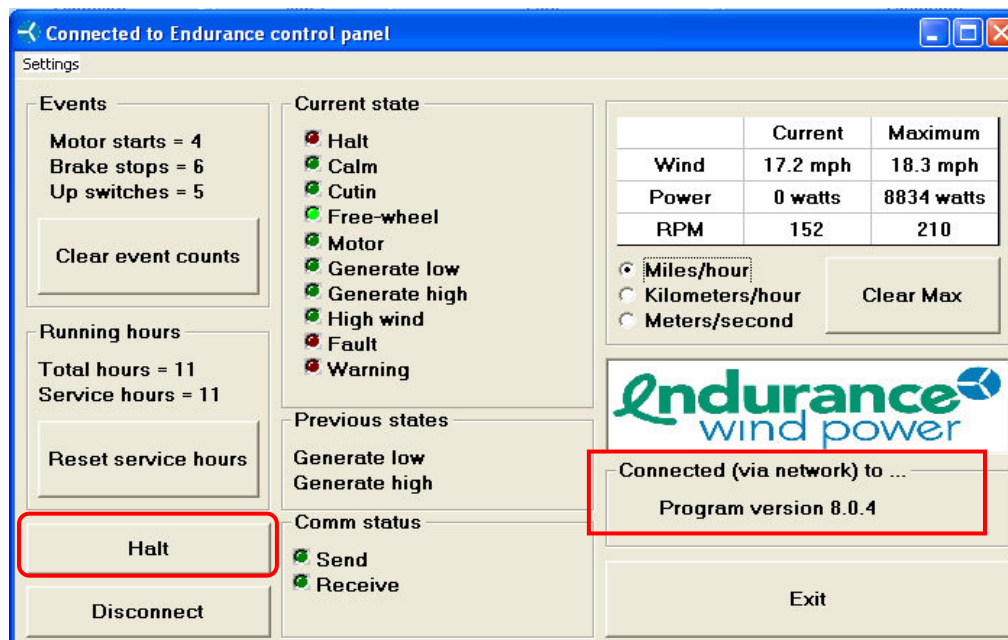
1. Go to [www.endurancewindpower.com/support](http://www.endurancewindpower.com/support) and under the heading “Firmware Upgrade Package”, Select “Firmware Upload Tool”. Select “Open”. The two files available will be as follows:
  - a. UDPDownload.exe – Download Utility Application
  - b. PDL\_Generic\_D.bin – RAM Loader fileSave the files to your PC in an easily accessible location such as your desktop.

Go back to the website and select “Current Firmware Download”. One file will be available:

- a. WINDMAIN\_nnn.bin – Updated Controller program (where nnn is 3-digit firmware version number)

Save the file to your PC in an easily accessible location.

2. Connect to the Endurance control panel using the ERI software on your PC. Ensure that you are connected and communicating with the turbine controller.
3. Halt the turbine by clicking on the HALT button in the ERI.

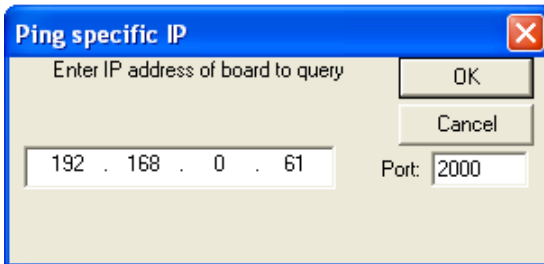


4. Select DISCONNECT.

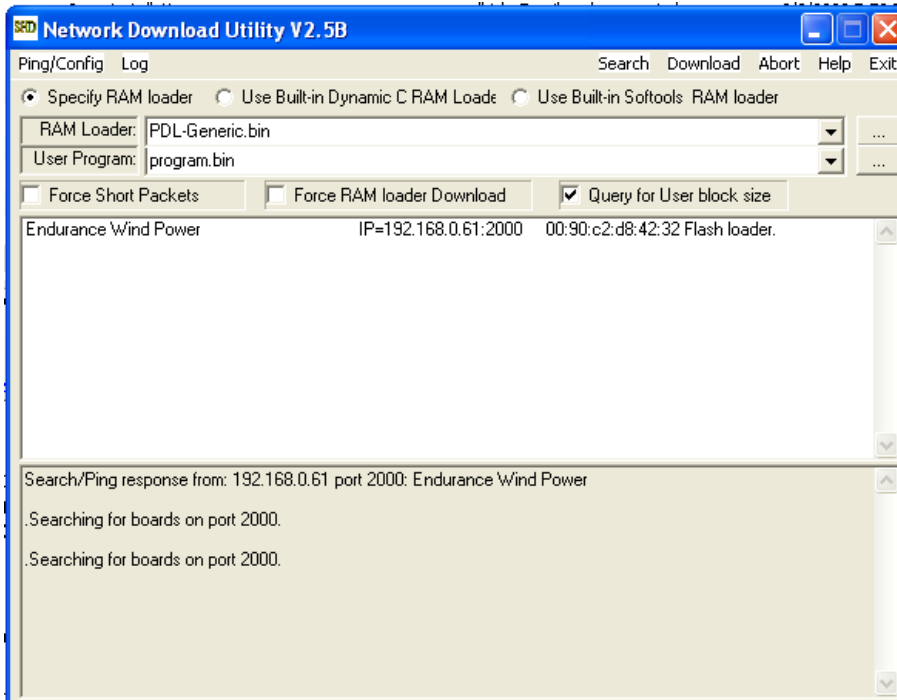
5. Open the SHD Utility by double-clicking on the SHD icon (on your desktop or wherever you copied it on your PC).



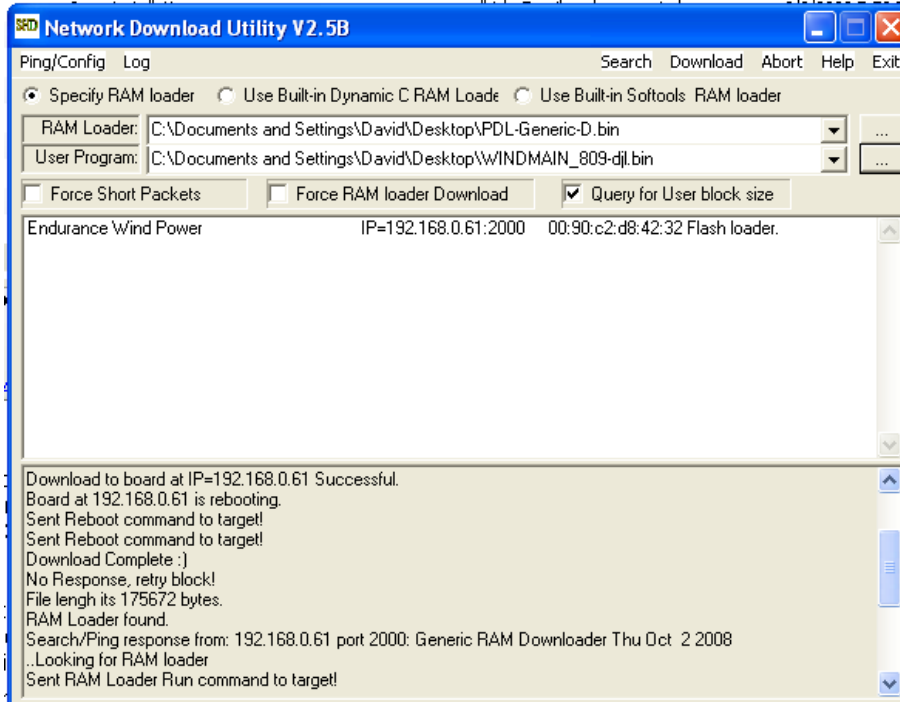
6. The SHD Utility window will open. In the upper left Click the Ping/Config menu button and select "Ping Specific IP." In the IP address field enter the IP address of the turbine controller as shown below and click OK.



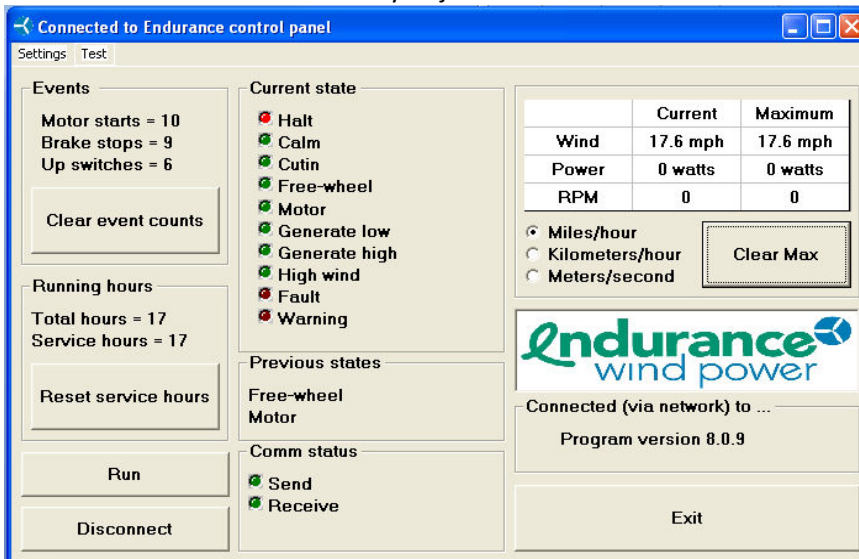
7. NOTE: On the upper right of the menu bar are 5 buttons (Search, Download, Abort, Help and Exit). These look like dropdown menu buttons, but only Help has a menu. All others are simple buttons that perform a task.  
Click on "Search" on the right side of the menu bar to look for the Endurance PLC if SHD does not find it automatically. Once found SHD will display information about it as shown below.



8. Near the top of the SHD window you will need to set the RAM Loader and User Program to the proper files. Do this by clicking on the “...” button on the right of each box and selecting the correct files as follows:
  - a. RAM Loader: PDL-Generic-D.bin
  - b. User Program: WINDMAIN\_nnn.bin
9. On the right side of the menu bar, click “Download.” The new firmware will now be downloaded to your Endurance control panel. When successful the SHD Utility will confirm as shown below



10. When complete confirm the new firmware version is running by checking the ERI. The program version number should be what you just downloaded.



11. The firmware upgrade is complete! You can exit the SHD utility