Heliodyne Pro Controller Updating Instructions

From time to time, you will need to update your Pro controller to ensure that it has the most current firmware. If your controller has been working correctly and suddenly manifests an issue, try updating the software first before contacting Heliodyne to see if this fixes the issue.

The 2nd generation software versions (versions 4.0 and higher) will allow you to choose between your existing, direct (Ad-Hoc) connection to the controller data through any wifi capable device **or** accessing your controller's performance and energy data remotely (via our website) for free. This will require either a wireless or Ethernet router (depending on what version of the Pro controller that you have), and the additional step of setting up the remote monitoring. It is preferable to do this after you have done the update. Please refer to the controller manual for details along with the video on our http://www.deltatcontrols.com website that will walk you through the remote energy set-up, if you choose to do this option. ***This website has various controller support including offering the current manuals and tutorial videos on updating your firmware. For a written version of how to update your controller, see below.***

(NOTE: UPDATING TO NEW FIRMWARE WILL CAUSE ALL SETTINGS ON THE CONTROLLER TO GO BACK TO FACTORY DEFAULTS! PLEASE TAKE NOTE OF CURRENT OPERATIONAL AND NETWORK INPUTS PRIOR TO INSTALLING NEW FIRMWARE!)

Step one for all Pro versions:

Go to: www.heliodyne.com/controls and click on the "Delta-T Downloads" link on the left hand column. Scroll down to select your specific firmware listed under the **PRO & PRO LITE FIRMWARE** section. Click on the .zip file to unzip and then save this new firmware version '.bin' file onto your computer somewhere easily accessible.

For the Pro Wi-Fi controller update:

1. If the Pro-Wi-Fi Controller is in Ad-hoc mode, connect your computer to the "DTT PRO Wi-Fi" wireless signal and in a browser window enter in the controller's default IP address: 169.254.148.50

OR

1. If the Pro-Wi-Fi Controller is in infrastructure mode and already connected to your home wireless network, open a browser window to the newly assigned IP address of the controller.
2. Click over to the "Settings" Page
3. In the "Settings" Page, under the "System" tab, click on the link: Update Software Version. The username and password will be the same as the ones to enter into the Settings page.
4. In the new window, click on the button "Choose File" or "browse". Browse your computer and enter in the '.bin' file you saved to your computer earlier.
5. Once the new software .bin file is selected, click on the "Upload" button.
6. After 1-2 minutes, a new page will pop up with the message "Firmware Uploaded Successfully".
7. On this new page, click on the "INSTALL" button.
8. Once you have clicked on the "INSTALL" button, then page will become unresponsive. The controller is now installing new firmware and will switch back to Ad-Hoc mode. Heliodyne suggests disconnecting from whatever wireless signal you are on, then reconnect back to the "DTT PRO Wi-Fi" wireless signal to access the controller.
9. Verify the settings in the controller are as required. Please refer to the controller manual section 3.0 for more guidance on how to set the controller back onto Infrastructure Mode.

For the Pro-LITE controller update:

Follow the same directions as above except make sure that the .bin file that you download from the Heliodyne Website is the one specific for the Pro Lites.

The Pro Lites also have a connection on the board that allows for a direct connection to the computer that will be used to update the controller via an AB printer cable that is easy to source.

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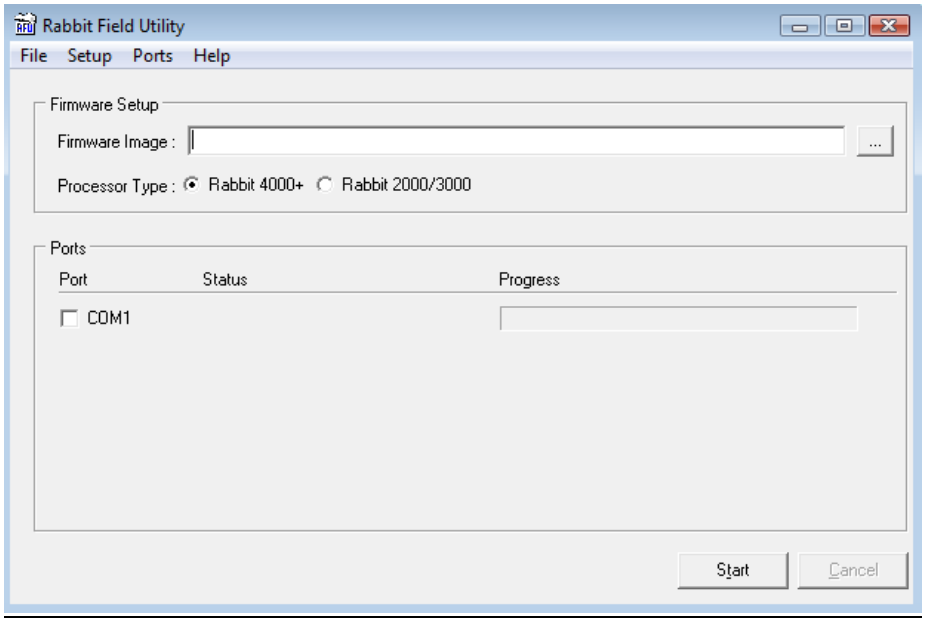
For the Ethernet controller update:

Note: Updating the Ethernet controllers involves using a special 2 part cable available from Heliodyne. If you are updating the Ethernet controller, make sure the computer is a PC as the executable file doesn't work with MAC computers without VMware software.

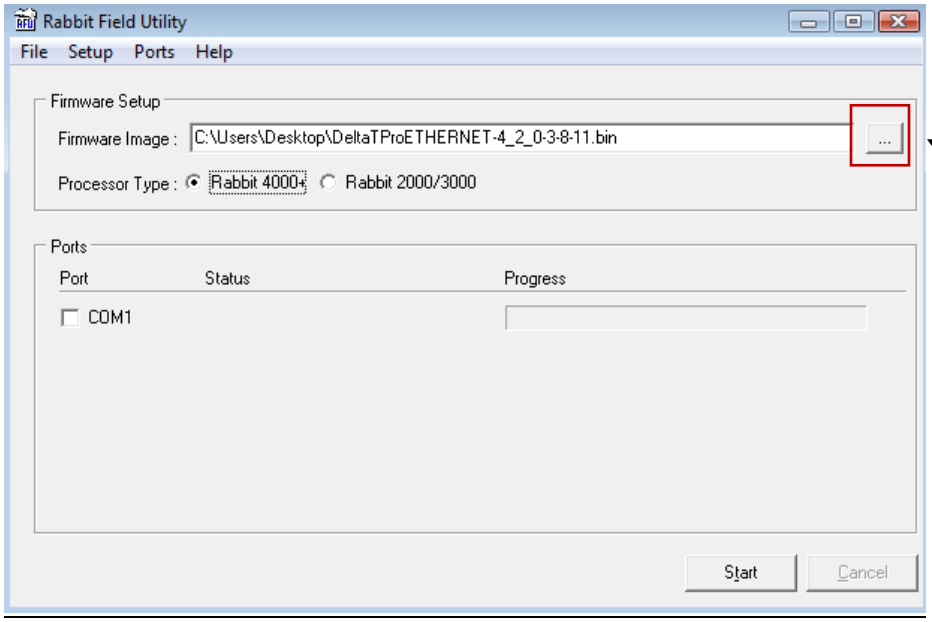
1. Go to www.heliodyne.com/controls and click on the "Delta-T Downloads" link on the left hand column.

2. Scroll down and click on the link "Delta-T Pro & Pro Lite Field Upgrade Utility". Follow the steps in the installation wizard to save the Field Upgrade Utility Program to your computer.

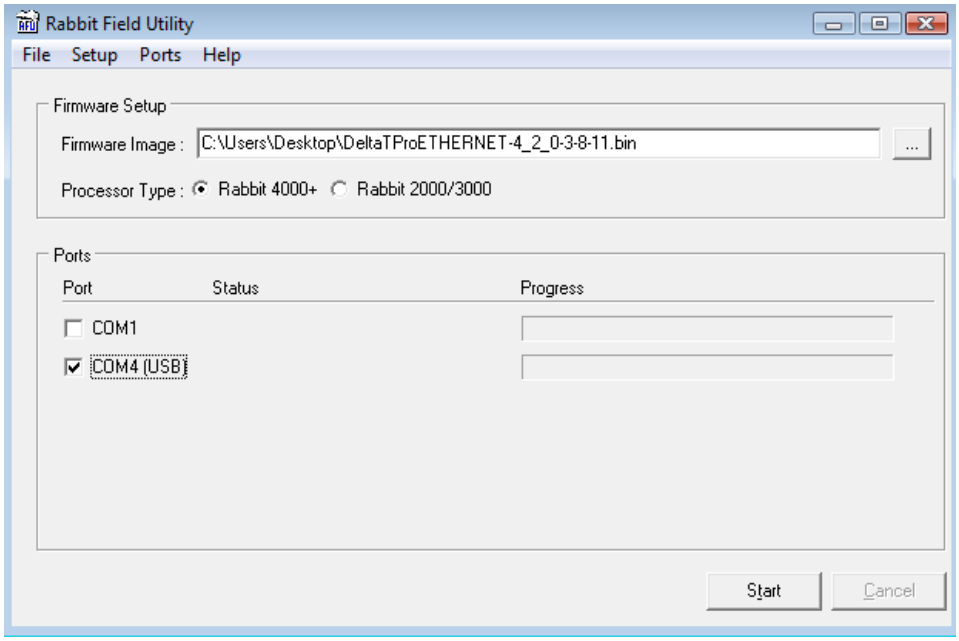
3. If the program does not automatically open up at the end of installation, go to your start menu and open the program named "Delta-T Pro Upgrade Utility". This is an executable program so it will NOT work on MAC computers without VMware. Once opened, it should look as below:



4. For the Firmware Image box, click on the "…" button on the left hand side and browse your computer to find the new Ethernet firmware .bin file you saved earlier:



5. Next, take out the 2-part Ethernet update cables available from Heliodyne. Connect the USB port to your computer. You should see a new port show up under the list of ports to use with a "(USB)" label next to it. Select to use this port:



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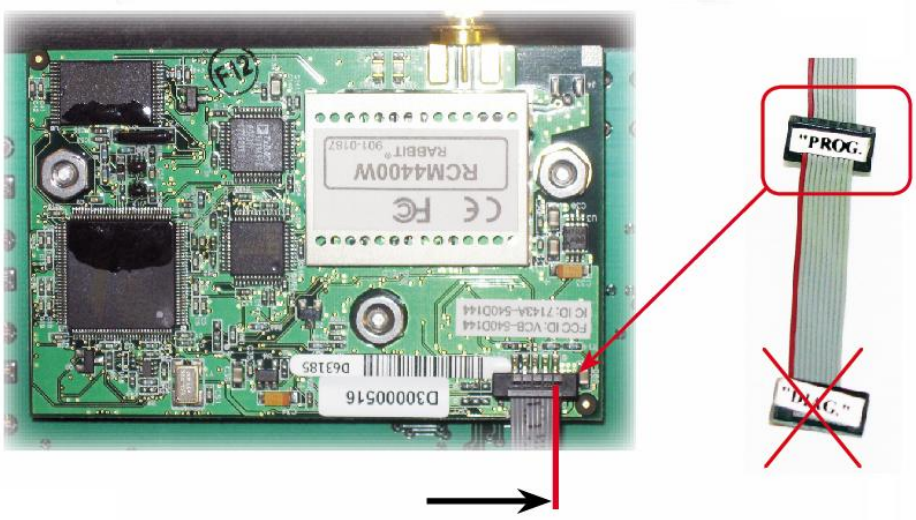
6. To connect the cables to the Ethernet controller, you will need to disconnect power to the Ethernet controller and unscrew the main controller board from the box (there are 4 screws attaching the board to the controller box) to access the smaller RCM board on the backside. Connect the gray ribbon end labeled “PROG” into the RCM board of the Ethernet Controller, with the red colored ribbon on the outboard edge of the controller connection. (NOTE: The ribbon end “PROG” connection MUST be used, NOT the”DIAG” connection!)



7. Reconnect power to the controller.

8. Click on ‘Start’ on the Rabbit Field Utility Program to begin the software loading.

9. If the software loaded correctly, you will see the progress bar at 100% and the ‘Elapsed Time’ pops up under the status.

10. After 100% progress is reached on the Rabbit Utility, once again disconnect the power from the controller.

11. Remove the programming cable from the back of the controller and the USB cable from your computer.

12. Reconnect power and login to the controller using a cat-5 cable to verify the settings in the controller are as required.

13. If using Infrastructure Mode, the controller may have been reset back to its default networking settings; see section 3.0 in the controller manual to reestablish back in infrastructure mode.