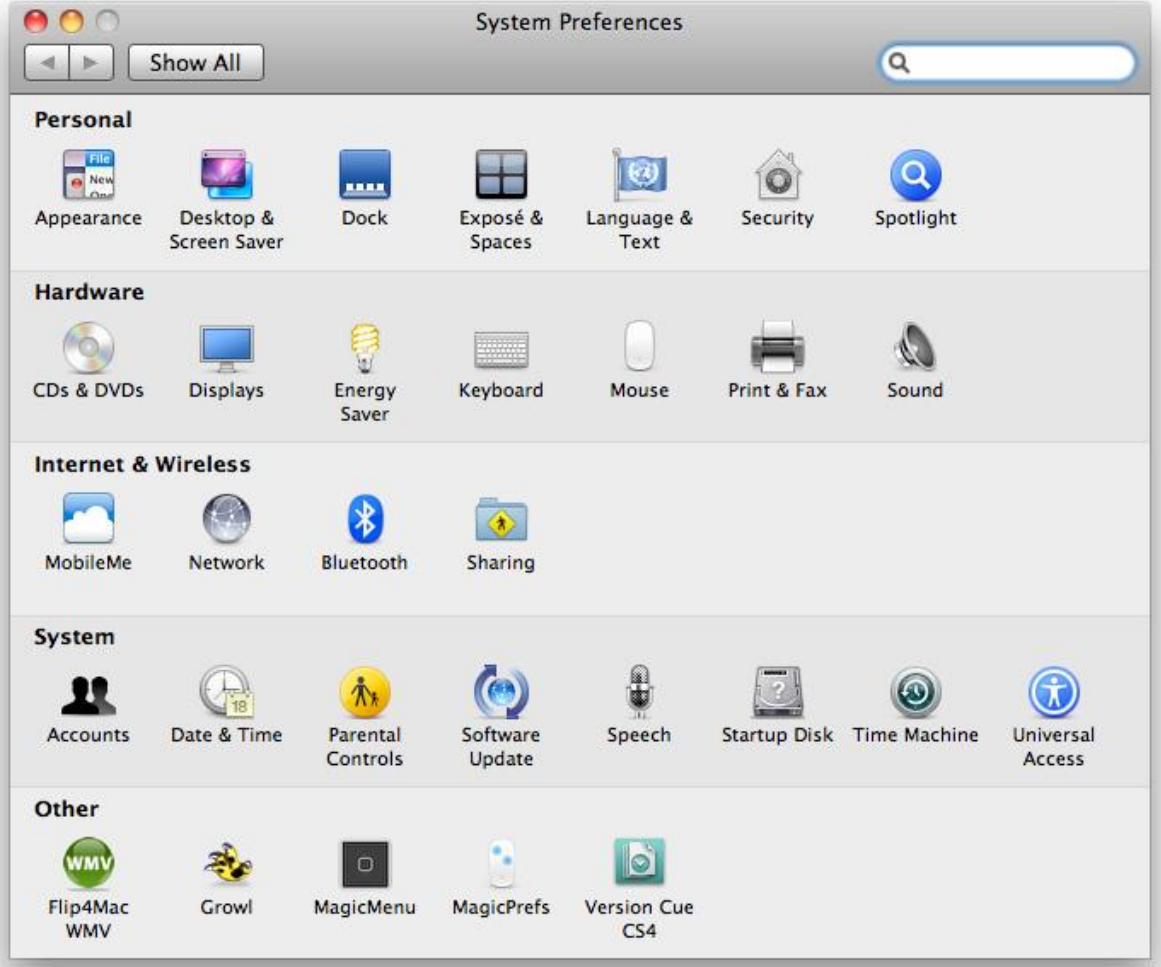
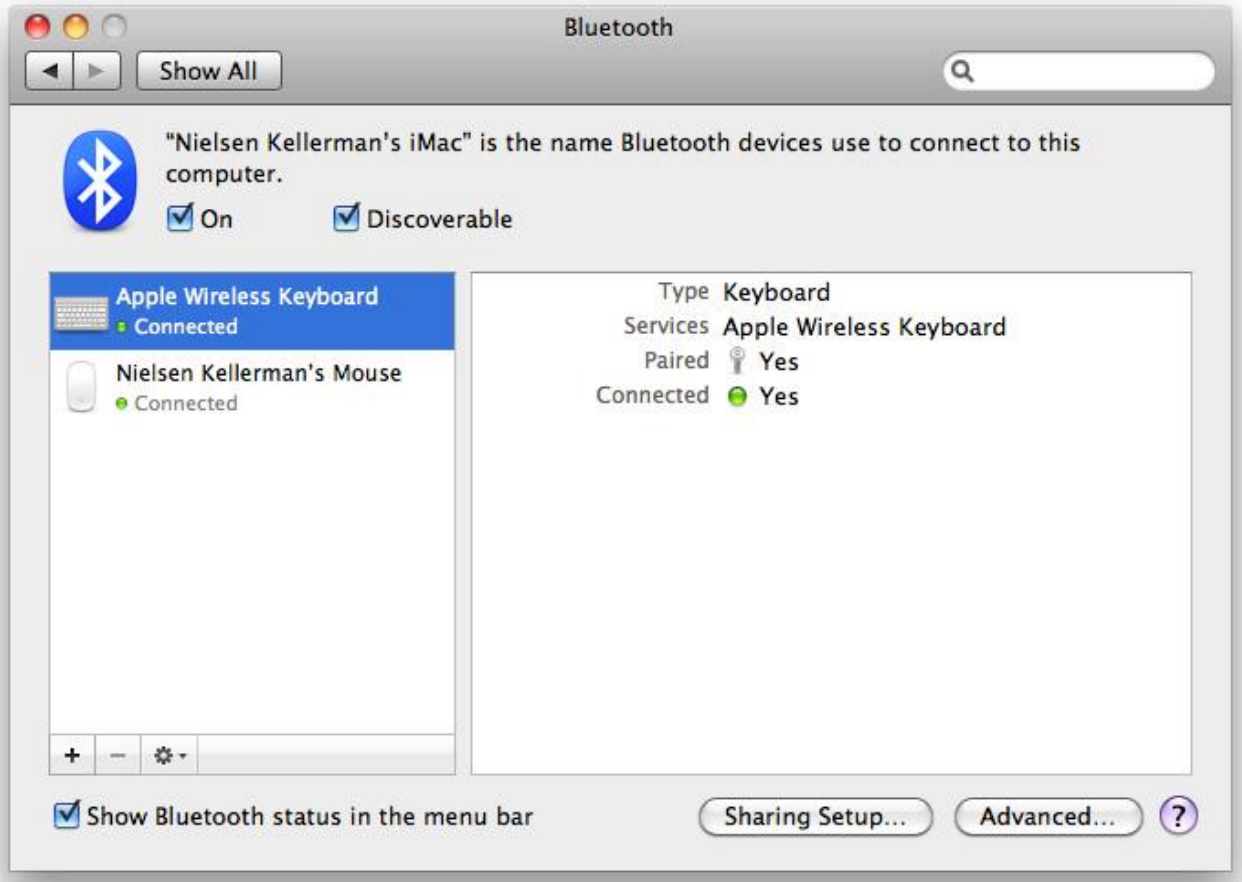
Connecting your Kestrel 4xxx Series to a MAC

System Preferences



Go the System Preferences and click on the Bluetooth setup under Internet & Wireless

Bluetooth Setup – Add Device



Click the '+' symbol at the bottom left of the window to add a new Bluetooth device.

Note: Make sure your Kestrel is on and Bluetooth is turned on on your device.

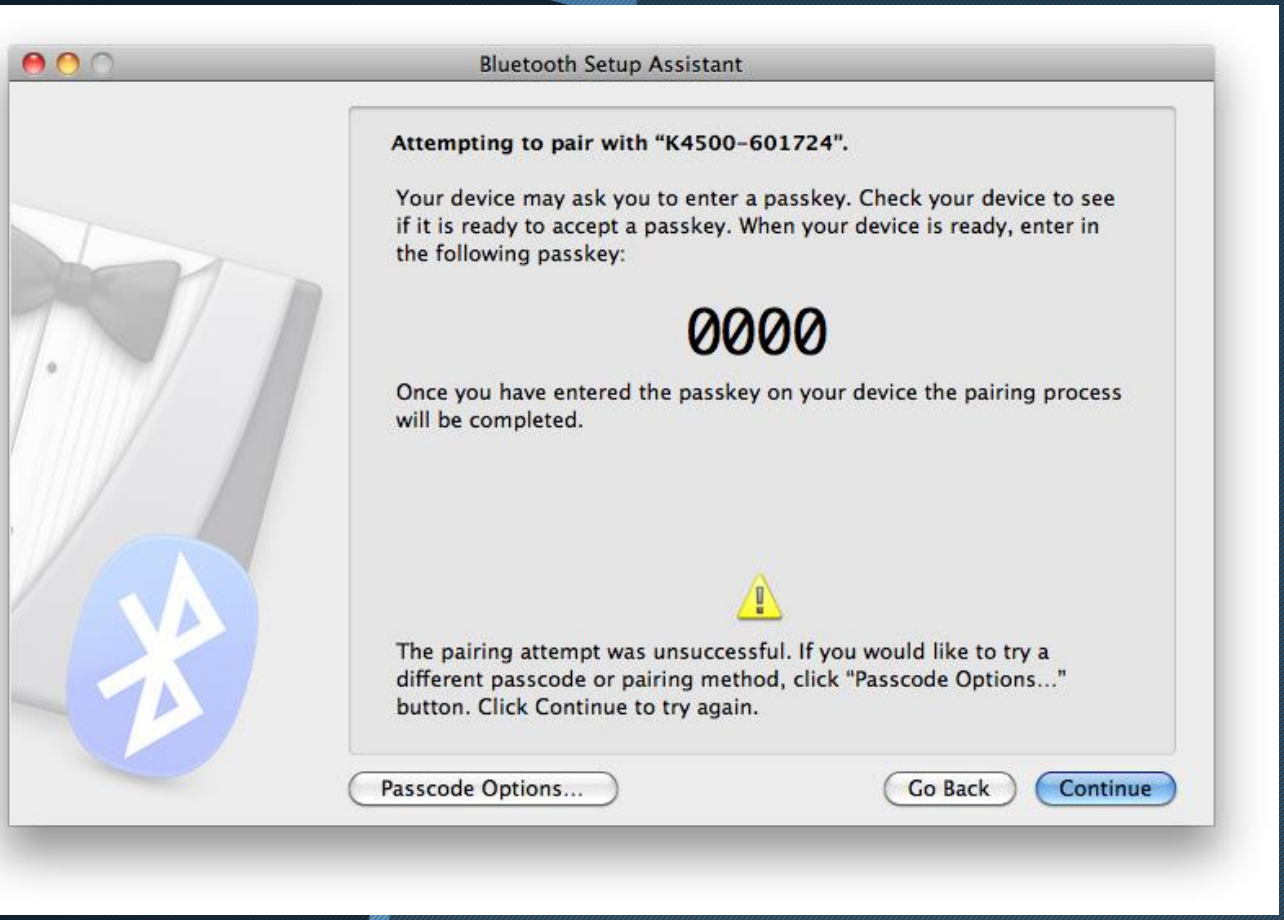
Setup Assistant

Wait as your Mac finds all Bluetooth devices within range. Select you Kestrel, the numbers will correspond with the ID number under the Bluetooth --> Info menu on your Kestrel.

Pairing

At this point your Mac will attempt to pair with your Kestrel. (It most likely will not)

Pairing Code Setup

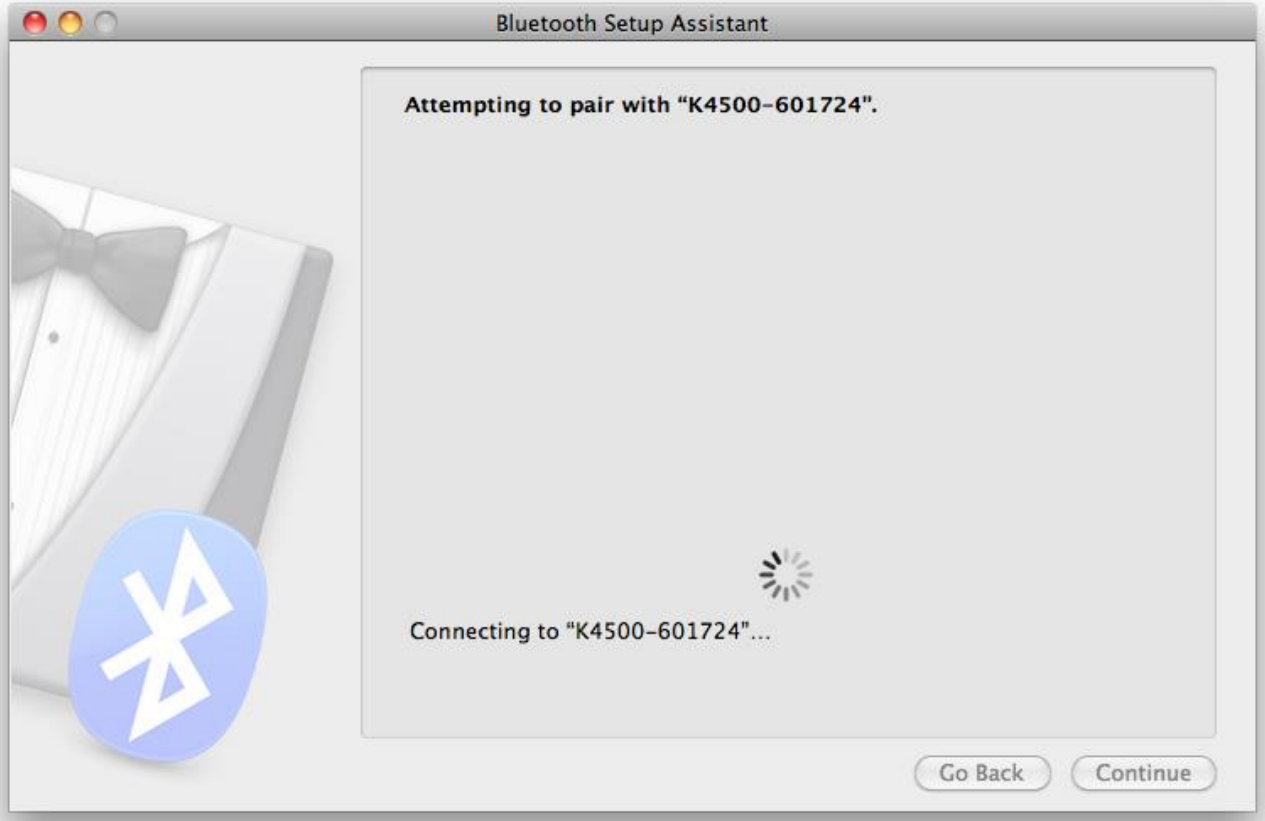


You will reach the warning window that requests the Passcode to your device. Click the 'Passcode Options...' button at the bottom left of the window

Enter Pairing

Select the 'Use a specific passcode:' option and enter the unique passcode assigned to your Kestrel, which can be found under the Bluetooth --> Info menu of your Kestrel labeled PIN. Hit the 'OK' button.

Retry Pairing

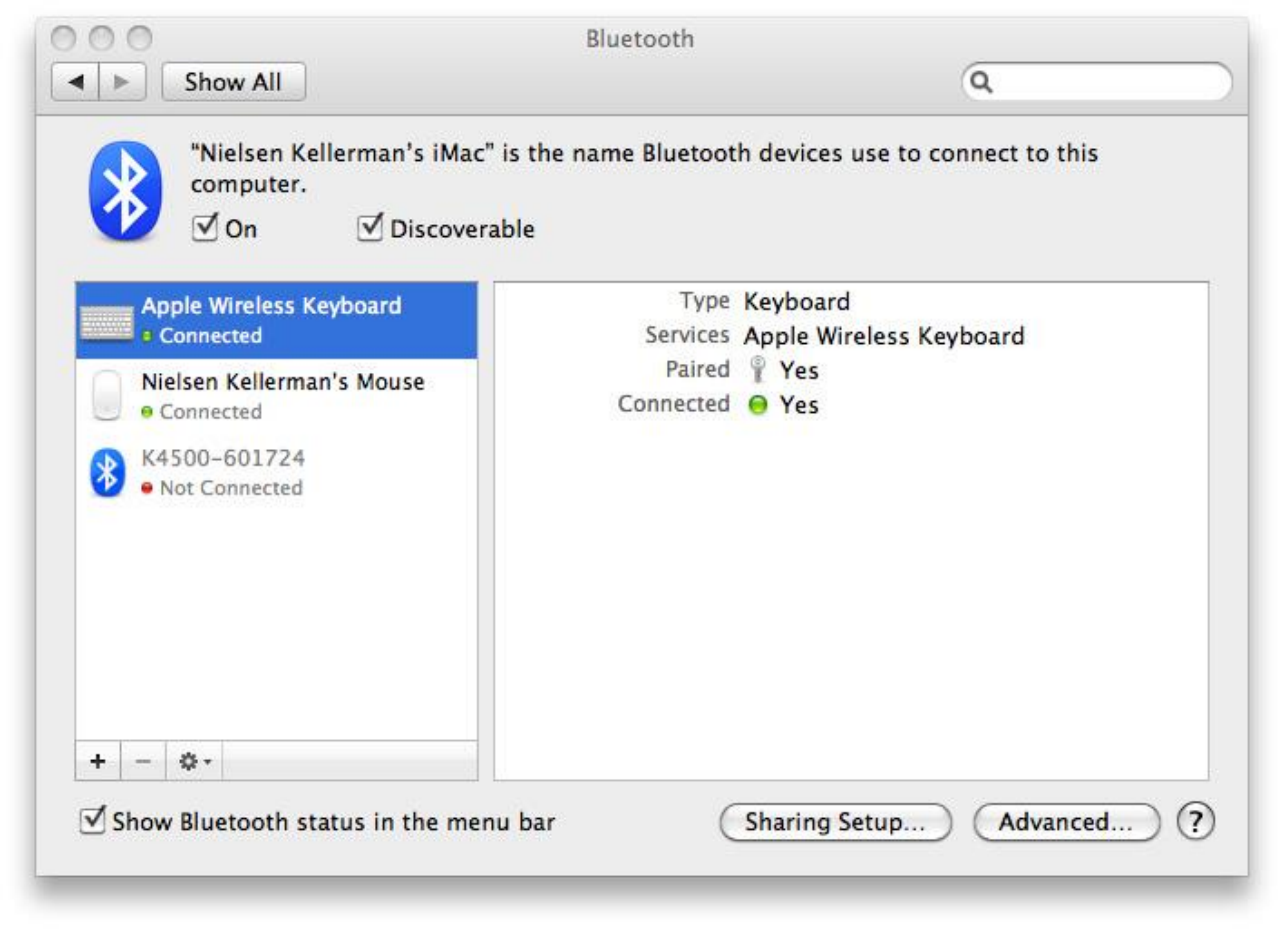


Your Mac will once again attempt to pair with your Kestrel.

Pairing Complete

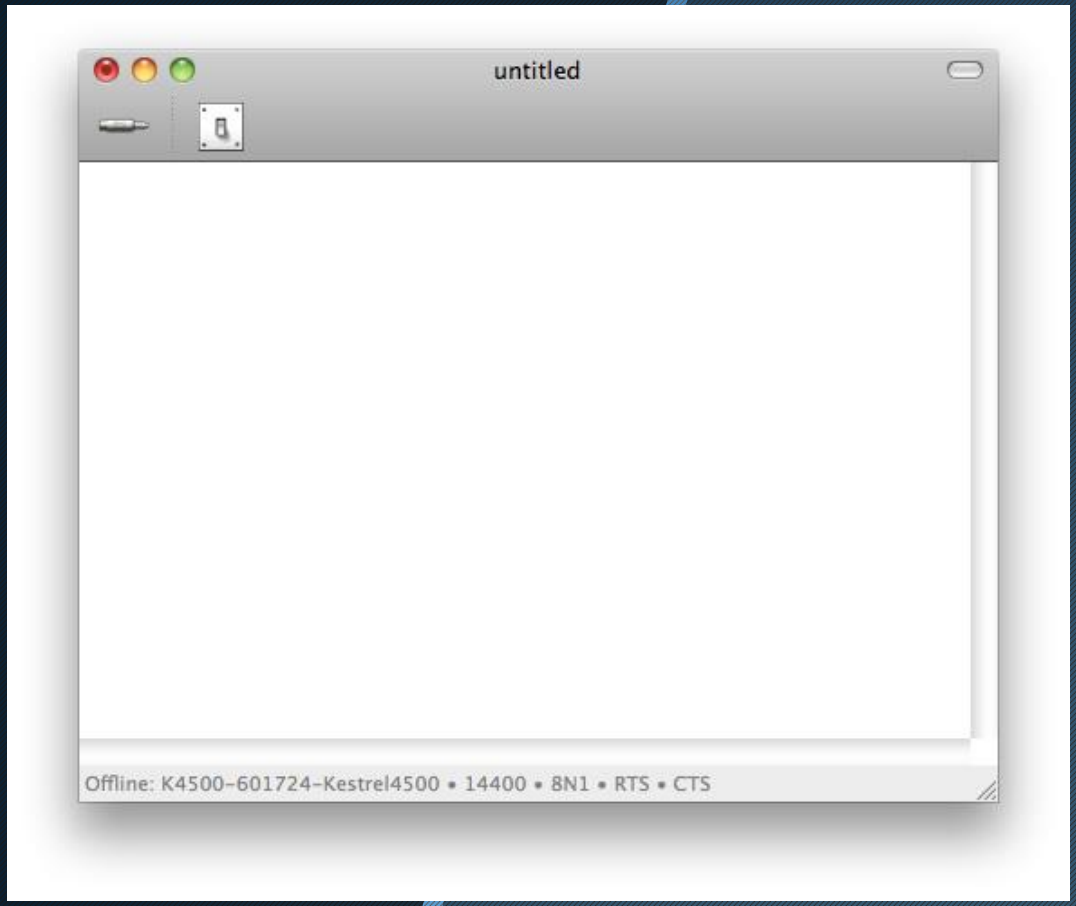
Your Bluetooth Kestrel should now be successfully paired with your Mac. Hit the 'Quit' button to complete setup.

Bluetooth Device List



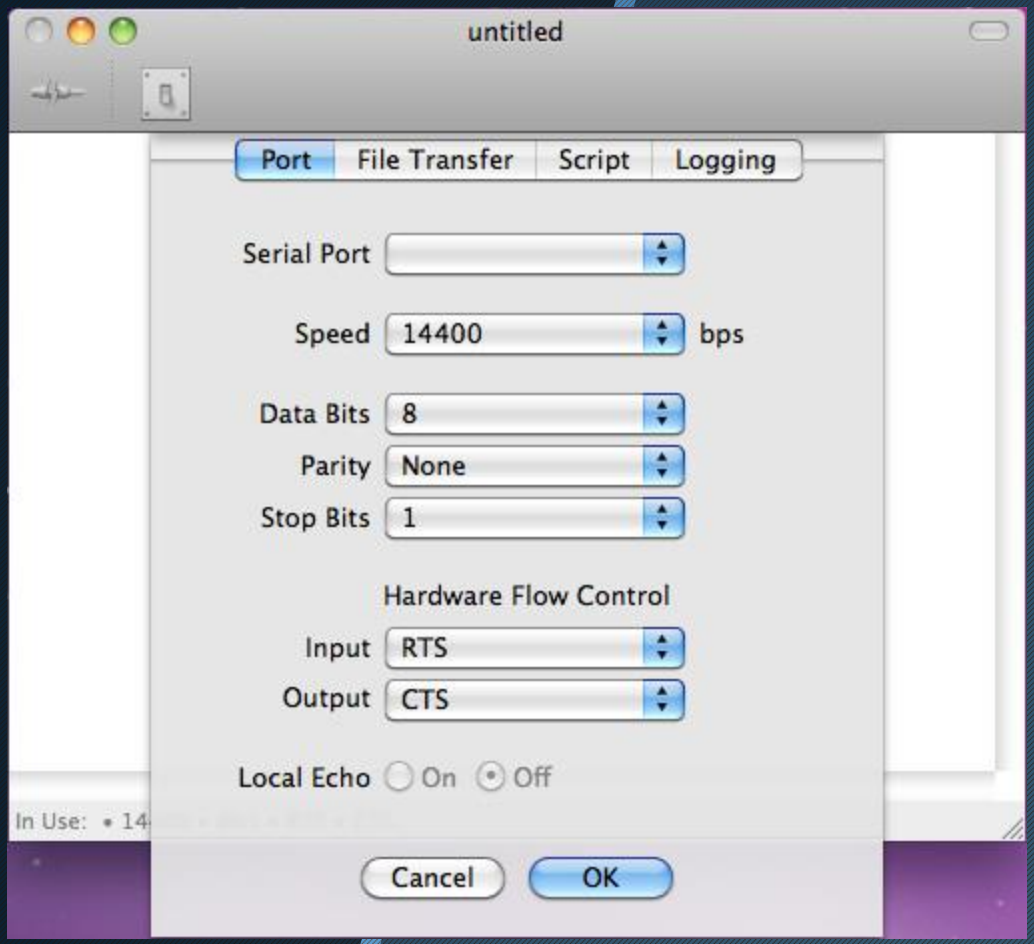
You should now see that your Kestrel is listed along with the other Bluetooth devices paired with your Mac. It should say 'Not Connected' under your device.

Serial Terminal Emulator



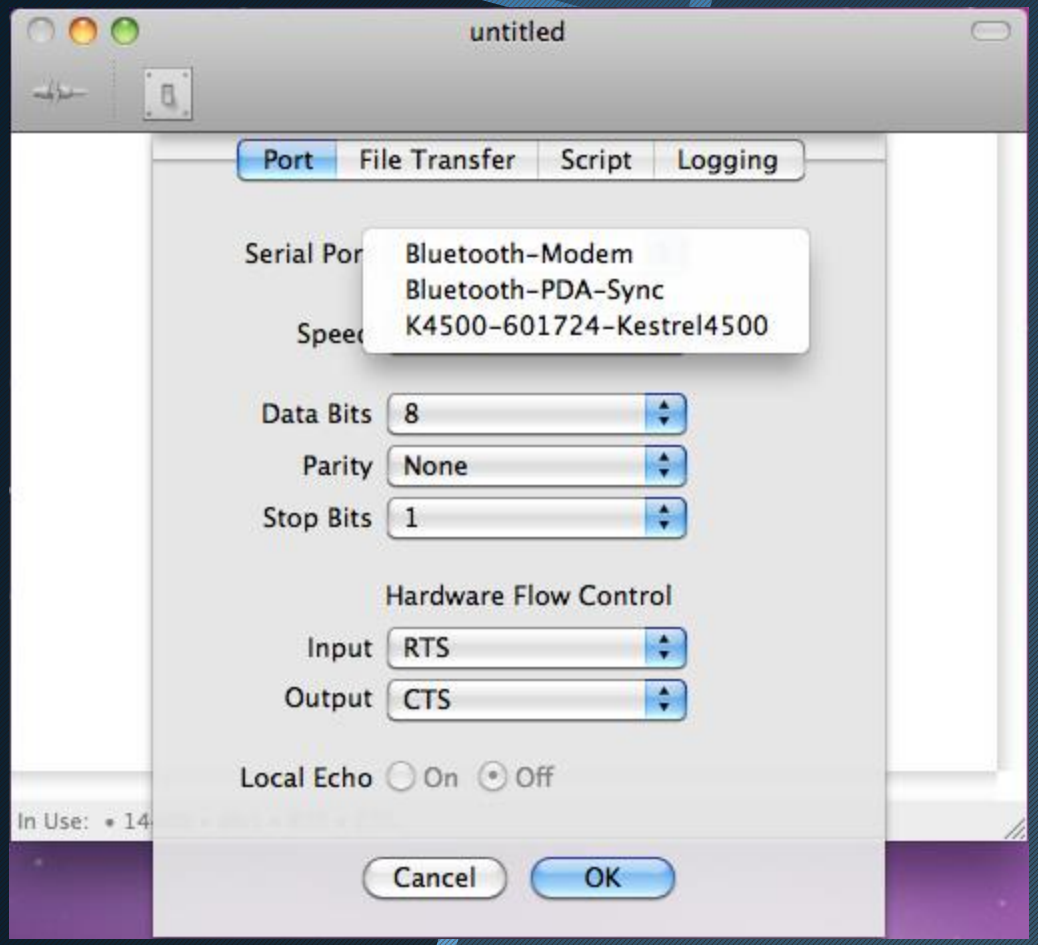
To communicate with your Kestrel to pass it commands and get information from it, you will need a Serial Terminal Emulator for Mac. Some include goSerial (Shown in this tutorial) or ZTerm. Go to the setup screen (may differ with other software) by clicking on the light switch button at the top left.

Device Setup



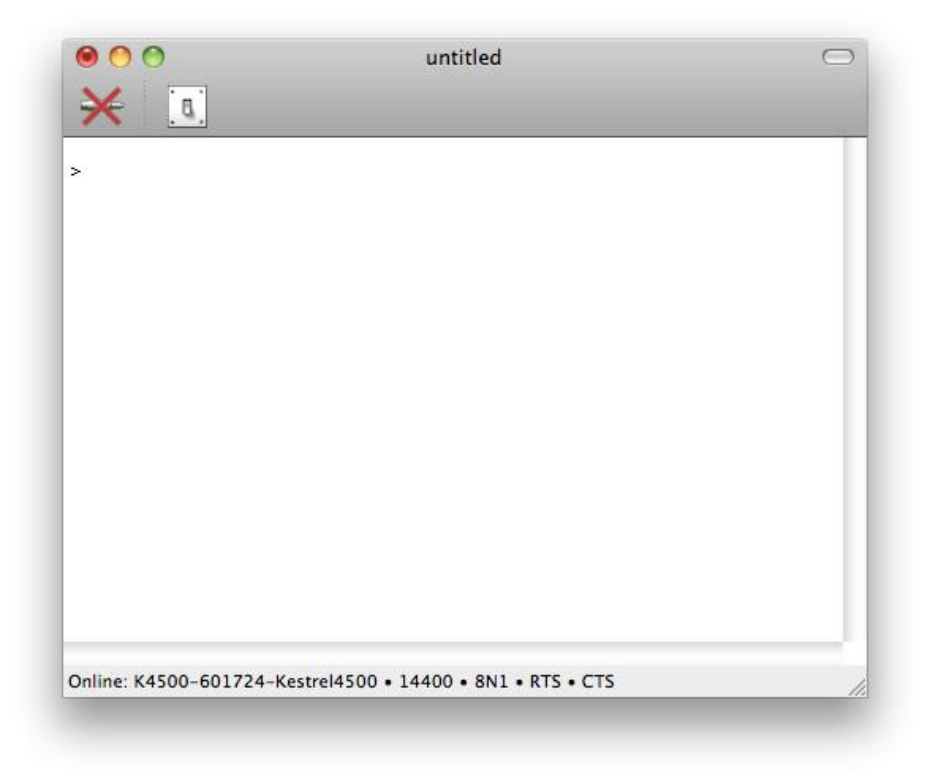
Under the 'Port' tab you will see a list of dropdown menus. Select your device from the 'Serial Port' dropdown menu. You should not need to change any other option to communicate with you Kestrel.

Select Serial Port / Device



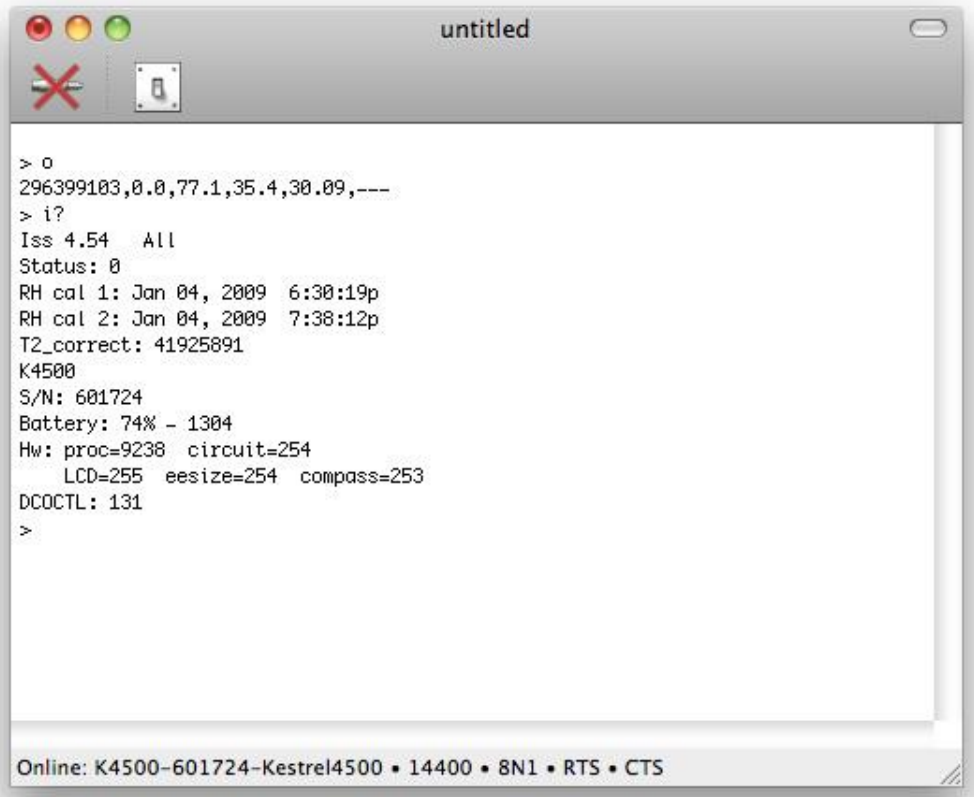
After selecting your device, hit the 'OK' button.

Terminal Blank Session



On the main screen of goSerial you will need to open the connection with the Kestrel by clicking the cable icon at the top left of the window. After the connection is established it will show an 'X' over the button that can be used to close the connection. It will also show the first '>' character in the text window to execute your first command.

HyperTerminal Commands



As shown here,
the **O** (not zero) command followed by a carriage return will provide a single string of real-time data with no units attached;

the **P** command will return a real-time string (updated at 1 Hz) of the same measurements;

the **S** command will return a full string of all the measurements, including units.

Lastly, the **B** command will perform a ‘data dump’ and copy all the data from the Kestrel to the HyperTerminal window.

This data can be cut and pasted into a word document (to be saved as a .txt file) and then imported to Excel as a comma delimited document.