Macintosh Product Operation Validation

Q: My computer is not recognizing my GPS receiver after I installed the enclosed drivers. What do I need to perform to verify my receiver is functional?

A: Under rare circumstances there will be driver recognition or even communication conflicts presented after driver installation steps are fully completed as described by the user's manual. Effects such as this can be immediately addressed, a step-by-step troubleshooting instructional guide is provided below to assist and perhaps solved your current problem.

GPS Driver Verification

In the initial stage, you need to identify if the appropriate drivers are loaded. Two good sources to determine that your device's driver is properly installed are in System Profiler and System Preferences in the Operating System. A full description of instructions of how to access this handy information is provided below.

First, shut your computer down, connect GPS receiver to your USB port and boot your Macintosh computer.

Second, access the System Profiler utility. Select the blue apple icon on the top left hand side of the Apple menu. Then, select the following "About This Mac"->"More Info..."-> Hardware->USB to display device's detection. Under USB Device Tree, you will view "USB Device" this pertains to your GPS USB receiver. Driver information can be found under USB Device window. Vendor Name, Speed, Product ID, and Bus (mA) will be provided.

If no information is provided, this is an indication that no drivers are currently installed for this device to operate properly. For complete installation instructions use the Mac Install .pdf .

Mac OSX Install Guide (.pdf)

http://www.usglobalsat.com/downloads/TN-200P/TN200p mac manual.pdf

Mac OSX TN-200 Driver (.zip)

http://www.usglobalsat.com/downloads/TN-200P/macdriverpl2303 1.0.8b4.zip

Finally, under System Preferences, select Network, Show, and Network Port Configurations. Your device will appear as an "usbserial" device in the Port Configurations box. This completes and confirms that your GPS USB drivers are fully installed and operational.

GPS Test Utility

In the next stage, a GPS test application will be downloaded and used to view the receiver's activity or can be compare with your current loaded mapping application. This GPS Info program utility will provide you with viewable GPS data information needed for full receiver functionality validation.

You may download this utility at the link provided below.

Mac OSX GPS Utility (.dmg)

http://www.usglobalsat.com/downloads/Mac_GPS_Utility.dmg

First, launch the GPS Utility program this will display GPS coordinate data. Select "Settings" from the selections, a small window will appear with Port, Rate and Units fields. Configure the application settings to the following: **Port:** /dev/cu.usbserial **Rate:** 4800 Units: Miles Then you may re-select the "Settings" selection to close configurations window. Select "Monitor" from the selections, a small window will appear with raw NMEA data strings displayed across at a rate of less than one second intervals.

Select "Satellites" a real-time window satellite information can be viewed. Within two-minute window period, your first GPS fix should be acquired. This Satellites window will provide the user with realtime satellite visibility and green graphical signal strength representation from real-time satellites synchronization data. Note: Three satellites are required for two dimension positioning. Two dimension positioning reports position only. Four satellites are required for three-dimension positioning, that is to say position and elevation.

Route 66

Once verification of your hardware's performance is completed, exit GPS Utility program and proceed by launching Route 66 application. Next, select the furthest right red icon (GPS status window) from the horizontal listed icons. This action will provide you with a window, select "OK" to launch GPS configuration window. Begin by selecting "Edit Properties", in result, GPS Properties will be displayed. Set GPS connection settings to the following:

"/dev/cu. usbserial" "4800"

This completes configurations needed for this application. Now, you may view the "status" field in the GPS window with the real-time satellite acquisition status, in addition, to three dimensional coordinates.