



Connecting GPS Units to DNRGPS

Abstract

This guide gives an overview of how to connect serial port and USB port GPS units in use in Indiana to a computer for use with DNRGPS. It is targeted at connections with Garmin GPSMap 76(s) units and Oregon 550(t) units.

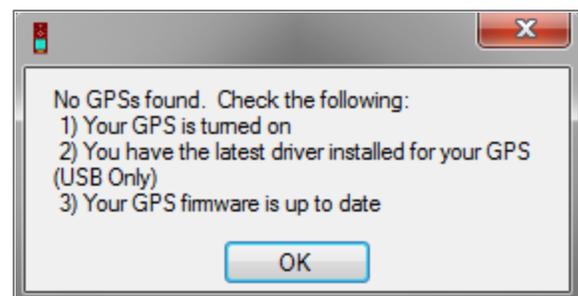
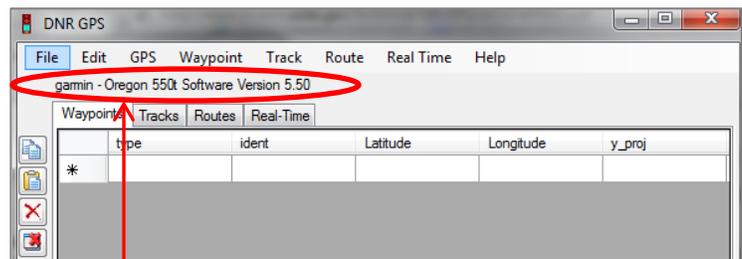
Oregon 550(t) Steps: Set GPS interface to Garmin Spanner (if needed) – Connect GPS to USB port on computer – Answer the Mass Storage Mode prompt on GPS unit – Accept driver installation on computer, if prompted – Open DNRGPS – Click GPS → Find GPS

GPSMap 76(s) Steps: Set GPS interface to Garmin – Connect GPS unit to computer via parallel port or via USB port using a parallel to USB converter – Open DNRGPS – Click GPS → Find GPS

Details

Connecting an Oregon 550(t)

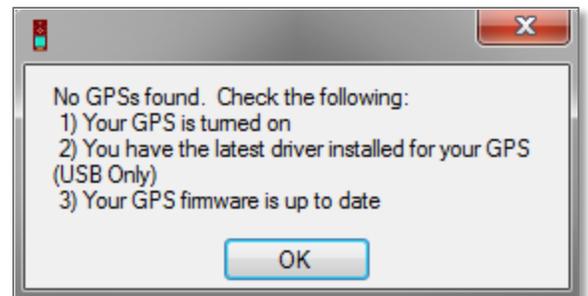
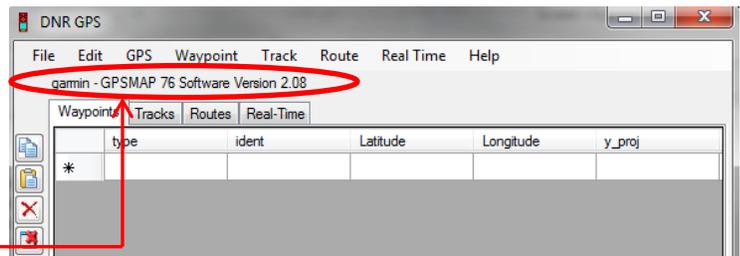
1. Without being connected to the computer, **turn on** the Oregon GPS unit
2. On the Oregon GPS unit, go into **Setup** → **System** and make sure **Interface** is set to **Garmin Spanner** mode. If it is not set properly, **press** the **Interface** button and select **Garmin Spanner**.
3. **Exit** the setup menus and turn **off** the Oregon GPS unit.
4. **Connect** the Oregon GPS unit to your computer. The preferred USB port is any USB port directly on the computer. Docking station USB ports can be used, but are the secondary choice.
5. Once connected the Oregon GPS unit will power on and show the following prompt: “**USB Cable Detected. Would you like to go to Mass Storage?**” If you want to connect for data transfer, **press Yes**. If you want to connect for real time data streaming into DNRGPS and ArcMap, **press No**.
6. On your computer, Windows may be trying to install the driver and will display status messages to that effect. Wait until any such messages indicate driver installs were completed.
7. On your computer, **Open DNRGPS**.
8. In **DNRGPS**, **click GPS → Find GPS**. DNRGPS will scan all possible ports.
9. When **DNRGPS** finds your connected GPS unit, it will display the name of the unit just beneath the primary menus.
10. If a GPS is not found, you will see this error message instead. See the Troubleshooting section.





Connecting a GPSMap 76(s)

- Without being connected to the computer, **turn on** the GPSMap 76(s) unit.
- Press Page** twice to cycle past the startup screens. **Press Menu** twice and then use the rocker button to select the **Setup** menu.
- Use the rocker button to go to the **Interface** tab and then update the **Serial Data Format** entry. Select **Garmin**. You will need to change this back for data collection modes when in the field. **Exit** the menus and **turn off** the GPS 76 unit.
- Connect the GPS 76 unit to the computer using a parallel port connection or a parallel to USB port converter. The preferred port is a serial port if your computer or docking station has one; otherwise use a USB port directly on the computer. A docking station USB port is also acceptable but should be the last option.
- On your computer, Windows may be trying to install a USB driver if you are using a parallel to USB converter. Wait for any messages to indicate that installs were completed.
- On your computer, **Open DNRGPS**.
- In *DNRGPS*, **click GPS → Find GPS**. *DNRGPS* will scan all possible ports.
- When *DNRGPS* finds your connected GPS unit, it will display the name of the unit just beneath the primary menus.
- If a GPS is not found, you will see this error message instead. See the Troubleshooting section.



Troubleshooting

- Q1: When connecting my Oregon 550(t) using these instructions, DNRGPS still does not find the Oregon unit. What should I do?
- A1: Make sure the Oregon unit is not displaying the Mass Storage mode prompt. Also, try a different USB port on your computer. If the problem persists, contact the State GIS Coordinator for assistance.
- Q2: When connecting my GPSMap 76(s) to the computer using a parallel to USB converter, DNRGPS still cannot find the unit. What should I do?
- A2: Make sure the GPS interface mode is set to Garmin. Otherwise, the most likely problem is that the driver for the parallel to USB converter is missing or corrupt. Contact your ITS specialist and ask them to connect the GPS unit to the computer while they are logged in so that they can accept the default Windows driver install. If you or your ITS specialist have further questions, contact the State GIS Coordinator for further assistance.