

## Robot Tracking

In addition to downloading historical GPS data into your computer for various applications, it is possible to obtain GPS data in real time.

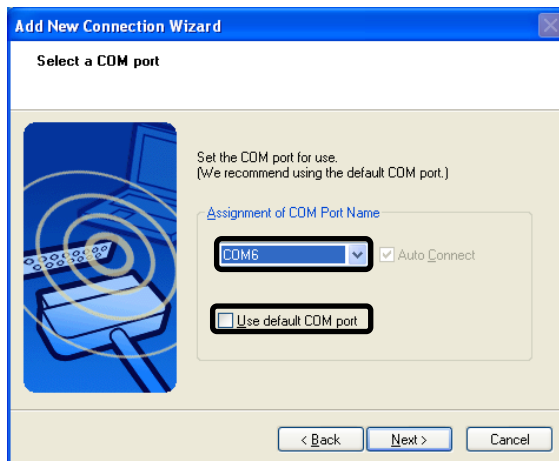
### Helper's Guide

#### How to Prepare

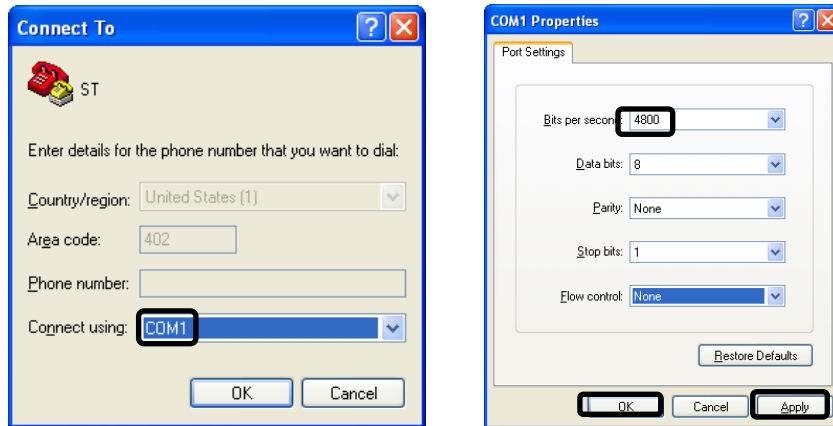
Make sure all the hardware works properly. Set up Bluetooth connection: go to Start > All programs > Bluetooth > Bluetooth settings to create a new connection. Click the New Connection button and then choose Custom Mode to select the com properties of your Bluetooth device as shown below.



Make sure data logger is on. The set up wizard will automatically detect your data logger. Click Com port setting .Uncheck use default COM port and choose Com 6 (or another available port) for this activity. After you set up the wizard don't forget to right click and connect to activate the Bluetooth connection. Your Bluetooth connection should be as indicated below.



To check connection to your computer click Windows Start > All programs > Accessories > Communications > HyperTerminal. Name your hyperterminal file and click OK to set up the port as shown below. Click OK to set up the com properties as indicated below. Hit Apply and then OK.



If properly setup, hyper terminal window will show NMEA string messages at a constant rate. Make sure to close HyperTerminal before proceedings with GIS software.

Make sure to run this activity using both Google Earth and ArcGIS/DNRGarmin software in advance to assure proper functioning of all software components.

### **Need to Emphasize**

- The importance of GPS for vehicle tracking.
- GPS receivers can be used in real-time or to log historic data.

### **Related Links**

- [http://www8.garmin.com/manuals/Rino130\\_OwnersManual.pdf](http://www8.garmin.com/manuals/Rino130_OwnersManual.pdf)
- <http://www.u-blox.com/technology/GPS-X-02007.pdf>
- <http://www.esri.com/news/arcuser/0103/differential2of2.html>
- [http://www.teletype.com/pages/support/laptop\\_gps\\_test.htm](http://www.teletype.com/pages/support/laptop_gps_test.htm)
- [http://www.gps.caltech.edu/gislab/howto/docs/GPS\\_Support\\_ArcGIS\\_9\\_1\\_Help\\_Files.pdf](http://www.gps.caltech.edu/gislab/howto/docs/GPS_Support_ArcGIS_9_1_Help_Files.pdf)
- <ftp://ftp-fc.sc.egov.usda.gov/WI/gistoolkit/garmin.pdf>

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*Viacheslav Adamchuk and Shana Thomas  
Phone: 402-472-8431  
E-mail: vadamchuk2@unl.edu  
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