

Carlson Software  
SS900 Radio and Geodimeter Setup Guide  
Prepared: 4-9-2007

Configure the rover (the radio on the Carlson Explorer 600+) and the base (the SS900 radio).

Here's the setup (using a null modem cable between the base and 600+):

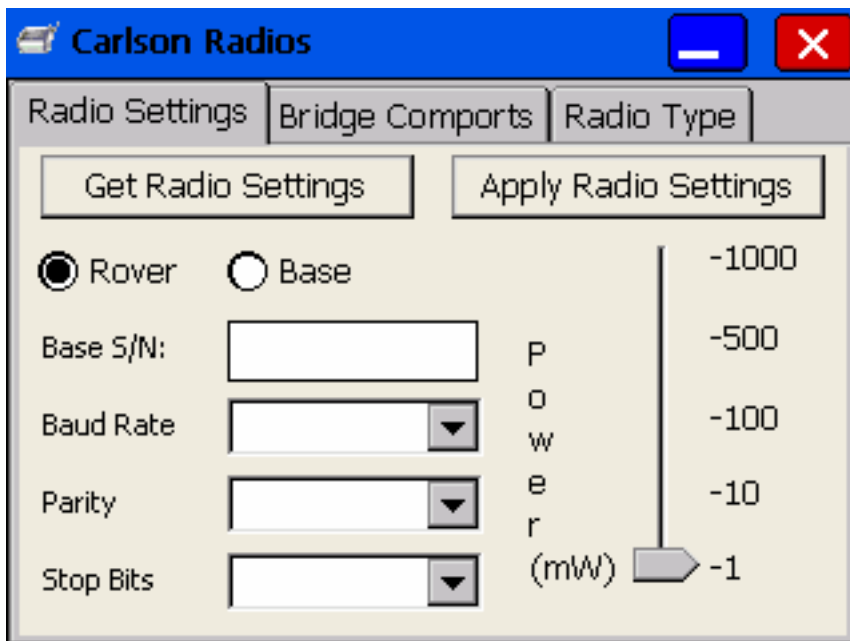


Look for Carlson Radios on the desktop:

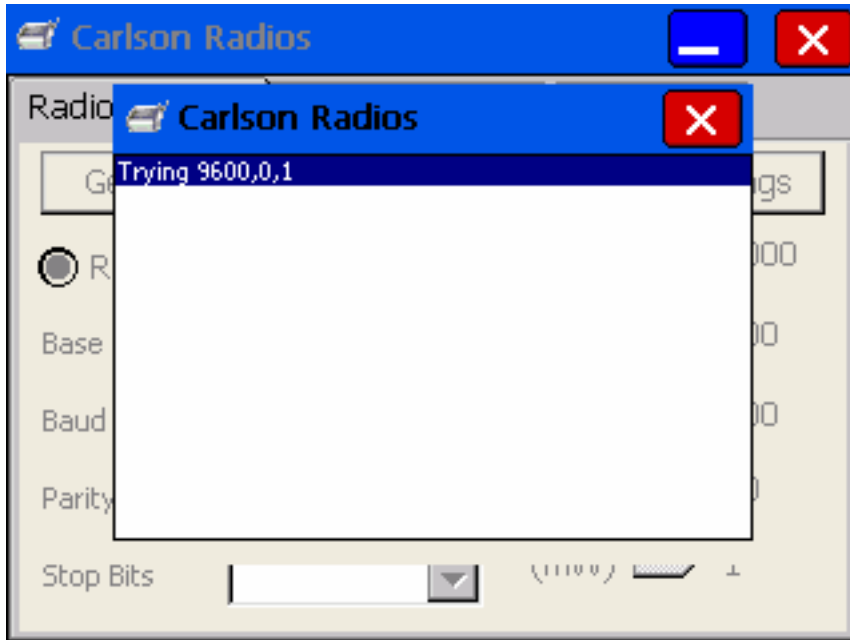


(If you do not see Carlson Radios on the desktop, then look in My Device → System CF → Carlson Utilities → Carlson Radios.)

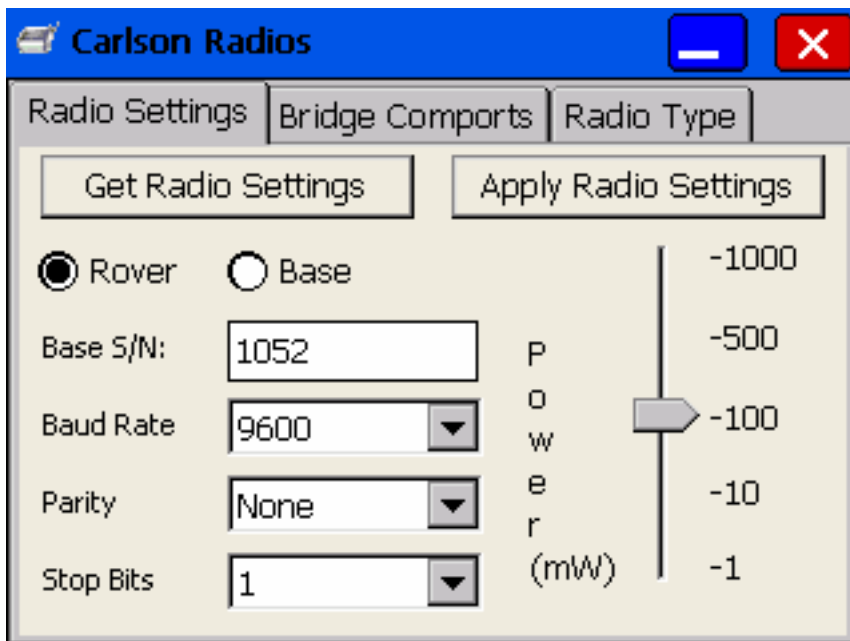
Now, to configure the rover first:



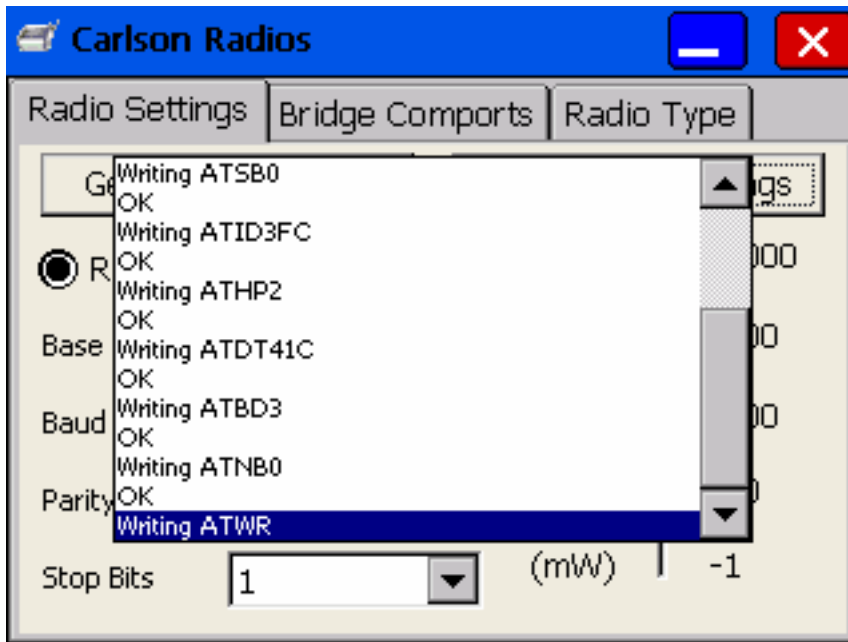
Click “Get Radio Settings”:



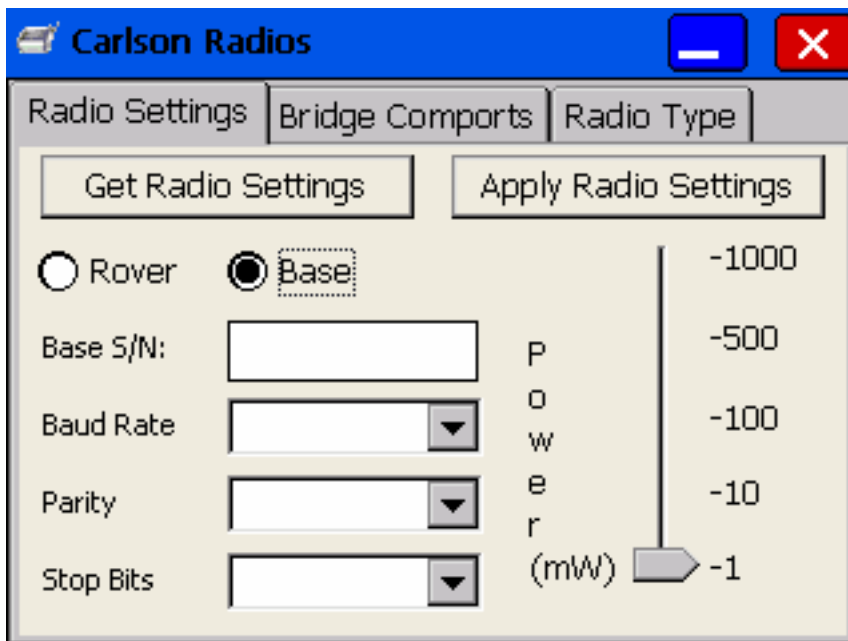
Get the base serial number off of the base radio (1052 in this case). Select a power level depending on how far you will be working from instrument (100mw is good for most applications). Check to make sure that the baud rate, parity, and stop bits match the Geodimeter:



Then click “Apply Radio Settings”:

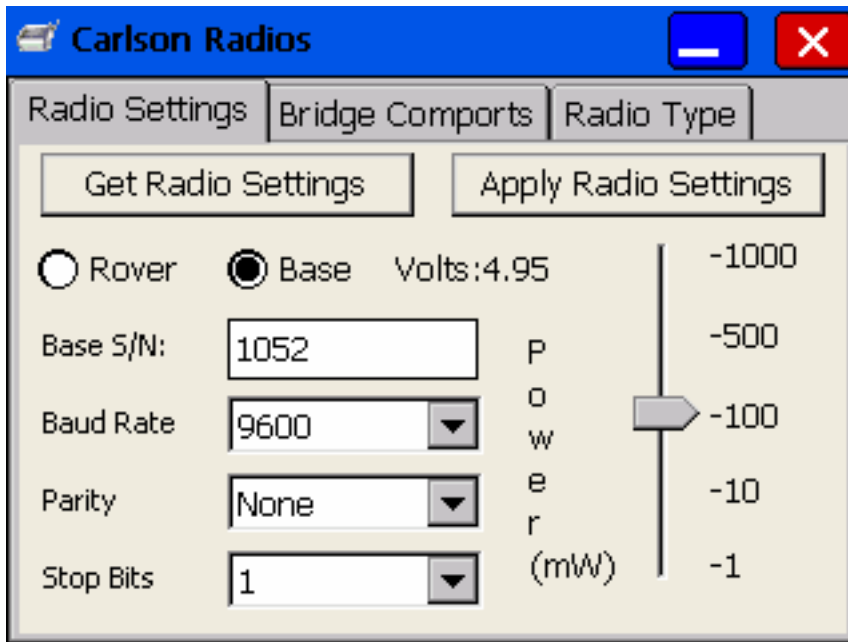


Now configure the base:



Click “Get Radio Settings” yet again!

Make sure the baud rate, parity, and stop bits match the rover settings.



Hit “Apply Radio Settings” again to store the information.

Now we have to setup the Geodimeter:



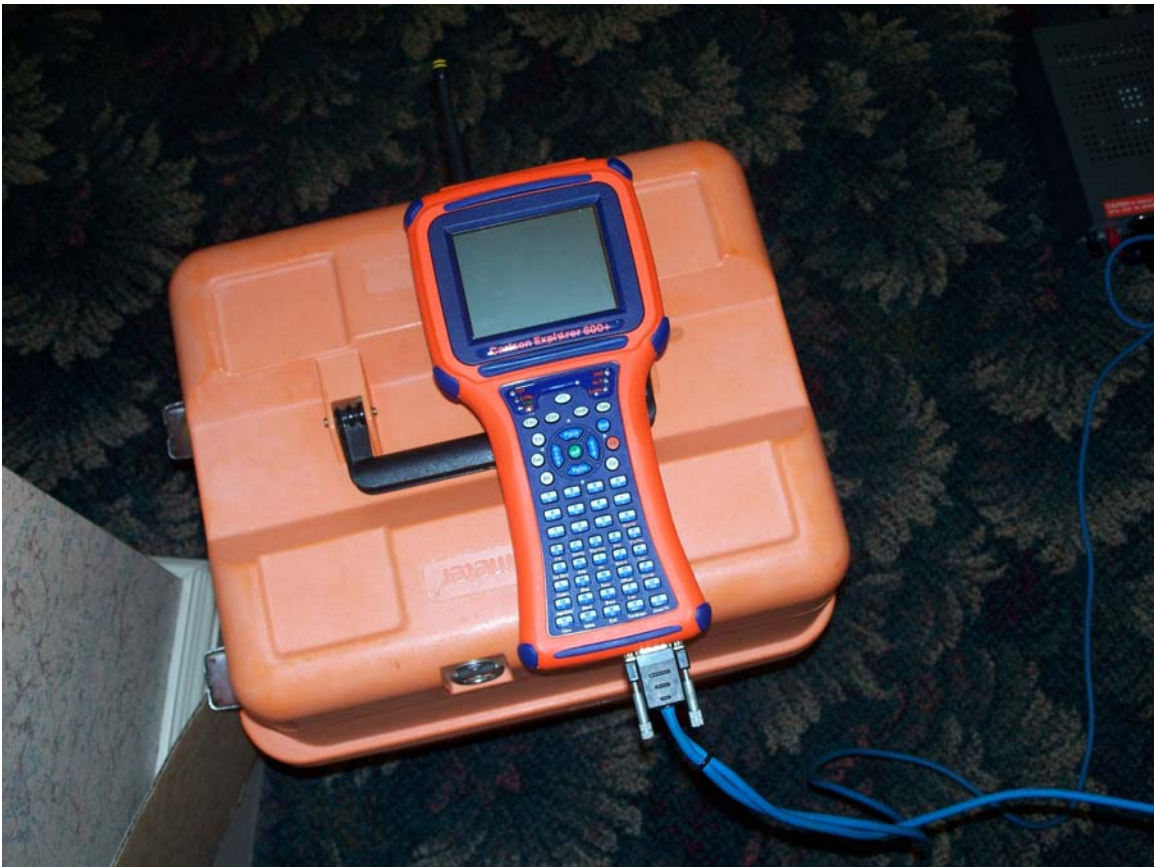
That is the power supply.



The cable from the power supply goes into the Geodimeter.



At this point, you should have the 9-pin serial cable plugged into the data collector.





After hitting PWR and calibrating the machine, this is the standard window:



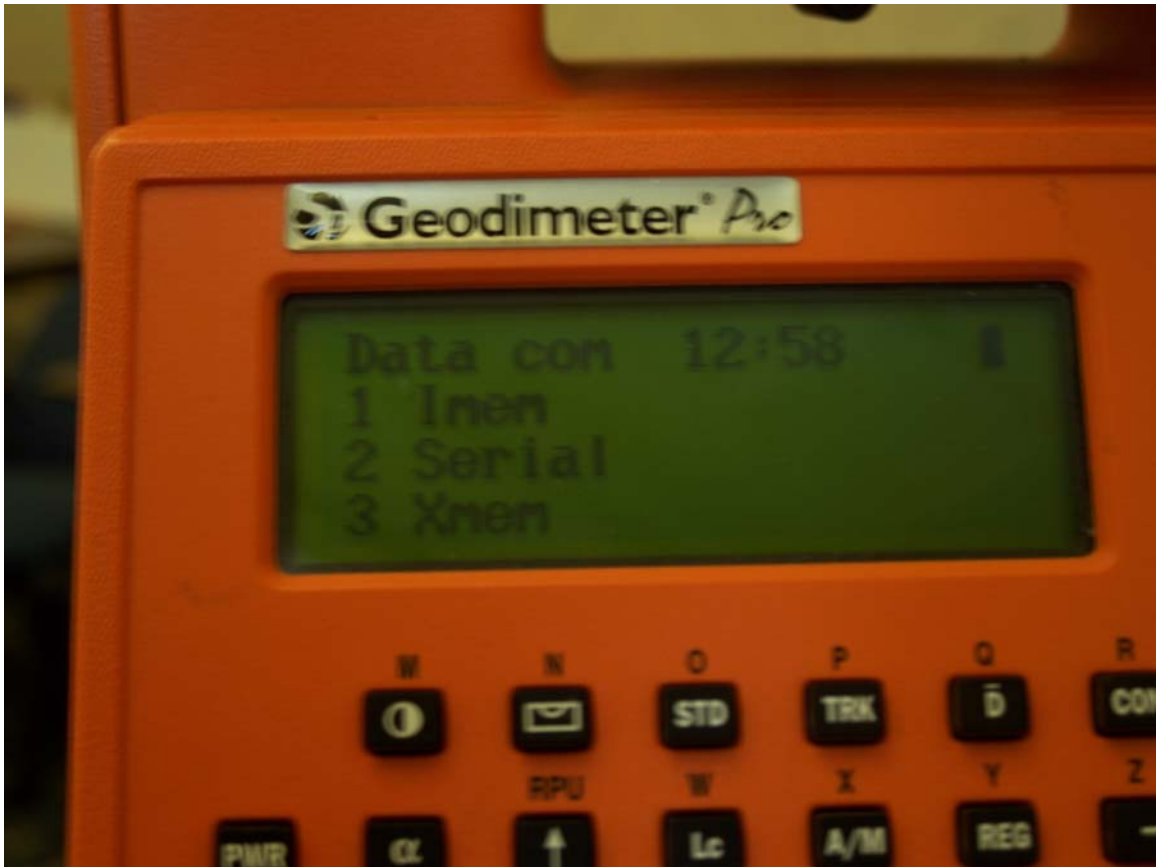
Now, press the MNU button on the Geodimeter keypad.



Then click 4 on the keypad to take you to the Data com window:



Then click 1. Select device, which brings you to this window:



Then click 2. Serial:



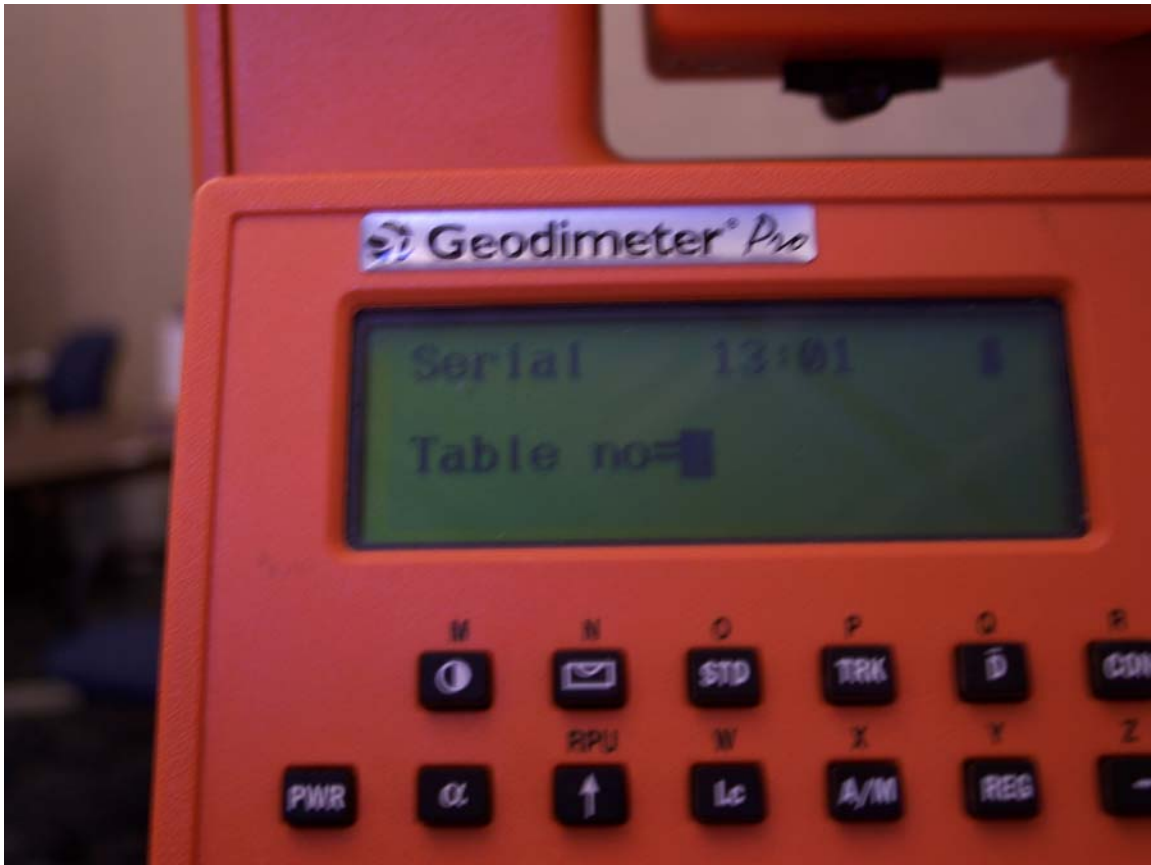


Click the ENT button on the keypad.



Click ENT again if the settings are correct. If they are not correct, then change them and click ENT.

Now, after that you will come to this window:



Click ENT.

Then this window will appear:



Click ENT again.

Then you will be back at the first window which looks like this:



Now hit the RPU button, with the arrow pointing straight up.

That will bring you to a window which looks like this:



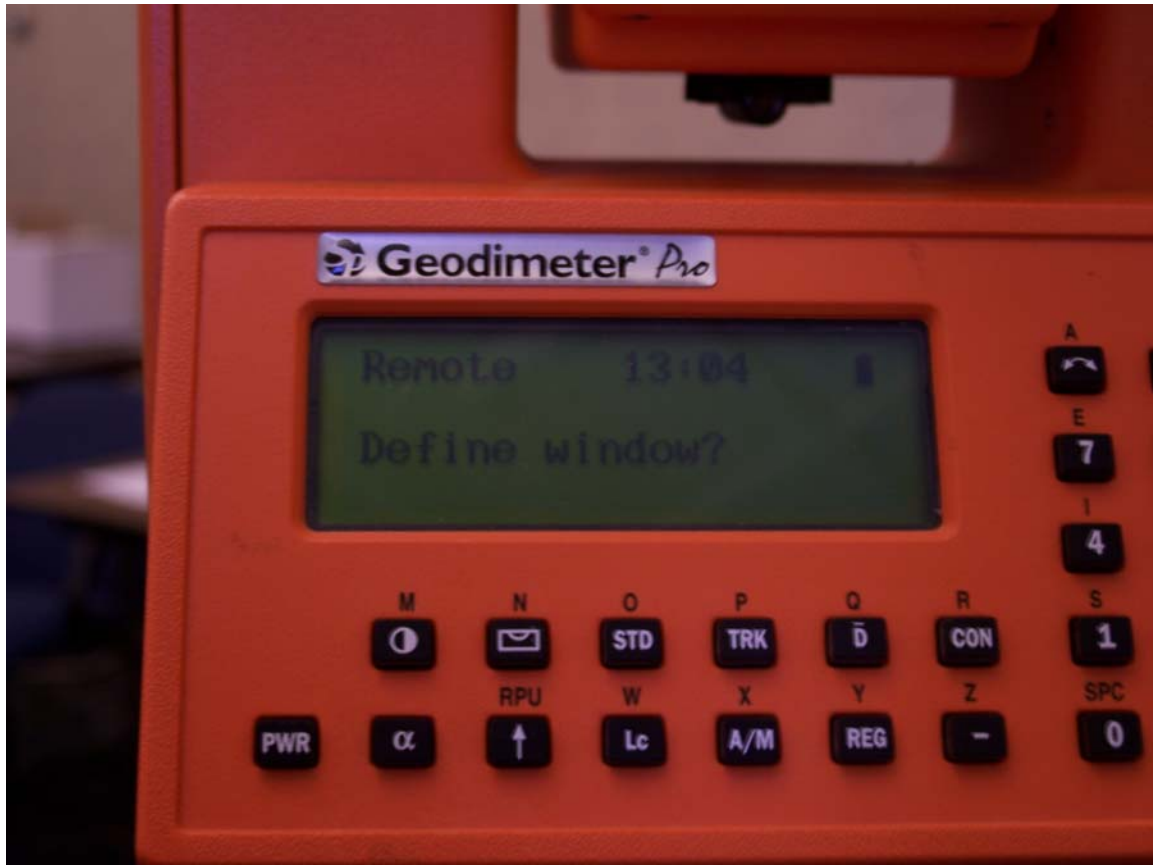


Then click 3. Remote which leads you to this screen:



Then click 1. OK.

Your new window will look like this:



Click the ( ← ) or the No button (same button).

Then the window will look like this:



Again, click the ( ← )/No button.

Then you will be prompted to press any key and remove the keyboard:



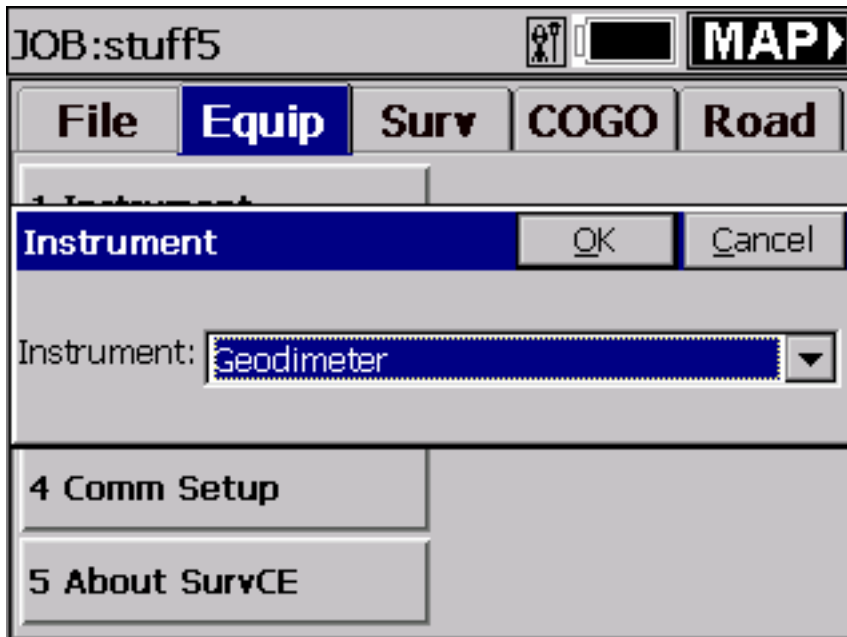
Now enter into SurvCE:



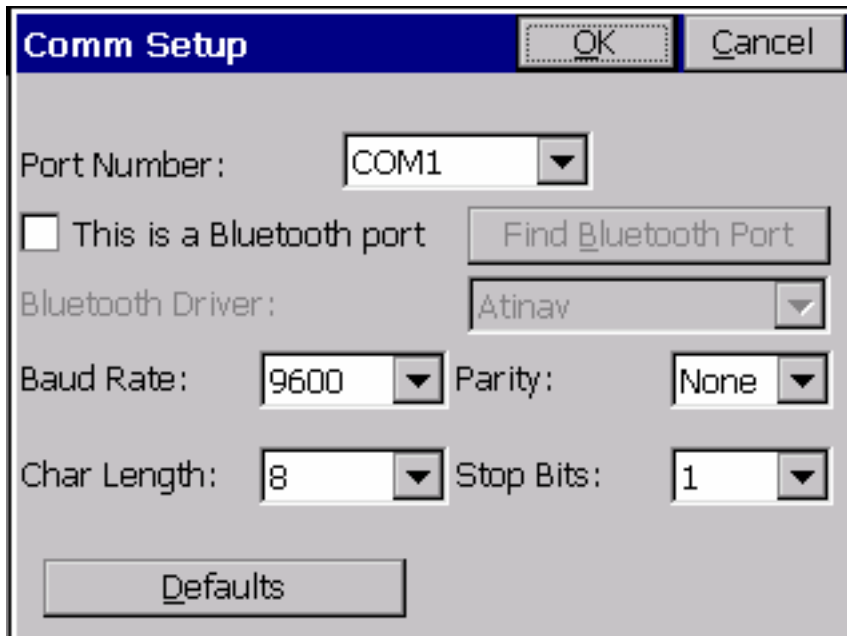
Select whichever you need.



Now select the Geodimeter under Equip → Instrument:

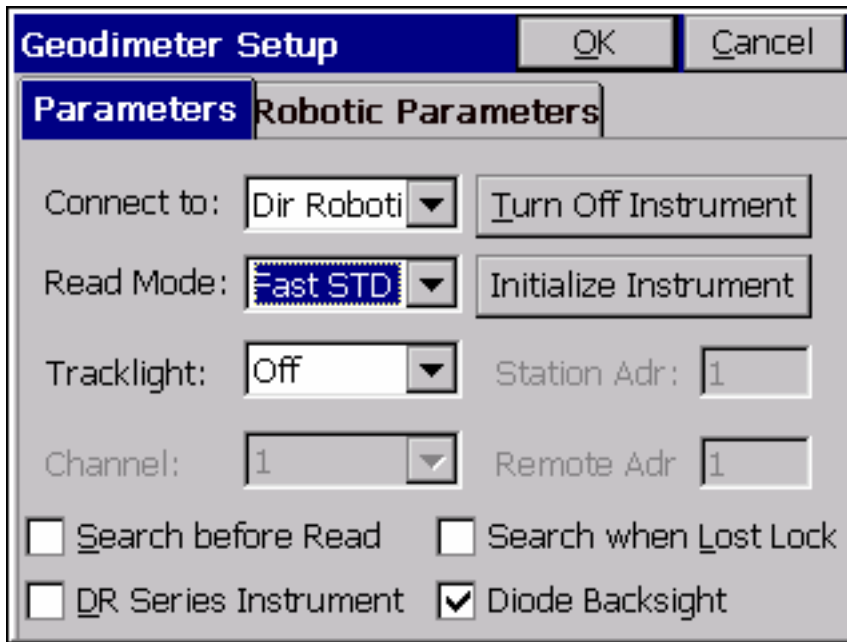


Then you will be taken into the Comm Setup page:



Make sure everything looks correct. Also, for now, use Com1. Later you will use Com2 for the radio.

Now enter into the Settings dialog:

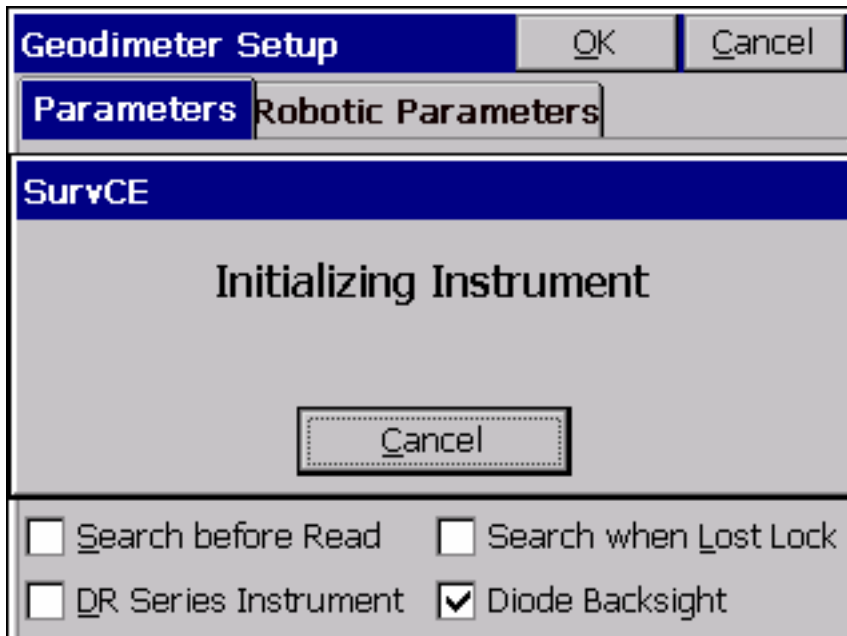


The screenshot shows the 'Geodimeter Setup' dialog box with the 'Robotic Parameters' tab selected. The 'Parameters' sub-tab is also visible. The settings are as follows:

- Connect to: Dir Roboti (dropdown)
- Read Mode: Fast STD (dropdown)
- Tracklight: Off (dropdown)
- Channel: 1 (dropdown)
- Station Adr: 1 (text box)
- Remote Adr: 1 (text box)
- Search before Read
- Search when Lost Lock
- DR Series Instrument
- Diode Backsight

Buttons: Turn Off Instrument, Initialize Instrument, OK, Cancel.

Click on Initialize Instrument. You should hear the Geodimeter beeping, and then it will begin to spin around. Then the data collector will alert you that everything went okay.



The screenshot shows the 'Geodimeter Setup' dialog box with the 'SurvCE' tab selected. The 'Parameters' sub-tab is also visible. The settings are as follows:

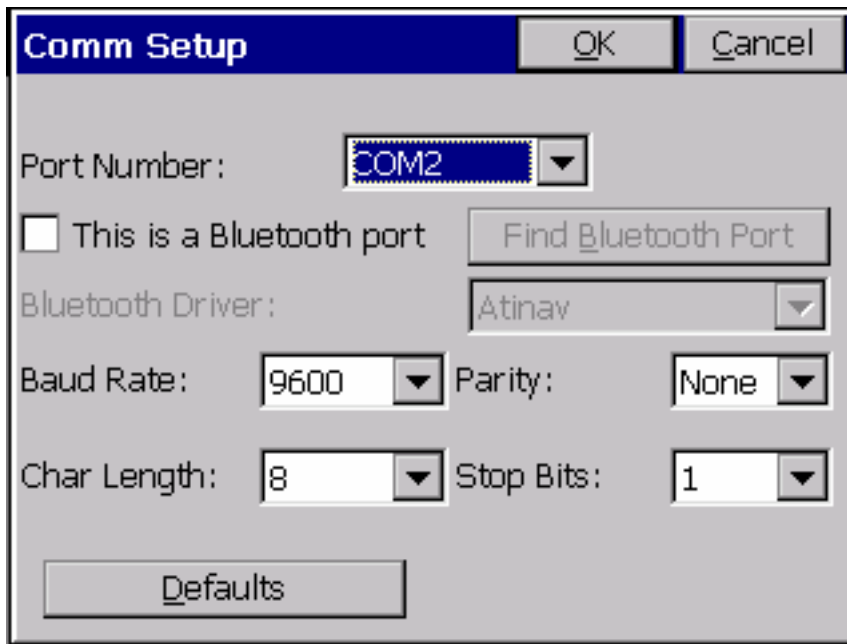
- Search before Read:
- Search when Lost Lock:
- DR Series Instrument:
- Diode Backsight:

Buttons: Cancel, OK, Cancel.

Click okay at the top right after you are done initializing.

Now, after the instrument is initialized from the serial cable, all you need to do is unplug the 9-pin cable from the data collector and plug it into the serial port on the SS900. Obviously, make sure the SS900 is on.

Now go back into Comm Setup and click on Com2:



After you are done with that, click OK, and begin surveying:

JOB:stuff5



**MAP** ▶

<b>File</b>	<b>Equip</b>	<b>Surv</b>	<b>COGO</b>	<b>Road</b>
1 Sideshot/Traverse			6 Auto by Interval	
2 Stakeout Points			7 Remote Elevation	
3 Stakeout Line/Arc			8 Resection	
4 Offset Stakeout			9 Set Collection	
5 Elevation Difference			0 Set Review	