

GS14 Base and Rover Set Up

First, turn on and set up the Base receiver BEFORE you turn on the controller. Once the Base is running, start Smartworx.

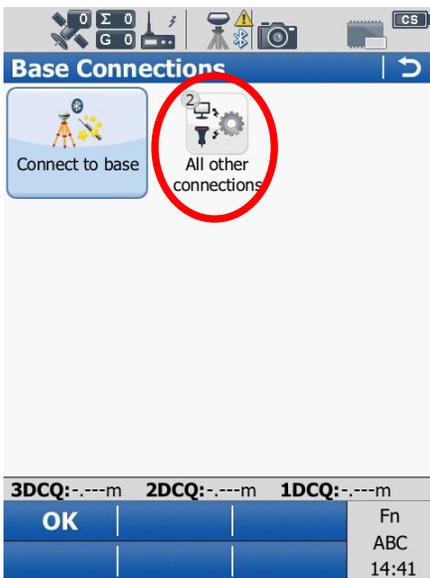
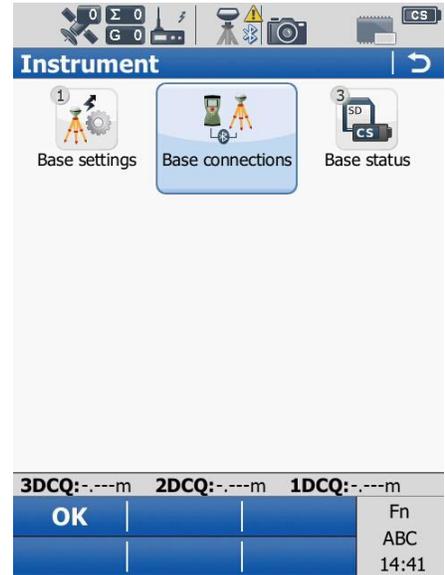
Once Smartworx starts, from the Main Menu, select GO TO WORK, and then GO TO BASE MENU to enter the Base Menu



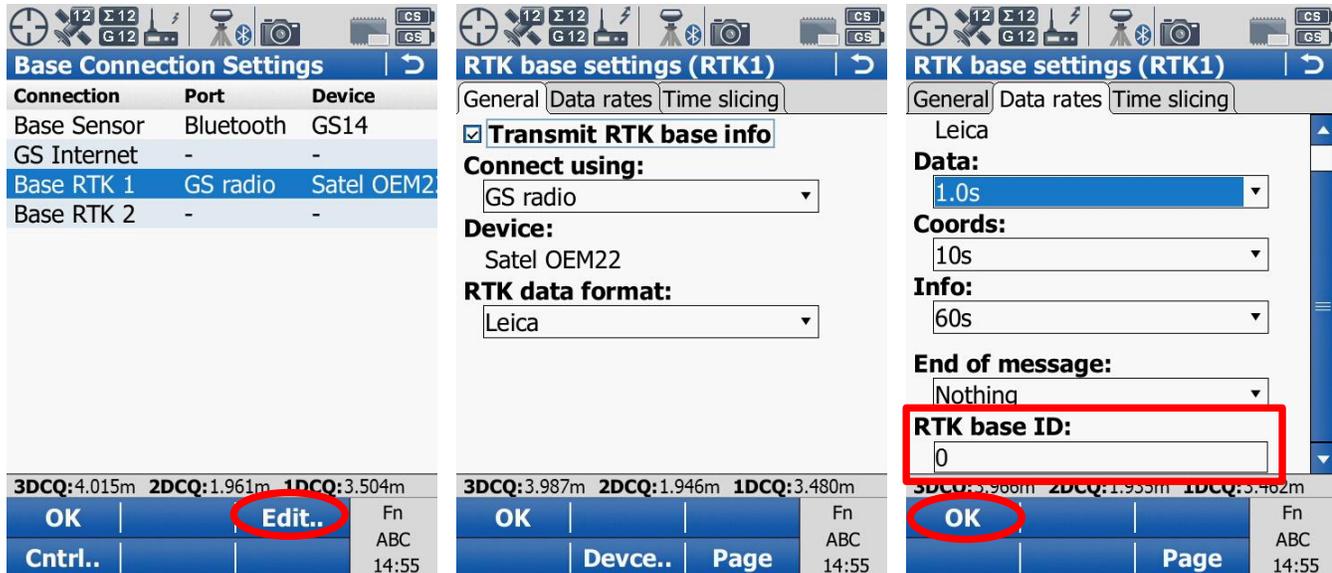
From the Base Menu, select INSTRUMENT, then BASE CONNECTIONS, and then CONNECT TO BASE. In the Connect to Base Sensor menu you should see the ID of your other base. To find the new base tap SEARCH.



The controller should find your new base. **NAME: GS2804775**. Highlight it and tap **OK**. The controller should now connect to the Base and return you to the Base Menu. Tap **Instrument**, then **Base Connections**, then **ALL OTHER CONNECTIONS** to set RTK Base Connection Settings.



Highlight BASE RTK1 and tap EDIT. Set the Base to transmit RTK Base information using the GS Radio (device = Satel OEM22). In the DATA RATES tab, set the RTK Base ID to 0. Tap OK to continue.



You should be back at the Base Connection Settings Menu. Make sure that BASE RTK1 is highlighted and tap “CNTRL...” to configure the radio settings for the base to broadcast the RTK data. Make sure that you set the Base and the Rover to the same channel. (The frequencies should match now). Tap OK to return to the Base Menu.



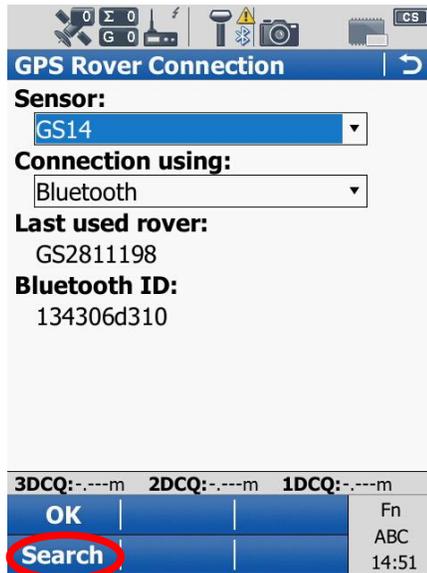
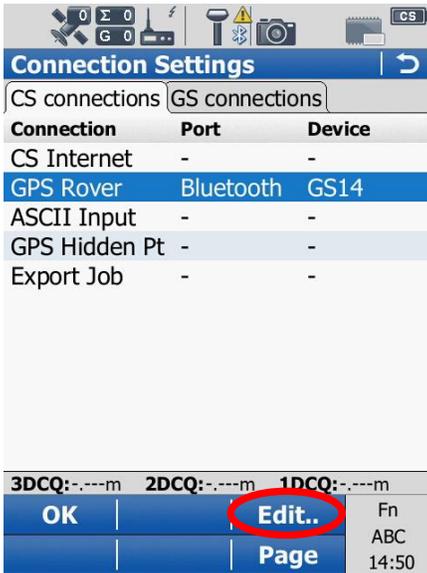
From the Base Menu tap **GO TO WORK!** And setup the receiver over your point. Once the point is set, the controller will ask you to switch to the Rover menu. Tap **ROVER** to configure the Rover settings, and turn on your GS14 Rover.

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| <p>Base Menu</p> <p>Go to Work! Start base Go to rover menu</p> <p>Instrument Base settings Connections & status</p> <p>3DCQ:----m 2DCQ:----m 1DCQ:----m</p> <table border="1"> <tr><td>OK</td><td></td><td></td><td>Fn</td></tr> <tr><td></td><td></td><td></td><td>ABC</td></tr> <tr><td></td><td></td><td></td><td>14:45</td></tr> </table> | OK | | | Fn | | | | ABC | | | | 14:45 | <p>Go to Work!</p> <p>1 Over known point 2 Over last setup Over any point</p> <p>4 Go to Rover menu</p> <p>3DCQ:----m 2DCQ:----m 1DCQ:----m</p> <table border="1"> <tr><td>OK</td><td></td><td></td><td>Fn</td></tr> <tr><td></td><td></td><td></td><td>ABC</td></tr> <tr><td></td><td></td><td></td><td>14:45</td></tr> </table> | OK | | | Fn | | | | ABC | | | | 14:45 | <p>Base Over Any Point</p> <p>Base setup complete.</p> <p>Base setup complete.</p> <p>Press Rover to return to the rover survey menu (first disconnect the cable from the controller to the GS if using a cable).</p> <p>Press Base to return to the Base menu.</p> <p>3DCQ:4.888m 2DCQ:2.413m 1DCQ:4.250m</p> <table border="1"> <tr><td>Rover</td><td></td><td></td><td>Fn</td></tr> <tr><td></td><td></td><td>Base</td><td>ABC</td></tr> <tr><td></td><td></td><td></td><td>14:49</td></tr> </table> | Rover | | | Fn | | | Base | ABC | | | | 14:49 |
| OK | | | Fn | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | ABC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 14:45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OK | | | Fn | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | ABC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 14:45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rover | | | Fn | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Base | ABC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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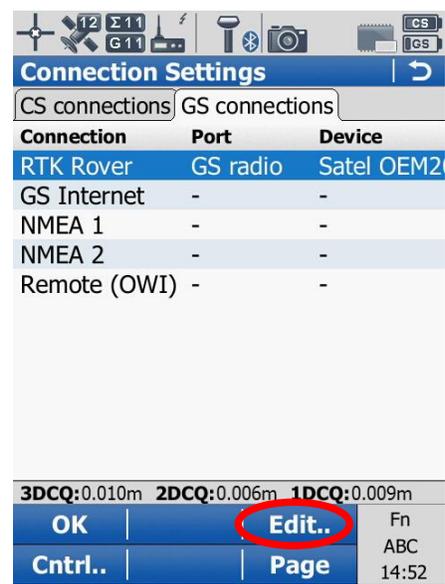
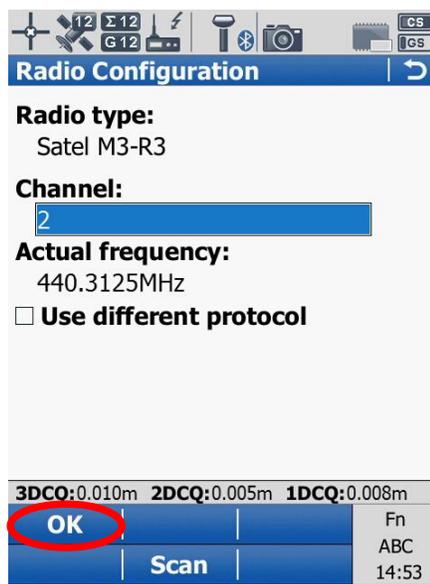
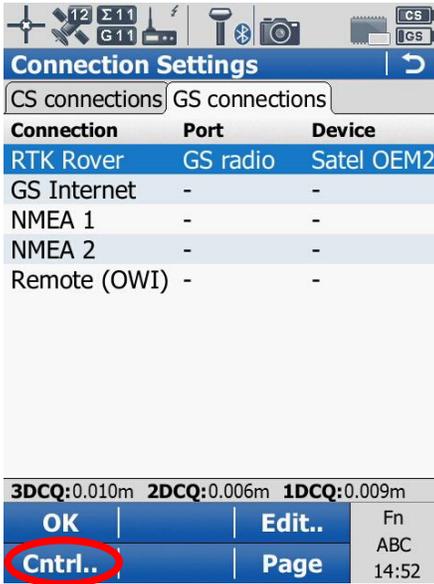
From the main menu, tap **INSTRUMENT**, then **CONNECTIONS**, then **ALL OTHER CONNECTIONS** to get to the CS Connections settings.

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|---|----|-----|-------|----|--|--|--|-----|--|--|--|-------|---|----|--|-----|----|--|--|--|-----|--|--|--|-------|--|----|--|-----|----|--|--|--|-----|--|--|--|-------|
| <p>Job: Default</p> <p>1 Go to Work! Survey & stake pts Start base station</p> <p>2 Jobs & Data Point management Import & export</p> <p>Instrument Settings & status Connections</p> <p>4 User Software settings Screen & audio</p> <p>3DCQ:----m 2DCQ:----m 1DCQ:----m</p> <table border="1"> <tr><td>OK</td><td></td><td>Map</td><td>Fn</td></tr> <tr><td></td><td></td><td></td><td>ABC</td></tr> <tr><td></td><td></td><td></td><td>14:49</td></tr> </table> | OK | | Map | Fn | | | | ABC | | | | 14:49 | <p>Instrument</p> <p>1 GPS settings.. Connections.. 3 Instrument status..</p> <p>3DCQ:----m 2DCQ:----m 1DCQ:----m</p> <table border="1"> <tr><td>OK</td><td></td><td>Map</td><td>Fn</td></tr> <tr><td></td><td></td><td></td><td>ABC</td></tr> <tr><td></td><td></td><td></td><td>14:50</td></tr> </table> | OK | | Map | Fn | | | | ABC | | | | 14:50 | <p>Connections</p> <p>1 GS connection wizard 2 Internet wizard All other connections</p> <p>3DCQ:----m 2DCQ:----m 1DCQ:----m</p> <table border="1"> <tr><td>OK</td><td></td><td>Map</td><td>Fn</td></tr> <tr><td></td><td></td><td></td><td>ABC</td></tr> <tr><td></td><td></td><td></td><td>14:50</td></tr> </table> | OK | | Map | Fn | | | | ABC | | | | 14:50 |
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| | | | ABC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | ABC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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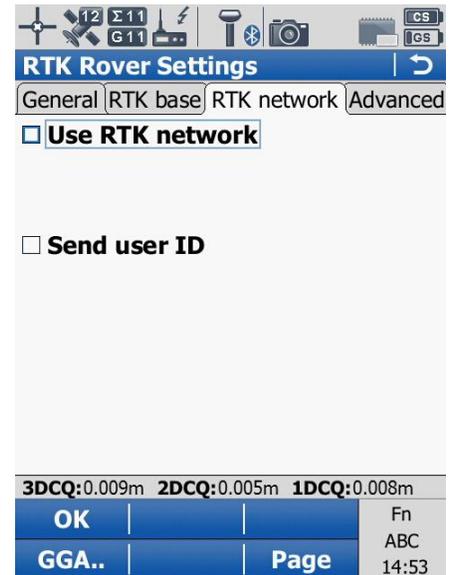
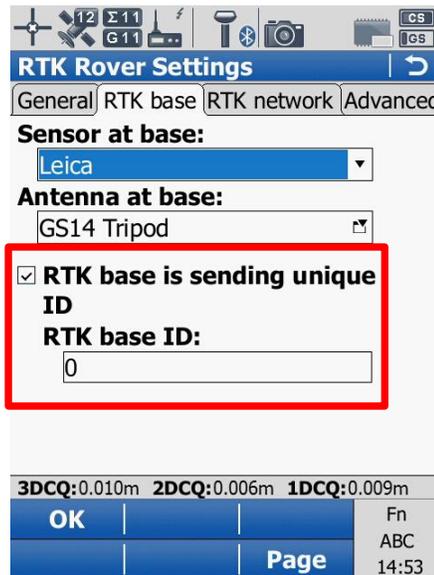
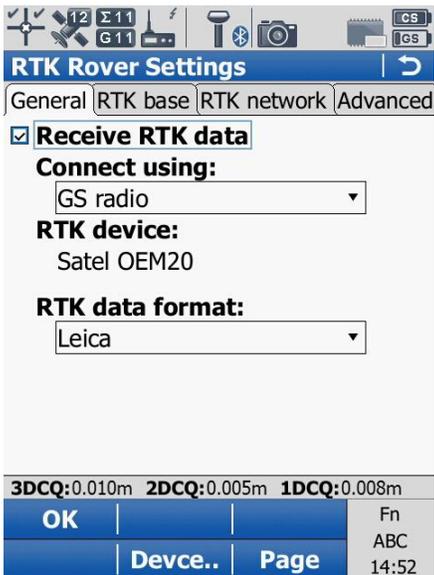
Highlight GPS ROVER and tap EDIT. Then SEARCH to find your new Rover. Highlight GS2811198 and tap OK. The controller should then connect to your Rover. Once connected, tap OK to continue. Your controller should now know which unit is the Base and which is the Rover.



Now, we need the Rover to receive the RTK corrections from the Base. From the Connection Settings menu, tap **GS CONNECTIONS** and highlight **RTK ROVER**. Tap **CNTRL** to set the channel. *Remember, the channel must match the Base channel.* Tap **OK** to return to Connection Settings. Tap **EDIT** to enter the RTK Rover settings.

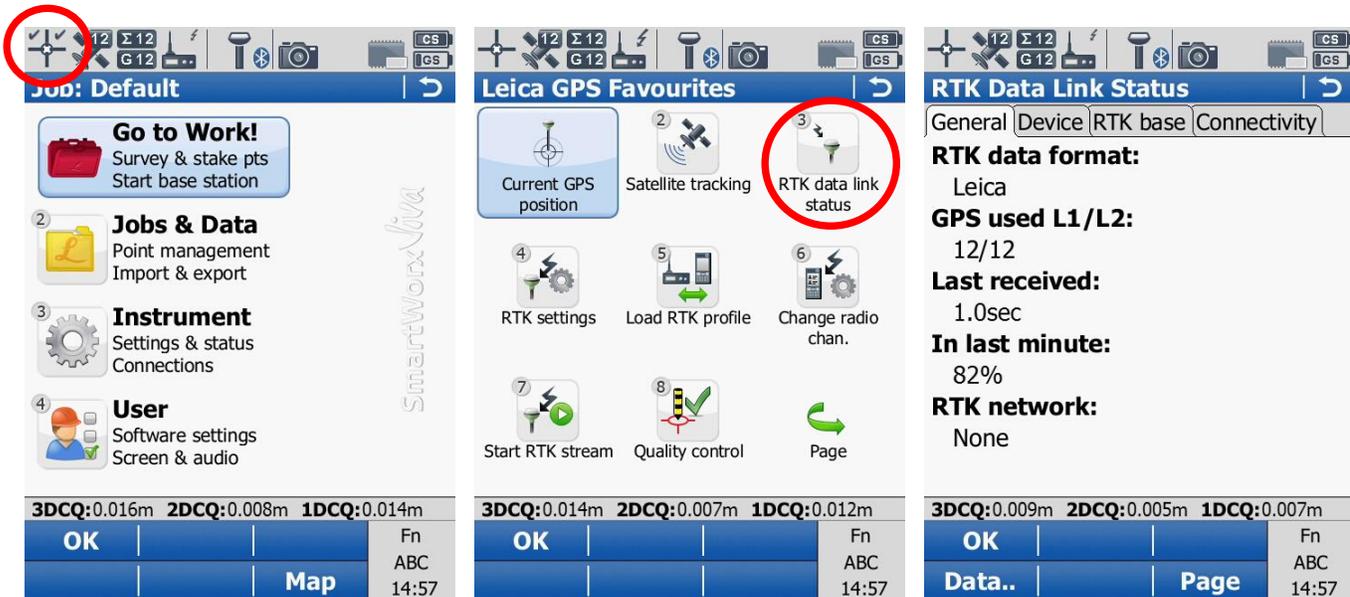


Check the RTK Rover Settings.





RTK Data link should now be initialized. To verify the RTK settings, check the position icon at the upper left corner. From the main menu, press the Star key, then RTK DATA LINK STATUS to verify the RTK corrections are being received.



RTK Data Link Status

General | Device | RTK base | Connectivity

RTK data format:
Leica

GPS used L1/L2:
12/12

Last received:
1.0sec

In last minute:
82%

RTK network:
None

RTK Data Link Status

General Device RTK base Connectivity

Name:
Satel OEM20

Type:
Satel M3-R3

Port:
GS radio

Channel:
2

Frequency:
440.3125MHz

Channel spacing:
3DCQ:0.010m 2DCQ:0.005m 1DCQ:0.008m

OK | Page | Fn ABC 14:58

RTK Data Link Status

General Device RTK base Connectivity

Point ID:
1001

RTK base ID:
0

ARP to marker ht:
0.000m

Coords of:
Marker

Northing:
5448261.478m

Easting:
3DCQ:0.016m 2DCQ:0.008m 1DCQ:0.014m

OK | Coord | Page | Fn ABC 14:58

RTK Data Link Status

General Device RTK base Connectivity

GS sensor detected

RTK device auto detected

RTK corrections being received

3DCQ:0.012m 2DCQ:0.006m 1DCQ:0.010m

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You should now be ready to begin working.