

Configuring a X91 as a Network Rover

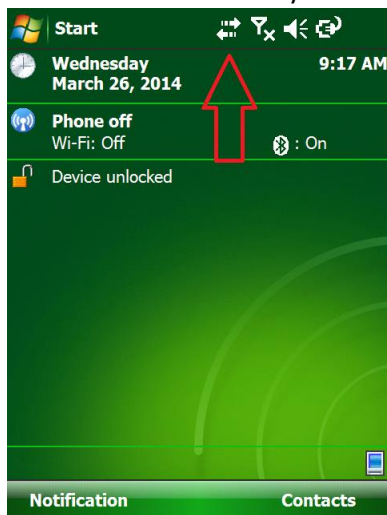
By: Mark Silver, ms@igage.com

Date: 26 March 2014

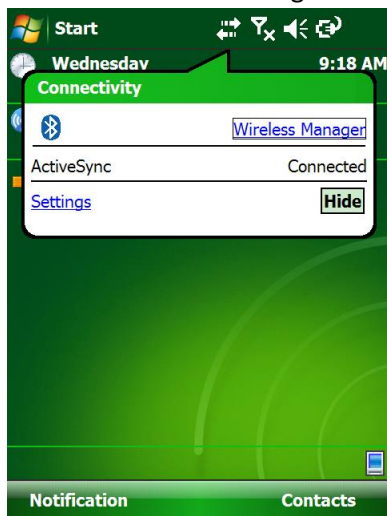
File: C:\Users\Mark\Documents\CHC\X91+\Manual\Configuring X91 as Network Rover.docx

Connect data collector to MiFi and verify there is internet connectivity.

1. Click on the Connectivity Button:

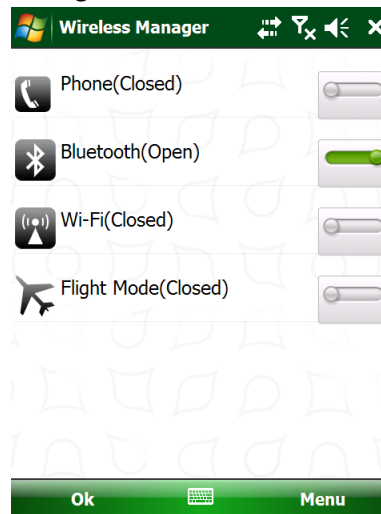


2. Click on 'Wireless Manager':

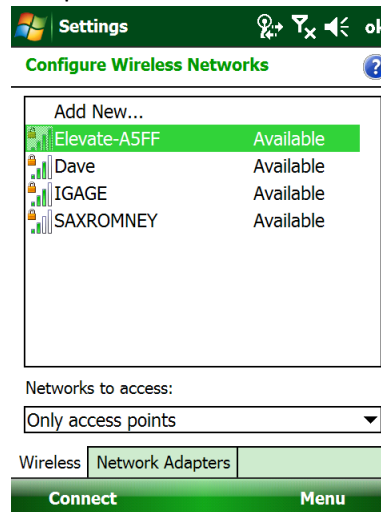


3. Enable (Turn ON, OPEN) the Wi-Fi connection by clicking on the slider to

the right of Wi-Fi:

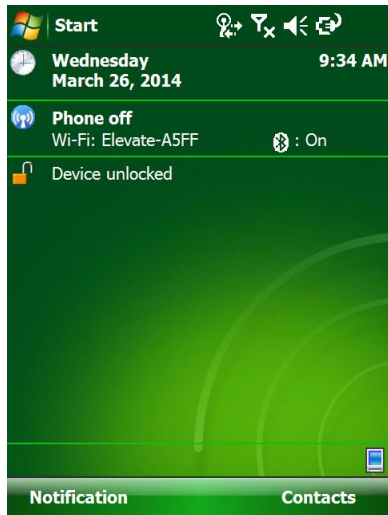


4. Connect to the Wi-Fi Hotspot. The hotspot name is "Elevate-A5FF"

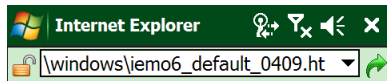


5. If the data collector does not automatically connect, highlight Elevate-A5FF then click on connect in the lower left corner. The passcode is "15451100" and is printed on the back of the hotspot and displayed on the front screen.
6. Once connected, click on OK to return to the main screen on the data

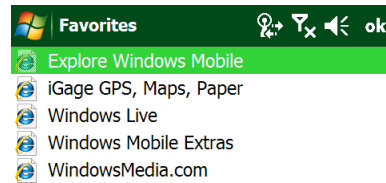
collector:



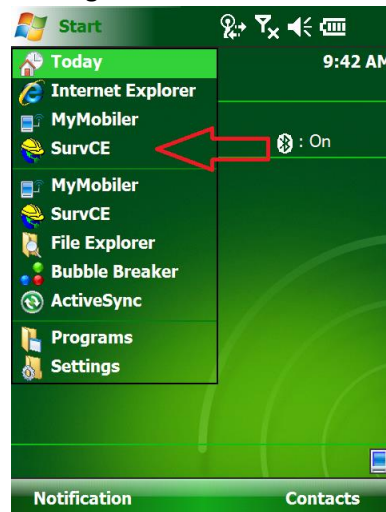
7. Verify that you are connected to the internet. Click on the 'Start' icon in upper left corner, then click on Internet Explorer:



8. Click on Menu, then Favorites:

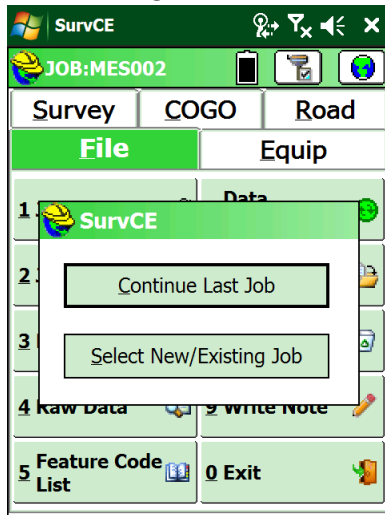


9. Click on 'iGage GPS, Maps, Paper' and verify that the data collector can browse to the internet. Close the Internet Explorer.
10. From the main menu, start SurvCE by clicking on 'Start: SurvCE'

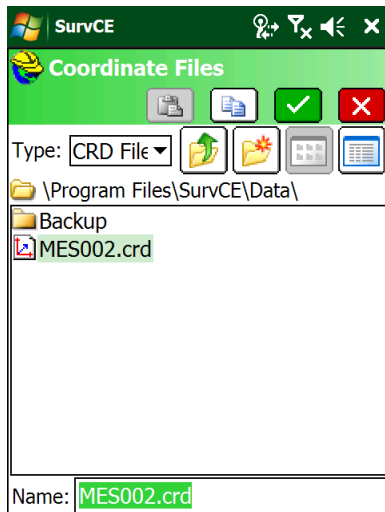


11. If you want the same job, click on 'Continue...' otherwise click on 'Select'

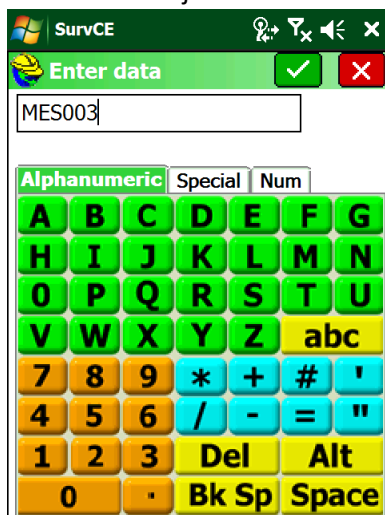
New/Existing Job':



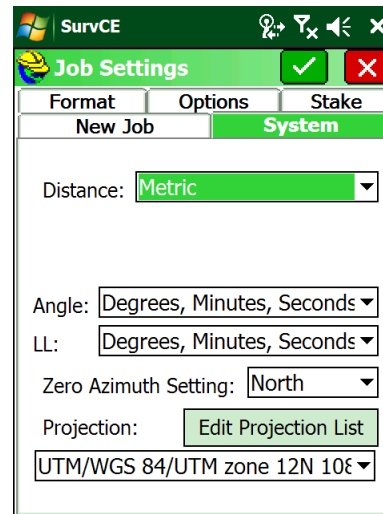
12. Click on the Name to enter a new job name:



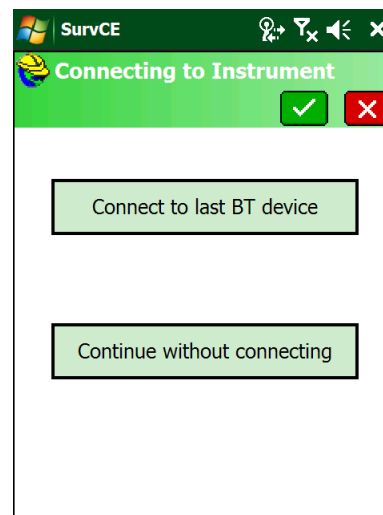
13. Enter the new job name:



14. Click on the Green Checkmark, choose the correct Projection and distance units:



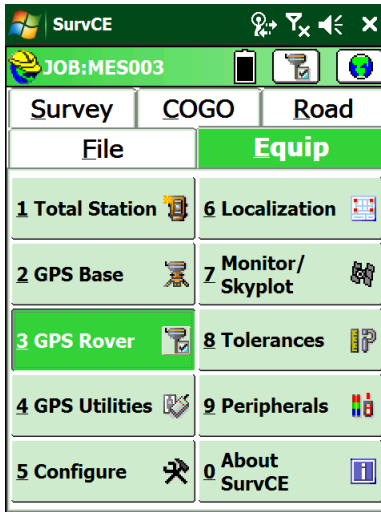
15. Click on the Green checkmark to accept the Job settings. You should be able to click on 'Connect to Last BT device' and automatically connect to the correct receiver:



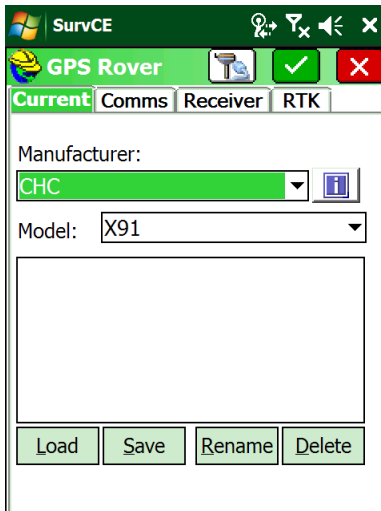
16. You will see a series of screens: "Bonding with Bluetooth, Connecting to instrument, Waiting for Reading, Initializing Modem, Connecting to Network, Successful." If it makes the connection, then you are ready to survey. You can verify the receiver status from 'Equip: Monitor / Skyplot' if not...continue to the next step.

17. Configure the rover from scratch.

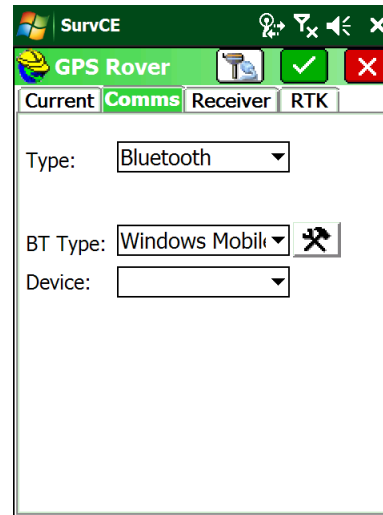
From the main screen, select "Equip: 3 GPS Rover":



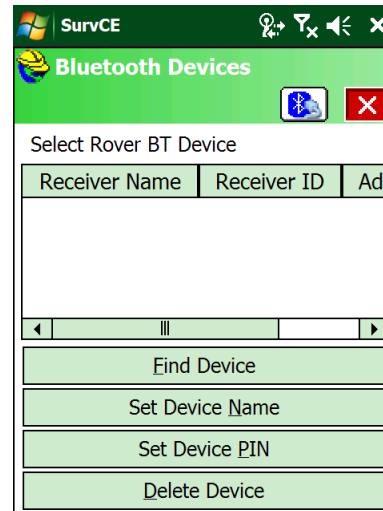
18. Select Manufacturer: CHC and Model: X91:



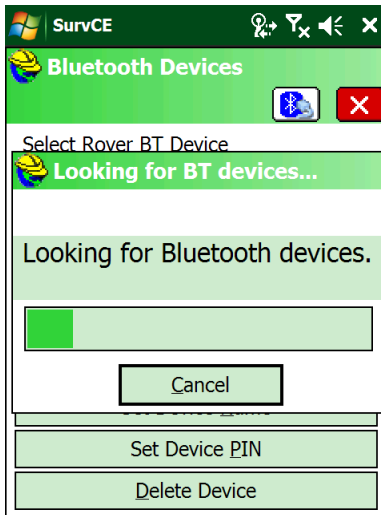
19. Click on the 'Comms' tab:



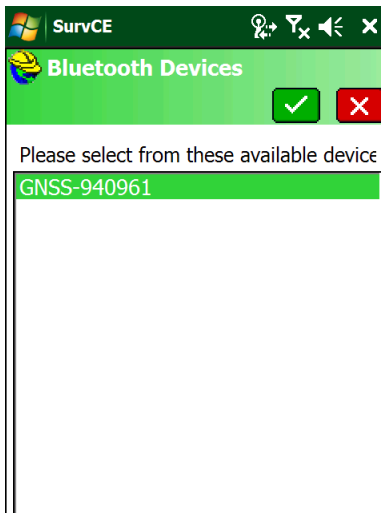
20. Choose Type = Bluetooth, BT Type = Windows Mobile as shown, then click on the Hammer/Wrench to the right of BT Type:



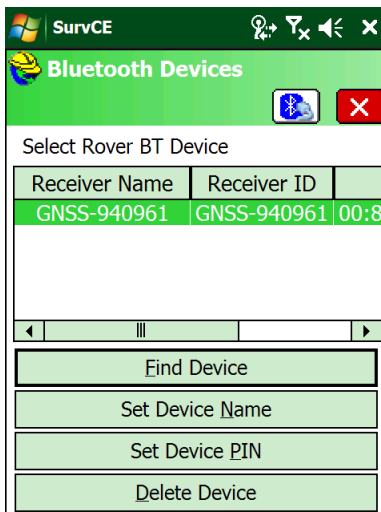
21. Click on Find Device and wait:



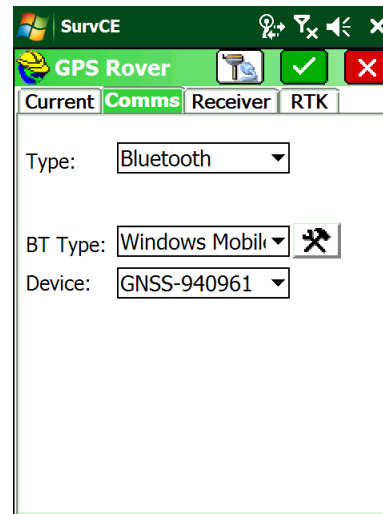
22. Click on the X91 device "GNSS-840961":



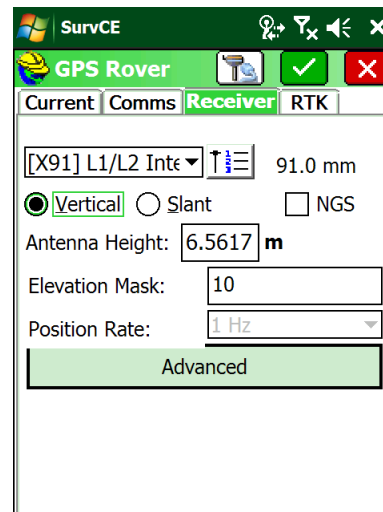
23. Click on the Green check mark



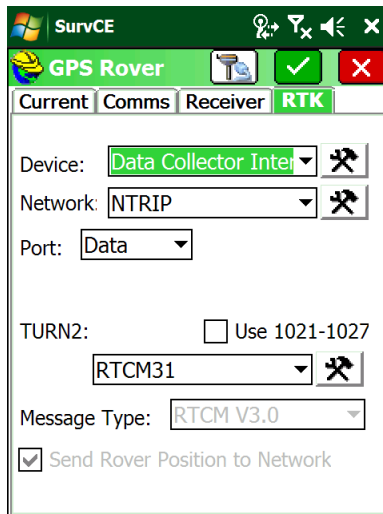
24. Click on the 'Bluetooth' button (looks like Bluetooth icon with cable pointing towards it').



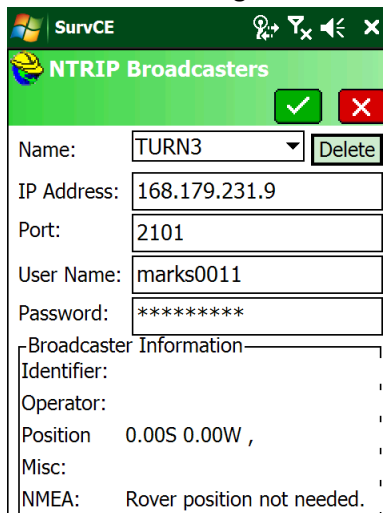
25. Click on the 'Receiver' tab:



26. Configure as shown. Then click on the RTK tab:



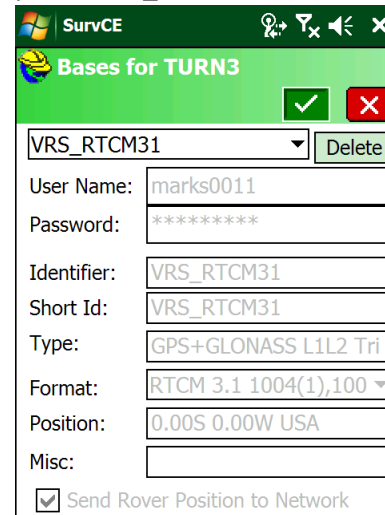
27. Configure as shown, then click on the Hammer/Wrench button to the right of the Network. Configure as shown:



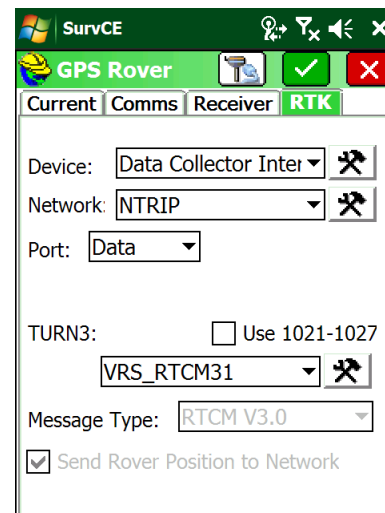
The password is 'marks0011' and both the username and password must be lowercase.

28. Click on Green Checkmark. The data collector will load the mount table for the network, choose the correct mount

point "VRS_RTCM31":



29. Click the Green checkmark

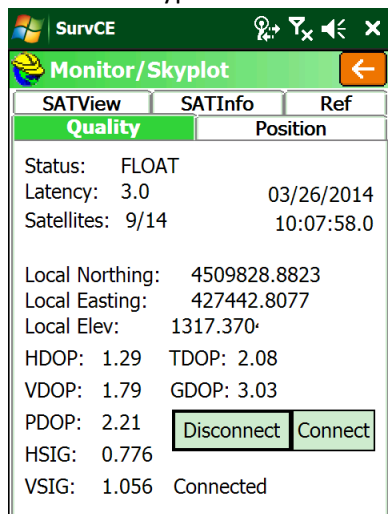


30. Click the Green checkmark again to configure the rover and connect to the network. You will see "Waiting for Reading, Initialize Modem, Connect to

Network”:



31. You can check if all is well using “Equip: 7 Monitor Skyplot”:



20 seconds after the receiver makes a network connect, it should goto Status Float.

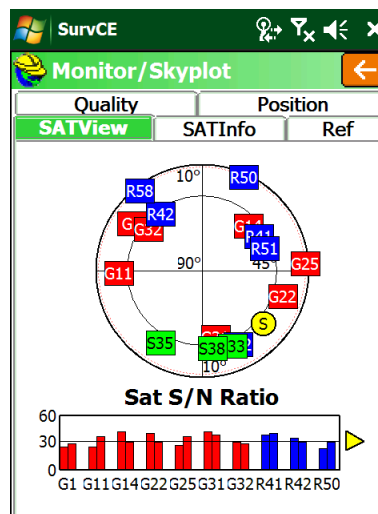
The Latency should be less than 4 seconds.

The Satellite count should be reasonable.

The HSig should be dropping.

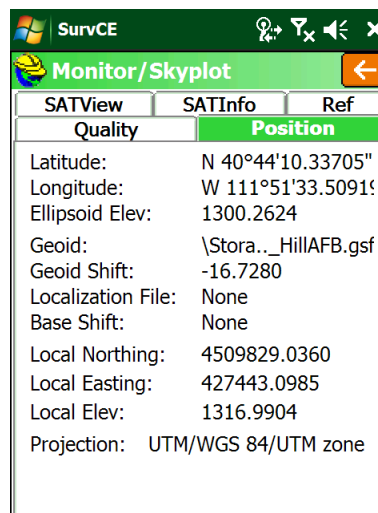
After some period of time, the status will change to FIXED.

32. If fixing is difficult, check the SAT View screen:



There should be a US SV (red) in every quadrant; there should be a GLONASS SV (blue) someplace.

33. You can verify that the GEOID is loaded and in use on the Position tab:



The Geoid Shift should be negative and the Local (orthometric) elevation should be above the Ellipsoid elevation as shown above.