

Connecting CHC X91+ Rover to NTRIP Network

Connect Data Collector to Internet

From the main menu of the data collector, click on the 'Wireless Manager':



Click on 'Wi-Fi' if it is not Open (which means ON):



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Click on 'Menu: Wi-Fi Settings' to connect to your MiFi wireless hotspot:



Click on your wireless hotspot in the list and take the necessary actions to connect (usually a passkey is required):





Once 'Connected', click on "ok" (upper right hand corner):



Finally click on "Ok" on lower left corner. You should be connected to the internet. It is usually worth the time to check and make sure. Click on the start flag on the upper left corner:



Then click on 'Internet Explorer':

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| 0 | Windows Media | |
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| | Programs | |
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After a second the test web site should be displayed:



Start SurvCE

Click on 'Start' and then SurvCE: <u>कि ∠</u> ⊀ €5 Start 🔊 Today 7:06 PM Calendar 🛞 : On 💵 HcGPSSet Internet Explorer É 🄏 RTKCe 😂 SurvCE 🕞 Windows Media 6 File Explorer Programs P Settings 0 Phone Contacts

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Click on "Equip: 3 GPS Rover":

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| Current | Comms | Receiver | RTK | |
| Manufac | cturer: | | | |
| CHC | | | • | i. |
| Model: | X91+ | | | ▼ |
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Select Manufacturer: CHC; Model: X91+ Then click on the 'Comms' tab

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Select Type: Bluetooth; BT Type Windows Modile and then

click on the 'hammer/wrench' button:

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| 8 | Bluetooth De | vices | | | | |
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| Se | lect Rover BT De | evice | | | | |
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| Eind Device | | | | | | |
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Click on 'Find Device':

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|---------------------------------|---------------------|
| <mark> Bluetooth Devices</mark> | ~ × |
| Please select from these avail | able device |
| GNSS-943651 | |

Click on the device that matches your device serial number, then click on the Green Check Mark:



Click on the 'Bluetooth Connect' button, then select the 'Receiver' tab:

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|---------------------------|-------------------------|--|--|--|
| 😂 GPS Rover | 🔁 🗹 🔀 | | | |
| Current Comms R | eceiver RTK | | | |
| [X91] L1/L2 Inte ▼ | † | | | |
| Antenna Height: 6. | 5617 ft | | | |
| Elevation Mask: | 10 | | | |
| Position Rate: | 1 Hz 🔻 | | | |
| Store Vectors in Raw Data | | | | |
| Adva | nced | | | |
| | | | | |
| | | | | |

Set the 'Antenna Height' to match your pole. Hint: if you have a 2 meter pole you can enter "2M" and SurvCE will compute 6.5617 feet.

If you click on the 1 button, the Antenna Definition should match this:





Click on the Green Check Mark, and then the 'RTK' tab:

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| 📚 GPS Rover 🛛 🔀 🗹 🔀 |
| Current Comms Receiver RTK |
| Device: Data Collector Inter |
| test: |
| · · · · · · · · · · · · · · · · · · · |
| Message Type: RTCM Send Rover Position to Network |

Set Device to "Data Collector Internet", set Network to "NTRIP", set Port to "Data"; click on the hammer/wrench to the right of the Network: NTRIP:

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|-------------------------|----------------------------|--|--|--|--|
| NTRIP | Broadcasters | | | | |
| | 🗹 🔀 | | | | |
| Name: | TURN | | | | |
| IP Address: | 168.179.231.6 | | | | |
| Port: | 2101 | | | | |
| User Name: | marks0011 | | | | |
| Password: | ***** | | | | |
| Broadcaster Information | | | | | |
| Operator: | | | | | |
| Position (| 0.00S 0.00W , | | | | |
| Misc: | | | | | |
| NMEA: I | Rover position not needed. | | | | |

Configure for your NTRIP server. Settings above reflect TURN (The Utah Reference Network.) Username and Password are case sensitive. Click on the Green Check Mark. SurvCE will connect to the NTRIP server and show a list of bases:



Use the drop down arrow on the 'Name:' to select the RTCM or CMR+ connection for your NTRIP server.

Finally click on the Green Check Mark:

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| 😂 GPS Rover | | \checkmark | X |
| Current Comms | Receiver | RTK | Ì |
| Device: Data C Network: NTRIP Port: Data | ollector Int | | * |
| TURN: AGRC_RT | Use CM_31 | 1021-1 | .027 |
| Message Type: | RTCM V3.0 |) | - |
| Send Rover Po | sition to Ne | etwork | |

Finally click the Green Check Mark and SurvCE will connect the receiver to the NTRIP network and the receiver.



From the main menu, select "Equip: Monitor/Skyplot" and then the Quality tab:

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| SATV | iew | S | ATIn | fo | Re | f |
| Qu | ality | | | Pos | ition | |
| Status: Latency Satellite | FIXE : 1.0 s: 11/: | D | | 10 13 | /10/20 3:46:2 |)13 2.0 |
| Local N Local Ea Local El | orthing: asting: ev: | 7 1 428 | 7437 1540 80.42 | 116.4 844.0 23 | 603 848 | |
| HDOP: | 1.06 | TD | OP: | 1.57 | | |
| VDOP: | 1.40 | GD | OP: | 2.35 | | |
| PDOP: | 1.75 | D | iscor | nnect | Conne | ect |
| VSIG: | 0.064 | Co | nnec | cted | | |

If all is well, the receiver will report a 'Fixed' Status.