

Topcon GR3 GSM FH915 GPS Configuration

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Abstract: The following document details the steps necessary to use Carlson SurvCE 2.0 with the Topcon GR3 GSM FH915 GPS receivers.

Instrument Configuration GSM FH915:

- 1. Start SurvCE and complete job setup.
- 2. From the equipment menu choose configure "GPS Rover."
- 3. On the "Current" tab choose Topcon for the manufacturer and GR-3 for the Model.

📚 GPS Rover 🚬 🔽 🔀			
Current Com	ns Receiver RTK		
Manufacturer:	Topcon	•	
Model:	GR-3	-	
Load	Save Rename	Delete	

4. On the "Comms" tab configure you connection to the GPS – cable or Bluetooth.

📚 GPS Ro	🔽 🗙	
Current	Comms Receiver RTK	1
Type:	Cable	
Device:	Cable or Generic Device	
Port:	COM 1	Defaults
Baud:	115200 💌 Parity:	None 🔻
Data Bits:	8 Stop Bits:	1 🔻

5. On the "Receiver" tab configure your desired settings. The image below shows typical settings.

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😂 GPS Rover		X	
Current Comms	Receiver	RTK	
Antenna Type:	Internal		
Antenna Height:	0	ft 🖲 Vert 🕤 Slant	
Elevation Mask:	10		
Position Rate:	1 Hz	•	
Ambiguity Fixing:	Medium	•	
RTK Calculation:	Extrapolat	e 🔽	

- 6. Select the "RTK" tab.
- 7. For "Device" choose "Internal GSM FH915."

😂 GPS Rover 🔽 🗙				
Current Comms Receiver RTK				
Device:	Internal GSM FH915 🔽 Configure			
Network:	NTRIP Configure			
RTK Port:	C 🔽 Baud: 38400 🔽			
Parity:	None 🔽 Stop Bits: 1			
Message Type: CMR+				
Base ID:	e ID: Mountpoint2			
Send Rover Position to Network				

- 8. Press "Configure" next to the selected device.
- 9. Enter your GSM dialing information. You will need to obtain this from your wireless provider. Below is an example of the settings for Cingular/AT&T.

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癸 Configon GSM w/ FH915 Modem 🔽 🗙				
APN Pin:	3			
APN Server:	isp.cingular			
APN User Name:	WAP@CINGULARGPRS.C			
APN Password:	CINGULAR1			
GPRS Dial:	*99***1#			

- 10. Press the green checkbox.
- 11. For "Network" select "NTRIP".
- 12. Press "Configure" next to "Network."
- 13. Enter the connection information for your NTRIP network. You will need to obtain this from your NTRIP network administrator. Below is an example setup.

😂 NTRIP Broadcasters 🛛 🖌 🗙				
Name:	CaronEastNtrip		•	Delete
IP Address:	207.255.193.225 Por		Port:	9000
Default User :	XXX Password:		sword:	XXX
Broadcaster Information				
Identifier:	Identifier:			
Operator:				
Position 0.00S 0.00W ,				
Misc:				
NMEA: Rover position not needed.				

- 14. Press the green checkbox. Be patient while the connection is configured, this may take a few minutes.
- 15. Select the desired Mount Point from the drop down list next to "Name." If you cycle through the different Mount Points you will see the connection information for each mount point in the lower half of the screen.

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😂 Bases fr CaronEastNtrip 🛛 🖌 🗙				
Name:	Mountpoint2 Delete			
User Name:	XXX Password: XXX			
Identifier:	Mountpoint2			
Short Id:	Mountpoint2			
Type:	GPS+GLONASS L1L2 TopNET-N CaronNe			
Format:	CMR+			
Position:	38.69N 282.79E USA			
Misc:				
🗹 Send Rover Postion to Network				

- 16. Press the green check box to return to the GPS Rover dialog.
- 17. Press the green check box to save the connection. When prompted "Would you like to configure the modem now" answer "yes" if you would like to connect to the network immediately. If you are only configuring the connection, but want to connect later answer "no." This step may take several minutes if you answer "yes."

SurvCE		N		
Would	you like to co	onNigure t	ne modem no	w?
	Yes		No	

18. Once the connection is configured you can connect/disconnect under Equip->GPS Utilities. You can verify the connection using Equip->Monitor/Skyplot.

<mark> GPS Utilities</mark>	×
Configure RTK Device	Power On/Off Receiver
Network Connect	Set Satellite Status
Network Disconnect	Known Point Initialization
Reset Receiver	Send Command
Factory Reset	
	-

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