# Sokkia GRX1– NTRIP Configuration

You must be using FieldGenius v4.4.1.1 or newer or EVR 7.2.1.1 or newer GRX1 Firmware: 3.4 p2 or newer Auxiliary Firmware: 1.1 or newer

# Start | Settings | Coordinate System

#### **Coordinate System Settings**

	Coordina Horizontal Group	ute System Settings	<sup>12</sup> 3 <b>?</b>	You will be prompted to assign a coordinate system when you start a new project. Choose the datum settings for the area the GPS receiver is in. Note: You usually need to extract the grid (geoid) files for your area before using FieldGenius. To do this, use the Datum Grid Editor that is available from our Support Helpdesk or load a byn file from your local Geodetic authority.
-	System Info	UTM83-11 Datum: NAD83		
	Vertical	Ellipsoidal	Incel	

# Start | Settings | Instrument Selection

#### **GPS Rover Profile**



### Model and Communication

Model a	nd Communicat	ion	≡∎1 <sub>23</sub>		
Make	Sokkia 💌	Model GRX1	•		cable are shown.
	Status: Not Co	onnected			If you are using Bluetooth in a Windows Mobile device, Tracker Xtreme or Sokkia/Toncon 2500 you only need to
Port	COM1		-		select Bluetooth in the Port field and
Baud Rate	38400 💌	Data Bits 8	•		follow the directions.
Parity	None	Stop Bits 1	•	]	Other devices will require you to create a Bluetooth partnership and then set the com port to match the partnership.
1	Connect	×	Close		

#### **Tolerance Modes 1-3**

Tolerance 1 Description RTK Fixed	₩ <sup>1</sup> 23 <b>?</b>	There are three different tolerance modes that can be set.
Masks Solution RTK Fixed  Elevation 15 ° PDOP 6.00 SVs 5 Reference ID Any  Close	Standard Deviation Horz 0.10' Vert 0.10' Point Tolerance Obs 3 Time 3 sec	Configure the three tolerance modes based on your needs. Once connected you can switch between them on the GPS Control menu.

#### **Active Tolerance Mode**

Selec	t Tolerance 🖷		≣ <sup>1</sup> 23 <b>(?)</b>	Here you can set the default tolerance mode when you first connect to the rover.	
	<b>V</b>	RTK Fixed			Once connected you can switch
		DGPS			between them on the GPS Control menu.
		DGPS			
×		Cancel			

#### **Antenna Height**

Antenna Height	<b>≣</b> ¹2 <sub>3</sub> ?	
Model GRX1 (1)	•	the list.
Measured Height 1.4		You should always confirm the antenna
Measure Point Bottom of antenna mo	unt	offsets to those published for your receiver.
Offsets		
Measure Point to ARP Offset - Horizontal	0.0mm	Select User Defined to enter your own
Measure Point to ARP Offset - Vertical	0.0mm	
ARP to APC (L1) Offset - Vertical	110.1mm	
Close		

Now you will need to locate some information provided by the service provider that supplied your Sim card and the provider of your Ntrip caster service:

- Dialup and login information for the Sim card (to be entered in "Network options")
- Ntrip address and login information from the Ntrip provider (to be entered in "Ntrip Options")

Once this information is located power up your equipment, head outside where you have a good view of the sky and pick connect from the Instrument Select Screen.

Now you can configure your correction link:

# **Correction Link**

Link Configure	<b>≡</b> 12 <sub>3</sub>	0	
Link Device	Link Communication		Choose the message type you want to use such as RTCM or CMR. If you later
Mobile	GPS Port Internal Dev 💌		select a mount point which uses a
Setup	Baud Rate	]	different data format, FieldGenius will change this setting to match the selected
	Parity -		mount point's data format.
	Data Bits	]	Press the Setup button to set the
	Stop Bits	]	network parameters.
	Flow Control	]	
(in The Connect	Close		

# **Correction Link – Modem Setup**

М	lobile Settings		1 <sub>23</sub> 💡	Select NTDID on the Connection Method
Co	nnection Method NTRIP		•	at the top of the screen.
=	Network Options			Linder Network Options, opter the login
	Model	Default		information which is used to connect
	Internet User ID	wapuser1	=	your modem to the internet.
	Internet Password	wap		Under NTRIP Options, enter the login
	Internet APN (GSM)	internet.com		information which is used to connect
-	NTRIP Options			FieldGenius to your NTRIP server.
	User ID	2013-5- 	-	(Scroll down so you do not miss any
	R	or		settings further down the page).
<u>_</u>	/	UK		Pick on "OK," then "Connect"
М	lobile Settings		1 <sub>23</sub> 😮	
Co	onnection Method NTRIP		-	After about a minute you will be prompted to Request a Mountpoint list
		· ·	-	prompted to request a mountpoint list.
	Internet Password	wap		
	Internet APN (GSM)	internet.com	_	
	NTRIP Options			
	User ID			
	Password	15/964		
	IP Address	07.79 221 160		
	TCP/IP Port	220	-	
1	/	ок		

Mount Point List			Highlight the desired mount point that	
Mount Point 🛕	Identifier	Format	Format Deta 🔺	vou want to connect to then press the
CMR01	CMR correction	CMR	0(1) 1(10)	Select Highlighted button.
CMRVR	CMR VRS	CMR	0(1) 1(10)	
RT3V	VRS RTCM3	RTCM30	1004(1) 1006	Or press the <b>Select Nearest</b> button to
SOK01	FirstReferenceSt	RTCM23	3(17) 20(1) 2	nave FieldGenius determine which
SOK03	RTCM3.0 correc	RTCM30	1004(1) 1006	rover's current position, and connect to
TEST1	VRS RTCM3 Nev	RTCM30	1004(1) 1006	it.
TESTG	VRS RTCM3 req	RTCM30	1004(1) 1006	
VRS01	VRS	RTCM23	3(17) 20(1) 2 🔻	You will get a message indicating which
•			►	Mount Point was connected to. Press
Correction Infor	rmation	·····	123 <b>(</b> )	
Status			You will be returned the Correction	
Message Type	RTCM	/3	H	see the Message Count increasing and
Message Count	44708			the Message Age getting smaller.
Message Age	2.0 sec			
Message Quality				Press the <b>Close</b> button to return to the
Message Info	Message Info Connecte			an RTK solution.
Reference				
Identification 110				
Latitude N 49° 49' 44.00753"				
Longitude W 119° 33' 32,76000"				
NTRIP MP Lis	st Discon	nect MP	Close	

#### **RTK Solution** When you get to the map screen, you will see the current solution cycle from "Autonomous" to "RTK Fixed" X 🔥 FieldGenius \$ £, + ++ œ 18 PDOP 1 3.4 3 5 + 1 40' **RTK** Fixed S ふ <No Line> Start Next ID 2 <No Desc>