# Sokkia GRX1 – Rover Configuration

You must be using EVR 7.1.1, FieldGenius 2010 v4.3.4 or newer.

# Start | Settings | Coordinate System

## **Coordinate System Settings**

Coordinate System Settings 🔤 123 ? Horizontal Group UTM Zones, NAD83	You will be prompted to assign a coordinate system when you start a new project.
System UTM83-11  Info Datum: NAD83	You will be prompted to assign a coordinate system when you start a new project. Choose the datum settings for your location.
System Ellipsoidal	Use the Datum Grid Editor that is available from our Support Helpdesk or load a byn file from your local Geodetic
✓ OK Save As Default X Cancel	referenced vertical system, but Filipsoidal is sufficient for testing

# Start | Settings | Instrument Selection

# **GPS Rover Profile**



# Model and Communication

Model a	nd Communic	ation	E	∎¹2 <sub>3</sub> ?	
Make	Sokkia 💌	Model GR	X1	•	cable are shown.
	Status: Not (	Connected			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 Rat	e 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.
	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**

Sele	ect Tolerance		≡1 <sub>23</sub> ?	Here you can set the default tolerance
				mode when you first connect to the rover.
	<	RTK Fixed		Once connected you can switch
		DGPS		between them on the GPS Control menu.
		DGPS		
×		Cancel		

# **Antenna Height**

Antenna Height		<b>≡</b> <sup>1</sup> 2 <sub>3</sub> <b>?</b>		Select the correct antenna model from
Model	GRX1 (1)	-		the list.
Measured Height	ight 1.4			You should always confirm the antenna
Measure Point	Measure Point Bottom of antenna mount			offsets to those published for your
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			

To configure the radio you will need to set up and power on the equipment, program the base, power up the rover, head outside where you have a good view of the sky and pick "Connect" from the "Instrument Selection" Screen.

Now you can configure your correction link:

#### **Correction Link** Link Configure 🕅 🕂 <sup>1</sup>23 😯 Always confirm the radio settings with your dealer. Link Device Link Communication Internal Devi 👻 Digital UHF GPS Port • Choose the data format you want to use. This must match the correction type Baud Rate Setup being broadcast by the base receiver. Parity Data Format -Press the Setup button to set the radio Data Bits parameters. CMR/CMR+ Ŧ Stop Bits Flow Control (e 😽 Connect Close 🕅 🕂 <sup>1</sup>23 😯 Radio Setup Select a frequency or channel. This must match the frequency which the - 464.50000 MHz Channel • base receiver is broadcasting on. Simplex Rx Protocol Ŧ Select an "Rx" protocol for the rover to match the "Tx" protocol selected for the Off Scrambling Ŧ base. **Transmit Power** 1 W Ŧ Pick on "OK" and in the Link Configure Screen, pick "Connect:" OK Cancel (e 🖌 Connect

#### **RTK Solution**

+1	++ // PDOP 2.2 % 6 //	When you get to the map screen, you will see the current solution cycle from "Autonomous" to "RTK Fixed" See your position by picking on the "Globe" button. Pick the "Wrench" icon and access "Link Information" to confirm that you are
	RTK Fixed	receiving messages over the radio.