

Part 2 – First Time Rover Setup

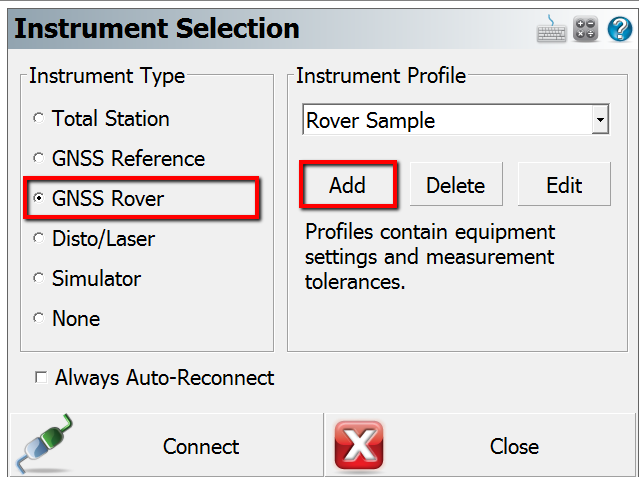
FieldGenius instrument profiles contain settings specific to each instrument. When selecting an instrument profile and connecting to the instrument, all these settings are automatically inherited.

Create Instrument Connection Profile (Rover)

To create a new GNSS Rover profile:

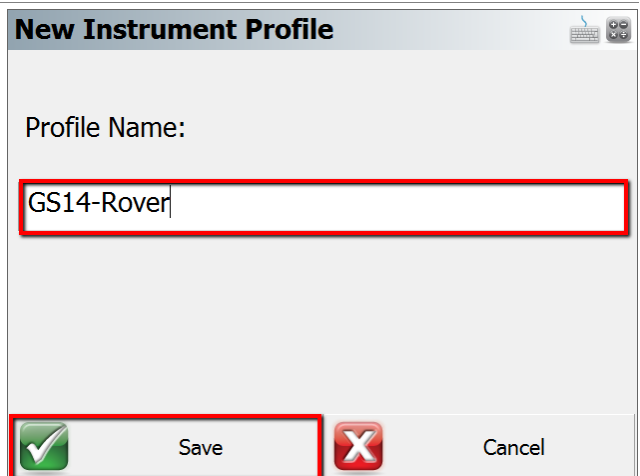
Add a New Profile

- From the Instrument Selection dialog pick the GNSS Rover instrument type
- Pick “Add” to create a new profile



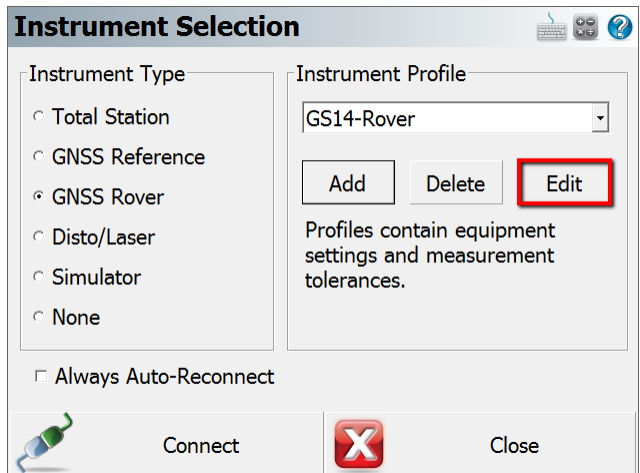
Enter Name and Save

- Enter a name for your profile
- Pick “Save”



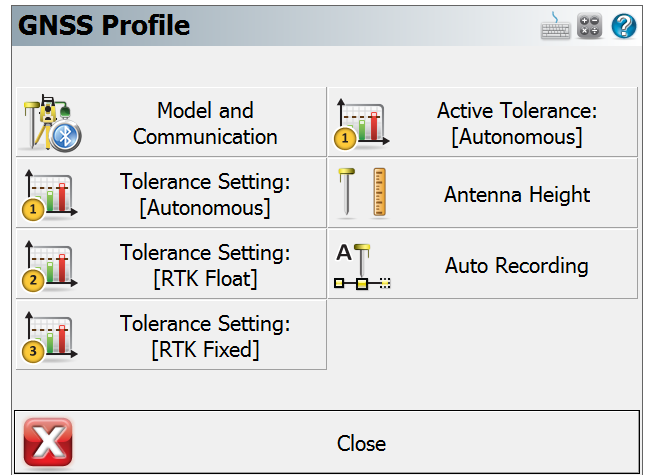
Edit Profile

- With the new instrument profile selected, pick “Edit” to edit the profile



Profile Setup

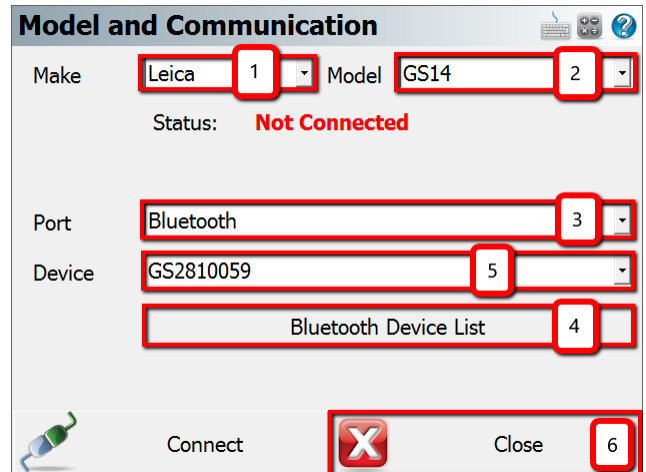
- Choose the profile component to configure



Model and Communication

The main component of the instrument profile is the instrument driver itself, which is specified by picking the make and model of the device.

1. Pick the Make from the list
2. Pick the Model from the list
3. Choose the connection Port
4. Open the Bluetooth Device List and search for the Bluetooth device
5. Ensure the new Device is selected
6. Pick Close to configure other components of the profile, the selections will be saved on Close



Tolerance Settings Concepts

FieldGenius can be configured with three tolerance settings that determine the minimum requirements that must be met for storing a position when the tolerance setting is active. The user can change the active tolerance setting to suit the conditions and/or actions.

Tolerance Setting: [Autonomous] / [RTK Float] / [RTK Fixed]

The three tolerance settings each have a default description and various options configured for specific conditions. The available options may vary between GNSS receivers.

Real Time Settings

Configure the minimum requirements for real time positioning.

Post Process Settings

Configure Raw Data Logging settings based on satellite availability.

Action Settings

Configure tolerance override ability, automatic skipping of statistics screen, and automatic point storing.

Real Time	
Observations	5
Solution	RTK Fixed
Elevation	10°
PDOP	4.00
Satellites Computed	5
StdDev Horizontal	0.030m

Active Tolerance

The active tolerance is used when measuring points to determine if minimum requirements are met and which actions will take place. It is a method of ensuring quality standards are met.

Antenna Height

The antenna height dialog allows the user to change the measured height of the receiver, and specifics about the receiver:

Model

The preconfigured offsets information of the receiver is stored under the model name, pick "User Defined" to manually enter the offset values.

Measure Point

Available options vary between receivers.

Offsets

Generally, the preconfigured or user-definable values are displayed, for some receivers this information is provided by the firmware once connected.

Antenna Height

Model: GS14

Measured Height: 2.000m

Measure Point: Bottom of antenna mount

Offsets

Measure Point to ARP Offset - Horizontal: TBD

Measure Point to ARP Offset - Vertical: TBD

ARP to APC (L1) Offset - Vertical: TBD

OK

Auto Recording

Auto recording settings are stored for each instrument profile.

Auto recording intervals can be set by distance or time. These settings will automatically be used with the Auto Record measure mode.

Auto Recording

Interval Mode: Distance

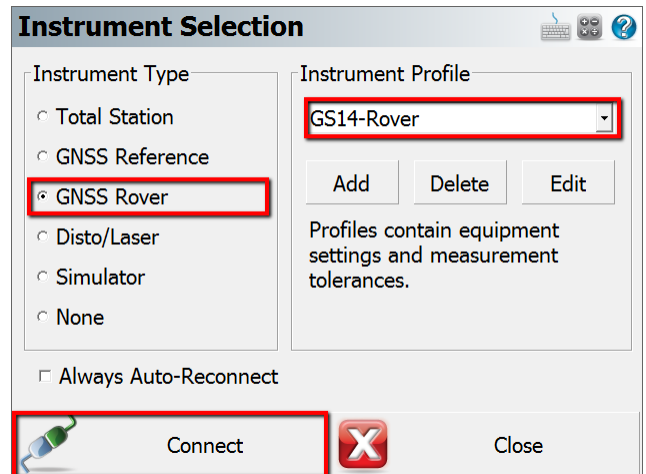
Distance Interval: 5.000m

OK

Part 3 - Connect and Configure Correction Link

Connect to Instrument

To connect to an instrument, pick the predefined profile and choose “Connect”.



Configure Correction Link

When connecting to a GNSS Rover device, the Link Configure dialog will be displayed following successful connection. Available options will vary depending on the device type selected.

Device Settings

Device Type

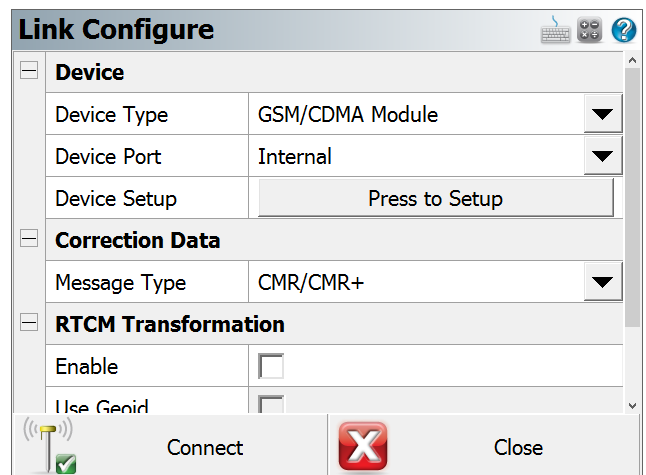
Select the appropriate Correction Link device type, such as GSM Module, UHF Radio Module, Data Collector Internet, or Other Device.

Device Port

Select the appropriate Port when multiple options exist.

Device Setup

Setup the parameters for the Radio or Modem connection.



For radio corrections, choose the radio make and model from the pull-down and set the channel or frequency, the radio will be programmed by FieldGenius to the channel or frequency selected (on some models).

For NTRIP or Network corrections, enter your internet and server credentials here.

Correction Data Settings

Message Type

The message type is used in determining what data streams are sent from the reference station to the rover. They can be RTCM, CMR or a proprietary format.

RTCM Transformation Settings

To receive horizontal and vertical coordinate system information from your network, enable RTCM Transformation messages.