

MicroSurvey FieldGenius 8

Basic Setup Guidelines for Base and Rover Operation

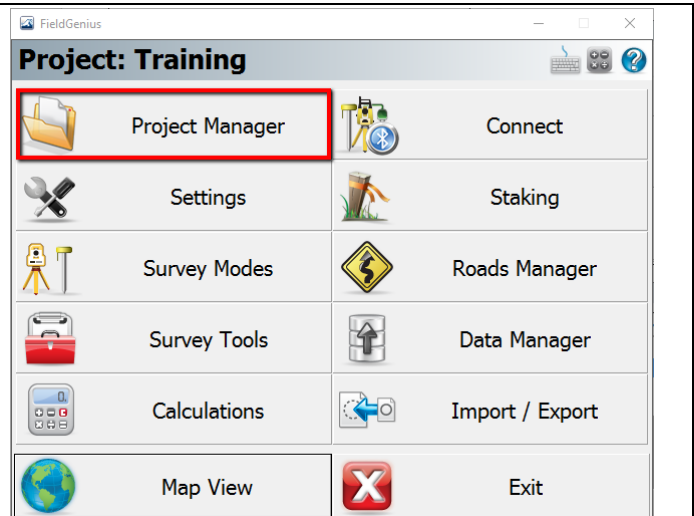
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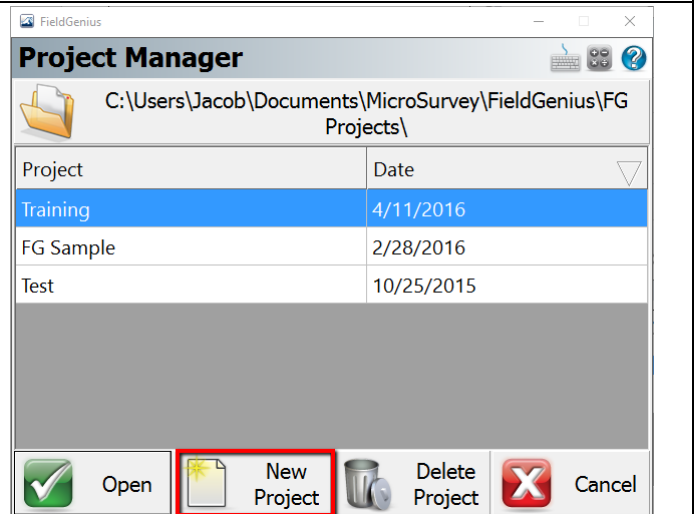


Creating a New Project

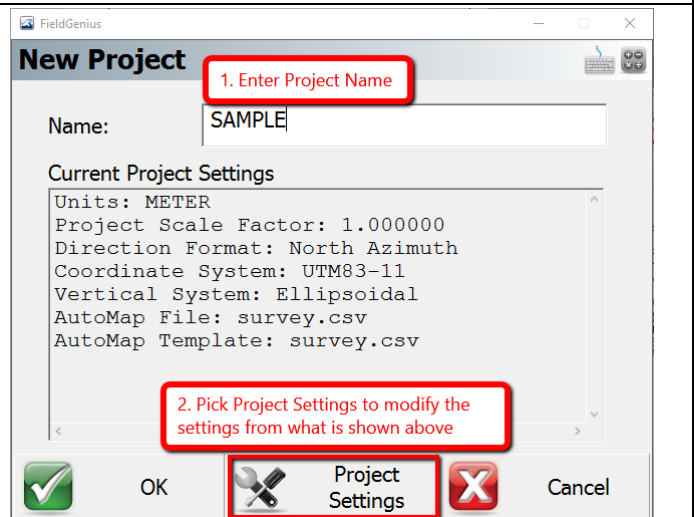
1. When you start MicroSurvey FieldGenius, the **Project Manager** will open. Also from the Main Menu you can choose the **Project Manager** option:



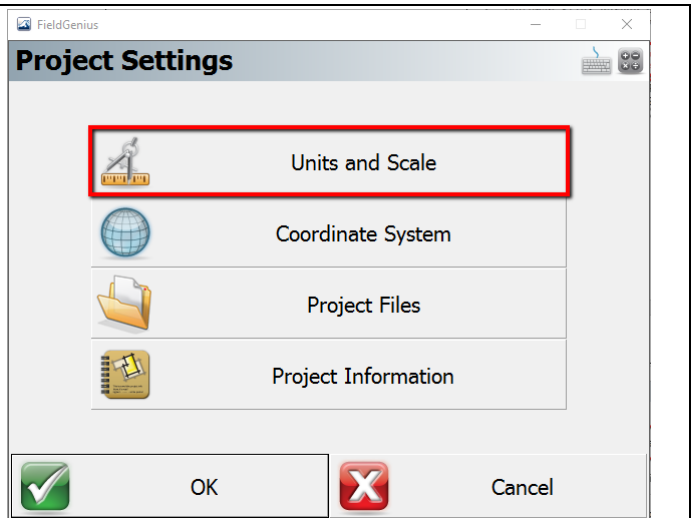
2. Pick **New Project** to create a new project:



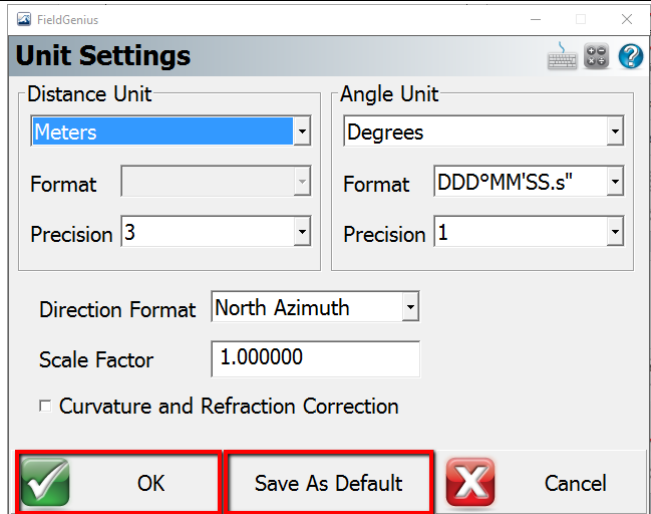
3. Enter a Project Name, then pick **Project Settings** to modify the project settings:



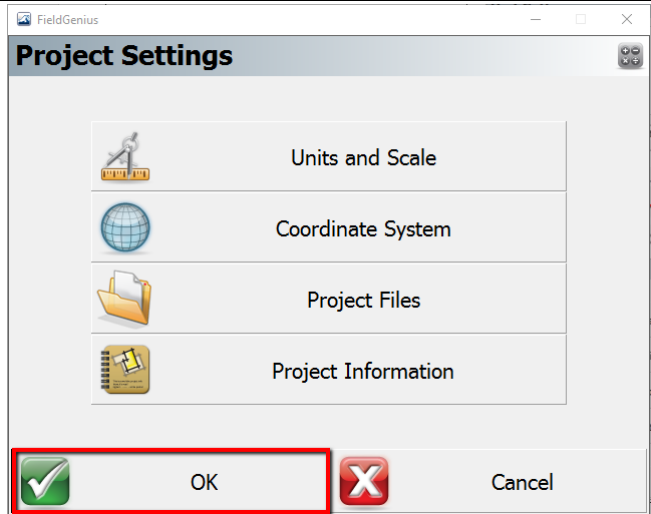
4. The **Units and Scale** settings may need to be modified:



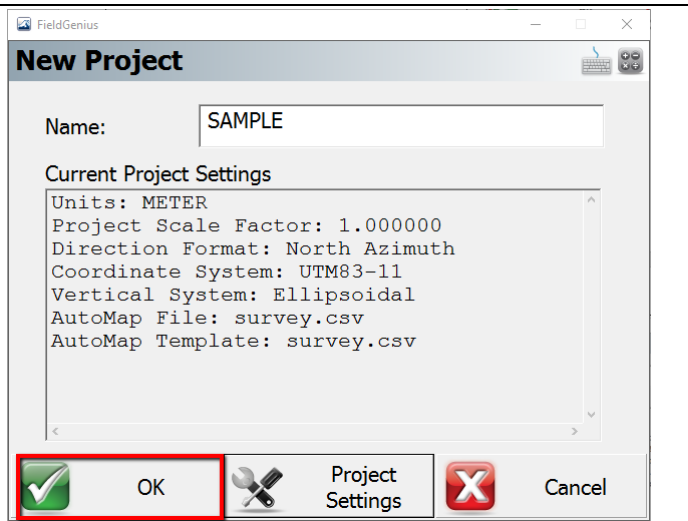
5. Set your preferred settings, and optionally **Save As Default** values for all future new projects, then pick **OK**:



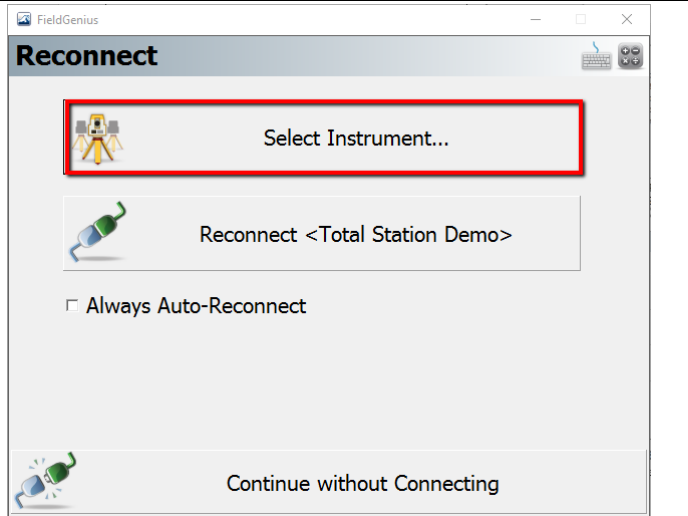
6. Pick **OK** to finish with the Project Settings:



7. Pick **OK** again to create the project:

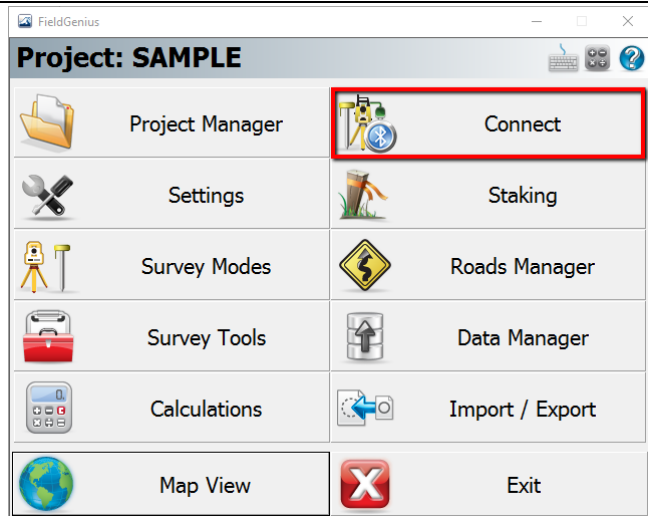


8. New project has been created, and the Connection screen appears. You can use the **Select Instrument** here, or select **Connect** from the Main Menu later if you choose to **Continue without Connecting**:

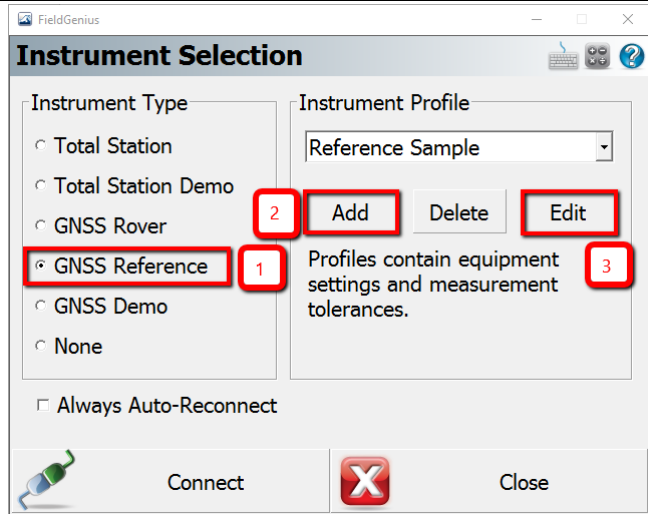


Creating an Instrument Profile for the GPS Base - and Connecting

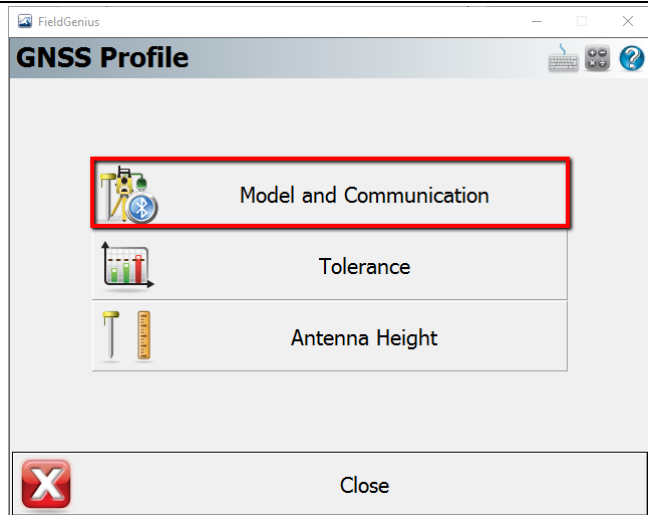
1. From the Main Menu pick **Connect**:



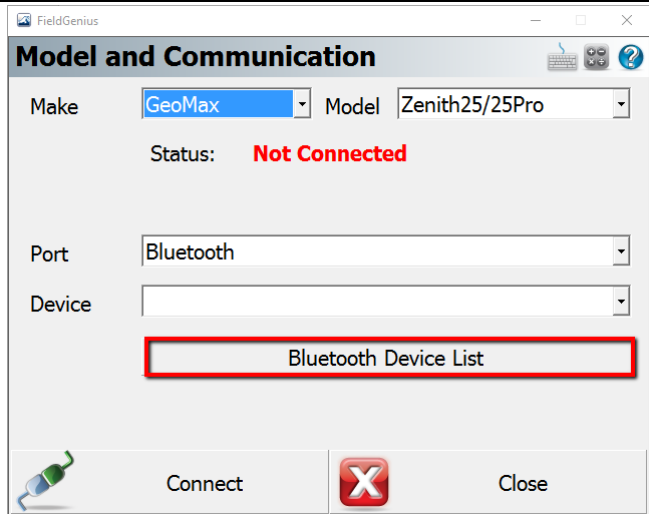
2. First, pick the GNSS Reference **Instrument Type**, then pick **Add** to create a new profile.



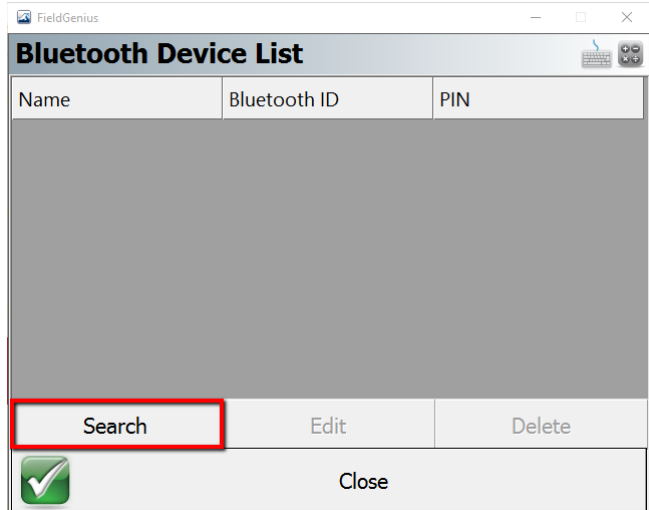
3. After entering a name for your profile pick **Edit** to configure the profile, and select **Model and Communication**.



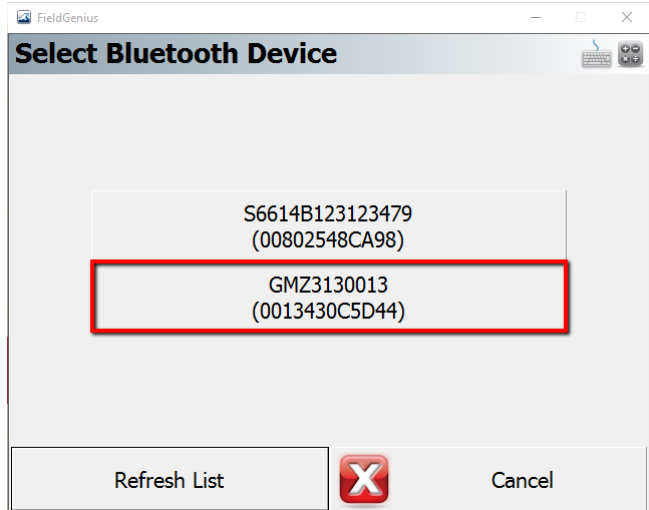
4. Select the Make and Model of your device, and the connection Port. If connecting by Bluetooth, pick **Bluetooth Device List** to search for Bluetooth devices:



5. **Search** for Bluetooth devices and select your device:



6. The Bluetooth ID of your Device will contain the device serial number in case there are multiple devices found and you're not sure which one to pick



7. Pick **OK** to confirm Name, and enter PIN Code if required (often not):

FieldGenius

New Bluetooth Device

Name:

Bluetooth ID:

PIN Code:

Leave PIN Code blank if not required

OK Cancel

8. Pick **Close** when the correct Bluetooth Device has been added to the list:

FieldGenius

Bluetooth Device List

| Name | Bluetooth ID | PIN |
|------------|--------------|-----|
| GMZ3130013 | GMZ3130013 | |

Search Edit Delete

Close

9. With all the settings configured, pick **Connect** to connect to the device:

FieldGenius

Model and Communication

Make: Model:

Status: **Not Connected**

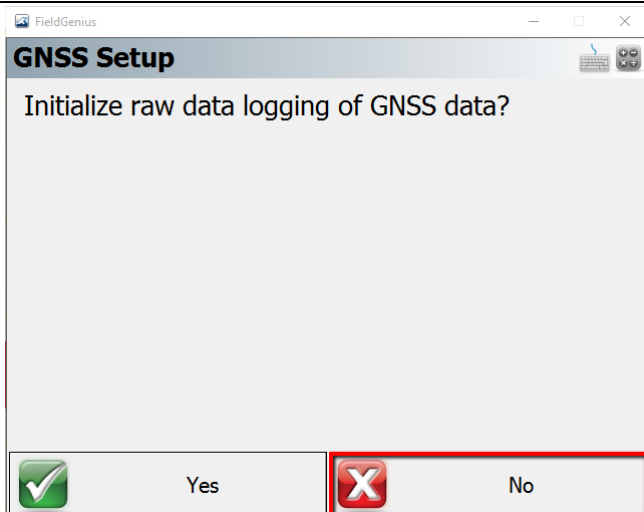
Port:

Device:

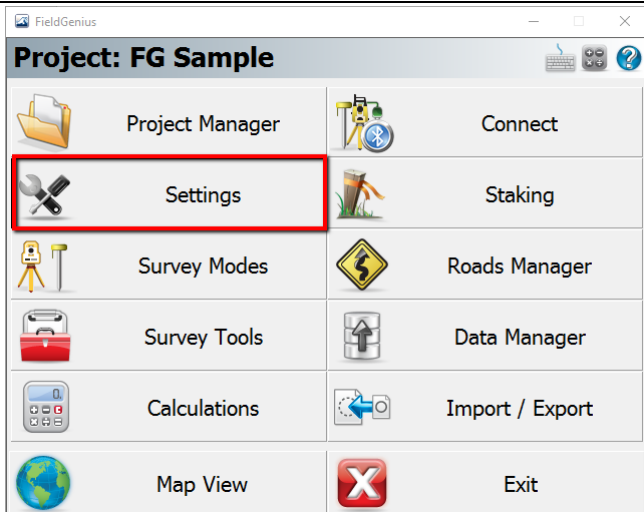
Connect Close

Raw Data Logging Option

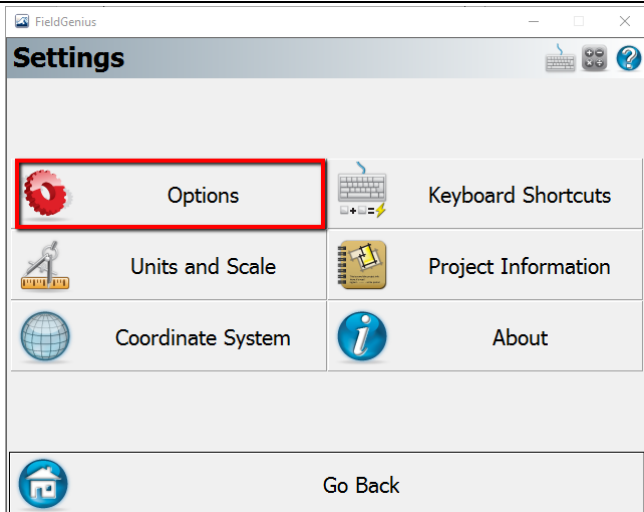
1. You may see the prompt to choose whether to initialize raw data logging of GNSS data. If you're not planning on post-processing the raw data, pick **No**. This prompt can be turned off in the Settings.



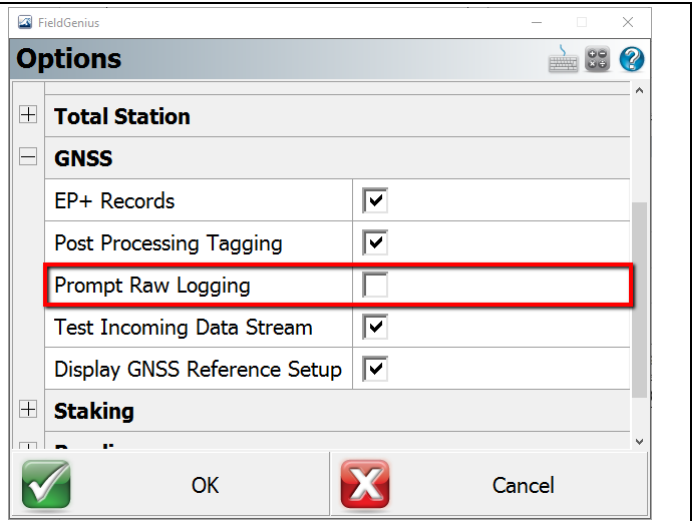
2. Pick **Settings** from the Main Menu:



3. Pick **Options**:

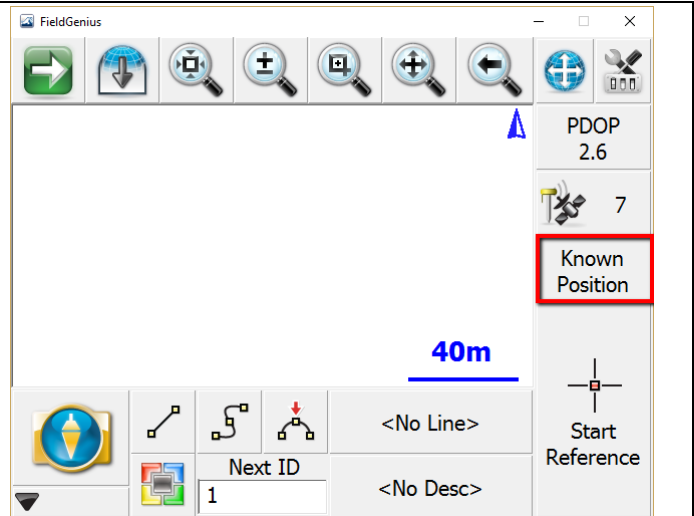


4. Under the GNSS category, uncheck the **Prompt Raw Logging** option:

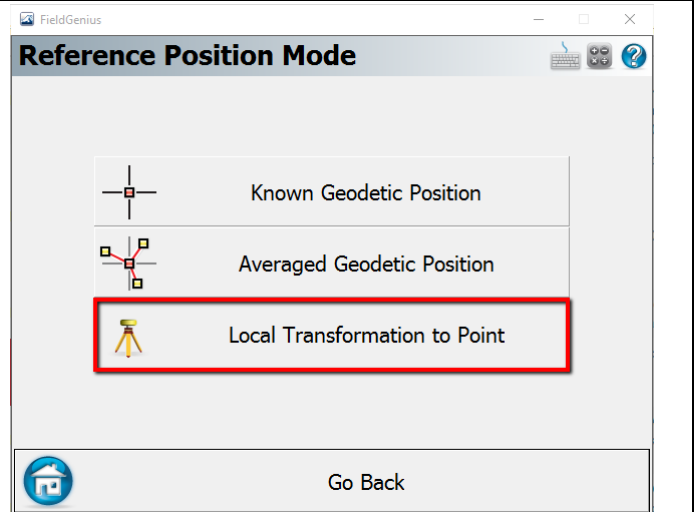


Setting the Base Position - and Configuring the Radio Link

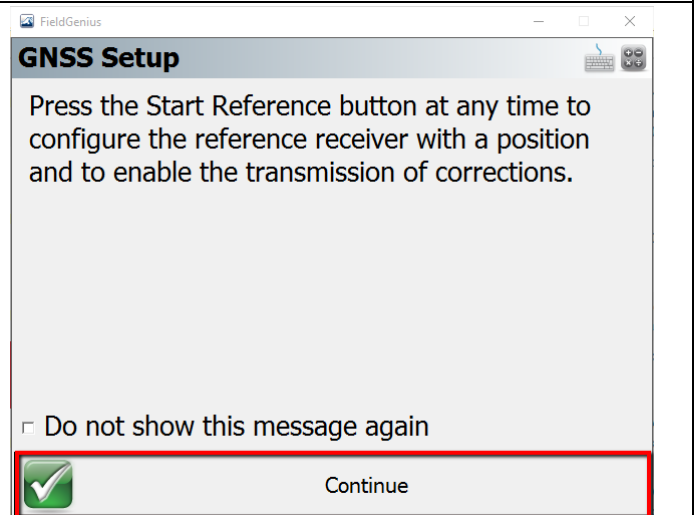
1. Once connected to the Base and on the Map Screen, pick the Measurement Mode button labeled **Known Position** by default:



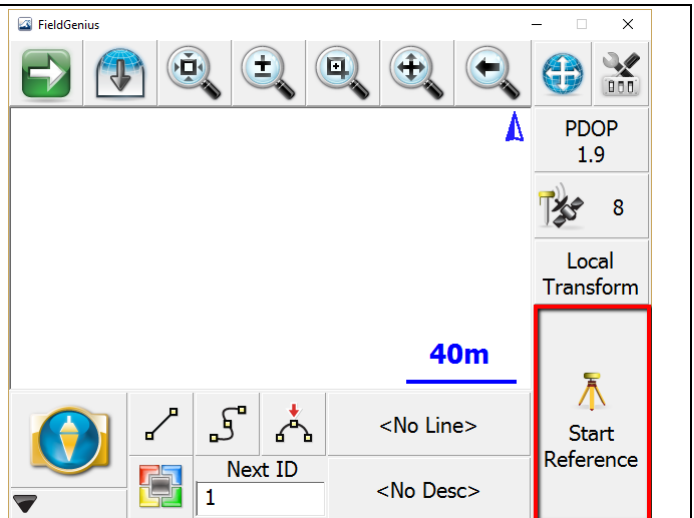
2. Pick **Local Transformation to Point** as the method to set the Base Reference Position:



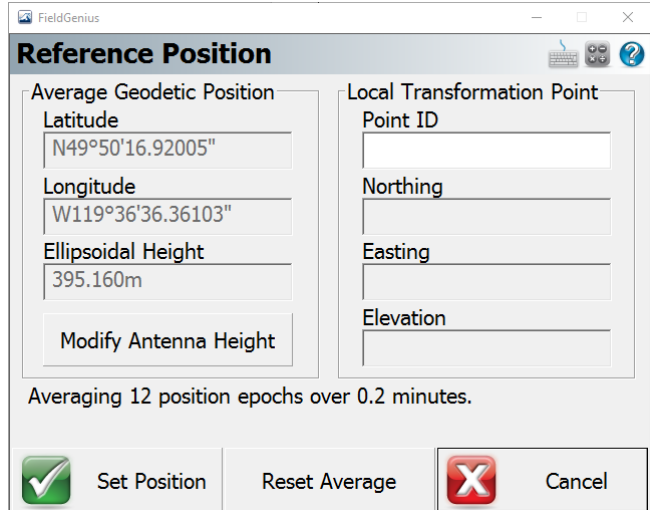
3. A message will appear indicating that you are ready to start the reference. Check the box to not show this screen in the future:



4. Pick **Start Reference** to begin:

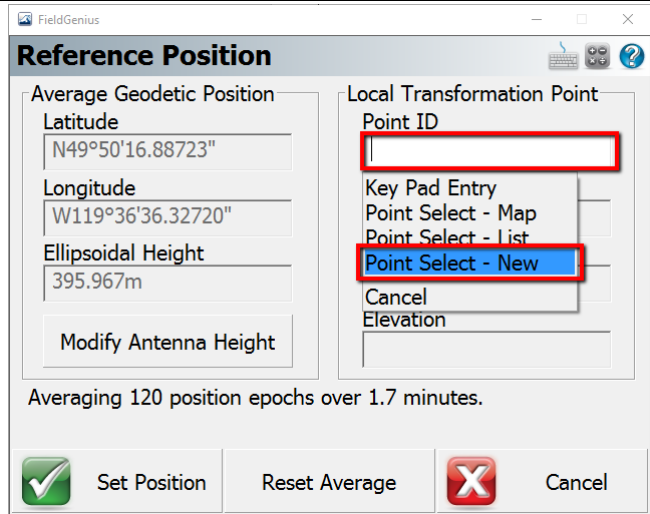


5. Immediately measurements are started, and the program will average all the observations taken until the position is set.



We need to set a local coordinate point for the position of the base, and we have may not have any points stored in the project yet.

6. Pick on the **Point ID** field to bring up a menu and then pick **Point Select – New:**



7. Enter a Point ID and some arbitrary coordinate values, then pick **Store Point** to store that point in the database:

FieldGenius

Store Point

Point ID: 1

Description: BASE

Northing: 5000.000m

Easting: 5000.000m

Elevation: 100.000m

Store As: User Point

Buttons: Review Measurement, GIS Attributes, Advanced, Enter Note, Store Pnt, Cancel

8. With the local transformation point set, pick **Set Position**:

FieldGenius

Reference Position

Average Geodetic Position

Latitude: N49°50'16.88948"

Longitude: W119°36'36.31547"

Ellipsoidal Height: 395.366m

Modify Antenna Height

Local Transformation Point

Point ID: 1

Northing: 5000.000m

Easting: 5000.000m

Elevation: 100.000m

Averaging 255 position epochs over 3.5 minutes.

Buttons: Set Position, Reset Average, Cancel

9. An option is presented to choose whether or not to store the measured point in the database. The point will have the same position as transformation point, and sometimes can be a good idea to store this point, but to simplify the procedure, pick **No**:

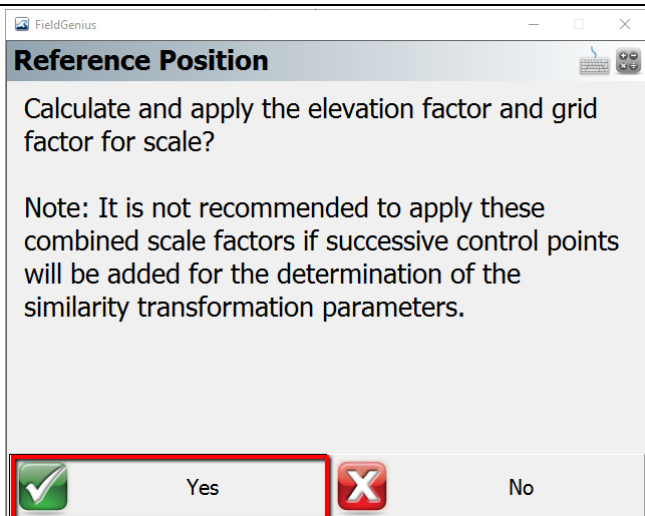
FieldGenius

Reference Position

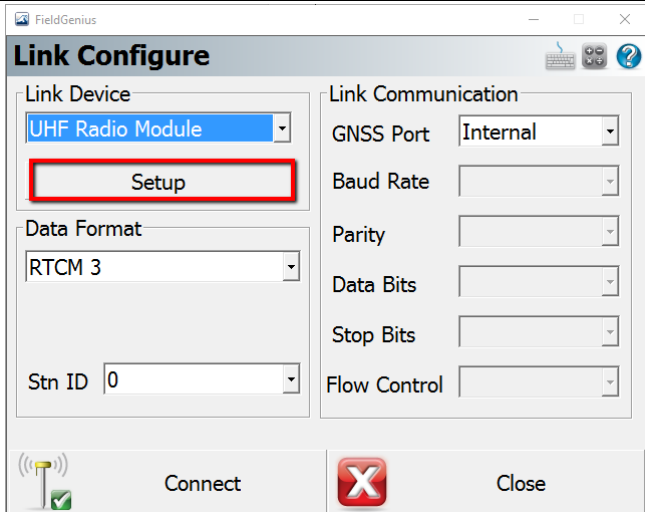
Would you like to save the measured position to the points database (saving the point is not required for use with local transformations)?

Buttons: Yes, No

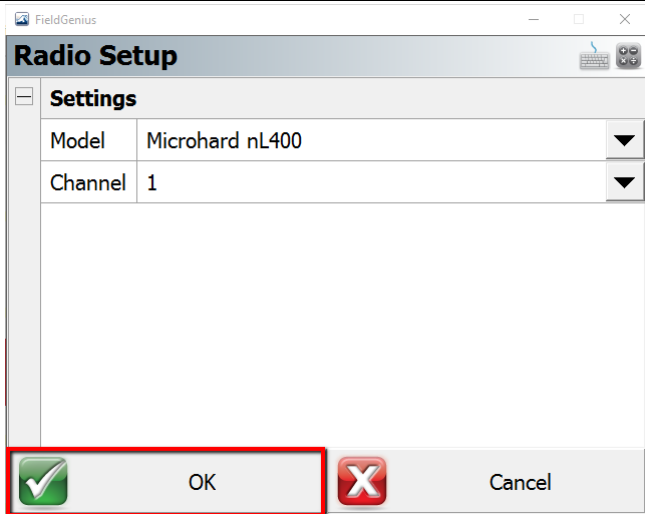
10. An option is presented to apply the scale factors to the position, pick **Yes**:



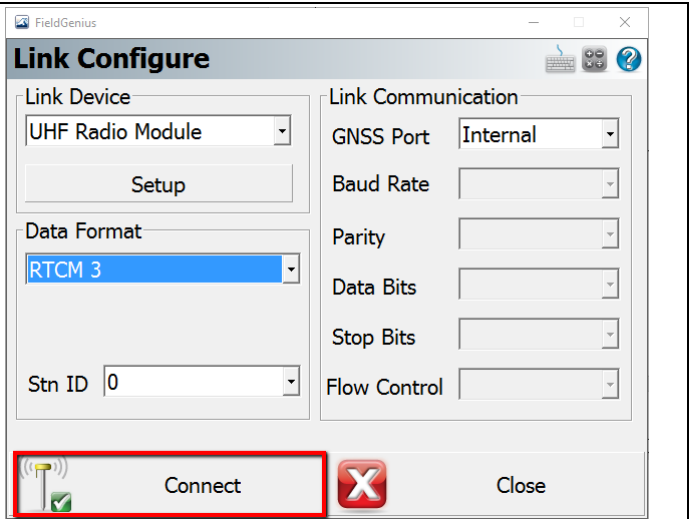
11. The Link Configure screen appears immediately after the base position has been set. Select the Link Device as appropriate and pick Setup to configure



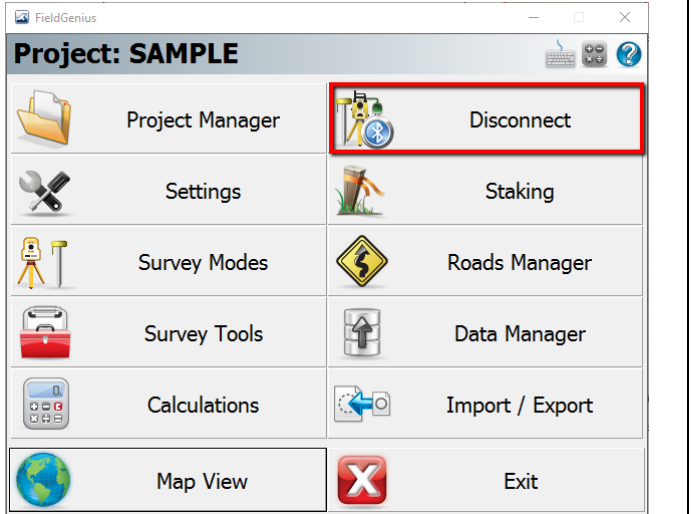
12. The Radio Setup step will vary between different devices. Set the appropriate radio frequency settings, and pick **OK**:



13. Pick **Connect** to initialize the radio and start transmitting corrections:

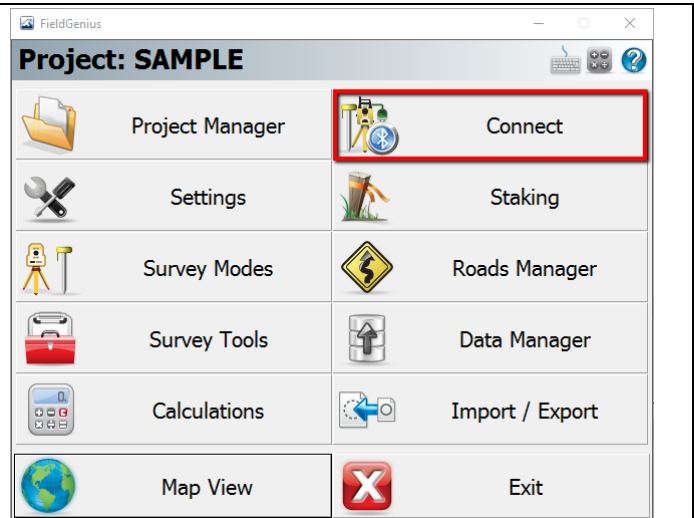


14. Pick **Disconnect** to disconnect from the Base receiver, the radio link will continue to transmit corrections.

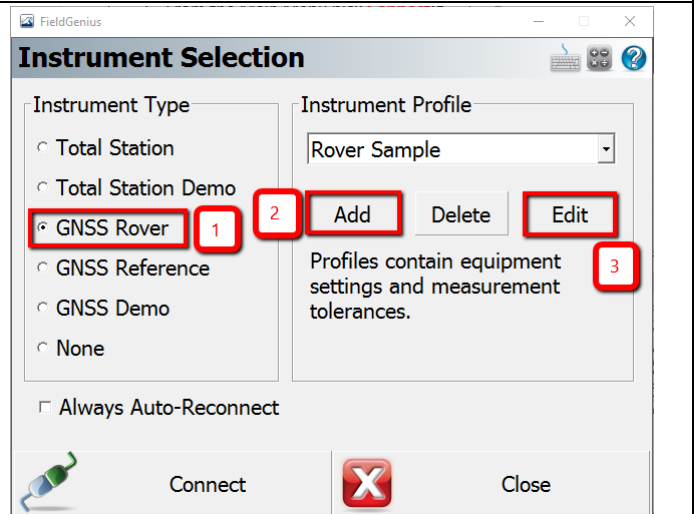


Creating an Instrument Profile for the GPS Rover – and Connecting

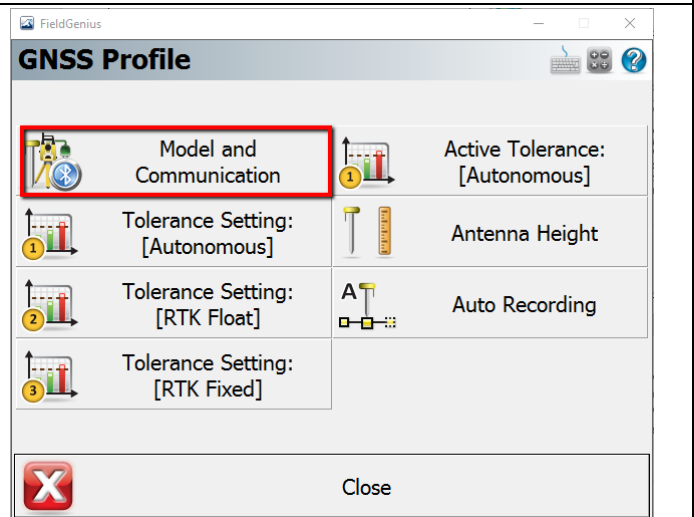
1. From the Main Menu pick **Connect**:



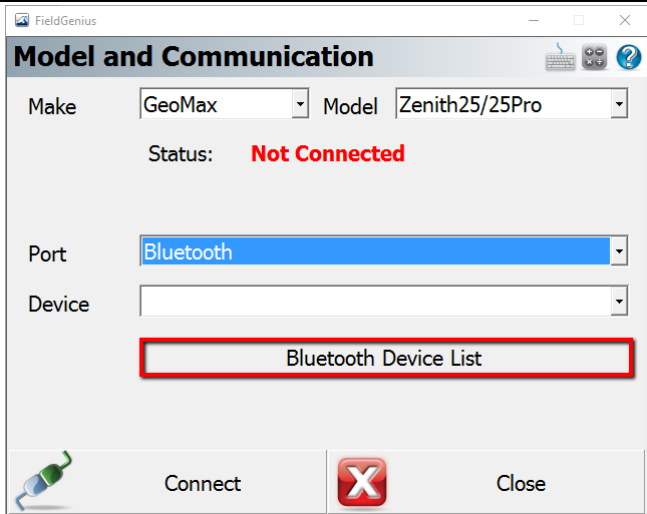
2. First, pick the GNSS Rover **Instrument Type**, then pick **Add** to create a new profile.



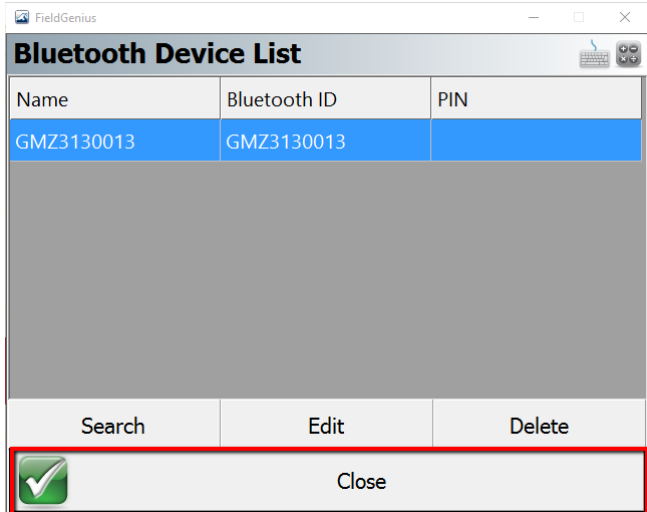
3. After entering a name for your profile pick **Edit** to configure the profile, and select **Model and Communication**.



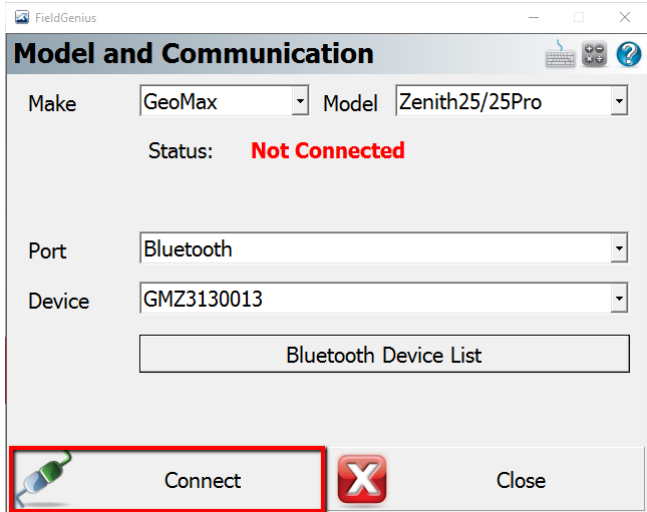
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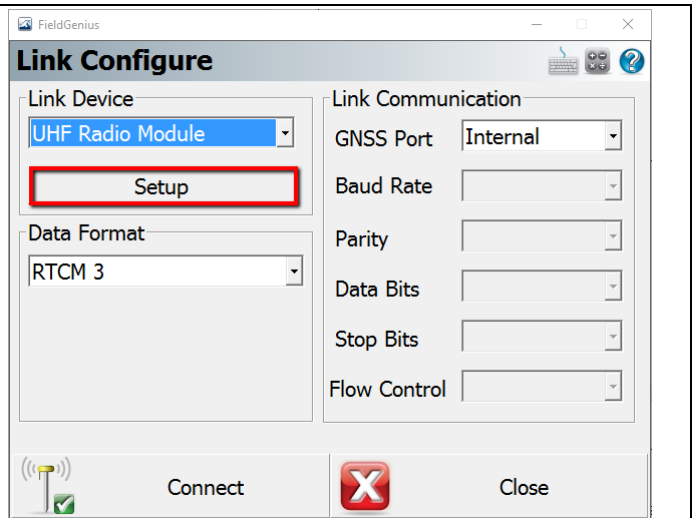
5. **Search** for Bluetooth devices and select your device. The Bluetooth ID of your Device will contain the device serial number in case there are multiple devices found and you're not sure which one to pick:



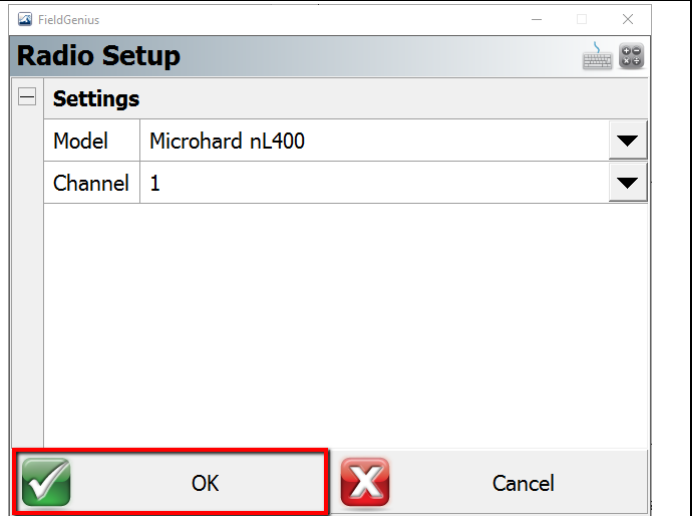
6. With all the settings configured, pick **Connect** to connect to the device:



7. The Link Configure screen appears immediately after the rover is connected. Select the Link Device as appropriate and pick **Setup** to configure:



8. Set the appropriate radio frequency settings, and pick **OK**:



9. Pick **Connect** to start receiving corrections:

