

# Setup Guide – EMLID Reach RS

PART 2 OF 3 - CREATE A FIELDGENIUS PROJECT AND INSTRUMENT PROFILE TO CONNECT

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**This guide demonstrates the steps required to connect to the EMLID Reach RS GNSS with MicroSurvey FieldGenius.**

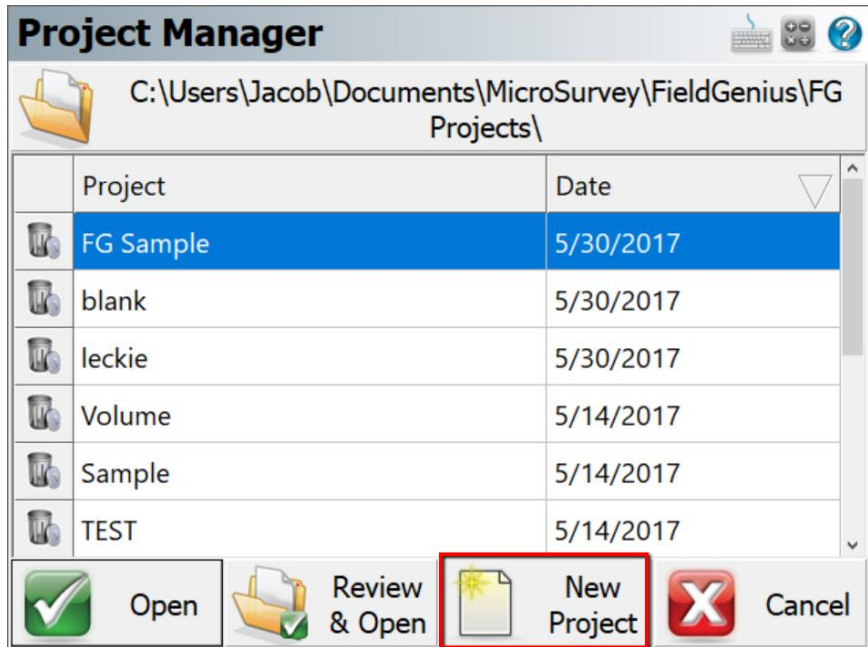
**Creating a new project and configuring project settings are covered, as well as creating a profile for the receiver and connecting to it.**

**Part 1 of the setup guide is required to be completed before using this guide.**

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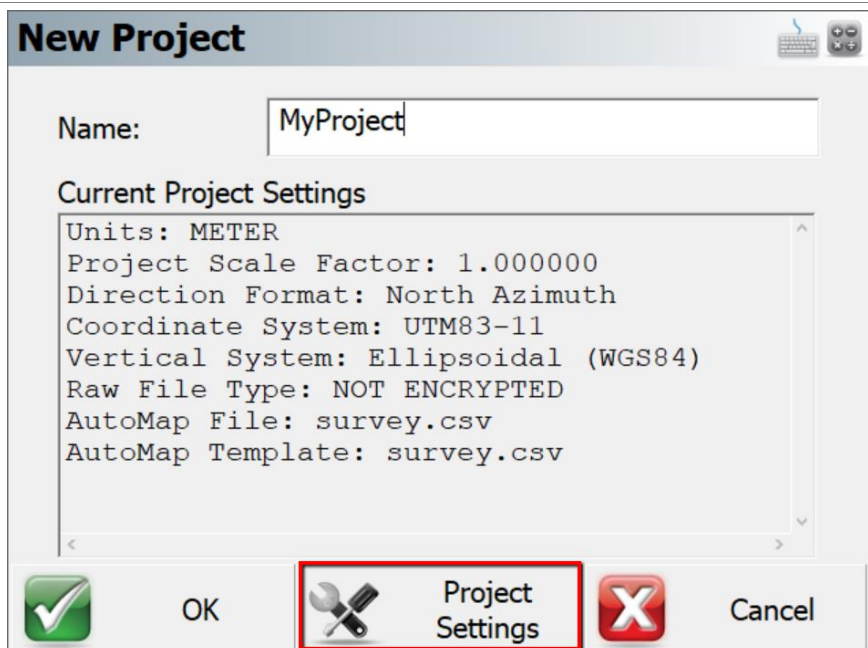
### Open FieldGenius

- Launch FieldGenius
- From the Project Manager pick the **New Project** option



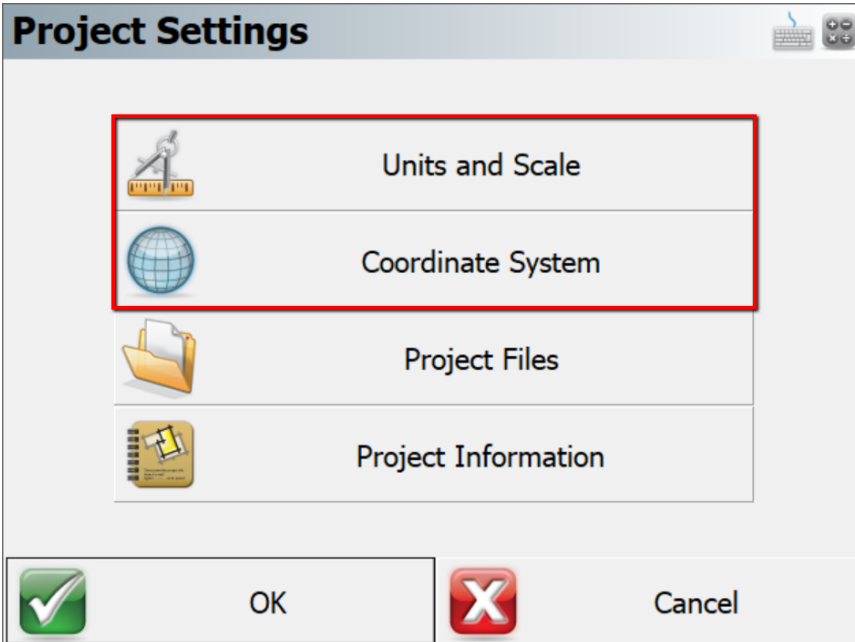
### Create a new project

- Enter a name for your project
- Pick the **Project Settings** option



### Configure Project Settings

- Unit settings can only be set at project creation



**Project Settings**

Units and Scale

Coordinate System

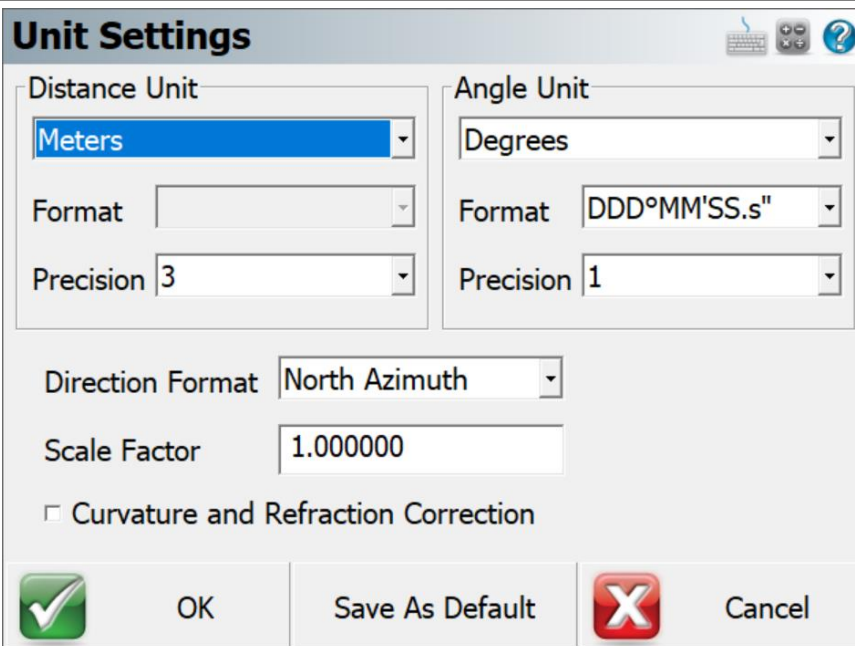
Project Files

Project Information

OK Cancel

### Set Unit Settings

- Set desired distance unit and angle unit settings
- Optionally **Save As Default**



**Unit Settings**

Distance Unit: Meters

Angle Unit: Degrees

Format: [Empty]

Format: DDD°MM'SS.s"

Precision: 3

Precision: 1

Direction Format: North Azimuth

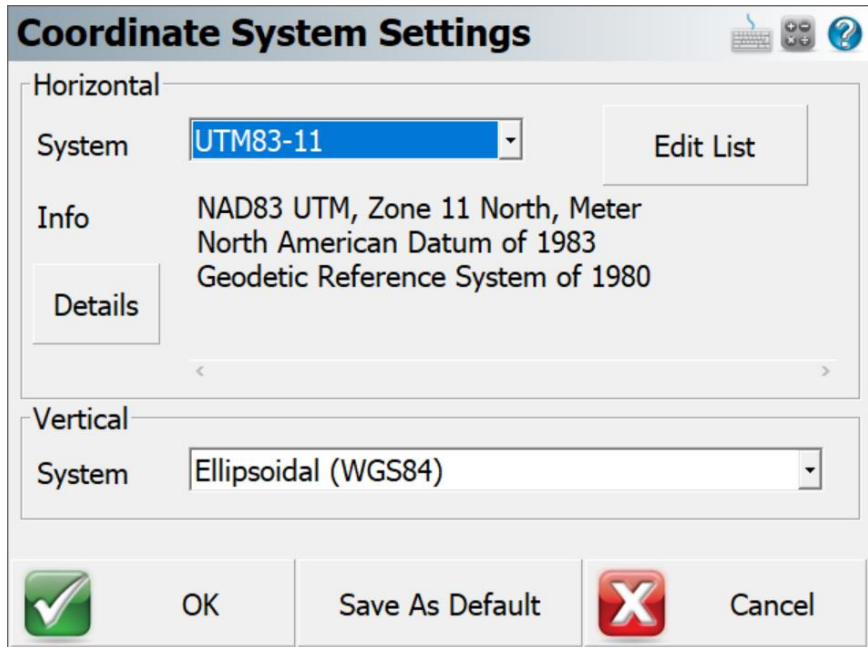
Scale Factor: 1.000000

☐ Curvature and Refraction Correction

OK Save As Default Cancel

### Set Coordinate System Settings

- Set desired horizontal and vertical systems
- Optionally **Save As Default**



**Coordinate System Settings**

Horizontal



System: **UTM83-11** Edit List

Info: NAD83 UTM, Zone 11 North, Meter  
North American Datum of 1983  
Geodetic Reference System of 1980

Details

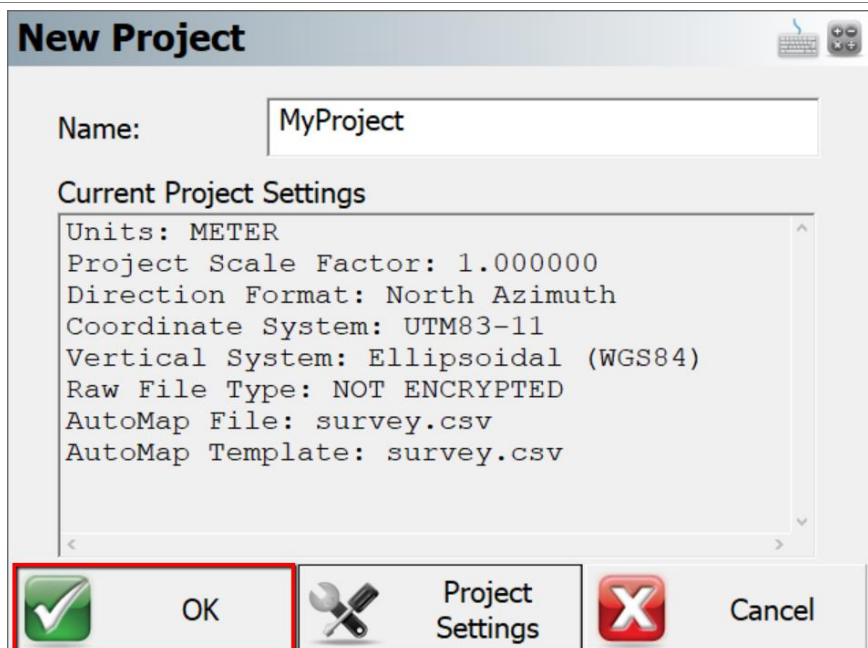
Vertical

System: **Ellipsoidal (WGS84)**

 OK Save As Default  Cancel

### Create Project

- Pick **OK** to finish creating the new project






**New Project**

Name: **MyProject**

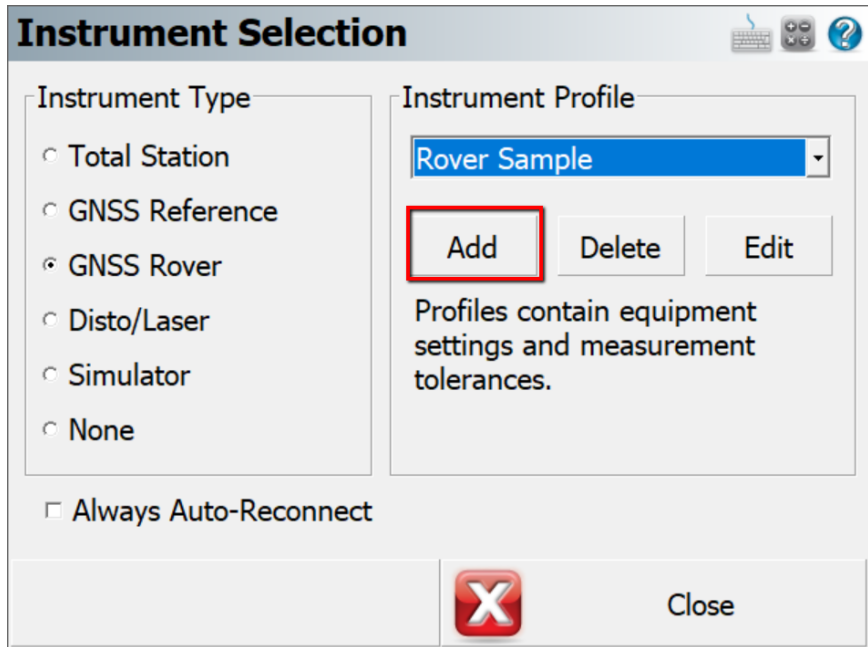
Current Project Settings

Units: METER  
Project Scale Factor: 1.000000  
Direction Format: North Azimuth  
Coordinate System: UTM83-11  
Vertical System: Ellipsoidal (WGS84)  
Raw File Type: NOT ENCRYPTED  
AutoMap File: survey.csv  
AutoMap Template: survey.csv

 OK  Project Settings  Cancel

### Create Instrument Profile

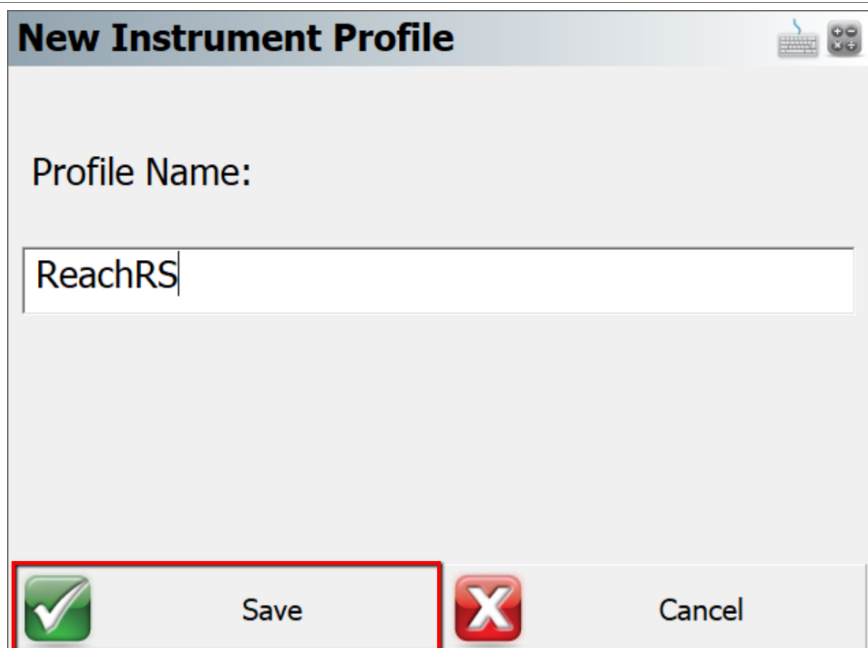
- From the Instrument Selection dialog pick the **GNSS Rover** Instrument Type
- Pick the **Add** option to add a new Instrument Profile



The **Instrument Selection** dialog box is shown. It has two main sections: **Instrument Type** and **Instrument Profile**. In the **Instrument Type** section, the **GNSS Rover** option is selected. In the **Instrument Profile** section, a dropdown menu shows **Rover Sample**. Below the dropdown are three buttons: **Add** (highlighted with a red box), **Delete**, and **Edit**. Below these buttons is the text: "Profiles contain equipment settings and measurement tolerances." At the bottom of the dialog is a checkbox labeled **Always Auto-Reconnect** and a **Close** button.

### Create Instrument Profile Cont'd

- Enter a name for your profile
- Pick **Save** to create the profile



The **New Instrument Profile** dialog box is shown. It has a label **Profile Name:** and a text input field containing **ReachRS**. At the bottom of the dialog are three buttons: a **Save** button (highlighted with a red box and a green checkmark icon), a **Cancel** button, and a red **X** icon.

### Edit Instrument Profile

- Pick the **Edit** option to edit the newly created Instrument Profile

### Instrument Selection

Instrument Type

- ☐ Total Station
- ☐ GNSS Reference
- ☒ GNSS Rover
- ☐ Disto/Laser
- ☐ Simulator
- ☐ None



Instrument Profile

ReachRS

Add
Delete
**Edit**

Profiles contain equipment settings and measurement tolerances.








☐ Always Auto-Reconnect



Connect

Close

### Edit Instrument Profile Cont'd

- Pick **Model and Communication**

### GNSS Profile

	Model and Communication		Active Tolerance: [Autonomous]
	Tolerance Setting: [Autonomous]		Antenna Height
	Tolerance Setting: [RTK Float]		Auto Recording
	Tolerance Setting: [RTK Fixed]		


Close

### Edit Instrument Profile Cont'd

- From the Make list choose **NMEA**
- The only Model available is **Basic**
- From the Port list choose **Bluetooth**
- Pick the **Bluetooth Device List** option to add the device

### Model and Communication



Make NMEA Model Basic

Status: **Not Connected**

Port Bluetooth

Device

**Bluetooth Device List**

 Connect  Close


### Add Bluetooth Device

- Pick the **Search** option to search for available Bluetooth devices

### Bluetooth Device List

Name	Bluetooth ID	PIN

Search Edit Delete

 Close

#### Add Bluetooth Device Cont'd

- Select the **reach** device from the list

#### Select Bluetooth Device

Bluetooth Mouse M557  
(001F20E54BA1)

TS883120  
(D4F513F6E64B)

reach  
(58A8390131F2)

HAL-2  
(8019346C9ACF)

Galaxy S6 edge  
(8CBFA6B3E3E8)

Refresh List



Cancel

#### Add Bluetooth Device Cont'd

- Enter the PIN Code as set in the ReachView app, 123456 by default
- Pick **OK** to add the device to the list

#### New Bluetooth Device

Name: reach

Bluetooth ID: reach

PIN Code: 123456

Leave PIN Code blank if not required



OK



Cancel



### Add Bluetooth Device Cont'd

- With the device selected, pick **Close** to finish

### Bluetooth Device List

Name	Bluetooth ID	PIN
reach	reach	123456

☒ Close

### Connect

- Ensure the device is selected
- Pick **Connect** to establish the connection

### Model and Communication

Make:  Model:

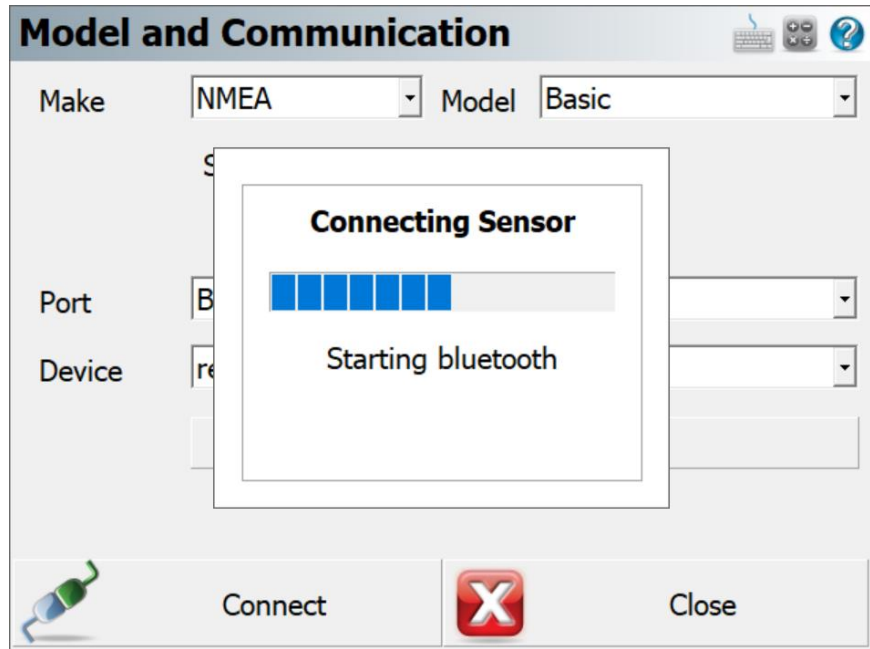
Status: **Not Connected**

Port:

Device:

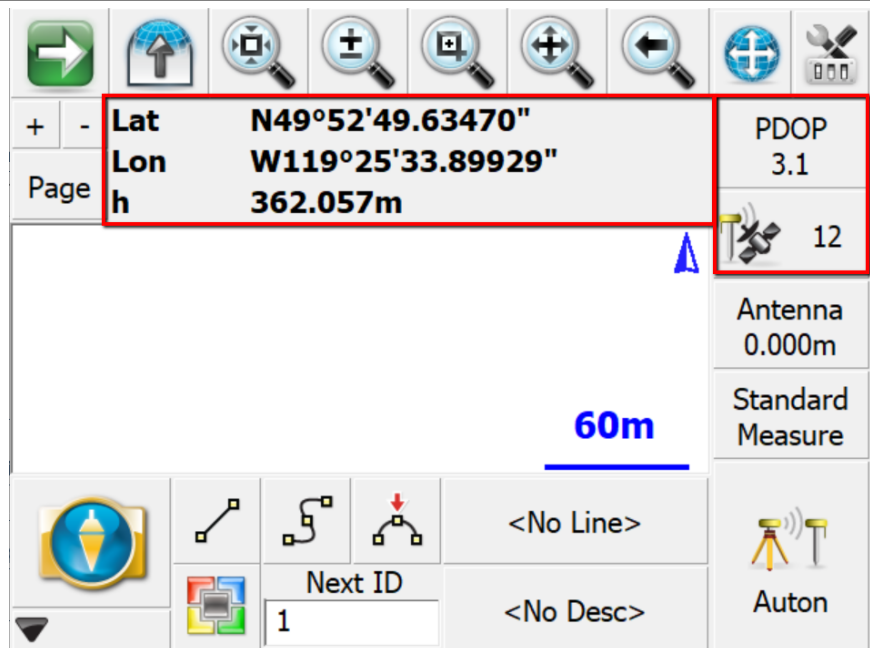
### Connect Cont'd

- A progress dialog is displayed



### Confirm Connection

- A valid position is reported
- PDOP values is reported
- Number of satellites is reported



### Complete

The Reach RS is now connected to work with MicroSurvey FieldGenius with an Autonomous or DGPS position solution.

Part 3 of the Setup Guide will cover the procedure to setup a RTK correction link using Data Collector Internet.