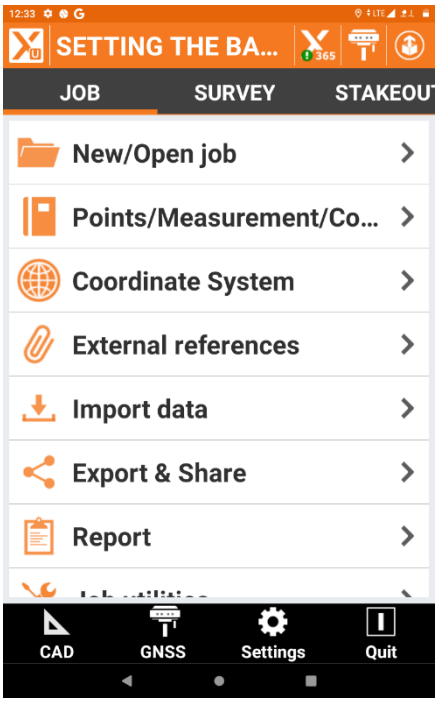
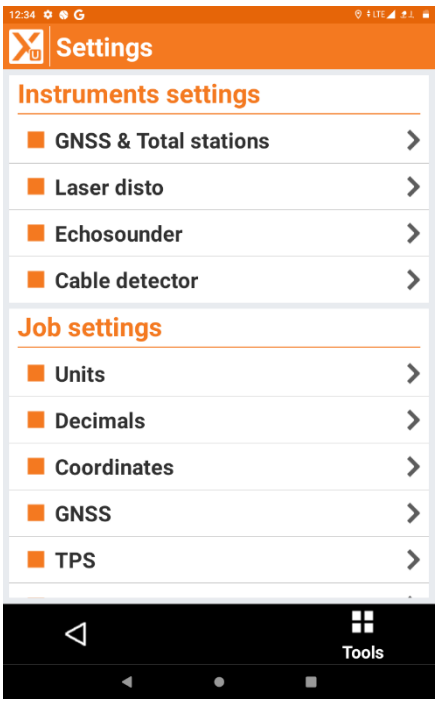
Grid to Ground with Base Receiver

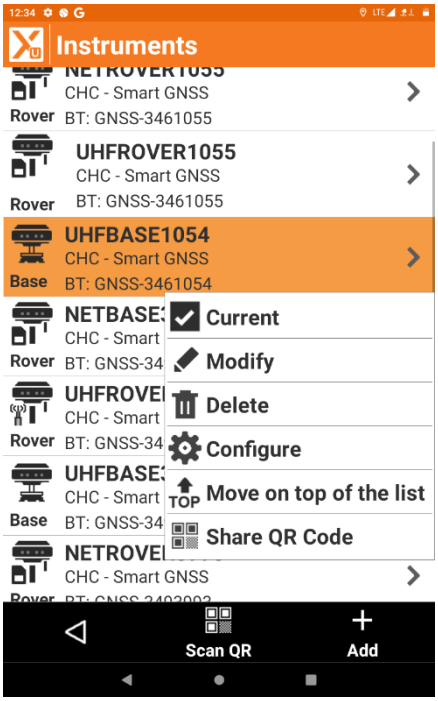


In this example we will set the Base receiver to broadcast Ground Coordinates. (Grid to Ground)

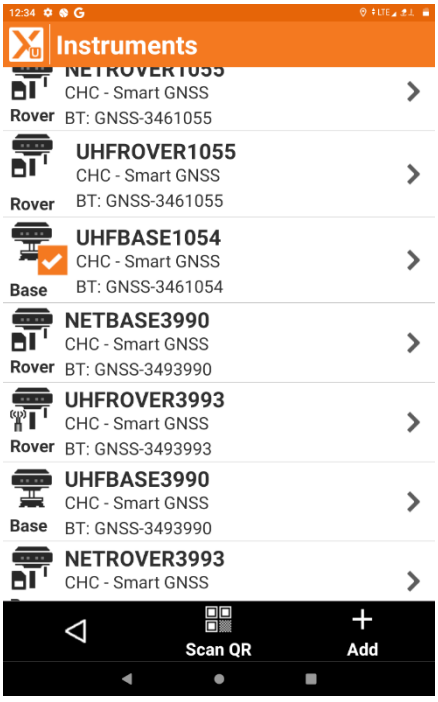
I have an established point I observed using an RTN Network to derive Grid Coordinates.



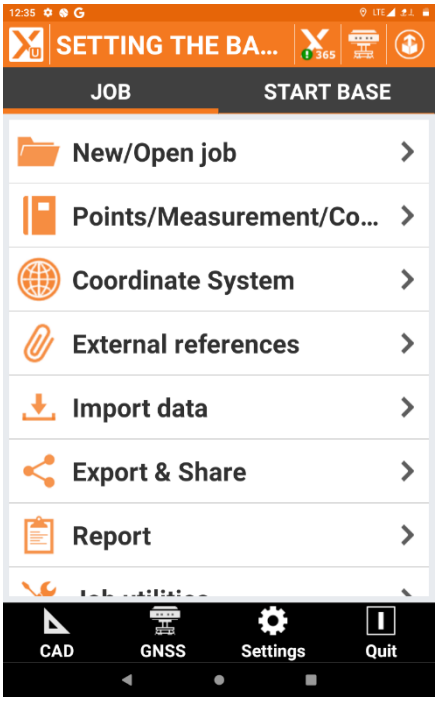
Go Job/Settings/ GNSS and Total Stations



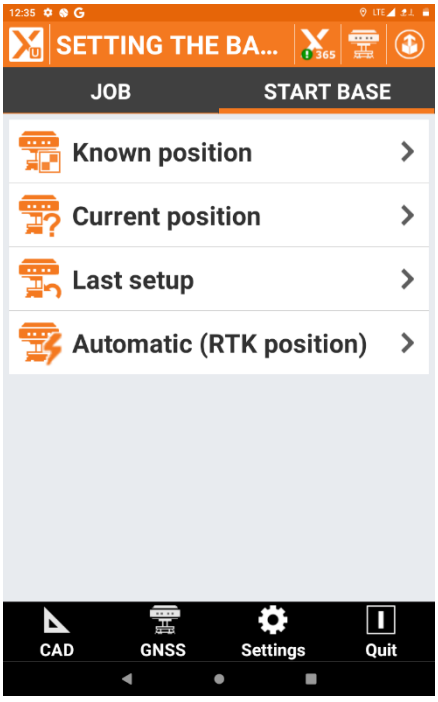
I have selected my GNSS Base and made it current.



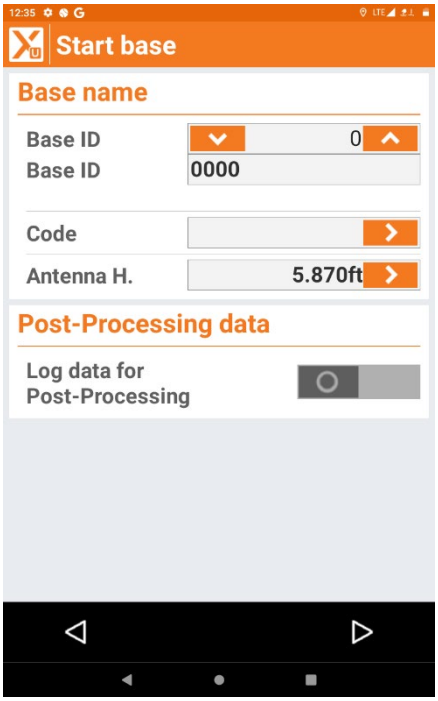
My Base now has an Orange Checkmark to indicate it is indeed the current instrument.



Returning to Survey Points I now have the option to Start Base Displayed.



Having located a point previously, choose Known Position from the options listed on screen.



On the Start Base Screen you will now see Base

Name. Base ID: 0

Base ID: 0000

Code: I leave Blank

Antenna H. HI of Receiver

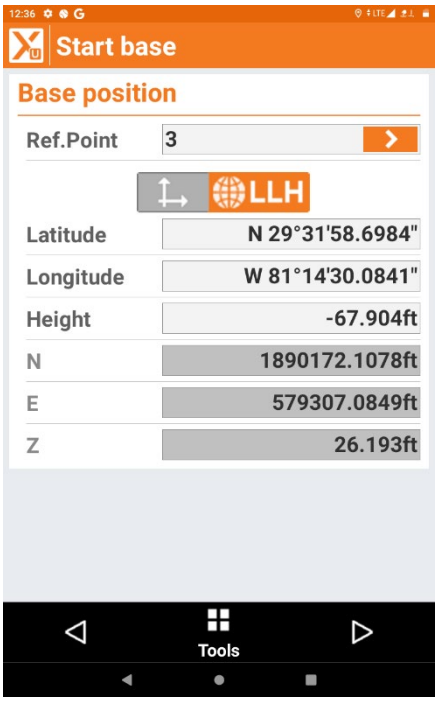
Post -Processing data

Log Data for Post Processing.

Slider to left = Off

I am choosing not to create a Static Observation File.

Right Arrow

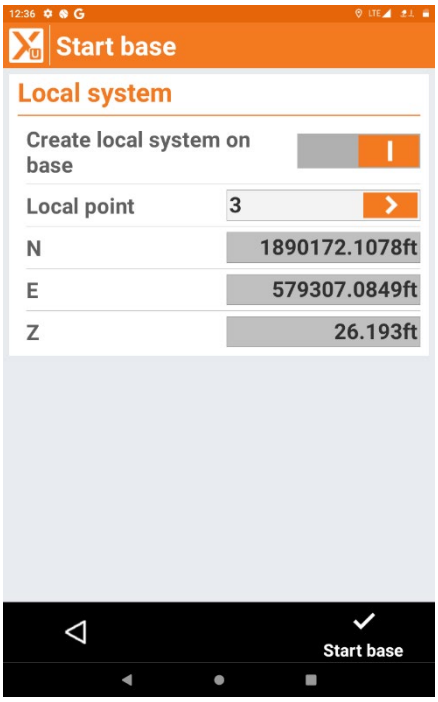


Base Position Screen

Ref. Point: Previously Surveyed Point Number

The Information will populate all fields.

Right Arrow

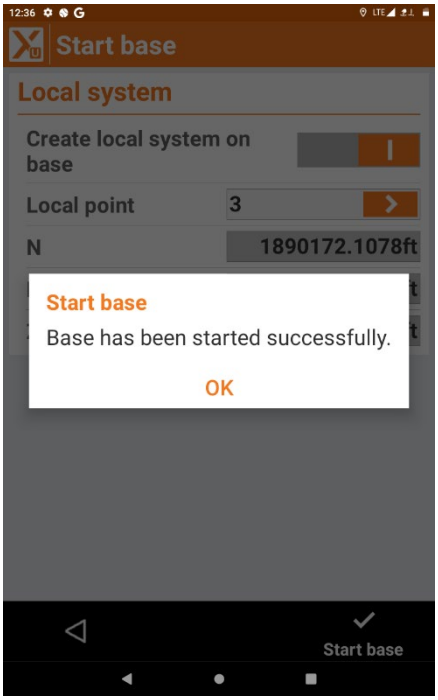


Local System (Ground Coordinates)

Create Local System on Base – Slider to the Right

Local Point: I choose my Base Point as my Scale Point from Grid to Ground. The Grid Coordinates will Populate the Previous SPC Coordinates.

Start Base



Start Base Message Dialog Box is displayed showing Base has been started successfully.

You can now connect your rover and all coordinates will be Ground values.

When the job is complete you can Export the Report as a pdf to be Shared/Stored on Device and all Scale factor information will be included in the Report.

Measurements report

Job information

Job annotation:	MySite
Job name:	SETTING THE BASE ON
Created:	06-01-2023 12:29:11 PM
Creator:	

Coordinate system information

Name:	FL83 - East
Transformation type:	Cartographic

Parameters		Datum		Ellipsoid	
Projection:	TM	**Name:**	NAD83	**Name:**	GRS80
Lat. origin:	N 24°20'00.0000"	**Type:**	Molodensky	**Major semiaxis:**	20925604.474250ft
Long. origin:	W 81°00'00.0000"	**Shift. X:**	0.000000ft	**Inv.flattening:**	298.25722210
False East:	656166.6667ft	**Shift. Y:**	0.000000ft		
False North:	0.0000ft	**Shift. Z:**	0.000000ft		
Scale:	0.999941	**Rotation about X:**	0.00000000		
		Rotation about Y:	0.00000000		
		Rotation about Z:	0.00000000		
		Scale:	0.00000000		

System type:	Single point

WGS84		Local grid	
Point name:	3	**Point name:**	3
Latitude:	N 29°31'58.6984"	**E:**	579307.0849ft
Longitude:	W 81°14'30.0841"	**N:**	1890172.1078ft
Height:	-67.904ft	**Z:**	26.193ft

Ground to grid scale factor

Average elevation:	26.193ft
To sea level:	0.999998748
To cartographic plane:	0.999947946
Combined scale:	0.999946694

Grid to ground scale factor

To cartographic plane:	1.000052057

Elevation:	Local system