

Ceaser 3.0 GPS Basics



www.ceaser.co.za

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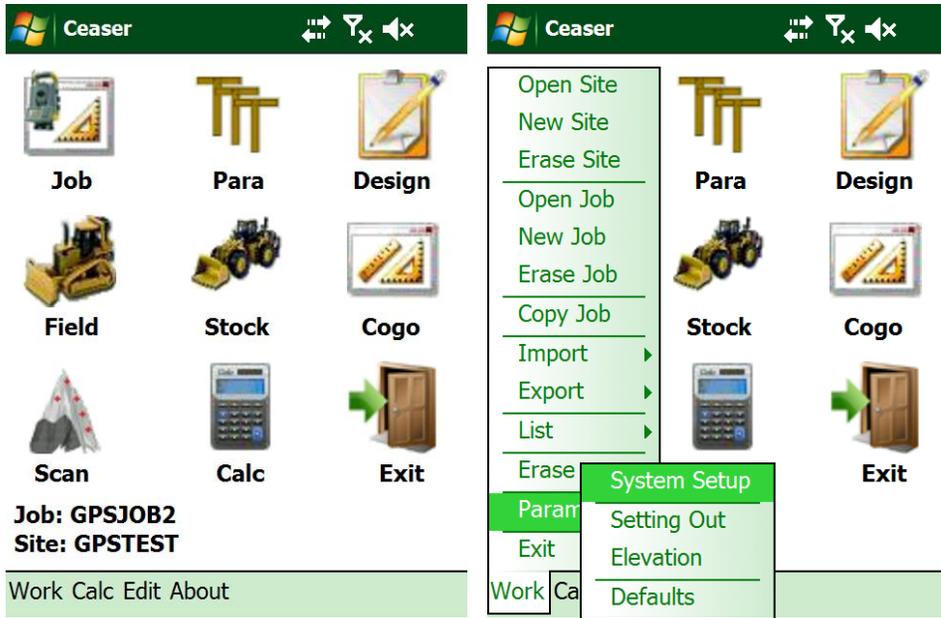
Jesse@ceaser.co.za

Ceaser GPS Tutorial

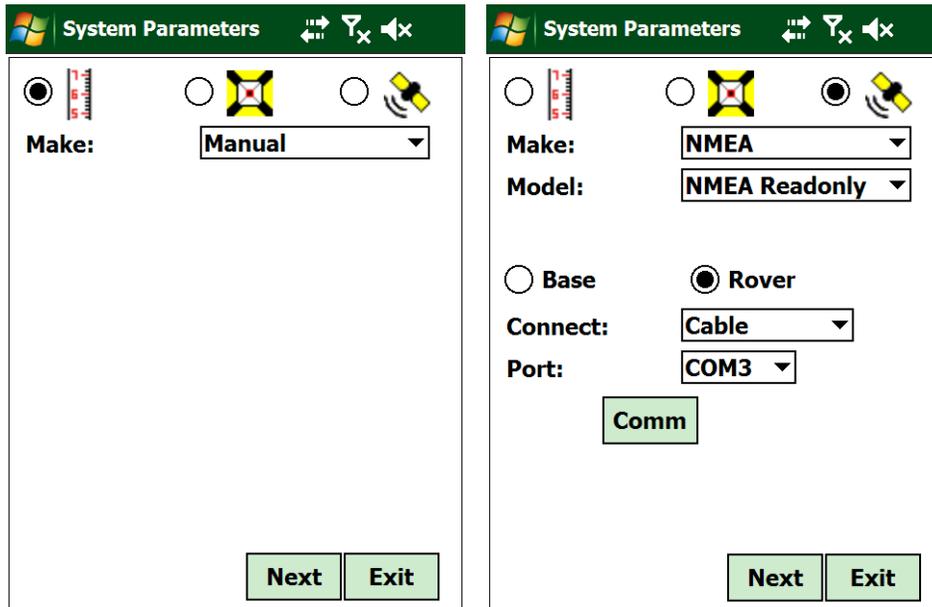
- How to connect (Bluetooth Pair) to your GPS
- How to Setup your Base and Rover
- How to Calibrate(Localize)
- How To Check your Fix Status
- How to Log a Tachy Point
- How to Setout a point

How to connect (Bluetooth Pair) to your GPS:

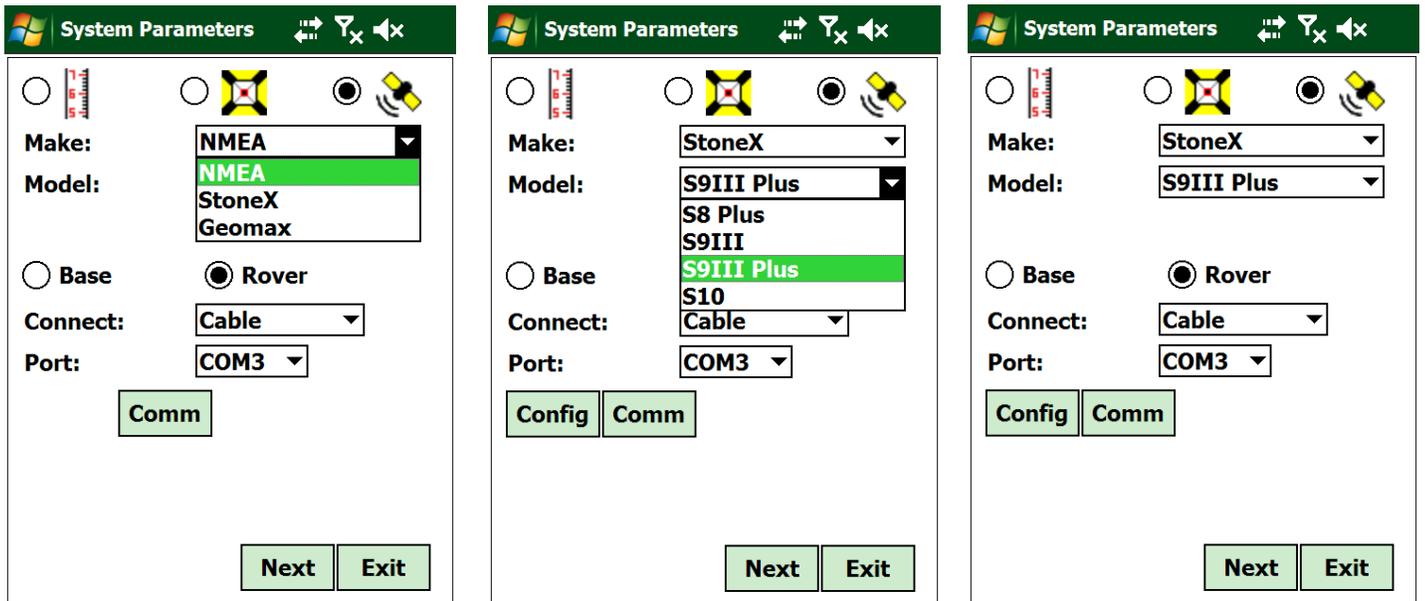
- From the Main Menu click **Work > Parameters > System Setup**



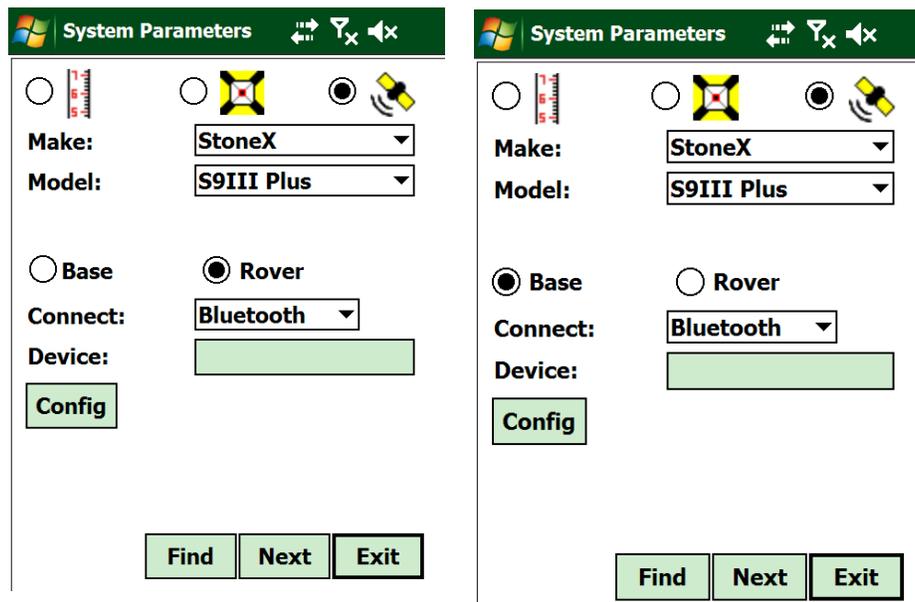
- Select GPS by clicking on the dot next to the GPS icon 



- Select the Correct Make and Model and Connection type(Cable/Bluetooth)



- To add your base, Click on the Circle next to the word **Base** Base // Base



- If Bluetooth communication was selected, Click **Find** to start Searching for bluetooth devices.

System Parameters

Select Device:
STNS94031011

Pin code:

Searching...

Find Pair Prev

System Parameters

Select Device:
STNS94031027
STNS94031027
Parrot v5.25C
STNS94031011

Pin code:

Find Pair Prev

- Assign the appropriate Serial number for your Base/Rover and Click **Pair**

System Parameters

Select Device:
STNS94031011

Pin code:

Find Pair Prev

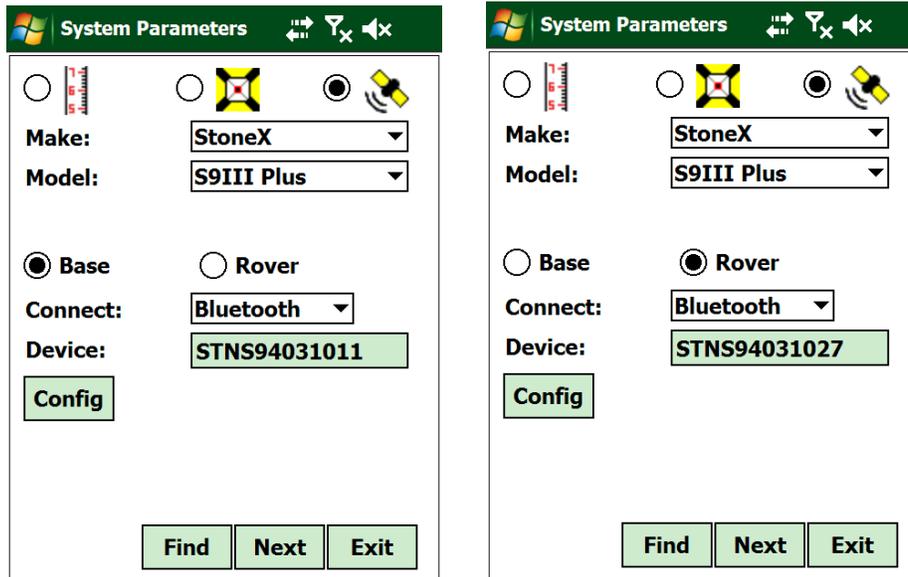
System Parameters

Select Device:
STNS94031027

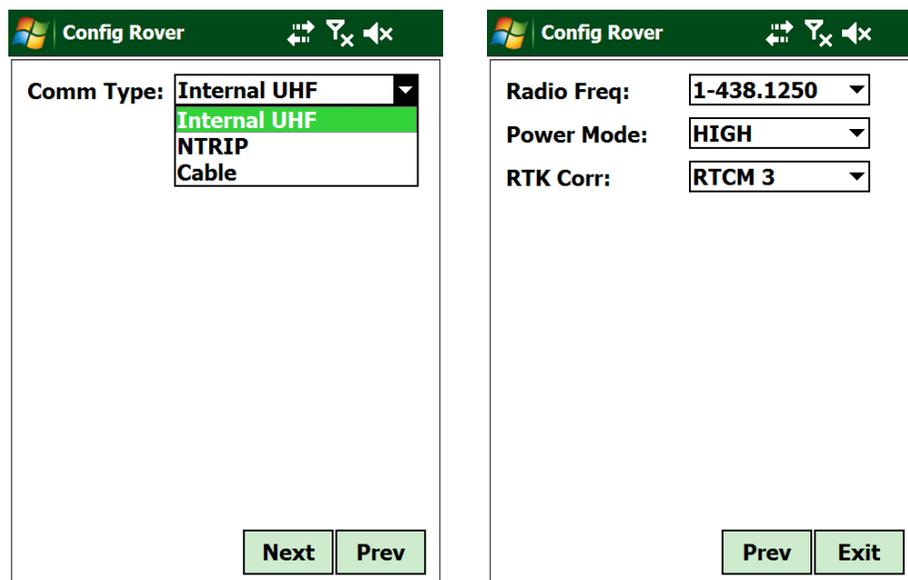
Pin code:

Find Pair Prev

- Once both Devices have been paired and assigned



- Click **Config** to change Correction settings/type and **Next** to change settings.



- Once you have matched the radio settings click **Exit**.

- Proceed through the Menu by Clicking **Next** to Finish your System Settings.

The image shows three sequential screenshots of the 'System Parameters' menu. Each window has a green title bar with the Windows logo, the text 'System Parameters', and navigation icons (back, forward, search, and volume).

First Screenshot: Shows the 'Make' dropdown set to 'StoneX' and 'Model' dropdown set to 'S9III Plus'. There are radio buttons for 'Base' (selected) and 'Rover'. The 'Connect' dropdown is set to 'Bluetooth' and the 'Device' text box contains 'STNS94031011'. A 'Config' button is visible. At the bottom are 'Find', 'Next', and 'Exit' buttons.

Second Screenshot: Shows numerical input fields for 'Temp (C): 0', 'Press (mb): 0', 'P\Con(mm): 0', 'Ver Index: 0.0000', 'Ave Hgt: 0.000', 'Ave Y Crd: 0.000', and 'S\Factor: 1.00000000'. At the bottom are 'Next', 'Prev', and 'Exit' buttons.

Third Screenshot: Shows dropdown menus for 'Angle Units: Degrees', 'Grid: Y Crd\X Crd', and 'Azimuth: South'. It also has 'Record: No', 'Voice: Yes', and 'Keyboard: Yes' dropdowns. At the bottom are 'Next', 'Prev', and 'Exit' buttons.

- Select the correct Coordinate System and click **Exit** to save settings

This screenshot shows the 'System Parameters' menu with the following settings:

- Country:** South Africa
- Coord Sys:** Hartebeesthoek94 / Lo19 (highlighted in green)
- SV Mask:** 0
- ELV Mask:** 10
- PDOP:** 15.0

A question mark icon is visible next to the 'Coord Sys' dropdown. At the bottom are 'Prev' and 'Exit' buttons.

How to Setup your Base for RTK Survey:

- In the **Field** screen Click **Fix > Setup Base**
- Choose your setup method, *In this example "Known" is used.*
- Select your known position and type in your Base Antennae Height
- Click **Next**

Setup Base

Known Manual Here
 Local Site Global

Select Pt:

Pt Name:

Ant Hgt:

Base ID:

Setup Base

Known Manual Here
 Local Site Global

Select Pt:

Pt Name:

Ant Hgt:

Base ID:

Setup Base

Known Manual Here
 Local Site Global

Select Pt:

Pt Name:

Ant Hgt:

Base ID:

- Click **Start** to Start Logging data for Base position and **Stop** when ready.

Setup Base

PDOP: Sat No:

State:

Sdy:

Sdx:

Sdz:

Y Coord:

X Coord:

Z Coord:

Setup Base

PDOP: Sat No:

State:

Sdy:

Sdx:

Sdz:

Y Coord:

X Coord:

Z Coord:

Setup Base

PDOP: Sat No:

State:

Sdy:

Sdx:

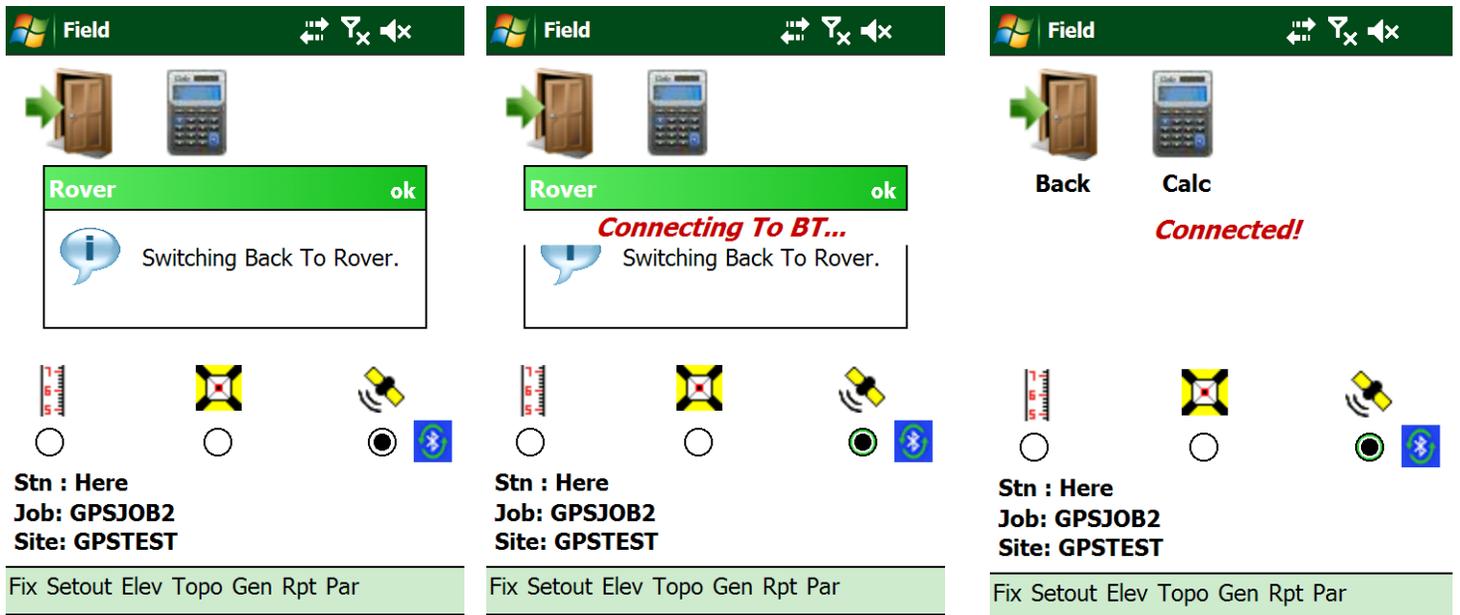
Sdz:

Y Coord:

X Coord:

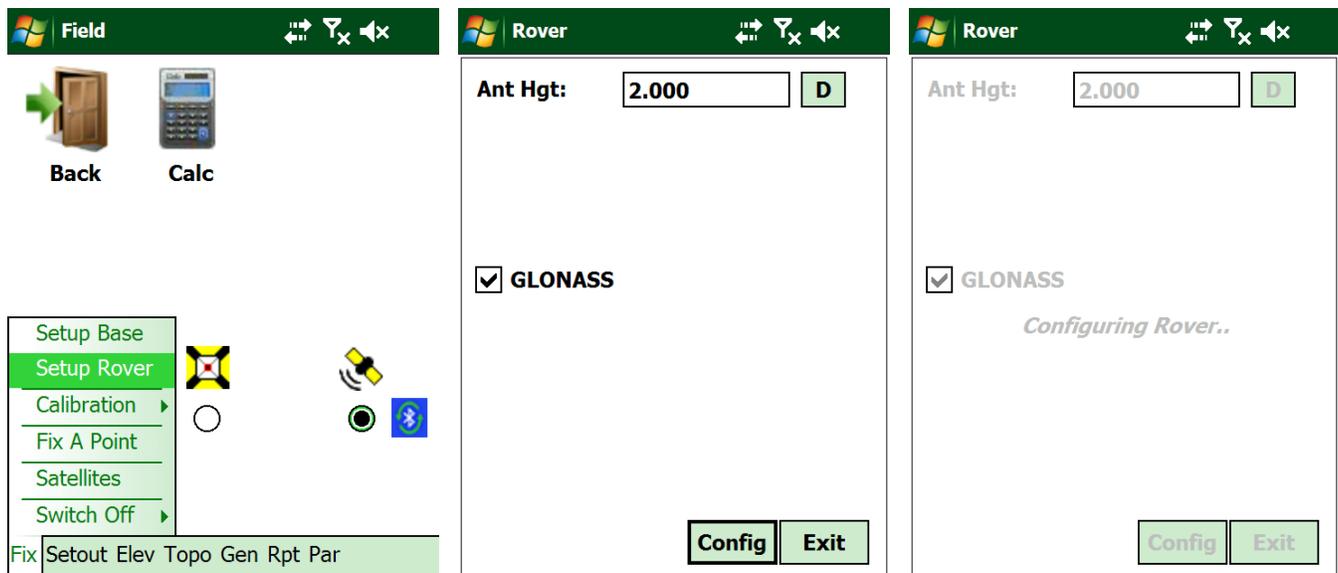
Z Coord:

- Click **Config** to configure your base's position and to start Surveying
- Ceaser will automatically connect to your rover.



Remember to apply all configurations that were made in "System Setup" to your GPS unit.

- From the Field Menu, Click **Fix > Setup Rover**. This will reconfigure your GPS unit to the selected configuration in "System setup".
- Click **Config** to send the configuration to the GPS unit.



How To Check your Fix Status

- To check your fix, from the **Field Menu**, Click **Topo >Log**.
- Look at the Status Display at the bottom of the Screen

The image displays two screenshots from a GPS software interface. The left screenshot shows the 'Field' menu with 'Log' selected, and a status display at the bottom showing 'Sat:12|PDOP:2.0|FIX|Age:1'. The right screenshot shows the 'Log Topo Survey' screen with various data entry fields and a status display at the bottom showing 'Sat:12|PDOP:2.0|FIX|Age:1'.

Field Menu:

- Code: Point
- Select: [Dropdown]
- Feature: [Text Field]
- Ant Hgt: 2.000
- Y Coord: 46026.818
- X Coord: 3763590.316
- Z Coord: 31.229 3

Status Display (Left): Sat:12|PDOP:2.0|FIX|Age:1

Status Display (Right): Sat:12|PDOP:2.0|FIX|Age:1

Sat:14|PDOP1.6|FIX|Age:2

Sat: Amount of Satellites being used

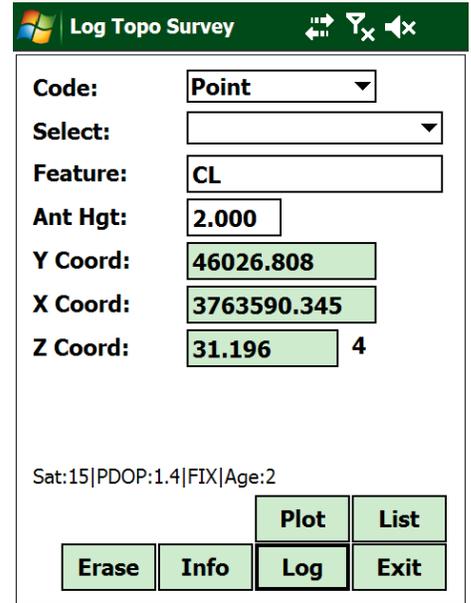
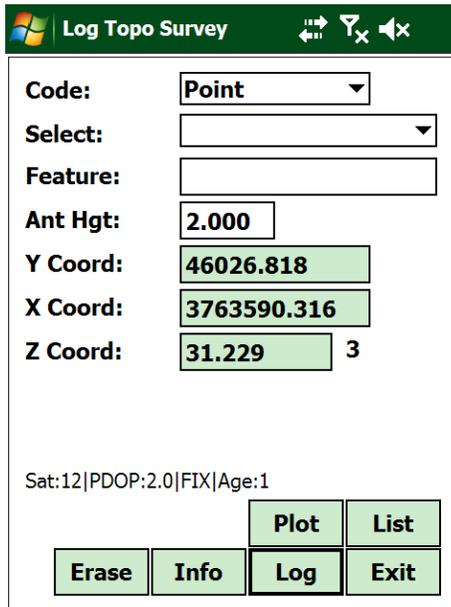
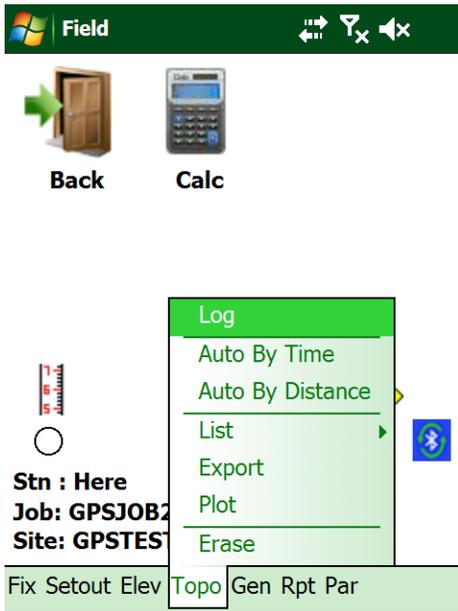
FIX: Fix status, eg. FLOAT,DGPS,AUTO

PDOP:PDOP rating

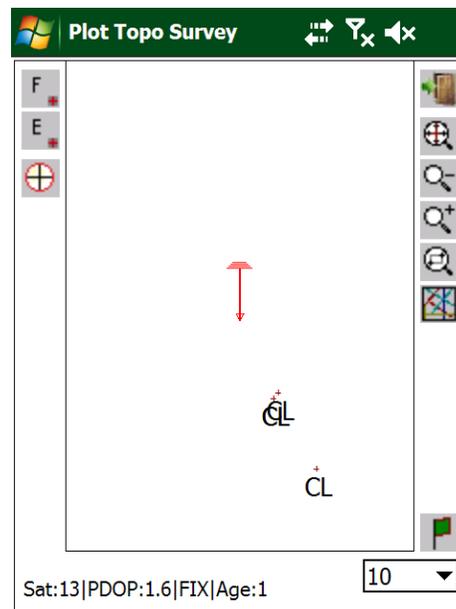
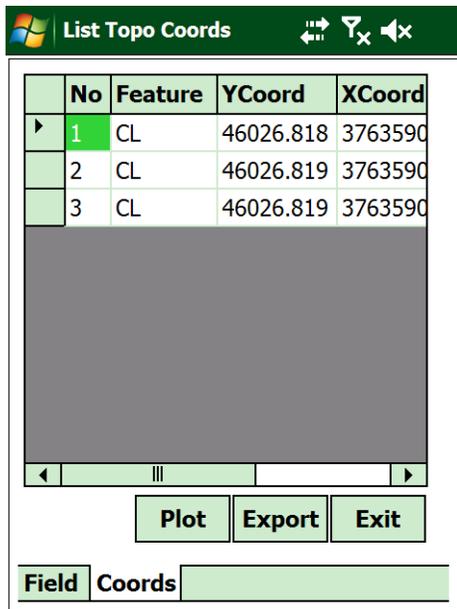
Age: Time of last correction message recieved

How To Log a point:

- From the **Field Menu**, Click **Topo >Log**.
- Type in your Feature name and click **Log**

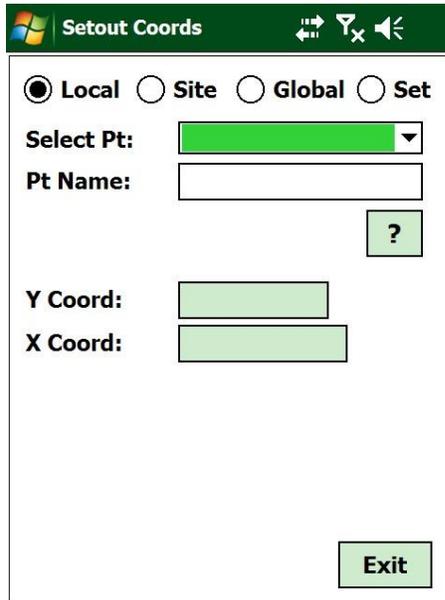
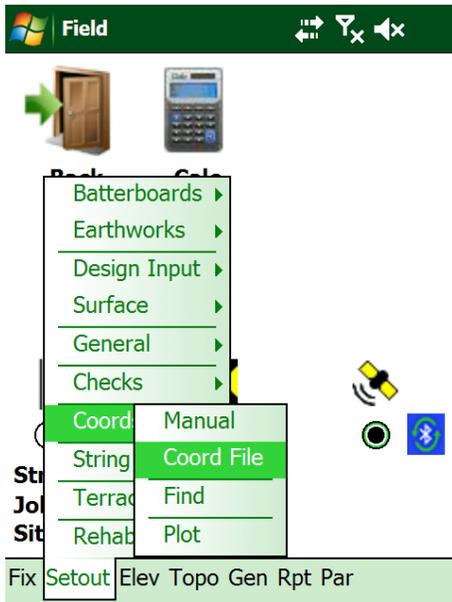


- Click **List** to view points and **Plot** to View your coordinates via Map View

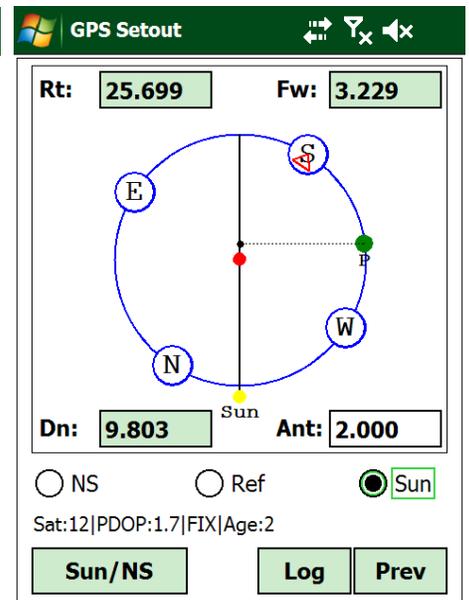
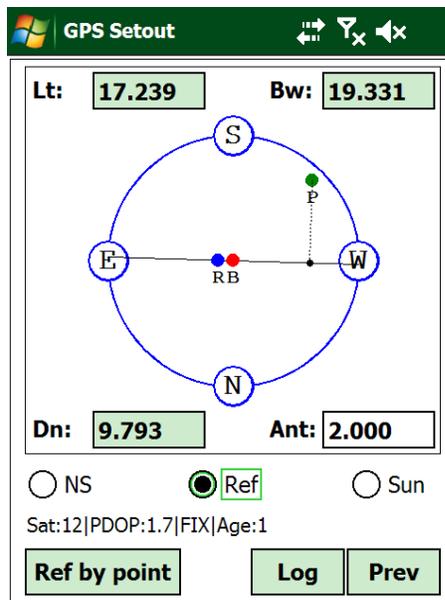
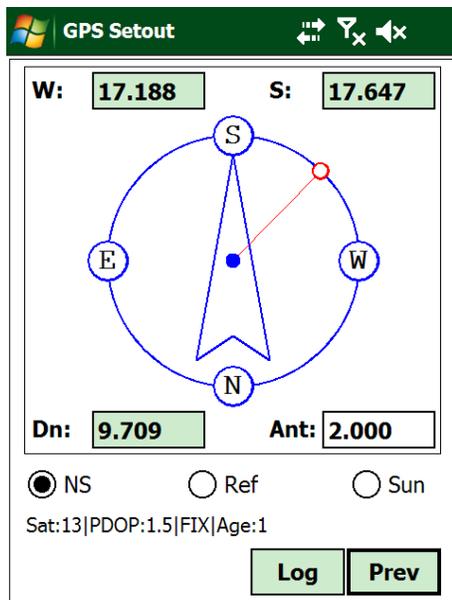


How To Setout a point:

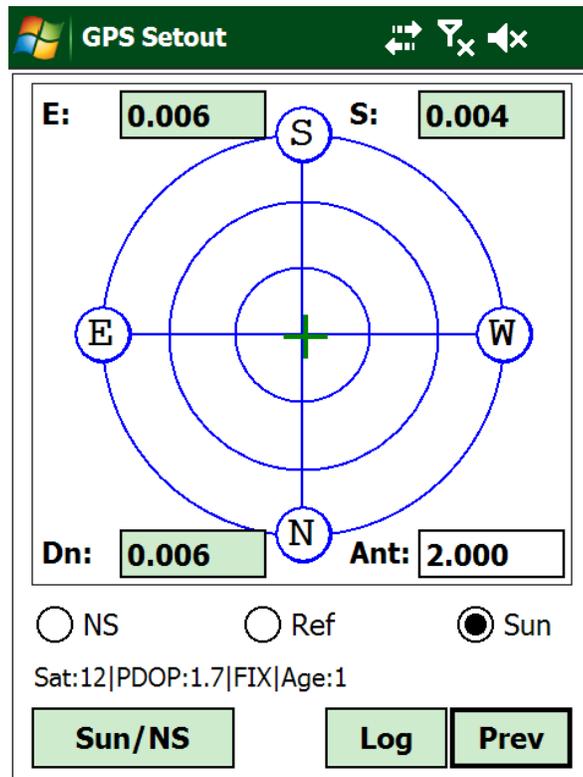
- From the **Field Menu**, Click **Setout > Coords > Coord File**



Choose from 3 different viewing options



When you are close to the setout point your display will change to this



Click *Log* to Store Point data

North/South: This view uses the standard North, South, East and West to help direct you to a point

Reference Line: With this view an imaginary line is drawn from the Base or Manually selected coordinate to the current Rover position. The program will then guide the Surveyor with directions and distance in relation to this imaginary line.

Sun/Shadow Method: Using the direction of the shadows the program will guide the Surveyor to the setting out point.