

Ceaser 3.0 GPS Basics

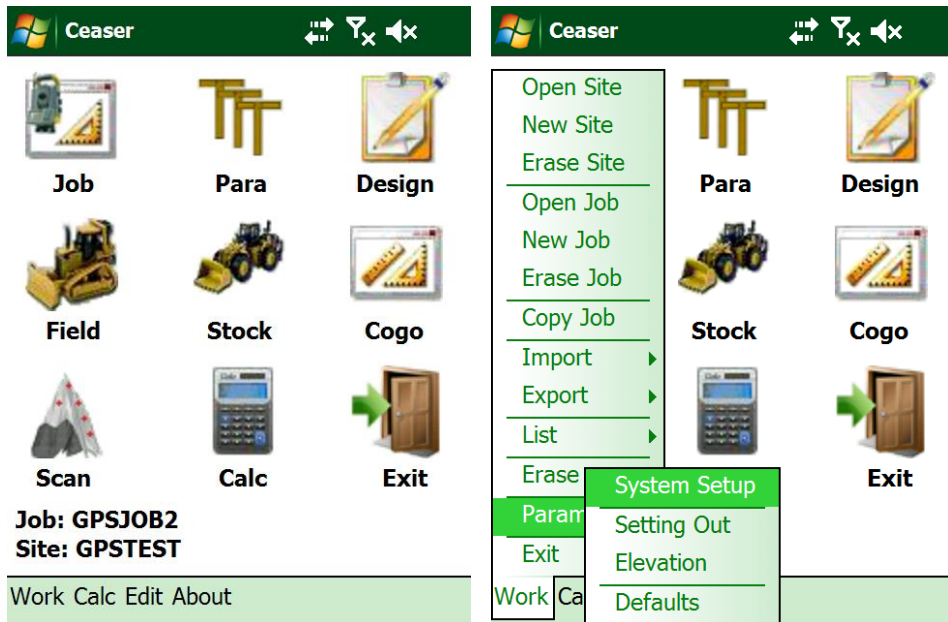



Ceaser GPS Tutorial

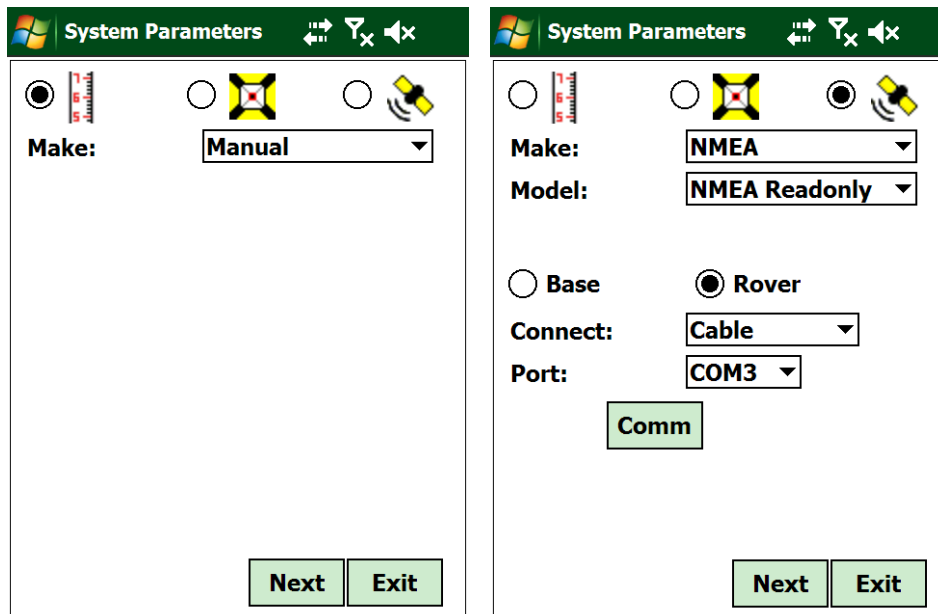
- How to connect (Bluetooth Pair) to your GPS
- How to Setup your Base and Rover
- How to Calibrate(Localize)
- How To Check your Fix Status
- How to Log a Tachy Point
- How to Setout a point

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)

The first screenshot shows the 'System Parameters' window with the following settings: Make: NMEA, Model: NMEA, Base: (unselected), Rover: (selected), Connect: Cable, Port: COM3. The second screenshot shows: Make: StoneX, Model: S9III Plus, Base: (unselected), Rover: (selected), Connect: Cable, Port: COM3. The third screenshot shows: Make: StoneX, Model: S9III Plus, Base: (unselected), Rover: (selected), Connect: Cable, Port: COM3. Each window has 'Next' and 'Exit' buttons at the bottom.

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

The first screenshot shows the 'System Parameters' window with the following settings: Make: StoneX, Model: S9III Plus, Base: (selected), Rover: (unselected), Connect: Bluetooth, Device: (empty). The second screenshot shows: Make: StoneX, Model: S9III Plus, Base: (selected), Rover: (unselected), Connect: Bluetooth, Device: (empty). Each window has 'Find', 'Next', and 'Exit' buttons at the bottom.

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

The image shows two side-by-side screenshots of a software window titled 'System Parameters'. The window has a green header bar with a Windows logo, the title, and three icons (Bluetooth, a filter, and a speaker). The main area contains a 'Select Device:' label above a dropdown menu, a 'Pin code:' label above a text input field, and the text 'Searching...' in the center. At the bottom are three buttons: 'Find', 'Pair', and 'Prev'. In the left screenshot, the dropdown shows 'STNS94031011'. In the right screenshot, the dropdown shows a list of devices: 'STNS94031027' (highlighted in green), 'STNS94031027', 'Parrot v5.25C', and 'STNS94031011'.

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

The image shows two side-by-side screenshots of the 'System Parameters' window. The layout is identical to the previous screenshots, but the 'Searching...' text is absent. In the left screenshot, the 'Select Device:' dropdown shows 'STNS94031011'. In the right screenshot, the dropdown shows 'STNS94031027'. The 'Find' button is no longer visible, and the 'Pair' button is now the primary action button at the bottom.

- Once both Devices have been paired and assigned

The image shows two side-by-side screenshots of the 'System Parameters' window. Both windows have a green header bar with the Windows logo, the title 'System Parameters', and three icons (a double-headed arrow, a radio tower, and a speaker). Below the header, there are three radio buttons: a base station icon, a rover icon, and a combined icon. In the left window, the 'Base' radio button is selected. In the right window, the 'Rover' radio button is selected. Below the radio buttons, there are two dropdown menus for 'Make' (both set to 'StoneX') and 'Model' (both set to 'S9III Plus'). Below these are two more dropdown menus for 'Connect' (both set to 'Bluetooth') and 'Device' (left set to 'STNS94031011', right set to 'STNS94031027'). At the bottom of each window is a green 'Config' button and a row of three buttons: 'Find', 'Next', and 'Exit'.

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

The image shows two side-by-side screenshots of the 'Config Rover' window. Both windows have a green header bar with the Windows logo, the title 'Config Rover', and three icons (a double-headed arrow, a radio tower, and a speaker). Below the header, there are three settings. In the left window, the 'Comm Type' dropdown menu is open, showing 'Internal UHF' (highlighted in green), 'NTRIP', and 'Cable'. In the right window, the 'Radio Freq' dropdown is set to '1-438.1250', 'Power Mode' is set to 'HIGH', and 'RTK Corr' is set to 'RTCM 3'. At the bottom of each window are two buttons: 'Next' and 'Prev'.

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

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

System Parameters		System Parameters		System Parameters	
<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/>	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/>	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/>	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/>	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/>	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/>
Make: StoneX	Make: StoneX	Make: StoneX	Make: StoneX	Make: StoneX	Make: StoneX
Model: S9III Plus	Model: S9III Plus	Model: S9III Plus	Model: S9III Plus	Model: S9III Plus	Model: S9III Plus
Base	Base	Base	Base	Base	Base
Connect: Bluetooth	Connect: Bluetooth	Connect: Bluetooth	Connect: Bluetooth	Connect: Bluetooth	Connect: Bluetooth
Device: STNS94031011	Device: STNS94031011	Device: STNS94031011	Device: STNS94031011	Device: STNS94031011	Device: STNS94031011
Config	Config	Config	Config	Config	Config
Temp (C): 0	Temp (C): 0	Temp (C): 0	Temp (C): 0	Temp (C): 0	Temp (C): 0
Press (mb): 0	Press (mb): 0	Press (mb): 0	Press (mb): 0	Press (mb): 0	Press (mb): 0
P\Con(mm): 0	P\Con(mm): 0	P\Con(mm): 0	P\Con(mm): 0	P\Con(mm): 0	P\Con(mm): 0
Ver Index: 0.0000	Ver Index: 0.0000	Ver Index: 0.0000	Ver Index: 0.0000	Ver Index: 0.0000	Ver Index: 0.0000
Ave Hgt: 0.000	Ave Hgt: 0.000	Ave Hgt: 0.000	Ave Hgt: 0.000	Ave Hgt: 0.000	Ave Hgt: 0.000
Ave Y Crd: 0.000	Ave Y Crd: 0.000	Ave Y Crd: 0.000	Ave Y Crd: 0.000	Ave Y Crd: 0.000	Ave Y Crd: 0.000
S\Factor: 1.000000000	S\Factor: 1.000000000	S\Factor: 1.000000000	S\Factor: 1.000000000	S\Factor: 1.000000000	S\Factor: 1.000000000
Angle Units: Degrees	Angle Units: Degrees	Angle Units: Degrees	Angle Units: Degrees	Angle Units: Degrees	Angle Units: Degrees
Grid: Y Crd\X Crd	Grid: Y Crd\X Crd	Grid: Y Crd\X Crd	Grid: Y Crd\X Crd	Grid: Y Crd\X Crd	Grid: Y Crd\X Crd
Azimuth: South	Azimuth: South	Azimuth: South	Azimuth: South	Azimuth: South	Azimuth: South
Record: No	Record: No	Record: No	Record: No	Record: No	Record: No
Voice: Yes	Voice: Yes	Voice: Yes	Voice: Yes	Voice: Yes	Voice: Yes
Keyboard: Yes	Keyboard: Yes	Keyboard: Yes	Keyboard: Yes	Keyboard: Yes	Keyboard: Yes
Find Next Exit	Next Prev Exit	Next Prev Exit	Next Prev Exit	Next Prev Exit	Next Prev Exit

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

System Parameters	
Country:	South Africa
Coord Sys:	Hartebeesthoek94 / Lo19
SV Mask:	0
ELV Mask:	10
PDOP:	15.0
<div> <div>?</div> </div>	
<div> <div>Prev</div> <div>Exit</div> </div>	

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:

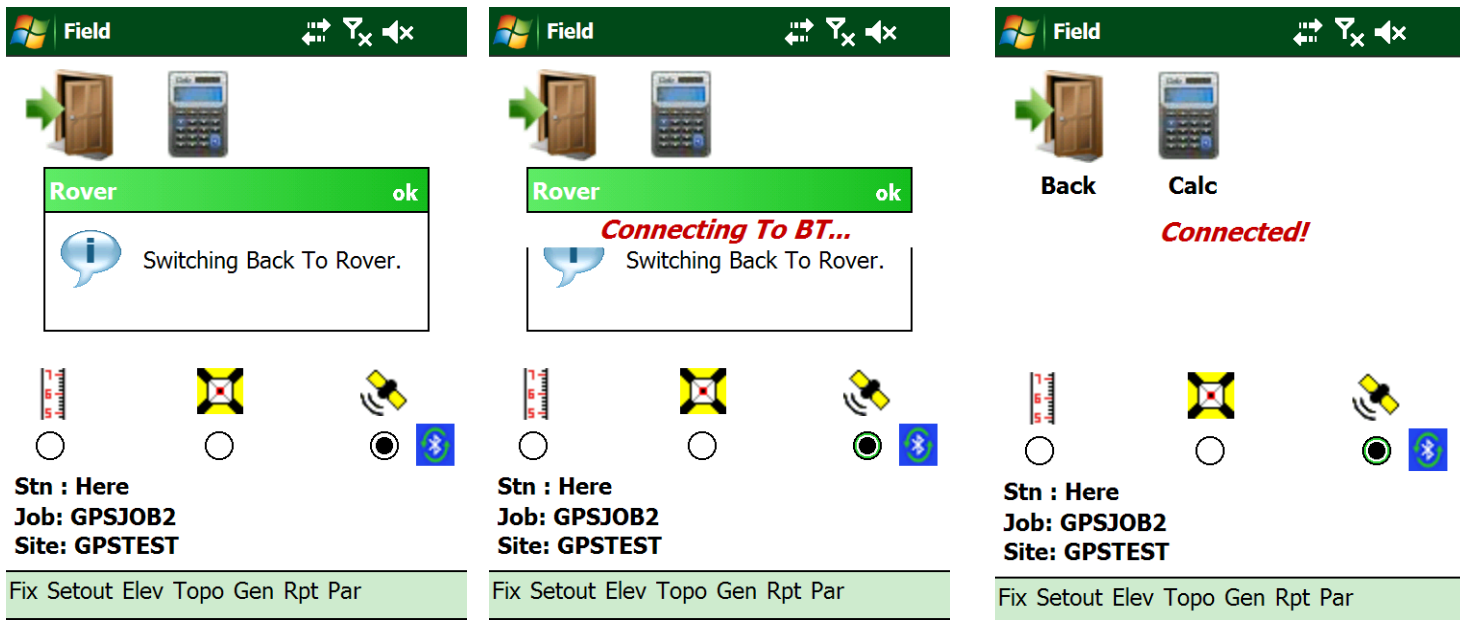
Sdz:

Y Coord:

X Coord:

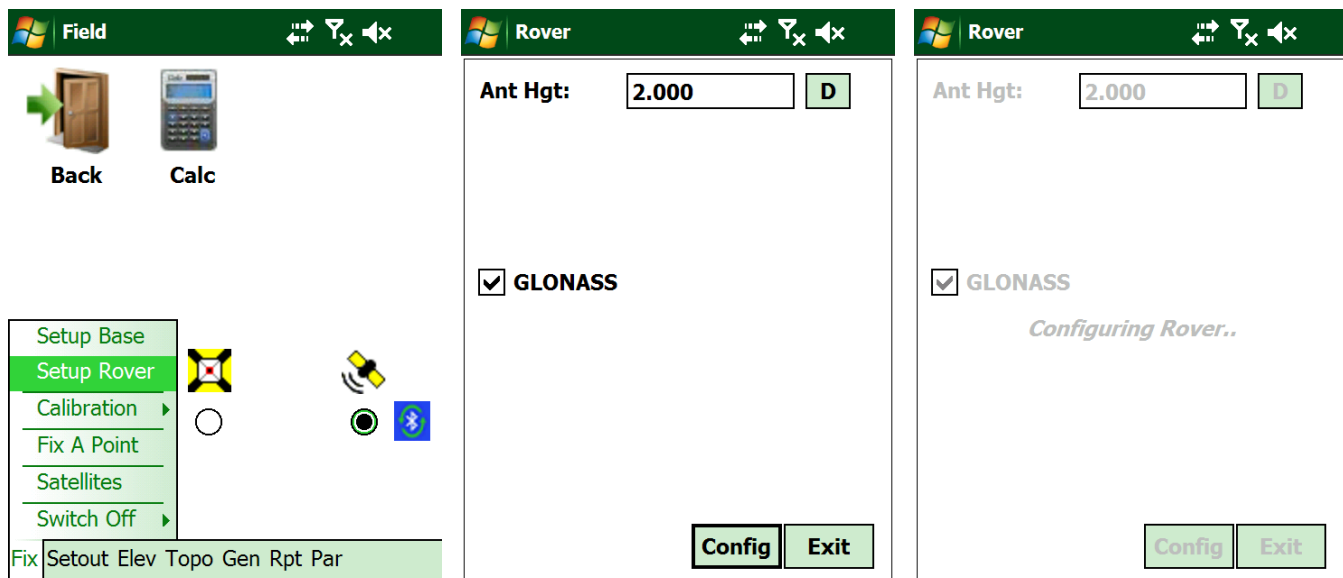
Z Coord:

- 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

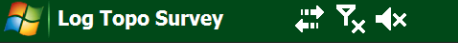
- To check your fix, from the **Field Menu**, Click **Topo >Log**.
- Look at the Status Display at the bottom of the Screen


 **Back**  **Calc**


Stn : Here
Job: GPSJOB2
Site: GPSTEST
Fix Setout Elev **Topo** Gen Rpt Par

Log
Auto By Time
Auto By Distance
List
Export
Plot
Erase




Code:
Select:
Feature:
Ant Hgt:
Y Coord:
X Coord:
Z Coord: 3

Sat:12|PDOP:2.0|FIX|Age:1

		Plot	List
Erase	Info	Log	Exit

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**

Field

Back Calc

Stn : Here
Job: GPSJOB2
Site: GPSTES

Fix Setout Elev Topo Gen Rpt Par

Log
Auto By Time
Auto By Distance
List
Export
Plot
Erase

Log Topo Survey

Code: Point
Select:
Feature:
Ant Hgt: 2.000
Y Coord: 46026.818
X Coord: 3763590.316
Z Coord: 31.229 3

Sat:12|PDOP:2.0|FIX|Age:1

Erase Info Log Plot List Exit

Log Topo Survey

Code: Point
Select:
Feature: CL
Ant Hgt: 2.000
Y Coord: 46026.808
X Coord: 3763590.345
Z Coord: 31.196 4

Sat:15|PDOP:1.4|FIX|Age:2

Erase Info Log Plot List Exit

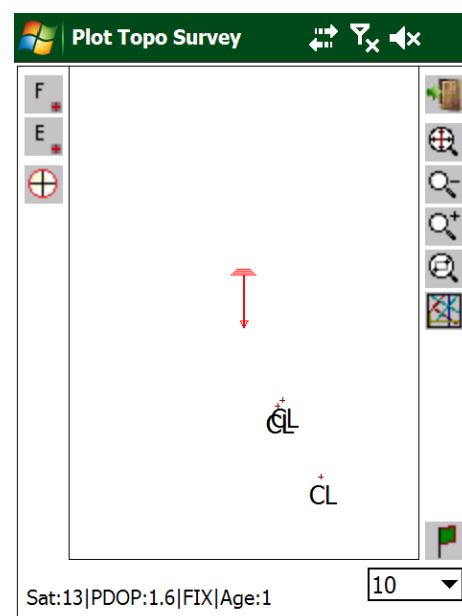
- Click **List** to view points and **Plot** to View your coordinates via Map View

List Topo Coords

No	Feature	YCoord	XCoord
1	CL	46026.818	3763590
2	CL	46026.819	3763590
3	CL	46026.819	3763590

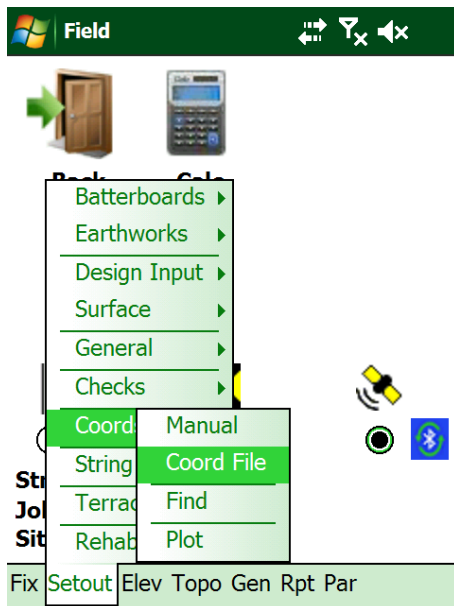
Plot Export Exit

Field Coords



How To Setout a point:

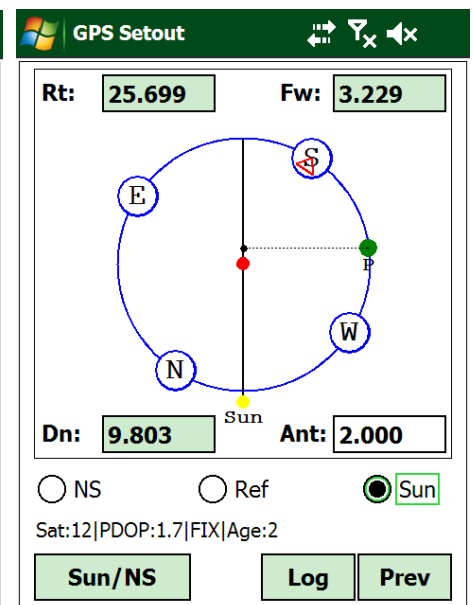
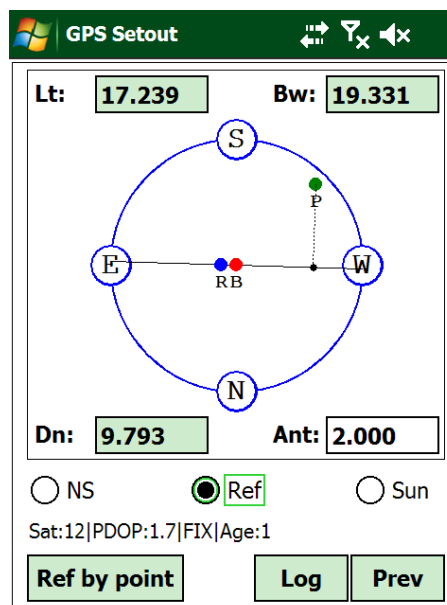
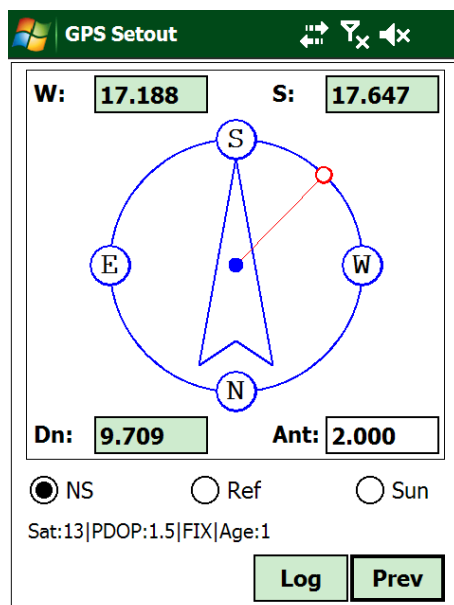
- From the **Field Menu**, Click **Setout > Coords > Coord File**



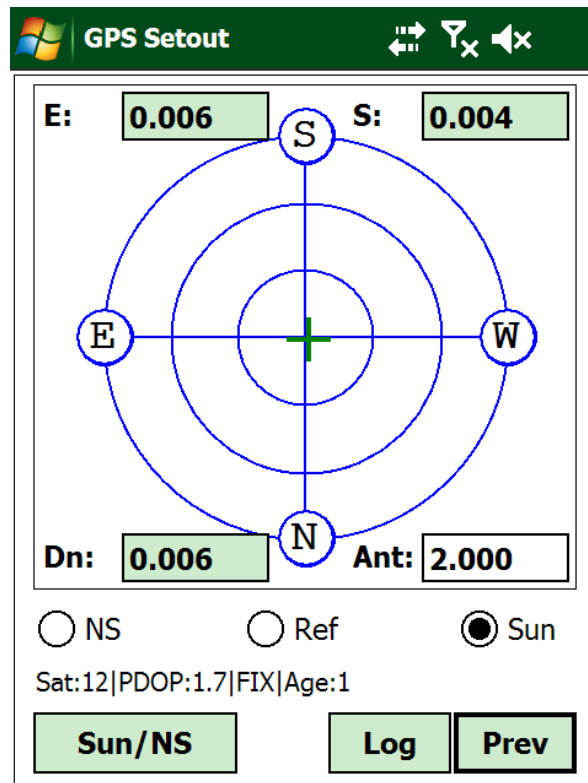
The 'Setout Coords' screen shows the 'Local' mode selected. The 'Select Pt:' dropdown is empty, and the 'Pt Name:' field is empty. The 'Y Coord:' and 'X Coord:' fields are empty. An 'Exit' button is at the bottom right.

The 'Setout Coords' screen shows the 'Global' mode selected. The 'Select Pt:' dropdown is set to 'G', and the 'Pt Name:' field is 'G'. The 'Y Coord:' field is '46043.991' and the 'X Coord:' field is '3763607.992'. 'Next' and 'Exit' buttons are at the bottom right.

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.