# YCCCART

## **Basic Users Guide for Magellan GPS**

The GPS software runs under Windows CE, a cut down version of Windows. The Windows CE graphical user interface is very similar to desktop Windows operating systems.

The GPS has a touch screen. To interact with the software use the stylus to tap the screen. Warning – use the stylus provided otherwise you may scratch the screen.

WHEN IN USE ENSURE THAT THE GPS IS INCLINED AT ABOUT 45° AND HAS A CLEAR VIEW OF THE SKY

## **Turning GPS On/Off**



To turn the GPS on press the red power button until the green LED turns on. The GPS will start and boot-up Windows CE.

To Turn the GPS off press the red power button and tap OK on Shut Down pop-up screen.

### **GPS Status**

This utility allows you to quickly see if the GPS is calculating a position from the currently visible GPS satellites.

To launch *GPS Status* either double tap the screen shortcut icon or press and hold down on the shortcut icon and select Open from the pop-up menu.

The two useful features are under the Sig/Nav and Stats tabs which are described below.

#### Sig/Nav Tab



This window shows in graphical form the signal strength for the satellites in view. The blue bars are the satellites being used by the GPS to calculate the current GPS position.

The position part of the screen provides the co-ordinates of the current GPS position including altitude and the number of satellites in view and used. The altitude reading is not reliable unless the bar at the bottom of the screen is showing 3D. Note that even with 3D shown the altitude reading should be used with caution.

#### Stats Tab



This window shows the averaged co-ordinates of the computed position together with the accuracy figures.

To reset the averaged values so that only data for the current GPS position is used select from the Tool Bar Tools>Stats>Reset and tap the Yes button on the pop-up window.

## PocketGIS

*PocketGIS* is a Geographical Information System which can be used to display and edit map data and when connected to a GPS receiver for data capture or location tracking.



To launch *PocketGIS*, from the desktop either double tap the screen shortcut icon or press and hold down on the shortcut icon and select Open from the pop-up menu.

*PocketGIS* has many facilities most of which are not used for our work. This note describes the features most YCCCART users will find useful.

#### **Connect to GPS**

The first thing that must be done is to connect *PocketGIS* to the GPS receiver. From the Menu Bar select Tools>GPS Receiver and tap Connect on the pop-up window as shown below:

PocketGIS	<u>V</u> iew	Tools	
		<u>M</u> ap M	anager
		Laser Rangefinder GPS Receiver	

GPS Receiver		×		
Connect <u>V</u> ia:	Serial Cable on COM1:	•		
Protocol:	NMEA 0183 (V 2.0)			
<u>A</u> bout	Options Connect			

#### **Display GPS Position**



*PocketGIS* has been set to display the current GPS position in a box in the bottom left hand corner of the screen. The display shows the current GPS co-ordinate position, altitude, number of satellites used and the accuracy of the readings.

The co-ordinate is given as Easting and Northing in metres. It is advisable to use the altitude reading only if the number of satellites used is 7 or more and the HDOP is less than about 1.5.

The GPS shows the current position on the screen and gives out a bleep every time it updates with a reading about 2 or 3 readings every second. If there is no valid

reading the position symbol changes to a simple circle, the message No GPS Position is shown and there is no bleep.

#### **GPS Navigation**

This is a simple GO TO tool that will give the direction and distance from the GPS current position to a preselected point.

Tools		
Map Manager		
GPS <u>N</u> avigation		
<u>C</u> reate Simple Map		
C <u>r</u> eate Grid		
Laser Rangefinder		
GPS Receiver		

From the Menu Bar tap Tools>GPS Navigation which will bring up the GPS Navigation window.

GPS Navigation ×					
Easting:	837828		m		
<u>N</u> orthing:	367209		m		
<u>A</u> bout		<u>S</u> tart			

Enter the co-ordinate of the position you wish to navigate to and tap Start. A monitor will appear on

the right hand edge of the screen showing the direction and distance to the selected point.

