



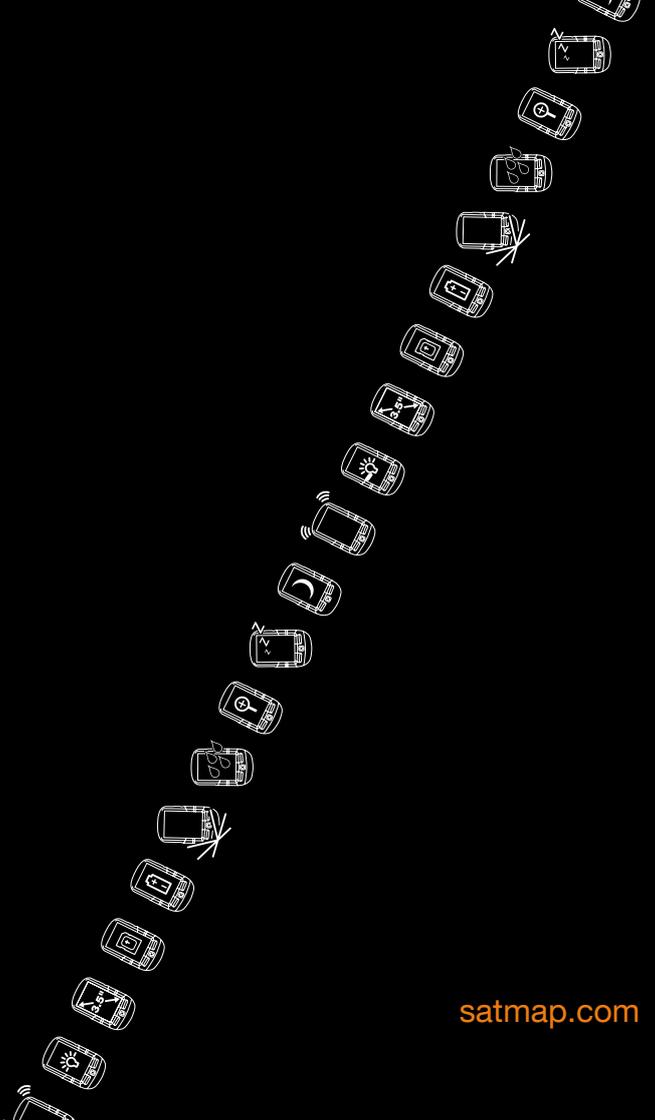
active 20

THE ULTIMATE SPORTS GPS

Full User Guide A20 v3.4

Software v3.11.671 (Jan 2018)

satmap.com



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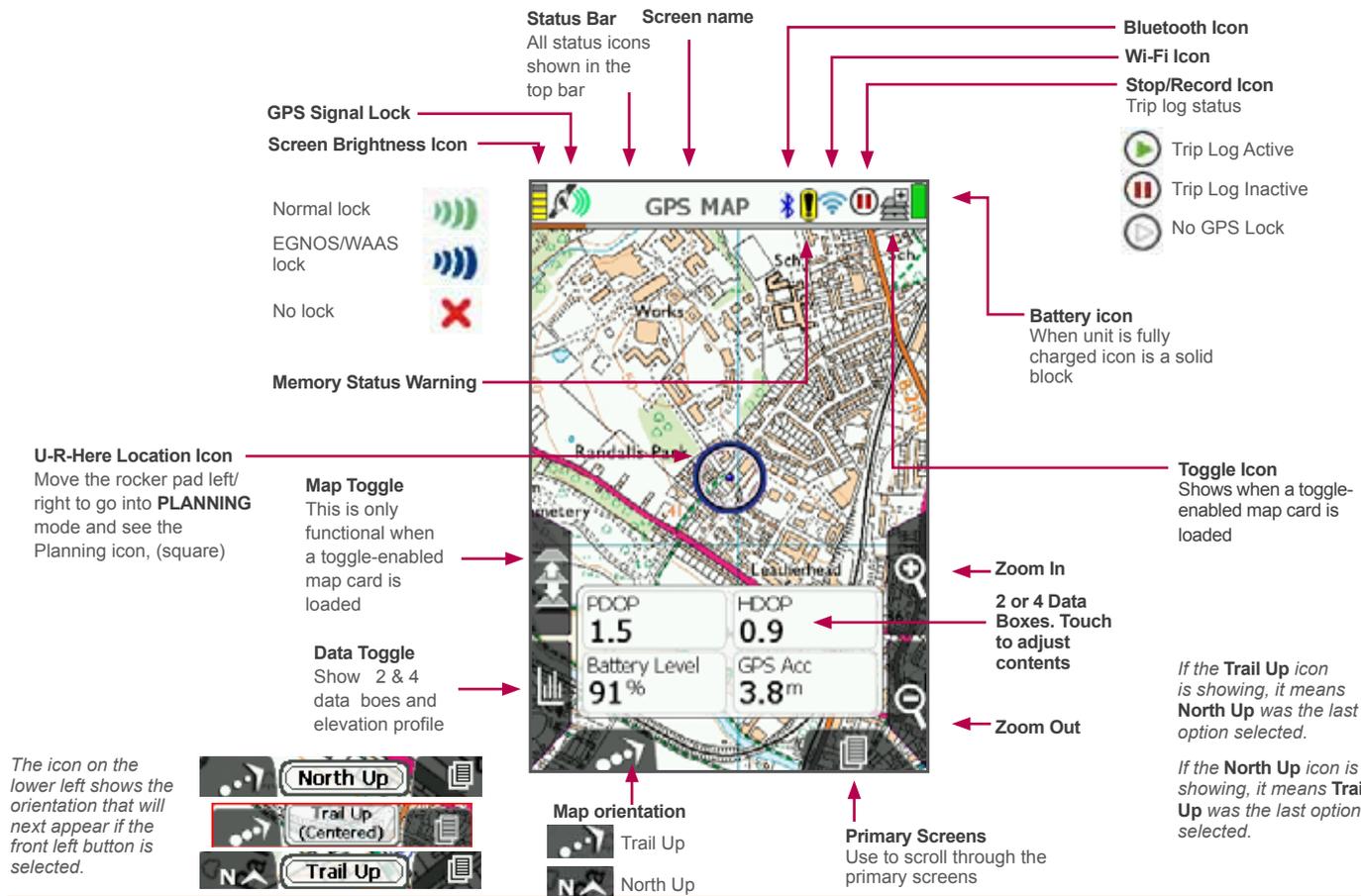
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ii. Basic Layout



iii. Map Screen Layout



1. Introduction

Dare to EXPLORE

Welcome to the world of GPS mapping!

Register your Active 20 online so that we can notify you of updates which are available for download from our website. As with most software products, we have ongoing updates and developments. We continually strive to improve our product and value any feedback you may like to share with us.

Introduction

Satmap Systems is the creator of the Active 10, 12, and now the Active 20 — an award-winning range of rugged sports GPS, purpose-built for the Great Outdoors, offering a long battery life in a weatherproof and shockproof casing.

- Easy-to-use with 'plug-and-play' mapping
- Rugged, shockproof and weather-resistant
- Latest dual-band Bluetooth connectivity for Peer-to-Peer data sharing, in addition to support for Heart Rate Monitors and bike speed/cadence sensors.
- Barometric altimeter for accurate elevation and pressure readings.
- Map orientation options for enhanced visibility
- barometric altimeter for accurate elevation and pressure readings.
- Hi-Res (HVGA) bright 3.5" colour screen
- Long battery life with numerous power management options.
- Ability to plan routes on GPS and online
- Extensive range of international maps

The **Active 20** is latest model from Satmap Systems **Ultimate Sports GPS range**. It is easy-to-use and intuitive, showing a blue location dot on a real map so you know exactly where you are at all times. Switch it on, wait for a couple of minutes and your position is shown as being the centre of the screen. It has never been easier to find yourself in the great outdoors!

Global Mapping ...

We have over 450 maps to choose from. The unit is supplied with a world base map, and individual maps are sold separately on SD cards that plug straight into the Active 20. Simple to use, there is no computer or other equipment needed.

As a standalone unit, you are able to plot routes or Objects-of-Interest at home or whilst exploring the outdoors. The unit is weatherproof with a backlit screen which means it can be used day or night in any weather, with enhanced features such as the Red Filter for night vision and the Sun Filter for use in bright sunlight.

This guide will go through everything you need to know about how to use the Active 20 on:

Version 3.11.671 software.

Please see www.satmap.com for software version history.



2. Care for your Active 20

2.1 Safety & Care Tips:

The Active 20 is purpose-built for the great outdoors, offering a long battery life in a weatherproof and shockproof casing. Although the unit has been built to be rugged and reliable, you should remember that this is a complex electronic device requiring specific care and maintenance.

These tips are intended to provide you with suggestions on getting the most from your Active 20, ensuring you have many years of accurate and reliable GPS and digital map use.

2.2 Battery Charging

When using the Lithium Polymer battery option supplied by Satmap, it is extremely important that you only use Satmap products to charge the battery (i.e. Satmap Wall Charger, Car Charger, etc.) Failure to do so is potentially dangerous, may damage the Active 20, or result in partial or complete loss of warranty.

2.3 Spare Batteries

We recommend that you always carry a set of new / spare batteries, and keep them in a watertight wrapping. Although the Active 20 will give you many hours of use, it can be difficult to keep track of the length of time you have been using the batteries, so it is always good to have a back up.

2.4 Acquiring a Lock / GPS Accuracy

To acquire a satellite lock, the Active 20 should be under open skies, immobile and held upright. When a lock has been acquired, the top left signal icon will change from a red 'x' to green or blue crescents, depending on the signal. (Satellite lock times vary).

It is important to remember that the accuracy of any GPS is variable. The GPS system uses triangulation on a constellation of satellites circling the earth to determine a position on the ground. There are a

number of factors which can reduce the accuracy of this position information, including poor weather, a limited view of the sky (e.g. in a building, urban/natural canyons, under a thick tree canopy, etc), metallized glass (such as a car windshield), etc. You may also notice a variable performance from one day to the next. This is due to the fact that the position of the satellites relative to the ground can change, resulting in a different triangulation value.

Understanding this variability in the accuracy is important when enjoying outdoor sports in the proximity of dangerous features (e.g. cliffs, marsh, rivers, lakes, etc.) as users must still apply safe practice, be aware of the weather conditions and their own abilities in order to avoid unnecessary risks and dangers.

2.5 Spare Mapping

Although the Active 20 has been designed for use in the great outdoors, carrying a paper map of the area and a compass is always considered good practice.

2.6 Understanding Your Map

Although the Active 20 gives your exact position on a map, it is important that you understand the symbols and notations on the map. If you are unsure about these, you can download them from our website:

www.satmap.com

2. Care for your Active 20 (... cont)

2.7 Extreme Weather Care Tips

The Active 20 unit is waterproof to **IP68** standard. Which means that it has been tested to 1.5m of still water submersion for 1.5 hours. **But** some case is still needed when handling the unit in wet conditions.

To be fully waterproof the **battery pack** has to be properly inserted and the **USB door** correctly closed.

Your GPS unit is fitted with toughened Gorilla Glass, which has a very high resistance to scratching. After use for cleaning use a soft, damp cloth and avoid using cleaning agents.

MapCards: Please do **not** expose the microSD MapCards to water. They should be kept dry and clean at all times. **NEVER** insert a damp, wet or dirty map card into the Active 20.



USB and Battery fully closed



USB door open

2.8 In extreme weather conditions:

If you wish to provide your Active 20 with an extra degree of impact protection you may wish to purchase the optional Active 20 Carry Case, which is specific for this device, having slightly different dimensions to the earlier Active 10/12. The carry case has a vertical 10cm loop, allowing for belt attachment.

You can also carry the unit around your neck on the lanyard.

The interior of the unit should not be exposed to water or dust. Avoid changing the batteries or map card whilst exposed to bad weather conditions. With the USB door, or battery back open, the Active 20 will not remain weatherproof. Should water or significant dust enter the Active 20, do not switch it back on until it has been completely dried out or the dust has been removed.



USB door and Main Seal

2.9 In the case of water ingress:

Once indoors, remove the battery pack and any SD MapCard that may be fitted.

Wipe down the unit with a soft dry cloth.

Place the Active 20 and components in a warm, dry place (e.g. on a window sill near a heater or airing cupboard), with the front end tilted up slightly and let them dry completely, preferably overnight.

If you are unsure about any damage to your Active 20, please call our technical team who will be able to give you advice on how to proceed, and if necessary, repair your unit accordingly. Please refer to **Satmap.com** for your local number.

2.10 Missing / worn parts:

You will need to send your Active 20 back to Satmap for repair if parts have been lost or worn down. Failure to do so may result in partial or complete loss of warranty, as it will no longer be weatherproof.

Rubber seals: The watertight seal on the USB port and the main Battery Pack of the Active 20 should always remain properly intact to prevent water leaking into the unit. If either of these seals is lost or damaged, they should be replaced straight away; spare parts are available from Satmap.

Rocker pad & Keypad: If your rocker pad or keypad buttons are badly worn or ripped, this can cause water to leak into the unit. Please send your Active 20 back to Satmap for repair.

3. Overview

3.1 Battery Power

The Active 20 can be powered by a Lithium Polymer rechargeable battery, or three AA batteries. The rechargeable battery is optimized to last longer over a wide range of temperatures/conditions and lasts significantly longer than AA's. Since AA batteries vary significantly in power and life from one type to another, we recommend using Lithium Energizers which are the most powerful on the market. It is not advisable to use cheap batteries in the unit as they will have a short life.

There are 4 ways to conserve power:

1. Select a 'Screen Turn Off' option
Settings > Power Control > Automatic Screen Turn Off > Select 'Off after 3 minutes'

2. Change the Power Saving Mode to **Advanced** or **Ultra**, so the **GPS MAP** screen updates every 4 / 8 seconds instead of every second.
Settings > Advanced Power Control > Power Saving Mode > Advanced / Ultra

Note: The "Trail Up" facility is disabled when in Advanced Powersaving Mode, and backlight is limited to 80%.

3. Decrease the Backlight setting
Settings > Backlight (adjust slider accordingly)

4. Use **Hibernate Mode** to set an ultra low power state and rapid satellite acquisition.
Power Button > Hibernate for X hours

Note: Trip log data is not stored in this mode.

3.2 Switching On, Off & Hibernate

When first installed, the software allows users to select the operating language. Whatever language is selected, the unit is then set for the appropriate GPS position: i.e. selecting English sets up the GPS

default to Great Britain.

After switching on the unit, the **GPS STATUS** screen will load up. The bars at the bottom of the screen indicate how many satellites are in range of the Active 20.

When the bars turn from blue to green this shows that the unit has locked to that specific satellite. In general, the unit needs a minimum of four satellites to get a lock. Outdoors, the unit should get a lock within three minutes or less. If it takes much longer, please contact Satmap. Hibernate mode allows rapid satellite lock as the unit remembers the satellites' position. Generally, it is easier for GPS devices to get a first lock whilst the unit is stationary.

To switch the unit off, press the **On/Off** button and a **Power Off?** screen is displayed in order to prevent accidental switch-off; select **Power Off**. Your data will be saved before power off. If no selection is made after 10 seconds the unit will revert to the previous screen.

Hibernate mode puts the unit into a very low power state, but keeps the real-time clock alive. This permits a very quick boot-up time & fast satellite lock when the power button is re-pressed. However, in this mode, **no Trip Stats** are saved.

3.3 Keyboard Lock

The **Power Off?** screen has a padlock (Keypad Lock) icon by the **On/Off** button. Press the **On/Off** button to lock the keypad. A padlock icon is displayed by the battery indicator.

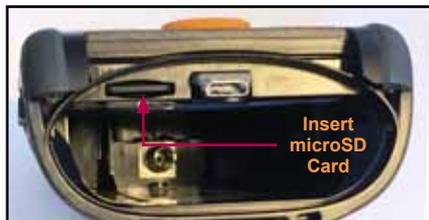
To unlock the keypad press any button and the **Unlock** screen will be displayed. Select **Yes** to unlock the keypad. If no selection is made after 3 seconds the unit will revert to the previous screen.



3. Overview (... cont)

3.4 MapCard Insertion

The microSD MapCards have to be inserted with the battery Pack removed. The microSD slot can be seen on the Left hand Side of the microUSB socket.



When inserting the card please ensure that the text is facing upwards, and the bright terminals are facing downwards.

3.5 Base Mapping

The Active 20 is supplied with a world base map at 1:5m up to 1:200m (and in addition for UK customers, a 1:1 m & 1:250k scale UK road map). Once a map card has been inserted, you can zoom through the base mapping to see more detail. If you have a toggleable map, you can switch between different map layers at a particular point on the same zoom level, e.g. you can flip between the two scales (1:50k and 1:25k) and the base map.

3.6 Battery Icon RHS of Status Bar

The green battery indicator is solid for new or fully charged batteries. Upon purchase, please give the unit a good charge for best results prior to use. As the charge decreases the icon is broken into five bars which then reduce. When a single bar remains, it will turn green to red. After some further time (depending on the power source and activity), an on-screen warning alerts that the unit will power off in 30 seconds and a countdown is shown.

If you are using the rechargeable LiPol battery the battery indicator shows a lightning flash whilst charging, and an approximate %age level of charge will be shown.

3.7 Start & Stop Icons

On the Right Hand Side of the Status Bar the **Stop/Record** icon indicates that data logging is either paused or recording. This can be accessed on the **TRIP LOG** screen. When the unit has a lock, the record icon has a solid **green** arrowhead. The record icon is shown as 'empty' when there is no lock. A **red** pause symbol indicates data logging is paused.

3.8 PLANNING Mode

Moving the rocker-pad or swiping the touchscreen changes the screen from the **GPS MAP** screen to the **PLANNING** screen. The blue circle (**Location Icon**) will move away from the middle of the screen as you control the rocker pad to move the map. A visual cue that you are in planning mode is the black **Locator Square** which has long crosshairs. In **PLANNING** mode you can plan routes via the Routes Menu, study the map using the rocker pad to pan across the map, and set a **GoTo** point/**Marker/POI**. **Please Note - it is very easy to move the screen into PLANNING mode, and lose your current location. To re-centre your location on the map - simply press the U-R-Here button, left-hand side of the rocker-pad**

3.9 SatSYNC

(Refer to SatSYNC User Guide)

SatSYNC is a free software available for download from satmap.com. It allows you to connect your Active 20 to a computer via a standard microUSB-USA-A connection. With this software you can upload/download routes, Objects of Interest, and geotag photos. These files can then be shared via e-mail or forums (e.g. Satmap Route Share Network) or viewed on a computer-based mapping system (e.g. Satmap-Xpedition Online Route Planner and Google Earth), compatible with a number of supported formats. The Satmap-Xpedition allows the download of pre-planned routes, the upload of routes for editing, and the printing of a paper version of the route to take as back-up when outdoors.

To view your trail recorded by the Active 20 on a computer:

1. You will need to **Export** your converted track. Once you have finished your walk, **Stop** the **Trip Log**.
2. On the **TRIP LOG** screen press **Menu > Convert Trail to Track**
3. Connect the Active 20 to a computer via a USB and open SatSYNC.
4. Select the converted track (.map file, e.g. 2017-06-24_1502 167km.map) and press **Export** to copy to your desktop as a .gpx or .kml file.
5. Import the file to your computer mapping system (e.g. Online Route Planner and Google Earth).

4. Ten Primary Screens

Ten Primary Screens

(GPS MAP/PLANNING → POSITION INFO → TRIP LOG → MAIN MENU → SEARCH → COMPASS → WI-FI NETWORKS → DATA SHARE → GPS STATUS)

Use the lower right button (**Primary Screens** ) to scroll through the primary screens which give you access to the main GPS features. You can also move the rocker pad left/right to scroll through these options. If you would prefer to see fewer screens, this can be adjusted in **SETTINGS**.

1. GPS MAP



- Toggle maps
- Data boxes
- North Up/Trail Up
- Your position on the map
- U-R-Here
- Zoom In
- Zoom Out
- Page Forward
- Routes Menu

2. PLANNING



- Planning Box
- Pan and zoom across the map. (Nudge the rocker pad on the GPS MAP screen to get to PLANNING mode).

3. POSITION INFO



Extra functions

4. TRIP LOG



Log data

Data and trail logging

5. MAIN MENU



- Elevation data
- Add / View OOLs
- Elevation profile
- Menu for trail conversion options
- Maps
- Access to main functions
- Add/View Routes
- Settings

6. SEARCH



- Search results
- Search sets

Search window

7. COMPASS



- Orange tipped north indicator
- Bearing indication given here
- Calibrate Compass
- Pointer

Built-in electronic compass with direction indicator

8. WI-FI NETWORKS



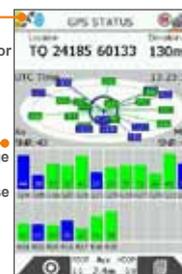
Wi-Fi connectivity for Software Update (Route Sync - pending)

9. SHARED DATA



Nearby Active 20 units that may have shareable data, showing name & unique ID.

10. GPS STATUS



- Signal indicator
- Average Signal to Noise Ratio (SNR)
- Satellites' atomic clock time
- Maximum Signal to Noise Ratio

Satellite acquisition screen

4.1 Screen 1: GPS MAP

4.1.1 Screen Data Capture

Screenshots may be captured as jpeg files and accessed in SatSYNC, listed with time/date details.

This might be useful in a variety of circumstances. For example, sending a screenshot of a particular location to another person or using a series of screenshots in conjunction with timed digital photos for use in a presentation.

Press and hold either the **Status Bar** or the **Backlight Toggle** button for 2-3 seconds; a camera icon briefly replaces the icons next to the battery (i.e. **Stop/Record** icon, toggle icon). A beep sounds to indicate a successful screenshot capture, depending on your **Beep Alert Count** setting.

To access your screenshot:

Connect your Active 20 to the computer via a USB cable. Open either a Windows Explorer / Finder or SatSYNC. Screenshots are found in **Internal Storage / Screenshots**. Select the screenshot and either Drag & Drop (or Press Export SatSYNC) transfer it to your computer.

4.1.2 GPS MAP Screen

For best results in achieving a satellite lock; The Active 20 should be pointed at clear sky. The unit can also acquire a lock through glass, i.e. windows/ car windshield.

Getting a GPS whilst moving may take longer. From a cold start, very large MapCard may also slow the GPS lock time slightly.

From start-up, the progress of the GPS lock can be seen on the **GPS STATUS** screen, using the **Primary Screens** (page forward) button.

The primary purpose of the "GPS Map" screen is to display your own location in the centre of the screen (blue circle) and the mapping around you.

Buttons Functions (from L to R):

Toggle maps (The Icon represents three layers of stacked mapping) Toggle between available maps at the same zoom level by pressing this button.

Databoxes. Toggle between none, 2 or 4 data boxes on-screen. Keep on toggling and the **GPS MAP / ELEV** dynamic elevation screens will appear.

North Up/Trail Up. Map display cycles through North Up, Trail Up (Centred), and Trail Up (Low)

Primary Screens. Scroll through the 10 Primary Screens. **SETTINGS** allows you to reduce the number of visible screens if you wish.

Zoom In / Out. Map scale is displayed momentarily after zooming *Note: Moving the rocker pad in the GPS MAP screen will take you into PLANNING mode. To avoid this, lock your keypad.*

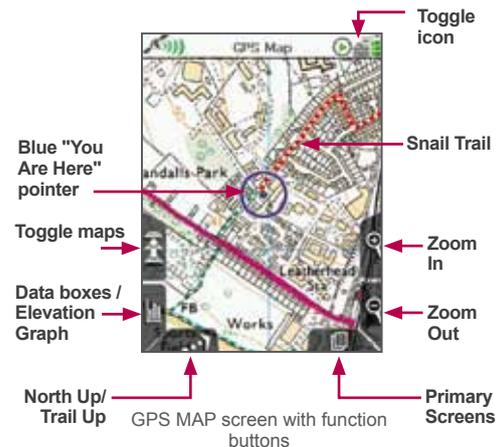
A successful satellite lock (a 'fix') is indicated at the top left of the screen by the red cross changing to a green or blue signal icon. The number of green or blue crescents denotes the signal strength. A weak lock is indicated by a single crescent plus a '2D' caption.

The unit is **EGNOS/WAAS** enabled. This means users in Europe and North America are able to benefit from 'differential' GPS when one of the EGNOS/WAAS satellites is in view. When this service is available, the green signal crescents turn blue and accuracy is enhanced.

Your position is shown as a blue dot in the centre

of the screen. Once moving, a small pointer appears on the blue circle, indicating the current direction of travel. As you move, a snail trail of red dots is laid down, indicating the path you have taken, **as long as you have started the trip log**. To change the red trail dot size may be changed in the **Settings Menu**.

The Active 20 logs your position once every second. The rate at which red dots are displayed depends on the map scale and the speed of travel. Dots are laid down so an appropriate distance is rendered between them to create a clear track. A power saving option (in **Advanced Power Control**), allows screen data to be set to update once every 4 or 8 seconds.



4.1 Screen 1: GPS MAP (... cont)

4.1.3 Toggleable Maps

Map toggling is a feature available on all Active 20's. Toggle-enabled MapCards allow you to switch between different map layers at a particular point on the same zoom level. For example, you can flip between the two scales (1:50k and 1:25k) and the Base Map. It is also possible to toggle between different map types and map providers.

If a toggle-enabled MapCard is loaded, a minitoggle symbol  appears next to the **Stop/Record** icon on the GPS screen in the status bar, indicating the map inserted can be toggled. This enables the toggle maps button on the left

Please Note: Not all maps are toggleable. Look for the toggle icon or logo on all of our toggle-enabled products. The toggle function can also be added to existing map cards (see satmap.com for further details on this service).



Toggle icon



Toggle logo



Toggle Symbol
(shown on screen)

Getting Started:

Insert your SD MapCard. This will load your **Map Packs** screen.

Use the rocker pad to flip between maps, and select **View Map** to access the desired **GPS MAP** screen.

To access the **Map Packs** screen at any point, centre press the rocker pad (or page forward on the Primary Screens to **POSITION INFO**) and select **Map Packs** using the lower left-hand side button.

Toggle between maps by pressing the upper left-hand side button (**Toggle maps**) and switch seamlessly between different maps without having to zoom in or out.

Please note: Most detailed maps have a "ceiling", and will disappear from the screen when zoomed out above this ceiling. This is intentional, as the map detail would be too small to observe clearly. If no other maps are available for toggling, the Toggle icon will disappear.



Toggle maps button appears **bold** when suitable map card is loaded and map areas and zoom levels overlap.

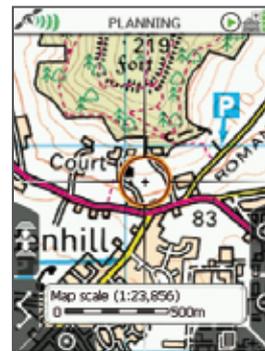


Toggle maps button appears **gray** when toggle function is not available.

Toggle maps



OS 1:25 000
scale mapping



OS 1:50 000 scale
mapping

4.1 Screen 1: GPS MAP (... cont)

4.1.4 Data Boxes

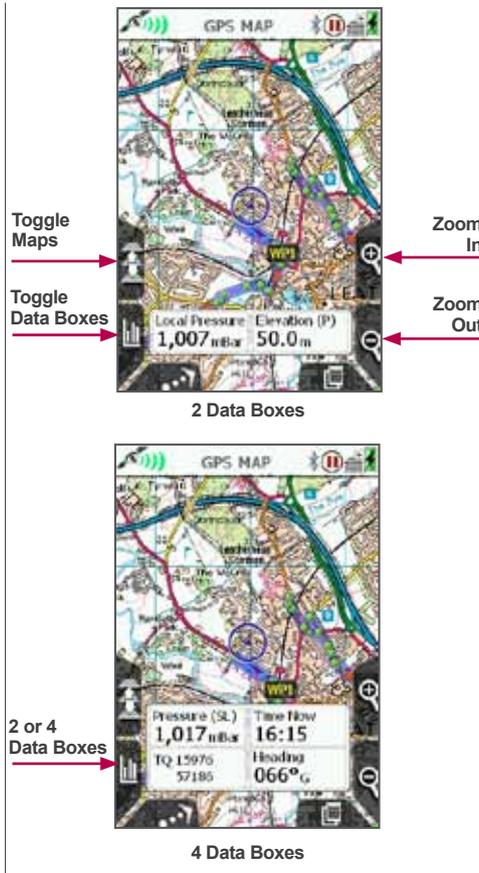
General. Data boxes on the **GPS MAP** screen can show a wide range of useful data items. Using the middle right button, 2 or 4 data boxes can be toggled on and off.

Contents. The contents of the data boxes can be selected from the **SETTINGS** menu. Please refer to the **MAIN MENU / Settings** Menu section of the User Guide for full details of each data item.

Data Boxes and Profiles. An easy way to change several databoxes at once is to set up different selection in **Profiles**. Switching a Profile can thus be used to change all the data boxes at once. Alternatively, Press & Hold on the touchscreen will take you directly to the relevant settings menu.

Independent Boxes. The contents of the 4 **Data Box** selection are independent of the 2 **Daya Box** selection. So it is possible to set up 6 separate data items, or repeat items between the 2 and 4 box selection.

Elevation Data and Data Boxes. Repeated pressing of the Data Box toggle button will then reveal the **GPS MAP / ELEV** screen, and then an addition 2 Data Boxes. One last press will return to the **GPS MAP** screen and no data boxes.



Data Items available

1. Speed Now
2. Average Speed
3. Average Moving
4. Max Speed
5. Wheel Speed
6. Time Now
7. Time Moving
8. Stopped time
9. Trip Time
10. Trip Elapsed Time
11. Trip Distance
12. Elevation (Pressure)
13. Elevation (Maps)
14. Elevation (GPS)
15. Gradient
16. Max Altitude
17. Min Altitude
18. Total Ascents
19. Total Descents
20. Local Pressure
21. Pressure (Sea Level)
22. HRM
23. HRM (Avg)
24. Cadence
25. Cad (Avg)
26. Heading
27. GoTo Bearing
28. GoTo Distance
29. GoTo ETA
30. GoTo Time
31. GoTo VMG
32. Nearest POI
33. Bearing to POI
34. Nearest POI Dist
35. POI ETA
36. POI Time
37. POI VMG
38. Route Name
39. Route Distance
40. Route X-Track Err
41. Route Done
42. WP Index
43. WP Name
44. Bearing Next WP
45. Dist Next WP
46. ETA to Next
47. Time Next
48. VMG Next
49. Bearing to End
50. Distance to End
51. ETA to End
52. Time to End
53. VMG End
54. Date
55. Posn as DD.MM.MM
56. Posn as DD.DDDDD
57. Posn as OSGB
58. Position (Local)
59. Sunrise
60. Sunset
61. Moon Phase
62. GPS Accuracy
63. Battery Voltage
64. PDOP
65. HDOP
66. VDOP
67. TDOP
68. Battery Level

4.1 Screen 1: GPS MAP (... cont)

4.1.5 Dynamic Elevation

General. This features allows you to view mapping and a live elevation profile on the same screen, allowing detailed visibility of the profile of the route ahead, or the completed route behind. After pressing the Data Box button following the 4 data box selection, the **GPS MAP / ELEV** screen will appear. The elevation profile works in 3 modes: *Active Route* mode, *GoTo* mode and *No Route* mode.

Active Route mode. With a pre-planned route loaded onto your Active 20 and "Activated" the elevation graph will show you the profile of the route ahead. A red spot will indicate your location on the profile. The "ahead" direction will be indicated by the graph to the right of the spot. In general use the red spot will lie 1/3 the way along the graph, showing a portion of the route already travelled.

Please Note: moving the rocker pad will put the screen into **PLANNING** mode and the Elevation profile will disappear, until you return to **GPS MAP** screen, using the bottom left hand button.

GoTo mode. The dynamic elevation feature also works in conjunction with the **GoTo** point (please see later chapter for activation of the **GoTo** feature). In this instance (and assuming that height data is available from the map dataset), an elevation profile between your location and the **GoTo** point will be shown. **Please note:** This is assuming a straightline route to the **GoTo** point.

Route mode. Without an Active Route, the elevation profile will display the route completed thus far, since the **TRIP LOG** was started.

Profile Resolution. The level of detail shown on the profile graph can be adjusted with horizontal sliders driven either by the rocker pad or by the **Zoom In / Zoom Out** buttons - on the slider that is "in focus" indicated by the orange fill. This settings feature is accessed by pressing the **TRAIL UP** button twice when in **GPS MAP** mode.



Elevation: "Active Route" mode



Elevation: "No Route" mode

Grid Scale



Elevation: "GoTo" mode



Orange Fill = Setting Focus

Adjust Distance
Adjust Height

Setting the profile resolution

4.1 Screen 1: GPS MAP (... cont)

4.1.6 Map orientation

There are 3 map orientation options for enhanced visibility: **North Up** / **Trail Up (Centre)** / **Trail Up (Low)**

North Up



North Up is currently on the screen. **Trail Up** can be selected by pressing the **Trail Up** icon (front left button).

The blue location icon is shown in the centre of the screen with North facing up on the map. Use this mode to conserve battery power.

From the **PLANNING** screen if you wish to switch the map to North Up, return to the **GPS Map** screen and press the **North Up/Trail Up** button.

Trail Up (Centre)



Trail Up (Centre) is currently on the screen. **Trail Up (Low)** can be selected by pressing the **Trail Up** icon (front left button).

The blue location icon is shown in the centre of the screen. The map orientates to match the direction of travel (similar to turning a paper map to find your bearings).

If you switch to **PLANNING** mode, the map will stay in **Trail Up** mode.

Note: Trail Up is not available in advanced power saving mode. (The screen refreshes more frequently in Trail Up, drawing more power).

Trail Up (Low)



Trail Up (Low) is currently on the screen. **North Up** can be selected by pressing the **North Up** icon (front left button).

The map orientates to match the direction of travel. However the blue location icon is positioned **low** on the screen so you can see more mapping ahead of you. Useful for when you are traveling at higher speeds, such as on a bike.

Note: The 4 data box option is not available in the Trail Up (Low) mode as it would obscure the locator circle.

4.2 Screen 2: PLANNING

To access PLANNING screen

(GPS MAP → PLANNING, via rocker pad nudge)

The **PLANNING** screen is accessed from the **GPS MAP** screen by moving the rocker pad away from your current location (blue location icon).

The **PLANNING** screen displays a **planning icon** (black square with a black cross) as soon as you move the rocker pad away from your current location. Instead of a blue dot, a small black cross is shown in the centre. From the edges of the black square planning icon radiate crosshairs as an additional visual cue that you are in **PLANNING** mode rather than **GPS MAP** mode. The black planning icon stays in place as you use the rocker pad to move the map.

The **POSITION INFO** screen may be accessed from the **PLANNING** screen by centre pressing the rocker pad, or by pressing the bottom right Primary Screens button.

When a map is loaded, the **PLANNING** screen shows a central default location for that particular map.

There is a data box overlay which shows;

- Grid reference – format options are given in **GPS Settings / Position Display Format** option).
- Altitude for this location – elevation above sea level, obtained from base maps (UK) or from map cards (non-UK).
- Distance from your last known location, i.e. where you last acquired a GPS lock. This is useful as a 'rangefinder'.
- Bearing from your last known location – format options given in **Compass Settings**.

Note: This data overlay is not configurable by the user,

unlike the 2-Data Box and 4-Data Box layouts available on the GPS MAP screen.

When the crosshairs are moved over an OOI or a route, an OOI/route indicator icon appears at the bottom of the screen. Centre pressing the rocker pad brings up further information via the '**Choose Information Type**' window.

Buttons:

Toggle Maps

Toggle between maps at the same zoom level

ROUTES MENU

Go to **ROUTES MENU**

GPS Map

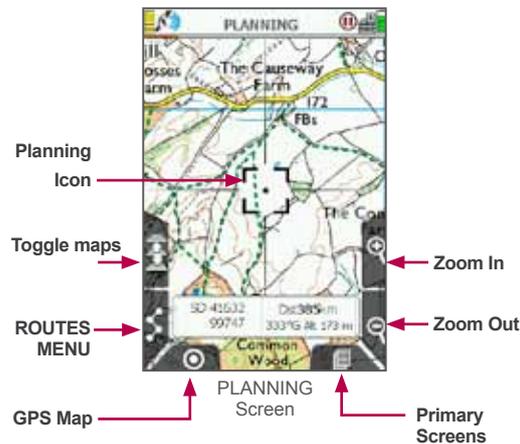
Go to **GPS MAP**

Zoom

Zoom in/out

Primary Screens

Page forward to **POSITION INFO** screen and scroll through primary screens



4.3 Screen 3: POSITION INFO

To access POSITION INFO Screen:

(GPS MAP / PLANNING → POSITION INFO, via Primary Screen page forward)

The **POSITION INFO** screen is accessed from either the **GPS MAP** or **PLANNING** screens screen either by a centre press of the rocker pad, or by pressing the **Primary Screen** button once.

The purpose of the **POSITION INFO** screen is to display useful information about that particular location, be it your own location (GPS MAP) or somewhere else on the map (PLANNING).

Buttons:

Set Marker - This function allows you to measure the distance and bearing between any two points on the map, the first point being the centre of the circle in the middle of the screen, and the second point being any that you cursor to with the rocker pad, connected by a red line. Cleared by using the **Clear Marker** button.

Map Packs - Allows you to see the maps that are present on your SD **MapCard**. A separate BookCover will be displayed for each of the MapPacks present on the SD card.

Maps - Flicks you back into your previous map screen (**GPS MAP** or **PLANNING**).

Primary Screens - Pages forward to the TRIP LOG screen.

Add POI - Will place a POI menu at the centre of the circle. A default name will be given (e.g. POI 1) that can be over written, and a POI Icon can be selected.

Set GoTo - This function places a **GoTo** waypoint at the centre of the circle. A solid blue line will then connect your location to the **GoTo** point at all times, until the **Clear GoTo** button is pressed.

This is a particularly useful and quick way of setting a simple, single-leg route. Especially when zoomed in to view map detail, and when in Track Up mode, the

GoTo line still shows the required direction.

Info Boxes: Local Grid & Lat/Long -

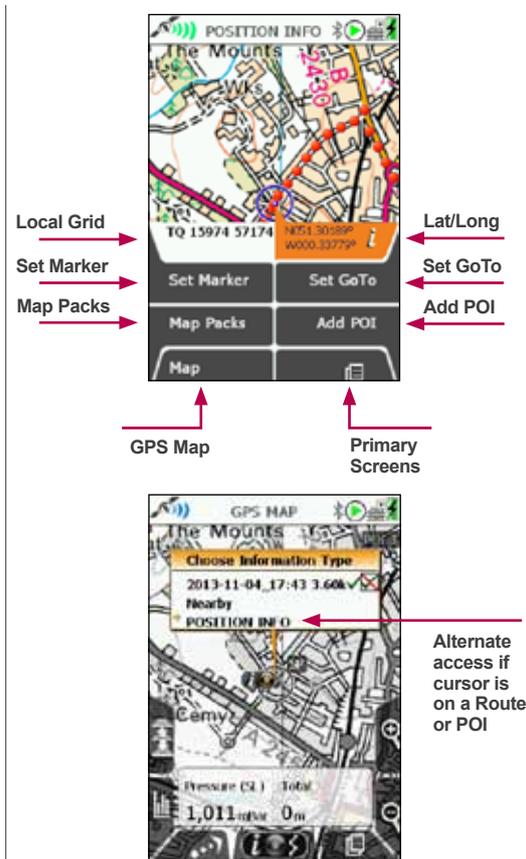
This feature allows the location of the circle centre to be simultaneously displayed in two grid formats. The format of Local Grid is determined in the **SETTINGS / GPS Settings** screen.

The format of the right hand box has been pre-set as Lat/Long (decimals). This feature is very useful if you may need to quickly convert one position format into another: simply use the rocker pad to cursor to the desired location, and then read off the other format version of the grid reference.



Example "Book Cover"

Map title



4.4 Screen 4: TRIP LOG

4.4.1 To access TRIP LOG Screen (GPS MAP→ POSITION INFO→ TRIP LOG), (PLANNING→ POSITION INFO→ TRIP LOG)

The upper half of the **TRIP LOG** screen is split into 12 data fields:

- Total distance travelled (Total Dist)
- Total time (Total Time)
- Time of last reset (Trip Reset)
- Straight line distance: from start position to end position (Strt Line Dist)
- Time moving (Time Moving)
- Average moving speed (Av Moving)
- Speed now (Speed Now)
- Average speed (Av Speed)
- Maximum speed (Max Speed)
- Sunrise time (Sunrise)
- Sunset time (Sunset)
- Altitude above sea level (Elevation)

All units can be given in metric or imperial.

The lower half of the **TRIP LOG** screen shows a graph of the elevation profile of your journey. Above the graph, a red pointer indicates the maximum height and a blue pointer indicates the minimum height. Figures for these heights are given below the graph. Also shown is the abbreviation '**Asc.**' for ascended height.

Buttons:

Start/Stop

Press to start/stop data logging.

(Note: remember that if **Stop** is showing, it means **Start** was the button pressed previously and the GPS is logging data).

The unit's data logging functions are intended to register a single trip. The log should be reset before starting the next trip. Using the **Start/Stop** button allows you to pause data logging during a journey, e.g. pausing for a lunch break.

When **Stop** has been pressed, the unit stops all data logging. If you switch to the **GPS MAP** screen and continue moving, no new snail trail is created.

Spot Button (GPS Map)

Return to **GPS MAP**

Primary Screens (Page Forward)

Go to **GPS STATUS** screen and scroll through primary screens.

Menu

Access the following range of options:

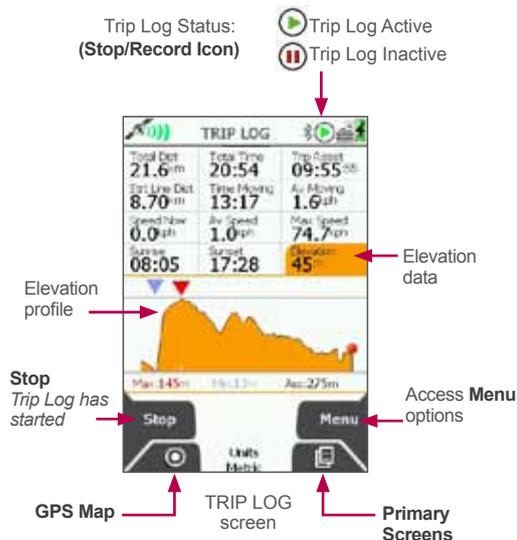
- Reset All
- Reset All & Convert
- Reset Log (keeps the snail trail and elevation profile)
- Reset Trail (also resets elevation data)
- Reset Trail & Convert
- Convert Trail to Track
- Set Trip Data

There are on-screen descriptors for each option. If you would like to save your data before resetting, choose one of the 'Convert' options in the menu.

As the trip log data uses up memory on your unit, make sure you reset the trip log regularly to maintain optimum performance.

*Note: If you transit between trips and press **Start** without resetting the log, the transit is shown as a straight line snail trail to your present location and will be incorporated into subsequent data logging.*

Elevation data data is obtained from maps, GPS, or derived from Pressure data. See **GPS Settings** for more details (section 7.09).



Note: Trip log data is not stored in hibernate mode.

4.4 Screen 4 : TRIP LOG (... cont)

4.4.2 Convert Trail to Track

(TRIP LOG → Menu → Convert Trail to Track)

When a route has been completed the (snail) trail can be saved for reference, future use, or for swapping with others on the Route Share Network. Select the **Convert Trail to Track** option to convert the snail trail of red dots into a track.

Waypoints will automatically be added at key points on the map. As these are computer generated, the positions should be checked and where appropriate, amended to ensure they are practical from a user's point of view. When the track has been created, this can be viewed on the unit in the **Routes Menu**, or can be shared using the SatSYNC program (free download from www.satmap.com).

The terms **trail**, **route** and **track** are used to describe different stages of a recorded route:

Trail: The path that has been taken, shown as a series of red dots ('snail trail').

Route: The planned path users intend to take. It has waypoints laid down at key turning points, and can be created on the unit, or on a mapping system such as the Online Route Planner, Google Earth etc.

Track: The snail trail that has been saved and converted to a track. It is called a **track** to differentiate it from a **route**. A track is a route derived from a recorded snail trail, and can still be found in the **Routes Menu** like a route. A track is likely to have timestamps and many more waypoints than a pre-planned route, and consequently the files will be larger.

Note: At the bottom of the elevation profile screen there is a list of all the trip data attached to each waypoint on the route.

4.4.3 Convert Trail to LOI/AOI (Lines / Areas)

This feature is only available on SatSYNC. After using one of the **Convert Trail to Track** options, you can export the track as a .GPX or .KMZ file to your computer. This can be imported back as an LOI/AOI by selecting the appropriate import settings in SatSYNC. (Please refer to the SatSYNC 1.5 User Guide for more information).

Note: KMZ/KML files give enhanced features on Google Earth. GPX files are better for the Online Route Planner/Route Share Network.

4.4.4 Geotag Photos with Trip Log Data

This feature is only available on SatSYNC. Photos are labeled or 'tagged' indicating where they were taken. Date/time information from your camera is synchronized with the GPS local time. After recording your trip log data, it can be used to geotag your photos via SatSYNC. This adds longitude and latitude information to the photos, which can then be viewed in the correct location on Google Earth or similar applications. This allows you and other to see where the pictures were taken.

(Please refer to the SatSYNC 1.5 User Guide to find out more on how to use the geotagging application within SatSYNC to geotag your photos).



ROUTE PLAN screen

4.5 Screen 5: MAIN MENU

To access MAIN MENU screen

(GPS MAP → POSITION INFO → TRIP LOG → MAIN MENU)

The **MAIN MENU** screen gives access to some of the Active 20's main functions and settings.

The upper half of the **MAIN MENU** screen shows the title of the **Active Map**, ie. the loaded **MapPack** on the **MapCard**. The lower half of the **MAIN MENU** screen shows the name of the **Active Route**.

Please Note : Only one at once Route can be "**Active**". If a **GoTo** point has been set - this counts as a Route - and the previous Active Route will be deactivated.

BUTTONS :

OOI Menu.

Go to **OOI Menu**. These are *Objects of Interest*, and include *Points of Interest (POIs)*, *Areas (AOIs)* and *Lines (LOIs)*.

GoTo and Marker.

Set **GoTo** point / **Marker** either by coordinates (or postcode: GB only).

A **GoTo** point is a single leg route with a single waypoint.

A **Marker** allows the measurement of distance and bearing between any two points.

Map Screens.

Return to **GPS MAP / PLANNING** map screens

Routes Menu.

Go to **ROUTES MENU**. Create routes, View routes, Activate, Edit and Delete routes functionality.

Settings.

Go to **SETTINGS MENU**. More detail later in the user guide

Primary Screens (Page Forward).

Press to scroll through the primary screens. This can also be achieved by using the Left-Right action on the rocker pad.



4.6 Screen 6: SEARCH

To access SEARCH screen

(GPS MAP → POSITION INFO → TRIP LOG → MAIN MENU → SEARCH)

The **SEARCH** screen gives access to a number of different search datasets.

These include (Search Icon) from left to right :

- Towns and Cities,
- Roads, Streets, etc.,
- Postcodes,
- Mountains, Hills, etc.,
- POIs & OOs on your Active 20,
- Tracks and Routes on your Active 20

Search datasets need to be loaded :

Depending on your geographic area and the type of data you wish to search, the relevant datasets **will need to be downloaded first**. This can be done either with a **Wi-Fi** connection, or by using **SatSYNC**. More datasets will be added as they become available.

Save data to Internal Memory or SD Card :

Internal memory space is limited, so more search data will leave less space for route data. The Mapping SD cards usually have more free space - but clearly, if you swap SD cards you may need to re-download search data onto the new SD card. Datasets can be loaded, deleted and reloaded as many times as you wish.

Press search result to see Map location :

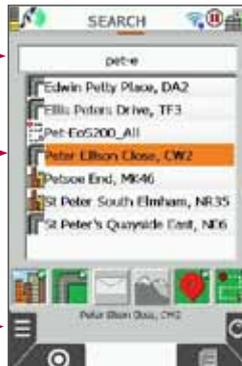
To see the location of the search results, just touch or select the entry, and the Planning Map will display the location (and add a POI, which can be controlled in **SETTINGS**).

Enter search term via keyboard



Choose one or more datasets to search

Enter search term via keyboard



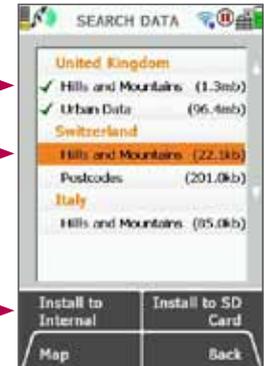
Select search result to display on PLANNING MAP

Access search datasets management

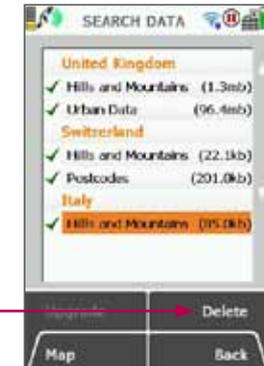
Green tick : Data loaded

No tick : Data available for download

Choose installation location



Delete data to save space, if needed



4.6 Screen 7: COMPASS / POINTER

4.6.1 To access COMPASS screen

(GPS MAP → MAIN MENU → COMPASS)

The Active 20 has a 3-axis electronic compass and a GPS "heading" compass. It switches between the two at a preset speed. Having both ensures you have the correct bearings at all times whether you are moving or stationary. Being 3-axis the GPS unit does not need to be held exactly level - but the results make more sense if you do!

It is important to periodically Calibrate the Compass.

Buttons:

Calibrate Compass

Go to **Calibrate Compass**

Spot Button (map Screens)

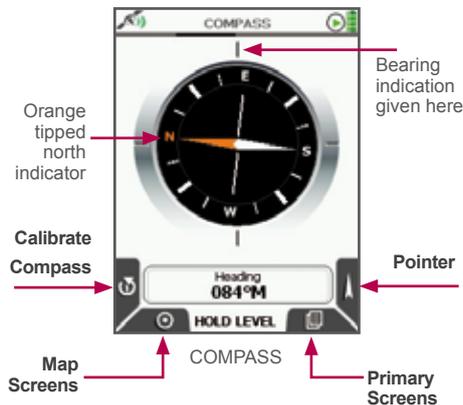
Return to map screens (GPS MAP / PLANNING)

Pointer

Go to **POINTER** screen

Primary Screens (page Forward)

Go to **TRIP LOG** screen and scroll through primary screens



4.6 Screen 7: COMPASS / POINTER (... cont)

4.6.2 POINTER Screen

(GPS MAP → POSITION INFO → MAIN MENU → COMPASS → POINTER)

Within the **COMPASS** menu there is the option of following a **Pointer**, which points you in the direction of your desired destination ie. a waypoint, Point Of Interest (POI), Line Of Interest (LOI), Area Of Interest (AOI) or GoTo point.

To access the **POINTER** screen, press the **Pointer** button on the **COMPASS** screen 

Buttons:

Target type

Scroll through overlays giving data on either nearest Waypoint, Point Of Interest, Line Of Interest, Area Of Interest, or Go To Point

GPS Map

Return to **GPS MAP** screen

Compass

Return to **COMPASS** screen

Primary Screens

Go to **TRIP LOG** screen and scroll through primary screens

Note: You need at least 1 POI or route on the map for the Pointer to work. (It does not work if you only have one Grid, AOI or LOI).

There are 3 types of 'target' to select from using the **Target type** button.

1. Nearest POI/LOI/AOI

Only available once a POI has been entered.



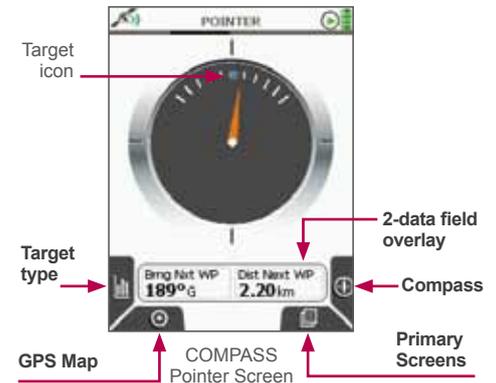
2. GoTo Point

Only available once a GoTo Point has been set. A green flag will appear at the top of the pointer image.



3. Next WayPoint

Only available once a route has been activated. A blue dot will appear at the top of the pointer image.



In each target type, the 2-data field overlay contains information on bearing and distance to the target.

Note: If you have POIs/LOIs/AOIs/waypoints set to invisible, the pointer will not show their location.

4.7 Screen 8: Wi-Fi NETWORKS

(MAIN MENU → WiFi Networks)

The Wi-Fi connectivity on the Active 20 serves 2 purposes :

- Download Software Updates,
- Sync your routes and activities with Xpedition Online Route Planner (this feature coming soon).

Connect to Wi-Fi

Navigate to the WI-FI NETWORKS screen using the Primary Screen page forward button. Select your local network using either the touch screen or rocker pad, then press **Enter Password** and fill in the details in the normal fashion. **Please note** : Active 20 does not yet support Wi-Fi networks that require additional browser information to join (e.g. some hotels that require marketing information)

Software Upgrades; press this button to check the status of the "application" software.

Installed Version: This is the version that is currently running on your device. If it is a lower number than the **Official Version** you should upgrade by pressing the **Install Official** button.

Official Release: This is the version that is currently being shipped by the factory on new units, has been the most fully tested and should be supported by a Full User Guide.

Beta Release: This is the latest version from the Satmap software development team, and will include all the latest features and bug fixes. However, it may not be as fully tested or stable as the **Official Release**. If the Beta Release is causing you issues - you can "Roll-Back" to the Official Release.

Platform Upgrades : From time to time a Platform Upgrade may be released. This is a larger and longer download than the Application software, and handles more basic functions of the GPS unit (power supplies, screen drivers and the such like). Satmap recommend that you always upgrade to the latest Platform, if a newer one is available.

This upgrade requires that you have an SD card fitted with sufficient space available, however the system will test for this and issue a warning if required.

Please Note : During All software upgrades it is essential to ensure that the power to the GPS unit is not disturbed, otherwise the software may be corrupted and the unit could enter "**Recovery Mode**" and / or require return to Satmap for attention.

The image shows four sequential screenshots of the device's upgrade interface:

- WiFi Networks**: Lists available networks like NETGEAR Home, PlusnetWireless, SM-Wireless, and SM-Wireless_EXT (selected).
- Manage Upgrades**: Shows software versions (Installed: 3.11.671, Official: 3.11.450, Beta: 3.11.671, Other: 1 available), platform versions (latest installed), and other updates (Base maps: 6 available, Other: 0 available).
- Software Upgrades**: Displays installed version (3.0.11121), official release (3.0.11065, 2017-06-12), and beta release (3.0.11121, 2017-06-26).
- Platform Upgrades**: Shows current platform (35) and latest platform (35, 2017-06-23).

Dot Colours :

- Red :** Important update needed
- Green:** All OK : Formal updates loaded
- Blue :** All OK - Some Beta software loaded.

4.8 Screen 9: SHARED DATA

Access SHARED DATA screen

(GPS MAP / PLANNING → POSITION INFO → TRIP LOG → MAIN MENU → COMPASS → SHARED DATA)

The **SHARED DATA** screen allows you to use Bluetooth wireless connectivity to share route data with other nearby Active 20's. To move Routes between devices, they have to have been previously marked as "**Share**" in the **Route Edit** screen.

Operation: Selection of this screen will initiate a scan for nearby Active 20's. Other Bluetooth devices will not be visible on this screen.

Main List: The list will display the User Name and ID number for all nearby Active 20's that have Bluetooth turned on. The blue signal strength bars on the right hand side range from 1-5 bars.

This Device: Your device will always be at the top of the list. Either centre press the rocker pad, or the **Select** button to display the list of Routes that you have previously marked as "**Share**". To make an item shareable or not, locate it in your **ROUTES** menu, press **Edit**, then **Share / Unshare**.

MY SHARED DATA screen also allows access back to the Routes Menu screen, and the ability to **Unshare** items.

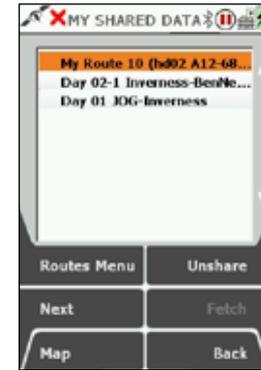
Fetch Data. Back on the **SHARED DATA** screen, items that have been made shareable by other Active 20's can be viewed by highlighting that device using the rocker pad, and then either a centre press of the rocker pad or the **Select** button will take you to their "catalogue" data. Press **Fetch** to transfer that item to you device. As the transfer occurs an information box will display "Data downloading in progress ... Please wait".



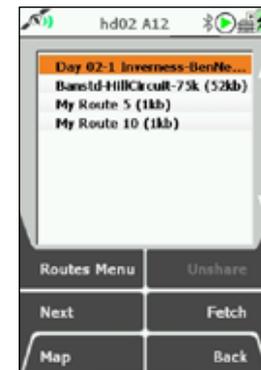
Lists all nearby Active 20's



Select an Active 20 to view their shareable routes.



Lists your Routes marked for sharing



Press Fetch to get a route.

4.8 Screen 9: SHARED DATA (... cont)

Imported Data. Once an item has been fetched to your device, it will be placed in the **ImportedData** folder on the Internal memory. From here all the standard **ROUTES MENU** functions are available. The route that you have just imported should be highlighted.

Shareable - by default. All imported data is flagged as shareable by default. If you wish to change this, **Edit** the route and change the status to "**Not Shared**"

SHARED DATA - Other buttons:

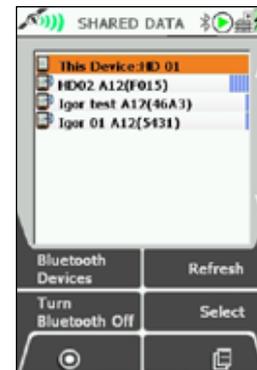
Bluetooth Devices: this will hop to a screen where all Bluetooth devices can be observed - including Bluetooth Smart Low Energy fitness sensors and other BT devices generally.

Turn Bluetooth Off / On: When turned Off - the BT icon will disappear from the **Status Bar** and only the shareable data on your own device can be inspected. The **SETTINGS** button will hop to the **SETTINGS / Bluetooth** screen.

Refresh: This button will rescan for nearby Active 20's - and typically takes about 10 seconds. You may see the list move about & reorder, depending on new devices in range and signal strength.



Lists all nearby Active 20's



Other Buttons



Bluetooth Off

4.9 Screen 10: GPS STATUS

Access GPS STATUS screen

(GPS MAP/PLANNING → POSITION INFO → TRIP LOG → MAIN MENU → COMPASS → SHARED DATA → GPS STATUS)

This is the screen that is first displayed when switching on the unit (unless there is already a map card inserted in which case the unit will briefly show the **Map Packs** screen.

The elliptical diagram represents the sky above you where North is the top of the ellipse. Satellites (Satellite Vehicles = SVs) visible to the unit are allocated numbers and also shown on the bar chart. Blue bars indicate the unit can "see" an SV. The bars change to Green when the data from an SV is used in the position Lock. There are also indications of "Signal to Noise Ratio" (Av SNR and Max SNR).

Before acquiring a lock, details of your last known position, with time, date, and grid reference are shown at the top of the screen. (Grid reference format options are given in **GPS Settings**, 'Position Display Format').

Once you have a lock, your current coordinates and elevation are shown. As a guide, a **minimum of four satellites** are needed to acquire a lock.

To access the **GPS STATUS** screen from the **GPS MAP** screen, keep pressing the **Primary Screens** button (front right button) until you reach the **GPS STATUS** screen.

The signal indicator (either red cross or green/blue signal icon) indicates the strength of signal received by the unit. The GPS indicator caption at the bottom of the screen either says 'Acquiring GPS' or gives accuracy to within a certain distance.

If the unit is receiving a poor signal e.g. under wet tree canopy, it may only be able to give two dimensional data, i.e. **no elevation data**. Under these circumstances the elevation caption at the top right of the screen will show '2D' instead of an elevation figure. The signal received icon at the top left will also show a single green crescent plus '2D'.

Accuracy Values (Acc)

For those interested in other satellite data, an Accuracy figure is provided: less than 2m is very good, and less than 6m is acceptable, depending on the prevailing conditions.

PDOP / HDOP values

As a further set of indicators for the quality of GPS lock at the time PDOP (Positional Dilution of Precision) and HDOP (Horizontal Dilution of Precision) values are also provided. These are ratios (and not measurements in feet or metres). Values approaching 1-2 are very good. For example - very heavy overhead tree cover or a deep canyon, provide more challenging conditions for GPS and these values will fluctuate.

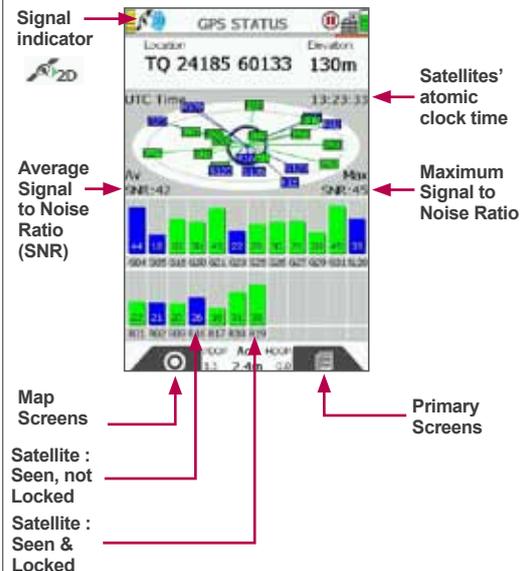
Buttons:

GPS Map

Return to **GPS MAP**

Primary Screens

Go to **PLANNING** screen and scroll through primary screens



GPS Status

5. POWER OFF Screen

Power Off: Press the long side button on the right hand side of the GPS to display the **Power Off?** screen. The bottom right **Power Off** button will totally power down the GPS unit, but your current data will be saved. Once off, no GPS logging or trip data will be recorded until the unit is tuned on again.

Hibernate: This function puts the GPS into a low power "stand-by" mode. The primary benefit of this is to allow a very fast restart and GPS re-acquisition. Typically useful over a lunch break, for instance. **After the specified period, the GPS will do a full "Power Off"**. In Hibernate mode, the Active 20 will not log any further data until the **Power** button is repressed and a GPS lock is restored.

Screen Lock: You may wish to lock the screen to prevent accidental button presses. From the **Power Off?** screen - just press the long Power Button one more time, this will send you back to previous working screen, and will place a small yellow padlock icon on the status bar. Thereafter, pressing any button will display the **Unlock?** screen.



POWER Screen,
with Hibernate
options



LOCK Screen option.

6. MAIN MENU: Settings Menu

6.0 Access SETTINGS MENU screen

(GPS MAP → MAIN MENU → Settings)

The **SETTINGS MENU** screen gives you access to a wide range of settings options.

In addition, use **Memory Status** to find out how much RAM/operating memory you are using. If the consumption is too high, you can reduce it by adjusting **Set Trip Data** to 'Hide Inactive Routes' or only show the start point of an inactive route ('Show Inactive Routes SP').

The full list of settings options are:

1. Touch Screen Settings
2. Setting Profiles
3. Power Control
4. Advanced Power Control
5. Hibernate Settings
6. Wi-Fi Settings
7. Bluetooth
8. Elevation
9. Backlight
10. 2 Data Box Layout
11. 4 Data Box Layout (upper)
12. 4 Data Box Layout (lower)
13. GPS Settings
14. Static Position Hold
15. Logging Options
16. Memory Status
17. Units and Set Speed
18. Compass Settings
19. Calibrate Compass
20. Set Trip Data
21. Alert Settings
22. Buttons Control
23. Panning Speed
24. Cycling
25. Data Save Options
26. Search Settings
27. List Mode
28. Software Updates
29. Screen Data Options

30. Primary Screen Selector
31. Time Offset
32. Enter User Name
33. Languages
34. About

At any point, should you wish to exit a settings screen, either press **Map** (front left button) to go to the **GPS MAP/PLANNING** screen, or press **Back** (front right button).

Buttons:

Next

Scroll through menu options. Alternatively use the rocker pad to highlight an option.

Default

Takes you to the **Default Settings** screen with the option to choose **Yes** or **No**. Pressing **Yes** takes you to the **Default Options** screen:

- Choose **Clear All** to reset all the user defined settings, trail and GPS data, (including OOs and routes) to the factory set defaults. The unit will then turn itself off.
- Choose **Reset Settings** to reset only the settings data to the factory set defaults.

(If you choose **Yes** you will not be able to go back without choosing one of these options).

Choose **No** to retain all current settings and return to the **SETTINGS MENU**.

Map

Return to last map screen

Select

Either press **Select** or centre press the rocker pad to select the highlighted option

Cancel / Back

Return to **MAIN MENU**



SETTINGS Menu

6. MAIN MENU: Settings Menu (... cont)

6.1 Touch Screen Settings

(GPS MAP → MAIN MENU → Settings)

Touch Screen Enabled

This setting allows DualControl (TouchScreen and Buttons) **On** or Button Control only : **Off**.

When there is a lot of rain / sweat / dirt on the touch-screen, occasionally unexpected screenpresses can occur. In these circumstances, you may prefer to switch the Touchscreen off, and use Button Control instead.

Exit Screen Off via Touchscreen

This controls the exit from "screen-off" mode.

On : Allows the screen to wake by simply touching it

OFF : Requires a button press to turn the screen back on.



6. MAIN MENU: Settings Menu (... cont)

6.2 Setting Profiles

(MAIN MENU → Settings → Setting Profiles)

User created **Profiles** are an easy and flexible way to save groups of settings. Extra Profiles can be created by using the **Copy** button, and they will appear with the word "*copy*" after the original title.

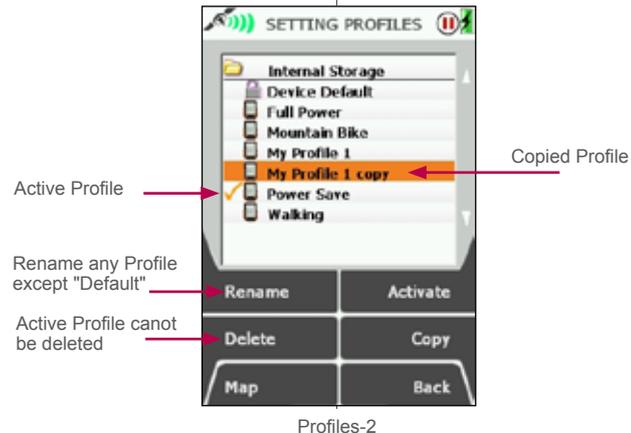
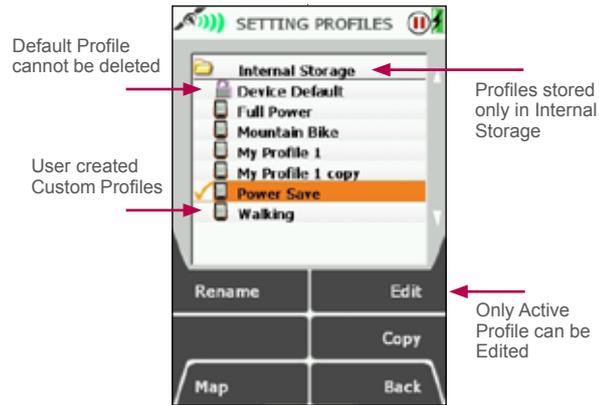
Profiles can easily be renamed with the **Rename** button.

Custom user Profiles have a variety of uses. For Example: A "*Night Time*" profile could be set with a very low backlight. A "*Power Save*" profile could be set with very specific settings, e.g.

No backlight boost
Backlight off after 30 seconds
Backlight at 50%
Map in North Up.

Please Note: The current "Active" Profile cannot be deleted. To do this, activate an alternate Profile, then focus back on the original Profile and press **Delete**.

Important: Any changes to Settings generally will be reflected in the Active Profile.



6. MAIN MENU: Settings Menu (... cont)

6.3 Power Control

(MAIN MENU → Settings → Power Control)

Automatic Screen Turn Off

This is a power saving option.

- Use the rocker pad, moving left / right to select desired time before the screen will turn off leaving the unit still operating
- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.
- GPS lock will be maintained and the unit will continue to log your position.
- To instantly re-activate the screen, press any button, except when the screen is locked. In this case, use the power button.

Alert When Screen Off

Use the rocker pad, moving left/right to toggle between Off and Screen Alerts Every Minute.

Press Done or centre press the rocker pad to return to SETTINGS MENU.

With the alerts mode selected the screen will flash on at 1 minute intervals to remind you the unit is switched on—particularly useful when dark.

Pressing the Default button restores the factory settings:

Automatic Power Saving

- Use the rocker pad, moving left/right to select desired time the unit will stay powered on for.
- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

Note: *Allowing the unit to power off will cause it to lose GPS lock. However, if the unit is in hibernate mode, then it will be able to acquire a lock very quickly after powering on.*



6.4 Advanced Power Control

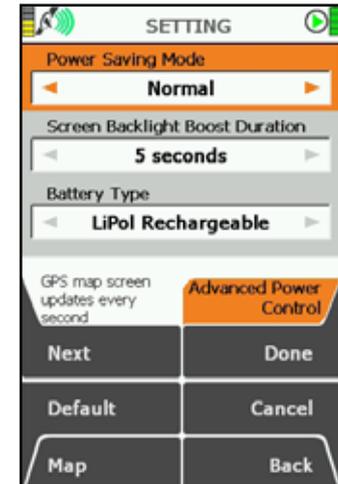
(MAIN MENU → Settings → Advanced Power Control)

Power Saving Mode

To save power, select **Advanced** power saving mode and the screen will update every four seconds instead of every second.

In this mode **Trail Up** is disabled and the **Backlight** setting has a maximum value of 80%, but can be temporarily be set to 100% by pressing the backlight button.

- Use the rocker pad, moving left/right to select **Normal** or **Advanced**.
- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.



6.5 Hibernate Settings

(MAIN MENU → Settings → Hibernate)

Hibernate

This function puts the GPS unit into a low power sleep mode that allows a very fast re-start. Ideal for lunch breaks!

Whilst in hibernate, the screen goes dark, and the unit does not log any stats or GPS data.

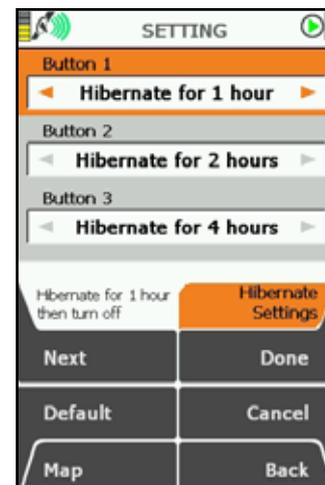
After the hibernate period, the unit will **turn off**.

Pressing the **Power** button brings up the **Power Off?** screen, which displays various Hibernate timer periods.

The buttons can be user configured (if so desired) in the Hibernate Settings screen.

Hibernate Time options range from 1 Minute to 12 Hours.

The **Restart** button is a handy control to restart the GPS unit. This occasionally is necessary in the event of some type of Software Upgrades where you will be requested to restart the Active 20 unit.



6.6 Wi-Fi Settings

(MAIN MENU → WiFi Networks)

The Wi-Fi connectivity on the Active 20 serves 2 purposes :

- a. Download Software Updates,
- b. Sync your routes and activities with Xpedition Online Route Planner (this feature coming soon).

Connect to Wi-Fi

Navigate to the WI-FI NETWORKS screen using the Primary Screen page forward button. Select your local network using either the touch screen or rocker pad, then press **Enter Password** and fill in the details in the normal fashion. **Please note** : Active 20 does not yet support Wi-Fi networks that require additional browser information to join (e.g. some hotels that require marketing information)



Software Upgrades; press this button to check the status of the "application" software.

Installed Version: This is the version that is currently running on your device. If it is a lower number than the **Official Version** you should upgrade by pressing the **Install Official** button.

Official Release: This is the version that is currently being shipped by the factory on new units, has been the most fully tested and should be supported by a Full User Guide.

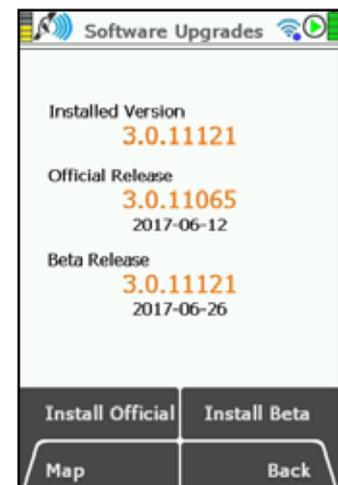
Beta Release: This is the latest version from the Satmap software development team, and will include all the latest features and bug fixes. However, it may not be as fully tested or stable as the **Official Release**. If the Beta Release is causing you issues - you can "Roll-Back" to the Official Release.



Platform Upgrades : From time to time a Platform Upgrade may be released. This is a larger and longer download than the Application software, and handles more basic functions of the GPS unit (power supplies, screen drivers and the such like). Satmap recommend that you always upgrade to the latest Platform, if a newer one is available.

This upgrade requires that you have an SD card fitted with sufficient space available, however the system will test for this and issue a warning if required.

Please Note : During All software upgrades it is essential to ensure that the power to the GPS unit is not distributed, otherwise the software may be corrupted and the unit could enter "**Recovery Mode**" and / or require return to Satmap for attention.



6. MAIN MENU: Settings Menu (... cont)

6.7 Bluetooth Settings

(MAIN MENU → Settings → Bluetooth)

This Active 20 carries a **Bluetooth 4.0** module (also known as **Bluetooth Smart**), which has two bands: **Classic** (which handles route data transfer between Active 20's) and **Low Energy** (LE, which handles fitness sensor data, e.g. Heart Rate and Cadence Monitors).

The SETTING/Bluetooth buttons have the following functions:

Rocker pad Left / Right will turn Bluetooth On & Off. When turned On, the BT Icon on the status bar should flash as the unit search for other devices. Data transfer and fitness sensor data will not function whilst Bluetooth is turned off.

Bluetooth Devices will display all Bluetooth enable devices that are nearby (Classic & Low Energy).

Done returns you to the SETTINGS screen.

Shared Data hops to the SHARED DATA screen which allows you to see and fetch other Active 20 users' route data.

Cancel will cancel the operation and return you to the SETTINGS menu.

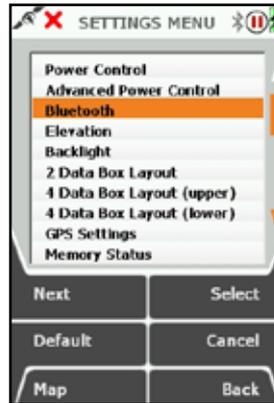
Map returns to the GPS MAP/PLANNING screens.

Back will go back to the previous that you were on.

BLUETOOTH SCREEN This screen allows you to see local devices - and connect to Low Energy sensors.

Shared Data, as above, hops to the SHARED DATA screen.

Refresh, kicks off a Bluetooth refresh scan to look for new devices nearby. In this version of the software, previously identified Active 20's and LE devices will be displayed. The blue bars on the right hand side of the screen indicate signal strength. Typically 5 bars indicate a range of 1m and 1 bar approx. 10m.



SETTINGS Menu

Turn Bluetooth Off, does exactly that, and returns to the main SETTINGS screen. At this point any connected LE devices will disconnect, and Bluetooth data sharing and data logging will cease.

Select/Deselect, this controls the connections to BT LE fitness sensors. This version of the software allows Bluetooth Smart connection to two types of fitness sensors: Heart Rate Monitors (**HRM**), and bike Speed & Cadence sensors (**Sp/Cad**).

Sensors. Bluetooth Smart sensors are optional extras for the Active 20 GPS units. They can be purchased from the Satmap website, or from other outlets.

Please Note; Currently Satmap has partnered with the "Wahoo" brand for these fitness sensors. When selecting other brands, please ensure that they support the Bluetooth 4.0 "Smart" and "Smart Ready" profiles. The Active 20 **does not** support the ANT+ profile.



SETTINGS / Bluetooth



BLUETOOTH screen

6. MAIN MENU: Settings Menu (... cont)

Connecting Step 1. Ensure that your sensors is activated. For HRM, this is typically done by putting the strap around your chest. For bike Sp/Cad sensors, typically by spinning the wheel or pedals.

Connecting Step 2. Providing the sensor is in range and activated, the Active should "see" it on the Bluetooth devices screen. If not, please press Refresh and the name of sensor should appear, in the example right: "Wahoo HRM v2.1". Use the joy stick to cursor up and down to your desired sensor device. Either press the **Select** button, or centre press the rocker pad and a black tick will indicate that the sensor has been "Selected".

Please Note; Bluetooth allows only one of each type of sensor to be selected at any one time. You can have a **HRM** and a **Sp/Cad** sensor selected, but not two **HRM's**.

Connecting Step 3. Wait for a short period and the black tick should turn blue. This indicates that your selected LE device has now "connected" and sensor data can be collected. During the connection process, the BT icon on the status bar should flash blue/grey and then turn solid blue when the connection is made.

Troubleshooting.

Very occasionally Bluetooth can be temperamental! If a connection is not made on the first attempt - deselect the BT LE device, check that your sensor is activated and in range, and then reselect the device. Failing that, turn the Bluetooth fully off, then back on again, and reattempt the connection process. If that continues to fail, please connect Satmap support.

Connecting Step 4. Once a blue "connected" tick has been observed, you sensor will then pass data to the Active 20. This data may then be displayed in the 2 & 4 data boxes that appear on the GPS MAP screen. To set this up, you will need to select SETTINGS / 2/4 BoxLayout and the HRM

data item (20.HRM).

Data Types : HRM. Heart rate data is displayed as "beats per second". Future editions of software will display Heart Rate Zones, and the such like.

Data Types : Cadence. This is a measure of the pedal revolutions per second on a bike.

Data Types : Wheel Speed. In addition to using speed calculated by GPS position movement, cyclist often use "wheel speed" as a reliable backup. This is especially useful if a GPS lock is difficult for any reasons (e.g. very thick woodland or the urban jungle).

Set up for Wheel Speed. This relies on a default value for the wheel circumference, which is then multiplied by the wheel revolutions output from the sensor. The default setting is 2,096mm, and this can be changed in the **SETTINGS / Cycling** screen. Use the rocker pad to navigate the numbers and set the values.

Data Output. HRM and cadence data will be stored on the Active 20. After your activity, save your data for later upload. This is done via the **TRIPLOG / Menu / Convert** options. Your data containing the HRM and cadence values will be stored in a TCX file (e.g. MyRoute1.tcx). You will be able to see these files when you use the **SatSYNC PC** application to upload your data.

About TCX files. This is an industry standard format that is accepted by a wide variety of 3rd party activity storing and sharing web sites. These TCX files can contain location and speed data, along with a wide variety of fitness related data items.



Two Sensors "Selected"



One Sensor "Connected"

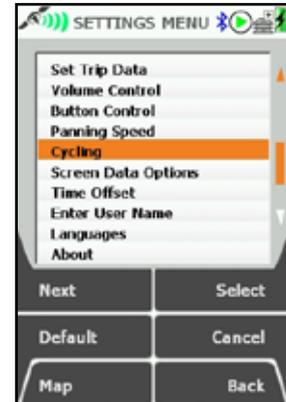
6. MAIN MENU: Settings Menu (... cont)



Two Sensors "Connected"



Sensor data displayed



SETTINGS / Cycling



Set your Wheel Circumference in mm.

6. MAIN MENU: Settings Menu (... cont)

6.8 Elevation Settings

(MAIN MENU / Settings /Elevation)

Overview. The Active 20 gives you 3 options for calculating elevation values. All are useful, but they do have some pros and cons.

Elevation from Maps. Each map is supplied with a "height data set" that provides spot heights at regular horizontal intervals (post spacing). Typically these are between 50m-100m. This method works well when the ground is less steep, with fewer cliffs around.

Elevation from GPS. This method uses height data supplied by the GPS itself, and works best when there is a good, unobstructed view of a large portion of the sky. The data can be quite variable in forests and amongst tall buildings.

Elevation from Pressure. The highly accurate barometric altimeter can be used to assist with elevation calculations, and uses the principle that pressure falls as elevation rises. It is especially useful over short periods of time where the weather is relatively stable, since pressure also generally falls when bad weather is approaching.

Setting "Elevation" source. Data that is stored for later upload has a single set of elevation data. You can control this by setting its source. Select Elevation from the SETTINGS screen. The top box indicates the Elevation data source and can be changed by moving the rocker pad left and right (when it is highlighted by the orange background). A selection can be made between "Elevation from Maps, GPS or Pressure". The first two settings require no further action -

just press Done, Back or Map to continue with the GPS use.

Setting Elevation from Pressure. To work effectively, elevation from the barometric altimeter needs to be calibrated at intervals. This is because changing weather would otherwise affect the elevation reading.

Altimeter Calibration: Auto. On this setting the Altimeter is recalibrated against the Map elevation every 2 hours (by default). This is a good setting for normal use and requires no further user input.

Info Box:

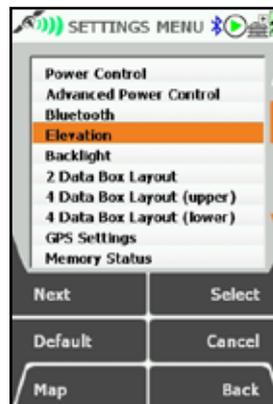
"Last Successful Calibration." If a long time has elapsed since the last calibration, the accuracy may have drifted due to weather change: it would be wise to recalibrate the device as described below.

Auto Recalibrate Frequency. The left / right rocker pad function can be used to toggle the recalibrate time interval between 2 / 4 / 6 / 8 hours.

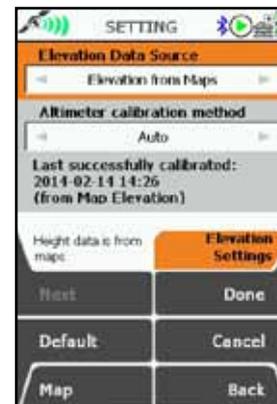
"Calibrate Now" button will calibrate the local pressure against your current Map Elevation, and record the date and time for future reference.

Manual Calibration. Should you wish to have more control over the recalibration of the altimeter, select **"Manual"** using the rocker pad, and then **Select**.

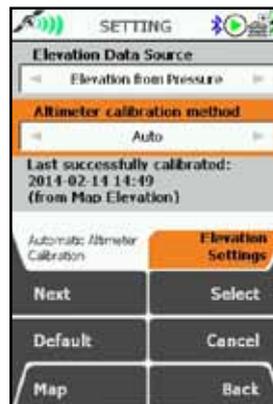
Method 1: Map/GPS Elevation. This will simply use the Map elevation for calibration (or GPS height data for no map data is available).



Select "Elevation" from SETTINGS



Select Elevation data source



Auto calibration setting

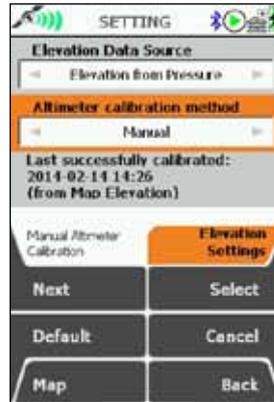


Select Recalibration frequency

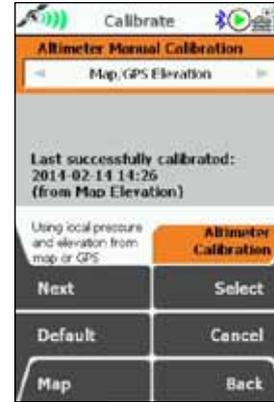
6. MAIN MENU: Settings Menu (... cont)

Method 2: Known Elevation. This allows you to enter your own known elevation for a precise calibration. Typically you might be at a Trig Point or a map location where you are sure of the exact height. Use the rocker pad to scroll through and set the values.

Viewing Elevation Data. On the **GPS MAP** screen the **Data Boxes** can be used to view your elevation data. It is even possible to select all 3 types of elevation data for comparison, however, only one set of elevation data can be saved in the TRIP LOG for display and upload.



2/4/6/8 Hour Intervals



Manual: Using Map/GPS



Precise Calibration: Known Elevation



Set Your Known Height



View your Elevation data



Trip Elevation data

6. MAIN MENU: Settings Menu (... cont)

6.9 Backlight Settings

(MAIN MENU → Settings → Backlight)

The **Backlight** setting is used to control the brightness of the GPS screen. It has significant impact on the battery life and is therefore recommended that you choose a setting which you find comfortable, not necessarily the brightest.

Filter Options:

Within the **Backlight** settings you will find options for filtering your screen. These include options for use at night and in strong sunlight:

Red Filter: for night vision

Press the **Red Filter** button for night use to preserve your night vision. This adds a red tint to your screen so your eyes are protected from viewing a bright screen in the dark.

To preserve night vision, use a low level setting. Below 10%, the scale goes down in steps of 2%. (Some text may become illegible using the red filter with a backlight setting below 10%).

Select **Sun Filter**, then **Normal** to return to the daylight screen.

Sun Filter: for strong sunlight

Press the **Red Filter** button to access the **Sun Filter** option. This gives your screen a higher contrast and increases the levels of red, green and blue, so it is easier to view your map in very bright sunlight.

Note: With the Sun Filter your screen loses some intricate map details in order to enhance the visibility of the map in sunlight.

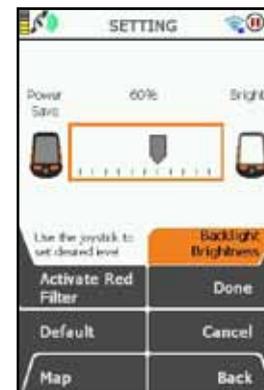
Select **Normal** to return to the daylight screen.

The **Red Filter**, **Sun Filter** and **Backlight** level can be used in combination to suit your individual needs.

- Use the rocker pad, moving left/right to select the desired level.
- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

Pressing the **Default** button restores the following setting: 90%

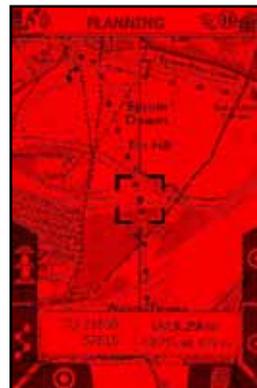
Note: If you are in Advanced Power Saving mode, the Backlight setting cannot go beyond 80%.



Adjust backlight brightness



Normal



Red Filter



Sun Filter

6. MAIN MENU: Settings Menu (... cont)

6.10 Data Box Settings

In the lower half of the GPS MAP screen two or four Data Boxes can be toggled to show customised information about your trip.

Data - 2 Box Layout (MAIN MENU → Settings → 2 Data Box Layout)

For both the Left Box and the Right Box:

- Use the rocker pad, moving left/right to select the desired option.
- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

The data options are listed below and are the same for both 2 data box and 4 data box layouts.

Pressing the **Default** button restores the factory settings for this item.



Select items for the Data Boxes



Toggle Data Boxes



2 Data Box Layout

Toggle Data Boxes



4 Data Box Layout

6. MAIN MENU: Settings Menu (... cont)

6.11 Data - 4 Box Layout (upper)

(GPS MAP → MAIN MENU → Settings →
4 Data Box Layout: upper)

For both the Upper Left Box and the Upper Right Box:

- Use the rocker pad, moving left/right to select the desired option.
- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

The data options are listed below and are the same for both 2 data box and 4 data box layouts.

Pressing the **Default** button restores the factory settings for this item:

Data boxes are shown on the **GPS MAP** screen.

To reach the **GPS MAP** screen from the **SETTINGS MENU**, press **Map** (front left button).

On the **GPS MAP** screen, use the lower left side button to toggle between having 2 data boxes, 4 data boxes or none.

6.12 Data - 4 Box Layout (lower)

(GPS MAP → MAIN MENU → Settings →
4 Data Box Layout: lower)

For both the Lower Left Box and the Lower Right Box:

- Use the rocker pad, moving left/right to select the desired option.
- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

The data options are listed below and are the same for both 2 data box and 4 data box layouts.

Pressing the **Default** button restores the factory settings:



Upper Data
box selections



Lower Data
box selections

6. MAIN MENU: Settings Menu (... cont)

Content options for 2 & 4 Data Boxes

(GPS MAP → MAIN MENU → Settings →

2/4 Data Box Layout)

The following data options are available for each box in both the **2-box** and **4-box** layouts. Move the rocker pad left/right to select the desired option, and then press **Done** or centre press the rocker pad to complete. For each data option, a summary descriptor is given on-screen.

1. Speed Now. Current speed

2. Average Speed. Average speed from starting Stats. Total distance divided by total time.

3. Average Moving Speed. Average moving speed from starting Stats

4. Max Speed. Maximum speed/average speed from starting Stats

5. Wheel speed. For cycling, speed taken from the wheel (via Bluetooth) rather than GPS.

6. Time Now. Taken from Satellite time (assuming GPS is active) and offset according to the Time Offset settings

7. Time Moving. Excludes periods when unit is off and in hibernate. Starts when **Trip Log** started and end on Trip Reset. GPS needs to be registering movement.

8. Stopped Time Time spent not moving. See **Time Moving** summary above.

9. Trip Time. Total time From Trip reset to Trip Reset, when Stats were running, not Paused/Stopped.

10. Trip Elapsed Time. Total elapsed time between Stats being started and Now, including periods when the unit may have been turned off, or stats Paused (depends on GPS lock for accurate time values).

11. Trip Distance. Total distance whilst Stats were running

12. Elevation (Pressure). The Elevation, calculated by the Barometric Altimeter. **Please Note** to be accurate, the Barometric Altimeter needs to be calibrated by one of several methods at the beginning of your Trip. Please see relevant section. This is the most accurate Elevation method.

13. Elevation (Maps). The Elevation calculated from embedded data in the mapping. Please use this as a general guide only as this type of data source is not as accurate as GPS or Elevation data. This source is prone to "drift" in rapidly changing weather conditions.

14. Elevation (GPS). The Elevation as calculated by the GPS signals received. This is a reasonably accurate measure, but can be affected by heavy overhead cover and sometimes by "Canyon effect". However, GPS elevation is not prone to weather changes in the same way as Elevation from Pressure.

15. Gradient. Given as a percentage, and not as an angle or ratio. E.g. 5% gradient = 5m rise over 100m distance.

16. Max Altitude. The maximum height (altitude) attained during the trip since the last reset.

17. Min Altitude. The minimum height (altitude) attained during the trip since the last reset.

18. Total Ascents Cumulative total of height (altitude) gained.

19. Total Descents Cumulative total of height (altitude) lost.

20. Local pressure. The air pressure at your location.

21. Pressure (Sea Level) The calculated Pressure at Sea Level. This will be the Pressure typically seen on Weather charts and forecasts. Generally Local Pressure will be **lower** than Sea Level pressure - unless you are at the coast.

22. HRM Heart Rate Monitor data (beats per minute) as provided via the Bluetooth low Energy connection to a supported Bluetooth Smart HRM strap.

23. HRM (Avg) Heart Rate Monitor average beats per minute as provided via the Bluetooth low Energy connection to a supported Bluetooth Smart HRM strap.

24. Cadence. For bikes - this is the rotational speed of the pedals, in revolutions per minute, as provided by the Bluetooth Low Energy link.

25. Cadence (Avg). For bikes - this is the **average** rotational speed of the pedals, in revolutions per minute, as provided by the Bluetooth Low Energy link.

26. Heading Direction of travel, given in either Degrees (M – Magnetic North, G – Grid North, T – True North), Cardinal points (e.g. N, NNE), or milliradians. See **Compass Settings**.

6. MAIN MENU: Settings Menu (... cont)

27. GoTo Bearing Bearing to your "GoTo" point. See **POSITION INFO**, (**Set as GoTo** option).

28. GoTo Distance Distance to **GoTo** point, either imperial or metric. See **Units and Set Speed**.

29. GoTo ETA Estimated Time of Arrival at **GoTo** point.

30. GoTo Time How long to reach **GoTo** point.

31. GoTo VMG (Velocity Made Good) is the actual speed you are making toward your chosen location (POI, Next WP or GoTo point (AOI, LOI, POI, WP or any unidentified point on the map), rather than your simple forward speed.

33. Nearest POI* Name of nearest POI/LOI/AOI.

33. Bearing to POI* Bearing to nearest POI/LOI/AOI.

34. Nearest POI* Distance Distance to nearest POI/LOI/AOI.

35. POI* ETA Time of arrival at nearest POI/LOI/AOI.

36. POI* Time Time until nearest POI/LOI/AOI.

37. POI* VMG Velocity Made Good to nearest POI/LOI/AOI. See **GoTo VMG** summary.

38. Route Name Name of route.

39. Route Distance Total distance of the active route.

40. Route Cross Track Error This is the distance between the planned blue/yellow route and the snail trail. It is most relevant for aircraft (cross wind effects) and nautical applications (effects of currents).

41. Route Done Percentage of route travelled so far.

42. WP Index Index of next waypoint.

43. WP Name Name of next waypoint.

44. Bearing Next WP Bearing to the next waypoint.

45. Distance Next WP Distance to the next waypoint.

46. ETA to Next Estimated Time of Arrival at next waypoint.

47. Time Next How long to reach next waypoint.

48. VMG Next Velocity Made Good to next waypoint. See **GoTo VMG** summary above.

49. Bearing to End Bearing to the route end.

50. Distance to End Distance to route end (along the route).

51. ETA to End Estimated Time of Arrival at route end.

52. Time to End How long to get to route end.

53. VMG End Velocity Made Good to route end. See **GoTo VMG** summary.

54. Date. Today's date.

55. Posn as DD MM.MM. Position given as Degrees, Minutes Decimal

56. Posn as DD.DDDDD. Position given as degrees decimal, to 5dp.

57. Posn as OSGB. GPS position given as r OSGB (Ordnance Survey GB); UTM; Degrees decimal; Degrees, minutes decimal; Degrees, minutes, seconds decimal; British Grid. See **GPS Settings** for other formats.

58. Position Position given in local selected co-ordinates. This allows different formats to be easily compared.

59. Sunrise Time of sunrise.

60. Sunset Time of sunset.

61. Moon Phase An icon is displayed along with the percentage of a full moon.

62. GPS Accuracy. Given in metres or feet, this is a measure of the GPS positional accuracy. GPS devices typically aim for sub-2m for 50% of the time. Clear skies will give the best reading, whilst very heavy overhead cover, tall buildings, etc. will see this value deteriorate (get larger). Typically expect values of 2m-5m.

63. Battery Voltage. Typically this runs from approx 4.1V to a cut-off level of 3.2V

64. PDOP. Positional Dilution of Precision - this is a ratio to indicate how accurately the GPS module is recording the overall positional signal from the Satellites.

65. HDOP. Horizontal Dilution of Precision - this is a ratio to indicate how accurately the GPS module is recording the horizontal location signal from the Satellites.

66. VDOP. Vertical Dilution of Precision - this is a ratio to indicate how accurately the GPS module is recording the vertical / elevation signal from the Satellites.

67. TDOP. Time Dilution of Precision - this is a ratio to indicate how accurately the GPS module is recording the time signal from the Satellites.

68. Battery Level. Given as a Percentage

** In the data boxes, data options mentioning POIs also refer to any reference point of an LOI and AOI (usually the point at the start of the name).*

6. MAIN MENU: Settings Menu (... cont)

6.13 GPS Settings

(GPS MAP → MAIN MENU → Settings → GPS settings) *

Position Display Format (i.e. grid reference format)

Use the rocker pad, moving left/right to select from

DDD.DDDDDD (Degrees decimal)
DDD MM.MM (Degrees, minutes decimal)
DDD MM SS.S (Deg, Mins, Secs decimal)
British Grid.
OSGB (Ordnance Survey GB);
German Grid;
UTM (Universal transverse Mercator);
MGRS (Military Grid Ref System);
GARS (Global Area Reference System);
CH1903 / LV03 Swiss Grid;
Swedish Grid RT90;
French Grid Lambert 2E;
French Grid Lambert 93;
Irish Grid ITM;
Irish Grid IG;
Pakistan MG;
New Zealand TM;
Maidenhead
PSAD56 21N (Guyana)

Press Done or centre press the rocker pad to return to SETTINGS MENU.

OSGB grid references are given to 10 figures. If you are working to 6-figure grid references, set the last 2 digits of each number set to 0.

Use GPS Compass

The Active 20 has an electronic compass (good when stationary) and a GPS compass (good when in motion), and switches between the two at a preset speed. In this setting you are able to select the speed at which the GPS compass overrides the electronic compass. *The GPS compass is more accurate the faster you go.*

Use the rocker pad, moving left/right to select from **Never**, then from **1 kph/0.5 mph to 16 kph/10 mph**. Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

Satellite Constellations

GPS, GLONASS, GALILEO

This is the default & recommended setting for best all-round performance, allowing the GPS unit to access all the major global satellite networks.

GPS Only

Specifically some users may want to use only GPS (American) satellites for their global navigation. In this mode the GPS module uses slightly less power, but occasionally the GPS location may be worse under certain circumstances than using GPS, GLONASS & GALILEO.

Test Mode (origin)

In this mode a simulated GPS signal is given to the unit and it starts a pseudo track from the Origin (lat 0, Long 0). In certain circumstances this is used for software development & testing. **Please Note:** this mode is **not** suitable for outdoor activity navigation.

Test Mode (UK)

In this mode a simulated GPS signal is given to the unit and it starts a pseudo track from a position in the West of England. In certain circumstances this is used for software development & testing. **Please Note:** this mode is **not** suitable for outdoor activity navigation.

Demo Mode

This mode is typically used by retailers wishing to have the unit periodically reset to default settings and display a moving map on the screen. Best used with a relevant MapCard fitted. **Please Note:** this mode is **not** suitable for outdoor activity navigation.

Off

In this mode the GPS signal is turned Off.

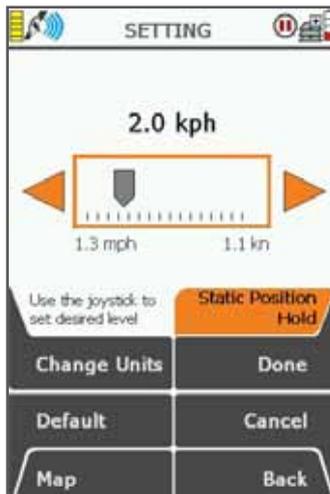


6.14 Static Position Hold

(MAIN MENU → Settings → Static Position Hold)

Static Position Hold

This function sets a threshold speed for the GPS and helps to prevent location "noise" (lots of position dots - when in reality you may not be moving). If this value is set too low - you may get a lot of screen clutter. If you set this value high - the GPS may take a short while to react correctly when you really are moving. In most instances, the default value should work fine.



6.15 Logging Options

(MAIN MENU → Settings → Logging Options)

Logging Options

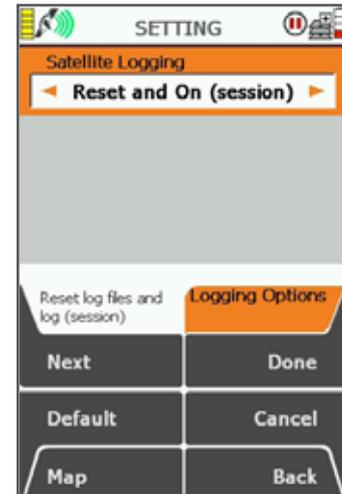
This function is an **advanced** GPS logging data setting. By default, this function is set to **Off**. It controls the creation of a log file from the uBlox GPS module recorded in a format called **UBX**, which is used by downloadable software to analyse the performance of the GPS.

Options include

- Off
- On (session)
- On (always)
- Reset and Off
- Reset and On (session)
- Reset and On (always)

Please Note : this logging data uses a lot of space in Internal Memory, which will quickly become full if this function is inadvertently left running.

If you are having unexplained GPS accuracy issues with your unit, the Satmap tech team may advise you to switch on this feature and e-mail the resulting log file to Satmap for analysis and fault finding if required.



6. MAIN MENU: Settings Menu (... cont)

6.16 Memory Status

(GPS MAP → MAIN MENU → Settings → Memory Status)

This screen provides information on the memory usage and status of the different types of memory on your unit. These include:

• SD Card Information

Shows the percentage of memory used on your SD card. Also indicates the total size and amount of free space remaining on your SD card.

• Internal Storage (Flash)

Shows the percentage of memory used on your unit.

• Operating Memory (RAM)

Shows the percentage of memory being used to operate the unit.

A warning icon  (showing a yellow bubble with a black exclamation mark) appears on the status bar of every screen if:

- amount of memory used on the SD card is 95% or higher.
- amount of memory used on the internal storage is 95% or higher.
- amount of memory used in the operating memory is 95% or higher.
- SD card is read-only (write-protected).

In this case a message will also appear on the memory status screen below the progress bars telling you that the 'SD Card is Read-Only'. (Make the SD Card writable by sliding the small switch on side of the card upwards. This will also remove the warning icon that appears on the screen).

A memory warning icon appears in 3 places in these cases:

- on the status bar of every screen
- next to the **Settings** button in the **MAIN MENU**
- next to the 'Memory Status' option in the **SETTINGS MENU**.

When a memory warning icon appears on the status bar of your screen you will need to go to **MAIN MENU** → **Settings** to check the warning. On pressing the **Settings** button, you will be immediately taken to the Memory Status screen on the **SETTING** screen.

*(Usually by selecting the **Settings** button you are directed to the **SETTINGS MENU** where you can select an option. If you would like to access the menu from the Memory Status screen, press **Back**).*

Move the rocker pad up/down, or press the **Next** button to select a memory option. Move the rocker pad left/right to opt in/out of the memory warning.

Opt in by selecting the yellow icon which keeps the warning icon message showing in the status bar.

Opt out by either fixing the problem or selecting the yellow icon with a red line through it. This removes the warning icon message.

Pressing the **Default** button sets the opt in option for all warnings.

To fix the memory status warning:

- Hide inactive routes (reduces RAM)
- Show inactive routes SP (reduces RAM)
- Back up and delete non-essential OOs & routes (reduces Internal Storage, SD Card space & RAM)
- Reset trip log (reduces Internal Storage & RAM)

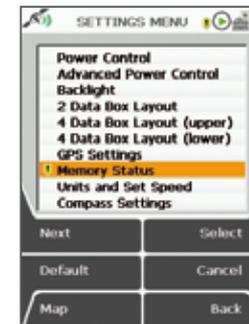


Progress bars:

orange: safe usage
green: low usage
purple: high usage



Back
to get to the
SETTINGS
MENU



6. MAIN MENU: Settings Menu (... cont)

6.17 Units and Set Speed

(GPS MAP → MAIN MENU → Settings → Units and Set Speed)

This is where you can set your preference for units of measurement (i.e. for elevation, speeds and distances), and set your target speed.

Units: Distance & Speed. Use the rocker pad, moving left/right to switch between Miles and feet, Kilometres and meters, Nautical Miles and Knots. Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

Target Speed. This is the speed on which **Estimated Time of Arrival (ETA)** calculations are based if the average moving speed in the trip log (**Av. Moving**) is zero, i.e. you are stationary. Once you are moving, your **ETA** is taken from your average moving speed if you have a lock or recently had a lock.

Use the rocker pad, moving left/right to select the Target Speed from 1 kph (0.6 mph) to 100 kph (62.5 mph).

Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**. Pressing the **Default** button restores the following settings:

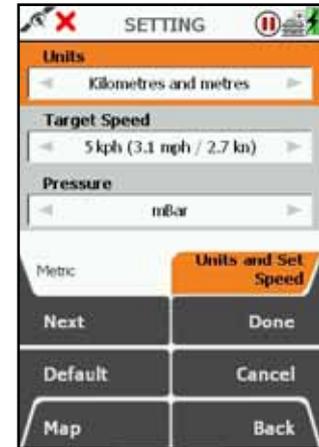
Units: Kilometres and meters

Target Speed: 10 kph (6.2 mph / 5.4 kn)

Pressure Units. Use the rocker pad (L/R) function to select your desired units for the Pressure display:

Options are :

- a. mBar (millibars)
- b. inHg (inches mercury)
- c. mmHg (mm of mercury)
- d. hPa (Hectopascal)



Set desired Units

6. MAIN MENU: Settings Menu (... cont)

6.18 Compass Settings

(GPS MAP → MAIN MENU → Settings → Compass Settings)

This controls the data boxes that appear on the **COMPASS** screen and **POINTER** screen, and how the bearing options are displayed in the data box on the **GPS MAP** screen.

There are three norths commonly used in Great Britain:

- **Grid North:** the direction of a grid line which is parallel to the central meridian on the National Grid.
- **True North:** the direction of a meridian of longitude which converges on the North Pole.
- **Magnetic North:** the direction indicated by a magnetic compass. Magnetic North moves slowly with a variable rate and currently is West of Grid North in Great Britain.

Compass Display

- Use the rocker pad, moving left/right to select from Degrees, Cardinal points (e.g. N, NNE), or milliradians.
- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

Grid Magnetic Angle

- Use the rocker pad, moving left/right to switch between **Manual** and **Automatic**.

Press **Done** to select **Automatic**.

If you want to set your Grid Magnetic Angle manually, select **Manual** and then press Set. This will take you onto a new **SETTING** screen on which the **Grid Magnetic Angle** may be adjusted by moving the rocker pad up/down.

Pressing the **Default** button restores the following setting:

Grid Magnetic Angle Value: W 03

- Press **Done** or centre press the rocker pad to return to **Compass Settings** screen. Press **Done** again to return to **SETTINGS MENU**.

Bearing Display

- Use the rocker pad, moving left/right to switch between **Show Grid Bearings** and **Show Magnetic Bearings**.
- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

Pressing the **Default** button restores the following settings:

Compass Display

Degrees

Grid Magnetic Angle

Manual

Bearing Display

Show Grid Bearings



Settings for Grid Magnetic Angle



Manual or Automatic

Enter values for Manual selection

6. MAIN MENU: Settings Menu (... cont)

6.19 Calibrate Compass

(GPS MAP → MAIN MENU → Settings → Calibrate Compass)

Ideally you should calibrate your compass before every trip to get the most accurate bearings. It only takes a few moments, and is very straight forward.

When the GPS unit leave the factory it will have basic calibration settings installed, by regular calibration when used will improve the results.

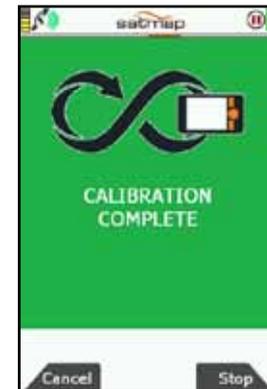
The 3-Axis compass can be calibrated from either the **COMPASS** screen (by pressing the left-hand circular icon)- or from the **Settings Menu** (by pressing Calibrate Compass)

As this is a 3-Axis Compass the calibration needs to be carried out in a "swooping" figure-of-8 fashion. This is so that all 3 axes (X, Y and Z) can be fully calibrated.

During the process, a progress bar will appear, and final when complete a green "Calibration Complete" screen will appear. Press the Stop button to return to the previous screen

Please Note: *When in motion it is better to use the GPS compass over the electronic compass. The GPS compass requires forward motion to provide a heading; it will not work when static. See GPS Settings to control the speed at which the GPS compass overrides the electronic compass: 'GPS Used as Heading at'.*

Use on a Bike with iron content: Just like a regular compass, nearby iron content will cause the Compass to deviate from true. This especially so if clamped to a bike with iron handlebars, frame or nearby compents. In this instance, it is probably better to rely on the gPS compass whilst in motion, or simply detach the Active 20 from the mount if a station compass reading is required.



6. MAIN MENU: Settings Menu (... cont)

6.20 Set Trip Data

(GPS MAP → MAIN MENU → Settings → Set Trip Data)

This is where you can control how inactive routes are displayed, as well as the deletion/preservation of trail and trip log data when a new route is activated.

Showing Inactive Routes

- Use the rocker pad, moving left/right to toggle between;

Show Inactive Routes: Inactive routes are shown on maps.

Hide Inactive Routes: Inactive routes are hidden on maps.

Show Inactive Routes SP: The start point (SP) of each inactive route is shown on the maps. (A gray marker with a black triangle appears at the start point).

- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

*Note: Showing inactive routes uses a lot of operating memory on the unit, so it is important to keep this selection to a minimum, as it will slow down your unit. Showing too many inactive routes could also 'freeze' your unit. Only show a few short inactive routes, or to reduce RAM consumption, choose the **Show Inactive Routes SP** option.*

Auto Clear Trail Data

- Use the rocker pad, moving left/right to toggle between;

On: Trail data is cleared when a new route is selected.

Off: Trail data is not cleared on new route selection.

- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

Auto Reset Log

- Use the rocker pad, moving left/right to toggle between;

Keep Log on New Route: Log will not be cleared when starting a new route.

Clear Log on New Route: Log will be cleared on starting a new route.

- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**

Pressing the **Default** button restores the following settings:

Showing Inactive Routes

Show Inactive Routes SP

Auto Clear Trail Data

Off

Auto Reset Log

Keep Log on New Route



Control Data on Map Screens

6. MAIN MENU: Settings Menu (... cont)

6.21 Alert Settings

(GPS MAP → MAIN MENU → Settings → Volume Control)

Beep Alert Count

The unit will beep when it encounters

WayPoints,
Points Of Interest,
GoTo Points or
Routes.
MapCard is inserted
Screenshot is captured.

You are able to customize how many beeps sound in these instances: by using the Rocker Pad or Touchscreen to select Mute, 1-10. Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**. Pressing the **Default** button restores the factor settings for this item. *Please Note: You cannot control the volume of the beeps.*

6.22 Button Control

(GPS MAP → MAIN MENU → Settings → Button Control)

The 4 side-press or 2 front-press buttons on the unit enable one-handed operation and are multifunctional, with variable keys depending on the screen displayed. You are able to customize the operating of your unit and tailor it to fit your needs, i.e. how many clicks you want the buttons to operate with, and whether you are right/left handed.

Map Buttons Activation - This function applies to the **GPS MAP** or **PLANNING** screens. Use the rocker pad to toggle between settings.

One Click (Always show): one click activates button instantly. The screen button icons will stay displayed always. Useful for new new users.

One Click (Hide): Pressing a button will immediately activate the selected function. For Pan and Zoom, the screen button icons will **NOT** show after the function has been completed. This setting is useful for experienced users, who are already familiar with the button layout and require the screens to react as quickly as possible.

Two Clicks: This setting is useful for new users who wish to see the "soft" keys before activating a particular function. After press a key once - the "soft key" on-screen icon will show - and then a second press is required to initial the function. After the function is completed, the icons will disappear, allowing the maximum map visibility.

Press **Done** to return to **SETTINGS MENU**.

Please Note: The "Always Show" and Two Click' operations are particularly useful for beginners, as they will be able to see the gray icon that appears on the screen before the button takes the intended action.

Left / Right Handed Setting -

Use the rocker pad, moving left / right to toggle between **Right Handed** and **Left Handed** operation.

Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

Pressing the **Default** button restores the factory settings.



6. MAIN MENU: Settings Menu (... cont)

6.23 Pan and Zoom Speed

(GPS MAP → MAIN MENU → Settings → Panning Speed)

Set Pan and Zoom Speed This control allows the Pan and Zoom rates to be adjusted between:

Very Slow
Slow
Medium
Fast
Very fast

Use the rocker pad to cursor left and right to your desired setting. The default settings is **Medium**.

6.24 Cycling

(GPS MAP → MAIN MENU → Settings → Cycling)

Introduction - The Bluetooth wireless connectivity allows for the connection of Bluetooth Smart bike speed and cadence sensor units (sold separately). Bike speed is calculated directly from the wheels, while "cadence" is calculated from the pedal revolutions. Generally, the speed data given by the GPS will adequate for most purposes, however, in certain conditions (thickly wooded areas and near tall buildings) the wheel speed data (for bike riders) will give a more stable and accurate reading.

Sensor Unit - Sends back "wheel revolutions per second" data. To turn this into speed data it needs to be multiplied by the circumference of the bike wheel being used.

Set Wheel Circumference in mm - The default setting is 2096mm, which is generally good for most road bike (700C) wheels, but will need to be adjusted for other types of bikes with different size wheels and tyres.

Wheel size? - If you are unsure of your wheel size, you can either measure this directly, or refer to the bike manufacturer's documentation.

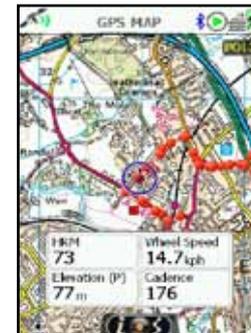
Set in mm - In this edition of the software the wheel size needs to be entered in mm, although speed can be displayed in metric or imperial.



Panning Speed Options



Set Wheel Circumference for Wheel speed data



Display wheel speed on GPS MAP screen data Boxes

6. MAIN MENU: Settings Menu (... cont)

6.25 Data Save Options

(GPS MAP → MAIN MENU → Settings → Data Save Options)

This option controls the format and location of your saved activity data.

Route Format

Your routes can be saved in 3 formats

GPX (recommended)

.map (older Satmap format)

TCX (used on some Garmins)

GPX is a universal route format widely used by many Activity logging and Mapping web sites. It is also easy to e-mail to friends and family as a file attachment.

.map Is the earlier proprietary format used by Active 10 and 12 GPS units, and is provided here for backward compatibility

TCX is another popular format, used especially by Garmin GPS units.

The smallest amount of storage space is used when **GPX Only** is selected.

Once completed, your activity files can be seen and transferred from you Active 20 using either a Windows/Mac browser or SatSYNC.

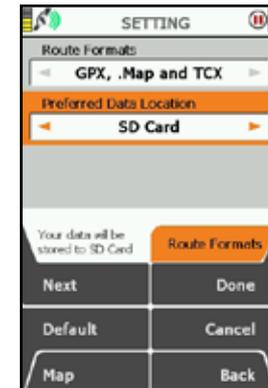
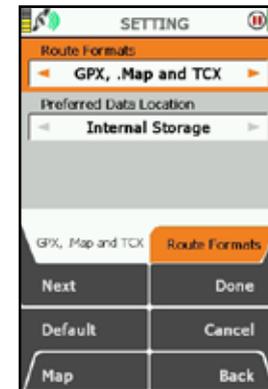
Preferred Data Location

Select either

Internal Storage, or

SD Card

Top Tip: Use **Internal Memory** if you swap MapCards frequently and wish to keep your routes centralised on the GPS units; use **SD Card** if you are doing very long trips and the size of your data files is likely to be large.



6.26 Search Settings

(GPS MAP → MAIN MENU → Settings → Search Settings)

This option controls the output and method of search in the primary **Search** screen.

Add POI at Search Target

Having selected the results of a search, a POI will be placed on the map screen.

Use accents when Searching

This option allows your search to be as wide as possible, and when set to **Yes** results will be returned that include accents, and other glyphs.

6.27 List Mode

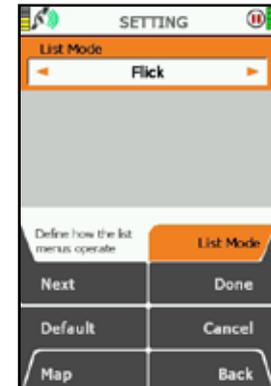
(MAIN MENU → Settings → List Mode)

This controls the various lists on the GPS unit are handled when the touchscreen is used.

The options include :

- **Wraparound**
- **Drag**, and
- **Flick**

The best way to understand how the options work is to try them out, and see which one you prefer!



6. MAIN MENU: Settings Menu (... cont)

6.28 Software Updates

(MAIN MENU → Settings → Software Updates)

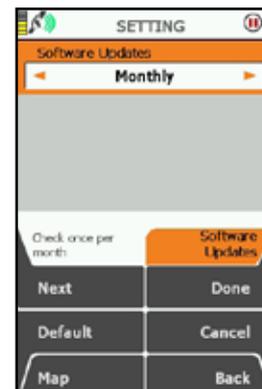
This screen controls frequency with which the unit checks the Satmap servers for fresh software updates.

A Wi-Fi connection is typically needed for these updates unless SatSYNC is used.

Options include :

- On Connection
- Daily
- Weekly
- Monthly
- Don't Check

The Software Update details can be found on a button on the **Wi-Fi NETWORKS** screen.



6. MAIN MENU: Settings Menu (... cont)

6.29 Screen Data Options

(GPS MAP → MAIN MENU → Settings → Screen Data Options)

This controls the automatic display of the POI details screen and the display of POI names, waypoint names, and route names (i.e. 'titles') on maps. Pressing the **Default** button restores the following settings:

Auto Show POI Information: Off

Show Titles on Maps: On

Auto Show POI Information

- Use the rocker pad, moving left/right to switch between;

On: POI overlay data is automatically shown when nearby.

Off: POI overlay data is not automatically shown.

- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

Show Titles on Maps

These are the names of POIs, waypoints and routes, and appear as white text within a black rectangle.

- Use the rocker pad, moving left/right to switch between;

On: POIs, waypoints and route names shown on maps.

Off: Names not shown on maps.

- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

6.30 Primary Screens Selector

(GPS MAP → MAIN MENU → Settings → Primary Screens Selector)

This function allows you to hide a number of the primary Screens - if you wish. However, both the Mapping and Main Menu screens are locked, and will always be visible. This option is useful if you have no desire to see or use certain screens, for example the GPS screen, data Share or WiFi screen.

6.31 Time Offset

(GPS MAP → MAIN MENU → Settings → Time Offset)

This function allows you to vary the time setting in relation to GMT (e.g. for British Summer Time add one hour).

- Use the rocker pad, moving left / right to select the time offset.
- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

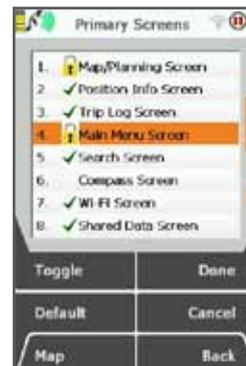
GPS/UTC time (appears in the on-screen descriptor) is the same as Greenwich Mean Time, GMT. An explanation of UTC is given in the glossary.



Screen Data Options



Set Time Offset



Primary Screen Selector



Enter User Name

6. MAIN MENU: Settings Menu (... cont)

6.32 Enter User Name

(GPS MAP → MAIN MENU → Settings → Enter User Name)

This function allows you to set a **User Name** for your device. This name is primarily used in the **SHARED DATA** screens to identify other nearby Active 20s.

After a full default factory reset - the device will normally ask you to set a fresh **User Name**.

6.33 Languages

(GPS MAP → MAIN MENU → Settings → Languages)

Select your preferred language:

- Select your preferred keyboard style.
- Select your preferred language.
- Press **Done** or centre press the rocker pad to return to **SETTINGS MENU**.

6.34 About

(GPS MAP → MAIN MENU → Settings → About)

This screen gives details of the software version installed on your unit and Satmap contact details. Press **Done** to return to the **SETTINGS MENU**. To check for the latest software updates, please:

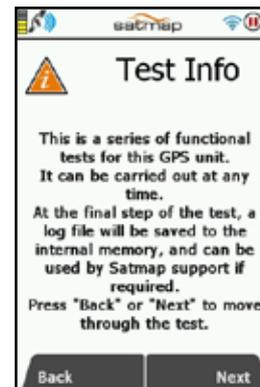
1. Either use the **Wi-Fi NETWORKS** screen or download the **SatSYNC** application from the Satmap website.
2. For using SatSYNC, please connect your Active 20 to your PC/Mac, and SatSYNC will automatically check if software updates are available. You will be asked if you wish to update your device.

Alternatively, if you do not use Wi-Fi or a PC/Mac, please contact Satmap support and an Upgrader SD card will be mailed to you.

*Please Note: The 1st release software for the Active 20 was **Version 3.0.11065**, but fresh updates are*

released regularly

All Active 20 GPS have "Platform 29", or higher.



7. MAIN MENU: Routes Menu

7.1 ROUTES MENU Screen

(MAIN MENU → ROUTES MENU)

The **ROUTES MENU** contains the listing of routes, stored in a series of folders.

By default, the first route created is entitled 'My Route 1'. The routes following are titled in numerical order, i.e. 'My Route 2', (unless you have imported a prenamed route to your unit from an external mapping system). You can rename the title of your route via the **Edit** button.

When a trail is converted to a track it is also saved in the **ROUTES MENU** and is allocated a default title including the year, month, day, time and distance (e.g. 2010-08-14_16:35 15.6km). A track is a route derived from a trail that has already been made.

Buttons:

Edit. Go to **ROUTE EDIT** screen

View. Go to **ROUTE MAP** screen

Map. Return to **GPS MAP** screen

Up folder / Select / Activate / No route active.

Move up to a higher level folder, or when a route is highlighted, toggle between activating it and selecting no route active.

Create New Route. Go to **CREATE ROUTE** (section 8.01)

Back. Return to **MAIN MENU**

Accelerated scrolling: If you have several routes in one folder you are able to scroll quickly by holding the rocker pad up/down. Keep the rocker pad pressed up/down until you reach the file you are looking for.

7.2 Active and Inactive Routes

There are three ways to 'activate' a route:

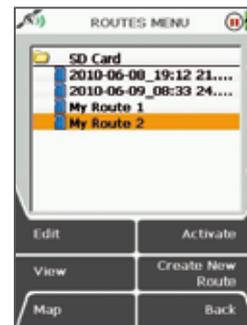
- Highlight the route in the **ROUTES MENU** and press **Activate**. An active route is indicated by a tick next to the route name. To deactivate, highlight the ticked route name and press **No route active**.
- Alternatively you can go to the **ROUTES MENU**, press **View** and then **Start**, which activates the route automatically.
- If you can see the route on the **GPS MAP** or **PLANNING** screen, centre press the rocker pad anywhere on the route. This will bring up the **Choose Information Type** window (section 11.00). Select the route, and then move the rocker pad left/right to highlight the green tick.

An activate route has relevant data choices available for display on the GPS MAP screen in either 2 or 4 data box overlays. Refer to **MAIN MENU → Settings → Set Trip Data** to control whether changing an activated route during a trip will reset the log data. When active, the route is shown as a yellow or blue highlighted line with red arrowheads indicating the direction of travel. Inactive routes are shown as gray highlighted lines when displayed. Inactive routes may be hidden or have just their start points displayed.

Note: Showing your inactive routes will take up operating memory.



Two storage areas



Route listing

7. MAIN MENU: Route Menu (... cont)

7.3 Following a Route

A route is made up of individual routepoints, shown as small green circles which turn blue as you approach the next routepoint. The route colour can be either blue or yellow, with varying transparency, depending on the active route colour chosen. The default route colour is blue.

To follow a route, you need to first 'activate' it.

As you begin to follow the yellow/blue route, the next waypoint along turns blue. The current leg between waypoints is shown to have blue edging and blue arrowheads. As you approach this point, the waypoint name is displayed and the unit will beep. As you pass this waypoint it will turn from blue to green, and the next waypoint marker will turn blue, and so on.

7.4 Create New Route

(MAIN MENU → ROUTES MENU → Create New Route)

From the MAIN MENU, select the Routes Menu and press **Create New Route**. This takes you to the **CREATE ROUTE** screen where you will be able to plot routes by laying down a series of waypoints. Zoom in for greater accuracy in placing waypoints.

Alternative ways to create a route:

GPS MAP → POSITION INFO via centre press → Create New Route

or

GPS MAP → PLANNING → ROUTES MENU via lower left button → Create New Route

Buttons:

Add Waypoint*

Press the button or centre press the rocker pad

Remove Waypoint

Press the button or centre press the rocker pad

ROUTES MENU

Return to **ROUTES MENU**



Tick = Route Activated



Toggle Map Layer

Add Route Point

Delete Route Point



"Choose Info Type" box

Active route

Inactive route

7. MAIN MENU: Routes Menu (... cont)

Zoom

Zoom in and out

Done

Press when route is finished, unless you have 'closed' the route.

If there is an SD card in the unit and it is not write-protected, by default the route will go into the **SD Card** folder. If there is no SD card in the unit, by default the route will go into the **Internal Storage** folder.

You can create route folders using SatSYNC. To create a new route in an existing folder, you will need to select the folder in the **Routes Menu** and press **Create New Route** from there.

Note: Folders are only visible if they contain a minimum of one route or OOI.

The **Add Waypoint** button has 3 functions:

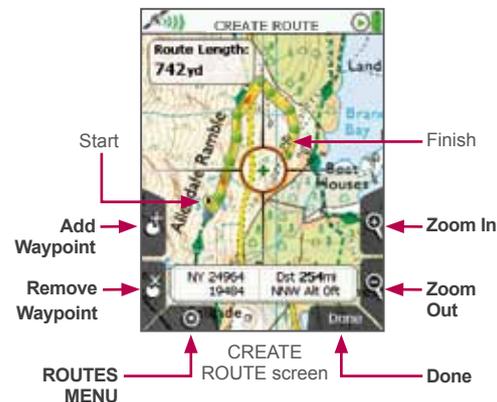
1. To add a waypoint.
2. To click on an existing waypoint and drag it to another location.
3. To close the route (i.e. connect the last waypoint to the start point) if the last waypoint is very close to the start waypoint.

The centre cross turns green inside the orange location icon when you are on the **CREATE ROUTE** screen to indicate you are ready to add waypoints. Place waypoints wherever your planned route changes direction. Waypoints are shown as green dots. As waypoints are laid down, a yellow/blue highlighted route is created. To remove waypoints, position the green cross over a waypoint and press the **Remove Waypoint** button.

The start point of a route has an icon with a forward arrowhead in a yellow bubble. The end of a route has an icon with a chequered flag in a yellow bubble.

Press **Done** or press the lower left button to return to the **ROUTES MENU**.

To view the route, highlight it and press **View**; a route map plus route length is shown.



Route Start



Route End

7. MAIN MENU: Routes Menu (... cont)

7.5 ROUTE EDIT Screen

(GPS MAP → MAIN MENU → ROUTES MENU → (folder/route) → Edit)

Alternative access:

(GPS MAP/PLANNING → click on route → Choose Information Type → select route via centre press → ROUTE MAP → Edit)

To access the **ROUTE EDIT** screen, highlight the route to be edited in the **ROUTES MENU** (section 8.00), and press **Edit**.

In selecting either **Edit Title** or **Edit Comments** you will bring up an on-screen keypad. When using the keypad for labelling, either press **Select** or centre press the rocker pad to select entries. Use the **Shift** button for upper case letters, the **More** button offers more characters.

Buttons:

Next

Press **Next** or use rocker pad to scroll down options

Map

Return to last map screen

Edit

Either press **Edit** button or centre press rocker pad to access alpha-numeric keypad for labelling.

*Note: This button changes depending on the option selected. Other options include **Copy**, **Move**, **Delete**, **Reverse**.*

Back

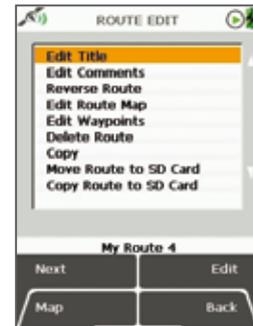
Return to **ROUTES MENU**

When the title and any comments have been entered, the **ROUTE MAP** screen will be annotated with the new title and comments. (To get to the **ROUTE MAP** screen, select **View** on the **ROUTES MENU** screen).

The menu options on the **ROUTE EDIT** screen are as follows;

- Edit Title
- Edit Comments
- Reverse Route
- Edit Route Map
- Edit Waypoints
- Edit Active Route Colour
- Delete Route
- Copy
- Move Route to/from SD Card*
- Copy Route to/from SD Card*

**The last two options on the list become available only when a mapcard has been inserted and is not write-protected.*



ROUTE EDIT screen

7. MAIN MENU: Routes Menu (... cont)

7.6 Edit Title

(GPS MAP → MAIN MENU → ROUTES MENU → (folder/route) → Edit → Edit Title)

When a route is created it is called 'My Route 1' by default (or similar, depending on the number of existing routes). To rename it, use **Edit Title**.

Highlight **Edit Title**, then either press the **Edit** button or centre press the rocker pad to access the keypad (section 9.00).

7.7 Edit Comments

(GPS MAP → MAIN MENU → ROUTES MENU → (folder/route) → Edit → Edit Comments)

Highlight **Edit Comments**, then either press the **Edit** button or centre press the rocker pad to access the keypad.

Operate the keypad to input comments describing the route and press **Done** when finished. The screen will return to the **ROUTE EDIT** screen.

7.8 Reverse Route

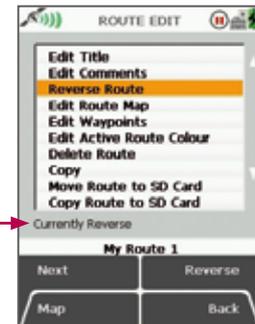
(GPS MAP → MAIN MENU → ROUTES MENU → (folder/route) → Edit → Reverse Route)

Press **Reverse** to reverse the route. Press again to go back to the original direction of travel. There is an on-screen statement which says either **Currently Forward** or **Currently Reverse**.

Alternative ways to reverse the route are via the **ROUTE PLAN** screen or the **ROUTE CARD** screen.



TEXT EDIT screen



Currently Reverse or Currently Forward

Reverse Route option

7. MAIN MENU: Routes Menu (... cont)

7.9 Edit Route Map

(GPS MAP → MAIN MENU → ROUTES MENU → (folder/route) → Edit → Edit Route Map)

Highlight **Edit Route Map**, then press **Edit** to access **EDIT ROUTE** screen. Using the rocker pad, move the location icon to the edit point on the route. Either press the **Add Waypoint** button or centre press the rocker pad to add a waypoint with a green-headed 'pin'. Drag the new waypoint to the desired location.

Either press **Done** or centre press the rocker pad to fix the new waypoint. Move the location icon away from the route. Press **Done** to return to **ROUTE EDIT** screen.

7.10 Edit Waypoints

(GPS MAP → MAIN MENU → ROUTES MENU → (folder/route) → Edit → Edit Waypoints)

Highlight **Edit Waypoints**, press **Edit** to access the **WAYPOINTS** screen. A list is shown, SP is for start point, WP is for waypoint. Highlight the waypoint to be edited and either press **Edit** or centre press the rocker pad to access the **EDIT WAYPOINT** screen. Here you have the option to edit individual waypoints:

- Edit Name
- Edit Comments
- Edit Location by Grid
- Edit Location by Map
- Delete

Edit Name

Highlight **Edit Name** and press **Edit** or centre press the rocker pad to access the keypad and rename the waypoint.

Edit Comments

Highlight **Edit Comments** and press **Edit** or centre press the rocker pad to access the keypad and add a description to the waypoint. This will show up next to the waypoint name in the **WAYPOINTS** menu.

Edit Location by Grid

Highlight **Edit Location by Grid** and press **Edit** or centre press the rocker pad to edit the waypoint by changing the grid reference values. This will take you to the **SETTING** screen where you can use the rocker pad to move left/right to toggle between boxes. Move the rocker pad up/down to change the box entries. Pressing **Next** will move between rows (except with OSGB). Select **Done** when complete to go back to the **EDIT WAYPOINT** menu.

Edit Location by Map

Highlight **Edit Location by Map** and press **Edit** or centre press the rocker pad to edit the waypoint on the map. Click the waypoint to set a green-headed 'pin' and drag it to a new location. Press **Done** or centre press the rocker pad to confirm the placement.

Delete

Highlight **Delete** and press **Delete** or centre press the rocker pad to instantly delete the waypoint. Press **Back** to go back to the **ROUTE EDIT** menu.



Edit Route on Map options



Waypoint edit options

7. MAIN MENU: Routes Menu (... cont)

7.11 Edit Active Route Colour

(MAIN MENU → ROUTES MENU → (folder/route) → Edit → Edit Active Route Colour)

Highlight **Edit Active Route Colour**, press **Edit** or centre press the rocker pad to access the **ROUTE MAP** screen. Here you will be able to customize the colour of your route. You are able to choose from 6 options that range between the two colours blue and yellow with varying degrees of transparency. You can make the appropriate selection to avoid obscuring map details.

Use the rocker pad to move across the colours. Once you are happy with the selection, press **Set** or **Back** to go back to the **Route Edit** menu.

7.12 Delete Route

(MAIN MENU → ROUTES MENU → (folder/route) → Edit → Delete Route)

Highlight **Delete Route**, then press **Delete** to access a screen showing the option to delete the route. When either **Delete** or **Cancel** is selected, the screen will return to the **ROUTES MENU**.

7.13 Copy

(MAIN MENU → ROUTES MENU → (folder/route) → Copy)

Press **Copy** to create a copy of the current route which will appear in the same folder.

7.14 Move Route to SD Card

(MAIN MENU → ROUTES MENU → (folder/route) → Edit → Move Route to SD Card)

(Only available if an SD card has been inserted).

Highlight **Move Route to SD Card** and either press **Move** or centre press the rocker pad. (Subsequently this option becomes **Move Route from SD Card**). The screen will go to the **ROUTES MENU** and your route will appear in the SD Card folder. It will no longer exist in its previous location.

7.15 Copy Route to SD Card

(MAIN MENU → ROUTES MENU → (folder/route) → Edit → Copy Route to SD Card)

(Only available if an SD card has been inserted).

Highlight **Copy Route to SD Card** and either press **Copy** or centre press the rocker pad. (Subsequently this option becomes **Copy Route from SD Card**). The screen will go to the **ROUTES MENU** and you can find a copy of the route in the SD Card folder.



Route colour options

The default colour for a route is the medium blue option.

7. MAIN MENU: Routes Menu (... cont)

7.16 ROUTE MAP Screen

(GPS MAP → MAIN MENU → ROUTES MENU → (folder/route) → View)

Alternative access:

(GPS MAP/PLANNING → click on activated route → Choose Information Type → select route via centre press → ROUTE MAP)

A map showing the entire planned route is shown. An appropriate scale is used to ensure the whole route can be displayed on the screen.

Note: If you see your route on a blue background, this means there is no suitable map at that scale to incorporate the entire route.

The route length is given in a window. From this screen you can either examine details of the route via the **Profile** button, or edit the route via the **Edit** button. You can also view the start of a route by pressing **Start**.

To return to the **PLANNING** screen, either press Back or centre press the rocker pad.

Buttons:

Profile

Go to **ROUTE PLAN** screen

Start

Go to the start of the route on the **PLANNING** screen (section 6.00)

Note: This is useful to locate a route on your screen when it is not visible.

Edit

Go to the **ROUTE EDIT** screen

Back

Go to **PLANNING**



ROUTE MAP
screen

7. MAIN MENU: Routes Menu (... cont)

7.17 ROUTE PLAN Screen

(GPS MAP → MAIN MENU → ROUTES MENU → (folder/route) → View → Profile)

This screen shows an elevation profile of the route, together with six data fields:

- Distance
- Total Ascents
- Total Descents
- Maximum Altitude
- Minimum Altitude
- Approximate Time

The **ROUTE PLAN** screen is accessed from the **ROUTE MAP** screen by pressing the **Profile** button.

The vertical line can be used to access information about each waypoint by moving the rocker pad left/right. Pressing the rocker pad once left/right, moves the vertical line along each individual waypoint. Pushing and holding the rocker pad left/right moves the vertical line across numerous waypoints, giving you accelerated scrolling.

Accelerated scrolling: *This is useful if you have a route with many waypoints and want to access information about a particular waypoint. Press and hold the rocker pad left/right until you reach the specific waypoint.*

If you have more than 50 waypoints, then you will only be able to see the start and end points, but you will still be able to access details of each point using the vertical line.

The waypoint label on the map, its coordinates and comments appear under the elevation profile. Below a total of fifty waypoints, individual waypoints are shown along the profile as green dots. If a route is a 'track', i.e. a converted trail, the comment field contains date, time, speed etc. as recorded by the Active 20.

Buttons:

Card

Go to **ROUTE CARD** screen

Go To

Go to **PLANNING** screen, centred on the indicated waypoint

Reverse

Press to **Reverse** the route

Back

Go to previous screen



7. MAIN MENU: Routes Menu (... cont)

7.18 ROUTE CARD Screen

(GPS MAP → MAIN MENU → ROUTES MENU → (folder/route) → View → Profile → Card)

The **ROUTE CARD** screen gives a list of 'legs' (distance and bearing between 2 waypoints). At the bottom of the screen you will see the start point and end point of the highlighted leg. Below that is the name and description of the route.

This screen is accessed from the **ROUTE PLAN** screen.

Buttons:

Map

Go to **ROUTE MAP** screen

Go To

Go to the start of the highlighted leg on the **PLANNING** screen

Reverse

Reverse the sequence of waypoints

Back

Go to **ROUTES MENU**



ROUTE CARD
screen

Accelerated scrolling: *This is useful if you have a long list of 'legs' and want to access a particular one. Scroll through the list quickly by holding the rocker pad up/down. Keep the rocker pad pressed up/down until you reach the leg you are looking for.*

7. MAIN MENU: Routes Menu (... cont)

7.19 Routes Folders (GPS MAP → MAIN MENU → ROUTES MENU)

Routes folders or sub-folders can only be created via **SatSYNC** (please refer to the *SatSYNC User Guide*) and **only appear on the unit if they contain at least one route or one OOI**. These folders consist of groups of routes and help you manage your files, by organizing for example, your routes into different categories, e.g. 'geocaches', 'pubs', 'walks' etc.

If you are in a sub-folder and want to go back to another folder, you can use the **Up Folder** button to move up to the next folder.

Another way to access other folders is to centre press the rocker pad on the folder name. This will reveal a **Choose Folder** drop-down box with options to select a specific folder. (This applies to any folder menu).



ROUTE CARD
screen



8. Keypad

There are several instances when the keypad is used. One example is:

GPS MAP → **MAIN MENU** → **OOI Menu** →
(OOI folders) → **POI 1** → **Edit** → **Rename**

Other instances include:

- Naming an OOI
- Adding comments to an OOI
- Naming a waypoint
- Adding comments to a waypoint
- Naming a route
- Adding comments to a route

Use the rocker pad to navigate around the keypad (including going off the 'edge' left/right and up/down). Press **Select** or centre press the rocker pad for character selections. Use **Shift** to access upper case and **More** for more characters. Press Done when finished and then **Back** to return to the **OOI Folders**.

Buttons:

Delete

Delete characters in the display

Shift / Shift Lock

Access upper case letters, and Shift-Lock

Cancel

Option depends on the context

More

Access more characters

Select

Character selection

Done

Option depends on the context



9. Choose Information Window

(GPS MAP → Choose Information Type via centre press)

Alternative access:

(PLANNING → Choose Information Type via centre press)

This window will be accessed via the **GPS MAP** or **PLANNING** screen, by centre pressing the rocker pad on a route or OOI. When the locator circle is over an OOI or a route, an indicator icon is displayed at the bottom of the screen. It comprises of 3 elements:

- 'i' for information
- rocker pad image (in the centre)
- POI icon/route symbol



OOI indicator icon



Route indicator icon

To bring up the **Choose Information Type** window:

On the GPS MAP screen: your current location has to coincide with a route or OOI.

On the PLANNING screen: planning icon has to be placed over any point on a route or OOI.

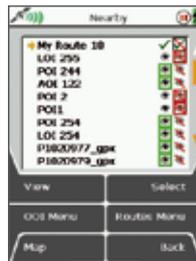
(Otherwise, centre pressing the rocker pad will bring up the **POSITION INFO** screen).

By centre pressing the rocker pad on a route or OOI, the screen turns gray and an overlay shows the **Choose Information Type** window.

To cancel the gray screen, press either of the front buttons.

Once you are in the **Choose Information Type** window, you will be able to:

- Make OOIs visible and invisible (move the rocker pad left/right to highlight relevant icon).
- Activate and deactivate routes (change time varies depending on the size of the route).
- Centre press the rocker pad to view details of an OOI.
- Go to the **ROUTE MAP** screen of any route, shows your route on a map, with details such as trip length, and gives you access to the **Profile** screen).
- Access the **Nearby** option, which includes nearby routes and OOIs.



Nearby routes & OOIs



OOI details

'Nearby' is defined by an OOI reference point at a radius of:

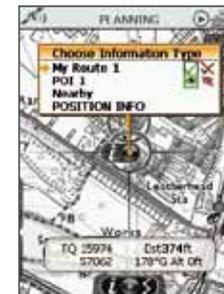
245m (804ft) at 1:50 000

122.5m (402ft) at 1:25 000

49m (160ft) at 1:10 000

A route is classified as being 'nearby' if any of the three conditions are true:

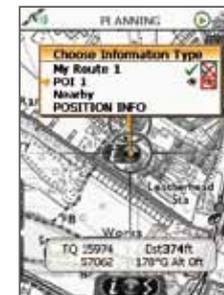
- The cursor is within it's bounding area (a square or rectangle which covers ALL the points in a route).
- The centre of the bounding area is nearby as defined above for OOI reference points.
- The start point of the route is nearby as defined above for OOI reference points.



Active route



Visible OOI



Inactive route



Invisible OOI



10. Objects of Interest (OOI's)

10.1 OOI Menu

(GPS MAP → MAIN MENU → OOI Menu)

OOIs are **Objects Of Interest** and collectively refer to all 'points' of interest. They consist of the following 'objects':

- POIs (Points of Interest)
- AOIs (Areas of Interest)
- LOIs (Lines of Interest)
- Grids
- IOIs (Items of Interest)

OOIs can contain a description with **rich text and pictures**, both of which can only be added via SatSYNC 1.5 or higher. These can be retrieved from third party applications such as geocaching.com, Google Maps, Google Earth etc.

Note: OOIs created on the unit can only have a description with simple plain text. The only OOIs that will work on software versions 1.4 and lower are POIs with plain or rich text.

The **OOI Menu** shows options for managing and creating all OOIs:

- List All OOIs
- Visibility - All On
- Visibility - All Off
- Visibility - Default
- Add POI by Map
- Add POI by Grid Ref
- Add AOI by Map
- Add LOI by Map
- Add Grid by Map
- Add IOI

Create new POIs, AOIs, LOIs, Grids and IOIs from the **OOI Menu** using the 'Add' options.

Users can easily hide or show all OOIs on the **Internal Storage** and **SD card**, and visibility can be set individually at folder level or globally. Icons are only available for POIs and can also be set individually or at folder level.

From the **OOI Menu** you are also able to access the **OOI Folders** where all OOIs are stored, as well as the **Routes Menu** for creating and managing your routes.

Buttons:

Next

Move down to next option

OOI Folders

Access all folders containing OOIs

Map

Return to **GPS Map** screen

Select

Press **Select** or centre press the rocker pad to select an option from the menu

Routes Menu

Access the **Routes Menu**

Back

Go back to **MAIN MENU**



OOI Menu

• List All OOIs

Takes you to the last visited OOI Folder.

• Visibility - All On

All OOIs will be displayed on the map, regardless of the folder and individual settings.

• Visibility - All Off

All OOIs will not be displayed on the map, regardless of the folder and individual settings.

• Visibility - Default

(Recommended option)

Respects individual settings of each OOI. Use 'Default' visibility to allow visibility to be editable for individual OOIs.

10. MAIN MENU: OOI Menu (... cont)

10.2 OOI Folders

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders)

All OOIs are stored in the **OOI Folders**.

Detailed information for each OOI can be viewed by highlighting a specific OOI and selecting the **Show Details** button from this screen.

It is also possible to view each OOI on the map by selecting **Centre on Map** (with exception to IOIs).

Create a new POI directly from this menu by selecting the **Create New POI** option. This will lead you to the **Add POI** screen where you will be able to create and remove POIs using the '+' and 'x' buttons. Once you are done, the keypad will appear for you to name the POI and then choose a POI icon.

Access the edit menu by selecting the **Edit** button once an OOI has been highlighted. To edit visibility and set a new default icon for all OOIs **within a specific folder** (instead of an individual OOI), select the folder and use the **Edit All** button.

To access other folders, use the **Up Folder** option or centre press the rocker pad to reveal a **Choose Folder** drop-down box and select a specific folder. (This applies to any folder menu).

Note: Sub folders can only be created via SatSYNC. (Please refer to the SatSYNC User Guide for detailed information).

Buttons:

Edit

Go to **EDIT** screen

Centre on Map

Go to **PLANNING** screen with the OOI in the centre

Map

Return to **GPS Map** screen

Show Details

Go to OOI details screen

Create New POI

Go to the **Add POI** screen

Back

Return to the **OOI Menu**

Accelerated scrolling: *If you have several OOIs listed in one folder you are able to scroll quickly by holding the rocker pad up/down. Keep the rocker pad pressed up/down until you reach the OOI you are looking for.*



OOI Folders & Items



11. POIs (Points of Interest)

11.1 POIs Overview

POIs are **Points of Interest**: points on a map linked to geo-referenced data (latitude/longitude), displaying text or images with information about that point (e.g. hotel, restaurant, viewpoint, historical site, etc).

POIs can be added to the unit in two ways — either by map or by grid reference. (POIs can also be added by postcode for some units in the UK). Individual icons can be allocated to each POI. These allow for better management of POIs and faster recognition.

Note: Use SatSYNC to add graphics or more detailed information to a POI. (See the SatSYNC 1.5 User Guide).

11.2 Add POI by Map

(GPS MAP → MAIN MENU → OOI Menu → Add POI by Map)

Alternative access:

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Create New POI)

To create a POI using the map, select **Add POI by Map** from the **OOI Menu** and press **Select** or centre press the rocker pad. This will take you to the **Add POI** screen where you will be able to set a POI icon.

The orange locator circle has a red cross in the centre to indicate you are in edit mode on the **Add POI** screen. Create a POI by either pressing the top left '+' button or centre press the rocker pad in the desired location. Use the lower left 'x' button to remove POIs.

Once you set a POI you are prompted to name the POI on the keypad screen. When a POI is created it is called 'POI 1' by default (or similar, depending on the number of existing POIs). Use the rocker pad to rename your POI.

Pressing **Done** will take you to the **POI Icon Selection** screen that consists of a library of POI icons. Here you will be able to allocate an individual icon to the POI. Use the rocker pad to scroll through choices and press **Done** to select the icon. Move the rocker pad up/down to access more screens with POI icons.

The **Add POI** screen appears with your recent POI creation in the centre of the map. Press **Back** to return to the **OOI Menu**.

Alternatively you can access the **Add POI** screen by selecting **Create New POI** from the **OOI Folders** menu.

Buttons:

Add POI (+)

Lay down POI icons on the map

Remove POI (x)

Remove POIs from the map

GPS Map

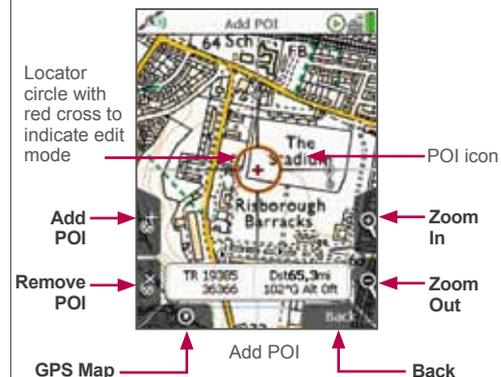
Return to GPS MAP screen

Zoom

Zoom in/out

Back

Go back to OOI Menu



11. POIs (Points of Interest) (... cont)

11.3 Add POI by Grid Reference

(GPS MAP → MAIN MENU → OOI Menu → Add POI by Grid Ref)

To create a POI by grid reference, select **Add POI by Grid Ref** from the **OOI Menu** and press **Select** or centre press the rocker pad. This will take you to the **SETTING** screen where you will be able to create a POI using a grid reference.

To add a location entry, move the rocker pad left/right to toggle between boxes. Move the rocker pad up/down to change the box entries.

Under the grid reference boxes are the 'conversions' showing the initial grid references. Once you begin changing the grid reference (i.e. moving the rocker pad up/down to change the entries), these conversion figures are grayed out and the **Convert** button becomes bold. Pressing **Convert** will update the conversions.

11.4 Add POI by Postcode (UK only)

(GPS MAP → MAIN MENU → OOI Menu → Add POI by Postcode)

POIs can be added by postcode for some units in the UK. Select **Add POI by Postcode** from the **OOI Menu** and press **Select** or centre press the rocker pad. This will take you to the keypad. Enter the desired postcode and press **Done** to go to the **Add POI** screen.

Follow the steps as described in *section 14.01* ('Add POI by Map') to create your POI on the map.

11.5 Add POI in a Specific Folder

(MAIN MENU → OOI Menu → OOI Folders → specific folder → final subfolder → Back → Add POI by Map or Add POI by Grid Reference or Add POI by Postcode)

This will add the POI to the last visited folder.

Note: Folders are created using SatSYNC and must contain at least one OOI or route to be visible on the unit. (See SatSYNC User Guide for more information).

11.6 POI Details Screen

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select POI → Show Details)

Alternative access:

(GPS MAP/PLANNING → click on POI → Choose Information Type → select POI via centre press → POI details)

This screen summarises details of the POI and is titled by the current POI name. POIs are date and time 'stamped', and the following information is given:

- Name of the POI
- Grid reference
- Distance and bearing from current location
- Elevation
- POI icon
- POI description (if added)

The highlighted green 'eye' icon indicates the POI is visible on the map. When invisible, the 'eye' icon is highlighted in red with a red line through it.



Set location by Grid Reference



Basic POI detail

11. POIs (Points of Interest) (... cont)

11.7 Edit POI Menu

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select POI → Edit)

Alternative access:

(GPS MAP/PLANNING → click on POI → Choose Information Type → select POI via centre press → POI details → Edit)

To access the **EDIT POI** menu, highlight the POI to be edited in the **OOI Folders** (section 13.00), and press **Edit** or centre press the rocker pad. Scroll up/down using the **Next** button or the rocker pad. The current setting for the highlighted option is shown under the window.

In selecting either **Rename** or **Edit Description** you will bring up an on-screen keypad (section 9.00). When using the keypad for labelling, either press **Select** or centre press the rocker pad to select entries.

The menu options on the **Edit POI** screen are as follows;

- Rename
- Edit Description*
- Edit Location by Map
- Edit Location by Grid
- Edit Warning Radius
- Edit Visibility
- Edit POI Icon
- Delete
- Move to SD Card**
- Copy to SD Card**

Buttons:

Next

Move down to next option

Map

Return to **GPS MAP** screen

Edit

Either press **Edit** button or centre press rocker pad to access alpha-numeric keypad for labelling.

*Note: This button changes depending on the option selected. Other options include **Rename, Delete, Move, Copy.***

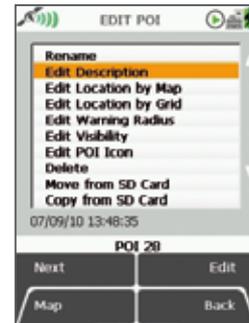
Back

- * Return to **OOI Folders**

The 'Edit Description' option is only available if the existing description has 128 characters or less (e.g. externally imported descriptions from geocaches etc. with more than 128 characters cannot be edited).

- **

The last two options on the list become available only when an SD card has been inserted and is not write-protected.



EDIT POI options

11. POIs (Points of Interest) (... cont)

11.8 Rename POI

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select POI → Edit → Rename)

When a POI is created it is called 'POI 1' by default (or similar, depending on the number of existing OOIs). To rename it, highlight the POI in the **OOI Folders**, press **Edit**, then **Rename**. The keypad appears. Use the rocker pad to rename the POI (*section 9.00*).

11.9 Edit Description

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select POI → Edit → Edit Description)

Highlight **Edit Description**, then either press the **Edit** button or centre press the rocker pad to access the keypad (*section 9.00*).

Operate the keypad to input comments describing the POI and press **Done** when finished. The screen will return to the **EDIT POI** menu.

The description can be viewed on the POI details screen.

Note: The 'Edit Description' option is only available if the existing description has 128 characters or less (e.g. externally imported descriptions from geocaches etc. with more than 128 characters cannot be edited).

11.10 Edit Location by Map

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select POI → Edit → Edit Location by Map)

You are in edit mode when a red cross appears inside the orange locator circle. A copy of the POI icon appears just inside the locator circle. Drag the POI to a new location and centre press the rocker pad to confirm the placement.

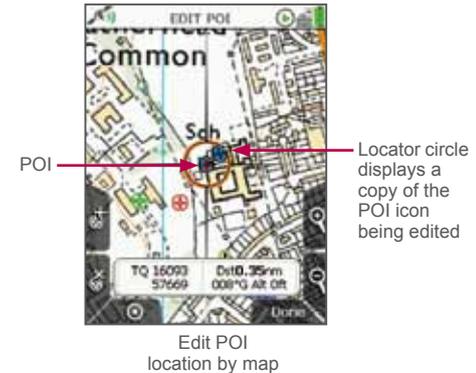
Note: This mode only allows you to edit the specific POI selected. Nothing else on the map is editable, (i.e. the remove POI button 'x' does not have a function on this screen).

Press the **GPS Map** button to return to the last map screen.

11.11 Edit Location by Grid

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select POI → Edit → Edit Location by Map)

Highlight **Edit Location by Grid** in the **EDIT POI** menu if you want to edit the POI by changing the grid reference values. This will take you to the **SETTING** screen where you can use the rocker pad to move left/right to toggle between boxes. Move the rocker pad up/down to change the box entries. Pressing **Next** will move between rows (except with OSGB). Select **Done** when complete to go back to the **EDIT POI** menu.



11. POIs (Points of Interest) (... cont)

11.12 Edit Warning Radius

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select POI → Edit → Edit Warning Radius)

Select **Edit Warning Radius** to take you to the **Warning Radius** screen. Use the rocker pad or the **Next** button to scroll through the options. Press **Select** to choose a radius at which the unit will sound warning beeps indicating the vicinity of the selected POI.

11.13 Edit Visibility

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select POI → Edit → Edit Visibility)

On selecting **Edit Visibility** you are taken to a menu where you can hide or show your POIs by setting them as 'visible' or 'not visible' on your map. Pressing **Select** takes you back to the edit menu.

Note: This is only respected if the global visibility is set to 'Default' (GPS MAP → MAIN MENU → OOI Menu → 'Visibility - Default').

11.14 Edit POI Icon

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select POI → Edit → Edit POI Icon)

Highlight **Edit POI Icon** and use the rocker pad to select a POI icon from the **POI Icon Selection** screen. Press **Done** to return to the **EDIT POI** menu.

11.15 Delete

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select POI → Edit → Delete)

Press **Delete** or centre press the rocker pad to access a screen showing the option to delete the POI. When **Delete** is selected the screen will go back to the **OOI Folders**. Pressing **Cancel** will take you back to the **EDIT POI** menu.

11.16 Move to SD Card

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select POI → Edit → Move to SD Card)

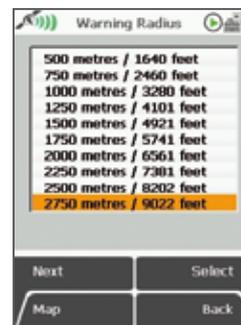
(Only available if an SD card has been inserted). Move the POI from the SD card to the Internal Storage.

Highlight **Move to SD Card** and either press **Move** or centre press the rocker pad. (Subsequently this option becomes **Move from SD Card**). The screen will go to the **OOI Folders** and the POI will appear in the **SD Card** folder. (To move the POI from the SD card, select **Move from SD Card** from the edit menu. The POI will then appear in the **Internal Storage** folder).

11.17 Copy to SD Card

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select POI → Edit → Copy to SD Card)

(Only available if an SD card has been inserted). Make a copy of the POI onto the SD card. Highlight **Copy to SD Card** and either press **Copy** or centre press the rocker pad. (Subsequently this option becomes **Copy from SD Card**). The screen will go to the **OOI Folders** and a copy of the POI will appear in the **SD Card** folder, as well as in the **Internal Storage** folder.



Set POI warning radius



Set visibility for POIs

Note: Visibility should be set to 'Default' to be editable for individual OOs.

12. AOIs (Areas of Interest)

12.1 AOIs (Areas of Interest) Overview

AOIs are **Areas of Interest** and consist of a series of points making up an area of any size or shape. These can be used:

- To mark various areas of interest on a map, (e.g. forests, wetlands).
- To measure an area on a map.
- As an alternative to the circular **Warning Radius** as any shape can be drawn.

The area can be filled with different colours and patterns.

Note: Use SatSYNC to add graphics or more detailed information to an AOI. (See the SatSYNC 1.5 User Guide).

12.2 Add AOI Screen

(GPS MAP → MAIN MENU → OOI Menu → Add AOI by Map)

To create an AOI, select **Add AOI by Map** from the **OOI Menu** and press **Select** or centre press the rocker pad. This will take you to the **Add AOI** screen where you will be able to lay down points (green dots) to form an 'area'.

The orange locator circle has a red cross in the centre to indicate you are in edit mode on the **Add AOI** screen. You can plot points by either pressing the top left '+' button or by centre pressing the rocker pad. Use the lower left 'x' button to remove points.

The area is shown as you create the AOI. You will be able to change the colour and pattern options of the AOI. The name of the AOI appears in the designated area.

Buttons:

Add AOI point (+)

Lay down AOI points on the map

Remove AOI point (x)

Remove AOI points from the map

GPS Map

Return to **GPS MAP** screen

Zoom

Zoom in/out

Done/(Back)

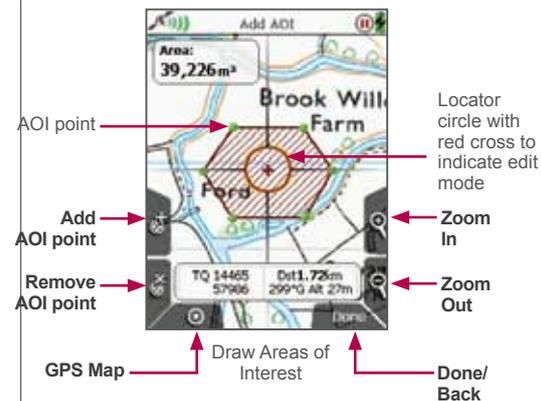
Go to keypad to name AOI and then to **OOI Folders**. (**Back** cancels the operation and takes you back to the **OOI Menu**).

12.3 Add AOI in a Specific Folder

(MAIN MENU → OOI Menu → OOI Folders → specific folder → final subfolder → Back → Add AOI by Map)

This will add the AOI to the last visited folder.

Note: Folders are created using SatSYNC and must contain at least one OOI or route to be visible on the unit. (See SatSYNC User Guide for more information).



12. AOIs (Areas of Interest) (... cont)

12.4 AOI Details Screen

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → select AOI → Show Details)

Alternative access:

(GPS MAP/PLANNING → click on AOI → Choose Information Type → select AOI via centre press → AOI details)

This screen summarises details of the AOI and is titled by the current AOI name. AOIs are date and time 'stamped', and the following information is given:

- Name of the AOI
- Grid reference*
- Distance and bearing from current location*
- Elevation*
- Area of AOI
- Description of AOI

*Refers to the arbitrary reference point in an AOI (usually close to the centre).

The highlighted green 'eye' icon indicates the AOI is visible on the map. When invisible, the 'eye' icon is highlighted in red with a red line through it.

AOI reference point

(Used for grid reference, elevation, and distance and bearing from current location on AOI details screen).

This is the arbitrary reference point in an AOI indicated by a default icon (visible when editing the AOI on the map) and AOI name. (Icon cannot be changed, but the name is editable). It is also used as a reference point in the following instances:

- As a GoTo point
- As a 'POI' in data boxes
- When using the Pointer
- When using the **Centre on Map** button

This reference point can be moved to any new location by using the **Edit Location by Map** option.



Basic AOI detail



AOI reference point
(default icon and AOI name)

AOI reference point

12. AOIs (Areas of Interest) (... cont)

12.5 Edit AOI Menu

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select AOI → Edit)

Alternative access:

(GPS MAP/PLANNING → click on AOI → Choose Information Type → select AOI via centre press → AOI details → Edit)

To access the **EDIT AOI** menu, highlight the AOI to be edited in the **OOI Folders**, and press **Edit** or centre press the rocker pad. Scroll up/down using the **Next** button or the rocker pad. The current setting for the highlighted option is shown under the window.

In selecting either **Rename** or **Edit Description** you will bring up an on-screen keypad. When using the keypad for labelling, either press **Select** or centre press the rocker pad to select entries.

The menu options on the **Edit AOI** screen are as follows;

- Rename
- Edit Description*
- Edit Location by Map
- Edit Visibility
- Edit Colour
- Edit Pattern
- Delete
- Move to SD Card**
- Copy to SD Card**

Buttons:

Next

Move down to next option

Map

Return to **GPS MAP** screen

Edit

Either press **Edit** button or centre press rocker pad to access alpha-numeric keypad for labelling.

*Note: This button changes depending on the option selected. Other options include **Rename, Delete, Move, Copy.***

Back

* Return to **OOI Folders**

*The 'Edit Description' option is only available if the existing description has 128 characters or less (e.g. Externally imported descriptions from geocaches etc. ** with more than 128 characters cannot be edited).*

The last two options on the list become available only when an SD card has been inserted and is not write-protected.



EDIT AOI options

12. AOIs (Areas of Interest) (... cont)

12.6 Rename AOI

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select AOI → Edit → Rename)

When an AOI is created it is called 'AOI 1' by default (or similar, depending on the number of existing OOs). To rename it, highlight the AOI in the **OOI Folders**, press **Edit**, then **Rename**. The keypad appears. Use the rocker pad to rename the AOI.

12.7 Edit Description

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select AOI → Edit → Edit Description)

Highlight **Edit Description**, then either press the **Edit** button or centre press the rocker pad to access the keypad.

Operate the keypad to input comments describing the AOI and press **Done** when finished. The screen will return to the **EDIT AOI** menu.

Note: The 'Edit Description' option is only available if the existing description has 128 characters or less (e.g. externally imported descriptions from geocaches etc. with more than 128 characters cannot be edited).

12.8 Edit Location by Map

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select AOI → Edit → Edit Location by Map)

You are in edit mode when a red cross appears inside the orange locator circle. Use the rocker pad to move the locator circle over individual AOI points and centre press the rocker pad to select them. A blue POI icon appears just inside the locator circle which means you can then drag the AOI point to a new location. Centre press the rocker pad to confirm the placement.

If you wish to add another AOI point, press the '+' button. To remove an existing AOI point, press the 'x' button.

Press the **GPS Map** button to return to the last map screen.

12.9 Edit Visibility

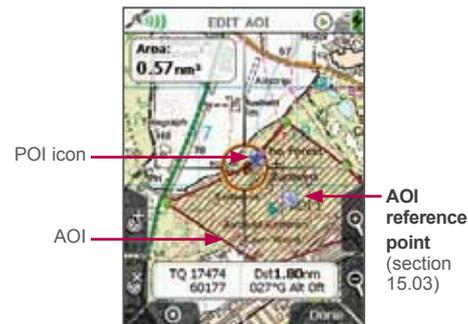
(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select AOI → Edit → Edit Visibility)

On selecting **Edit Visibility** you are taken to a menu where you can hide or show your AOIs by setting them as 'visible' or 'not visible' on your map. Pressing **Select** takes you back to the edit menu.

Note: This is only respected if the global visibility is set to 'Default' (GPS MAP → MAIN MENU → OOI Menu → 'Visibility - Default').



EDIT AOI
name



EDIT AOI

12. AOIs (Areas of Interest) (... cont)

12.10 Edit Colour

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select AOI → Edit → Edit Colour)

Highlight **Edit Colour** and use the rocker pad to make a selection from the colour palette. As you move the rocker pad over a colour, the AOI automatically changes colour on the map. Once you are happy with the colour choice, press **Set** to confirm or centre press the rocker pad. This will take you back to the edit menu.

12.11 Edit Pattern

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select AOI → Edit → Edit Pattern)

Highlight **Edit Pattern** and use the rocker pad to make a selection from six different pattern options. As you move the rocker pad over a pattern, the AOI pattern automatically changes on the map. Once you are happy with the pattern choice, press **Set** to confirm or centre press the rocker pad. This will take you back to the edit menu.

12.12 Delete

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select AOI → Edit → Delete)

Highlight **Delete**, then press **Delete** or centre press the rocker pad to access a screen showing the option to delete the AOI. When **Delete** is selected the screen will go back to the **OOI Folders**. Pressing **Cancel** will take you back to the **EDIT AOI** menu.

12.13 Move to SD Card

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select AOI → Edit → Move to SD Card)

(Only available if an SD card has been inserted). Move the AOI from the SD card to the Internal Storage.

Highlight **Move to SD Card** and either press **Move** or centre press the rocker pad. (Subsequently this option becomes **Move from SD Card**). The screen will go to the **OOI Folders** and the AOI will appear in the **SD Card** folder. To move the AOI from the SD card you will need to select **Move from SD Card** from the edit menu.

12.14 Copy to SD Card

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select AOI → Edit → Copy to SD Card)

(Only available if an SD card has been inserted). Make a copy of the AOI onto the SD card. Highlight **Copy to SD Card** and either press **Copy** or centre press the rocker pad. (Subsequently this option becomes **Copy from SD Card**). The screen will go to the **OOI Folders** and a copy of the AOI will appear in the **SD Card** folder.



Edit AOI fill colour



Edit AOI fill style

13. LOIs (Lines of Interest)

13.1 LOIs (Lines of Interest) Overview

LOIs are **Lines of Interest** allowing you to plot a line consisting of multiple waypoints joined together, instead of a single POI (Point of Interest).

LOIs are drawn in a similar way to a route, but cannot be followed or activated like a route, or have comments for individual points. They are used to represent boundaries or alternative routes. The description screen shows the length of the line and the line colour can be edited.

Note: Use SatSYNC to add graphics or more detailed information to an LOI. (See the SatSYNC 1.5 User Guide).

13.02 Add LOI Screen

(GPS MAP → MAIN MENU → OOI Menu → Add LOI by Map)

To create an LOI, select **Add LOI by Map** from the **OOI Menu** and press **Select** or centre press the rocker pad. This will take you to the **Add LOI** screen where you will be able to lay down points (green dots) to form a 'line'.

The orange locator circle has a red cross in the centre to indicate you are in edit mode and on the **Add LOI** screen. You can plot points by either pressing the top left '+' button or by centre pressing the rocker pad. Use the lower left 'x' button to remove points.

The line and its length are shown as you create the LOI. The name of the LOI appears in the designated area and you will be able to change the colour of the LOI.

Buttons:

Add LOI point (+)

Lay down LOI points on the map

Remove LOI point (x)

Remove LOI points from the map

GPS Map

Return to **GPS MAP** screen

Zoom

Zoom in/out

Done/(Back)

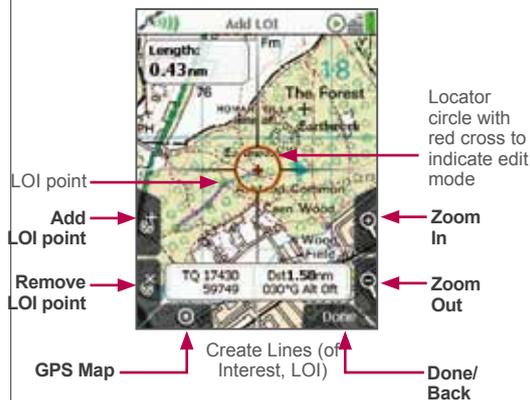
Go to keypad to name LOI and then to **OOI Folders**. (**Back** cancels the operation and takes you back to the **OOI Menu**).

13.03 Add LOI in a Specific Folder

(MAIN MENU → OOI Menu → OOI Folders → specific folder → final subfolder → Back → Add LOI by Map)

This will add the LOI to the last visited folder.

Note: Folders are created using SatSYNC and must contain at least one OOI or route to be visible on the unit. (See SatSYNC User Guide for more information).



13. LOIs (Lines of Interest) (... cont)

13.4 LOI Details Screen

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select LOI → Show Details)

Alternative access:

(GPS MAP/PLANNING → click on LOI → Choose Information Type → select LOI via centre press → LOI details)

This screen summarises details of the LOI and is titled by the current LOI name. LOIs are date and time 'stamped', and the following information is given:

- Name of the LOI
- Grid reference*
- Distance and bearing from current location*
- Length of the line
- Elevation*
- Description of LOI

* Refers to the arbitrary reference point in an LOI (usually close to the centre).

The highlighted green 'eye' icon indicates the LOI is visible on the map. When invisible, the 'eye' icon is highlighted in red with a red line through it.

LOI reference point

(Used for grid reference, elevation, and distance and bearing from current location on LOI details screen).

This is the arbitrary reference point in an LOI indicated by a default icon (visible when editing the LOI on the map) and LOI name. (Icon cannot be changed, but the name is editable). It is also used as a reference point in the following instances:

- As a GoTo point
- As a 'POI' in data boxes
- When using the Pointer
- When using the **Centre on Map** button

This reference point can be moved to any new location by using the **Edit Location by Map** option.



Basic LOI detail



LOI reference point
(default icon and AO name)

13. LOIs (Lines of Interest) (... cont)

13.5 Edit LOI Menu

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select LOI → Edit)

Alternative access:

(GPS MAP/PLANNING → click on LOI → Choose Information Type → select LOI via centre press → LOI details → Edit)

To access the **EDIT LOI** menu, highlight the LOI to be edited in the **OOI Folders**, and press **Edit** or centre press the rocker pad. Scroll up/down using the **Next** button or the rocker pad. The current setting for the highlighted option is shown under the window.

In selecting either **Rename** or **Edit Description** you will bring up an on-screen keypad. When using the keypad for labelling, either press **Select** or centre press the rocker pad to select entries.

The menu options on the **Edit LOI** screen are as follows;

- Rename
- Edit Description*
- Edit Location by Map
- Edit Visibility
- Edit Colour
- Delete
- Move to SD Card**
- Copy to SD Card**

Buttons:

Next

Move down to next option

Map

Return to **GPS MAP** screen

Edit

Either press **Edit** button or centre press rocker pad to access alpha-numeric keypad for labelling.

*Note: This button changes depending on the option selected. Other options include **Rename**, **Delete**, **Move**, **Copy**.*

Back

Return to **OOI Folders**

* *The 'Edit Description' option is only available if the existing description has 128 characters or less (e.g. externally imported descriptions from geocaches etc. with more than 128 characters cannot be edited).*

** *The last two options on the list become available only when an SD card has been inserted and is not write-protected.*



Edit LOIs

13. LOIs (Lines of Interest) (... cont)

13.6 Rename LOI

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select LOI → Edit → Rename)

When an LOI is created it is called 'LOI 1' by default (or similar, depending on the number of existing OOs). To rename it, highlight the LOI in the **OOI Folders**, press **Edit**, then **Rename**. The keypad appears. Use the rocker pad to rename the LOI.

13.7 Edit Description

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select LOI → Edit → Edit Description)

Highlight **Edit Description**, then either press the Edit button or centre press the rocker pad to access the keypad (*section 9.00*).

Operate the keypad to input comments describing the LOI and press **Done** when finished. The screen will return to the **EDIT LOI** menu.

*The 'Edit Description' option is only available if the existing description has 128 characters or less (e.g. externally imported descriptions from geocaches etc. with more than 128 characters cannot be edited).

13.8 Edit Location by Map

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select LOI → Edit → Edit Location by Map)

You are in edit mode when a red cross appears inside the orange locator circle. Use the rocker pad to move the locator circle over individual LOI points and centre press the rocker pad to select them. A blue POI icon appears just inside the locator circle which means you can then drag the LOI point to a new location. Centre press the rocker pad to confirm the placement.

If you wish to add another LOI point, press the '+' button. To remove an existing LOI point, press the 'x' button.

Press the **GPS Map** button to return to the last map screen.



Edit LOI name



Edit LOI location

13. LOIs (Lines of Interest) (... cont)

13.9 Edit Visibility

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select LOI → Edit → Edit Visibility)

On selecting **Edit Visibility** you are taken to a menu where you can hide or show your LOIs by setting them as 'visible' or 'not visible' on your map. Pressing **Select** takes you back to the edit menu.

Note: This is only respected if the global visibility is set to 'Default' (GPS MAP → MAIN MENU → OOI Menu → 'Visibility - Default').

13.10 Edit Colour

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select LOI → Edit → Edit Colour)

Highlight **Edit Colour** and use the rocker pad to make a selection from the colour palette. As you move the rocker pad over a colour, the LOI automatically changes colour on the map. Once you are happy with the colour choice, press **Set** to confirm or centre press the rocker pad. This will take you back to the edit menu.

13.11 Delete

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select LOI → Edit → Delete)

Highlight **Delete**, then press **Delete** or centre press the rocker pad to access a screen showing the option to delete the LOI. When either **Delete** or **Cancel** is selected, the screen will go back to the **EDIT LOI** menu.

13.12 Move to SD Card

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select LOI → Edit → Move to SD Card)

(Only available if an SD card has been inserted). Move the LOI from the SD card to the Internal Storage.

Highlight **Move to SD Card** and either press **Move** or centre press the rocker pad. (Subsequently this option becomes **Move from SD Card**). The screen will go to the **OOI Folders** and the LOI will appear in the **SD Card** folder. To move the LOI from the SD card you will need to select **Move from SD Card** from the edit menu.

13.13 Copy to SD Card

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select LOI → Edit → Copy to SD Card)

(Only available if an SD card has been inserted). Make a copy of the LOI onto the SD card. Highlight **Copy to SD Card** and either press **Copy** or centre press the rocker pad. (Subsequently this option becomes

Copy from SD Card). The screen will go to the **OOI Folders** and a copy of the LOI will appear in the **SD Card** folder.



Set LOI visibility



Set LOI colour

14. Grids

14.1 Grids Overview

Grids consist of a group of square-shaped AOIs in a large square/grid formation. They allow you to overlay a square grid/table onto the map. Grids are used to split an area into searchable chunks. For example, search and rescue teams can use grids for rescue missions. Other examples of uses include ornithology (bird watching), archaeology, forestry, crime surveying, etc.

Each grid consists of 100 AOIs (or squares), i.e. 10 across and 10 down. Each AOI is 300m x 300m. The grid follows a default naming convention and individual AOIs can be renamed individually (*section 17.05*). As you zoom into the map, the name of the AOI appears in each square. Moving the locator circle over individual squares shows the name of the AOI in the top right-hand corner.

Rows are labelled AA, AB, AC, etc... and columns are labelled 1, 2, 3, etc... so a square or individual AOI can be referred to as "AA3" or "AB2". (*To avoid confusion with the number 1, the letter 'l' has been omitted*).

You are able to change the colour and pattern of individual AOIs just like a regular AOI. The grid appears on the **PLANNING** screen once created. More than one grid can be placed on the map. Visibility can only be set for individual AOIs, not for the entire grid.

14.2 Add Grid Screen

(GPS MAP → MAIN MENU → OOI Menu → Add Grid by Map)

To create a grid, select **Add Grid by Map** from the **OOI Menu** and press **Select** or centre press the rocker pad. This will take you to the **Add Grid** screen where you will need to **set the centre point of the grid**.

The orange locator circle has a red cross in the centre to indicate you are in edit mode and on the **Add Grid** screen. Use the top left '+' button or centre press the rocker pad to set the centre point. This will take you to the keypad to name your grid.

Note: The lower left 'x' button is not used on this screen.

Buttons:

Add Grid (+)

Sets the centre point of the grid

GPS Map

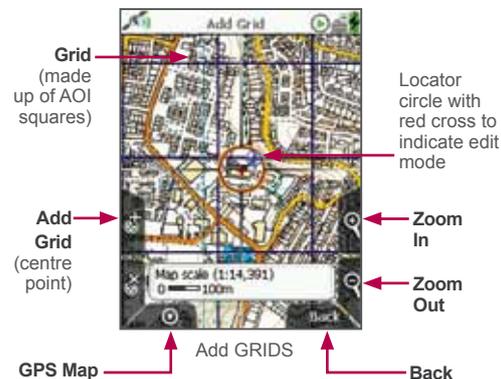
Return to **GPS MAP** screen

Zoom

Zoom in/out

Back

Go back to the **OOI Menu**



	1	2	3	4	5	6	7	8	9	10
AA	AA1	AA2	AA3	AA4	AA5	AA6	AA7	AA8	AA9	AA10
AB	AB1	AB2	AB3	AB4	AB5	AB6	AB7	AB8	AB9	AB10
AC	AC1	AC2	AC3	AC4	AC5	AC6	AC7	AC8	AC9	AC10
AD	AD1	AD2	AD3	AD4	AD5	AD6	AD7	AD8	AD9	AD10
AE	AE1	AE2	AE3	AE4	AE5	AE6	AE7	AE8	AE9	AE10
AF	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10
AG	AG1	AG2	AG3	AG4	AG5	AG6	AG7	AG8	AG9	AG10
AH	AH1	AH2	AH3	AH4	AH5	AH6	AH7	AH8	AH9	AH10
AJ	AJ1	AJ2	AJ3	AJ4	AJ5	AJ6	AJ7	AJ8	AJ9	AJ10
AK	AK1	AK2	AK3	AK4	AK5	AK6	AK7	AK8	AK9	AK10

14. Grids (... cont)

14.3 Add Grid in a Specific Folder

(MAIN MENU → OOI Menu → OOI Folders → specific folder → final subfolder → Back → Add Grid by Map)

This will add the grid to the last visited folder.

Note: Folders are created using SatSYNC and must contain at least one OOI or route to be visible on the unit. (See SatSYNC User Guide for more information).

14.4 Grid Details Screen

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select Grid → Select AOI → Show Details)

Alternative access:

(GPS MAP/PLANNING → click on Grid → Choose Information Type → select AOI on Grid via centre press → AOI details)

This screen summarises details of individual AOIs that make up a grid, depending on the AOI selected. It is titled by the current AOI name (e.g. AA1). AOIs in a grid are not date and time 'stamped'. The following information is given:

- Name of the AOI
- Grid reference*
- Distance and bearing from current location*
- Area (meters squared)
- Elevation*
- Description of grid

Refers to the arbitrary reference point of the AOI within the grid (usually top left corner of an AOI within a grid).

The highlighted green 'eye' icon indicates the AOI is visible on the map. When invisible, the 'eye' icon is highlighted in red with a red line through it.

AOI reference point within a grid

(Used for grid reference, elevation, and distance and bearing from current location on AOI details screen).

This is the arbitrary reference point in a particular AOI within the grid, indicated by the AOI name.

(Name is editable). It is also used as a reference point in the following instances:

- As a GoTo point
- As a 'POI' in data boxes
- When using the Pointer
- When using the **Centre on Map** button

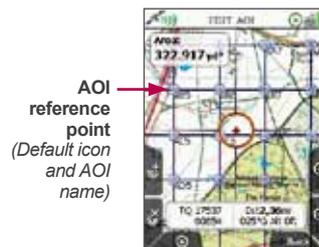
This reference point can be moved to any new location by using the **Edit Location by Map** option in the **EDIT AOI** menu (once you have selected a particular AOI within the grid). Here reference points for all AOIs within the grid will be displayed on the map, indicated by default icons and individual AOI names (see below).



Basic GRID info



AOI reference point in a grid (AOI name)



14. Grids (... cont)

14.5 Edit Grid Menu

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select Grid → Edit)

To access the **EDIT** menu for a grid, highlight the grid to be edited in the **OOI Folders**, and press Edit or centre press the rocker pad. Scroll up/down using the **Next** button or the rocker pad. The current setting for the highlighted option is shown under the window.

In selecting either **Rename** you will bring up an on-screen keypad. When using the keypad for labelling, either press **Select** or centre press the rocker pad to select entries.

The menu options for a grid on the **EDIT** screen are as follows;

- Rename
- Copy
- Delete
- Move to SD Card*
- Copy to SD Card*

The last two options on the list become available only when an SD card has been inserted and is not write-protected.

Buttons:

Next

Move down to next option

Map

Return to **GPS Map** screen

Rename

Either press **Edit** button or centre press rocker pad to access alpha-numeric keypad for labelling.

*Note: This button changes depending on the option selected. Other options include **Copy, Delete, Move.***

Back

Return to **OOI Folders**



EDIT GRIDS

14. Grids (... cont)

14.6 Rename Grid

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select Grid → Edit → Rename)

When a grid is created it is called 'Grid 1' by default (or similar, depending on the number of existing OOs). To rename it, highlight the grid in the **OOI Folders**, press **Edit**, then **Rename**. The keypad appears. Use the rocker pad to rename the grid.

14.7 Copy

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select Grid → Edit → Copy)

To create a duplicate of the grid, highlight the grid in the **Edit** menu, select **Copy**, and either press the **Copy** button or centre press the rocker pad.

The screen will return to the **OOI Folders** and a copy of the grid will appear above the original grid. It has the prefix 'Copy of' to indicate it is a copy, e.g. 'Copy of Grid 1'. The options in the **EDIT** menu can also be applied to the grid copy, e.g. if you need to rename it, etc.

14.8 Delete

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select Grid → Edit → Delete)

Highlight **Delete**, then press **Delete** or centre press the rocker pad to access a screen showing the option to delete the grid. When either **Delete** or **Cancel** is selected, the screen will go back to the **OOI Folders**.

14.9 Move to SD Card

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select Grid → Edit → Move to SD Card)

(Only available if an SD card has been inserted). Move the grid from the SD card to the Internal Storage.

Highlight **Move to SD Card** and either press **Move** or centre press the rocker pad. (Subsequently this option becomes **Move from SD Card**). The screen will go to the **OOI Folders** and the grid will appear in the **SD Card** folder. To move the grid from the SD card you will need to select **Move from SD Card** from the edit menu.

14.10 Copy to SD Card

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select grid → Edit → Copy to SD Card)

(Only available if an SD card has been inserted). Make a copy of the grid onto the SD card. Highlight **Copy to SD Card** and either press **Copy** or centre press the rocker pad. (Subsequently this option becomes **Copy from SD Card**). The screen will go to the **OOI Folders** and a copy of the grid will appear in the **SD Card** folder.



Edit GRID name



GRIDs in OOI folders

14. Grids (... cont)

14.11 Edit AOIs Within a Grid

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select Grid → Select AOI → Edit)

Alternative access:

(GPS MAP/PLANNING → click on AOI → Choose Information Type → select AOI via centre press → AOI details → Edit)

Individual AOIs within a grid can be edited in the same way as regular AOIs. Go to the **OOI Folders**, highlight the grid and press **Select** to list the AOIs that make up the grid. By pressing **Edit** you will be taken to the **EDIT AOI** menu. Here you will be able to change the colour and pattern of individual AOIs within a grid. (Please refer to the **AOI** section for more information on the **EDIT AOI** menu options).

From the grid screen you will also be able to centre an AOI on the map or locate the nearest AOI to your current location. Pressing the **Show Details** button will give you a description of the AOI selected. You can also access the edit options from this screen. (Please refer to section above for more on the **Choose Information Type** window).

Note: Only individual AOIs within a grid can be made visible or invisible. An entire grid cannot be made visible or invisible, unless you set the visibility options of a folder containing the grid.

Buttons:

Edit

Go to **EDIT AOI** screen

Centre on Map

Go to **PLANNING** screen with the AOI in the centre

Locate Nearest

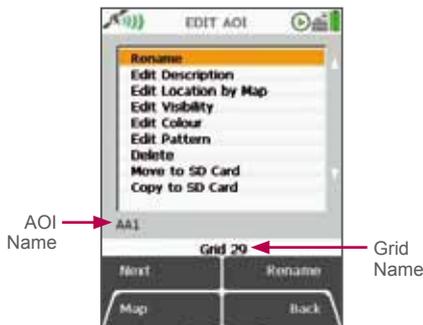
Go to **PLANNING** screen and show nearest AOI to current location

Show Details

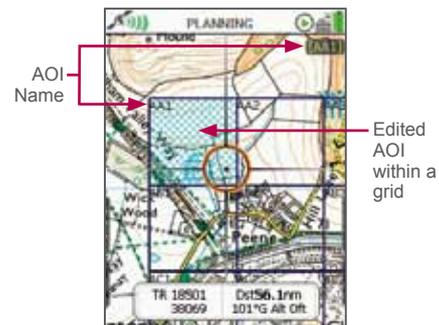
Go to AOI details screen

Back

Return to the **OOI Menu**



Editing GRIDS



15. IOIs (Items of Interest)

15.1 IOIs (Items of Interest) Overview

IOIs are **Items of Interest** and are non geo-referenced documents. They include digital information that can be saved on the unit, such as a graphic showing information about a species of a bird or flower. They can also be used to reference instructions, e.g. how to make a camp fire or first aid tips.

An IOI is not necessarily assigned to a specific point on the map. (If the item was plotted against a specific point on the map, it would be a POI). An IOI contains no latitude or longitude data. It can be created directly on the unit as a simple text description, and details of the IOI are shown on the description screen.

Note: If you want to add graphics or more detailed information, you are able to create an IOI on your computer and import it to your unit via SatSYNC. (Please refer to the SatSYNC 1.5 User Guide provided on the CD or downloadable from satmap.com). This employs the use of a tab delimited plain text file containing OOI data in different columns and is used for creating routes, POIs, AOIs, LOIs, as well as IOIs.

15.2 Add an IOI

(GPS MAP → MAIN MENU → OOI Menu → Add IOI)

To create an IOI, highlight the **Add IOI** option from the **OOI Menu** and press **Select** or centre press the rocker pad. This will take you straight to the keypad to prompt you to rename your IOI.

When an IOI is created it is called 'IOI 1' by default (or similar, depending on the number of existing OOIs). Use the rocker pad to rename your IOI and then press **Done** when complete.

The **Edit Description** screen appears and this is where you can add a brief description using the keypad. This information is shown in the IOI. Pressing **Done** takes you back to the **OOI Menu**. To view your IOI, go to the **OOI Folders**.

15.3 Add IOI in a Specific Folder

(MAIN MENU → OOI Menu → OOI Folders → specific folder → final subfolder → Back → Add IOI)

This will add the IOI to the last visited folder.

Note: Folders are created using SatSYNC and must contain at least one OOI or route to be visible on the unit. (See SatSYNC User Guide for more information).

15.4 IOI Details Screen

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select IOI → Show Details)

This screen shows the description included in the IOI and is titled by the current IOI name. Graphics and more detailed information created on a computer and imported onto the unit can be viewed on this screen. (See SatSYNC 1.5 User Guide).

An IOI contains information that is for reference only. Therefore there are no options to adjust visibility as an IOI does not appear on the map, and no date or time 'stamp' is shown.



Non-geographic Items of Interest

15. IOIs (Items of Interest) (... cont)

15.5 Edit IOI Screen

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select IOI → Edit)

Alternative access:

(GPS MAP → MAIN MENU → OOI Menu → OOI Folders → Select IOI → Show Details → Edit)

To access the **EDIT IOI** screen, highlight the IOI to be edited in the **OOI Folders**, and press **Edit** or centre press the rocker pad. Scroll up/down using the **Next** button or the rocker pad. The current setting for the highlighted option is shown under the window.

In selecting either **Rename** or **Edit Description** you will bring up an on-screen keypad. When using the keypad for labelling, either press **Select** or centre press the rocker pad to select entries.

The menu options on the **Edit IOI** screen are as follows;

- Rename
- Edit Description
- Delete
- Move to SD Card*
- Copy to SD Card*

* *The last two options on the list become available only when an SD card has been inserted and is not write-protected.*

Buttons:

Next

Move down to next option

Map

Return to GPS Map screen

Edit

Either press the **Edit** button or centre press rocker pad to access alpha-numeric keypad for labelling.

*Note: This button changes depending on the option selected. Other options include **Rename**, **Delete**, **Move**, **Copy**.*

Back

Return to **OOI Folders**



Edit IOIs

15. IOIs (Items of Interest) (... cont)

15.6 Rename IOI

(MAIN MENU → OOI Menu → OOI Folders → Select IOI → Edit → Rename)

When an IOI is created it is called 'IOI 1' by default (or similar, depending on the number of existing IOIs). To rename it, highlight the IOI in the **OOI Folders**, press **Edit**, then **Rename**. The keypad appears. Use the rocker pad to rename the IOI.

15.7 Edit Description

(MAIN MENU → OOI Menu → OOI Folders → Select IOI → Edit → Edit Description)

Highlight **Edit Description**, then either press the **Edit** button or centre press the rocker pad to access the keypad.

Operate the keypad to input comments describing the IOI and press **Done** when finished. The screen will return to the **EDIT IOI** menu.

15.8 Delete

(MAIN MENU → OOI Menu → OOI Folders → Select IOI → Edit → Delete)

Highlight **Delete**, then press **Delete** or centre press the rocker pad to access a screen showing the option to delete the IOI. Pressing **Delete** will delete the IOI and take you back to the **OOI Folders**. Pressing **Cancel** will take you back to the **EDIT IOI** menu.

15.9 Move to SD Card

(MAIN MENU → OOI Menu → OOI Folders → Select IOI → Edit → Move to SD Card)

(Only available if an SD card has been inserted). Move the IOI from the SD card to the Internal Storage.

Highlight **Move to SD Card** and either press **Move** or centre press the rocker pad. (Subsequently this option becomes **Move from SD Card**). The screen will go to the **OOI Folders** and the IOI will appear in the **SD Card** folder. To move the IOI from the SD card you will need to select **Move from SD Card** from the edit menu.

15.10 Copy to SD Card

(MAIN MENU → OOI Menu → OOI Folders → Select IOI → Edit → Copy to SD Card)

(Only available if an SD card has been inserted). Make a copy of the IOI onto the SD card. Highlight **Copy to SD Card** and either press **Copy** or centre press the rocker pad. (Subsequently this option becomes **Copy from SD Card**). The screen will go to the **OOI Folders** and a copy of the IOI will appear in the **SD Card** folder.



Edit IOI name

16. GoTo and Marker

16.1 GoTo and Marker Overview

(GPS MAP → MAIN MENU → GoTo and Marker)

GoTo point: A set point that acts as a target. Once you have activated a GoTo point, a straight line from your current location and GoTo point (or route) will appear. This is useful in situations when you do not know where you are going, i.e. you have no determined route. Access various statistics from the data box options using this feature, e.g. GoTo Distance, GoTo ETA, GoTo Bearing etc.

Marker: A red flag (reference point) on the map from which the distance and bearing to any other point on the map can be measured. You are not able to follow a Marker and it is only available in Planning mode. Use the rocker pad to move the planning circle in the desired direction to calculate the straight line distance or bearing.

The menu options are as follows:

- GoTo – Set By Coords
- GoTo – Route*
- Marker – Set By Coords

*Available once a GoTo point has been set.

Note: GoTo and Marker function for setting by postcode are available for some units sold in the UK.

Clear Marker and **GoTo – Clear** buttons are active once a point/marker has been set. (Also accessible from the **POSITION INFO** screen).

16.2 GoTo & Marker – Set By Coords

Selecting one of these options brings up a screen on which grid references may be entered. Move the rocker pad up/down to change the coordinate values, and left/right to select the next entry box, or use the **Next** button to move to the next row.

Buttons:

Next

Move between rows (*does not work with OSGB*)

Convert

Updates coordinate conversions. (*Active once original coordinates have been changed*).

Map

Return to last map screen

Done

Press to set coordinates of GoTo point/Marker

Cancel

Return to **GoTo and Marker** screen

Back

Return to **PLANNING** screen

Coordinates can be entered in different position display formats and the preferred format can be selected from **Main Menu → Settings → GPS Settings**.

Alternative option for setting a GoTo point/Marker:
(**PLANNING → POSITION INFO** via centre press → **Set Marker/Set GoTo**)

16.3 GoTo – Route

Only available once a GoTo point has been set. Selecting this option shows the straight line distance from your current location to a route and puts the centre of the planning circle at the GoTo point.



GoTo point



Set GoTo by
Grid reference

17. Accessories

Accessories

The following accessories are available from Satmap. For a full range, please visit www.satmap.com.

17.1 Quad Lock A20 Custom Backplate

This Backplate is secured with two 2mm M3 bolts (supplied, with hex key) and is used for interfacing with all Quad Lock Mounting systems. Once fitted, it provides a low profile mounting socket does **not** require removal for the walking activities.

17.2 Quad Lock Out Front Bike Mount.

This is the Satmap recommended Bike Mount for most types of Handlebar / stem combinations. Specifically it allows the mount to be reversed over the stem for maximum unit support, symmetry and minimum height. Suits bars 25.4mm-31.8mm

17.3 Quad Lock Pro Bike Mount.

This mount sits slightly higher than the Out Front mount but offers increased fitting options for stems and bars between 25-40mm. Quad Lock say "The Bike Mount can be mounted in seconds using our quick mount o-rings or, for a more permanent fixture, the mount can be secured using zip ties. Light, strong and durable.

17.4 Quad Lock Vehicle Mount.

The Quad Lock Car Mount is one of the strongest and most stable smart phone mounts on the market. This mount easily connects and disconnects to your phone in a matter of seconds and features a patented cam-locking industrial-strength suction cup.

17.5 Active 20 Carry Case

The Carry Case has a padded compartment for the Active 20, closed with a Velcro top for fast access, and an elasticated front mesh for additional storage.

17.6 Lanyard.

The Lanyard is 1.3m long, branded with the Satmap logo, and is adjustable to fit most requirements. It has two fittings on each end: a metal clip for attaching to the D-Rings on the side of the carry case, or a nylon hoop fitting for attaching directly onto the shoulders of the Active 20 itself.

17.7 Spare LiPol Power Pack

For those extra-long duration activities, a spare LiPol Battery Pack is just the answer.



Quad Lock Custom Backplate fitted



Quad Lock Pro Bike Mount



Quad Lock Out Front Bike Mount



Lanyard (Active 20/12/10)



Quad Lock Vehicle Mount



Carry Case (Active 20)



18. Services

Satmap offers a variety of services. Please check www.satmap.com for more information.

18.1 General Service

Whilst our unit is designed to withstand the rigors of outdoor sports, it is not (totally) indestructible. Satmap offers a General Service for the care of your Active 20 which includes:

- Replacement caseworks (if needed)
- Replacement TFT screen (if needed)
- Replacement PCB (if needed)
- Replacement battery caddy (if needed)
- Software upgrade (if needed)
- Antenna and GPS check
- Full performance testing

Please allow 10 working days for Satmap to complete this service.

18.2 World Base Map

The World Map is derived from data supplied by Collins Bartholomew. At 1:30 million you get an overview of the world and once you have zoomed down to 1:5 million you will be able to see the major roads, towns and cities in every country. Such details provide a useful backdrop when you are using the Active 20 internationally. If you do not have the World Base Map on your unit (applicable to earlier units), it is available as an upgrade.

18.3 Specialized Custom Map Service

If Satmap does not have the map data, we can put your own digital map data onto an SD card. Our GIS specialists can convert almost any map into a format that can be viewed on the Active 20 unit.

18.4 Toggleable Map Service

Toggleing is a feature first introduced on Active 10 & 12 software version 1.4 or later of our platform software. Toggleable map cards allow you to switch between different map layers at a particular point on the same zoom level. For example, you can flip between the two scales (1:50,000 and 1:25,000) and the base map. It is also possible to toggle between different map types and map providers.

Toggleable maps are marked with a toggle icon  and are available from our website. Not all maps are toggleable. It is also possible to customize existing maps and make them toggleable. (Please see website for further details).

18.5 Custom Mapping (GB only)

Custom Mapping allows you to create your own unique maps of the highly detailed Ordnance Survey 1:25,000 scale Explorer series. The result is that you get a map of exactly the area or areas you want, making it a very effective way of capturing your favorite outdoor areas on one map card. This service is only available for GB maps.

18.6 Site-Centred Mapping (Select areas only)

For customers who want non-standard map areas, Satmap offers a bespoke service to create and supply map cards centred on a place (grid reference) of your choice. Now available for Austria (BEV), France (IGN), Germany (LVA), Great Britain (OS), and Switzerland (Swisstopo). Price is determined by the area covered.

There is a key difference between the Site-Centred Map service and the Custom Mapping service:

- Custom Mapping allows you to create irregular shaped maps.
- Site-Centred Maps are only supplied as a square or rectangle of a set size.

18.7 Map Consolidation

Many of our customers are finding that the Active 20 is so useful they are taking it everywhere with them. As a result, they are building up impressive collections of SD cards. We offer a service to add several of these maps together onto one consolidated SD card so you don't have to worry about keeping track of all your maps. Depending on the size of the maps in question, this service may not always be appropriate, so please call us to check what is possible.

19. Xpedition : Mapping & Route Planner

Online Planning Software

With the Online Route Planner and Route Share Network customers can create routes on their computer, download them onto their Active 20 via SatSYNC*, and share them with other users. This software is available online for select countries only (please see below). As both applications complement each other, they are sold as a bundle.

Online Route Planner

The Online Route Planner provides users with access to digital topographical mapping for a range of countries, at various scales from local map providers, with new maps being added regularly:

- Great Britain: Ordnance Survey 1:50,000 & 1:25,000
- Germany: LVA 1:50,000
- Switzerland: Swisstopo 1:50,000 & 1:25,000
- Belgium: IGN 1:50,000
- Spain: IGN 1:200,000 (Whole) & 1:25,000 (Islands)
- Spain: Alpina Various Scales (Hot Spots)
- Northern Ireland: OSNI 1:50,000 & 1:25,000
- Republic of Ireland: OSI 1:210,000 & 1:50,000
- Netherlands: Kadaster 1:50,000
- Italy: Kompass/OpenCycleMap 1:50,000
- Austria: BEV 1:50,000 & 1:25,000

The Online Route Planner allows users to:

- Create routes
- Name routes and waypoints
- Add comments to a route or individual waypoints within a route
- Download routes onto the Active 20 via SatSYNC*
- Upload routes from the Active 20 via SatSYNC*
- Create a route card
- Print out copies of the map and route
- Store routes on a private space on the server.
- Includes Bing™ (Microsoft) road maps and aerial imagery for the whole world.

Route Share Network

The Route Share Network is exactly as the name suggests: an area for users to share and access a library of routes. It features:

- Route upload and download
- Ability to view routes from other users—ideal for areas you are planning to explore.
- An option to add comments and feedback on routes

This Network will allow you to view routes worldwide.

* Please refer to the 1.5 SatSYNC User Guide provided on the CD or downloadable from our website.



Online Route Planner



Organise Routes

20. Tips

- **For the best performance in acquiring a satellite lock:** Wait until a lock is established before inserting a map card. The GPS should be under open skies, immobile and held upright. When a lock has been acquired, the top left signal icon will change from a red 'x' to green or blue crescents, depending on the signal. (Satellite lock times vary). The Active 20 can acquire a lock on the move, e.g. whilst driving. However, this can cause a delay in the time to get a lock.
- **Calibrate compass before use:** Before you use the Active 20 compass, make sure you have calibrated it first by going to [Main Menu > Settings > Calibrate Compass](#)
- **To prevent the screen switching from GPS MAP to PLANNING:** Either lock the screen (section 3.02), or allow it to go into the powersave screen off mode before stowing it away.
- **To maximize battery life:** Refer to section 3.00 for tips on how to conserve battery power. If you want to carry out route planning on your Active 20, connect it to your computer as a good way to get more out of your batteries.
- **Take out the batteries when not using the Active 20:** Even when switched off the unit draws some power, which over time can drain the batteries.
- **Recording your trip log:** Remember to use the **Stop** (data logging) button if you take a break and want to maintain a log of all trip statistics. Don't forget to press **Start** once you are ready to go again. If you remain stationary for a longer period of time without pausing (**Stop**), the data logging/trip statistics will be inaccurate.
- **Make a back-up file copy of any maps that you purchase:** A back-up may be done either using an SD card reader or SD card slot on your computer. If your map card data is corrupted or erased, copy the file back onto the original card. Data transferred to a different card will not be usable.
- **Use a GoTo point as a rangefinder:** Set a **GoTo** point on your destination to calculate the straight line distance from your current location to the **GoTo** point.
- **Use SatSYNC to manage files:** Upload/download routes and OOs from your computer to your unit by using our free SatSYNC software (download available from our website). You can transfer all sorts of GPS data files from your computer to your Active 20, e.g. .map, .kml, gpx, .loc, geocaching files, tab delimited text files etc. (*Refer to section 3.07 or the SatSYNC user guide for more information*).
- **To set the time on your unit:** Go to [MAIN MENU > Settings > Time offset](#) and move the rocker pad to select the appropriate hour differential (+/- GMT).
- **To quickly setup a route on your unit:** Go to [GPS MAP > POSITION INFO via centre press > Create New Route](#). Plot in your waypoints using the directional rocker pad and press **Done**.
- **To quickly setup a POI on your unit:** Go to [GPS MAP or PLANNING > POSITION INFO via centre press > Add POI](#). Name the POI using the keypad and press **Done**. Select an icon from the POI icon selection screen and press **Done**.

21. Troubleshooting

- **If your unit fails to recognize a map card:** Switch off the unit and remove the card. Switch the unit on again and re-insert the card. Also be sure to check you are on the latest version of software (download available from our website).
- **If your screen flickers:** Wait 10 minutes or so and it should stop. Some flickering is normal and happens when using a strong power source such as when using the supplied AA Lithium Energizers (the most powerful AA batteries on the market).
- **If water gets under the screen cover:** Remove the cover and gently wipe away the moisture with a soft cloth. Any direct hand pressure may mark the inner screen. (Refer to section 2.06 for more tips on how to care for your unit).
- **'Snail trail' is not displaying:** Make sure you have a GPS lock and the trip log is recording ([TRIP LOG > Start](#)). Check the snail trail is on by going to [GPS MAP > POSITION INFO via centre press > Turn Trail On](#). Here you can also adjust the size of the dots.
- **Software has been upgraded but is still showing old version:** Ensure that Hibernate Timeout is turned off ([MAIN MENU > Settings > Advanced Power Control > Hibernate Timeout](#)). Press the **Power Off** button and select **Yes** to switch the unit off. Switch the unit back on and check the software has been installed by going to [MAIN MENU > Settings > About](#).
- **Unit is slow/freezing:** Make sure you have the latest version of the software (download available from our website). It is a good idea to reset the trip log, ([TRIP LOG > Menu > Reset All](#)) as it uses up memory on your unit. Make sure you back up any data beforehand. You can also reset all the settings to the factory default ([MAIN MENU > Settings > Default > Yes](#)).
- For further assistance or additional queries please contact our technical department on **+44 (0)845 873 0101**. Please also check our FAQs on www.satmap.com.

22. Glossary

Active map. The map on a card which is in use (multiple maps can be on one SD card).

Active route. Shown as a highlighted yellow or blue line to follow on the map with red arrows between waypoints.

AOI. An Area of Interest. Consists of a series of points making up an area of any size or shape. Can be used to measure an area on a map, mark various areas of interest, or as an alternative to the circular POI warning radius.

Arbitrary reference point (for AOIs/LOIs/Grids) Automatically generated (set) point within or on an AOI/LOI/Grid. It is used as a reference point in the following instances:

- As a GoTo point
- As a 'POI' in data boxes
- When using the Pointer
- When using the **Centre on Map** button

This reference point can be moved to any new location by using the **Edit Location by Map** option.

Asc. Abbreviation for ascended height.

Ascents. Positive changes in elevation.

Atomic clock. A type of clock that uses microwave signals emitted by electrons as its timekeeping element. It is the most accurate time standard and is used to control the frequency of GPS satellite signals.

Bearing. Direction from one object to another.

CEP (Circular Error Probability). Determines the radius of a circle containing 50% of the GPS readings.

Cross Track Error. The difference in distance between a planned route and your location.

Data Box. A white overlay box that appears in the lower half of the map screen. Shows customized information about your trip, environment and map objects. Available as a 2 or 4 box layout.

Descents. Negative changes in elevation.

EGNOS. The **European Geostationary Navigation Overlay Service** has been developed by the European Space Agency (ESA) for safety of air navigation. It is part of the Galileo project. When a signal is available (which is only in the south of England and mainland Europe), this signal improves the accuracy of signals from the GPS system.

Electronic compass. Uses magnetic fields to calculate accurate compass bearings whilst stationary.

ETA. Estimated Time of Arrival. The ETA is calculated from the average moving speed if it is available (see Trip Log). Otherwise the set speed is used. For example if you have no lock but the unit previously recorded an average moving speed which has not been cleared from the trip log, the ETA will be based on this average moving speed.

Explorer. 1:25 000 Ordnance Survey map.

Galileo. A planned global navigation satellite system, being built by the European Union and European Space Agency as an alternative for the US Global Positioning System (GPS) and the Russian GLONASS system. The project is expected

to be completed in 2013.

Geocaching. An outdoor treasure hunt activity using a GPS to locate hidden containers, ('geocaches'). Often called a "game of high-tech hide and seek", coordinates, along with other details of the location, are posted online. Download files onto your computer from geocaching.com and use SatSYNC to import them to the Active 20.

Geotagging. Photos are labeled or 'tagged' to show where they were taken. Date/time information from the photos is matched with the location information from the GPS unit. (Use the geotagging application in SatSYNC).

GLONASS. A space-based navigation system comparable to the American GPS system. Developed by the former Soviet Union and now operated for the Russian government by the Russian Space Forces.

GoTo point. A set point which acts as a target. It is on a straight line from your current location and the route (yellow or blue highlighted route with red arrows between current location and GoTo point).

GMT (Greenwich Mean Time). The local time at the 0 meridian passing through Greenwich.

GPS. The Global Positioning System is the only fully operational Global Navigation Satellite System in the world. Created in the US it utilizes a constellation of 24 Medium Earth Orbit satellites that transmit precise signals. The system enables a GPS receiver to determine its time, location, speed and distance.

GPS 'compass' Relies on a GPS signal to determine the direction of travel from two locations and calculate accurate compass bearings whilst moving. Need a GPS lock.

22. Glossary (Cont...)

Grid. A group of square-shaped AOIs (Areas of Interest) in a large square/grid formation. Used to split an area into searchable pieces by overlaying a 10 x 10 square grid onto a map (each AOI covering 300m x 300m).

Grid Magnetic Angle. The horizontal angular difference between Grid North and Magnetic North. It is this angle which needs to be applied when converting between magnetic and grid bearings.

Grid North. The direction of a grid line which is parallel to the central meridian on the national grid.

Heading. Direction you are traveling.

Hibernate mode. An ultra low power state giving significantly extended battery life and a rapid satellite acquisition.

Inactive route. Shown as a gray highlighted line on the map (only if you have made it visible).

IOI. An Item of Interest. A non geo-referenced document including digital information saved on the unit that contains no latitude or longitude data. Used to reference instructions, or contain a graphic showing information. Can be created directly on the unit as a simple text description with details of the IOI shown on the description screen.

Knot. One nautical mile per hour.

Landranger. 1:50 000 Ordnance Survey map.

LOI. A Line of Interest. Allows you to plot a line consisting of multiple waypoints joined together, instead of a single POI (Point of Interest). Cannot be followed or activated like a route, but used to represent boundaries or alternative routes and to customize your map.

Magnetic North. The direction indicated by a magnetic compass. Magnetic North moves slowly and is currently West of Grid North in Great Britain.

Marker. A red flag on the map from which you can measure distance and bearing from any other point on the map.

Meridian. A line of longitude.

MGRS. Military Grid Reference System, used by NATO countries. It is derived from the UTM grid system but uses a different labelling convention. It does not describe a point, but rather an area.

Mil-radians. The military use mil-radians (short for milli-radians) because breaking down a circle into 6400 mil-radians rather than 360 degrees allows greater accuracy.

Nautical mile. Distance corresponding to one minute of arc of latitude along any meridian, 1852m. A mile ('statute mile') is 1609m.

OOI. An Object of Interest. A collective term for all 'points' of interest – POI, AOI, LOI Grids, IOI. OOIs can include rich text and pictures.

Ordnance Survey (OS). Mapping provider for

Great Britain.

POI. A Point of Interest. A point on a map linked to geo-referenced data (latitude/longitude), displaying text or images with information about that point (e.g. hotel, restaurant, viewpoint, historical site, etc).

Primary screens. Eight main screens that give you access to the key GPS features: GPS MAP, PLANNING, POSITION INFO, TRIP LOG, MAIN MENU, COMPASS, SHARED DATA, GPS STATUS.

Rangefinder, The distance from your location to a given point.

Route. A route is shown on the unit as a series of transparent yellow or blue lines going from waypoint to waypoint (with red arrows between waypoints). A route may be planned either on the unit or on a computer, and it may also be a converted trail (known as a 'track').

Satellite. A GPS satellite used by the NAVSTAR (Navigation Signal Timing and Ranging Global Positioning System (GPS)). The first satellite in the system, Navstar 1, was launched February 22, 1978.

SBAS. Satellite Based Augmentation System, is a series of a small number of special satellites sending correction data to the other Satellite Systems, of which WAAS and EGNOS are part.

SD Card. Secure Digital card (1MB – 4GB). SDHC is Secure Digital High Capacity (4GB – 32GB) card, which has a different internal format. In the manual these are also referred to as mapcards since they are pre-loaded with digital mapping.

22. Glossary (... cont)

Soft keys. Buttons with functions that vary depending on the screen displayed.

Target speed. The speed on which Estimated Time of Arrival calculations are based if there is no GPS lock, or there is a GPS lock and you are stationary.

Toggle function. Allows users to select which map they want to view at a particular point without changing the zoom level. Only possible if you have a toggle-enabled map card with map layers of the same area.

Toggleable maps. Map cards that have been toggle-enabled, i.e. contain more than one scale or map type of a particular area, and can therefore be used with the toggle function. Toggle-enabled map cards are available from our website. Older maps can also be converted to enable toggling via the Toggleable Map Service.

Total Ascents. Sum of all the positive changes in elevation.

Total Descents. Sum of all the negative changes in elevation.

Track. A track is a trail that has been converted. It effectively becomes a route (.map file) which can then be exported as a GPX or KMZ file for viewing on online planning software, e.g. Google Earth.

Trail. The path taken, leaving behind a snail trail.

Trail Up. The map is orientated to match the ground

ahead of you.

Trip Log. Records trip data.

True North. The direction along the earth's surface towards the geographic North Pole.

uBLOX Max M8. This is the version of high-precision GPS chipset installed in the Active 20.

UTC (also GMT and Zulu Time). The worldwide standard for time is coordinated universal time, abbreviated UTC. This was formerly known as Greenwich Mean Time, GMT. UTC is a high precision atomic time standard also referred to by the military and civil aviation as Zulu time (Z). The abbreviation is a compromise between CUT (Coordinated Universal Time) and TUC (Temps Universel Coordonné).

UTM. The Universal Transverse Mercator coordinate system is a grid based method of specifying locations.

VMG. Velocity Made Good is the effective velocity towards a target, after the effects of crosswinds (especially relevant to aircraft), currents (watercraft) and terrain (walkers/cyclists who have planned on walking at a certain speed) have taken effect. It is the forward component of velocity.

WAAS. Wide Area Augmentation System. This is a GPS augmentation system in the U.S. which enhances the accuracy of GPS.

Warning Radius. Distance at which the unit will sound beeps indicating the vicinity of a POI, GoTo point or a route.

Waypoint. Set of coordinates that identify a point on the map and make up a route ('route points').

Waypoints are usually placed at turns in the path or where the path changes.

Disclaimer: Satmap Systems is not liable for damages and injuries caused by improper use or fitting of the device. Subject to technical changes and errors. Satmap does not disclaim any statutory rights relating to faulty or misdescribed goods that cannot be disclaimed under applicable law. Translations into languages other than English are provided for information only. In the event of any confusion, the English text is the controlling language. Please note: Product specifications are liable to change without notice.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.



active 20

THE ULTIMATE SPORTS GPS

Full User Guide A20

Software v3.11.671 (Jan 2018)

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