# Table of Contents

**Foreword**

**Part I Introduction**

1. In the Box ................................................................. 2
2. Charging the battery ............................................. 3

**Part II Getting started**

1. Getting to know Oudie 4 ........................................ 5
2. Turning Oudie 4 on and off .................................... 6
3. Updating your Oudie 4 ........................................... 6
4. Running Oudie 4 software for the first time .......... 9
5. Using vario .............................................................. 12
6. Copying files to Oudie 4 ....................................... 13
7. Learning to use Oudie 4 ......................................... 14

**Part III How to**

1. Using Profiles ......................................................... 16
2. Set takeoff altitude .............................................. 18
3. Manage airspace warnings .................................. 20
4. Using Thermal Assistant ....................................... 22
5. Entering and flying the tasks ............................... 24
6. Flying with the FAI Triangle Assistant ..................... 39
7. Finish flight ........................................................... 42
8. Connect to the internet ......................................... 43
9. Share your profile .................................................. 46

**Part IV Map page**

1. Cursor info .............................................................. 50
   - Waypoints .......................................................... 50
   - Airspace .............................................................. 51
2. Glider position ...................................................... 52
3. Arrow towards the North ................................... 53
4. Wind vector .......................................................... 53
5. Vector map ............................................................ 53
6. Airspace warning .................................................... 54
7. Navboxes .............................................................. 54
8. Animation speed ................................................... 55
9. Command bar ......................................................... 56

© 2003 - 2016 ... Naviter d.o.o.
Index 149
Part I
1 Introduction

**Oudie 4 version 7.2**

Company Naviter is dedicated to solving glider pilot’s problems and Oudie 4 is one of the answers in this challenge. It’s intended use is helping para-glider, hang glider and other pilots navigate during leisure, cross country and competition flights.

Oudie 4 is a Personal Gliding Assistant which aims at providing everything a glider pilot needs in one simple package. For this reason Oudie 4 have big bright sun readable screen, excellent vario and a large battery which is powerful enough for more than twelve hours of flying. Vario and Navigation software, maps and airspaces for Oudie 4 are already preinstalled. You can literally take it out of the box and launch.

Oudie 4 works great in combination with other Naviter products such as SeeYou for the PC, Soaring Spot and others. It was designed to answer the question which was most frequently posted to us as "Why do you not build the device for paraglider and hang glider pilots?"

Naviter is a Slovenian based software company. We focus on highly featured and easy to use software for glider pilots. The needs of paraglider, hang glider and sailplane pilots worldwide are what we are interested in.

Naviter d.o.o.
Planina 3
4000 Kranj
Slovenia
email: info@naviter.com

All rights reserved by Naviter d.o.o. 2003-2016

### 1.1 In the Box

The Oudie 4 is delivered with pre-installed Oudie 4 software and world-wide vector maps (topographical data, ground elevation data, cities, rivers, lakes, roads, etc.). Airspace and Airports files for much of the world are also pre-installed. Your Oudie 4 was delivered in a package with the following items:

1. Oudie 4
2. Protective case
3. Getting started manual
4. SeeYou Trial CD
5. Universal Wall Charger (110-220V)
6. Car Charger (12V)
7. USB Cable
8. Velcro tape for easy installation
9. PDF Manual on the CD
10. 2 pcs Naviter stickers
11. USB charger cable
1.2 Charging the battery

There are several ways to charge Oudie 4 powerful internal battery:

- Connect the universal wall **Quick charger** cable to AC 110-240 V power source and insert the connector to the Oudie 4.

- Connect the **car charger** to the DC 12-24 V source and insert the connector to the mini USB slot on the Oudie 4.

- Connect the Power and Serial data cable to DC 12V power source and insert the USB connector to the mini USB slot

- Connect the USB cable to an external Power Pack battery via USB quick charger cable.

The Charging light indicates charging status of the Oudie 4. Green light means that the device's internal battery is fully charged. Orange light indicates that the battery is charging and blue light indicates that the Oudie 4 is connected to computer.

Fast charge with the universal wall Quick charger take about 6 hours to fully charge the Oudie 4. Slow charge will take about 10 hours to fully charge the battery.
Part II
2 Getting started

This topic wants to cover some of the basic things you need to know about how to use your Oudie 4. If this is the first time you are using Oudie 4 please take a few moments to read about the basics about how to use Oudie 4:

- Getting to know Oudie 4
- Turning Oudie 4 on and off
- Upgrading firmware
- Running Oudie 4 software for the first time
- Using vario
- Copying files to Oudie 4
- Learning to use Oudie 4
- Using profiles with Oudie 4
- Entering the task
- How Airspace warning works
- Flying Assigned Area tasks
- Flying with the FAI Triangle Assistant
- Using Thermal Assistant

2.1 Getting to know Oudie 4

1. Power On/Off button
2. Power indicator
3. Earphone jack
4. microSD card slot
5. Charging light
6. Quick charger port
7. Mini USB port
8. Stylus
9. Speaker
10. Reset key
2.2 Turning Oudie 4 on and off

To turn the Oudie 4 ON press the power button for 1 second. In order to prevent turning on the device by accident you have to press the confirm button in five seconds.

To turn the Oudie 4 OFF go to Menu > Next > Exit > Yes. Once Oudie 4 software is turned off, press the power button for 1 second while the device is running then choose the desired action:

- **Power Off**: will stop the navigation and turn off the device. You should do this before long term storage. Battery should be at least 50% full before you store it for a long time.

- **Sleep**: will turn off the screen, GPS, Bluetooth and power down the processor. The navigation will be put on hold and the battery will drain very slightly. After switching back on you are ready for navigation in just a few seconds. You should use the Sleep function when you are waiting to launch and want to conserve the battery for example. It’s ok to use Sleep over night as well. The battery drain is negligible.

- **Cancel**: will do nothing and return focus to navigation.

To reboot press the reset button on the back of the device.

See also: [Getting to know Oudie 4](#)

2.3 Updating your Oudie 4

Keep your Oudie 4 updated at all times with OudieUpdater.

OudieUpdater is a very simple, amazingly effective software. It will help you keep your Oudie 4 updated with latest versions, airspaces files and maps at all times.

On windows it installs into the tray, sits there quietly until there is something you need to know. That’s all! Press the buttons when there is something to update and keep your Oudie updated at all times. Just look out for this message:

Click on message and OudieUpdater will show up:
How it works?

Please download and install OudieUpdater on your PC: [http://download.naviter.com/OudieUpdater/ousetup.exe](http://download.naviter.com/OudieUpdater/ousetup.exe)

1. To update Software, Airspace or Maps press buttons by side and wait until copying of all files is completed.

2. Disconnect Oudie 4 from PC.

3. Reboot Oudie 4 with restart button on the back side.

4. Wait until it boots into an Update dialog box.
5. Press "Update" and wait until the process is finished.

If you need to check your Oudie 4 software version go to: Menu > About > Oudie 4 (Ver 7.2).

2.4 Running Oudie 4 software for the first time

When you turn the Oudie 4 on for the first time or after a reset, navigation software is started automatically.

Create new profile
Oudie 4 has pre-installed two templates for profiles:
- XC,
- RACE.

Choose one of them to add new profile to Oudie 4. One application for several profiles is when you fly different paragliders and need different setups for them (Competition flying - RACE template, XC flying - XC template, etc...). When there is more than one profile available, you get to choose it when startin the
application for the next time.

Select template dialog:

![Select template dialog]

**Language**
Select language which you would like to use on Oudie 4 and confirm this by tapping on the Select button:

**Region**
Select region in which you are going to fly and confirm this with Select button:

**Connecting to the GPS**
When the navigation device is turned on for the first time or after a long period of non-use, initialising the integrated GPS receiver can take up to 40 minutes. Optimal conditions for problem-free and fast GPS receptions are: having a clear view of the open sky, no high buildings immediately close by and remaining in one place until the GPS position has been determined. The Navbox icon on the upper side of the map will show you the GPS status (by default - you can change the navboxes later).

**Map** with symbols
This is where you will be looking for information all the time. You can do many things on the Map page:

You can move the map by dragging it. It will return to the position of the glider after 10 seconds automatically or by pressing the Map orientation symbol.

You can move the Navboxes around the map to place them where you need them.

You can also tap on any symbol to bring up additional dialogs for:
- Map orientation by tapping on upper (North) arrow,
- Wind by tapping on the Wind vector,
- Map zoom by tapping on the Zoom button,
- Pan mode is a special mode where you can freely move around the map to explore some details along the course.
- Move the glider if you tap on the glider.
- Moving on Map 2 by tapping on the Map 2 Navbox.

Tapping on a waypoint on the map gives you a list of Airspaces and Waypoints. Waypoints are sorted on distance from the tap. This is a quick way to select a waypoint from a group of waypoints.

The Navboxes are what you will use to display the information you need. Be at waiting for Start gate, Final glide, Navigation, Optimization or another issue, use Menu > Navboxes to select which items you want displayed.
**Command bar**

holds 2 shortcuts to specific actions. In addition to the Command bar, actions are also assigned to any hardware buttons on the Pocket PC. You can select which buttons do which actions through **Menu > Settings > Commands**.

The default actions for software buttons from left to right (Command bar) are:
- **Zoom**
- **Menu**

Try the functions of these buttons.

See also: **Getting Started**

### 2.5 Using vario

Oudie 4 is now assisted by inertial sensors (gyros, accelerometers and magnetometers). Contrary to our initial expectations the inertial vario – when done right – is a real benefit and does provide additional information to pilot through its instantaneous response without being nervous or too sensitive.

You can control the audio settings of the vario on the **Menu > Settings > Vario** page. We went into a lot of trouble fine tuning the vario sound. Make sure to try the default settings in the air before you change them.

You can control the size and position of the Vario Symbol on the map. Simply drag it on the screen if you wish to move it to a new position. Go to **Menu > Settings > Symbols > Vario** to change it size and appearance. You can choose from two different shapes for the vario, its transparency, size and more. Once you finished with selected settings you can also ?lock? vario position: **Menu > Settings > Symbols > Vario > Do not allow drag (remove checkmark) > OK.**

If you want to remember this setting, please save the profile with **Menu > Next > Save Settings > Save Profile > Yes.**
Red symbol is average vario for last circle in thermal. Blue symbol is last (current) thermal vario. Practically is very useful to see when you climbing if thermal is increasing (red diamond is above blue T) or decreasing (red diamond is below blue T).

2.6 Copying files to Oudie 4

Copying files on the Oudie 4 similar to Upgrading the firmware. Just copy files in the root of your Oudie’s 3 Resident Flash memory when connected to PC with the supplied USB cable.

If you need more instructions this is the whole procedure:

1. **Connect your Oudie 4 with PC** using the USB cable which was supplied in the box,
2. Once connected, **tap "Connect to PC"** or the USB Stick icon on Oudie 4,
3. You should now see Oudie 4 as an **external Mass Storage drive on your PC** (named TFAT),
4. **Copy Files** to the root or folder on your Oudie 4 device,
5. Once you finished copying files Safely remove your Oudie 4 from the PC software.
6. **Disconnect** Oudie 4 from PC and run the Oudie 4 software.
7. Then go to Menu > Settings > Files > Waypoints > "..." > Select your waypoints file > press Active and close all dialogs with OK.

8. We strongly recommend that you remember this setting with Menu > Next > Save Settings > Save Profile > Yes.

See also:
Getting Started

2.7 Learning to use Oudie 4

There are two recommended ways to learn how to use Oudie 4 before you get airborne.

File replay
This is by far the most efficient way to learn Oudie 4 software. What it does is it replays an already flown flight and enables you to see the data you would have been looking at if you had Oudie 4 with you on the particular flight.

In order to set this up, copy some of your flights from the desktop PC to your device. Then go to Menu > Settings > Input, then change input to "File". Press the "..." button and choose a flight you wish to replay. Now use the buttons to change Waypoints, MacCready and pages. Tap on the screen to see what happens and setup Navboxes to what you want them to be. Note that you can setup Navboxes separately for each of the two Map pages.

If you wish you can replay your flight as well directly from Logbook: Menu > Next > Logbook > select flight > Tools > Replay flight.

Simulator
In the Simulator input mode, you can move the glider freely even without a prerecorded flight which enables you to go places you haven't visited in the air yet. To move the glider, tap on it, then drag a line out of the glider in the direction you want it to move. The longer the line, the faster it will go in the specified direction.

By learning how to use Oudie 4 software on the ground you will have more time to think about gliding, task and scenery in the air. It is warmly recommended.

See also:
Getting Started
3 How to

3.1 Using Profiles

If you feel no need to use more than one set of Navboxes or fly more than one type of gliders ignore this feature and go read the next chapter.

If however you fly several types of gliders at different locations you are likely to be fed up with changing the polar, terrain, waypoint and airspace files each time before the flight. Profiles were added in Oudie 3 software. You can have separate setups for each of your gliders or type of flying. Here’s how it works.

1. When you first ran Oudie 4, a Default profile was created. Anything you have changed in the application was stored to this profile. Now comes a day when you fly the another glider with a significantly different polar than the one you have used previously. To avoid entering the polar, header and hardware data each time you go fly this glider, you may create a new profile by going to Menu > Settings > Miscellaneous and click the “Add Profile...” button.
2. You get to choose to either
   - Copy current profile (which makes an exact copy of your current settings),
   - Create a new profile (which creates a copy of the default settings).

You may give the new profile a name according to what you are going to use it for. Be it "RACE", "XC" or "Hike and fly glider".
3. Next time you start Oudie 4 you will have two (or more) profiles to choose from. You have 10 seconds to select a profile. If you do nothing, the profile you used last is loaded.

4. After you have loaded the profile for the first time you will want to set it up according to your preferences. Here is a handful of settings you will probably want to change before use:
- Links to Terrain, Airspace and Waypoint files
- Pilot name and Glider type settings
- Navboxes for Map1
- Navboxes for Map2

Note: Switch Profile is not featured in Oudie 4 Basic.

See also:
- Getting Started

3.2 Set takeoff altitude

Setting the takeoff altitude correctly could be the difference between a successful and a frustrating end of the flight.

The altitude in the Oudie 4 is recorded at the standard pressure of 1013.25 hPa. In order to know you current altitude above mean sea level and your current flight level altitude the altitudes need to be corrected to correspond with the real world.

There are several ways how the Oudie 4 can correct the takeoff altitude. It will typically assume that the pressure recorded by the pressure sensor is relative to the standard atmosphere pressure of 1013.25 hPa (but it is even possible to correct for that, see below). It is quite possible to correct the altitudes to QNH automatically with the data which is already available on the Oudie 4. If you get the information from an external source (such as the ATC tower or the competition task sheet) then it is possible to enter the values manually as well.
In order to correct the takeoff altitude you need to go to Menu > Vol & Alt. dialog.

By default the Auto QNH checkbox is checked. Auto QNH will try to correct the takeoff altitude to your current altitude by searching for a nearby airport or by using the Ground elevation at your location or (if all else fails) using a very much averaged GPS altitude (but the latter is only a fallback and should not normally happen since there is a worldwide terrain database already installed on each Oudie 4). Auto QNH setting will give you a very good idea about the current pressure level and it works automatically without your input.

If you want to change the altitude manually you should disable the Auto QNH navbox and enter the takeoff altitude manually. If the Linked checkbox is checked (which it is by default) then the pressure level will increase accordingly.

Typically in a competition you could get a complete set of data from the competition organization. In this case remove the Auto QNH checkbox AND the Linked checkbox. Enter the takeoff altitude AND the QNH pressure given from the competition then press ok. This way you will see exactly the same altitudes during your flight as the ones that you will be scored by later in the evening. DO NOT set the "linked" checkbox back in this case because it will change the pressure level back to the "linked" value.
3.3 Manage airspace warnings

Avoiding forbidden airspace is often just as important as navigating in general. It can however be much trickier than finding the right valley since the airspace structure is very abstract and often complicated. Oudie 4 will be your best friend if you use the whole potential of what it's got to offer.

1. Airspace Warning

The first stage - let's name it the Airspace Warning - is often merely informative. The screen will display an orange banner at the top of the page and highlight the airspaces you are about to encounter. It will also display a line with distances from your position to the nearest position of each airspace you are about to encounter. And it will beep briefly.

You get to choose to turn the airspace warning off for the airspace which is listed in the banner. You can turn it off for either
- Today - until next takeoff,
- 5 minutes - note that this number is user selectable through Menu > Settings > Warnings,
- Ignore - for as long as you are flying towards it it won't beep again.
2. Airspace Alarm

Once you come too close for comfort an airspace alarm will sound. It gives you a red banner at the top where you can read all about the airspace in question and it will highlight the airspace in question. It will also draw the line to the closest point of the airspace and it will give you a sound alarm continuously.

You still get to choose to turn this alarm off for:
- Today - until next takeoff,
- 5 minutes - user selectable in Menu > Settings > Warnings,
- Mute - continue to display everything but stop the sound alarm.

After you have pressed Mute you can still Ignore this airspace alarm.

3. Helpful Navboxes

There are three airspace related navboxes which will give you a good overview of the airspace situation if you are familiar with what they are displaying:

1. "Nearest airspace - Horizontally" gives you the distance from your position to the nearest position of an airspace where you are not horizontally inside (i.e. you are not below this airspace yet).

2. "Horizontally nearest airspace - Altitude" gives you the altitude difference towards the horizontally nearest airspace. The altitude difference is negative if you are below horizontally nearest airspace. It is positive if you are above and "Inside" if you are about to hit the lateral borders of the airspace in question.

3. "Nearest airspace - Vertically" gives you the altitude difference towards the airspace above or below the glider. The value is negative if you are below the airspace. It is positive if you are above, "Inside" if you are already inside an airspace and "N/A" if there is no airspace at your location.

In addition to the airspaces there is also a very useful Action which can be assigned to any Navbox. It is the action "Highlight nearest airspace" and it is assigned to the "Nearest airspace - Horizontally" by default. If you touch a Navbox which has this action assigned to it, Oudie 4 will highlight the airspace in question. It will link the glider with the airspace and display the distance from the glider to the airspace.
4. Screen taps

In addition to all the above you may tap anywhere on the screen and then choose “Airspace” to quickly access the list of airspaces at the location of the tap. With this list you can quickly change the visibility of the airspaces or simply get an overview of what lies ahead. You can also change the properties of an airspace such as lower or upper limit.

With this information airspace navigation should be easy and understandable even in a rather complex airspace environment.

Read also:
- Setting up the Warnings
- Changing properties of an airspace
- Loading (multiple) airspace files

3.4 Using Thermal Assistant

Thermal assistant is a feature of Oudie 4 which should help you get centered in a lift more quickly if you decide to follow its instructions.

Thermal assistant analyses the lift in your thermal. It calculates the average and follows how strongly the vario values change in each circle.

So how does it work?

**Your job:**
- find a thermal,
- start circling,
- look outside,
- observe the thermal clues,
- observe traffic in your vicinity,
- make use of Assistant’s suggestions.

**Assistant’s job:**
- analyze the thermal,
- find the strongest lift in the circle,
- make audio and visual suggestions.

It uses three ways to catch your attention:
1. You may choose between Bubbles or a Zoomed map which shows the best part of the lift. Bubbles are disabled by default, zooming in is enabled.

2. Thermal assistant graphics is displayed if variance for displaying the thermal assistant is large enough (see Settings - Thermal). The size of the bubbles represents the amount of lift. The color of the bubble is relative to the MacCready setting. Red is better than MC, blue is more than 0.5m/s (1kts) less than MC, yellow is in between. The arrow is pointing towards the maximum of the lift in the previous circle while the length of the arrow is how “strong” the advice is to move your circle elsewhere. The arrow is longer if variance is larger.
3. **Thermal Assistant audio warning** goes off if variance is large enough (see **Settings - Thermal**). It whistles a selected amount of seconds or degrees (see **Settings - Thermal**) before the glider will reach the same part of the circle where maximum lift was reached in the previous circle.

We were not trying to develop a Thermal Wizard, just an Assistant for the times when you are tired or have better things to do than focus 100% on the thermal. It will only sound a bell if the thermal varies significantly in strength.

If you would like to display Thermal assistant regardless of the current vario variation, feel free to navigate to the Menu and press the Thermal Assistant button. During the flight Thermal assistant could be cancelled after a press on the screen even if screen is locked.

We will be happy if you continue to enjoy soaring and if you never find the need to use the Thermal Assistant at all :-)

See also:
- **Getting Started**
- **Settings - Thermal**

© 2003 - 2016 ... Naviter d.o.o.
3.5 Entering and flying the tasks

Entering the tasks by list

This is a tutorial about entering the task in Oudie 4. We have had the privilege to look over the shoulder many impressively experienced pilots who have found a very difficult way to enter a task into Oudie3.

Please read this because entering the task is just that - enter the waypoint names, set the times (Gate, Start speed section, End speed section, Task deadline) and Sector type (Line, Cylinder, FAI sector or Assigned area). No setting up of observation zones is necessary. Tutorial will focus on entering the demo task. The default one in the evaluation version of Oudie 4. The task will become a 39.9 km Race to goal in the west part Slovenia - flying site Lijak. Both Racing, Record tasks as well as Assigned Area tasks are covered.

Always start from the scratch. Menu > Task > Tools > Clear task:

Make sure the first line in the empty list is selected (if you didn't touch the screen after clearing the task, then it is already selected). Then press the "Insert" or ?Keyb? (as in Keyboard) button:
Start typing and you will notice that the waypoint name auto-completes while you are typing (note that the keyboard characters which do not make sense are disabled while you type):
Note that L and 01 keys were pressed while "058" was auto-completed. If you know your waypoint is in alphabetical vicinity of the currently auto-completed name of the waypoint, you may also use the "<" and ">>" buttons on the full screen keyboard to advance the waypoint names alphabetically. Once you have found the waypoint you were looking for, press OK.

**Edit point** dialog will open automatically after choosing each waypoint. Setup these values to fly competitions or FAI records.
Press the "OK" button again and start entering the Start Gate turnpoint's name, L01058 in this example:
Note that after entering "L" and "0" the suggested waypoint name is "L01058". If not "L01058" - Press ">>" once and you are now at "L01058". Press OK.

After you have entered the task waypoints, check that waypoint sectors once again (cylinders, lines, FAI sectors) and times are setup correctly. Note that you can choose your default Sector type settings in Menu > Settings > Task > Observation Zone > Type > Cylinder are what you wanted to use on most flights!
Entering the tasks by Map

Entering the task by Map is also useful way to set the task. It help you to make easier visualization of the task. This tool is most useful for Task comity, to easy set and plan the task on competitions. You can also quickly create a task without waypoints for your upcoming cross country flight.

As before: Always start from the scratch. Menu > Task > Tools > Clear task:
Make sure the first line in the empty list is selected (if you didn't touch the screen after clearing the task, then it is already selected). Then press the "Tools" and choose Map. Set the right Zoom to see codes of waypoints.
Unknown task

Menu

ESC     <Prev     Next>

Edit point     Delete point     Insert point

Point up     Point down     Invert task

Load task     Save task     Clear task

Options     Map

OK     Cancel     Tools     Keyb

OK     Cancel     Keyb
Now you can start adding waypoints to list. Simply tap first waypoint (B01) for a second and Oudie will automatically ask you if you want to Append point to list. Confirm this with Yes.
With tap on OK button continue with adding waypoints trough all the task. Use Pan mode to find waypoints on Map for which you’re looking for.
After you have added all the task waypoints press Tools > List. Check waypoint sectors (cylinders, lines, FAI sectors) and times once again they are setup correctly. Once you finished tap OK and your task is ready to fly.

**Start and re-start the task**

To make a re-start. Change the target waypoint back to start point. The quickest way to do it is to open the Task dialog, select start point and press Goto. Statistics will be reset, when you cross the start line again.
Note that once cylinder is reached you will not see it on the map any more.

**How to set Conical end Speed Section - CESS**
1. Set task as described above.
2. Choose End Speed Section Point.
3. Set Cone: ?None? - there is no cone, ?1:2.5? or ?1:4?... When cone is set as End speed section this observation zone is as marked with crossed lines on map page (visible also in wayponit Edit dialog - picture above).
4. OK.

**Flying Conical End Speed Section - CESS**
**Side view**

Side view is showing terrain collision from your position to the target including Airspaces, observation zone(s), Current L/D (grey line) and Required L/D or arrival altitude (purple line). You can turn it ON/OFF with Action on any Navbox. You’ll find Action name as **Toggle side view** in **Menu > Settings > Next > Navboxes > Select one Navbox > Action > Toggle side view**.
Flying the task
To navigate during the task use all of the features that are made available to you through Oudie 4 software:
- Map pages to see where you are,
- Navboxes to see the flight parameters you are interested in,
- Statistics to see what you have done,
- Airspace warning to keep yourself out of trouble,
- Goto dialog to find nearest airports etc.,
- Side view to see where to set it.

Final glide
Here's a suggestion. Flying final glides is the most comfortable when you use the Required L/D and Current L/D navboxes. What they do is they show the required L/D to the finish line and current L/D you are doing at the moment. You are on glide slope when Current L/D is higher than Required L/D. The calculation already includes reserve altitude. The nice part is that it is insensible of the MC setting, glider polar, wind calculation etc. All of them can be wrong when you try to math through the glider polar.

Current L/D however is pragmatic - it tells you what you are doing. Required L/D is pragmatic as well. It tells you what you should be doing. If Current L/D is higher than the Required one you are doing good. If it looks like you can keep going like that, you are doing great.
Have fun making those final glides!

**Go fly the task and enjoy!**

**SAVING TASK FOR LATER USE**

It is always wise to make sure you have all the data securely stored in case of an unintended outage of the device. Start from the main screen and select Menu > Next > Save Settings > tick the "Save profile" and "Save waypoints and tasks" checkboxes (if they are both enabled), then tap "Yes".

See also:
[Getting Started](#)

### 3.6 Flying with the FAI Triangle Assistant

FAI Triangle Assistant helps you complete the largest possible FAI Triangle.

You don't have to do much to use the FAI Triangle Assistant. Just turn it on and fly is how we tried to design the assistant. Here's how it works.

Turning the **FAI Assistant on or off** follows the same philosophy as toggling the Map, Waypoints, Airspace, Navboxes etc. It is controlled through the [Display Options](#) dialog.
Flying the Free FAI Triangle task

Once the FAI Area is on, you don't have to do much. You are of course required to know at least roughly which direction you would like to fly to fly a triangle. The larger the triangle you are attempting, the more you will know where to go. FAI Triangle Assistant will simply follow what you are doing. As you fly the first leg it won't yet know which way you are going to fly. That is not a problem. The FAI Area will be drawn on one side of the first leg. If you would like it to be on the other side, simply tap inside the area and it will rotate (provided that "Rotate on click" is enabled in the settings, which - by default - it is).

Once you have turned your first waypoint, simply continue to fly towards your other waypoint (or rather a larger area where you would like to turn your second waypoint). As soon as the triangle you have flown is deep enough the FAI Area changes. It is not drawn on the longest leg anymore. Instead it is drawn on the last leg you have flown. That means it is showing you the way towards the area where you will be able to turn your second waypoint and allow your whole flight to be an FAI triangle.

When you are near your second waypoint you will appreciate some help from the FAI Triangle optimization navbox, which is available through the list of Navboxes. Place it visibly on the screen to know exactly how large the triangle will be if you can finish it home. After you are happy with what you have done in your second area, head home. The FAI Triangle optimization should not change anymore, it's just about getting home.

The above example focused on an FAI Triangle which has been started from one of its corners. Flying a triangle with the start on the leg is no different. The only difference is that the second point you turn
represents the first point from the above example and the third one is the final one from which you fly home.

**Finishing the task**
An FAI Triangle is not finished unless you fly back to your start point. One finish fix within 1 km radius from another fix that occurred before turning the 1st waypoint of the optimized triangle is required to finish the task. It may be a single fix if you started your triangle in one of its corners. It is a whole series of fixes between soaring begin and the first waypoint if you started the triangle on one of its legs.

FAI Triangle Assistant also helps you identify the exact course to fly by always highlighting a 1km diameter circle around the closest available finish fix.

**Rotating the area**
Sometimes the flight requires much more thinking than the above examples. You may wish to know if your current leg is long enough already to cover Town X with the FAI Area of your current flight. For this reason you will want to rotate the FAI area from its current position. It can hardly be easier to do - simply tap on the FAI Area on the moving map and it will rotate. If you are on your first leg (or not far enough on the second), it will rotate left/right around the first leg. Once you are far enough on the second leg to make it obvious which way you are going to fly the triangle, it will rotate around the legs. All this provided that "Rotate on click" is enabled in the settings, which - by default - it is.

The FAI Area icons may also be placed on the Command bar if you wish to have quick and constant access to them in flight. There are options for toggling the FAI Area and Rotating the FAI Area under **Menu > Settings > Commands**.

**FAI Triangle Assistant preferences**
If you would like to influence the look and feel of the FAI Triangle Assistant you may do so through **Menu > Settings > OLC & FAI Area** dialog.

Example shows kilometer lines for Triangles between 80 - 120 km. If you fly into the violet area, the triangle will be an FAI triangle.
See also:
Getting Started

### 3.7 Finish flight

Oudie 4 will finish the flight automatically without needing any input from the user. Once the flight is finished and signed it will copy the flight to the micro SD card if such card is present in the Oudie 4.
3.8 Connect to the internet

It is possible to connect any Oudie 4 running SeeYou Mobile software to the internet. This is achieved by using an Android smart-phone as an internet proxy. The Oudie 4 connects to the phone through Bluetooth while the phone then connects to the internet by the any means available to the phone - typically Wifi or Data plan.

In order to connect your Oudie 4 to the Android smartphone you need to install a free app "Oudie Live" from the Google Play store.

Once you have installed the Oudie Live app please follow the instructions on the smartphone to pair the two devices. If you wish to replay the tutorial on the phone press the "?” button at the top of the screen.

Here it is:
Welcome
This is Oudie Live tutorial.
Press next to see the features.

To pair your Oudie with your phone,
make the phone visible.
Tap the icon to start the Oudie Live service.

An app wants to turn on Bluetooth and make your phone visible to other devices for 300 seconds.

Deny  Allow
3.9 Share your profile

Oudie 4's Transfer menu option enables you by far the fastest way to copy all of the existing data from one to another Oudie 4. No cables, no wireless communication is needed, just a microSD card! This means you can share your waypoints, profile or declared task with your friends on the spot!

How to do it? It is very easy:

- insert a microSD card on the side of your Oudie 4
- go to Menu>Transfer>Settings to SD card. This will transfer all of Oudie 4's data to the microSD card.
- remove the microSD card and insert it to another Oudie 4.
- go to Menu>Transfer>Setting from SD card.
- now you can choose which data and files you wish to transfer to your Oudie 4
Additionally you can transfer to microSD card all flights that are saved on Oudie 4, this way you can save all of your flight elsewhere without any cables etc.

See also:
Transfer
4 Map page

Map view is the main Oudie 4 window. It contains the following elements:

- Glider position
- Arrow towards the North
- Wind vector
- Vector map
- Flight trace
- Terrain collision
- Airspace warning
- Navboxes
- Animation speed
- Command bar

A function is assigned to each one of these elements. It is described in the chapters you will access by following the above links. An important feature of the Map page is Cursor info.

Overview of the most important features of the Map view:
There are two Map views (Map 1 and Map 2) which are setup independently from each other. Each map view can be orientated differently, have different Zoom levels, details of the map and its own Navboxes. This is useful because you can switch from an overview map.

4.1 Cursor info

A tap on the map brings up a dialog with relevant information about 
- Waypoints
- Airspace
- Task

If either of the items above is present within the Drag limit distance from the tap, such information is presented in a dialog.

4.1.1 Waypoints

If a tap on the map occurred close to a Waypoint, cursor info dialog appears with Waypoints sorted on distance from the position where the tap occurred.

You can also get a list of Waypoints, sorted on direction. Tap the screen and hold it down, then move the finger in one direction. You will get a list of points sorted on distance.
Columns are sortable in the Goto dialog. Click on the column header to sort ascending or descending on these parameters:
  . Name
  . Type
  . Crs = Course
  . Distance
  . Arrival altitude
  . Required L/D
  . Code (short name)

If you would like to change the order or size of the columns, you may drag the boundaries to change size or drag the header to change the order of the columns.

Tap on a Waypoint, then tap OK to start navigating to the selected point.

4.1.2 Airspace

A tap on an airspace brings up a dialog where you can read the information on the airspace.

By default this page shows all airspace within a certain margin around the area of your tap. You can quickly change the status of any of these airspaces by using the buttons for disabling an airspace for Always, Today, 5 minutes or turning them back on with the Activate button.
By turning on the **Show all** checkbox all airspace from the airspace file is listed. This helps you turn remote airspaces on or off. It also helps you to turn several airspaces off quickly. Note that Multiselect feature works in this dialog meaning that you can select as many airspaces as you wish.

### 4.2 Glider position

The symbol always represents the current position of the glider. The nose of the symbolic arrow is pointed in the direction of the movement of the glider.

Tap and hold aircraft symbol to move its current position. You will want to do that if you wish to have a different view of the map.

You can choose several sizes glider symbol through Menu > Settings > Symbols.
4.3 **Arrow towards the North**

Map orientation on Oudie 3 is not always "North up". It can be anything, therefore the North arrow is always pointed in the direction of true North. By tapping the North arrow a menu will open up where you can select any of the other possible Map orientations.

North, East, South and West Up, will rotate the map so, that the selected orientation is towards the top of the screen.

Goal Up will put the direction of the Selected Goto Waypoint to the top of the screen. Track Up will put the direction of the current track towards the top of the screen.

When panning the map freely, the arrow gets a caption "Pan mode". Tapping once on this symbol returns the view back to the glider and original map orientation.

See also: Map orientation

4.4 **Wind vector**

The wind vector gives you a graphical and textual orientation about the wind at current height. The new sensors (and clever use of the Kalman filters if you like) allowed us to improve wind prediction considerably. In the best case scenario Oudie 4 will give a useful wind estimate already after a single 180 degree turn on the ridge. It also works at wind speeds higher than your airspeed. Additional turns make the prediction better of course. There is even lots of room for improvement of this in the future.

A tap on the Wind symbol will open the Wind dialog. You can also access it through Menu > Wind.

4.5 **Vector map**

Oudie 4 uses the CIT maps to display terrain and topographic features. These are the same maps also used in the desktop version of SeeYou. Maps for the whole world are preloaded on Oudie 4 already. Just turn it on and you will have a map.

Map preferences can be setup through the Setup Map dialog.
4.6 **Airspace warning**

Oudie 4 tries to estimate your position in the future and give you comprehensive warnings before you enter airspace.

Please read [How Airspace warning works](#) from the Getting Started chapter.

4.7 **Navboxes**

Oudie 4 supports several Navigation boxes. You have full control over which Navboxes you wish to display, how large they should be and where they should be located.

Navboxes are setup separately for Map 1 and Map 2 views. That is because normally you will want to use the two map views for two different reasons. One could be general navigation while the other one is approaching the waypoint where details are important. You will require two different settings for which Navboxes should be displayed in these conditions.
4.8 Animation speed

When in File reader mode, you can control the speed and position of the airplane symbol by jumping around the replayed IGC file. Tap on the black animation rate box (5x) to open this dialog.

Pause button will pause the animation
Rate box controls the speed of the animation. The higher the number, the faster animation, the slower refresh rate for the Map page. Pocket PC reaches its limits here.
Slider allows you to quickly jump to a point within the flight.
4.9 Command bar

The bottom line of Oudie 4 window is the Menu. It is optional (it can be disabled through Settings > Miscellaneous).

What it does is it adds 5 more shortcut buttons available in addition to all the hardware buttons on the Oudie 4 device. You can setup what each of the buttons in the Menu does through the Settings > Commands dialog. Change the actions for Toolbtn1 and Toolbtn2.
Part V
5 Information page

This page gives you some very general information about your position. Use it to report your landing position or check if everything is setup OK.

The Status panel gives information about GPS and additional pressure data if they are available. Something like GTWAV may be listed after the GPS status message where
- $G =$ Groundspeed from GPS
- $T =$ Track heading from GPS
- $W =$ Vario from a pressure sensor source
- $A =$ Pressure Altitude from a pressure sensor source
- $V =$ True Airspeed from a pressure sensor source

Position panel shows present position (also in UTM coordinates format), local date and time.

Altitude panel shows Altitude QNH, Flight Level altitude and Height over ground.

Sunrise and Sunset panel shows local sunrise and sunset (UTC Offset must be set correctly).

<table>
<thead>
<tr>
<th>Status</th>
<th>(Battery: Chrg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPS:</td>
<td>Last fix, GT</td>
</tr>
<tr>
<td>Position</td>
<td>N43°19'10&quot; - E020°37'57&quot;</td>
</tr>
<tr>
<td></td>
<td>34T 0470212E 4796351N</td>
</tr>
<tr>
<td></td>
<td>8/29/2014 2:02:52 PM</td>
</tr>
<tr>
<td>Altitude</td>
<td>Alti: 447m 1466ft</td>
</tr>
<tr>
<td></td>
<td>Fl.Level: 447m 1466ft</td>
</tr>
<tr>
<td></td>
<td>Height: 18m 58ft</td>
</tr>
<tr>
<td>Sunrise &amp; Sunset</td>
<td>5:58:48 AM - 7:16:51 PM</td>
</tr>
<tr>
<td>Info</td>
<td>Battery: 3.89V, Power: -341mA, -1326mW</td>
</tr>
<tr>
<td></td>
<td>Board info: 1.22, AUG 6 2014 10:09:38</td>
</tr>
<tr>
<td></td>
<td>Up time: 297s</td>
</tr>
<tr>
<td></td>
<td>Backup battery: 4.66V</td>
</tr>
<tr>
<td></td>
<td>PK Status: GOALBD</td>
</tr>
<tr>
<td></td>
<td>Event counter: 0</td>
</tr>
<tr>
<td></td>
<td>ENL filter: 0</td>
</tr>
</tbody>
</table>
Part VI
6 Statistics page

The statistics page gives you detailed information on Thermals and the flight. To change the content of the statistics pane, tap on it to switch between:

- Flight statistics
- Task statistics
- last 60 minutes statistics

**Thermals** panel graphically displays the last four thermals where the left most is newest. At the top of each bar you can see the Thermal average. The height of each bar represents the entrance and departure from each thermal relative to the other four. The number on the right is average for the last four thermals. Use it for your MacCready setting if you wish.

**Flight statistics** gives averages for the Lift, Average speed, Distance flown, circling percentage and duration of flight. Distance is the same as Optimized distance in the "Opt" navbox.

**Task statistics** gives averages achieved since the start of the task.

**Last 60 minutes statistics** gives averages achieved on the Race to goal task or the Optimized task in the last hour.

You can press the "Back" button to get back to the last map page you have used before Statistics.

---

**Thermals**

```
+1.6  +1.7  +2.0  +1.9
```

**Flight statistics**

```
<60 mins.  Task>
Avg.vario: 1.8m/s
Avg.speed: 19.6km/h
XC speed: 32.6km/h
Dis.flown: 4.40km
Circling: 43%
Duration: 0:13:27
```
7 Menu

The menu offers shortcuts to many features a pilot will want to access quickly. Buttons are large and well readable. There are two pages of the menu located one next to the other:

Page 1:
- Esc
- Prev and Next
- Settings
- Display Options
- Screen Lock
- Map orientation
- Exit
- Zoom
- Volume & Alt.
- Goto
- Task
- Next Map
- Info page
- Statistics

Page 2:
- About
- Save Settings
- Thermal Assistant
- Switch Profile
- Add Waypoint
- Wind
- Logbook
- Transfer

Note that this is the default order of the Menu. It can be changed through the Settings > Menu dialog.
7.1 Esc

The **ESC** button in the menu returns the view back to Map view.

```
ESC  <Prev  Next>
```

7.2 < Prev and Next >

These buttons show the next and previous page in the Menu.

```
ESC  <Prev  Next>
```

7.3 Settings

The Settings button in the Menu opens the **Settings dialog** where all of the preferences of Oudie 4 can be setup.
Note that some settings like Map and Navboxes are separate for Map 1 and Map 2 views while others like Units, Commands etc. are unique through the whole application.

7.4 Display options

You can control what is visible on the Map page. All items which can be made visible or invisible on Oudie 4 are listed in this dialog:
7.5 **Screen lock**

Screen lock dialog will locked the screen. It’s very useful to lock it during the flight. Some action Navboxes like: Zoom in - Zoom out, Previous- Next turnpoint on task will still works.

Tu unlock the screen press the Menu button and confirm this by clickin on the upper side of screen. See screenshot below:
7.6 Map orientation

Opens a dialog which lets you choose from these different map display options:

- **Circling North** map is turned heading up in straight flight and north up when circling. This is the recommended orientation for those who don't want to fly North up
- **North Up** where top of the display is always true North,
- **East Up** where true East is at the top of the screen,
- **South Up** where true South is at the top of the screen,
- **West Up** where true West is at the top of the screen,
- **Goal Up** sets up the display so, that the point you are navigating to is always at the top of the screen,
- **Track Up** puts your current track towards the top of the screen,
- **Heading Up** puts your current heading towards the top of the screen. Heading is calculated by subtracting Wind vector from the Track vector.

- **Pan mode** is a special mode where you can freely move around the map, zoom in, zoom out and rotate the map to explore some details along the course.

To move around the map in Pan mode you simply drag your finger over the screen and the map will follow your finger. To rotate the map drag your finger in the bottom 10% of the screen left/right. The map will again follow your finger, but this time it will rotate around the center point of the screen. If you will not move map in Pan mode for 10 seconds the Map orientation will change back to what it was before you started to pan.

There is a shortcut for this dialog if you tap with your finger on the North Arrow indicator.
7.7 Exit

Pressing this button quits the application.

Before you exit, the program will ask you whether or not you wish to:
- save the current profile changes
- save changes to the waypoints and tasks
- save changed or added Flarm aliases
- Finish the flight by signing the IGC file with SeeYou G-record

See also:
North arrow symbol

Oudie 4
7.8  Zoom

The Zoom dialog lets you choose from several predefined values (depending on the units). The value represents the width of the Oudie 4 window.

0.1km, ... 2km, 5km ... 35km, 50km ... are fixed zoom settings. Setting represents the width of the Map window. Depending on the units, it can be in either kilometers, statute or nautical miles.

Target is a special kind of Zoom where the application determines what width of the Map window to use to keep the target and the glider on the screen all the time.
7.9 **Volume & Altitude**

This menu item opens the Flight Properties dialog box which lets you enter:
- Take-off altitude,
- QNH,
- MacCready setting,
- Altitude reserve,
- Volume.

**Take-off altitude**
By changing this setting you can change your take-off altitude. Setting up this value correctly is essential for correct final glide indications. When there is a waypoint or the terrain map with elevations in vicinity, there is a suggestion at what to set up in the top line of this dialog.

Auto QNH will take the best possible guess at what your altitude is and use that as your QNH setting. In
order for this feature to work reliably please remember to turn the Oudie 4 on at least 3 minutes before takeoff.

**QNH**
By changing the QNH value you can change the pressure at start or change the QNH in flight to correct the change in pressure.

**MacCready**
You can setup the MC setting here. The optimum value for the MC setting can be derived from the statistics page and other Navboxes.

**Altitude reserve**
All final glide calculations are subject to correction of the altitude reserve. If this value is greater than 0, then your arrival altitude to the waypoint will be this much above the altitude of the waypoint elevation from the waypoint database (this may not be its actual altitude, so use at own risk, needless to say).

**Volume**
This property is used for changing the Vario volume.

**Vario mute**
You can mute Vario here - all other sounds will work, except vario.

**Use GPS altitude for calculations**
Add checkmark and Oudie will use GPS altitude for all calculations.
7.10  Goto

The goto dialog allows you to select the "Navigate to" point quickly. There are several ways to access this dialog:

**Tap on the map**
Brings up the Goto dialog. Waypoints are sorted on distance from the point where the tap happened on the Map screen. This way it is easy to select the waypoint you were trying to "tap" even though you couldn't tell them apart in the Map view due to the Zoom level.

**Through the menu**
If the Goto dialog is accessed through Menu > Goto, waypoints are sorted first on type, then distance.

Pressing the Details button will open a new window where you can read waypoint details and edit waypoint properties. It will close automatically after 10 seconds or when you press the OK/Goto button.
Since the waypoint list may be huge there is a quicker way to accessing a particular point alphabetically by filtering the points. When the waypoints are filtered, the Filter caption is highlighted in the command bar (see screenshot below).

At the bottom of the screen, immediately above the menu, three recently used waypoints are displayed.

7.10.1 Details overview

This window opens when you click on the Details menu option in the Goto dialog or Cursor Info - Waypoints dialog. It displays the general information about a waypoint.

It also allows you to edit and delete waypoint properties on pages Edit Waypoint and Edit Description. You can access these pages with the ">>" and "<<" buttons in the command bar.
7.10.2 Edit Waypoint

You may edit and delete waypoints on this screen.

This window opens when you click on the Details menu option in the Goto dialog or Cursor Info - Waypoints dialog and press the ">>" button once.

Use the ++, +, - and -- buttons to change values quickly and without the use of the keyboard.

7.10.3 Waypoint filter

Since SeeYou Mobile may use multiple files as the input for waypoints there is need for a simple way to filter the waypoints so that only those waypoints are presented which are of the most interest for the user.
Three filters are available in order for you to organize your waypoints in a more readable way:
  . Alphabetical filter
  . Filter by file

Alphabetical filter allows you to simply enter the waypoint's name. As soon as the list of waypoints is less
than the length of the screen filter closes and you may choose the waypoint that you were looking for
from the list that matches the filter you have entered. The screenshot below left displays such filter with
the letters "MAL" already entered. The result is a list of all waypoints that begin with MAL (see
screenshot on the right):

![Waypoint filter - Alphabetical](image)

Filter by file allows you to show or hide waypoints that are stored in separate files. In the example below
only two out of four waypoint files that were selected through Settings > Files will be displayed in the
Goto dialog

See also:
Goto dialog
Details overview
Edit Waypoint
7.11 Task

The task dialog allows you to edit and enter the task in list view.

You can edit the task either in
- List view[78]
- Map view[76]

7.11.1 List edit

Entering the task is best done in list view. Open the keyboard to start entering waypoint name. Oudie 4 will automatically suggest the first waypoint in alphabetical order. Use the right/left button to change waypoint name in alphabetical vicinity of what you had entered. Please read the Getting Started chapter Entering and flying the task[24].
By tapping on the Edit button Edit point dialog opens where you can setup preferences of the Observation Zone (cylinder, line, FAI sector), Start speed section and End speed section etc. Use Insert and Delete buttons to change the Task.

Options button gives you quick access and overview of the task settings.

From the command bar you can choose
. OK to accept any changes
. Cancel to discard any changes
. Tools to Edit point, Delete point, Insert point, Move point up and down, Invert task, Load task, Save task, Clear task or setup Task Options.
. Keyb to start typing waypoint names

A warning dialog will be issued if finish altitude is set to zero. This is to protect you from making final glides to the wrong altitude.

7.11.2 Map edit

The same simple philosophy from graphical task editing in SeeYou has been implemented in the Oudie 4 software.

Tap & Move anywhere except on a waypoint to move the map.
Tap & Move on a Waypoint to move it. FAI Area is drawn to easily fly an FAI Triangle
Tap & Hold on a **Waypoint** to delete it from the task.
Tap & Hold on a **Leg** to insert a point to this leg.
Tap & Hold anywhere on the map except on a leg and on a waypoint to append a waypoint to the end of the task.

- Use **Zoom** (200km) to change zoom, then Tap&Move the map to pinpoint the position of the free waypoint.
- **OK** to accept any changes
- **Cancel** to discard any changes
- **Edit** to **Edit point**, **Delete point**, **Insert point**, **Invert task**, **Copy task**, **Delete task** or setup **Task Options**.
- **List** to change to graphical view.

---

### 7.11.3 Edit Point

**Point**
Choose the waypoint name. Note that the easiest way to do this is by typing its name in List view.

**Elev = Elevation**
This is the reference altitude for the point in question. This is the altitude that is taken into account when calculating the final glide.
**Sector type** select type of the sector for this waypoint. Default setting is cylinder.

**Radius** will setup the sector in the same way as already used to in the desktop version of SeeYou.

**Point type** could be **Start speed section**, **Task point** or **End speed section**. For **Start speed section** type you must choose: **Gate time**, **Gate interval** and **Start Type** (Entry, Exit).*

**Buttons at the bottom** will help you enter the correct values quickly with your fingers.

*not featured in Oudie 4 Basic.

### 7.11.4 Load task

Load task dialog is accessed through Menu > Task > Tools > Load task... You can access it through both List[75] and Map[76] view of the Task.

Select a task from your database and press **OK** to make it your active task. Press **Cancel** to discard any changes. You pressed **Help** to get here.
7.11.5 Task options

Task options dialog is accessed through Menu > Task > Tools > Options.

Description
You can name a task. This is particularly useful at a competition briefing where you can name it Task A (or 1) and Task B (or 2).

Start speed section
In this box you can set Start speed section waypoint, gate time and interval and number of intervals. For Race to goal tasks is Start on entry set to default.

End speed section
In this box you choose the end of speed section waypoint and Cone.

Task deadline time
You can put task deadline here. Oudie 4 will give you a warning 15 minutes before Task deadline time.

Assigned area task time is essential for flying the Assigned Area tasks. It is used to calculate required speed to finish as well as time difference on task.

The MC (MacCready) panel allows you to set your average lift in the edit box and see what your
theoretical speed will be if you fly according to the MacCready theory.

The **Navigate by shortest route** check box will automatically navigate you on task by shortest optimized distance.

Use the + and - buttons to quickly change values.

Note: Task settings are not featured in Oudie 4 Basic.

### 7.12 Next map

If you are currently viewing Map 1 it changes the view to Map 2 and vice versa.
7.13 **Info page**

See [Information page](#)

![Info page]

7.14 **Statistics**

See [Statistics page](#)

![Statistics page]

7.15 **About**

Through the About dialog you can see serial number and the version of Oudie 4 software. Upgrades are free and available through [http://www.oudie3.com](http://www.oudie3.com)

![About]
7.16 Save Settings

Once you have setup Oudie 4 for your flight you may want to save the settings without exiting Oudie 4.
7.17 Thermal assistant

See Using Thermal Assistant.

7.18 Switch Profile

The switch profile icon shuts down Oudie 4 and runs it again so you can choose another profile.
Note: Switch Profile is featured in Oudie 4 Basic.

See also
Using Profiles

7.19 Add Waypoint

You may edit and delete waypoints on this screen.

This window opens when you tap Menu > Add Waypoint or use the shortcut on a hardware or software button.

Click waypoint position on Map. Use Zoom and Pan mode to define waypoint’s position on Map for which you’re looking for. If you click on the notification you will add a waypoint at your current location.
After the tap the edit dialog appears. Use the keyboard and ++ and -- buttons if you would like to change values quickly and without the use of the keyboard.

Click **GOTO** if you would immediately like to navigate to the newly created waypoint.

**UTM Calculator**
This tool converts usual coordinate format to UTM format or vice versa.
Wind

This dialog lets you see the wind in the third dimension as well as quickly adjust the wind for either one or several layers.

To change the wind:
1. select a layer or several layers by dragging over the left side of the dialog,
2. draw a wind vector in the square in the lower right corner,
3. longer line means stronger wind. Direction of the movement determines direction of the wind,
4. If needed, adjust Direction and Speed with the buttons in the lower part of the display,
5. tap Apply, then OK.

Wind is calculated using three methods in Oudie 4:
. Position drift when Lat/Lon are the only available data,
. Groundspeed difference when groundspeed and track are received from the GPS,
Combination of Groundspeed and straight flight when true air speed is received from the instrument. In this case, the wind is updated in straight flight as well.

7.21 Logbook

The logbook displays a list of flights written by your Oudie 4. It also displays information about the glider and the pilot if it is stored in the IGC file.

7.21.1 Flight statistic and replay

At end of each flight some statistics is written to IGC file for later use.

To see statistic from your flight go to Menu > Next > Logbook > select flight > Tools > Statistic.
If you wish you can replay your flight as well directly from Logbook: Menu > Next > Logbook > select
flight >Tools > Replay flight.
7.22 Transfer

Transfer menu option enables to copy all of the existing data from one to another Oudie 4 with a microSD card.

Settings to SD card packages and transfer all of the existing user data to the inserted microSD card.

Settings from SD card open the source file on microSD card and enables you to transfer data such as:
- Declared task
- Waypoints & Airspace
- Screen layout
- Glider
. or everything

**Flights to SD card** transfers to all flights that are saved on Oudie 4 on the microSD card.

See also:
[Share your profile](#)

© 2003 - 2016 ... Naviter d.o.o.
Part VIII
8 Settings

The Settings dialog has an array of Pages where all of the Oudie 4 preferences can be setup. Note that some settings like Map and Navboxes are separate for Map 1 and Map 2 views while others like Units, Commands etc. are unique through the whole application.

Available pages are
- **Map** where display of the vector map is setup
- **Airspace** where display of airspace and airspace warning is setup
- **Waypoints** page controls the way waypoints are displayed
- **Track & Target** page sets up the trace, vario colors of the displayed trace
- **OLC & FAI area** page (short for Optimization) lets you setup how the optimizations are calculated
- **Task** page sets up the observation zones and other task options
- **Navboxes** page lets you choose which navboxes to display and control their appearance
- **Symbols** page allows you to choose from symbols for the map display
- **Warnings** page sets up airspace and altitude warnings
- **Thermal** page sets up the Thermal assistant
- **Polar** page has all the controls to choose the polar for your glider
- **Units** by your preference
- **Fonts** page changes the appearance of the text on the screen
- **Input** page lets you select between GPS, Simulator and File replay mode
- **Commands** page reassigns tasks to all buttons of your PDA and SeeYou Mobile
- **Menu** page lets you control the content of the main Menu
- **Files** page has shortcuts to the terrain, waypoint and airspace files
- **IGC Logging** page sets up the header for the IGC file
- **User interface** is short for User Interface
- **Miscellaneous** page has all the rest
- **Hardware** page controls communication to GPS with proprietary sentences

### 8.1 Map

This dialog allows you to setup the appearance of the map in **Map view**. Oudie 4 uses CIT maps for rendering the terrain. It is the same map as in the desktop version of SeeYou.

**Show map** check box will enable the display of the Vector map if checked.
**Terrain**
You can choose from several levels of detail of the terrain which is being rendered. When terrain is Off, you will still see Water bodies, Roads, Railroads, Towns and labels on the screen. With the setting at Low isolines will appear at approximately 300m each. With the setting at Medium, isolines appear at about 100m. With the setting at High, you get exactly what you are used to in the desktop SeeYou version.

**Scheme**
Several color schemes are preloaded in a new installation. It is easier to see how each one looks if you look at it in the desktop SeeYou. We recommend "High contrast" for mountaneous terrain, ICAO for just general navigation and Open Street Maps color scheme for the Flatlands.

If Custom color scheme is chosen you get to define your own colors and other properties for the map objects.

**Background color**
For each scheme you can select background color.

**Shade map**
This function will shade map.

**Draw surface objects** will enable drawing woods and grass, glaciers, fields if newer Open Street Maps are used.
Note: Map settings are not featured in Oudie 4 Basic.

8.1.1 Scheme properties

Scheme Properties dialog lets you change the color scheme for the topographic features of the map.

Object properties allows you to change the zoom level, transparency and color for each of the topographic features in the combo box.

You can also copy settings from another scheme with Copy from scheme function.
8.2 Airspace

In this dialog, you can setup airspace display and Warnings.

In the **Type** panel you can setup how airspace is displayed. You should setup each type of airspace separately. Choose an airspace type from the drop down list. Choose until which zoom level it is visible from the **Zoom** drop down list. By checking the **Warn me** check box you will be warned before entering this type of zone. Choose whether or not a zone should be filled from the **Fill** drop down list. Chose a **Color** for the airspace type from the drop down list. Fill transparencies could be set from 0 to 100% in 10% step.

Each airspace may be presented with its label (name). Choose until which zoom this label is visible from the **Labels zoom** drop down list.

If **Fill alarmed zones** is checked, airspaces for which an alarm was triggered will be colored transparently.

If **Hide inactive zones** option is checked, then an airspace zone will be hidden from the Map page when dismissed.

If **Show airspace** check box is checked, then airspace will be displayed in the Map view. Combo box **Hide airspace above** enables you to exclude airspace with lower limit higher than the height you select to show on the map screen. This helps declutter the screen in complex airspace.
Note: Airspace settings are not featured in Oudie 4 Basic.

8.3 Waypoints (Wpts)

The Waypoints dialog allows you to control how waypoints are displayed. Each waypoint consists of:
- Waypoint symbol,
- Label one,
- Label two.

**Type** panel allows you to select the type of waypoint. Several types are available. Each type has its own waypoint symbol.

**Zoom** sets up until which zoom a waypoint label is visible.

**Label one** chooses what parameter is displayed in the Label one caption. **Label two** chooses what parameter is displayed in the Label two caption.

**Length** chooses how many characters of each waypoint name are displayed in Label one or two.

**Colorize label one/ two** will color the selected label with green or orange depending on whether or not this waypoint is within glide slope. Green if it is within glideslope of the preset MC value. Orange if it is within glide range of MC set to zero.
Single line label will display the label one and two in a single line.

Max number of visible symbols lets you setup how many waypoint symbols you wish to have displayed with their icons before they become points.

Cursor sort allows you to select how the waypoints are sorted when you use the Up/Down key (by default) to change the Target waypoint. The default setting is that waypoints are sorted on Name, but you can select to sort them either on Name, Code, Style, Course, Distance, Arrival Alt, Required L/D or in the same order as currently selected in the Goto dialog.

Defaults button will return factory settings if pressed.

Note: Waypoints settings are not featured in Oudie 4 Basic.

8.4 Track & target

Setup the appearance of the flight on Map page.

Track panel lets you choose the Color and Width of the trace of the flight through the combo boxes. Choose the tail Length in minutes. If Show vario check box is checked, then the flight track is colored.
with vario readings by default. Flight track could be also colored by Mc settings, Altitude or Ground speed. It could be also in fixed color. If **Show track** checkbox is not checked, then the trace will not be drawn.

**Show current track vector** lets you draw a line ahead of the glider to show your projected flight path if you continue to fly the current track. You may change the **Color**, **Width** and **Length** of the line through the combo boxes. You may choose to disable the display of the current track vector by disabling the option **Show current track vector**.

**Target** is a straight line that connects the glider's current position with the selected navigation goal. In the Target panel you can select the **Color** and **Width** of this line through the combo boxes. You can also choose to show or hide the **Terrain collision** point and the target line itself. The Terrain collision marker is a red square which is only displayed when there is not enough altitude to reach the target with the current glider settings.

**Distance circles** helps you to value how far you are from anything on the map.

### 8.5 OLC & FAI area

**Optimization** panel lets you select the **Color** and **Width** of the optimized track. **Nr. of points** (5 is for XC Contest, XC Globe, Leonardo...) and whether or not the **Optimized track** is shown.
**FAI Area** panel largely influences the behaviour of the FAI Triangle Assistant.

You may choose the **Color** and transparency **Fill** for the FAI Area. **Show area** checkbox determines whether or not the FAI area will be displayed in the first place. Note that you can control this option much more conveniently through the **Display Options** dialog.

The **Rotate** button will change where the FAI Area is drawn. If the currently flown triangle is not deep enough it will switch sides over the longest currently flown leg, giving you the option to fly the triangle in the left or right direction. Once the Triangle is deep enough, it will rotate between the legs so you can accurately determine where to fly.

**Rotate on click** refers to the FAI Area when it is drawn on the moving map. A tap on the area will rotate the area as described above.

**Show km. lines** will draw the curves connecting locations where the triangle has the same distance.

Example shows kilometer lines for Triangles between 80 - 140 km. If you fly into the violet area, the triangle will be an FAI triangle.

See also:  
. FAI Triangle Assistant

Note: FAI area settings are not featured in Oudie 4 Basic.
8.6 Task

Observation zone properties are setup with the same philosophy as in SeeYou. You can setup Fill and Color properties for the display of the observation zone on the Map page.

In Observation zone dialog you can separately choose sector type properties for the Start, Waypoint and Finish points.

Observation zone style lets you choose the color and width for the waypoint sector. Observation zone fill determines whether or not the sector should be displayed filled or outlined. Also transparency could be set.

Task style lets you choose the color and width for the line connecting the task waypoints.

Show task will show or hide the task from the Map page.

8.7 Navboxes

Navigational boxes are one of the most important parts of Oudie 4. They show all parameters of flight. You have full control over which Navboxes you wish to display, how large and how transparent they should be and where they should be located. Note that each Navbox can also function as a button if you assign an "Action" to it.
Navboxes are setup separately for Map 1 and Map 2 views. That is because normally you will want to use the two map views for two different reasons. One could be general navigation while the other one is approaching the waypoint where details are important. You will require two different settings for which Navboxes should be displayed in these conditions.

Through this dialog you can select which of the available Navboxes you wish to display on the active map.

The Combo box allows you to choose from a sub-group of navboxes so you can more easily select or change the ones you want. One sub-group is also "Currently visible navboxes" for example.

**Navigation navboxes:**
- **Target name** (Target) = Name of the selected waypoint
- **Distance to target** (Dis) = Distance from your position to currently selected target
- **Steering course** (To) = Difference in degrees between Bearing to target and Track over ground
- **Bearing to target** (Brg) = Direction towards the selected waypoint
- **Magnetic bearing to target** (MagBrg) = Magnetic course to fly to get to the target*
- **Track over ground** (Trk) = Direction of the flight (true)
- **Magnetic Track over ground** (MagTrk) = Current magnetic course of flight*
- **Radial** (Radial) = Magnetic direction from the waypoint to the current position
- **Speed over ground** (GS) = Groundspeed. This value is negative if the difference between heading and track is more than 90 degrees
- **Local time** (Time) = UTC time from GPS corrected by time zone set in the Units dialog
- **Arrival time** (ETA) = Estimated time of arrival to the selected waypoint*
- **Estimated time enroute** (ETE) = Estimated time to go to selected waypoint*
- **Nearest airport** (Near Apt) = Name of the nearest airport. Tapping on this navbox opens airport properties dialog*
- **Inverted Distance to target** (DisInv) = Distance to selected target in inverted units as currently selected units. If your units are kilometers, this distance will be in nautical miles*
- **Dist to TP** (DistTP) = The distance from your position to selected center of turnpoint
- **Distance to OZ** (DistOZ) = The shortest distance from your position to currently selected Observation Zone (Cylinder, Line, FAI sector)*
- **Steering course to last thermal** (ToLT) = Difference in degrees between Bearing to last thermal and Track over ground
- **Dist to last thermal** (DisLT) = Distance to the last thermal
- **GPS Status** (GPS) = It displays the status of the GPS signal. It can be either NODATA, BAD, OK, 2D, 3D/x
- **Battery info** (Bat) = Displays battery status. It can be either Full, Chrg (Charging), Ext (External) or a percentage value of the battery status
- **Distance from takeoff** (dToff) = distance from your position to the Takeoff

**Altitude navboxes:**
- **Altitude QNH** (Alt) = Altitude above sea level
- **Flight level** (FL) = Altitude above standard atmosphere pressure
- **Height AGL** (AgI) = Altitude above the ground elevation vertically below the glider position
- **Altitude m QNH** (Alt m) = Altitude in meters QNH regardless of the units you are currently using
- **Altitude ft QNH** (Alt ft) = Altitude in feet QNH regardless of the units you are currently using
- **Altitude QNH 2.5 h** = It’s altitude you have been 2.5 h ago from current time*
- **Ground elevation** (Gnd) = Terrain elevation vertically below the glider position
- **GPS Altitude** = GPS altitude
- **Arrival altitude** (Arrival) = Expected Arrival altitude at the selected waypoint calculated by taking the distance, MC, wind, glider polar, bugs and ballast into account. It is corrected for reserve altitude. "Arrival altitude" will be positive when the glider is above the calculated glide slope, and negative when it
is below the calculated glide slope.

- **Required Altitude** (ReqAlt) = Estimated altitude loss from current position to target taking into account current MC, bugs, ballast and wind settings*
- **Task arrival altitude** (tArr) = Arrival altitude to goal from your position with taking into account current MC, bugs, ballast and wind settings*
- **Task required altitude** (tReqAlt) = Altitude required to complete the task*
- **Conical end speed section** (Cone) = Main value is optimum speed to reach cone as quickly as possible. In third line is calculated minimum required thermal which will allow you to reach cone sooner as in straight flight.

*Final glide navboxes:
- **Flown L/D** (Cur.L/D) = Current glide ratio estimated over the last two minutes of flight
- **Required L/D** (Req. L/D) = Required glide ratio to reach the selected waypoint
- **Thermal L/D** (Ther. L/D) = Glide ratio since last circling phase finished*
- **Arrival altitude** (Arrival) = Expected Arrival altitude at the selected waypoint calculated by taking the distance, MC, wind, glider polar, bugs and ballast into account.
- **Required Altitude** (ReqAlt) = Estimated altitude loss from current position to target taking into account current MC, bugs, ballast and wind settings*
- **Required Mc** (Req.Mc) = MacCready ring setting which will allow you to final glide exactly to the Target. It shows Arrival Altitude when Arrival altitude for MC=0 is less than zero*
- **Task required L/D** (tL/D) = Required glide ration to complete the task

**Speed navboxes:**
- **Speed over ground** (GS) = Groundspeed. This value is negative if the difference between heading and track is more than 90 degrees
- **True airspeed** (TAS) = Groundspeed corrected with indicated wind, if no pressure data is available*
- **Speed to fly** (STF) = Speed to fly according to MC theory which takes MC setting and sink into account.
- **Speed to gate/Task speed** (Tsk.Sp.) = Speed on task until the present position
- **Task required speed** (tReq.Sp) = Average speed you need to achieve to complete the task inside the Task time
- **Speed Last hour** (60'.Sp) = Average speed achieved in the last 60 minutes

**Vario navboxes:**
- **Last thermal vario** (VarT) = average vario since beginning of circling
- **Average vertical speed** (VarA) = average vario for the last 20s
- **Vertical speed** (Vario) = current vario reading
- **Netto vertical speed** (Netto) = Variometer reading corrected for the sink of the glider according to the selected polar*

**Wind navboxes:**
- **Current wind** (Wind) = Current wind measurement
- **Current wind component** (cWind) = Wind component in current direction of the flight. Positive values are tailwind, negative values are headwind. Two numbers are displayed. First number is difference between groundspeed and true airspeed. The second one is wind component derived from the calculated wind at current altitude. When the two are significantly different you will know not to rely on the calculated wind strength

**Airspace navboxes:**
- **Nearest airspace - Vertically** (Near AS.V) = Relative altitude to the airspace at the location of the glider. It can be either negative if you are below an airspace, positive if you are above an airspace or "Inside" if your altitude is in between the lower and the upper limit of the airspace in question.
- **Nearest airspace - Horizontally** (Near AS.H) = Distance to horizontally nearest airspace where you
are not "inside". The caption of this navbox will show airspace name. Tapping on this navbox will temporarily arm this airspace so you can turn it off if you wish.

- **Nearest airspace - Altitude** (Near AS.V) = Relative altitude to the vertically nearest airspace. It can be either negative if you are below the lower limit of the airspace, positive if you are above the upper limit of the airspace or "Inside" if your altitude is in between the lower and the upper limit of the airspace in question.

**Task navboxes:**
- **Task remaining distance** (tDis) = Distance remaining on the task
- **Task arrival altitude** (tArr) = Altitude required to complete the task
- **Task required L/ D** (tL/D) = Required glide ration to complete the task
- **Task arrival time** (tETA) = Estimated time of arrival to the finish*
- **Task estimated time** (tETE) = Estimated time to go on task*
- **Task remaining time** (tRemain) = Remaining time until task time elapses*
- **Task Delta time** (tDelta) = Task established time - Task remaining time*
- **Speed to gate/ Task speed** (tsk.Sp) = required speed for optimal arrival on gate in time*
- **Task speed** (Tsk.Sp.) = Speed on task until the present position
- **Task required speed** (tReq.Sp) = Average speed you need to achieve to complete the task inside the Task time*
- **Task gate time** (Gate) = opening time of gate (depends on the UTC Offset Setting)*
- **Task time to go** (TTG) = optimal arrival time for the start gate*

**Statistics navboxes:**
- **Thermal vario** (VarT) = average vario since beginning of circling
- **Optimized distance** (Opt) = Optimization over a preselected number of waypoints (default is OLC optimization)
- **Closed optimized distance** (cOpt) = Optimization of flight if you return back to the point of takeoff*
- **FAI Triangle distance** (FAI) = Triangle optimization. It displays "FAI Tri" when proportions are correct*
- **Speed Last hour** (60'.Sp) = Average speed achieved in the last 60 minutes
- **Flight time** = Flying duration
- **Triangle distance** (Tri) = optimized triangle*

**Action buttons:**
There are a few "dummy" navboxes which are used on devices with few hardware buttons. Due to the lack of hardware buttons you may place "software" buttons in the shape of a Navbox on your screen. The following "buttons" are supported:
- **TP next** will switch to next waypoint on task
- **TP prev** will switch to previous waypoint on task
- **MC increase** will increase the MacCready value by 0.1 m/s or 0.2 kts*
- **MC decrease** will decrease the MacCready value by 0.1 m/s or 0.2 kts*
- **Volume increase** will increase the Volume of the device
- **Volume decrease** will decrease the Volume of the device
- **Map 1 page** will switch view to Map 1
- **Map 2 page** will switch view to Map 2
- **Statistics page** will switch view to Statistics page
- **Info page** will switch view to Info page
- **Engine running** will reset optimization when "engine" is stopped. Tap on the navbox changes the state of the "engine"
- **Zoom in**
- **Zoom out**
- **Sideview** will turn ON or turn OFF Side view.
*not featured in Oudie 4 Basic.

Note that these actions will work even when the screen is locked:
- Zoom in and Zoom out actions on navboxes,
- Increase and decrease volume as an action on the navbox,
- turn OFF Thermal assistant (with press on screen anywhere),
- turn ON, Turn OFF side view.

When **Select multiple** is checked you can tap on a single navbox to select it and keep selected the ones that were already selected. To select a number of navboxes at once, tap, hold and move the stylus. **Select All** quickly selects all navboxes, so you can use the Edit button.

**Edit...** button allows you to change common values of the navboxes. Select single or several navboxes by dragging the stylus over the navbox names. Then press Edit to select the **Number of lines** you wish them to have and whether or not you want the selected navboxes to be **Transparent**.

You can assign an **Action** to each of the Navboxes. Action is performed when you tap on a specific navbox. Actions such as Zoom in/out, Vol+/-, Map 1/2 page work also under a locked screen.

**Auto Arrange** check box will rearrange new navboxes so, that they stack at the bottom of the screen.

**Show navboxes** check box will hide navboxes if not checked.

**Move navboxes** check box if checked will allow you to place any Navbox anywhere on the screen. To move it, Tap on the Navbox in question, then move it to a new spot. Note that you can move the North Arrow, Glider symbol, Wind indicator and Glideslope indicator in the same way.
8.7.1 Edit

While you editing selected or group of selected NavBoxes properties dialog will show you sample support.
Number of lines determines how many lines a navbox will have on the screen. A navbox consists of three lines:

- Title line (Line 1) which is black by default and has white font
- Data line (Line 2) with white or transparent background and black text by default
- Units line (Line 3) with units or other sub data to the main data line.

When Number of lines is one, only the Data line (Line 2) will be displayed.
When you select two Title and Data lines will be displayed (Line 1 and Line 2).
When you select three all three lines will be displayed.

Size
There are three different sizes available: Normal, Large, Huge. For some Navboxes it is useful to set also Width, for example Target name.

Colors panel accounts controls the looks of the Navboxes. You can change the colors for:

- Background,
- Frame,
- Title line,
- Data line,
- Units line.

Note that you can change the Navbox colors separately for each Navbox. Select a group of navboxes in
Menu > Next > Navboxes, then press Edit to edit the Color and Number of lines settings for several navboxes at once. By same system you can set size of Navboxes.

If the checkbox for Transparent is selected, the Data and Units line will be transparent. With the Fill combo box you can control how transparent the navboxes are from 0 to 100 % in 10 % step. Text Outline property could be used for Navbox text or by default with tap on Value only button.

### 8.8 Symbols

You can choose the preferences for these symbols:
- Aircraft,
- Wind,
- Orientation,
- Scale,
- Task button,
- Speed to Fly,
- Vario.

Visible property shows or hides a specific symbol.

Transparent property makes the symbol outlined if checked.

Reset position button will bring the selected button back to its default position on the screen.

The Size slider selects the size of each symbol.

Type combo box lets you choose from several options for a particular symbol.

Legend option is available only for Vario symbol.

All Symbols could be outlined with white color.
There is three types of warnings in Oudie 4:

1. Airspace warnings
2. Altitude warnings

**Airspace Warning** is activated by two triggers. First warning is when the projected point of the flight is inside a sector. Sector is outlined bold red, so you can clearly identify it on the screen. The position of the glider is projected for the value in seconds ahead of the current position. This value is setup in Time [s] setting.

Second Airspace warning appears when you fly closer than the preselected **Distance** from the Airspace or when your altitude is less than **Alt.res** different from the airspace boundaries. A continuous sound warning and whole-screen warning appears.

**Altitude warning** is a general warning, useful for example when there is a maximum altitude set for a competition day or 18.000ft for the USA. When you come close to the airspace, you get a beep and the red banner much like the airspace warning.
8.10 Thermal assistant

Thermal assistant continuously analyzes the thermal when you are circling. You can decide when you would like to be warned about potential better lift in one part of the circle.

Vario variance is the difference between squares of deviations and the mean vario value. The bigger the difference, the more possible it is that if you move your circle in the direction of the strongest lift that the average climb will increase.

In the Menu > Settings > Thermal you can determine at which vario variance you would like the visual Thermal Assistant and Audio thermal assistant will appear. For the audio you can also select how much before the maximum the thermal assistance will whistle.

You may choose between Bubbles and Ring representation of the graph which shows the best part of the lift. Ring is default setting. If Hide map option is choosen you will not see map while Thermal Assistant is turned ON.

Thermal Assistant is automatically activated after 120 degrees turn. When you are flying out from
thermal for more than 200 m Thermal Assistant is deactivated.

Thermal Assistant could be completely disabled with **Use thermal assistant** checkbox.
See also: 
Getting started - Thermal Assistant (with a shortcut to show the Thermal Assistant regardless of the variables)

8.11 Polar

The Polar dialog lets you enter your glider polar data into Oudie 4. These data is essential for performing the final glide calculations.

You can access a list of pre-generated polars by clicking on the "List..." button.

Glider field lets you enter a name for the polar.

Stall speed tells Oudie 4 about the assumed stall speed of the glider.

A, B and C are parameters of the quadratic equation which is a mathematical approximation of the glider's actual performance. To calculate A, B and C parameters open Calculate dialog and fill the data.

By checking the User polars only checkbox, only polars entered by the user will be displayed in the Saved Polars combo box.

Info panel gives you a basic information about what has been setup.
If you tap on Calculate button new dialog will show up. Here you make complete polar curve calculations for A,B and C coefficients.

Note: Polar settings are not featured in Oudie 4 Basic.

8.12 Units

Setup the units you are used to in the Units dialog. You can choose the units for:
- **Distance** - km, nm, ml
- **Altitude** - m, ft
- **Speed** - m/s, km/h, kts, mph
- **Vertical speed** - m/s, kts, fpm
- **XC Speed** (cross country speed or average speed) - m/s, km/h, kts, mph
- **Pressure** - mbar, hPa, mmHG, inHg
- **Load** (wing loading) - kg/m2, lb/ft2
- **Latitude/Longitude** - DDMMSS, DD.MMmmm, DD.dd

**Set to metric** sets up km, m, km/h, m/s, km/h, mbar, kg/m2 and DDMMSS
**Set to imperial** sets up ml, ft, mph, kts, mph, inHg, lb/ft2, DDMMSS
**Set to British** sets up km, kts, km/h, lb/ft², inHg, °F, ft, lbs, DDMMSS

### 8.13 Fonts

The fonts dialog allows you to change preferences of the fonts in Oudie 4.

Choose one Item then change **Font, Size, Color, Bold, Underline, Outline** and **Italic** preferences. See an example in the **Sample** panel at the bottom of the dialog.
8.14 Input

The input dialog lets you choose from three different input methods for displaying a flight in Oudie 4.

**GPS/Vario**

is what you will want to use in the air. In normal circumstances all you need to do is turned on Oudie 4 and the communication will run automatically.

The header line of the Map view will display 3D/X, 2D/X or BAD in the top left corner when in GPS/Vario input mode.

**Simulator**

In this mode a glider is controlled by dragging a line out of the glider thus telling it in which direction to move and how fast. You can specify a start Latitude and Longitude through the edit boxes if you wish.

**File**

This mode takes an IGC file and animates an old flight. This is the most perfect way to test the application. You will be able to rely on own feelings from the actual flight and observe what Oudie 4 would have been telling you if you had it with you in the air at that time. Use the "..." button to select a flight you wish to animate and the Rate spin do select how fast the animation should run.

A particularly useful way to replay a flight is if you managed to save a NMEA log of your flight. In the
NMEA log all of the messages that were sent to the device may be reproduced on screen, including other Flarm data and its warnings. To replay a saved NMEA log you need to create a "TMP" folder in the root of your Oudie memory, save the NMEA log as "nmeain.log" and select "File" as your input in Menu > Settings > input.
8.15 Commands

You can customize the 2 software buttons in the Command bar here.

Note: Commands settings are not featured in Oudie 4 Basic.

8.16 Menu

You can fully control the content and order of the buttons in the menu. Use the Up/Down and Edit/Insert/Delete buttons to change the main menu.
Note: Menu settings are not featured in Oudie 4 Basic.

8.17 Files

Setup the default file locations for Oudie 4 through this dialog. To read about how to transfer your waypoint and airspace files to Oudie 4, please read the chapter Copying files to Oudie 4.
Selecting multiple waypoint and airspace files.

It is possible to select more than one waypoint and more than one airspace file in Oudie 4. Maps are preloaded for the whole world. You don't have to change those at any time.

Waypoint files only: If you decide to use more than one waypoint file, then one file must be selected as Active. Tasks will be read and written to this file and no other files. Many waypoint file types are supported: SeeYou waypoint file format .cup - .cupx, .wpt (Compe GPS and Ozi explorer), .dat, .grw, .wht, .cdb, .ndb, .dbt, .dat, .wpz, .att, .da4.
Automatic search for files. When you open the "Select files dialog" such as in the screenshot above, the whole file system of your device is searched for corresponding files. If you are looking for terrain files, all CIT files from your PDA will be listed etc.

8.18 IGC Logging

Oudie 4 does also log a flight and produces an IGC file. It can however be analyzed in SeeYou or similar software after the flight.

This dialog lets you enter the Header information for the flights recorded with Oudie 4. Information on Pilot, Copilot, Competition ID, Glider and Class is collected here. Interval spin box lets you select the interval between consecutive fixes that are recorded.

Auto detect end of flight check box turns logging off automatically at the end of flight.

Logger permanently on enables you to manually start or finish the recording (to test Vario sound for example) of the flight regardless of the current flight parameters which try to determine takeoff and landing automatically.

Launch Type determines how soaring begin is calculated. At the setting "Foot launch" Soaring begin is equal to takeoff. At other settings it is not.
8.19 User Interface (UI)

Screen orientation may not be supported on all devices. If certain or all directions are greyed out then your devices does not support rotating the screen in that particular direction. The directions given are relative to the default orientation:
0 = default orientation
90 = 90 degrees clock-wise from the default orientation
180 = upside down from the portrait orientation
270 = 90 degrees anti-clockwise from the default orientation

Changing the screen orientation requires a reboot of the Oudie in order for all changes to take effect.

Dialog timeout sets up how long a dialog will wait for you to press something before it quits and returns back to navigation. Dialogs subjected to this are Zoom, Flight Properties, Wind, Map orientation and similar. Note that the Settings dialog is not a subject to disappearing as we consider you know what you are doing when you are going through the Settings.

Drag limit is an area of pixels within which the control will not move even if you move the stylus or your finger. This is required for using the display with fingers because it is difficult to keep still in a shaky environment of the glider.
Snap pix lets you choose the margin for how far away a point from the database is selected automatically in Task > Map mode.

Show command bar will show the command bar with Tool buttons at the bottom of the Map view.

Show task bar will show the task bar at the top of the Map view.

Tap & Hold activation will force you to tap and hold a symbol on the Map page to bring up a dialog like the Wind, Map direction, Flight properties.

Oudie 4 speaks several Languages. You may select your language through the Language combo box. Managing installed language files is possible through the Language combo box. Note that you need to have installed the Multilingual version of SeeYou to have other languages than English available.

Regional Settings drop down list allows you to select how you would like the date and time field to be formatted. For example if you wish to use SeeYou Mobile in English but still want your local date and time format choose your locale through this drop down list.

8.20 Miscellaneous (Misc)

The Miscellaneous dialog takes care of all the rest of the options, not covered in other parts of the application.
If all goes wrong, you can Restore all settings to default by checking this check box and restarting the application.

You can choose Distance calculation on Spheroid or Elipsoid.

Manage profiles... button allows you to add new profiles to Oudie 3. One application for several profiles is when you fly different paragliders and need different setups for them (competition flying, XC flying, etc.). When there is more than one profile available, you get to choose it when starting the application.

Reset "do not show again". There is several dialogs with "do not show again" labels at the bottom. If you would like to see them all again, press this button.

Copy map settings... will replace settings of one map with settings from the other map. Please read the message in the dialog carefully, so you don't accidentally replace the wrong map settings.

8.21 Hardware

GPS data dialog
If you will confirm Popup ?Flight properties dialog? Oudie 4 will open this dialog before you will start your flight.
8.21.1 **Terminal**

This dialog allows you to see what data Oudie 4 is receiving through the COM port. It may be very useful for debugging any problems related to GPS input.

The upper edit box allows you to enter commands and sending them with the **Send...** button.

**Port settings...** opens up the COM options dialog.

**Pause** button pauses receiving of NMEA data.

**Stamp** will add a timestamp to each NMEA sentence which makes it easier to debug.

**Save...** button will save the log which you would perhaps like to send to support@naviter.com if there is a problem you are debugging.
8.22 Vario

Filter
This setting tells you how fast Oudie 4 will respond on climbing or sinking.

Sound frequencies
Here you can set sound frequencies of Oudie 4 vario. Make sure to try factory settings before you’ll make any changes.

You can simply mute vario sound with checkmark in Mute checkbox.

Silence threshold
In first field you can set value where Oudie 4 will start to draw attention on sinking which is more that set value. With checkmark you can Enable or Disable this function.

Averager
Set the time window for average vario output.

Inertial vario
Turn on/off the inertial vario and calibrate Oudie 4 inertial vario accelerometers.
See also:
* Using vario
* Volume & altitude

### 8.23 Oudie Live

This is where you can setup for the Oudie 4 to connect to the internet through the free Oudie Live Android app.
Please make sure to read the "How to connect Oudie to Internet" chapter first.

Once you have paired your Oudie 4 with your smartphone you can setup the available services such as SeeYou Cloud, LiveTrack24 and more to come.
9 Oudie firmware

By default Oudie 4 software will run automatically when you turn on the Oudie 4. If you exit Oudie 4 software (through Menu > Next > Exit) then you will end up in an environment where you can setup some basic things on the Oudie 4.

9.1 Main screen

Main screen is where you can easily start Oudie 4 or ConnectMe software. Oudie 4 is the navigation software while ConnectMe can download flight traces, upload declarations and more from other flight recorders (required cables are not included). A separate help file is available for running ConnectMe.

By tapping on the ">>" button you can proceed to the Oudie's Settings screen.

9.2 Settings screen

The settings screen has links to subpages where you can setup:
- Volume
- Backlight
- Language
- Autorun
By tapping on the ">>" button you can proceed to the Oudie 4's Main screen.

9.2.1 Volume

The slider allows you to select the volume setting on the device.

The checkbox allows you to select whether or not you would like the Oudie to make a sound each time you tap the screen.
9.2.2 Backlight

The slider for Backlight allows you to setup the screen brightness. To be honest - you will want to leave it on full brightness most of the time.

Auto OFF allows you to save battery life by selecting after which time the screen Backlight is automatically switched off. Default setting is "Always ON".

Auto backlight checkbox allows Oudie 4 to adapt it’s Backlight according to the light conditions as seen by the sensor on the back of the device.
9.2.3 Language

By pressing the left and right icons you can choose the language of the Oudie 4.
9.2.4 Autorun

The checkbox allows you to select whether or not the software will run automatically after the Oudie 4 has been switched on or reset.

You can use the "..." button to determine which software will be run when pressing the Oudie 4 icon on the main menu (or started if automatic start is enabled).
9.2.5 Calibration

Allows you to re-calibrate the screen if the touch screen has become inaccurate.
9.2.6 USB

This option allows you to select how Oudie 4 behaves when connected to PC with that USB cable.

In **Mass Storage** mode Oudie 4 will become a logical drive when connected to PC. After you plug in the USB cable you will be asked whether or not you wish to "Connect to PC" or "Charge Battery". If you choose to "Connect to PC" then all running programs on Oudie 4 will be shut down including Oudie 4 and ConnectMe.

In **Active Sync** mode Oudie 4 will be recognized as an external device. Transfer speeds are much lower than in Mass Storage mode, but Oudie 4 and PC connection can work simultaneously.
Mass Storage

MS ActiveSync
10 Oudie 4 tips and tricks

There are some tricks in using the Oudie 4.

Using Oudie 4 with your fingers and gloves
Usually in office conditions, you will be using your Oudie 4 with the included stylus. However in flight this is a pain. Stylus is small, Oudie 4 is shaking, so taping the screen is pretty inaccurate. The stylus could get lost really quickly. Oudie 4 is therefore designed to be used with fingers (gloves) rather than the stylus.

Tap
This is similar to mouse left-click in desktop Windows. Press your finger or nail anywhere on the screen to create a "Tap". This way you can navigate through the menus or tap on the map to get the Goto and Airspace menu for example.

Tap and Hold
Tap and hold is something similar to the mouse right-click in desktop Windows. There are few uses for a pop-up menu in Oudie 4, so Tap and Hold is normally used to perform special tasks on the map. An example is moving the Nav-boxes or accessing the Flight parameters by tapping and holding the Glideslope indicator. Similar use is assigned to tapping and holding the Wind and North indicators.
Part XI
## 11 Technical specification

<table>
<thead>
<tr>
<th>Device</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>ARM 11, 500 MHz</td>
</tr>
<tr>
<td>RAM</td>
<td>128 MB</td>
</tr>
<tr>
<td>Built-in Flash</td>
<td>8 GB</td>
</tr>
<tr>
<td>Loudspeaker</td>
<td>Yes</td>
</tr>
<tr>
<td>Buttons</td>
<td>On/Off, Reset</td>
</tr>
<tr>
<td>Battery</td>
<td>9600 mAh</td>
</tr>
<tr>
<td>Battery indicator</td>
<td>Yes</td>
</tr>
<tr>
<td>Battery autonomy</td>
<td>&gt;12h</td>
</tr>
<tr>
<td>Charging time</td>
<td>max. 6 hours</td>
</tr>
<tr>
<td>Size</td>
<td>135 x 86 x 25 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>350 g</td>
</tr>
<tr>
<td>Vario</td>
<td>Yes, high sensitivity</td>
</tr>
<tr>
<td>Pressure altitude</td>
<td>Yes, high precision</td>
</tr>
<tr>
<td>Flight recorder</td>
<td>Yes</td>
</tr>
<tr>
<td>Flight storage</td>
<td>Practically unlimited</td>
</tr>
<tr>
<td>Operating Temp.</td>
<td>-15°... +50°</td>
</tr>
</tbody>
</table>

| Touch screen                  |          |
| Display size                  | 5" TFT LCD |
| Resolution                    | 480 x 272 |
| Aspect ratio                  | '16:9    |
| Portrait mode                 | Yes      |
| Landscape mode                | Yes      |
| Touchscreen                   | Yes, Resistive |
| Screen lock                   | Yes, Smart |
| Gloves optimized              | Yes      |

| Connectivity                  |          |
| Built-in GPS                  | Yes, aviation grade |
| USB                           | USB 2.0   |
| Mass Storage                  | Yes      |
| Active Sync                   | Yes      |
| External Flash                | microSDHC |
| Headphones                    | Yes, 3.5 mm jack |
| Wired Serial port             | Yes      |
| Bluetooth port                | Yes      |

<p>| Software                      |          |
| Languages                     | 17       |
| Moving map                    | Yes      |
| Preinstalled maps             | World-wide |
| Airspaces                     | World-wide |
| Airspace updates              | Automatic &amp; Free |
| Software updates              | Free     |</p>
<table>
<thead>
<tr>
<th>Feature</th>
<th>Yes</th>
<th>Unlimited</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Airspace warning</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Max. Altitude warning</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Final glide calculator</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Thermal assistant</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>OLC optimization</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>FAI Triangle optimization</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Profiles</td>
<td>Unlimited</td>
<td></td>
</tr>
<tr>
<td>Speed to fly indicator</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Navboxes</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Flight statistics</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Race To Goal</td>
<td>Yes, automatic</td>
<td></td>
</tr>
<tr>
<td>Assigned Area</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Task route optimization</td>
<td>Yes, automatic</td>
<td></td>
</tr>
<tr>
<td>Wind calculator</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Units</td>
<td>Metric/Imperial</td>
<td></td>
</tr>
<tr>
<td>File Replay</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

### In the box

- Oudie 4
- Protective case
- Getting started manual
- SeeYou Trial CD
- Universal Wall Charger (110-220V)
- Car Charger (12V)
- USB Cable
- USB charger cable
- Velcro tape for easy installation
- PDF Manual on Oudie and CD
- 2 pcs Naviter stickers
Part XII
12 Troubleshooting

**Symptom:** Device doesn't turn on after pressing the power button or shuts down during boot.
Solution: Charge the device's internal battery

**Symptom:** Navigation software does not find my position
Solution: Get out where the view to the sky is unobstructed and wait for up to 40 minutes. If you still cannot acquire satellites check Menu > Settings > Input options.

**Symptom:** Navigation software displays NODATA in the GPS Fix navbox.
Solution: Check the Menu > Settings > Input options.

For **other problems** contact support@naviter.com

See also:
Input
Part XIII
13 Notice of non-liability

This is a personal navigation assistance device only. It is not a replacement for any legally required device, method or service.

Before it is put to use it is the responsibility of any user who will use this device to become familiar with operation and safety aspects of this device. Using the system improperly could cause failure and lead to possible property damage and/or personal injury.

Naviter assumes no responsibility for property damage, accidents, injury or death that may result from the misuse of this device/equipment. This includes any use of this device/equipment outside the scope of common sense, the User Manual, inserts and other related documentation.
Part XIV
14  **Limited Warranty**

Naviter company warrants your Oudie 4 against defects in materials and workmanship for one (1) year from date of purchase invoice. The warranty is non-transferable. Should any part of the Oudie 4 become defective within the warranty period return the Oudie 4 with a description of what/why it is not functioning and we will repair or replace it, at our discretion, free of charge (you pay only shipping to Naviter).

Return the unit to:
Naviter d.o.o.
Planina 3
4000 Kranj
Slovenia

The warranty is non-transferable and only valid if Naviter determines that the system and its components have not been damaged due to improper use, been submerged in fluids, dismantled or abused. Naviter reserves the right to determine if repairs are to be done under warranty or at a nominal charge. As a proof of activated warranty you must send a copy of the purchase invoice.
Index

- < -
< Prev and Next >  62

- 1 -
1 hour  54
1000m  79

- 5 -
5 minutes  51, 54

- A -
About  81
Action  100
Activate  51
Active  118
Active Sync  13
Add  84
Add Waypoint  84
Agl  100
Airspace  13, 50, 51, 54, 95, 109
Airspace warning  49, 54
Airspace warning banner  54
alarm  54
Allow drag  106, 108
Alphabetical  73
Alt  100
Alt. Colors  92
Altitude  94, 109
Altitude Colors  94
Altitude QNH  100
Altitude reserve  69
Always  51
Angle1  77, 100
Angle12  77, 100
Angle2  77, 100
Animation  55
Animation speed  49
area  13
Arrival  100
Arrival altitude  100
Arrival time  100
Arrow towards the North  49
As.Dis  100
Assigned Area  77
Auto advance  79
Auto Arrange  100
Automatic search  118
automatically suggest  75
Average vario  100

- B -
BAD  52
banner  54
Bearing to target  100
beep  54
below start  79
Brg  100
Browse  13
Bugs  69
button  117
by file  73
by waypoint type  73

- C -
center  22
Checksum  115
Circling North  66
CIT  53, 92
Color  97, 98
Colorize  96
Colors  106
COM  124
Command  56
command bar  9, 49, 121
Commands  117
connection error  13
Copy  122
Copying  13
Cur.L/D  100
Current wind  100
Current wind component  100
Cursor sort  96
cWind  100
- D -
Default 16
Defaults 92, 96
delete 72, 73, 75, 76
Delete point 75
desktop PC 14
Destination folder 13
Details 71, 72
Direction 77, 100
Dis 100
DisInv 100
dismiss 54
Display 64
Display options 9, 39, 64
Distance to airspace 100
Distance to target 100
drag 66
Drag limit 121

- E -
East Up 66
Edit 72, 77
Edit Point 75, 77
Edit Waypoint 73
Elev 77
Elevation 77
Entering the task 75
Esc 63
Established time 100
ETA 100
ETE 69, 100
Exit 67

- F -
FAI 100
FAI Area 98
FAI Triangle 39
FAI Triangle Assistant 39
FAI Triangle distance 100
File 14, 115
File replay 14
Files 118
Fill 95, 97, 98
filter 71, 73
Final glide 9
finger 139
Finish 39, 79
first time 9
FL 100
Flarm 50, 109
flash 52
flashing 52
Flight 60, 97
Flight level 100
Flight properties 9
Flight statistics 60
Flight trace 49
Flown L/D 100
fonts 114
Free FAI 39

- G -
Getting Started 5, 22
Glider 52
Glider position 49
Glideslope indicator 49
Gnd 100
Goal Up 66
GOTO 9, 71, 84
goto dialog 71
GPS 52, 100, 123
GPS Status 100
green 71
Ground elevation 100
GS 100

- H -
Hardware 123
Header 9
Header line 49
Heading Up 66
Height above ground level 100
Hide 95

- I -
IGC file 120
imperial 113
inactive 54
Information 58
input 14, 115
insert 75, 76
Invert 75

- L -
LabelOne 96
LabelTwo 96
Lake 13
Landable 71, 73
Languages 121
last 60 minutes 60
Leg Sp. 100
Leg speed 100
Length 97
lift 22
Line only 77, 100
Linked 69
list 75
List view 75
Load 69
Load task 75, 78
Local time 100
Log 120

- M -
MacCready 69, 79
MagBrg 100
Magnetic bearing to target 100
Magnetic Track over ground 100
MagTrk 100
map 9, 49, 66, 75, 76, 92
Map 1 49
Map 2 49
Map orientation 9, 53, 66
Map view 75, 92
MAWT 64
Max number 96
MC 79
menu 9, 56, 62, 117
metric 113
Misc 122
Miscellaneous 122
Mobile Wizard 13
move 75, 76
multi 16
multiple 118
multiple files 73

- N -
Navbox 54, 100
Navboxes 9, 49, 100
Navigation 9
Navigation button 139
Near Airport 50, 71
Netto 100
Netto vertical speed 100
Next 63
NMEA 14, 123
NMEA log 14
nmeain.log 14
NODATA 115
North 9, 53
North arrow 9
North Up 66

- O -
Observation zone 100
Opt 98, 100
Optimization 9, 98
Optimized distance 100
Optimized track 97

- P -
Pan 53, 66
Pan mode 66
Pause 55, 124
PDA buttons 139
play 55
Pocket PC 2
Polar 112
Port settings 115, 124
position 52, 58
Prev 63
profile 16, 122
Profiles 16
proximity 54
- Q -
QNH 69
quit 67

- R -
Radial 100
Radius1 77, 100
Radius2 77, 100
Railroad 13
recently used 71
rectangle 13
registration 81
registration key 81
Relative coloring 94
report 58
Req. L/D 100
Req.Mc 100
ReqAlt 100
Required Altitude 100
Required L/D 100
Required Mc 100
reserve 69
Reset 122
Restore 122
River 13
Road 13
Rotate 39, 66, 98

- S -
Save 75
Save As 94
Scheme 94
sector 100
SeeYou 13
SeeYou Mobile 2
SeeYou Mobile Simulator 14
Send 124
send files 13
Serial 115
settings 13, 63, 92, 122
several files 73
Show 92, 95, 96, 100
Show all 51
Show area 98
Show current track vector 97
Show track 97
Show vario 97
Simulator 14, 115
Soaring time 69
sort 50
South Up 66
Speed over ground 100
Speed to Fly 100
Speed to Fly indicator 49
statistics 60
Steering course 100
STF 100
Storage Card 118
symbol 52
Symbols 9, 108

- T -
Take-off altitude 69
Tap 9, 50, 52, 60, 76, 139
Tap & Hold 121
Tap and Hold 52, 139
Target 97, 100
Target name 100
tArr 100
TAS 100
task 9, 50, 75
task arrival altitude 100
task arrival time 100
task bar 121
task Delta time 100
task established time 100
task options 79
task remaining distance 100
task remaining time 100
task required L/D 100
task required speed 100
task speed 100
task statistics 60
task time 79
tasks 13
tDelta 100
tDis 100
Team 100
Team position code 100
Terminal 123, 124
Terrain 13, 53, 92
Terrain collision 49
Terrain elevations 13
tETA 100
tETE 100
Thermal 22, 110
Thermal assistant 22, 110
Thermal vario 100
Thermals 60
Time 100
tL/D 100
To 100
Today 51, 54, 122
Today screen 9
topographic 53
Town 13
Track 97
Track over ground 100
Track Up 66
transfer 13
Transparent 100, 106, 108
tRemain 100
tReq.Sp 100
Trk 100
True airspeed 100
Tsk.Sp. 100

- W -

warning 54
Warnings 109
Waypoint 50, 84
waypoint files 118
Waypoint filter 73
Waypoints 13, 50, 96
West Up 66
Width 97
Wind 9, 53, 100
Wind vector 49, 53
Wing loading 69
Wpts 96

- Y -

yellow 71

- Z -

Zoom 9, 68, 76

- U -

UI 121
units 113
Upgrades 81

- V -

VarA 100
Vario 100
Variometer 123
VarT 100
Vector 53
Vector map 49
Visible 64, 108
visible symbols 96
Volume 69