

Manual

(Version 16-002)

The English language manual for *iPhiGéNie* has been created by Tim Barker (tim@tbarker.net) and is NOT the official manual. It is loosely based on the official manual for the programme and the Google Translation of such as well as comments in the online manual. Should users find errors of fact, translation or in methods of use please contact the aforementioned and I will amend the errors. I have focussed on those areas of the programme that I have used most so it is NOT the complete manual although it is intended to continue to expand the coverage. Should anybody be interested in helping out, please let me know and this manual continues to be a work in progress.

Licences

- 7-day trial licence:** On first download a 7 day trial licence is enabled. Each day on which *iPhiGéNie* is run then a day is taken off the available licence period. The user has access to all features of the programme.
- Vmax:** Enables preloading of Maps and Tiles into Cache as well as
- Geoportal:** Enables access to the IGN map database including roads, cadastral, geology, aerial photos, historic maps at all scales.
- Preload Tiles:** Enables multi scale/layers of predefined regions on Maps
- OACI:** Enables access to airline maps
- Litoral:** Enables access to littoral maps of the coastline, estuaries and seas around the coast of France.
- Belgium:** Enables access to topographic maps of Belgium.

Current licences are visible via Main Menu -> Secondary Menu -> Info and under Licenses –See/Add/Renew.

At first launch

On first launch, *iPhiGéNie* contacts the license server to initiate the licence. This IGN trial license remains valid for 7 calendar days*. It is therefore **essential** to have **internet connectivity** to retrieve this key on first use. A message informs the user of the activation key. Simultaneously, the first map appears – normally of the whole of France, after which *iPhiGéNie* zooms to a map centred around the current location if the GPS is active. Each map is composed of numerous smaller ‘tiles’ which are displayed as loaded.

* - a day is deducted on each day the application is used.

At startup,

At startup *iPhiGéNie* displays a map of the whole of western Europe (incl UK!). Briefly, at the bottom of the screen you will see a dialog box appear to indicate whether the GPS is active or not, then it dissolves. At this point, if the programme is able to provide a location (by GPS or phone triangulation) the map is automatically zoomed and centred on this position. In the preferences, you may choose what scale of map is displayed according to the location accuracy. In the case below this is 1:100,000. On first startup the application centres on Rue Racine in Paris but thereafter centres on the last known position unless the GPS is active at the time where the map will centre on the current position.



The toolbars

On most phones and tablets the menus are situated at the bottom of the screen. NB that on some larger tablets the menu is situated at the top of the screen so as not to interfere with the Android buttons at the bottom. For example on my Samsung SM-T525 (Galaxy Tab-Pro) it is at the top of the screen and my Samsung SM-N9005 (Galaxy Note-3) at the bottom.

Home toolbar – Primary Menu



At the bottom of the screen is the 'Home' toolbar or main menu. It is semi-transparent to reveal the map to the maximum. It has three "buttons":



On the left, the 'crosshair' button has a dual function. If the card is not framed around the current position, a touch of the button redraws the map with the current geolocation in the centre. The map is also briefly darkened to highlight the cursor position. If the current position is already centred this darkening makes it easier to see the location on a busy background. A double tap of this button switches on/off the GPS



In the centre, (showing the copyright notice) touching this shows the second level menu or toolbar, refer below. Holding the finger on the button for >2s sees the main help menu open.



On the right, the "scale" button. It is also an indicator displaying the current value of the scale and a scale mark. A touch of this button zooms out to the next map scale up (ie from 1:25,000 to 1:50,000).

Framing and Scaling

To move around the map simply place a finger on the map and sweep it up, down, left or right. To change the scale (zoom in/out) there are several methods:

Classic:

1. A double tap on a point on the map to refocus on this position **and** change of scale (zoom in).
2. Zoom out tapping on the key symbol on the scale at the bottom right.

iOS/Android:

Zoom with two fingers sliding them apart or pinch to increase scale. It is also possible to centre the current location on the map with these operations by tapping the crosshairs once after zooming.

View a region other than where you are

If you leave the area of the map where the cursor rests, the map redraws to include any new map 'tiles'. To reactivate the automatic centring, touch the crosshair button at the bottom left (main toolbar) which will take you back to your current position. You may zoom into the new area at will either by zooming with 2 fingers or by double tapping the screen.

The automatic caching of map tiles

This feature is still operational, **with or without optional modules**. Any tile displayed at least once is available in the device memory until the expiration of the license (ie 7 days, a month or a year). Following the expiry of a trial licence tiles should remain on the device for 12 months once viewed when on-line. So just look at a map when a network connection is available and, even without a mobile-network/wi-fi, you should have access to these tiles when you next use the programme. You may find that when recording a track on the trial licence that the caching of maps does not occur correctly (at least on a Samsung Note 3 under Android). **NB**. I have found that caching of tiles only works when one has the Vmax/Amx option active. Even without using the caching option it is possible to download tiles onto the device by viewing a route at all likely scales/map types while connected via wi-fi. Later, when disconnected, it is still possible to view all the tiles viewed earlier.

Airplane mode

NB: With flight mode operational the GPS is inoperative. This is a comprehensive limitation of iOS and is not specific to *iPhiGéNie*.

The following lists the several menus within the application, each button is more fully explained later. Depending on the width of the tablet/phone a limited number of icons may be visible in which the last icon will consist of 3 dots indicating and an extended menu is available (as shown below). Touch this last icon and the additional items will be displayed.

Secondary Toolbar - Main Menu



Return to the Previous Menu



Shows Current Statistics (position, speed, altitude, direction)



Indicates and Changes the Mix of Maps used by the application



Map Caching and Memory Caches



Waypoint Management



Track Management



Information Pages – Help



Extension for other icons which are...



Mode Change – North to top, direction of travel to top



Enter 3D Mode



Settings

Holding the icon for > 2 secs opens the help page for the particular menu item.

Tertiary Toolbars and Menus

Map Display Menu



Exit to Previous Menu



Underlying Map - Layer 1



Upper Map - Layer 2



Export Screenshot



Slider to Switch Between Map Layers

NB The Map Slider allows the user to mix the underlying map shown. For example one can use a geological map as Layer 1 and the 'normal' cartographic maps as Layer 2. By positioning the slider one can show either the geological map, the cartographic map or a mix of the 2 as the map in the normal screen.

Map Cache Menu



Exit to Previous Menu



Cache Management – Delete tiles



Cache Information



List Tile Footprints



Show/Hide Footprints



Reload Cache

Waypoint Menu



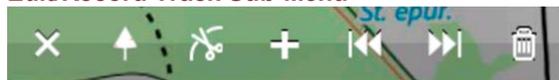
- | | |
|---|--|
|  Exit to Previous Menu |  Activate Beacon |
|  New Waypoint – Editable |  Follow Beacon |
|  Search by Toponyms |  Extension for other icons which are... |
|  New Waypoint – Uneditable |  Photo Waypoint |
|  Waypoint Management |  Export |

Track Menu



- | | |
|--|---|
|  Exit Track Menu |  List and Manage Tracks |
|  Information on track |  Begin/Stop Track, Route or Journey Segment. |
|  Record Track or Restart Recording |  Edit Saved Track or Create New Track |
| Or  Stop Track (while recording) |  Extension for other icons which are... |
|  Pause Track (highlighted when recording) |  Export Trackpoints |
| | Import Trackpoints |

Edit/Record Track Sub-Menu



- | | |
|--|--|
|  Exit Menu |  Previous Point |
|  Toggle Navigable |  Next Point |
|  Divide Segments |  Delete Point |
|  Add Point | |

Main Section - Track Management



T Trace	Track – a journey recorded in <i>iPhiGéNie</i> . The points are dated and, in general, have altitude and time recorded. Most imported journeys are of this type. These traces follow accurately a journey followed by a walker, a runner, a cyclist with a definable accuracy.
T Tracé	Route – created manually within <i>iPhiGéNie</i> to prepare for a journey. This does not include time or altitude information.
R Route	Journey – a journey created within <i>iPhiGéNie</i> or imported in GPX format (formatted as a route with waypoints). This is a simplified journey passing through navigable locations and does necessarily follow known tracks, paths or roads. It does not include time information. The routes are often utilised by off-piste skiers and aerial or nautical users where journeys between defined waypoints are not pre-determined.
TR Trace nav	Track with navigable points.
TR Tracé nav	Route with navigable points

NB: Tracks are named by default with the date of the start of the recording (manual or otherwise). You may modify the name through the information details of the track. 

Icons for Track Management are shown above in the list of icons contained in the menus.

To record a Track in the field

Before leaving home (or a point at which Wifi is freely available) it is necessary to download all the tiles necessary to display the area of the desired walk on the phone screen at the map resolution required. It is easiest to do this through the Map Caching facility (only available with the Amax option) – refer later under Map Caching. Whilst it is possible to use the software to record tracks without “Amax” it is possible that the tiles necessary to view the route at the scale determined in the field may not be available while walking. Thus without the “Amax” option it is necessary to view the proposed area at all scales required and with photos to ensure the tiles are ‘cached’ before the walk. With the “Amax” option this is a simple procedure (refer later).

Once at the point of origin enter the track menu and press record . This starts the programme recording GPS points. A point is recorded every time you change direction or stop walking. A curved track tends to record as a series of straight lines with reasonable gaps between points. If you desire to add a waypoint with description at any point (or photo) it is possible to do so by exiting the Track menu  and entering the Waypoint Menu . Then press Add Waypoint  (or Take Photo  in the extended menu), save the point if it is a photo, then exit the Waypoint menu and return to the Track Menu . Recording of the track does not cease while you are in the Waypoint Menu. Waypoints and Track Points are recorded and accessible from the Track Management Menu  once completed. It should be noted, though, that exporting a Track does NOT include waypoints or photos and that these need to be exported separately through the Waypoint Management Menu.

It is possible to pause the track recording at any time by pressing the pause button  but remember to press start  before continuing again. Pressing stop  will insert a Track Segment (<trkseg>) point into the file. A complete track can be composed of several track segments and these can be combined later into a single segment with manual editing. If a second or subsequent segment is started after you have continued walking (ie at a point later in the journey) then when the journey is shown the path between the two segments will be indicated with a dashed line.

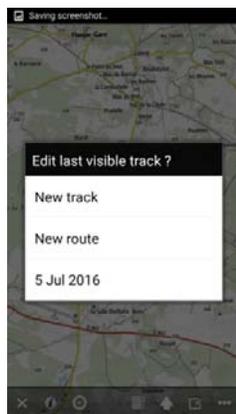
It is even possible to add waypoints to track files manually to display on a Google Map or a *iPhiGéNie* map and a description of the two different file formats follows. This combination needs to be done in an external text editor and requires a small amount of skill but is not difficult.

The Information Icon  becomes selectable when recording a journey. This will display real-time measurement of the journey in the form of :-

1. Distance from the point of the start of the journey
2. The cumulative height gained and lost during the journey (the difference being the height change)
3. Time since the recording commenced
4. Average speed since the recording commenced.

Manually Creating a Track or Route.

Pressing the icon “Edit” opens a dialog box with 2 or 3 choices: Create a New Track; Create a New Route; or Modify an existing Track, Journey or the current route when one exists.



Choose New Track, at this point a gold point (refer table below) is positioned in the centre of the screen with a blue pointer indicating the start of a track segment or route. The end of a track segment or route is marked by a yellow triangle whilst markers within the route are just the round red or yellow spots. A single tap on the point turns the colour of the point to red indicating that it can be moved and a round white spot  will appear below the point as well as an information box above. Holding the finger on the white spot for >1sec activates the pointer and you will see a dashed red line joining the white circle and the red point. It is then possible to move the point and ‘drop’ the marker on the position that you require to be the start of the track. A single tap on the circle changes the colour in a specific order with each colour representing a certain type of pointer (red, green, blue and grey). Once the first point has been positioned the moving point has a gold and red triangle above it as you continue to extend the track. The blue and gold triangles represent beginning and end of track segments respectively.

Colour	Begin	mid	End	Segment
Gold				Initial point and subsequent recorded points along track/route.
Red				Point in edit mode.
Green				‘Magic Edit’ – touching and dragging the point automatically inserts the necessary points for the route following the cursor. Releasing the button ‘forces’ a point at the current position. This follows your finger trace
Blue				‘Auto Trace’ – Move the point to a position where you wish to go then release it. The programme then sends a request to the IGN server to request an optimum route and this is placed on the map as a series of yellow points. This mode requires a working internet connection.
Grey				‘Manual’ - Allows the user to enter single points separated by lines by dragging the point and releasing it for each location

The track created remains in the [New] group.

With ‘Auto-Trace’ there are a number of important points to consider.

- With a scale of better than 1:100k (ie Pedestrian Mode) the programme optimises the distance between the points it is given.
- It ignores nature paths (GR,slope etc) but considers trails, paths, tracks and roads.
- It is important not to ask too much of the optimiser thus keep sections between points relatively short and ‘prompt’ the optimiser in sections where there are two alternative directions it might use. Remember it uses the shortest path, not necessarily the most interesting.
- The optimiser does NOT segment the route at the points that you indicate. The route is calculated and drawn by extending the current route.
- If the connection to the server fails the final point remains in its original position with no additional points entered.

For most manually created tracks it is suggested that the grey icon be used to minimise the number of points within the GPX file whilst maintaining the position of the ‘recorded track’ along the tracks shown on the photo traces or maps.

Editing a Track or Route

Stored tracks can be edited in much the same way as they are created. Listing and managing Tracks is similar in method to managing Waypoints and many of the same procedures are common to both. To manually edit a track or route enter the Track Management menu and press the List and Manage Tracks button . The screen that appears shows the number of tracks within a number of groups. Those groups within square brackets are programmed defined and include tracks that are displayed, imported and deleted. You will also see a group titled [IGN EL], this is an inbuilt folder which has references to tracks and routes

contained on your IGN 'Espace-Loisirs' if such exists. Below each group name is indicated the number of different tracks within the group that are stored.

- [displayed] - folder containing all points that would be displayed on any map tile across France.
- [IGN EL] - folder containing all points held within your IGN Espace-Loisirs.
- [import] - folder containing points from your last 'import'.
- [news] - folder containing...
- [trash can] - folder containing all points deleted by you during management of your tracks and routes. Much like the normal computer 'Trash Can' this needs to be emptied of points to completely delete a point you no longer want to display. This does not necessarily empty when leaving the programme.

Below these are listed user 'groups' (or folders) of waypoints or track points. To add a group touch the + group button (bottom left). You will see a new line added to the list of groups on the screen with a standard 'folder' symbol on the left indicating this is a user group or 'folder'. The name will initially be "New Group" but can be changed by touching the 'Edit' button towards the centre of the line. The final icon on the line is a rubbish bin, the usual sign to delete the folder and its contents – however remember that even though deleted the track points or waypoints do not disappear until they are deleted from the [trash can] folder.

To edit a new set of points added to the underlying map tiles (which will be contained in the [displayed] folder) it is suggested that a new group be created and that the name be changed to reflect the contents (ie "Walk through Cevennes"). Then on the Group listing press the blue right arrow on [displayed]. You will now be presented with a list of points as recorded (manually or through the record facility) which will have the time and date as a default name (third column) for each point. The first column will be a grey arrow followed a second column showing the style of the waypoint or trackpoint. The fourth column has a black arrow pointing to the base of the 'pin' 📌, the fifth column an 'eye' (👁️ black if point is visible, grey if not visible) and the final sixth column a white arrow in a blue circle ➡️. At the bottom of the screen is the main Waypoint or Trackpoint Management menu:-



On larger screens the eye with a cross (hide) may also have an eye without a cross (show) as well as a text indication of what each button does. The explanations of each are:-

	Check all		Join separate tracks
	Uncheck all		Change sort order
	Switch all		Hide/(Unhide)
	Move to Folder		Delete point

Now press the 'Check All' icon and then the 'Move to Folder' icon. You will then be asked which of the user folders you wish to move the points to (in the case above press 'Walk through Cevennes') and these points will be moved to the new folder.

Versions

- 16-002 - Started Waypoint and Trackpoint Management descriptions. (Aug 2016)
- 16-001 - Description of main menus and sub-menus. (July 2016)