January 21, 2025 Version 4.08

**Matterhorn** 4478 m 16,7 km 285°

# Mountains AR

Download on the App Store

Google Play

# Summary

Introduction	
References	3
General consideration	
Purpose of the software	
Warranty	
Reports	
Manual conventions	
First start	
Terms of use	
Permissions	é
	10
Folders and files	10
Advice for ontimal use	14
General features of the app	
Screen organization	
Background mode	10 16
Scrollable nages	
List functions	
Sorting functions	
Filter functions	
Entering the coordinates	
Man	
Organization of the man	20
Objects drawn on the map	
Indicators	
Menu	
Мар	
Change map	
Set zoom level	
Zoom to copied coordinates	
Close all popups	
Reset indicators	
Mode	
Follow the user	
Rotation	
Show	
Show geographic grid	25
Show the compass	
Show mountains	
Show viewfinder	
Show AR limits	
Search	
Search for a mountain	
Search for an address	
Search for coordinates	
Clear found coordinates	
Viewfinder	
Info coordinates	
Copy coordinates	
Copy coordinates (text format)	

Mountains AR – Manuale utente	21 gennaio 2025
Clear copied coordinates	
RA mountains	28
KA mountains	
Status and data	
Compass	
List mountains	
View a mountain	
Web maps	
Preferences	
Geographic areas	
Units of measure	
Coordinates	
Maps	
Web API Keys	
Geographic grid	
Distance	
Photos	
AR mountains	
Notifications	
Screen	
Permissions	
About	
Help	

# Introduction

# References

Official site	http://www.okmap.org
Forum	http://www.okmap.org/forum
Mountains AR for Android	https://play.google.com/store/apps/details?id=com.MountainsAR
Mountains AR for iOS	https://apps.apple.com/us/app/mountains-ar/id884969067
This manual	http://www.okmap.org/download/mountainsARXam_en.pdf

#### **General consideration**

#### Purpose of the software

The software should never be used as a single source of information for navigation.

You should always use your experience and make use of charts, compasses and any other tools before making any kind of orientation or navigation decision.

#### Warranty

The software is as it is and we will not be responsible in any way for its proper or improper use and for any direct or indirect damage caused by the use of the same software.

The use of the software is at the sole risk of the user.

#### Reports

We are willing to do our best to remove errors or inaccuracies in the software, so your every report will be precious to us.

Reports can be sent through the OkMap forum or by sending an email to this address.

Before submitting negative reviews, please let us know your considerations so that we will be able to better meet your needs and, consequently, improve the app.

#### **Manual conventions**

The presence, at the beginning of a paragraph, of the icons and indicates a specificity of the Android and iOS systems.

Sample images were produced with an Android mobile phone. In the iOS version the images are completely similar except for differences which will be highlighted on a case-by-case basis.

## **First start**

Thank you for purchasing Mountains AR.

The Mountains AR app was designed to be installed on both mobile phones and tablets with the Android or iOS operating system.

The first time you use Mountains AR a sequence of pages is displayed to accept the terms of use and provide some permissions.

#### Terms of use

11:54 8 8 8 8 9 • 8 4 100% •	To use the app, you must accept the terms of use
	shown in the figure on the side.
← Terms of use	Read the information carefully and check the <b>I accept</b>
Terms of use	the terms of use checkbox.
The software is as it is and we will not be in any way responsible for the use or	are not accepted.
abuse or for any damage resulting directly or indirectly from use of the software. The use of the software is at the sole risk of the user.	Press the <b>Next</b> button.
Software must never be used as the only source of information for navigation. It is always necessary to use the own	
experience and to make use of maps, compasses and any other tools before begin any type of decision about orientation or navigation.	
ATTENTION: At the end of the initial process of granting permissions, we recommend that you close and restart the app.	
To obtain good results the device must be calibrated periodically; make a figure 8 pattern until your compass is calibrated. Usually, you will have to do the figure 8 motion only a few times.	
I accept the terms of use	
Next	



11:55 🙇 📾 🚔 🖬 🕒 🔹

# Permissions

🤋 🗉 100% 🛍

This app uses your geographic location to determine the position of mountains on the screen.

To allow this, you need to set the Location permission to "While use the app".

Please tap on the "Set permission" button and then on the "Next" button.

Set permissions

The first permission required concerns the use of the user's location (GPS).

Carefully read the note on the page and press the **Set permissions** button.

This permission is required to make full use of the app's features.

revious	Next





Select the item **While using the app** to allow the app to access the location of the device.

In addition, it is necessary to turn on (if not already) the **Use precise location** switch in order to obtain the most accurate positions possible from the GPS.

This permission can also be granted later in the system settings using the following path (in Android 13): Settings -> Privacy -> Permissions manager -> Location -> OkMap.Mobile -> **Allow only when using the app**.

Alternatively: Settings -> Apps -> OkMap.Mobile -> Permissions -> Location -> Allow only when using the app.

Press the **Next** button.

11:55 🧟 📾 🚔 🖸 🕒 🔹

# Permissions

S. II 100%

This app can take photos.

To allow this, you need to set the Camera permission to "While use the app".

Please tap on the "Set permission" button and then on the "Next" button.

Set permissions

The second authorization concerns access to camera.

To use the augmented reality feature you must provide permission to access the camera.

The app can take photos that will be stored in the pictures public folder if request in <u>Preferences -</u> <u>Photos</u>. In any case they are saved in the app sandbox in the subfolder Pictures.

Press the **Set Permissions** button.

Previous Finish





12:03

.... 🕈 733

# Permissions

This app uses your geographic location to determine the position of mountains on the screen.

To allow this, you need to set the Location permission to "Allow while use the app".

Please tap on the "Set permission" button and then on the "Next" button.

Set permissions

The first permission required concerns the use of the user's location (GPS).

Carefully read the note on the page and press the **Set permissions** button.

This permission is required to make full use of the app's features.

Previous

Next





Select the item **Allow while using the app** to allow the app to access the location of the device.

This permission can also be granted later in the system settings.

Location permission can also be granted later in the system settings.

In iOS 16 the path is the following: Settings - Privacy & Security - Location Services - OkMap - **Allow** while using the app.

Press the **Next** button.

12:03 🖌

.... 🗢 739

# Permissions

This app can take photos.

To allow this, you need to set the Camera permission to "Ok".

Please tap on the "Set permission" button and then on the "Next" button.

Set permissions

The second authorization concerns access to camera.

To use the augmented reality feature you must provide permission to access the camera.

The app can take photos that will be stored in the pictures public folder if request in <u>Preferences -</u> <u>Photos</u>. In any case they are saved in the app sandbox in the subfolder Pictures.

Press the **Set Permissions** button.

Previous

Finish

12:03

.... 🕈 🖽

# Permissions

This app can take photos.

To allow this, you need to set the Camera permission to "Ok".

Please tap on the "Set permission" button and then on the "Next" button.

	"Moun Like	tainsAR" to Access Camera	Would the
	Mounta use yo picture	insAR would ur camera to s with mou	d like to o take ntains
	C	on't Allow	(
		OK	
Dec	wiews		Tiniah
Pre	evious		Finish

Consent is required to access the camera. Press the **OK** button.

This permission can also be granted later in the system settings.

In iOS 16 the path to use is the following: Settings -> Privacy and security -> Camera -> OkMap.Mobile -> **ON**.

Press the **Next** button.

# Folders and files

At the first start Mountains AR creates some folders in the app *sandbox*. Each app has its own storage space (*sandbox*) whose files are not visible to other apps.

In the case of Mountains AR, the sandbox address is as follows: Android/data/com.MountainsAR/files/.

It in turn contains the following folders:

• **Logs**: contains log files that the app creates in the event of an error (bug) and that must be sent together with the report in order to make the necessary changes to the software.

If you were to inadvertently delete some of these folders, they will be automatically recreated the next time the Mountains AR app is restarted. Of course, the original content will be lost.

If you use the Take a picture function, the following folder will be created:

• **Pictures**: The image files in .jpg format containing the photos taken are stored in this folder. A copy of the files can be stored in the **Pictures** public folder if the **Save to Album** option on the <u>Preferences - Photos</u> page is activated.

# Advice for optimal use

It is advisable to periodically calibrate the magnetometer.

This can easily be done by rotating the device at least 3 times to form a figure 8 shape.

## **General features of the app**

## **Screen organization**



All the main pages of the app display a bar at the top as shown in the figure on the side.

The bar is organized like this:

- On the left is the **main menu** of the app. Pressing this button opens the list of main functions. Each chapter of this manual describes each of these items.
- Below is a short **title** of the current page which in some cases can be displayed abbreviated.
- The **toolbar** follows. The buttons displayed depend on the current page. It may not be present on some pages. The meaning of the buttons is explained in each specific paragraph of the page.
- Finally, the **page menu** which, if pressed, opens a secondary list of the functions of the current page. The meaning of the buttons is explained in each specific paragraph of the page.



In some cases, the main pages may display secondary pages in cascade.

The secondary pages are organized as shown in the figure on the side.

The only difference with the main pages is that instead of the main menu an arrow is displayed which allows you to **return to the previous page**.

Return to previous page

Many sub-pages have two buttons that allow you to cancel (**Cancel**) or confirm (**OK**) the changes made to the page.

In any case, you will then return to the calling page.



Warning: using the return to the previous page (arrow at the top left) is equivalent to the **Cancel** button.

#### Background mode

The app also works in *background* mode to give the possibility to record the track that the user is following even with the screen off.

Furthermore, even if the app is closed, the registration is not interrupted. For more information see the paragraph <u>GPS and navigation</u>.

#### **Orientation of the device**

The app can work both in *portrait* mode (device in vertical) and in *landscape* mode (device in horizontal).

The choice of horizontal or vertical orientation of the device is essentially personal and depends on your habits and the type of information you are viewing.

The positions of the page elements are automatically adapted, based on the orientation of the device, to facilitate reading.

However, most of the pages have been designed to have a better use in *portrait* mode.

The <u>RA Mountains</u> page can only work in landscape to optimally display the panorama.

The <u>Compass</u> page can only work in *portrait* mode as it displays the north direction and consequently cannot be readjusted.

#### **Scrollable pages**

Most of the pages and menu items can be scrolled up or down as the size of the screen does not allow full viewing.

To scroll through a page or menu, use a finger swipe on the screen.

#### **List functions**

	NAMES AND A SAME AND	
Mountains	↓ª :	In these pages there are often some functions (usually one or two) that act on the single line.
Croce San Martin	no	
61.580 km	-36.2 deg	To activate these features, simply drag your finger on
asetesta		This reveals the buttons that activate the functions
60.735 km	36.3 deg	(swipe menu).
Nibbio		These functions typically refer to changing or deleting
60.331 km	-33.4 deg	row data.
ella Piana		
60.085 km	37.3 deg	To return to the row view and hide the buttons, drag
occana		your miger nom lert to right.
60.032 km	35.2 deg	
Varo		
59.207 km	-31.2 deg	
km -32.0 deg	OTHER	
Fogliano	1	
58.558 km	-37.5 deg	
Ceccone		
58.382 km	-30.9 deg	
la Botte		
58.241 km	-31.6 deg	
del Diavolo		
58.156 km	-34.0 deg	
	Mountains Croce San Martin 61.580 km asetesta 60.735 km Nibbio 60.331 km ella Piana 60.085 km occana 60.032 km boccana 60.032 km varo 59.207 km cm -32.0 deg Fogliano 58.558 km Ceccone 58.382 km la Botte 58.241 km del Diavolo 58.156 km	Mountains       P         Croce San Martino         61.580 km       -36.2 deg         asetesta       60.735 km       36.3 deg         Nibbio       60.331 km       -33.4 deg         ella Piana       60.085 km       37.3 deg         60.032 km       35.2 deg       0         Varo       59.207 km       -31.2 deg         Coccana       0THER       0         60.032 km       -37.5 deg       0         Fogliano       58.558 km       -37.5 deg         Ceccone       58.382 km       -30.9 deg         Ia Botte       58.241 km       -31.6 deg         fel Diavolo       58.156 km       -34.0 deg

#### **Sorting functions**

In almost all the list functions there is the possibility to sort the rows according to some criteria.

The sorting functions are activated with the toolbar button shown at the side (see A Screen organization). 12

A list opens where you can choose the sort order.

If you choose the same criterion twice in succession, the ordering takes place in reverse.

At the bottom of the list of sorting criteria there is always the CANCEL button which cancels the function in progress and leaves the previous sorting criteria active.

#### **Filter functions**

In almost all the list functions there is the possibility to filter the data in order to reduce the number of rows displayed in order to find what you are looking for more easily.

To set the filters, use the *Set filters* item in the page menu (see <u>Screen organization</u>). A page is displayed where you can enter some values that act as a filter on the data. The required conditions must all be verified (logical *and* operator).

To cancel all filters and return to the complete list, use the *Cancel Filters* menu item.

#### **Entering the coordinates**

In some circumstances it is necessary to enter the geographical coordinates and in this case the appr	
side).	
resentation tapping on	
affects the ordingly.	
ged by the	



At the top right there is a menu with the following items:

- Copy and paste
  - **Copy Coordinates**: Copies coordinates into memory for future use.
  - **Copy Coordinates (text format)**: Copies coordinates into the clipboard in text format.
  - Paste coordinates: pastes previously stored coordinates (if available) into the page.
  - **Clean coordinates**: clears the page for entering new coordinates.
  - **Paste GPS coordinates**: paste the coordinates of the user's position into the page, if available.
- Mountains
  - **Select mountain**: opens a page to select a mountain. Once selected, the mountain coordinates will be pasted on the page.
- Others
  - **Info coordinates**: displays a message with the address corresponding to the coordinates on the page (*Reverse geocoding*).

# Мар

# Organization of the map



The map page is organized as shown in the figure on the side.

- At the top is the map **scale** in meters. The scale is adjusted according to the zoom factor.
- On the right there are 4 small buttons that allow you to **zoom** the map, **center the map** on the user's position (highlighted by a blue dot), and **orient** the map to the north. This last button is rotated together with the map and is therefore useful for understanding the orientation of the map respect to the north.
- A viewfinder is displayed in the exact center of the map which is useful in some functions of the <u>Menu - Viewfinder</u>.
- At the bottom a black line allows the visualization of 6 **indicators** of the <u>Status and</u> <u>data</u> page. These indicators can be customized by tapping on their respective labels.
- The **attribution** of the map displayed is described at the bottom of the page. The current map can be changed (see <u>Menu Map</u>).

**Moving** the map is done with a simple gesture of sliding your finger on the map itself.

**Zoom +** is achieved with a gesture of two fingers moving apart while **zoom -** with a gesture of two fingers moving together.

The **rotation** of the map is achieved with a gesture of two fingers that rotate left or right.

## **Objects drawn on the map**

The following objects are drawn in the map container:

- Background containing the selected **web map** (see <u>Menu Map</u>).
- **User position** represented by a blue dot.
- **Geographic grid**: (see <u>Show geographic grid</u>) it is adapted to the zoom of the map and covers an extension a little larger than the extent of the map displayed. It is not adapted to the zoom variation for performance reasons. However, it can be automatically readjusted by turning off and on the switch that allows it to be displayed. The grid shows the coordinates in degrees, minutes, seconds.
- **Copied coordinates**: it is a placeholder that identifies the position of the copied coordinates (see <u>Menu Copy coordinates</u>).

## Indicators

In the lower part of the map, it is possible to view 6 indicators of the <u>Status and data</u> page by tapping on the thick black line at the bottom of the page. A further tab on the black line closes the display of the indicators.

The 6 indicators can be customized by tapping on their labels; a list is displayed from which you can select the desired item.

To know all the possible indicators, see the <u>Status and data</u>.

If the user has moved several kilometers from the last position received or if a lot of time has passed, it is possible that the calculation of the precise position of the position, based on the position of the satellites in view, (fixing) may take longer expected.

Naturally, if the device is indoors or there are not enough satellites in sight, it is possible that the fixing will not take place due to the absence of the signal or insufficient precision.

## Menu

The menu items on the Map page are organized into groups according to their purpose.

### Мар

#### Change map

This button allows you to select one or more maps other than the default one.

When you press the button, a page containing a list of web maps is displayed.

In this list it is possible to select the maps to be displayed (see <u>Web maps</u>). Only active maps are listed (*Active* indicator selected). You can select from 1 to 3 different maps.

To select a map, use the swipe menu on the right and select the + button. To deselect a map, use the swipe menu on the right and select the - button. Selected maps are displayed in green.

In the toolbar of this page there is a button which allows you to cancel all the selections made.

With the menu it is also possible to filter or not the listed data.

#### Set zoom level

Set the zoom level to the desired value.

#### Zoom to copied coordinates

It positions the map and zoom in on the point corresponding to the copied coordinates (see <u>Copy coordinates</u> menu).

If the coordinates have never been copied, a message is issued.

#### Close all popups

Closes all popups on the map opened by the user.

#### **Reset indicators**

This function resets the indicators displayed at the bottom of the page to the factory settings.

Confirmation is requested.

#### Mode

#### Follow the user

When this switch is activated, the map is automatically moved to the point where the user is and is constantly centered on its position.

When this function is active it is not possible to move the map manually but only to act on the zoom and orientation.

To reactivate manual movement, turn off the switch.

#### *Rotation*

Set the map rotation as follows:

- Normal rotation
- Rotation based on terrain
- Rotation locked

#### Distance mode

Calculates the distance from the initial point to the central red viewfinder.

Two placeholders are drawn at the beginning and at the end of the measurement and a line that joins the two points.

Distance, direction, and reverse direction are shown in the description of the destination placeholder.

The thickness, color and style of the line can be changed on the <u>Preferences - Distances</u> page.

To exit distance mode, turn off the switch.

#### Show

#### Show geographic grid

This switch shows or hides the geographical grid of the map (see <u>Objects drawn on the map</u>).

#### Show the compass

This toggle shows or hides a protractor in the center of the map. The color of the protractor can be customized in the <u>Preferences – Maps</u> page.

#### Show mountains

This switch shows or hides the mountains on the map.

#### Show viewfinder

This switch shows or hides the red viewfinder drawn in the center of the map. The viewfinder is useful in the functions of the <u>Viewfinder</u> group.

#### Show AR limits

This switch shows on the map the area containing the mountains visible in the <u>Mountains</u> <u>augmented reality</u> function.

#### Search

#### Search for a mountain

This function is used to search for a mountain on the map. A page is displayed with the list of mountains present into the app.

To select the mountain to search, tap on the corresponding line. Two blue bars are displayed on the sides to indicate the selected item.

You can use the <u>sort</u> and <u>filter</u> functions.

Press the OK button to confirm or the Cancel button to cancel the operation in progress.

The map will be moved so that the selected mountain is displayed in the center of the map (position of the viewfinder).

#### Search for an address

This function is used to search for an address or any point of interest on the map. A dialog box is opened to enter the subject of the search.

Here are some examples of possible searches: "Piazza Venezia, 56 Rome" "Colosseum" "Santo Spirito Hospital, Rome" "00186"

The address found will be displayed in the center of the map with a pin.

To delete the pin, use the Clear found coordinates function.

#### Search for coordinates

This function is used to position the map at certain coordinates. The page for <u>entering the coordinates</u> opens.

The map will be centered on the coordinates and a pin will be displayed.

To delete the pin, use the Clear found coordinates function.

#### Clear found coordinates

The found coordinates are cleared and the corresponding pin is hidden on the map.

#### Viewfinder

#### Info coordinates

A message is displayed with the address corresponding to the center of the map (in the position of the viewfinder). This function is called *Reverse geocoding*.

#### Copy coordinates

The coordinates corresponding to the center of the map (at the location of the viewfinder) are copied to memory for future use.

The copied coordinates are displayed on the map with a pin.

To delete the pin, use the *Clear copied coordinates* function.

#### Copy coordinates (text format)

The coordinates corresponding to the center of the map (at the location of the viewfinder) are copied into the clipboard in text format.

The copied coordinates are displayed on the map with a pin.

To delete the pin, use the *Clear copied coordinates* function.

#### Clear copied coordinates

The copied coordinates are canceled and the corresponding pin on the map is hidden.

# **RA mountains**



With this function you can view in the camera the mountains present in your device.

The position of the icons respects the position, altitude and distance of the mountains so as to be displayed in the position where the human eye would see it.

By tapping on the icons, you can view/hide a balloon containing the following information:

- Mountain description
- Mountain altitude
- Distance of the mountain from the user position
- Direction of the mountain from the user position

By moving your finger on the camera view you can more precisely align icons by taking a known mountain as a reference.

The original position can be restored with the Auto button (see below).

Only mountains with the following characteristics are displayed:

• Mountains whose distances from the user's position fall within the range of the selected distances and exceed the selected minimum altitude (see below)

Functionality (right side buttons):

- Main menu
- Ruler: Opens/closes the left sidebar for defining the distance range and minimum altitude
- Camera: Take the photo
- Auto: Automatic position reset

Clicking on the balloons relating to the mountsins, opens a menu containing the following functions:

- Show mountains
- Show mountains on map

# Status and data

12:30 🧸 🗠 🚔 🖬 🗭 🔹	o 🖘 🗉 100% 🛍
$\equiv$ Status and	nd data ↓Z
Sta	atus
Battery status	Full
Battery level	100
Navigation status	Started
Compass status	Started
Barometer status	Not supported
Navigation accuracy	20 m
Navigation vertical accuracy	2 m
Coorr	linatos

Coordinates	
Current coordinates (format 1)	Lat: 41.9098227° Lon: 12.5768679°
Current coordinates (format 2)	Lat: 0.73146439504206 Lon:

Map center coordinates (format 1)	Lat: 41.9098194° Lon: 12.5768748°
Map center coordinates (format 2)	Lat: 0.731464337446194 Lon:
Map zoom	18
Map resolution	1.19432856695586

This page collects all the app values updated in real time.

In the toolbar there is a first button that allows you to **sort** the list by *Measure* or *Type*.

Sorting by *Measure* is shown in detail below.

Sorting by *Type* provides for the same items but grouped according to a different scheme that prefers the type of values:

- Status
- Мар
- Current values

The values are updated in real time without the need to drag the list down to *refresh* the list.

On the <u>Map</u> and <u>Compass</u> page you can select 6 of these indicators to have them handy.

Below all the possible items organized by *Measure*:

Label	Value
	Status
Battery status	Charging - Discharging - Complete - Not charging - Not present – Unknown
Battery level	Value between 0 and 100 (fully charged)
Navigation status	Not enabled - Not supported - No permission - Poor signal - Started - Stopped or no signal - Unable to get data
Compass status	Not supported – Started – Stopped – Unable to get data
Barometer status	Not supported – Started – Stopped – Unable to get data
Navigation accuracy	In the short distance unit of measure (see <u>Preferences -</u> <u>Unit of measure</u> )
Navigation vertical accuracy	n
Coordinates	

Current coordinates (format 1)	In format 1 coordinates (see Preferences - Coordinates)	
	In format I coordinates (see <u>Preferences - Coordinates</u> )	
Current coordinates (format 2)	In format 2 coordinates (see <u>Preferences - Coordinates</u> )	
Мар		
Map center coordinates (format 1)	In format 1 coordinates (see <u>Preferences - Coordinates</u> )	
Map center coordinates (format 2)	In format 2 coordinates (see <u>Preferences - Coordinates</u> )	
Map zoom	Value between 2 and 20	
Map resolution	In m/pixel	
Directions		
Direction of course	In the unit of measure of direction (see <u>Preferences - Unit</u> of measure)	
Direction of magnetic north	n	
Altitudes		
Pressure	If the barometer is available, in the unit of measure of pressure (see <u>Preferences - Unit of measure</u> )	
Altitude	In the unit of measure of altitude (see <u>Preferences - Unit of</u> <u>measure</u> )	
Times		
Time of last GPS point	In the format date - hours: minutes: seconds	
Time of sunrise	In the format hours: minutes: seconds	
Time of sunset	W	

# Compass



The page displays a rotating compass that looks in the direction the device is pointing (indicated by the red triangle).

This page remains locked in *portrait* position and cannot be rotated in order not to create confusion about the orientation of the device itself.

In the lower part of the map, 6 indicators of the page <u>Status and data</u> are visible.

The 6 indicators can be customized by tapping on their labels; a list is displayed from which you can select the desired item.

To know all the possible indicators, see <u>Status and</u> <u>data</u>.

In the toolbar there is a button that activates the **speech synthesizer** which reproduces the direction in degrees.

This feature can be very useful if you are pointing the device at a target and cannot read the screen content.

In the menu there is the only item **Reset indicators** which restores the indicators displayed at the bottom of the page according to the factory settings (default). Confirmation is requested.

# **List mountains**

12:09 👌 📾 🏯 🖸 🖸 🔹		ଡ଼ ଵୖ୷୲୲ 100% 🛍	
	Mountains	↓ª :	
Poggio (	Croce San Martii	no	
763 m	61.580 km	-36.2 deg	
Colle Ca	setesta		
732 m	60.735 km	36.3 deg	
Poggio N	Nibbio		
896 m	60.331 km	-33.4 deg	
Colle de	lla Piana		
772 m	60.085 km	37.3 deg	
Colle Ro	ccana	1994	
692 m	60.032 km	35.2 deg	
Poggio \	/aro		
793 m	59.207 km	-31.2 deg	
sano			
58.569 kr	n -32.0 deg	OTHER	
Monte F	ogliano	1. A.	
965 m	58.558 km	-37.5 deg	
Pogigo (	Ceccone		
757 m	58.382 km	-30.9 deg	
Poggio I	a Botte		
817 m	58.241 km	-31.6 deg	
Pozzo de	el Diavolo	362	
840 m	58.156 km	-34.0 deg	

\_\_\_\_\_

Lists all the mountains in the area where the user is located.

Each row shows the following information:

- Description
- Altitude
- Distance from the user's position
- Direction from the user's position

The list can be sorted by:

- Description
- Altitude
- Distance

The menu contains the following functions:

- Set filters
- Reset filters

The rows have a *swipe* menu that allows the following functions:

- Other
  - Show mountain
  - Show on the map

# View a mountain

This page allows you to change the attributes of a mountain.

14:44 & ⊚ ⊗ & ≊ • ← Mountair	୧ ଲିଖା 100% 🗎 1	<ul> <li>You can edit:</li> <li>Description</li> <li>Coordinates</li> <li>Altitude (in the short distance unit of measure)</li> </ul>
Name	Monte Gennaro (cima Zappi)	<ul> <li>(see <u>Preferences - Unit of measure</u>)</li> <li>Distance (in the distance unit of measure (see <u>Preferences - Unit of measure</u>)</li> <li>Direction (in the direction unit of measure (see <u>Preferences - Unit of measure</u>)</li> </ul>
Coordinates	Lat: 42.0605621338° Lon: 12.8065862656°	
Altitude (m)	1271	
Distance	25.355 km	
Direction	48.5 deg	



.

# Web maps

Greece

10:44 🖸 🗣 🗟 🌢 🗕 🥱	.ıl 100% 🗎
$\equiv$ Web maps	:
Google Satellite <sup>World</sup>	XYZ
Google Satellite Hybrid <sup>World</sup>	XYZ
Google Terrain Hybrid <sup>World</sup>	XYZ
Google Traffic World	XYZ
Google Transit <sup>World</sup>	xyz
Greece ktimanet	
Greece Orthophoto	

Lists all available web maps.

Selected maps are numbered in red in stacking order.

Maps that require an API key (see <u>Web API Keys</u>) are highlighted with a red warning.

The menu shows the following functions:

- Set filters
- Reset filters

Rows have a swipe menu on the right which allows the following functions:

- + Adds the map to the list of maps to view (only available in map selection mode)
- Removes the map from the list of maps to view (only available in map selection mode)

There is also a swipe menu on the left which allows the following functions:

- **Test**: to preview the map at the specified coordinates
- Capabilities: to view the capabilities of the web service in XML format (only available for WMS maps)

HERE	
HERE Hybrid World Api key required	XYZ
HERE Map World Api key required	XYZ
HERE Satellite World	XYZ

WMS

## Preferences

After selecting the Preferences menu, a list of items appears that group preferences by theme.

Each page has a button in the toolbar that allows the factory settings to be restored limited to the values described on the page itself. Confirmation is requested.

The changes to the data must in any case be confirmed with the OK button. To discard the changes, press the Cancel button.

## **Geographic areas**

This page allows you to download mountain data from the site <u>https://www.okmap.org</u>.

The area and date of the version of the previously downloaded data are described at the top. To upload or update data, simply press the *Download* button corresponding to the chosen geographic area.

Only one geographic area can be downloaded at a time. When the app is started, a message may warn you of the availability of new data.

## **Units of measure**

This page allows you to define the units of measure for the system.

These are pairs of values that define the unit of measurement (selectable from a list) and the number of decimals with which to represent the relative values (selectable with a dot that slides on a bar).

The list of couples is described below:

- Distance: used for example to represent the values of the distances traveled
- Short distance: used for example to represent off course or other short distances
- Altitude
- Direction
- Pressure: used if the barometer is present

# Coordinates

Allows you to define:

- Format 1 coordinates: it can be:
  - Deg: Degrees
  - DMM: Degrees -Minutes
  - DMS: Degrees -Minutes-Seconds
  - Rad: Radians
- Format 2 coordinates: (similar to format 1)
- Decimals with which to represent the coordinates:
  - o **Degrees**
  - o Minutes
  - o Seconds
  - o Radians
- Default box coordinates: specifies the default coordinate type in the coordinates page

## Maps

Allows you to define:

- Compass color: blue, green, red
- Zoom web map preview: used in the web map list to produce previews

## Web API Keys

Allows you to define the API keys used in some map delivery web services. It involves multiple pairs of values consisting of:

- Web server group (see <u>Web Maps</u> function)
- Web API key

Any custom maps can include the API key encoded with the string @apikey@ in the url.

# Geographic grid

Allows you to define:

- Grid line width: establishes the thickness of the grid line in pixels
- Grid line color: establishes the color of the grid line through a window where it is possible to indicate the RGB value using three sliders (0-255)
- Grid line pattern: establishes the style of the lattice line; the possible values are:
  - o Default
  - Solid: solid line
  - Dash: dashed line
  - Dot: line of points
  - DashDot: dash-dot line
  - DashDotDot: dash-point-point line
- Label background color: establishes the background color of the labels through a window where it is possible to indicate the RGB value using three sliders (0-255)
- Label font size: determines the font size of the labels
- Label color: establishes the color of the labels through a window where it is possible to indicate the RGB value using three sliders (0-255)

## Distance

Allows you to define:

- Distance line width: establishes the thickness of the distance line in pixels
- Distance line color: establishes the color of the distance line through a window where it is possible to indicate the RGB value using three cursors (0-255)
- Distance line pattern: establishes the style of the distance line; the possible values are:
  - Default
  - Solid: solid line
  - Dash: dotted line
  - Dot: line of points
  - DashDot: dash-dot line
  - DashDotDot: dash-point-point line

# Photos

Allows you to define:

- Folder organization: photos can be organized into sub-folders to improve their organization. The possible values are:
  - None: No sub-folder is created
  - YYYY: photos are organized into sub-folders by Year
  - YYYYMM: photos are organized into sub-folders by YearMonth
  - YYYYMMDD: photos are organized into sub-folders by YearMonthDay
- Save to album: if activated, a copy of the photo is saved in the Pictures public folder; in any case, the photos are saved in the Pictures app folder

## **AR mountains**

Allows you to define:

- AR circle width: establishes the thickness in pixels of the circle that delimits the mountains display area
- AR circle color: establishes the color of the circle through a window where it is possible to indicate the RGB value using three cursors (0-255)
- AR circle pattern: establishes the style of the circle; the possible values are the same as for the distance line
- AR circle fill style: establishes how the circle should be filled; the possible values are:
  - Default: the area is not filled
  - Hollow: the area is not filled
  - Solid: the area is filled with a solid color
  - o Dotted: the area is filled with colored dots
  - Horizontal: the area is filled with horizontal lines
  - Vertical: the area is filled with vertical lines
  - Cross: the area is filled with small crosses
  - DiagonalCross: the area is filled with a diagonal grid
  - ForwardDiagonal: the area is filled with diagonal lines from left to right
  - BackwardDiagonal: the area is filled with diagonal lines from right to left

## Notifications

Defines whether notifications are to be issued for certain events. The events are:

- Low battery level: it is triggered when the battery charge level is below 10%
- Poor or no GPS signal

In addition, the type of report can be specified:

• Speech synthesizer or acoustic signal

#### Screen

Defines under which circumstances the screen should remain on:

- When the device is powered on
- All time

# Permissions

This function repeats the authorization process displayed when the application is first launched.

It can be useful if the user has forgotten to provide some authorization necessary for correct use of the application.

The sequence of pages is the same as already seen in the <u>First start</u> chapter.

# About

12:30 🤱 💩 🏯 🖬 🗿 🔹	০ জi 100% 🕯 🛛 Th	۱
≡ About	ap	)
MountainsAR	4.0 It th	e
The software is as it is and v	ve will not	
be in any way responsible fo abuse or for any damage res or indirectly from use of the use of the software is at the user.	r the use or ulting directly software. The sole risk of the	r
Software must never be used source of information for na It is always necessary to use experience and to make use compasses and any other to begin any type of decision al orientation or navigation.	d as the only vigation. : the own of maps, ols before bout	
ATTENTION: At the end of th process of granting permiss recommend that you close a app.	ne initial ions, we nd restart the	
To obtain good results the de	evice must ake a figure 8	

pattern until your compass is calibrated. Usually, you will have to do the figure 8 motion only a few times.

Web site	www.okmap.org
Forum	www.okmap.org/forum
Email	info@okmap.org
	Libraries
Mapsui	github.com/Mapsui/
BruTile	github.com/BruTile/
Geolocator	github.com/jamesmo
sqlite-net-pcl	github.com/praecl
lcons	www.flaticon.com
3	

# Help

View this manual directly from the app.

is page provides all the information and references of the p.

also contains links to the official website and the websites of e libraries used.

**nportant**: read the disclaimer at the top of the page.