



The Terra Map™ How-To serie

How to use OFFLINE maps with your iPhone/iPad

Digital Map Basics

All the digital maps can be divided in 2 main types: Raster maps and Vector maps. Even if you could use both of them to represent the same “area”, they are very different from a conceptual point of view. **Raster maps** (see Image 1) are very similar to photos (in some cases are really photos) and give only a visual information, **Vector maps** (see Image 2) describe the area in term of points, lines and polygons and shall be interpreted by some software to be displayed. As pros and cons, Raster maps are generally more space consuming but more pleasant to the reading.

To make a parallel with music, a Raster map is like a recorded music in a CD (you can play it anywhere but you cannot do much more) whereas a Vectorial map is the musical score of the same song. You need to have a band to play it and the result could be very different from band to band.

The Digital Maps in the iOS devices

On iOS there are many applications using Digital maps and most of these Apps use the maps in **Online mode** (see Image 3), this means you can have access to these maps only while you



Image 1: Raster chart



Image 2: Vector chart



Image 3: Maps app, using Online maps

are connected to Internet. This could be fine when you are using the device for Navigation in a city but it easily becomes useless if you are in areas where you don't have 3G or Wifi signal, as in open sea or at mountain. More professional Apps allow to use the maps also in **Offline mode**, that means you can use them even if you don't have any connection with Internet. To allow this, the maps are stored on your device (in Raster or Vectorial format) and then used even if you don't have any 3G or wifi signal.

If the Application uses Offline Raster maps you can normally store only a small area and you can only display them without the possibility to customize its drawing or to query the map. Whereas if the App uses Vector maps you can store bigger areas and you have a full functional map on your device.

The Digital maps with *Terra Map™*

When you install the *Terra Map™* in your device, you will have "only" a world map (Raster) allowing you to pan and zoom to a country level. When zooming further the App will display a grid to be used to download the *Terra Map™* Offline maps of your area. Using this grid you tap on the squares (tiles) you are interested in (turning them blu) and when you are fine with the selection you can tap on the **Download button** and the App will start downloading your maps (see Image 4). If you close the App meanwhile the download is going on, the download will be stopped. The *Terra Map™* Offline maps could be Raster maps or Vector maps depending on the area, both of them are obtained using local Hydrographic Office charts.

You can download additional Offline maps at any time tapping on the **Grid button** (see Image 5) and opening the grid page. In this page you have additional info on the tiles depending on their color: a Green tile means you have already downloaded it on the device, a Grey tile means you cannot download it (not part of your package), a tile with a Lock (only on some versions) means you have to still buy it and a tile with a red "Update" band means a new version of this tile is available.

If the Grid button becomes flashing blu means that in the area you are zooming in you have not downloaded any Offline maps,

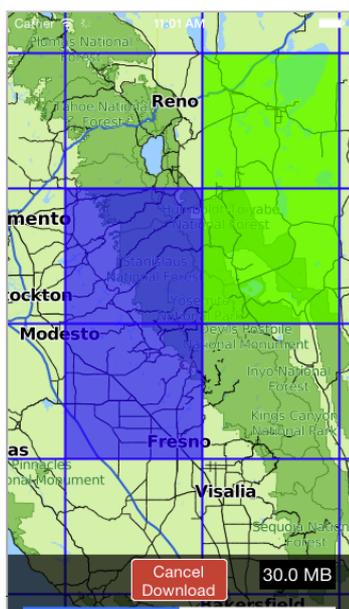


Image 4: Grid page while downloading

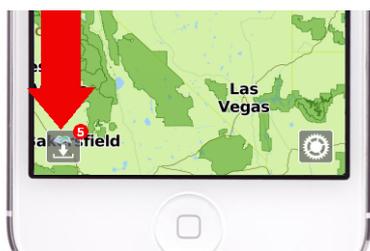


Image 5: Grid button with red

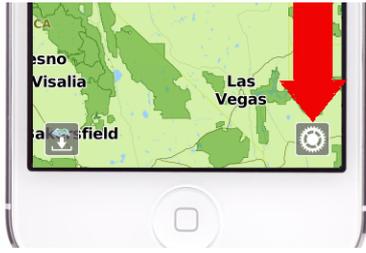


Image 6: Settings button

just tap on the Grid button and download what you need. If the Grid button has a small red box with a number in it (see Image 5) means that some of the downloaded tiles have an update available, just tap on it and select the “**Update ALL**” button to update all the tiles (Note: all the updates can be downloaded for FREE). You can always re-download any already downloaded tile, as you can delete all of them with the **RESET** button in the Setting page (you can open the Settings page tapping on the Settings button, see Image 6).

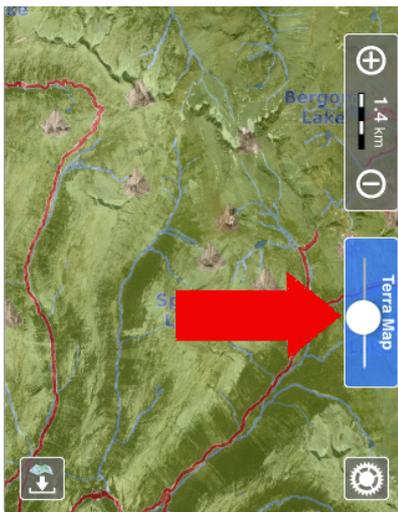


Image 7: Satellite mode on Yosemite

With *Terra Map*TM you can mix different maps to have a better understanding of the area, in the Settings page you have a “**Map background**” switch that allows to select (other than the Offline mode) a Satellite and a Street mode (that request you to be connected with Internet). You will see a Satellite (or Street) map as background and the *Terra Map*TM cartography in semi-transparency on top of it. In this case a small window will appear on the main page (see Image 7) that allows to adjust the transparency of the overlaid map. Moving the slider up you will make the *Terra Map*TM cartography less transparent and viceversa. To be noted that on the Land the *Terra Map*TM cartography is always completely transparent when in overlay.

*Terra Map*TM is an iOS application for Outdoor navigation, see www.globalterramaps.com