

MBeGPS

Software installation

After the cab file downloading it is necessary copy it on a device folder (in the device or memory card) and launch.

The installation program will ask if you want to install it in the device or in the external memory (choose the destination you want). If you choose to install the program in the external memory please be sure that the access time was fast.



At the end of the installation we can launch the program or through the Program folder or through a assigned tab.



If the Device is provided with an internal GPS Antenna there are not settings to do because the program is auto detecting . If you have an external GPS Bluetooth Antenna is necessary doing the

Paring and after that assign the COM port through the **External GPS** menu located into the **Settings, System**.

If this icon is not visible (this is a problem of the old WM 5.0) it is necessary modify this registry key:
HKEY_LOCAL_MACHINE\ControlPanel\GPS Settings
change the value
from: "Hide"=dword:00000001
to "Hide"=dword:00000000
and Soft Reset.



Check in the Bluetooth menu the gps antenna assigned Com port and after that goes in the Settings, System and click on the External GPS and Hardware to set the same value for GPS hardware port, for the speed see in the Antenna user manual and choose the some value.



Utilize the Program

After launch the program enable the data receiving from the GPS Antenna. The warm up time depend from the Antenna or from the geographic position, or from the meteorological condition (clouds or high hills could be reduce the signal quality).

Appena dei dati validi vengono ricevuti, i vari pannelli cominciano a mostrare le varie informazioni.

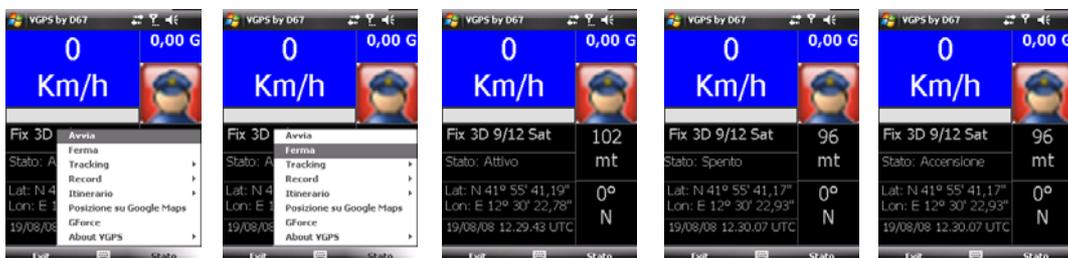


mostrare le varie informazioni.



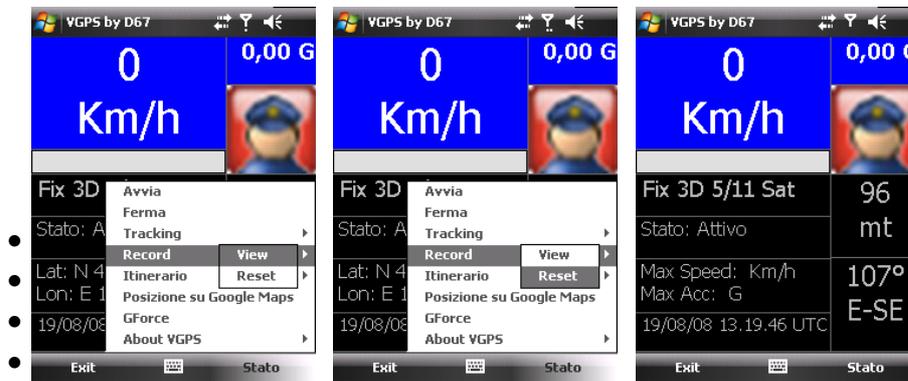
The function panels are the following (starting from left up corner):

- **Speed panel**
 - This panel is splitted into two different part, the blue panel show the speed value in Km/h or Knot. Touching the panel the two icons on the right changes from highlight to shadow to indicate the correct function.
 - The bar show the speed with maximum value @250 Km/h or @ 130 Knot.stra.
- **Satellites panel**
 - This panel show how many satellites are in use or in view. The left value is for the satellites in use, the right is for how is in view. With up to 3 satellites we can have a correct signal for the altitude (more satellites mean more accuracy).
- **Status panel**
 - This panel show the status of the GPS receiver and can be assume the following conditions:
 - **Spento (off)**
 - In the menu **Stato, Ferma** (picture 2) it is possible switch off the receiver without close the application (picture 4).
 - **Attivo (on)**
 - In the menu **Stato, Attiva** (picture 1) it is possible switch on the receiver (picture 3)
 - **Accensione (StartingUp)**
 - This message appear when the we have choose the menu **Attiva** but the (external) antenna is switched off (picture5).



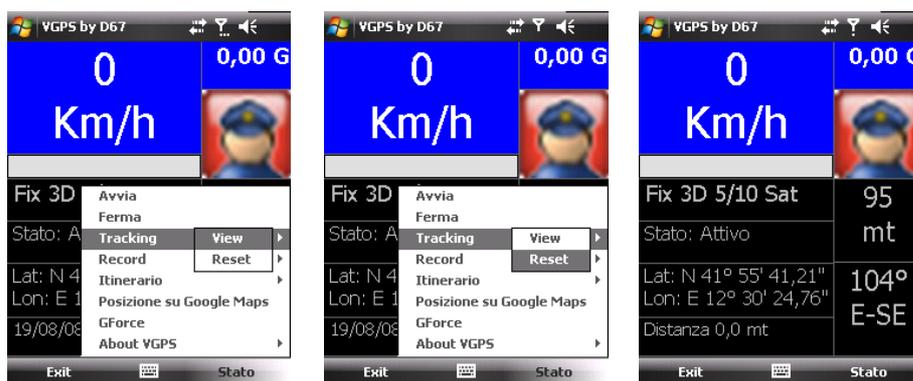
- **Coordinate – Record panel**

- The main function of this panel is to show the geographic coordinates **Latitude** and **Longitude** esprime in *Degree, Minutes and Seconds* or in alternative with the menu **Stato, Record, View** we can display the maximum reached speed and the maximum acceleration. This record can be resets using the menu **Stato, Record, Reset**. For show again the coordinates de-flag the **Stato, Record, View**.



- **Time – Tracking panel**

- The main function of this panel is to show the UTC Time. UTC time = GMT time, GMT = Greenwich Mean Time. The alternative function is to know the crossed distance using the menu **Stato, Tracking, View**. As soon flagged the menu **View** the program starting to measure the crossed distance with an update frequency with one per second. The calculation of the distance is the summary of every measured distance from the previous coordinate and the actual coordinate in straight way. This value can be resets using menu **Stato, Tracking, Reset**. Starting from that the calculation restart from zero. To come back at the Time visualization de-flag **Stato, Tracking, View**.



The function on right side are the following:

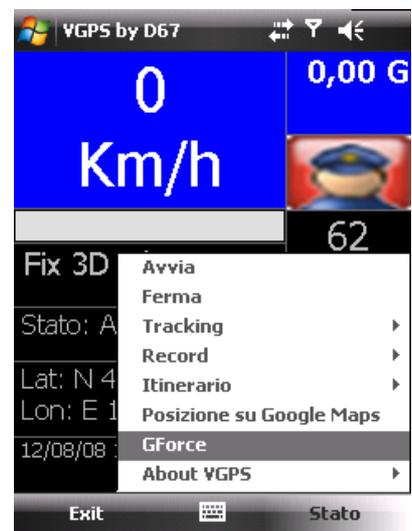
- **Acceleration panel**

- This panel show the acceleration calculated how the difference from two note speed values in a certain time, this time is the GPS transmission time that is one second. The backcolor changes with the acceleration range, we could be have two different green for positive acceleration and two different red color for negative acceleration. Touching the window (or using the menu **Stato, GForce**) we can open a all screen window with a picture like a Formula 1. The yellow cursor can be move only up or down because the acceleration measure is a calculation and the system doesn't use an accelerometric sensor (this will be done with a new software for the devices provided, and at this time only the HTC Diamod is one of that).



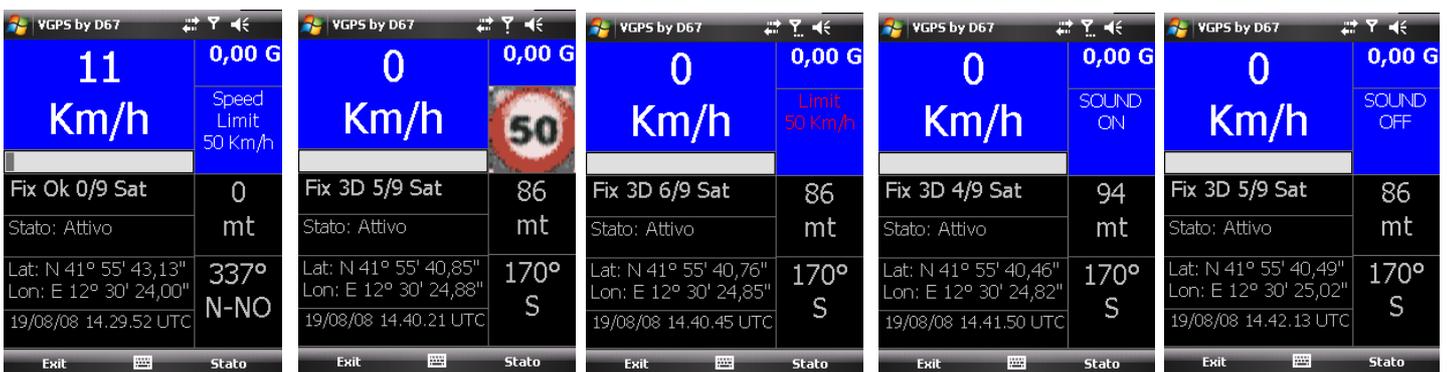
To come back at the main program is necessary touch the **Exit** menu.

We can take under control in this window the speed, the altitude and the direction.



- **Speed Limit panel**

- This panel show the “cop” icon and it's dedicate to take under contrl own speed. If the copi s visible this function is deactivate. Pressing the right or left arrows we can assign the alert speed limit, these values are: 50, 70, 90, 110 and 130 Km/h. If our speed exceeds the selected speed (plus 5 km for tolerance) for example 56 with 50 selected, the panel alternate the limit (written in red) with the limit panel .It is also possible assign a sound alarm in order to don't be forced to always turn the head. To able or disable the sound press alternatively the down arrow (two beeps for active, one for deactive).



- **Altimeter panel**

- This panel show the the altitude . there are two way for this measure, the over sea level or the geode level. This difference depends from the GPS antenna you use. This value is indicative and is calculated by the GPS satellites triangulation. More satellites is more accuracy but is not absolute value.

- **Compass panel**

- This panel show the direction but this calculation (it is the same for all gps software that use only gps value) is done how the difference from two different coordinates, in case you rotate the device or the antenna over hown vertical axle the direction doesn't change.

Special functions

There are two special function that use the Google Maps and Google Earth functionalities.

1. The possibility to detect our position knows the coordinates over a Google Maps
2. The possibility to store and review one or more itineraries and view it on Google Earth

Position on Google Maps

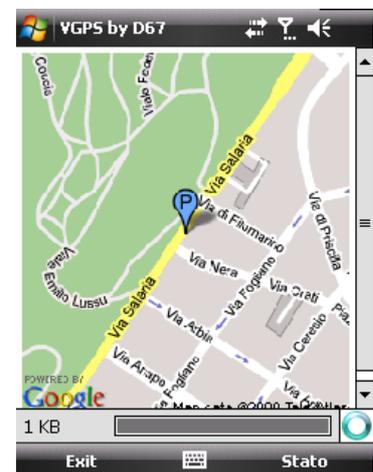
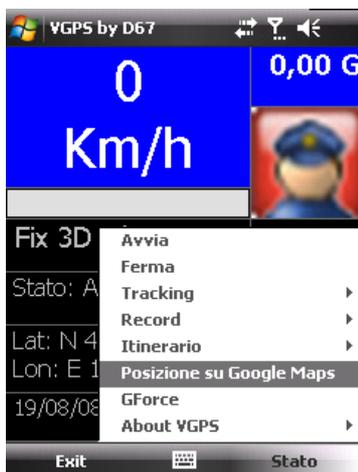
Choose on menu **Stato**, **Posizione su Google Maps** otherwise press the center arrow button of the Joypad.

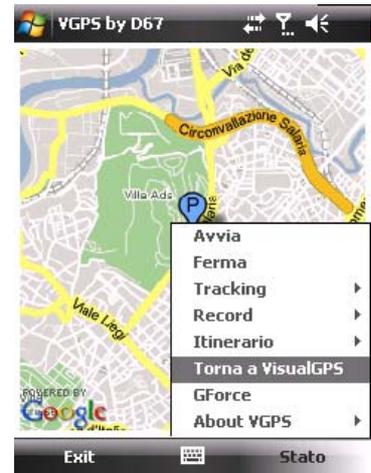
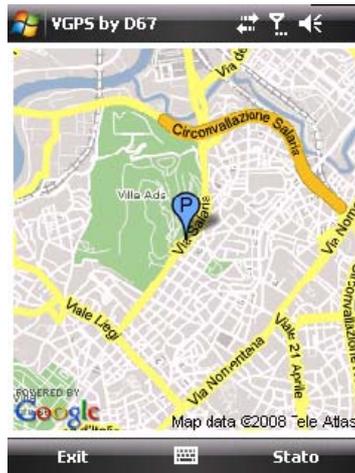
This function needs of a upload and download information and can be dome trough WiFi or UMTS/Gprs. Check with your Mobile Operator the cost for that.

The downloading of the maps is about 20Kb.

To avoid inproper download a message box ask the confirmation before proceed. If you choos No, the program come back to the main window, if yoy choose Yes the program send the actual coordinate to a special page of Google Maps that answer with the maps centering to the coordinates and add a blue marker to higlight our position on the map. There is the possibility to Zoom + or – with the left or right arrow (**every zoom is a maps request and is a new download**)

To come back at main windows choose menu **Stato**, **Torna a MBeGPS** .





Posizione su Google Earth

Choose menu **Stato**, **Posizione Itinerario**, **Nuovo**.

Starting from now the program will save on an internal file the Latitude and Longitude with a frequency of one store every 5 secs.

When we decide to finish our itinerary it is necessary save on a special file that can be read from Google Earth. This file have extension .kml. If we keep empty the name the program assign the default (Itinerario.kml)

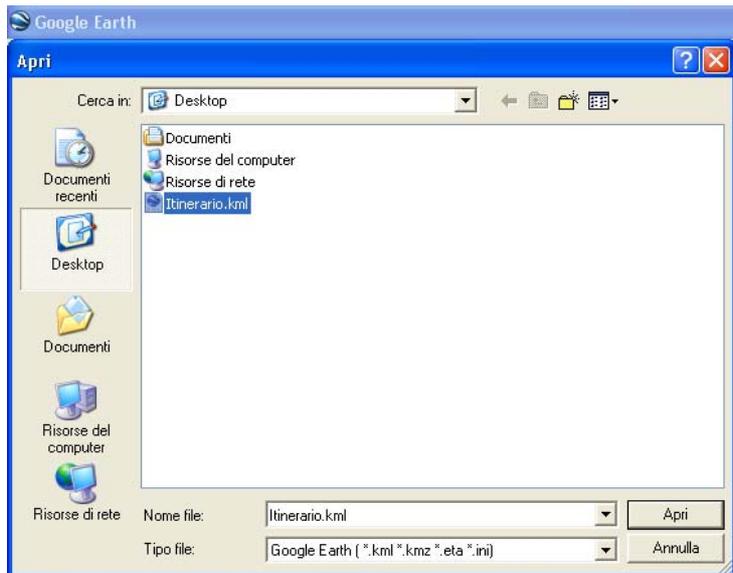
Every itinerary must be saved into Device\Program (this pattern cannot be changed).

Now we are ready to see our itinerary on Google Earth, to do that it is necessary copy the file in the PC in a directory we want and run Google Earth (or click directly on our itinerary file).



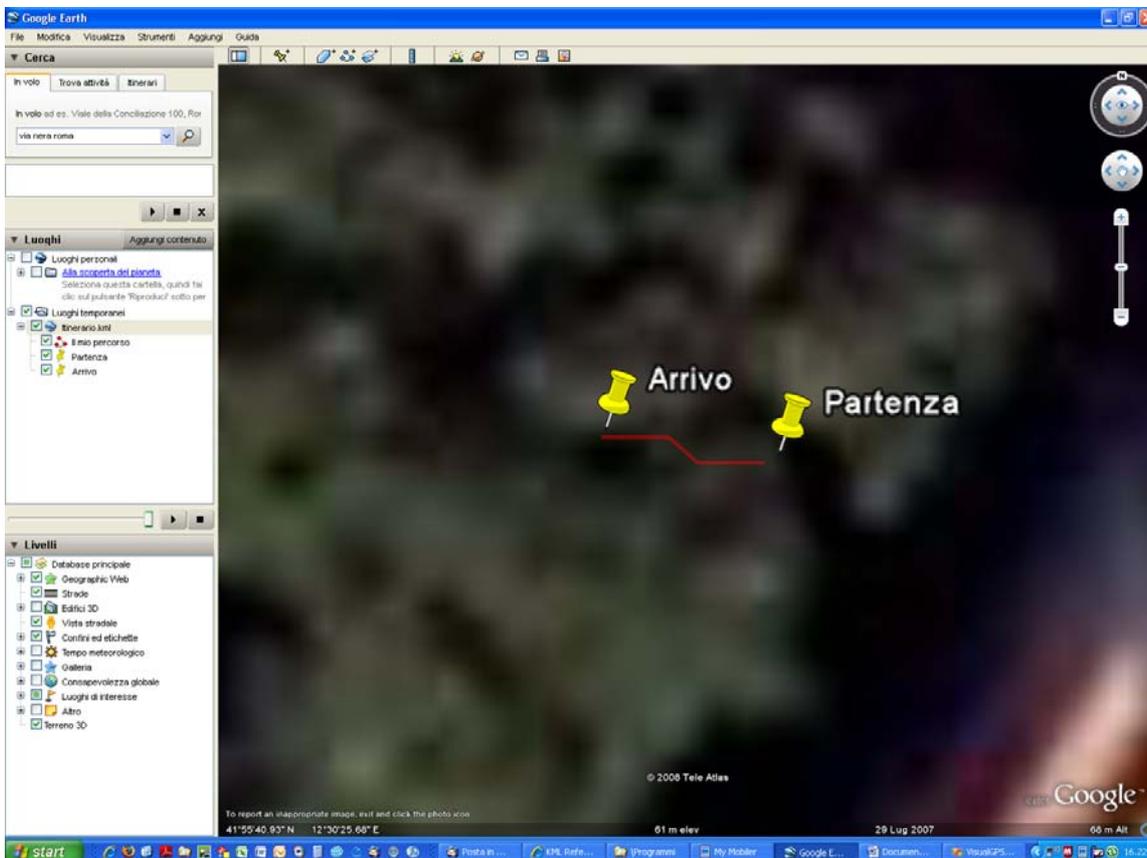
Google Earth can be download here: earth.google.it and it is free.

After lunch the program with Open, File we can choose our (or more) itinerary.



Google Earth puts our itinerary in Temporary itinerary, each one is composed by a three different name that can be flag or un flag to see or hide.

- My itinerary
- Start
- End



David Mariani