



VGpsMobile User's Guide

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Second time users may directly go to the “Quick take-off reminder for second time users” section at the end of this manual.

VGpsMobile provides you with a cheap and user friendly solution to be tracked virtually live while you are paragliding or doing any activity within GSM/GPRS network range.

The tracks are available from an internet server at www.victorb.fr. 3D simultaneous viewing is available for competitions. More functionality will soon be available to enhance the retrieve and to administrate multi-pilots live playing mode.

The data from your GPS are sent over a GSM/GPRS network thanks to a Java application running on your mobile phone: VGpsMobile. Retrieve time and safety can be improved as far as GSM/GPRS network is available.

1 Prerequisites

To be tracked on the internet server you need to have:

- a mobile phone with a Java virtual machine embedded and GPRS ability,
- GPRS communication must be enabled by your network operator,
- GPS position available from an embedded GPS in your mobile phone or an external Bluetooth linked GPS (usually with better results for external GPS),
- VGpsMobile installed on your mobile phone.

See “List of tested devices and networks”.

Internal GPS may be used in a special version see “Install VGpsMobile” section.

2 Install VGpsMobile

Go to the URL www.victorb.fr/gps.jad (use www.victorb.fr/gpsint.jad if you have to use an internal GPS. Windows Mobile users should always use [gps.jad](http://www.victorb.fr/gps.jad) even if they want to use an internal GPS) on your mobile phone web browser and the application is self-installed, you must see a progress bar during download. Version must be 1.9.5 or above. Your phone will ask you if you really want to install it as it is not signed, you must accept it. VGpsMobile may not work if installed on a memory stick in your phone: install it on the phone memory itself if possible.

Try “Troubleshooting section” if needed.

2.1 Windows Mobile devices

For devices running with the Windows Mobile OS, you also need to download www.victorb.fr/GpsPortSP.exe. This application must be launched before VGpsMobile. Select the COM port where your GPS is installed in the Combo List on top of the main menu. Enter “1234” in the text box below. Start this application and then start VGpsMobile without closing it. You must select a “Socket” type GPS in the option menu.

3 Set phone to allow GPRS communication to the internet server

The phone parameters must be set so that Java settings are on your network operator GPRS data access point. If you bought your phone through your mobile phone operator, it is likely to be the case. GSM data access point must not be used for tracking (too slow and too expensive).

Try “Troubleshooting section” if needed.

4 Launch VGpsMobile

Go to the “Applications” directory of your phone where the Java applications are and launch VGpsMobile. See “Troubleshooting” section if you cannot find VGpsMobile. Your phone must offer you an “Option” or “More” button to “delete” this application or “move” it to a new directory etc. this is where you can move VGpsMobile to the phone memory itself if it is on a memory stick. In this same menu you can set the internet/GPRS access right of VGpsMobile to “Yes, ask once” to allow the application to send data over the network with only one confirmation when starting VGpsMobile and not for every packet sent during your flight.

Then you launch VGpsMobile.

The main menu is:



4.1 Test mobile to server connection

You want to know if the GPRS link to the server is working. You do not need any ID from the server (which will be mandatory to be tracked) for this test.

Select “More...” in the main menu to see this new menu:



Make sure the GSM network is available where you are and press “Test data transfer” to see if your GPRS connection to the server is valid. You are asked permission to send data to the network and answer yes. If the connection is valid, a message “connection successful ID=XXX” will show. If not, you will see an error message and may read useful information in the Debug page of the same menu. Press OK to come back to the menu.

You can make sure that the communication is successful by going to www.victorb.fr and checking if you can see the connection ID in the test list table.

Try “Troubleshooting section” if needed.

4.2 Connect your Bluetooth GPS

If you are not using an internal GPS only:

Activate the Bluetooth on your phone.

Start your GPS Bluetooth device.

Launch VGpsMobile and select “GPS: no gps” in the main menu: the phone is looking for Bluetooth devices and you should see and select your GPS in the list.

Press OK to come back to the menu.

ATTENTION: This is a one shot setting, do not do it again unless you change GPS.

The first line of the main menu should have switched from “GPS: no gps” to “GPS: XXX-GPS-YYY” where XXX-GPS-YYY is the Bluetooth ID of your GPS.

4.3 Test your mobile to GPS Bluetooth connection

You want to know if the mobile to GPS Bluetooth link working.

Select “More...” in the main menu to see this new menu:



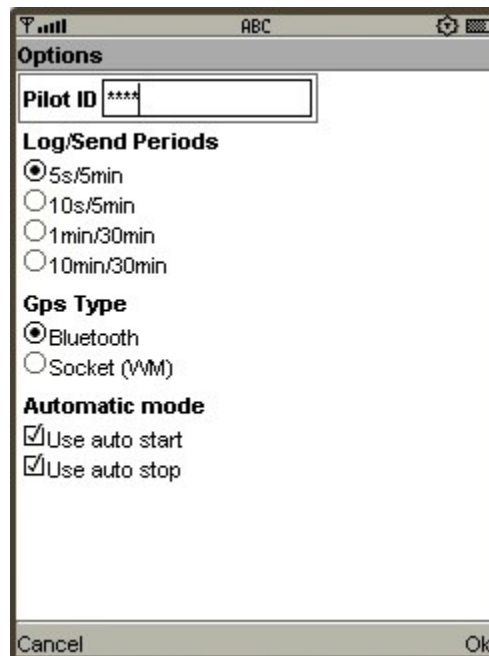
Make sure you went through the “Connect your Bluetooth GPS” section. When the GPS is locked on the satellites, select “Gps position” and your latitude/longitude/altitude should be available.

Try “Troubleshooting section” if needed.

4.4 Set VGpsMobile options

In the main menu select “Options”.

The options setup is:



Automatic modes are enabled by default to make sure you send data only when you are in movement. For home testing purpose or hike tracking you may want to disable them.

Gps Type is Bluetooth by default, only Windows Mobile phones want the second option to bypass Bluetooth limits in Windows Mobile. Windows Mobile users must always select a “Socket” GPS type even if they are using a Bluetooth GPS (See “Install VGpsMobile” section for details).

Log/Send Periods can be downgraded to limit network access and therefore price for tracking (see “List of tested device and networks” section). 5s/5min means that positions are recorded on the phone every 5 seconds and are sent every 5 minutes.

The Pilot ID is your ID on the server, it is case sensitive. You must contact Victor on victor.berchet@yahoo.com to get your Pilot ID (free).

5 List of tested devices and networks

To take the safe way we give you a list of successfully tested devices. This does not mean yours will not work.

5.1 Bluetooth GPS

- RBT-2210 available from Cricel.com.
- Nokia Bluetooth GPS.
- Nokia internal GPS (N95) : not recommended.
- Any Bluetooth GPS should work fine.

5.2 Phones

- Nokia N95 (better results with external GPS).
- Nokia 6120.
- Sony Ericsson Z710i.
- Sony Ericsson W910i.
- Mio A701.
- Samsung SGH-U600 but “Minimize” function do not work so batteries will worn out quickly.
- Actually any Nokia or Sony Ericsson with GPRS and Java should be fine. Any phone with GPRS and Java is worth trying.

5.3 Network operators

The network situation is now well defined in France but remains to be explored over the world.

5.3.1 GPRS availability

In France:

Bouygues Telecom enables GPRS connection by default, even with prepaid cards (you can get a SIM card on www.bouyguestelecom.fr for 15 euros including a new phone number, postage and 4 euros of communications to start with!). The rate is then 0.02 euro/kbyte but lower if you have a subscription.

Orange and SFR want a 5 euros/month option to enable GPRS. This option is not available with prepaid cards. Orange option is then charged 0.015euro/kbyte or less, depending on the main subscription. There is a 9.90 euro/month option at Orange to include data communication. Actually, you must remember that Orange and SFR need an internet option to get GPRS even if you can have internet access through GSM data and download the application. Enabling internet option can be done online on the network operator website and is valid after 48h max.

The hour of tracking at 5s/5min rate (see “Set VGpsMobile options” section) is about 30kbyte/hour and therefore 0.60 euro/hour on the most expansive option (Bouygues prepaid).

5.3.2 GPRS data point settings

If you bought your phone to your network operator everything should be setup. Only exception met so far: when GPRS is not default (Orange and SFR) the data access point selected to access internet may be the GSM data to allow you some sort of internet access. Even in this case, the Java to internet setup is probably GPRS (seen on Orange). If you buy the internet option set all this so that it uses your network operator’s GPRS data access point (the Java application setting must be GPRS to be tracked correctly). To be able to select the correct GPRS data access point, this must have been created. Network operators or mobile phone manufacturers can provide you with special SMS to create and set up their GPRS data access point if necessary (see “Troubleshooting” section). This will create a GPRS data access point that you still will have to select as THE data access point to be used by your Java applications.

6 Other functionalities

In the main menu you select “More...” and the new menu is:



We have not explained anything about “Weather”, “Flying sites” and “Where am I” yet. They all need a GPS valid connection because the information is adapted to your location.

“Weather” provides you with METAR information (and more meteoFrance information only relevant in France).

“Flying sites” tells you the free flying sites around you (worldwide).

“Where Am I ?” displays a map centered at your current location.

7 Troubleshooting

7.1 First time users

If you have managed to be tracked on the www.victorb.fr/ once, go to the “Second time users” section.

You cannot install from www.victorb.fr/gps.jad:

Try to reach another website to see if our website is the problem.

You cannot access any website make set your phone sure:

- That your network operator allows you to use data communication (GSM data is always open and is enough to download the application but not suitable for tracking: you will need a valid GPRS data access). See “List of tested devices and Networks”.
- That, on your phone, your internet browser uses a valid GPRS data access point. If you bought your phone through your network operator, it is likely to be the case and reads something like “Orange World GPRS”.
- The GPRS data access point itself must be set correctly too, they depend on your phone and your operator (APN, proxy address, Login and Password etc...) our advice is to get your operator to send you a special SMS to set the GPRS data

access point. To know what you are talking about with the help line you may also have a look at:

<http://europe.nokia.com/A4144889>

[http://www.sonyericsson.com/spg.jsp?](http://www.sonyericsson.com/spg.jsp?cc=global&lc=en&ver=4001&template=ps3&zone=ps)

[cc=global&lc=en&ver=4001&template=ps3&zone=ps](http://www.sonyericsson.com/spg.jsp?cc=global&lc=en&ver=4001&template=ps3&zone=ps)

You have internet access but you cannot install VGpsMobile:

- Check that you can access www.victorb.fr/ otherwise our server may be temporarily down.
- Check if there is space on your phone (about 150 kbytes).
- Were you asked to accept unsigned software? If not your browser/phone settings may prevent you from downloading unsigned software.

You downloaded VGpsMobile but you cannot find the application on the phone:

Go to the “Applications” directory of your phone to find where the Java applications are. Sometimes the Java applications default location is named “Games” and, anyway, VGpsMobile is likely to have been put where the games are.

Test data transfer does not get a reply from server:

- Make sure you are in a place where the GSM/GPRS network is available. You can test GSM when you phone to somebody, unfortunately, remote areas may be covered with GSM but not GPRS. This happens in remote locations only.
- Try to access any website with your browser to make sure that you have internet access. To make this test fully valid you have to set your browser access point to a GPRS access point and not a GSM one because VGpsMobile needs GPRS connection.
- If you have internet access try to view www.victorb.fr to make sure our server is working. If yes, you probably have a GSM data access to internet but not a GPRS access. See “List of tested devices and networks”.
- If you do not have internet make sure your network operator allows your access to GPRS, see “List of tested devices and networks” section.

7.2 Second time users

No data recorded on the server after flight:

Have you set your “Pilot ID” in the “Options”? See “Set VGpsMobile options” section.

See “Test mobile connection to server” and “Test GPS connection” sections and come back to the “Troubleshooting section” with the results.

No reply from server when “Test data transfer”:

- Try to access any website with your browser to make sure that you have internet access. To make this test fully valid you have to set your browser access point to a GPRS access point and not a GSM one because VGpsMobile needs GPRS connection. If you do not have internet check for network availability. If you have internet access try to view www.victorb.fr to make sure our server is working.
- If you have changed your network operator make sure the new one allows your access to GPRS, see “List of tested devices and networks” section. Then create a new GPRS data access point on your mobile phone access the network of the new

operator. Your operator can help you and send you a special SMS to set it up. Then see “Set phone to allow GPRS communication to the internet server” section.

- If you are near a border or not in the country where you usually use VGpsMobile your network operator may need to send you a new special SMS to change the GPRS data access point settings.
- Check first time user suggestions...

“GPS Fix Invalid” and / or “More... > GPS position” void

- If you have a new GPS Bluetooth see “Connect your Bluetooth GPS” section.
- If you always use the same GPS Bluetooth DO NOT press “GPS: *gps id*” on the take-off because you may select somebody else’s GPS. It is a one-shot setting.
- Verify that Bluetooth is activated on your phone.
- Verify with another phone that the GPS Bluetooth is visible from another phone.

Data recorded on the server lacks some packets:

When GPRS network is not available GPS data stay in the phone but when buffer is full the older data is lost to make sure your last position is always in the phone and sent as soon as possible to the server.

Only the first few minutes of the flights are on the server:

See “Launch VGpsMobile” section and make sure this application will only need once to be allowed to send data on the internet and make sure you are asked to allow this application to send data when you press “Start” on the main menu.

8 Quick take-off reminder for second time users

Start your GPS Bluetooth.

Launch VGpsMobile on your phone.

Select “Start” on the third line of the main menu:



The Java logo may appear on top of the screen and you are asked if you allow the application to send data over the internet, which you must do. You may go to talk to friends on the take off, Bluetooth will reconnect automatically and no data will be sent until you trig the auto start by moving at more than 20km/h for 30s.

Then the menu should switch to:



Until the GPS is locked on the satellites and it switches to:



Then select "Minimize" but DO NOT "Exit" the application or you will have to launch it again. Once the application minimized you can use your phone again while VGpsMobile runs in background.

When you land, you go to the application again and you select "Stop" before you select "Exit" (or the server will not be able to track that you safely landed). Alternatively if you use the auto stop feature, the application will detect that you ended your flight when you

stop moving for 90 seconds. Once the application has detected the end of your flight, the start/stop menu switches to “Start” again.