



FEATURES

- Tri-band GPRS/GSM card for use on networks worldwide:
EGSM900, GSM1800, PCS1900
- WLAN card for use on 2.4 Ghz band
- GSM Voice capability as well as GSM and GPRS Data (up to 53.6 kbps) connectivity
- WLAN high speed data (up to 11 Mbps) connectivity
- GPRS Class B, Type 1 GPRS MT
- Multislot Class 10 GSM 05.02 (4 slots receive, 2 slot transmit, 5 maximum active)
- ETSI Multiplexer for simultaneous calls and network coverage reports
- Integral antenna: robust, retractable and flexible, user exchangeable
- GPRS SMS GSMS Supported
- 802.11b Ethernet Interface
- 802.11 WEP encryption and Wi-Fi certified WPA
- Supports EAP-SIM (3GPP TS 23.234) within the purview of 802.1x Authentication
- The embedded SIM reader is provided with a related API interface: PC SC-driver
- Optional Accessories: quality headset; external tri-band GPRS/GSM antenna
- Roaming between WLAN and GPRS/GSM networks

SYSTEM REQUIREMENTS

- Windows 98SE/ME/2000/XP
- Type II PC-Card slot



OPTION
WIRELESS TECHNOLOGY
WWW.OPTION.COM

GLOBETROTTER COMBO



High speed WLAN | GPRS
Wireless Internet Card



Universal Tri-Band
WLAN | GPRS | GSM
PC-Radio Card

GLOBETROTTER
MOBILITYMANAGER

**GLOBE
TROTTER**
COMBO

Register with Option	3
Introduction	4
System Requirements	6
Installation	10
Getting Started	14
Troubleshooting	39
Agency Requirements	41
Safety Information	45

Warning ! Do not insert the card !

Registering your card is of great value to you.

As soon as you register, you will qualify for:

- > Validation of warranty, which includes repair or replacement if faulty
- > After-sales customer care
- > Advanced bulletins on product updates and software upgrades

During the installation process, you will have the possibility to register online or via E-mail.

You also have the alternative to register on-line directly at:

http://www.option.com/registration/4_3_registration.shtml

Congratulations on your purchase of the Option GlobeTrotter card.

GlobeTrotter is the ultimate solution to provide high performance mobile wireless functionality for Laptops and Notebooks enabling users to browse the Internet, send and receive e-Mails, with SIM management seamlessly integrated with Microsoft Outlook™.

The “Always On” feature of GPRS lends itself to real time remote connectivity and is ideal for the synchronization of mobile devices with the office or home computer. GlobeTrotter is designed to support IPsec client software providing secure remote IP mobile access to corporate networks.

The GlobeTrotter card plugs into any compatible portable computers or other devices with a PC Card type II or III slot.

This guide describes how to install the GlobeTrotter Mobility Manager (GTMM) software on your PC and how to start using it. For more detailed information, consult the GTMM Online Help Guide.

Contents of the sales package

In the sales package, you will find the following items:

- > Option GlobeTrotter card
- > A CD-Rom containing the software

To overcome any installation and usage barriers and to enhance the user experience, the following documentation is also included:

- > Quick Start Guide, which gives the installation of the GlobeTrotter Mobility Manager Software in a limited number of steps, and assists the user in making his/her first data call
- > Online User Manual, which describes a number of common scenarios of use. The online User manual can be accessed at all times through the Help menu of the software.

The GlobeTrotter card requires:

Processor

- > Client (a computer not working in a server capacity): Min. 90-megahertz (MHz) Intel Pentium II-class processor or higher
- > Server (a computer working in a server capacity): Min.133-MHz Intel Pentium-class processor

Operating System

- > Microsoft Windows® Server 2003
- > Windows XP Professional
- > Windows XP Home Edition
- > Windows 2000
- > Windows 98SE

Memory

- > Client: 64 megabytes (MB) of RAM, 96 MB recommended
- > Server: 128 MB of RAM, 256 MB recommended

Hard Disk

Min. 15 MB for installation of SW & Drivers

Display

800 x 600 or higher-resolution display with 256 colors

Input Device

Microsoft mouse or compatible pointing device

Slot

Type II PC-Card slot

Other requirements

- > Microsoft Internet Explorer 5.01 or later
- > The latest Windows service packs and critical updates from the Windows Update site.

Network services

The GlobeTrotter card operates on the EGSM 900, GSM 1800 and PCS 1900 cellular networks.

To use your Option GlobeTrotter card, you must first activate an account with a GPRS/GSM network provider and have received a Subscriber Identity Module (SIM) card from the GPRS/GSM provider.

Some service providers may not provide all communications services. Contact your service provider for further information about the availability and details of the services in your home network.

Additional information may be required from your service provider to activate the GPRS functionality of the Option GlobeTrotter card such as:

- > User Name - if applicable
- > Password - if applicable
- > Access Point Name (APN)
- > IP Address - if not dynamic
- > DNS Address - if not dynamic

Communications software

When you run the installation program, the following programs will be installed on your computer:

- > Windows based telephony driver (TAPI compatible)
- > The GlobeTrotter Mobility Manager (TAPI compatible)

The GlobeTrotter Mobility Manager

The GlobeTrotter Mobility Manager simplifies SMS messaging and the configuration of GPRS settings for applications such as downloading e-mail or browsing the Internet. It also gives the possibility to make a WLAN connection.

The **GTMM** application also incorporates a powerful SMS editor, message templates, and a viewer for reading SMS messages. Incoming and outgoing messages are listed in Outlook™-style directories. The application also offers many other facilities, including the automatic generation of SMS texts.

The **GPRS centre** gives users a quick and easy way of defining GPRS connection settings.

The **WLAN centre** gives users a quick and easy way to scan and connect on a WLAN network.

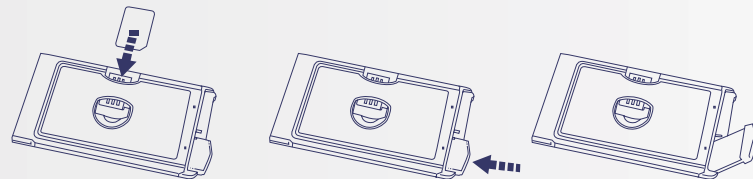
This section provides step-by-step instructions on how to install the Option GlobeTrotter card on your PC.

NOTE: There are some slight differences in the installation process between Windows 2000 and XP Pro/Home Edition. If the installation differs from the steps described in this section, follow the instructions on the screen.

If you want to quit the Setup program without installing or uninstalling, click **Cancel** and then **Exit Setup** to quit Setup. If you want to return the Setup program after having quit the installation before it was completed, follow the installation steps as if you were installing the program for the first time.

Inserting the SIM card in the Option GlobeTrotter card

1. Verify that you have a plug-in SIM card and locate the golden connector area on this SIM. Please make sure the golden connector is perfectly clean.
2. Look for the SIM connector on top of the Option GlobeTrotter card.
3. Slide the SIM card with the cut corner of the SIM to the centre of the GlobeTrotter, and with the golden connector area on it facing to the Option GlobeTrotter card.



Antenna

You need to eject the pop out antenna from the card in order to be able to establish a connection.

Installing the Option GlobeTrotter card and the GlobeTrotter Mobility Manager

WARNING! DO NOT INSERT THE CARD!

It is advised to connect your PC to the mains, before starting the installation

1. Start **Windows**.
2. Close all applications.
3. Insert the CD-Rom into your computer's CD-Rom drive. If auto play is enabled the setup will start automatically.

4. If this does not happen, select the **Run** command from the Start menu.
5. Select the drive that contains the CD. Go to **D:\MobilityManagerSetup*.exe** (**D:** represents the CD-Rom drive).
6. Click **OK** to execute the file.
7. Select the language you want to install the program in.
8. The installation will start.
9. The software will automatically be copied into Program Files\OPTION\Mobility Manager. Another target folder can also be chosen during the installation process.
10. For some operating systems, it will be necessary to reboot the computer.
11. At the end of the installation you can automatically start the GTMM application.
12. Insert the Option GlobeTrotter card into the PCMCIA slot of your PC.
13. Wait until the system has recognized the card.
13. You will now be asked to register the product. Registration is required to benefit from the warranty and customer care. By connecting to the Internet you can register online immediately at [http: //www.option.com/registration/4_3_registration.shtml](http://www.option.com/registration/4_3_registration.shtml)

Choose **Cancel** if you want to register later. You will be able to start the registration from the help menu in the main interface. When you click cancel each time you start GTMM you will be asked to register.

Uninstalling the Option GlobeTrotter card and the GlobeTrotter Mobility Manager

1. Go to the Control Panel of the operating system.
2. Open Add/Remove Programs.
3. To uninstall the GlobeTrotter card and the GTMM software, select **GlobeTrotter Mobility Manager** and click the **Remove...** button. Follow the steps of the uninstall wizard.

Starting the Option GlobeTrotter card.

Slide the SIM card into the SIM card slot of the Option GlobeTrotter card and insert the Option GlobeTrotter card into the PC Card slot of your computer. It is recommended to insert the card in the top PCMCIA slot. You may have to enter the PIN (Personal Identity Number) code if the PIN code request is activated in the SIM card. The PIN code is usually supplied with the SIM card. If you enter an incorrect PIN code three times in a row, you will need a PUK (Personal Unblocking Key) code to unblock the SIM card. If this doesn't work, contact your service provider.

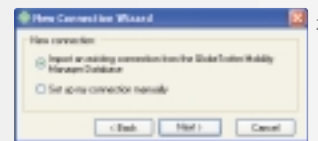
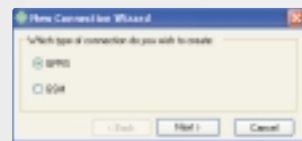
Using the GlobeTrotter card for a DATA connection

Caution! Some Service Providers use automatic DNS Server assignment. However if you can connect but have trouble opening a webpage we advise you to enter the DNS settings manually. Please contact your Service Provider to obtain the required DNS settings.

Depending on your network operator, a GPRS or GSM connection might already have been installed. If not, you will have to create a new connection following the next steps. Click on **GSM GPRS folder**. Click on **New** to create a new connection.



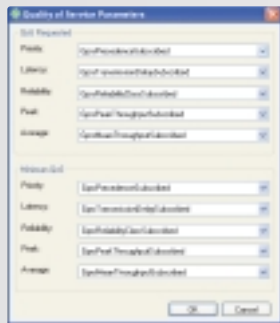
You have to select which type of connection you want to set up. (1)
You have to select either importing an existing connection or setting up a connection manually. (2)



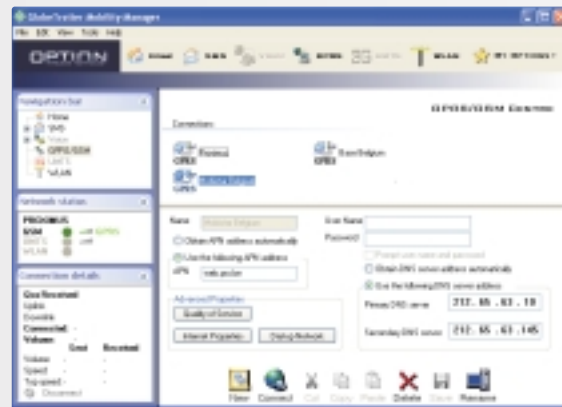
When you set up your connection manually right click on the connection and select rename. Enter a name for your connection (e.g. My GPRS connection with Operator X) and fill in all the parameters of your GPRS connection. Enter the GPRS settings you received from your provider.

In **Quality of Service (QoS)**, you can change the **QoS** parameters. See the help files for definitions of the **QoS** parameters.

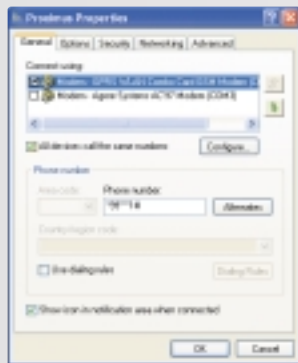
CAUTION! Do not change the QoS parameters unless your provider explicitly tells you to do it.



In Name Servers (DNS) you can specify the DNS if required by your carrier.



In **Dial up Network** you can modify the card settings and the dial properties.



Click **Save**. You are now ready to start a GPRS connection!

Setting up a GSM connection is similar to setting up a GPRS connection, so please refer to the above steps.

All connections can be started from the GTMM controller icon in the taskbar.

Using the GlobeTrotter card for SMS, Voice and Phonebook management.

During the installation of the **GlobeTrotter Mobility Manager** software a link is created in the Startup folder. GlobeTrotter Mobility Manager will subsequently start every time the computer is turned on. The GlobeTrotter Mobility Manager icon then appears in the task bar. If the GlobeTrotter Mobility Manager software does not start automatically when the computer is switched on, or if the GlobeTrotter Mobility Manager program has been closed in the meantime, it can be started again in the Start menu.

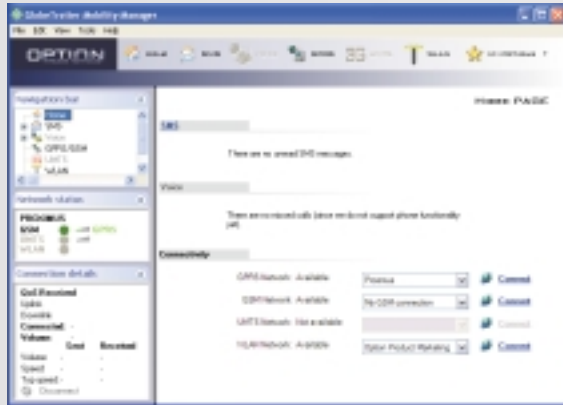
Once the program has started, the **PIN code** will be requested (if the PIN code request is activated on the card) in order to activate the Globetrotter card. The card will subsequently be registered onto the network.

If the PIN code request has been disabled, the GlobeTrotter card will be registered on the network as soon as it is powered.



At the end of the network registration the interface will open and the connection will start

The GlobeTrotter Mobility Manager Home Page



The Home Page is the place where you have a complete overview on everything that the GlobeTrotter Mobility Manager can offer.

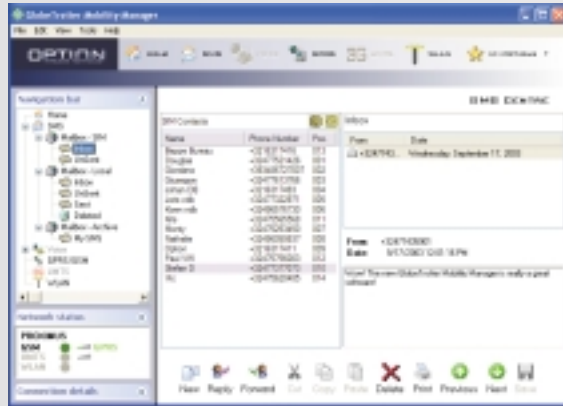
From the Home Page you can:

- > Access every section of GlobeTrotter Mobility Manager (the Toolbar)
- > Access every subsection (the Navigation bar)
- > Overview about the status of the available network
- > Indication of missed calls and SMS
- > Quick connection launch

In case you have missed calls or unread SMS, these will be shown in the GTMM Home Page. A text will inform about the number of missed calls and/or unread messages.

In the Home Page, you have the possibility to connect directly to an available network. Once you have created or imported a connection, this will be available for a quick connect in the Home Page if the used network (GSM/GPRS/WLAN) is available.

The SMS Centre



You can access the SMS center:

- > From GlobeTrotter Mobility Manager Home Page:
 - By left-clicking once on the SMS button on the top toolbar
 - By left-clicking once on the “Icon” next to the “You have received n SMS messages” section
 - By left-clicking once on the SMS icon on the upper left navigation bar
- > By left-clicking once the “SMS envelope” icon in the systray. This is as a result of the system having recognized that a new SMS message had arrived.

The **SIM** or **Outlook** address book will be shown when clicking on the respective icon.

You can read, create, reply, forward and delete an SMS by clicking the icons on the SMS Message Management Bar, which is located at the bottom of the GlobeTrotter Mobility Manager SMS Page

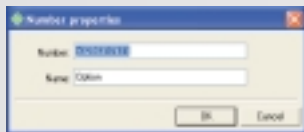
The Phone book

The available phonebooks are:

- > SIM Phonebook
- > Outlook contacts (if Outlook is present)

Contacts are read on the fly, which means no duplicate phonebooks or synchronization. The software will operate directly on the SIM and in the Outlook contacts.

You can edit the name or phone entry in the SIM contacts by right click on the SIM contacts and select new or by going to 'File/New/SIM contact'. Then you get the following popup window where you can edit your contact.



You can edit the name or phone entry in the Outlook contacts by going to 'File/New/Outlook contact'. Then you get the standard Outlook window to make a new contact.

You can also create new, cut, copy paste either the SIM contacts or the Outlook contacts by clicking on the icons in the "SMS Message Management Bar"

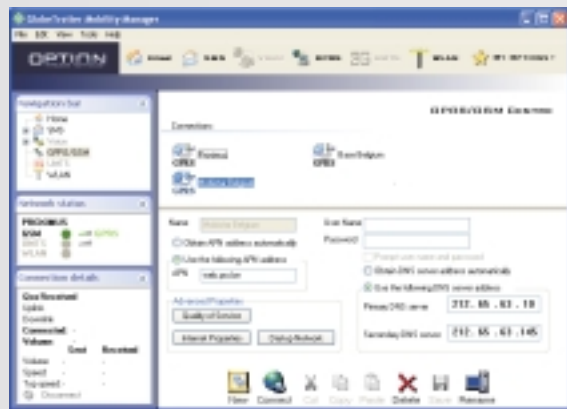
My Options

Using the **My Options** button you can add shortcuts to your favorite applications. With a drop down it has immediately an overview to all application that you have added. You can consider **My Options** button as an extension of the main toolbar.

From the menu View > Customize Toolbar it's possible to choose which buttons you want to appear in the Toolbar and in the My Options list. Or you can also do it in 'My Options/Customize Toolbar...'



GPRS Connectivity



The GPRS page allows you to create, edit and configure a GPRS connection. Also, when a connection is present, this can be started from there.

In the top of the screen you have a list of all available connections.

The Connection states tab



Once that you are connected, the network status tab will show the connection statistics.

Which means:

- > Connected with (GSM/GPRS/WLAN/UMTS)
- > Duration of the connection
- > Total volume transferred
- > Sent and received volume.
- > Actual speed (upload and download)
- > Top speed (upload and download)
- > QoS Received (Up- and Downlink). **ONLY AVAILABLE FOR UMTS CONNECTIONS.**



Start a connection

A connection can be started from:

- > The connect button in one of the connectivity tabs
- > From the controller > right-click > “Connect using” for every available connection
- > From the controller > left-click > “Connect” for the default connection

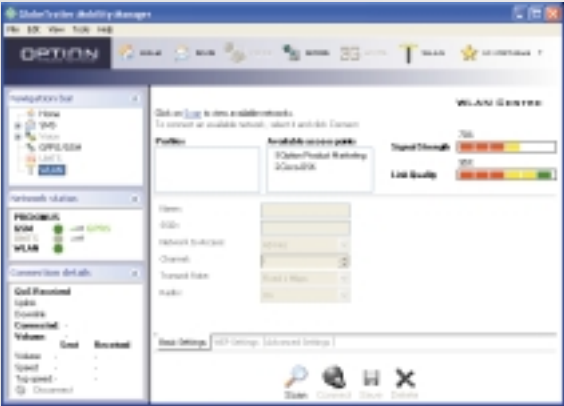
WLAN

First time using WLAN

When you go to the GlobeTrotter Mobility Manager Home Page, in the **Connectivity Section** you will find a drop down list for WLAN network: this drop down list will contain all the available **Access Points** in the area and will also display the profile you make later.



When you have a profile available, you can choose it in the drop down list and click “**Connect**” to get access to the WLAN using your settings.



The screen is divided into three parts:

> The monitor screen

Here you have an overview of the WLAN access points that are available and the profiles you have previously saved on the computer.

> How to make a profile

Go to the WLAN page.

On top you find the **Monitor Screen**, which is divided into three parts:

From left to right is:

- The **Saved** Profiles
- All the available Access Points in the area
- The Signal Strength and Link Quality for the selected profile.

> Steps to make a Profile

- First you need to click “**Scan**” to find all the available access points in your area, all these access points will be listed in the Available AP window.



- When you select one of them, all the technical settings will be displayed in the “**Basic Settings**”, where it includes the name of **SSID (Access Point Name)** etc.
- You can give a friendly name to this connection in the **NAME** field and change any settings if required by the WLAN provider and / or Access Point.
- If necessary you can also change the WEP Settings. GTMM uses alphanumeric encryption. When you use 64 bits, you need to give in 5 characters and for 128 bits you need to give in 10 characters.
- Finally click “**Save**” to save all your settings
- Your profile name will now be available in the profile window.



> **The settings screen**

If you highlight one of the connections in the Monitor screen, the settings will become editable. You can change the basic settings, WEP settings and advanced settings.

For a WLAN connection you have found for the first time, all **Basic Settings** will be as default. When you select an access point you can give a friendly name to this connection in the NAME field and change any settings if required by the WLAN provider.

If something has been changed from the default settings, the **SAVE** button will become available.

You can save the connection and this will be always available in the profiles list (indicated by the floppy icon).



The **WEP Settings** will indicate if the access point that you use on this moment uses data encryption or not. This will be automatically indicated. That information comes from the access point.

The encryption key needs to be alphanumeric. You can choose between 64 bits or 128 bits. For 64 bits you use 5 characters and for the 128 bits you use 10 characters.

The **Advanced Settings** give you the opportunity to select other parameters like:

- Preamble Type
- Fragmentation Threshold
- RTS/CTS Threshold

> The tasks screen

In the bottom part of the screen you will have buttons to the most used tasks. Here you can:

- **SCAN** to check the connections in range
- **CONNECT** to the highlighted connection
- **SAVE** the changes you have made in the highlighted connection settings
- **DELETE** to remove a saved WLAN connection



Configuration Settings

The configuration tabs are accessible from:

- GTMM controller > Left Click > Settings > Configuration
- Menu bar > Tools > Configuration

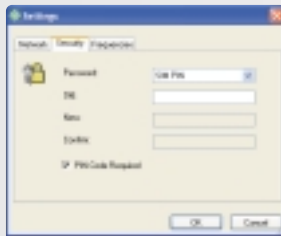
> Security

The following passwords can be changed:

- SIM PIN
- SIM PIN2

To change a password, the old password needs to be entered and two times the new password.

PIN code Require: if checked, PIN must be entered any time a new connection to the network is initiated after the device has been turned off.

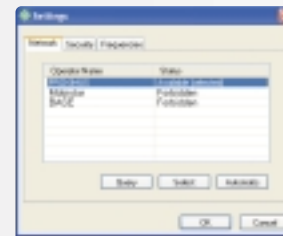


> Network operator selection

The network operator selection window calls a list of available network operators and selects the chosen network provider from the list.

To check the current settings and read the current list of operators from the network, tap **Query**. The list displays all available operators sorted alphabetically. The operator's status is shown in the second column. To register with a different operator, highlight the Operator name, tap **Select** and click **OK**.

Selecting an operator switches the device to manual registration mode; the device will try to register with the selected operator only. To go back to automatic registration, you must tap Automatic.



> Frequencies

The cards can use all three common frequencies for GSM/GPRS: 900MHz, 1800 MHz and 1900 MHz. Automatic selection is supported for only two bands 900/1800 and 900/1900. Switching between bands has to be done manually.

Two radio buttons are available:

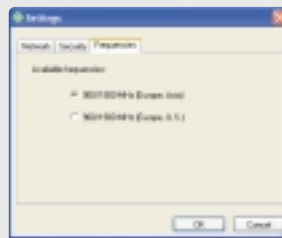
- 900/1800 MHz (Europe, Asia)
- 900/1900 MHz (Europe, US)

> Diagnostic Utilities

A general diagnostic tool will check the basic settings like installation, network availability, signal strength...

Other advanced diagnostic utilities will be accessible in GTMM, such as:

- UMTS Trace
- Connection History



This section points out the basic problems that could occur when you are installing and using the card. There is a list of symptoms and possible actions you can take in any of the following situations below.

Not enough disk space for installation.

There is not enough space to complete the installation on the selected drive. Select another drive for installation or delete unnecessary files to free up additional disk space. If there are several hard disk drives in the system and you decide to install the program on a drive other than the one where the Windows system files are located, disk space is required on both drives. The program will always need to place some files in the Windows directory.

Setup does not accept the target directory.

The program can only be installed on a local drive. If the path to the directory is over 80 characters, it will not be accepted. Select another directory or shorten the names of the subdirectories.

The GlobeTrotter card cannot be installed or used.

The Interrupt Request (IRQ) resources may be in conflict. Check the GlobeTrotter resources from **Control Panel/System/Hardware/Device Manager**.

If there is a resource conflict, consult the Windows online help on changing the resource settings.

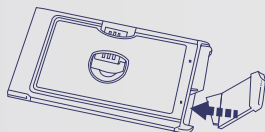
The GlobeTrotter card is not properly inserted.

Make sure that the PC Card slot or the computer is functioning properly and that the GlobeTrotter drivers are installed (In Control Panel > Ports).

Also make sure that the SIM card has been inserted.

Refitting the antenna

When the antenna becomes disconnected, refit it as follows:



Federal communications commission notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Option may void the user’s authority to operate the equipment.

Cables

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods in order to maintain compliance with FCC Rules and Regulations.

**Declaration of Conformity for products marked with the FCC logo
United States only**

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

For questions regarding your product or FCC declaration, contact:
Option | Kolonel Begaultlaan 45 | 3012 Leuven | Belgium
www.option.com

Exposure Information to Radio Frequency Energy

This PCMCIA card has been tested in different notebooks for compliance with the SAR requirements.

The maximum measured body SAR values (averaged over a mass of 1 g) are 0.18 W/kg for GSM1900 and 0.20 W/kg for WLAN, which is well below the limit of 1.6 W/kg.

For safe and efficient use the user should keep the antenna of the card at a minimum distance of 1 cm away from this body.

CAUTION: Users concerned with the risk of Radio Frequency exposure may wish to limit the duration of their calls and to position the antenna as far away from the body as is practical.

European Union notice

Products bearing the CE marking comply with the R&TTE Directive (99/5/EC), EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms (in parentheses are the equivalent international standards and regulations):

Radio Frequency spectrum efficiency:

- EN 301 511, v9.0.2
- EN 300 328-2, v1.4.1

Electromagnetic Compatibility

- EN 301 489-1: v1.4.1
- EN 301 489-7: v1.2.1
- EN 301 489-17: v1.2.1

Safety and Health

- EN 60950: 2000
- EN 50371 (07/02) & IEEE P1528/D1.2 (04/03)

This product may be used in all EU and EFTA countries.

Read these simple guidelines. Breaking the rules may be dangerous or illegal. Further detailed information is given in this manual.

Driving

Do not use the GlobeTrotter while driving; park the vehicle first.

Interference

All wireless devices may get interference, which could affect performance.

Do not use in hospitals

Follow any regulations or rules. Do not use near medical equipment.

Do not use in airplane

Wireless devices can cause interference. Using them on airplanes is illegal.

Do not use near refueling points

Do not use the device at a refueling point. Do not use near fuel or chemicals.

Use sensibly

Do not touch the antenna unnecessarily.

Use qualified service

Do not attempt to disassemble GlobeTrotter. Doing so will void warranty. Service should only be performed by Authorized Service Centers.

Accessories

Use only approved accessories. Do not connect incompatible products.

Liquids

Do not expose your card to rain, or spill beverages on it.

Extreme temperatures

Do not expose the card or the antenna to extreme temperatures, below -25 or over +70 degrees Celsius.

Traveling

Handle the card with care while traveling. It is recommended to remove the Card from the laptop and put it in the protective leather wallet.

More information

www.option.com