Wireless parameters of the
SAGEM F@st™1500WG
SSID: SAGEM

ENGLISH

User Guide

ADSL Wi-Fi modem/router

SAGEM F@st™ 1500/1500WG

SAGEM

Table of Contents

PRESENTATION

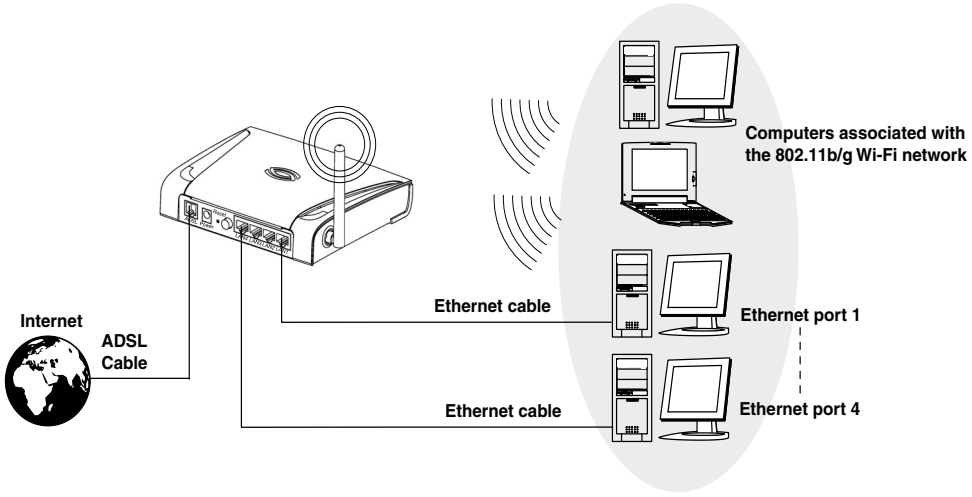
This guide will enable you to easily install your SAGEM F@st™ 1500 /1500WG modem/ router.

This unit is an ADSL Wi-Fi modem/router integrating three functions:

1. An integrated ADSL modem for a direct connection to your ADSL line.
2. A router enabling you to simultaneously connect several computers to this ADSL line.
3. A wireless access point linking your computers with no additional wiring (SAGEM F@st™ 1500WG only).

This modem/router has three types of local interface for connection with the computers making up your local network:

- 4 Ethernet 10/100BT ports.
- 1 Wi-Fi wireless access point (SAGEM F@st™ 1500WG only).



What is Wi-Fi ? (SAGEM F@st™ 1500WG only)
Wi-Fi is a wireless network technology. With it, owing to the SAGEM F@st™ 1500WG modem/router, the various computers connected to this wireless network are able to share your ADSL line. The wireless network complies with the IEEE 802.11b/g standard.

Symbols used in this guide


Warns you against a hazardous act or omission.


Gives important information that you should be aware of.

1.1 Prerequisites

The following elements are required before the modem/router can be used:

- a telephone line able to accommodate ADSL transmission,
- a subscription with a high-speed Internet Service Provider,
- a telephone line able to accommodate ADSL transmission,
- a Web browser (preferably Internet Explorer version 5 or later).

The minimum configuration of your computer must be:

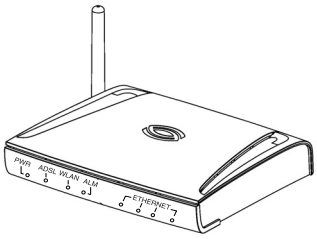
- for Windows: Pentium II, 400 MHz, RAM: 128 MB,
- for MacOS: Power PC G3, 233 MHz, RAM: 128 MB,
- 30 MB of available space on your hard disk,
- a monitor with a minimum resolution of 1024 x 768.

If your computer does not have the Wi-Fi function, it will have to be fitted with a Wi-Fi accessory (IEEE 802.11b/g standard).

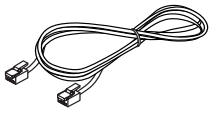
Several types are available:

- USB Wi-Fi keys
- PCMCIA Wi-Fi cards
- PCI Wi-Fi cards

1.2 Contents of the SAGEM F@st™ 1500 / 1500WG modem/router package

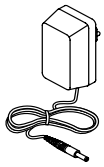


ADSL Wi-Fi modem/router (1)



ADSL line cord (RJ11/RJ11) (2)

ADSL filter (option) (3)



Power block (4)

Ethernet cable (RJ45/RJ45 cable) (5)

+ Installation CD-ROM
+ Quick installation guide

The installation CD-ROM contains the detailed reference manual for the modem/router.

This guide shows you the steps you have to follow in order to get connected to the Internet:

1. **Installing the hardware.**
2. **Configuring the modem/router.**
3. **Configuring the wireless network.**

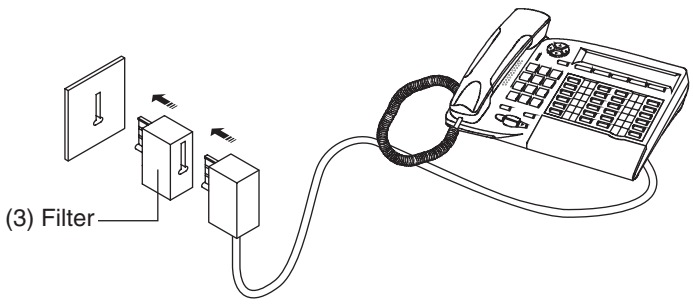
INSTALLING THE HARDWARE

1 Installing the ADSL filters

Installing a filter on all the phone plugs used is essential for ensuring that your phone terminals and modem/router operate correctly (3 filters maximum per installation).

Carry out the following steps:

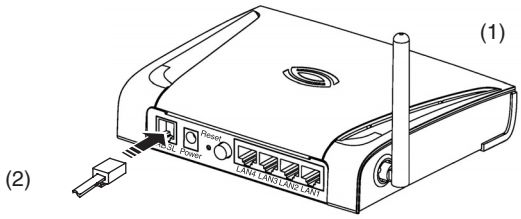
- unplug the telephone cable from your appliance (telephone, fax, etc.),
- insert a filter into the plug,
- plug your appliance back onto the ADSL/RTC separator filter.



2 Installing the modem/router

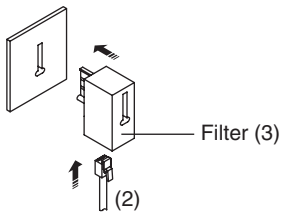
2.1 Plugging in the telephone line cord

- Connect one end of the ADSL telephone line cord (2) to the **LINE** port on your modem/router.

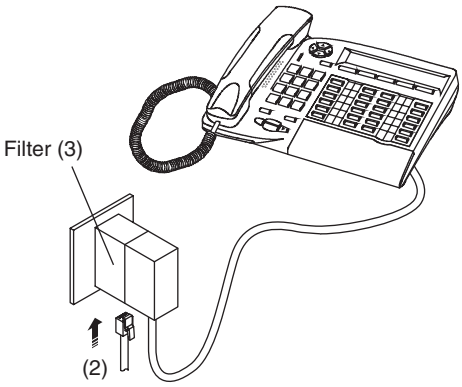


Do not insert the line cord in the Ethernet port marked LAN 1 to LAN 4. This may damage your modem/router.

- Connect the other end of the ADSL line cord to one of the ADSL filters on your installation.



Connection with no telephone set



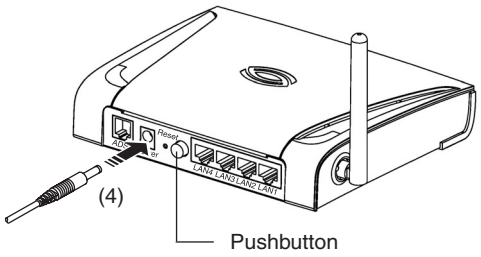
Connection with a telephone set or a FAX

The line cord is the black RJ-11-type cord. Do not mistake it for the RJ-45-type Ethernet cable. The RJ-11 connector is narrower than the RJ-45.

2.2 Powering up the modem/router

- Connect the cable (4) to the **Power** port located on the rear panel of the modem/router.
- Connect the power pack to a nearby socket.
- Press on the ON/Off pushbutton (holding it down).

The **PWR** LED comes on.



After a few minutes, the modem/router is automatically synchronized with your ADSL line. The **ADSL** LED comes on permanently.

If there is no synchronization, refer to the chapter "Troubleshooting" 1 - Absence of ADSL synchronization (see page 26).

You can now connect your computers to the SAGEM F@st™ 1500/1500WG modem/router:

- **via the Ethernet interface,**
  see chapter 3 "Connection via the Ethernet port" ..... page 10
- **via the wireless network interface (SAGEM F@st™ 1500WG only)**
  see section entitled "Configuring the wireless network" ..... page 17

CONFIGURING THE MODEM/ROUTER

1 Preliminary configuration

You can configure your modem/router via its HTTP configuration interface. This interface is visible from your Web browser.

This chapter describes the steps making possible:

- access to this HTTP configuration interface,
- configuration of your Internet account on the modem/router,
- access to the Internet.

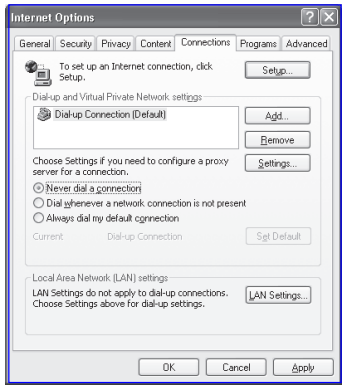
The SAGEM F@st™ 1500/1500WG is a router. It contains the parameters of your ADSL subscription. It is therefore pointless carrying these parameters over into the properties of your computer.

You are recommended to check that the Internet browser of each computer is configured in the following way:

Internet Explorer, for example

In the **Tools** menu, click on **Internet Options**.

In the **Connections** tab, select "Never dial a connection".



2 Choice of the port for the modem/router configuration

The router has the following interfaces to be configured:

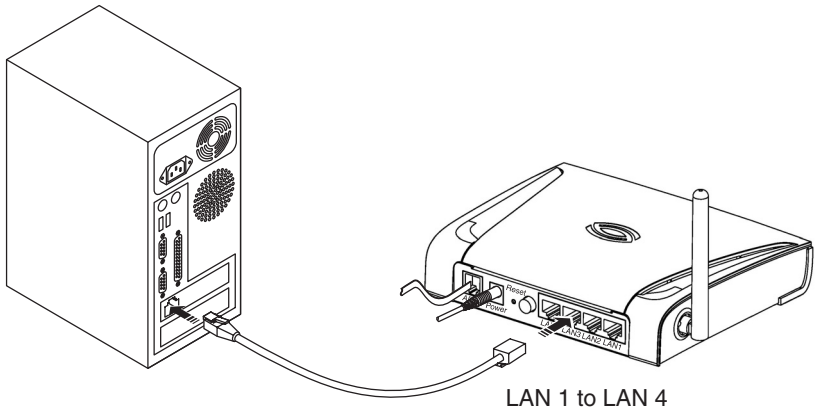
- Ethernet ports (LAN 1 to LAN 4).
- Wi-Fi interface (802.11b/g).

SAGEM SA. recommends configuration via Ethernet ports.

3 Connection via the Ethernet port

3.1 Wiring

- Connect the Ethernet cable (5) to one of the Ethernet (**LAN 1** to **LAN 4**) ports on the modem/router.
- Connect the other end of the Ethernet cable to your computer's Ethernet card.



LAN 1 to LAN 4

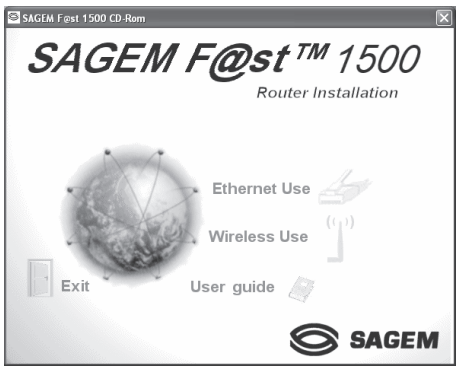
(5)

3.2 Configuring the network parameters

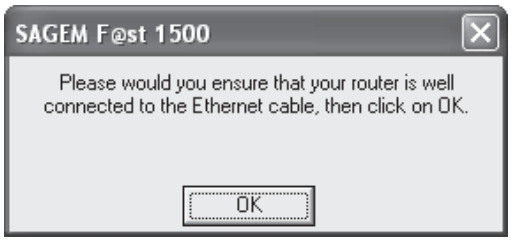
The installation CD-ROM enables you to automatically configure your network card in Windows.

Automatic configuration

- Insert the modem/router installation CD-ROM and the window opposite will come up on the screen.
- Click on **Ethernet Use**.



- Check that the modem/router is
  - connected to the computer via the Ethernet cable,
  - powered up.



The application searches for your Ethernet card and integrates the parameters required for communicating with the modem/router.

The following screen will be displayed.

When configuration is complete, the modem/router settings window opens automatically.

You can now access the modem/router's HTTP configurator.

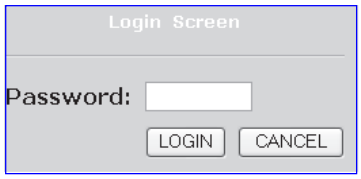
Refer to chapter 4 - "Access to the HTTP configurator", page 12.

If you cannot access your router's HTTP configurator, refer to chapter "Troubleshooting" 2 - Access to the HTTP configurator is impossible (see page 26).

4 Access to the HTTP configurator

Access to the modem/router's HTTP configurator is protected by a password.

The authentication screen is the following:



Key in the following password:

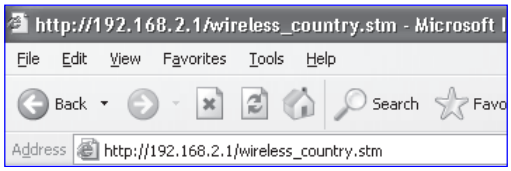
- Password: (**EMPTY**).

To change the password, refer to the chapter "Safety on your modem/router" 1 - Controlling access to the HTTP configurator (page 20).

We recommend that you create a HTTP configurator access password.

If the screen above does not appear:

- Open your Web browser.
- Key in the modem/router's default IP address: **http://192.168.2.1**.
- Validate by pressing **Enter**.



The home page will be displayed in the Web browser.

It enables you to choose a country and to access all your modem/router's settings.

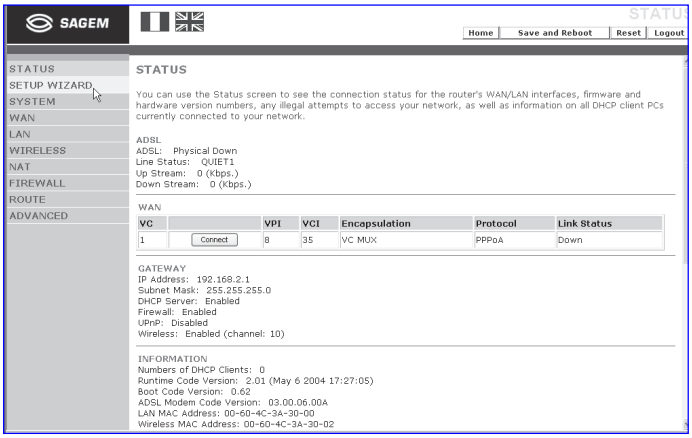
The choice of country determines the range of channels that you can use in Wi-Fi mode.

You can now configure the modem/router.

5 High-speed configuration of your subscription settings

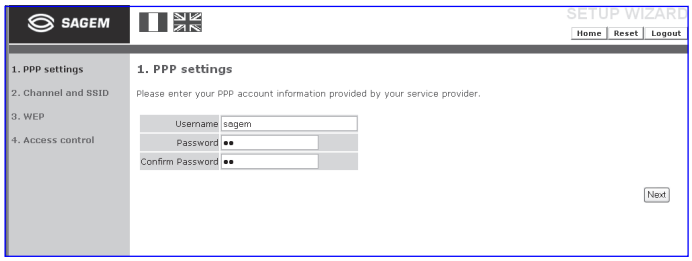
To start the Quick Setup wizard, click on **SETUP WIZARD** in the left-side column of the screen.

The **SETUP WIZARD** enables you to fill in your Internet Service Provider's (ISP) parameters and configure the wireless network settings.



1 - PPP Configuration

- Fill in the user name, the ADSL password provided by your Internet Service Provider on your subscription form and then confirm the password.



Respect upper case (capital) and lower case letters when entering data.

- Click on **Next**, and the message below appears: "Connecting to the Internet, please wait".

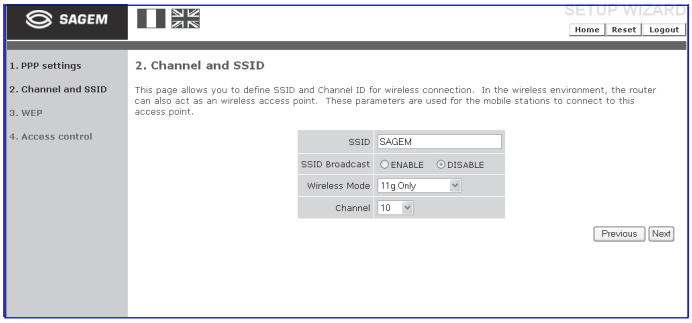
After a few minutes, the Internet connection is set up and the following message appears: You're connected to the Internet.

In case of a failure to connect to the Internet, you will be notified by the following message: "You do not have access to the Internet". See chapter "Troubleshooting" 3 - Consultation of Internet sites impossible (see page 28).

2 - Channel and SSID (SAGEM F@st™ 1500WG only)

If you wish (advanced users), you may:

- Suspend the diffusion of the SSID by checking **Disable**.
- Select a specific Wi-Fi mode (11b or 11g).
- Choose a specific channel.

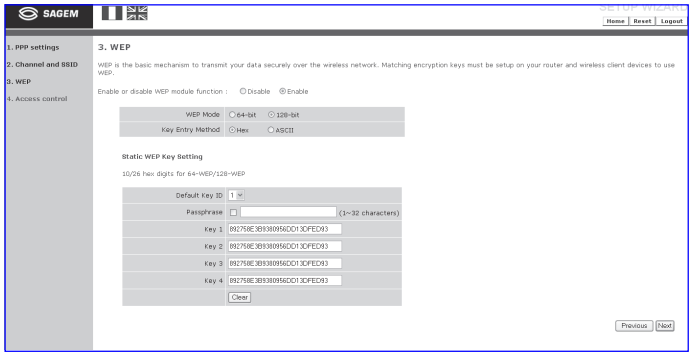


Once you have chosen your options, click on **Next**.

3 - WEP / Configuring Wi-Fi security

You are advised to enable WEP encryption.

- Select **Enable** in the field "Enable or disable WEP module function".
- Select **128 bits** in the "WEP Mode" field.



Choosing the transmission key

- Select the transmission key (keys n° 1 to 4) by clicking on one of the radio buttons.

The transmission key is used to encrypt the data transmitted by your computer.

Modifying the keys

Modify the keys so that they are personal and note their values. You will be able to use them when configuring the other pieces of equipment making up your wireless network.

- To modify the keys, key in a sentence in the **Passphrase** field:
  - in 64-bit mode: the sentence generates the 4 keys simultaneously,
  - in 128-bit mode: the sentence generates a key for the line selected.

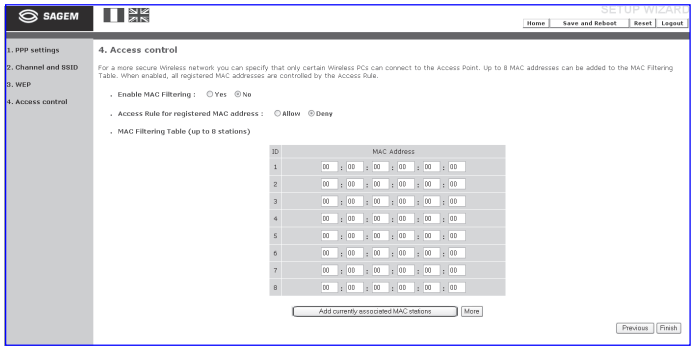
Make a note of the keys and the sentence keyed in, and keep them in a safe place. Avoid noting them down in a file on your computer.

- You can also modify the keys by keying them directly into the boxes. The characters are "0" to "9" and "A" to "F".
- Click on **Next**.

4 - Access control

You may enable the filtering of the computer connected to your wireless network (Wi-Fi). To do this, key in the MAC address in the list proposed.

- Click on **Finish**.



Your modem/router is now configured, so you can access high-speed Internet via your usual Web browser.

In case of a problem, see chapter "Troubleshooting" 3 - Consultation of Internet sites impossible (see page 28).

CONFIGURING THE WIRELESS NETWORK

The wireless network is only available on the SAGEM F@st™ 1500WG.

The Wi-Fi technology protects the data flowing on your wireless network. This protection is provided by two configurable parameters:

- The SSID identifier
- The WEP encryption key

This stage is included in the chapter "Configuring the modem/router" 5 - High-speed configuration of your subscription settings. However, the chapter below shows you how to change the configuration of your wireless network.

1 Definitions

The SSID is your wireless network's identifier.

For your wireless network to be able to operate, you must key in the same SSID on your modem/router and on all the computers making up your wireless network.

The WEP - Wired Equivalent Privacy - key serves to encrypt the information exchanged over your wireless network.

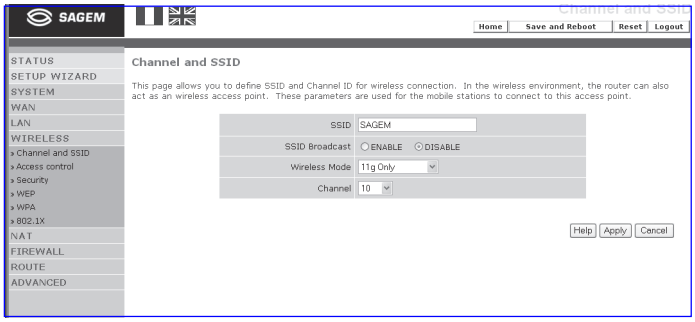
Like the SSID, this WEP key must be configured identically on each computer making up your wireless network as well as on your modem/router.

The WEP key format is defined by the IEEE 802.11b/g standard.

2 Configuring the wireless network on your modem/router

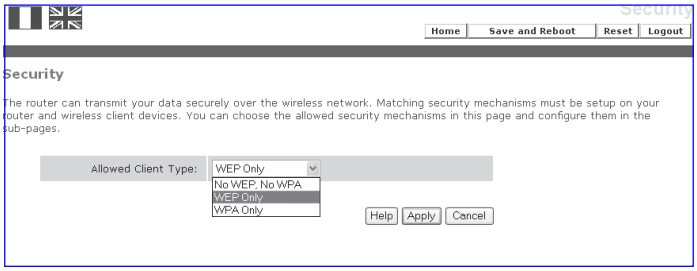
Once you are connected to your modem/router's HTTP configurator, click on **WIRELESS** in the column to the left of the screen.

- To enable the wireless network, select **Enable** in the appropriate field. The default SSID is indicated on the cover of this guide.
- Select the sub-menu "Channel and SSID".
- Modify the **SSID** field by the name of the network of your choice (32 characters at most).
- Click on **Apply** to validate the SSID.

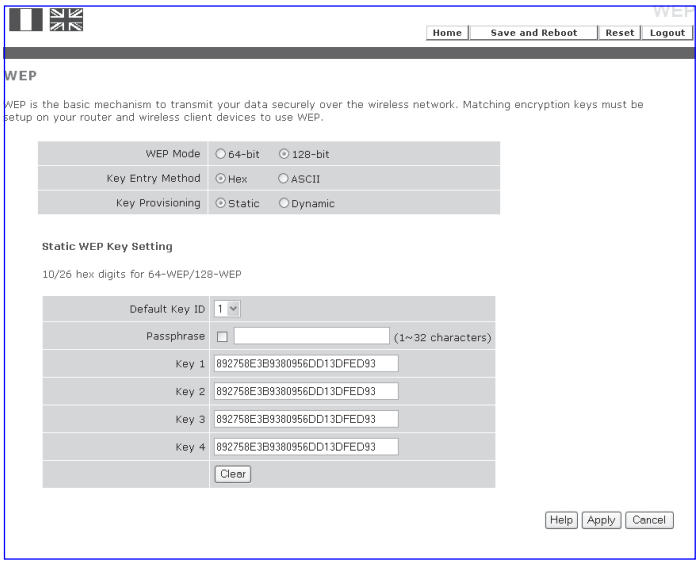


You are advised to enable encryption. To do this, select the sub-menu "Security".

- In the dropdown list, select the security option of your wireless network (No WEP, No WPA or WEP Only or WPA Only).
- Click on **Apply** to validate the security option.



- Select the sub-menu "WEP".
- Select **128 bits** in the "WEP Mode" field.



Choosing the transmission key

- Select the transmission key (keys n° 1 to 4) by clicking on one of the radio buttons.

The transmission key is used to encrypt the data transmitted by your computer.

Modifying the keys

Modify the keys so that they are personal and note their values. You will be able to use them when configuring the other pieces of equipment making up your wireless network.

- To modify the keys, key in a sentence in the **Passphrase** field:
  - in 64-bit mode: the sentence generates the 4 keys simultaneously,
  - in 128-bit mode: the sentence generates a key for the line selected.

Make a note of the keys and the sentence keyed in, and keep them in a safe place. Avoid noting them down in a file on your computer.

- You can also modify the keys by keying them directly into the boxes. The characters are "0" to "9" and "A" to "F".
- Click on **Apply**.

Once you have finished configuring your wireless network on your modem/router, do not forget to save the configuration in a file.

To do this:

- Select the **System** menu and then the **Configuration tools** sub-menu.
- Select **Save the router configuration.**
- Choose the name of the file and the location of the file saved.

3 Configuring your computers

To configure the SSID and the WEP key on your computer, please consult the documents delivered with your Wi-Fi accessory.

These elements can be parameterized by means of the application installed with your Wi-Fi accessory's drivers.

In Windows XP, this configuration is possible via the properties of your wireless connection.

SAFETY ON YOUR MODEM/ROUTER

Your SAGEM F@st™ 1500WG modem/router has been designed with the constant concern in mind to protect your data and your high-speed Internet access.

The functions described in this chapter therefore protect your installation from intrusions on the Wi-Fi wireless network as well as from Internet.

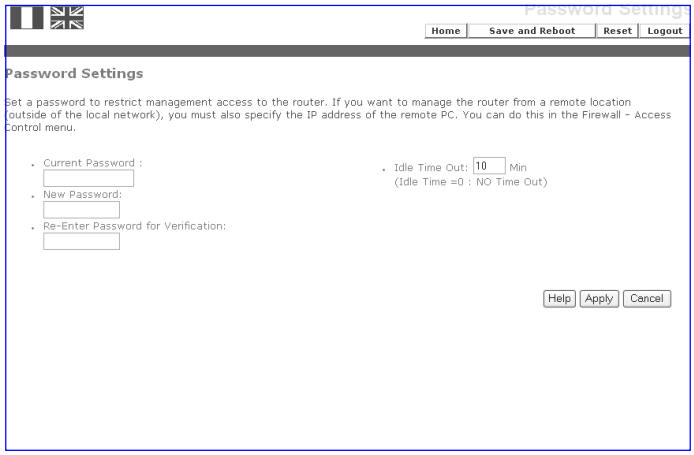
For a maximum degree of safety, do not hesitate to use each of these functions.

1 Controlling access to the HTTP configurator

It is possible to modify the password enabling access to your modem/router's HTTP configurator.

Modifying the password

On the modem/router's home page:



- In the left column, click on the "System" menu and then select the sub-menu "Password Settings".
- In the **Current Password** field, key in the appropriate password.
- In the **New Password** field, key in the new password.
- In the **Re-Enter Password for Verification** field, key in the new current password.
- Click on **Apply**.

2 SSID and WEP key (SAGEM F@st™ 1500WG only)

These settings protect your wireless network against local intrusions.

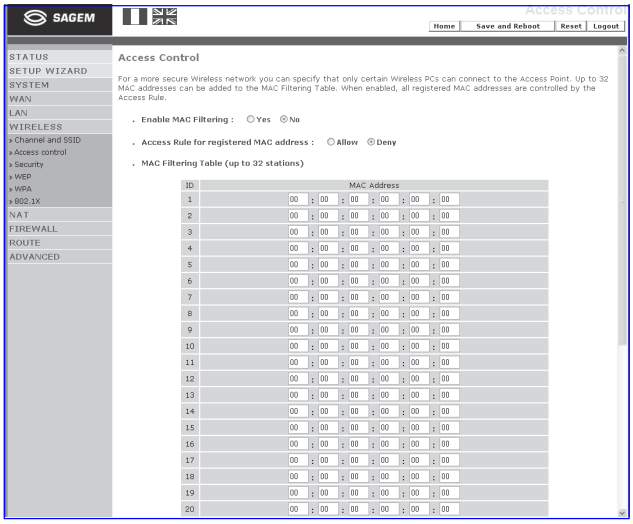
Look up the "Configuring the wireless network" section on page 17 to modify these settings.

3 Filtering the Mac addresses (SAGEM F@st™ 1500WG only)

This function makes it possible to limit the number of computers with access to your wireless network.

Filtering the MAC addresses on the wireless network

- The access control to your wireless network is disabled by default. To enable it, choose **Enable MAC Filtering** in the appropriate field.



After you enter the MAC addresses, click on **Apply**.

The MAC address is the identification number of the network cards.

To obtain the MAC address of a wireless network card:

- in Windows 98: **Start** then **Run**, key in **winipcfg**.
- in Windows XP, 2000, Me: **Start** then **Run**, key in **cmd** then **ipconfig** / all. Validate by pressing **Enter**.
- Identify your wireless network card in the list which appears by means of the "Description" line.
- The MAC address sought corresponds to the "Physical address" line.

4 Firewall

Your modem/router has a built-in firewall protecting your wired or wireless local network from intrusions originating in the Internet network.

For the usual Internet uses - consulting Web sites or mail boxes - no specific firewall configuration is required.

However, if you wish to use file sharing software programs (Peer-to-Peer) or even install a server on your local network, refer to the following section "Installing servers on the local network".

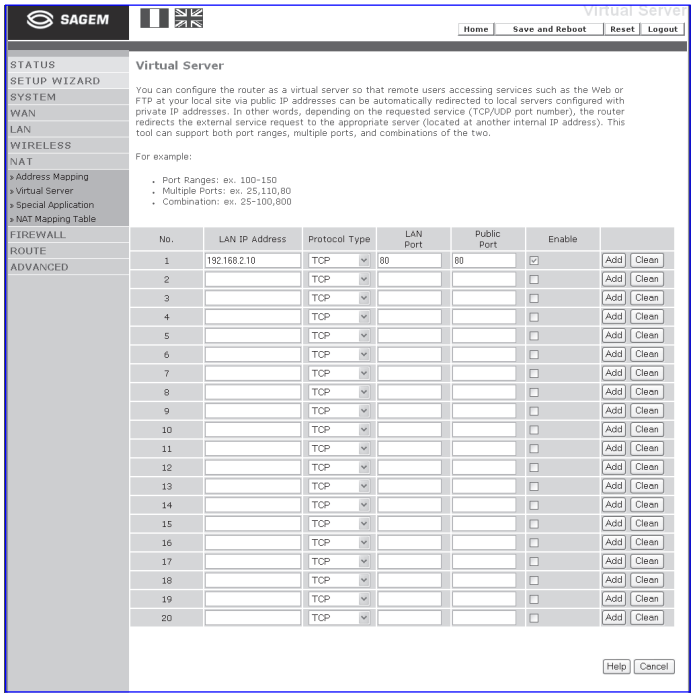
INSTALLING SERVERS ON THE LOCAL NETWORK

Installing servers on the local network or using certain Peer-to-Peer software programs requires an additional configuration of your modem/router.

1 Configuring the modem/router in order to be able to use servers on the local network

- Select the **NAT** menu in the column to the left of the screen and then select the sub-menu **Virtual Server**.

The screen opposite will be displayed.



For each virtual port:

- Indicate your server's local IP address.
- Indicate the protocol and the LAN port used for the local server (LAN).
- Indicate the public port used for the remote server (WAN).
- Check the **Enable** box.
- Click on **Add** to validate the parameters of the virtual port or on **Clean**.
- Click on **Apply**.

You can now access your server from the Internet.

Depending on the type of server you wish to install, the parameters you need to indicate differ:

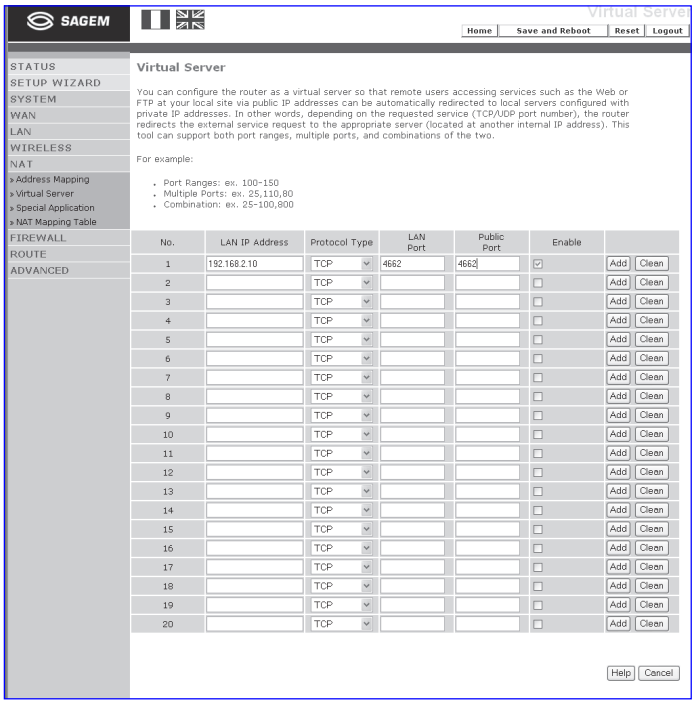
	Private FTP server access from the Internet: port 20 or 21	Private HTTP server access from the Internet: port 80
Protocol	TCP	TCP
Port	20 or 21	80
Local IP address	IP address of your FTP server	IP address of your HTTP server

2 Configuring the modem/router for Peer-to-Peer software programs

Some Peer-to-Peer software programs (e.g. "eMule" and "eDonkey") require an additional configuration of the modem/router:

- Select the **NAT** menu in the column to the left of the screen and then select the sub-menu **Virtual Server**.

The screen opposite will be displayed.



For each virtual port:

- Indicate your server's local IP address.
- Indicate the protocol and the LAN port used for the local server (LAN).
- Indicate the public port used for the remote server (WAN).
- Check the **Enable** box.

- Click on **Add** to validate the parameters of the virtual port or on **Clean**.
  e.g. for "eMule" and "eDonkey", the protocol is **TCP** and the port is **4662**.
- Click on **Apply**.

You can now use your Peer-to-Peer software program.

N.B.: In this way, only one computer can be authorized to use "eMule" or "eDonkey".

WARNING

Files available on the Internet through "Peer to Peer" software may be copyright protected. It is therefore illegal to reproduce them.

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TROUBLESHOOTING

1 Absence of ADSL synchronization

The **ADSL** LED does not come on or is flashing.

- Check that the modem/router is powered up. The **PWR** LED should be on. If that is not the case:
  - Check that the power pack is properly connected to the mains. If it is connected to a multiple socket block, check that this is powered up.
  - Check that the power pack cable is properly connected to the modem/router.
  - Check that the pushbutton is in "**depressed**" position.
- Check that the ADSL cable is properly connected to your telephone socket, to the **ADSL** port of the modem/router.
- Check that all the ADSL filters are properly connected to each of your telephone sockets.

All your telephone installation sockets must be fitted with an ADSL filter.

If the problem persists, consult your Internet Service Provider.

2 Access to the HTTP configurator is impossible

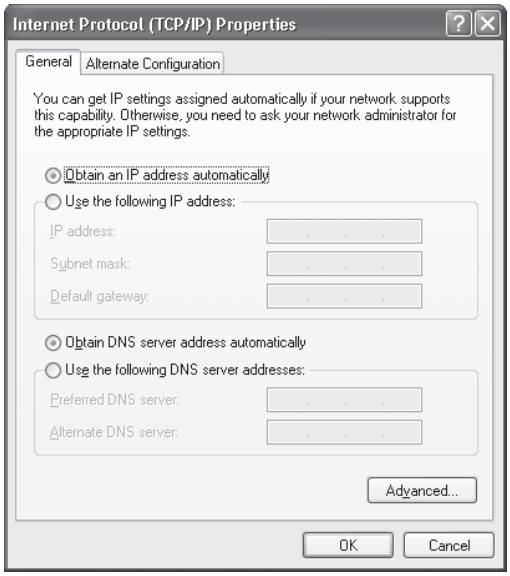
- Open your usual Web browser.
- In the **Address** field, type the modem/router's IP address: http://192.168.2.1.

If access to the configurator is still impossible, you should carry out the following instructions:

1. Check that the Ethernet cable is properly connected at both its ends.
2. Check that your computer is configured in DHCP client.

In Windows

- Click on **Start** and then on **Configuration** tab in **Network Properties.**
- Click on the wireless network card's **TCP/IP** protocol, then click on **Properties.**



The screen opposite will be displayed.

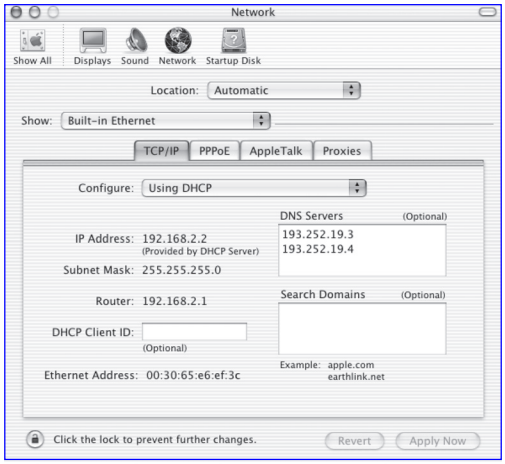
- Select the General tab, then the "**Obtain an IP address automatically**" and "**Obtain DNS server address automatically**" commands.
- Click on the **OK** button to validate your choice.

In Mac

- Click on the **Apple** menu in the menu bar, select **System Preferences**, then click on the **Network** icon. The following screen will be displayed.
- Select the **TCP/IP** tab.

  The **Configure** field should display **Using DHCP** by default.

  If this is not the case, select this value by means of the drop-down list.



3. Checking IP address allocation.

In Windows

- In Windows 98: **Start** then **Run**, key in **winipcfg**.
- In Windows XP, 2000, Me: **Start** then **Run**, key in **cmd** then **ipconfig** /**all.** Validate by pressing **Enter**.
- Check that the IP address entry contains a value other than 0.0.0.0 (e.g. 192.168.2.1). If not, reboot your computer.

In Mac (e.g. MacOS X)

- Click on the **Apple** menu in the menu bar.
- Select **System Preferences**, then click on the **Network** icon.
- The IP address field must contain a value other than 0.0.0.0 (e.g. 192.168.2.1). If not, reboot your computer.

4. Have you already modified your HTTP configurator access password?

   If you have and you have lost your password, return to the factory configuration (refer to chapter 4, page 29).

3 Consultation of Internet sites impossible

Check the state of the ADSL synchronization (see chapter 1, page 26).

Check that you are able to access the HTTP configurator (see chapter 2, page 26).

If these two conditions are met, check the status of the **ALM** LED.

- If the **ALM** LED is off, shut down and then turn on your computer and check again that you have access to the HTTP configurator and then try to connect to the Internet once again.
- If the **ALM** LED is steady red, then check your ADSL subscription parameters.

If the problem persists, return to the factory configuration, reading the chapter on "Troubleshooting" 4 - Return to factory configuration (see page 29).

4 Return to factory configuration

There are two possible methods for reconfiguring the modem/router with its original parameters:

Méthod 1:

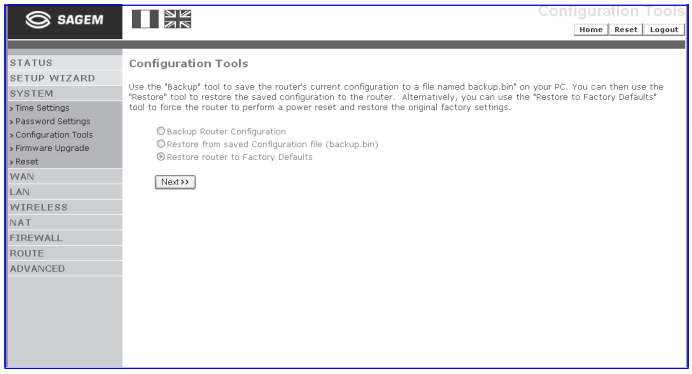
With the modem/ router on, press down the **Reset** pushbutton on the back of the SAGEM F@st™ 1500, for at least 5 seconds.

To do this, use the tip of a pencil or a pen or if you have one, a paper clip.

Méthod 2:

Open your Web browser (e.g. Internet Explorer) and proceed as follows:

- Click on **Configuration Tools** in the **System** menu.

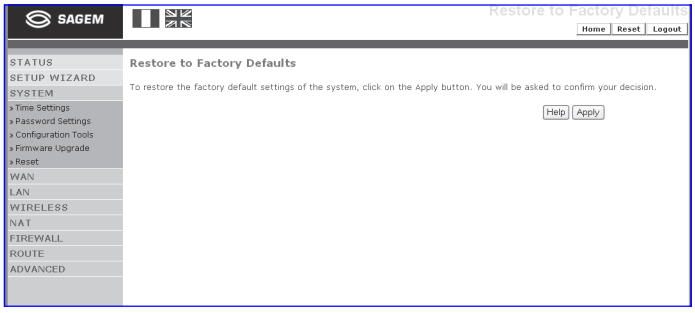


The screen opposite will be displayed.

- Select the **Restore router to Factory Defaults** option.
- Click on **Next**.

The screen opposite will be displayed.

- Click on **Apply**.



The screen opposite will be displayed.

- Click on **OK** to start the return to factory configuration procedure.

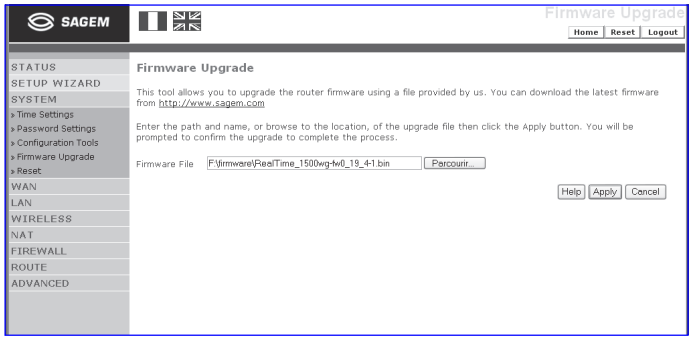
The modem/router restarts and returns to its default configuration, among which are the following settings (the full list is available in the Reference Manual):

IP address: 192.168.2.1,
Password: (EMPTY).

5 Updating the modem/router's application software progam

The modem/router's application software program can be easily updated.
To do this, open your Web browser (e.g. Internet Explorer) and proceed as follows:

- Click on **Firmware Update** in the **System** menu



The screen opposite will be displayed.

- Click on **Browse** to select the download file (available on the CD-ROM in the **Firmware** folder) from the **Firmware File** field.

- Click on **Apply**.

The screen opposite will be displayed.

- Click on **OK** to start the software update download transfer procedure.

A comment area and a progress bar keep you informed as to how the update operation is unfolding.

Do not carry out any operation while the file is being transferred, owing to the risk of damage to the modem/router.

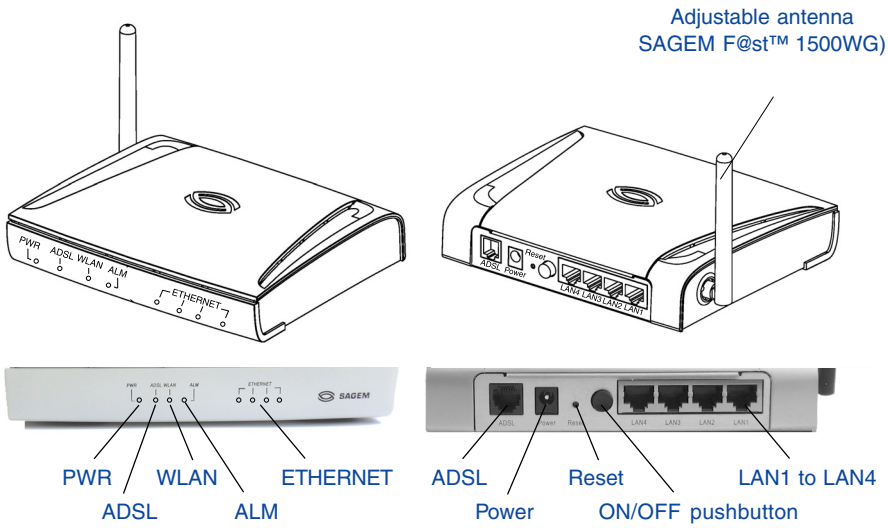
If the modem/router is affected by a power cut arising during this phase, the operation to update the software program will fail and the modem/router will be unable to restart in the previously active version.

- Wait for the connection screen telling you the transfer has been completed to appear.

APPENDICES

Connect to our Web site (www.sagem.com) to download the latest versions of the drivers and softwares, to look up the Frequently Asked Questions (FAQ) and the electronic documentation relating to your modem.

A Description of the modem/router



LEDs

PWR : Modem/router powered on

ADSL : ADSL line synchronization

WLAN : Wireless network module installed and active (SAGEM F@st™ 1500WG)

ALM : Detection of the setting up of PPP on the ADSL link

ETHERNET : Connection and traffic on the Ethernet port (network card)

Connectors

ADSL : RJ11 socket for ADSL line

LAN 1 to LAN 4 : 10/100 T-base network interface Ethernet socket (RJ45)

Power : Mains adapter cable male connector

ON / OFF : ON/OFF pushbutton

Reset : This pushbutton is used to delete the existing configuration and relaunches the SAGEM F@st™ 1500 that restarts in its factory configuration.

When powered up, the modem/router carries out a test of its LEDs. All the LEDs light up for a few seconds.

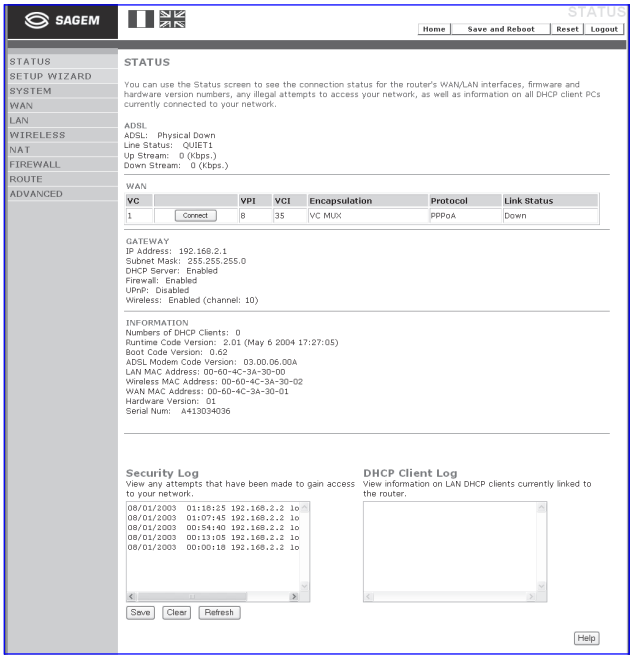
LED / Status	On	Flashing	Off
PWR	Modem/router powered on	-	Modem/router powered off
ADSL	ADSL line synchronized	ADSL line synchro-nization in progress	ADSL line not synchronized
WLAN*	Wireless network operational	-	Wireless network not operational
ALM	PPP link not set up	-	PPP link set up
ETHERNET	Ethernet link active	Traffic on the Ethernet link	Ethernet link inactive

* The WLAN LED is significant only in the case of the SAGEM F@st™ 1500WG modem/router.

B Modem/router status (STATUS)

Click on **Status** to view the modem/router connection statuses.

The fields are described in the Reference Manual on the CD-ROM.



SAFETY INSTRUCTIONS

Environment

- The modem/router should be installed and used inside a building.
- The room temperature should not exceed 45°C.
- The modem/router can be placed on a desktop or fixed vertically in its wall mounting.
- The modem/router should not be exposed to strong sunlight or placed near a substantial source of heat.
- The modem/router should not be placed in an environment where it would be subjected to considerable steam condensation.
- The modem/router should not be exposed to splashes of water.
- The modem/router's casing should not be covered.
- The modem/router and its peripherals should not be used for outdoor transmissions.

Power supply source

- The modem/router's mains adaptor should not be covered.
- The modem/router comes with its own mains adaptor. It should not be used with another adaptor.
- This Class II adaptor does not to be grounded (earthed). The connection to the electrical network should comply with the indications given on the label.
- Use a readily accessible mains outlet located near the modem/router. The power supply cord is 2 m long.
- Arrange the power supply cord in such a way as to avoid any accidental power cut to the modem/router.
- The modem/router is designed to be connected to a GG- (ground-to-ground) or GN- (ground-to-neutral) type power supply network.
- The modem/router is not designed to be connected to to an independent neutral electrical installation.
- Protection against short-circuits and leaks between phase, neutral and earth should be provided by the building's electrical installation. The power supply circuit for this equipment should be fitted with 16 A overcurrent protection and differential protection.
- The modem/router should be connected to the mains via a readily accessible wall socket with a cutout device.

Maintenance

- It is prohibited to open the casing. This must be done only by qualified personnel approved by your supplier.
- Do not use liquid or aerosol cleaning agents.

SAFETY INSTRUCTIONS (contd.)

Safety levels

Primary power source access Bipolar AC mains socket	HPV (Hazardous Primary Voltage circuit)
DC power supply access Miniature fixed connector (Power)	SELV (Safety Extra Low Voltage circuit)
RJ45 Ethernet access (ETHERNET)	SELV
RJ11 line access (ADSL)	TNV-3 (Telecommunication Network Voltage level 3 circuit)

CE

Products bearing this symbol comply with EMC regulations as well as the Low Voltage Directive published by the Commission of the European Community (CEC)

EC declaration
EC compliance declaration
SAGEM SA declares that the product named SAGEM F@st™ 1500/1500WG complies with the demands of the European Community directives 1995/5/CE as well as with the essential demands of the directives 89/336/CEE dated 03/05/1989 and 73/23/CEE dated 19/02/1973.
The CE compliance declaration for the SAGEM F@st™ 1500/1500WG is implemented within the framework of the R&TTE directive.

NOTES:

NOTES:

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