Gigaset

EN Dear Customer,

Gigaset Communications GmbH is the legal successor to Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), which in turn continued the Gigaset business of Siemens AG. Any statements made by Siemens AG or SHC that are found in the user guides should therefore be understood as statements of Gigaset Communications GmbH.

We hope you enjoy your Gigaset.

DE Sehr geehrte Kundin, sehr geehrter Kunde,

die Gigaset Communications GmbH ist Rechtsnachfolgerin der Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), die ihrerseits das Gigaset-Geschäft der Siemens AG fortführte. Etwaige Erklärungen der Siemens AG oder der SHC in den Bedienungsanleitungen sind daher als Erklärungen der Gigaset Communications GmbH zu verstehen.

Wir wünschen Ihnen viel Freude mit Ihrem Gigaset.

FR Chère Cliente, Cher Client,

la société Gigaset Communications GmbH succède en droit à Siemens Home and Office Communication Devices GmbH & Co. KG (SHC) qui poursuivait elle-même les activités Gigaset de Siemens AG. Donc les éventuelles explications de Siemens AG ou de SHC figurant dans les modes d'emploi doivent être comprises comme des explications de Gigaset Communications GmbH.

Nous vous souhaitons beaucoup d'agrément avec votre Gigaset.

IT Gentile cliente,

la Gigaset Communications GmbH è successore della Siemens Home and Office Communication Devices GmbH & Co. KG (SHC) che a sua volta ha proseguito l'attività della Siemens AG. Eventuali dichiarazioni della Siemens AG o della SHC nei manuali d'istruzione, vanno pertanto intese come dichiarazioni della Gigaset Communications GmbH.

Le auguriamo tanta soddisfazione con il vostro Gigaset.

NL Geachte klant,

Gigaset Communications GmbH is de rechtsopvolger van Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), de onderneming die de Gigaset-activiteiten van Siemens AG heeft overgenomen. Eventuele uitspraken of mededelingen van Siemens AG of SHC in de gebruiksaanwijzingen dienen daarom als mededelingen van Gigaset Communications GmbH te worden gezien.

Wij wensen u veel plezier met uw Gigaset.

ES Estimado cliente,

la Gigaset Communications GmbH es derechohabiente de la Siemens Home and Office Communication Devices GmbH & Co. KG (SHC) que por su parte continuó el negocio Gigaset de la Siemens AG. Las posibles declaraciones de la Siemens AG o de la SHC en las instrucciones de uso se deben entender por lo tanto como declaraciones de la Gigaset Communications GmbH.

Le deseamos que disfrute con su Gigaset.

PT SCaros clientes,

Gigaset Communications GmbH é a sucessora legal da Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), que, por sua vez, deu continuidade ao sector de negócios Gigaset, da Siemens AG. Quaisquer declarações por parte da Siemens AG ou da SHC encontradas nos manuais de utilização deverão, portanto, ser consideradas como declarações da Gigaset Communications GmbH.

Desejamos que tenham bons momentos com o seu Gigaset.

DA Kære Kunde,

Gigaset Communications GmbH er retlig efterfølger til Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), som fra deres side videreførte Siemens AGs Gigaset-forretninger. Siemens AGs eller SHCs eventuelle forklaringer i betjeningsvejledningerne skal derfor forstås som Gigaset Communications GmbHs forklaringer.

Vi håber, du får meget glæde af din Gigaset.

FI Arvoisa asiakkaamme,

Gigaset Communications GmbH on Siemens Home and Office Communication Devices GmbH & Co. KG (SHC)-yrityksen oikeudenomistaja, joka jatkoi puolestaan Siemens AG:n Gigaset-liiketoimintaa. Käyttöoppaissa mahdollisesti esiintyvät Siemens AG:n tai SHC:n selosteet on tämän vuoksi ymmärrettävä Gigaset Communications GmbH:n selosteina.

Toivotamme Teille paljon iloa Gigaset-laitteestanne.

SV Kära kund,

Gigaset Communications GmbH övertar rättigheterna från Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), som bedrev Gigaset-verksamheten efter Siemens AG. Alla förklaringar från Siemens AG eller SHC i användarhandboken gäller därför som förklaringar från Gigaset Communications GmbH.

Vi önskar dig mycket nöje med din Gigaset.

NO Kjære kunde,

Gigaset Communications GmbH er rettslig etterfølger etter Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), som i sin tur videreførte Gigaset-geskjeften i Siemens AG. Eventuelle meddelelser fra Siemens AG eller SHC i bruksanvisningene er derfor å forstå som meddelelser fra Gigaset Communications GmbH.

Vi håper du får stor glede av din Gigaset-enhet.

EL Αγαπητή πελάτισσα, αγαπητέ πελάτη,

η Gigaset Communications GmbH είναι η νομική διάδοχος της Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), η οποία έχει αναλάβει την εμπορική δραστηριότητα Gigaset της Siemens AG. Οι δηλώσεις της Siemens AG ή της SHC στις οδηγίες χρήσης αποτελούν επομένως δηλώσεις της Gigaset Communications GmbH.

Σας ευχόμαστε καλή διασκέδαση με τη συσκευή σας Gigaset.

HR Poštovani korisnici,

Gigaset Communications GmbH pravni je sljednik tvrtke Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), koji je nastavio Gigaset poslovanje tvrtke Siemens AG. Zato sve izjave tvrtke Siemens AG ili SHC koje se nalaze u uputama za upotrebu treba tumačiti kao izjave tvrtke Gigaset Communications GmbH.

Nadamo se da sa zadovoljstvom koristite svoj Gigaset uređaj.

SL Spoštovani kupec!

Podjetje Gigaset Communications GmbH je pravni naslednik podjetja Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), ki nadaljuje dejavnost znamke Gigaset podjetja Siemens AG. Vse izjave podjetja Siemens AG ali SHC v priročnikih za uporabnike torej veljajo kot izjave podjetja Gigaset Communications GmbH.

Želimo vam veliko užitkov ob uporabi naprave Gigaset.

Gigaset

CS Vážení zákazníci,

společnost Gigaset Communications GmbH je právním nástupcem společnosti Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), která dále přejala segment produktů Gigaset společnosti Siemens AG. Jakékoli prohlášení společnosti Siemens AG nebo SHC, které naleznete v uživatelských příručkách, je třeba považovat za prohlášení společnosti Gigaset Communications GmbH.

Doufáme, že jste s produkty Gigaset spokojeni.

SK Vážený zákazník,

Spoločnosť Gigaset Communications GmbH je právnym nástupcom spoločnosti Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), ktorá zasa pokračovala v činnosti divízie Gigaset spoločnosti Siemens AG. Z tohto dôvodu je potrebné všetky vyhlásenia spoločnosti Siemens AG alebo SHC, ktoré sa nachádzajú v používateľských príručkách, chápať ako vyhlásenia spoločnosti Gigaset Communications GmbH.

Veríme, že budete so zariadením Gigaset spokojní.

RO Stimate client,

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Sperăm ca produsele Gigaset să fie la înălţimea dorinţelor dvs.

SR Poštovani potrošaču,

Gigaset Communications GmbH je pravni naslednik kompanije Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), kroz koju je nastavljeno poslovanje kompanije Gigaset kao dela Siemens AG. Stoga sve izjave od strane Siemens AG ili SHC koje se mogu naći u korisničkim uputstvima treba tumačiti kao izjave kompanije Gigaset Communications GmbH.

Nadamo se da ćete uživati u korišćenju svog Gigaset uređaja.

BG Уважаеми потребители,

Gigaset Communications GmbH е правоприемникът на Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), която на свой ред продължи бизнеса на подразделението Siemens AG. По тази причина всякакви изложения, направени от Siemens AG или SHC, които се намират в ръководствата за потребителя, следва да се разбират като изложения на Gigaset Communications GmbH.

Надяваме се да ползвате с удоволствие вашия Gigaset.

HU Tisztelt Vásárló!

A Siemens Home and Communication Devices GmbH & Co. KG (SHC) törvényes jogutódja a Gigaset Communications GmbH, amely a Siemens AG Gigaset üzletágának utódja. Ebből következően a Siemens AG vagy az SHC felhasználói kézikönyveiben található bármely kijelentést a Gigaset Communications GmbH kijelentésének kell tekinteni.

Reméljük, megelégedéssel használja Gigaset készülékét.

PL Szanowny Kliencie,

Firma Gigaset Communications GmbH jest spadkobiercą prawnym firmy Siemens Home and Office Communication Devices GmbH & Co. KG (SHC), która z kolei przejęła segment produktów Gigaset od firmy Siemens AG. Wszelkie oświadczenia firm Siemens AG i SHC, które można znaleźć w instrukcjach obsługi, należy traktować jako oświadczenia firmy Gigaset Communications GmbH.

Życzymy wiele przyjemności z korzystania z produktów Gigaset.

TR Sayın Müşterimiz,

Gigaset Communications GmbH, Siemens AG'nin Gigaset işletmesini yürüten Siemens Home and Office Communication Devices GmbH & Co. KG (SHC)'nin yasal halefidir. Kullanma kılavuzlarında bulunan ve Siemens AG veya SHC tarafından yapılan bildiriler Gigaset Communications GmbH tarafından yapılmış bildiriler olarak algılanmalıdır.

Gigaset'ten memnun kalmanızı ümit ediyoruz.

RU Уважаемыи покупатель!

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Мы надеемся, что продукты Gigaset удовлетворяют вашим требованиям.

SIEMENS

Gigaset
USB Stick 54

Total 802.11
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ATHEROS

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Safety precautions

◆ The Gigaset USB Stick 54 can affect medical equipment. You should therefore pay attention to the technical conditions of its environment.

◆ Make sure you include the operating instructions if you pass on your Gigaset USB Stick 54 to somebody else.

◆ Under no circumstances should you try to use a damaged device. If in doubt, please contact our service department, see Section "Customer service (Customer Care)" on page 47.

Notes on secure operation

When you have installed and configured the Gigaset USB Stick 54 on your PC, you should make some security settings on the wireless network:

◆ Change the SSID for all wireless devices in your network
(see "SSID (Service Set Identifier)" on page 19).

◆ Encrypt the communication over your wireless network
(see "Configuration – Security" on page 21).

Trademarks

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Note:
Brand or trade names that appear in this guide are used to indicate individual steps in operation and do not mean they are freely available. Brand and trade names always remain the property of their respective owners.

The Gigaset USB Stick 54

The Gigaset USB Stick 54 is a 54 Mbps network adapter that can be connected to your PC or Notebook by means of a USB (Universal Serial Bus). You can use Gigaset data products to set up a wireless local network (WLAN = Wireless Local Area Network) without having to lay cables.

Your Gigaset USB Stick 54 can be used to connect your PC to other PCs equipped with wireless network adapters (ad-hoc mode).

You can also connect your PC to a wireless router, for example to the Gigaset SE361 WLAN, for Internet access (infrastructure mode).

Since the PCs communicate with each other via radio waves, it does not matter where they are located, as long as they are within range of the wireless network. Mobile PCs, such as notebooks, can connect to the WLAN even after changing location. This enables you to use all the files and printers on the network. The Gigaset USB Stick 54 works according to the IEEE 802.11g transmission standard and is backward compatible with the older standard IEEE 802.11b. For network security, wireless transmission can be encrypted using 64/128-bit WEP or the newer WPA standard.

These operating instructions contain important information on how to set up a WLAN and configure your Gigaset USB Stick 54.

Wireless LAN basics

This section provides basic information on wireless LANs to show the role of the Gigaset USB Stick 54 in setting up a wireless network

Local Area Network (LAN)

A LAN is a network that exists in a limited area. A network comprises two or more computers that are connected together in order to share files as well as peripheral devices, for example a printer.

Using the Gigaset USB Stick 54 you can communicate with other PCs without having to route network cables. Thus you can take your computer to another place and still remain connected to the network or the Internet.

You can use the Gigaset USB Stick 54 in two different ways. On one hand, you can establish a connection to one or more PCs equipped with wireless network adapters. This is an ad-hoc network. On the other hand, you can establish a connection to an access point, which is used to obtain access to an existing wired LAN (infrastructure network).

Ad-hoc network

In an ad-hoc network, PCs communicate with each other via wireless peer-to-peer connections. An ad-hoc network is set up by participants as and when required. All the PCs must have a wireless network adapter installed, for example a Gigaset USB Stick 54. Ad-hoc networks are used wherever communication networks have to be set up quickly without any existing network infrastructure and where the participants are mobile.

Infrastructure network

In an infrastructure network, connections between network participants are set up via an access point (or several access points). The access point provides the basis for the wireless network. It controls the connections between the participants and can also establish the connection from the mobile stations of a wireless network to a wired LAN (Ethernet) or the Internet.

Roaming

Several access points can be installed to extend the range of a wireless network. Participants in the wireless network can move freely between the various access points without losing contact with the network. As soon as there is a risk of losing contact, the PC automatically looks for another access point with a stronger signal. All access points and wireless network adapters must have the same SSID. All access points must be connected to the same Ethernet network.

Security in wireless networks – Encryption

Any network, be it wired or wireless, is exposed to the risk of eavesdropping.

Connecting your local network to the public network exposes your data and applications to not inconsiderable risks. As with an individual connection, you should always protect your network PCs against external attacks, for example via e-mail, with a virus scanner.

These virus scanners, however, do not provide any protection against unauthorised access from outside (hackers). To counter this risk, Gigaset data products offer various encryption procedures that largely rule out unauthorised access (hacking) to your wireless network.

WEP encryption

WEP encryption (Wired Equivalent Privacy) encodes data for sending using a key that you have defined. Once the data reaches the recipient, who uses the same key, it is restored to the state before you sent it. Recipients who do not know this key cannot read the content of this data stream or only after a great deal of effort.

There are two security levels for calculating the encryption key:

◆ 64-bit mode
◆ 128-bit mode

WPA encryption

Wireless Protected Access (WPA) is a new standard-compliant solution for greater security in wireless networks. WPA is meant to replace the existing WEP standard (Wired Equivalent Privacy) and offers more reliable encryption and authentication methods.

Your Gigaset USB Stick 54 allows you to use WPA encryption regardless of the operating system used. WPA encryption is particularly recommended where maximum security is required.

Range of wireless communication via a WLAN

The range is up to 300 m in the open. In buildings, the maximum range is up to 30 m. The operating environment as well as the nature of the rooms and building may reduce the range considerably. You can boost the range of your wireless network by placing a repeater, for example a Gigaset WLAN Repeater, at the limit of its range.

Installing the Gigaset USB Stick 54

System requirements

To operate the stick, you need:

◆ A PC with at least 466 MHz and one of the following operating systems: Windows Vista, Windows XP, Windows 2000, Windows 98SE or Windows ME
◆ 64 MB RAM, more memory is recommended
◆ Minimum free hard drive capacity of 30 MB
◆ A free USB port
◆ A CD-ROM drive **or** a DVD drive

Contents

The package contains the following components:

◆ A Gigaset USB Stick 54
◆ A CD-ROM with installation and configuration software, the detailed user guide and Adobe Reader, which you will need to read the user guide
◆ A Quick Start Guide

About the installation location

Select the location for the PC to which you plan to connect the Gigaset USB Stick 54 so that the radio waves are interrupted by as few obstacles as possible. Protect the Gigaset USB Stick 54 from damp.

The PC with the Gigaset USB Stick 54 should not be placed directly next to other electrical devices. Electrical equipment can mutually affect each other, the radio waves may impair the function of other devices.

If your PC with the Gigaset USB Stick 54 is located under a desk or in a casing, this may affect the reach of the wireless network. For greater reach, we recommend setting up the WLAN component in a central, open position.

Status display

The Gigaset USB Stick 54 has an LED display for the connection to the network:

LED is off	The Gigaset USB Stick 54 does not have a connection to a wireless network.
LED is on	The Gigaset USB Stick 54 does have a connection to a wireless network and is ready to transfer data.
LED flashes quickly	The Gigaset USB Stick 54 is sending or receiving data.

Installation procedure

Note:
◆ Only insert the Gigaset USB Stick 54 into a spare USB port on your PC when the installation software prompts you to do so.
◆ If other WLAN adapter software is installed on your PC, please uninstall it before starting the Gigaset USB Stick 54 installation.

The software included in the delivery must be installed first. This software contains both the driver software for the device and the Gigaset WLAN Adapter Monitor tool, which is used for configuration and monitoring.

Only this software has been geared to the Gigaset USB Stick 54. Similar drivers are included with the Windows driver databases. However, such drivers do not usually offer the full range of features or they function in a completely different way.

Do not connect the Gigaset USB Stick 54 to your PC until prompted by the installation program. If you connect the Gigaset USB Stick 54 to your PC before installing the software, Windows recognises the device automatically and displays a dialog window requesting the appropriate drivers. Click on *Cancel* to close the dialog box. Remove the Gigaset USB Stick 54 from the PC and start again by installing the software.

Note:
You may require administrator rights on your PC for the installation process.

Information for users with Windows 98SE/ME:
If you are prompted to restart your computer during installation, click on *Restart*. After this, installation continues automatically. You should now follow the instructions and steps shown below.
Have your Windows Installation CD to hand. You may be prompted to insert it.

Running the installation

➜ Close all running programs.

➜ Insert the CD-ROM that is included in the delivery into the CD-ROM or DVD drive on your PC and wait until the start window is displayed. If the start window does not appear automatically on your PC, start the installation manually:

– Open Windows Explorer.

– Select the CD-ROM or DVD drive.

– Double-click on the program `start.exe`.

The language selection screen appears.

➜ Select your language.

A window with a list of the CD-ROM contents appears.

|	
Installation	Install the software for your Gigaset USB Stick 54.
User guide	This opens the detailed user guide on the CD-ROM. If you cannot open the detailed user guide on the CD-ROM, you must first install AdobeReader, which is included on the CD.
Installing Adobe Reader	Install Adobe Reader.
Searching the CD	If you are looking for a particular file on the CD-ROM, you can display the CD-ROM contents in an Explorer window.
Back	The program returns to the language selection screen.
Exit	This closes the program.

➜ Click on **Installation**.

> **Note:**
> The windows in the different operating systems and versions (Windows XP, Windows XP 2SP, Windows 2000, Windows 98SE/ME) differ only very slightly. Installation is largely automatic, apart from a few mouse clicks and restart processes.

The InstallShield Wizard appears.
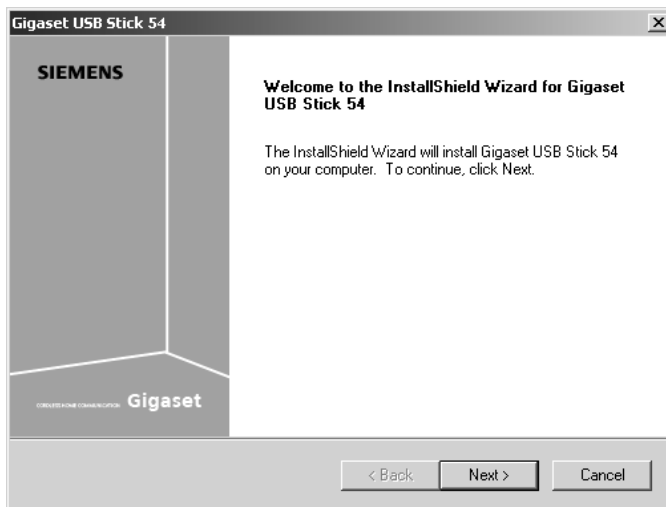
➜ Click on **Next** to continue installation.

In the next screen, choose the directory for the installation.

➥ Click on *Browse* to select another directory. Click on *Next* to continue installation.

During installation, the InstallShield Wizard uses the setup progress window to show the action that is currently executing and the progress made in installation.

After this stage of installation is completed, a message appears prompting you to connect the Gigaset USB Stick 54 to your PC.

Connecting the Gigaset USB Stick 54
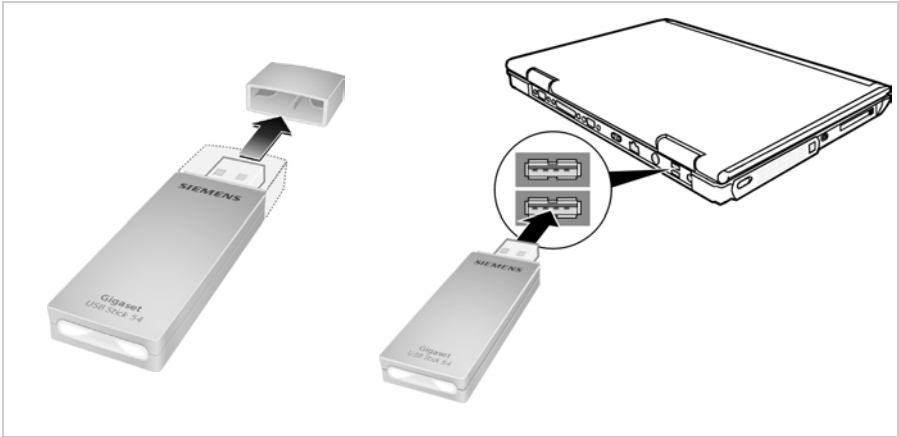
➥ Take off the cap from your Gigaset USB Stick 54 and insert it in a free USB port on your PC.

Note:
The Gigaset USB Stick 54 complies with USB Version 2.0.
If your PC still has the older USB Version 1.1, you may see an error message to that effect during installation. You can ignore this message. The Gigaset USB Stick 54 also works with USB Version 1.1. However, the transmission rate under USB V1.1 is lower.

Installing the driver software

Once the Gigaset USB Stick 54 has been plugged in, the installation continues automatically. The operating system's automatic hardware recognition function opens in order to install the drivers for the Gigaset USB Stick 54.

Notes for installation on Windows XP

If Windows XP SP1 is installed on your PC, a query window will appear.

➡ Select the *Install software automatically* option and click *Next*.

If Windows XP SP2 is installed on your PC, you will be asked whether the Windows update function should look for suitable software.

➡ Select the *No, not this time* option and click *Next*.

➡ Then select the *Install software automatically* option and click *Next*.

Notes for installation on Windows Vista

If Windows Vista is installed on your PC, there may be a more recent driver on your PC for the Gigaset USB Stick 54.

➡ Click *Yes* if you would like to use this driver (recommended).

Click *No* if you want to replace the driver with the driver on the CD.

Notes:

◆ **Windows 98SE / ME**: You may be prompted to insert your Windows Installation CD to continue driver installation. Therefore you should have this CD to hand or enter the path name where the Windows installation files are stored on your PC.

◆ Restart your PC if you are prompted to do so.

◆ If your PC already contains more recent files, answer the question whether you want to keep them with *YES.*

➡ Select the option *Finish* to close the hardware wizard.

A window may appear following installation prompting you to finish the installation.

➡ Select the option to restart the PC and click *Finish*.

Checking the installation

If installation was successful, you can now use the Gigaset WLAN Adapter Monitor. You can use the Gigaset WLAN Adapter Monitor to configure your Gigaset USB Stick 54 and establish a connection to other network adapters or an access point.

The Gigaset WLAN Adapter Monitor is represented by an icon in the status area of the taskbar; this icon shows you if there is a connection to a connection partner and the quality of the connection.

The following may be displayed in the status area of the taskbar:
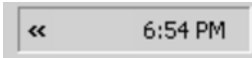
The Gigaset WLAN Adapter Monitor icon is not displayed.

➡ First try to open it manually, see the section entitled "Opening the monitor" on page 16.

If this fails, then something went wrong during installation.

➡ Uninstall the software, see the section entitled "Uninstalling the software" on page 33.

➡ Then install the software again, see the section entitled "Running the installation" on page 10.

The Gigaset WLAN Adapter Monitor icon is displayed in the taskbar with a grey ball above the icon:
The Gigaset WLAN Adapter Monitor is installed; the Gigaset USB Stick 54 is not, or not yet, correctly inserted.
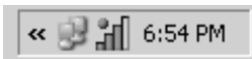
➡ Check the USB connection.
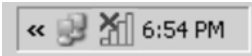
The Gigaset WLAN Adapter Monitor icon is displayed in the taskbar with a red cross above the icon:
The Gigaset WLAN Adapter Monitor is installed and active; a connection to the local network has not yet been established.

➡ Go to the section entitled "Configuring the Gigaset USB Stick 54" on page 16.

The icon is displayed in the taskbar with a green ball above the icon:
The Gigaset WLAN Adapter Monitor is installed and active; a connection to the local network has been established. The number of bars displayed in the icon shows the connection quality.

Please refer to the section entitled "Notes on secure operation" on page 5.

Show QuickInfo for the connection

If you move the mouse over the icon in the taskbar, you will see a small window that displays the connection properties.

```
Recycle Bin:
Connection: ConnectionPoint
Speed: 54 Mbps
Link Quality: 100%
```
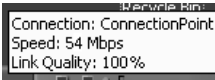
The following properties are shown:

◆ SSID (Service Set Identifier) in the *Connection* line
◆ The transmission rate (in Mbps) in the *Speed* line
◆ The transmission quality (in %) in the *Link quality* line

If no connection is currently active, a red cross appears above the icon and *Disconnected* is displayed in QuickInfo.

Reading the connection quality from the icon

The icon changes gradually depending on the current connection quality. The better the connection quality, the higher the transmission speed

With reasonable to poor connection:

➡ If possible, move your PC closer to the connection partner for greater field strength.

No WLAN available (red cross over bar)

There is no WLAN available to which you could establish a connection within the reach of your Gigaset USB Stick 54.

➡ Check the configuration of the access point and adjust the settings for the Gigaset USB Stick 54 accordingly.

Or

➡ Change your location to reduce the distance to a connection partner.

Configuring the Gigaset USB Stick 54

The Gigaset WLAN Adapter Monitor

You can use the Gigaset WLAN Adapter Monitor to configure and monitor your Gigaset USB Stick 54.

Opening the monitor

In the standard setting, the Gigaset WLAN Adapter Monitor is opened automatically in the background when you launch your PC. The Gigaset WLAN Adapter Monitor icon is displayed in the status area of the taskbar.

➡ Double-click on the Gigaset WLAN Adapter Monitor icon in the status area of the taskbar to open the monitor user interface.

Or

➡ Right-click on the Gigaset WLAN Adapter Monitor icon in the status area of the taskbar.
   In the pop-up menu, you will see the available tabs and the *Exit* option.

➡ In the pop-up menu, click on the appropriate tab to open the monitor user interface and display this tab directly.
   Use the *Exit* option to close the Gigaset WLAN Adapter Monitor.

If you do not see the Gigaset WLAN Adapter Monitor icon in the status area of the taskbar, you will have to run the program first:

➡ In the start menu, click on *Start – Programs – Gigaset USB Stick 54 – Gigaset WLAN Adapter Monitor*.
   This launches the program. The Gigaset WLAN Adapter Monitor icon is displayed in the status area of the taskbar.

Deactivating Autostart

The Gigaset WLAN Adapter Monitor is opened automatically every time you power up or reboot your PC. If you do not need the monitor all the time, you can deactivate Autostart.

➡ Select **Start** – **Programs** – **Autostart**.

➡ Right-click on the **Gigaset WLAN Adapter Monitor** entry.

➡ Choose **Delete** to remove the link to Gigaset WLAN Adapter Monitor from Autostart.

Now that the monitor is no longer opened automatically when you launch your PC, you will have to open it manually when you need it.

Operating the Gigaset WLAN Adapter Monitor

In the Gigaset WLAN Adapter Monitor user interface you will find various settings and status displays for your network adapter on various tabs, which will be described in detail in the following sections.

Buttons

With the buttons under each tab you can use one of the following options:
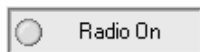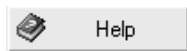
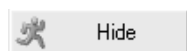|	
○ Radio On	Wireless operation of the network adapter is activated (green icon). The PC is available on the network. ➡ Click on **Radio On** to deactivate the wireless operation of the network adapter. **Radio Off** is now displayed. The PC is no longer available on the network.
● Radio Off	The wireless operation of the network adapter is deactivated (red icon). The PC is not available on the network. ➡ Click on **Radio Off** to activate the wireless operation of the network adapter. **Radio On** is now displayed. The PC is available on the network.
🖫 Help	Use the **Help** button to open the Gigaset WLAN Adapter Monitor help file.
🏃 Hide	Use the **Hide** button to close the user interface of the Gigaset WLAN Adapter Monitor. The icon in the status area of the task bar shows that the monitor is still active in the background. ➡ Double-click on this icon if you want to open the Gigaset WLAN Adapter Monitor user interface again.

Closing the monitor

➡ Right-click on the Gigaset WLAN Adapter Monitor icon in the status area of the taskbar.
This opens the pop-up menu.

➡ Select **Exit** to close the program.
The Gigaset WLAN Adapter Monitor is closed. The icon disappears from the status area in the taskbar.

Configuration

On the **Configuration** tab, you can choose the general basic settings and the security options for operating the Gigaset USB Stick 54. The **Configuration** tab is divided into three sections:

Configuration – General

Successful communication in a WLAN depends on all the PCs using the same ID (SSID) and the same radio channel. In addition, the connected PCs must coordinate their transmission rate for successful data transfer.

You can choose the basic settings for each profile under **Common** on the **Configuration** tab.

> **Please remember:**
> For security reasons, you should change the **SSID** of your WLAN following installation, as the default SSID may also be known to unauthorised persons.
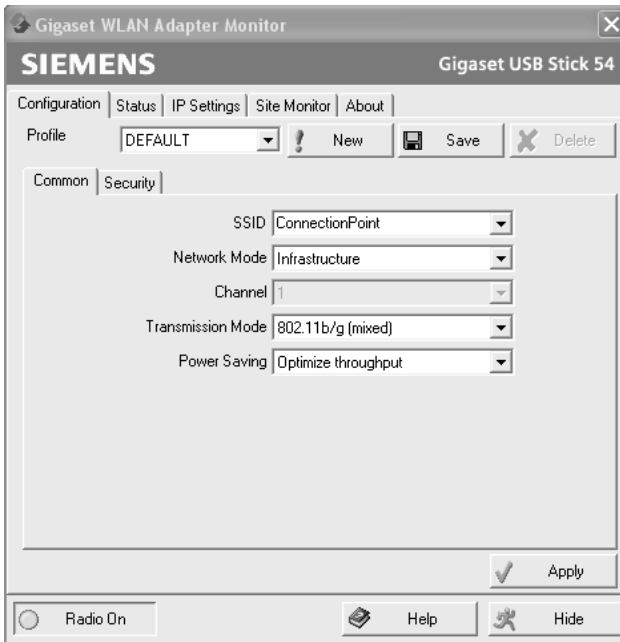
SSID (Service Set Identifier)

The SSID is the ID used for uniquely identifying a wireless network (WLAN) so that this network can be distinguished from a parallel network. Within a WLAN, all the network adapters must have the same SSID.

➡ In the **SSID** field, select the ID of the partner you want to connect your PC to. The default setting is **ConnectionPoint**.

The order for defining the SSID depends on the **Network Mode** of the WLAN:

◆ **Infrastructure**:
   The SSID must be defined on the access point first. This SSID is then assigned automatically to every network adapter registering with it.

◆ **AdHoc**:
   It is important that all network adapters use the same SSID. The order of entry is irrelevant.

Network Mode

➡ Enter the **Network Mode** for the network environment:

   – **Infrastructure**:
      There are wireless (WLAN) and wired (LAN) PCs in the network environment. The connection between WLAN and LAN is set up via an access point.

   – **AdHoc**:
      The network environment does not have a fixed structure, rather is set up between the available wireless network adapters as and when required. No access point is required.

   The default operating mode is Infrastructure.

You will find a detailed description of the operating modes in Section "Wireless LAN basics" on page 6.

Channel

The **Channel** field shows the radio channel used to set up communication with the connection partners. You can choose from radio channels 1-13.

In **Infrastructure** mode, the radio channel is set by the access point for all WLAN participants and can only be changed there. In this case, the **Channel** field shows the channel being used.

In **AdHoc** mode, you set the network adapter channel manually.

➡ Select the channel used by the desired connection partners in the ad-hoc network.

If you use a PC with the operating system Windows Vista, the channel will be set automatically in the **AdHoc** operational mode.

Transmission mode

The Gigaset USB Stick 54 is designed to operate according to various WLAN standards. You can select the transmission mode in *Infrastructure* mode:

➡ Select *802.11b* if the network environment uses this WLAN standard.
   The maximum transmission rate possible is limited to 11 Mbps.

Or

➡ Select *802.11g* if the network environment uses this WLAN standard.
   The maximum transmission rate possible is limited to 54 Mbps.

Or

➡ Select *Mixed Mode* if the network environment uses both modes. Some of the network adapters use Standard 802.11g, others Standard 802.11b.
   The maximum transmission rate possible depends on the WLAN standard of the connection partner in question.

In *Ad Hoc* mode, the transmission mode is set to *802.11b*.

If you are using a PC with the operating system Windows Vista, the transmission mode is set automatically depending on the access point.

Power saving

This feature is not available for Windows Vista.

You can choose two options for the Gigaset USB Stick 54 in *Power Saving* mode.

➡ Select *Optimize power saving* to use the network adapter in power-saving mode. Your PC remains available on the network, but the network adapter's energy consumption is reduced to a minimum.

➡ Select *Optimize throughput* if you want to achieve a maximum data transmission rate (default).

Configuration – Security

The range of a wireless network cannot be restricted to an enclosed area. The advantage of a location-independent connection set-up brings with it the risk of unauthorised persons eavesdropping on your wireless communications. To avoid misuse of your data, it is especially important to encrypt transmission over your WLAN.

With Gigaset data products, you can adjust the security settings for each configuration profile to suit your needs. The following encryption methods are available:

◆ WPA-PSK or WPA2-PSK (recommended)
◆ WEP, 128-bit or 64-bit

You can perform the security settings under *Security* on the *Configuration* tab.

Please remember:
Successful communication depends on all the connection partners in a WLAN using the same security settings (type of encryption and the appropriate keys).
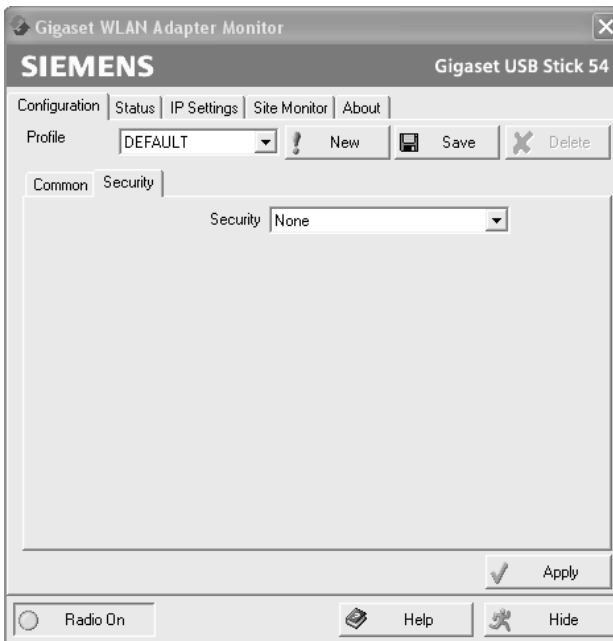
Activating security options

On the *Configuration – Security* tab, the default security mode is *Disabled*. You can use this to register on all wireless networks that do not use encryption for data transfer.

If you would like to register on a wireless network where registration is checked and data transfer is encrypted, you must activate the security options of your Gigaset USB Stick 54.

➡ Select the security mode you require from the **Security** list:

A window opens to configure the mode.

WPA-PSK/WPA2-PSK

WPA-PSK or *WPA2-PSK* offers greater protection for your network than WEP. *WPA2-PSK* is the newer encryption standard. You should therefore use one of these encryption modes for registration if all components in your network support this.
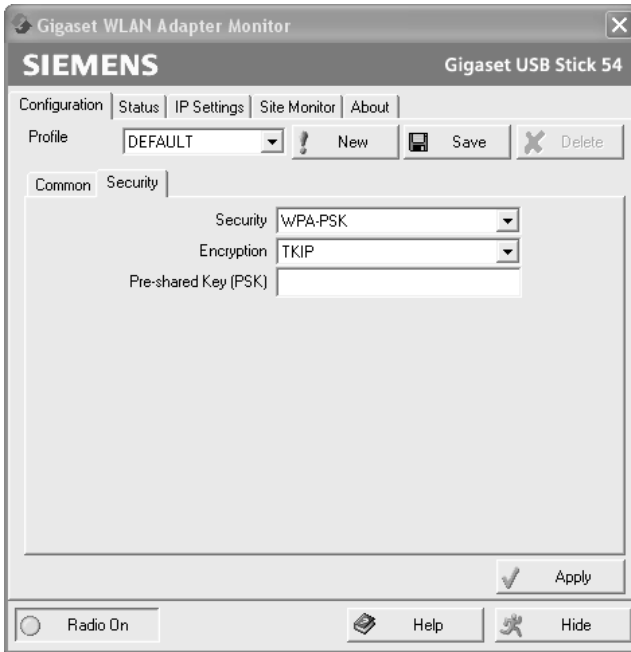
➡ In the **Encryption** field, select the required encryption method (TKIP or AES).

Remember that when selecting encryption, two connection partners must use the same type of encryption.

➡ In the **Pre-shared Key (PSK)** field, enter the key you would like to use for registration on the network.

Note that all components in a network must use the same **Pre-shared Key (PSK)** to be able to communicate with each other.

If you would like to register on a network in **Infrastructure** mode, first define a pre-shared key on your wireless router for your network. Then use this for all remaining components in your network. You can find more information in the user manual for your wireless router.

➡ Click **Apply** to accept the changes.

WEP
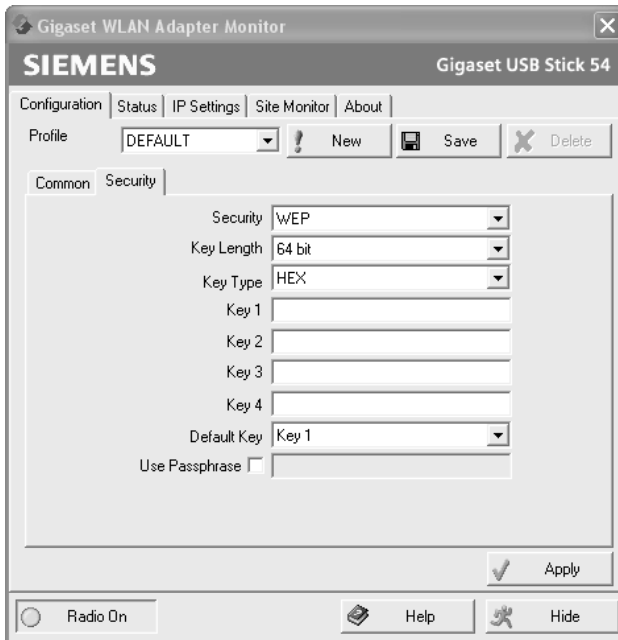
➡ In the **Key Length** field, select the required length of the WEP key.

Note that all components in a network must use the same key length to be able to communicate with each other.

Use a key of length **128 bit** if all network components support this. This offers greater protection for the data in your network.

➡ In the **Key Type** field, select the character format for creating keys:

– **HEX**
The keys are entered as hexadecimal characters. Please only use the digits 0 to 9 and the letters A to F. For a key length of 128 bits, 26 hexadecimal characters are used, and for a key length of 64 bits, 10 hexadecimal characters are used.

– **ASCII**
The keys are formed from characters of the ASCII character set. For a key length of 128 bits, 13 characters are used, and for a key length of 64 bits, 5 characters are used.

After selecting the key length and key type, you can use either a passphrase to generate your key automatically, or manually enter the key:

◆ Generating keys with a passphrase

For encryption, you can use a passphrase from which the required keys are generated automatically.

➡ Activate the **Use Passphrase** option.
This activates the appropriate entry field.

➡ In the **Use Passphrase** field, enter any sequence of characters as the passphrase. You can enter up to 260 characters.

> **Notes:**
> ◆ Remember that all the connection partners must use the same passphrase for encryption.
> ◆ Make a note of your passphrase and store it in a safe place.

➡ In the **Default Key** field, select one of these four created keys with which data transfer on your PC is to be encrypted.

➡ Click **Apply** to accept the changes.

The security options of your Gigaset USB Stick 54 have been activated.

◆ Creating keys manually

You can enter up to four keys in the **Key 1** to **Key 4** fields. The length of the keys entered is determined by the settings in the **Key Length** and **Key Type** fields.

➡ Enter at least one key in one of the four text fields.

> **Please remember:**
> All connection partners must use the same key for encryption.

➡ In the **Default Key** field, select one of these four created keys with which data transfer on your PC is to be encrypted.

➡ Click **Apply** to accept the changes.

The security options of your Gigaset USB Stick 54 have been activated.

Configuration – Profile

Selecting a profile

The Gigaset WLAN Adapter Monitor can manage several configuration profiles for your Gigaset USB Stick 54. If you want to use your PC in different wireless networks, for example, you can create several profiles and adjust them to the requirements of the corresponding networks. When changing networks, you only have to choose the appropriate profile for registering your PC in the new network.
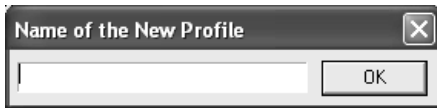
The Gigaset USB Stick 54 always uses the settings for the **Profile** displayed in the **Profile** field.

> **Note:**
> After installation, the **DEFAULT** profile contains common settings.

Creating a profile

➜ Click on **New** next to the **Profile** field.
This opens a dialogue for entering a profile name.

➜ Enter a name for the new profile and confirm your entry with **OK**. The maximum length of the profile name is 29 characters.

> **Note:**
> To make it easier to recognise them again, it is advisable to use an "illustrative" name for the profiles. A suitable name for a profile could be the location of the wireless network.

The currently applicable settings continue to be shown.

➜ Adjust the settings to the requirements of the network environment.

➜ Click on **Save**.
This saves your configuration as a new profile. The selection in the **Profile** field is expanded to include the new profile name.

Selecting a profile

➜ Open the selection in the **Profile** field.

➜ Click on the profile name you want.
This activates the selected profile and displays it in the **Profile** field.

➜ Click on **Apply** to activate the selected profile.

Editing a profile

➡ In the *Profile* field, select the required profile.

➡ Make the required changes to the settings.

➡ Click on *Save*.
This saves your changes in the selected profile.

> **Please remember:**
>
> *Save* updates the selected profile. The old settings are overwritten and are no longer available.

Deleting a profile

➡ In the *Profile* field, select the profile you want to delete.

➡ Click on *Delete*.
The name of the selected profile is removed from the selection in the *Profile* field. The settings in this profile are now lost.
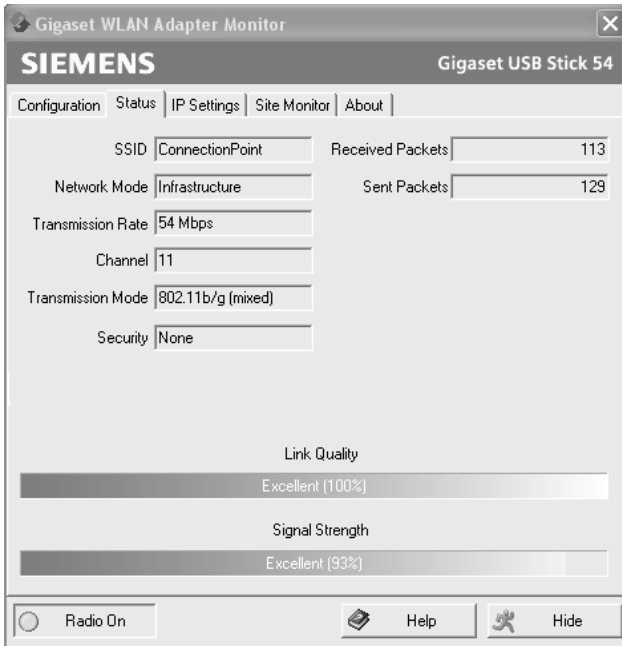
> **Note:**
>
> The **DEFAULT** can be changed, but not erased.

Status

The **Status** tab provides information about the status of the wireless network your PC is connected to via the network adapter:

◆ The left-hand pane shows the valid settings for the active configuration profile.

◆ The right-hand and lower pane show the statistics for the previous data transfer.

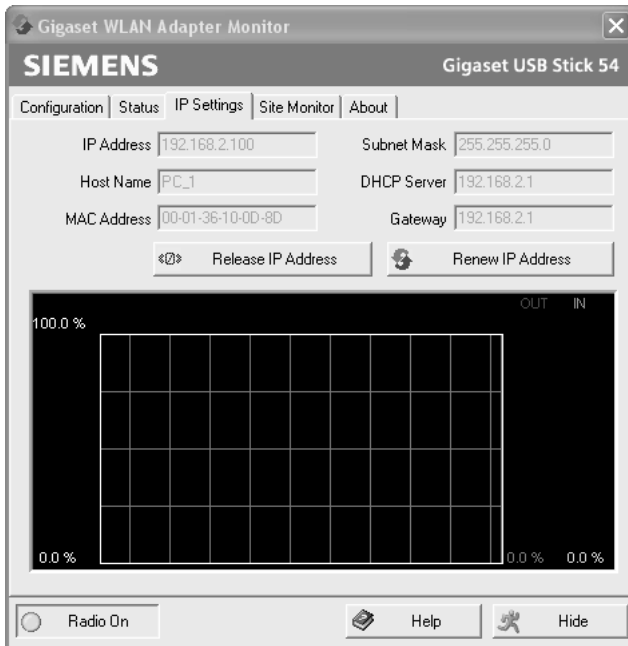|	
SSID	Shows the ID for the network environment. (see "SSID (Service Set Identifier)" on page 19).
Network Mode	Shows the structure of the network environment (see "Network Mode" on page 19).
Transmission Rate	Shows the current transmission rate in Mbps
Channel	Shows the channel used for radio transmission (see "Channel" on page 19)
Transmission Mode	Shows the WLAN standard used for data transmission (see "Transmission mode" on page 20)
Security	Shows the encryption method (see "Configuration – Security" on page 21)
Received Packets	Shows how many data packets have been received from connection partners on the current WLAN since the connection was set up.

Sent Packets	Shows how many data packets have been sent on the current WLAN since the connection was set up between your PC and your connection partner.
Link Quality	Shows the quality of the wireless connection. The graphic display of the connection quality is supported with a percentage figure and an evaluation of the signal (*Excellent*, *Good*, *Fair* or *Poor*).
Signal Strength	Shows the strength of the radio signal of the wireless connection. The graphic display of the signal strength is supported with a percentage figure and an evaluation of the signal (*Excellent*, *Good, Fair* or *Poor*).

IP addresses on the network

The *IP Settings* tab provides you with all the information relevant for using your wireless connected PCs in the network. There are two buttons for updating and releasing your PC's IP address. A graphic display in the lower section of the tab shows data traffic over time on the WLAN.

IP Address	Shows the IP address with which your PC is registered in the WLAN. As a rule, the IP address is assigned to your PC by the DHCP server coordinating the PC's access to a network. In a WLAN, for example, this is the access point's DHCP server.
Host Name	Computer name entered for your PC during installation of the operating system.
MAC Address	Shows the physical address of your network adapter.
Subnetmask	Shows the value of the subnet mask that defines the address block of the IP address. For example, the value 255.255.255.0 shows that the network address is formed by the first three blocks of the IP address. The last block is for the PC addresses in this network. The number of IP address blocks used for PC addressing depends on the size of the network and hence the number of connected PCs.
DHCP Server	Shows the IP address of the system that provides the DHCP server for automatic addressing and coordination of the connected PCs.
Gateway	Shows the IP address of the system that enables access to an upper-level, for example a connection to the Internet.

Updating the IP address

➡ Click on **Renew IP Address** to connect your PC to a WLAN network.
The network adapter checks whether there is a DHCP server available within its radio range whose settings are compatible with those of the active configuration profile. If this is the case, the DHCP server responds to the query by assigning an IP address that your PC can use to exchange data over the new network.

Releasing the IP address

➡ Click on **Release IP Address** to deregister your PC from the current WLAN.
Your PC is deregistered at the DHCP server and is no longer available to WLAN connection partners. The DHCP server can assign the IP address allocated to your PC to a new connection partner.

Network utilisation

The diagram in the lower section of the **IP Settings** tab shows the network utilisation achieved between the connection partner and your PC.

Divided into data received and data sent, the actual transmission rates are shown and compared with the theoretical transmission rate available on this WLAN. The percentage values are updated continuously in the diagram.

Site Monitor

The **Site Monitor** tab provides a comprehensive overview of the connection partners available via the visible SSID. One click reads in a list with all the relevant information on the potential connection partners. If you want, you can set up a connection to one of the connection partners shown directly from the list.
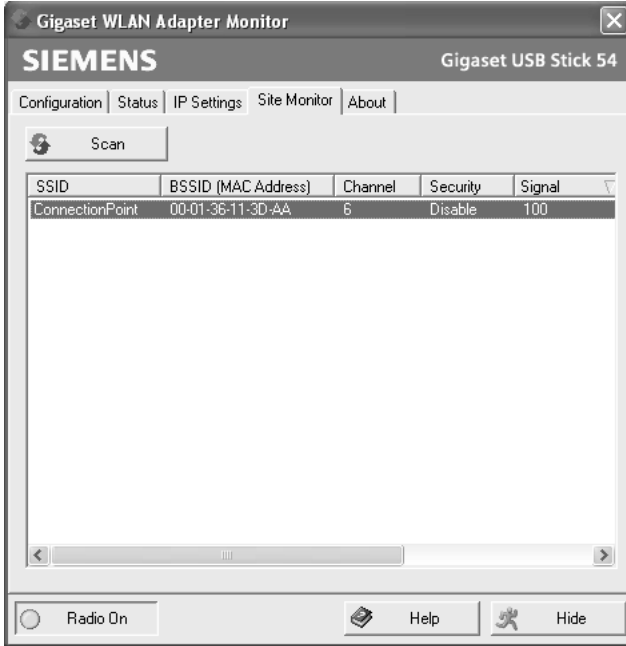
Reading in the list

➡ Click on **Scan** to search the network environment for potential connection partners. This creates a list of the currently available connection partners.

➡ Click on **Scan** again to update the displayed list.

Depending on the reaction time of the various connection partners, updating the list may take 1-2 minutes.

The list shows the following parameters for each connection partner:

SSID	Shows the connection partner's ID (see "SSID (Service Set Identifier)" on page 19).
BSSID (MAC Address)	Shows the connection partner's physical address (Basic Service Set Identifier). In networks with **AdHoc** mode, the **BSSID** corresponds to the **MAC address** of the WLAN adapter in the corresponding partner.

Channel   Shows the radio channel the connection partner uses to trans-
                             mit data (see "Channel" on page 19).

Security   Shows whether radio traffic to the connection partner is
                             encrypted (see "Configuration – Security" on page 21). If this is
                             the case, you will see the selected security mechanism.

Signal   Shows the signal strength of the radio traffic between your PC
                             and the connection partner as a percentage
                             (see "Signal Strength" on page 28).

Transmission Mode   Shows the connection partner's current transmission mode
                             (see "Transmission mode" on page 20).

Network Mode   Shows the connection partner's current network mode
                             (see "Network Mode" on page 19).

Establishing a connection

➡ Double-click in the list on the connection partner with which you want to set up a
   connection.
   This connects your PC to the connection partner.

Note:

If your network adapter's active configuration profile is not compatible with the con-
nection partner's settings, for example the encryption has not been set correctly, you
will first see the **Configuration** – **Security** tab:

Change the settings required for the connection.

Or

Select a saved profile.

The connection will then be set up automatically.

About

The *About* tab provides the version number of the software installed on your PC. The Internet address takes you directly to the company's product page containing the latest information and software updates for your network adapter.

Uninstalling the Gigaset USB Stick 54

You may have to uninstall the Gigaset USB Stick 54 if:

◆ An error occurred during installation.

◆ The Gigaset USB Stick 54 is not working properly and the problem cannot be rectified (see Section "Troubleshooting" on page 42).

◆ You have acquired a newer version of the Gigaset USB Stick 54 and the operating instructions for the new device recommend uninstalling the older version.

◆ You no longer need the Gigaset USB Stick 54 and want to free up space on your hard drive and in working memory.

Uninstalling involves the following steps:

1. First uninstall the software for the Gigaset USB Stick 54.

2. Then uninstall the hardware.

3. Complete the uninstall process.

Uninstalling the software

To uninstall the software for the Gigaset USB Stick 54 from your PC:

➡ Close all running programs.

➡ Select **Start** – **Programs** – **Gigaset USB Stick 54** – **Gigaset USB Stick 54 Uninstall**.

➡ Confirm the security prompt for the uninstall process with **OK**.

The software and all the drivers will now be removed from your PC.

Note:
Do not restart your PC until you have also removed the hardware.
If you restart the PC before removing the Gigaset USB Stick 54, Windows will automatically start its hardware recognition program. If this happens, close automatic hardware recognition by clicking on **Cancel**.

Completing the uninstall

➡ Remove the Gigaset USB Stick 54 from the USB socket of your PC.

➡ Follow the remaining instructions and then restart your PC.

Updating device drivers

You should update the drivers for the Gigaset USB Stick 54 if there is a newer driver version. You can find information about the latest driver updates on our web site,
http://www.siemens.com/gigasetusbstick54.

→ Download the latest driver.

Then follow the steps below to update the device driver:

→ Uninstall the software for the Gigaset USB Stick 54 as described in Chapter "Uninstalling the Gigaset USB Stick 54" on page 33.

→ After restarting your PC, open the directory where you downloaded the new drivers.

→ Start the update and follow the instructions given.

You will find further information about installation in Chapter "Installing the Gigaset USB Stick 54" on page 9.

Glossary

Access point

An access point, such as the Gigaset SE 505 dsl/cable, is the centre of a wireless local network (WLAN). It handles the connection of the wireless linked network components and regulates the data traffic in the wireless network. The access point also serves as an interface to other networks, for example an existing Ethernet LAN or via a modem to the Internet. The operating mode of wireless networks with an access point is called infrastructure mode.

Ad-hoc mode

Ad-hoc mode describes wireless local networks (WLAN) in which the network components set up a spontaneous network without an access point, for example several notebooks in a conference. All the network components are peers. They must have a wireless network adapter.

Authentication

Authentication checks the true identity of a PC using a particular property.

Bridge

A bridge connects several network segments to form a joint network, for example to make a TCP/IP network. The segments can have different physical characteristics, for example different linking such as Ethernet and wireless LANs. Linking individual segments using bridges allows local networks of practically unlimited size.

See also Gateway, Hub, Router, Switch

Broadcast

A broadcast is a data packet not directed to a particular recipient but to all the network components on the network. The Gigaset SE 505 dsl/cable does not pass broadcast packets on; they always remain within the local network (LAN) it administers.

DHCP

Dynamic Host Configuration Protocol

DHCP handles the automatic assignment of IP addresses to network components. It was developed because in large networks – especially the Internet – the defining of IP addresses is very complex as participants frequently move, drop out or new ones join. A DHCP server automatically assigns the connected network components (DHCP clients) dynamic addresses from a defined IP pool range thus saving a great deal of configuration work. In addition, the address blocks can be used more effectively: since not all participants are on the network at the same time, the same IP address can be assigned to different network components in succession as and when required.

The Gigaset SE 505 dsl/cable includes a DHCP server and therefore can automatically assign IP addresses for the PCs on its local network. You can specify for certain PCs that their IP addresses are never changed.

DHCP server

See DHCP

DNS

Domain Name System

DNS permits the assignment of IP addresses to PC or domain names that are easier to remember. A DNS server must administer this information for each LAN with an Internet connection. As soon as a page on the Internet is called up, the browser obtains the corresponding IP address from the DNS server so that it can establish the connection.

The assignment of domain names to IP addresses follows a hierarchical system on the Internet. A local PC only knows the address of the local DNS server. This in turn knows all the addresses of the PCs in the local network and the next higher DNS server, which again knows addresses in its network and that of the next DNS server.

DNS server

See DNS

Domain name

The domain name is the reference to one or more web servers on the Internet (e.g. siemens.com). The domain name is mapped via the DNS service to the corresponding IP address.

DSL

Digital Subscriber Line

DSL is a data transmission technology in which a connection to the Internet can be run over normal telephone lines. A DSL connection is provided by an Internet provider. It requires a DSL modem.

Dynamic IP address

A dynamic IP address is assigned to a network component automatically via DHCP. This means that the IP address of a network component can change with every login or at certain intervals.

See also Static IP address

Encryption

Encryption protects confidential information against unauthorised access. With an encryption system, data packets can be sent securely over a network.

Ethernet

Ethernet is the most widely-distributed network technology for local networks (LAN). It was defined by IEEE as standard 802.3. Ethernet uses a base band cable for data transmission with a transmission rate of 10 or 100 Mbps or 1 Gbps.

Gateway

A gateway is the system component that connects networks with completely different architectures (addressing, protocols, application interfaces etc.). Although it is not totally correct, the term is also used as a synonym for router.

See also Bridge, Hub, Router, Switch

Hub

A hub connects several network components in a star-shaped topology network by sending all the data it receives from one network component to all the other network components.

See also Bridge, Gateway, Router, Switch

IEEE

Institute of Electrical and Electronics Engineers

IEEE is an international body for defining network standards, especially for standardising LAN technologies, transmission protocols and speeds, and wiring.

IEEE 802.11

IEEE 802.11 is a standard for wireless 2.4-GHz and 5 GHz band LANs. In infrastructure mode, terminals can be connected to a base station (access point) or connect with each other spontaneously (Ad-hoc mode).

Infrastructure mode

Infrastructure mode is a way of operating wireless local networks (WLAN), in which an access point handles the data traffic. Network components cannot establish a direct connection with each other as is the case of ad-hoc mode.

Internet

The Internet is a wide-area network (= Wide Area Network), linking several million users around the world. A number of protocols have been created for exchanging data, which are known collectively as a TCP/IP stack. All participants on the Internet are identifiable by an IP address. Servers are addressed by a domain name (e.g. siemens.com). Domain Name Service (DNS) is used to assign domain names to IP addresses.

Among the most important Internet services are:

◆ Electronic mail (email)
◆ The World Wide Web (WWW)
◆ File transfer (FTP)
◆ Discussion forums (Usenet/Newsgroups)

Internet Service Provider

An Internet service provider offers access to the Internet for a fee.

IP

Internet Protocol

The IP protocol is one of the TCP/IP protocols. It is responsible for the addressing of participants in a network using IP addresses and routes data from the sender to the recipient. It decides the paths along which the data packets travel from the sender to the recipient in a complex network (routing).

IP address

An IP address is a network-wide unique address of a network component in a network based on the TCP/IP protocol (e.g. in a local network (LAN) or on the Internet). The IP address has four parts (values from 0 to 255) separated by periods (e.g. 192.168.2.1). The IP address comprises the network address and the PC address. Depending on the subnet mask, one, two or three parts form the network address and the remainder the computer address. You can find out the IP address of your PC by entering `ipconfig` at the command prompt.

IP addresses can be assigned manually (see static IP address) or automatically (see dynamic IP address).

On the Internet, domain names are normally used instead of the IP addresses. DNS is used to assign domain names to IP addresses.

ISP

Internet Service Provider

LAN

Local Area Network

A local network links network components so that they can exchange data and share resources. The physical range is restricted to a particular area (e.g. a site). As a rule, the users and operators are identical. A local network can be connected to other local networks or to a wide-area network (WAN) such as the Internet.

MAC address

Media Access Control Address

The MAC address is used for the globally unique identification of a network adapter. It comprises six parts (hexadecimal numbers), e.g. 00-90-96-34-00-1A. The MAC address is assigned by the network adapter manufacturer. You can find out the MAC address of your PC by entering `ipconfig/all` in the "physical address" entry at the command prompt.

Mbps

Megabits per second/Millions of bits per second (MBit/s)

Mbps is a unit that can be used to describe speed when transmitting data in a network.

Network

A network is a group of devices connected in wired or wireless mode so that they can share resources such as data and peripherals. A general distinction is made between local networks (LAN) and wide-area networks (WAN).

Network adapter

The network adapter is the hardware device that implements the connection of a network component to a local network. The connection can be wired or wireless. An Ethernet network card is an example of a wired network adapter. Wireless network adapters include, for example, the Gigaset USB Stick 54, the Gigaset USB Adapter 54, the Gigaset PC Card 54 and the Gigaset PCI Card 54.

A network adapter has a unique address, the MAC address.

Protocol

A protocol describes the agreements for communicating on a network. It contains rules for opening, administering and closing a connection, about data formats, time frames and error handling. Communications between two applications require different protocols at various levels, for example the TCP/IP protocols for the Internet.

RC4

RC4 is an encryption algorithm on which WEP and TKIP encryption is based. Particular features of this algorithm are a secret key and variable key length.

Roaming

In order to extend the range of a wireless local network, roaming involves several access points with the same SSID and radio channel that are connected via Ethernet. The PCs on the network can switch dynamically between the various access points without interrupting an open network connection.

Router

A router directs data packets from one local network (LAN) to another via the fastest route. A router makes it possible to connect networks that have different network technologies. For example, it connects a WLAN to the Internet.

See also Bridge, Gateway, Hub, Switch

SSID

Service Set Identifier

The SSID is used to identify the stations of a wireless network (WLAN). All wireless network components with the same SSID form a common network. The SSID can be assigned by the network operator.

Static IP address

A static IP address is assigned to a network component manually during network configuration. Unlike a dynamic address, a static IP address never changes.

See also dynamic IP address

Subnet

A subnet divides a network into smaller units.

Subnet mask

The subnet mask determines how many parts of the IP addresses of a network represent the network address and how many parts represent the computer address.

The subnet mask administered by the Gigaset SE505 dsl/cable is always 255.255.255.0. This means the first three parts of the IP address form the network address and the final part is used for assigning PC addresses. The first three parts of the IP address of all network components are always the same in this case.

Switch

A switch, like a hub, is an element for linking different network segments or components. Unlike a hub however, the switch has its own intelligence that enables it to forward packets to only that subnet or network component they are meant for.

See also Bridge, Gateway, Hub, Router

TKIP

Temporal Key Integrity Protocol

TKIP is a further development of WEP encryption. Like WEP, TKIP encryption is based on the RC4 encryption algorithm. TKIP however generates new keys after every 10-Kbyte packet, thus meeting higher security requirements.

UDP

User Datagram Protocol

UDP is a protocol in the TCP/IP family that handles data transport between communication partners (applications.) Unlike TCP, UDP is a non-session based protocol. It does not establish a fixed connection. The data packets, so-called datagrams, are sent as a broadcast. The recipient is responsible for making sure the data is received. The sender is not notified about whether it is received or not.

WAN

Wide Area Network

A WAN is a network that is not restricted to one particular area, such as the LAN. The Internet is the most frequently used WAN. A WAN is run by one or more public providers to enable private access. You access the Internet via an Internet provider.

WEP

Wired Equivalent Privacy

WEP is a security protocol defined in the IEEE 802.11 standard. In a WLAN, WEP encryption protects data against unauthorised access. WEP encryption uses the RC4 encryption algorithm.

Wireless network

See WLAN

WLAN

Wireless LAN

Wireless LANs enable network components to communicate with a network using radio waves as the transport medium. A wireless LAN can be connected as an extension to a wired LAN or it can form the basis for a new network. The basic element of a wireless network is the cell. This is the area where the wireless communication takes place. A WLAN can be operated in ad-hoc mode or infrastructure mode.

WLAN is currently specified in standard IEEE 802.11. The Gigaset USB Stick 54 complies with Standard 802.11g.

WPA

Wireless Protected Access

WPA is a standard-compliant solution for greater security in wireless networks. WPA is intended as a replacement for the existing WEP standard (Wired Equivalent Privacy) and offers more reliable encryption and authentication methods.

WPA-PSK

Wireless Protected Access – Pre-Shared Key

WPA-PSK is a form of authentication in wireless networks that allows users to define their own key. This key must then be used by all connection partners for WPA authentication.

Appendix

Troubleshooting

Problem	Causes and remedies
Drivers not found.	WLAN or LAN adapters may have been installed earlier on your PC. It is possible that the drivers are being looked for in the wrong installation path.
	➡ Enter the path name for the drivers manually. The drivers are stored in **CD-ROM:\Installation\Gigaset USB Stick 54\Driver**
Gigaset WLAN Adapter Monitor icon does not appear in the taskbar.	The Gigaset WLAN Adapter Monitor software or the device drivers were not installed properly or the device has been deactivated in the device manager.
	➡ First check in the device manager of the Control Panel whether the device exists and has been activated. If not, activate it. If it is not there, uninstall the software and install it again as described in Chapter "Installing the Gigaset USB Stick 54" on page 9.
The PC does not recognise the Gigaset USB Stick 54.	The Gigaset USB Stick 54 is not properly in the socket.
	➡ Check to see if it is loose and push it in properly.
	➡ Check in the device manager of the Windows operating system whether the USB socket has been activated or not. If not, activate it.
The connection quality is poor, or there is interference.	➡ Increase the distance between your Gigaset USB Stick 54 and the device causing the interference.
	➡ Make sure that the PC in which the Gigaset USB Stick 54 is installed and the device causing the interference are connected to the power supply via different sockets.
	➡ Do not place your PC with the Gigaset USB Stick 54 near microwave devices or devices with wireless video-audio transmission, for example room monitors used as baby alarms, or near large metal objects. Ask your dealer or an experienced radio technician for advice.

Problem	Causes and remedies
The connection is not set up at all or not properly.	If you cannot set up a connection between your PC with the Gigaset USB Stick 54 and another wireless network adapter, this may be due to a number of reasons:
	The PC you want to connect to has not been powered up. ➙ Power up the PC.
	You are working in an ad-hoc network and a different radio channel is being used. ➙ Select the correct radio channel.
	The wrong mode has been set (infrastructure or ad-hoc mode). ➙ Select the correct mode.
	The SSIDs of the devices that are to communicate with each other are different. ➙ Make sure that the same SSID is used for all connection partners with network adapters for wireless operation.
	Different encryption is being used. ➙ Select the same encryption on all devices.
	Changes in the configuration have not been applied by your PC ➙ Reboot your PC.
	The IP address or the subnet mask is configured incorrectly. ➙ Make sure that the IP address and the subnet mask are correctly configured on the *IP settings* tab. As a rule, it is necessary to assign static IP addresses when operating a network in ad-hoc mode.
It takes a long time to set up a connection.	Depending on the environment and the devices, setting up a connection may take a while. ➙ Click on the *Site Monitor* tab on *Scan* or double-click on the network in question.

Problem	Causes and remedies
You cannot set up a connection to the access point.	If you cannot set up a connection between your Gigaset USB Stick 54 and an access point, try one or more of the following:
	➙ Make sure that the physical connection of the access point operates reliably.
	➙ Make sure that the same SSID is used for the Gigaset USB Stick 54 and the access point.
	➙ Check whether the security settings configured for the Gigaset USB Stick 54 match those for the access point, for example the same key for WEP encryption.
	➙ Check whether your access to the access point is blocked by other security measures, for example by a MAC filter or filter for IP addresses.
	➙ Make sure that the IP address and the subnet mask are correctly configured on the *IP settings* tab. As a rule, it is necessary to assign dynamic IP addresses when operating a network in infrastructure mode.
Installation cancelled under Windows 2000.	If the following error message appears when installing the Gigaset USB Stick 54 under Windows 2000 "1608:Unable to create InstallDriver instance" and the installation is cancelled, the reasons is that the Microsoft Network Client component is missing.
	To install the Microsoft Network Client:
	➙ Select *Start* – *Settings* – *Control Panel* – *Network and Dial-up Connections*.
	➙ Right-click on *LAN Connection* and select *Properties*.
	➙ Then click on the following *Install* – *Client* – *Add* – *Client for Microsoft Networks* – *OK*. The Microsoft Network Client component is now installed.
	➙ Restart your PC to apply the change.
	➙ Install the software, see Chapter "Installing the Gigaset USB Stick 54" on page 9.
The data transfer rate seems too low.	➙ If possible, position your PC with the Gigaset USB Stick 54 closer to the access point or remove any visible obstacles.
	➙ Re-align the aerials of the access point.
	➙ Change the transmission mode of the Gigaset USB Stick 54 and of the access point to 802.11g.
	➙ Try another channel. Make sure that the channel setting is changed on the access point first.

Problem	Causes and remedies
The Gigaset USB Stick 54 does not work properly.	You have checked all of the causes specified above, and still no communication is possible.
	➡ Uninstall the software and install it again as described in Chapters "Uninstalling the Gigaset USB Stick 54" on page 33 and "Installing the Gigaset USB Stick 54" on page 9.

Specifications

The specifications are subject to change.

Software

Compliance with standards	IEEE 802.11b/802.11g
Operating modes	Ad-hoc mode Infrastructure mode
Security properties	Support of SSID network identification for security Support of data encryption using the WEP algorithm (64 bit/128 bit) WPA-PSK/WPA2-PSK encryption Further security settings for routers (filter for MAC addresses, Firewall, etc.)
Configuration and monitoring	Monitor for configuration and monitoring 1 LED display for connection and transmission status
Supported operating systems	WIndows VIsta, Windows XP, Windows 2000, Windows 98SE and Windows ME

Hardware

Interface	USB V2.0, backward compatible with USB V1.1

Wireless properties

Frequency range	2.400 to 2.4835 GHz
Spreading	Direct Sequence Spread Spectrum (DSSS)
Modulation	CCK, OFDM
Number of channels	IEEE 802.11b: 13 (Europe, ETSI) IEEE 802.11g: 13 (Europe, ETSI)
Transmission rate	IEEE 802.11b: up to 11 Mbps IEEE 802.11g: up to 54 Mbps
Antenna	1 internal antenna
Antenna output power	< 100 mW

Requirements for the operating environment

Temperature	Operating temperature: 0 °C to +55 °C Storage temperature: -20 °C to +70 °C
Humidity	5 % to 90 % (non condensing)

Compliance with security conditions and regulations

CE, EN 6095

Authorisation

This device is intended for use worldwide outside the European Economic Area (with the exception of Switzerland) subject to national approval. In France, this device is only intended for internal use within buildings.

Country-specific requirements have been taken into consideration.

We, Siemens Home and Office Communication Devices GmbH & Co. KG, declare that this device meets the essential requirements and other relevant regulations laid down in Directive 1999/5/EC.

A copy of the 1999/5/EC Declaration of Conformity is available at this Internet address: http://www.siemens.com/gigasetdocs.

CE 0682 ①

Approval

All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.

This crossed-out wheeled bin symbol on the product means the product is covered by the European Directive 2002/96/EC.

The correct disposal and separate collection of your old appliance will help prevent potential negative consequences for the environment and human health. It is a precondition for reuse and recycling of used electrical and electronic equipment.

For more detailed information about disposal of your old appliance, please contact your local council refuse centre or the original supplier of the product.

Customer service (Customer Care)

We offer you support that is fast and tailored to your specific needs!

◆ Our **Online Support on the Internet** can be reached any time from anywhere:

http://www.siemens.com/gigasetcustomercare

It provides you with 24/7 support for all our products. It also provides interactive troubleshooting, a list of FAQs and answers plus user guides and current software updates for you to download.

You will also find frequently asked questions and answers in the comprehensive user guide on the supplied CD.

◆ For fast and dependable assistance with any repairs or guarantee/warranty claims, contact our **Service Centres** in:

Ireland	**18 50 77 72 77**
United Kingdom	**08 45 36 70 81 2**

Please have your proof of purchase ready when calling.

Replacement or repair services are not offered in countries where our product is not sold by authorised dealers.

Please address any questions about the DSL or cable connection to your Internet service provider.

Guarantee Certificate United Kingdom

Without prejudice to any claim the user (customer) may have in relation to the dealer or retailer, the customer shall be granted a manufacturer's Guarantee under the conditions set out below:

◆ In the case of new devices and their components exhibiting defects resulting from manufacturing and/or material faults within 24 months of purchase, Siemens shall, at its own option and free of charge, either replace the device with another device reflecting the current state of the art, or repair the said device. In respect of parts subject to wear and tear (including but not limited to, batteries, keypads, casing), this warranty shall be valid for six months from the date of purchase.

◆ This Guarantee shall be invalid if the device defect is attributable to improper treatment and/or failure to comply with information contained in the user guides.

◆ This Guarantee shall not apply to or extend to services performed by the authorised dealer or the customer themselves (e. g. installation, configuration, software downloads). User guides and any software supplied on a separate data medium shall be excluded from the Guarantee.

◆ The purchase receipt, together with the date of purchase, shall be required as evidence for invoking the Guarantee. Claims under the Guarantee must be submitted within two months of the Guarantee default becoming evident.

◆ Ownership of devices or components replaced by and returned to Siemens shall vest in Siemens.

◆ This Guarantee shall apply to new devices purchased in the European Union. For Products sold in the United Kingdom the Guarantee is issued by: Siemens Home and Office Communication Devices GmbH & Co. KG, Schlavenhorst 66, D-46395 Bocholt, Germany.

◆ Any other claims resulting out of or in connection with the device shall be excluded from this Guarantee. Nothing in this Guarantee shall attempt to limit or exclude a Customers Statutory Rights, nor the manufacturer's liability for death or personal injury resulting from its negligence.

◆ The duration of the Guarantee shall not be extended by services rendered under the terms of the Guarantee.

◆ Insofar as no Guarantee default exists, Siemens reserves the right to charge the customer for replacement or repair.

◆ The above provisions does not imply a change in the burden of proof to the detriment of the customer.

To invoke this Guarantee, please contact the Siemens telephone service. The relevant number is to be found in the accompanying user guide.

Guarantee Certificate Ireland

Without prejudice to any claim the user (customer) may have in relation to the dealer or retailer, the customer shall be granted a manufacturer's Guarantee under the conditions set out below:

◆ In the case of new devices and their components exhibiting defects resulting from manufacturing and/or material faults within 24 months of purchase, Siemens shall, at its own option and free of charge, either replace the device with another device reflecting the current state of the art, or repair the said device. In respect of parts subject to wear and tear (including but not limited to, batteries, keypads, casing), this warranty shall be valid for six months from the date of purchase.

◆ This Guarantee shall be invalid if the device defect is attributable to improper care or use and/or failure to comply with information contained in the user manuals. In particular claims under the Guarantee cannot be made if:

◆ The device is opened (this is classed as third party intervention)

◆ Repairs or other work done by persons not authorised by Siemens.

◆ Components on the printed circuit board are manipulated

◆ The software is manipulated

◆ Defects or damage caused by dropping, breaking, lightning or ingress of moisture. This also applies if defects or damage was caused by mechanical, chemical, radio interference or thermal factors (e.g.: microwave, sauna etc.)

◆ Devices fitted with accessories not authorised by Siemens

◆ This Guarantee shall not apply to or extend to services performed by the authorised dealer or the customer themselves (e.g. installation, configuration, software downloads). User manuals and any software supplied on a separate data medium shall be excluded from the Guarantee.

◆ The purchase receipt, together with the date of purchase, shall be required as evidence for invoking the Guarantee. Claims under the Guarantee must be submitted within two months of the Guarantee default becoming evident.

◆ Ownership of devices or components replaced by and returned to Siemens shall vest in Siemens.

◆ This Guarantee shall apply to new devices purchased in the European Union. For Products sold in the Republic of Ireland the Guarantee is issued by Siemens Home and Office Communication Devices GmbH & Co. KG, Schlavenhorst 66, D-46395 Bocholt, Germany.

◆ Any other claims resulting out of or in connection with the device shall be excluded from this Guarantee. Nothing in this Guarantee shall attempt to limit or exclude a Customers Statutory Rights, nor the manufacturer's liability for death or personal injury resulting from its negligence.

◆ The duration of the Guarantee shall not be extended by services rendered under the terms of the Guarantee.

◆ Insofar as no Guarantee default exists, Siemens reserves the right to charge the customer for replacement or repair.

◆ The above provisions does not imply a change in the burden of proof to the detriment of the customer.

To invoke this Guarantee, please contact the Siemens helpdesk on 1850 777 277. This number is also to be found in the accompanying user guide.

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