

Quick Start Guide



SANTIS[®] WLAN USB Adapter

- Protect the device from damp.
- The SANTIS WLAN USB Adapter may affect the operation of medical equipment. Take account of the technical conditions in the relevant environment.
- Be sure to include the Quick Start Guide if you pass your SANTIS WLAN USB Adapter on to someone else.
- Dispose of the SANTIS WLAN USB Adapter in an environmentally safe manner.

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Before you begin

The SANTIS WLAN USB Adapter

The SANTIS WLAN USB Adapter is an IEEE 802.11b wireless LAN USB adapter. It allows your computer to connect to a wireless network to share network resources and access the internet via an ADSL wireless Router-modem, without being restricted to the network wires. Operating in 2.4GHz Direct Sequence Spread Spectrum (DSSS) radio transmission, the SANTIS WLAN USB Adapter transfers data at speeds up to 11 Mbps. For network security reasons, 64/128-bit Wired Equivalent Protection (WEP) can be activated.

This Quick Start Guide contains information on how to install and connect your SANTIS WLAN USB Adapter to an ADSL wireless Router or Router-modem (e.g. a SANTIS ADSL Router-modem). An ADSL wireless Router or Router-modem is used in an **infrastructure** network as a gateway linking your computer among other things to the internet.

System Requirements

To use the SANTIS WLAN USB Adapter, your computer must meet at least the following requirements:

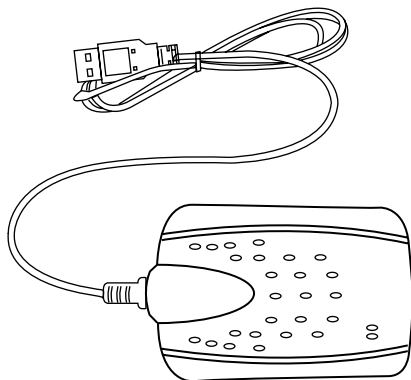
- Windows 98 SE, Windows ME, Windows 2000 or Windows XP
- 32 MB of RAM, additional memory recommended
- **Free** standard USB port

Package Content

Verify your package content:

- SANTIS WLAN USB Adapter
- Installation CD
- Quick Start Guide

Note: Do not connect the SANTIS WLAN USB Adapter to your computer before installing its software. If this happens, Windows will automatically detect the USB device and issue a dialog box requesting its driver. Click **Cancel** to quit the wizard.



Status LEDs

The two LEDs on the SANTIS WLAN USB Adapter indicate connection status (red) and data transfer operation status (green):

- The **red** LED is on, if the SANTIS WLAN USB Adapter is plugged into the USB port of your computer.
- The **green** LED indicates the transmission mode. The faster the LED blinks, the higher the data exchange rate is.

Antenna

The SANTIS WLAN USB Adapter comes with a powerful antenna. You can rotate it from 0 to 180 degrees to adjust its range and the connection quality.



Do not rotate the antenna more than 180 degrees, otherwise permanent damage may be caused.

Step 1a:

Installation for Windows 98 SE, ME, 2000

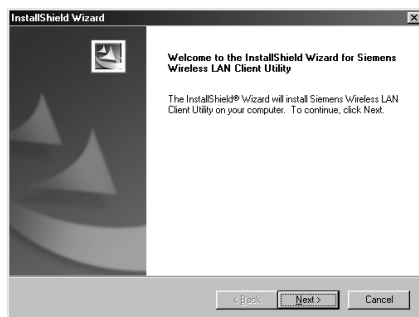
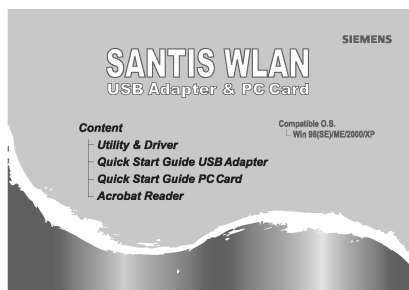


Do not connect the SANTIS WLAN USB Adapter to your computer before installing its software. If this happens, Windows will automatically detect the USB device and issue a dialog box requesting its driver. Click **Cancel** to quit the wizard.

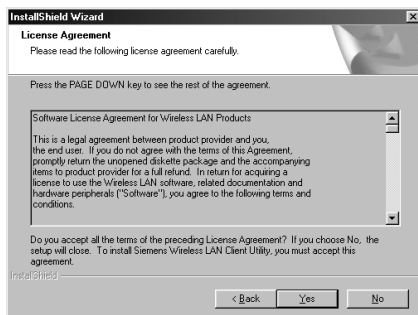
Windows 98 SE users need the Windows 98 SE installation CD to complete the installation.

Follow these steps to install the SANTIS WLAN USB Adapter software:

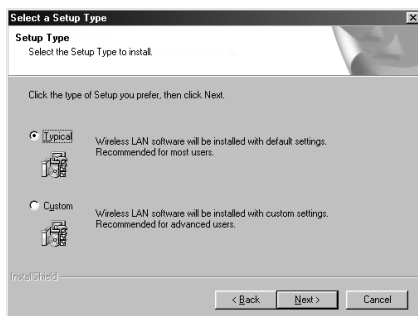
1. Close all programs that are currently running.
2. Insert the provided Software Utility CD into your CD-ROM drive. The setup program should automatically start. (If the installation does not launch automatically, run **setup.exe** from the **Utility&Driver** folder of the provided CD.)
When the **SANTIS WLAN** screen appears, select your language and then **Utility & Driver**.
3. When the welcome screen appears, click **Next**.



4. Read the license agreement and accept with **Yes**.



5. Select **Typical** for quick installation and click **Next**. The program will auto-process the software installation.



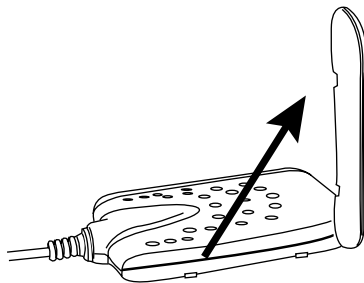
6. After the software installation is finished, you are prompted to insert the SANTIS WLAN USB Adapter into the USB socket of your computer. The red LED on the SANTIS WLAN USB Adapter will light when the SANTIS WLAN USB Adapter is connected.



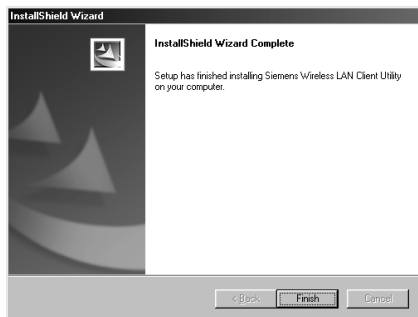
7. Rotate the antenna on the SANTIS WLAN USB Adapter to adjust its range and the connection quality.

8. Upon hardware detection, Windows OS will install the driver for the adapter automatically.

For Windows 2000: If you are prompted with the "Digital Signature Not Found" alarm message, just click **Yes** to ignore and continue with the autoinstallation.



9. Complete the installation with **Finish**.



Note:

- If you are prompted with the "INF not found" alarm, please click the **Browse** button to locate the .inf file. Usually it is located on C:\Windows\inf or C:\Winnt\inf.
- For Windows 98 SE: If prompted, you need to insert your Windows 98 SE installation CD to complete the driver installation.

Now you are done with the installation procedure.

The SANTIS WLAN USB Adapter uses the **Wireless LAN Monitor Utility** for both configuration and monitoring.

The utility is launched automatically with its icon located on the system tray.



If the utility is not launched, manually start it by selecting **Start -> Programs -> Siemens SANTIS WLAN -> SANTIS USB and PC Card Utility**.

Next, you have to connect the SANTIS WLAN USB Adapter to an ADSL wireless Router or Router-modem. Continue with section "Step 1b: Connecting to an ADSL wireless Router or Router-modem" on page 9.

Step 1b:

Connecting to an an ADSL wireless Router or Router-modem for Windows 98 SE, ME, 2000

The SANTIS WLAN USB Adapter uses the **Wireless LAN Monitor Utility** for both configuration and monitoring. The utility is launched automatically with its icon located on the system tray. Right-clicking the icon displays the context menu.

The **Wireless LAN Monitor** icon color is green to indicate your SANTIS WLAN USB Adapter is in infrastructure mode.



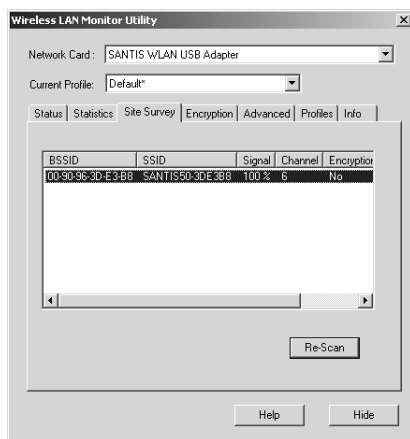
If the icon is marked with a red "X", it means that it is not connected to an ADSL wireless Router or Router-modem.



If the utility is not launched, manually start it by selecting **Start -> Programs -> Siemens SANTIS WLAN -> SANTIS USB and PC Card Utility**.

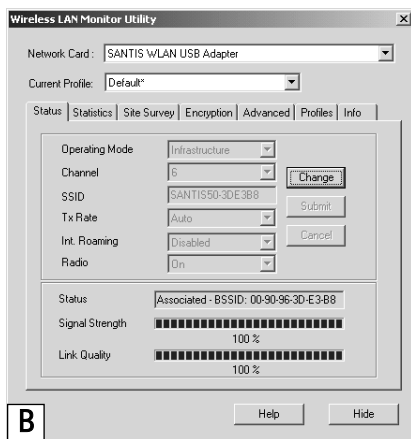
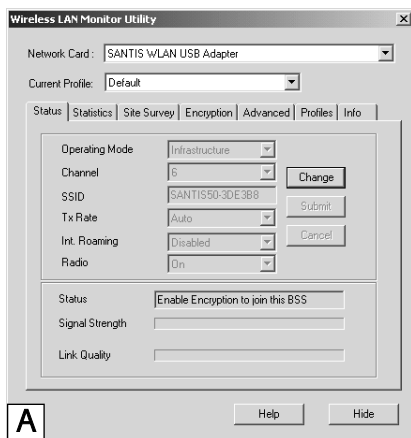
To connect to an existing ADSL wireless Router or Router-modem, proceed as follows:

1. Double-click the **Wireless LAN Monitor** icon or select **Settings** from its context menu to start the **Wireless LAN Monitor Utility**.
2. Change to the **Site Survey** tab. All available ADSL wireless Router or Router-modems within the range of the adapter are listed.
If there is no ADSL wireless Router or Router-modem displayed, make sure that the **Hide SSID** option is not enabled for your ADSL wireless Router or Router-modem (for SANTIS ADSL Router-modems refer to the Quick Configuration of the Wireless LAN configuration).
3. Double-click on the **BSSID** field of the ADSL wireless Router or Router-modem you want to connect to. The utility will take you back to the **Status** tab.

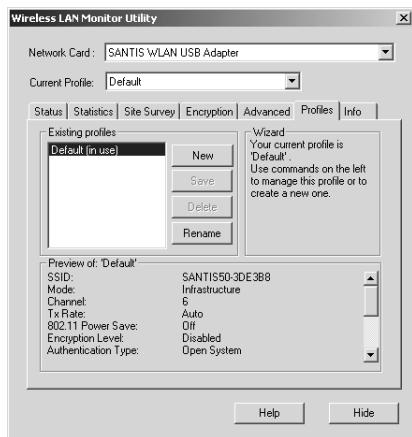
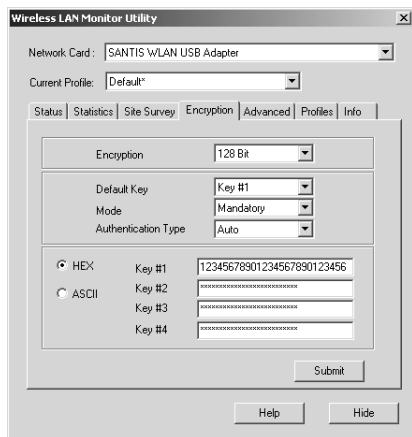


4. If there is the message **Enable Encryption to join this BBS** in the **Status** field (A), then the ADSL wireless Router or Router-modem is configured with WEP, continue with point 5.

Otherwise the BSSID of the associated ADSL wireless Router or Router-modem and the link quality of the connection are displayed (B), continue with point 10.



5. Change to the **Encryption** tab.
6. Select **64 Bit** or **128 Bit** from the **Encryption** drop-down menu.
7. Make sure that the **HEX** radio button is set and **Key #1** is selected in the **Default Key** box.
8. In the **Key #1** field enter the same WEP key as defined for the ADSL wireless Router or Router-modem. Note that the HEX format only allows digits 0-9 and letters A-F for input.
9. Click the **Submit** button to enable the settings and change to the **Status** tab to check the connection.
10. Change to the **Profiles** tab and click the **Save** button to save your settings as default. This ensures, that your configuration is used for default after a re-enabling of the connection.
11. If you wish to exit the utility, click **Hide**.
12. Start your web browser (e.g. Internet Explorer). If you have no access to the internet, you may have to configure your ADSL wireless Router or Router-modem (refer to the corresponding manual).



Step 1c:

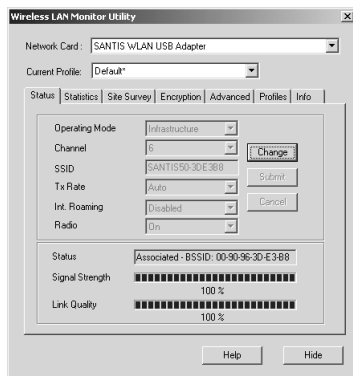
Using the Wireless LAN Monitor Utility for Windows 98 SE, ME, 2000

To start the **Wireless LAN Monitor Utility**, double-click the icon or select **Settings** from its context menu. The **Wireless LAN Monitor Utility** comes with seven tabs: **Status**, **Statistics**, **Site Survey**, **Encryption**, **Advanced**, **Profiles** and **Info**. If you wish to exit the utility, click **Hide**.

Status

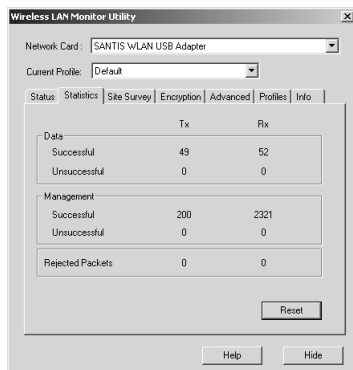
The **Status** tab displays the configuration parameters: **Operating Mode**, **Channel**, **SSID**, **TxRate**, **Int. Roaming** and **Radio** of the SANTIS WLAN USB Adapter.

The **Status** field shows the BSSID of the ADSL wireless Router or Router-modem with which the adapter is associated. **Signal Strength** and **Link Quality** allow you to check the connectivity status.



Statistics

The **Statistics** tab allows you to view the available statistic information for Data, Management and Rejected Packets. Tx indicates data is being transmitted, whereas Rx indicates data being received. You may click the **Reset** button to renew the statistics.



Site Survey

The **Site Survey** tab displays the available ADSL wireless Router or Router-modems within the range of the card. With each ADSL wireless Router or Router-modem, these information are provided:

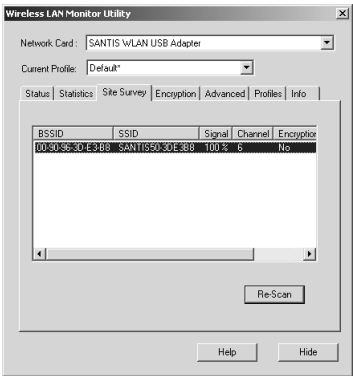
BSSID: Basic Service Set ID. It is actually the MAC address of the ADSL wireless Router or Router-modem.

SSID: Service Set ID.

Signal: Shows the signal strength ratio.
The higher the ratio, the more powerful the signal received by your SANTIS WLAN USB Adapter.

Cannel: The operating radio channel number.

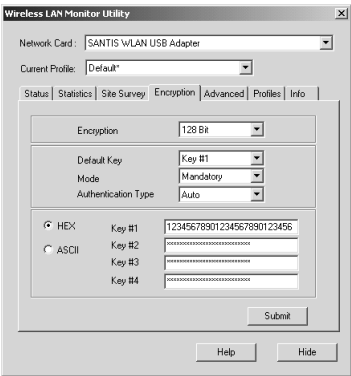
Encryption: Indicates whether encryption is enabled or disabled on the ADSL wireless Router or Router-modem.



In order to update the list, click the **Re-Scan** button. If you want to associate with any of the ADSL wireless Router or Router-modem listed, double-click on your choice (on the **BSSID** field). The utility will take you back to the **Status** tab showing the parameters of the connection newly established.

Encryption

Encryption technology is used to enhance wireless media security. Your encryption settings must match those used by the ADSL wireless Router or Router-modems in your network, or your computer will not be able to communicate with others through the network.



Advanced

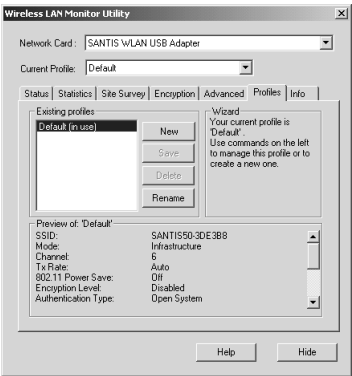
The **Advanced** tab allows you to change advanced configuration settings, including **Fragmentation Threshold**, **RTS Threshold** and **802.11 Power Save**.

Both Fragmentation and RTS Threshold are disabled by default. To change the parameters, move the slide bar with your mouse and then use the right and left arrow keys on your keyboard to select an exact number of bytes.

To have the new settings take effect, click the **Submit** button.

Profiles

The **Profiles** tab allows you to save the current wireless network settings. You can save multiple profiles for different network environments and easily retrieve the required one as needed.



Version

The **Version** tab displays the basic information about the device, including the Driver, Firmware and Application Version.

Step 2a: Installation for Windows XP

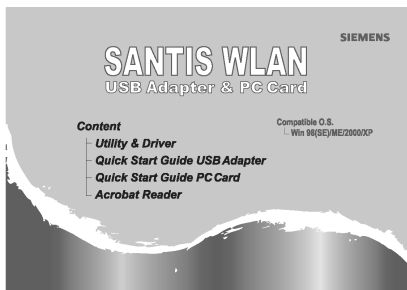


Do not connect the SANTIS WLAN USB Adapter to your computer before installing its software. If this happens, Windows will automatically detect the USB device and issue a dialog box requesting its driver. Click **Cancel** to quit the wizard.

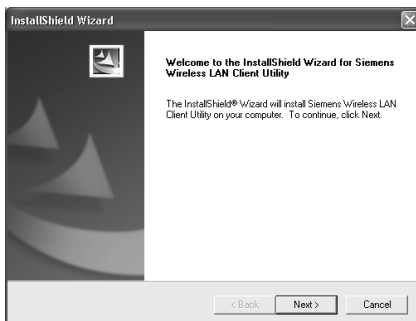
Follow these steps to install the SANTIS WLAN USB Adapter software:

1. Close all programs that are currently running.

2. Insert the provided Software Utility CD into your CD-ROM drive. The setup program should automatically start. (If the installation does not launch automatically, run **setup.exe** from the **Utility&Driver** folder of the provided CD.) When the **SANTIS WLAN** screen appears, select your language and then **Utility & Driver**.



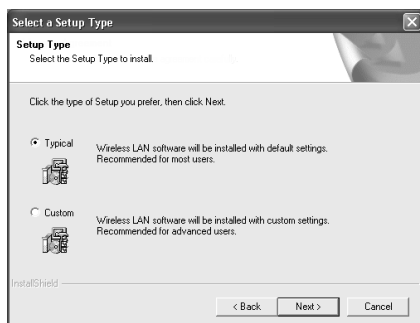
3. When the welcome screen appears, click **Next**.



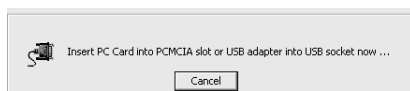
4. Read the license agreement and accept with **Yes**.



5. Select **Typical** for quick installation and click **Next**. The program will auto-process the software installation.

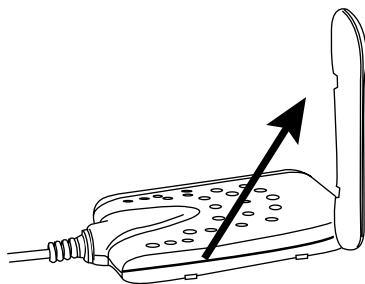


6. After the software installation is finished, you are prompted to insert the SANTIS WLAN USB Adapter into the USB socket of your computer. The red LED on the SANTIS WLAN USB Adapter will light when the SANTIS WLAN USB Adapter is connected.



7. Rotate the antenna on the SANTIS WLAN USB Adapter to adjust its range and the connection quality.

8. Upon hardware detection, Windows XP will install the driver for the adapter automatically.



9. Complete the installation with **Finish**.



Note:

- If you are prompted with the “INF not found” alarm, please click the **Browse** button to locate the .inf file. Usually it is located on C:\Windows\inf.

Now you are done with the installation procedure.

The SANTIS WLAN USB Adapter uses the Windows XP **Wireless Network Connection** utility for both configuration and monitoring.

The utility is launched automatically with its icon located on the system tray.



The **Wireless LAN Monitor Utility** is used for statistic information only (refer to section “Statistics” on page 12).



If the **Wireless Network Connection** utility is not launched, manually start it by selecting **start** → **Connect To** → **Wireless Network Connection**.

Next, you have to connect the SANTIS WLAN USB Adapter to an ADSL wireless Router or Router-modem. Continue with section “Step 2b: Connecting to an ADSL wireless Router or Router-modem” on page 20.

Step 2b:

Connecting to an ADSL wireless Router or Router-modem for Windows XP

Under Windows XP, the SANTIS WLAN USB Adapter uses the **Wireless Network Connection** utility for both configuration and monitoring. It can be quickly accessed via the **Wireless Network Connection** icon on the system tray. If the icons are marked with a red "X", it means that there is no connection to an ADSL wireless Router or Router-modem.



If the utility is not launched, manually start it by selecting **start -> Connect To -> Wireless Network Connection**.

The **Wireless LAN Monitor Utility** is used for statistic information only (refer to section "Statistics" on page 12).



Depending on whether or not you have activated the WEP security on your ADSL wireless router or router-modem, you can connect to it as follows:

A. Connect to an ADSL wireless Router or Router-modem without WEP

1. Click the **Wireless Network Connection** icon to start the **Wireless Network Connection** utility.
If there is already a connection established, select **View Available Wireless Networks** from the icons context menu.
2. All ADSL wireless Router or Router-modems available are listed. Select the one you want to connect to.
If there is no ADSL wireless Router or Router-modem displayed, make sure that the **Hide SSID** option is not enabled for your ADSL wireless Router or Router-modem.
3. Enable the **Allow me to connect to the selected wireless network...** option.
4. Click **Connect** to establish the connection to the desired ADSL wireless Router or Router-modem.
5. Start your web browser (e.g. Internet Explorer). If you have no access to the internet, you may have to configure your ADSL wireless Router or Router-modem (refer to the corresponding manual).



B. Connect to an ADSL wireless Router or Router-modem with WEP

1. Click the **Wireless Network Connection** icon to start the **Wireless Network Connection** utility. If there is already a connection established, select **View Available Wireless Networks** from the icons context menu.
2. All ADSL wireless Router or Router-modems available within the range of your adapter are listed. Select the one you want to connect to.
3. In the **Network key** field, enter the same WEP key as defined for the ADSL wireless Router or Router-modem. Note that the WEP key is in HEX format which only allows digits 0-9 and letters A-F for input.
4. Enter the same WEP key in the **Confirm network key** field.
5. Click **Connect** to establish the connection to the desired ADSL wireless Router or Router-modem.
6. Start your web browser (e.g. Internet Explorer). If you have no access to the internet, you may have to configure your ADSL wireless Router or Router-modem (refer to the corresponding manual).

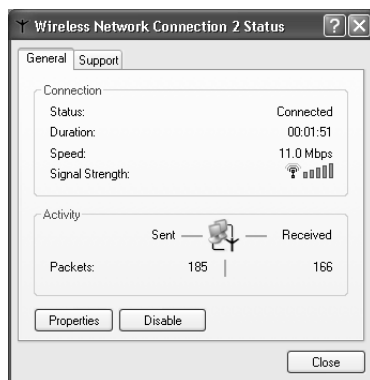


Step 2c: Configuration Utility for Windows XP

Viewing Connection Status

After you successfully connect to the ADSL wireless Router or Router-modem, Click the **Wireless Network Connection** icon.

The **Wireless Network Connection Status** window displays the general data of the card, such as **Status**, **Duration**, **Speed** and **Signal Strength**. Additionally the number of data packets sent and received are displayed.



Wireless LAN Monitor Utility

To start the **Wireless LAN Monitor Utility**, double-click the **Wireless LAN Monitor** icon or select **Settings** from its context menu. The utility comes with two tabs: **Statistics** and **Info**. For more information refer to section "Using the Wireless LAN Monitor Utility" on page 12. If you wish to exit the utility, click **Hide**.

Uninstalling the SANTIS WLAN USB Adapter

Should you need to uninstall the SANTIS WLAN USB Adapter and application software for any reason, you should remove the hardware from your computer and then uninstall the associated software. Please proceed as follows.

Removing the SANTIS WLAN USB Adapter

The SANTIS WLAN USB Adapter complies with the USB standard that allows devices to be inserted into and removed from the computer's USB port when the computer is power on. Just remove the card from your PC's USB port.



To avoid any damage from occurring to your computer, under Windows 98/ME, please click on the **Wireless LAN Monitor Utility** icon first before removing the SANTIS WLAN USB Adapter. Press the right mouse button and select **Exit**. Later the icon will disappear. Then remove the SANTIS WLAN USB Adapter.

Uninstalling the SANTIS WLAN USB Adapter software

Make sure that you have removed the hardware before you proceed:

1. Close all programs that are currently running.
2. Click the Windows **Start** button, point to **Programs** → **Siemens SANTIS WLAN** and then click **Uninstall driver**.
3. Click **OK** to proceed with the software removal procedure.
4. Click **Finish** to exit the Wizard.