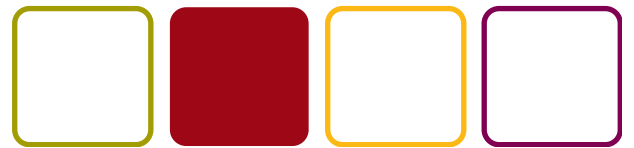


speedtouch™

SpeedTouch™ 580

Wireless Residential ADSL Gateway



Installation and Setup Guide



Release R4.3.1



A THOMSON BRAND

SpeedTouch™

580

Installation and Setup Guide

R4.3.1

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About this Installation and Setup Guide

Used symbols



A **note** provides additional information about a topic.



A **tip** provides an alternative method or shortcut to perform an action.



A **caution** warns you about potential problems or specific precautions that need to be taken.

Terminology

Generally, the SpeedTouch™580(i) will be referred to as SpeedTouch™ in this Installation and Setup Guide.

Documentation and software updates

THOMSON continuously develops new solutions, but is also committed to improve its existing products.

For suggestions regarding this document, please contact documentation.speedtouch@thomson.net.

For more information on THOMSON's latest technological innovations, documents and software releases, visit us at:

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1 Introducing the SpeedTouch™

Introduction In a minute you will be able to access the Internet using your SpeedTouch™580(i) Residential ADSL Gateway.

This Installation and Setup Guide will show you how to set up your SpeedTouch™ and how to connect a computer or a local area network (LAN) to the Internet.

Identifying your SpeedTouch™

The label on the bottom side of your SpeedTouch™, informs you on the SpeedTouch™'s:

- ▶ Product name
- ▶ Model number
- ▶ Serial number



Do not remove, nor cover the marking label.

Variants

The SpeedTouch™ comes in two ADSL flavours:

- ▶ The ADSL POTS variant: The SpeedTouch™580 connects to an analogue Plain Old Telephone Service (POTS) line.
- ▶ The ADSL ISDN variant: The SpeedTouch™580i connects to an Integrated Service Digital Network (ISDN) line, enabling residences with an ISDN line to use the ADSL service.

You can easily identify your variant by checking the product name printed on the identification label on the bottom of your SpeedTouch™.



Use only the SpeedTouch™ variant which is appropriate for the DSL service provided to your premises.

Delivery check

In case items are missing or damaged, please contact your local distributor. Your box should contain:

- ▶ SpeedTouch™ Gateway
- ▶ Yellow Ethernet cable (RJ-45)
- ▶ Grey DSL cable (RJ-11)
- ▶ Power adapter
- ▶ SpeedTouch™ Setup CD
- ▶ Safety Instructions & Regulatory Notices booklet (optional)
- ▶ Quick Installation Guide booklet
- ▶ Stand-up cradle (optional)
- ▶ Wall-mount drilling leaflet, screws and dowels (optional)
- ▶ DSL filter(s) (optional)
- ▶ SpeedTouch™ wireless networking product(s) (optional)

SpeedTouch™ Setup CD

Your SpeedTouch™ is delivered with a Setup CD.

If you insert the CD on a Microsoft Windows PC or Mac OS X computer, an intuitive CD Menu guides you through the features and contents of the Setup CD.

See “2.3 The SpeedTouch™ Setup CD” on page 9 for more information.

In case of another operating system a set of subdirectories allows you to easily browse for user documentation, SpeedTouch™ system software, service templates, etcetera.

2 Basic Installation

Before you begin

Make sure to read the safety instructions and regulatory notices first. The safety instructions can be found on the Setup CD and/or may also be provided as printed booklet.

ADSL service

The ADSL service must be up and running on your telephone or ISDN line.

If both telephone and ADSL service are simultaneously available from the same copper pair, you will need a central splitter or distributed filters for decoupling ADSL and telephone signals.



Public telephone lines carry voltages that can cause electric shock. Only try to set up splitter/filters that have been designed to be installed by unqualified personnel. For further assistance, contact your service provider.

Computer requirements

To connect computer(s) via Ethernet, make sure your computer is equipped with an Ethernet network interface card (NIC).

To connect a computer via USB, you need a free USB port on your computer or a connected USB hub.

For wireless networking, you will need a wireless 802.11 b/g compatible client adapter for each computer you intend to connect wirelessly.

As wireless client adapter, you can:

- ▶ Use a provided SpeedTouch™ 110g CardBus.
- ▶ Use a provided SpeedTouch™ 120g USB adapter (with cable).
- ▶ Plug a provided SpeedTouch™ 121g adapter directly into your computer's USB port (without cable).
- ▶ Use any other Wi-Fi certified WLAN client.

2.1 Installing your SpeedTouch™

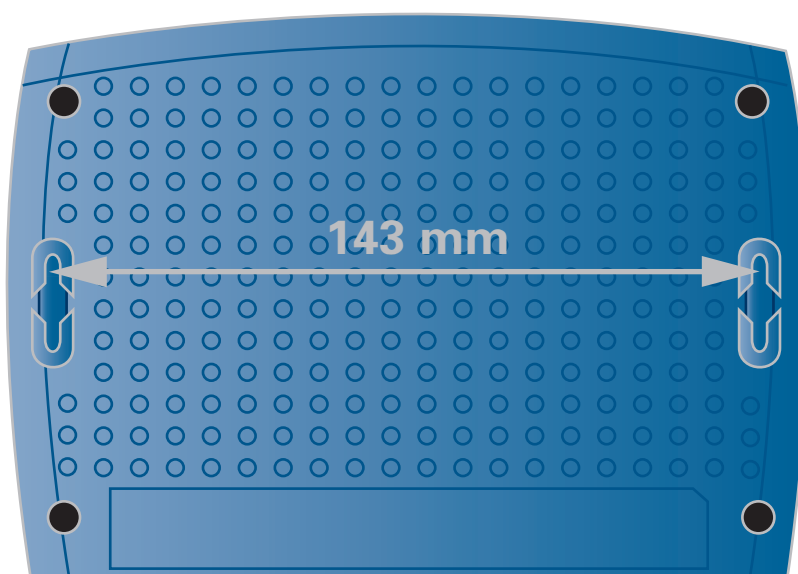
SpeedTouch™ housing

The SpeedTouch™ can be mounted on a wall, setup upright or simply be placed as a desktop.

Wall mount

To mount the SpeedTouch™ on a wall or other vertical surface:

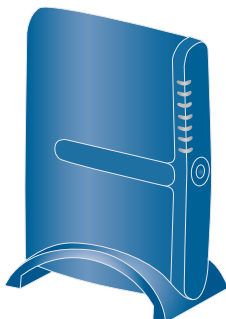
- 1** Drill two holes in the wall or other vertical surface where you want to place the SpeedTouch™. Keep a space of 143 millimetres between the two holes.
- 2** Fasten two screws in the wall holes. The screws should protrude five millimetres from the surface of the wall.
- 3** Attach your SpeedTouch™ on the wall using the two mounting slots on the bottom side.



If you install the SpeedTouch™ onto plasterboard, use dowels to secure the screws. Otherwise the strain of the cables connected to the SpeedTouch™ rear panel connectors could pull the SpeedTouch™ from the wall.

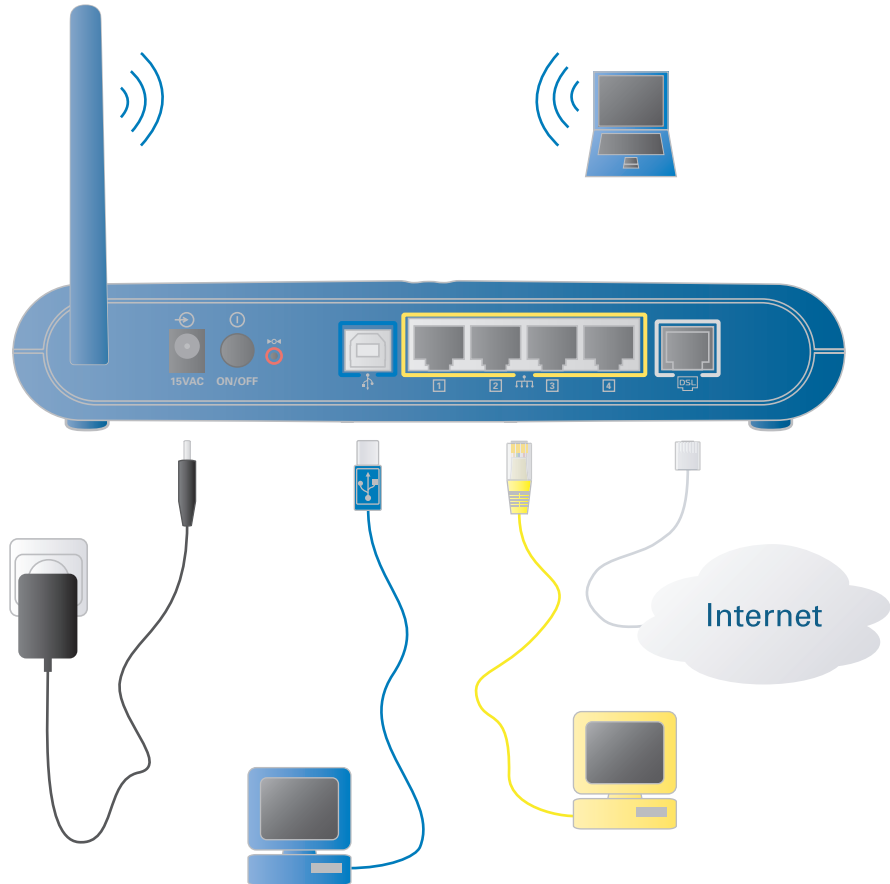
Stand-up

To setup the SpeedTouch™ in an upright position, use the provided cradle (if available).



2.2 Connecting the Hardware

Wiring The figure below shows all possible types of connection to the SpeedTouch™.



Proceed as follows:

- 1** Plug in the coaxial jack from the electric power supply adapter into the SpeedTouch™ '15VAC' port and the other end to the wall outlet.
- 2** During the SpeedTouch™ Home Install Wizard, you will be asked to make one of following connections:
 - ▶ Connect the yellow RJ-45 Ethernet cable to the Ethernet port on your SpeedTouch™ and the other end to the computer's Ethernet port.
 - ▶ Connect the blue USB cable to the blue USB port on your SpeedTouch™ and the other end to the computer's USB port.
 - ▶ For wireless networking, plug a wireless card or adapter in your computer.



If you will run the SpeedTouch™ Home Install Wizard, as described in "3.1 SpeedTouch™ Home Install Wizard" on page 12, it is recommended to wait to make these connections until the wizard will ask you to do so.

Powering the SpeedTouch™

To power on the SpeedTouch™, press the power button on the SpeedTouch™ rear panel.

During the start-up procedure, the power LED on the front panel is lit red for some seconds. As soon as the power LED is solidly lit green, your SpeedTouch™ is ready for service. After another couple of seconds, also the DSL LED will light green.

If these LEDs do not light, please refer to [“Checking the LEDs” on page 29](#). A comprehensive LED overview can be found in the SpeedTouch™ User’s Guide.

To power off your SpeedTouch™, press the same button.

2.3 The SpeedTouch™ Setup CD

Introduction Your SpeedTouch™ is delivered with a Setup CD.

If you insert the CD on a Microsoft Windows PC or Mac OS X computer, an intuitive CD Menu guides you through the features and contents of the Setup CD.






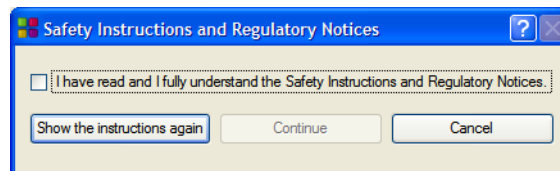
To be able to run the applications on the Setup CD on an MS Windows 2000, an MS Windows XP operating system, or Mac OS X computer, you need administrative rights.

In case of another operating system a set of subdirectories allows you to easily browse for user documentation, SpeedTouch™ system software, service templates, etcetera.

Launching the CD on MS Windows or Mac OS X

To launch the SpeedTouch™ Setup CD Menu:

- 1 Insert the Setup CD in your computer's CD-ROM or DVD-ROM drive.
 - ▶ On MS Windows: The CD should autostart.
 -  If not, refer to "The SpeedTouch™ CD does not start automatically" on page 32.
 - ▶ On Mac OS X: If the CD does not autostart, double-click **Menu** in the window with the content of the CD.
- 2 In the **Choose Language** window, select the language of your choice and click **OK**.
- 3 The SpeedTouch™ Safety Instructions and Regulatory Notices will be displayed in your default web browser.
 -  If you accepted the Safety Instructions and Regulatory Notices agreement on this computer before, the instructions are not shown; instead the CD menu pops up.
- 4 Read all the instructions carefully. If needed you can select another language to read the instructions in the language bar available at the top right corner of the web browser window.
 -  Your SpeedTouch™ product is designed and tested to meet the latest safety standards. However, to ensure safe use of this product, it is important that the Safety Instructions and Regulatory Notices shown and/or available in the Safety and Regulatory booklet are read, and complied with carefully, before installing the SpeedTouch™ product.
- 5 If you have carefully read these Safety Instructions and Regulatory Notices, please close the browser window to proceed. You should see the **Safety Instructions and Regulatory Notices** window inviting you to confirm your reading:



- 6 Select **I have read and I fully understand the Safety Instructions and Regulatory Information** and click **Continue**.

As a result the SpeedTouch™ CD menu pops up.

SpeedTouch™ CD menu

The SpeedTouch™ CD menu will pop up automatically each time you insert the CD:



Select:

- ▶ **Setup my SpeedTouch** to start the SpeedTouch™ Home Install Wizard allowing you to prepare your SpeedTouch™ and network for Internet connectivity.
 - ▶ See “3.1 SpeedTouch™ Home Install Wizard” on page 12 for more information.
- ▶ **SpeedTouch Maintenance** to:
 - ▶ Reconfigure your SpeedTouch™ via the Home Install Wizard.
 - ▶ Upgrade the software version on your SpeedTouch™.
 - ▶ Check for SpeedTouch™ upgrades on the Internet.
- ▶ **Documentation and Help** to:
 - ▶ Consult user documentation for your SpeedTouch™ DSL Gateway.
 - ▶ Consult user documentation for SpeedTouch™ networking products.
 - ▶ See more information on the SpeedTouch™ product portfolio.
 - ▶ Visit the online support sections on www.speedtouch.com.
- ▶ In case you experience problems when viewing the SpeedTouch™ documentation, see “SpeedTouch™ documentation cannot be viewed” on page 33.
- ▶ Open a new window to view the Setup CD contents.

3 Internet Access in No Time

What you need from your ISP

Following configuration parameters are provided by your ISP:

- ▶ Your ISP's connection service model (for example PPPoE)
- ▶ VPI/VCI (for example 8/35)
- ▶ Your user name and password to connect to the Internet



Optionally your ISP may indicate the Service Profile to use in the SpeedTouch™ Home Install Wizard or Easy Setup.

Internet connectivity setup

There are different ways of setting up Internet connectivity on your SpeedTouch™. The best way depends on your operating system.

If you use following operating system	the recommended way to setup your SpeedTouch™ is
MS Windows (98 SE, Millennium, 2000 or XP)	the Home Install Wizard, as described in "3.1 SpeedTouch™ Home Install Wizard" on page 12.
Mac OS X, provided you will use a wired connection to your SpeedTouch™	
Any operating system (provided you have IP connectivity)	the Easy Setup, as described in "3.2 Web-Based Easy Setup" on page 21: Open your web browser, the SpeedTouch™ HTTP intercept will do the rest.
Mac OS X, wirelessly connected to your SpeedTouch™	



If you are using MS Windows XP, it is also possible to use the MS Windows XP Internet Gateway Device (IGD) Control Agent for UPnP, as described in the SpeedTouch™ User's Guide.

3.1 SpeedTouch™ Home Install Wizard

Internet connection setup

With the help of the SpeedTouch™ Home Install Wizard you will be on the Internet in a flash.

First, the wizard will try to detect your SpeedTouch™. After connecting your computer, the wizard will configure your SpeedTouch™ and - if necessary - your computer.

The Home Install Wizard was designed for Microsoft Windows operating systems and Mac OS X - in the latter case provided you will use a wired connection to your SpeedTouch™.

Preconditions

Make sure that:

- ▶ Your SpeedTouch™ is only connected to a DSL-enabled phone line and to an electrical outlet.
- ▶ Your SpeedTouch™ is correctly set up and powered on.

Launching the Home Install Wizard

To launch the SpeedTouch™ Home Install Wizard:

- 1** Launch the SpeedTouch™ Setup CD.



See "2.3 The SpeedTouch™ Setup CD" on page 9 for more information.

- 2** The SpeedTouch™ CD menu pops up.



If not, refer to "The SpeedTouch™ CD does not start automatically" on page 32.

In the SpeedTouch™ CD menu, click **Setup my SpeedTouch** to start the SpeedTouch™ Home Install Wizard.

- 3** On the **Welcome** page, click **Next** to continue.
- 4** The **Software License Agreement** window appears.

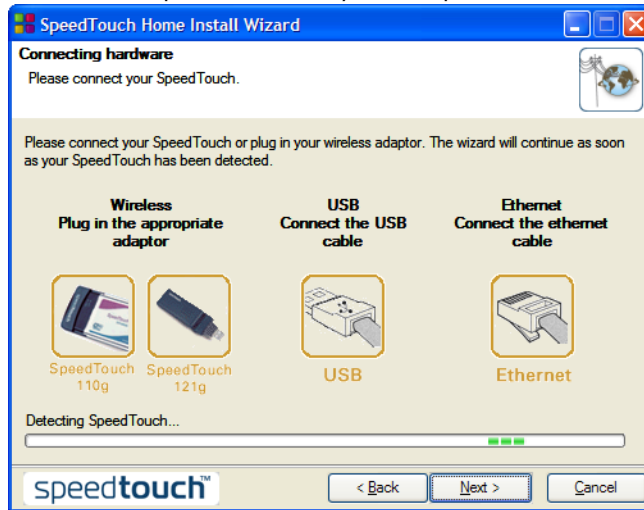
You must accept before continuing. Click **Yes** to accept.



If you accepted this License Agreement in a previous configuration setup, this window will not be shown.

Connecting your computer

The SpeedTouch™ Home Install Wizard will check your system and will invite you to connect the SpeedTouch™ to your computer.



The next step will depend on the connection type you will use. In case of:

- ▶ Wireless: Go to “3.1.1 Wireless Setup” on page 17.
- ▶ USB: Go to “3.1.2 Installing USB drivers” on page 18.
- ▶ Ethernet: After you have plugged in the Ethernet cable to both the computer and the SpeedTouch™, proceed with “Configuring the SpeedTouch™ (and your computer)” on page 14.



If the wizard does not detect a connection, an error message will be displayed. Refer to “The wizard does not detect a connection” on page 32.

Configuring the SpeedTouch™ (and your computer)

Once the hardware is installed successfully and you are connected to the SpeedTouch™, the wizard will continue with the configuration of your SpeedTouch™.

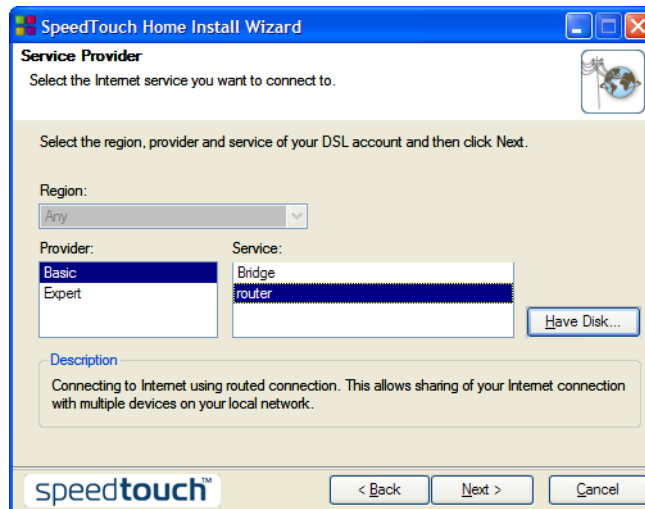
Proceed as follows:

- 1 If prompted, enter the **User name** and **Password** for your SpeedTouch™ security settings and click **OK**.



The factory default user is 'Administrator'. Its password is blank, meaning you do not have to enter anything in the password field. It is advisable to specify another user name and password to protect your SpeedTouch™ from security violation during the configuration procedure (see "Access Control" on page 15), or as described in "3.4 Basic Security" on page 24.

- 2 Select the appropriate **Region**, **Provider** and **Service** for your Internet connection as specified by your service provider and click **Next**.



If the service provider has included a separate disk with a dedicated service profile, click **Have Disk...** to browse to the location of the appropriate service profile template file.



From here on the procedure might differ from the description below. The requested information will depend on the selected service profile and should be provided by your Service Provider. Subsequent screens will guide you through the configuration setup of both the SpeedTouch™ and your computer. Enter the requested information and click **Next** whenever requested.

- 3 Select the **VPI/VCI** - and, if required, the **Connection Type** - as specified by your service provider and click **Next**.
- 4 Enter the **User Name** and **Password** for your Internet account settings as specified by your service provider and click **Next**.

Access Control

To protect your SpeedTouch™ from unauthorised access, you must provide a user name and password. Each time a user wants to access a SpeedTouch™ management interface, the user will be prompted to provide this user name and password before access is granted.



Wireless Security

To protect the wireless connections to your SpeedTouch™, move the slide control to the desired security mode.



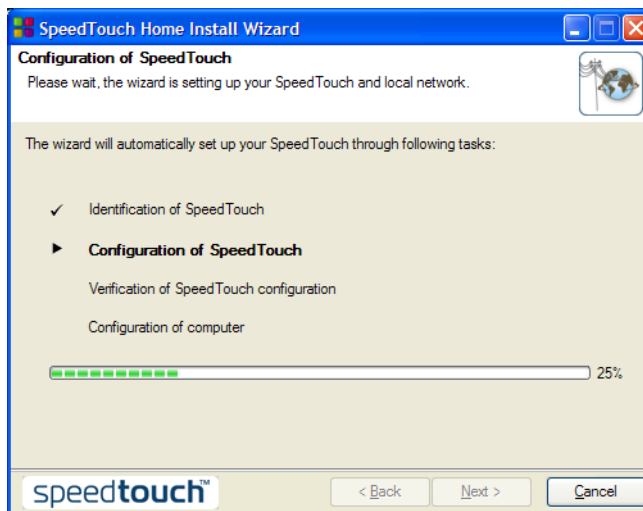
Following security modes to secure traffic between the SpeedTouch™ and connected wireless stations are available:

- ▶ **Low**, which implies in fact that no security measures are taken at all
- ▶ **Medium**, implying that traffic is encrypted by means of a static encryption key (WEP).
- ▶ **High**, providing the highest security standard available (WPA) for encrypting all wireless traffic.

For an overview on all SpeedTouch™ wireless security features, see “ Securing your wireless network” on page 24.

Terminating the Home Install Wizard

- 1 The SpeedTouch™ Home Install Wizard will configure the SpeedTouch™ and your computer according to the service profile. You can follow the configuration progress in following window:



- 2 Finally, click **Finish** to close the wizard. After some seconds, the Internet LED will be lit green. If not, refer to “5.2 LED Diagnostics” on page 29.
- 3 You will be redirected to the embedded SpeedTouch™ pages automatically (unless you cleared the **http://speedtouch.lan** check box in the previous window).



These pages allow you to configure your firewall, device settings, your wireless access point settings, and so on. More information can be found in the SpeedTouch™ User’s Guide.

You can test your Internet connection as described in “3.3 Testing your Internet Connection” on page 23.

IP settings

The SpeedTouch™ DHCP server is enabled by default. Therefore, the computer’s networking interface, used during the Home Install Wizard procedure, is configured for obtaining its IP configuration dynamically.



For fixed IP configurations, please follow the instructions of your ISP.

3.1.1 Wireless Setup

Wireless client adapters

For a wireless connection to your Wi-Fi certified SpeedTouch™, you will need a wireless 802.11 b/g compatible client adapter.

As wireless client adapter, you can use a provided SpeedTouch™ 110g CardBus, a provided SpeedTouch™ 120g USB adapter (with cable), you can plug a provided SpeedTouch™ 121g adapter directly into your computer's USB port (without cable) or any other Wi-Fi certified WLAN client.



To be able to install hardware on a MS Windows 2000 or a MS Windows XP operating system, you need administrative rights on your computer.

Installing your wireless client adapter

The Home Install Wizard will invite you to plug in the wireless client adapter.

Proceed as follows:

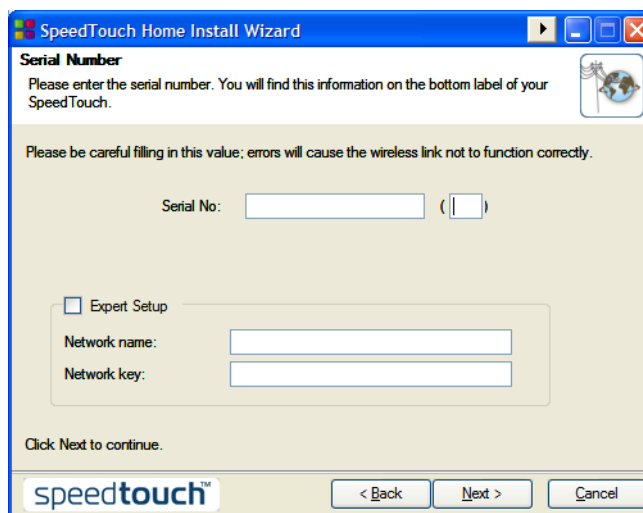
- 1 Plug in the wireless client adapter. The hardware is being installed.



If you use a SpeedTouch™ 110g/120g/121g adapter, the SpeedTouch™ Wireless Client Manager, an alternative to the Wireless Zero Configuration (WZC) in Windows XP, will be installed. If you're working on Windows XP and prefer to work with the WZC, see "Restoring Windows Zero Configuration" on page 35 to switch back to WZC.

With the provided SpeedTouch™ 110g/120g/121g adapter, the client manager will be configured correctly for secure WLAN connectivity to the SpeedTouch™. Also for a third party WLAN client on MS Windows XP with Service Pack 2, the WLAN configuration will be correctly done via the WZC. In other cases you will need to configure the client manager of your WLAN client without help of the wizard.

- 2 Enter your SpeedTouch™'s serial number. This 13 digit key is printed on the bottom label of your SpeedTouch™. Then click **Next**.



- 3 In a progress window you can follow the setup of the wireless connection to your SpeedTouch™.
- 4 Continue with "Configuring the SpeedTouch™ (and your computer)" on page 14.

3.1.2 Installing USB drivers

USB connection

You may want to connect your computer to the SpeedTouch™ using the USB port. To be able to do so, you must install the corresponding USB driver.

Supported operating systems

USB connection on the SpeedTouch™ is supported for following

- ▶ Microsoft Operating Systems:
 - ▶ MS Windows 98SE
 - ▶ MS Windows Millennium
 - ▶ MS Windows 2000
 - ▶ MS Windows XP

You may need the Windows installation CD during installation.



The installation procedure might be slightly different depending on the MS Windows OS you are using.

- ▶ Mac Operating Systems:
 - ▶ Mac OS X 10.2 (Jaguar)
 - ▶ Mac OS X 10.3 (Panther)

Installing Windows USB drivers

The first time you connect the SpeedTouch™ to your computer through a USB interface, as soon as you plug the USB cable into the computer, you will be prompted for a USB driver.

You will find the required USB driver software on the Setup CD, you just entered in your computer's CD-ROM or DVD-ROM drive. The installation is plug and play, meaning that installation will require almost no effort.

Proceed as follows:

- 1** Insert the blue USB cable provided into the SpeedTouch™ USB port marked with the USB logo.



An USB logo looks like this: 

- 2** The other end of the USB cable fits in (one of) the USB port(s) of your computer. In most cases your computer's USB port is marked with the same USB symbol.



You can also connect your computer to the SpeedTouch™ via a USB hub, provided that the hub is autonomously powered.

- 3** Windows will automatically recognise the Thomson USB Remote NDIS device:



- 4 The Windows Found New Hardware Wizard appears:
This wizard will guide you through the installation procedure of the USB drivers.
Click **Next** to continue.



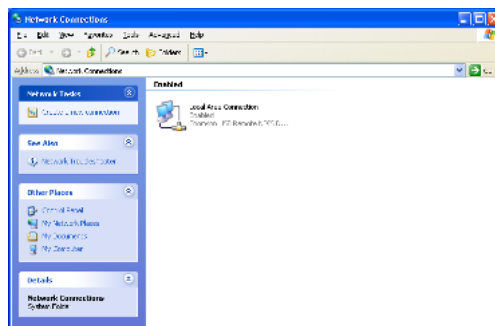
The Windows Found New Hardware Wizard may ask your authorisation to connect to Windows Update to search for software. If this is the case, select **No, not this time** and click **Next**.

- 5 Select **Install the software automatically (Recommended)**, and click **Next**.
- 6 The USB driver is being installed. After a while a completing dialogue will appear. Click **Finish**, to close the wizard.
- 7 Continue with "Configuring the SpeedTouch™ (and your computer)" on page 14.

Verifying USB connectivity in Windows

You can easily check the USB networking interface; for example in MS Windows XP:

- 1 In the Windows XP task bar, click **Start**.
- 2 Select **(Settings >) Control Panel > (Network and Internet Connections >) Network Connections**.
- 3 The SpeedTouch™ USB connection is represented as a local network interface:



Installing Mac USB drivers

The Mac USB driver on the Setup CD will be installed automatically on your Mac and happens without notification.



On the Setup CD, the USB driver is located in **stInstall.app > Contents > MacOS > CDCdriver**.

Continue with "Configuring the SpeedTouch™ (and your computer)" on page 14.

3.1.3 Connecting Multiple Computers

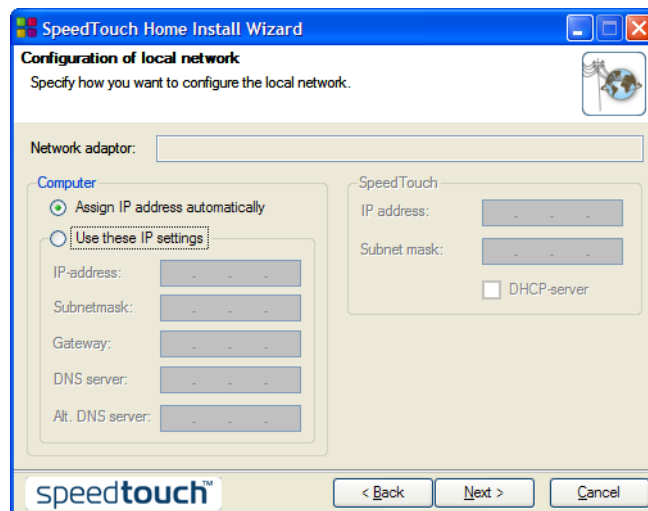
Multi-user

When multiple computers are used with a single SpeedTouch™, you can run the Home Install Wizard on each computer to ensure correct TCP/IP settings on the computers to connect to the SpeedTouch™.

The Home Install Wizard will detect your SpeedTouch™ device and sense that the SpeedTouch™ has already been configured. You will be given the choice to reconfigure the SpeedTouch™ or not.



- 1 Select **No**, if you only want to configure the computer, and click **Next**.
- 2 Select **Assign IP address automatically**.



For fixed IP configuration, proceed as follows:

- 1 Select **Use these IP settings**.
- 2 Enter the IP address and subnet mask off your computer and your SpeedTouch™. Make sure they are in the same subnet.

Click **Next**.

- 3 To close the wizard, click **Finish**.

3.2 Web-Based Easy Setup

Easy Setup With help of the Easy Setup, your Internet connection is set up in a few clicks. The Easy Setup is operating system independent.

Preconditions

Make sure that:

- ▶ Your SpeedTouch™ is correctly set up and powered on.
- ▶ Your computer is connected to the SpeedTouch™. In case of a wireless connection, a wireless client adapter has to be installed on your computer and correctly configured to connect to your SpeedTouch™.
- ▶ Your host computer is configured as DHCP client or is configured with a valid fixed IP address.



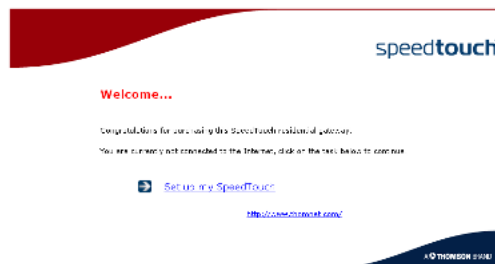
in case of problems, you can give the host computer a fixed IP address in the same subnet as your SpeedTouch™ (If the SpeedTouch™ is in its default settings, that is an address between 192.168.1.1 and 192.168.1.253). In case you use fixed IP addresses, the SpeedTouch™ has to be configured as DNS server (default).

- ▶ Your web browser is not using a proxy server. For more information, see “Disable proxy server” on page 36.

HTTP intercept

Proceed as follows:

- 1** Open a web browser. Browse to an arbitrary web site, for instance <http://www.speedtouch.com>. As long as no Internet connection has been set up, you will be automatically redirected to the SpeedTouch™ **Welcome** page.



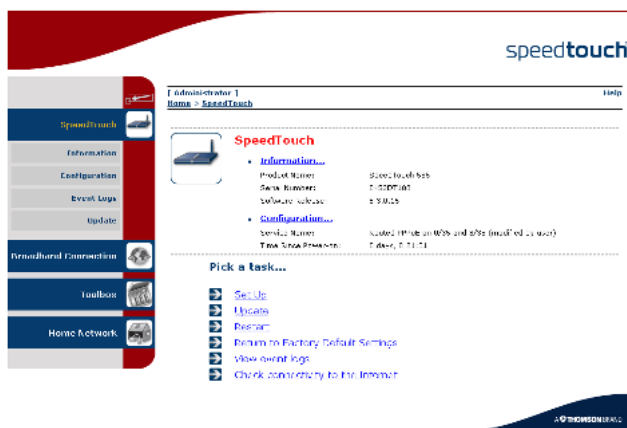
If you're not redirected automatically, go to “Launching the Easy Setup wizard” on page 22

- 2** Click on **Setup my SpeedTouch** to launch the Easy Setup wizard.
- 3** Continue with “Setting up Internet connection” on page 22.

Launching the Easy Setup wizard

It is always possible to launch the Easy Setup wizard from within the embedded web pages. Proceed as follows:

- 1 Browse to the SpeedTouch™ pages on <http://speedtouch.lan> or on its IP address, its default being 192.168.1.254.
- 2 In the menu click **SpeedTouch**.



- 3 In the **Pick a task...** list click **Set Up**.

Setting up Internet connection

In the Easy Setup wizard:

- 1 Click **Next** to proceed. If for some reason you want to abort the wizard, click **Cancel**.
- 2 Choose the **Service** provided by your ISP (Router or Bridge); then click **Next**.
- 3 Select the appropriate **VPI/VCI** - and, if required, the **Connection Type** (PPPoE or PPPoA) - provided by your ISP; then click **Next**.
- 4 For a Router Service, fill in the Internet Account settings (**PPP user name** and **password**) provided by your ISP. Click **Next**.
- 5 Fill in the SpeedTouch™ **Security user name** and **Password**.



The factory default user is 'Administrator'. Its password is blank, meaning you do not need to enter anything in the password field. It is advisable to specify another Administrator user name and password to protect your SpeedTouch™ from security violation, as described in "3.4 Basic Security" on page 24.

- 6 In the next screen you can review your settings, before to start the configuration of your SpeedTouch™. If something is missing or incorrect, click **Back**. To confirm the settings, click **Start**.
- 7 Please wait until the configuration has been done, and then click **Finish**. After a while you will be returned automatically to the **Welcome** page. Click on the bottom link to go to the SpeedTouch™ pages or select **Don't show this page** to access the Internet via your default home page.

3.3 Testing your Internet Connection

Connectivity check

After setting up the Internet connection, there is a simple way to check whether your configuration is fine.

- 1** Go to the SpeedTouch™ home page (<http://speedtouch.lan> or 192.168.1.254).
- 2** On the left navigation pane, select **SpeedTouch**.
- 3** In the **Pick a task...** list, click **Check connectivity to the Internet**.
- 4** Select an **Internet Service to Check**.
- 5** Click **Check Connectivity**.
- 6** If the test is successful, you will get a list of green check marks as in the example below:

Internet Service to Check:

• Test Results



DSL

ATM

Ethernet

PPP

IP

Internet

Connectivity to Gateway
(101.101.101.1)

Connectivity to DNS Server 1
(10.50.2.20)

In case of problems, please refer to “5.3 Web Diagnostics” on page 31.

3.4 Basic Security

Default user name and password

The SpeedTouch™ comes with a default user; its user name is 'Administrator' and the default password is blank.

Changing your password

For security reasons, it is recommended to set a password to access the SpeedTouch™.

- 1** Go to the SpeedTouch™ home page (<http://speedtouch.lan> or 192.168.1.254).
- 2** In the left pane select **Toolbox > User Management**.
- 3** In the **Pick a task...** list, click **Change my password**.
- 4** Enter a new password and confirm.



Do not forget this login information. In case you forget, you will be forced to reset the SpeedTouch™ back to its default configuration.

Default wireless security settings


Also for wireless connections to your SpeedTouch™, by default there are no security settings, so the SpeedTouch™ is initially accessible to all wireless devices:

- ▶ The Access Control List (ACL) is open and empty; new stations are automatically allowed to access the SpeedTouch™.
- ▶ The Network Name (SSID) is broadcasted.
- ▶ The security level is initially set to Low (that is: no encryption is used).

It is recommended to change these SpeedTouch™ wireless access point settings either automatically via the SpeedTouch™ Home Install Wizard, either manually as described in the SpeedTouch™ User's Guide.

Securing your wireless network

To secure your wireless network, you can:

- 1** Allow or deny access based on the MAC address of the wireless client(s). Known MAC addresses are kept in the Access Control List (ACL). If the SpeedTouch™ is configured to allow new stations via registration, unknown computers will have to register before they can connect.
 -  For the ACL you have following options: New stations are:
 - ▶ **Allowed (automatically):** All new stations can access the SpeedTouch™.
 - ▶ **Allowed (via registration):** Only allowed stations in the ACL have access. You can add new stations via the Association / Registration button.
 - ▶ **Not allowed:** Only allowed stations in the ACL have access.
- 2** Turn off the broadcast of the wireless Network Name (SSID). New wireless clients that are scanning for available networks will not see your network appear in their list.
- 3** Encrypt the data that will be sent over the wireless network. You can choose different encryption methods or levels of security:
 - ▶ **High:** Wi-Fi Protected Access Pre-Shared Key (WPA-PSK) encryption, the highest form of security available, but can only be used if your wireless client and client manager support it
 - ▶ **Medium:** Wired-Equivalent Privacy (WEP) encryption
 - ▶ **Low:** no encryption, no security

For more information, see the SpeedTouch™ User's Guide.

4 Web-Based User Interface

Embedded pages The SpeedTouch™ comes with embedded web pages, providing an interface to the software installed on the device. It allows easy setup and management of the SpeedTouch™ via your web browser from any PC connected to the SpeedTouch™.

Access To access the pages:

- 1** Open your web browser.



The recommended screen resolution is 1024 by 768 pixels.

- 2** In the address bar type `http://speedtouch.lan` or your SpeedTouch™'s IP address, by default that is 192.168.1.254, and press Enter.

- 3** Enter your SpeedTouch™ security user name and password.



The default user name is Administrator and the default password is blank.

- 4** The SpeedTouch™'s home page will be displayed in your browser window. From here - depending on the rights of your user account - you have access to the other pages.

Tasks Amongst others you can:

- ▶ View the SpeedTouch™'s current settings and status.
- ▶ Configure the SpeedTouch™ to connect to your Service Provider with the settings provided.
- ▶ Set the SpeedTouch™'s firewall to work with specific applications.
- ▶ Set up security features.
- ▶ Enable remote management access.
- ▶ Back up your configuration settings.
- ▶ Reset the SpeedTouch™'s default settings.
- ▶ Update the SpeedTouch™'s firmware.

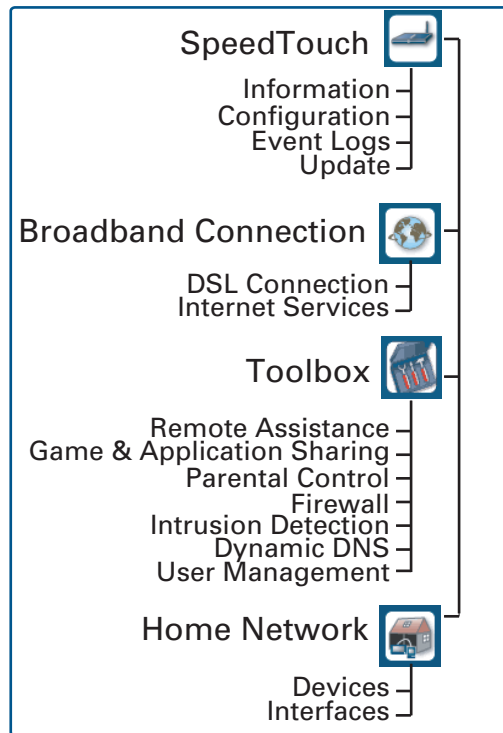
Using the web pages

When making changes to the SpeedTouch™ configuration via the web pages, the configuration is stored automatically whenever you click the **Apply** button.

For more information on the embedded pages, go to the **Help** link in the upper right side of the notification and navigation area or refer to the SpeedTouch™ User's Guide.

Site Map

The following Site Map gives you an overview of the main pages:



5 Internet Connection Troubleshooting

What to check The first things to check if you cannot access the Internet, are:

- ▶ Power
- ▶ Hardware connections
- ▶ LEDs

If the suggestions in this chapter do not resolve the Internet connection problem, please contact your Service Provider.

For other problems (Wireless, Security, Management,...), refer to the SpeedTouch™ User's Guide.

5.1 Checking the Hardware

Check the wiring

Plug in properly all cables you need. Ensure that the cables between your SpeedTouch™, computers and telephone socket are plugged in firmly. Loose connections can affect your Internet connection.

Damaged cables can interfere with your Internet connection. Check for damage along the cables and loose connections at the end of the cable. Replace any damaged cables.

Test the telephone line

To eliminate the possibility of a fault with the telephone line itself, check for a dial-tone by using a telephone connected to the telephone master socket.

If you are using ADSL, check whether a splitter has been installed or that micro-filters have been correctly fitted.

If there is no dial tone, contact your telephone company.

Reboot your computer

Loss of Internet or network connectivity can be caused by the computer. Often a reboot will rectify the problem.

Power-cycle the SpeedTouch™

To reboot your SpeedTouch™, simply turn off your SpeedTouch™. Wait five seconds and turn it back on.

5.2 LED Diagnostics

Checking the LEDs

After establishing Internet connectivity, at least following LEDs should solidly light green: Power, DSL, Internet.

LED status	Possible solutions
No LEDs are lit or flashing	<ul style="list-style-type: none"> ▶ Make sure the SpeedTouch™ is plugged into an electrical outlet. ▶ Make sure you are using the correct power supply for your SpeedTouch™ device, that is a 15V AC power adapter, like the one provided. ▶ Make the SpeedTouch™ is powered on. ▶ Unplug the SpeedTouch™, reboot your computer and then plug the SpeedTouch™ back in.
DSL LED is flashing green or no DSL LED	<p>Your DSL service is unable to synchronise.</p> <ul style="list-style-type: none"> ▶ Ensure the SpeedTouch™ is plugged into the DSL-enabled phone line. ▶ Ensure micro-filters have been correctly fitted (if not, there is a big chance you also have a bad regular telephone service). ▶ Make sure you use the right power supply (15V AC). ▶ Make sure that the correct SpeedTouch™ variant is used for your DSL service (ISDN/POTS). ▶ If you have previously had a working connection, call your ISP to check for service outages.
No Ethernet LED No Ethernet's Link Integrity/Activity LED	<p>No Ethernet connectivity:</p> <ul style="list-style-type: none"> ▶ Make sure the Ethernet cable(s) are firmly connected to the 10/100Base-T port. ▶ Make sure you are using the correct cable type for your Ethernet equipment. ▶ Make sure the Ethernet NIC driver is correctly installed and enabled on your computer. Power safe options for the Ethernet NIC should preferably be disabled.
No USB LED	<p>No USB connectivity:</p> <ul style="list-style-type: none"> ▶ Make sure the USB cable is firmly connected to the USB port. ▶ Make sure the USB driver is correctly installed and enabled on your computer.

LED status	Possible solutions
WLAN LED is flashing or not lit	<ul style="list-style-type: none"> ▶ The WLAN LED flashes if there is wireless LAN activity and can have different colours: <ul style="list-style-type: none"> ▶ Green: The SpeedTouch™ wireless access point is operating in highest security mode (WPA). Make sure to use the same WPA encryption on the WLAN client. ▶ Amber: The SpeedTouch™ wireless access point is operating in medium security mode (WEP). Make sure to use the same WEP encryption on the WLAN client. ▶ Red: The SpeedTouch™ wireless access point uses no security. ▶ The WLAN LED is not lit if the SpeedTouch™ wireless access point is disabled. For wireless networking, ensure the WLAN is enabled on the SpeedTouch™: <ol style="list-style-type: none"> 1 Go to the SpeedTouch™ web pages. 2 In the menu select Home Network > Interfaces. 3 Click the WLAN. 4 Click Configure. 5 Select Interface Enabled. <p style="margin-left: 20px;">- OR -</p> <p style="margin-left: 20px;">Press and hold the Association / Registration button until the WLAN LED is lit (green, amber or red).</p> ▶ The WLAN LED is toggling between red and green: If new stations are only allowed via registration and if you pressed the Association / Registration button, the ACL will be unlocked for 30 seconds during which you can connect new wireless clients.
Red Internet LED or No Internet LED	<ul style="list-style-type: none"> ▶ There was an authentication failure. This will usually present itself as an error message regarding an incorrect password. <ul style="list-style-type: none"> ▶ Check that your user name is correct. For ADSL connections, the user name is normally in the form of username@ISP. ▶ Check that your password is correctly entered. The password is case sensitive. <p style="margin-left: 20px;">If you continue to get password failures, contact your ISP.</p> ▶ The wrong service profile was selected. Restart the setup of your SpeedTouch™, and make sure to select the correct service profile.





A comprehensive LED overview can be found in the SpeedTouch™ User's Guide.

5.3 Web Diagnostics

Connectivity check

How to do a simple connectivity check on the web pages, is described in “3.3 Testing your Internet Connection” on page 23.

If the test is successful, you will get a list of green check marks in the test results. Otherwise a red cross will help you to diagnose the problem.

Test result	Explanation
 DSL	Your DSL line is not synchronised. <ul style="list-style-type: none"> ▶ Check if your telephone line is correctly connected to your SpeedTouch™. ▶ Check the DSL LED, as described in “Checking the LEDs” on page 29.
 ATM	No ATM activity detected on your DSL line.
 Ethernet	No Ethernet activity. In case you are connected through a protocol other than PPPoE, this check is not applicable; the result will always be ‘No Ethernet activity’.
 PPP	<ul style="list-style-type: none"> ▶ Authentication failed: check your user name and password. The user name is in most cases in the form of username@ISP. ▶ Your connection is disconnected. ▶ Could not bring up link.
No IP	No IP address or no DNS server has been configured. During IP address negotiation, there was an IPCP error or a DHCP error.
No Internet	This test sends 1 ping to each address of a configured list of IP addresses. The test succeeds if all addresses can be reached. If your primary and secondary DNS server are part of the list, reaching one of both is enough.
No DNS	If this step fails, it may be because the DNS service provided by your ISP has a problem.

5.4 SpeedTouch™ Setup CD Troubleshooting

The SpeedTouch™ CD does not start automatically

In MS Windows:

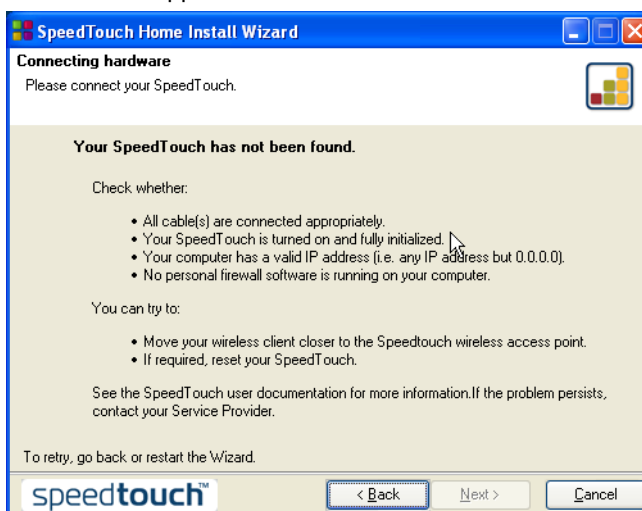
- 1** In the Windows task bar, click the **Start** button.
- 2** Select **Run...**
- 3** In the **Open** field, enter the following path: **D:\Setup.exe**, where D stands for the drive letter of your CD-ROM drive.

In Mac OS X:

- 1** On your desktop double-click the CD icon.
- 2** Double-click **Setup**.

The wizard does not detect a connection

If the Home Install Wizard does not detect a connection to your SpeedTouch™, an error window appears.



In this case check that:

- ▶ The SpeedTouch™ is turned on and fully initialised.
- ▶ Your computer has a valid IP address, that is any address but 0.0.0.0.

In MS Windows:

- 1** In the task bar, click the **Start** button.
- 2** Select **Run...**
- 3** Type **cmd** in the **Open** field.
- 4** Click **OK**. A black window will appear with a flashing cursor.
- 5** Type **ipconfig /all** and then press Enter.



In MS Windows 98 or MS Windows Millennium, type **wipcfg** and then press Enter.

- 6** Your IP address is displayed.


In Mac OS X:

1 Go to **Dock > System References**.


2 Click **Network**.

3 On the **TCP/IP** tab, your IP address is displayed.

- ▶ No dedicated firewall device or router is placed between your computer and the SpeedTouch™.
- ▶ No personal firewall software is running on your computer.
- ▶ Your computer is correctly connected to the SpeedTouch™, in other words, check whether the WLAN client is correctly associated with the SpeedTouch™:

1 In the Windows XP notification area, click the Wireless Network Connection icon .



If you're not connected, this icon will have a red cross: .

2 Check whether the displayed network has your SpeedTouch™ network name (SSID).

To repeat the search for your SpeedTouch™, click **Back** or restart the wizard. As soon as the wizard finds your SpeedTouch™, you can continue with "Configuring the SpeedTouch™ (and your computer)" on page 14.

The SpeedTouch™ is not responding

If after running the SpeedTouch™ Home Install Wizard, the completing window does not appear. Instead, you will get a message, the SpeedTouch™ is not responding.

There are two possibilities:

- ▶ This might be due to the reconfiguration of the SpeedTouch™'s IP settings or wireless access point settings. In this case, the last window of the Home Install Wizard will not be shown. Your SpeedTouch™ is correctly set up though and you will be able to surf the Internet.
- ▶ If you did not reconfigure the SpeedTouch™'s IP settings or wireless access point settings, restart the wizard.

If the setup fails over a wireless connection, try - if possible - to setup your SpeedTouch™ using a wired connection.

If the problem persists, refer to the Service Provider's instructions for more information.

SpeedTouch™ documentation cannot be viewed

To be able to view the SpeedTouch™ documentation pages on the Setup CD, Javascript must be enabled in your web browser. For more information, see the help file of your web browser.


To allow active content on an MS Windows XP system, see "Active content in Internet Explorer" on page 34.

Active content in Internet Explorer

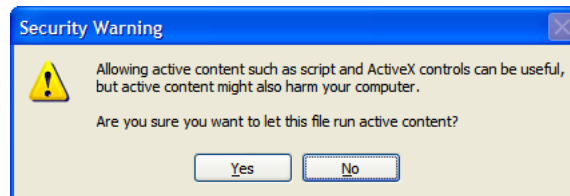
When opening documentation pages from the Setup CD a warning might be displayed; this is for instance the case if the pages are opened in Internet Explorer and you are using MS Windows XP with Service Pack 2.

To be able to view the documentation, proceed as follows:

- 1 In Internet Explorer following message will appear in the Information Bar:

 To help protect your security, Internet Explorer has restricted this file from showing active content that could access your computer. Click here for options...

- 2 Click the Information Bar (with the warning).
- 3 Select **Allow Blocked Content**.
- 4 A security warning will be displayed:



- 5 Click **Yes**.

Now you can view or print the SpeedTouch™ documentation pages.



This warning will be displayed every time you consult the documentation. If you do not want this message to be shown in the future, you must allow CDs to run active content on your computer:

- 1 In the Internet Explorer menu select **Tools > Internet Options**.
- 2 Under **Security** select **Allow active content from CDs to run on My Computer**.

5.5 Wireless Setup Troubleshooting

Restoring Windows Zero Configuration

When installing a SpeedTouch™ 110g/120g/121g, the SpeedTouch™ Client Manager will be installed. The SpeedTouch™ Client Manager is an alternative to the Windows Zero Configuration (WZC) in Windows XP. In many cases the SpeedTouch™ Client Manager will disable the WZC.



You need administrative privileges on your computer to restore the WZC service.

For information about starting the WZC service, visit the Microsoft knowledge base on <http://support.microsoft.com>.

Uninstalling the SpeedTouch™ Wireless Client Manager

Every time you reconnect to a WLAN the SpeedTouch™ Wireless Client Manager will start itself up again though, forcing the WZC to go down.

Therefore, you might want to uninstall the SpeedTouch™ Wireless Client Manager.

Proceed as follows:

- 1** In the Windows XP task bar, click the **Start** button
- 2** Select **(All) Programs > SpeedTouch 110g/120g/121g Wireless Monitor > Uninstall SpeedTouch 110g/120g/121g Wireless Monitor**.
- 3** The Uninstall wizard will start running. Click **OK** to confirm you want to uninstall.
- 4** The Install Shield Wizard will appear and will notify the SpeedTouch ST110g/120g/121g Monitor is successfully uninstalled. Click **Finish** to close the wizard.
- 5** After uninstalling the SpeedTouch™ Wireless Client Manager, you can restore the WZC.

5.6 Easy Setup Troubleshooting

Prerequisites

Before to run the Easy Setup on the embedded SpeedTouch™ pages, check following:

- ▶ The necessary connections are made.
- ▶ The SpeedTouch™ is powered on.
- ▶ Your host computer is configured as DHCP client or is configured with a valid fixed IP address.



In case of problems, you can give the host computer a fixed IP address in the same subnet as your SpeedTouch™ (If the SpeedTouch™ is in its default settings, that is an address between 192.168.1.1 and 192.168.1.253).

In case you use fixed IP addresses, the SpeedTouch™ has to be configured as DNS server (default).

Supported web browsers

Your web browser must be able to run Javascript. Following browsers are supported:

- ▶ Internet Explorer (5.0 and later)
- ▶ Netscape Navigator (4.7 and later)
- ▶ Mozilla Firefox (1.2 and later)
- ▶ Opera (5 and later)
- ▶ Safari (1.0 and later)
- ▶ Konqueror (2.2 and later)

Disable proxy server

The Easy Setup will only work if the proxy server is disabled or if the proxy server is bypassed for local addresses. For more information, see the help file of your web browser.

To disable a proxy server in Internet Explorer:

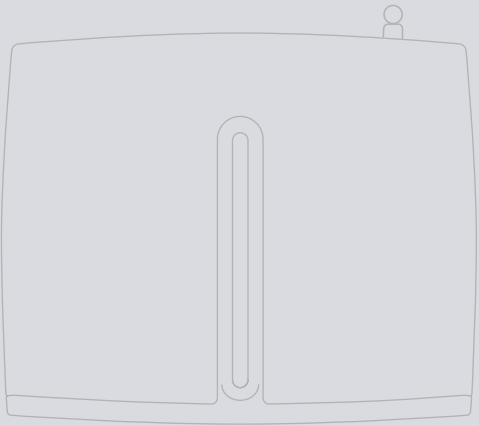
- 1** In Internet Explorer, select **Tools > Internet Options** from the menu.
- 2** Select the **Connections** tab.
- 3** Click the **Lan settings...** button.
- 4** Clear the **Use proxy server** box and the **Use automatic script** box.



It is recommended first to disable all other network connections on your computer, except the one connecting to your SpeedTouch™.

To disable a network connection:

- 1** In the Windows XP task bar, click the **Start** button
- 2** Select **(All) Programs > Control Panel > (Network and Internet Connections >) Network Connections**.
- 3** Right-click on the network interface icon you want to disable and choose **Disable**.



Need more help?

Additional help is available online at www.speedtouch.com