

SpeedTouchTM 580

Installation and Setup Guide R4.3.0



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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 $^{m}580$ (i) will be referred to as SpeedTouch m 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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Introducing the SpeedTouch™

Introduction

In a minute you will be able to access the Internet using your SpeedTouch™580(i)

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.

Key features

Your SpeedTouch™ offers you following features:

- A full operating system independent Internet Gateway Device
- Interfaces:
 - Wi-Fi 802.11b/g
 - USB v1.1 slave port
 - Four RJ-45 Ethernet ports
- Networking support and services:
 - DHCP, Dynamic DNS, event logging
 - Port mapping, Embedded Hyper-NAT, NAT application helpers
 - Stateful Inspection Firewall, intrusion detection, Parental Control
 - **UPnP**
- Management:
 - Easy Setup and Management
 - User friendly web based configuration
 - Firmware upgradeable
 - Home Network Install Wizard
 - On Demand Remote Management

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 $^{\text{\tiny{M}}}$.



Use only the SpeedTouch $^{\!\scriptscriptstyle\mathsf{TM}}$ 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.

SpeedTouch™ Setup

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.

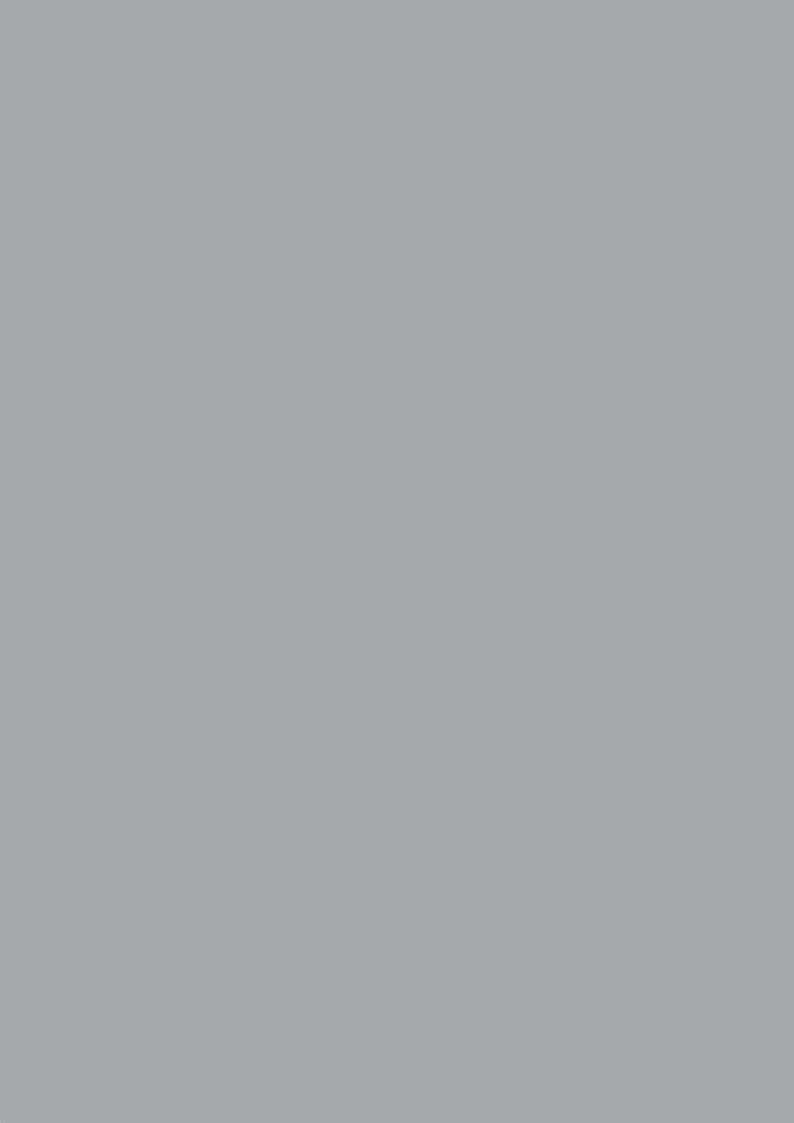
See "2.3 The SpeedTouch™ Setup CD" on page 13 for more information.

In case of another operating system a set of subdirectories allow you to easily browse for user documentation, SpeedTouch $^{\text{\tiny{TM}}}$ system software, service templates, etcetera.



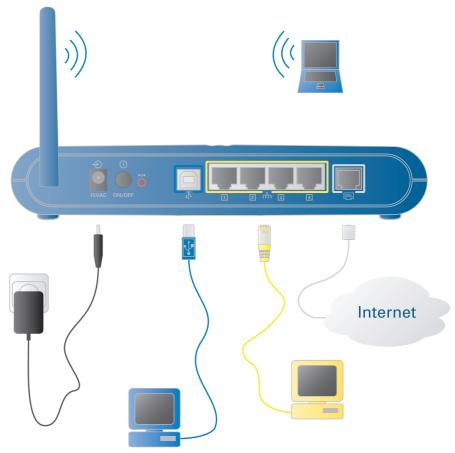


speed**tou**?



2.2 Connecting the Hardware

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





The colour coded printing on the backpanel of your SpeedTouch $^{\text{m}}$ will facilitate matching the colour coded cables.

- 1 Use the grey DSL cable to wire the SpeedTouch™ DSL port to your telephone wall outlet or distributed filter.
- 2 Plug in the coaxial jack from the electric power supply adapter into the SpeedTouch™ '15VAC' port and the other end to the wall outlet.
- 3 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 yellow Ethernet port and the other end to the PC's Ethernet port.
 - (Connect the blue USB cable to the blue USB port on your SpeedTouch™ and the other end to the PC's USB port.
 - (For wireless networking, plug the provided SpeedTouch™110g/120g/121g or other 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 16, it is recommended to wait to make these connections until the wizard will ask you to do so.





Powering the SpeedTouch™

To turn 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 $^{\mathbb{M}}$ 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 33. A comprehensive LED overview can be found in the SpeedTouch™ User's Guide.

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







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 16 for more information.

- (SpeedTouch™ Maintenance to:
 - (Reconfigure your SpeedTouch™ via the Home Install Wizard.
 - (Upgrade 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 <u>www.speedtouch.com</u>.



In case you experience problems when viewing the SpeedTouch™ documentation, see " SpeedTouch™ documentation cannot be viewed" on page 37.

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 $^{\text{\tiny{M}}}$. 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 16.
Mac OS X, provided you will use a wired connection to your SpeedTouch™	the Home Install Wizard, as described in "3.1 SpeedTouch™ Home Install Wizard" on page 16.
Mac OS X, wirelessly connected to your SpeedTouch™	the Easy Setup, as described in "3.2 Web-Based Easy Setup" on page 25.
Other	the Easy Setup, as described in "3.2 Web-Based Easy Setup" on page 25.
Any operating system, connected via wired Ethernet	open your web browser, the SpeedTouch™ HTTP intercept will do the rest; see " HTTP intercept" on page 25.



If you are using MS Windows XP, it is also be 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 PC, the wizard will configure your SpeedTouch™ and - if necessary - your PC.

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 turned on.
- Your SpeedTouch™ is in its default configuration state.

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 13 for more information.

2 The SpeedTouch™ CD menu pops up.



If not, refer to "The SpeedTouch™ CD does not start automatically" on page 36.

- 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.

Detecting the SpeedTouch™

The SpeedTouch™ Home Install Wizard will check your system and will search for your SpeedTouch™ on the local network. A progress bar is displayed.



If more than one device is found, all available devices will be listed. Select your SpeedTouch $^{\rm m}$ and click **Next**.





Connecting your PC

The wizard will now ask you to connect the SpeedTouch™ to your PC.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 22.
- USB: Go to "3.1.2 Installing USB drivers" on page 23.
- (Ethernet: After you have plugged in the Ethernet cable to both the computer and the SpeedTouch™, click **Next** and proceed with " Configuring the SpeedTouch™ (and your PC)" on page 18.



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 36.





Configuring the SpeedTouch™ (and your PC)

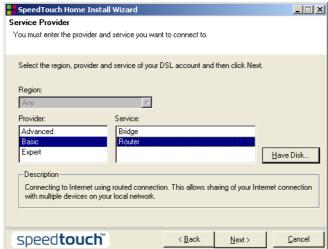
Once the hardware is installed successfully and you are connected to the SpeedTouch™, the wizard will continue with the configuration of your SpeedTouch™. Proceed as follows:

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 19), or as described in "3.4 Basic Security" on page 28.

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 $^{\mathbb{M}}$ and your PC. 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.





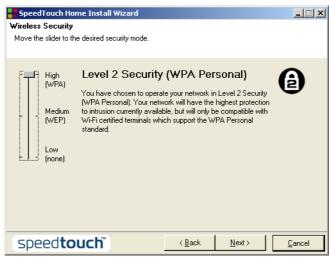
Access Control

To protect your SpeedTouch™ from unauthorized access, you must provide a user name and password. Each time a user wants to access the SpeedTouch™ web 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 available (WPA) for securing all wireless traffic.

For an overview on all SpeedTouch™ wireless security features, see " Securing your wireless network" on page 28.





Terminating the Home Install Wizard

1 The SpeedTouch™ Home Install Wizard will configure the SpeedTouch™ and your PC 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 33.
- 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, 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 27.

IP settings

The SpeedTouch™ DHCP server is enabled by default. Therefore, during the wizard 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.

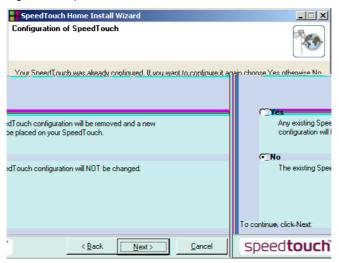




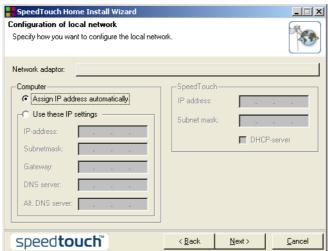
Multi-user

When multiple PCs are used with a single SpeedTouch™, you can run the Home Install Wizard on each PC to ensure correct TCP/IP settings on the PCs 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 PC, and click **Next**.
- 2 Select Assign IP address automatically. For Fixed IP configuration, refer to the Operator's Guide. Click Next.



3 To close the wizard, click Finish.





3.1.1 Wireless Setup

Wireless client adapters

For a wireless connection to your Wi-Fi certified SpeedTouch™, you will need a wireless 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 PC.

Installing your wireless client adapter

If you want to use a wireless connection to your SpeedTouch™, the Home Install Wizard will invite you to plug in the wireless client adapter.

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. See "Restoring Windows Zero Configuration" on page 39 for more information.

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.

- After scanning for wireless networks, if the wizard found more than one wireless network, you need to select your SpeedTouch™ network name (SSID) and to enter your SpeedTouch™'s Network Key (WEP-WPA), both printed on the bottom label of your SpeedTouch™. Click **Next**.
- 3 Enter your SpeedTouch™'s serial number. This 13 digit key is printed on the bottom label of your SpeedTouch™. Then click Next.



- In a progress window you can follow the setup of the wireless connection to your SpeedTouch™.
- 5 Continue with "Configuring the SpeedTouch™ (and your PC)" on page 18.





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

The first time you connect the SpeedTouch™ to your PC through a USB interface, as soon as you plug the USB cable into the PC, 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 PC'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:



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



You can also connect your PC 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 Instal the software automatically (Recommended), and click Next.





- 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 PC)" on page 18.

Verifying USB connectivity in Windows

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

- 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 PC)" on page 18.





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 setup and turned on.
- Your PC is connected to the SpeedTouch™ using wired or wireless Ethernet. In the latter case, a wireless client adapter has to be installed on your PC and correctly configured to connect to your SpeedTouch™.
- Your host PC is configured as DHCP client or is configured with a valid fixed IP address.



in case of problems, you can give the host PC 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 40.

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 26

- 2 Click on **Setup my SpeedTouch** to launch the Easy Setup wizard.
- **3** Continue with "Setting up Internet connection" on page 26.

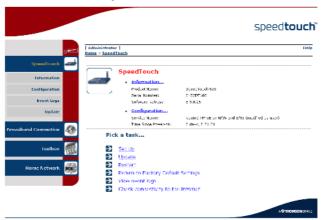




Launching the Easy Setup wizard

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 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 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 28.

- 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.



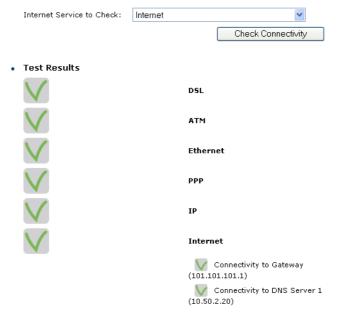


3.3 Testing your Internet Connection

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://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:



In case of problems, please refer to "5.3 Web Diagnostics" on page 35.





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 $\mathsf{SpeedTouch}^{\mathtt{m}}.$

- 1 Go to the SpeedTouch™ home page (192.168.1.254 or http://speedtouch.lan).
- 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:

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 PCs 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 off the wireless Network Name (SSID). Only clients configured with the correct SSID will be able to connect.
- 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 HTML 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 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 Amon

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

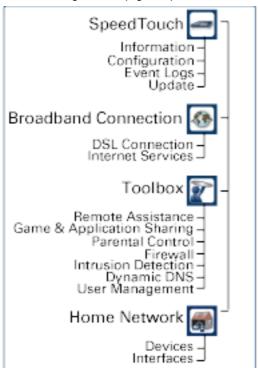
When making changes to the SpeedTouch™ configuration via the web pages, the configuration is stored automatically whenever you click the **Apply** button..

For more information on the embedded web pages, go to the **Help** link in the upper right side of the notification and navigation area of the SpeedTouch $^{\text{\tiny{M}}}$ web pages, or refer to the SpeedTouch $^{\text{\tiny{M}}}$ 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 $^{\text{\tiny{M}}}$, 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 dialtone by using a telephone connected to the telephone master socket.

If you are using ADSL, check whether a splitter has been installed or that microfilters 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 $^{\mathbb{M}}$, simply turn off your SpeedTouch $^{\mathbb{M}}$. 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	(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 sure the power switch on the SpeedTouch™ is turned on.
DSL LED is flashing	Your service is unable to synchronise.
green or no DSL LED	(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).
	(Unplug the SpeedTouch™, reboot your computer and then plug the SpeedTouch™ back in.
	(If you have previously had a working connection, call your ISP to check for service outages.
No Ethernet LED	No Ethernet connectivity:
No Ethernet's Link Integrity/Activity LED	(Make sure the Ethernet cable(s) are firmly connected to the 10/100Base-T port.
LLD	(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	No USB connectivity:
	(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	(The WLAN LED flashes if there is wireless LAN activity and can have different colours:
	(Green: The SpeedTouch™ wireless access point is operating in WPA security mode. Make sure to use the same WPA encryption on the WLAN client.
	(Amber: The SpeedTouch™ wireless access point is operating in WEP security mode. 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™:
	1 Go to the SpeedTouch™ web pages.
	In the menu select Home Network > Interfaces.
	3 Click the WLAN.
	4 Click Configure.
	5 Select Interface Enabled.
	- OR -
	Press and hold the Association / Registration button until the WLAN LED is lit (green, amber or red).
	(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	(There was an authentication failure. This will usually present itself as an error message regarding an incorrect password.
	(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.
	If you continue to get password failures, contact your ISP.
	(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 $^{\!\scriptscriptstyle{\text{TM}}}$ 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 27.

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. (Check if your telephone line is correctly connected to your SpeedTouch™. (Check the DSL LED, as described in " Checking the LEDs" on page 33.	
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'.	
У РРР	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 DNS1 and DNS2 are part of the list, reaching 1 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 PC 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 **winipcfg** 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 PC and the SpeedTouch™.
- (No personal firewall software is running on your PC.
- Your PC is correctly connected to the SpeedTouch™, in other words, check whether the WLAN client is correctly associated with the SpeedTouch™:
 - 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 PC)" on page 18.

The SpeedTouch™ is not responding

If after running the SpeedTouch™ Home Install Wizard, the completing window does not appear, this might be due to the reconfiguration of he SpeedTouch™'s IP settings or wireless access point settings. In this case, the last window of the Home Install Wizard will not be shown because of loss of connectivity. Your SpeedTouch™ is correctly set up though and you will be able to surf the Internet.

If the connection is lost, the following window appears:



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 $SpeedTouch^{m}$ 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 38.





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:'
- 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.







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 PC 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
- 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 unistalled. 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 wizard on the embedded SpeedTouch™ pages, check following:

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



in case of problems, you can give the host PC a fixed IP address in the same subnet as your SpeedTouch $^{\text{m}}$ (If the SpeedTouch $^{\text{m}}$ 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 (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 $^{\mathbb{N}}$.

To disable a network connection:

- 1 In the Windows XP task bar, click the **Start** button
- 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**.







Chapter 5

Internet Connection Troubleshooting







Need more help?

Additional help is available online at www.speedtouch.com