

SpeedTouch™580

Wireless Residential ADSL Gateway



Installation and Setup Guide









SpeedTouchTM 580

Installation and Setup Guide R4.3.2



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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 $^{\text{TM}}$ 580(i) will be referred to as SpeedTouch $^{\text{TM}}$ 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.

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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 TM , informs you on the SpeedTouch TM 's:

- Product name
- Model number
- Serial number
- Power requirements



Do not remove, nor cover the marking label.

DSL 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 label on the bottom of your SpeedTouch™.



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





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:

- The first time, an intuitive SpeedTouch™ Quick Installation Wizard will guide you through the hardware setup of your SpeedTouch™ and will help you to connect to the Internet.
 - See "2.2 First Time Installation" on page 7 for more information.
- ► For future reference, the SpeedTouchTM CD Menu provides links to all contents See "2.3 The SpeedTouchTM Setup CD" on page 19 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

SpeedTouch™ Home Install Wizard

The SpeedTouch[™] Home Install Wizard has been designed to help you 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 $^{\text{TM}}$.

You can launch the SpeedTouch™ Home Install Wizard:

- ▶ Automatically from out the SpeedTouch™ Quick Installation Wizard when you insert the SpeedTouch™ Setup CD in a computer for the first time.
 - See "2.2 First Time Installation" on page 7 for more information.
- From the SpeedTouch™ CD Menu **Home** page, via **Run Quick Installation**. This will in fact re-run the Quick Installation Wizard and subsequently start the Home Install Wizard as if you launch the Setup CD for the first time.
- From the SpeedTouch™ CD Menu Maintenance page, via Reconfigure my SpeedTouch™.



If you do not want to use the guided installation procedure, you can also fully manual install and configure your SpeedTouch™. See "2.2.2 Manual Installation" on page 17 for more information.





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 (see "2.2 First Time Installation" on page 7) 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 the computer(s) are equipped with an Ethernet network interface card (NIC).

To connect a computer via USB, you need a free USB port on the 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.

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



2.1 Setting Up your SpeedTouch™

SpeedTouch™ housing

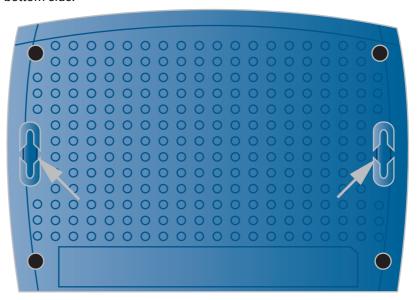
The SpeedTouch $^{\text{TM}}$ can be mounted on a wall, setup upright or simply be placed as a desktop.

Wall mount

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

Proceed as follows:

- 1 Drill two holes in the wall or other vertical surface where you want to place the SpeedTouch™.
- 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 SpeedTouchTM onto plasterboard, use dowels to secure the screws. Otherwise the strain of the cables connected to the SpeedTouchTM rear panel connectors could pull the SpeedTouchTM from the wall.

Stand-up

To setup the SpeedTouch $^{\text{TM}}$ in an upright position, use the provided cradle (if available).







2.2 First Time Installation

Internet connectivity setup

There are different ways of setting up Internet connectivity on your SpeedTouch TM . 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 "2.2.1 Guided Installation" on page 8.	
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 "2.2.2 Manual Installation" on page 17: Open your web browser, the SpeedTouch™ HTTP intercept will	
Mac OS X, wirelessly connected to your SpeedTouch™ and provided you have IP connectivity	do the rest.	



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 $^{\text{TM}}$ User's Guide.



2.2.1 Guided Installation

Introduction

On the CD a Quick Installation Wizard is provided that will guide you through the first installation and set-up of your SpeedTouch™.

The Quick Installation Wizard will:

- Provide important safety information and regulatory information.
- Show you how to make the necessary connections to your SpeedTouch™.
- How to turn on your device.
- ▶ Prepare you to smoothly run the SpeedTouch™ Home Install Wizard.

The subsequent SpeedTouch™ Home Install Wizard will then prepare your SpeedTouch™ and your local computer(s) for connecting to the Internet.

The Home Install Wizard will:

- Guide you through connecting your computer(s) to your SpeedTouch™.
- ▶ Prepare the SpeedTouch™ for connecting to the Internet.



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.

IMPORTANT NOTICE

Do not make any connections to your SpeedTouch™ until you are instructed to do so by the SpeedTouch™ Quick Installation Wizard and/or the SpeedTouch™ Home Install Wizard.

Launching the CD for the first time

To launch the SpeedTouch™ Setup CD Menu:

- 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 37.

- On Mac OS X: Double-click Menu in the window with the content of the CD.
- In the Choose Language window, select the language of your choice and click OK.
- The procedure continues with the SpeedTouch™ Quick Installation Wizard. Proceed with " Quick Installation Wizard" on page 9.



Quick Installation Wizard

Proceed as follows:

1 The SpeedTouch™ Quick Installation Wizard will guide you through the first setup of your SpeedTouch™.

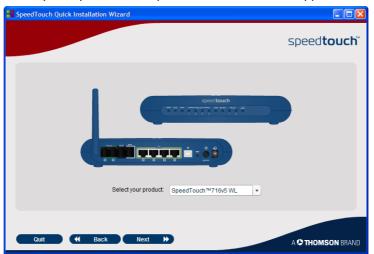


On the Welcome page, click Next to continue.



If you ran the CD on this computer before, the Quick Installation Wizard is not shown; instead the CD menu pops up.

2 Select your SpeedTouch™ product from the list of supported devices.





To easily identify your SpeedTouchTM a product picture is shown. If you are not sure what device you have, check the label on the bottom side of your SpeedTouchTM.

Click Next to continue.



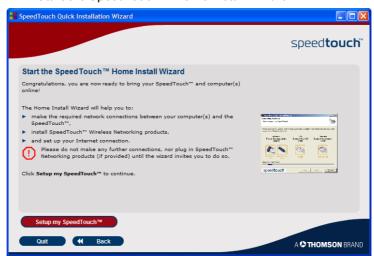


3 The SpeedTouch™ Safety Instructions and Regulatory Notices will be displayed. Scroll down to read all the instructions carefully. If you have carefully read these Safety Instructions and Regulatory Notices, select I have read and I fully understand the Safety Instructions and Regulatory Information to confirm your reading and click Next.



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.

- 4 Subsequent screens will guide you through the preliminary hardware setup of your SpeedTouch™.
 - Carefully follow all the instructions. Click **Next** each time your are ready to proceed.
- As soon as all required preliminary connections to your SpeedTouch™ have been made, and your SpeedTouch™ is turned on and initialized, the final steps in the Quick Installation Wizard will:
 - Make sure that you have all information readily available to let the Home Install Wizard configure your SpeedTouch™ to connect to the Internet.
 - See "What you need from your ISP" on page 5for an overview of information you must have readily available.
 - Start the SpeedTouch™ Home Install Wizard.



Click Setup my SpeedTouch to continue.

6 The procedure continues with the SpeedTouch™ Home Install Wizard.
Proceed with " Home Install Wizard" on page 11.





Home Install Wizard

Proceed as follows:

1 The SpeedTouch™ Home Install Wizard will guide you through your local network connections and prepare the SpeedTouch™ for Internet connectivity.



On the Welcome page, click Next to continue.

2 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.

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





See " SpeedTouch TM wiring" on page 21 for a comprehensive overview of all SpeedTouch TM connections.

speed**touch**™



- 4 Make one of following connections:
 - Connect the yellow RJ-45 Ethernet cable to the yellow (indicated) Ethernet port on your SpeedTouch™ and the other end to the computer's Ethernet port.
 - Connect the blue USB cable to the blue indicated USB port on your SpeedTouch™ and the other end to the computer's USB port.



In case of problems or for advanced information, see "2.5.1 Installing USB drivers" on page 23.

For wireless networking, plug a wireless card or adapter in your computer.



In case of problems or for advanced information, see "2.5.2 Wireless Setup" on page 25.

Once the hardware is installed successfully and you are connected to the SpeedTouch™, the procedure continues with configuring your Internet connection.



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 37.

Proceed with "Configuring the Internet connection" on page 13.



Configuring the Internet connection

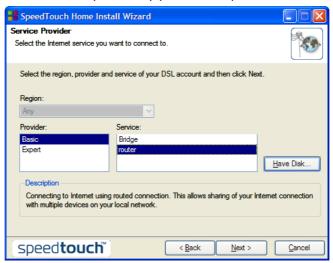
Proceed as follows:

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 "2.6 Basic Security" on page 26 for more information.

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 First your Internet connectivity will be set up:
 - Select the VPI/VCI and, if required, the Connection Type as specified by your service provider and click Next.
 - Enter the User Name and Password for your Internet account settings as specified by your service provider and click Next.
- 4 The procedure continues with some additional configurations.

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





Configuring the SpeedTouch™ (and your computer)

Proceed as follows:

- 1 Depending on the selected service profile and your ISP's requirements, additional settings may be requested to be filled in during the Home Install Wizard, like Dynamic DNS Service, Time Configuration or other.
 - Enter the information provided by your ISP and click **Next** whenever requested.
- 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.



Click Next to continue.

3 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 26.

4 The procedure continues with the final steps of configuring your SpeedTouch™ and your computer.

Proceed with "Finishing the Home Install Wizard" on page 16.





Finishing the Home Install Wizard

Proceed as follows:

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 on your SpeedTouch™ will be lit green to indicate Internet connectivity. If not, refer to "4.2 LED Diagnostics" on page 33. If needed, you can test your Internet connection as described in "Testing your Internet Connection" on page 35.

The SpeedTouch™ CD Menu will be displayed. See "2.3 The SpeedTouch™ Setup CD" on page 19 for more information.

You will be redirected to the embedded SpeedTouch™ pages automatically (unless you cleared the http://speedtouch.lan check box in the last window of the Home Install Wizard). These pages allow you to configure your firewall, device settings, your wireless access point settings, and so on. See the SpeedTouch™ User's Guide for more information.

More on IP settings

The computer's networking interface, used during the Home Install Wizard procedure, will be configured for obtaining its IP configuration dynamically in the very most cases. This is the most convenient configuration and should not be changed.



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





2.2.2 Manual Installation

Web-Based 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™.



See "SpeedTouch™ wiring" on page 21 for a comprehensive overview of all SpeedTouch™ connections.

 Your host computer is configured as DHCP client or is configured with a valid fixed IP address.



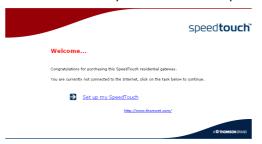
in case of problems, you can give the host computer a fixed IP address in the same subnet as your SpeedTouch™ (If the SpeedTouch™ is in its default settings, that is an address between 192.168.1.1 and 192.168.1.253). In case you use fixed IP addresses, the SpeedTouch™ has to be configured as DNS server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

Your web browser is not using a proxy server. For more information, see "Disable proxy server" on page 41.

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 18

- 2 Click on **Setup my SpeedTouch** to launch the Easy Setup wizard.
- 3 Proceed with "Setting up Internet connection" on page 18.





Launching the Easy Setup wizard

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

- 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.
- For a Routed 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 "2.6 Basic Security" on page 26.

- 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**.
- 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.



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.

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

SpeedTouch™ CD menu

The SpeedTouch™ CD menu will pop up automatically each time you insert the CD, or after running the Quick Installation Wizard and subsequent Home Install Wizard:



Select:

- **Run Quick Installation** to start the SpeedTouch™ Quick Installation Wizard.
- **▶ 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 SpeedTouch™ products and solutions.
- 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 38.

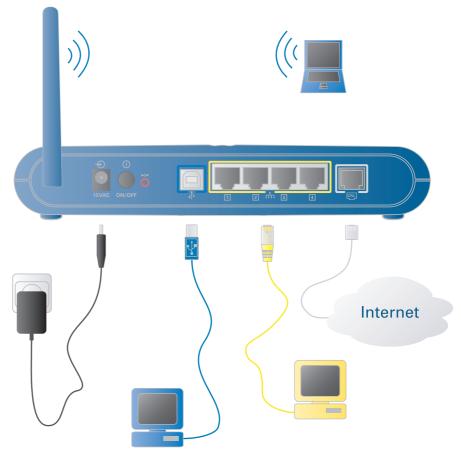
Open a new window to view the Setup CD contents.



2.4 SpeedTouch™ Connections Essentials

SpeedTouch™ wiring

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





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

Making connections

In most cases, the SpeedTouch™ Quick Installation Wizard and Home Install Wizard will guide you through the process of making all required connections to your SpeedTouch™.



It is recommended to wait to make any of these connections until the wizard will ask you to do so. See "2.2 First Time Installation" on page 7 for more information.

In case you want to make the required connections yourself, see "2.5 Connections Overview and Powering" on page 22 for more information.





2.5 Connections Overview and Powering

Introduction

In case you want to make the required connections yourself without using the guided installation procedure as recommended, you must:

Make sure to read the safety instructions and regulatory notices first.



The safety instructions can be found on the Setup CD (see "2.2 First Time Installation" on page 7) and/or may also be provided as printed booklet.

► Follow the order as indicated below for making connections to your SpeedTouchTM.

DSL Connection

Use the grey DSL cable to wire the SpeedTouch™ DSL port to your telephone wall outlet or distributed filter.

Powering the SpeedTouch™

Plug in the coaxial jack from the electric power supply adapter into the SpeedTouch™ power inlet port and the other end to the wall outlet.



The SpeedTouch™ electrical power requirements are indicated on the label on the bottom side of your SpeedTouch™. In case you need to use another power supply than the one provided, make sure that the spare supply complies with the SpeedTouch™ power requirements.

To power on the SpeedTouch TM , press the power button on the SpeedTouch TM 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 33. A comprehensive LED overview can be found in the SpeedTouch™ User's Guide.

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

Network connections

Your SpeedTouch™ allows you to connect your computer(s) via:

- Ethernet
- USB
- Wireless networking



It is recommended to use the Guided Installation procedure.

See "2.2.1 Guided Installation" on page 8 for more information.



2.5.1 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 connectivity on the SpeedTouch™ is supported for:

- 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)
 - Mac OS X 10.4 (Tiger)

Installing Windows USB drivers

The first time you connect the SpeedTouch™ to your computer through the USB port, 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. The installation is plug and play, meaning that installation will require almost no effort.

Proceed as follows:

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 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 Make sure that the SpeedTouch™ Setup CD is inserted, then select Instal 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.

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

Installing Mac USB drivers

You will find the required USB driver software on the Setup CD. The installation is plug and play, meaning that installation will require almost no effort.

Proceed as follows:

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 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 Mac OS X will automatically recognise the detection of a new port.
- 4 Make sure the SpeedTouch™ Setup CD is inserted, then click OK.
- 5 In the Network window, click **Apply Now**.

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



2.5.2 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 plug in a provided SpeedTouch™110g CardBus, a SpeedTouch™120g USB adapter (with cable), a SpeedTouch™121g adapter or any other Wi-Fi certified WLAN client, or - if present in your computer - use the built-in Wi-Fi certified WLAN adapter



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 SpeedTouchTM wireless networking adapter, the SpeedTouchTM 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 40 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.





2.6 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 TM .

- **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 TM 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 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.
- 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 $\mbox{^{TM}}$ User's Guide.



Chapter 2Basic Installation





3 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:

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 SpeedTouchTM 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 software.

Using the web pages

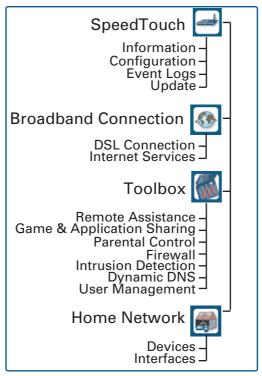
When making changes to the SpeedTouchTM configuration via the web pages, the configuration is stored automatically whenever you click the **Apply** button.

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:







4 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.





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





4.2 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	The SpeedTouch™ is not powered, or turned of.		
	Make sure the SpeedTouch™ is plugged into an electrical outlet.		
	Make sure you are using the correct power supply for your SpeedTouch™ device. The SpeedTouch™ electrical power requirements are indicated on the label on the bottom side of your SpeedTouch™.		
	Make the SpeedTouch™ is powered on.		
	Unplug the SpeedTouch™, reboot your computer and then plug the SpeedTouch™ back in.		
Power LED is lit red or flashing	The SpeedTouch™ is malfunctioning or not able to start up.		
amber	Fully unplug the SpeedTouch™ from any computer and disconnect it from its power supply. Wait five seconds, connect the SpeedTouch™ again and turn it back on.		
	Run the SpeedTouch™ Upgrade Wizard, available from the CD Menu to restore the system software.		
DSL LED is flashing green or no DSL LED	Your DSL service is unable to synchronise.		
	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 that the correct SpeedTouch™ variant (ISDN or POTS) according the DSL/phone service provided to your premises.		
	If you have previously had a working connection, call your ISP to check for service outages.		
No Ethernet LED No Ethernet port's Link Integrity/ Activity LED	No Ethernet connectivity:		
	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.		





LED status	Possible solutions		
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.	
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 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™:	
		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.- 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 $^{\text{TM}}$, and make sure to select the correct service profile.	

A comprehensive LED overview can be found in the SpeedTouch $^{\text{TM}}$ User's Guide.



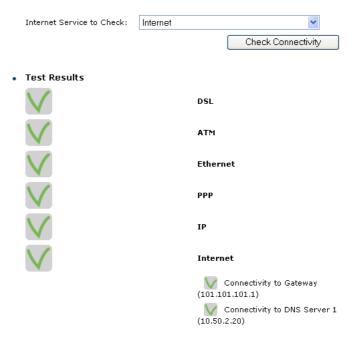


4.3 Web Diagnostics

Testing your Internet Connection

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:



In case of problems, see "Connectivity check" on page 36.





Connectivity check

How to do a simple connectivity check on the web pages, is described in "Testing your Internet Connection" on page 35.

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 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.





4.4 SpeedTouch™ Setup CD Troubleshooting

The SpeedTouch™ CD does not start automatically

In MS Windows:

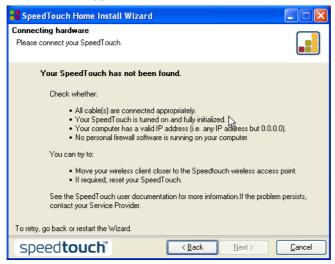
- In the Windows task bar, click the Start button.
- 2 Select Run..
- 3 In the **Open** field, enter the following path: **D:\Setup.exe**, where D stands for the drive letter of your CD-ROM drive.

In Mac OS X:

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

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 **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 computer and the SpeedTouch™.
- No personal firewall software is running on your computer.
- Your computer is correctly connected to the SpeedTouch™, or 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 computer)" on page 14.

The SpeedTouch™ is not responding

If the completing window does not appear after running the SpeedTouch™ Home Install Wizard, this means that the SpeedTouch™ is not responding or not accessible anymore.

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 Home Install Wizard.



If the setup fails over a wireless connection, try - if possible - to setup your SpeedTouch TM 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 39.





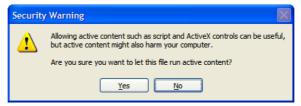
Active content in Internet Explorer

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:

 1 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.





4.5 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

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.
- 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.





4.6 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 $^{\text{TM}}$ 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**.

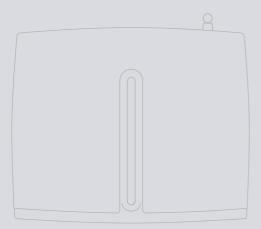


Chapter 4

Internet Connection Troubleshooting







Need more help?

Additional help is available online at www.speedtouch.com