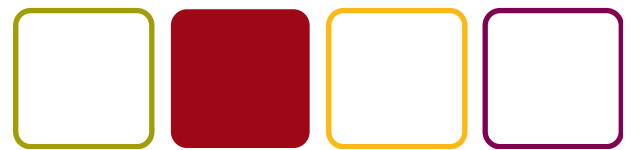


speedtouch™

SpeedTouch™ 716_{v5} (WL)

(Wireless) Residential DSL Gateway with Voice



User's Guide

Release R5.3.1



SpeedTouch™ 716_{v5} WL only



A THOMSON BRAND

SpeedTouch™

716_{v5} (VWL)

User's Guide

R5.3.1

speedtouch™

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About this User's 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™716_{v5(i)} and the SpeedTouch™716_{v5(i)} WL will be referred to as SpeedTouch™ in this User's Guide.

Typographical Conventions

In interactive input and output, typed input is displayed **in a bold font** and commands are displayed **like this**.

Comments are added *in italics*.

Example:

```
=>language list
CODE LANGUAGE VERSION FILENAME
en* english 4.2.0.1 <system> Only one language is available
```

Documentation and software updates

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

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1 Your SpeedTouch™

Introduction	With the SpeedTouch™716v5 (WL) (Wireless) Residential DSL Gateway with Voice you can build a secure home or small office network, seamlessly connecting wired and wireless devices, surf the Internet at high speed, make and receive phone calls over the Internet or over the traditional phone line - all combined in one device.
Installation	For more information on how to set up your SpeedTouch™, installation and wiring and how to do a first Internet connection setup, refer to the provided Installation and Setup Guide.
Contents	This User's Guide will assist you in configuring your SpeedTouch™.
Safety instructions	Before connecting the SpeedTouch™, please read the SpeedTouch™ Quick Installation Guide and the Safety Instructions and Regularity Notices.

1.1 SpeedTouch™ Features

- Introduction Your SpeedTouch™ offers you a wide range of outstanding features.
In this section you will find a comprehensive overview of the:
- ▶ Hardware Specifications
 - ▶ Software Features

1.1.1 Hardware Specifications

Gateway	<p>Integrated multi-mode ADSL modem, supporting:</p> <ul style="list-style-type: none"> ▶ ADSL over POTS for a SpeedTouch™ ADSL/POTS variant) ▶ ADSL over ISDN for a SpeedTouch™ ADSL/ISDN variant) ▶ ADSL/RE-ADLS2/ADSL2/ADSL2+ for both ADSL over POTS and ADSL over ISDN
Physical interfaces	<ul style="list-style-type: none"> ▶ WAN: <ul style="list-style-type: none"> ▶ One RJ-11 port for ADSL/POTS or ADSL/ISDN connection ▶ LAN: <ul style="list-style-type: none"> ▶ A USB 1.1 port to connect one PC over USB ▶ Four RJ-45 ports for managed 10/100Base-T Half-/Full-duplex auto-sensing MDI/MDI-X Ethernet switch ▶ Wireless LAN: IEEE 802.11b/g Wi-Fi compliant access point on the SpeedTouch™ 716v5 WL ▶ Power inlet ▶ Telephony: <ul style="list-style-type: none"> ▶ Two Voice over IP (VoIP) ports allowing high quality Internet telephony ▶ A PSTN port allowing regular phone calls
LEDs	LED indicators for all interfaces
Reset button	One recessed reset button for restoring the default settings
Wireless performance	<p>On the SpeedTouch™ 716v5 WL:</p> <ul style="list-style-type: none"> ▶ Typical indoor coverage: 60m ▶ Dynamic rate switching ▶ Manual / Automatic channel selection ▶ Manual / Automatic selection of pure 802.11g, pure 802.11b or mixed mode (802.11b/g) network ▶ Wireless Distribution System (WDS) ▶ WPA-PSK / WEP data encryption
Power requirement	Power supply: 18V AC, 1000mA

1.1.2 Software Features

-
- ADSL compliance
- ▶ If POTS in overlay: G. handshake, Full Rate ADSL, G.dmt, G.lite (splitterless ADSL), ADSL2, RE-ADSL and ADSL2 +
 - ▶ If ISDN in overlay: G.handshake, G.dmt, ADSL2, RE-ADSL and ADSL2 +
-
- ATM features
- ▶ Up to 16 simultaneous PVCs, allowing multiple simultaneous destinations
 - ▶ ATM QoS per PVC: CBR, VBR-rt, VBR-nrt, UBR
 - ▶ RFC 1483 / 2684 multiprotocol encapsulation over AAL5 / ATM: both LLC / SNAP and VC-based multiplexing supported
-
- Bridging features
- ▶ Multiport self-learning transparent bridge per IEEE 802.1D for LAN interconnect
 - ▶ Remote bridge ports are isolated from each other
 - ▶ Pre-defined bridge filters to WAN (no filter, no CPE-to-WAN broadcast, PPPoE only) and to LAN (no filter, multicast filter)
-
- Routing features
- ▶ Multi-port (up to 16 PVCs) router
 - ▶ Static routing, automatic routes (PPP, LAN)
 - ▶ IP address multi-homing
-
- Services
- ▶ UPnP with NAT traversal capability:
 - ▶ enables game technologies (Xbox live, Direct X, and many others)
 - ▶ enables conferencing functions of Microsoft Messenger
 - ▶ Transparent bridging (IEEE802.1D)
 - ▶ PPPoE routing/bridging with integrated PPP Relay
 - ▶ PPPoA routing, PPPoA-to-PPTP relaying
 - ▶ IP routing with static routing, packet classified routing and residential RIP
 - ▶ Hyper-NAT with virtual server mapping (for instance for Web, FTP, Mail servers) and ALGs (such as NetMeeting, MSN Messenger, VPN passthrough, and others)
 - ▶ Quality of Service:
 - ▶ IP QoS
 - ▶ Integrated Dynamic DNS client
-
- Security
- ▶ PAP (RFC1334), CHAP (RFC1994) for PPP session
 - ▶ Integrated Stateful Inspection Firewall, Intrusion Detection
 - ▶ Parental Control, URL Filtering
 - ▶ Wireless security on SpeedTouch™716_{v5} WL:
 - ▶ 64/128bit WEP encryption, WPA-PSK
 - ▶ Wireless client registration/access control
 - ▶ Multi-level SpeedTouch™ access policies, Digest Authentication

-
- Configuration
- ▶ Home Install Wizard, Easy Setup wizard
 - ▶ Intuitive web-based GUI (HTTP/HTTPS)
 - ▶ Advanced configuration via telnet - Command Line Interface (CLI)
 - ▶ Remote management access control
-
- Management
- ▶ Multi-level user protection, Event logging
 - ▶ DHCP server, client and relay, DHCP-to-PPP spoofing
 - ▶ DNS server, client and relay
 - ▶ Time synchronization:
 - ▶ SNTPv1, SNTPv2, SNTPv3 and SNTPv4
 - ▶ System logging
 - ▶ SNMPv1 agent with MIB-II
 - ▶ Firmware upgradeable via upgrade wizard on Setup CD
-
- VoIP
- ▶ Two VoIP (FXS) ports for VoIP phone calls, supporting:
 - ▶ intelligent lifeline backup
 - ▶ manual selection of PSTN mode or VoIP mode while making a phone call
 - ▶ Automatic selection of PSTN phone call on dialing emergency numbers
 - ▶ Support for IP QoS for VoIP

1.2 SpeedTouch™ LED Behaviour

Front panel LEDs

The SpeedTouch™ is equipped with a number of LEDs on its front panel, indicating the state of the device during normal operation.



Following table shows the meaning of the different LEDs:

Indicator			Description
Name	Colour	State	
PWR	Green	On	Power on, normal operation
	Red	On	Startup pending
		Flashing	Updating firmware
	Off		Power off
DSL	Green	Flashing	DSL line trying to detect carrier signal
		High speed flashing	DSL line trying to synchronise
		On	DSL line synchronised, no Internet activity
	Off		Power off or DSL line not synchronised
PPP	Green	Flashing	Internet activity
		On	At least one PPPoA or PPPoE connection is up. Users can access the Internet.
	Off		No PPPoA or PPPoE connection
Ethernet 1-4	Green	Flashing	Ethernet activity
		On	Ethernet connection, no activity
	Off		No Ethernet connection

Indicator			Description
Name	Colour	State	
USB	Green	Flashing	USB activity
		On	USB connection, no activity
	Off	Power off or wait for USB connection going up	
WLAN (SpeedTouch™7 16v5 WL only)	Green	Flashing	Wireless activity
		On	Wireless LAN enabled
	Off	Wireless LAN disabled	
Phone 1-2	Green	On	The phone is off hook
	Off	The phone is on hook or no phone connected	
VoIP Ready	Green	On	VoIP service up
		Flashing	VoIP activity
	Off	VoIP service down	

1.3 How to Access your SpeedTouch™

Access methods Your SpeedTouch™ is accessible in one of following ways:

Access Method	Can be used to:
Web	Configure your SpeedTouch™ via HTTP or HTTPS. For more information, see “1.3.1 Access via the Web Interface” on page 11.
Command Line Interface (CLI)	Fine tune your SpeedTouch™ configuration. For more information, see “1.3.2 Access via CLI” on page 12.
File Transfer Protocol (FTP)	Backup and restore data on your SpeedTouch™. For more information, see “1.3.3 Access via FTP” on page 14.
Remote Assistance	Allow a remote user to help you configuring your SpeedTouch™. For more information, see “1.3.4 Remote Assistance” on page 17.

1.3.1 Access via the Web Interface

Procedure To access the SpeedTouch™ via the web interface:

- 1** Open a web browser.
- 2** In the address bar type your SpeedTouch™'s IP address or DNS host name, by default that is 'http://speedtouch.lan' or '192.168.1.254'.



You can access the pages via the http protocol. For remote assistance the secure version, https, in combination with certificates is used; provide your ISP with the https link, user name and password before he can log on to the pages. For more information, see "1.3.4 Remote Assistance" on page 17.

- 3** As a result the SpeedTouch™ Home page appears, from where you can navigate to all the configurable aspects of the SpeedTouch™.

The screenshot displays the SpeedTouch™ web interface. At the top right, the 'speedtouch™' logo is visible. Below it, the user is logged in as '[Administrator]' with a 'Home' link and a 'Help' link. The main content is organized into several sections:

- SpeedTouch:** Includes an 'Information' link, 'Product Name: SpeedTouch', 'Software Release: 5.3', and an 'Update' button.
- Broadband Connection:** Includes an 'Internet:' status of 'Disconnected' and a 'Connect' button.
- Toolbox:** Lists several services: 'Remote Assistance' (Disabled), 'Game & Application Sharing' (Disabled), 'Firewall' (Disabled), and 'Dynamic DNS' (Disabled).
- Home Network:** Shows 'Wireless:' with 'No devices detected' and 'Ethernet:' with the MAC address 'Unknown-00-01-02-98-1f-df'.

A navigation sidebar on the left contains icons and labels for 'SpeedTouch', 'Broadband Connection', 'Toolbox', and 'Home Network'. The bottom right corner of the page features the 'A THOMSON BRAND' logo.

For more information on the web pages, see "5 SpeedTouch™ Web Interface" on page 57.

1.3.2 Access via CLI

Command Line Interface (CLI)

You can access the Command Line Interface (CLI) via:

- ▶ A Telnet session

This requires that TCP/IP connectivity exists between the host from which the Telnet session is opened and the SpeedTouch™. Your SpeedTouch™ and the connected PC must have an IP address in the same subnet.

- ▶ Quote site commands (over FTP)

For more information, see “Quote site command” on page 16.

For information on CLI commands, see the SpeedTouch™ CLI Reference Guide.

1.3.3 Access via FTP

File Transfer Protocol (FTP)

You can access the file system of the SpeedTouch™ via the File Transfer Protocol (FTP), in order to:

- ▶ Restore or backup configuration files, templates or language packs.
- ▶ Upgrade your configuration or firmware.

File system

The SpeedTouch™ file system is stored on nonvolatile memory, and contains the SpeedTouch™ software, service template files and (optionally) default setting files.

FTP session

To open an FTP session:

- 1 Open a **Command Prompt** window.



In Windows XP for instance:

- 1 On the Windows task bar, click **Start**.
- 2 Select **(All) Programs > Accessories > Command Prompt**.
- 2 At the prompt, type **ftp** followed by the IP address of your SpeedTouch™ (default is 192.168.1.254).
- 3 Enter your SpeedTouch™ security user name and password.



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

- 4 The example below shows an FTP session to the SpeedTouch™ file system:

```
C:\WINDOWS\system32\cmd.exe - ftp 192.168.1.254
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\nielsenv>ftp 192.168.1.254
Connected to 192.168.1.254.
220 Inactivity timer = 120 seconds. Use 'site idle <secs>' to change.
User (192.168.1.254:(none)): Administrator
331 SpeedTouch (00-0E-50-5A-D9-A0) Password required.
Password:
230 OK
ftp>
```

File system structure

The structure of the file system is very simple: It consists of a single root directory called **root** and a subdirectory called **dl**.

- ▶ The **root** directory contains:
 - ▶ all the necessary files for the SpeedTouch™ to boot correctly
 - ▶ the **dl** directory
- ▶ The **dl** (download) directory contains the software image.



If you made changes to the SpeedTouch™ configuration and saved them, a user.ini configuration settings file is created in the **dl** subdirectory.

File system access rights

On the different directories you have following privileges:

Directory	Access rights
root	NO read/write
dl	read/write

Common FTP commands

Depending on the access rights you have on a directory, you can use one of following commands:

Command...	You can use to...
cd	access another directory than the one currently open. Example: ftp> cd dl.
dir	list the directory files. Example: ftp> dir.
bin	set the transfer mode to 'binary'.
hash	turn on the hashing option.
put	upload files. Example: ftp> put C:/MyBackupFiles/user.ini. A configuration file must be uploaded to the dl directory.
get	download files. Example: ftp> get user.ini. Downloading the configuration file must be done from the dl directory.
delete	delete files.
bye	quit FTP.

FTP file transfer

To allow correct file transfers, set the transfer mode to “binary”: At the ftp prompt, type **bin** and press Enter.



Turn on the hashing option to see the progression of the file transfer: At the ftp prompt type **hash** and press Enter.

Example:

```
/home/doejohn{1}$ftp 192.168.1.254
Connected to 192.168.1.254
220 Inactivity timer = 120 seconds. Use 'site idle <secs>' to change.
Name (192.168.1.254:doejohn):
331 SpeedTouch™ (00-90-D0-01-02-03) User 'doejohn' OK. Password required.
Password : #####
330 OK
ftp>
ftp>bin
200 TYPE is now 8-bit binary
ftp>
ftp>hash
200Hash mark printing on (8192 bytes/hash mark).
ftp>cd dl
250 Changed to /dl
ftp>put C:\user.ini
200 Connected to 192.168.1.10 port 1271
150 Opening data connection for user.ini

226 File written successfully
ftp: 256 bytes sent in 0,000Seconds 256000,000Kbytes/sec.
ftp>
```

Quote site command

All the CLI commands can be executed from within an FTP session. Only complete CLI commands (in other words, the complete command syntax with all the parameters already specified) can be executed.

Example: To execute the CLI command **:software cleanup**: At the FTP prompt type 'quote site software cleanup' and press Enter.

```
ftp> quote site software cleanup
200-
200 CLI command "software cleanup" executed
ftp>
```


For more information on CLI commands, see the CLI Reference Guide.

1.3.4 Remote Assistance

Remote access You can make your SpeedTouch accessible from the Internet with regard to remote support. This way, you can allow your helpdesk to access your SpeedTouch™ remotely.

Enabling remote access To enable remote assistance:

- 1** Go to the SpeedTouch™ pages, as described in “1.3.1 Access via the Web Interface” on page 11.
- 2** In the menu select **Toolbox > Remote Assistance**.
- 3** Click **Enable Remote Assistance**.
- 4** Provide the following parameters to your helpdesk:
 - ▶ URL (the HTTPS link)
 - ▶ User name
 - ▶ Password
- 5** Your ISP is now able to access your SpeedTouch™ via the secure HTTPS link in combination with the provided certificate (a secure authentication mechanism).

 For security reasons, after 20 minutes of inactivity, or on reboot, Remote Assistance will be automatically disabled.

Disabling remote access To disable remote assistance:

- 1** Go to the SpeedTouch™ pages, as described in “1.3.1 Access via the Web Interface” on page 11.
- 2** In the menu select **Toolbox > Remote Assistance**.
- 3** Click **Disable Remote Assistance**.

2 Local Network Setup

Introduction The SpeedTouch™ offers you following local networking solutions:

- ▶ Wired Ethernet
- ▶ USB (1.1)
- ▶ Wireless Ethernet on the SpeedTouch™716v5 WL

Device settings Once you've connected a device, you are able to personalise its settings:

- 1** Go to the SpeedTouch™ web pages.
- 2** In the menu select **Home Network > Devices**.
- 3** Click the name of your device, or if the device's settings haven't been personalised yet, click the MAC address of the device.
- 4** On the top right, click **Configure**.
- 5** Now you can change the device's name, lock its IP address and assign applications and services to the device.



PC1

- **Information**

New Name:

Status: Active

Type:

Connected To: ethif1 (Ethernet)

- **Addressing**

Physical Address: 00:01:02:98:1f:df

IP Address Assignment: DHCP

IP Address: 192.168.1.64

Always use the same address:



DHCP Lease Time: 1 day, 0:00:00

- **Connection Sharing**

Game or Service

FTP Server	Unassign
HTTP Server (World Wide Web)	Unassign
<input type="text" value="Age of Empires"/>	<input type="button" value="Add"/>

2.1 Wired Ethernet

-
- Local network** The Ethernet ports on the backpanel allow you to connect the SpeedTouch™ to an existing 10 or 100 Base-T Ethernet network or one (or more) computer(s) with installed Ethernet card.
- Using the SpeedTouch™ Ethernet switch, you can create a local Ethernet network of up to four devices, without needing extra networking devices.
-  In the SpeedTouch™ package, a yellow full-wired straight-through RJ-45/RJ-45 Ethernet cable is included.
-
- Standard wiring procedure** Use the yellow Ethernet cable provided to wire your computer's Ethernet port to one of the SpeedTouch™'s Ethernet ports.
- The Ethernet cable can also be used to wire any Ethernet port of your SpeedTouch™ to an external hub or switch.
-  Please follow the installation instructions supplied with the external hub or switch for connections and Ethernet cabling.
-
- Device settings** Once you've connected a device, you are able to personalise its settings.
- For more information, see "[Device settings](#)" on page 19.
-
- Managed Ethernet switch** Your SpeedTouch™ intelligently switches data between the devices on your LAN, using priority queuing to ensure that higher priority messages are delivered first and in real-time. This feature maximizes your network performance.
- You can configure the managed Ethernet switch manually using CLI (For more information, see the SpeedTouch™ CLI Reference Guide).

2.2 USB

Supported operating systems

Installing and using the SpeedTouch™ USB connection on the SpeedTouch™ is supported for following operating systems:

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

You may need the Windows installation CD-ROM during installation.



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

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

System requirements

- ▶ For Windows 98SE/ME:
 - ▶ Pentium processor 166 MHz or compatible
 - ▶ 32 megabytes (MB) of memory
 - ▶ 30 MB of free disk space
- ▶ For Windows 2000/XP:
 - ▶ Pentium II processor or compatible
 - ▶ 64 MB of memory
 - ▶ 30 MB of free disk space
- ▶ For Mac OS X:
 - ▶ 128 MB of memory
 - ▶ 30 MB of free disk space

Prerequisites

It is strongly advised to remove any SpeedTouch™ USB driver installation that may reside on your PC before you install USB drivers from the SpeedTouch™ Setup CD delivered with your SpeedTouch™ product.

Make sure both your PC and SpeedTouch™ are turned on and operational.



In the SpeedTouch™ package, a blue USB cable is included to connect a single computer to your SpeedTouch™.

Installing Windows USB driver

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:



- 2 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.

- 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 Window Update to search for software. If this is the case, select **No, not this time** and click **Next**.

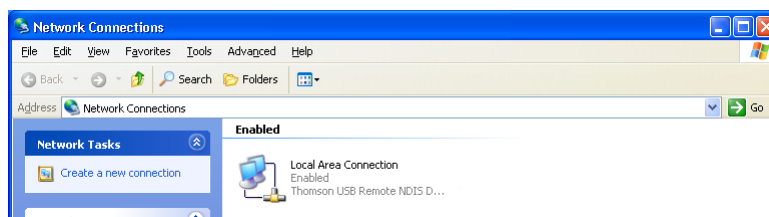
- 5 Select **Install the software automatically (Recommended)**, and click **Next**.

- 6 The USB driver is being installed. After a while a completing dialogue will appear. Click **Finish** to complete the installation.

- 7 As a result your USB connection is installed and ready for use.

Verifying USB connectivity in Windows

The SpeedTouch™ USB connection is represented as a local network interface. You can easily check this interface by opening the Network Connections window from Windows' Control Panel:



Installing Mac USB drivers

The USB driver will be installed automatically on your Mac.



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

Device settings

Once you've connected a device, you are able to personalise its settings. For more information, see "Device settings" on page 19.

2.3 Wireless Ethernet

Introduction

The SpeedTouch™ 716_{v5} WL Wi-Fi® certified IEEE 802.11g compliant wireless access point allows multiple computers to connect wirelessly to your local network over the SpeedTouch™ Wireless LAN environment. The SpeedTouch™ is backward compatible with IEEE 802.11b, which means 802.11b and 802.11g devices can coexist in the same wireless network.

The Wireless Distribution System (WDS) on your SpeedTouch™ allows you to extend the range of your wireless network. To be able to use WDS, you will need to introduce an additional WDS-enabled access point into your wireless network.

To be able to connect the computers, make sure that a wireless client adapter (WLAN client) is installed on each computer you want to connect via the WLAN.

Wireless client requirements

All wireless client adapters compliant to 802.11g and/or 802.11b, will be able to communicate with the SpeedTouch™ and other members of the SpeedTouch™ (W)LAN environment. However, be aware that only 802.11g compliant wireless clients are able to gain full profit of the 54 Mb/s (Max) bandwidth delivered by the SpeedTouch™.

It is highly recommended to use only wireless client adapters that are Wi-Fi™ certified to ensure smooth interoperability with the SpeedTouch™'s WLAN.

2.3.1 Wireless Basics

Introduction In this section some key wireless concepts are explained.

802.11b/g 802.11b is an IEEE standard, operating at 2,4 GHz at a speed of up to 11 Mb/s. 802.11g, a newer IEEE standard also operating at 2,4 GHz, gives you up to 54 Mb/s speed, more security and better performance.

Wireless Fidelity The Wi-Fi certification ensures that your SpeedTouch™ will interoperate with any Wi-Fi certified 802.11g and 802.11b compliant wireless device.

Access Point The SpeedTouch™ Wireless LAN Access Point (AP) behaves as a networking hub allowing to wirelessly interconnect several devices to the local (W)LAN and to provide access to the Internet.

Network Name or SSID The WLAN's 'radio' link is a shared medium. As no physical connection exists between the SpeedTouch™ and wireless clients, a name must be given to allow unique identification of your WLAN radio link. This is done by the Service Set ID (SSID), also referred to as Network Name. Wireless clients must be part of this SSID environment in order to be able to communicate with other clients on the (W)LAN - including the SpeedTouch™.

Radio channels The 802.11g standard allows several WLAN networks using different radio channels to be co-located. The SpeedTouch™ supports multiple radio channels and is able to select the best radio channel at each start-up.

You can choose to set the channels automatically or manually.



The different channels are overlapping. To avoid interference with another access point, make sure that the separation (in terms of frequency) is as high as possible. It's recommended to keep at least 3 channels between 2 different access points.

The SpeedTouch™ supports all channels allowed for wireless networking. However, depending on local regulations, the number of channels actually allowed to be used may be additionally restricted, as shown in the table below:

Regulatory Domain	Allowed Radio Channels
China	1 to 13
Europe	1 to 13
Israel	5 to 8
Japan	1 to 14
Jordan	10 to 13
Thailand	1 to 14
USA	1 to 11

Antennas Direct the external antenna to allow optimization of the wireless link. If for example the antenna is erect, wireless links in the horizontal plane are favoured. Please note that the antenna characteristics are influenced by the environment, that is by reflections of the radio signal against walls or ceilings. It is advisable to use the received signal strength as indicated by the wireless client manager to optimize the antenna position for the link to a given client.

Concrete walls will die down the radio signal strength and thus affect the connection.

2.3.2 Connecting First-time Wireless Clients

Wireless default settings

After every Reset-to-Defaults, the SpeedTouch™ wireless access point configuration is returned to its initial default settings.

These default settings are:

- ▶ Security level is low (security disabled) for an easy first use, meaning the data will not be encrypted. Wireless security settings are described in “2.3.3 Wireless Security” on page 29.
- ▶ The SpeedTouch™ is broadcasting its network name (SSID).
This default network name (SSID) is printed on the identification label located on the bottom of your SpeedTouch™ and is unique for each device. It consists of the concatenation of the word “SpeedTouch” and 6 hexadecimal characters, without any spaces, for example SpeedTouch123456.
- ▶ The radio channel number is set to ‘automatically scan for the best radio channel’.
- ▶ Registration is not activated. New stations are allowed automatically. The Access Control List is open and empty. No wireless client will be denied access to the SpeedTouch™ based on its physical hardware address.



The default wireless settings may differ from the settings listed above depending on your Service Provider’s requirements. If this is the case, refer to the installation/configuration instructions provided by your Service Provider.

Preparing first-time wireless clients

Make sure that:

- ▶ The SpeedTouch™ is powered on and ready for service.
- ▶ The SpeedTouch™ is in its default configuration.
If needed, reset the SpeedTouch™ to its default configuration (See “7.4 Reset to Factory Defaults” on page 129 for more information).
- ▶ A wireless client adapter is installed on your computer.
- ▶ The wireless client adapter’s IP configuration is set to dynamically obtain its IP configuration (DHCP) - this is usually the default. For more information, see the documentation of your wireless client adapter.

Configuring first-time wireless clients

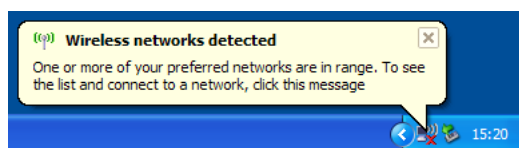
The wireless client must be correctly configured for the default network name. As the SpeedTouch™ broadcasts its network name to the wireless clients, you can select the SpeedTouch™ wireless network from a list of available networks. Depending on your wireless client a wireless icon may become green or a message similar to the following may pop up: “Successfully joined Wireless network SpeedTouch123456”.




Some wireless clients do not automatically join a wireless network. If so, follow the instructions for the wireless client software to initiate association.

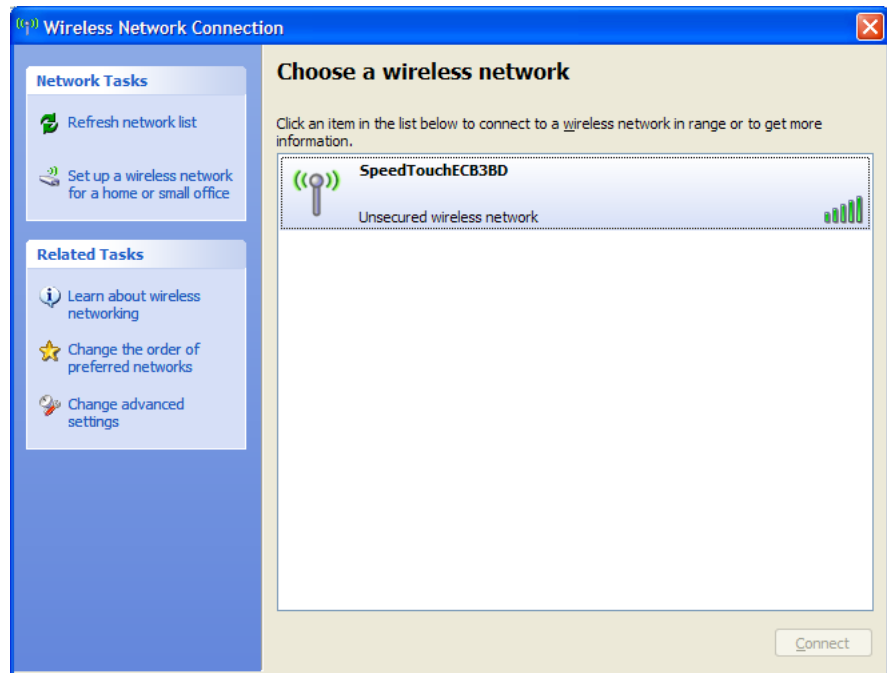
First-time association example

In the example below is shown how the SpeedTouch™ wireless network is presented towards an MS Windows XP Service Pack 2 system:



To associate your wireless client to the SpeedTouch™:

- 1 Click the network icon in the notification area: 
- 2 The **Wireless Network Connection** window appears:



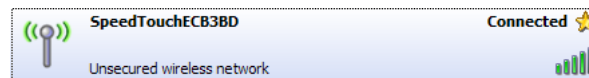
In the **Choose a wireless network** list, select the SpeedTouch™ wireless network and click **Connect**.

- 3 Following window appears:



Click **Connect Anyway**.

- 4 Your computer is now connected to the SpeedTouch™ wireless network.



For other Operating Systems the wireless client will in most cases be configured via dedicated client managers.

Wireless device settings

Once you've connected a device, you are able to personalise its settings. For more information, see " Device settings" on page 19.



YourLaptop

• **Information**

New Name:	<input type="text" value="YourLaptop"/>
Status:	Active
Type:	<input type="text" value="Generic Device"/>
Connected To:	WLAN (Wireless)
Allowed on WLAN:	<input checked="" type="checkbox"/>

• **Addressing**

Physical Address:	00:30:f1:d4:e7:ff
IP Address Assignment:	DHCP
IP Address:	192.168.1.64
Always use the same address:	<input type="checkbox"/>
DHCP Lease Time:	1 day, 0:00:00

• **Connection Sharing**

Game or Service

<input type="text" value="ABC (Another Bittorent Client)"/>	<input type="button" value="Add"/>
---	------------------------------------



To add a wireless device to the Access Control List (ACL), select **Allowed on WLAN**.

2.3.3 Wireless Security

Introduction

Since the SpeedTouch™ wireless environment is a radio environment, precautions must be taken to ensure that your wireless network is safe from malicious intruders. To secure your wireless network, following wireless access point settings can be personalised:

- ▶ Your Network Name (SSID)
- ▶ ACL setting
- ▶ Data encryption

Security settings

To personalise the wireless security settings on your SpeedTouch™:

- 1** Go to the SpeedTouch™ web pages.
- 2** In the menu select **Home Network**.
- 3** Click your WLAN.
- 4** On the top right, click **Configure**.
- 5** On the **Wireless Access Point** page, you can modify the **Security** settings.

• Security

Broadcast Network Name:

Allow New Devices: ▼

Disabled

Use WEP Encryption

Use WPA-PSK Encryption

Network Name (SSID)

On the **Wireless Access Point** page, you can give a new name to your **Network Name (SSID)**.

Under **Security**, you can clear **Broadcast Network Name (SSID)**, to prohibit the Network Name from being broadcasted.

Access Control List (ACL)

The SpeedTouch™ features a managed Access Control List (ACL) .

On the **Wireless Access Point** page, you have following options for the ACL: **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 to the ACL only via the **Search for wireless devices** task.
- ▶ **Not allowed:** Only allowed stations in the ACL have access.

Data encryption To setup wireless connectivity, you can choose different levels of security:

- ▶ **Low** (Security disabled, the default): No security; the data will not be encrypted, no authentication process will be used.
- ▶ **Medium**: Use WEP (Wired-Equivalent Privacy) to encrypt the traffic between the SpeedTouch™ and the clients by sharing a pre-defined 64-bit or a 128-bit Network key for secure communication with legacy 802.11b clients.



The default 64 bits hexadecimal WEP key is printed on the identification label located at the bottom of the SpeedTouch™ and is unique for each device.

- ▶ **High**: Use WPA-PSK (Wi-Fi Protected Access Pre-Shared Key) encryption, the highest form of security available, but make sure that your wireless client and client manager are compatible with it.



The default WPA-Personal passphrase is printed on the identification label located at the bottom of the SpeedTouch™ and is unique for each device.

The WPA-Personal passphrase must consist of 8 to 63 ASCII characters or 8 to 64 HEX digits.



2.3.4 Connecting Additional Wireless Clients

Preconditions

Make sure that:

- ▶ The SpeedTouch™ is powered on and ready for service.
- ▶ The SpeedTouch™ has been configured as DHCP server (default).
- ▶ The wireless client adapters have been installed on all computers you want to connect to the WLAN.

Security issues

Depending on the personalised wireless settings:

- ▶ Make sure to use the same encryption or security level on the client as on your SpeedTouch™. If for instance WPA-PSK is enabled on the SpeedTouch™, you must also configure the wireless client to use WPA-PSK and configure the same WPA-PSK passphrase.
- ▶ In case the Network Name (SSID) is not broadcasted, you must configure the wireless client for the SpeedTouch™ Network Name. Refer to the documentation of your wireless client for more information.
- ▶ Depending on the ACL settings:
 - ▶ In case **New stations are allowed (automatically)**, your device will be able to access the SpeedTouch™ WLAN.
 - ▶ In case **New stations are allowed (via registration)**, you will need to register.
 - ▶ In case **New stations are not allowed**, you will not be able to access the SpeedTouch™.

Registering clients

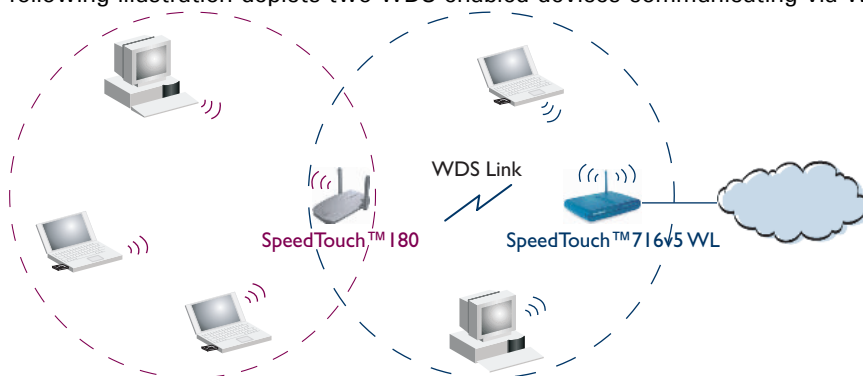
You can add a wireless client to the ACL as follows:

- 1** Go to the SpeedTouch™ web pages.
- 2** In the menu select **Home Network > Devices**.
- 3** Under **Pick a task...**, click **Search for wireless devices**.
- 4** The SpeedTouch™ searches for new wireless stations that use the encryption key of the SpeedTouch™ Access Point.
- 5** The SpeedTouch™ takes you to the Home Network. The new station will be shown next to the name of the SpeedTouch™ WLAN.
- 6** Click the name of the new station.
- 7** Click **Configure**.
- 8** Select **Allowed on WLAN** and click **Apply**.
- 9** Now the device is added to the ACL and will always be allowed to connect to the SpeedTouch™.

2.3.5 Extending the Range of Your Wireless Network

WDS The SpeedTouch™ features Wireless Distribution System (WDS) functionality. This feature allows you to extend the range of your wireless network by introducing one or more WDS-enabled devices into your wireless network.

The Wireless Distribution System (WDS) enables data packets to pass from one wireless access point to another, just as if the access points were ports on a wired Ethernet switch. WDS allows you to extend the range of your SpeedTouch™ by means of one or more wireless repeaters, like for instance a SpeedTouch™180. The following illustration depicts two WDS-enabled devices communicating via WDS:



The SpeedTouch™ allows you to add up to four wireless repeaters.



Repeaters extend the coverage area of your wireless LAN, however bear in mind that throughput is reduced for wireless clients that are connected through a repeater.

Preconditions

Check on following:

- ▶ Your wireless repeater must be WDS enabled.
- ▶ Both your SpeedTouch™ and your wireless repeater must use:
 - ▶ The same WEP key if WEP is enabled.



WPA encryption is not supported when using WDS.



- ▶ The same **fixed** channel.

The SpeedTouch™ and your wireless repeater do not necessarily need to use the same SSID. Using different SSIDs allows you to force your wireless clients to use either the access point of the SpeedTouch™ or the one of your wireless repeater.

Configuring WDS

To configure your WDS on the web pages:

- 1 Go to the SpeedTouch™ web pages.
- 2 In the menu select **Home Network**.
- 3 Click your WLAN.
- 4 On the top right, click **Configure**.



If not already done, set a **fixed** channel and check whether the security settings (WEP encryption or no encryption) on your SpeedTouch™ are the same as on the repeater.

- 5 On the **Wireless Access Point** page, in the **Pick a task...** list, click **Configure WDS**.



SpeedTouch123456

• **Configuration**

WDS Enabled:

• **Accessible Access Points**

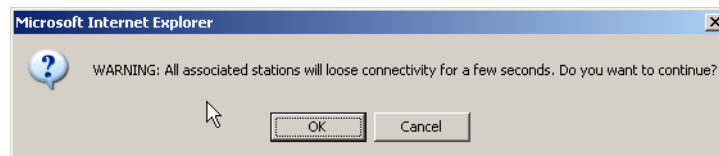
WDS	SSID	BSSID	Channel	Noise
There are no networks detected.				

Apply Cancel

Pick a task...

[Scan for wireless accesspoints](#)

- 6 Select **WDS Enabled**.
- 7 In the **Pick a task...** list, click **Scan for wireless access points**.
- 8 A warning will be displayed:.



Click **OK**.

- 9 The SpeedTouch™ will scan for access points on the same radio channel.
- 10 Select your repeater in the **List of Accessible Access Points** and click **Apply**.



SpeedTouch123456

• **Configuration**

WDS Enabled:

• **Accessible Access Points**


WDS	SSID	BSSID	Channel	Noise
<input type="checkbox"/>	YourNetwork	00:30:F1:DB:B8:3D	3	-89

Apply Cancel

3 Internet Connectivity Dial-In Clients

Introduction For setting up initial Internet connectivity, using the Home Install Wizard on the Setup CD or the embedded Easy Setup, refer to the provided Installation and Setup Guide.

Access methods Depending on the configuration of the SpeedTouch™ you may have:

- ▶ **Direct access:**
As soon as the initial configuration has been done, immediate and uninterrupted WAN access is provided.
 In case of direct access, the remote organisation might ask for a user name and password on an Internet welcome page.
- ▶ **Dial-in access:**
Access must be explicitly established, that is by "dialling" into a Broadband Remote Access Server (BRAS).
Depending on the SpeedTouch™ configuration, dial-in access is provided via the SpeedTouch™'s Routed PPPoA or Routed PPPoE packet services with embedded PPP client.

Connection protocols The applied connection protocol model depends on the service profile you selected to configure the SpeedTouch™ and should correspond with the Service Provider's requirements. If your ISP provides PPPoE for instance, you should configure PPPoE. More information on connection protocols can be found in the Internet Connection Configuration Guide.

Dial-in clients There are different ways of dialling in, depending on the operating system on your PC and your preferences.

Dial-in method:	can be used on following operating system:	For more information, see:
Embedded PPP dial-in client:		
Dial-in client on embedded pages	MS Windows, Mac, unix, other	"3.1 SpeedTouch™ Web Pages"
MS Windows XP IGD Control Agent for UPnP	MS Windows XP	"3.2 IGD Control Agent" on page 39
Host PPP dial-in client for a SpeedTouch™ configured in pure bridging mode:		
MS Windows XP Broadband connection	MS Windows XP	"3.3 MS Windows XP BroadBand Connection"
Mac OS X PPPoE dial-in client	Mac OS X	"3.4 Mac OS X PPPoE Dial-in Client"

Embedded PPP dial-in clients

The SpeedTouch™'s embedded PPP dial-in client allows you to establish an Internet connection for computers residing on your local network, using only one computer of the network to control the client.

If this computer runs:

- ▶ Any Operating System
you can always use the SpeedTouch™ web pages.
See "3.1 SpeedTouch™ Web Pages" on page 37 to proceed.
- ▶ MS Windows XP
you can use MS Windows XP's Internet Gateway Device Control Client.
See "3.2 IGD Control Agent" on page 39 to proceed.

Broadband host PPPoE dial-in clients

You can also connect to the Internet using a Broadband PPPoE dial-in application. The PPP over Ethernet connection scenario provides PPP-like dial-in behaviour over the virtual Ethernet segment.

To be able to use a broadband dial-in application on your computer for connecting to the Internet, the SpeedTouch™ needs to be configured for Bridged Ethernet or Routed PPPoE (with PPPoE relay) via the SpeedTouch™ Home Install Wizard on the Setup CD or the embedded Easy Setup.

If this computer runs:

- ▶ MS Windows XP
you can use the MS Windows XP broadband dial-in client. See "3.3 MS Windows XP BroadBand Connection" on page 41 for more information.
- ▶ Mac OS X
you can use a Mac OS X broadband dial-in client. See "3.4 Mac OS X PPPoE Dial-in Client" on page 45 for more information.

- or -

- ▶ A broadband PPPoE dial-in client provided by your Service Provider to connect to the Internet



Upon availability of OS-specific PPPoE dial-in client applications, the latter method is Operating System independent.

For PPPoE session connectivity from a Mac OS 8.6/9.x, an MS Windows 95/98(SE)/ME/2000 or a Linux system, a host PPPoE dial-in application is mandatory.

3.1 SpeedTouch™ Web Pages

Introduction

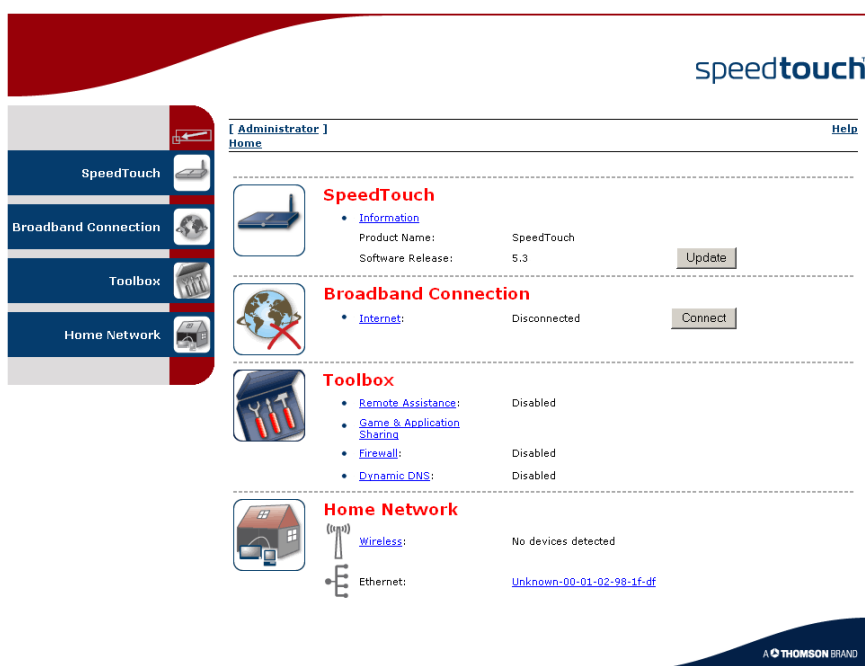
As the SpeedTouch™ web pages are controllable from any Operating System with an installed web browser, the method to establish PPP sessions described below you can use on any computer system.

For more information on Internet connection setup, see the provided Installation and Setup Guide.

Starting an Internet session

Proceed as follows:

- 1 Open a web browser on your computer and browse to the SpeedTouch™ web pages (see “1.3.1 Access via the Web Interface” on page 11 for more information):



By default the SpeedTouch™ shows you the **Home** page.

- 2 Click **Connect** at the appropriate broadband connection.
You might be requested to enter your user name and password.
As a result SpeedTouch™'s embedded PPP dial-in client establishes the Internet connection.
- 3 Now you can surf the Internet.

Monitoring your Internet connection

You are able to overview and monitor your Internet connectivity as long as the session is running via:

- ▶ The SpeedTouch™ System Information page: see “5.3.1 Information” on page 66.
- ▶ The SpeedTouch™ Diagnostics task: see “5.4.1 Connectivity Check” on page 75.

Terminating an Internet session

To close an active PPP connection:

- 1** Go to the SpeedTouch™ Home page.
- 2** Click **Disconnect** at the appropriate broadband connection.

As a result the SpeedTouch™'s embedded PPP dial-in client will close the Internet connection. The Internet Link status will change to **Disconnected** and your PC is off-line.

3.2 IGD Control Agent

Introduction

MS Windows XP users can easily establish PPP sessions, thanks to MS Windows XP's Internet Gateway Device (IGD) Discovery and Control Client that allows you to control the SpeedTouch™ directly from your PC.



The IGD control client only allows to connect or to disconnect a fully configured connection.

Preconditions

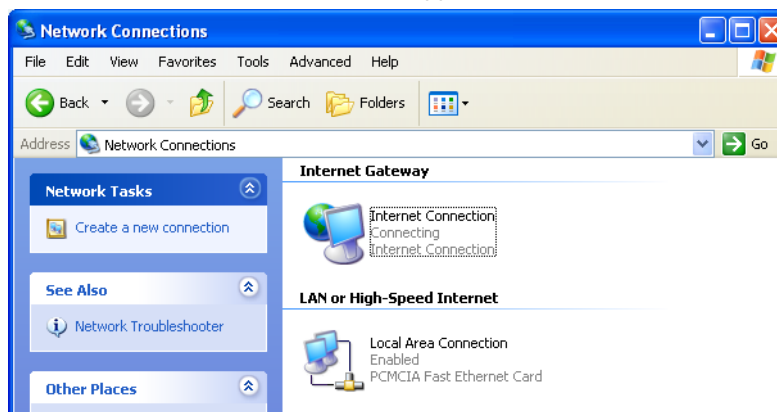
Following conditions must be met:

- ▶ Following subcomponents of Windows XP's Networking Services must be added to your Windows XP system:
 - ▶ UPnP™ (see "SpeedTouch™ not detected by UPnP™ or IGD Control Client" on page 126).
 - ▶ IGD Discovery and Control Client (see "Adding IGD Discovery and Control" on page 127).
- ▶ UPnP™ must be enabled on your SpeedTouch™. To enable UPnP, see "5.5.4 Game & Application Sharing" on page 85.

Starting an Internet session

Proceed as follows:

- 1 In the Windows task bar, click **Start**.
- 2 Select **(Settings >) Control Panel**.
- 3 The **Control Panel** window appears. Go to **(Network and Internet Connections >) Network Connections**.
- 4 The **Network Connections** window appears:

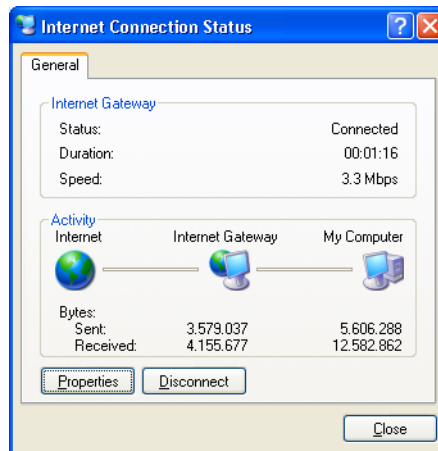


You will find an **Internet Gateway** icon, representing the SpeedTouch™ IGD Internet connection ability.

- 5 Double-click the **Internet Connection** icon.
As a result the SpeedTouch™'s embedded PPP dial-in client establishes the Internet connection. The **Internet Gateway** icon displays **connected** and your PC is online.
- 6 You can open a web browser and surf the Internet.

Internet connection status

As long as the SpeedTouch™'s embedded PPP dial-in client is connected, you are able to overview the connection status and some counters by double-clicking the **Internet Connection** icon in your PC's **Network Connections** window:



Terminating an Internet session

Proceed as follows:

- 1** In the Windows task bar, click **Start**.
- 2** Select **(Settings >) Control Panel > (Network and Internet Connections >) Network Connections**.
- 3** In the **Network Connections** window, right-click the **Internet Connection** icon and select **Disconnect to close the session**.



You can also double-click the icon. Then the **Internet Connection Status** window will appear on which a **Disconnect** button is available to close the session.

- 4** As a result the SpeedTouch™'s embedded PPP dial-in client will close the Internet connection. The **Internet Gateway** icon displays **Disconnected** and your computers are off-line.

3.3 MS Windows XP BroadBand Connection

Prerequisites To be able to use the MS Windows XP BroadBand Connection, your SpeedTouch™ must be configured for either:

- ▶ Bridging, or
- ▶ PPPoE Relay

Configuring a broadband connection

Proceed as follows:

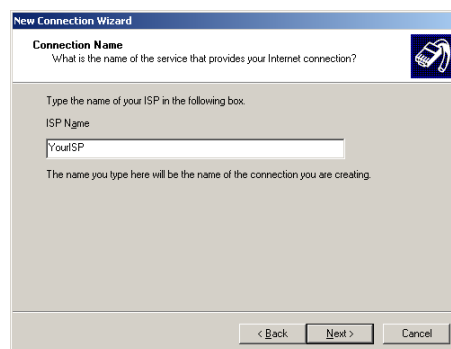
- 1** On the **Start** menu, click **(Settings >) Control Panel**.
- 2** The **Control Panel** window appears. Go to **(Network and Internet Connections >) Network Connections**.
- 3** In the **Network Tasks** menu, click **Create a new connection**.

The **New Connection Wizard** appears:

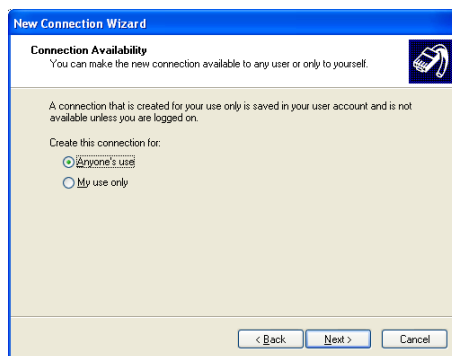


Click **Next**.

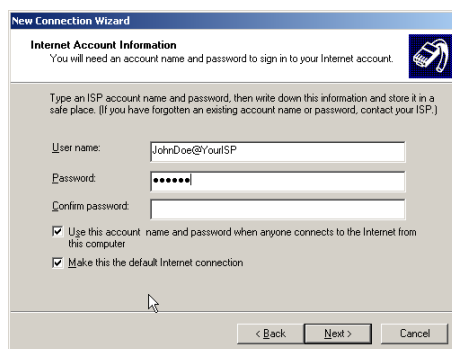
- 4** Select **Connect to the Internet** and click **Next**.
- 5** Select **Set up my connection manually** and click **Next**.
- 6** Select **Connect using a broadband connection that requires a user name and password** and click **Next**.
- 7** Give a name to the connection you are creating, for example YourISP:



- 8 Select whether the connection will be available to any user or only to yourself:



- 9 Fill in the Internet account information. This information should be provided by your service provider:



- 10 At the end of the configuration the following window appears:



Click **Finish** to complete the configuration.

The Connect **YourISP** window (see below) appears.

Starting a broadband
Internet session

Proceed as follows:

- 1 On the **Start** menu, point **Connect To** and click the name of the connection you've created, for example YourISP.

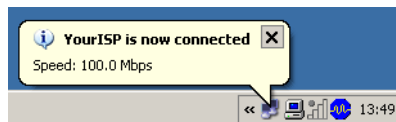


If you are using the **Classic Start** menu click **Start > Settings > Network (and Dial-up) connections > YourISP**.

- 2 The **Connect YourISP** window appears:



- 3 If requested, enter user name and password for your user account at the Service Provider.
- 4 Click **Connect**.
- 5 As soon as the connection is established, the **Connection** message box and **Dialup** window are minimised into an icon in the notification area:



- 6 You can open your web browser and surf the Internet.

Terminating a
broadband Internet
session

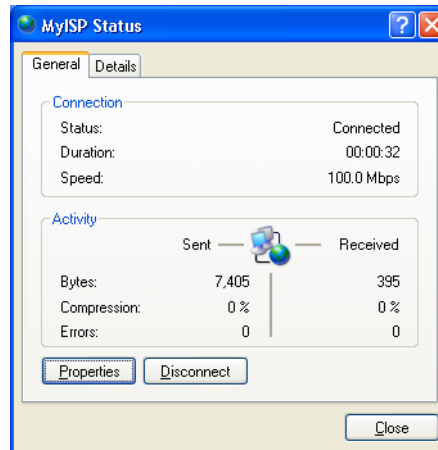
Proceed as follows:

- 1 On the **Start** menu, point **Connect To** and click the name of the connection you've created, for example YourISP.



If you are using the **Classic Start** menu go to **Start > Settings > Network (and Dial-up) connections > YourISP**.

- 2 The **YourISP Status** window appears:



- 3 Click **Disconnect**.
- 4 The connection is released. As a result no Internet connectivity exists any more.

3.4 Mac OS X PPPoE Dial-in Client

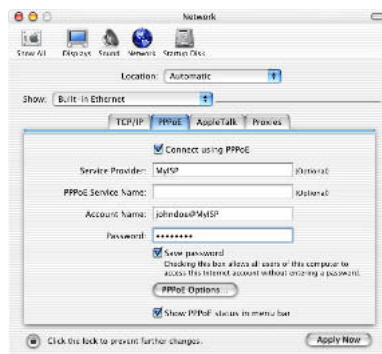
Prerequisites To be able to use the MS Windows XP BroadBand Connection, your SpeedTouch™ must be configured for either:


- ▶ Bridging, or
- ▶ PPPoE Relay

Configuring a broadband connection

Proceed as follows:

- 1** On the **Apple** menu, click **System Preferences**.
- 2** In the **System Preferences** window, click the **Network** icon.
- 3** The **Network** window appears. Make sure **Built-in Ethernet** is selected in the **Show** list and click the **PPPoE** tab:



- 4** Enter the **Account Name** and **Password** provided by your **Service Provider**.
 Select **Save password** in case you want the computer to remember the password for this account name.
 Optionally you can enter a name for this connection in the **Service Provider** field. All other fields may stay empty.
- 5** Click **Apply Now**.

Starting a broadband Internet session

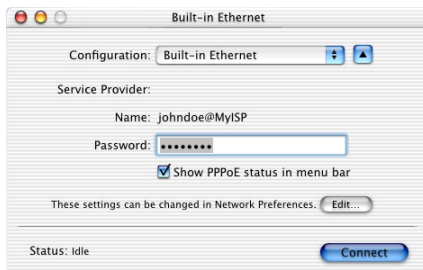
Proceed as follows:

- 1 Click the **Internet Connect** dockling.



If the **Internet Connect** dockling is not available, go to the **Applications** folder on the system startup disk and double-click **Internet Connect**.

- 2 The following window appears:



Make sure **Built-in Ethernet** is selected in the **Configuration** list.

- 3 If needed, enter user name and password for your user account at the Service Provider.
- 4 Click **Connect**.
- 5 As soon as the connection is established you can open your web browser and surf the Internet.

Terminating a broadband Internet session

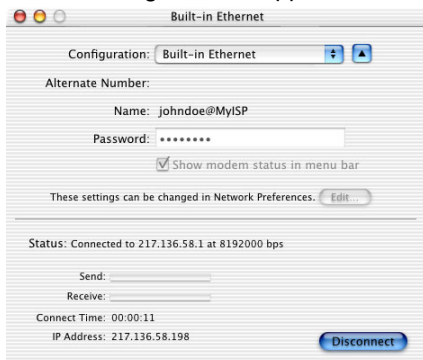
Proceed as follows:

- 1 Click the **Internet Connect** dockling.



If the **Internet Connect** dockling is not available, go to the **Applications** folder on the system startup disk and double-click **Internet Connect**.

- 2 The following window appears:



Make sure **Built-in Ethernet** is selected in the **Configuration** list

- 3 Click **Disconnect**.
- 4 The connection is released. As a result no Internet connectivity exists any more.

4 Voice over IP

What is Voice over IP

Internet telephony or Voice over IP (VoIP) can be defined as the transport of telephone calls over your Internet connection.

The SpeedTouch™ VoIP solution

With your SpeedTouch™ you can make Internet and regular telephone calls using traditional analogue phones, connected to your SpeedTouch™.



As VoIP signalling protocol your SpeedTouch™ uses the Session Initiation Protocol (SIP), defined in RFC 3261.

Multi-line service

Moreover, the voice service on your SpeedTouch™ provides additional lines without the need for additional copper pairs. The additional lines allow you to make and receive several internal and external Internet calls simultaneously.

Fax

It is also possible to connect a fax machine to your SpeedTouch™, enabling to send and receive faxes over your Internet connection or over the traditional phone line.

What you need from your ISP

Following SIP configuration parameters are provided by your ISP:

- ▶ Uniform Resource Identifier (URI)
- ▶ User name
- ▶ Password
- ▶ IP address and port number (usually 5060) of the provider's registrar
- ▶ IP address and port number (usually 5060) of the provider's SIP proxy server

Uniform Resource Identifier

The SIP Uniform Resource Identifier (URI) is a unique name used to identify and locate your telephone. The SIP URI can be in a numerical format or in the format user@host.

Examples:

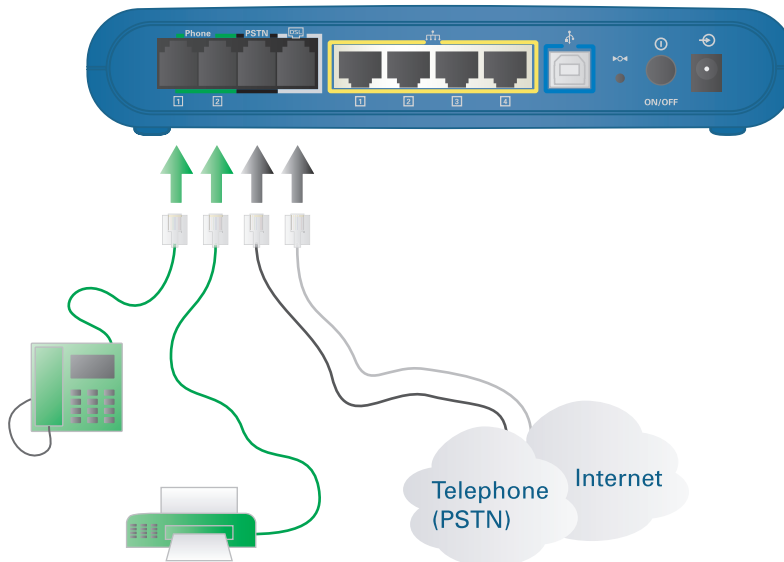
- ▶ 3443614
- ▶ username@hostname.org
- ▶ username@192.168.10.1
- ▶ 3443614@hostname.org



If your provider gives you an URI in the format containing an '@', your service provider will tell you whether the '@' can be formed on your phone by dialing a '1', '**', or '#'.

4.1 Telephony Setup

Telephony installation The SpeedTouch™ is equipped to connect one or two analogue phones or faxes.



Use a phone cable with RJ-11 connectors to:

- 1 Wire the SpeedTouch™ Phone port(s) to your phone(s) or fax.
- 2 Wire the SpeedTouch™ PSTN port to your telephone wall outlet or distributed filter depending on your Service Provider's specific needs.



This is only required if you still want to make phone calls using the regular telephone line.



Be aware that if the PSTN port is not wired to your telephone wall outlet or distributed filter, emergency calls will not always be possible!

Telephony configuration The telephony service might already have been configured on your SpeedTouch™ during initial setup.

If the service hasn't been configured yet, follow the instructions hereunder:


- ▶ Enable the telephony service
- ▶ Assign phone numbers
- ▶ Configure the telephony service



Your Internet connection must be up, to be able to configure Internet telephony.

Enable the telephony service

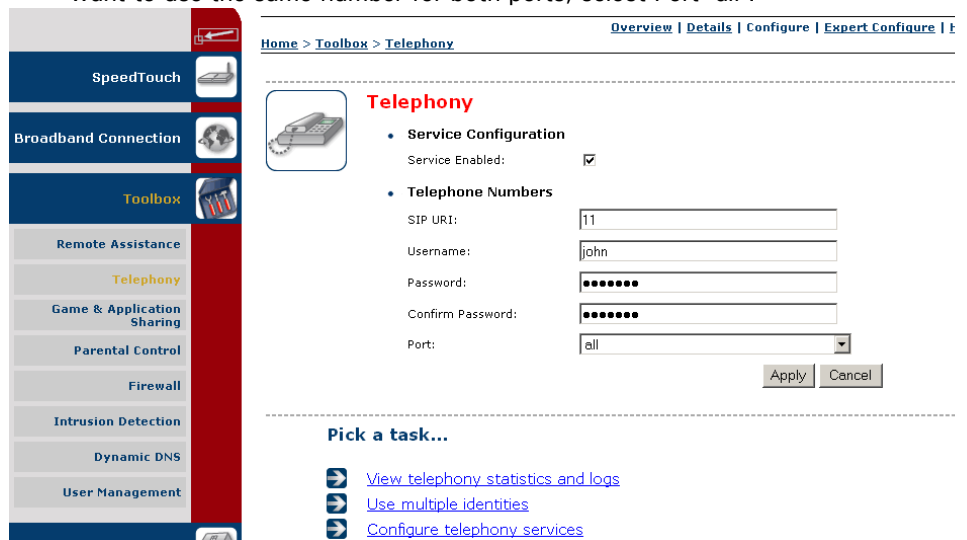
Proceed as follows:

- 1 Go to the SpeedTouch™ web pages.
 For more information, see "1.3.1 Access via the Web Interface" on page 11.
- 2 In the menu select **Toolbox > Telephony**.
- 3 On the top right, click **Configure**.
- 4 Select **Service Enabled**.
- 5 Click **Apply**.

Assign phone numbers

To configure your Internet SIP telephone numbers:

- 1 Go to the SpeedTouch™ web pages.
- 2 In the menu select **Toolbox > Telephony**.
- 3 On the top right, click **Configure**.
- 4 Assign phone numbers to phone port 1 (FXS1) and phone port 2 (FXS2). If you want to use the same number for both ports, select Port 'all'.




The phone numbers are provided by your provider.

- 5 Click **Apply**.

Configure the telephony service

To configure the SIP telephony service:

- 1 Go to the SpeedTouch™ web pages.
- 2 In the menu select **Toolbox > Telephony**.
- 3 On the top right, click **Expert configure**.
- 4 Enter the IP address and the port number of the registrar and the proxy, as provided by your ISP:

[Home > Toolbox > Telephony](#) [Overview](#) | [Details](#) | [Configure](#) | [Expert Configure](#) | [Help](#)



Telephony

• Service Configuration

Registrar:	<input type="text" value="10.50.2.60"/>
Registrar Port:	<input type="text" value="5060"/>
Proxy:	<input type="text" value="10.50.2.60"/>
Proxy Port:	<input type="text" value="5060"/>
Expire Time:	<input type="text" value="3600"/>



Some of the SIP components are explained below:

- ▶ **Proxy:** The SIP proxy server at your provider's forwards signalling messages between the caller and callee.
- ▶ **Registrar:** The SIP registrar resembles a DNS, as it matches your URI with your IP address. Your SpeedTouch™ will periodically - depending on the expire time - register its correct IP address with the SIP registrar that may be collocated with the proxy server.
- ▶ **Expire Time:** This is the frequency with which your IP address is updated on the registrar.

- 5 Click **Apply**.

Verifying telephone connectivity

To verify the voice connection:

- 1 Make sure the SpeedTouch™ is powered on and ready for service.
- 2 Check whether your phone is properly attached to the SpeedTouch™.
- 3 Make sure the Internet telephony service is enabled and configured.
- 4 The **VoIP Ready** LED must be on.
- 5 Pick up your phone, wait for the dial tone, and dial the number. You can dial a '#' after the phone number to indicate the end of the number, as a result of which the phone number will be called instantly.



The phone(s) attached to the SpeedTouch™ are reachable for incoming VoIP calls, as long as your SpeedTouch™ is powered on and the VoIP Ready LED is on.

For calls over the regular phone line, your phones are line powered by the telephone company and thus are always reachable, even if the modem is powered off.

Multiple identities

You can assign up to three Internet telephone numbers or URIs to one or both phone ports or assign a common number to both phone ports.




The phone numbers are provided by your provider.

Proceed as follows:

- 1 Go to the SpeedTouch™ web pages.
- 2 In the menu select **Toolbox > Telephony**.
- 3 On the top right, click **Configure**.
- 4 Under **Pick a task...** click **Use multiple identities**.

[Overview](#) | [Details](#) | [Configure](#) | [Expert Configure](#) | [Help](#)

[Home](#) > [Toolbox](#) > [Telephony](#)



Telephony

- **Service Configuration**
Service Enabled: Apply Cancel
- **Telephone Numbers**

User Name	URI	Port		
john	11	FXS1	Edit	Delete
john	10	FXS1	Edit	Delete

- 5 Click **Add**.
- 6 Enter another URI, your user name and password.
- 7 Choose the phone port for which you want to use this telephone number.
- 8 Click **Apply**.

Telephony statistics

The telephony statistics page gives you:

- ▶ **Call Statistics:** an overview of the successful, unsuccessful, missed or total number of incoming or outgoing calls per phone.
- ▶ **Call Log:** with detailed statistics per call.

To retrieve the statistics, proceed as follows:

- 1** Go to the SpeedTouch™ home page (<http://speedtouch.lan> or 192.168.1.254).
- 2** In the menu select **Toolbox > Telephony**.
- 3** Under **Pick a task...** click **View telephony statistics and logs**.



Your last ten calls (outgoing, incoming, missed or unsuccessful) are also shown in **Toolbox > Telephony**.

4.2 Supplementary Telephony Services

Supported telephony services

Depending on your provider's configuration, following services will be available:

Service	Description
Call Hold	Allows you to put a call on hold, to dial another number, and to switch between the active and held call whenever you want, or to terminate the active or held call.
Call Waiting	Allows you to answer or reject an incoming call while you are in a conversation.
Call Transfer	Allows you to transfer a call to another person.
Conference Call (3 Party)	Allows you to make a conference call.
Calling Line Identification Presentation (CLIP)	Allows you to see the phone number of the person who is calling you on your phone display. In case you are unable to take the call, the phone number remains stored on the SpeedTouch™ web pages, guaranteeing you do not miss important calls. CLIP will only work if CLIR is deactivated on the calling phone.
Calling Line Identification Restriction (CLIR)	Restricts the transmission of your phone number when you make a call, in order to protect your confidentiality. Your phone number will not appear on the screen of your partner. When this service is activated, your phone number will never be transmitted. To activate CLIR on call basis, see "Using the services on the phone" on page 55.
Forced FXO	Allows you to force the SpeedTouch™ to make the phone call over the PSTN, that is the regular telephone line.

For more information on how to use some of these services, see "Using the services on the phone" on page 55.

Activating/Deactivating the services

Before to be able to use one of the provisioned telephony services, the service has to be activated. This might have been done during the initial setup of your SpeedTouch™.

Otherwise, you can activate or deactivate a particular telephony service:

- ▶ on the SpeedTouch™ web pages: see “ (De)activating services on the web pages”.
- ▶ or simply by dialling the regarding activation code on your telephone: see “ (De)activating services on your telephone”.

(De)activating services on the web pages

To activate a service on the web pages:

- 1** Go to the SpeedTouch™ web pages.
- 2** In the menu select **Toolbox > Telephony**.
- 3** On the top right, click **Configure**.
- 4** Under **Pick a task...** list click **Configure telephony services**.
- 5** A list of telephony services provisioned by your provider is shown:

• **Telephony Services**

Service	Code	Activated
Call Hold	22	<input checked="" type="checkbox"/>
Call Waiting	43	<input checked="" type="checkbox"/>
Call Transfer	96	<input checked="" type="checkbox"/>
Conference Call (3 Party);	95	<input checked="" type="checkbox"/>
Calling Line Identification Presentation	30	<input checked="" type="checkbox"/>
Calling Line Identification Restriction	31	<input checked="" type="checkbox"/>
Forced FXO	01	<input checked="" type="checkbox"/>

- 6** Select those services you want to activate.



To deactivate the service, clear the corresponding check box.

- 7** Click **Apply**.

(De)activating services on your telephone

To activate a service using the attached telephone:

- 1** Hook off the phone.
- 2** Dial an ‘*’ followed by the activation code. You can dial a ‘#’ after the activation code to indicate the end of the code, as a result of which the service will be activated instantly.



The activation code depends on your provider’s configuration. The activation codes can be found on the **Telephony Services** web page.

To deactivate the service, dial a ‘#’ followed by the activation code.

- 3** Wait for the confirmation tone, and then hook on the phone.



The Forced FXO service cannot be activated on your phone.

Using the services on the phone

In following table the procedures are shown of how to use a telephony service. The commands are depending on your provider's configuration, so might be different from the ones described here. For more information, see your provider's documentation.



Make sure your phone is off hook while dialing the commands.



If your phone hasn't got an **R** or another hook flash button, put down the hook for 1/2 second and then dial the command number.

To use the service:	Proceed as follows:
Call Hold	<p>To put person A on hold:</p> <ol style="list-style-type: none"> 1 Dial R, 2 to put the call with person A on hold. 2 Dial R, 1 to retrieve the call on hold. <p>To put person A on hold and set up a call to person B:</p> <ol style="list-style-type: none"> 1 Dial R, 2 to put the call with person A on hold. 2 Wait for the dial tone, and dial the number of person B. 3 Dial R, 2 to switch back to person A. Person B is put on hold.
Call Waiting	<p>You are in a phone conversation with person A while person B is calling you. The phone produces a waiting tone and - if CLIP is enabled and CLIR disabled - displays the number of person B on the display.</p> <ul style="list-style-type: none"> ▶ To reject the incoming call, dial R, 0. ▶ To terminate the first call and to switch to the waiting call, dial R, 1. ▶ If you do not want to terminate the first call, dial R, 2 to keep the first caller on hold while answering the second call. <ul style="list-style-type: none"> ▶ To return to person A while putting person B on hold, dial R, 2. ▶ To return to person A while terminating the call with person B, dial R, 1.
Call Transfer	<p>You receive a phone call from person A and you want to transfer him to person B.</p> <ol style="list-style-type: none"> 1 Dial R, 2. 2 Wait for the dial tone. 3 Dial the number of person B. 4 Person B picks up the phone. 5 Dial R, 4 to transfer the call. 6 Hang up the phone.

To use the service:	Proceed as follows:
Conference Call (3 Party)	<p>To set up a conference call:</p> <ol style="list-style-type: none"> 1 Call person A. 2 Dial R, 2. Person A is put on hold. 3 Wait for the dial tone. 4 Dial the number of person B. 5 Person B picks up the phone. 6 Dial R, 3. <p>Once the conference call has been established, you can:</p> <ol style="list-style-type: none"> 1 Dial R, 2 to put the 2 calls on hold. 2 Dial R, 3 to retrieve the 2 held calls.
CLIR on call basis	It is possible to hide your phone number for one particular call. Dial *31* directly followed by the phone number of person A.
Forced FXO	<p>To make a phone call over the regular telephone line:</p> <ol style="list-style-type: none"> 1 Dial *01*. 2 Wait for the dial tone, and then dial the phone number of person A.

Command overview

In the table below all standard service codes of the telephony services are listed. On your SpeedTouch™ these might be different, depending on your provider.

Phone command:	Is used to:
R 0	<ul style="list-style-type: none"> ▶ drop a held call ▶ reject an incoming call
R 1	<ul style="list-style-type: none"> ▶ terminate an active call and switch to the waiting or held call
R 2	<ul style="list-style-type: none"> ▶ put a call on hold ▶ switch between active and waiting or held call ▶ put a conference call on hold
R 3	<ul style="list-style-type: none"> ▶ establish a 3-way conference call
R 4	<ul style="list-style-type: none"> ▶ transfer a call
31	<ul style="list-style-type: none"> ▶ make an anonymous call (use CLIR) on call basis
01	<ul style="list-style-type: none"> ▶ use the regular telephone line

5 SpeedTouch™ Web Interface

Introduction 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™. See “1.3.1 Access via the Web Interface” on page 11 to access the pages.

**SpeedTouch™
documentation**

Consult:

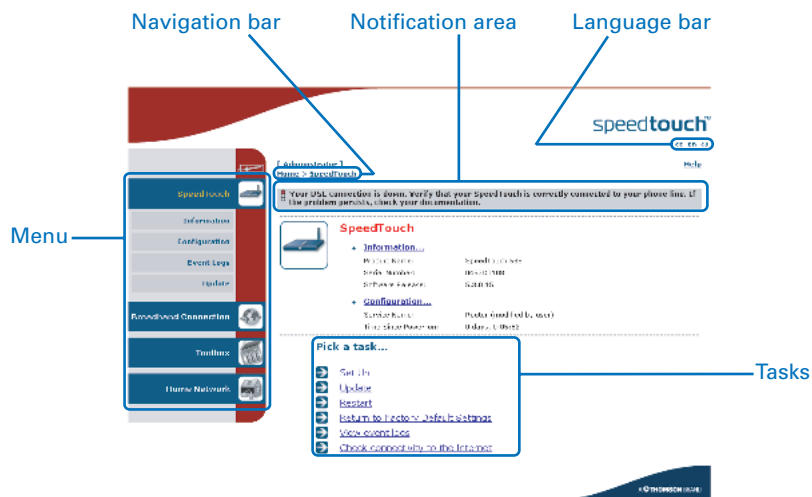
- ▶ The SpeedTouch™ Installation and Setup Guide for more information on setup and installation procedures.

5.1 Navigation

Navigation components

The SpeedTouch™ web interface consists of following components:

- ▶ Menu
- ▶ Language Bar
- ▶ Navigation Bar
- ▶ Notification Area
- ▶ Tasks



5.1.1 Menu

Menu items The menu is located on the left side of the page and consists of the following menu items:

- ▶ **SpeedTouch:**
Provides basic information on the SpeedTouch™.
- ▶ **Broadband Connection:**
Allows you to view/configure your broadband connections.
- ▶ **Toolbox:**
Allows you to assign games or applications to a device and secure your Internet connection.
- ▶ **Home Network:**
Allows you to manage your local network.

Collapsing and expanding the menu

You are able to collapse/expand the menu by clicking the arrow located on the top of the menu.



5.1.2 Language Bar

Language bar

The language bar is located under the SpeedTouch™ logo and allows you to change the language of the SpeedTouch™ web interface.



The language bar will only be shown if more than one language is available.

5.1.3 Navigation Bar

Navigation bar The navigation bar is located on the top of the page and allows you to:

- ▶ View the current user name.
Click this name to change your password or switch to another user.
- ▶ View the current position on the SpeedTouch™ web interface.
- ▶ Get context related **Help** information.

Display level Depending on the page you are viewing following buttons will be available:

- ▶ **Overview** to view a summary of the current status or configuration.
- ▶ **Details** to view more detailed information on the current status or configuration.
- ▶ **Configure** to change the current settings.

5.1.4 Notification Area

Notification area

The notification area is located under the [Navigation Bar](#) and is used to display:

- ▶ Error messages indicated by a red traffic light.
- ▶ Warnings indicated by an orange traffic light.
- ▶ Information indicated by a green traffic light.



If none of these events occur, the notification area will not be shown.

5.1.5 Tasks

Tasks To allow a swift configuration of your SpeedTouch™, some pages may offer you a number of related tasks. These tasks will guide you to the page where you can perform the selected task.

5.2 Home

SpeedTouch™ home page

The SpeedTouch™ home page gives you a short overview of all the configurable aspects of the SpeedTouch™:

- ▶ SpeedTouch
- ▶ Broadband Connection
- ▶ Toolbox
- ▶ Home Network

5.3 SpeedTouch

The SpeedTouch menu

The **SpeedTouch** menu consists of following items:

- ▶ Information
- ▶ Configuration
- ▶ Event Logs
- ▶ Update

The SpeedTouch page

The **SpeedTouch** page gives you some basic information on the SpeedTouch™:

- ▶ Product Information
- ▶ Configuration

The screenshot shows the SpeedTouch web interface. On the left is a vertical sidebar menu with the following items: SpeedTouch (highlighted), Information, Configuration, Event Logs, Update, Broadband Connection, Toolbox, and Home Network. The main content area has a red header with the 'speedtouch™' logo. Below the header, there is a navigation bar with '[Administrator]', 'Home > SpeedTouch', and a 'Help' link. The main content area is titled 'SpeedTouch' and features a small router icon. It lists two main sections: 'Information...' and 'Configuration...'. Under 'Information...', the following details are shown: Product Name: SpeedTouch 585, Serial Number: 0452DT108, and Software Release: 5.3.0.15. Under 'Configuration...', the details are: Service Name: Routed PPPoE on 0/35 and 6/35 (modified by user) and Time Since Power-on: 0 days, 0:21:31. Below this information is a section titled 'Pick a task...' with a list of actions: Set Up, Update, Restart, Return to Factory Default Settings, View event logs, and Check connectivity to the internet. The bottom right corner of the page features the 'A THOMSON BRAND' logo.

5.3.1 Information

Information

The **Information** page summarizes important information on your SpeedTouch™. You may need this information when you contact your helpdesk.



System Information

This page summarizes important information on your SpeedTouch. You may need this information when you contact your helpdesk.

Product Name:	SpeedTouch 585
Serial Number:	0452DT108
Software Release:	5.3.0.15
Software Variant:	AA
Boot Loader Version:	1.0.16
Product Code:	35723430
Board Name:	BANT-K

5.3.2 SpeedTouch™ Easy Setup

Easy Setup Wizard

This wizard helps you configure your SpeedTouch™ Internet connection.

To configure the SpeedTouch™ using the SpeedTouch™ Easy Setup wizard:

- 1** On the left menu, click **SpeedTouch**.
- 2** In the **Pick a task...** list, click **Set up**.
- 3** The **Easy Setup** wizard will now guide you through the configuration of your SpeedTouch™.



5.3.3 Restart

Accessing the Restart page

Proceed as follows:

- 1 On the left menu, click **SpeedTouch**.
- 2 In the **Pick a task...** list, click **Restart**.



Warning: System Restart

You are about to restart your SpeedTouch. All active connections will be restarted.

Do you want to proceed?

Yes, restart my SpeedTouch

No

Restarting your SpeedTouch™

Proceed as follows:

- 1 Click **Yes, restart my SpeedTouch**.
- 2 The SpeedTouch™ restarts.
- 3 The SpeedTouch™ returns to the [Home](#) page.

5.3.4 Configuration

Overview The **Overview** page displays the current configuration of your SpeedTouch™.

Details The **Details** page displays more detailed information on the current configuration of your SpeedTouch™.

Configure The **Configure** page allows you to change the current configuration.



System Configuration

This page lets you configure your SpeedTouch.

- Service Configuration**

You cannot directly edit the service settings of your SpeedTouch. In order to modify those settings, you must use the [Configuration Wizard](#) and follow the instructions appearing on the screen.

Service Name: Router

- Time Configuration**

Auto-configuration:

Date (dd-mm-yyyy): - -

Time (hh:mm:ss): : :

Timezone: (UTC+01:00) Amsterdam, Bern, Rome, Stc

Summer Time:

- System Configuration**

Web Browsing Interception:

Apply Cancel

If you want to:

- ▶ Reconfigure your SpeedTouch™:
Click **Configuration Wizard** under **Service Configuration**. For more information, see "5.3.2 SpeedTouch™ Easy Setup" on page 67.
- ▶ Configure the time settings of your SpeedTouch™:
 - ▶ Select **Auto-configuration** if you want the SpeedTouch™ to use a time server to synchronise its clock to a dedicated time server.
 - ▶ Clear **Auto-configuration** to manually configure the SpeedTouch™ time settings.
- ▶ Disable/enable web browsing interception or set it to automatic.



If you disable web browsing interception or set it to automatic you will not be able to use [Parental Control](#).

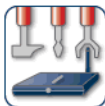
Click **Apply** to save your settings.

5.3.5 Backup & Restore

Introduction

This page allows you to:

- ▶ Save your current configuration.
- ▶ Restore a previously saved configuration.



Backup & Restore

This page enables you to save and restore the configuration of your SpeedTouch. Follow instructions below...

- **Backup current configuration**

In order to store the current configuration of your SpeedTouch, click on the 'Backup Configuration Now...' button. You will be prompted by your web browser to store the configuration file locally on your hard disk. Choose a location and store the file on your computer.

Backup Configuration Now...

- **Restore saved configuration**

You can restore a configuration file you have previously stored on your computer.

Click on 'Browse', choose the configuration file you want to restore on your SpeedTouch and click on 'Restore Configuration Now...' to restore the configuration.

Configuration File:

Restore Configuration Now...

Accessing the Backup & Restore page

Proceed as follows:

- 1** On the **SpeedTouch** menu, click **Configuration**.
- 2** Click **Configure**.
- 3** In the **Pick a task...** list, click **Save or Restore Configuration**.

Saving your current configuration

Proceed as follows:

- 1** Click **Backup Configuration Now**.
- 2** Click **Save**.
- 3** Choose a location to save your backup file and click **Save**.

Restoring a previously saved configuration

Proceed as follows:

- 1** Click **Browse**.
- 2** Select the configuration file you want to restore and click **Open**.
- 3** Click **Restore Configuration Now...**
- 4** The SpeedTouch™ loads your configuration and restarts.
- 5** At the end of the procedure, the SpeedTouch™ returns to the [Home](#) page.

5.3.6 Reset to Factory Defaults

Introduction

This page allows you to reset the SpeedTouch™ to return to the initial configuration of your SpeedTouch™. All your changes will be deleted.



Warning: Reset to Factory Defaults

You are about to reset your SpeedTouch to factory default settings. All active connections will be disconnected.

Do you want to proceed?

Yes, reset my SpeedTouch

No

Accessing the Reset to Factory Defaults page

Proceed as follows:

- 1** On the left menu, click **SpeedTouch**.
- 2** In the **Pick a task...** list, click **Return to Factory Default Settings**.

Resetting the SpeedTouch™ to factory defaults

If you want to reset your SpeedTouch™ to factory defaults, click **Yes, reset my SpeedTouch**.



If you reset your SpeedTouch™ to factory default settings, all active connections will be disconnected.

5.3.7 Event Logs

Event Logging

The **Event Logs** page summarizes the latest events recorded on your SpeedTouch™.








Event Logging

This page summarizes the last events that have been recorded on your SpeedTouch. Choose a display filter...




Category:

Recorded Events

Time	Message
 00:23:11 (since last boot)	DHCS server up
 00:23:10 (since last boot)	DHCS server went down
 00:00:04 (since last boot)	DHCS server up
 00:00:03 (since last boot)	WIRELESS interface turned on.
 00:00:03 (since last boot)	WIRELESS automatic channel selection done (channel = 1)

Recorded Events table

The **Recorded Events** table gives you an overview of the latest event logs that have been recorded since power on. The first column of the table indicates the importance of the event log

Indicator	Description
	Informational
	Warning
	Error

The **Category** list allows you to filter the events shown in the **Recorded Events** table. For example, by clicking **Security** you can view all security related events, for example generated by the SpeedTouch™ firewall.

5.3.8 Update

Updating the SpeedTouch™ system software

The **Update** page allows you to:

- ▶ View System Information.
- ▶ View information on the current System Firmware.
- ▶ Update your SpeedTouch™ from a remote server. Use this option if you want to have your SpeedTouch™ check on the internet for new firmware and update if it found one.
- ▶ Update from a PC. Use this option if you want to install on your SpeedTouch™ that is located on the PC.



System Update

This page allows you to update your SpeedTouch with the latest software version available. Choose a way to update your SpeedTouch and follow the instructions.

• System Information

Product Name:	SpeedTouch 585
Serial Number:	0452DT108
Boot Loader Version:	1.0.16
Product Code:	35723430
Board Name:	BANT-K

• System Firmware

Current Software Version:	5.3.0.15
Current Software Variant:	AA
Available Software Version:	No update available

Update SpeedTouch from remote server...

➔ To check if a new software version is available click on 'Check For Updates...'

Check For Updates

Upgrade from PC

➔ To update your SpeedTouch from your PC, you may follow the three steps described below.

1-Download the latest software to your PC.

You may update your SpeedTouch by downloading the latest software from the [SpeedTouch Support Site](#) to your PC's hard drive.

2-Upload software to your SpeedTouch

Select the update file you have placed on your PC's hard drive.

Browse...

3-Load the new software and restart your SpeedTouch

Note: uploading the new software takes several minutes to complete.

Proceed

5.4 Broadband Connection

The Broadband Connection menu

The **Broadband Connection** menu consists of following menu items:

- ▶ DSL Connection
- ▶ Internet Services

The Broadband Connection page

The **Broadband Connection** page gives you a short status overview of the connections configured on the SpeedTouch™.



The screenshot shows the SpeedTouch web interface. On the left is a navigation menu with items: SpeedTouch, Broadband Connection (highlighted), DSL Connection, Internet Services, Toolbox, and Home Network. The main content area shows the following information:

[Administrator] Help
 Home > Broadband Connection

DSL Connection

- [View more...](#)

Uptime:	0 days, 0:24:01
Bandwidth (Up/Down) [kpbs/kpbs]:	544 / 2.272
Data Transferred (Sent/Received) [KB/KB]:	0,00 / 0,00

Internet Disconnect

- [View more...](#)

Type:	PPPoE
Uptime:	0 days, 0:01:43
IP Address:	101.101.101.39
Data Transferred (Sent/Received) [B/B]:	0 / 0

Pick a task...

- ▶ [Check connectivity to the Internet](#)

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Click **View more** to see more information on the selected broadband connection.



If you configured a dial-up connection, you are able to establish/terminate the connection by clicking **Connect/Disconnect**.

5.4.1 Connectivity Check

Introduction

This page enables you to perform a connectivity check on an Internet service of your SpeedTouch™.



Connectivity Check

This page enables you to perform a connectivity check on an Internet service of your SpeedTouch.

Choose an Internet service and click the button to launch the tests.

Internet Service to Check:

Accessing the Connectivity Check page

Proceed as follows:

- 1 On the left menu, click **Broadband Connection**.
- 2 In the **Pick a task...** list, click **Check connectivity to the Internet**.

Checking you Internet Connectivity

Proceed as follows:

- 1 In the **Internet Service to Check** list, click the Internet service that you want to check.
- 2 Click **Check Connectivity**.
- 3 The SpeedTouch™ lists the test results in the **Test Results** list.

Analysing the test results

If the test is successful, you will get a list of green check marks. Otherwise a red cross will indicate which tests have failed.



Connectivity Check

This page enables you to perform a connectivity check on an Internet service of your SpeedTouch.

Choose an Internet service and click the button to launch the tests.

Internet Service to Check:

• Test Results



DSL



ATM



Ethernet



PPP



IP



Internet



Connectivity to Gateway (101.101.101.1)



Connectivity to DNS Server 1 (10.50.2.20)



Connectivity to DNS Server 2 (10.50.2.21)

5.4.2 DSL Connection

Overview Click **Overview** to view brief information on your DSL connection.

Details Click **Details** to view a more detailed information on your DSL connection.



DSL Connection

- **Link Information**

Uptime:	0 days, 0:43:10
Modulation:	G.992.1 Annex A
Bandwidth (Up/Down) [kbps/kbps]:	544 / 2.272
Data Transferred (Sent/Received) [KB/KB]:	0,00 / 0,00
Output Power (Up/Down) [dBm]:	11,5 / 7,5
Line Attenuation (Up/Down) [dB]:	2,0 / 0,0
SN Margin (Up/Down) [dB]:	5,0 / 6,5
Vendor ID (Local/Remote):	TMMB / ALCB
Loss of Framing (Local/Remote):	0 / 0
Loss of Signal (Local/Remote):	0 / 0
Loss of Power (Local/Remote):	0 / 0
Loss of Link (Remote):	0
Error Seconds (Local/Remote):	0 / 0
FEC Errors (Up/Down):	0 / 0
CRC Errors (Up/Down):	0 / 0
HEC Errors (Up/Down):	0 / 0

5.4.3 Internet Services

Internet Services information

The **Internet Services** page displays information on your Internet Connection(s).



Internet

Disconnect

- [View more...](#)

Type:	PPPoE
Uptime:	0 days, 0:21:48
IP Address:	101.101.101.39
Data Transferred (Sent/Received) [KB/B]:	3,39 / 282



If you configured a dial-up connection you are able to establish/terminate the connection by clicking **Connect/Disconnect**.

To view more detailed information on a specific connection, click the **View more...** link of the corresponding connection.

5.4.4 Internet Service Settings

Accessing the Internet Service Settings page

Proceed as follows:

- 1** On the **Broadband Connection** menu click **Internet Services**.
- 2** Click the **View more** link of the internet service you want to view.

Overview

The **Overview** page gives you basic information on the selected Internet Service.



If you configured a connection you are able to establish/terminate the connection by clicking **Connect/Disconnect**.

Details

The **Details** page gives you more detailed information on the selected Internet Service.



Internet

Disconnect

- **Connection Information**

Uptime: 0 days, 0:22:44
Data Transferred (Sent/Received) [KB/B]: 3,39 / 282

- **Connection Settings**

PVC Info (VPI.VCI): 8.35
Type: PPPoE

- **PPP Settings**

Username: cpesit@rednet
Password: *****
Connection Mode: Always-On
Service Name: -
Concentrator Name: 15031100007146-Redback

- **TCP/IP Settings**

IP Address: 101.101.101.39/32
Default Gateway: 101.101.101.1
Primary DNS: 10.50.2.20
Secondary DNS: 10.50.2.21



If you configured a dial-up connection you are able to establish/terminate the connection by clicking **Connect/Disconnect**.

5.5 Toolbox

The Toolbox menu

The **Toolbox** menu consists of following menu items:

- ▶ **Remote Assistance:**
Allows you to make your SpeedTouch™ accessible for remote support.
- ▶ **Telephony:**
Allows you to configure your Voice over IP (VoIP) network.
- ▶ **Game & Application Sharing:**
Allows you to share services and games that you run in your private network towards the internet.
- ▶ **Parental Control:**
Allows you to block/allow access to specific web sites.
- ▶ **Firewall:**
Allows you to configure the security level of the SpeedTouch™ firewall.
- ▶ **Intrusion Detection:**
Allows you to view the intrusions you are protected against.
- ▶ **Dynamic DNS:**
Allows you to assign a DNS host name to your broadband connection(s).
- ▶ **User Management:**
Allows you to manage the users configured on your SpeedTouch™.

The Toolbox page

The **Toolbox** page gives you an overview of the available services and their current status. You can click on the names of these services to go to the corresponding web page.

The screenshot shows the SpeedTouch web interface. At the top right is the 'speedtouch™' logo. Below it is a navigation bar with '[Administrator]', 'Home > Toolbox', and a 'Help' link. A sidebar on the left contains menu items: SpeedTouch, Broadband Connection, Toolbox (highlighted), Remote Assistance, Game & Application Sharing, Parental Control, Firewall, Intrusion Detection, Dynamic DNS, User Management, and Home Network. The main content area is titled 'Toolbox' and contains the following information:

Toolbox
Your SpeedTouch device offers multiple services.
Those services enable you to protect your network, to ease sharing of games and applications with other people on the Internet, or manage your local network.

	Remote Assistance Disabled		Game & Application Sharing UPnP: Enabled
	Parental Control Address Filtering: Enabled		Firewall Security Level: Disabled
	Intrusion Detection Enabled		Dynamic DNS Disabled
	User Management Logged In As: Administrator Switch User		

At the bottom right of the page is the 'A THOMSON BRAND' logo.

5.5.1 Remote Assistance

Enabling Remote Assistance

This page allows you to make your SpeedTouch™ accessible for remote support.



Remote Assistance

Remote assistance is currently disabled.

By clicking on the 'Enable Remote Assistance' button your SpeedTouch will be accessible from your broadband connection. After 20 minutes of inactivity, or on reboot, remote assistance will be automatically disabled.

Provide the following parameters to your ISP:

URL:
 Username:
 Password:

Enable Remote Assistance

Quit



You must be connected to the Internet to be able to enable remote assistance.

To use remote assistance:

- 1** If needed, type a password in the **Password** box.
- 2** Click **Enable Remote Assistance**.
- 3** Pass the information listed under:

- ▶ **URL**
- ▶ **Username**
- ▶ **Password**

to your technical support, in order for them to be able to access your SpeedTouch™.



Once the technical support is connected, no other connections are possible.

- 4** The remote assistance session ends:
 - ▶ If the technical support disables remote assistance.
 - ▶ After 20 minutes of inactivity, or after a reboot, remote management.

5.5.2 Telephony

Introduction

The SpeedTouch™ is equipped with:



- ▶ Two **Phone** ports allowing you to connect up to two phones for making phone calls over the Internet.
- ▶ One **PSTN** port allowing you to make phone calls over the Public Switched Telephone Network (PSTN) network.



For more information on how to set up your Voice over IP (VoIP) network, consult the User's Guide on the SpeedTouch™ Setup CD.

Overview

This page allows you to view the ten last calls (or missed calls) handled by your SpeedTouch™. Incoming and Outgoing calls are indicated as follows:

Indicator	Description
	Incoming call
	Outgoing call

To view the complete list, click **View telephony statistics and logs** in the **Pick a task...** list. For more information, see "5.5.3 Telephony Statistics" on page 84 for more information.

Details

This page allows you to view detailed information on your current VoIP configuration.

 Configure

This page allows you to:

- ▶ Disable/enable the telephone service.
 - ▶ Configure your VoIP settings:
 - ▶ SIP Uniform Resource Identifier (URI)
 - ▶ Username and password:
The username and password are used when authentication is requested by another SIP entity such as a Proxy or Registrar.
 - ▶ Port:
The voice port that will be associated with this account.
-

Expert Configure

This page allows you to view/change following SIP parameters:

- ▶ **Registrar:**
The IP address of your SIP registrar.
 - ▶ **Registrar Port:**
The port used by your SIP registrar (usually port 5060). This port will be used to contact the SIP registrar.
 - ▶ **Proxy:**
The IP address of your SIP proxy.
 - ▶ **Proxy Port:**
The port used by your SIP proxy (usually port 5060). This port will be used to contact the SIP proxy server.
 - ▶ **Expire Time**
When the **Expire Time** is not filled in, a default value of 3600 seconds will be used.
-

Telephony services
table

To view the telephony services:

- 1** In the upper right corner, click **Details**.
- 2** In the **Pick a task...** list, click **View telephony services**.

Configure View the telephony services:

- 1** In the upper right corner, click **Configure**.
- 2** In the **Pick a task...** list, click **Configure telephony services**.

This table consists of following columns:

- ▶ **Services:**
Depending on you provider's configuration following services will be available:
 - ▶ **Call Hold:**
Allows you to put a call on hold, and return to the call whenever you want. When the call is o hold you can dial another number or take an incoming call.
 - ▶ **Call Waiting:**
Allows you to you to answer or reject an incoming call while you are in a conversation.
 - ▶ **Call Transfer:**
Allows you to transfer a call to another person.
 - ▶ **Conference Call (3 Party):**
Allows you to make a conference call.

- ▶ **Calling Line Identification Presentation:**
Allows you to see the phone number of the person who is calling you on your phone display and in the statistics.
- ▶ **Calling Line Identification Restriction:**
Allows you to hide your phone number when making phone calls.
- ▶ **Forced FXO:**
Allows you to force the SpeedTouch™ to make the phone call over the PSTN.
- ▶ **Code:**
Displays the code assigned to this service. To:
 - ▶ Activate a service dial "*" followed by the corresponding code.
 - ▶ Deactivate a service dial "#" followed by the corresponding code.
 The service will automatically be activated after a few seconds. To immediately activate it, dial "#" after dialling the code.
- ▶ **Activated:**
Indicates whether the service is activated or not.



To activate a service, click **Configure** in the upper right corner.

5.5.3 Telephony Statistics

On this page This page allows you to view:



- ▶ Call Statistics
- ▶ Call Log

Call Statistics The **Call Statistics** page allows you to view the number of:

- ▶ Successful incoming calls
- ▶ Missed incoming calls
- ▶ Successful outgoing calls
- ▶ Failed outgoing calls

for the two phones separately or combined.

Call Log The **Call Log** page allows you to view a list of the telephone calls handled by the SpeedTouch™. Incoming and Outgoing calls are indicated as follows:

Indicator	Description
	Incoming call
	Outgoing call

5.5.4 Game & Application Sharing

Overview The **Overview** page summarizes the games and applications on a particular host on your network, for which the SpeedTouch™ accepts connections coming from the Internet.

Configure The **Configuration** page allows you to:

- ▶ Select **Use UPnP** to enable UPnP on the SpeedTouch™.



Universal Plug and Play is an architecture for transparent peer-to-peer connectivity of PCs, intelligent appliances, and (wireless) devices. It enables seamless operation of a wide range of games and messaging applications.

- ▶ Select **Use Extended Security** to only allow the creation of port maps.
- ▶ Assign a game or application to a specific network device.



Game & Application Sharing

This page summarizes the games and applications defined on your SpeedTouch. Each game or application can be assigned to a device on your local network.

- **Universal Plug and Play**

Universal Plug and Play (UPnP) is a technology that enables seamless operation of a wide range of games and messaging applications.

Use UPnP:

Use Extended Security:

Apply Cancel

- **Assigned Games & Applications**

Click on 'Unassign' to disable a game or a application or use the last row in the table to assign a game or application to a local network device.

If the game or the application you are looking for does not exist, [click here](#) to create it (you will be asked for game or application details).

Choose 'User-defined' in the device list and enter its IP address if the device you are looking for does not appear in the device list.

Game or Application	Device	Log		
FTP Server	YourPC	Off	Edit	Unassign
HTTP Server (World Wide Web)	YourPC	Off	Edit	Unassign
NetMeeting	YourPC	Off	Edit	Unassign
ABC (Another Bittorrent Client)	YourPC	<input type="checkbox"/>		Add

5.5.5 Defined Games & Applications

Accessing the Defined Games & Applications page

Proceed as follows:

- 1** In the **Toolbox** menu, click **Game & Application Sharing**.
- 2** In the **Pick a task...** list, click **Modify a game or application**.

The Defined Games & Applications page

This page gives you an overview of the games and applications defined on your SpeedTouch™. Each game or application can be assigned to a device on your local network.



Defined Games & Applications

This page summarizes the games and applications defined on your SpeedTouch. Each game or application can be assigned to a device on your local network.

Game or Application	Assigned to ...	Mode
ABC (Another Bittorent Client)	Client	Edit Delete
Age of Empires	Server	Edit Delete
Age of Mythology	Server	Edit Delete
AIM Talk	Client	Edit Delete
Aliens vs. Predator	Server	Edit Delete
America s Army	Server	Edit Delete
Azureus	Client	Edit Delete
Bay VPN	Server	Edit Delete
BearShare	Server	Edit Delete
BitTorrent	Client	Edit Delete
Black and White	Server	Edit Delete
Call of Duty	Server	Edit Delete
Call of Duty - United Offensive	Server	Edit Delete
CarbonCopy32	Server	Edit Delete
Castle Wolfenstein	Server	Edit Delete
Championship Manager 03-04	Server	Edit Delete
Checkpoint FW1 VPN	Server	Edit Delete
Command and Conquer Generals	Server	Edit Delete
Command and Conquer Zero Hour	Server	Edit Delete
Counter Strike	Server	Edit Delete
Cu-SeeMe Cornell	Server	Edit Delete
Cu-SeeMe White Pine 3.1.2 and 4.0	Server	Edit Delete
Dark Reign 2	Server	Edit Delete
Default Server	Server	Edit Delete
Delta Force	Server	Edit Delete
Destroyer Command	Server	Edit Delete
Diablo II	Server	Edit Delete
Direct Connect	Server	Edit Delete
DirectX 7	Server	Edit Delete
DirectX 8	Server	Edit Delete
DirectX 9	Server	Edit Delete
Doom3	Server	Edit Delete
Dune 2000	Server	Edit Delete
Dungeon Siege	Server	Edit Delete
eDonkey	Server	Edit Delete
Elite Force	Server	Edit Delete
eMule	Server	Edit Delete
Enemy Territory	Server	Edit Delete
Everquest	Server	Edit Delete
Everquest 2	Server	Edit Delete

To:

- ▶ View the translation rules of a game or application, click the name of the rule.
- ▶ Change the translation rules of a game or application, click the **Edit** link of the the game or application.

5.5.6 Game or Application Definition

Accessing the Game or Application Definition page

Proceed as follows:

- 1 In the **Toolbox** menu, click **Game & Application Sharing**.
- 2 In the **Pick a task...** list, click **Modify a game or application**.
- 3 Click the name of the game or application you want to view/change.

Overview

This page gives you an overview of the port mappings used to allow this service or game to be initiated from the Internet.



Consult the user's guide or support pages of your application to know which ports are being used by this application.

A service is made of one or more TCP/UDP port ranges. Each incoming port range can be translated into a different internal (local network) port range. Port ranges can be statically assigned to devices or dynamically assigned using an outgoing trigger.

Configure

Under:

- ▶ **Game or Application Name** you can:
Change the name of the game or application.
- ▶ **Game or Application Definition** you can:
Change the TCP/UDP port definition for this game or application.



Lotus Notes

- **Game or Application Name**

New Name:

Apply Cancel

- **Game or Application Definition**

A game or application is made of one or more TCP/UDP port ranges. Each incoming port range can be translated into a different internal (local network) port range. Port ranges can be statically assigned to devices or dynamically assigned using an outgoing trigger.

Protocol	Port Range	Translate To ...	Trigger Protocol	Trigger Port	
Any	1352 - 1352	1352 - 1352	-	-	Edit Delete
Any	<input type="text"/> to <input type="text"/>	<input type="text"/>	Any	<input type="text"/>	<input type="button" value="Add"/>

Adding a Port Translation rule

Proceed as follows:

- 1 In the **Protocol** list, click the protocol the game or application uses.
- 2 In the **Port Range** box, type the port range the game or application uses.
- 3 In the **Translate To...** box, type the port range to which the SpeedTouch™ has to translate the ports specified under **Port Range**.
- 4 If you want to make a dynamic translation rule you must specify a trigger protocol and port.



As soon as the SpeedTouch™ receives outgoing traffic on this trigger port, it will activate this translation rule.

- 5 Click **Apply**.

5.5.7 New Game or Application

Accessing the Game or Application Definition

Proceed as follows:

- 1 On the **Applications** page, click **Game & Application Sharing**.
- 2 In the **Pick a task...** list, click **Create a new game or application**.



New Game or Application

Enter the name of the new game or application.

Name:

Select how you want to define the new game or application.

Clone Existing Game or Application
 Manual Entry of Port Maps

Creating a new game or application

Proceed as follows:

- 1 Type the name of the game or application in the **Name** box.
- 2 Click:
 - ▶ **Clone Existing Game or Application** if you want to start from the port mappings of the selected game or application.
 - ▶ **Manual Entry of Port Maps** if you want to manually configure the port mapping for this game or application.
- 3 The SpeedTouch™ creates the game or application and takes you to the [Game or Application Definition](#) page to configure the port mappings for this game or application.
- 4 Enter the necessary port mappings and click **Add**.

5.5.8 Parental Control

Parental Control

The SpeedTouch™ allows you to block/allow particular web sites:

- ▶ Based on the web site's URL.



As within a web site lots of references can be made to other URLs, it is recommended to use this feature in combination with content based filtering.

- ▶ Based on the web site's content.
- ▶ Redirect a web site to another web site.



If your administrator account is configured as default user, make sure to configure a password for this account or change the default user. Otherwise users on your local network can surf to your SpeedTouch™ to disable your filtering rules.

For more information, see "5.5.15 User Management" on page 99 and "5.5.17 Change Default User" on page 101.

Overview

The **Overview** page displays:

- ▶ The current **Address Based Filtering** rules.
- ▶ The current **Content Based Filtering** configuration.
To view which content types are blocked/allowed, click **Details**. For more information, see "5.5.10 Content Level" on page 93.



Address based filtering rules have priority over content based filtering rules.

Configure

The **Configure** page allows you to:

- ▶ Deny access to a specific web site.
- ▶ Allow access to a specific web site.
- ▶ Redirect a web site.
- ▶ Configure content based filtering settings.

Content levels

Following content levels are available:

- ▶ **All:**
Allow all categorized web sites.
- ▶ **Legal:**
Allow all except illegal, extreme, spam and spyware web sites.
- ▶ **Teenagers:**
Block illegal, adult, extreme, online ordering/gambling, spam and spyware web sites.
- ▶ **Children:**
Only allow children-safe web sites.
- ▶ **BlockAll:**
Block all categorized web sites.

Deny access to a specific web site

Use this feature if:

- ▶ **Allow** is selected under **Action for Unknown Sites**.
- ▶ **Block** is selected under **Action for Unknown Sites** and you want to make an exception on an allow rule. For example: you are allowing "provider.com" but you want to deny access to "mail.provider.com".
- ▶ A content category/group is allowed by Content Based Filtering and you want to make an exception. For example: you are allowing **Web Mail** content but you want to deny access to "mail.provider.com".

Proceed as follows:

- 1** Type the URL of the web site you want to block (for example "mail.provider.com") in the **Web Site** box.
- 2** In the **Action** list, click:
 - ▶ **Block** if you want to block this web site.
 - ▶ **Redirect** if you want to redirect to another page. Type the address of the redirect page in the **Redirect** box.
- 3** Click **Add**.

Allow access to a specific web site

Use this feature if:

- ▶ **Block** is selected under **Action for Unknown Sites**
- ▶ **Allow** is selected under **Action for Unknown Sites** and you want to make an exception on a block/redirect rule. For example: you are blocking "bank.com" but you want to allow access to "netbanking.bank.com".
- ▶ A content category/group is blocked by Content Based Filtering and you want to make an exception. For example: you are blocking **Finance / Investment** content but you want to allow access to "netbanking.bank.com".

Proceed as follows:

- 1** Type the URL of the web site you want to allow (for example "netbanking.bank.com") in the **Web Site** box.
- 2** Click **Allow** in the **Action** list.
- 3** Click **Add**.

Redirect a web site

Proceed as follows:

- 1** Type the URL of the web site you want to redirect (for example "cracks.am") in the **Web Site** box.
- 2** Click **Redirect** in the **Action** list.
- 3** Type the URL of the web site you want to redirect to (for example "mycompany.com/internetpolicy.htm") in the **Redirect** box.
- 4** Click **Add**.

Redirecting all web sites

Proceed as follows:

- 1** Type "*" in the **Web Site** box.
- 2** Click **Redirect** in the **Action list**.
- 3** Type the URL of the web site you want to redirect to (for example "mycompany.com/internetpolicy.htm") in the **Redirect** box.
- 4** Click **Add**.
- 5** Type the URL of the web site you want to redirect to (for example "mycompany.com/internetpolicy.htm") in the **Web Site** box.
- 6** Click **Allow** in the **Action list**.
- 7** Click **Add**.

Configure content based filtering settings

Under **Content Based Filtering** you are able to:

- ▶ Enable/disable content based filtering.
- ▶ Allow/block uncategorized web sites.
- ▶ Select a content level in the **Content Level** list.



To change a content level definition, click the **Edit** link of the content level you want to change. For more information, see "[5.5.10 Content Level](#)" on page 93.

5.5.9 Web Filtering Activation

Accessing this page

Proceed as follows:

- 1 On the **Toolbox** menu, click **Web Site Filtering**.
- 2 In the **Pick a task...** list, click **Activate Web filtering License**.

Web Filtering Activation page

This page allows you to:

- ▶ Activate a Web Filtering evaluation license.
- ▶ Activate a free 30-days Web Filtering evaluation license.

Standard license activation

Proceed as follows:

- 1 Click **Standard**.
- 2 In the **License Key** box, type the license key provided by your ISP.
- 3 Click **Apply**.

5.5.10 Content Level

Accessing this page

Proceed as follows:

- 1** On the **Toolbox** menu, click **Web Site Filtering**.
- 2** Click **Configure**.
- 3** Click the **Edit** link of the content level you want to edit.

Overview

This page gives you an overview of the different categories and their rules. Following icons indicate whether the content type is allowed or not:

Icon	Description
	The category/group is allowed
	The category/group is not allowed.
	The group is partly allowed.

Configure

This page allows you to change:

- ▶ The content level name.
- ▶ The content level description.
- ▶ The content level configuration.

5.5.11 New Content Level

Introduction This page allows you to create a new content level. To access this page:

- 1** On the **Toolbox** menu, click **Web Site Filtering**.
- 2** In the upper right corner, click **Configure**.
- 3** Under **Pick a task...**, click **Create a new content level**.

Procedure To apply a new content level following actions must be performed:

- 1** Content level creation
- 2** Content level configuration
- 3** Content level definition
- 4** Content level activation




You can create up to 16 content levels.

Content level creation Proceed as follows:

- 1** In the **Name** box, type a name for the new content level.
- 2** In the **Description** box, type a short text to describe what this security level will do.
- 3** Click **Next**.

Content level configuration Proceed as follows:

- 1** The Configuration section becomes available.
- 2** Click:
 - ▶ **Clone Existing Level** to start from a previously created content level.
 -  If no levels have been defined before, this option will not be shown.
 - ▶ **Black List** to allow all web sites by default.
 - ▶ **White List** to block all web sites by default.
- 3** Click **Next**.

Content level definition Only web sites that match the selected content level will be allowed. Proceed as follows:

- 1** If you want to:
 - ▶ Allow a category:
Select the check box next to the category name.
 - ▶ Allow an entire group:
Select the check box next to the group name.
 - ▶ Block a category:
Clear the check box next to the category name.
 - ▶ Block an entire group:
Clear the check box next to the group name.
- 2** Click **Apply**.

Content level activation

To activate your new content level:

- 1** On the **Toolbox** menu, click **Web Site Filtering**.
- 2** In the upper right corner, click **Configure**.
- 3** In the **Content Level** list, select your new content level.
- 4** The new content level is now active.

5.5.12 Firewall

Overview The **Overview** page summarizes the overall security policy configured on your SpeedTouch™.

Configure The **Configure** page allows you to select the security level of the SpeedTouch™.



Firewall

This page summarizes the overall security policy configured on your SpeedTouch.

• Security Settings

Security Level:

BlockAll

Use this Security Level to block all traffic from and to the Internet. Game & Application sharing is not allowed by the firewall.

Standard

Use this Security Level to allow all outgoing connections and block all incoming traffic. Game & Application sharing is allowed by the firewall..

Disabled

Disable the firewall. All traffic is allowed to pass through your SpeedTouch. Game & Application sharing is allowed by the firewall.

Apply Cancel

Select one of following security levels:

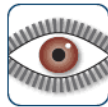
- ▶ **Block All:** to protect your network from all attempts of incoming (from untrusted site) connection requests and to perform checks on outgoing (from trusted site) connections. This level is meant to prevent incoming malicious traffic.
- ▶ **Standard:** to protect your network from all incoming (from untrusted site) connection requests while permitting safe outgoing connections. This is the default.
- ▶ **Disabled:** to allow all incoming and outgoing traffic. This does not mean the complete SpeedTouch™ firewall is disabled. It means all traffic coming in on one interface and going out on another is allowed, but access to the embedded services of the SpeedTouch™ (as telnet, web interface,...) is only allowed for clients residing on the LAN side, so the SpeedTouch™ itself stays protected.
- ▶ **High:**
Use this Security Level to block all outgoing connections except well known applications (DNS, HTTP, HTTPS, FTP, TELNET, IMAP, POP) and block all incoming connections. Game & Application sharing is not allowed by the firewall.

5.5.13 Intrusion Detection

Intrusion Detection

Your SpeedTouch™ is protecting your network against malicious intrusions. This page shows you the intrusions you are protected against.

The **Protected Intrusions** table shows the number of times the SpeedTouch™ actively protected your network against each intrusion since last statistics reset.



Intrusion Detection

Your SpeedTouch is protecting your network against malicious intrusions. This page shows you the intrusions you are protected against.

- Protected Intrusions

The table shows the number of times the SpeedTouch actively protected your network against each intrusion since last statistics reset.

Intrusion Name	Count
fragment_sweep	0
zero-length_fragment_size	0
small_fragment_size	0
fragment_size_overrun	0
fragment_overlap	0
fragment_out-of-order	0
ip_protocol_scan	0
tcp_port_scan	0
tcp_syn_scan	0
stealth_tcp_null_scan	0
stealth_tcp_fin_scan	0
stealth_tcp_xmas_scan	0
stealth_tcp_full_xmas_scan	0
stealth_tcp_vecna_scan	0
stealth_tcp_syn-fin_scan	0
udp_port_scan	0
ping_sweep_scan	0
tcp_syn_flood	0
udp_flood	0
ping_flood	0
icmp_unreachable_storm	0
smurf_broadcast_attack	0
smurf_storm_attack	0
fraggle_broadcast_attack	0
fraggle_storm_attack	0
land_attack	0
spoofed_packet	0
tcp_null_port	0
tcp_data_on_syn_segment	0
tcp_invalid_urgent_offset	0
udp_null_port	0
icmp_type_unknown	0
icmp_code_unknown	0
ip_zero_payload	0
tcp_rate_limiting	0

5.5.14 Dynamic DNS

What is Dynamic DNS

The Dynamic DNS service allows you to assign a dynamic DNS host name (e.g. john.dyndns.org) to a broadband connection even if it is using a dynamic IP address. As soon as the device gets a new IP address, the dynamic DNS server updates its entry to the new IP address.

Overview

Click **Overview** to view the different Dynamic DNS clients with their name, hostnames, interface and IP address.

Configure

The **Configure** page allows you to assign a Dynamic DNS host name to a broadband connection:

- 1 Create an account at the Dynamic DNS service of your choice, for example:
 - ▶ www.dyndns.org
 - ▶ www.no-ip.com
 - ▶ www.dtdns.com
 - ▶ GnuDIP for Linux
- 2 On the **Dynamic DNS** page, click **Configure**.
- 3 Select **Enabled**.



Dynamic DNS Service

• Configuration

Enabled:	<input checked="" type="checkbox"/>
Interface:	Internet
Username:	MyName
Password:	••••••••
Confirm password:	••••••••
Service:	gnudip
Host:	MyDomainName

- 4 If needed, click the broadband connection to which you want to assign the Dynamic DNS hostname in the **Interface** list.
- 5 Type the user name and password of your Dynamic DNS service account in the corresponding fields.
- 6 In the **Service** list, click your Dynamic DNS service.
- 7 In the **Host** box, type the host name you want to assign to this interface (for example myspeedtouch.dyndns.org).
- 8 Click **Apply**.

5.5.15 User Management

Overview The **Overview** page gives you an overview of the currently configured users and their privileges.

Clicking the name of a user allows you to edit his user account.

Configure The **Configure** page allows you to:

- ▶ Click **Add** to create a new user account.
- ▶ Click **Delete** to remove a user.
- ▶ Click **Edit** to change a user account.



User Management

This page provides you with information regarding the users configured on your SpeedTouch.

- **Local User Data**

The table below shows the configured users who are able to access your SpeedTouch. You need to configure user privileges if you want to differentiate between people using your SpeedTouch. The current privileges of the user are mentioned in the privileges column.

Username	Privileges	Default User	
Administrator	Administrator	✓	Edit
Jon	User		Edit Delete
Melissa	User		Edit Delete
			<input type="button" value="Add"/>

5.5.16 Edit User

Accessing the User Edit page

Proceed as follows:

- 1 On the **Toolbox** menu, click **User Management**.
- 2 Under **Local User Data**, click on the name of the user you want to edit.



Edit User

This page allows you to edit the user settings. Besides resetting your password you're not allowed to change your own settings. If you want to have your settings changed, ask someone with higher privileges.

- **User definition**

Name: Jon

Administration Privileges:

Editing a user account

The **Edit User** page allows you to:

- ▶ Click **Reset Password** to reset the password of the selected user to the user name. So, if you reset the password of John his password will be "John".
- ▶ Change the administration privileges of the selected user.



You can not change the administration privileges of the account you are logged on to.

5.5.17 Change Default User

Changing the default user

This page allows you to change the default user. If users browse to the SpeedTouch™ web pages, they will be automatically logged in under this account.



Change Default User

This page allows you to change the default user. The default user is the user whose settings will be chosen as the default login settings.

- Change Default User

User Name:



To allow users to automatically log on under this account, this default user account must be configured with a blank password.

5.5.18 Add User

Adding users

This page allows you to add a new user.



Add User

This page allows you to add a user. You're only allowed to add a user who has privileges which are the same or lower than your own. The password of the new user will be the same as the account name.

- **User definition**

Name:

Administration Privileges:

Under **User definition** you can configure:

- ▶ The name of the new user.



The password of the new user will be equal to the user name; for example if the user name is John Doe, the password will be John Doe. Also when resetting a user, the password will be changed into the user name.

- ▶ The administration privileges of the new user



You can only add users with less than or equal administration privileges as yourself.

5.6 Home Network

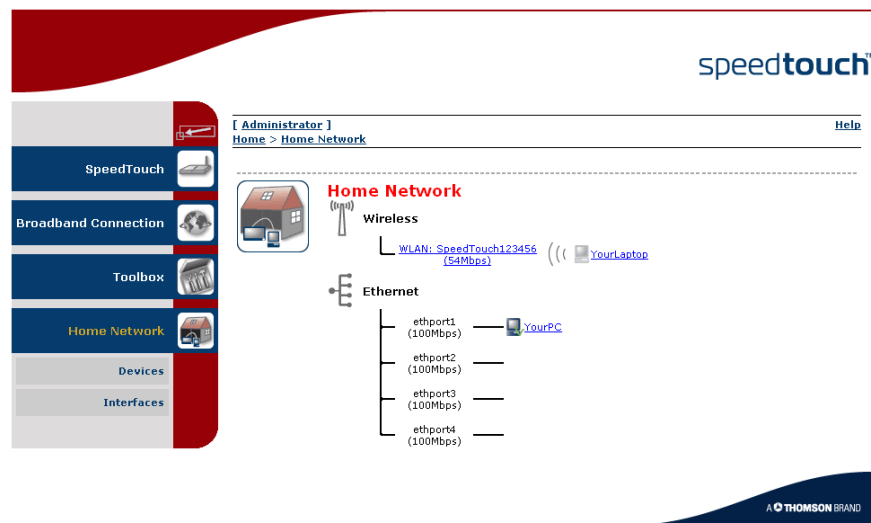
Home Network Menu

This menu consists of following items:

- ▶ **Devices**
Allows you the view/configure the devices detected on your local network.
- ▶ **Interfaces**
Allows you to view/configure the interfaces that are available on the SpeedTouch™.

The Home Network page

The Home Network gives you an overview of your SpeedTouch™ network.



Viewing (wireless) client information

If you click a on (wireless) client you will be able to:

- ▶ View the (wireless) client's network settings.
- ▶ Configure the (wireless) client's network settings by clicking **Configure**.

Viewing VoIP information

If you click **VoIP** you will be able to view/change your VoIP configuration.
For more information, see "5.5.2 Telephony" on page 81.

5.6.1 Devices






Overview The **Overview** page gives you an overview of the devices that are currently connected to the SpeedTouch™ network. Click on a device name to get more information on a specific device.



Local Network Devices

- **Detected Device(s)**

The table below contains the list of devices the SpeedTouch detected on your local network. Click on a device name to get more information on a device.

Name	IP Address	Interface
 dsldevice	10.0.0.138	
 YourPC	192.168.1.10	 ethport1
 YourLaptop	192.168.1.64	 WLAN

Configure The **Configure** page gives you an overview of the devices that are currently connected to the SpeedTouch™ network.

To:

- ▶ Get more information on a specific device, click on the name of the device. See “5.6.2 Device Settings” on page 105 for more information.
- ▶ Edit a device from the **Detected Device(s)** list, click **Edit**.
- ▶ Delete a device from the **Detected Device(s)** list, click **Delete**.



Once a device connects to the SpeedTouch™ network, it will remain listed in the **Detected Device(s)** list until you delete it.

5.6.2 Device Settings

Accessing the device settings page

Proceed as follows:

- 1** On the **Home Network** menu, click **Devices**.
- 2** In the **Detected Device(s)**, click the name of the device you want to view.

Overview

The **Overview** page displays following information:

- ▶ **Information** allows you to view:
 - ▶ **Status** shows whether the device is currently connected to the SpeedTouch™ network.
 - ▶ **Type** shows the device type.
 - ▶ **Connected To** shows the interface to which the device is currently connected.
- ▶ **Addressing** allows you to view:
 - ▶ **Physical Address** shows the MAC address of the device.
 - ▶ **IP Address Assignment** shows whether the device is using a static or dynamic IP address.
 - ▶ **IP Address** shows the current IP address of the device.
- ▶ **Connection Sharing:**
Gives you an overview of the games or services that are currently assigned to this device. Click the name of the game or service to view the used port mappings.
For more information, see “5.5.6 Game or Application Definition” on page 87.

Configure

The **Configure** page allows you to:

- ▶ Change the device information.
- ▶ Allow a game or service running on this device to be initiated from the Internet.



John

• **Information**

New Name:	<input type="text" value="John"/>
Status:	Active
Type:	<input type="text" value="Desktop Computer"/>
Connected To:	ethport1 (Ethernet)

• **Addressing**

Physical Address:	00:01:02:98:1f:df
IP Address Assignment:	Static
IP Address:	192.168.1.10

• **Connection Sharing**

Game or Service

5.6.3 Assign Public IP

Introduction

This page allows you to assign the public IP address of your Internet Connection(s) to a specific device on your local network. You might want to do this if:

- ▶ You do not want to use the Network Address Translation engine of your SpeedTouch™.
- ▶ This device is running server applications (web server,...) and you want it to be accessible from the Internet.



You can also achieve this by creating a port mapping for the specified server, as described in "5.5.4 Game & Application Sharing" on page 85.

- ▶ This device has to be considered as the unique access point to your local network (DMZ).



It is not recommended to use this feature as this device will lose all security offered by the SpeedTouch™.

Accessing the Assign Public IP page

Proceed as follows:

- 1 On the **Home Network** menu, click **Devices**.
- 2 In the **Pick a task...** list, click **Assign the public IP address of a connection to a device**.

Assigning the public IP address to a device

Proceed as follows:

- 1 Click the **Edit** link of your Internet connection.
- 2 In the **Device** list, select the device you want to assign the public address to.



Assign the public IP address of a connection to a LAN device

This page allows you to assign the public IP address of your Internet Connection(s) to a specific device on your local network...

You might want to do this if:

- You encounter issues with some applications through the Network Address Translation engine of your SpeedTouch.
- This device is running server applications (web server, ...) and you want it to be accessible from the internet.
- This device has to be considered as the unique entry to your local network (DMZ).

Internet Service	Device		
Internet	YourLaptop	Apply	Cancel

- 3 Click **Apply**.
- 4 The SpeedTouch™ prompts you that you will have to make some adjustments as a result of the new configuration, click **OK**.
- 5 Release and renew the IP address of the device.



For more information, see your operating system's user guide or help.

- 6 If needed, reassign server applications to this device.

5.6.4 Wireless Device Settings

Availability This page is only available on the SpeedTouch™ 716v5 WL.

Accessing the wireless device settings page

Proceed as follows:

- 1** On the **Home Network** menu, click **Devices**.
 - 2** In the **Detected Device(s)**, click the name of the wireless device you want to view.
-

Overview

The **Overview** page displays following information:

- ▶ **Information** allows you to view:
 - ▶ **Status** displays whether the device is currently connected to the SpeedTouch™ network.
 - ▶ **Type** displays the device type.
 - ▶ **Connected To** displays the interface to which the device is currently connected.
 - ▶ **Allowed on LAN** indicates whether the wireless client is allowed to connect to the SpeedTouch™ WLAN.
 - ▶ **Addressing** allows you to view:
 - ▶ **Physical Address** displays the MAC address of the device.
 - ▶ **IP Address Assignment** displays whether the device is using a static or dynamic IP address.
 - ▶ **IP Address** displays the current IP address of the device.
 - ▶ **Always use the same address** indicates whether the wireless client has a static DHCP lease or not.
 - ▶ **DHCP Lease Time** displays the time for which the wireless client can use this IP address.
 - ▶ **Connection Sharing:**
 Gives you an overview of the games or services that are currently assigned to this device. Click the name of the game or service to view the used port mappings.
 For more information, see "5.5.6 Game or Application Definition" on page 87.
-

Configure

The **Configure** page allows you to:

- ▶ Change the device information.
- ▶ Assign a static DHCP server lease to this device by selecting the **Always use the same address** check box.
- ▶ Allow a game or service running on this device to be initiated from the Internet.

5.6.5 Access Point Settings

Availability This page is only available on the SpeedTouch™716v5 WL.

Accessing the Access Point settings

Proceed as follows:

- 1** On the left menu, click **Home Network**.
- 2** Under **Wireless**, click the name of the Access Point you want to view or configure.



The Access Points names are of the following format: "WLAN: " + Network Name, for example "WLAN: SpeedTouch123456".

Overview The **Overview** page displays a brief overview of the current configuration.

Details The **Details** page displays a more detailed overview of the current configuration.

Configure

Under **Configuration** following fields are available:

- ▶ **Interface Enabled:**
Allows you to enable/disable the wireless interface.
- ▶ **Physical Address:**
Displays the Base Service Set Identifier (BSSID) of the selected Access Point.
- ▶ **Network Name (SSID):**
Allows you to change the network name of your WLAN.
- ▶ **Interface Type:**
Allows you to choose between:
 - ▶ 802.11b
 - ▶ 802.11b(legacy)/g
 - ▶ 802.11b/g
 - ▶ 802.11g
- ▶ **Actual Speed:**
Displays the current transmission speed.
- ▶ **Channel Selection:**
Allows you to select a fixed channel or let the SpeedTouch™ automatically select a channel for you.
- ▶ **Region:**
Displays your region.
- ▶ **Channel:**
Displays the channel that is currently used by the Access Point.
- ▶ **Allow multicast from Broadband Network:**
Allows you to allow/deny multicast messages from the Internet.



Large bandwidth streams like video streams, have a large impact on your wireless performance.

Under **Security** following fields are available:

- ▶ **Broadcast Network Name:**
By default the SpeedTouch™ broadcasts its network name, allowing you to easily recognise your wireless network in the list of available networks. Once you have configured your wireless clients, it is recommended to disable this feature by clearing this check box.
- ▶ **Allow New Devices:**
Allows you to change the access control used by the SpeedTouch™.
- ▶ **Encryption:**
Allows you to select an encryption level for your wireless network. Following encryption methods are supported by the SpeedTouch™:
 - ▶ The Wired Equivalent Protocol (WEP)
 - ▶ WPA-Pre Shared Key (WPA-PSK).



The default WEP key and the default WPA key is printed on the SpeedTouch™ bottom label.



Before configuring the SpeedTouch™ encryption, make sure you know which encryption methods are supported by your wireless client.

WEP

The Wired Equivalent Privacy (WEP) algorithm protects wireless communication from eavesdropping.

WEP relies on a secret key that is shared between the wireless client (e.g. a laptop with a wireless ethernet card and the SpeedTouch™). The fixed secret key is used to encrypt packets before they are transmitted. I.e. during transmission between client and AP ("in the air") the information in the packets is encrypted.



If your wireless client(s) supports WPA-PSK we recommend you to use WPA-PSK, because WEP encryption has been proven to have some security issues.

To enable WEP:

- 1** Select Use WPA-PSK Encryption
- 2** In the **WEP Key Length** list, click the desired Data Security level (either 64-bit or 128-bit and Alphanumeric or Hexadecimal).
- 3** In the **Encryption key** box, type a Network key of your choice. In case of:
 - ▶ **64 bits, Alphanumeric:**
The 40-bits Network key must consist of 5 alphanumeric characters.
 - ▶ **64 bits, Hexadecimal:**
The 40-bits Network key must consist of 10 hexadecimal digits.
 - ▶ **128 bits, Alphanumeric:**
The 104-bits Network key consists of 13 alphanumeric characters.
 - ▶ **128 bits, Hexadecimal:**
The 104-bits Network key consists of 26 hexadecimal digits.
- 4** Click **Apply** to immediately apply your changes.
- 5** Configure your wireless client(s) with the same settings.


WPA-PSK

The SpeedTouch™ supports WPA-PSK which has 3 improvements regarding to WEP:

- ▶ Authentication via a 4-way handshake to check whether the Pre-Shared Keys (PSKs) are the same.
 - ▶ Stronger encryption types:
 - ▶ Temporal Key Integrity Protocol (TKIP) (default): Instead of using a fixed WEP key, TKIP uses in pairs temporary session keys which are derived from the PSK during the 4-way handshake. For each packet it uses a different key. TKIP also provides a message integrity check (MIC) and a rekeying mechanism (in seconds).
 - ▶ Advanced Encryption Standard (AES): State-of-the-art encryption; can only be used if all wireless devices in your WLAN support AES.
- ▶ Message Integrity Check (MIC). Which is a strong mathematical function in which the recipient and transmitter each compute and compare the MIC. If they don't match it is assumed that a third person has been trying to read the data.

To enable WPA-PSK:

- 1** Select **WPA-PSK Encryption**.
- 2** In the **WPA-PSK Encryption Key** box, type a passphrase (aka Pre-shared key) of your choice. The passphrase must consist of 8 to 63 ASCII characters or 64 HEX digits.
- 3** In the **Encryption** list, click select the desired Encryption method (either TKIP or AES).

 AES is not yet implemented in most clients but AES is implemented in the SpeedTouch™ because it will be the future security standard.
- 4** Optionally select the rekeying interval.
- 5** Click **Apply** to immediately apply your changes.
- 6** Configure your wireless client(s) with the same settings.

Access control on the SpeedTouch™

Following modes are available:

- ▶ **New stations are allowed (automatically):**
All New stations can access the SpeedTouch™ WLAN.
- ▶ **New stations are allowed (via registration):**
Only allowed stations in the Access Control List (ACL) have access. You can add new stations via registration.
For more information, see “[Registering new wireless clients](#)” on page 110
- ▶ **New stations are not allowed:**
Only allowed stations in the Access Control List (ACL) have access.

Registering new wireless clients

Proceed as follows:

- 1** On the **Home Network** menu, click **Devices**.
- 2** Under **Pick a task...**, click **Search for wireless devices**.
- 3** The SpeedTouch™ searches for new wireless stations that use the encryption key of the SpeedTouch™ Access Point.
- 4** The SpeedTouch™ takes you to the **Home Network**. The new station will be shown next to the name of the SpeedTouch™ WLAN.



To view the device settings, click the name of the new station. For more Information, see “[6 If needed, reassign server applications to this device.](#)” on page 106.

5.6.6 Configuring WDS

Availability This page is only available on the SpeedTouch™716v5 WL.

What is WDS The **Wireless Distribution System** (WDS) allows you to extend the range of your wireless network by introducing one or more WDS-enabled devices into your wireless network.



You can only establish WDS links with WDS enabled devices.

Accessing the WDS page

To access the WDS pages on the SpeedTouch™:

- 1** On the left menu, click **Home Network**.
- 2** Under **Wireless**, click the Access Point you want to configure for WDS.



The Access Points names are of the following format: "WLAN: " + Network Name, for example "WLAN: SpeedTouch123456.

- 3** Click **Configure**.
- 4** Under **Pick a task...** list, click **Configure WDS**.

SpeedTouch™ configuration

Proceed as follow:

- 1** Under **Pick a task...**, click **Scan for wireless accesspoints**.
- 2** The SpeedTouch™ prompts you that all associated stations will loose connectivity for a few seconds. Click **OK**.
- 3** The SpeedTouch™ lists the results in the **Accessible Access Points** table.
- 4** Select the Access Point to which you want to establish a WDS connection.
- 5** Click **Apply**.
- 6** Configure this Access Point with:
 - ▶ The same WEP key if WEP is enabled.
 - ▶ The same **fixed** channel.

5.6.7 Interfaces

Interfaces overview

This page gives you an overview of the interfaces used on your SpeedTouch™. If you want to know more on the network settings of a specific interface, click the name of the interface you want to view.



Interfaces

- [LocalNetwork](#)
 - ethport1
(100Mbps)
 - ethport2
(100Mbps)
 - ethport3
(100Mbps)
 - ethport4
(100Mbps)
 - WLAN: [SpeedTouch00D961](#)
(54Mbps)

5.6.8 Interface Settings

Overview The **Overview** page gives you an overview of the current interface settings.



Interface - LocalNetwork

- Interface Information**

Interface Group: lan

- TCP/IP Configuration**

Auto-IP: Disabled

Use DHCP Server: Enabled

- IP Addresses**

IP Address/Mask	Type
10.0.0.138/24	Static
192.168.1.254/24	Static

- DHCP Pools**

DHCP Pool Name	Address Range	Gateway
LAN_private	192.168.1.64 - 192.168.1.253	192.168.1.254

Configure The **Configure** page allows you to:

- ▶ Change the IP address settings of the SpeedTouch™.
- ▶ Change the DHCP IP address pool settings.



Before changing the DHCP pools, make sure that at least one IP address of the SpeedTouch™ uses the same subnet as the IP addresses in the DHCP pools.

Assigning a new IP address to the SpeedTouch™

Under **IP Addresses**:

- 1 Type the IP address of your choice (for example 192.168.1.1) in the left text box.
- 2 Type subnet mask in the right text box (for example 255.255.255.0).
- 3 Click **Add**.
- 4 Network devices using the same subnet mask can now access the SpeedTouch™ using this IP address.

5.6.9 DHCP Pool

DHCP Pool This page allows you to create/change a DHCP pool.

Accessing the DHCP Pool page

Proceed as follows:

- 1 On the **Home Network** menu, click **Interfaces**.
- 2 Click on the name of the interface of which you want to change the DHCP pool settings.
- 3 Click **Configure**.



[Your_DHCP_pool]
Configure parameters for your DHCP pool.

• Pool Configuration

Interface:	LocalNetwork
Start Address:	192.168.1.10
End Address:	192.168.1.20
Subnet Mask:	255.255.255.0
Server:	192.168.1.254
Gateway:	192.168.1.254
Primary DNS:	192.168.1.254
Secondary DNS:	0.0.0.0
Primary WINS:	0.0.0.0
Secondary WINS:	0.0.0.0
Lease Time:	Infinite
Always give same address to DHCP clients:	<input checked="" type="checkbox"/>

Apply Cancel

- 4 Under **DHCP Pools** click:
 - ▶ **Add** if you want to add a new DHCP pool.
 - ▶ **Edit** if you want to edit an existing DHCP pool.
 - ▶ **Delete** if you want to delete an existing DHCP pool.





This link will only be shown if there are more than one DHCP pools.

The DHCP Pool page


Following settings are available for configuration:

- ▶ **Interface:**
The SpeedTouch™ interface for which the DHCP pool applies.
- ▶ **Start Address:**
The start IP address of the DHCP server's address pool.
- ▶ **End Address:**
The end IP address of the DHCP server's address pool.

 Both the start and end IP address define the IP address range used by the DHCP server to assign leases.
- ▶ **Subnet Mask:**
The subnet mask of the DHCP server's address pool.
- ▶ **Server:**
The SpeedTouch™ IP address used as DHCP server address.
- ▶ **Gateway:**
The IP address that will be assigned to the DHCP clients as their default gateway.
- ▶ **Primary DNS:**
The IP address of the primary DNS server.
- ▶ **Secondary DNS:**
The IP address of the secondary DNS server.
- ▶ **Primary WINS:**
The IP address of the primary WINS server.
- ▶ **Secondary WINS:**
The IP address of the secondary WINS server.
- ▶ **Lease Time:**
The time for which the DHCP client is allowed to use the assigned IP address:

 If **Always give same address to DHCP clients** the lease time will be automatically set to **Infinite**.
- ▶ **Always give same address to DHCP clients:**
Select this check box if you always want to use the same IP address for the DHCP clients.

6 Software Upgrade

Introduction	This chapter describes how to upgrade the SpeedTouch™ system software or firmware.
System software upgrades availability	<p>For the availability of new system software version packages you can:</p> <ul style="list-style-type: none"> ▶ Click the SpeedTouch Maintenance link, available on the Setup CD menu. ▶ Check for SpeedTouch™ upgrades at http://www.speedtouch.com/upgrade.
System software packages and security	<p>All system software packages for the SpeedTouch™ are digitally signed and encrypted. Packages that may have become corrupted, or been altered in any way, will not be accepted by the SpeedTouch™.</p> <p>This way the SpeedTouch™ or its service can never be corrupted or lost.</p>
System software upgrades	<p>Depending on the Operating System your computer is running, you can upgrade your SpeedTouch™ via:</p> <ul style="list-style-type: none"> ▶ The SpeedTouch™ Upgrade Wizard (Microsoft Windows or Mac OS X); see “6.1 Upgrade Wizard on Setup CD” on page 118 for more information.
Preliminary steps	<p>Before you start with upgrading the SpeedTouch™, always make sure:</p> <ul style="list-style-type: none"> ▶ To inform all people relying on the SpeedTouch™ services, that service may be down for some short period. ▶ The new system software file is stored on your local disk or another storage device. <p> It is NOT possible to upgrade your SpeedTouch™ over a wireless connection.</p>

6.1 Upgrade Wizard on Setup CD

Introduction

The procedures described in this section are valid only in case:

- ▶ You run an MS Windows Operating System or Mac OS X.
- ▶ Your SpeedTouch™ and computer are properly connected through Ethernet or USB.



It is NOT possible to upgrade your SpeedTouch™ over a wireless connection.

During the upgrade procedure in most cases configuration settings are backed up by the wizard and restored after uploading the system software.

Starting the Upgrade Wizard

To launch the SpeedTouch™ Upgrade Wizard:

- 1 Insert the Setup CD in your computer's CD-ROM or DVD-ROM drive. The SpeedTouch™ CD menu will pop up automatically.



If not:

- ▶ In MS Windows:

Click **Run** on the **Start** menu and enter the following path:

D:\Setup.exe where D stands for the drive letter of your CD-ROM or DVD-ROM drive.

- ▶ On Mac OS X

Double-click the CD icon and then double-click **Menu**.

- 2 Optionally, in the **Choose Language** window, select the language of your choice and click **OK**.
- 3 The SpeedTouch™ safety instructions will be displayed in your default web browser. Close the window.
- 4 Select **I have read and I fully understand the Safety Instructions and Regularity Information** and click **Continue**.
- 5 In the SpeedTouch™ CD Menu, click **SpeedTouch Maintenance**.
- 6 Click **Upgrade My SpeedTouch**, to start the SpeedTouch™ Upgrade Wizard.
- 7 See "Upgrade procedure" on page 119 to continue.

Upgrade procedure

- 1 In the **Welcome to the SpeedTouch Upgrade Wizard** window, click **Next**.

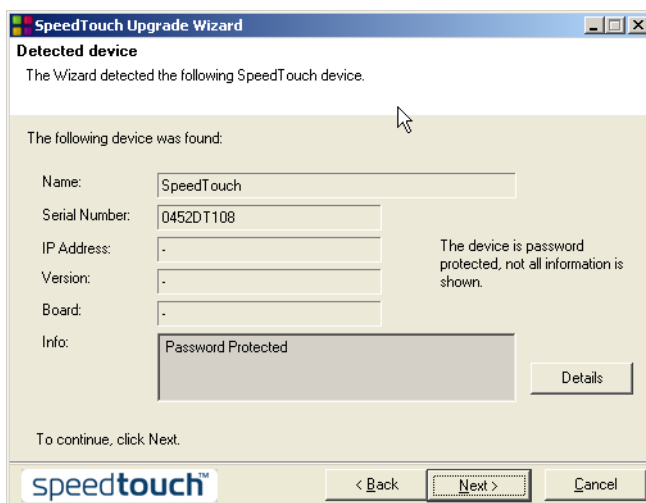


- 2 The SpeedTouch™ **Software License Agreement** window appears. You must accept before continuing. Click **Yes** to accept.



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

- 3 The SpeedTouch™ Upgrade Wizard will search for the SpeedTouch™ on the network. A progress bar is displayed.
- 4 The SpeedTouch™ Upgrade Wizard should find your SpeedTouch™ device on the local network. This is indicated by the following window:



If more than one device is found, a list of available devices will be provided. If this is the case, select your SpeedTouch™ device and click **Next**.



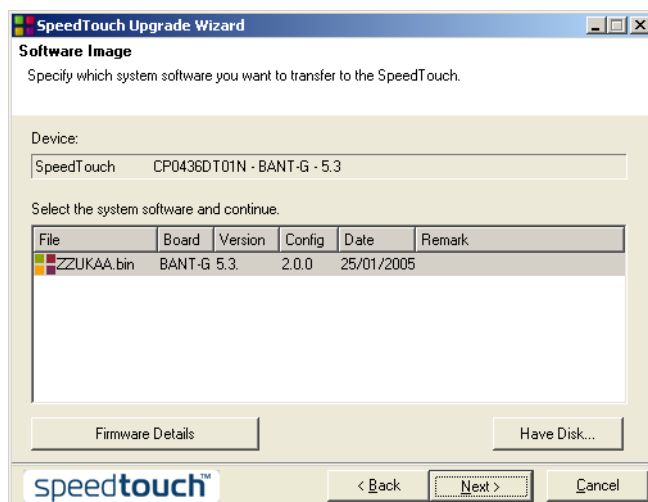
If the wizard does not find any SpeedTouch™ on the network an error window appears, refer to [“7.1.3 Upgrade Troubleshooting”](#) on page 125.



It is NOT possible to upgrade your SpeedTouch™ over a wireless connection.

- 5 Enter your SpeedTouch™ security **User name** and **Password**.

- 6 The following window shows the system software version currently active on the SpeedTouch™ as well as one or more system software versions available on the CD:



For more information on a found software version, click **Firmware Details**.

Select the appropriate system software version and click **Next**.



If your Service Provider has included a separate disk with dedicated upgrade system software, click **Have Disk** to navigate to the location of the appropriate file.

- 7 The following window will allow you to overview your selection. Click **Next** to continue.
- 8 A progress bar will be displayed.
- 9 Finally, click **Finish** to close the wizard.

System software downgrade

Via the identical procedure it is also possible - although not recommended - to downgrade the SpeedTouch™ by uploading an older system software than the current running version.

However, be aware that functionality added by previous upgrades may be lost, that system password settings may be lost as well as end-to-end connectivity and other configuration settings.



In case of a system software downgrade, in step 6, you must specifically acknowledge your decision before being able to proceed.

7 Troubleshooting

Introduction

This chapter suggest solutions for problems you may encounter while installing or configuring your SpeedTouch™.

If the suggestions do not resolve the problem, look at the support pages on <http://www.speedtouch.com/support> or contact your service provider.

For Internet connection troubleshooting, refer to the provided Installation and Setup Guide.

7.1 General SpeedTouch™ Troubleshooting

SpeedTouch™ does not work

If none of the LEDs light up, make sure that:

- ▶ The SpeedTouch™ is plugged into a power socket outlet.
- ▶ You are using the correct power supply for your SpeedTouch™ device, that is 18V AC.
- ▶ The power on the SpeedTouch™ is turned on via the push button on the back panel.

SpeedTouch™ unreachable

In case your SpeedTouch™ is unreachable due to misconfiguration, you might consider a hardware reset to factory defaults as described in “7.4 Reset to Factory Defaults” on page 129.



However, note that resetting the SpeedTouch™ to its factory settings will revoke all the changes you made to the configuration.

Poor SpeedTouch™ performance

Make sure that the SpeedTouch™ is installed and configured as instructed in the Installation and Setup Guide or as instructed by the Service Provider.

7.1.1 Wired Ethernet Troubleshooting

LAN LED does not light
up

Make sure that:

- ▶ The LAN cable is securely connected to the 10/100Base-T port.
- ▶ You are using the correct cable type for your Ethernet equipment, that is UTP CAT5 with RJ-45 connectors.

7.1.2 Wireless Ethernet Troubleshooting

Not able to connect wireless clients

Check following:

- ▶ In case registration is enabled, you must search for wireless devices via the embedded web pages.
- ▶ Make sure the SpeedTouch™ Association Control List is not locked. You can check this on the web pages. On the Wireless Access Point settings, make sure **New stations are not allowed** is NOT selected.

No wireless connectivity

Make sure that:

- ▶ Both wireless client adapter and SpeedTouch™ are allowed to connect through wireless channels as defined for local regulatory domain.
- ▶ The WLAN client is configured for the correct wireless settings (SSID, security settings).
- ▶ Check the signal strength, indicated by the wireless client manager. If the signal is low, try to place the SpeedTouch™ or to direct the SpeedTouch™'s antenna for optimal performance.
- ▶ Make sure that the wireless client adapter is enabled (message like "radio on").

Poor wireless connectivity or reach

Check following:

- ▶ Choose automatic channel selection or carefully select a radio channel that does not interfere with other radio channels.
- ▶ Make sure both WLAN client adapter and SpeedTouch™ are allowed to connect through wireless channels as defined for local regulatory domain.
- ▶ Check the location of the SpeedTouch™ in the building.
- ▶ Check the signal strength, indicated by the wireless client manager. If the signal is low, try to place the SpeedTouch™ or to direct the SpeedTouch™'s antenna for optimal performance.

7.1.3 Upgrade Troubleshooting

Introduction While upgrading your SpeedTouch™ via the Upgrade Wizard on the Setup CD, you might encounter one of following problems.

Upgrade via Setup CD

If the Upgrade Wizard in step 4, as described in “ Upgrade procedure” on page 119, does not find any SpeedTouch™ on the network, an error window will appear, stating your SpeedTouch™ has not been found.

In this case check that:

- ▶ The SpeedTouch™ is turned on and fully initialised.
- ▶ Your PC is correctly connected to the SpeedTouch™.
- ▶ Your PC has a valid IP address. To check this in MS Windows:
 - 1** In the Windows task bar, click **Start**.
 - 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** and then press Enter.
 - 6** Verify that your computer has a valid IP address, that is any address but 0.0.0.0.
- ▶ No dedicated firewall device or router is placed between your PC and the SpeedTouch™.
- ▶ No personal firewall software is running on your PC.

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 the Upgrade Wizard.

7.2 UPnP™ on Windows XP Systems

SpeedTouch™ not detected by UPnP™ or IGD Control Client

Check on following:

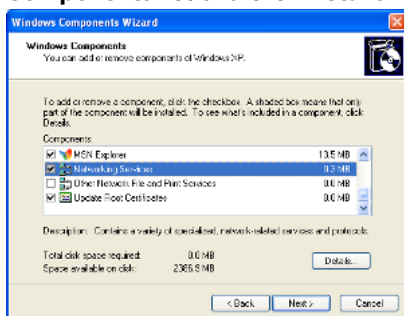
- ▶ Make sure the UPnP™ and Internet Gateway Device Control Client Networking components are added to your MS Windows XP system.
- ▶ Your computer doesn't support UPnP™ if you run an operating system other than MS Windows XP and MS Windows Millennium.
- ▶ Make sure that UPnP™ is not disabled in the SpeedTouch™ web page; see "5.5.4 Game & Application Sharing" on page 85.

Adding UPnP™

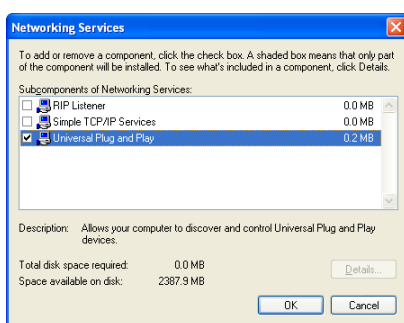
If you are running Microsoft Windows XP, it is recommended to add the UPnP™ component to your system.

Proceed as follows:

- 1 On the **Start** menu, click **(Settings >) Control Panel**.
- 2 The **Control Panel** window appears. Click **Add or Remove Programs**.
- 3 In the **Add or Remove Programs** window appears, click **Add/Remove Windows Components**.
- 4 In the **Windows Components Wizard**, select **Networking Services** in the **Components** list and click **Details**.



- 5 In the **Networking Services** window, select **Universal Plug and Play** or **UPnP User Interface** and click **OK**.



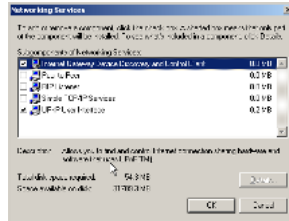
- 6 Click **Next** to start the installation and follow the instructions in the **Windows Components Wizard**.
- 7 At the end of the procedure the wizard prompts you that the installation was successful. Click **Finish** to quit.

Adding IGD Discovery and Control

Your MS Windows XP system is able to discover and control Internet Gateway Devices (IGD), like the SpeedTouch™ on your local network. Therefore it is recommended to add the IGD Discovery and Control client to your system.

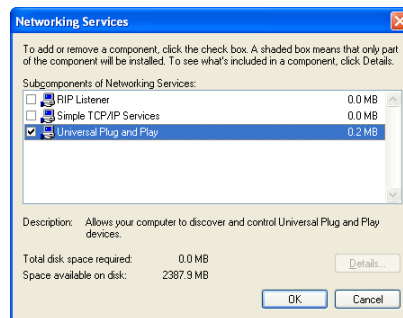
Proceed as follows:

- 1 On the Windows task bar, click **Start**.
- 2 Select **(Settings >) Control Panel > Add or Remove Programs**.
- 3 In the **Add or Remove Programs** window, click **Add/Remove Windows Components**.
- 4 The **Windows Components Wizard** appears:



Select **Networking Services** in the **Components** list and click **Details**.

- 5 In the **Networking Services** window, Select **Internet Gateway Device Discovery and Control Client** and click **OK**.



- 6 Click **Next** to start the installation and follow the instructions in the **Windows Components Wizard**.
- 7 At the end of the procedure the wizard prompts you that the installation was successful. Click **Finish** to quit.

7.3 Voice over IP Troubleshooting

Introduction If you're not able to establish a phone call via your SpeedTouch™, try the suggestions below.

Calling over VoIP

In case of problems when calling via VoIP, check following:

- ▶ Your telephone is correctly connected to the SpeedTouch™.
- ▶ Your telephone is working on the PSTN network:
 - ▶ Connect your phone directly to PSTN.
 - ▶ Try to make a phone call.
- ▶ Your phone number, user name, and password is configured correctly.
- ▶ The registrar's and proxy server's IP address and port number are configured correctly.
- ▶ The PWR, PPP and VoIP Ready LEDs are on.



As soon as the VoIP Ready LED turns on, you will here a click, indicating the switch form PSTN to VoIP.

Calling over PSTN

In case of problems when calling via the regular phone line, check following:

- ▶ Your telephone is correctly connected to the SpeedTouch™.
- ▶ Your telephone is working on the PSTN network:
 - ▶ Connect your phone directly to PSTN.
 - ▶ Try to make a phone call.
- ▶ Check whether the Forced FXO service is activated, or whether your service provider requested you to dial an extra prefix for making calls via PSTN.



If VoIP is enabled (VoIP Ready LED is on), and when making a forced FXO call, you will here a click, indicating the switch form VoIP to PSTN.

Problems with supplementary services

In case you have a problem with a supplementary telephony service, check whether the service is activated.

7.4 Reset to Factory Defaults

Resetting your SpeedTouch™

You might consider a reset to factory defaults as described below.



Be aware that a reset to factory defaults will revoke all configurational changes you made to the SpeedTouch™.

You can choose between:

- ▶ Hardware reset
- ▶ Software reset

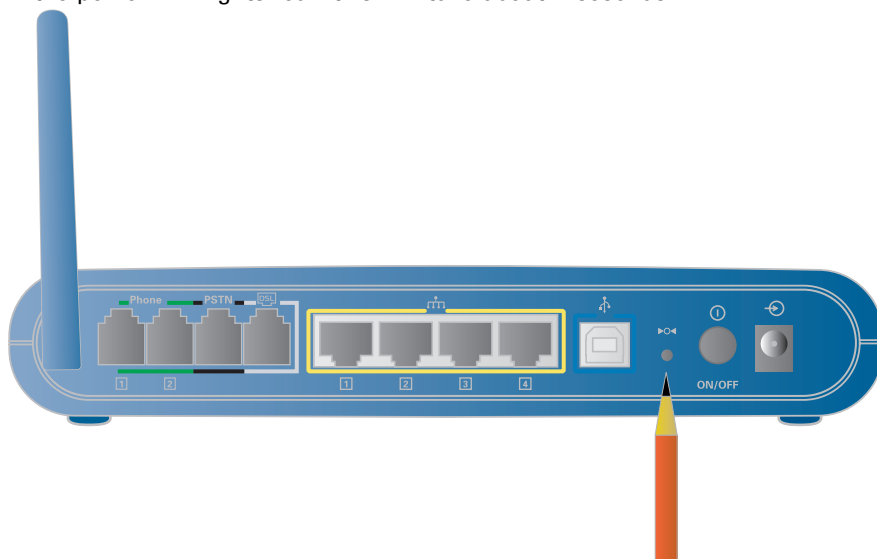
A reset to factory default settings deletes the configuration profile settings. Therefore, after the reset, a reconfiguration of your SpeedTouch™ will be needed.

Also your WLAN clients will have to be re-associated, as described in "2.3.2 Connecting First-time Wireless Clients" on page 26.

Hardware reset

Proceed as follows:

- 1 Make sure the SpeedTouch™ is powered on.
- 2 Use a pen or an unfolded paperclip to push the recessed reset button on the back panel. The reset button is marked with a red circle. Keep it pushed until the power LED lights red - this will take about 7 seconds.

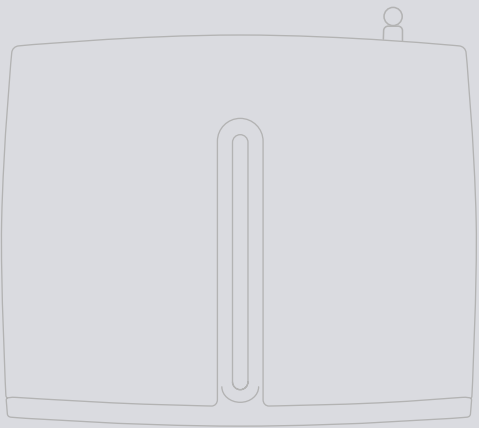


- 3 Release the reset button.
- 4 The SpeedTouch™ restarts.

Software reset

Proceed as follows:

- 1 Go to the SpeedTouch™ web pages.
- 2 In the menu select **SpeedTouch > Configuration**.
- 3 In the **Pick a task...** list, click **Reset my SpeedTouch to default settings**.
- 4 The SpeedTouch™ restarts.
- 5 The SpeedTouch™ returns to the SpeedTouch™ Home page (unless the IP address of your computer is not in the same subnet as the default IP address of the SpeedTouch™, being 192.168.1.254).



Need more help?

Additional help is available online at www.speedtouch.com

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