SpeedTouch™

500Series

Multi-User ADSL Gateways

Setup and User's Guide

THOMSON

speedtouch™

SpeedTouch™ 500Series

Setup and User's Guide

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Contents

1 SpeedTouch™ Installation

Introduction

Thank you for purchasing the SpeedTouch™500Series Multi-User ADSL Gateway! With the SpeedTouch™500Series Multi-User Asymmetric Digital Subscriber Line (DSL) Gateways, surfing the Internet will become a whole new experience.

In this Setup and User's Guide

This User's Guide will assist you in getting acquainted with the SpeedTouch™500Series Multi-User ADSL gateways and in getting connected quickly to the Internet.

Terminology

Generally, the SpeedTouch™500Series will be referred to as SpeedTouch™ in this Setup and User's Guide unless specifically indicated.

Safety instructions

Prior to connecting the SpeedTouch™, read the SpeedTouch™ Quick Installation Guide and Safety Instructions.

UPnP

The SpeedTouch™500Series are Universal Plug and Play (UPnP) certified products. This feature enables your computer to discover and control UPnP devices on the network.

Note For more information about how to install UPnP on your computer please consult your operating system's user's guide.

Documentation and software updates

The SpeedTouch™500Series products continue to evolve as extra and new functionalities are made available.

For more information on the latest technological innovations, software upgrades, and documents, please visit the SpeedTouch™ web site at:

www.speedtouch.com

1.1 Getting Acquainted with the SpeedTouch™

Introducing the SpeedTouch™

Prior to proceeding, please make sure to read first the SpeedTouch™ Quick Installation Guide. It provides important package content and safety information.

Check whether all items are present in your package.

In the event of damaged or missing items, please contact your local product dealer for further information.

The SpeedTouch™

Your SpeedTouch™ is presented in a slim line box:

Power on, power off

The power on/off button is located on the SpeedTouch™ front panel:

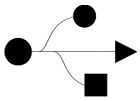
To turn on the SpeedTouch™: press the button once shortly.

To turn off the SpeedTouch™: press the button until all LEDs turn off.

Note As soon as the SpeedTouch™ is powered via its power inlet, the device starts up. If not press the front panel power button once shortly.

SpeedTouch™ LEDs

A set of LEDs is provided to overview the SpeedTouch™ status:

LED logo	Description
	Power/System LED
	DSL/WAN LED
	LAN LED
	USB LED

The USB LED is available on SpeedTouch™ variants that offer USB connectivity.

LED functionality during normal operation

The functionality of the LEDs during normal SpeedTouch™ operation is described in the table below:

Indicator			Description
Name	Color	Status	
Power/System	Off		Power off
	Green	On	Power on, normal operation
DSL/WAN	Off		No DSL line
	Amber	Flashing	DSL line synchronization pending
		On	DSL line synchronized
	Green/ Amber	Toggling	DSL line synchronized and end-to-end connection pending
	Green	On	DSL line synchronized and end-to-end connection active
LAN	Off		No Ethernet link
	Green	On	Ethernet link
USB	Off		No USB link
	Green	On	USB link

Alert condition LED functionality

In addition to normal operation behavior, the Power/System LED may also indicate following startup or error conditions:

Indicator			Description
Name	Color	Status	
Power/System	Off		Power off
	Amber	Flashing	Power on, BOOTP status
		On	Power on, POST(*) pending
	Red	On	Power on, POST(*) failed
	Green	Flashing	Power on, Back-to-Defaults status

(*) Power On Self Test (POST)

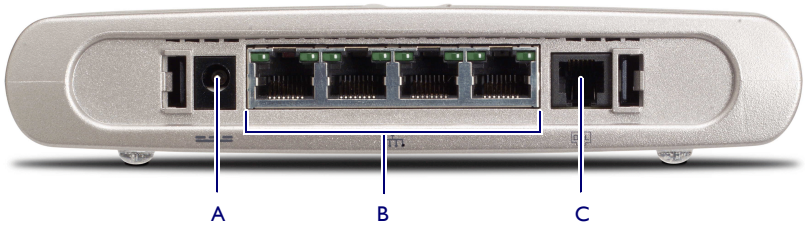
SpeedTouch™ back panel layout

Depending on the variant you purchased, your SpeedTouch™ is equipped with:

- A single 10/100Base-T Ethernet port:

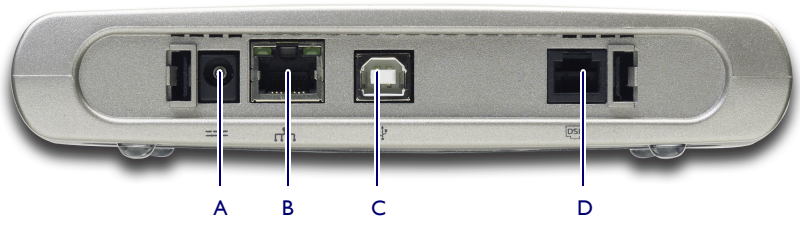
A	Power inlet
B	10/100Base-T Ethernet port
C	DSL line port

- A four port 10/100Base-T Ethernet switch:



A	Power inlet
B	10/100Base-T Ethernet switch
C	DSL line port

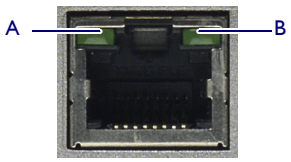
- A single 10/100Base-T Ethernet port and a USB port:



A	Power inlet	C	USB port
B	10/100Base-T Ethernet port	D	DSL line port

Ethernet port(s) LED functionality

Each Ethernet port on the rear panel has one LED to indicate the connection integrity (activity). Depending on the SpeedTouch™ variant you are using, a second LED may be provided to indicate the 10/100Base-T selection:



Indicator			Description
Name		LED Status	
A (Optional)	10/100Base-T	Off	10Base-T Ethernet connection.
		On	100Base-T Ethernet connection.
B	Integrity (Activity)	Off	No connection on this port.
		On	Ethernet link up.
		Flashing	Data is flowing from/to this port.

1.2 Setting up the SpeedTouch™

SpeedTouch™ variants

Two ADSL variants of the SpeedTouch™ exist:

- The ADSL/POTS variant connecting to an analog POTS(*) line
- The ADSL/ISDN variant connecting to a digital ISDN(**) line

Use only the SpeedTouch™ variant which is appropriate for the DSL service provided to your premises. Check with your Service Provider to determine whether your SpeedTouch™ is adapted to ADSL service requirements.

(*) Plain Old Telephone Service (POTS)

(**) Integrated Services Digital Network (ISDN)

ADSL service

The appropriate DSL service must be available at your premises:

- ADSL service must be enabled on your telephone line.
- As both telephone and ADSL service are simultaneously available from the same copper pair, you will need a central splitter or distributed filters for decoupling ADSL and telephone signals.

Always contact your Service Provider when installing splitters/filters!

Public telephone lines carry voltages that can cause electric shock. Only install splitter/filters yourself if these are qualified for that purpose. Other splitter/filters may only be installed by qualified service personnel.

Connect the DSL line

The DSL port on the SpeedTouch™ is marked DSL.

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

Connect the power supply

Always check first whether the power supply adapter provided is suitable for the local power specifications. Contact your Service Provider in case of any doubt.

The power inlet on the SpeedTouch™ is marked ⏻.

Plug the adapter's coaxial jack into the SpeedTouch™'s power inlet.

Turn on SpeedTouch™

As soon as the SpeedTouch™ is powered via its power inlet, the device starts up. If not press the front panel power button once shortly.

Local networking setup

Depending on the SpeedTouch™ variant you have, various solutions are available to connect your computer(s) to the device:

- Ethernet connectivity
  See "1.2.1 Local Ethernet Connection Setup" on page 10 for more information.
- USB connectivity
  USB connectivity is supported for MS Windows 98/98SE/ME, MS Windows 2000/XP, Mac OS 8.6/9.x and Mac OS X 10.1/10.2. Before being able to connect to the SpeedTouch™ through the USB connection you must first install USB drivers.
  See "1.2.2 SpeedTouch™ USB Connection Setup for Microsoft Windows Operating Systems" on page 11 and "1.2.3. SpeedTouch™ USB Connection Setup for Mac Operating Systems" on page 14 for more information.

In case of a SpeedTouch™ with USB connectivity you can use both local networking solutions simultaneously to form a single local network.

Internet connection setup

To continue with preparing the SpeedTouch™ for Internet connectivity, see "1.3 SpeedTouch™ Configuration Setup" on page 19.

1.2.1 Local Ethernet Connection Setup

Local network

For Ethernet connectivity you will need at least:

- A computer that already has an Ethernet Network Interface Card (NIC) installed
- If required, a hub or switch and the necessary connection cables

Ethernet cables

In the SpeedTouch™ package, a full-wired straight-through RJ45/RJ45 Ethernet cable, hereafter referred to as a LAN cable, is included.

As all SpeedTouch™ variants feature 10/100Base-T auto-sensing MDI/MDI-X Ethernet ports, you can use any type of full wired LAN cable to connect your equipment.

Standard wiring procedure

Use the LAN cable provided to wire your computer's Ethernet port to (one of) the SpeedTouch™'s Ethernet port(s).

In case of a single Ethernet port SpeedTouch™, you will need an external hub or switch to connect multiple computers.

In case of a SpeedTouch™ switch, you can create a local Ethernet network of up to four devices, without needing extra networking devices.

Ethernet link check

The SpeedTouch™ LED indicator(s) allow(s) you to check your Ethernet.

See "1.1 Getting Acquainted with the SpeedTouch™" on page 4 for more information.

1.2.2 SpeedTouch™ USB Connection Setup for Microsoft Windows Operating Systems

Supported Operating Systems

Installing and using the SpeedTouch™ USB connection is supported for following Microsoft Windows Operating Systems:

- Windows 98/98SE or Windows ME
- Windows 2000 or Windows XP

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

Minimum system requirements

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

Prerequisites

Make sure to remove any previous SpeedTouch™USB or SpeedTouch™330 installation that may reside on your PC before you install the USB drivers from the SpeedTouch™Setup CD-ROM.

Installing the SpeedTouch™ USB connection

The installation is Plug and Play, meaning that installation will require almost no effort.

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

Proceed as follows

1 Insert the 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.

Note You can also connect your computer to the SpeedTouch™ via a USB hub.

3 Windows will automatically recognize the SpeedTouch™:

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

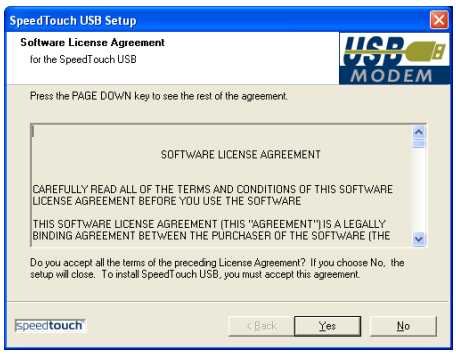
5 The following windows of the Found New Hardware Wizard allow you to select locations where it should search for drivers:

Insert the SpeedTouch™ Setup CD-ROM, make sure that the wizard looks for the drivers on the CD-ROM drive and click *Next* to continue.

6 The wizard will notify that it found drivers for the SpeedTouch™ on the CD-ROM.
Click *Next* to continue.

7 The installation procedure continues with the installation of the SpeedTouch™ USB drivers. The installation wizard will further refer to SpeedTouch™USB to indicate the SpeedTouch™ USB connection.

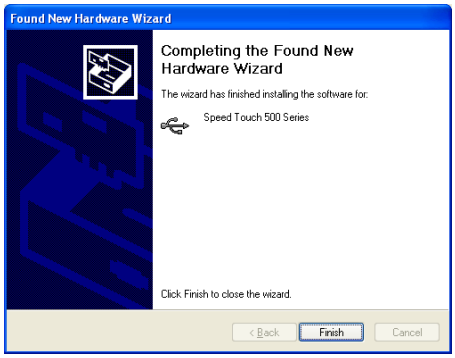
8 The Software Licence Agreement window appears:



You must accept before continuing. Therefor click *Yes* to accept.

9 In the following windows you can follow the installation procedure. Click *Next* whenever requested to continue the installation.

10 At the end of the procedure, the following window appears:



Click *Finish* to complete the installation.

As a result your SpeedTouch™ USB connection is installed and ready for use. Optionally you can connect another computer, using its Ethernet port, before continuing with the SpeedTouch™ Configuration Setup described in "1.3 SpeedTouch™ Configuration Setup" on page 19.

1.2.3. SpeedTouch™ USB Connection Setup for Mac Operating Systems

Supporting Operating Systems

Installing and using the SpeedTouch™ USB connection is supported for the following Mac Operating Systems:

- Mac OS 8.6/9.x
- Mac OS X 10.1/10.2 (or later)

Minimal system requirements

For Mac OS 8.6/9.x:

- 640 kilobytes (KB) of free disk space.

For Mac OS X 10.1/10.2:

- 118 megabytes (MB) of free disk space (during installation).

Prerequisites

Make sure to remove any previous SpeedTouch™ USB or SpeedTouch™ 330 installation that may reside on your computer before you install the USB drivers from the SpeedTouch™ Setup CD-ROM.

Make sure not to plug in the SpeedTouch™ USB interface to your computer as long as installation of the USB drivers is not completed and your computer restarted.

Installing the SpeedTouch™ USB connection on a Mac OS 8.6/9.x platform

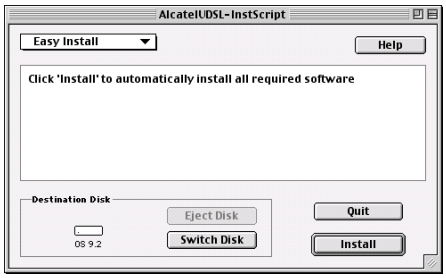
Make sure both your computer and SpeedTouch™ are turned on and operational.

Proceed as follows:

1 Insert the SpeedTouch™ Setup CD-ROM.

2 Open to the OS9 folder on your CD-ROM drive and double-click *Installer* to start the installation procedure.

3 The installation window appears:



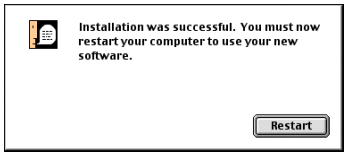
Make sure that *Easy Install* is selected in the drop-down list box and click *Switch Disk* to select your computer's OS8.6/9.x partition.
Click *Install* to continue.

4 The installer installs the necessary files to your computer.

5 The following screen appears:

Click *OK* to continue.

6 At the end of the procedure, the following window appears:



Click *Restart* to finish the installation and restart your computer.

7 After restarting your computer, the SpeedTouch™ USB drivers are fully installed and ready for use.
Insert the USB cable provided into the SpeedTouch™ USB port marked with the USB logo:  .

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

Optionally you can connect another computer, using its Ethernet port, before continuing with the SpeedTouch™ Configuration Setup described in "1.3 SpeedTouch™ Configuration Setup" on page 19.

Installing the SpeedTouch™ USB connection on a Mac OS 10.x platform

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

Proceed as follows:

1 Insert the USB cable provided into the SpeedTouch™ USB port marked with the USB logo:  .

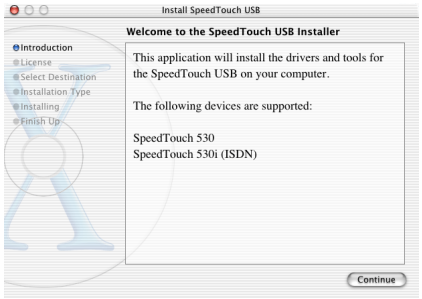
2 The other end of the USB cable fits in (one of) the USB port(s) of your computer. In most cases your computer's USB port is marked with the same USB symbol.

3 Insert the SpeedTouch™ Setup CD-ROM.

4 Open the OSX folder and double-click *SpeedTouchUSB* to start the installation procedure.

Note You need administration rights to perform this installation. If the installation wizard prompts you for authorization, click  to enter the administrator name and password or phrase.

5 The installation window appears:

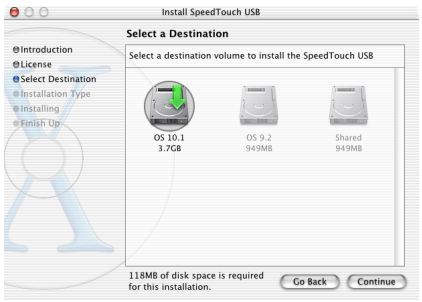


Click *Continue*.

6 The Software License Agreement appears:

When you click *Continue*, you are prompted to agree to the terms of the software license agreement. Click *Agree* to continue.

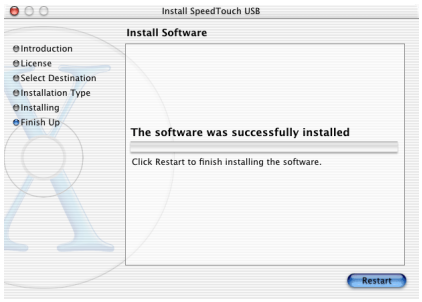
7 The installation wizard lists the drives found on your computer and asks you to select one:



The installation wizard automatically highlights your OS X partition.
Click the destination volume of your choice and click *Continue*.

8 In the following windows you can follow the installation procedure. Click *Continue* whenever requested to proceed.

9 At the end of the procedure, the following window appears:



Click *Restart*.

10 Your system restarts.

11 On the Apple menu, click *System Preferences*.

12 In the System Preferences window, click the Network icon.

13 The Network window appears:

In the Show list click *Active Network Ports*, and drag *Ethernet Adaptor (en_x)* to the top of the list. If you do not intend to use the other interfaces, clear the corresponding check boxes.
Click *Apply Now* to confirm the modifications to the network settings.

As a result your SpeedTouch™ USB connection is installed and ready for use. Optionally you can connect another computer, using its Ethernet port, before continuing with the SpeedTouch™ Configuration Setup described in "1.3 SpeedTouch™ Configuration Setup" on page 19.

1.3 SpeedTouch™ Configuration Setup

Internet connectivity

Regardless whether connectivity is made via the Ethernet port(s), or the USB port (or both), still some configuration may be required to prepare the SpeedTouch™ for Internet connectivity.

What you need from your ISP

You must have a user account with an Internet Service Provider (ISP) for Internet access. For this user account, it will provide you with:

- A user name (logon ID)
- A password

Other information may be required, depending on the ISP's specific requirements.

Configuration of the SpeedTouch™

Depending on your computer's Operating System (OS) the configuration of your Internet connectivity can be done automatically or manually.

If your computer runs:

- A Microsoft Windows OS.
  The SpeedTouch™ Setup wizard, included on the SpeedTouch™ Setup CD-ROM, will automatically guide you through the configuration of both the SpeedTouch™ and your PC for setting up the appropriate configuration.
  Proceed with "1.3.1 Configuration Setup for Microsoft Windows Operating Systems" on page 20.
- Another OS, e.g. Mac OS, Unix, Linux.
  The SpeedTouch™ Embedded Easy Setup wizard, accessible from the SpeedTouch™ web pages, will automatically guide you through the configuration of the SpeedTouch™.
  Proceed with "1.3.2 Configuration Setup for other Operating Systems" on page 26.

1.3.1 Configuration Setup for Microsoft Windows Operating Systems

Microsoft Windows

One of the following Windows operating systems must already be installed on your PC(s):

- Windows 98
- Windows 98SE
- Windows ME
- Windows NT4.0 SP6 (Ethernet only)
- Windows 2000
- Windows XP

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

The SpeedTouch™ Setup wizard

The SpeedTouch™ Setup wizard procedure consists of two major parts:

- The detection procedure
- The configuration procedure

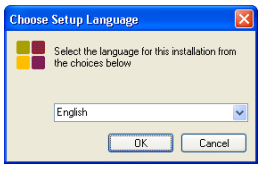
The detection procedure

The detection procedure proceeds as follows:

1 Insert the SpeedTouch™ Setup CD-ROM in your PC's CD-ROM drive. The SpeedTouch™ CD Browser will start automatically.

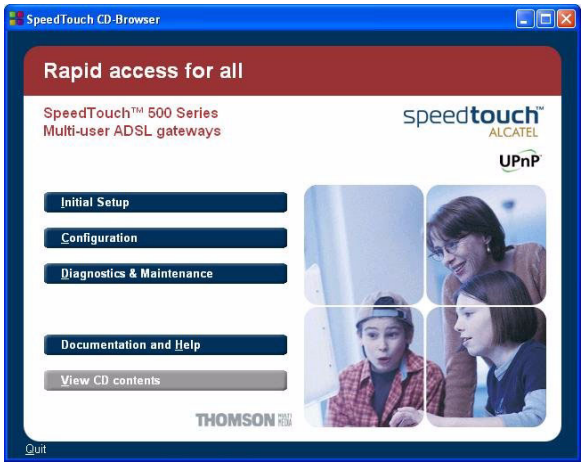
Note If the SpeedTouch™ CD Browser window does not appear automatically, open a Run window via Start > Run from the Start menu and enter the following path: *D:\Menu.exe*, where D stands for the drive letter of your CD-ROM drive.

2 The Choose Language window prompts you to select a language:



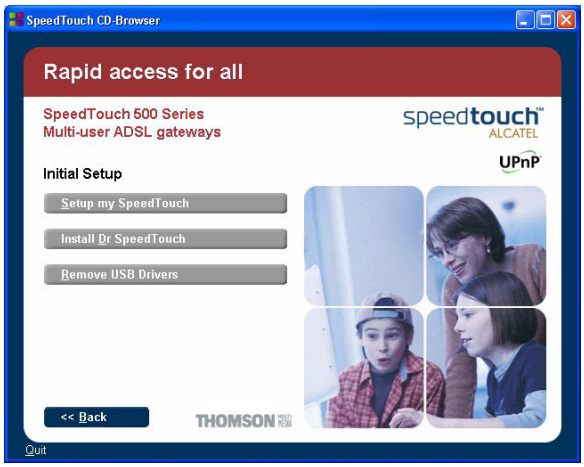
Select the language of your choice and click *OK*.

3 The SpeedTouch™ CD Browser appears:



Click *Initial Setup*.

4 The Setup and Installation window appears:

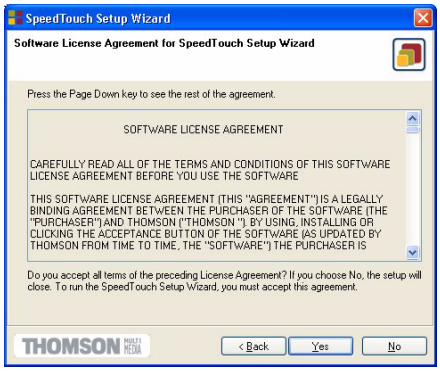


To start the SpeedTouch™ Setup wizard, click *Setup my* SpeedTouch™.

5 The Welcome to the SpeedTouch™ Setup Wizard window appears:

Click *Next* to proceed.

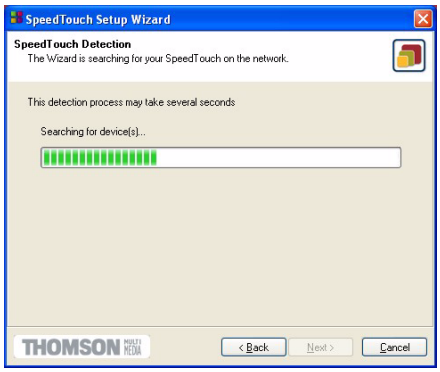
6 The Software License Agreement window appears:



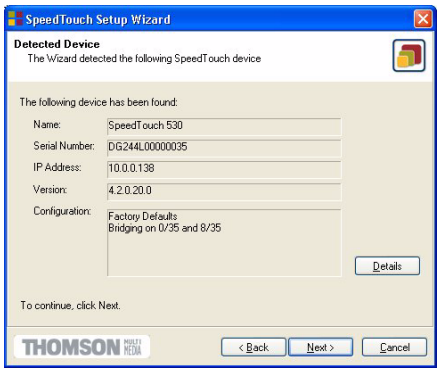
You must accept before continuing. Therefor click *Yes* to accept.

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

7 The Setup wizard will continue to search for the SpeedTouch™ on the network. The following window shows the detection progress:



8 The Setup wizard should find your SpeedTouch™ device on the local network. This is indicated by the following window:



In case more than one SpeedTouch™ device is found, a listing is provided from which you can select your SpeedTouch™.

Note If the Setup wizard does not find any SpeedTouch™ on the network an error window pops up. In this case check:

- Whether the SpeedTouch™ is turned on and fully initialized.
- Whether your PC is correctly connected to the SpeedTouch™ (Ethernet or USB).
- Whether no dedicated firewall device or router is placed between your PC and the SpeedTouch™ and whether no personal firewall software is running on your PC (in case of Ethernet connectivity).
- Whether the SpeedTouch™ USB drivers are correctly and fully installed (in case of USB connectivity).

To repeat the search for the SpeedTouch™, click *Back* and proceed with step 7 of this procedure.

9 To continue with the configuration of your SpeedTouch™ and your PC, proceed with the configuration procedure described below.

The configuration procedure

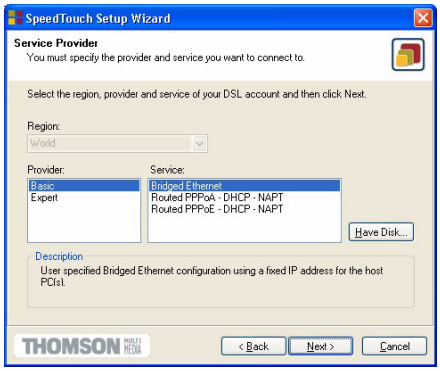
The Configuration procedure proceeds as follows:

1 Once the SpeedTouch™ Setup wizard has detected your SpeedTouch™ device, you can proceed with the configuration procedure.
If more than one SpeedTouch™ device is listed, select the appropriate one.
Then, click *Next* to proceed.

Note If the SpeedTouch™ has been configured before:

- It may be protected by a system password. You must provide this password before you can view the device details or continue with the configuration.
- You will be asked to choose between reconfiguring your SpeedTouch™ or changing your Local Area Network configuration. Select the Reconfigure the SpeedTouch™ option and click *Next*.

2 The following window invites you to select the appropriate connection profile for your Internet connectivity:

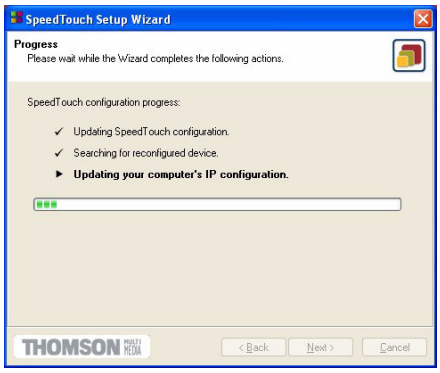


Select the connection profile of your choice and click *Next* to continue.

Note If the Service Provider has included a separate disk with a dedicated connection profile, click *Have Disk* to navigate to the location of the appropriate connection profile file.

3 Subsequent screens will guide you through the configuration setup of both your SpeedTouch™ and/or your PC. Follow the instructions and enter the required information where needed. This information should be provided by your Service Provider.

4 In a final step all configurations will be applied to the SpeedTouch™ and your PC. You can follow the configuration progress in following window:



5 The SpeedTouch™ Setup wizard will appear again to announce that the configuration has been successful:

Click *Finish* to close the wizard.

Note In some cases, the SpeedTouch™ Setup wizard may ask you to restart your computer.

Most configuration profiles will enable SpeedTouch™'s DHCP server - and a PC's Ethernet port is configured as DHCP client by default. Therefore, in most cases, no additional configuration of your PCs must be done if you want to enable multiple PCs on your local network for accessing the Internet via the SpeedTouch™.

To make sure that all PCs are configured as expected (DHCP or fixed IP addresses) you can re-run the SpeedTouch™ Setup wizard on every PC and select the Change the LAN configuration option.

For fixed IP configurations, or other advanced settings, please follow the instructions provided by your ISP or network administrator.

1.3.2 Configuration Setup for other Operating Systems

Supported Systems

As the SpeedTouch™ is OS-independent, this configuration setup can be used by any computer system.

Note The following procedure may equally be used on MS Windows OSs.

TCP/IP

Ensure that your operating system has a valid TCP/IP configuration.

Configure your computer with a static Net10 private IP address, e.g. 10.0.0.1. Ensure, however, that you do NOT use the 10.0.0.138 IP address as this is the default IP address of the SpeedTouch™.

To ensure that IP connectivity exists, you can ping the SpeedTouch™.

Procedure

The configuration setup proceeds as follows:

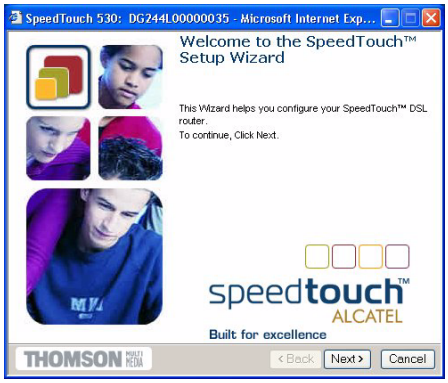
1 To ensure that the SpeedTouch™ is in its factory default state, reset the SpeedTouch™ to the default configuration. See "5 Troubleshooting" on page 73.

2 Open a web browser and browse to the SpeedTouch™'s default IP address 10.0.0.138. See "3 SpeedTouch™ Web Interface" on page 43 for more information.

3 As a result the SpeedTouch™ System Info web page appears.
Expand the Advanced Topics and click *Easy Setup*.

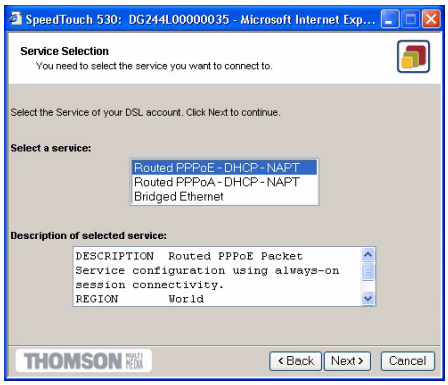
Note If the SpeedTouch™ is in factory defaults, the Easy Setup wizard will appear automatically.

4 The Welcome to the SpeedTouch™ Setup Wizard window appears:



Click *Next* to continue.

5 The following window invites you to select the appropriate connection profile for your internet connectivity:



In the Service list, click the connection profile of your choice.

Note You can add services to the Services list by uploading templates. See " Templates" on page 61 for more information on uploading templates.

6 Subsequent screens guide you through the configuration setup of both your SpeedTouch™ and/or your PC. Follow the instructions and enter the required information where needed. This information should be provided by your Service Provider.

7 In a final step all configurations are applied to the SpeedTouch™:

8 The SpeedTouch™ Setup Wizard appears again to announce that the configuration has been successful:

Click *Finish* to close the wizard.

9 After the configuration is applied on the SpeedTouch™ some additional configuration of your computer system may be necessary.

Note The required settings for your computer should be provided by your Service Provider, if applicable.

10 To check whether the new configuration was successfully completed, you can browse to the SpeedTouch™ and check its current status.

1.4 Dr SpeedTouch™ Installation

Supported Operating Systems

Installing and using Dr SpeedTouch™ is only supported for following Microsoft Windows Operating Systems:

- Windows 98
- Windows 98SE
- Windows ME
- Windows NT4.0 SP6
- Windows 2000
- Windows XP

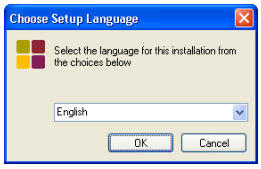
Installation procedure

The installation procedure proceeds as follows:

1 Insert the SpeedTouch™ Setup CD-ROM in your PC's CD-ROM drive. The SpeedTouch™ CD Browser will start automatically.

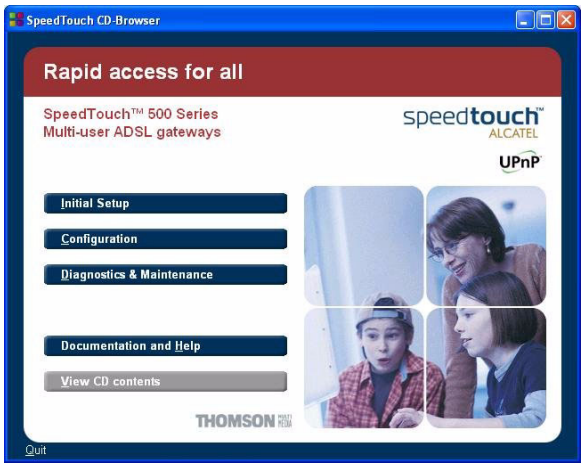
Note If the SpeedTouch™ CD Browser window does not appear automatically, open a Run window via Start > Run from the Start menu and enter the following path: *D:\Menu.exe*, where D stands for the drive letter of your CD-ROM drive.

2 The Choose Language window prompts you to select a language:



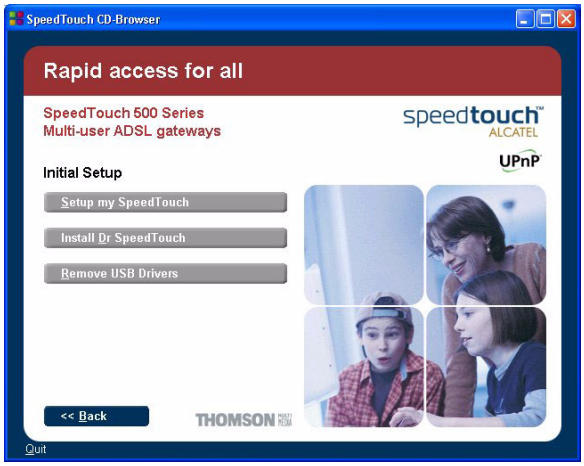
Select the language of your choice and click *OK*.

3 The SpeedTouch™ CD Browser appears:



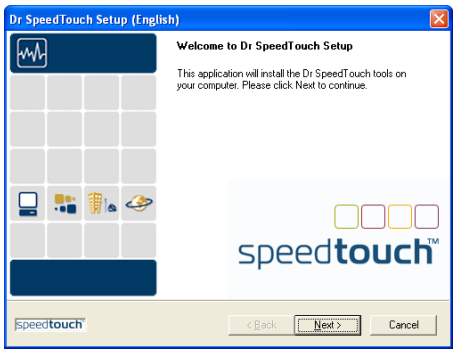
Click *Initial Setup*.

4 The Setup and Installation window appears:



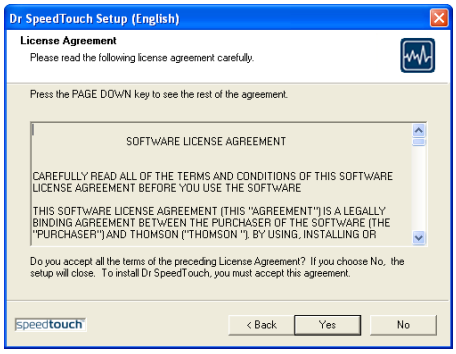
To start the Dr SpeedTouch™ Setup wizard, click *Install Dr* SpeedTouch™.

5 The Dr SpeedTouch™ Setup wizard appears:



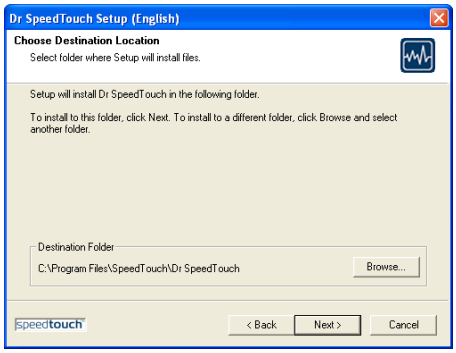
Click *Next* to continue.

6 The Software License Agreement appears:



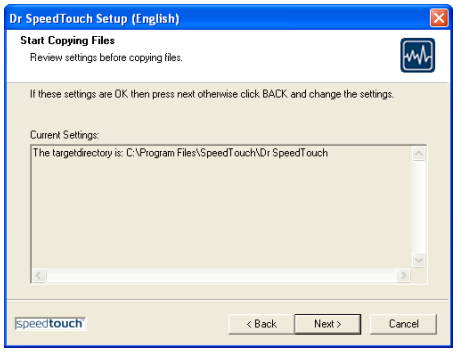
You must accept before continuing. Therefor click *Yes* to accept.

7 The Dr SpeedTouch™ Setup wizard asks you to select a destination folder:



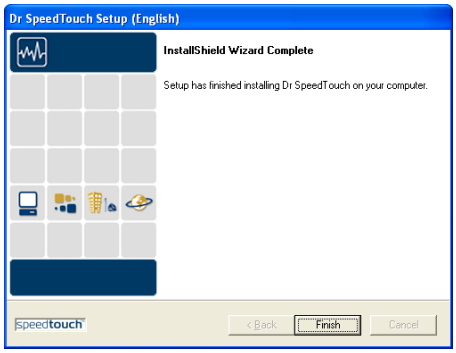
Click *Next* to install Dr SpeedTouch™ to the default folder. To select a different folder, click *Browse*.

8 The following screen appears:



Click *Next* to continue.

9 At the end of the procedure the following window appears:



Click *Finish* to complete the installation.

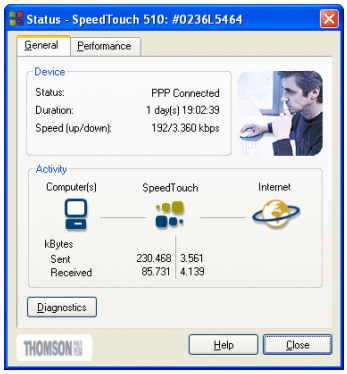
Starting Dr SpeedTouch™

To start Dr SpeedTouch™:

1 Double-click in the status area.

2 Dr SpeedTouch™ searches your network for SpeedTouch™ devices. If more than one device is found, a list of available devices will be provided. If this is the case, select the SpeedTouch™ of your choice and click *OK*.

3 The Dr SpeedTouch™ window appears:



Dr SpeedTouch™ features

Dr SpeedTouch™ allows you to:

- View the SpeedTouch™ device information.
- View the SpeedTouch™ activity.
- Test the connectivity of your computer and the SpeedTouch™ device via the Diagnostics wizard.
- Monitor the SpeedTouch™ performance.

Note For more information on Dr SpeedTouch™ please click *Help*.

2 SpeedTouch™ Internet Connectivity

Introduction

This chapter provides information on how to access the Internet and how to configure your SpeedTouch™ according to your preferences.

Adding UPnP to a Microsoft Windows XP system

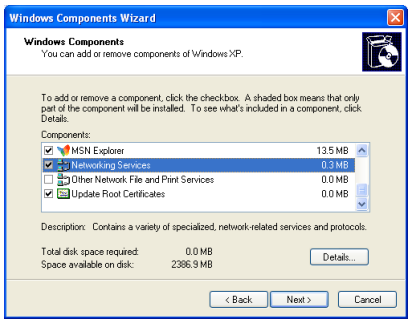
If you are running Microsoft Windows XP, we strongly recommend to add the Universal Plug and Play (UPnP) component to your system. To add the UPnP component proceed as follows:

1 On the start menu, click *Control Panel*.

2 The Control Panel window appears. Double-click the *Add or Remove Programs* icon.

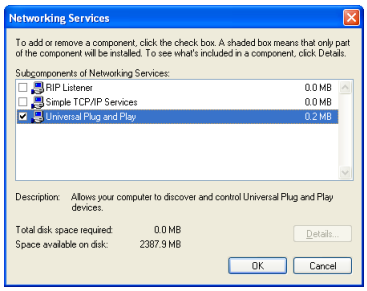
3 The Add or Remove Programs window appears. Click *Add/Remove Windows Components*.

4 The Windows Components wizard appears:



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

5 The Networking Services window appears:



Select the Universal Plug and Play check box 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 succesfull. Click *Finish* to quit the installation.

For more information on UPnP and SpeedTouch™ UPnP features go to the UPnP pages at the SpeedTouch™ web site:

www.speedtouch.com/upnp.htm

2.1 Surfing the Internet

Introduction

Once the SpeedTouch™ and the computers have been configured as outlined in "1.3 SpeedTouch™ Configuration Setup" on page 19, you can connect to the Internet.

Access methods

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

- Direct access
  As soon as the initial configuration has been performed, continuous and immediate access is available via the DSL line.
- Dial-in access
  Access must be explicitly established, e.g. by "dialing" into a Broadband Remote Access Server (BRAS).

The method used depends on the configuration profile/file you used to configure the SpeedTouch™ and the Service Provider's requirements.

Dial-in access

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.
  See "2.2 Connect to the Internet via SpeedTouch™'s embedded PPP client." on page 35 for more information.
- A dial-in application on your computer.
  See "2.3 Connect to the Internet via a Host PPPoE Dial-in Client" on page 38 for more information.

Your Internet connection

Regardless of whether a direct access or a dial-in access method is used to make your connection, once the connection is established, opening your web browser is enough to access the World Wide Web (WWW) or Internet.

Note In case of direct access, the remote organization might ask for a user name and password on an Internet welcome page.

2.2 Connect to the Internet via SpeedTouch™'s embedded PPP client.

Introduction

The SpeedTouch™ supports both two most popular connection methods: Routed PPP over ATM (PPPoA) and PPP over Ethernet (PPPoE).

The connection method to use depends on the preferences of your ISP, hence the configuration profile you must apply to the SpeedTouch™.

Note To use the embedded Routed PPPoA (PPPoE) dial-in client, the SpeedTouch™ needs to be configured for Routed PPPoA (PPPoE) via the SpeedTouch™ Setup wizard or the embedded Easy Setup wizard.

2.2.1 Internet Sessions via Windows XP's UPnP

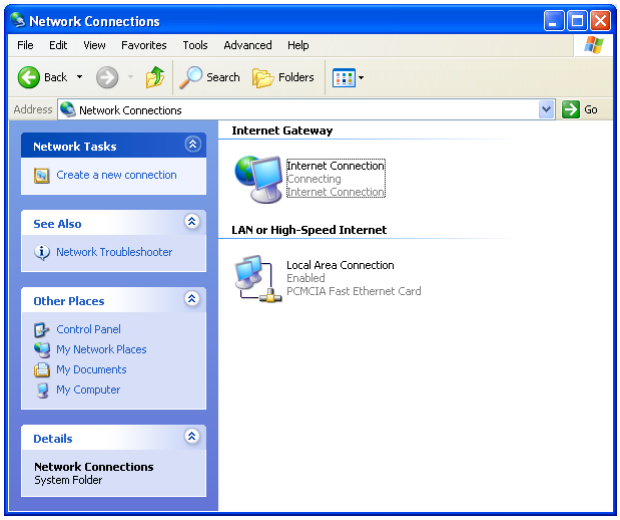
Starting an Internet session via Windows XP's UPnP

To connect to the internet via Windows XP's Internet Connection icon proceed as follows:

1 Click *Control Panel* on the Start menu.

2 The Control Panel window appears. Double-click *Network Connections*.

3 The Network Connections window appears:



Double-click the *Internet Connection* icon.

4 Your computer connects to the Internet.

Terminating an Internet Session session via Windows XP's UPnP

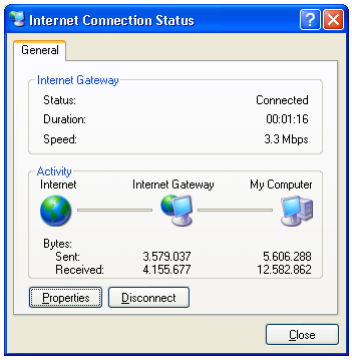
To close an active Internet session:

1 Click *Control Panel* on the Start menu.

2 The Control Panel window appears. Double-click *Network Connections*.

3 The Network Connections window appears. Double-click the *Internet Connection* icon.

4 The Internet Connection Status window appears:



Click *Disconnect* to close the session.

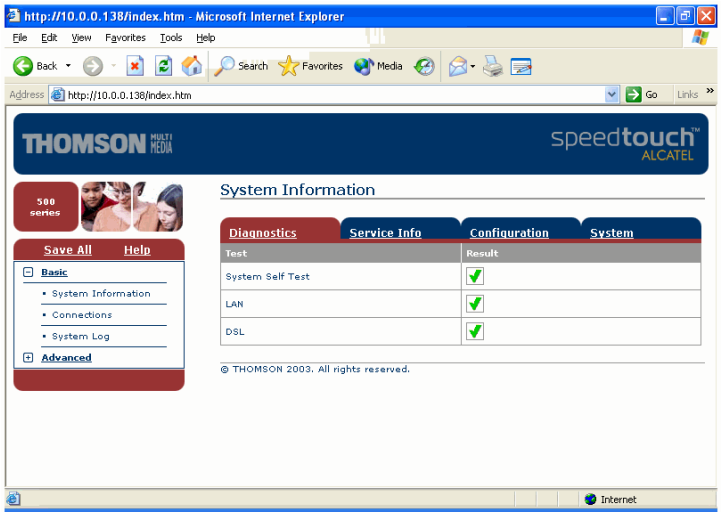
5 Your computer terminates the connection.

2.2.2 Internet Sessions via the SpeedTouch™ Web Pages (all OSs)

Starting a PPP session

To open a Routed PPP connection to the Internet:

1 Open a web browser on your computer and browse to the SpeedTouch™ web pages:



2 If needed, expand the Basic Topics, and click *Connections* to open the Connections web page.

3 In the Connections table all configured Routed PPP entries are shown.
In the Interface column click the entry you want to start a session with. As a result the entry will be highlighted.

4 Make sure the connection is disconnected.

5 If not provided yet, enter your user name and password in the appropriate fields. If you want the SpeedTouch™ to remember your credentials, select the Save this password check box.

6 Click *Connect*.
While the SpeedTouch™ tries to start the session 'trying' appears in the State column of the entry. Once the session is started successfully the field displays 'up'. From then on you are online and you can start your application or browse the Internet.

Terminating an opened PPP session

To close an active Routed PPP connection:

1 Ensure that you have access to the SpeedTouch™ web pages.

2 Browse to the SpeedTouch™ Connections page and select the connection entry you want to terminate the session for.

3 Click *Disconnect*. The entry's session state will change to 'Down', i.e. it becomes idle.

2.3 Connect to the Internet via a Host PPPoE Dial-in Client

Introduction

This section explains how you can connect to the Internet using a dial-in application on a computer running:

- Microsoft Windows XP.
- Mac OS X.

2.3.1 Using the Windows XP Dial-in Client

Configuring a dial-in connection on a Windows XP platform

To create a new dial-in connection proceed as follows:

1 On the Start menu, click *Control Panel*.

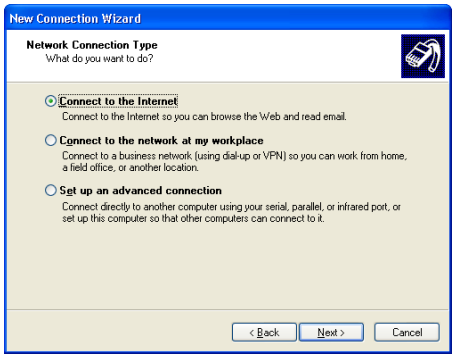
2 The Control Panel window appears. Double-click *Network Connections*.

3 The Network Connections window appears. Click *Create a new connection* in the Network Tasks menu.

4 The New Connection wizard appears:

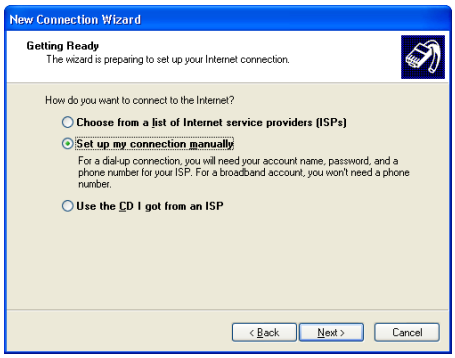
Click *Next* to continue.

5 The following window appears:



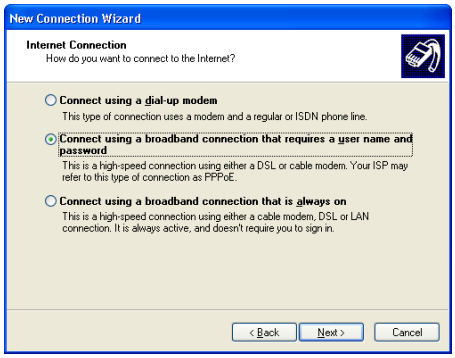
Select the *Connect to the Internet* option and click *Next* to continue.

6 The New Connection wizard asks you how you connect to the internet:



Select *Set up my connection manually* and click *Next* to continue.

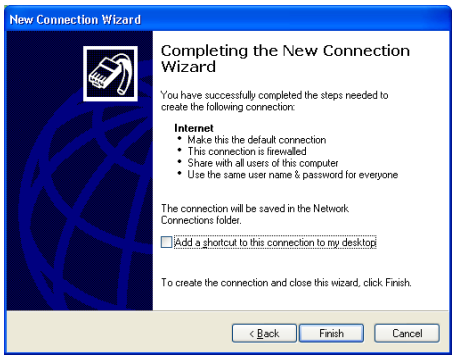
7 The New Connection wizard asks you how you connect to the internet:



Select *Connect using a broadband connection that requires a user name and password*. Click *Next* to continue.

8 Subsequent screens will guide you through the wizard. Follow the instructions and enter the required information where needed. This information should be provided by your Service Provider.

9 At the end of the configuration the following window appears:



Click *Finish* to complete the configuration.

Starting a dial-in Internet session from Windows XP

To connect to the internet proceed as follows:

1 On the Start menu, point Connect To and click *Internet*.

2 The Connect Internet window appears:

Enter User name and password if needed and click *Connect*.

3 Your computer connects to the internet.

2.3.2 Using the Mac OS X Dial-in Client

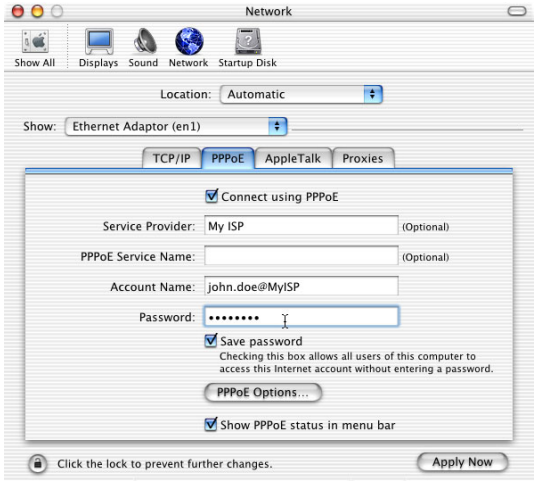
Configuring a dial-in connection on a Mac OS X platform

To create a dial-in connection proceed as follows:

1 On the Apple menu, click *System Preferences*.

2 The System Preferences window appears. Click the Network icon.

3 The Network window appears:



In the Show list, select Ethernet Adaptor (enx) and click the PPPoE tab.

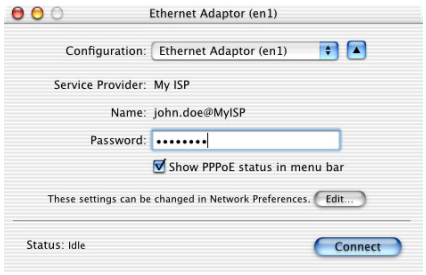
4 Enter the Account Name and Password provided by your Service Provider and Click *Apply now.*

Starting a dial-in connection on a Mac OS X platform

To connect to the internet proceed as follows:

1 Click the Internet Connect icon in the dock.

2 The following window appears:



Make sure Ethernet Adaptor (enx) is selected in the Configuration list. Enter your password and click *Connect*.

3 Your computer connects to the internet.

3 SpeedTouch™ Web Interface

Introduction

The SpeedTouch™ comes with integrated local configuration capabilities.

The local configuration, via the SpeedTouch™ web interface, is based on the HTTP server/web browser concept.

It allows you to configure your SpeedTouch™ via a web browser using HTML pages from any local computer attached to the Ethernet interface(s) and/or from the PC connected via the USB interface (in case of a SpeedTouch™ with USB connectivity).

Requirements

Before you access the SpeedTouch™ pages, make sure that your browser is configured to directly connect to the SpeedTouch™, i.e. that it is not using a proxy server.

If required, you can disable the proxy server for the time you want to access the SpeedTouch™ web pages.

For more information on how to disable your web browser's proxying, please consult the web browser's user's guide.

Use of the SpeedTouch™ web interface

In most cases, the SpeedTouch™ is correctly configured for your Internet connectivity via the appropriate configuration profile/file and no further configuration on the web interface is needed.

Access to the web pages is only required for some advanced configurations and upgrading/updating or backing up the SpeedTouch™ configuration.

Access to the SpeedTouch™ web interface

To access the SpeedTouch™ web pages:

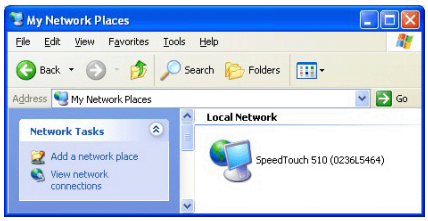
1. Start the web browser on your computer.
2. Browse to the SpeedTouch™ at the SpeedTouch™'s IP address (in most cases 10.0.0.138).
3. If a system password has been set, an authentication window will be displayed. Enter user name and system password in the appropriate fields.

Access to the SpeedTouch™ web interface via UPnP

If your computer is UPnP enabled you can access the pages as follows:

1 Double-click *My Network Places* on your desktop.

2 The following window appears:

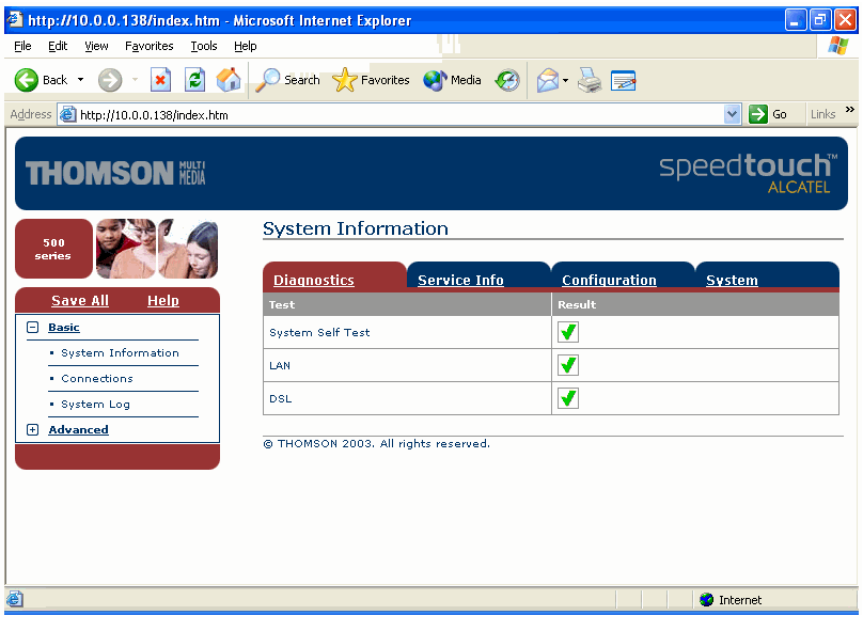


Double-click the SpeedTouch™ icon.

3 If a system password has been set, an authentication window will be displayed. Enter user name and system password in the appropriate fields.

Result

As a result the System Information page appears:



From now on, the SpeedTouch™ acts as a web server, sending HTML pages/forms at your request. You can fill out these pages/forms and submit them to the SpeedTouch™. The latter scans the pages and performs the appropriate configurations.

Topic menu and links

On the left of each of the SpeedTouch™ web pages a topics menu is provided. This menu navigates you via links through all configurational aspects of the SpeedTouch™.

For your convenience the links are sorted in two expandable topics menus: Basic and Advanced. The links in the Basic topic menu lead you to pages for basic SpeedTouch™ configuration and maintenance, i.e. the pages for every-day use. The Advanced topic menu, contains the links which allow advanced configuration of the SpeedTouch™. These pages need only to be accessed for some specific operations.

The following table lists all Basic topic links:

BASIC topic menu	
Click …	To …
System Information	View the current configuration profile. View the current ADSL line status.
Connections	Establish dial-in connections.
System Log	View the activity on the SpeedTouch™ since power on.

The following table lists all advanced topic links:

ADVANCED topic menu	
Click …	To …
Diagnostics	View SpeedTouch™ diagnostics.
Easy Setup	Configure the SpeedTouch™.
IP Addresses	View/configure the SpeedTouch™ IP interfaces.
IP Routing	View/configure the SpeedTouch™ IP router.
NAPT	View/configure static NAPT entries. View/configure multi-NAT entries. Define a default local server for inbound connectivity. Configure UPnP.
DHCP	View/configure the SpeedTouch™ DHCP server/client.
DNS	View/configure the SpeedTouch™ DNS server/client.
System	Backup and/or upload configuration files. Restore the SpeedTouch™ default settings.
System Password	Set a system password.
Templates	View/upload templates.
Language	Configure the web page language.

Help

The Help link in the topics menu header allows you to browse the SpeedTouch™ online Help.

For more information on a specific topic you can click the context-related Help links located at the Topic's web pages.

Save all

It is advised to save the SpeedTouch™ configuration and to back it up whenever you made changes to its settings.

To save the configuration click the Save All link in the topics menu header.

For backing up the SpeedTouch™ configuration, see " System" on page 60.

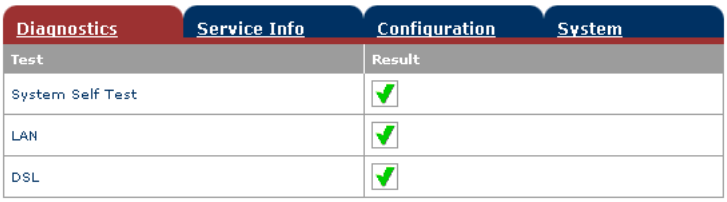
3.1 Basic Topics Menu Links

System Information

Click this link to display the System Information page. This page is also the SpeedTouch™ home page.

The System Information page consists of four sections:

- Click the Diagnostics tab to view the results of the System Self Test, LAN connectivity and DSL synchronization test:



Test	Result
System Self Test	✓
LAN	✓
DSL	✓

- Click the Service Info tab to view the current physical status of the ADSL line:

DSL	Statistics
Line Status	Enabled
Bandwidth Up/Down (Kbit/sec)	192 / 3360
Uptime	00:25:23
kBytes Tx/Rx	83 / 4
Interface	**PPPoA_1**
IP Addresses/Netmasks	217.136.165.117/32
Primary DNS	195.238.2.21
Secondary DNS	195.238.2.22

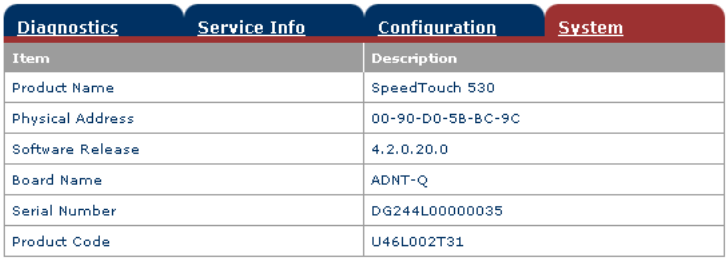
The DSL Statistics allow you to view:

- Line Status: this shows wether the DSL link is synchronized (Enabled) or not (Initializing).
- Bandwidth Up/Down: the maximum available bandwidth of the DSL link in both up- and downstream direction.
- Uptime: The duration of the current Enabled Line Status.
- kBytes Tx/Rx: the amount of kilobytes (kBytes) sent (Tx) and received (Rx) since the establishment of the DSL link.

- Click the Configuration tab to view the configuration profile currently active on the SpeedTouch™:

Item	Description
Region	World
Provider	Any
Service Name	Routed PPPoA - DHCP - NAPT
Service Description	Routed PPPoA Packet Service configuration using always-on session connectivity.

- Click the System tab to view some important system information of the SpeedTouch™:



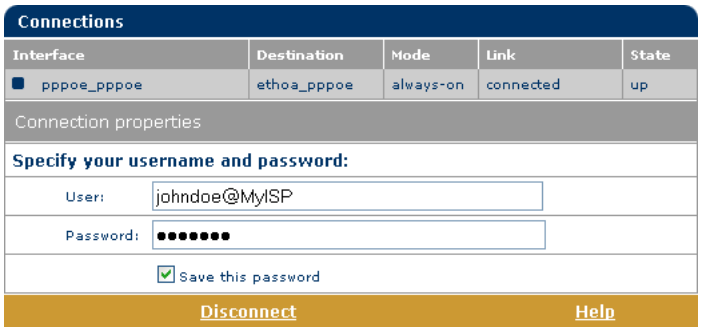
The System table lists:

- The SpeedTouch™ product name.
- The unique Medium Access Control (MAC) address of your SpeedTouch™. This MAC address can be used to identify your SpeedTouch™.
- The SpeedTouch™ Software Release.
- The SpeedTouch™ Board Name.
- The SpeedTouch™ Serial Number
- The SpeedTouch™ Product Code.

Connections

Click this link to view the Connections page.

This page allows you to establish dial-in connections, if applicable:

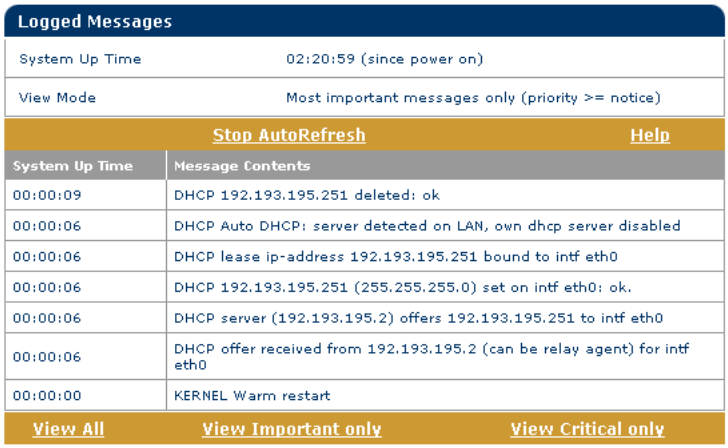


See "2.2.2 Internet Sessions via the SpeedTouch™ Web Pages (all OSs)" on page 37 for more information on how to use the Dial-in Connections table.

System Log

Click this link to view the System Log page.

This page allows you to view the activity on the SpeedTouch™ since power on:



Logged Messages

System Up Time	02:20:59 (since power on)
View Mode	Most important messages only (priority >= notice)

Stop AutoRefresh | Help

System Up Time	Message Contents
00:00:09	DHCP 192.193.195.251 deleted: ok
00:00:06	DHCP Auto DHCP: server detected on LAN, own dhcp server disabled
00:00:06	DHCP lease ip-address 192.193.195.251 bound to intf eth0
00:00:06	DHCP 192.193.195.251 (255.255.255.0) set on intf eth0: ok.
00:00:06	DHCP server (192.193.195.2) offers 192.193.195.251 to intf eth0
00:00:06	DHCP offer received from 192.193.195.2 (can be relay agent) for intf eth0
00:00:00	KERNEL Warm restart

View All | View Important only | View Critical only

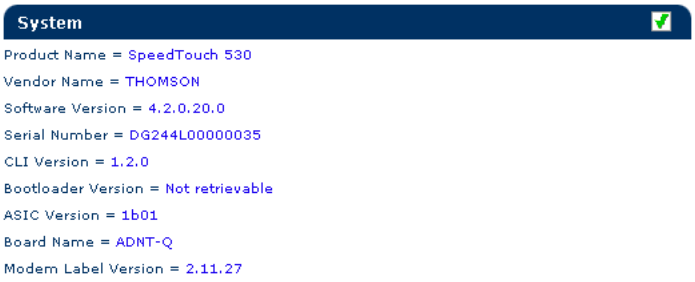
3.2 Advanced Topics Menu Links

Diagnostics

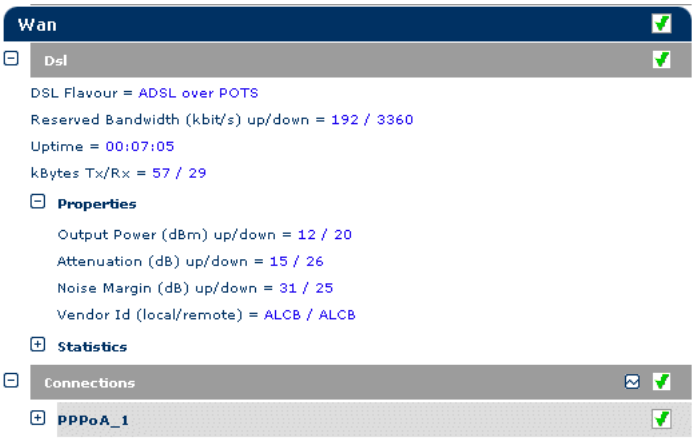
Click this link to display the Diagnostics page.

This page consists of three expandable sections:

- Expand the System section to view some important system information:

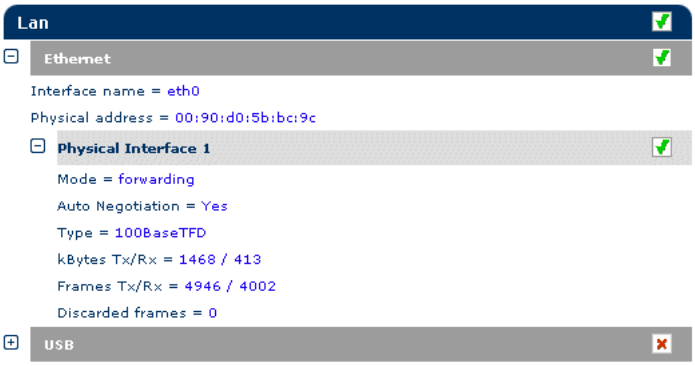


- Expand the Wan section to view the current DSL state and connection information click the plus next to DSL and Connections:



Click ⛶ to perform an IP connectivity test.

- Expand the Lan section to view the LAN configuration:

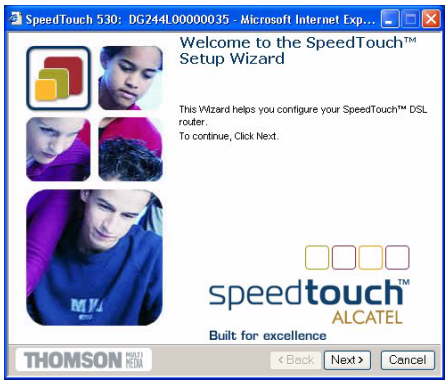


Easy Setup

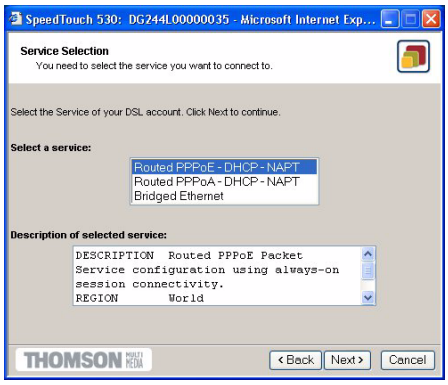
To configure the SpeedTouch™ using the Easy Setup wizard:

1 Click Advanced > Easy Setup to start the Easy Setup wizard.

2 The Welcome to the SpeedTouch™ Setup Wizard window appears:



3 The following window invites you to select the appropriate connection profile for your internet connectivity:



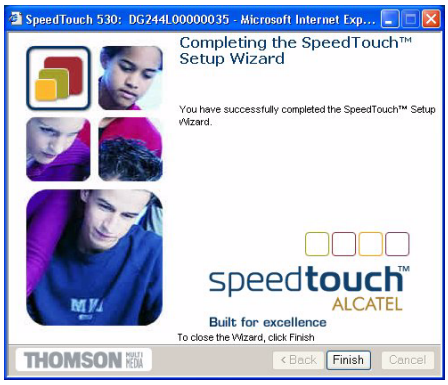
In the Service list, click the connection profile of your choice.

Note You can add services to the Services list by uploading templates. See " Templates" on page 61 for more information on uploading templates.

4 Subsequent screens guide you through the configuration setup of both your SpeedTouch™ and/or your PC. Follow the instructions and enter the required information where needed. This information should be provided by your Service Provider.

5 In a final step all configurations are applied to the SpeedTouch™:

6 The SpeedTouch™ Setup Wizard appears again to announce that the configuration has been successful:



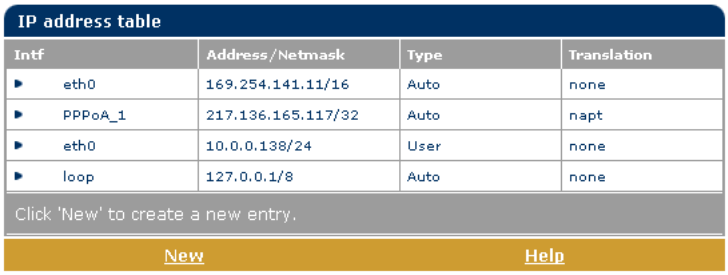
Click Finish to close the wizard.

Most configuration profiles will enable SpeedTouch™'s DHCP server - and a PC's Ethernet port is configured as DHCP client by default. Therefore, in most cases, no additional configuration of your PCs must be done if you want to enable multiple PCs on your local network for accessing the Internet via the SpeedTouch™.

IP Addresses

Click this link to display the IP Addresses page.

This page allows you to view or add/delete specific IP address entries for SpeedTouch™'s interfaces:



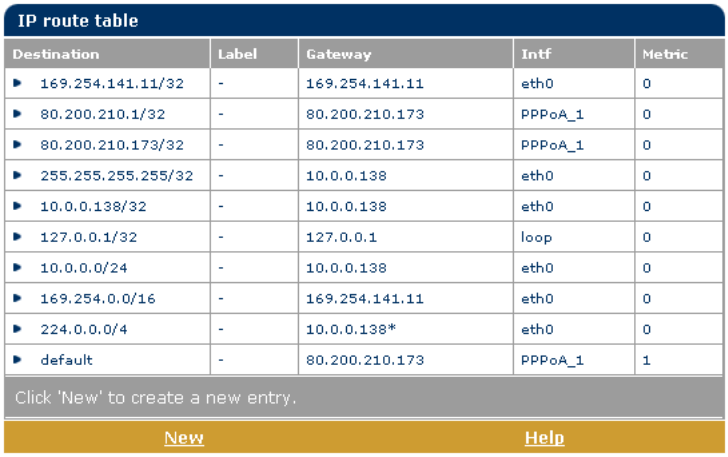
To add an IP address for one of the SpeedTouch™ interfaces:

1. Click New.
2. Select the interface to which the IP address applies (use eth0 for assigning to the SpeedTouch™ Ethernet interface).
3. Provide IP address and (sub)netmask in IP prefix notation (e.g. 192.6.11.150/24) or select Obtain an IP address automatically for assigning a dynamic IP address to the interface.
4. Optionally select NAPT in case you want to enable address translation on this IP address.
5. Click Apply
6. Click Save all to save your changes to persistent memory.

IP Routing

Click this link to display the IP Routing page.

This page allows you to view or add/delete static IP routes for SpeedTouch™'s IP router:



IP route table

Destination	Label	Gateway	Intf	Metric
169.254.141.11/32	-	169.254.141.11	eth0	0
80.200.210.1/32	-	80.200.210.173	PPPoA_1	0
80.200.210.173/32	-	80.200.210.173	PPPoA_1	0
255.255.255.255/32	-	10.0.0.138	eth0	0
10.0.0.138/32	-	10.0.0.138	eth0	0
127.0.0.1/32	-	127.0.0.1	loop	0
10.0.0.0/24	-	10.0.0.138	eth0	0
169.254.0.0/16	-	169.254.141.11	eth0	0
224.0.0.0/4	-	10.0.0.138*	eth0	0
default	-	80.200.210.173	PPPoA_1	1

Click 'New' to create a new entry.

New Help

Routing can be useful when subnetting your local network. To add a static IP route proceed as follows:

1 Click New.

2 Specify the destination IP address (use the prefix notation to apply a subnetmask), Gateway, Interface and Metric.

Note If applicable, you can also select a label for packet classified IP Routing.

3 Click Apply to add the entry to the table.

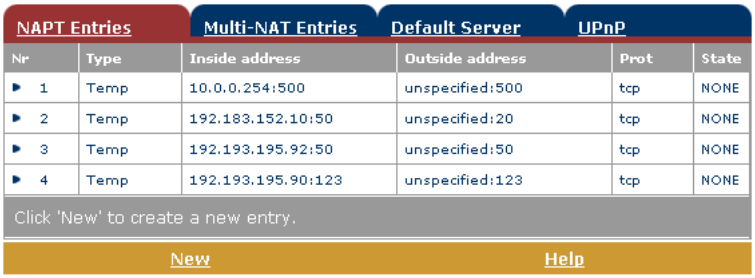
4 Click Save all to save your changes to persistent memory.

NAPT

Clicking this button displays the Network Address and Port Translation (NAPT) page.

This page allows you to:

- View or add/delete specific static NAPT entries:



To add static NAPT entries proceed as follows:

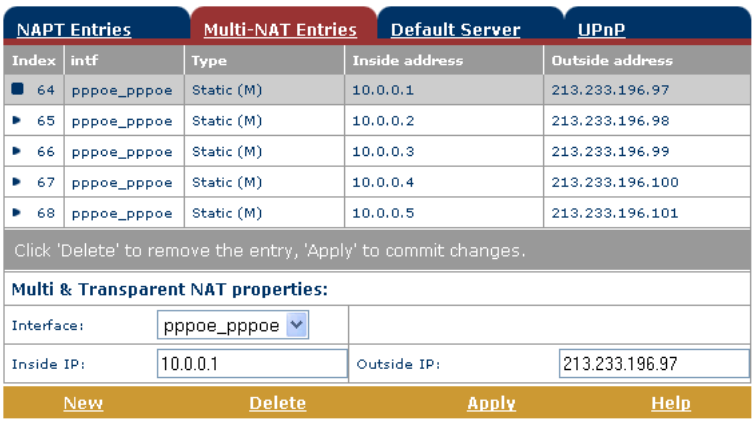
1 Click New.

2 Specify the outside address and inside address for the entry as well as the protocol and port to which the entry applies.

Note If the NAPT entry is applied to a connection's dynamically assigned local peer IP address, you should specify 0.0.0.0 as the outside address.

3 Click Apply to add the entry to the table.

- View or add/delete Multinat Entries:



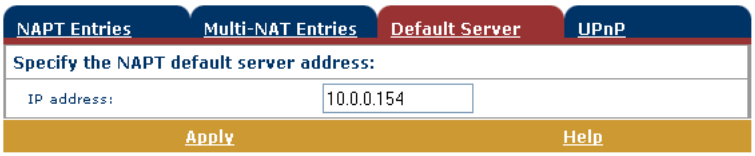
To add Multinat Entries proceed as follows:

1 Click New.

2 Specify the inside address and put the desired range between brackets e.g. 10.0.0.[1-10]. Specify the outside address and interface.

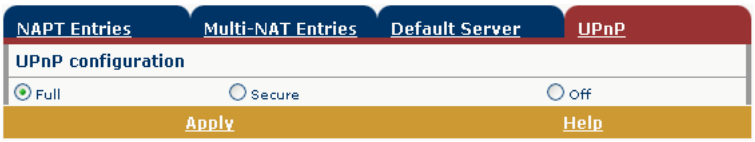
3 Click Apply.

- Define a default server:



By specifying a default server IP address, all incoming connections that don't match a specifically configured static NAPT entry will be forwarded to the device with this IP address. This setting should be adequate for most server applications and eliminates the need for specific static NAPT entries.

- Configure UPnP



The three UPnP configurations are:

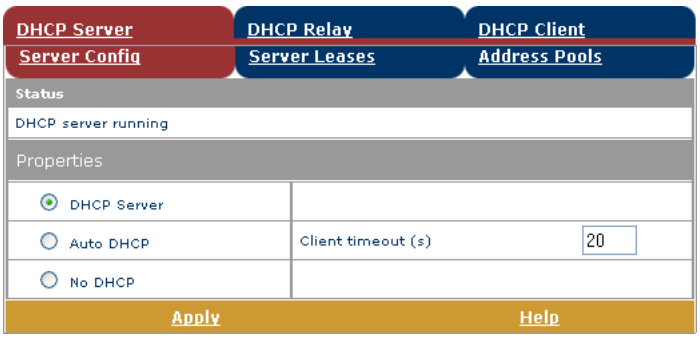
- Full
  The SpeedTouch™ is UPnP enabled, all local hosts are able to detect the SpeedTouch™. Any local host is able to create port mappings for any local device.
- Secure
  The SpeedTouch™ is UPnP enabled, all local hosts are able to detect the SpeedTouch™. A local host is allowed to make port mappings for its own, i.e. a local host is not allowed to create port mappings for other local devices.
- Off
  The SpeedTouch™ is UPnP disabled, none of the local hosts is able to detect the SpeedTouch™. Via UPnP no port mappings can be created.

DHCP

Click this link to display the Dynamic Host Configuration Protocol (DHCP) page.

This page allows you to:

- Click The DHCP Server tab to access the DHCP server pages.
  - Click the Server Config tab to enable/disable the SpeedTouch™ (Auto)DHCP server:



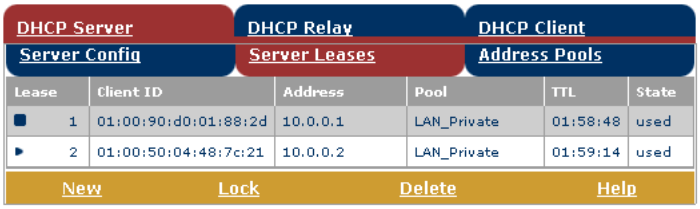
Depending on the DHCP server status, following Status may be shown:

- Scanning for other DHCP server
  In case the DHCP server and its Auto DHCP feature are enabled, during local network probing on the SpeedTouch™ Ethernet interface eth0.
- DHCP server stopped
  In case the DHCP server and its Auto DHCP feature are enabled, and a concurrent DHCP server was found during probing, thus causing its own DHCP server to be stopped and a DHCP client on the SpeedTouch™ Ethernet interface eth0 be created and activated.
- DHCP server started
  In case the DHCP server and its Auto DHCP feature are enabled, and no concurrent DHCP server was found during network probing, thus starting its own DHCP server on the SpeedTouch™ Ethernet interface eth0.
- DHCP server running
  In case the SpeedTouch™ DHCP server is enabled by default (without DHCP client)
- DHCP client
  In case the SpeedTouch™ server is disabled by default, and a DHCP client is running on the SpeedTouch™ Ethernet interface eth0.
- No DHCP
  In case the SpeedTouch™ server is disabled by default and the SpeedTouch™ Ethernet interface eth0 IP address is statically assigned.

Under Properties you can select:

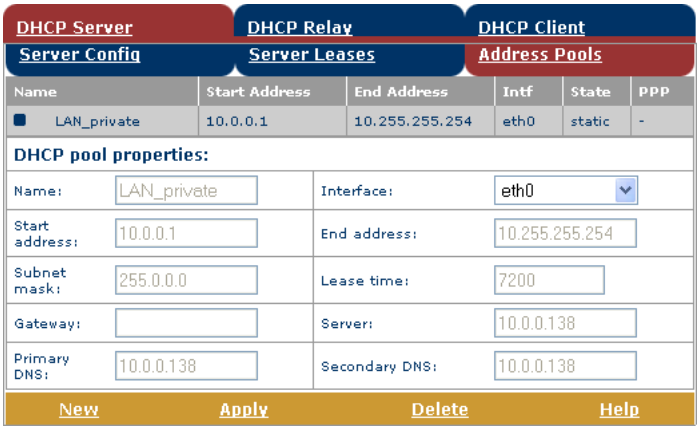
- DHCP server
  To enable the SpeedTouch™ DHCP server. In addition, select the appropriate Auto DHCP
- Auto DHCP
  The SpeedTouch™ will not start its DHCP server immediately, but will first probe the network for a possible concurrent DHCP server for some period of time (set by Client timeout in seconds). In case another DHCP server is found, the SpeedTouch™ DHCP server is not started, and a DHCP client will be created on its Ethernet interface instead. If no concurrent DHCP server is found, the SpeedTouch™ DHCP server is started.
- No DHCP
  To disable the SpeedTouch™ DHCP server. If it was running, it will be stopped immediately.

- Click the Server Leases tab to view the current leases provided by the SpeedTouch™ DHCP server.



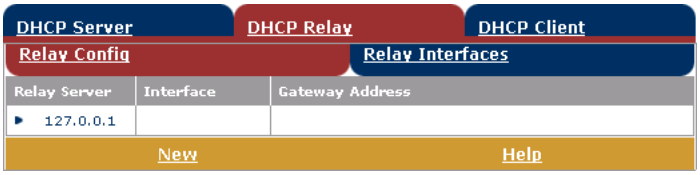
If needed, you can also manually add static DHCP leases for specific hosts or make dynamically assigned leases static by clicking Lock.

- Click the Address Pools tab to view the SpeedTouch™ DHCP server lease pool:



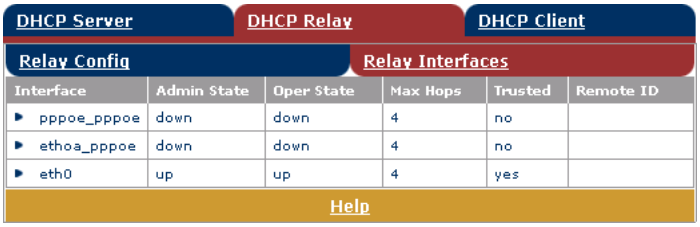
The SpeedTouch™ DHCP server (if enabled) will use the address pools listed in this table to provide IP addresses to requesting DHCP clients. If needed, you can add/delete DHCP address pools manually.

- Click the DHCP Relay tab to view the DHCP relay pages.
  - Click the Relay Config tab to view the current SpeedTouch™ DHCP relay status:



    Via this table you can also manually add static SpeedTouch™ DHCP relay entries for specific interfaces, if applicable.

  - Click the Relay Interfaces tab to view the SpeedTouch™ DHCP relay interfaces:



- Click the DHCP Client tab to view the current SpeedTouch™ DHCP client status:

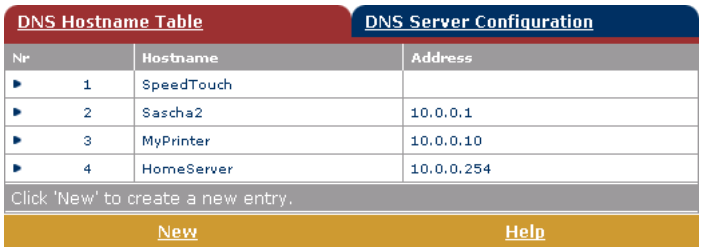
  You can also manually add static SpeedTouch™ DHCP client entries for specific interfaces, via this table or by using the IP address table.

DNS

Click this link to display the Dynamic Name System (DNS) page.

This page allows you to:

- View the current SpeedTouch™ DNS server hostname leases:



Via this table you can also add static DNS hostname entries.
This may be useful for devices which do not support DNS, e.g. a printer. By adding a name for your network printer, identified by its IP address, you will be able to contact this printer by name rather than by IP address.

- View and/or supply the SpeedTouch™ DNS domain name and to enable/disable the SpeedTouch™ DNS server:

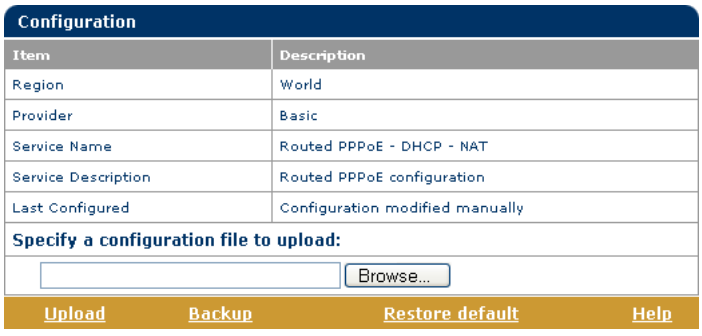
Note The use of DNS subdomains is supported, e.g. dsl.office.lan.

System

Click this link to display the Configuration page.

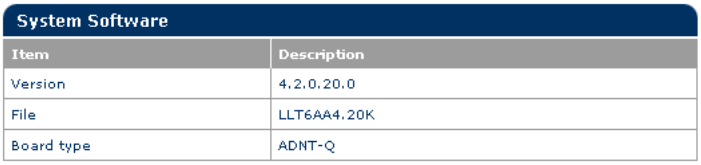
This page allows you to:

- Back up the current SpeedTouch™ configuration, restore the SpeedTouch™ default configuration, or upload a saved configuration file:



To backup the current configuration, click Backup and follow the instructions.
To restore the SpeedTouch™ defaults, click Restore default to load the default configuration.
To upload and apply a SpeedTouch™ configuration file you've previously backed up, click Browse to go to the location where the SpeedTouch™ configuration file resides. Select the configuration file and click Upload to upload and apply the new configuration.

- View the current system software version, file name and the SpeedTouch™ board type:

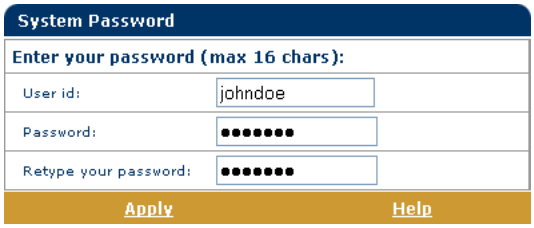


- Check for the latest SpeedTouch™ software upgrades.

System Password

Click this link to display the System Password page.

This page allows you to configure a system password to restrict access to the SpeedTouch™:



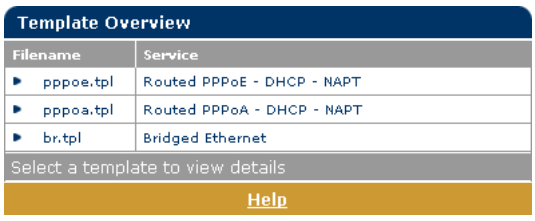
It is highly recommended that you configure a system password. To protect the SpeedTouch™ you should change the System password on a regular basis. However, never use an obvious password such as your name, date of birth, etc.
Enter User id and System password of your choice and re-enter your password in the appropriate field. Click Apply to apply the System password and Save all to save your changes to persistent memory.

Templates

Click this link to display the Templates page.

This page allows you to:

- View the templates available for the embedded Easy Setup wizard:



- Upload new template files, e.g. from the SpeedTouch™ Setup CD-ROM (usually template files have the extension .tpl):

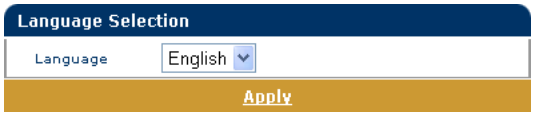
By uploading templates you can extend the number of services listed in the Easy Setup wizard.

Note Ask your Service Provider for more information about the use of templates.

Language

Click this link to view the Language page.

This page allows you to select the SpeedTouch™ web page language.



3.3 SpeedTouch™ NAPT Manager

Introduction

The SpeedTouch™ NAPT Manager allows you to add static NAT entries for specific applications.

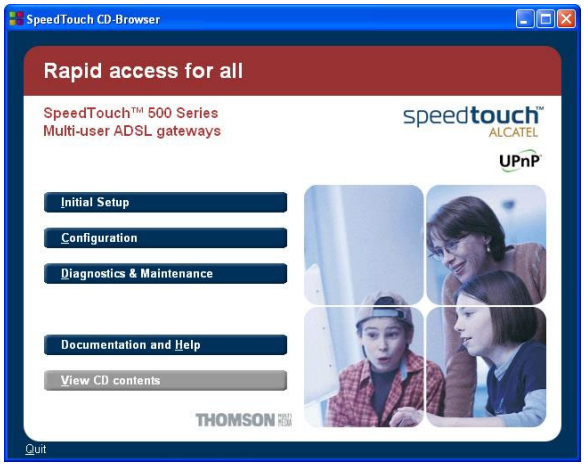
Using SpeedTouch™ NAPT Manager

To add a static NAPT entry using SpeedTouch™ NAPT Manager:

1 Insert the SpeedTouch™ Setup CD-ROM in your computer's CD-ROM drive. The SpeedTouch™ CD Browser will start automatically.

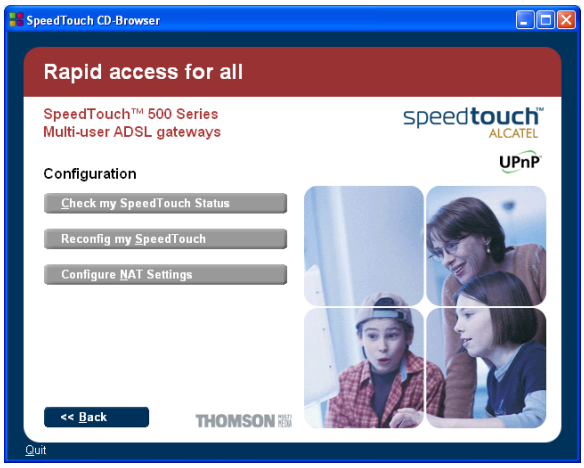
Note If the SpeedTouch™ CD Browser window does not appear automatically, click Run on the Start menu and enter the following path: *D:\Menu.exe* where D stands for the drive letter of your CD-ROM drive.

2 The SpeedTouch™ Menu appears:



Click *Configuration*.

3 The following window appears:

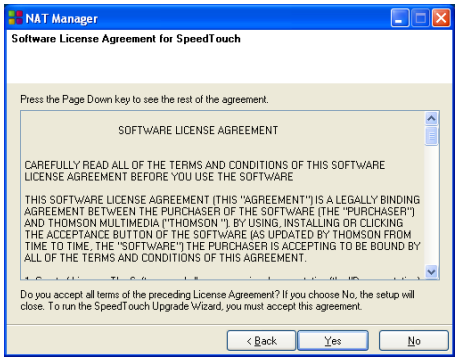


Click *Configure NAPT Settings*.

4 The NAPT Manager window appears:

Click *Next*.

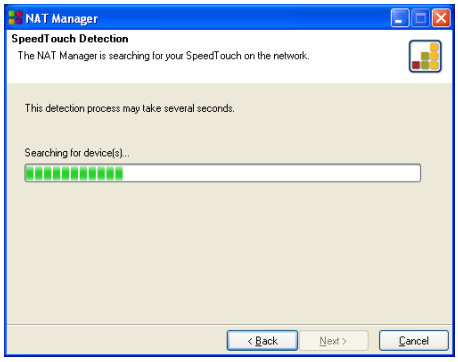
5 The Software License Agreement appears:



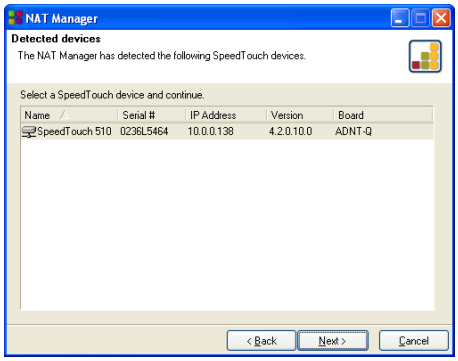
You must accept before continuing. Therefor click *Yes* to accept.

Note If you have already accepted this Software License Agreement in a previous session of NAPT Manager, this window will not be shown.

6 NAPT Manager will continue to search for the SpeedTouch™ on the network. The following window shows the detection progress:



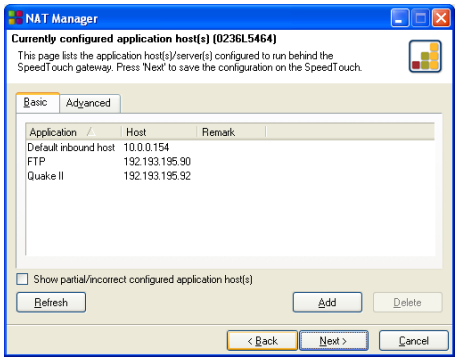
7 NAPT manager lists the SpeedTouch™ devices found on the network:



Select the SpeedTouch™ of your choice and click *Next*.

Note If your SpeedTouch™ is protected by a system password, the NAPT manager will prompt you to enter your user name and password.

8 The following page lists the current application hosts:



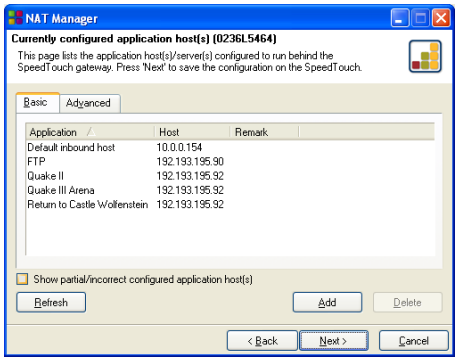
Click *Add* to enter a new application host.

9 The Add Port Mapping window appears.
If you want to:

- Enter a port mapping for a specific application, click the Basic tab. Select an application in the Application list and enter a host IP address.
- Manually add a static NAPT entries, click the Advanced tab. Select a protocol in the Protocol list and enter Port and Host IP address in the appropriate fields.
- Specify a default server IP address, click the Default inbound host tab. Enter the new IP address in the Host IP address field.

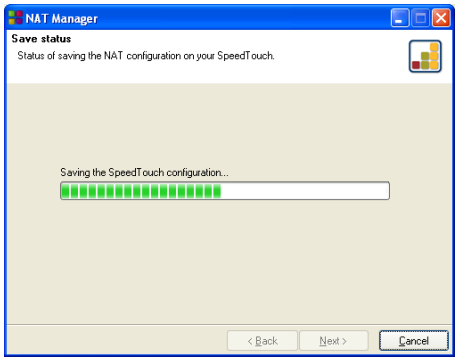
Click *Set* to add your entry to the list.

10 NAPT Manager adds the NAPT entry to the list:



Click *Next* to save the new entries.

11 NAPT Manager saves the new NAPT entries to persistent memory:



12 At the end of the procedure the following window appears:

Click *Finish* to quit NAPT Manager.

4 SpeedTouch™ System Software Upgrade

Introduction

The SpeedTouch™500Series products continue to evolve as extra and new functionalities are made available.

This chapter describes how to upgrade the SpeedTouch™ system software.

System software updates (all OSs)

You can check for system software upgrades via the SpeedTouch™ web pages.

See " System" on page 60 for more information.

Firmware upgrades may also be available from your Service Provider. Please contact your Service Provider for more information.

System software updates on a Windows platform

If your computer runs a Microsoft Windows operating system you can access the SpeedTouch™ web site using the SpeedTouch™ CD Browser:

1 Insert the SpeedTouch™ Setup CD-ROM in your PC's CD-ROM drive. The SpeedTouch™ CD Browser will start automatically.

Note If the SpeedTouch™ CD Browser window does not appear automatically, open a Run window via Start > Run from the Start menu and enter the following path: *D:\Menu.exe*, where D stands for the drive letter of your CD-ROM drive.

2 Choose a language in the Choose Language window.

3 Click *Diagnostics & Maintenance* in the SpeedTouch™ CD Browser menu.

4 Click *Check for new System Software*.

5 Your web browser appears and loads the SpeedTouch™ upgrade web page.

Firmware upgrades may also be available from your Service Provider. Please contact your Service Provider for more information.

Upgrade mechanisms

Depending on your Operating System and specific requirements, following options are available to upgrade the SpeedTouch™ system software:

- In case you run an MS Windows Operating System or Mac OS X 10.1/10.2:
  For your convenience a SpeedTouch™ Upgrade wizard will guide you through the system software upgrade procedure.
  See "4.1 The SpeedTouch™ Upgrade Wizard" on page 68 for more information.
- In case you run another Operating System, e.g. linux or Mac OS 8.6/9.x, or for extra information about advanced system software management:
  See "4.2 Manual System Software Management via BOOTP Server" on page 72 for more information.

4.1 The SpeedTouch™ Upgrade Wizard

Using the Upgrade Wizard

The procedure described in this section are valid only in case you run an MS Windows Operating System or Mac OS X 10.1/10.2.

During the upgrade procedure all configuration settings are backed up by the wizard and restored after upgrading the system software. Therefore, you do not need to back up the SpeedTouch™ configuration yourself.

Before you start

Make sure that you have a valid SpeedTouch™ system software file available on a local disk or CD-ROM.

System software upgrade procedure

Following procedure describes how to use the SpeedTouch™ Upgrade wizard from a PC running a MS Windows OS. For computers running Mac OS10 the behavior of the wizard is identical.

Proceed as follows:

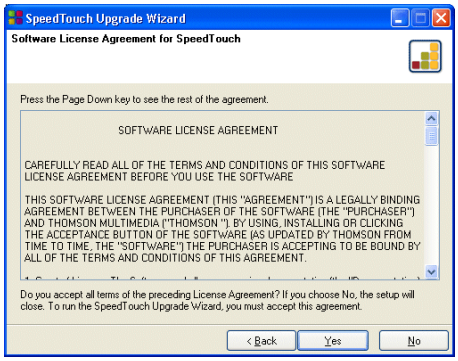
1 Insert the SpeedTouch™ Setup CD-ROM in your computer's CD-ROM drive.

- MS Windows OSs
  The SpeedTouch™ CD Browser will start automatically:
  If the SpeedTouch™ CD Browser window does not appear automatically, open a 'Run' window via Start > Run from the Start menu and enter the following path: *D:\Menu.exe*, where D stands for the drive letter of your CD-ROM drive.
  The wizard prompts you to select a language. Select the language of your choice and click *OK*.
  To start the SpeedTouch™ Upgrade wizard, click *Diagnostics & Maintenance* and then click *Upgrade My* SpeedTouch™.
- Mac OS10.1/10.2
  Open the CD-ROM and click *UpgradeST* to install the upgrade program. After installation, go to applications:SpeedTouch on the OS X partition and double-click *UpgradeST*.

2 The Welcome to the SpeedTouch™ Upgrade Wizard window appears:

Click *Next* to proceed.

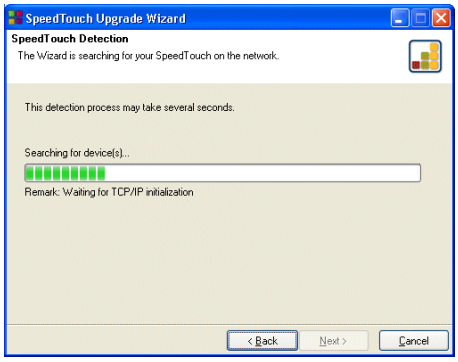
3 The SpeedTouch™ Software License Agreement window appears:



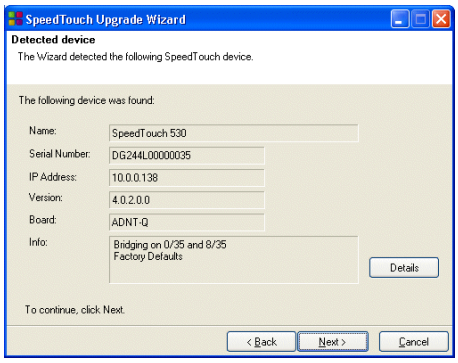
You must accept before continuing. Therefor click *Yes* to accept.

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

4 The Setup wizard will continue to search for the SpeedTouch™ on the network. The following window shows the detection progress:



5 The Setup wizard should find your SpeedTouch™ device on the local network. This is indicated by the following window:



In case more than one SpeedTouch™ device is found, a listing is provided from which you can select your SpeedTouch™ from.

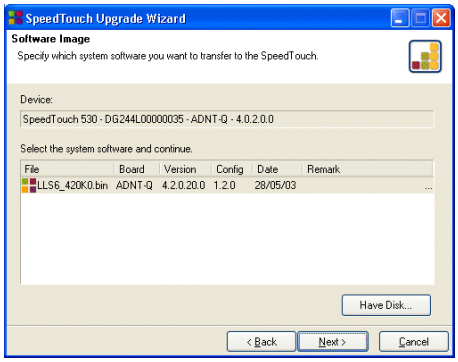
Note If the Setup wizard does not find any SpeedTouch™ on the network an error window pops up. In this case check:

- Whether the SpeedTouch™ is turned on and fully initialized.
- Whether your computer is correctly connected to the SpeedTouch™.
- Whether no dedicated firewall device or router is placed between your PC and the SpeedTouch™ and whether no personal firewall software is running on your PC (in case of Ethernet connectivity).
- Whether the SpeedTouch™ USB drivers are correctly and fully installed (in case of USB connectivity).

To repeat the search for the SpeedTouch™, click *Back* and proceed with step 4 of this procedure.

6 Once the SpeedTouch™ Setup wizard has detected your SpeedTouch™ device you can proceed with the upgrade procedure.
If more than one SpeedTouch™ device is listed, select the appropriate one.
Then, click *Next* to proceed.

7 The following window shows current the firmware version active on the SpeedTouch™ as well as one or more firmware versions available on the CD-ROM.

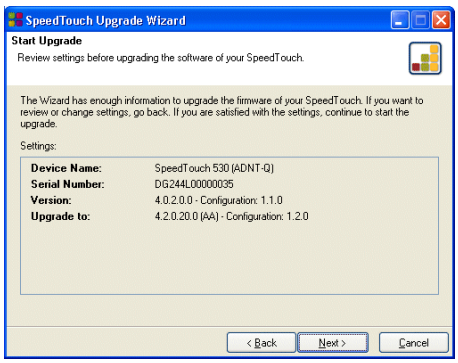


Select the appropriate firmware version and click *Next* to continue.

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

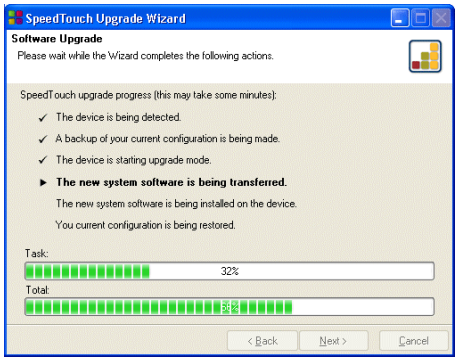
In case of a system software downgrade you must specifically acknowledge your decision before being able to proceed.

8 The following window allows you to overview your selection:



Click *Next* to continue.

9 You can follow the configuration progress in following window:



10 After upgrading the SpeedTouch™, a final window appears to announce that the upgrade has been successful:

Click *Finish* to close the wizard.

4.2 Manual System Software Management via BOOTP Server

SpeedTouch™ system software management

The SpeedTouch™ system software is based on BOOTP, a standard mechanism used for booting diskless stations.

The SpeedTouch™ is able to slip in BOOTP mode, allowing a BOOTP server to manage the SpeedTouch™ file system, and submit upgrade files to it.

Important note

It is recommended only to use the procedure described below in case you are familiar with the use of a BOOTP server, and the mechanisms on which BOOTP is based.

Upgrading the system software via the procedure described below will reset the SpeedTouch™ to its factory default settings. Therefore, prior to performing an upgrade of the system software it is recommended to back up the SpeedTouch™ configuration.

Before you start

You need a third party BOOTP server installed on the computer from which you want to perform the SpeedTouch™ system software upgrade.

Make sure that the SpeedTouch™ is connected to your computer via its Ethernet port. In case of a SpeedTouch™ with USB connectivity, please disconnect the USB interface, if used, to avoid communication errors during the system software upgrade.

You will need the SpeedTouch™ Medium Access Control (MAC) address of your SpeedTouch™ device. To retrieve this address see " System Information" on page 47.

Make sure a valid SpeedTouch™ system software image file is available on your local disk.

Procedure

To upgrade the SpeedTouch™ system software:

1. In a preliminary step, make sure that your SpeedTouch™ is powered on and that a BOOTP server is readily installed on the computer from which you intend to perform the system software upgrade.
2. Configure the BOOTP server to use the SpeedTouch™ system software image file in its reply to BOOTP requests from the SpeedTouch™ you want to upgrade.
3. To identify the BOOTP requests from the SpeedTouch™, you will need to specify its MAC address and define an IP range for basic communication between the BOOTP server and the SpeedTouch™.
4. Power off the SpeedTouch™ by pressing the power button until all LEDs turn off.
5. Press the SpeedTouch™ power button again and hold it until the Power/System LED flashes amber (approximately six seconds). This indicates that the SpeedTouch™ entered BOOTP mode and is sending BOOTP requests.
6. The BOOTP server will reply to the BOOTP requests and will perform the required operations to send the system software to the SpeedTouch™.
7. After checking whether the received system software is valid for the device, the SpeedTouch™ will start in normal operational mode to complete the upgrade.
8. Optionally, you can upload the backup configuration as described in " System" on page 60.

5 Troubleshooting

Introduction

This chapter provides information on how to identify and correct some common problems you may encounter when using and configuring the SpeedTouch™.

If the following troubleshooting tips do not resolve the problem contact the company from which you purchased the SpeedTouch™ for assistance.

5.1 General

Configuration problems

If you encounter DSL connectivity problems due to misconfiguration you might consider a hardware reset to factory defaults as described in this chapter.

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

Dr SpeedTouch™

Dr SpeedTouch™ enables you to test your computer and SpeedTouch™ connectivity via its Diagnostics wizard. The SpeedTouch™ Troubleshoot will report what is wrong with your connection.

For more information on Dr SpeedTouch™ see "1.4 Dr SpeedTouch™ Installation" on page 29.

Startup problems and alert indications

Via the LEDs you can check the status of the SpeedTouch™. Following table may help you in case of problems starting up the SpeedTouch™:

Indicator			Description
Name	Color	Status	
Power/System	Off		Power off.
	Green	On	Power on, normal operation.
		Flashing	Power on, Back-to-Defaults status.
	Amber	Flashing	Power-on, BOOTP status.
		On	Power on, POST(*) pending.
	Red	On	Power on, POST(*) failed.
DSL/WAN	Off		No DSL line.
	Amber	Flashing	DSL line synchronization pending.
		On	DSL line synchronized.
	Amber Green	Toggling	DSL line synchronized and end-to-end connection pending.
	Green	On	DSL line synchronized and end-to-end connection active.
LAN	Off		No Ethernet link.
	Green	On	Ethernet link.
USB	Off		No USB link.
	Green	On	USB link.

(*) Power On Self Test (POST)

Troubleshooting table

Following table may help you determine the nature of the problem, and provides some plausible solutions:

Problem	Solution
SpeedTouch™ does not work. (none of the LEDs light up)	Make sure that the SpeedTouch™ is plugged into an electrical outlet.
	Make sure that you are using the correct power supply for your SpeedTouch™ device.
	Press the power button.
LAN LED does not light up. Link integrity/Activity LED of particular Ethernet port does not light up.	Make sure that the cable(s) are securely connected to the 10/100Base-T port(s).
	Make sure that you are using the correct cable type for your Ethernet equipment.
	Make sure the computer's Ethernet port is configured for auto-negotiation.
SpeedTouch™ USB driver installation failed.	Verify that your computer is running one of the supported OSs and that it meets the according minimum requirements.
	Verify that no previous SpeedTouch™ USB driver is installed on your computer. Uninstall other SpeedTouch™ USB software and/or drivers.
Temporarily poor performance of SpeedTouch™ connected via a USB hub.	Your USB port congests, meaning that too much traffic is passing through it. Avoid using multiple high speed USB devices, e.g. scanners, speaker, etc. during heavy duty, e.g. a data download.
Poor SpeedTouch™ performance.	Check whether a central splitter or dedicated filters are installed properly.

Problem	Solution
No UPnP.	Make sure UPnP is installed on your PC if you are running Microsoft Windows XP.
	Your computer doesn't support UPnP if you run an operating system other than Microsoft Windows XP.
	Make sure that UPnP is not turned off in the SpeedTouch™ web pages.
No Line synchronization achieved. DSL/WAN LED off or flashing amber.	Make sure that ADSL service is enabled on the telephone line the SpeedTouch™ is connected to.
	Make sure that the correct SpeedTouch™ variant is used for your DSL service.
	In case of ADSL/POTS services at your premises, ONLY use a SpeedTouch™ ADSL/POTS variant. In case of ADSL/ISDN services at your local premises, ONLY use a SpeedTouch™ ADSL/ISDN variant.

5.2 SpeedTouch™ Default Configuration

How to perform a hardware reset to factory defaults

Proceed as follows:

1. Make sure the SpeedTouch™ is powered on.
2. Power off the SpeedTouch™ by pressing the power button until all LEDs turn off.
3. Press the power button once again (shortly).
4. As soon as the Power/System LED is flashing green, press the power button once more (shortly).
5. The Power/System LED stops flashing to become solid green. After six seconds, it starts flashing green again. Press the power button once more (shortly).
6. All LEDs flash green once.
7. The SpeedTouch™ reboots and will come online with factory default settings.

Resetting the system to its factory defaults also involves deleting the configuration profile settings. You may, therefore, need to reconfigure the system using the SpeedTouch™ Setup wizard or by uploading the relevant configuration file. See "1.3 SpeedTouch™ Configuration Setup" on page 19 for more information.

5.3 Removing a SpeedTouch™ USB Driver Installation

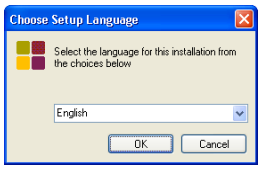
Removing a SpeedTouch™ USB driver installation from a Windows OS

In case a removal of the SpeedTouch™ USB driver is required, proceed as follows:

1 Insert the SpeedTouch™ Setup CD-ROM in your PC's CD-ROM drive. The SpeedTouch™ CD Browser will start automatically.

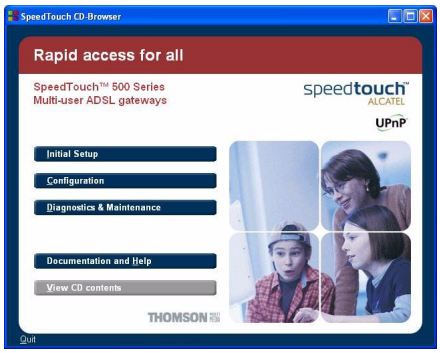
Note If the SpeedTouch™ CD Browser window does not appear automatically, open a Run window via Start > Run from the Start menu and enter the following path: *D:\Menu.exe*, where D stands for the drive letter of your CD-ROM drive.

2 The Choose Language window prompts you to select a language:



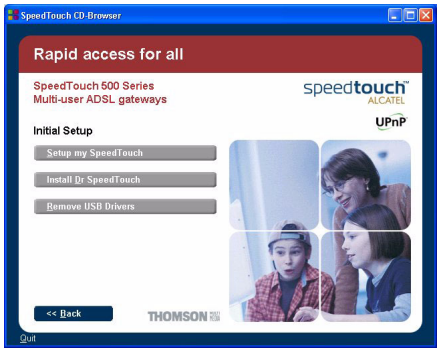
Select the language of your choice and click *OK*.

3 The SpeedTouch™ CD Browser appears:



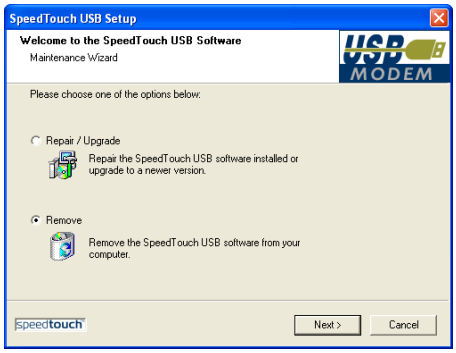
Click *Initial Setup*.

4 The Setup and Installation window appears:



Click *Remove USB Drivers*.

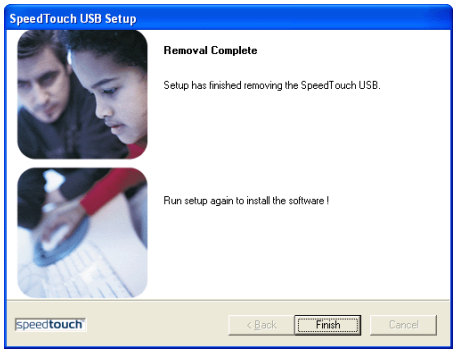
5 The SpeedTouch™ USB Setup window appears:



Select *Remove* and click *Next*.

6 In the following windows you can follow the removal procedure. Click *Next* whenever requested to continue the installation.

7 At the end of the procedure, the following window appears:



Click *Finish* to quit the SpeedTouch™ USB Setup wizard.

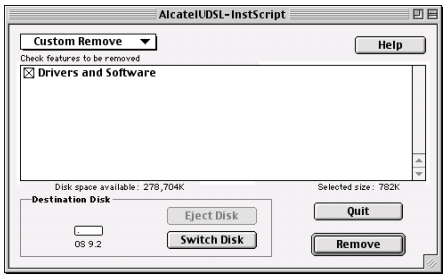
Removing a SpeedTouch™ USB connection from a Mac OS 8.6/9.x platform

In case a removal of the SpeedTouch™ USB driver is required, proceed as follows:

1 Insert the SpeedTouch™ Setup CD-ROM in your computer's CD-ROM drive.

2 Open the OS9 folder on your CD-ROM drive and double-click *Installer*.

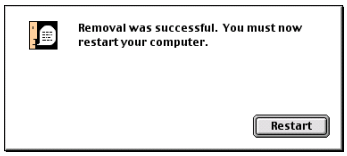
3 The Installer window appears:



Click *Custom Remove* in the drop-down list box, select the *Drivers and Software* check box and click *Switch Disk* to select the disk where the USB drivers were installed to.
Click *Remove* to Continue.

4 The Installer removes the driver from your computer.

5 At the end of the procedure, the Installer asks you to restart your computer:



Click *Restart* to complete the removal.

Removing a SpeedTouch™ USB connection from a Mac OS X 10.x Platform

In case a removal of the SpeedTouch™ USB driver is required, proceed as follows:

1 Insert the SpeedTouch™ Setup CD-ROM in your computer's CD-ROM drive.

2 Open the OSX folder on your CD-ROM drive and double-click *SpeedTouchUSBUninstaller*.

3 The Uninstaller window appears:

Click *Uninstall* to continue.

4 The Uninstaller prompts you to confirm your choice:

Click *OK* to start removing the files.

Note The Uninstaller may ask you to enter an administrator name and password or phrase.

5 The following window appears:

Click *OK* to quit the Uninstaller.

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