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CGA7740N



EN Wireless ADSL Modem Router

PHILIPS

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1 Important

Take time to read this user manual before you use your Wireless ADSL Modem Router. It contains important information and notes regarding your Wireless ADSL Modem Router.

1.1 Safety information

Warning

- This equipment must only be powered with the Power Adapter provided in the box.
- For use only with power supply "Leader : MU12-2150080-B2" and / or "Jentec : AH1215-C".
- Always use the cables provided with the product.
- Radio equipment for wireless applications is not protected against disturbance from other radio services.
- Do not expose the system to excessive moisture, rain, sand or heat sources.
- The product should not be exposed to dripping or splashing.
- No object filled with liquids, such as vases, should be placed on the product.
- Keep the product away from domestic heating equipment and direct sunlight.
- Allow a sufficient amount of free space all around the product for adequate ventilation.
- Do not open this product. Contact your ISP / cable provider helpdesk.

1.2 Network range & speed information

- The environment : Radio signals can travel further outside of buildings, and if the wireless components are in direct line of sight to one another. Putting wireless components in high places helps avoid physical obstacles and provides better coverage.
- Building construction such as metal framing and concrete or masonry walls and floors will reduce radio signal strength. Avoid putting wireless components next to large solid objects ; or next to large metal object such as computers, monitors, and appliances.
- Wireless signal range, speed, and strength can be affected by interference from neighbouring wireless networks and devices. Electro-magnetic devices such as televisions, radios, microwave ovens, and cordless phones, especially those with frequencies in the 2.4GHz range, may also interfere with wireless transmission.
- Standing or sitting too close to wireless equipment can also affect radio signal quality.
- Adjusting the antenna : Do not place antennas next to large pieces of metal, because this might cause interference.

1.3 Conformity

We, Philips declare that the product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. You can find the Declaration of Conformity on www.p4c.philips.com.

Following this Directive, this product can be brought into service in the following states :

B	✓	DK	✓	E	✓	GR	✓	F	✓
IRL	✓	I	✓	L	✓	NL	✓	A	✓
P	✓	SU	✓	S	✓	UK	✓	N	✓
D	✓	CH	✓	TR	✓				

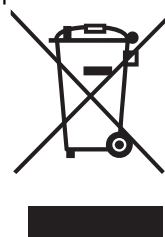
1.4 Recycling and disposal

Disposal instructions for old products :

The WEEE directive (Waste Electrical and Electronic Equipment Directive ; 2002/96/EC) has been put in place to ensure that products are recycled using best available treatment, recovery and recycling techniques to ensure human health and high environmental protection. Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.

Do not dispose of your old product in your general household waste bin.

Inform yourself about the local separate collection system for electrical and electronic products marked by this symbol :



Use one of the following disposal options :

- Dispose of the complete product (including its cables, plugs and accessories) in the designated WEEE collection facilities.
- If you purchase a replacement product, hand your complete old product back to the retailer. He should accept it as required by the WEEE directive.

Packaging information :

Philips has marked the packaging with standard symbols designed to promote the recycling and appropriate disposal of any waste.

 A financial contribution has been paid to the associated national recovery & recycling system.

 The labeled packaging material is recyclable.

1.5 FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

1.6 Software licenses

This product contains open source software packages. An overview of these packages, the licences and / or notices that apply to them, and the source code for a number of these packages are available in the on-line product documentation, which is visible on www.p4c.philips.com.

1.7 Disclaimer

This product is provided by "Philips" "as is" and without any express or implied warranty of any kind of warranties, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose are disclaimed.

In no event shall Philips be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to, procurement of substitute goods or services ; loss of information, data, or profits ; or business interruption) howsoever caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of the use of inability to use this product, even if advised of the possibility of such damages. Philips further does not warrant the accuracy or completeness of the information, text, graphics, links or other items transmitted by this product.

2 Your Wireless ADSL Modem Router

Congratulations on your purchase and welcome to Philips !

To fully benefit from the support that Philips offers, register your product at www.philips.com/welcome.

2.1 What's in the box



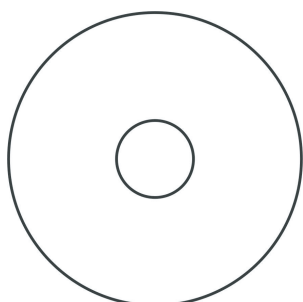
Wireless ADSL Modem Router



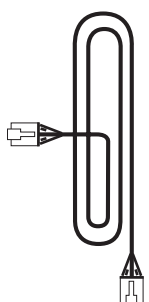
Quick start guide



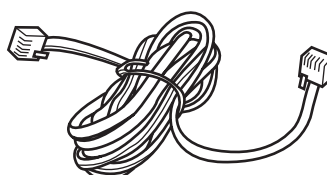
Power adapter



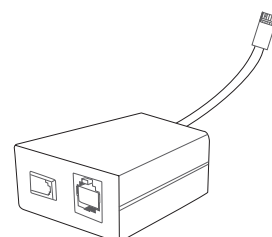
Installation CD Rom



Ethernet cable
(RJ-45)



Line cord (RJ-11)



ADSL Filter

2.2 What else will you need

ADSL filter adapted to your telephone plug



A desktop or a laptop with free
USB port and an Ethernet
connector

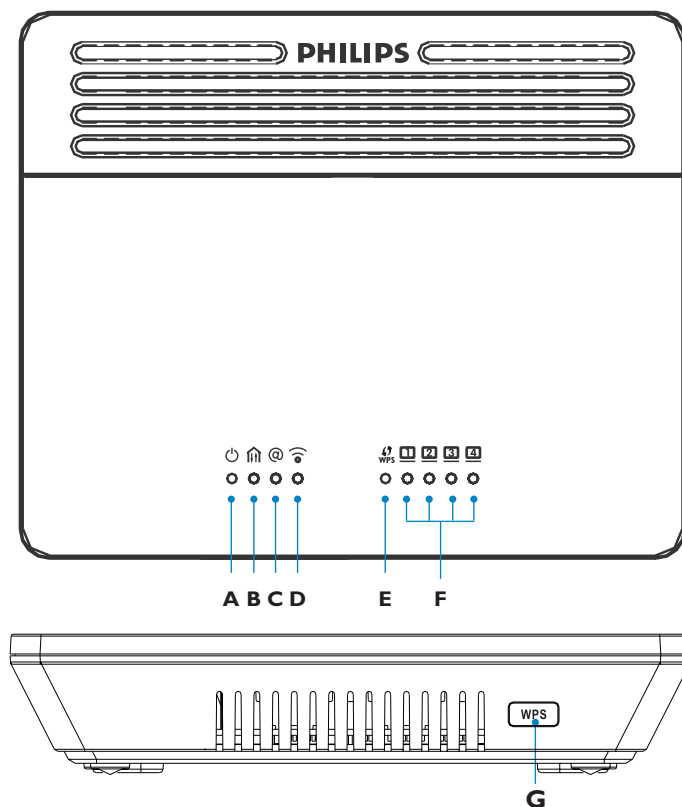


A web browser



An Internet connection

2.3 Overview of the front side of the wireless ADSL modem router



A
ON : Power on, normal operation
OFF : Power off or failure



B
ON : ADSL loop is brought up
Blinking : Start up
OFF : ADSL loop is down



C
ON : Internet connection is up
OFF : No data transferring



D
ON : Wireless link is up
Blinking : Send / Receive data
OFF : No data transferring



E
ON : Success
Flash Flash : In progress
Blinking : Fail
OFF : No connection

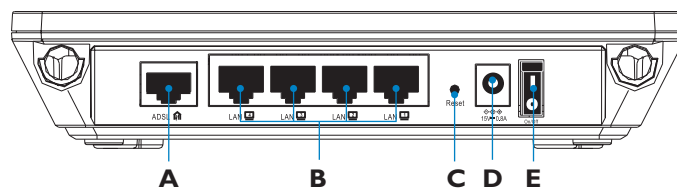


F
ON : Ethernet connection is established
Blinking : Send / Receive data
OFF : Without link

G WPS button

Push and hold this button for 3 seconds to install another WPS device on your network (see "WPS", page 12).

2.4 Overview of the rear side of the wireless ADSL modem router



A ADSL port

ADSL port (RJ-11). Connect your ADSL line to this port.

B LAN ports

10/100 Ethernet ports (RJ-45). Connect devices to your local area network on these ports (i.e., a PC, hub, or switch).

C Reset button

Use this button to reset the power and restore the default factory settings. To reset without losing configuration settings, see "Reset", page 15.

D Power Inlet

Connect the included power adapter to this inlet

Warning

Using the wrong type of power adapter may damage the ADSL Wireless Base Station.

For use only with power supply "Leader : MU12-2150080-B2" and / or "Jentec : AH1215-C".

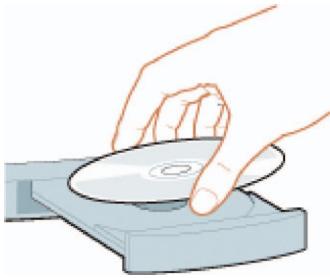
E ON / OFF

Button to switch unit ON / OFF

3 Getting started

3.1 Install

- 1 Insert the installation CD into the PC's CD ROM (or DVD ROM) drive



- The installation program will start automatically

- 2 Follow instructions on the screen

Note

If for some reason the installation does not start automatically :

- 1 Click on Windows **START** and then **RUN**
- 2 Type **explorer** and navigate to the CD ROM (or DVD ROM) drive
- 3 Double-click on **Setup.exe**

* Tip

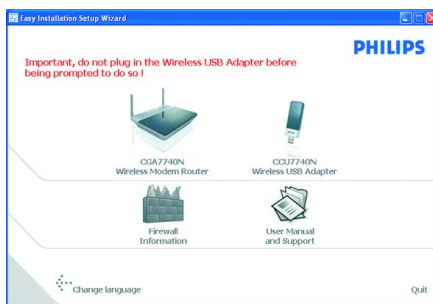
By default, the language of your operating system will be chosen, but you have 10 seconds if you want to select another one.

- 3 Click on the required language



- The next screen will be displayed automatically

- 4 Click on the picture of the CGA7740N Wireless Modem Router



- The next screen will be displayed automatically

3.2 Connect

- 1 Connect the supplied power adapter to the 15V ===0.8A port and switch on



- 2 Connect the power plug to the electricity supply socket

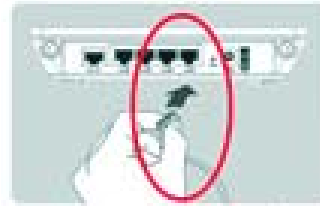


- Power light will turn on

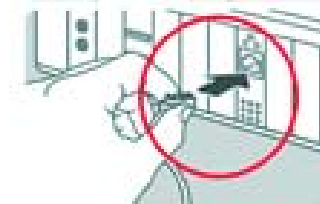
- 3 Take the Ethernet cable supplied in the box



- 4 Connect this Ethernet cable to the LAN 1 port on the CGA7740N

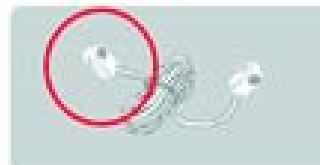


- 5 Connect the other end of the Ethernet cable to your computer

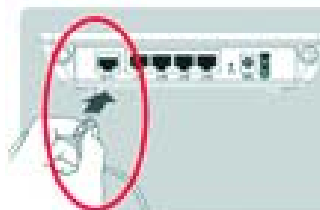


- LAN 1 light will turn on

- 6 Take the supplied line cord



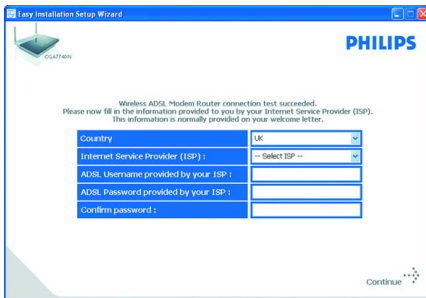
- 7 Connect the supplied line cord to the ADSL port



- 8 Connect the other end of the supplied line cord to the ADSL filter then connect the ADSL filter to the telephone socket



- light will turn on
- 9 Then click on **Continue**
- A progress bar screen will be displayed
- 10 Select your country and Internet Service Provider (ISP) using the information provided by your ISP



Note

If your ISP is not in the default list, please select "Other".

- 11 Click on **Continue**
- A progress bar screen will be displayed, your parameters will be saved and you will be connected to Internet
 - Once the installation completed, the following screen will be displayed



Note

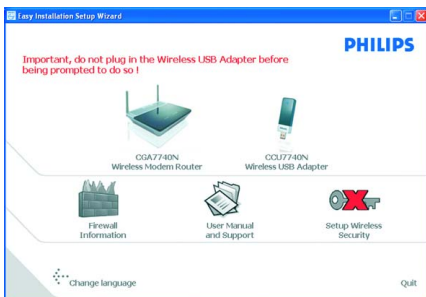
This screen is the Philips support site. It is a live Internet page, subject to change. The screen displayed may differ from the one shown.

- 12 Click on **Menu** if you want to go back to the menu screen

Tip

Your WiFi network is running but not secured.

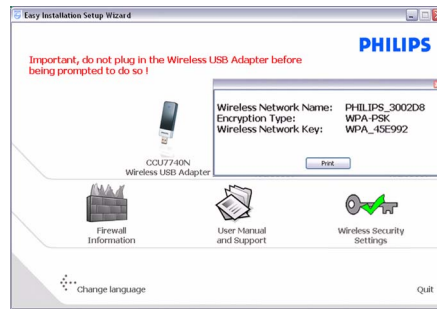
- 13 Click on **Set Encryption**



- Your WiFi network will be secured automatically
- You will not be able to choose your encryption key nor your network name (SSID)

Note

At any time you can retrieve your wireless security settings using your installation CD ROM on the computer where you installed your gateway and by clicking on the security icon  of the menu page.



3.3 Install a WiFi device

If you want to install a WiFi device you have to retrieve your wireless security settings using your installation CD ROM on the computer where you installed your gateway and by clicking on the security icon  of the menu page.

3.3.1 Install a Wireless USB adapter CCU7740N

If you have bought the starter kit CKA7740N, the Wireless USB adapter CCU7740N is part of the box content. In that case you just have to insert the installation CD ROM, provided with your CKA7740N, and follow the instructions on the screen.

3.3.2 Install another WiFi device

- 1 Refer to the manual of the other WiFi device

Note

If you have previously secured your network (see 3.2 step 13) through the easy installation, the name of your network (SSID) will be "PHILIPS_XXXXXX".

If not secured previously through the easy installation, the SSID will be "philips_install".

In case you have given another name to your network, bear in mind that this name will be displayed instead of the "PHILIPS_XXXXXX" or "philips_install".

Note

At any time you can retrieve your wireless security settings using your installation CD ROM on the computer where you installed your gateway and by clicking on the security icon  of the menu page.

3.4 Install another WPS device

You can install another WPS device on your network in any of the three following ways :

3.4.1 via the PIN method

- 1 Check that your Wireless router and that the other WPS device are connected and ON
- 2 On your Internet Browser, enter <http://192.168.2.1> in the address field and click on **GO** to access the webpages
- 3 Click on the **WIRELESS** tab on the left side of the page and select **PIN** to open the corresponding subpage
- 4 Enter the PIN from the client device (the other WPS device) and click **START PIN**
 - The other WPS device is installed on your network

3.4.2 via the PBC method

- 1 Check that your Wireless router and that the other WPS device are connected and ON
- 2 Push and hold the WPS button, located on the front side on your router, for 3 seconds
- 3 Push and hold the WPS button of the other WPS device for 3 seconds (refer to the manual of the other WPS device for location)
 - *The other WPS device is installed on your network*

OR

- 1 Check that your Wireless router and that the other WPS device are connected and ON
- 2 On your Internet Browser, enter *http://192.168.2.1* in the address field and click on **GO** to access the webpages
- 3 Click on the **WIRELESS** tab on the left side of the page and select **PBC** to open the corresponding subpage
- 4 Click on **START PBC**
 - *The other WPS device is installed on your network*

Note

The push and hold procedure on the two WPS buttons (router and other WPS device) has to be done within a two minutes' interval.

3.4.3 via the Manual configuration

This method enables you to configure client devices without WPS function.

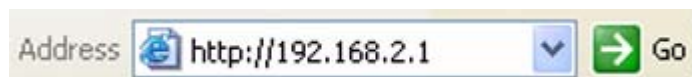
- 1 On your Internet Browser, enter *http://192.168.2.1* in the address field and click on **GO** to access the webpages
- 2 Click on the **WIRELESS** tab on the left side of the page and select **Manual** to open the corresponding subpage
- 3 Take note of the settings displayed and configure your non-WPS device accordingly
 - *Your non-WPS device is installed on your network*

4 Configuring the Wireless Modem Router

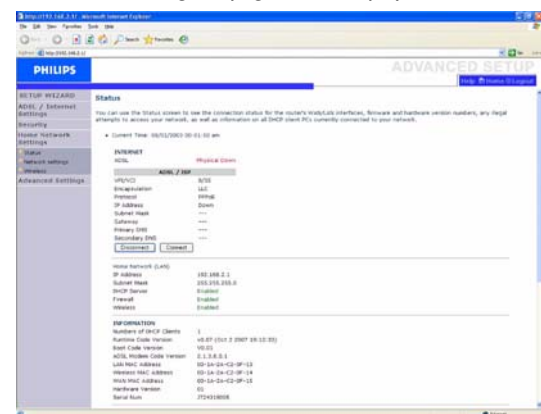
Advanced users may want to change the configuration of their Wireless Modem Router. This chapter explains how to access the configuration webpages, show you the structure of these webpages and it describes them.

4.1 Log on the webpages

- 1 Open your Internet Browser
- 2 Enter `http://192.168.2.1` in the address field



- 3 Click on **GO**
 - The following webpage will be displayed



Note

The only default language is English.

- 4 To access the required webpage, click on the corresponding tab on the left side of the page

4.2 Webpages' menu structure

The table below describes the menu tree of the webpages.

SET UP WIZARD	Getting started
	Wireless settings
	ADSL settings
	Confirm
	Connection status

Note

It is highly recommended to use the Easy Install program available on the provided CD ROM instead of the SET UP WIZARD pages.

ADSL / Internet Settings	ADSL status
	ISP settings
	Parameters
	DNS

Security	Firewall
	Access Control
	MAC Filter
	URL blocking
	Schedule Rule
	Intrusion Detection
	DMZ
	Wireless Security
	Wireless Encryption
	Access control

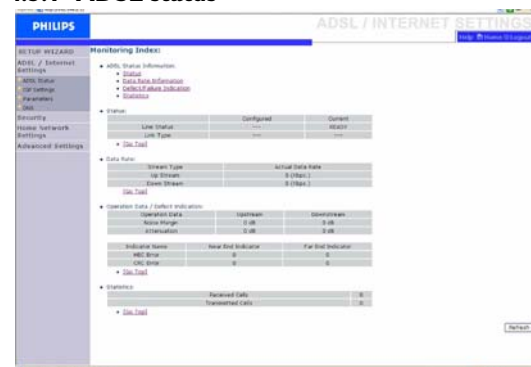
WEP
WPA/WPA2
802.1X
Wi-Fi Protected Setup
PIN
PBC
Manual

Home Network Settings	Status
	Network settings
	Wireless
	Channel and SSID

Advanced settings	NAT
	Address Mapping
	Virtual Server
	Special Applications
	NAT Mapping Table
	Maintenance
	Configuration Tools
	Firmware Upgrade
	Reset
	System
	Time Settings
	Password Settings
	Remote Management
	SNMP Community
	Community
	Trap
	UPNP
	QoS
	Traffic mapping
	Traffic statistics
	DDNS
	Routing
	Static route
	RIP
	Routing table

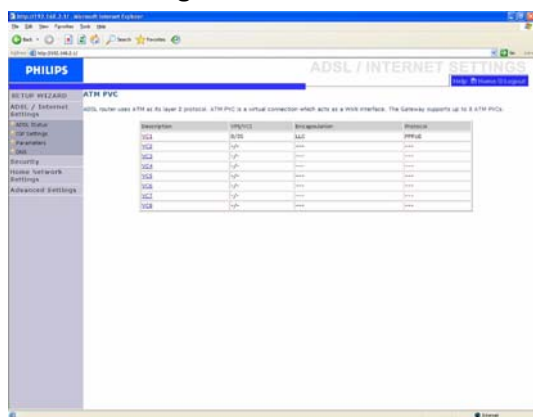
4.3 ADSL / Internet Settings webpages

4.3.1 ADSL status

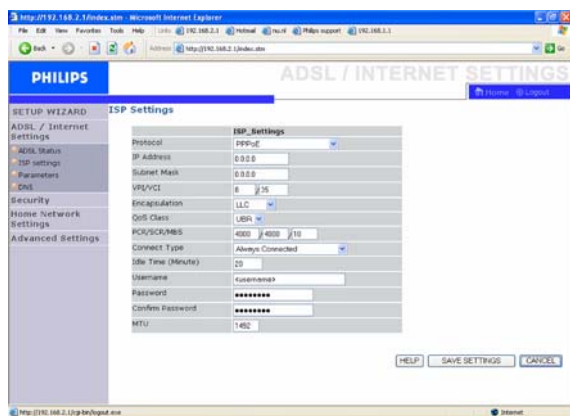


Click on "ADSL Status" which is located on the left side of the screen. The left-hand side displays the main menu and the right-hand side shows descriptive information.

4.3.2 ISP settings

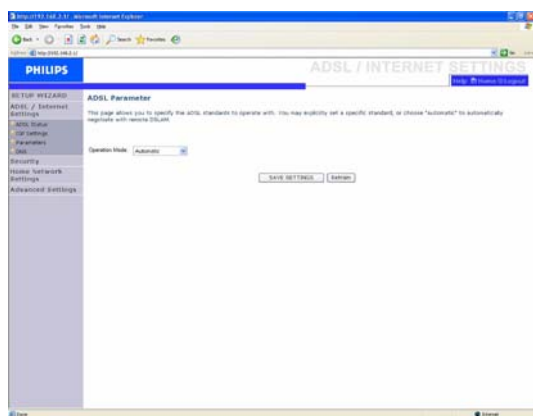


Click on VCx to open the ISP settings parameters window.



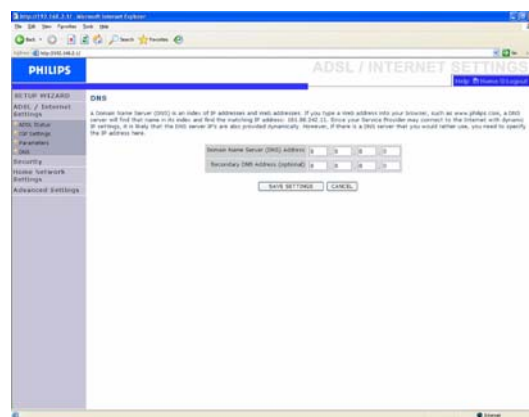
Enter the ISP settings parameters provided by your Internet Service Provider here.

4.3.3 Parameters



This page allows you to specify the ADSL standards to operate with. You may explicitly set specific standard, or choose "Automatic" to automatically negotiate with remote DSLAM.

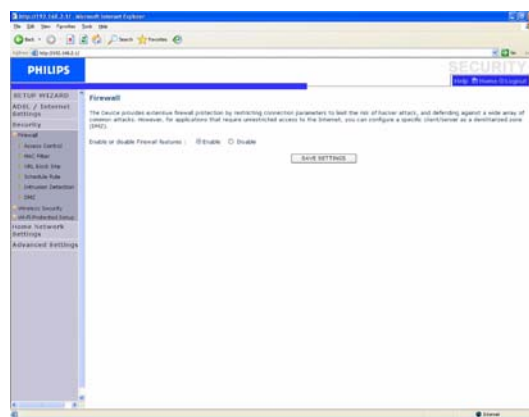
4.3.4 DNS



Domain Name Servers (DNS) are used to map a domain name (e.g., www.philips.com) with the IP address (e.g., 64.147.25.20). The DNS address is usually configured automatically. If this is not the case, one or more DNS address will be provided to you by your ISP.

4.4 Security webpages

4.4.1 Firewall



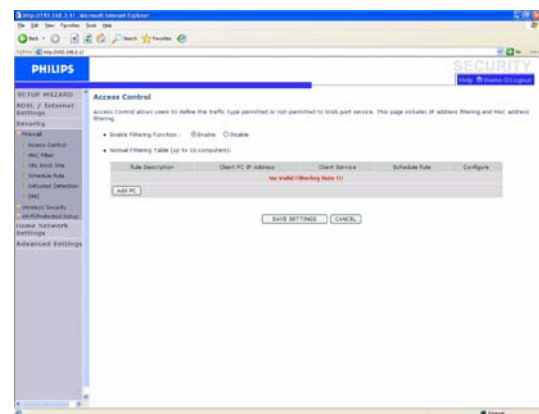
The ADSL Wireless Base Station's firewall inspects packets at the application layer, maintains TCP and UDP session information including time-outs and the number of active sessions, and provides the ability to detect and prevent certain types of network attacks.

Network attacks that deny access to a network device are called Denial-of-Service (DoS) attacks. DoS attacks are aimed at devices and networks with a connection to the Internet. Their goal is not to steal information, but to disable a device or network so users no longer have access to network resources.

The ADSL Wireless Base Station firewall function protects against the following DoS attacks : IP Spoofing, Land Attack, Ping of Death, IP with zero length, Smurf Attack, UDP port loopback, Snork Attack, TCP null scan, and TCP SYN flooding.

The firewall does not significantly affect system performance, so we advise leaving it enabled to protect your network. Select "Enable" and click the "SAVE SETTINGS" button to open the Firewall submenus.

Access Control



Access Control allows users to define the outgoing traffic permitted or not-permitted through the WAN interface. The default is to permit all outgoing traffic.

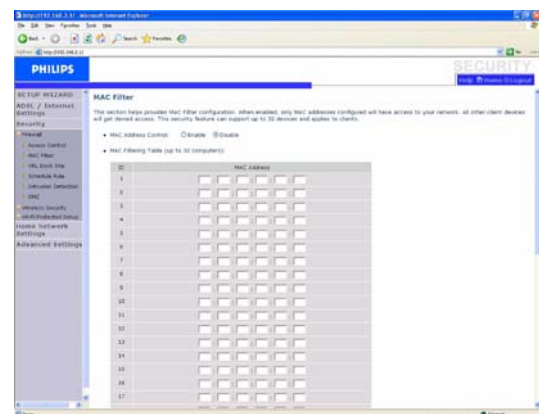
To add the PC to the filtering table :

- 1- Click "Add PC" on the Access Control screen



- 2- Define the appropriate settings for client PC services
- 3- Click "OK" and then click "SAVE SETTINGS" to save your settings

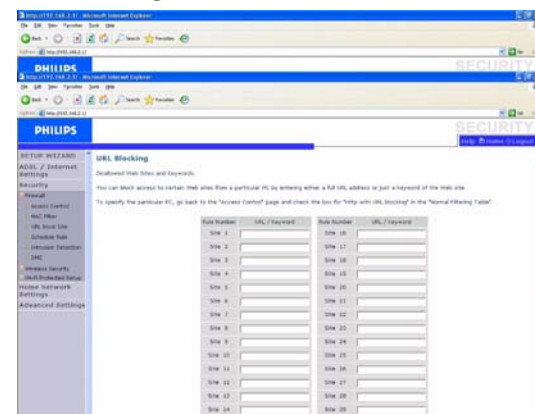
MAC filter



The ADSL Wireless Base Station can also limit the network access based on the MAC address. The MAC Filtering Table allows the ADSL Wireless Base Station to enter up to 32 MAC addresses that are allowed to access to the WAN port.

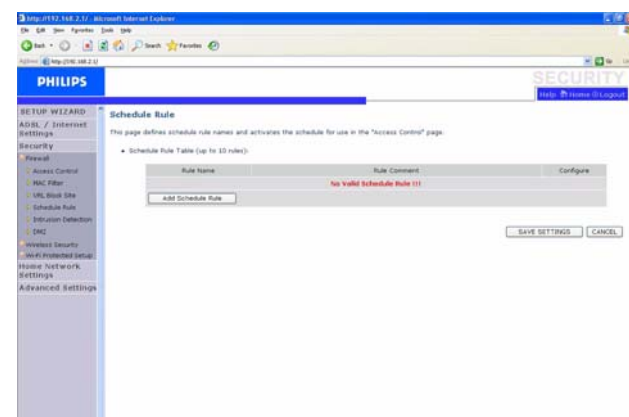
- 1- Click "Yes" to enable, or "No" to disable this function
- 2- Enter the MAC address in the space provided and click "SAVE SETTINGS" to confirm

URL Blocking



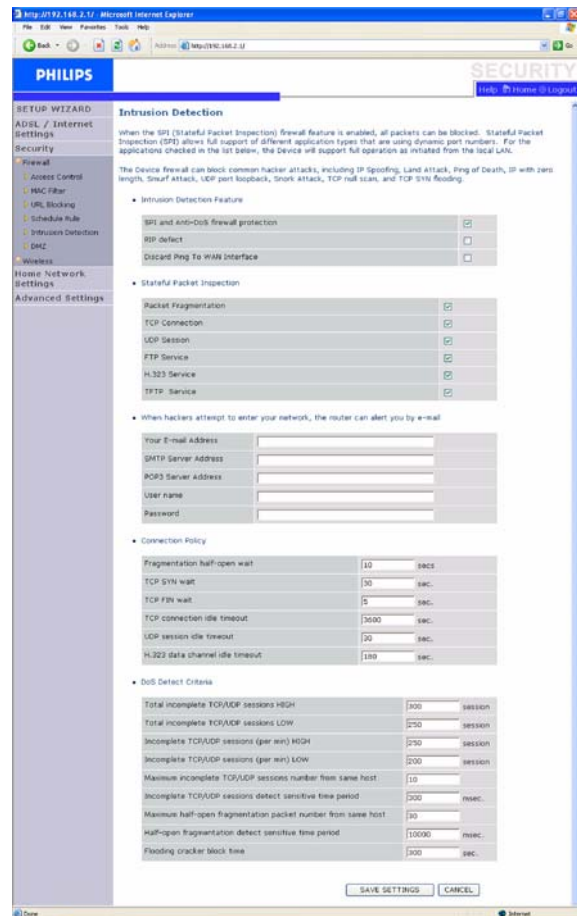
The ADSL Wireless Base Station allows the user to block access to web sites by entering either a full URL address or just a keyword. This feature can be used to protect children from accessing violent or pornographic web sites.

Schedule Rule



You may filter Internet access for local clients based on rules. Each access control rule may be activated at a scheduled time. Define the time schedule on this page, and apply the rule on the Access Control page.

Intrusion Detection



Intrusion Detection Feature

Stateful Packet Inspection (SPI) and Anti-DoS firewall protection (Default : Enabled) - The Intrusion Detection Feature of the ADSL Wireless Base Station limits access for incoming traffic at the WAN port. When the SPI feature is turned on, all incoming packets will be blocked except for those types marked in the Stateful Packet Inspection section.

RIP Defect (Default : Disabled) - If an RIP request packet is not acknowledged to by the router, it will stay in the input queue and not be released. Accumulated packets could cause the input queue to fill, causing severe problems for all protocols. enabling this feature prevents the packets from accumulating.

Discard Ping to WAN (Default : Disabled) - Prevent a ping on the ADSL Wireless Base Station's WAN port from being routed to the network.

Scroll down to view more information.

Stateful Packet Inspection

This is called a "Stateful" packet inspection because it examines the contents of the packet to determine the state of the communications ; i.e., it ensures that the stated destination computer has previously requested the current communication. This is a way of ensuring that all communications are initiated by the recipient computer and are taking place only with sources that are known and trusted from previous interactions. In addition to being more rigorous in their inspection of packets, stateful inspection firewalls also close off ports until connection to the specific port is requested.

When particular types of traffic are checked, only the particular type of traffic initiated from the internal LAN will be allowed. For example, if the user only checks "FTP Service" in the Stateful Packet Inspection section, all incoming traffic will be blocked except for FTP connections initiated from the local LAN.

Stateful Packet Inspection allows you to select different application types that are using dynamic port numbers. If you wish to use the Stateful Packet Inspection (SPI) to block packets, click on the "Yes" radio button in the "Enable SPI and Anti-DoS firewall protection" field and then check the inspection type that you need, such as Packet Fragmentation, TCP Connection, UDP Session, FTP Service, H.323 Service, or TFTP Service.

When hackers attempt to enter your network, the router can alert you by e-mail

If the mail server needs to authenticate your identification before sending out any e-mail, please fill related information in POP3 server, username and password fields. Otherwise leave the three fields blank.

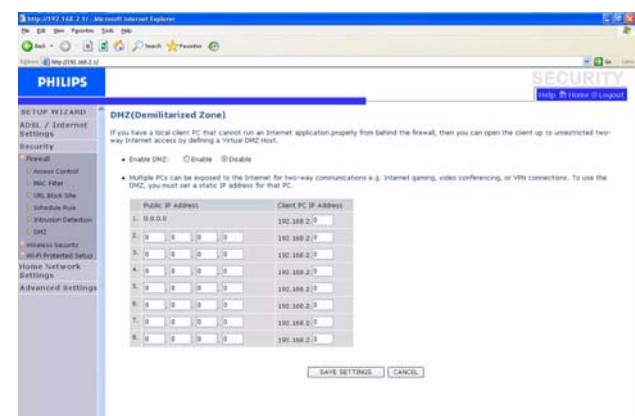
Connection Policy

Enter the appropriate values for TCP/UDP sessions as described in the following table.

Note

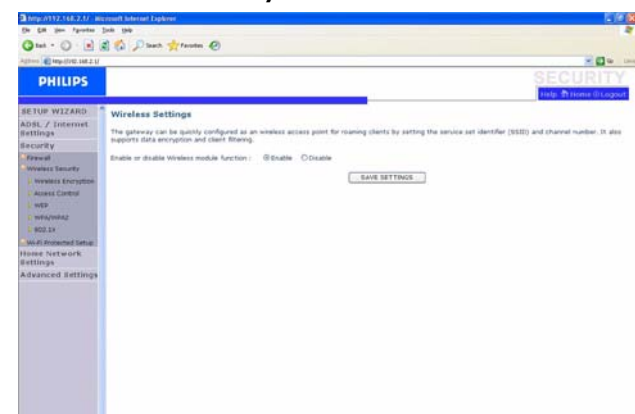
The firewall does not significantly affect system performance, so we advise enabling the prevention features to protect your network.

DMZ



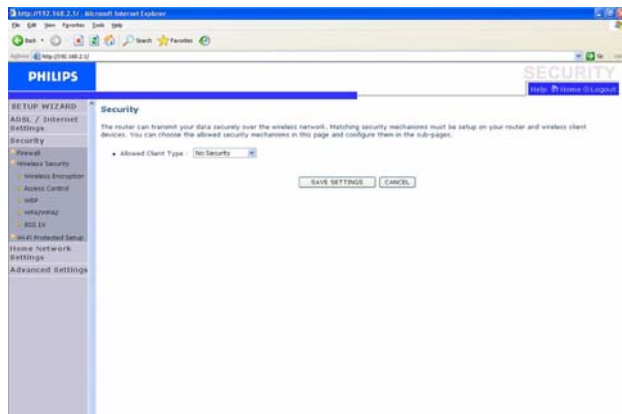
If you have a client PC that cannot run an Internet application properly from behind the firewall, you can open the client up to unrestricted two-way Internet access. Enter the IP address of a DMZ (Demilitarized Zone) host on this screen. Adding a client to the DMZ may expose your local network to a variety of security risks, so only use this option as a last resort.

4.4.2 Wireless Security



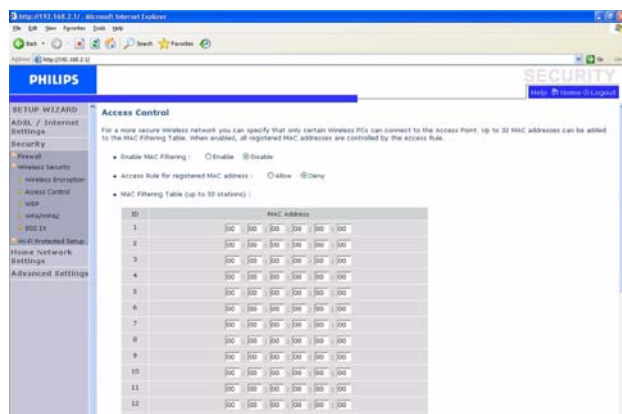
To make your wireless network safe, you should turn on the security function.

Wireless Encryption



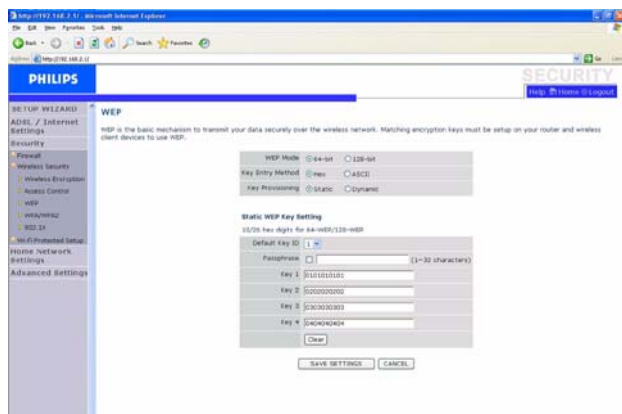
The ADSL Wireless Base Station supports WEP (Wired Equivalent Privacy), WPA/WPA2 (Wi-Fi Protected Access), and 802.1x security mechanisms. It is highly recommended to use WPA/WPA2 security.

Access Control



Access Control allows users to define the outgoing traffic permitted or not-permitted through the WAN interface. The default is to permit all outgoing traffic.

WEP



If you use WEP to protect your wireless network, you need to set the same parameters for the ADSL Wireless Base Station and all your wireless clients.

You may automatically generate encryption keys or manually enter the keys. To generate the key automatically with passphrase, check the Passphrase box, enter a string of characters. Select the default key from the drop down menu. Click "SAVE SETTINGS".

 Note

The passphrase can consist of up to 32 alphanumeric characters.

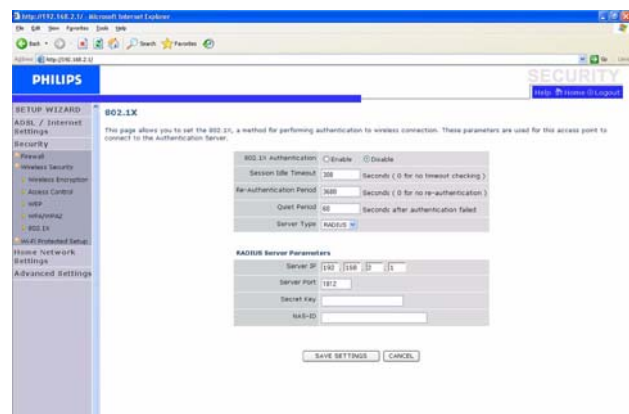
To manually configure the encryption key, enter five hexadecimal pairs of digits for each 64-bit key, or enter 13 pairs for the single 128-bit key. (A hexadecimal digit is a number or letter in the range 0-9 or A-F). Note that WEP protects data transmitted between wireless nodes, but does not protect any transmissions over your wired network or over the Internet.

WPA/WPA2



Wi-Fi Protected Access (WPA/WPA2) combines temporal key integrity protocol (TKIP) and 802.1x mechanisms. It provides dynamic key encryption and 802.1x authentication service.

802.1x



If 802.1x is used in your network, then you should enable this function for the ADSL Wireless Base Station. These parameters are used for the ADSL Wireless Base Station to connect to the authentication server.

4.4.3 WPS

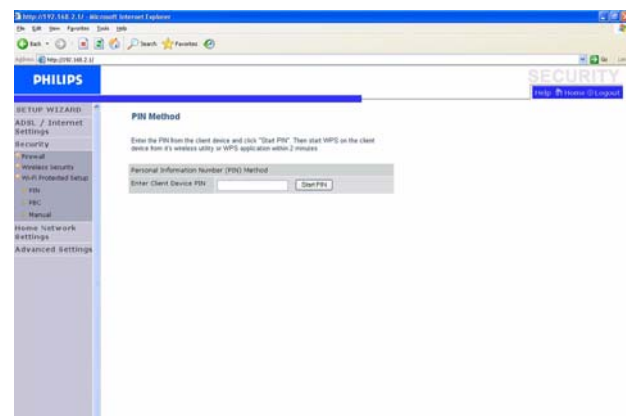


Wi-Fi Protected Setup (WPS) enables typical users who possess little understanding of traditional Wi-Fi configuration and security settings to easily configure new wireless networks, to add new devices and to enable security.

WPS can be done in any of the following ways :

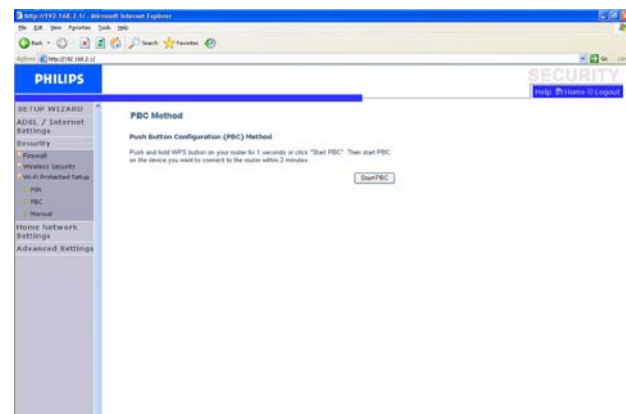
- PIN method
- PBC method
- Manual method

PIN



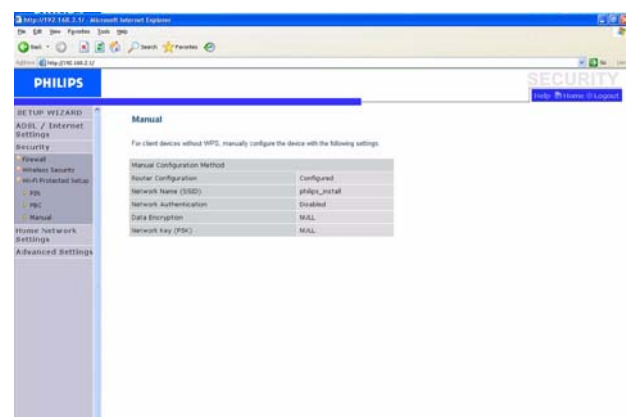
Enter the PIN from the client device and click **Start PIN**.

PBC



Push and hold the WPS button, located on the front side on your router, for 3 seconds or click **Start PBC**.

Manual



This method enables you to configure client devices without WPS function.

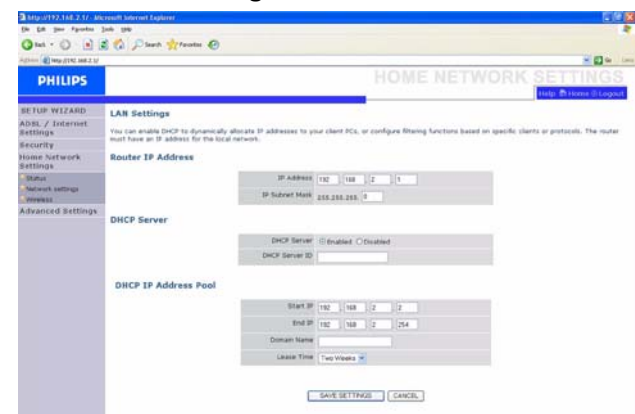
4.5 Home Network Settings webpages

4.5.1 Status



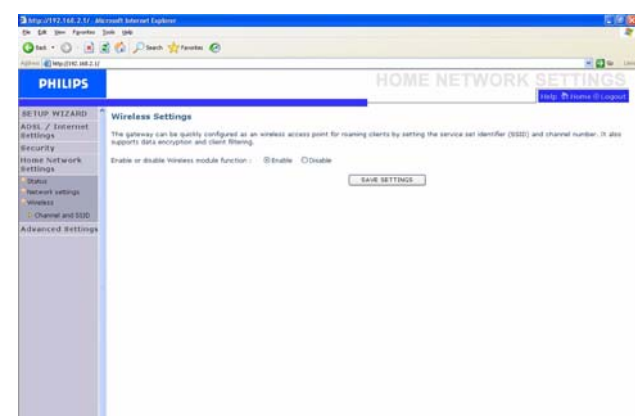
The Status page displays WAN/LAN connection status, firmware, and hardware version numbers, illegal attempts to access your network, as well as information on DHCP clients connected to your network. The security log may be saved to a file by clicking "Save" and choosing a location.

4.5.2 Network settings



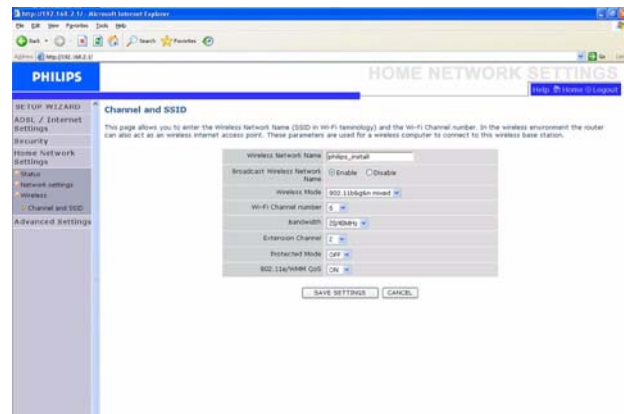
Use the Home Networking menu to configure the LAN IP address and to enable the DHCP server for dynamic client address allocation.

4.5.3 Wireless



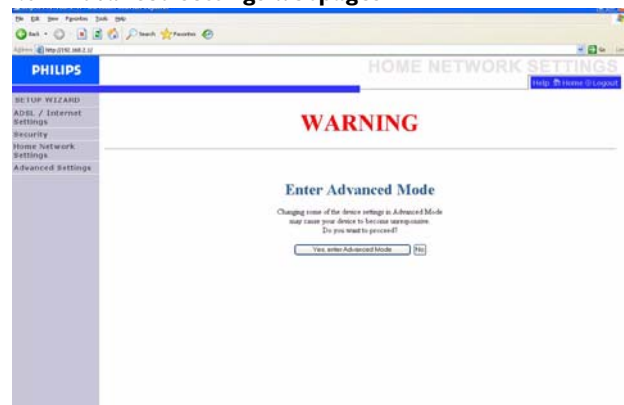
The ADSL Wireless Base Station also operates as a wireless access point, allowing wireless computers to communicate with each other. To configure this function, you need to enable the wireless function, define the radio channel, the domain identifier, and the security options. Check "Enable" and click "SAVE SETTINGS".

Channel and SSID



You must specify a common radio channel and SSID (Service Set ID) to be used by the ADSL Wireless Base Station and all of its wireless clients. Make sure you configure all of its clients to the same values.

4.6 Advanced settings webpages

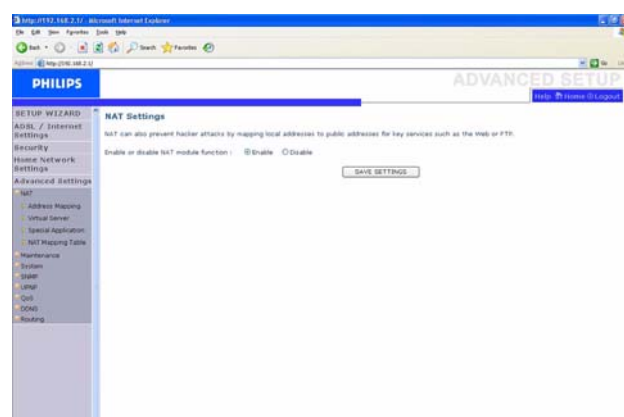


When you click on the Advanced Settings tab, you will first have this warning window displayed. It is to warn people who are not used to changing the configuration of their wireless modem router that changing some of the device settings in Advanced Mode may cause this device to become unresponsive.

Advanced Users can click on **"Yes, enter Advanced Mode"** to access the different advanced settings.

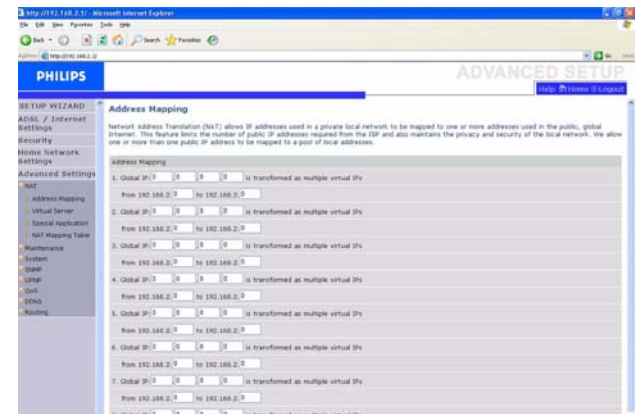
It is recommended for non Advanced Users to click on **"No"**.

4.6.1 NAT



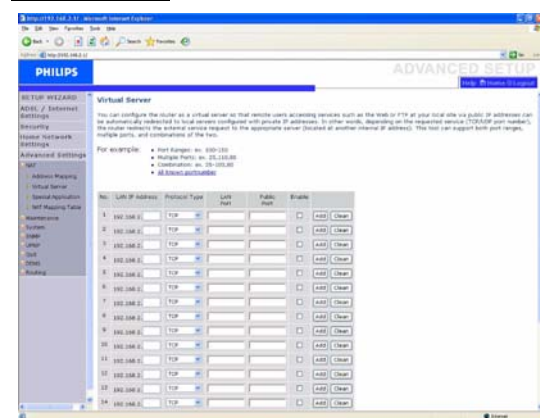
Network Address Translation allows multiple users to access the Internet sharing one public IP.

Address Mapping



Allows one or more public IP addresses to be shared by multiple internal users. This also hides the internal network for increased privacy and security. Enter the Public IP address you wish to share into the Global IP field. Enter a range of internal IPs that will share the global IP into the "from" field.

Virtual Server

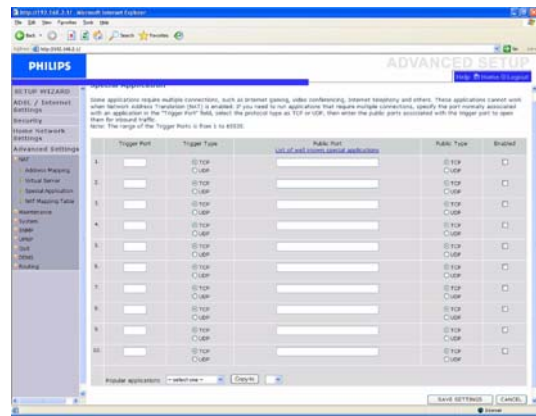


If you configure the ADSL Wireless Base Station as a virtual server, remote users accessing services such as web or FTP at your local site via public IP addresses can be automatically redirected to local servers configured with private IP addresses. In other words, depending on the requested service (TCP/UDP port number), the ADSL Wireless Base Station redirects the external service request to the appropriate server (located at another internal IP address).

For example, if you set Type/Public Port to TCP/80 (HTTP or web) and the Private IP/Port to 192.168.2.2/80, then all HTTP requests from outside users will be transferred to 192.168.2.2 on port 80. Therefore, by just entering the IP address provided by the ISP, Internet users can access the service they need at the local address to which you redirect them.

A list of ports is maintained at the following link : <http://www.iana.org/assignments/ports-numbers>

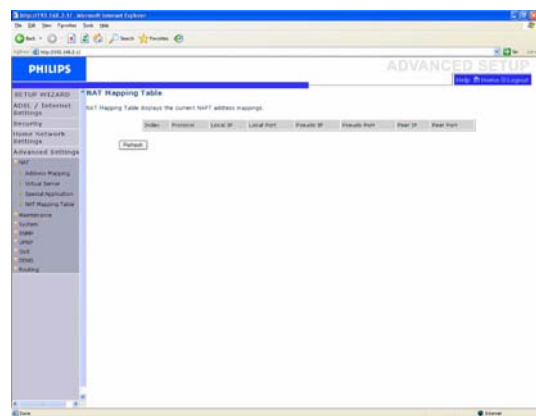
Special Applications



Some applications require multiple connections, such as Internet gaming, video-conferencing, and Internet telephony.

These applications may not work when Network Address Translation (NAT) is enabled. If you need to run applications that require multiple connections, use these pages to specify the additional public ports to be opened for each application.

NAT Mapping Table

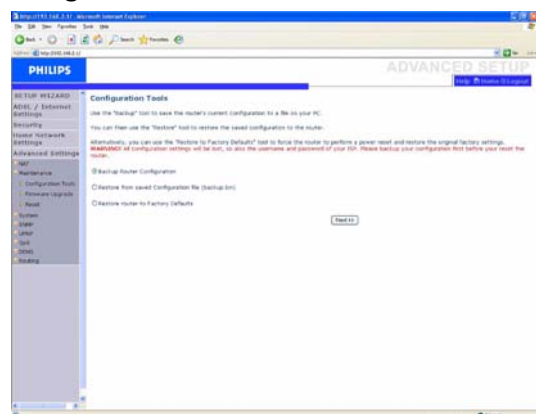


This page displays the current NAPT (Network Address Port Translation) address mappings.

4.6.2 Maintenance

Use the Maintenance menu to backup the current configuration, restore a previously saved configuration, restore factory settings, update firmware, and reset the ADSL Wireless Base Station.

Configuration Tools

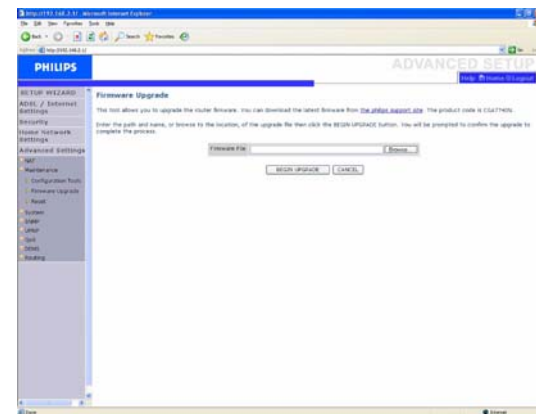


Choose a function and click **"Next>>"**.

"Backup" allows you to save the ADSL Wireless Base Station's configuration to a file.

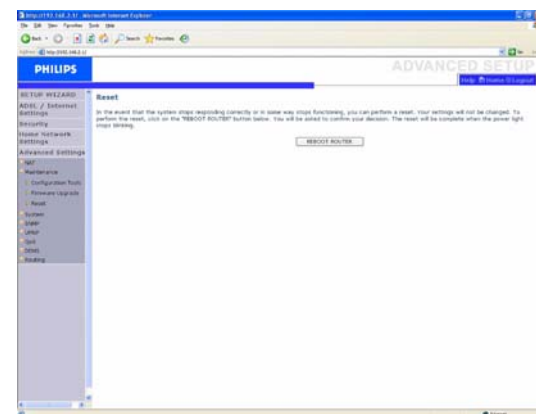
"Restore" can be used to restore the saved backup configuration file. "Restore to Factory Defaults" resets the ADSL Wireless Base Station to the original settings. You will be asked to confirm your decision.

Firmware Upgrade



Use the Firmware Upgrade screen to update the firmware or user interface to the latest versions. Download the upgrade file from www.philips.com/support (Model CGA5722), and save it to your hard drive. Then click "Browse..." to look for the downloaded file. Click "BEGIN UPGRADE". Check the Status page Information section to confirm that the upgrade process was successful.

Reset



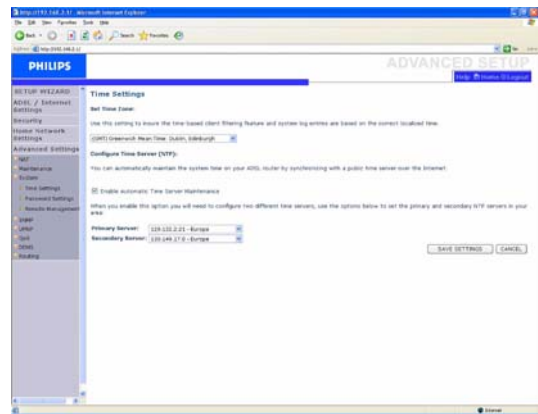
Click "REBOOT ROUTER" to reset the ADSL Wireless Base Station. If you perform a reset from this page, the configuration will not be changed back to the factory default settings.

Note

If you use the Reset button on the rear panel, the ADSL Wireless Base Station performs a power reset. Press the button for over five seconds, and the factory default settings will be restored.

4.6.3 System

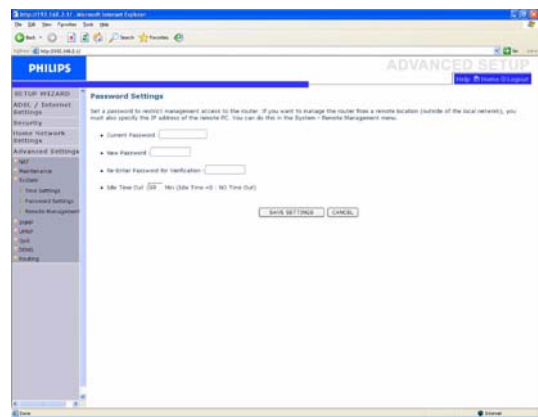
Time Settings



Select your local time zone from the drop down list. This information is used for log entries and client filtering.

If you want to automatically synchronize the ADSL Wireless Base Station with a public time server, check the box to "Enable Automatic Time Server Maintenance". Select the desired servers from the drop down menu.

Password Settings



Use this page to change the password for accessing the management interface of the ADSL Wireless Base Station.

Passwords can contain from 3~12 alphanumeric characters and are case sensitive.

Note

If you lost the password, or you cannot gain access to the user interface, press the blue reset button on the rear panel, holding it down for at least five seconds to restore the factory defaults. By default, there is no password to login to the user interface.

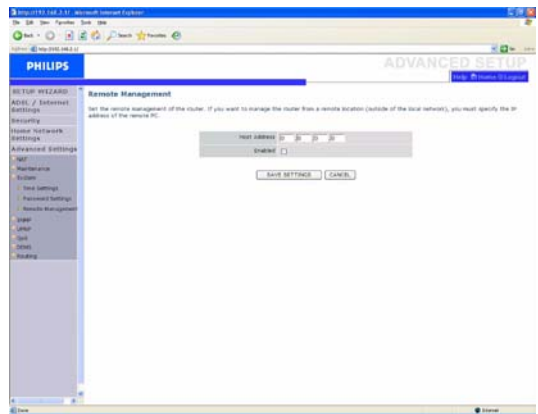
Warning

When you reset the ADSL Wireless Base Station using the reset button, all configuration settings will be lost, also your ISP setting (Internet Service Provider).

Enter a maximum Idle Time Out (in minutes) to define a maximum period of time for which the login session is maintained during inactivity.

If the connection is inactive for longer than the maximum idle time, it will perform system logout, and you have to log in again to access the management interface. (Default : 10 minutes)

Remote Management



By default, management access is only available to users on your local network. However, you can also manage the ADSL Wireless Base Station from a remote host by entering the IP address of a remote computer on this screen. Check the Enabled check box, and enter the IP address of the Host Address and click "SAVE SETTINGS".

Note

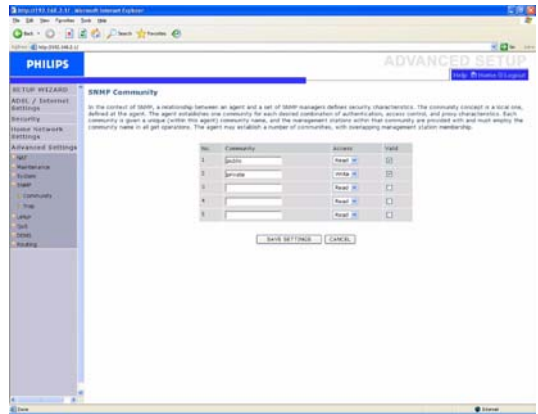
If you check "Enable" and specify an IP address of 0.0.0.0, any remote host can manage the ADSL Wireless Base Station.

For remote management via WAN IP address you need to connect using port 8080. Simply enter WAN IP address followed by :8080, for example, 212.120.68.20:8080.

4.6.4 SNMP

Use the SNMP configuration screen to display and modify parameters for the Simple Network Management Protocol (SNMP).

SNMP community



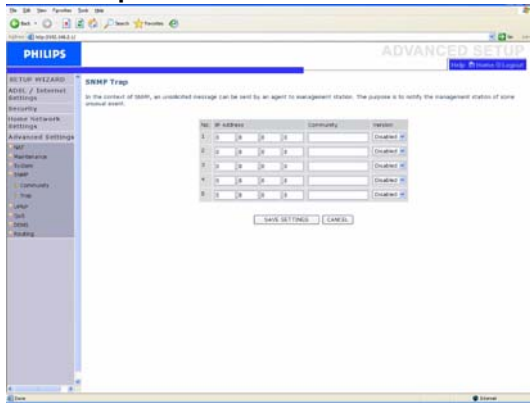
A computer attached to the network, called a Network Management Station (NMS), can be used to access this information. Access rights to the agent are controlled by community strings. To communicate with the ADSL Wireless Base Station, the NMS must first submit a valid community string for authentication.

Parameters	Description
Community	A community name authorized for management access
Access	Management access is restricted to Read Only (Read) or Read / Write (Write)
Valid	Enables / Disables the entry

Note

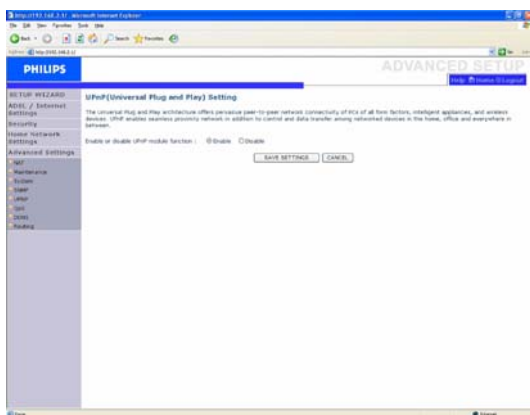
Up to five community names may be entered.

SNMP Trap



Specify the IP address of the NMS to notify when a significant event is detected by the agent. When a trap condition occurs, the SNMP agent sends an SNMP trap message to any NMS specified as a trap receiver.

4.7 UPNP



UPNP (Universal Plug and Play) settings

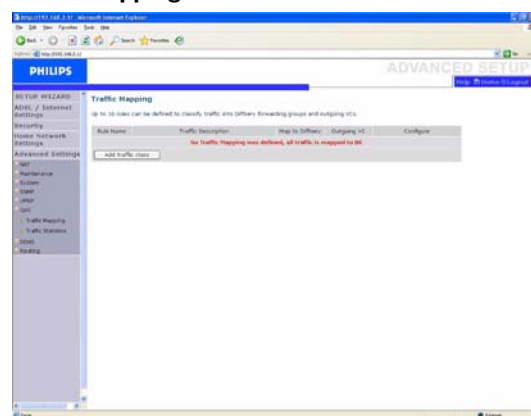
With Universal Plug and Play, a device can automatically join a network, obtain an IP address, communicate its capabilities, and learn about the presence and capabilities of other devices. Devices can then directly communicate with each other. This further enables peer-to-peer networking.

4.8 QoS

The QoS Settings page allows the user to configure the bandwidth allocation for each forwarding behavior. The QoS settings are described below :

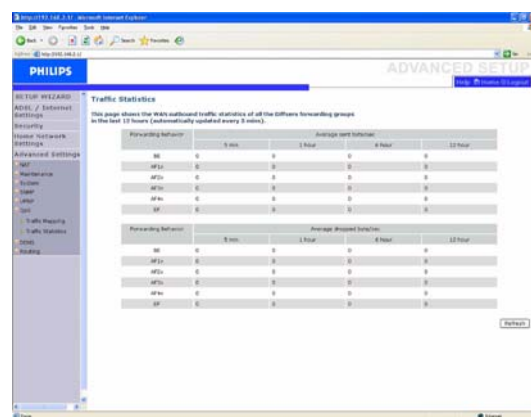
- "Name" - Displays the name of the forwarding method, i.e., 'Best Effort', 'Assured Forwarding' or 'Expedited Forwarding'.
- "Description" - Briefly describes the forwarding method employed.
- "Priority" - 'Best Effort' will have lowest priority as it is a basic connectivity service with no guarantees. 'Expedited Forwarding' will have highest priority. It provides low delay, low jitter and low loss delivery of packets.
- "Bandwidth Allocation" - You choose the minimum bandwidth for each forwarding method.

Traffic Mapping



Traffic Mapping allows you to describe up to 16 rules to classify traffic into forwarding groups. You must specify the traffic type, the forwarding method and the outgoing virtual connection (VC) that this traffic will be routed to.

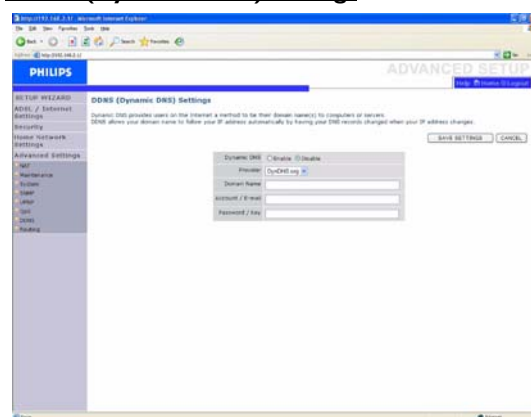
Traffic Statistics



The Traffic Statistic screen displays the outbound traffic statistics for all forwarding methods over a 12 hour period.

4.9 DDNS

DDNS (Dynamic DNS) settings



DDNS text "Domain Name" is a series of alphanumeric strings separated by periods that maps to the address of a network connection and identifies the owner of the address.

Dynamic DNS provides users on the Internet with a method to tie their domain name to a computer or server. DDNS allows your domain name to follow your IP address automatically by having your DNS records changed when your IP address changes.

The Server Configuration section automatically opens the TCP port options checked in the Virtual Server section. Simply enter in the IP

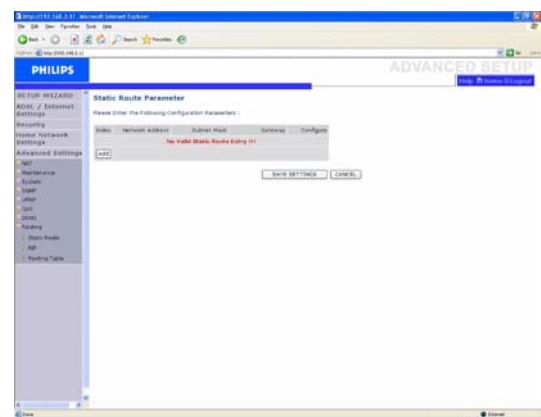
Address of your server, such as a web server, and then click on the port option HTTP Port 80 so users can access your web server from the Internet connection.

This DNS feature is powered by a DDNS service provider. With a DDNS connection you can host your own web site, email server, FTP site, and more at your own location even if you have a dynamic IP address. (Default : Disable)

4.10 Routing

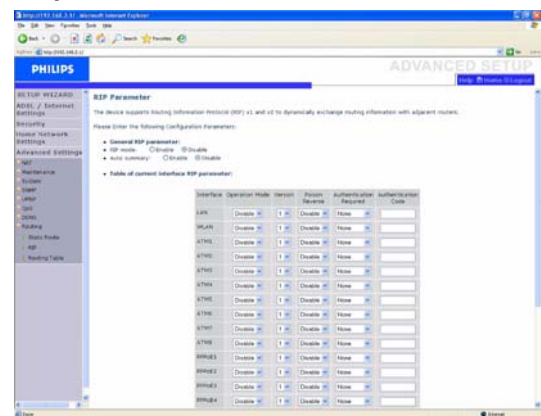
These pages define routing related parameters, including static routes and RIP (Routing Information Protocol) parameters.

Static route



- 1- Click "Add" to add a new static route to the list
- 2- Click "SAVE SETTINGS" to save the configuration

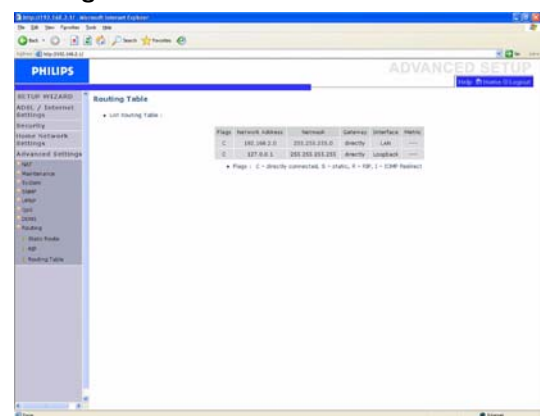
RIP parameters



RIP sends routing-update messages at regular intervals and when the network topology changes. When a router receives a routing update that includes changes to an entry, it updates its routing table to reflect the new route. RIP routers maintain only the best route to a destination.

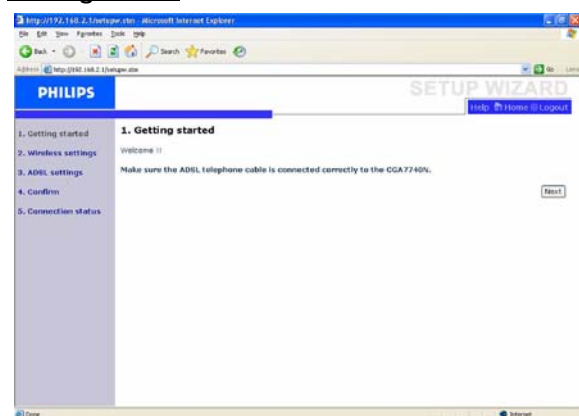
After updating its routing table, the router immediately begins transmitting routing updates to inform other network routers of the change.

Routing table



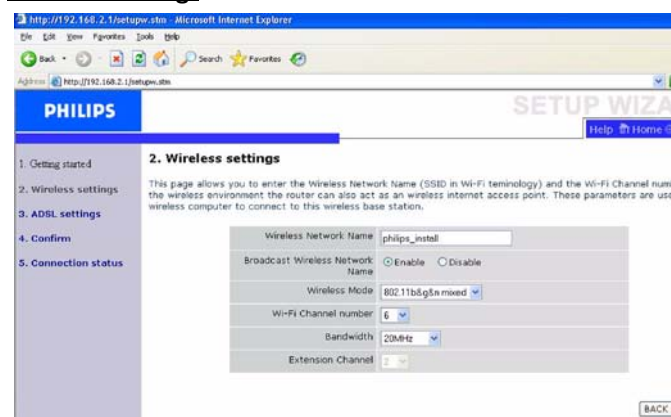
4.11 SET UP WiZARD

Getting started



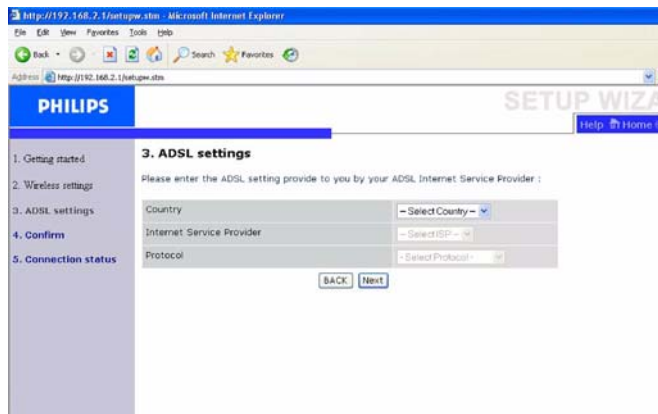
Make sure that you have a working ADSL subscription and that the ADSL Wireless Base Station is connected to the ADSL phone line. You can verify that the cable is connected correctly by looking at the ADSL light on the top of the ADSL Wireless Base Station. The ADSL light should be on solid after approximately 1 minute.

Wireless settings



In step 2 you can change the Wireless settings of the ADSL Wireless Base Station. For easy installation it is advised to keep the default settings. If you later would like to change any of the wireless settings you can do so via the menu in the ADSL Wireless Base Station.

ADSL settings



In step 3 you have to enter the settings applicable to your ADSL Internet Service Provider (ISP) subscription. For easy installation you can select your ISP from a list of predefined ADSL ISP's per country.

If you cannot find your ISP in the list you can enter the settings manually.

3. ADSL settings

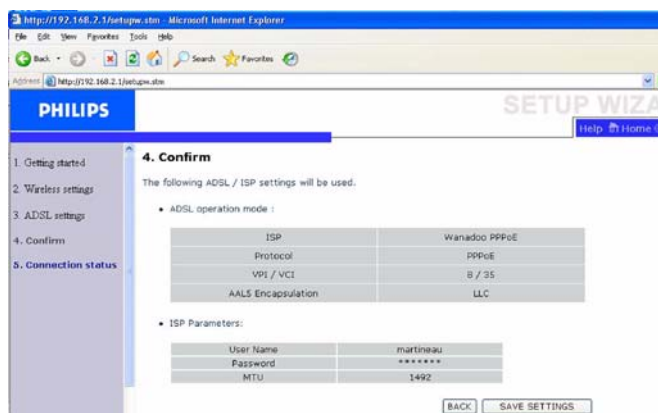
Please enter the ADSL setting provide to you by your ADSL Internet Service Provider :

Country	Others
Internet Service Provider	Unknown ISP
Protocol	Unknown ISP ISP use Bridging ISP use 1483Bridging-DHCP ISP use 1483Bridging-FixIP ISP use PPPoE ISP use PPPoA ISP use 1483Routing

BACK NEXT

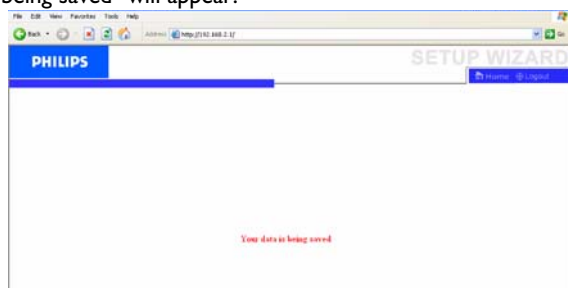
To do so select as "Country" "others" and select from the "Internet Service Provider" list the ADSL protocol your ISP is using (this should be mentioned in the documentation you received from your ISP).

Confirm



Step 4 displays the ADSL settings you've entered and that will be used to configure the ADSL Wireless Base Station. Please check that the settings comply with the information you received from your ADSL ISP subscription. If you want to make changes, click the "Back" button to go back to Step 3.

After you have clicked "SAVE SETTINGS" the message "Your data is being saved" will appear.



Ports

- Four 10/100Mbps RJ-45 Ports
- One ADSL RJ-11

ADSL Features

- Supports DMT line modulation
- Supports Annex A Full-Rate ADSL : up to 8 Mbps downstream, up to 1 Mbps upstream (G.992.1 & T1.143, Issue 2)
- Supports G.Lite ADSL : up to 1.5 Mbps downstream, up to 512 Kbps upstream
- Dying GASP support

ATM Features

- RFC1483 Encapsulation (IP, Bridging and encapsulated routing)
- PPP over ATM (LLC & VC multiplexing) (RFC2364)
- Classical IP (RFC1577)
- Traffic shaping (UBR, CBR)
- OAM F4/F5 support
- PPP over Ethernet Client

Management Features

- Firmware upgrade via web based management
- Web based management (configuration)
- Power indicators
- Event and history logging
- Network ping

Security Features

- Password protected configuration access
- User authentication (PAP/CHAP) with PPP
- Firewall NAT NAPT
- VPN pass through (IPSec-ESP Tunnel mode, L2TP, PPTP)

Wireless Security

- WEP 64/128 bit
- WPA/WPA2
- WPA/WPA2-Personal (PSK)
- WPA-PSK with TKIP
- WPA2-PSK with AES
- WPA-PSK + WPA2-PSK with TKIP+AES.AES, or TKIP
- WPS : PIN and PBC methods

LAN Features

- IEEE 802.1d (self-learning transparent Bridging)
- DHCP Server
- DNS Proxy
- Static Routing, RIPv1 and RIP

Radio Features

- Wireless RF module Frequency Band
 - 802.11n Radio : 2.4GHz
 - 802.11g Radio : 2.4GHz
 - 802.11b Radio : 2.4GHz
- Europe - ETSI
- 2412~2472MHz (Ch1~Ch13)

Modulation Type

- 802.11n Draft-2.0 : OFDM (BPSK, QPSK, 16- and 64-QAM)
- 802.11g : OFDM (BPSK, QPSK, 16- and 64-QAM)
- 802.11b : CCK (11 Mbps, 5.5 Mbps), DQPSK (2 Mbps)

Operating Channels IEEE 802.11n

- 13 channels (ETSI)

Operating Channels IEEE 802.11g

- 13 channels (ETSI)

Operating Channels IEEE 802.11b

- 13 channels (Europe)

Transmit Power and Sensitivity

TX Output Power : (Typical)

- 802.11b : 18.5 +/- 1dBm
- 802.11g : 14.5 +/- 1dBm@54Mbps
- 802.11n : 14.5 +/- 1dBm

RX Sensitivity : (Typical)

- -84 dBm@11Mbps
- -72 dBm@54Mbps
- -64 dBm@64-QAM, 20MHz channel spacing
- -61 dBm@64-QAM, 40MHz channel spacing

Environmental

Complies with the following standards :

Temperature : IEC 68-2-14

- 0 to 40 degrees C (Standard Operating)
- -20 to 70 degrees C (non-operation)

Humidity

- 5% to 95% (non-condensing)

Vibration

- IEC 68-2-36, IEC 68-2-6

Shock

- IEC 68-2-29

Drop

- IEC 68-2-32

Input Power

- 15V 0.8A

IEEE standards

- IEEE 802.3, 802.3u, 802.11g, 802.1d
- IUT G.dmt
- IUT G.Handshake
- IUT T.413 issue 2 - ADSL full rate

Standards Conformance Electromagnetic Compatibility

- CE, ETS 300 328, ETS 300 836 (Wireless)
- EN50081, EN50082, EN61000-3-2, EN61000-3-3 (EMC)
- Vista, WPS

Safety

- EN60950

6 Frequently asked questions

In this chapter you will find the most frequently asked questions and answers about your Wireless ADSL Modem Router.

Set-up

I cannot connect using the Web browser

- Check that you have a valid network connection to your ADSL Wireless Base Station
- Check all parameter settings with your Internet provider
- Check  and  signals

I forgot (or lost) the password. How do I reset my ADSL Wireless Base Station (Factory Defaults) ?

- Make sure the ADSL Wireless Base Station is turned ON
- Use a pen to push the recessed reset button on the rear panel, holding it down for at least five seconds
- Release the reset button and the ADSL Wireless Base Station restarts

Warning

When you reset the ADSL Wireless Base Station using the reset button, all configuration settings will be lost, also your ISP setting (Internet Service Provider).

A Wireless PC cannot associate with my ADSL Wireless Base Station

- Make sure that the WiFi function of your ADSL Wireless Base Station is enabled
- Make sure the Wireless PC has the same SSID setting as your ADSL Wireless Base Station. See webpage “Channel and SSID”.
- You need to have the same security settings on the Wireless PC and your ADSL Wireless Base Station. See “Security webpages”.

Product behaviour

The signal does not switch on

- Make sure that the electrical power supply is plugged into a wall outlet
- Make sure that the coaxial jack of the electrical power supply adapter is plugged into your ADSL Wireless Base Station
- Make sure you are using the correct power supply for your Wireless Modem Router
- Make sure that the power switch of your ADSL Wireless Base Station is ON
- However, if your ADSL Wireless Base Station power is OFF after running for a while, check for power loss or overcharge. (If your wall outlet has a switch is it in position ON ?)
- If you still cannot isolate the problem, then the external power supply may be defective. In this case, contact Technical Support for assistance.

The signal is OFF

- Make sure that the telephone cable (RJ11) is plugged into the ADSL port of your ADSL Wireless Base Station and to your telephone wall outlet or distributed filter
- Make sure that your landline works correctly. You can connect another telephone in the place of your current product. If you do not have tonality, the problem comes from your telephone line.

The signal is always OFF

- Confirm with your Internet Service Provider that your Internet service is active
- Confirm your Internet setting with your Internet Service Provider

The signals ... do not switch ON. Cannot ping the ADSL Wireless Base Station from the attached LAN.

- If you are using the Ethernet connection, verify that your TCP/IP is properly installed and configured on your PC.
- Make sure the Ethernet cable (RJ45) is firmly connected to your ADSL Wireless Base Station.
- Make sure you are using the correct cable type for your Ethernet equipment
- Verify that the IP address is properly configured. For most applications, you should use the ADSL Wireless Base Station DHCP function to dynamically assign IP address to hosts on the attached LAN. However, if you manually configure IP address on the LAN, verify that the same network address and subnet mask are used for both the ADSL Wireless Base Station and any attached LAN devices.

The Wireless network is often interrupted

- Move your Wireless PC closer to the ADSL Wireless Base Station to find a better signal. If the signal is still weak, you can change the angle of the antenna. There may be interference, possibly caused by microwave ovens, a Wireless TV link or wireless phones. Adapt the location of the interference sources or of the ADSL Wireless Base Station.
- You can change the wireless channels on the ADSL Wireless Base Station. See webpage “Channel and SSID”.

The Wireless Router is hot

- This is a normal behaviour
- Make sure to never cover the cooling slots



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