

CCU7740N





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# 1 Important

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

## 1.1 Safety information

### ⚠ Warning

- 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 avoiding 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](http://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](http://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.

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## 2 Your Wireless USB Adapter

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](http://www.philips.com/welcome).

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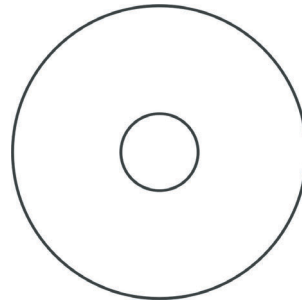
### 2.1 What's in the box



Wireless USB Adapter



Quick start guide



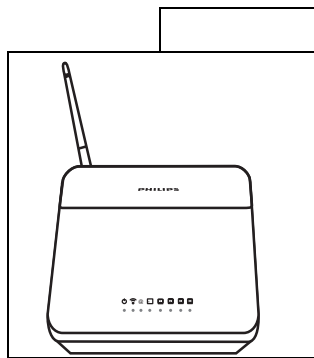
Installation CD Rom

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### 2.2 What else will you need



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



Wireless Modem or Router

or



Other Wireless Device

## 2.3 LED status



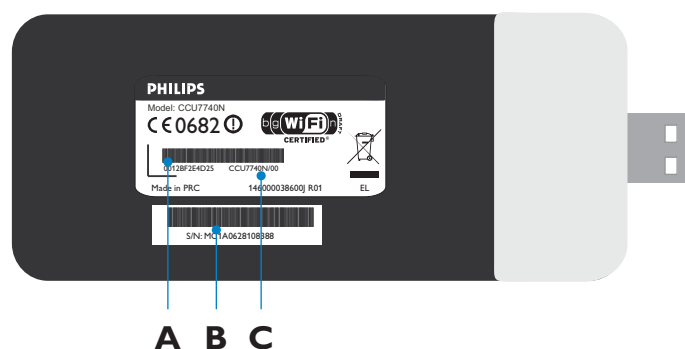
**A** 

ON: when receiving power and ready for operation  
OFF: when not connected or with PC switched off  
Blinking: when transmitting data (network activity)

## 2.4 Integrated antenna

Built-in antennas for establishing wireless connections.

## 2.5 Overview of the labels



### A MAC address

The designation consisting of 12 characters (e.g. 00:12:BF:2E:4D:25 or, in general xx:xx:xx:xx:xx:xx) is the unique MAC address of this network device. Some safety features or network identification purposes need this MAC address.

### B Serial Number

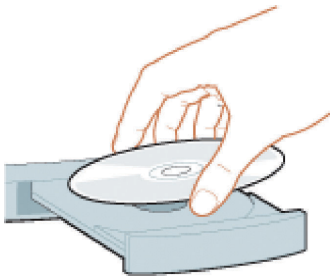
### C Model Number

This number has to be given when calling the hotline.

## 3 Getting started

### 3.1 Install

- 1 Insert the installation CD into the PC's CDROM (or DVDROM) 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 DVDROM) drive
- 3 Double-click on **Setup.exe**

#### Tip

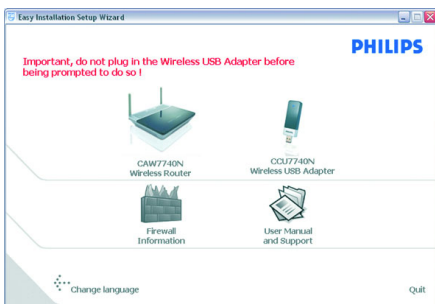
By default, the language of your operating system will be chosen, but you have 10 seconds if you want to select another one.

- 3 Click on the required language



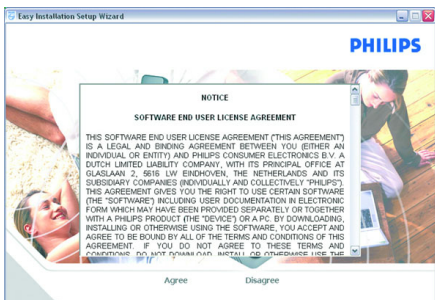
- The next screen will be displayed automatically

- 4 Click on the picture of the CCU7740N Wireless USB Adapter



- The software end user licence agreement screen is displayed

- 5 Read carefully and click on **Agree**



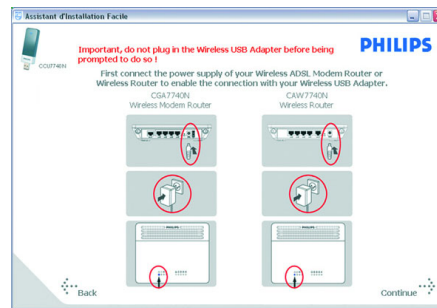
- The next screen will be displayed

### 3.2 Connect

#### Note

**DO NOT PLUG IN YOUR CCU7740N WIRELESS USB ADAPTER BEFORE BEING INSTRUCTED**

- 1 Click on **Continue**

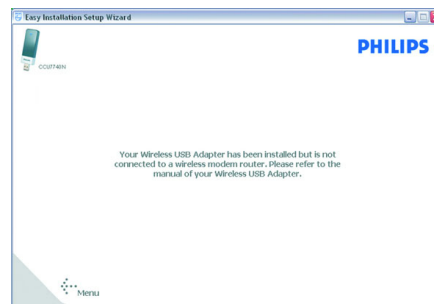


- A progress bar screen will be displayed
- You will be invited to connect your wireless USB adapter

- 2 Connect your CCU7740N wireless USB adapter



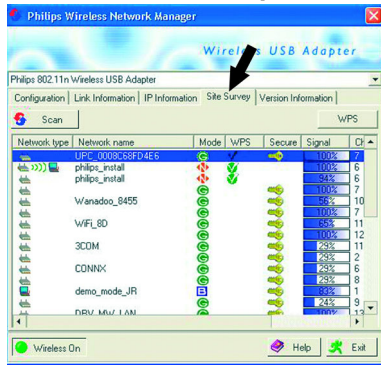
- The installation will go on and a confirmation of installation screen is displayed



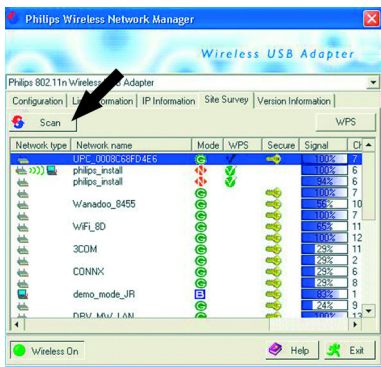
- 3 Double click on the tray icon in the right corner of your screen or on the Philips Wireless Network Manager icon on your desktop



#### 4 Select the **Site Survey** tab

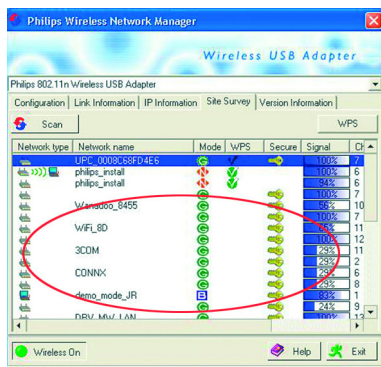


#### 5 Click on **Scan**



- A list of wireless network names is displayed

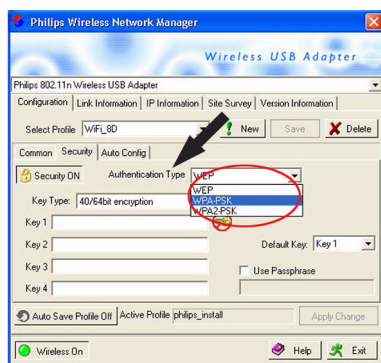
#### 6 Double click on your wireless network name



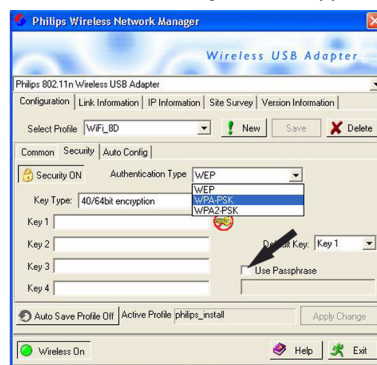
#### Note

If your network is secured, you will be asked to enter the security settings. See the user manual of your Router or Modem Router on how to identify these security settings.

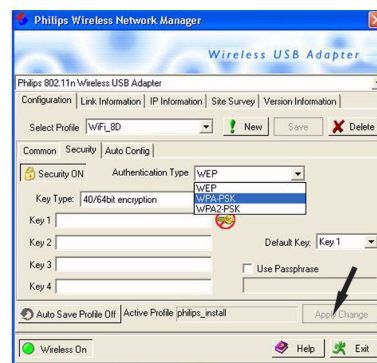
#### 7 Select your Authentication Type and select your key type



#### 8 Select **Use Passphrase** if applicable

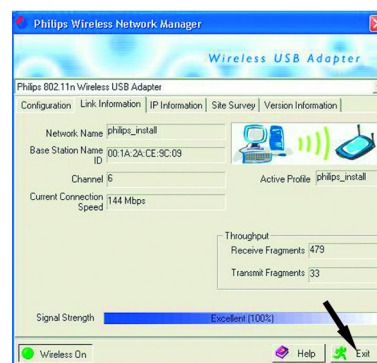


#### 9 Enter your encryption key and select **Apply Changes**



- A screen with the link information is displayed

#### 10 Click on **Exit**





## 4 Using your Wireless USB adapter

### 4.1 Access your wireless network manager program

- 1 Double click on the tray icon in the right corner of your screen or on the Philips Wireless Network Manager icon on your desktop



- You will access your wireless network settings

### 4.2 Wireless Network Manager program tabs

The Philips Wireless Network Manager program has five main tabs with information and settings.

#### Note

The Wireless On/Off button appears on the bottom of every tab to give you control over enabling and disabling the wireless link.

#### 4.2.1 Configuration tab

The **Configuration** tab lets you manage your profiles, and gives you access to your wireless network and encryption settings.



**Select Profile** - A profile is a set of all parameters needed for a particular wireless connection. If you want to change between wireless networks, you can simply switch from one saved profile to the other

Use the **New**, **Save** and **Delete** buttons to manage your profiles.

#### Auto Save Profile On/Off

When **Auto profile** is On, the **New** profile and **Save** profile buttons will be disabled. After you **Apply Change** a profile will automatically be created with your network settings.

The Configuration tab contains three sub-tabs: **Common**, **Security** and **Auto Config**.

#### Sub-tab Common:



**Network Name** - Input a wireless network name for the wireless network to which you want to connect. Alternatively, use the Site Survey tab to choose from the list of available Network Names. (Default: philips\_install)

**Operating Mode** - Set the operation mode to Ad Hoc (Peer-to-Peer) for network configurations that do not have a Wireless Router, and to Infrastructure for configurations with a Wireless Router. (Infrastructure is the default setting.)

**Transmit Rate** - Auto will automatically negotiate the highest possible wireless network speed. Or set a lower speed manually. Lower speeds will give better range.

**Channel** - The Channel can only be set when the Operating Mode is set to Ad Hoc (Peer-to-Peer). If you are setting up an Ad Hoc wireless network, set the channel number to the same radio channel as that used by the other wireless devices in your group. However, if you are connecting to a network via a Router, then the channel is automatically set to the channel of the Router to which the adapter connects.

**Power Save** - Click the box if you want to use power management to reduce your portable computer's consumption of battery power and still keep the computer available for immediate use.

#### Note

All computers and wireless network devices in the same network should have the same Network Name (SSID) and the same encryption key for wireless security. In Ad Hoc mode, you must also specify the same radio channel for all wireless devices.

#### Sub-tab Security:



First, click the **Security ON/OFF** button to enable or disable wireless security.

**Authentication Type** - Choose WEP, WPA-PSK or WPA2-PSK depending on the type of wireless security in the rest of your wireless network.

**Wired Equivalent Privacy (WEP)** and **WiFi Protected Access (WPA/WPA2)** are implemented in the adapter to prevent unauthorized access to your wireless network.

**Key Type** - For more secure data transmissions, set encryption to the highest number of bits. E.g. a 128-bit settings gives you a higher level of security than 64-bit.

**Note**

The setting must be the same for all clients in your wireless network.

**Use Passphrase** - If Passphrase is selected, security keys for WEP encryption are generated from your passphrase string. If encryption is set to 128 bit, only Key 1 is generated. If encryption is set to 64 bit, Keys1-4 are generated. You must use the same Passphrase and Default Key settings on all the other routers in your network.

**Note**

A passphrase string can consist of up to 32 alphanumeric characters.

The **WPA/WPA2 (WiFi Protected Access)** implemented in this Wireless USB Adapter uses an alphanumeric password between 8 and 63 characters long. This password may include symbols and spaces.

**Note**

You must use the same encryption key throughout your network.

**Apply Change** - Click on **Apply Change** to activate the changes you made.

**Key 1-4** - If the Key Type is set to Hex, the security keys are four 10 digit keys for the 64-bit WEP setting and four 26-digit keys for the 128-bit WEP setting.

(The hexadecimal digits can be 0~9 & A~F, e.g. D7 0A 9C 7F E5.)

**Default Key** - Choose the Key ID that has the encryption string you prefer. If you are using a key generated from the passphrase, you must use the same passphrase and key on each wireless device.

**Sub-tab Auto Config:**



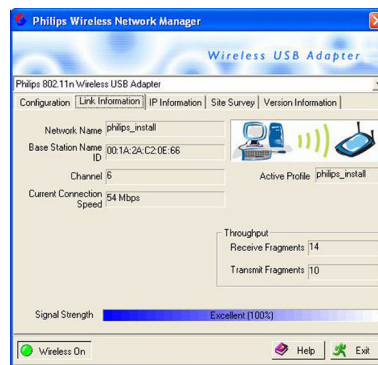
This sub-tab enables to get and modify the configuration of your Modem or Router.

**Search for UCP router** - If you click on this button, it detects the Modems or Routers with UCP protocol inside.

**Get Configuration** - enables to get the configuration of the selected device.

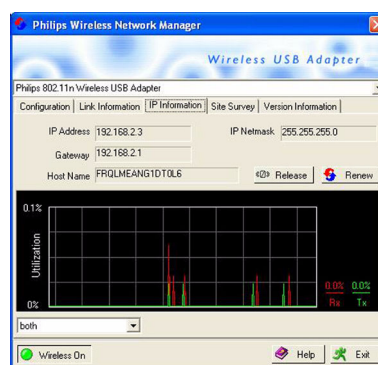
**Modify Configuration** - enables to modify the configuration of the selected device.

## 4.2.2 Link Information tab



The **Link information** tab displays information on the wireless network name (SSID) to which there is a wireless connection: the signal strength, Throughput history, current connection speed, channel and Network Name ID (MAC).

## 4.2.3 IP Information tab

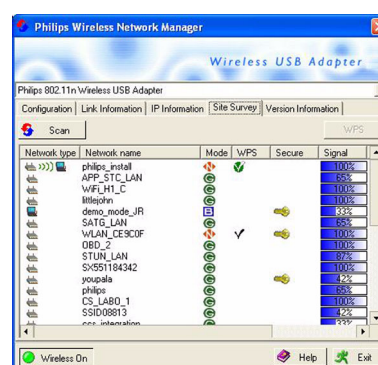


The **IP information** tab displays information on the Host Name, IP Address, IP Netmask, and Gateway.

This window also contains buttons for **releasing** and **renewing** the IP address. This is done to bring a computer back onto the network after moving it to a different location, or after experiencing an unexpected outage.

First release, then renew the IP address. Computers on DHCP networks often (but not always) re-establish network connectivity automatically.

## 4.2.4 Site Survey tab



Selecting the Site Survey tab displays a list of available wireless network access point.

Next, click **Scan** to update the list.

It shows you the following information:

- Network type shows the network setup
- The name of the wireless connection (Network Name, or SSID)
- Network mode shows which WiFi standard is used

- An icon reflecting if WPS is enabled
- An icon reflecting if encryption is enabled
- Signal strength
- Channel that is used by the network
- MAC address of the device

Double-click one of the network names to open the Profile Wizard for establishing a wireless connection with that network.

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#### 4.2.5 Version Information tab



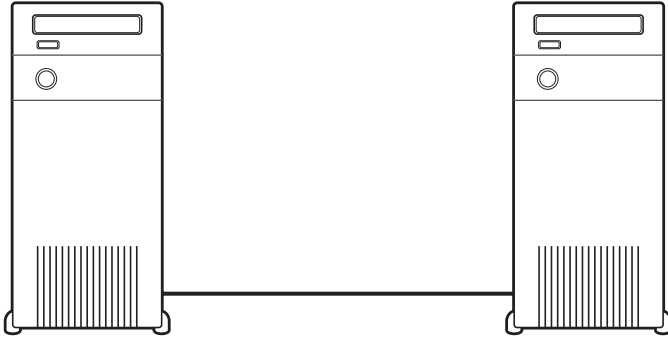
Selecting this tab displays vendor and version information.

## 5 Network Terminology

In a network, the computers need to be able to connect to each other physically. Therefore, another important network property is how the computers connect to each other, either directly or through a central device.

### ONE-ON-ONE WIRED NETWORK

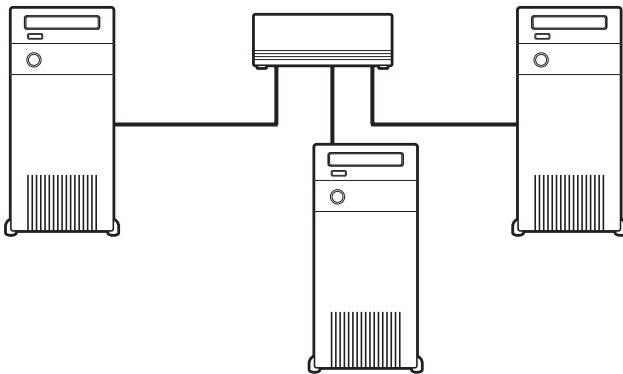
also known as: Direct connection (max. 2 PCs)



#### Note

Use a crossover Ethernet cable to connect two computers directly to each other.

### WIRED NETWORK WITH MORE THAN 2 PCs

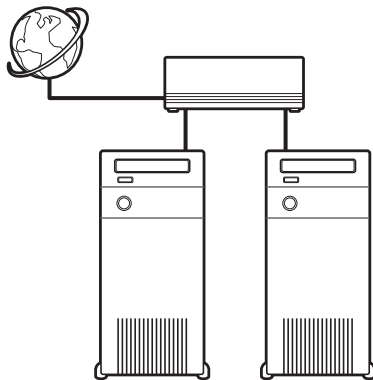


Use a hub or switch to connect more than 2 PCs to each other.

#### Note

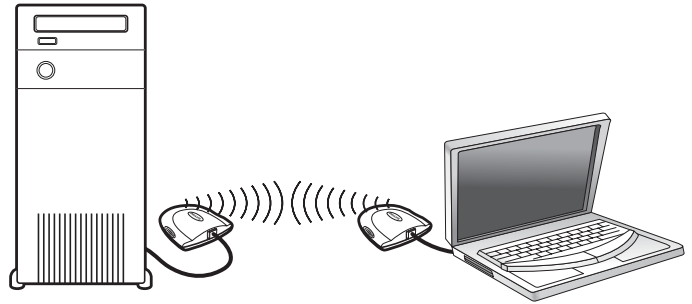
Use straight-through Ethernet cables to connect the computers to the central device (hub/switch).

### HOW TO INTERCONNECT WIRED NETWORKS



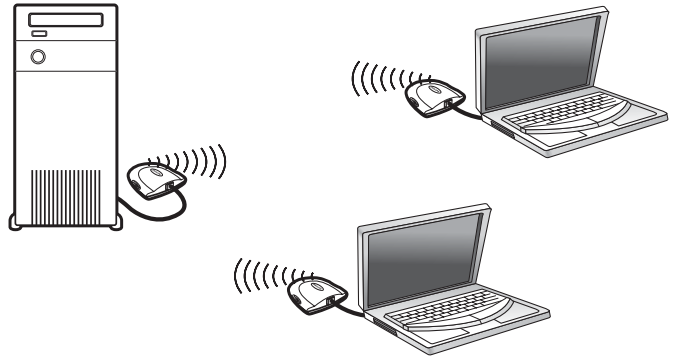
Use a gateway router to connect one network to another (e.g. to the Internet, also known as WAN).

### ONE-ON-ONE WIRELESS NETWORK



Also known as: Ad Hoc / Peer-to-Peer

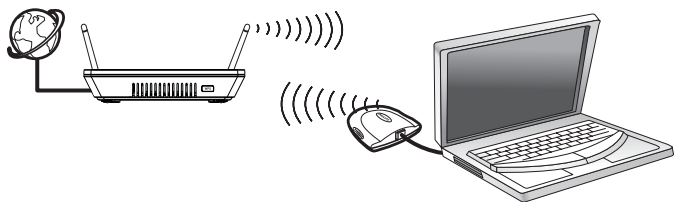
### WIRELESS NETWORK WITH MORE THAN 2 PCs



Also known as: Ad Hoc / Peer-to-Peer

The wireless medium forms a hub in and of itself. No hardware hub is needed.

### CONNECTING WIRELESS TO WIRED NETWORKS



Also known as: Infrastructure / Access Point

Use a **Wireless Router**

Central devices, like a hub, switch, router or wireless access point may be stand-alone devices or built into a computer.

- A **hub** has multiple ports and serves as a central connection point for communication lines from all computers on a wired network. It copies all data arriving at one port to the other ports. A **switch** is similar to a hub, but is able to handle different network speeds at each port.
- **Gateway routers** and **wireless access points** route network traffic from one network to another (e.g. from a wired network to the Internet, or from a wireless network to a wired network or to the Internet).

### Radio

- IEEE 802.11b/g/n (Draft 2.0)

### Radio Technology

- Direct Sequence Spread Spectrum (DSSS)
- Orthogonal Frequency Division Multiplexing (OFDM)

### Operating Frequency

- 2400~2483,5 MHz

### Channel Numbers:

- 13 channels (Europe)
- 11 channels (US)
- 14 channels (Japan)

### Antenna Type

- Built-in antennas

### Data Rate

- 300 Mbps Max

### 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 method

### Host Interface

- High speed USB 2.0 interface

### Power Consumption

- 2.25W

### Dimensions (h x w x d)

- 22 x 79 x 93 mm

### Weight

- Approx. 55 g (Adapter only)

### Operating Temperature:

- 0 to 40 degrees C (Standard Operating)

### Storage Temperature

- -20 to 70 degrees C (non-operation)

### Humidity

- 5% to 90% (must be non-condensing)

### 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

**D**  
**DHCP**

Dynamic Host Configuration Protocol. This protocol automatically configures the TCP/IP settings of every computer on your home network.

**DNS Server Address**

DNS stands for Domain Name System, which allows Internet host computers to have a domain name and one or more IP addresses. A DNS server keeps a database of host computers and their respective domain names and IP addresses, so that when a domain name is requested, the user is sent to the proper IP address. The DNS server address used by the computers on your home network is the location of the DNS server your ISP has assigned.

**DSL Modem**

DSL stands for Digital Subscriber Line. A DSL modem uses your existing phone lines to transmit data at high speeds.

**E**  
**Ethernet**

A standard for computer networks. Ethernet networks are connected by special cables and hubs, and move data around at up to 10 million bits per second (Mbps).

**H**  
**HPNA**

Home Phone Line Networking Alliance, which is an association of corporations (including) working to ensure the adoption of a single, unified phone line networking standard. Your Home Connect home network gateway is compliant with HPNA Specification 2.0, which allows networking speeds of up to 1 million bits per second (Mbps) using your existing home phone lines.

**I**  
**IP Address**

IP stands for Internet Protocol.

An IP address consists of a series of four numbers separated by periods, that identified a single, unique Internet computer host.

Example: 192.34.45.8.

**ISP**

Internet Service Provider. An ISP is a business that provides connectivity to the Internet for individuals and other businesses or organizations.

**ISP Gateway Address (see ISP for definition)**

The ISP Gateway Address is an IP address for the Internet router located at the ISP's office. This address is required only when using a cable or DSL modem.

**L**  
**LAN**

Local Area Network.

A LAN is a group of computers and devices connected together in a relatively small area (such as a house or an office). Your home network is considered a LAN.

**M**  
**MAC Address**

MAC stands for Media Access Control.

A MAC address is the hardware address of a device connected to a network.

**N**  
**NAT**

Network Address Translation. This process allows all of the computers on your home network to use one IP address. Using the NAT capability of the Home Connect home network gateway, you can access the Internet from any computer on your home network without having to purchase more IP addresses from your ISP.

**P**  
**PPPoE**

Point-to-Point Protocol over Ethernet. Point-to-Point Protocol is a method of secure data transmission originally created for dial-up connections ; PPPoE is for Ethernet connections.

**R**  
**Router**

A networking device that connects multiple networks together.

**S**  
**Secondary Dial-Up**

A secondary dial-up phone number is used by your ISP in case your primary dial-up number has too many other customers accessing it. The secondary dial-up phone number will be used if your primary dial-up phone number cannot be accessed.

**SPI**

Stateful Packet Inspection. SPI is the type of corporate-grade Internet security provided by your Home Connect home network gateway. Using SPI, the gateway acts as a "firewall", protecting your network from computer hackers.

**Subnet Mask**

A subnet mask, which may be a part of the TCP/IP information provided by your ISP, is a set of four numbers configured like an IP address. It is used to create IP address numbers used only within a particular network (as opposed to valid IP address numbers recognized by the Internet, which must assigned by InterNIC).

**T**  
**TCP/IP**

Transmission Control Protocol/Internet Protocol. This is the standard protocol for data transmission over the Internet.

**W**  
**WAN**

WAN stands for Wide Area Network. A network that connects computers located in geographically separate areas, (i.e., different buildings, cities, countries). The Internet is a wide area network.

**WPS**

WPS stands for Wifi Protected Setup. It is a feature allowing to register easily a device to a WiFi Access Point with security automatically enabled. The advantage is no need for the user to enter a long and complicated security key.

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## 8 Frequently asked questions

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In this chapter you will find the most frequently asked questions and answers about your Wireless USB Adapter. Check them and our web site [www.philips.com/welcome](http://www.philips.com/welcome) before contacting our technical support.

### Set-up

#### **My PC cannot find the Wireless USB Adapter/The network driver does not install correctly**

- Check that your USB Adapter is properly connected
- If you use a USB cable, check that the USB cable is securely connected to the USB connectors of both the adapter and of your PC.
- Check that your USB Adapter is not damaged.
- Check for any hardware problems, such as physical damage to the adapter's connector.
- Check that the USB port you use is not defective. Try to connect the adapter to another USB port. If this also fails, test your computer with another USB device that is known to operate correctly.
- If there are other network adapters in the computer, they may be causing conflicts. Remove all other adapters from the computer and test the wireless adapter separately.

If it still does not work, try re-installing the wireless USB adapter from the original Installation CD. Restart your PC.

#### **I cannot access any network resources from the computer**

- Make sure the computer and other network devices are receiving power.

#### **I have no access to a Windows or NetWare service on the network**

- Check that you have enabled and configured the service correctly. If you cannot connect to a particular server, be sure that you have access rights and a valid ID and password. If you cannot access the Internet, be sure you have configured your system for TCP/IP

#### **My Wireless USB Adapter cannot communicate with a computer in the network when configured for Infrastructure mode**

- Make sure the access point that the router is associated with is powered on.
- Reposition your Wireless USB Adapter
- Make sure the SSID and the network encryption key are the same as those used by the wireless access point.

#### **My network speed does not exceed 11 Mbps**

- Connect the Wireless USB Adapter to a hi-speed USB 2.0 port for maximum speed.
- Make sure all network components are suitable for high network speeds.

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### Product behaviour

#### **The link blue LED on the Wireless USB Adapter does not light**

- Make sure that the computer and other network devices are receiving power.







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