LCD TV

Streamium User Manual

connectedplanet

*Stream*ium

PHILIPS

Helpline

België/Belgique/Belgien/	02 275 0701
Luxemburg/Luxembourg	26 84 3000
Danmark	35 25 87 61
Deutschland	0696 698 4712
España	9 17 45 62 46
France	03 8717 0033
Greek	00800 3122 1223
Ireland	01 601 1161
Italia	02 48 27 11 53
Cyprus	800 92256
Nederland	053 482 9800
Norge	22 70 82 50
Österreich	01 546 575 603
Portugal	800 831 363
Schweiz/ Suisse/ Svizzera	02 23 10 21 16
Suomi	09 2290 1908
Sverige	08 632 0016
UK (United Kingdom)	0207 949 0069

www.philips.com/streamium

Contents

Thank you for purchasing this Philips Streamium Television set. You are the proud owner of a Streamium LCD TV set which promises full value to you as a customer. Please read the user manual and follow the steps and descriptions to enable you to set up your TV to access multimedia content stored on PCs and also brings live streaming Internet entertainment to your existing TV.

Table of Contents

2

Important information

- Please install and connect the product in the order as described in this manual only.
- Please read this guide carefully before using the Streamium LCD TV and keep it for future reference.
- The most recent downloads and information on this product will be available through our website www.philips.com/streamium.
- Broadband Internet access (min. 256 kbps) is required if you want to use the Internet functions of the Streamium LCD TV.
- Please check whether your Internet service provider charges extra fees for exceeding a certain limit of transferred data.

  When using Internet media services on a daily basis, you may exceed such a limit.

  For example: When you listen to Internet radio (at 64 kbps) for about 36 hours, 1 GB (gigabyte) of data will be transferred to your streamium system. Watching Internet video at 700 kbps exceeds a 1 GB limit in 3 hours.

- During set-up and installation, it may be helpful to have the instructions for your TV set, audio system and wireless base station or other wireless network components (if appropriate) at hand.

Safety Precautions

- NEVER MAKE OR CHANGE CONNECTIONS WITH THE POWER SWITCHED ON.
- Before operating the system, check that the operating voltage indicated on the nameplate (or the voltage indication beside the voltage selector) of your system is identical with the voltage of your local power supply. If not, please consult your dealer.
- Radio equipment for wireless applications is not protected against disturbance from other radio services.
- The product should not be exposed to dripping or splashing.

  No object filled with liquids, such as vases, should be placed on the product.

- Do not expose the system to excessive moisture, rain, sand or heat sources caused by heating equipment or direct sunlight.
- Allow a sufficient amount of free space all around the Streamium LCD TV for adequate ventilation.
- Do not attempt to repair the product yourself if you experience technical difficulties. Contact your Philips retailer.
- Place the system on a flat, hard and stable surface. When the system is switched to standby mode, it is still consuming some power. To disconnect the system from the power supply completely, remove the AC power plug from the wall socket.
- Make sure the air around the Streamium LCD TV can circulate to prevent the set from overheating internally. Also, avoid putting any heat sources (e.g. a power amplifier) underneath. The Streamium TV has a thermal shutdown that shuts down the set when the internal temperature exceeds a certain threshold. If this happens, the set switches to standby with the Power-LED flashing on and off. To remedy this situation: disconnect the mains, let the set cool down, improve ventilation, and reconnect the set to the mains.

Start by installing Philips Media Manager

This software enables the transfer of video, music and photo files in your computer to your Streamium LCD TV.

1 **Place the Philips Media Manager CD in your CD or DVD's drive and install the Philips Media Manager software.**
   The CD starts automatically. If it does not, double-click 'My Computer', then the CD-ROM drive icon and finally 'Setup.exe' to start the CD.

2 **In the menu that appears on your computer screen, click on 'Install Philips Media Manager', and follow the on-screen instructions.**
   Start the program by clicking Start > Programs > Philips Media Manager. When opening the Philips Media Manager for the first time, you will be asked if you want to add a folder and scan for media files. Open a drive or a folder with music, photos, or movies in it. (For example: the My Documents folder, if you have stored media files there.)

– You can always add more files and folders at a later time.

3 **Adding files to the Media Manager.**
   Only the files that you see in the Media Manager will be accessible from the Streamium LCD TV.

   A) Click one of the media categories: Music, Photos, or Movies.

   In this example, click 'Music'.

   B) First, click the 'Add Music' button below the media categories, then click 'Add Files or Folders...'.

   C) Select a folder or one or more media files and click the 'Open' button to add the selected folder or files to the Media Manager window.

> From now on, the media files you added may be accessed from the Streamium LCD TV.

4 **Opening and closing the Media Manager window.**
   You can close the Media Manager window, but its icon will remain active in the lower right corner of your computer monitor. This icon needs to remain visible, otherwise the TV Streamium LCD TV will not be able to access the media files on that computer.

   Double-clicking the icon opens the Media Manager window.

4
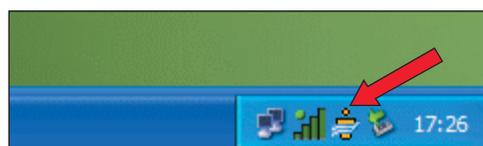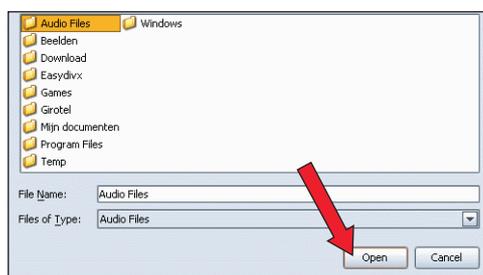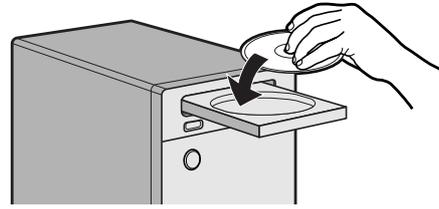
Chapter 2 – Connecting the Streamium LCD TV
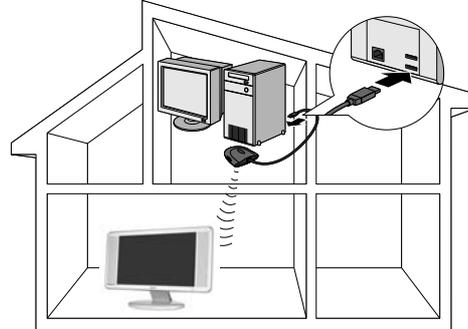
Choose the scenario that best fits your situation for installing the Streamium LCD TV.

<u>**Option A**</u> : **If you do not have a wireless computer network:**
In this configuration you only have a computer and a Streamium LCD TV.

•   You will install a Wireless Network Adapter on your computer.

• *Go to chapter 2.1 on page 6-7.*

OR

<u>**Option B**</u> : **If you already have a wireless computer network:**
In this configuration you already have a wireless computer network and a Streamium LCD TV.

•   You will check the settings of your existing wireless computer network.

•   You will adapt Streamium LCD TV to its settings to match your network.

• *Go to chapter 2.2 on page 8-9.*

OR

Option C: If you want to connect a network cable between the Streamium LCD TV and your PC or wired network:
In this configuration, the Streamium LCD TV and the computer come with a free ethernet connector (or a wired network with a free ethernet connector).

•   You will be connecting an Ethernet network cable between the Streamium LCD TV and your computer or wired network.

• *Go to chapter 2.3 on page 10-11.*

Installing

2.1 If you do not have a wireless computer network

Option A

In this configuration you only have a computer and the Streamium LCD TV.

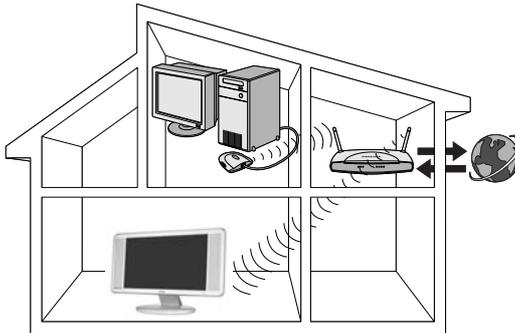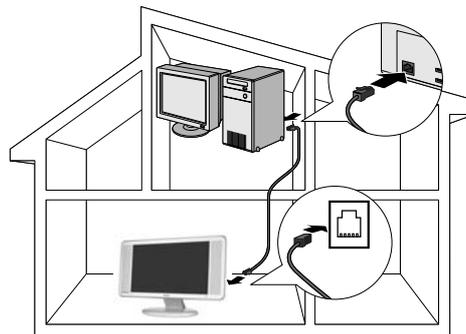• You will install a Wireless Network Adapter on your computer. At the end, you will be able to send music, movies, and pictures from your computer to your Streamium LCD TV.

1 Install a Wireless Network Adapter (not included, you will have to buy one separately, e.g. the Philips CPWUA054.)

See the separate instructions of the Wireless Network Adapter on how to install the adapter on your PC.
Note: Choose 'Ad-Hoc' as your network type during installation, and set your wireless network name (SSID).

After the Wireless Network Adapter has been installed successfully, continue below.

2 Make sure the Philips Media Manager you installed in chapter 1 is active.
Double-click the Media Manager icon in the lower right corner of your monitor OR click Start / Programs / Philips Media Manager. Leave the Media Manager window open to be sure it is active.

3 Switch on the Streamium LCD TV.
Press the SELECT button repeatedly until STREAM indicator is lighted up.

4 Pressing the HOME LINK button on the remote control.
Do not press the INTERNET button at this time, only the HOME LINK button.

> After about five seconds, a 'Streamium' welcoming message appears on the television screen.

5 If asked, select from the list of wireless network names (SSID) presented to you on the TV screen. Use the navigation buttons Cursor Up /Down on the remote control to select the network name to use and press **OK** button to confirm.

Note: If there is only one wireless network available, it will be selected for you and you will not be asked to select one.

> After about 30 seconds, you will see the PC Link menu appear on your TV screen. If you see the text 'Philips Media Manager' appear on your TV screen, the installation has succeeded. Should the PC Link menu stay empty, see the 'Problem solving' section on page 19-21.

6
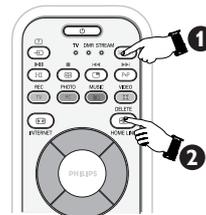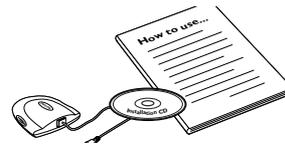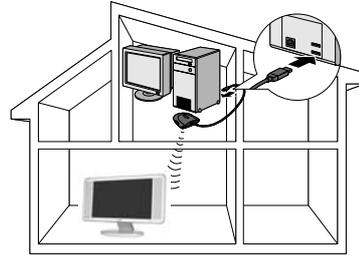
6 Explore the Home Link menu on the TV screen.
Use the navigation buttons (Cursor Left/Right/Up/Down) and the **OK** button on the remote control to explore the multimedia content you made available on your PC.

For example: press the Cursor Right *button on the remote control* several times until you have selected a music track, a photo or a movie, *and press* **OK** *button to play it on your television...*

Have fun!

7 How to enable INTERNET (For playing Internet Radio, Movie Trailers, etc., on your Streamium LCD TV.)
See the section on 'Enabling broadband Internet entertainment' on page 12-14 for information on how to make your broadband Internet connection (provided you have one) available to the Streamium LCD TV.

If you encounter problems during installation or should you need additional help, then:
a) see Problem solving on page 19-21, or

b) visit our website www.philips.com/streamium, and click on Support and FAQs, or

c) contact our help-line.

Tip: Enable the encryption key to secure your wireless computer network from intruders.
Philips advises you to set an encryption key to secure your wireless network. Please, read the text on 'Securing your wireless network' on page 33 in the extended version of the User Manual on the CD-ROM.

INTERNET

System Menu > Network

Network
Network Type
Network Config.
Wireless Config.
Encryption Config.
Proxy Config.
Network Info.
Wireless Info.

Encryption Config.
WEP Encryption
WEP Key 1
WEP Key 2
WEP Key 3
WEP Key 4
WEP Transmit Key

Use <Up> and <Down> keys to highlight a menu item.
Press <OK> or <Right> to select the item.

7
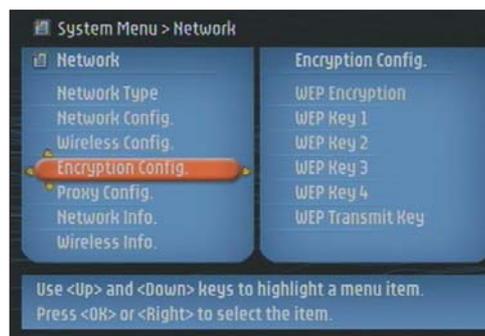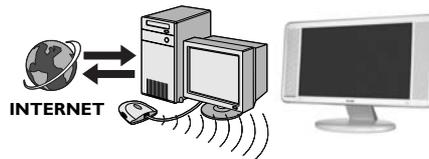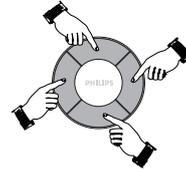
2.2 If you already have a wireless computer network

Option B

In this configuration you already have a wireless computer network, and the Streamium LCD TV.

• You will check the settings of your existing wireless computer network.

• You will connect the Streamium TV and adapt its settings to match your network. At the end, you will be able to send music, photos, and movies from your computer to your Streamium LCD TV.

1 Check your existing wireless network settings so you are able to enter them in STEP 4 of this procedure.
Find out the wireless network name (SSID) and the encryption key you used for securing your wireless network.

Wireless Network Name (SSID):
Usually, you can find the wireless network name in the options menu of your Wireless Network Adapter or Wireless Base Station. To check this, open the program that came with your network adapter.

Encryption key:
The wireless encryption key is a 64 or 128 bit WEP code that secures your wireless network communications.

– 64-bit: 5 characters ASCII, or 10 characters HEX, or

– 128 bit: 13 characters ASCII, or 26 characters HEX.

Note : The encryption key is case sensitive, meaning that 'ABC' is not the same as 'aBc'. Always input characters in the correct case to avoid problems. Basically, you will have to try and remember what you set it to. If you cannot remember the encryption key, you will either have to disable it completely for your entire wireless network, or set a new one that you can remember.

2 Make sure the Philips Media Manager you installed in chapter 1 is active.
An icon will appear at the bottom right hand corner of screen.

3 Switch on the Streamium LCD TV.
Press the SELECT button on the remote control repeatedly until STREAM indicator is lighted up.

4 Pressing the HOME LINK button on the remote control.
Do not press the INTERNET button at this time, only the HOME LINK button.

> After about five seconds, a 'Streamium' welcoming message appears on the television screen.
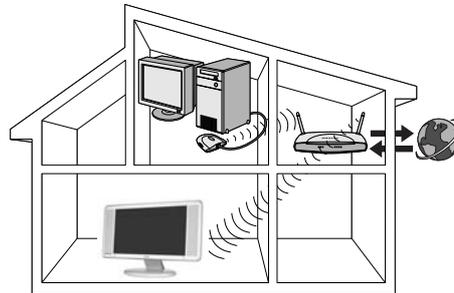
Check the:
NETWORK NAME (SSID)
. . . .
and
ENCRYPTION KEY
. . . .
of your wireless network

8

5 Select your wireless network name, and input the encryption key you found in step 1.
A) If asked, select the wireless network name from the list of wireless network names (SSID) presented to you on the TV screen.

Use the navigation buttons (**Cursor Up**/**Down**) on the remote control to select the correct network name and press **OK** button to confirm.

Note : If there is only one wireless network, it will be selected for you and you will not be asked to select one.

B) If asked, also input the encryption key.

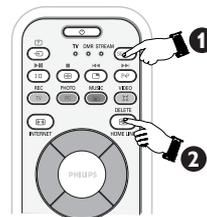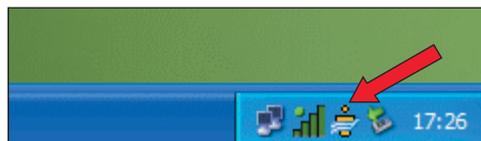Use the navigation buttons (**Cursor Left**/**Right**/**Up**/ **Down**) on the remote control to choose your type of encryption and to input the key itself. Press **OK** button to confirm.

Please remember that the encryption key is case sensitive, meaning that 'ABC' is not the same as 'aBc'. Always input characters in the correct case to avoid problems.

Note : If the wireless network is not encrypted, you will not be asked to input an encryption key.

> After about 30 seconds, you will see the PC Link menu appear on your TV screen.

If you see the text 'Philips Media Manager' appear on your TV screen, the installation has succeeded.

6 Explore the PC Link menu on the TV screen.
Use the navigation buttons (Cursor Left/Right/Up/ Down) and the **OK** button on the remote control to explore the multimedia content you made available on your PC.

For example: press the **Cursor Right** *button on the remote control several times until you have selected a music track, a photo or a movie,* and press **OK** button to play it on your television...

Have fun!

7 How to enable INTERNET (For playing Internet Radio, Movie Trailers, etc., on your Streamium LCD TV.)
See the section on 'Enabling broadband Internet entertainment' on page 12-14 for information on how to make your broadband Internet connection (provided you have one) available to the Streamium LCD TV.

If you encounter problems during installation or should you need additional help, then:
a) see Problem solving on page 19-21, or

b) visit our website www.philips.com/streamium, and click on Support and FAQs, or

c) contact our help-line.

PCLink(upnp)

PCLink(upnp)	1/1	Philips Media Manag...
Philips Media Mana...		Music
		Photos
		Movies

INTERNET

9

Installing

2.3 If you want to make a wired connection

Option C

In this configuration your Streamium LCD TV and computer already have a free ethernet connector (or a wired network with a ethernet connector).

• You will be connecting an Ethernet network cable between the Streamium LCD TV and your computer or wired network.

• You will be able to send music, photos, and movies from your computer to your Stremium TV.

Ethernet ports and cables look just like telephone connections and lines, but are thicker and wider. Ethernet (RJ-45) connectors have eight contacts, whereas standard telephone line (RJ-11) connectors have four or six.

Important: only use CAT.5 shielded Ethernet cable (STP).

1a Use a crossover Ethernet cable if you want to connect the Streamium LCD TV directly to your computer.
In a crossover Ethernet cable, the arrangement of the coloured wires changes between the two ends.

– Push one end of the Ethernet cable into the connector on the back of the Streamium LCD TV.

– Push the other end into the Ethernet connector of your computer.

Note : Your computer needs to have an Ethernet connector available.

<div align="center">OR</div>

1b Use a straight-through Ethernet cable if you want to connect the Streamium LCD TV to an existing computer network.
In a straight-through Ethernet cable, both ends have the same arrangement of coloured wires.

– Push one end of the Ethernet cable into the connector on the back of the Streamium LCD TV.

– Push the other end into a free Ethernet connector on your central network device, like a hub, switch or router.

Note : Your network needs to have an Ethernet connector available.
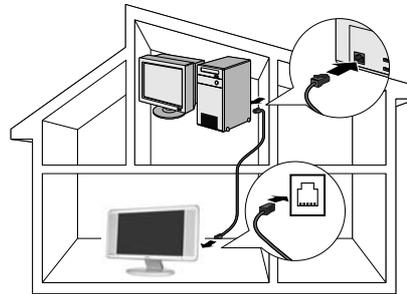
Ethernet port required
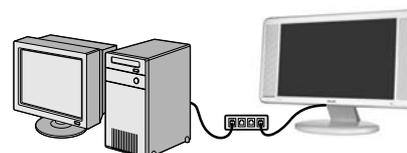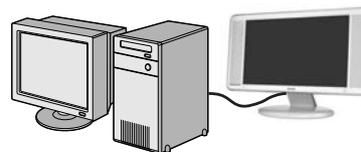
Network hub

2 Make sure the Philips Media Manager you installed in chapter 1 is active.
Double-click the Media Manager icon in the lower right corner of your screen or click Start / Programs / Philips Media Manager.

Leave the Media Manager window open to be sure it is active.

3 Switch on the Streamium LCD TV.
Press the SELECT button repeatedly until STREAM indicator is lighted up.

4 Pressing the HOME LINK button on the remote control.
Do not press the INTERNET button at this time, only the HOME LINK button.

> After about 30 seconds, you will see the PC Link menu appear on your Streamium LCD TV screen.

If you see the text 'Philips Media Manager' appear on your Streamium LCD TV screen, the installation has succeeded.

5 Explore the PC Link menu on the TV screen.
Use the navigation buttons (Cursor Left/Right/Up/Down) and the **OK** button on the remote control to explore the multimedia content you made available on your PC.

For example: press the Cursor Right button on the remote control several times until you have selected a music track, a photo or a movie, and press **OK** *button to play it on your television...*

Have fun!

6 How to enable INTERNET (For playing Internet Radio, Movie Trailers, etc., on your Streamium LCD TV.)
See the section on 'Enabling broadband Internet entertainment' on page 12-14 for information on how to make your broadband Internet connection (provided you have one) available to the Streamium TV.

If you encounter problems during installation or should you need additional help, then:
a) see Problem solving on page 19-21, or

b) visit our website www.philips.com/streamium, and click on Support and FAQs, or

c) contact our help-line.
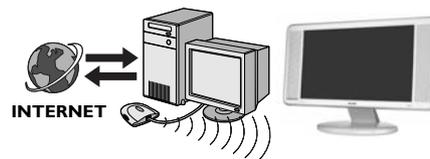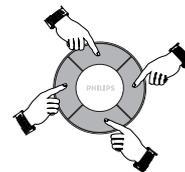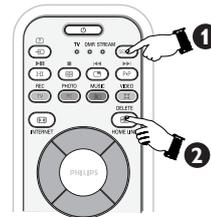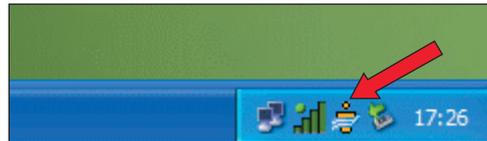
If you have a broadband Internet connection (minimum 256 kbps), you can stream Internet radio stations and movie trailers live from the Internet to the Streamium LCD TV. Broadband internet also provides the on-line upgrades for the Streamium LCD TV. The Internet entertainment offering is constantly being improved and new functions are added. Visit www.philips.com/streamium for the latest possibilities.

3.1 How does your computer connect to the Internet?

Option A: With a wired broadband Internet connection

If you have a PC with a wired broadband Internet connection, you will have to make that Internet connection available to the wireless (or wired) network. To do this, install router/gateway software on the PC for bridging the broadband Internet connection to the wireless or wired network. As an example we have included a chapter on page 38-41 on the Philips Media Manager CD on how to enable Internet Connection Sharing from your Microsoft® Windows® operating system. For Microsoft® and other operating systems, third party router/gateway software is readily available on the market. For more information on sharing an Internet connection, read the documentation that came with the software or with your operating system.

> After bridging the internet connection to your wireless (or wired) network, you will be able to access the Internet just like your computer. Wireless base stations (and wired internet gateway routers) share their broadband Internet access automatically within the network.
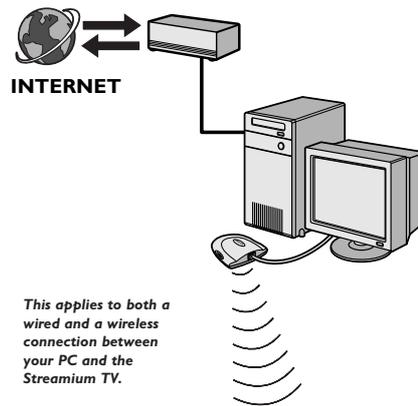
INTERNET

This applies to both a wired and a wireless connection between your PC and the Streamium TV.

OR

Option B: Through a wireless base station

Wireless base stations (and wired internet gateway routers) share their broadband Internet access automatically within the network.

> The Streamium LCD TV will be able to access the Internet just like your other wireless or wired network computer(s).

INTERNET

This also applies to a wired connection between your internet gateway router and the Streamium TV

12

3.2 Pressing the **INTERNET** button for the first time

1 First, check whether HOME LINK functions correctly. Start the Philips Media Manager program on your computer, and press the HOME LINK button on the remote control. See if the text 'Philips Media Manager' appears on your television screen.
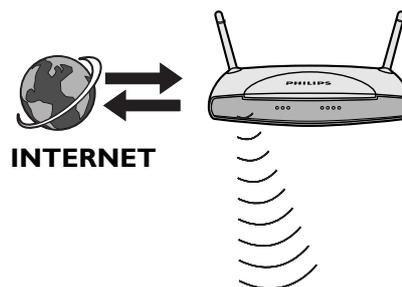
2 Then, check whether the PC on which you are running Philips Media Manager has Internet access by opening a website on the Internet with your Internet browser program (e.g. www.philips.com).

3 Next, press the INTERNET button to start streaming audio and video from the Internet to your Streamium LCD TV.

> You will be asked to register for the free Internet services. See next chapter on how to register.

Note: Internet services will only be available if you register.
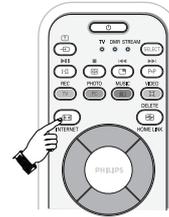
3.3 Registration (for free Internet services)

When the Streamium LCD TV connects to the Internet for the first time, or after you have reset all menu settings, the Streamium TV will ask you to register your email address. Also, each new user you add will have to register an email address.

1 Use the Cursor (**Up**/**Down**/**Right**) keys on your remote control to enter your email address. If you mis-typed, press Cursor **Left** button to delete the character you have entered. Next, press **OK** button to send your email address to My.Philips.

(See also: Chapter 8 - Entering or editing information)

Alternatively, use SMS TEXT-style keys for inputting your email address. SMS TEXT-style entry can be used to enter alphanumeric information. In this mode, text is entered by a method similar to that used for entering text messages on a cellular telephone.

For example: pressing the '2' key several times will cycle through the following characters : a – b – c – A – B – C – 2... etc

RC Key	SMS-style alphanumeric entry order
1	_ - 1 _ - 1 (etc.)
2	a b c A B C 2 a b c (etc.)
3	d e f D E F 3 d e f (etc.)
4	g h i G H I 4 g h i (etc.)
5	j k l J K L 5 j k l (etc.)
6	m n o M N O 6 m n o (etc.)
7	p q r s P Q R S 7 p q r s (etc.)
8	t u v T UV 8 t u v (etc.)
9	w x y z W X Y Z 9 w x y z (etc.)
0	.@ 0 .@ 0 (etc.)

Tip : The dot, and the @ sign, are under the 0 key. The space, hyphen, and underscore, are under the 1 key.

Note : Within a short time, you will receive an email with instructions on how to create an account at my.philips.com.

13

Enabling broadband Internet entertainment

You will need to go to your PC to perform Steps 2 to 4

2 From your PC, double-click the website address that is in the email.

3 Fill in the requested data to create an account.

4 After registration you can access the INTERNET service of the Streamium LCD TV and you can manage your user account at 'my.philips.com' by opening this website in your Internet browser program or by clicking the My.Philips button in Philips Media Manager.

Note : Make note of your password, as you will need it if you want to re-register after resetting the service of the Streamium LCD TV or if you want to access the Internet later.

5 After creating a My.Philips account, proceed to the Streamium LCD TV and press the INTERNET button again.

> The Streamium LCD TV will require you to enter the email address.

Enter your password and press the red button on the remote control.

If you forget your password :
Press the green button on the remote control.

> An email will be sent to your email address. Check your email and follow the instructions to change your password.

> The Streamium LCD TV will now have access to the Internet services of your My.Philips account.

Have fun!

14

Chapter 4 – Using the Streamium LCD TV

This Streamium LCD TV either connects to your wireless home network (HOME/PC LINK) and plays music, photos, and movies stored on your PC(s), or to the Internet (INTERNET) for accessing various Internet Entertainment services (e.g. internet radio, movie trailers…).

Note: Install the Philips Media Manager software, the Wireless Network Adapter (or wired connection), before you attempt to use the Streamium LCD TV. Also, make sure the Philips Media Manager icon is present in the lower right corner of your computer screen. Internet services require a broadband Internet connection.

IMPORTANT : Before you start using your Streamium LCD TV for Streamium functions or other functions, ensure the RIGHT MODE must be selected.
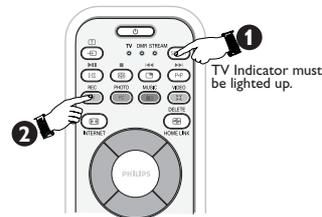
Switching from TV/FM Radio/PC mode to Streamium mode :

– Press the SELECT button on the remote control repeatedly until the indicator is lighted up at STREAM.

– Press the HOME LINK button to access the PC Link menu on your Streamium TV screen.

Switching from Streamium mode to TV mode :

– Press the SELECT button on the remote control repeatedly until the indicator is lighted up at TV.

– Press the TV button to return to TV mode to view programmes on your Streamium TV screen.

Switching from Streamium mode to FM Radio mode :

– Press the SELECT button on the remote control repeatedly until the indicator is lighted up at TV.

– Press the RADIO button to enter into FM Radio mode. You can now proceed to use your Streamium LCD TV as a radio for your listening pleasure. See the *TV User Manual's* section on "Using the Streamium LCD TV as a FM Radio".
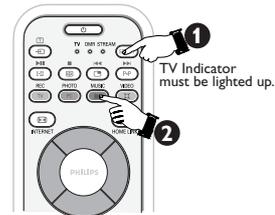
Switching from Streamium mode to PC mode :

– Press the SELECT button on the remote control repeatedly until the indicator is lighted up at TV.

– Press the PC button to enter into PC mode. You can now your Streamium TV as a PC monitor. See the *TV User Manual's* section on "Using the Streamium LCD TV as a PC Monitor".

STREAM Indicator must be lighted up.

TV Indicator must be lighted up.

TV Indicator must be lighted up.

TV Indicator must be lighted up.

15
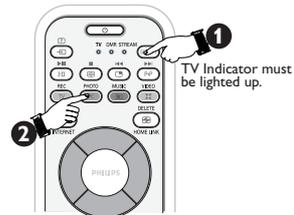
Using the Streamium LCD TV

4.1 INTERNET

With INTERNET you can make the Streamium TV play media files (music, photos, movies…) and start other services from the Internet.

1 Press the INTERNET button* on the remote control to open the Navigation View on your TV screen.

* *When the Streamium LCD TV connects to the Internet for the first time, and after resetting, the Streamium LCD TV will prompt you to register.*

See the chapter Enabling broadband Internet entertainment on pages 12-14.

2 Use the navigation buttons (Cursor Left/Right/Up/Down) and the **OK** button on the remote control to explore the available Internet services.

*For example: press the Cursor Right button on the remote control several times until you have selected a music track, a photo or a movie, and press **OK** button to play it on your television...*

Please, see *Basic navigation* on page 17 for an explanation of the navigation and control functions.
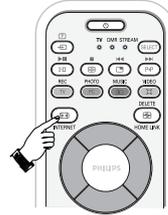
4.2 HOME LINK

With HOME LINK you can make the Streamium LCD TV play media files (music, photos, movies…) that are stored on your PC or a centralised storage such as a Ehub.

1 Press the HOME LINK button on the remote control to open the Navigation View on your TV screen.

2 Use the navigation buttons (**Cursor Left/Right/Up/Down**) and the **OK** button on the remote control to explore the multimedia content you made available on your PC.

*For example: press the **Cursor Right** button on the remote control several times until you have selected a music track, a photo or a movie, and press **OK** button to play it on your television...*

Please, see *Basic navigation* on page 17 for an explanation of the navigation and control functions.
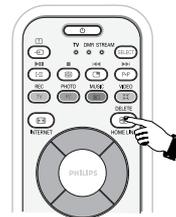
Chapter 5 – Basic navigation

This is the basic way of navigating through all the menus.
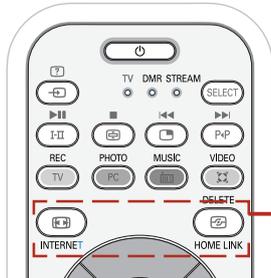
1 Press INTERNET or HOME LINK button on the remote control.

2 The available media sources and services will appear on the TV screen.
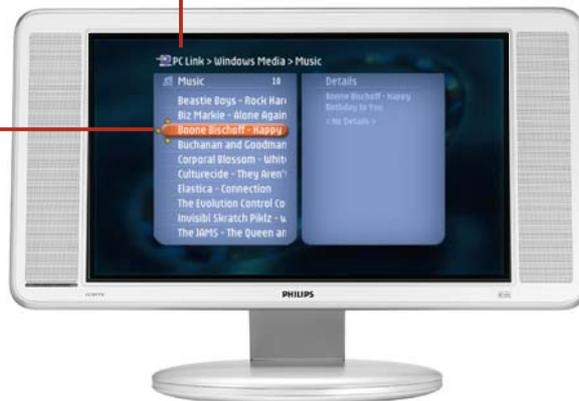
3 The little yellow arrows around the highlighted bar indicate which arrow buttons you can press to navigate through the menus on the television screen.
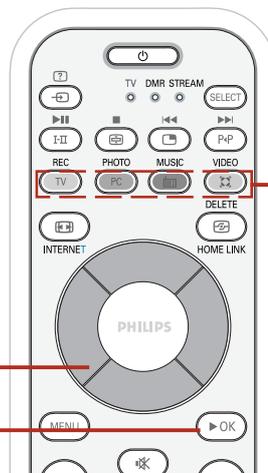
5 If colour coded user options appear on the TV screen, press the matching colour button to use that option.

4 Press Cursor Up or Cursor Down to make a selection. Next, press Cursor Right or **OK** button to confirm.

17

Additional information

Environmental information

All redundant packing material has been omitted. We have done our utmost to make the packaging easily separable into three mono materials: cardboard (box), polystyrene foam (buffer) and polyethylene (bags, protective foam sheet). Your set consists of materials that can be recycled if disassembled by a specialised company. Please observe the local regulations regarding the disposal of packing materials, exhausted batteries and old equipment.

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 or inability to use this product, even if the possibility of such damages has been mentioned. Philips further does not warrant the accuracy or completeness of the information, text, graphics, links or other items transmitted by this product.

Upgradeability

Both the Streamium TV and the Philips Media Manager software are upgradeable through your broadband Internet connection. From time to time, new features will be available and the functionality of this system will change. Therefore, this manual can only offer a rough overview of the internet and PC Link functionality. Please visit www.philips.com/streamium for the latest information on the availability of services and new functions.

Trademarks

All trademarks acknowledged. Microsoft and Windows are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries. Mac OS is a trademark of Apple Computer, Inc., registered in the U.S. and other countries. DivX® is a registered trademark of DivXNetworks, Inc. All other brands and product names are registered trademarks of their respective owners.

Statements

*   This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

    However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

    – Reorient or relocate the receiving antenna.

    – Increase the separation between the equipment and receiver.

    – Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

    – Consult the dealer or an experienced radio/TV technician for help.

*   This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

    1) this device my not cause harmful interference, and

    2) this device must accept any interference received, including interference that may cause undesired operation.

*   The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

    Example : Warning: Changes or modifications made to this equipment not expressly approved by Philips may void the FCC authorization to operate this equipment.

IMPORTANT NOTE
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. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

18

6.1 Audio/video problems

Check the Support section on www.philips.com/streamium for the latest information on problem solving.

Problem	Possible cause	Solution
Power light does not light up and/or the Streamium LCD TV cannot be switched on.	• No connection to mains power.	Connect the power adapter to the Streamium LCD TV and to a mains outlet that provides electrical power.
No display on the TV screen.	• TV is switched off.	Switch on your TV.
No sound from the speaker.	• Volume too low.	Increase volume or switch off mute of your Streamium LCD TV.
Intermittent video play.	• Not enough bandwidth available for the requested video quality.	Select a lower video quality by pressing the green button on the remote control one or more times. Lower video quality requires less bandwidth and should play with less interruptions.
No photo, music, or video play	• Incompatible codec (media format).	Comply with the supported codecs. Go to www.philips.com/streamium to see which codecs are currently supported.
	• Correct codec, but still low quality.	Most PC media formats use heavy data compression video/audio techniques that lower the video/audio quality, e.g. compared to DVD/CD. Lower quality display is normal.
	• Firewall software blocks streaming.	Disable firewall software to test whether it interferes with streaming video and audio. Go to www.philips.com/streamium to see what ports you need to open for streaming (42951 TCP and 42591 UDP)
The menu displayed on the television screen disappears after a few minutes.	• After a set amount of time, a screen saver will become active to prevent TV screens from burning in.	Press the MENU button on the remote control, select Preferences > Screen Saver, and set a longer time-out for the screen saver.
The remote control does not remote function properly.	• Wrong mode.	Ensure the right mode is selected. STREAM mode must by selected if you are accessing the streaming fuctions and TV mode if you are watching TV programmes.
	• Weak batteries.	Replace the batteries.
Error message appears when installing the Philps Media Manager.		Re-install the Philips Media Manager and reboot the PC after installation.

19

Problem solving

6.2 PC / Network problems

Check the Support section on www.philips.com/streamium for the latest information on problem solving.

Problem	Possible cause	Solution
The Installation CD will not start.	• Autorun disabled for your drive.	Double-click 'My Computer', then the CD-ROM drive icon and finally 'Setup.exe' to start the CD.
The software will not install.	• Wrong operating system.	Go to www.philips.com/streamium to see which operating systems are supported.
No wireless connection or intermittent drop-out of the wireless connection.	• 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 telephones, especially those with frequencies in the 2.4 GHz range, may also interfere with wireless transmission.	Switch off wireless devices that interfere with your wireless network connection. Place the wireless access point as high and centrally as possible to improve signal strength.
Pressing the PC LINK button produces an empty content screen on your television.	• PC is switched off.	Switch on your PC.
	• The Media Manager software is not running.	Start the Media Manager software.
	• No wireless network adapter connected or range too long (weak radio signal).	Connect the wireless network adapter to your PC or reposition your Wireless adapter. You may check the link quality by pressing the MENU button and selecting Network > Wireless Info > Signal Level.
	• Network host (PC) or wireless station base is switched off.	Make sure your home network is operational before you try to contact a networked computer with the Streamium LCD TV.
	• Your Wireless Base Station/network router employs MAC filtering and prevents the Streamium LCD TV from connecting to your network.	Add the Streamium LCD TV MAC address to the list of devices that may connect to your Station/Gateway router. See the user manual that came with your Station/Gateway router for instruction on how to do this. Press the MENU button and select: Network > Wireless Info> NIC MAC Address to see the wireless MAC address.
	• Not enough USB bandwidth available for a wireless USB adapter.	If you share the USB bandwidth with other heavy USB bandwidth users (like USB cameras, scanners or ReWritable drives, etc.), the remaining bandwidth may not be enough.
	• Radio interference from other (wireless) devices.	Check whether a wireless connection can be established with other devices switched off (e.g. microwave ovens, other wireless devices, etc.)
	• (Wireless) network problems.	See advanced network problem solving on page 41-42 of the User Manual.
	• No files were added in the Philips Media Manager.	Check that files have been added using the Philips Media Manager.
	• Media format not supported	Go to www.philips.com/streamium to check for the latest information on supported format.

20

Problem solving

Problem	Possible cause	Solution
Pressing the INTERNET button produces an empty content screen on your television.	• Check whether the Streamium TV can connect to your PC.	First, please check whether the Streamium LCD TV connect to a PC by pressing the PC LINK button. If not, see above.
	• No broadband Internet connection available.	Broadband Internet means at least a 256 kbps always-on Internet connection. Dial-up ISDN/ telephone connections will not work.
	• Not enough broadband Internet bandwidth available.	If you share the broadband bandwidth with other users as it may fall below the minimum requirements.
	• Network host (PC) or wireless base station is switched off.	Make sure your home network is operational before you try to connect a networked computer with the Streamium LCD TV.
	• Internet access not working.	Make sure you can access the Internet from your computer.
	• Internet Connection Sharing (ICS) is not working.	In this manual, read the chapters on networking. Alternatively, visit www.microsoft.com, click Support, and search on 'ICS'.
	• Internet or network problems.	See advanced network problem solving on page 42 of the User Manual.
New features as advertised on the Internet are not available.	• You are using an older software version that does not have those features.	Upgrade the Streamium LCD TV and the software. Upgrade the Steamuim TV by pressing the MENU button. Then select Online Upgrade. Go to www.philips.com/streamium for the latest version of the Media Manager software.
Internet radio/video services are slow or do not respond.	• Your Internet bandwidth might be (temporarily) too low.	Check for Internet congestion. Do not download large files while listening to Internet radio or viewing movies.
		Firewall software and Anti-Virus software may diminish the bandwidth effectively available to your PC. You may test whether this is the case by disabling the software temporarily.
It says 'System Recovery' on the content screen on my TV screen, and I am asked to press 'Continue'. What's wrong?	• The internal memory of the Streamium LCD TV has been corrupted e.g. during downloading new software from the Internet and it needs to start the emergency bootloader program that connects to the Internet to restore the Streamium LCD TV to a working state automatically.	Press the red button on the remote control to the emergency bootloader.

1. It will try to recover as many of the existing settings as possible for to your wireless network and the Internet.

2. If it cannot recover any wireless settings, you will be asked to connect the Streamium LCD TV with an Ethernet cable to your Internet gateway router or PC with Internet access.

3. It will ask you for any additional settings it needs to connect to the Internet. See the chapter about the Options menu on page 28-31 for reference.

4. Once the emergency bootloader has been able to connect to the Internet and has downloaded a valid software version, it will display 'Restarting system...'. The Streamium TV should be working again. If not, check your settings by pressing the MENU button. |

21

Chapter 7 – Remote Control

7.1 Functions of Remote control buttons for Streamium functions.

Note : For functions of the TV, explanation is done in another section.

❶ Power/standby button
– Switches Streamium LCD TV off (to standby).
– Switch on the Streamium LCD TV with the INTERNET or HOME LINK button.

❷ Playback control buttons
Playback (Play/Pause/Previous/Next) functions for multimedia content.

❸ Coloured menu buttons
For selecting or activating the colour-coded option from the on-screen menu.

❹ INTERNET source button
– Selects the Internet as your source of multimedia content.
– Requires a broadband Internet access of minimum 256 kbps, higher recommended.

❺ Menu navigation buttons: up/down/left/right/OK
Used for navigating through menus and for making choices.

❻ MENU
Accesses the Streamium menu settings.

❼ VOLUME + / – buttons
Increase or decrease volume.

❽ SHUFFLE (Home Link only)
Selects the shuffle mode.

❾ Number/Text buttons
For inputting numbers and SMS-style TEXT.

❿ SELECT mode button
Allows you to select **TV, DMR** or **STREAM** mode.

⓫ HOME LINK source button
Selects HOME LINK as your source of multimedia content.

⓬ K/Play button
Confirms selection and start playing content.

⓭ REPEAT button (Home Link only)
Selects the repeat mode.

22
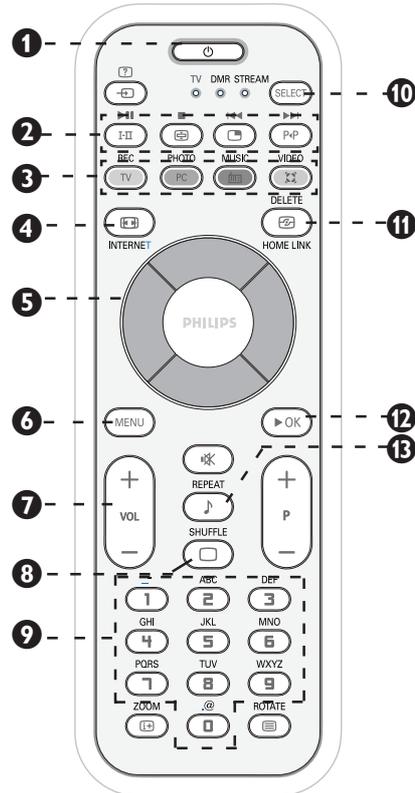
7.2 Using the remote control

Do the following steps to ensure that your remote control is ready for operation.

1   Pull out the plastic insulation sheet from the battery to enable the remote control to function.
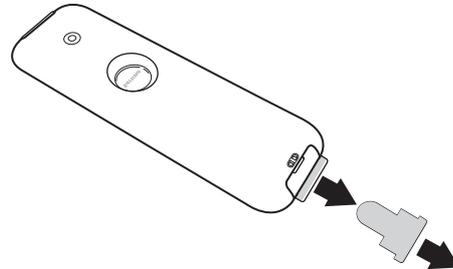
2   Pull out battery cover and check whether the lithium battery is placed correctly. The words on the battery should face you when you remove the battery cover.
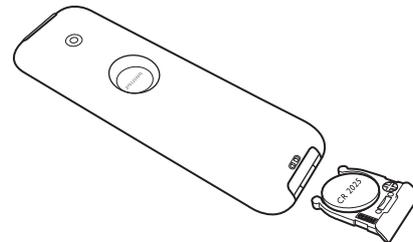
3   Insert battery cover and the remote control is now ready for use.

Note : the battery supplied with the set does not contain mercury or nickel cadmuim so as to protect the environment. When discarding your batteries, use the recycling options available.

23

You can enter numbers and text into the Streamium LCD TV in several ways:

Navigation keys

On the TV screen, arrows are displayed above and below the character being entered or edited and that character is shown in a different colour.

1 Press Cursor Up or Down button to browse through the characters available.

Note: there are two sets of characters to browse through, uppercase and lowercase characters.

2 Press Cursor Left or Right to go to the next or previous character.

3 Press **OK** or the green colour key to accept the entry.

Press ■ to cancel the entry and go back to the previous menu screen.

Direct number key entry
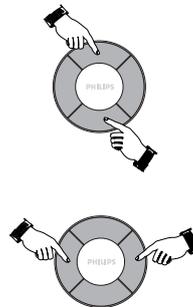
You may input numbers by direct key input from the remote control. Just press the number keys for the number you need.

SMS TEXT-style keys

SMS TEXT-style entry can be used to enter alphanumeric information. In this mode, text is entered by a method similar to that used for entering text messages on a cellular telephone.

For example: pressing the '2' key several times will cycle through the following characters : a – b – c – A – B – C – 2... etc

RC Key	SMS-style alphanumeric entry order
1	_ - 1 _ - 1 (etc.)
2	a b c A B C 2 a b c (etc.)
3	d e f D E F 3 d e f (etc.)
4	g h i G H I 4 g h i (etc.)
5	j k l J K L 5 j k l (etc.)
6	m n o M N O 6 m n o (etc.)
7	p q r s P Q R S 7 p q r s (etc.)
8	t u v T U V 8 t u v (etc.)
9	w x y z W X Y Z 9 w x y z (etc.)
0	.@ 0 .@ 0 (etc.)

Notes: Some text input is case sensitive, meaning that 'ABC' is not the same as 'aBc'. Always input characters in the correct case to avoid problems.

24

Chapter 9 – Advanced navigation and advanced Streamium functions

9.1 Navigation view

The view displayed on the TV screen while navigating the media menus, is called the 'Navigation View'. It works as follows:

1 Path
This shows you the menu choices you have made in getting to the current screen. A useful tool for Smart Navigation (see below).

2 Colour buttons bar
The colour button bar shows you the user actions available for each screen. Pressing a colour button on the remote control will perform the corresponding action as mentioned on the screen.

3 Details view
Shows you the available items for the highlighted menu bar on the left, or the details and a preview of individual items if possible.

9.1.1 Jump To (number keys on the remote control)

Use the remote control number buttons to access an item in a list directly by entering the first letter(s) or number(s) of the desired item.

If the list is sorted alphabetically, you do this by pressing the number buttons on the remote control in SMS TEXT style.

For example: pressing the '2' key several times will cycle through the following characters : A – B – C – 2... etc.

If the list is sorted numerically, items can be selected by entering a numbers directly (not in SMS TEXT style). Press **OK** to confirm your selection.
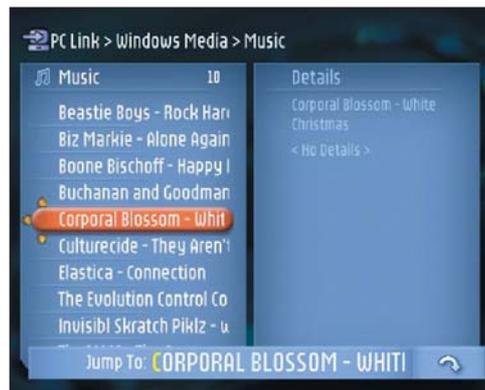
9.1.2 Smart Navigation

(Available for certain versions only)
Smart Navigation helps you to navigate 'intelligently' through the menus by remembering the menu path(s) you have taken previously (during the same session).

If you have backed out of a menu path by pressing the Cursor Left button repeatedly, Smart Navigation will remember that path for the duration of the current session.

By pressing Cursor Left button repeatedly, you will follow the same path through the menus. At any time, you may deviate from your path and follow a new one (this new branch will also be remembered by the Smart Navigation feature).

Switch Smart Navigation off (see Options menu on page 28-30) to always select the first menu item on a new page.

25

9.2 Play View

The view displayed on the TV screen while playing a movie, picture or music, is called the 'Play View'. It gives different information and user actions for each type of media.

9.2.1 For movies

It works as follows:

Track info.

This shows you information on the track currently playing.

Colour buttons bar.

The colour button bar shows you the user actions available for each screen. Pressing a colour button on the remote control will perform the corresponding action as mentioned on the screen.

Press the red button once or several times to determine the amount of information you see on the TV screen.

Press the green button once or several times to choose a bandwidth and determine the video quality. Note: If there is not enough bandwidth available, the movie will play intermittently. Switch to a lower value.

The yellow button is not used.

Press the blue button once or several times to determine the image size. If the colour button bar has disappeared from the screen, pressing any of the colour buttons on the remote control will bring it back. Next, press the colour button for the action you want.

9.2.2 For photos

It works as follows:

Picture info.

This shows you information on the image currently being displayed.

Colour buttons bar.

The colour button bar shows you the user actions available for each screen. Pressing a colour button on the remote control will perform the corresponding action as mentioned on the screen.

Press the red button once or several times to determine the amount of information you see on the TV screen.

The green button is not used.

Press to start a slide show by selecting the time for each photo to be displayed.

The blue button is not used.

If the colour button bar has disappeared from the screen, pressing any of the colour buttons on the remote control will bring it back.

Next, press the colour button for the action you want.

9.2.3 For music

It works as follows:

Track info.

This shows you information on the track currently playing.

Colour buttons bar.

The colour button bar shows you the user actions available for each screen. Pressing a colour button on the remote control will perform the corresponding action as mentioned on the screen.

Press the red button once or several times to determine the amount of information you see on the TV screen.

The green button is not used.

Press the yellow button and select one of the visuals for adding a visual dimension to the listening experience.

The blue button is not used.

If the colour button bar has disappeared from the screen, pressing any of the colour buttons on the remote control will bring it back. Next, press the colour button for the action you want.

26
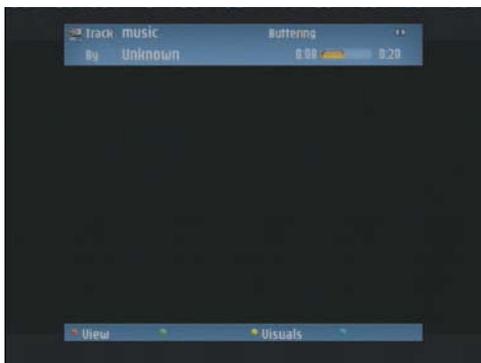
1 Running the Philips Media Manager program on more than one computer at the same time.

– If more than one computer has access to the wireless network, you can also run Media Manager on more than one computer at the same time to make the media files on that computer available to the Streamium LCD TV.

A) Install the Philips Media Manager in the same way as you did for the first computer (see on page 4, steps 1 - 4).

B) In the Media Manager window, click 'Settings'.

C) Click the 'Server' tab, and change the Server Name.

(e.g. to 'My laptop')

> This 'Server Name' will be shown in the top-level menu on your television screen. That way you can keep apart all the computers in the network that are running the Philips Media Manager at the same time.

2 Editing media information and creating playlists.

Right-click a music track, photo or movie to open a context menu.

In this menu:

– edit media information which will help you organise and sort your media files,

or

– add the media file to an existing or new playlist.

3 Managing your Streamium account.

After installing the Streamium LCD TV and connecting it to the Internet, you may click 'My.Philips' to open your personal Streamium account, or... open the website 'my.philips.com' in your Internet browser. Use the Streamium account window to manage your Internet settings and preferences.

About 'My.Philips.com'

'My.Philips.com' lets you organise your media services online.

For example:

– *Personalise and manage media and preferences*

   (e.g. music, favourites, user info)

– *Subscribe to PREMIUM Internet services*

– *Add internet radio stations which are not available yet*

   (currently only for MP3/pro radio streams).

– *Get additional information and links about artists and music tracks*

4 Learning more about the Media Manager program.

Click 'Help' to find out more on how to use and configure Media Manager.

27
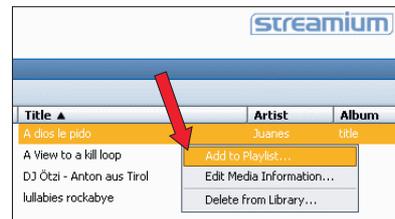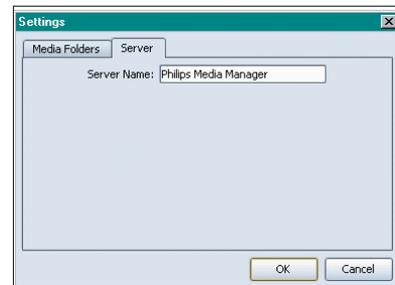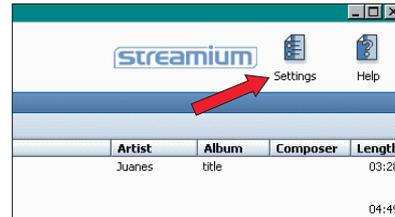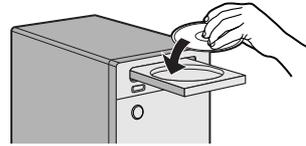
Chapter 11 – Options menu

In the Options menu you can view and edit the settings of the Streamium LCD TV. On the remote control, press the MENU button to enter the Options menu. Select a menu item by pressing Cursor Left, Right. Up or Down buttons and select by pressing **OK** or Cursor Right button. Close the Options menu by pressing the MENU button again on the remote control.

11.1 Main Menu (System Menu)

The System Menu is the top-level menu via which all settings are accessible. It is divided into sub-menus that address different categories of settings, see below for an overview.

Users

For selecting a user from the list of existing users. Also, for adding or removing users from the list.

Add user : You will be asked to enter a new user's email address. Remove user: To remove a user the primary user must enter his or her password.

Network

(see page 29 for details)

For information on and changing: Network, Wireless, Encryption and Proxy Settings

Preferences

(see page 30 for details)

For setting and changing : Access Control, Video Streaming and Screen Saver.

Product Info

Gives you information on product type, product ID, and version numbers.

Online Upgrade

For checking the availability of firmware upgrades. You need a broadband Internet connection for this to work.

Reset Settings

For resetting all Options menu settings to their default values. After resetting, the Streamium LCD TV will restart and you will be asked to reconnect to your network and to re-enter your primary user name and password.

About

Provides you with general information.

28
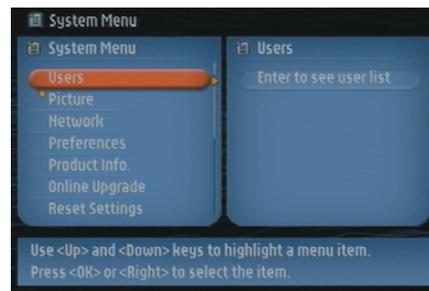
11.2 Network menu
The Network menu gives you access to network and wireless settings. See below for an overview.

Note: If you just want to see what the settings are, open the Network/ Wireless Info items and not the Config items.

Network Type
Select whether you want to connect to a Wireless network or to a Wired network.

Network Config.

Network Mode
Choose DHCP for automatic network configuration by your network host. (preferred) Choose Static IP for manually entering a static network configuration. Choose Auto IP for automatic network configuration without a network host.

Note: If you are not familiar with networking, choose DHCP for Network Mode.

IP Address, Netmask, Gateway, DNS 1 and DNS 2
Only Static IP requires you to fill values for IP Address, Netmask, Gateway, DNS 1 and DNS2. See below for an explanation.

Wireless Config.

Wireless Mode
Choose whether your wireless network has an Access Point (Wireless Base Station) or is an Ad-Hoc Network (Peer-to-peer).

Network Name (SSID)
Enter the name (SSID) of the wireless network you want to join. *Note: the SSID is case-sensitive, meaning that 'philips is not the same as 'PHILIPS' or 'Philips'.*

Channel Number
Choose one of the available WiFi channels in your region. (Select 0 for automatic channel assignment.)

Encryption Config.

First, select whether or not to use wireless network encryption : WEP Encryption Off/On. Then, you may enter up to 4 WEP Keys to choose from. Enter 5 ASCII or 10 HEX characters to use a 64-bit WEP-key; enter 13 ASCII or 26 HEX characters to use a 128-bit WEP-key. The number of characters determines the type of key you use. Finally, choose which of the four keys to use : WEP Transmit Key.

Important: You must use the same encryption key throughout your wireless network.

Note: Refer to the the FAQs on www.philips.com/streamium for more information on encryption.

Proxy Config.

Your Internet Service Provider (ISP) may have provided you with Proxy Settings for HTTP Internet) and/or for RTSP (used for video streaming MPEG-4)). If this is the case, enter the proxy name(s) and port(s) your ISP provided you with.

Network Info

For viewing the Network settings, including the physical Ethernet MAC Address you may sometimes need for identifying the Wired network of the Streamium LCD TV.

Wireless Info

For viewing the Wireless settings, including the physical NIC MAC Address you may sometimes need for identifying the Wireless network of the Streamium LCD TV. Go to Signal Level to check the wireless signal quality.

29
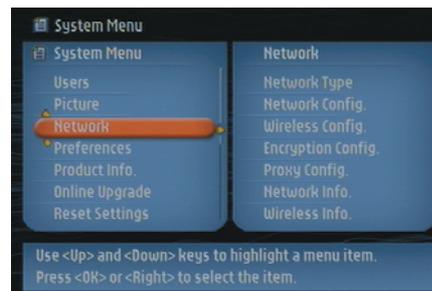
Options menu

11.2.1 Static IP settings

If you select Static IP as your Network Mode in Network > Network Config > Network Mode, you will need to provide the Streamium LCD TV with the following manual settings for its wireless network:

IP Address
> This is the fixed IP Address you want the Streamium LCD TV to have in your network. Preferably, choose one from the range 192.168.xxx.xxx.

Netmask
> Enter the same netmask throughout your network. E.g.: 255.255.255.000

Gateway
> Enter the IP Address of your Internet gateway router, Wireless Base Station, or network host computer. (E.g.: 192.168.0.1 for the host computer that provides Internet Connection Sharing.)

DNS 1
> Usually, this would be the same address as the Gateway Address above. However, some Internet Service Providers (ISP) provide you with separate Dynamic Name Server addresses you need to use. This should be a valid IP Address, like xxx.xxx.xxx.xxx

DNS 2
> See DNS 1.

11.3 Preferences menu

The Preferences menu gives you access to preferred settings. See below for an overview.

Access Control

Parental Level
Set a Parental Level up to which playback will be allowed for all content. If you try to play content that has a parental level above the selected one, you will be asked to enter a PIN code before playback. Please, see below for the disclaimer.
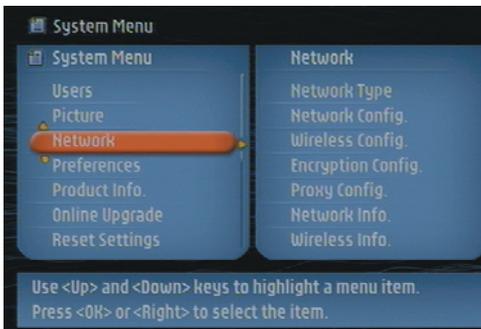
Change PIN
Set the code needed for playback of parental level protected content.

Video Streaming
> Choose **Low Bandwidth** (150 kbps) if video streaming does not work properly. High Bandwidth requires an Internet connection of 300 kbps or more.

Screen Saver
> Select the period of inactivity before you want the screen saver to appear.
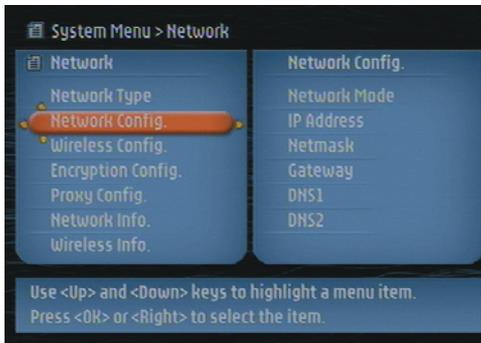
Parental Level Disclaimer

The Streamium LCD TV features the PARENTAL LEVEL control system, which is intended to activate when playing media files and streams that have certain software coding. This is according to technical standards adopted by the set maker and media content industries. Please note that the PARENTAL LEVEL system will not operate on files/streams that do not have the appropriate software coding. Also, note that at the time of release of this Streamium LCD TV certain aspects of the technical standards had not been settled between set makers and the media content industries.

On this basis Philips cannot guarantee the functioning of PARENTAL LEVEL system and declines any liability associated with unintended watching of media content. If in doubt, please make sure the media plays according to your PARENTAL LEVEL settings before you allow children access to the Streamium LCD TV.

Chapter 12 – What you need to know about networks

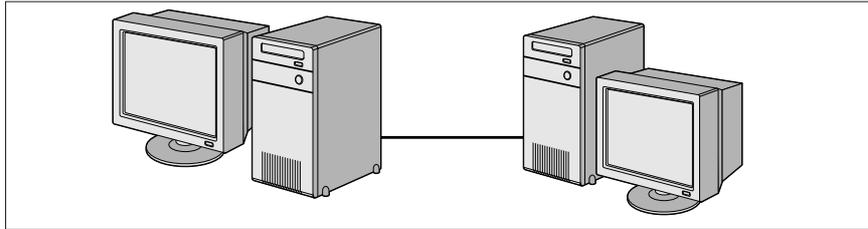*Important note: The Streamium LCD TV has a built-in wireless network adapter and is a wireless network device exactly like the PCs with a wireless network adapter in the illustrations below.*

A network provides a means of communication between two or more computers (and other devices) that are connected to each other through wired or wireless means.

WIRED

At each computer, you will need a network adapter or Network Interface Card (NIC) to be able to connect the computer to the network cable. Examples are:
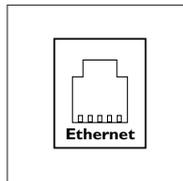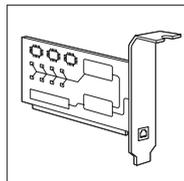
| Already built-in | PCI expansion card | USB/Ethernet cable | Ethernet notebook adapter |
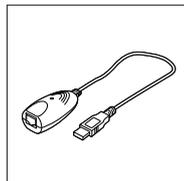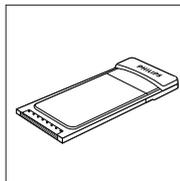
WIRELESS
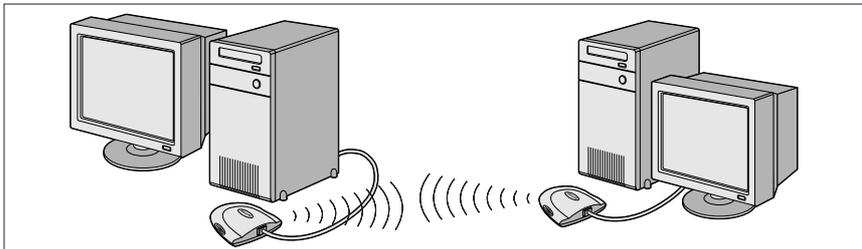
At each computer, you will need to install a WiFi wireless network adapter to be able to connect to another wireless network device. Examples are:
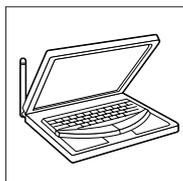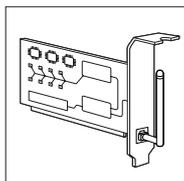
| Already built-in | Wireless PCI expansion card | Wireless USB adapter | Wireless notebook adapter |
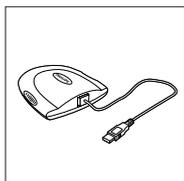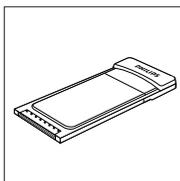
You do not need to open your PC to connect a wireless USB/notebook adapter (available from Philips) or USB/Ethernet cable to your PC.

31

What you need to know about networks

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 network (max. two PCs)

Note: Use a crossover Ethernet cable to connect two computers directly to each other.
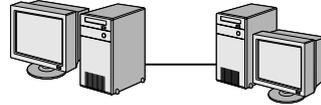
WIRED NETWORK WITH MORE THAN TWO PCs

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

Note: Use straight-through Ethernet cables to connect the computers to the central device (hub/switch).
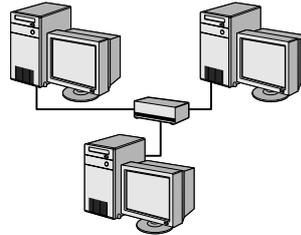
HOW TO INTERCONNECT WIRED NETWORKS

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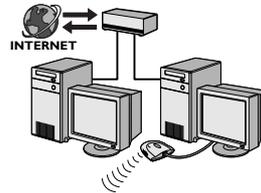
ONE-ON-ONE WIRELESS NETWORK

also known as: ad-hoc / peer-to-peer

WIRELESS NETWORK WITH MORE THAN TWO PCs

The wireless medium forms a hub in and of itself.

No hardware hub is needed.

Note: For very small networks only.
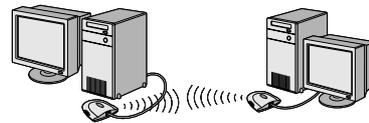
BRIDGING WIRELESS NETWORKS TO THE INTERNET

(e.g. the Internet, also known as WAN) also known as: infrastructure / access point. Use a wireless access point or base station.

Central devices, like a hub, switch, router or wireless base station 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 base stations 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).
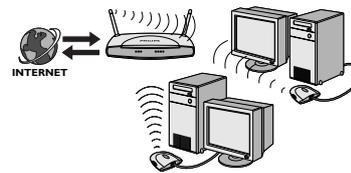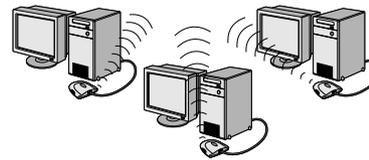
Important: Wired and Wireless components may be linked together to provide a variety of network layouts/ topologies.

32

Chapter 13 - Advanced wireless network information

What are wireless network connections?

Your wireless network adapter uses a wireless protocol (called IEEE 802.11b/g or WiFi) to communicate with the Streamium LCD TV by means of radio transmissions. WiFi radio waves travel outwards from the antenna in all directions, and can transmit through walls and floors. WiFi can theoretically reach up to 200 meters in an open environment and reach speeds of up to 11 (b) or 54 (g) megabits per second (Mbps) at close range. However, the actual network range and data throughput rate will always be less, depending on the wireless signal quality.

Factors determining your network range and network speed

- Wireless signals travel farther outside of buildings, and when the wireless components are in direct line of sight to one another. Putting wireless components high up 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 walls and other large, solid objects; or next to large metal objects such as computers, monitors, and appliances.

- Wireless signal range, speed, and strength can be affected by interference from neighbouring wireless networks and devices. Electromagnetic devices such as televisions, radios, microwave ovens, and cordless telephones, especially those with frequencies in the 2.4 GHz range, may also interfere with wireless transmission.

- Standing or sitting too close to wireless equipment can also affect radio signal quality.

- Adjusting the antennas: Certain areas, such as directly below the antenna, get relatively poor reception. Moving the antenna slightly may improve your reception. *Note : Pointing the antenna toward another wireless component will not improve reception.*

Securing your wireless network

Since wireless computer networks use radio signals, it is possible for other wireless network devices outside your immediate area to pick up the wireless signals and either connect to your network or to capture the network traffic. Therefore, you should always enable the Wired Equivalent Privacy (WEP) network encryption key to help prevent unauthorised connections or the possibility of eavesdroppers listening in on your network traffic.

What is WEP?

WEP is a 64-bit or 128 bit encryption key for securing your wireless network communication. Preferably, you should use the highest encryption strength available. Always enter the same key with the same length for all your home network computers and for the Streamium LCD TV.

Securing your network from Internet access

Check in the documentation of your Wireless Base Station or gateway router whether it provides you with a built-in firewall and network address translation (NAT), providing security for an 'always-on' broadband Internet connection that is being shared among the computers and devices on your home network. Computers on an ad-hoc network may share an Internet connection that is set up on one of the computers (ICS). However, a firewall is usually not built-in and you should install one on the computer that is sharing the Internet connection.

What is a firewall?

A firewall acts as a barrier that helps protect your network from outside intruders. The firewall specifies what information can be communicated from the computers on your network to the Internet, and from the Internet to the computers on your network.

33

Advanced wireless network information

The DOs and DON'Ts of securing your wireless network

DO

Enable the highest WEP key level that your hardware provides for. Upgrade your hardware, if possible. If you do not protect your wireless network, all data from your PC might be accessible by, for example, your neighbours or passers-by. Use a wireless base station or router with Network Address Translation (NAT) and firewall enabled for sharing your Internet connection.

Change the default passwords for your network devices. Leaving these at default makes it easy for an outsider to gain access.

Position wireless access points away from windows and toward the centre of your home. This decreases the strength of the signal outside your home.

Some wireless access points allow you to control access based on the unique Media Access Control (MAC) address of the network adapter trying to associate with it. If a MAC address has not been registered in the wireless access point, it will not associate with it. If your access point has this feature, enable it and add the MAC addresses of the network adapters including the one from the Streamium LCD TV.

The Wireless MAC address of the Streamium LCD TV can be found in the Options menu by pressing the MENU button on the remote control. Then select Network > Wireless Info.

Install an anti-virus program on each computer on your network and use it regularly to check your computers for viruses. Remember to update the anti-virus program on a regular basis.

DON'T

Do not rely on radio transmission range limitations to secure your network. Enable wireless security (WEP) to protect your network from unwanted access.

Do not use WEP keys and passwords that are easy to guess. Do not change passwords to reflect your name, address, or anything that would be easy to guess.

Never open attachments to email messages that you are not expecting. In addition, scan all diskettes and homemade CDs for viruses before opening files from them, or before starting your computer from them.

Do not load a program from an unknown source onto one of your network computers.

Do not ignore the common signs of viruses: unusual messages that appear on your screen, decreased system performance, missing data, and inability to access your hard drive. If you notice any of these problems on your computer, run your anti-virus program immediately to minimise the chances of losing data.

Do not connect your home network to broadband Internet without taking security measures:

If you do not have a wireless base station installed on your network and you are sharing Internet access through one of the computers, you may want to consider installing firewall software.

34

Chapter 14 – Entering an encryption key

A WEP encryption key protects your wireless network against intrusion by encrypting the data sent through your network. Its setting must be the same for all PCs and devices in your wireless network. (Default: Disabled.)

WEP key conversion table					
ASCII	HEX	ASCII	HEX	ASCII	HEX
0	30	L	4C	g	67
1	31	M	4D	h	68
2	32	N	4E	i	69
3	33	O	4F	j	6A
4	34	P	50	k	6B
5	35	Q	51	l	6C
6	36	R	52	m	6D
7	37	S	53	n	6E
8	38	T	54	o	6F
9	39	U	55	p	70
A	41	V	56	q	71
B	42	W	57	r	72
C	43	X	58	s	73
D	44	Y	59	t	74
E	45	Z	5A	u	75
F	46	a	61	v	76
G	47	b	62	w	77
H	48	c	63	x	78
I	49	d	64	y	79
J	4A	e	65	z	7A
K	4B	f	66		

The WEP (Wired Equivalent Privacy) implemented in this Streamium LCD TV is based on the RC4 encryption algorithm. Please, enter the key in either Hex or ASCII.

– If the key type is 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.)

– If the key type is ASCII, the security keys are four 5-digit keys for the 64-bit WEP setting and four 13-digit keys for the 128-bit WEP setting.

– Consult the ASCII/HEX conversion table if you need to translate a (case-sensitive) ASCII key into HEX notation. Example: MNode (ASCII) = 4D 4E 6F 64 65 (HEX).

Note : Some wireless network devices allow you to type in a passphrase instead of an encryption key. Do not use passphrases with the Streamium LCD TV, since passphrases are not supported.

Tip: Enable the encryption key to secure your wireless computer network from intruders.

Use an encryption key to secure your wireless network. The encryption key is like a password that you have to set for your Wireless Network of for the Streamium LCD TV.

35

Entering an encryption key

a) Setting the encryption key for the Streamium LCD TV:

1 Press the MENU button on the remote control, then

2 select 'Network', and

3 select 'Encryption Config'.

4 Enable WEP Encryption, and enter a 5, 10, 13 or 26 character password (see above) and press the OK button.

> The Streamium LCD TV will try to reconnect to the wireless network and will lose its connection with your computer.

Note that the encryption key is case sensitive, meaning that 'HELLO' is not the same password as 'hello' or 'Hello'.
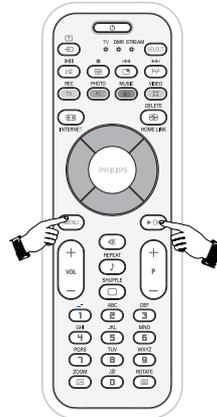
b) Setting the encryption key for your Wireless Network Adapter:

Enter the same encryption key for the Wireless Network Adapter. See the User Manual of the Wireless Network Adapter on how to do this.

> Once you have activated the same encryption key for the Wireless Network Adapter, the connection between the Streamium LCD TV and your computer will be re-established.

Example, for the Philips Wireless USB Adapter:

1 Double-click the CPWUA Monitor icon in the lower right corner of your computer monitor.

2 Click the 'Configuration' tab.

3 Adapt the 'Encryption' settings in the lower part of this window to match the encryption settings of the Streamium LCD TV.

4 Click 'Apply' and 'Save' to finish.

> The connection will be re-established.

Note : If you have forgotten your encryption key, switch off encryption or set a new encryption key for your entire wireless network and for the Streamium LCD TV.

36
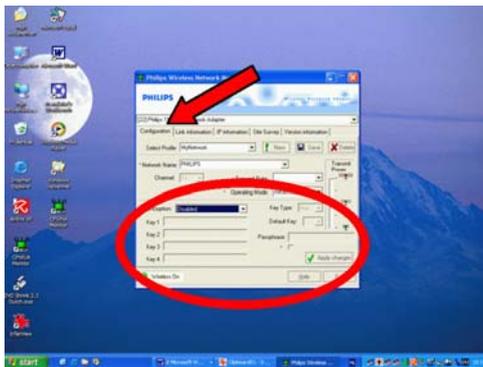
Before you press the INTERNET button for the first time, you need to make sure that the Streamium LCD TV has Internet access. Either directly through a wireless base station, or indirectly through a PC with Internet access and router/gateway software (e.g. ICS from the Windows OS) installed and running.

If you connect (either wired or wireless) the Streamium LCD TV to an existing network host with Internet access

Prefered solution:

If you have an existing home network with centrally shared broadband Internet access for all connected computers, you can connect the Streamium LCD TV directly to your central network device : the router/gateway. That way, the Streamium LCD TV can access the Internet just like your other computers and you do not need to install ICS to make Internet access available to your Streamium LCD TV.

If you connect the Streamium LCD TV (by wires or wireless) to a stand-alone or client PC with Internet access

If you connect the Wireless Network adapter to a stand-alone or client PC with an existing broadband Internet connection, you will need to bridge - within that PC - the wireless or wired connection that connects to the Streamium LCD TV, to the existing network adapter that connects to the Internet. You do this by enabling Internet Connection Sharing (ICS) from your Microsoft® Windows® operating system for that PC. This makes the PC share its existing broadband Internet connection with the Streamium LCD TV.

ICS configuration and usage issues

ICS is intended for use in small networks in which the network configuration and the Internet connection are managed by the Windows-based computer on which the shared connection resides (the 'host' computer). It is assumed that on its network, this computer is the only Internet connection, it is the only gateway to the Internet, and that it sets up all internal network addresses (this means it is the DHCP server for the network).

If a network has a central host computer or router that acts as a DHCP server, this server automatically allocates IP addresses, netmasks, and the gateway address to all DHCP client computers and devices in the network.

Important notes

– *Only Microsoft Windows98 SE (Second Edition) or higher provides ICS, other operating systems are not supported. You may try to use other router/gateway software at your own discretion.*

– *You should only install Internet Connection Sharing on the computer that you use to connect to the Internet.*

– *The host computer must remain switched on during Internet access sharing.*

– *ICS is router/gateway software with Dynamic Host Control Protocol server (DHCP) functionality. The ICS host computer must be the only DHCP server on the network. Before installing ICS, first disable any DHCP services that are provided on the network (e.g. by a hardware router/gateway or base station).*

    Refer to the router/gateway manufacturer's instructions on how to disable its DHCP services.

37
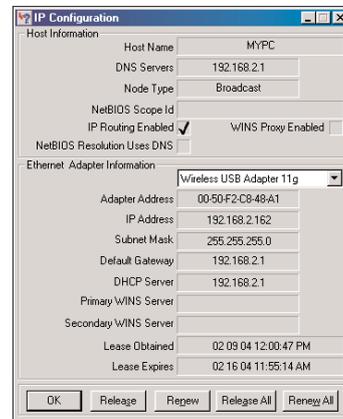
Internet connection sharing

Enabling Internet Connection Sharing (ICS)

Though ICS works similarly for all operating systems, each version of Microsoft®Windows® activates Internet Connection Sharing in its own way. Please see below for the operating system you are using.

In case of trouble, check Windows Help and the Microsoft website for information on Internet Connection Sharing.

Enabling Internet Connection Sharing for Windows XP

You must have administrative rights to enable ICS in Windows XP.

1 Before you begin, check if you have a working Internet connection and if your home network is working properly (if you have one)

• Check the Internet connection by opening a web page with your browser.

2 Click Start, Settings, and Control Panel. Then double-click 'Network and Internet Connections'. Finally, click 'Network Connections'.

> This will open a list of your network connections.

3 In the list of network connections, right-click on the network connection that your computer uses to connect to broadband Internet.

> This will open the context menu of that network connection.

Note : Do not right-click the wireless network connection that connects to your Streamium product (e.g. the Philips Wireless USB adapter 11g).

Right-click the network connection that provides you with broadband Internet access

4 Click 'Properties' at the bottom of the context menu.

> This will open the connection properties menu.

5 In the connection properties menu, click the 'Advanced' tab.

> This will give you access to the options for sharing your Internet connection.

Next:

a) In the 'Internet Connection Sharing' section: Place a check mark to allow other users to connect through this computer's Internet connection.

b) Remove the check mark that allows other network users to control or disable the shared Internet connection.

Note: For extra security: Enable the Internet Connection Firewall at the top of this menu to protect your computer and your network from malicious access from the Internet.

Click 'OK' to accept the changed settings.

> Your Internet connection will now be shared with other network connections, including the one that connects your computer to your Streamium system.

38
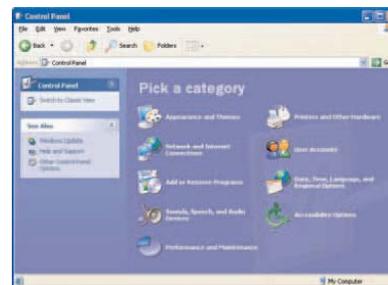
Internet connection sharing

Enabling Internet Connection Sharing for Windows 98SE

While installing, you may be asked for the Windows Installation CD. Please, keep it at hand.

1 Before you begin, check if you have a working Internet connection and if your home network is working properly (if you have one).
• Check the Internet connection by opening a web page with your browser.

2 Click Start, Settings, and Control Panel.
Then double-click Add/Remove Programs and click the Windows Setup tab.

> The window to the left will appear.

3 Double-click on Internet Tools
> The next window will appear.

4 In this window, put a mark in the check box for Internet Connection Sharing and click OK.
Then click OK again.

> The Internet Connection Sharing wizard will appear.

5 Follow the instructions on the screen, in each screen click Next to continue the wizard until it is finished. In the wizard you need to:
– Select 'High-speed connection' for your type of connection to the Internet.

– Choose the network adapter that provides you with Internet access to the PC.

– Choose the network adapter that connects your PC to the Streamium LCD TV.

– You may click 'Cancel' when asked if you want to make a Client Configuration disk.

> This concludes the wizard.

6 Next, check your Network properties as follows:

a) Click Start, Settings, Control Panel, and then double-click Network.

b) On the Configuration tab, browse the 'The following network components are installed' box. It should now include 'Internet Connection Sharing adapter' and 'TCP/IP->Internet Connection Sharing adapter'.

c) Double-click 'TCP/IP->Internet Connection Sharing adapter'.

d) In the IP Address tab, select 'Obtain an IP Address automatically'.

e) In the WINS Configuration tab, select 'Use DHCP for WINS resolution'.

f) In the Gateway tab, remove all gateways if any are listed.

g) In the DNS Configuration tab, select 'Disable DNS'.

h) In the Bindings tab, for security reasons you must de-select all bindings. (Please, do the same for 'TCP/IP (Shared)->External access network adapter'.)

i) Click OK to accept the new TCP/IP settings.

j) Select 'Windows Logon' as the Primary Network Logon. Any changes to the network configuration will require a restart of the computer.

39
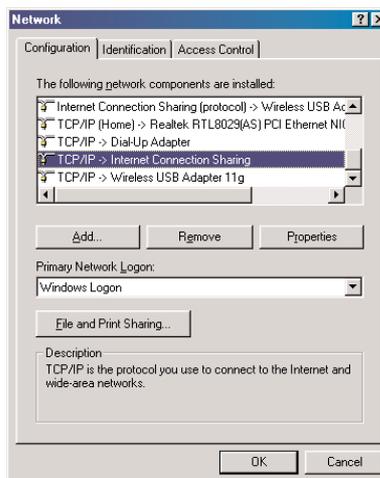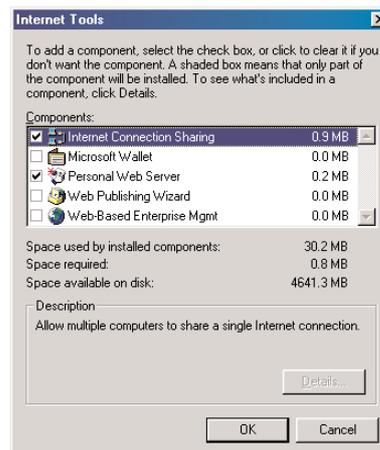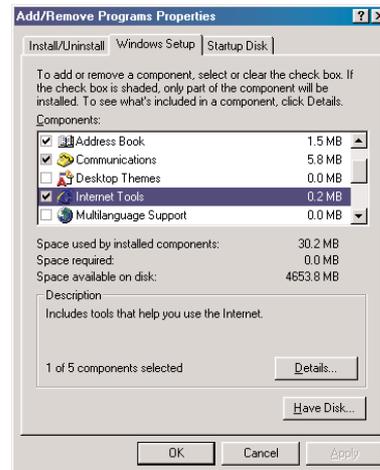
Internet connection sharing

Enabling Internet Connection Sharing for Windows Me

1 **Before you begin, check if you have a working Internet connection and if your home network is working properly (if you have one).**
• Check the Internet connection by opening a web page with your browser.

2 **On the desktop, double-click 'My Network Places' and then double-click 'Home Networking Wizard'.**
> The Home Networking wizard will appear.

3 **In each screen, click Next to continue the wizard until it is finished.**
In the wizard you need to select 'Yes' (you are using Internet on this computer) and select 'A direct connection to my ISP using the following device:' and choose the network adapter you use to make contact with the Internet from the list.

4 **In the next screen, select 'Yes' when asked 'if you want other computers on your home network to use the Internet connection on this computer'.**
Choose the network adapter that connects your PC to the Streamium LCD TV.

5 **Follow the instructions on the screen, and enter:**
– a computer name (unique for each computer, e.g. STUDY or MOM)

– a workgroup name (the same for all computers in the network, e.g. HOMENET)

Note: these names are not the SSID or network name. You do not need to share your files and printers. You do not have to make a Home Networking Setup disk.

> This concludes the wizard.

Enabling Internet Connection Sharing for Windows 2000

You must have administrative rights to enable ICS in Windows 2000.

1 **Before you begin, check if you have a working Internet connection and if your home network is working properly (if you have one).**
• Check the Internet connection by opening a web page with your browser.

2 **Click Start, Settings, and Control Panel. Then double-click 'Network and Dial-Up.**
Connections' and then double-click 'Home Networking Wizard'.

3 **Right-click the connection you want to share.**
Then, click Properties.

> The Properties window for this network connection will appear.

4 **Click the Sharing tab, and then select 'Enable Internet Connection Sharing for this connection'.**
> This enables the ICS feature.

40
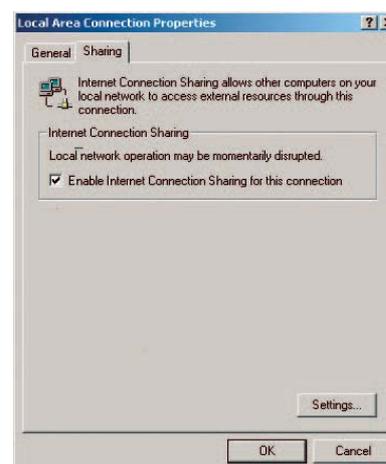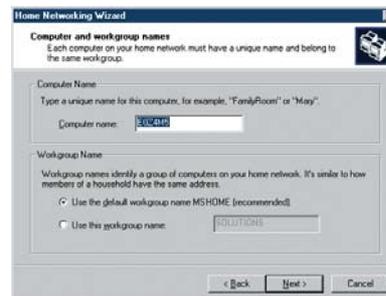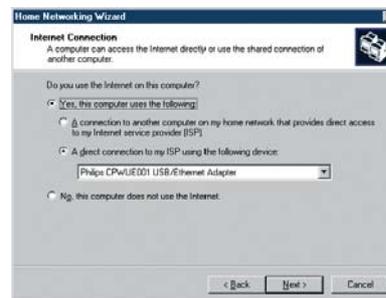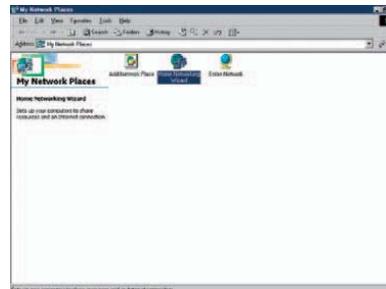
Chapter 16 – Advanced (Network) problem solving

Go to www.philips.com/streamium for the latest information on problem solving.

Movies will not play:
The bit rate might be too high. Convert the movie to a lower bit rate.

Check your broadband Internet speed
At www.2wire.com/meter/bm.html you can check your broadband Internet speed. This should be more than 240 kbps for the Streamium LCD TV's Internet function to work.

Check with your Internet Service Provider:
– Whether you may connect more than one device (computers and the Streamium system) to the internet connection.
– Whether your ISP allows only devices with registered MAC ad dresses to connect to the Internet.
– Whether or not you need to set-up proxy servers for HTTP and/or RTSP.

Check whether you have activated the same wireless encryption key throughout your wireless network:
If you have forgotten your Encryption key, switch off encryption or set a new encryption key for your entire wireless network and for the Streamium LCD TV.

If you are using a firewall, check whether you have opened the ports 42951 TCP and 42591 UDP:
Some ports need to be opened, check at www.philips.com/streamium for the latest information on which ports need to be open.

Check your network's IP configuration:
Check the Options menu of the Streamium LCD TV. In the Network > Network Info menu a gateway address should be present. This should be the IP address of the PC or network device that connects to the Internet. You can check the network gateway address through your network adapter program or with IPCONFIG (see below).

Note: Philips Wireless USB/Notebook Adapter users may click the 'Link information' tab in the CPWUA/CPWNA Monitor program.

Check your computer's IP configuration as follows:

For Windows 98SE / Windows Me
1. Click 'Start', 'Run...', and enter 'winipcfg'.
2. Click 'OK' to view the IP settings.
3. In this window, select your wireless network adapter.
4. Click 'More Info>>' to expand.

For Windows XP / Windows 2000
1. Click 'Start', 'Run...', and enter 'command'.
2. In the DOS box, type 'ipconfig /all' and press Enter.
3. For each network adapter, you will see results similar to the window on the left.

   • If your network uses static IP addressing that you have set manually, then you will also need to choose a unique IP address for the Streamium LCD TV in the same range as the network's IP addresses (e.g. 192.168.2.xxx). Use the same subnet mask as your network (e.g. 255.255.255.000), and write down the IP address of the network device that connects you to the Internet (the Gateway IP address).

   • Sometimes your Internet Service Provider requires you to use a proxy address. Check this with your Internet Service Provider. Alternatively, check the proxy settings of your Internet browser software for more information.

41
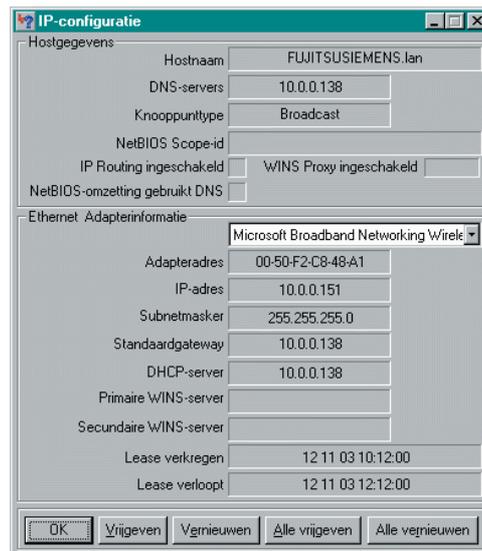
Chapter 17 – Glossary

Ad-Hoc Network	A direct network connection between two devices (two computers, or a PC and the Streamium LCD TV).
Access Point (Infrastructure network)	A network connection between two or more devices (computers, or PCs and the Streamium LCD TV) with a central network host (router, base station or PC).
Broadband	The Internet bandwidth determines the speed of your Internet connection. Broadband Internet is everything above 256 kbps.
Chroma Delay	Colour fine-tuning for different types of TV screens.
Codec	A software format for compressing and de-compressing media.
DHCP	If a network has a central host computer, wireless base station or router that acts as a DHCP server, this server allocates IP addresses, netmasks, and the gateway address to all DHCP client computers and devices in the network automatically.
Ethernet	The most popular type of wired home network.
Firewall	A firewall acts as a barrier that helps protect your network from intruders from the Internet. The firewall specifies what information can be communicated from the computers on your network to the Internet, and from the Internet to the computers on your network.
Gamma	Display intensity setting for different types of TV screens.
Gateway	The computer or network device that provides access to the Internet.
Home Link/PC Link	Refer to accessing streaming content from the home network.
Horizontal position (Advanced TV Setting)	Shifts the horizontal position of the display on the TV screen.
Infrastructure Network	See Access Point.
MAC Address	The unique 12-character hardware address of the (wireless) network adapter. Sometimes used for identifying network hardware.
NAT (Network Address Translation)	A security feature implemented in most Internet gateway routers and Wireless Base Stations to keep your home network safe from intrusions from the Internet.
Peer-to-peer	See Ad-Hoc Network.
Philips Media Manager	The software you need to install and have active on your computer to be able to use PC Link for sending music, photo and movie files from the PC to the Streamium LCD TV.
Proxy address	The address of an intermediate computer, provided to you by your Internet Service Provider. Sometimes needed for accessing the Internet.
SSID	The wireless network name (this is not the same as your computer network name).
STP	Shielded Twisted Pair. The type of network cable you need to use.
Streaming	Playing media content from the Internet while it is downloading is called 'streaming'.
Streamium	The Philips range of Internet enabled products.
uPnP	Universal Plug and Play.
Vertical position (Advanced TV Setting)	Shifts the vertical position of the display on the TV screen.
WEP	Designates a type of wireless encryption.
Wireless Base Station (wireless gateway router)	A hardware device that interconnects your wireless home network to the Internet.
Wireless USB Adapter (wireless network adapter)	The hardware device that you need to connect to your PC to be able to make wireless contact with the Streamium LCD TV.

42

MODEL : _____

PROD. NO : _____

PHILIPS

3139 125 33581

LCD TV

connectedplanet

streamium

PHILIPS

Thank you for purchasing this television set.
This handbook has been designed to help you install and operate your TV set.
We would strongly recommend that you read it thoroughly.
We hope our technology meets entirely with your satisfaction.

Recycling
The materials used in your set are either reusable or can be recycled.
To minimise environmental waste, specialist companies collect used appliances
and dismantle them after retrieving any materials that can be used again (ask
your dealer for further details).

Presentation of the LCD Television
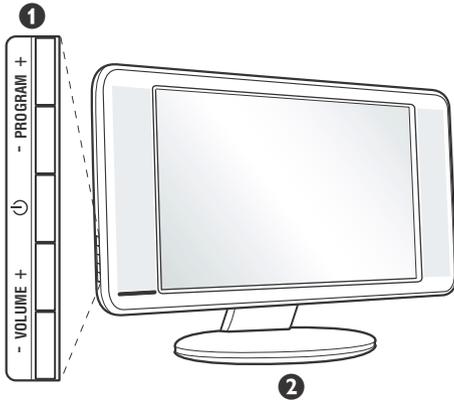
❶ **Television keys:**
  - ⏻ : to switch the TV on or off.
  - VOLUME - + (- ⊿+): to adjust sound level.
  - PROGRAM - + (- P +): to select programmes.
  - MENU: to access or close menus, simultaneously press the ⊿ - and ⊿ + keys. The - + keys can be used to select an adjustment and the ⊿ - + keys to make that adjustment.

❷ **Adjustable stand.**
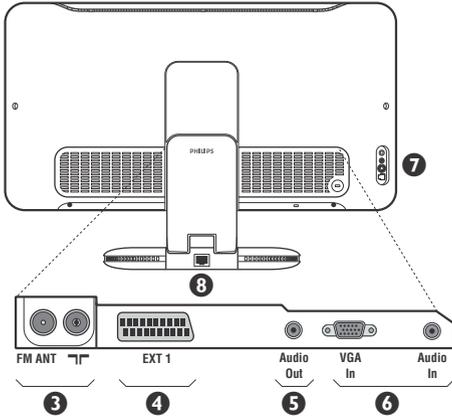
Rear of set :
The main connections are made at the bottom of the television.
For more details on connections see page 10.

❸ TV and radio aerial sockets
❹ EXT1 socket
❺ Audio output for connecting an amplifier.
❻ VGA and audio input for connecting a computer
❼ Side connections
❽ Ethernet socket :*For more information about the STREAMIUM functions, see the separate documentation.*

FM ANT   EXT 1   Audio Out   VGA In   Audio In

Remote control

CR 2025
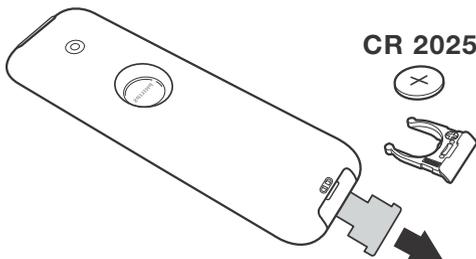
Pull out the plastic insulation sheet from the battery, this will activate the remote control. The battery supplied with the appliance does not contain mercury or nickel cadmium so as to protect the environment. Please do not discard your used batteries, but use the recycling methods available (consult your distributor).

Remote control keys

For more information about the STREAMIUM functions, see the separate documentation.

Teletext key (p. 8)

Select peripherals (p.10)
Press several times to select the required EXT connector.

Sound mode
Used to force programmes in **Stereo** and **Nicam Stereo** to **Mono** or, for bilingual programmes, to choose between **Dual I** or **Dual II**. *The* **Mono** *indication is red when in forced position.*

Unused key.

TV / PC / Radio
Press one of these keys to switch the television between TV, PC or radio mode (p. 9).

16:9 Format (p. 7)

Cursor (UP/DOWN/LEFT/RIGHT)
These 4 keys are used to move around the menus ($\wedge \vee \langle \rangle$).

Menu
To call up or exit the menus.

Mute
To mute or restore the sound.

Volume
To adjust the sound level.

Smart picture and sound
Used to access a series of predefined picture and sound settings. *The* **personal** *position relates to settings selected from the menus.*

Screen information
To display / remove the programme number, the time, the sound mode and the time remaining on the timer. Hold down for 5 seconds to permanently display the programme number on the screen.

Standby
To set the TV to standby mode. To switch the TV set on again, press ⏻, P - + or ⓪/⑨.

Mode selector *

Previous programme
To access the previously viewed programme.

Surround Sound
To activate / deactivate the surround sound effect. In stereo, this gives the impression that the speakers are further apart. For models equipped with Virtual Dolby Surround*, you can experience Dolby Surround Pro Logic sound effects.

Active control
Optimizes the picture quality depending on the quality of the incoming signal and the ambient light conditions.
Not applicable for TV mode.

Selecting TV programmes
To move up or down a programme. The number and the sound mode are displayed for a few seconds. *For some TV programmes the title of the programme appears at the bottom of the screen.*

Numerical keys
For direct access to programmes. For a 2 digit programme number, the 2nd digit must be entered before the dash disappears.

Teletext (p. 8)

* Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbols are trademarks of Dolby Laboratories.

*** Mode selector**
Press the **Select** key to select the required mode : **TV, DMR** (other equipment) or **STREAMIUM**.
The remote control indicator lights up to display the selected mode. It switches off automatically after 20 seconds if left idle. The remote control automatically returns to TV mode.
For more information about the STREAMIUM functions, see the separate documentation.

3

Installing your television set

5 cm

5 cm   **5 cm**
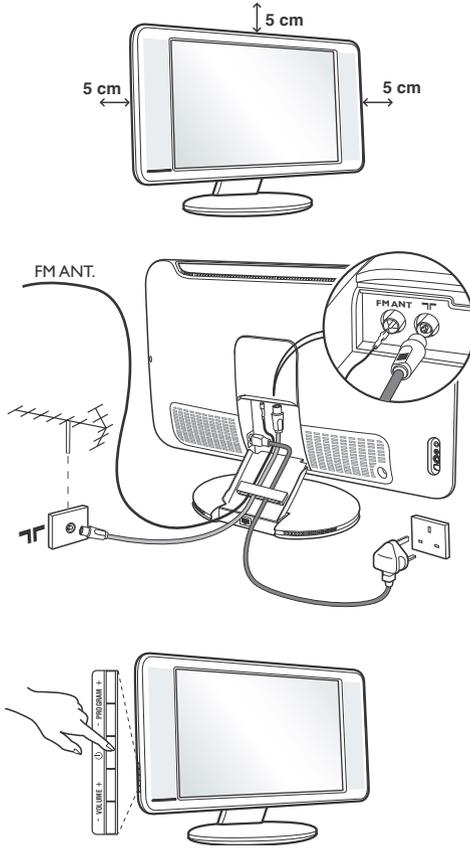
❶ Positioning the television set

Place your TV on a solid stable surface. To avoid danger do not expose the TV to water, or a heat source (e.g. lamp, candle, radiator). Do not obstruct the ventilation grid at the rear.

FM ANT.

FM ANT

❷ Connecting the aerials

• Use the aerial connection lead supplied and connect the ⊓⊓ socket situated at the bottom of the TV to your aerial socket.

• Insert the radio aerial lead supplied into the FM ANT socket located at the bottom of the TV.

• Connect the power lead to the television and the mains plug into the wall socket (220-240 V/50 Hz).

• Arrange the leads by passing them through the television stand. Replace the stand cover.

For connecting other appliances see page p.10.

❸ Switching on

To switch on the set, press the on/off key. A green indicator comes on and the screen lights up. Go straight to the Quick Installation chapter. If the TV remains in standby mode(red indicator), press the P ⊕ key on the remote control.

The indicator will flash when you use the remote control.

Plug & Play

Quick installation

When you turn on the TV set for the first time, a menu is displayed on screen. This menu prompts you to select the country and language for the menus:

Plug'n'Play

Country   Language

◊ **GB** ◊   ◊ **English** ◊

If the menu is not displayed, press and hold down the ◢- and ◢+ keys on the TV set for 5 seconds to display the menu.

❶ Use the cursor UP/DOWN on the remote control to select your country and validate with cursor RIGHT.

If your country does not appear in the list, select choice "…"

❷ Next select your language using the cursor UP/DOWN and validate with cursor RIGHT.

❸ The search starts automatically. All the available TV programmes and radio stations will be stored. This operation takes a few minutes. The display shows the progress of the search and the number of programs found. At the end of the search, the menu disappears.

To exit or interrupt the search, press (MENU). If no programme is found, consult the possible solutions p. 12.

❹ If the transmitter or cable network sends the automatic sort signal, the programs will be numbered correctly. In this case, the installation is complete.

❺ If this is not the case, you need to use the **Sort** menu to number the programs correctly.

Some transmitters or cable networks broadcast their own sort parameters (region, language, etc.). In this case, indicate your choice using the cursor UP/DOWN and validate with cursor RIGHT.

Program sort

❶ Press key (MENU). The **TV Menu** is displayed on the screen.

```
┌─────────────┐
│  TV Menu    │────────────────────────────┐
│             │       Install  🖾          │
│ Picture     │                            │
│ Sound       │   Language ▶  •    0        │
│ Features    │   Country ▶   •    1        │
│ Install     │  Auto Store ▶ •    2        │
│ Mode        │  Manual Store ▶ •  3   ◊    │
│       ──────┼─▶     Sort ▶   •    4        │
│             │      Name ▶    •    5        │
└─────────────┘
```
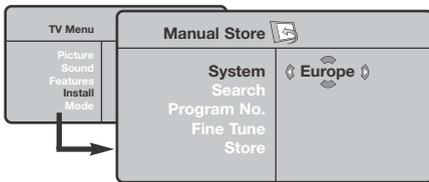
❷ With the cursor, select the **Install** menu followed by the **Sort** menu.

❸ Select the programme you want to move using the cursor UP/DOWN and press cursor RIGHT.

❹ Then use the cursor UP/DOWN to select the new number and validate with cursor LEFT.

❺ Repeat steps ❸ and ❹ for each program you wish to renumber.

❻ To quit the menus, press (⊞).

Manual store

This menu is used to store the programmes one at a time.

❶ Press the (MENU) key.

❷ With the cursor, select the **Install** menu then **Manual store**:

```
┌─────────────┐
│  TV Menu    │────────────────────────┐
│             │   Manual Store  🖾      │
│ Picture     │                        │
│ Sound       │     System  ◊ Europe ◊ │
│ Features    │     Search             │
│ Install     │   Program No.          │
│ Mode        │    Fine Tune           │
│       ──────┼─▶     Store            │
│             │                        │
└─────────────┘
```

❸ **System:** select **Europe** (automatic detection*) or **Western Europe** (BG standard), **Eastern Europe** (DK standard), **United Kingdom** (I standard) or **France** (LL' standard).
*Except for France (LL' standard), you must select choice **France**.*

❹ **Search:** press cursor RIGHT. The search starts. Once a programme is found, the scanning stops and its name is displayed (when available). Go to the next step. If you know the frequency of the required programme, this can be entered directly using the (0) to (9) keys.
If no picture is found, consult the possible solutions (p. 12).

❺ **Program No.:** enter the required number with the cursor LEFT/RIGHT or (0) to (9) keys.

❻ **Fine Tune:** if the reception is not satisfactory, adjust using the cursor LEFT/RIGHT.

❼ **Store:** press cursor RIGHT. The program is stored.

❽ Repeat steps ❹ to ❽ for each programme to store.

❾ To quit the menus, press (⊞).

Other settings in the Install menu

❶ Press the (MENU) key and select the **Install** menu:

❷ **Language:** to change the display language for the menus.

❸ **Country:** to select your country (**GB** for Great Britain).
This setting is used for the search, automatic programme sort and teletext display. If your country does not appear in the list, select "…"

❹ Auto Store: to start automatic search for all programmes available in your region. If the transmitter or cable network sends the automatic sort signal, the programmes will be numbered correctly. If this is not the case, you need to use the Sort menu to renumber the programmes (see p. 4).
Some transmitters or cable networks broadcast their own sort parameters (region, language, etc.). In this case, indicate your choice using the cursor UP/DOWN and validate with cursor RIGHT. To quit or interrupt the search, press (MENU). If no picture is found, consult the possible solutions (p. 12).

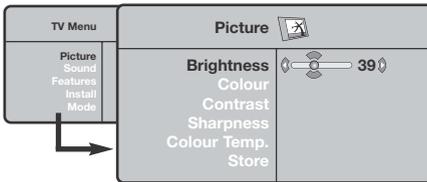❺ **Name :** If required, you can give a name to the programmes and external connectors. Use the cursor LEFT/RIGHT to move around the name display area (5 characters) and the cursor UP/DOWN to select the characters. When the name has been entered, use the cursor LEFT to exit. The name is stored.
Note: on installation, the programs are named automatically when an identification signal is sent.

❻ To quit the menus, press (⊞).

Picture settings

❶ Press ⬚MENU then cursor RIGHT. The **Picture** menu is displayed:

TV Menu	Picture 🖼
Picture Sound Features Install Mode	**Brightness** ◁⊙──── 39 ◁▷ Colour Contrast Sharpness Colour Temp. Store

❷ Use the cursor UP/DOWN to select a setting and the cursor LEFT/RIGHT to adjust.
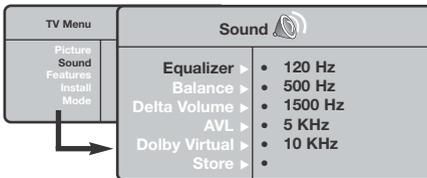
❸ Once the adjustments have been made, select Store and press cursor RIGHT to store them. Press ⬚ to exit.

Description of the adjustments:
- **Brightness:** this changes picture brilliance.
- **Colour:** this changes the intensity of the colour.
- **Contrast:** this changes the difference between the light and dark tones.
- **Sharpness:** this changes the picture definition.
- **Colour Temp.:** this changes the colour rendering: **Cold** (bluer), **Normal** (balanced) or **Warm** (redder).
- **Store:** to store the picture adjustments and settings.

Sound adjustments

❶ Press ⬚MENU, select Sound (DOWN) and press cursor RIGHT. The **Sound** menu is displayed:

TV Menu	Sound 🔊	
Picture Sound Features Install Mode	**Equalizer** ▶ Balance ▶ Delta Volume ▶ AVL ▶ Dolby Virtual ▶ Store ▶	• 120 Hz • 500 Hz • 1500 Hz • 5 KHz • 10 KHz •

❷ Use the cursor UP/DOWN to select a setting and the cursor LEFT/RIGHT to adjust.

❸ Once the adjustments have been made, select Store and press cursor RIGHT to store these changes.

❹ To quit the menus, press ⬚.

Description of the settings:
- **Equalizer**: to adjust the sound tone (from bass: 120 Hz to treble: 10 kHz).
- **Balance**: this balances the sound on the left and right speakers.
- **Delta Volume**: this is used to compensate any volume discrepancies between the different programs or EXT sockets. This setting is available for programs 0 to 40 and the EXT sockets.
- **AVL** (Automatic Volume Leveller): this is used to limit increases in sound, especially on program change or advertising slots.
- **Dolby Virtual**: To activate / deactivate the surround sound effect. *You can also access these settings with key* ⬚.
- **Store:** this is used to store the sound settings.

Feature settings

❶ Press ⬚MENU, select **Features** (cursor DOWN) and press cursor RIGHT. You can adjust:

❷ **Contrast +:** automatic adjustment of the picture contrast which permanently sets the darkest part of the picture to black.

❸ **NR:** attenuates picture noise (snow) in difficult reception conditions.

❹ **Sleep :** to select an automatic standby period.

❺ To quit the menus, press ⬚.

16:9 Formats

The pictures you receive may be transmitted in 16:9 format (wide screen) or 4:3 format (conventional screen). 4:3 pictures sometimes have a black band at the top and bottom of the screen (letterbox format). This function allows you to optimise the picture display on screen.
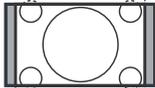
Press the ⊞ key (or cursor LEFT/RIGHT) to select the different modes:
This TV set is also equipped with automatic switching which will select the correct-screen format, provided the specific signals are transmitted with the programmes.
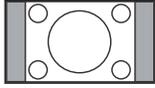
4:3
The picture is reproduced in 4:3 format and a black band is displayed on either side of the picture.

Zoom 14:9
The picture is enlarged to 14:9 format, a thin black band remains on both sides of the picture.
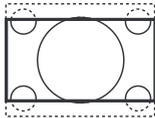
Zoom 16:9
The picture is enlarged to 16:9 format. This mode is recommended when displaying pictures which have black bands at the top and bottom (letterbox format).
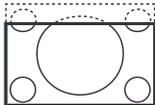
Subtitle Zoom
This mode is used to display 4:3 pictures using the full surface of the screen leaving the sub-titles visible.
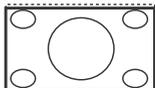
Super Wide
This mode is used to display 4:3 pictures using the full surface of the screen by enlarging the sides of the picture.
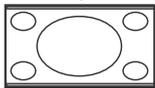
Widescreen
This mode restores the correct proportions of images transmitted in 16:9.
Note: If you display a 4:3 picture in thid mode, it will be enlarged horizontally.
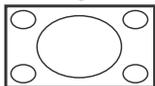
Fullscreen
This mode displays images in full screen.

Teletext

Teletext is an information system broadcast by certain channels which can be consulted like a newspaper. It also offers access to subtitles for viewers with hearing problems or who are not familiar with the transmission language (cable networks, satellite channels, etc.).

Press :	You will obtain :

Teletext call
This is used to call teletext, change to transparent mode and then exit. The summary appears with a list of items that can be accessed. Each item has a corresponding 3 digit page number.
If the channel selected does not broadcast teletext, the indication 100 will be displayed and the screen will remain blank (in this case, exit teletext and select another channel).

Selecting a page
Enter the number of the page required using the ⓪ to ⑨ or **- P +** keys. Example: page 120, enter ① ② ⓪. The number is displayed top left, the counter turns and then the page is displayed. Repeat this operation to view another page.
If the counter continues to search, this means that the page is not transmitted. Select another number.

Direct access to the items
Coloured areas are displayed at the bottom of the screen. The 4 coloured keys are used to access the items or corresponding pages.
The coloured areas flash when the item or the page is not yet available.

Contents
This returns you to the contents page (usually page 100).

Stop sub-page acquisition
Certain pages contain sub-pages which are automatically displayed successively. This key is used to stop or resume sub-page acquisition. The indication ⊟ appears top left.

Hidden information
To display or hide the concealed information (games solutions).

Enlarge a page
This allows you to display the top or bottom part of the page and then return to normal size.

Favourite pages
Instead of the standard coloured areas displayed at the bottom of the screen, you can store 4 favourite pages on the first 40 channels which can then be accessed using the coloured keys (red, green, yellow, blue). Once set, these favourite pages will become the default every time tetetext is selected.
❶ Press the MENU key to change to favourite pages mode.
❷ Display the teletext page that you want to store.
❸ Press the coloured key of your choice for 3 seconds. The page is now stored.
❹ Repeat the operation with the other coloured keys.
❺ Now when you consult teletext, your favourite pages will appear in colour at the bottom of the screen. To temporaly retrieve the standard items, press MENU.
To clear everything, and return the standard items as the default, press ▦ for 5 seconds.

Using the radio

Choosing radio mode
Press the 📻 key on the remote control to switch the TV to radio mode. Press the (TV) key to return to TV mode. In radio mode the number and name of the station (if available), its frequency and the sound mode are indicated on the screen.

Selecting programmes
Use the (0)/(9) or **- P +** keys to select the FM stations (from 1 to 40).

Using the radio menus
Use the (MENU) key to access the specific radio settings.

Searching radio stations
If you have used the quick installation all the available FM stations will be stored. To start a new search use the **Install** menu : **Auto Store** (for a complete search) or **Manual Store** (for a station by station search). These menus work in exactly the same way as the TV menus.

Screen saver
In the **Features** menu you can activate / close the screen saver.

Using in PC monitor mode

Note:
When using the LCD TV as a PC monitor, slight diagonal interference lines may be observed when it is operated under electromagnetic interference environment but will not affect the performance of this product. For better performance, good quality VGA cable with good noise isolation filter is recommended.

PC Mode
Your TV can be used as a computer monitor. *You must first of all connect the computer and adjust the resolution (see p.11).*

Choosing PC mode
Press the (PC) key on the remote control to switch the TV to PC. Press the (TV) key to return to TV mode.
If there is no PC signal for more than five seconds, the TV automatically goes into standby mode.

Using the PC menus
Press the (MENU) key to access the specific settings of the PC monitor mode. Use the cursor to adjust them (the settings are automatically saved) :
• **Picture** :
  - **Brightness / Contrast** : to adjust the brightness and contrast.
  - **Horizontal / Vertical** : to adjust the horizontal and vertical placing of the image.

  - **Adjust Colour** : to adjust the colours (cold, normal or warm).
• **Audio Selection** : to choose the sound reproduced on the TV (PC or TV/Radio). For example, you can listen to the radio while you use the computer.
• **Features** :
  - **Phase/Clock** : eliminates the horizontal (**Phase**) and vertical (**Clock**) interfering lines.
  - **View Format**: to choose between large screen or the original format of the PC screens.
 - **Auto Adjust** : position is set automatically.
• **Reset To Factory Setting** : to return to the factory settings (default settings).
• **Mode Select** : to come back to TV or radio mode.

9

Connecting peripheral equipment

Remove the stand cover and the clip on rear panel of the television to expose the connectors.
Arrange the leads by passing them through the television stand. Replace the stand cover.
The EXT1 socket has audio, CVBS/RGB inputs and audio, CVBS outputs.

AV in
AV 3
S-VIDEO

FM ANT   EXT 1   Audio Out   VGA In   Audio In

Video recorder

FM ANT   EXT 1
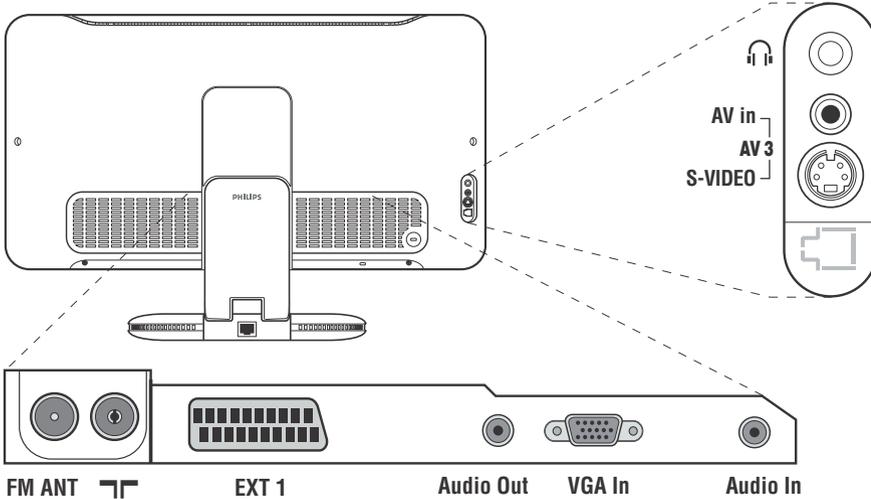
VCR
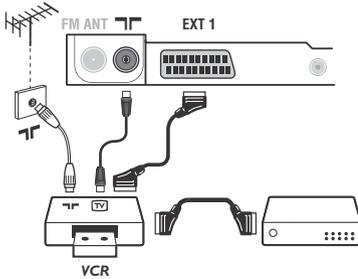
Carry out the connections shown opposite, using a good quality euroconnector cable.
If your video recorder does not have a euroconnector socket, the only connection possible is via the aerial cable. You will therefore need to tune in your video recorder's test signal and assign it programme number 0 (refer to manual store, p. 5).
To reproduce the video recorder picture, press ⓪.

Video recorder with decoder
Connect the decoder to the second euroconnector socket of the video recorder. You will then be able to record scrambled transmissions.

Other equipment

FM ANT   EXT 1
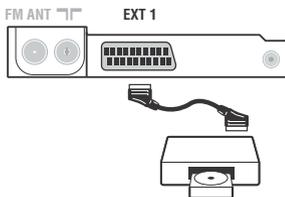
Satellite receiver, decoder, CDV, games, etc.
Carry out the connections shown opposite.

To select connected equipment
Press the ⊕ key to select **EXT1**.
Most equipment (decoder, video recorder) carries out the switching itself.

10
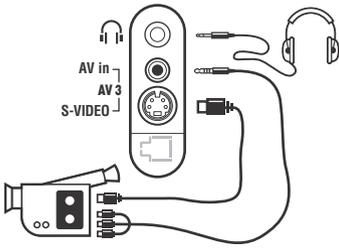
Side connections

Make the connections as shown opposite.
With the ⊕ key, select **AV/S-VHS**.
For a mono set, connect the sound signal to the AUDIO L (or AUDIO R) input. The sound automatically comes out of the left and right speakers of the set.

Headphones
When headphones are connected, the sound on the TV set will be cut. The **-** ◁ **+** keys are used to adjust the volume level.
The headphone impedance must be between 32 and 600 Ohms.

Amplifier
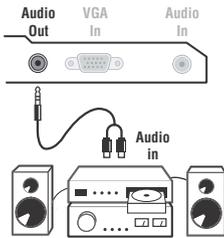
To connect to a hi-fi system, use an audio connection cable and connect the sound output **Audio out** on the TV set to the "AUDIO IN" "L" and "R" input on your hi-fi amplifier.

Computer
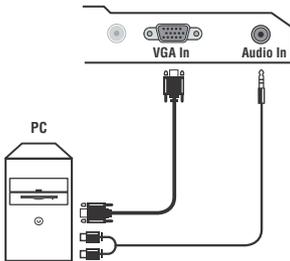
Connect the monitor output of your computer to the **PC VGA In** of the TV.
Connect the sound output **Audio out L** and **R** of the computer to the input **Audio in (PC)** of the TV.
For more information on using PC mode see page 9.
Configure the computer on 1024 x 768, 60 Hz for optimum resolution.
Here is the list of the different display resolutions available on your TV:

640 x 350, 70 Hz	720 x 400, 70 Hz	1024 x 768, 60 Hz
640 x 350, 85 Hz	720 x 400, 85 Hz	1024 x 768, 70 Hz
640 x 480, 60 Hz	800 x 600, 56 Hz	1024 x 768, 75 Hz
640 x 480, 67 Hz	800 x 600, 60 Hz	1024 x 768, 85 Hz
640 x 480, 72 Hz	800 x 600, 72 Hz	1152 x 864, 75 Hz
640 x 480, 75 Hz	800 x 600, 75 Hz	1280 x 768, 75 Hz
640 x 480, 85 Hz	800 x 600, 85 Hz	
	832 x 624, 75 Hz	

11

Tips

Poor reception	The proximity of mountains or high buildings may be responsible for ghost pictures, echoing or shadows. In this case, try manually adjusting your picture: see Fine Tune (p.5) or modify the orientation of the outside aerial. If you are using an indoor aerial, reception may be difficult in certain conditions. You can improve reception by rotating the aerial. If the reception remains poor, you will need to use an external aerial
No picture	Have you connected the aerial socket properly? Have you chosen the right system? (p. 5). Poorly connected euroconnector cables or aerial sockets are often the cause of picture or sound problems (sometimes the connectors can become half disconnected if the TV set is moved or turned). Check all connections.
No sound	If on certain channels you receive a picture but no sound, this means that you do not have the correct TV system. Modify the **System** setting (p. 5). The amplifier connected to the TV does not deliver any sound? Check that you have not confused the audio output with the audio input.
PC modes don't work ?	Check that you have configured the computer on a compatible display resolution (see p. 11).
Remote control	The TV set does not react to the remote control; the indicator on the set no longer flashes when you use the remote control? Replace the battery.
Standby	If the set receives no signal for 15 mins, it automatically goes into standby mode. To save power, your set is fitted with components that give it a very low power consumption when in standby mode (less than 1 W).
Cleaning the set	Only use a clean, soft and lint-free cloth to clean the screen and the casing of your set. Do not use alcohol-based or solvent-based products.
Still no results?	Disconnect the mains plug of the TV for 30 seconds then reconnect it. If your TV set breaks down, never attempt to repair it yourself: contact your dealer's after-sales service.

Glossary

RGB signals : These are the three video signals, Red Green Blue, which make up the picture. Using these signals improves picture quality.

S-VHS Signals: These are 2 separate Y/C video signals from the S-VHS and Hi-8 recording standards. The luminance signals Y (black and white) and chrominance signals C (colour) are recorded separately on the tape. This provides better picture quality than with standard video (VHS and 8 mm) where the Y/C signals are combined to provide only one video signal.

NICAM sound: Process by which digital sound can be transmitted.

System: Television pictures are not broadcast in the same way in all countries. There are different standards: BG, DK, I, and L L'. The **System** setting (p. 5) is used to select these different standards. This is not to be confused with PAL or SECAM colour coding. Pal is used in most countries in Europe, Secam in France, Russia and most African countries. The United States and Japan use a different system called NTSC.

16:9: Refers to the ration between the length and height of the screen.
Wide screen televisions have a ration of 16/9, conventional screen TV sets have a ration of 4/3.

Table of TV frequencies.
Frequenztabelle der Fernsehsender.
Liste des fréquences TV.
Frequentietabel TV-Zenders.
Tabella delle frequenze TV.
Lista de frecuencias TV.

Lista das frequências TV
Liste over TV senderne.
Tabell over TV-frekvenser.
Tabell över TV-frekvenser.
TV-taajuustaulukko.
Κατάλογος συχνοτήτων πομπών.

Список частот передатчиков.
A televízió-adóállomások frekvenciáinak a listája.
Lista częstotliwości stacji nadawczych.
Seznam frekvenčních pásem vysílačů.
Zoznam frekvenčných pásiem vysielačov.

EUROPE

CANAL	FREQ (MHz)	CANAL	FREQ (MHz)	CANAL	FREQ (MHz)
E2	48.25	S15	259.25	33	567.25
E3	55.25	S16	266.25	34	575.25
E4	62.25	S17	273.25	35	583.25
E5	175.25	S18	280.25	36	591.25
E6	182.25	S19	287.25	37	599.25
E7	189.25	S20	294.25	38	607.25
E8	196.25	H1	303.25	39	615.25
E9	203.25	H2	311.25	40	623.25
E10	210.25	H3	319.25	41	631.25
E11	217.25	H4	327.25	42	639.25
E12	224.25	H5	335.25	43	647.25
R1	49.75	H6	343.25	44	655.25
R2	59.25	H7	351.25	45	663.25
R3	77.25	H8	359.25	46	671.25
R4	85.25	H9	367.25	47	679.25
R5	93.25	H10	375.25	48	687.25
R6	175.25	H11	383.25	49	695.25
R7	183.25	H12	391.25	50	703.25
R8	191.25	H13	399.25	51	711.25
R9	199.25	H14	407.25	52	719.25
R10	207.25	H15	415.25	53	727.25
R11	215.25	H16	423.25	54	735.25
R12	223.25	H17	431.25	55	743.25
S1	105.25	H18	439.25	56	751.25
S2	112.25	H19	447.25	57	759.25
S3	119.25	21	471.25	58	767.25
S4	126.25	22	479.25	59	775.25
S5	133.25	23	487.25	60	783.25
S6	140.25	24	495.25	61	791.25
S7	147.25	25	503.25	62	799.25
S8	154.25	26	511.25	63	807.25
S9	161.25	27	519.25	64	815.25
S10	168.25	28	527.25	65	823.25
S11	231.25	29	535.25	66	831.25
S12	238.25	30	543.25	67	839.25
S13	245.25	31	551.25	68	839.25
S14	252.25	32	559.25	69	855.25

FRANCE

CANAL	FREQ (MHz)
2	55.75
3	60.50
4	63.75
5	176.0
6	184.0
7	192.0
8	200.0
9	208.0
10	216.0
B	116.75
C	128.75
D	140.75
E	159.75
F	164.75
G	176.75
H	188.75
I	200.75
J	212.75
K	224.75
L	236.75
M	248.75
N	260.75
O	272.75
P	284.75
Q	296.75

ITALY

CANALE	FREQ (MHz)
A	53.75
B	62.25
C	82.25
D	175.25
E	183.75
F	192.25
G	201.25
H	210.25
H1	217.25

Information for users in the UK *(not applicable outside the UK)*

Positioning the TV

For the best results, choose a position where light does not fall directly on the screen, and at some distance away from radiators or other sources of heat. Leave a space of at least 5 cm all around the TV for ventilation, making sure that curtains, cupboards etc. cannot obstruct the air flow through the ventilation apertures. The TV is intended for use in a domestic environment only and should never be operated or stored in excessively hot or humid atmospheres.

General Points

Please take note of the section entitled 'Tips' at the end of this booklet.

Interference

The Department of Trade and Industry operates a Radio Interference Investigation Service to help TV licence holders improve reception of BBC and IBA programmes where they are being spoilt by interference.
If your dealer cannot help, ask at a main Post Office for the booklet "How to Improve Television and Radio Reception".

Mains connection

Before connecting the TV to the mains, check that the mains supply voltage corresponds to the voltage printed on the type plate on the rear panel of the TV. If the mains voltage is different, consult your dealer.

Important

This apparatus is fitted with an approved moulded 13 Amp plug. To change a fuse in this type of plug proceed as follows:
1. Remove fuse cover and fuse.
2. Fit new fuse which should be a BS1362 5A, A.S.T.A. or BSI approved type.
3. Refit the fuse cover.
In order to maintain conformity to the EMC directive, the mains plug on this product must not be removed.

Connecting the aerial

The aerial should be connected to the socket marked ⊓⌐ at the back of the set. An inferior aerial is likely to result in a poor, perhaps unstable picture with ghost images and lack of contrast. Make-shift loft or set-top aerials are often inadequate. Your dealer will know from experience the most suitable type for your locality.
Should you wish to use the set in conjunction with other equipment, which connects to the aerial socket such as TV games, or a video camera it is recommended that these be connected via a combiner unit to avoid repeated connection and disconnection of the aerial plug.

Fitting the stand (if provided)

Use only the stand provided with the set, making sure that the fixings are properly tightened. A diagram showing how to assemble the stand is packed with the stand. Never use a make-shift stand, or legs fixed with woodscrews.

MODEL : _____

PROD. NO : _____

PHILIPS