FLAT TV™

English

PHILIPS

Country	Number	Tariff
Austria	0810 000205	€0.07/min
Belgium	078250145	€0.06/min
Czech Rep	800142840	free
Denmark	3525 8759	local
Finland	09 2311 3415	local
France	0821 611655	€0.09/min
Germany	0900 1101211	€0.10/min
Greece	0 0800 3122 1280	free
Hungary	0680018189	free
Ireland	01 601 1777	local
Italy	840320086	€0.08/min
Luxemburg	40 6661 5644	local
Netherlands	0900 8407	€0.10/min
Norway	2270 8111	local
Poland	0223491504	local
Portugal	2 1359 1442	local
Slovakia	0800004537	free
Spain	902 888 784	€0.10/min
Sweden	08 5792 9100	local
Switzerland	0844 800 544	local
UK	0845 601 0354	local

This information is correct at the time of press.

For updated information, see www.support.philips.com

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 13AMP plug. Should it become necessary to replace the mains fuse, this must be replaced with a fuse of the same value as indicated on the plug.

① Remove fuse cover and fuse.

② The replacement fuse must comply with BS 1362 and have the ASTA approval mark. If the fuse is lost, make contact with your retailer in order to verify the correct type.

③ Refit the fuse cover.
If for any reason the fitted plug is not suitable for your socket outlet, please consult your retailer or a qualified electrician before proceeding with the installation.

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.

Recycling

The packaging of this product is intended to be recycled. Apply to the local authorities for correct disposal.

Disposal of your old product

Your product is designed and manufactured with highly quality material and components, which can be recycled and reused. When this crossed-out wheeled bin symbol is attached to a product, it means the product is covered by the European Directive 2002/96/EC.

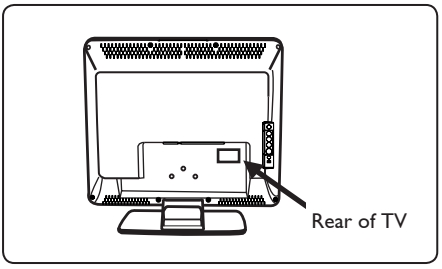
Please inform yourself about the local separate collection system for electrical and electronic products. Please act according to your local rules and do not dispose your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

Disposal of batteries

The batteries supplied do not contain the heavy metals mercury and cadmium. Please check on how to dispose exhausted batteries according to local regulations.

Product information

- This TV consumes minimal energy in standby mode to minimise environmental impact



- Standby Power Consumption for this set is less than 2 W.
- Power Consumption of the set can found on the type plate at the rear of the TV.
- For more specifications of the product see the product leaflet on www.philips.com/support.

Note

Specifications and information are subject to change without notice.

- If you need further assistance, please call the customer support service in your country. The corresponding telephone numbers and addresses are given in the supplied Worldwide guarantee booklet.

Introduction

English

Thank you for purchasing this television set.
This handbook has been designed to help you install and operate your TV set.
We strongly recommend that you read it thoroughly.

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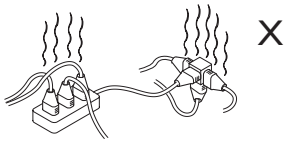
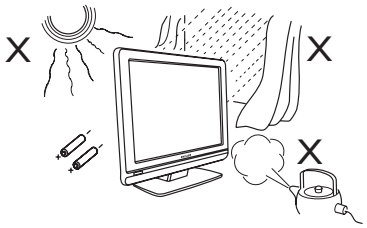
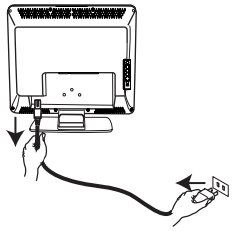
Safety Information



Do not connect too much equipment to the same mains socket because it can result in fire or electric shock.



Do not expose the TV or the batteries of the remote control to heat, direct sunlight, rain or water.



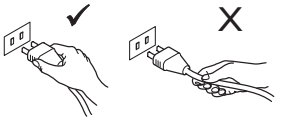
To connect to the mains, insert the appliance coupler into the mains socket at the back of the TV and the plug into the wall socket.

To disconnect from the mains, remove the appliance coupler from the mains socket at the back of the TV or remove the plug from the wall socket.

The appliance coupler or the mains cord on the TV is used as the disconnect device.

- When cleaning the surface or the screen of the set, wipe gently with absorbent cotton or cloth or other soft material like chamois. Do not use a cloth which is dripping with water. Do not use acetone, toulene or alcohol to clean the TV. As a safety precaution, unplug the power cord from the mains.
- As a safety precaution, do not touch any part of the TV, power lead or aerial lead during lightning storms.

- Do not place naked flame sources such as lighted candles close to the TV set.
- Do not place a vase filled with water near the TV. Spilling water into the TV can result in electric shock. Do not operate the TV if water is spilled into the set. Unplug the power cord from the mains immediately and have the set checked by a qualified technician.

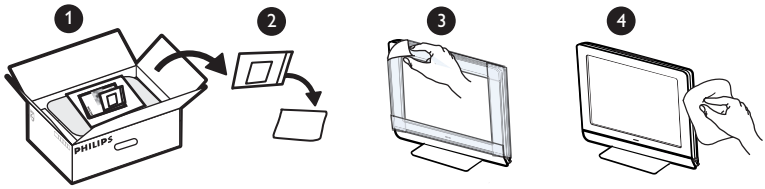


Pull the power lead by the plug. Do not pull on the power lead. Do not use a poor fitting mains socket. Insert the plug fully into the mains. If it is loose, it may cause arching and result in fire.

Electric, Magnetic and Electromagnetic Fields ("EMF")

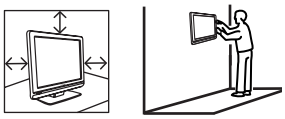
- Philips Royal Electronics manufactures and sells many products targeted at consumers, which, like any electronic apparatus, in general have the ability to emit and receive electro magnetic signals.
- One of Philips' leading Business Principles is to take all necessary health and safety measures for our products, to comply with all applicable legal requirements and to stay well within the EMF standards applicable at the time of producing the products.
- Philips is committed to develop, produce and market products that cause no adverse health effects.
- Philips confirms that if its products are handled properly for their intended use, they are safe to use according to scientific evidence available today.
- Philips plays an active role in the development of international EMF and safety standards, enabling Philips to anticipate further developments in standardisation for early integration in its products.

Preparation / Getting started



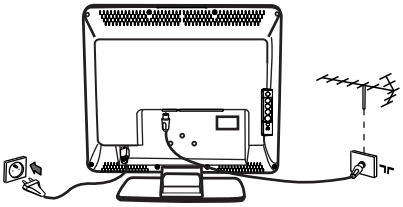
Do not remove the protective sheet until you have completed the stand/wallmounting and connections.
Please handle with care. Use a soft cloth provided to clean the glossy black front of the TV.

1 Positioning the TV set



- If you place the TV set on a surface, ensure the surface is level and that it can withstand the weight of the TV.
- Before you hang your TV on a wall, ensure the wall is suitable to carry the weight of the TV. Installation of the TV set on the wall should be carried out by qualified person. Improper installation can cause the TV to be unsafe.
- The connections do not have to be made before hanging the TV, but the cables must be inserted into connectors of the TV.
- Wherever you place or hang the TV, ensure that air can circulate freely through the ventilation slots. Do not position the TV in a confined space.

2 Connections



If you do not have a cable box or satellite box, follow these instructions:

- Insert the aerial plug into the ⊓⊢ socket at the bottom of the set.
- Insert the mains plug into a wall socket (220-240V 50/60Hz).

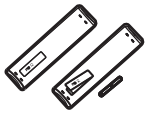
If you are using a cable box or satellite box see “Connecting peripheral equipment” on page 16 to 19.

- The power consumption of the set is given on the type plate at the rear of the TV.

Warning: Verify that the mains supply voltage in your home corresponds to the voltage printed on the sticker at the rear of the TV.

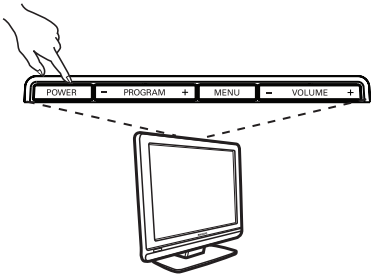
If the TV is mounted on a swivel base or swivel arm, ensure no strain is placed on the power cord when the TV is swivelled. Strain on the power cord can loosen connections. This may cause arcing and result in fire.

3 Using the Remote Control



- Insert the 2 batteries supplied. Ensure that the (+) and (-) ends of the batteries line up correctly (inside of case is marked.)

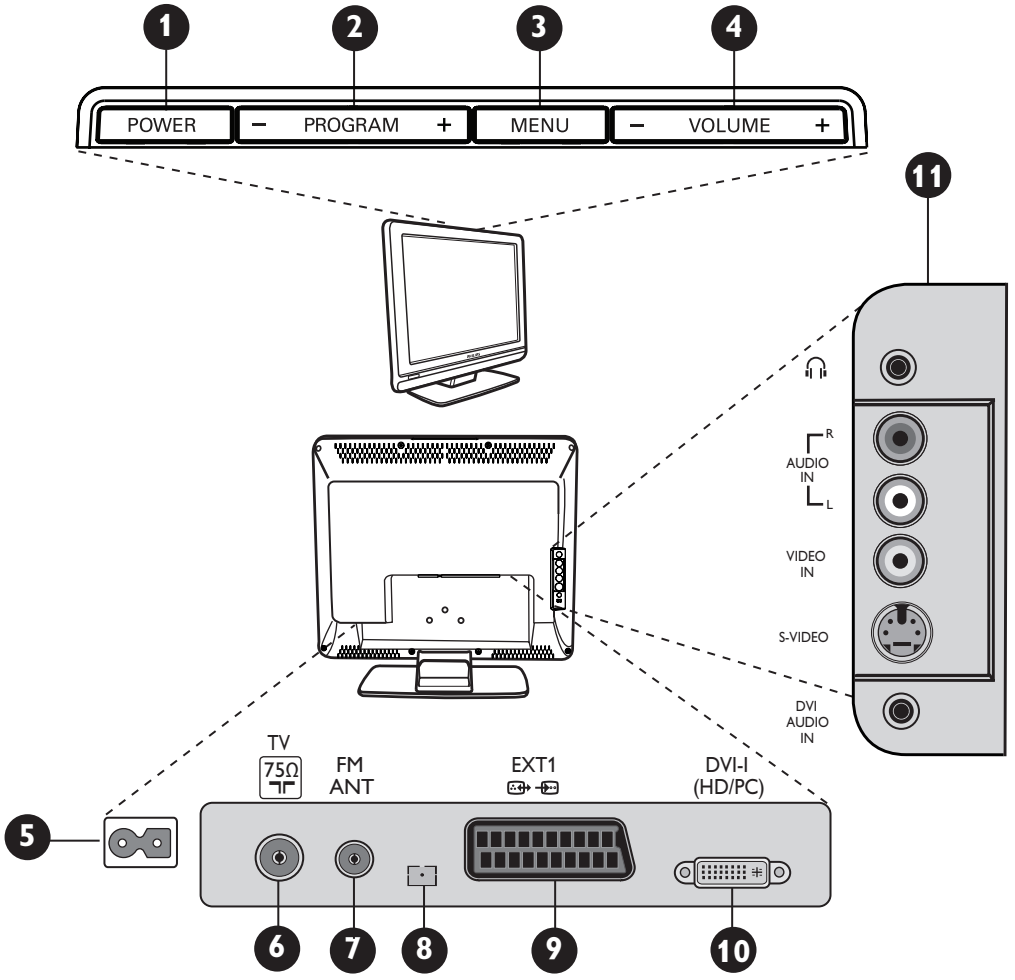
4 Switching on the TV set



- To switch on the TV set, press the POWER button. A green indicator comes on and the screen lights up.
- If the TV set remains in standby mode (red indicator), press the P – / + button on the remote control.

NOTE: Do not leave the TV in standby mode for an extended period of time. Instead, disconnect the TV from the mains.

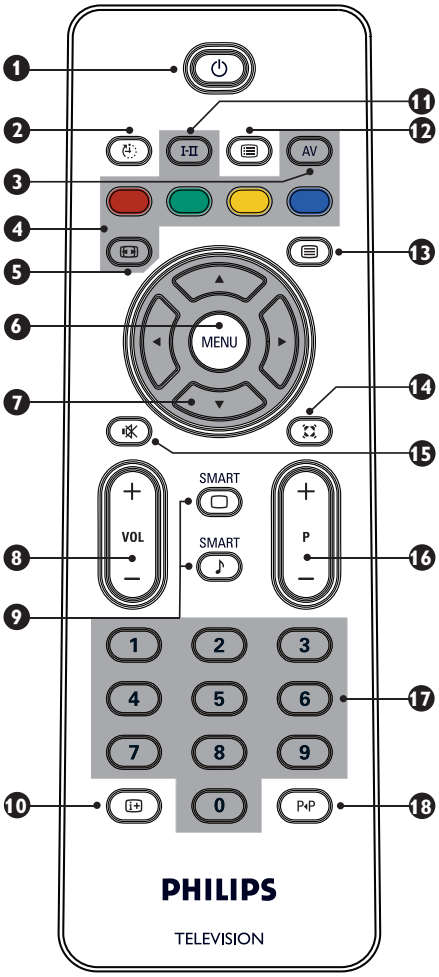
Television keys and connectors



1. **POWER** : to switch the TV on or off.
   Note : The power remains on even when the POWER switch is turned off.
2. **PROGRAM – / +** : to select programmes.
3. **MENU** : to access or close menus. The PROGRAM – / + keys can be used to select a menu item and the VOLUME – / + keys to enter into the selected menu item and make adjustments.
4. **VOLUME – / +**: to adjust sound level.
5. **POWER** socket : Insert the mains plug into a wall socket.
6. **TV Aerial** socket : Insert the aerial plug into the TV Antenna socket.
7. **FM Aerial** socket : Insert the radio aerial lead into the FM Antenna socket.
8. *For Service use only.*
9. **EXT1** socket : for connecting to devices like DVD, VCR, recorder, decoder or games console.
10. **DVI-I (HD / PC)** : for connecting a High Definition (HD) equipment or computer with DVI/VGA output.
11. **Side connections (AV/SVHS)** : for connecting to devices like camera or camcorder. Also allows you to connect your headphone for your personal listening pleasure.

For more information about connections, see page 16 to 19.

Remote Control keys



1 Standby

To set the TV to standby mode. To switch the TV set on again, press , 0 to 9 , P – / + (PROGRAM – / +) or AV key.

2 Sleeptimer

To select a time period before the set switches to standby mode automatically (see page 9).

3 AV AV

To display the Source List to select TV or peripheral equipment connected to EXT1, AV/SVHS, PC, HD or FM Radio.

4 Teletext keys (see page 11)

5 Screen Format **(see page 10).**

6 MENU MENU

To call up or exit the TV menus.

7 Cursors

To select and adjust the menu items.

8 Volume (– VOL +)

To adjust the sound level.

9 Smart Picture / Sound

To access a series of predefined picture and sound setting (see page 9).

10 Screen information

To display/remove the programme number, the sound mode and the remaining time of the sleeptimer.

11 Sound mode I-II

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.*

12 Programme List

To display / exit the list of programmes. Use the ▲ ▼ keys to select a programme and the ▶ key to display it.

13 Teletext key (see page 11).

14 Surround mode

To activate / deactivate the surround sound effect. In stereo, this gives the impression that the speakers are further apart.

15 Mute

Mute or restore sound.

16 Selecting TV programmes (– P +)

To select the next or previous 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.

17 0 / 9 Numerical keys 0 / 9

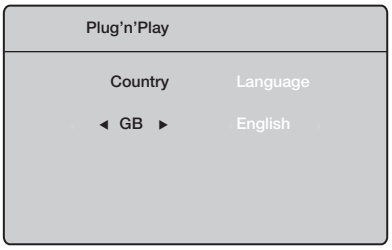
To access programmes directly. For a 2 digit programme number, the 2nd digit must be entered before the dash disappears.

18 Previous/Present programme PIP

To alternate between the last viewed and present programme.

Quick Installation

When you switch 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.



Note

If the above menu is not displayed, proceed to do the installation of channels by the

Auto Store *method (see page 7). If the above menu is displayed, proceed to do the following steps.*

1. Use the ▲ ▼ keys on the remote control to select your country. *If your country does not appear in the list, select ". . . " . Refer to the "Reference table of Countries available for selection" on page 22.*
2. Use the ► key to move to the Language mode and select your language with the ▲ ▼ keys.
3. Use the ► key to start search.

The search starts automatically. All the available TV programmes are stored. This operation takes a few minutes. The display shows the progress of the search and the number of programmes found.

Important : To exit or interrupt the search before it is completed, press the MENU key. If you interrupt search during auto store, not all channels are stored. For all channels to be stored, you need to do a complete auto store search again.

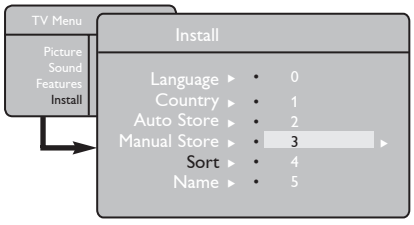
Note

ATS (Automatic Tuning System) feature
If the transmitter or cable network sends the automatic sort signal, the programmes are numbered correctly. In this case, the installation is complete. If this is not the case, you can use the **Sort** menu to number the programmes correctly.

ACI (Automatic Channel Installation) feature
If a cable system or a TV channel which broadcasts ACI is detected, a programme list appears. Without ACI broadcast, the channels are numbered according to your language and country selection. You can use the Sort menu to re-number them.
Some transmitters or cable networks broadcast their own sort parameters (region, language, etc.). In this case, indicate your choice using the ▲ ▼ keys and confirm with ► key.

Programme Sort

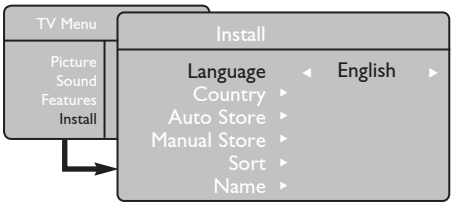
1. Press the MENU key. The **TV Menu** is displayed on the screen.



2. Use the ▼ key, select the **Install** menu and the ► key to enter the **Install** menu.
3. Use the ▼ key to select **Sort** and the ► key to enter sort mode.
4. Select the programme number you want to move by using the ▲ ▼ keys and the ► key to enter sorting mode. (The arrow cursor now points to the left.)
5. Use the ▲ ▼ keys to select the new programme number and confirm with the ◄ key. (The arrow points to the right and sorting is completed.)
6. Repeat steps 4 and 5 for each programme number you wish to re-number.
7. To exit the menu, press the i+ key.

Auto Store

1. Press the MENU key.
2. Using the ▼ key, select **Install** and the ▶ key to enter the **Install** menu (**Language** is highligted).



3. Before you proceed to auto store channels, select your desired menu *__Language__ with the ◄ ► keys.
4. Select **Country** with the ▼ key and use the ◄ ► keys to select the country of your choice.
5. Using the ▼ key, select **Auto Store.** Use the ▶ key to start automatic searching for channels. All the available TV programmes are stored. This operation takes a few minutes. The display shows the progress of the search and the number of programmes found. To exit or interrupt the search, press the MENU key.
6. To exit the menu, press the i+ key.

NOTE : If you interrupt search during auto store, not all channels are stored. For all channels to be stored, you must do a complete auto store search again.

*** Selecting the language**

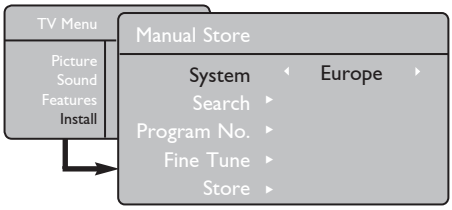
If you have selected the wrong language to operate the set, take the following steps to bring you back to your preferred language :

– Press the i+ key to exit the existing menu.
– Press the MENU key to enter the TV menu.
– Press the ▼ key repeatedly until the **FOURTH** item in the TV menu is highlighted.
– Press the ▶ key to go into the **Install** menu
– Press the ◄ ► keys to select your preferred language (the menu will now appear in the chosen language). You can proceed to install the TV channels automatically.

Manual Store

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

1. Press the MENU key.
2. With the ▼ key, select **Install** and the ▶ key to enter the **Install** menu.
3. Use the ▼ key to select **Manual Store** and the ▶ key to enter Manual Store menu.
4. Use the ▲ ▼ keys to select the items in the Manual Store menu to adjust or activate.

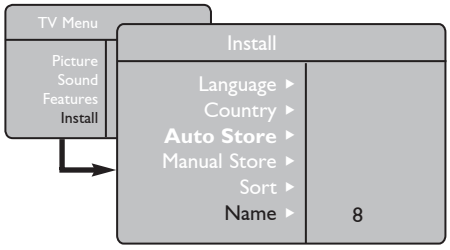


5. **System :** Use the ◄ ► keys to select either
   – **Europe** (automatic detection*),
   – **France** (LL' standard),
   – **UK** (I standard),
   – **West Europe** (BG standard),
   – **East Europe** (DK standard). or
   * *Except for France (LL' standard), you must select* **France**.
6. **Search** :
   Press the ▶ key. The search starts. Once a programme is found, the scanning stops and its name is displayed (if available). Go to the next step. If you know the frequency of the required programme, you can enter it directly by using the 0 to 9 keys.
   If no picture is found, see "Troubleshooting Tips on page 20-21.
7. **Program No.** :
   Enter the required number by using the 0 to 9 or ◄ ► keys.
8. **Fine Tune** :
   If the reception is not satisfactory, adjust it by using the ◄ ► keys.
9. **Store** :
   To store the changes, press the ▶ key . The programme is now stored.
10. Repeat steps 6 to 9 for each programme to be stored.
11. To exit the menu, press the i+ key.

Naming Channels

This menu is used to name channels.

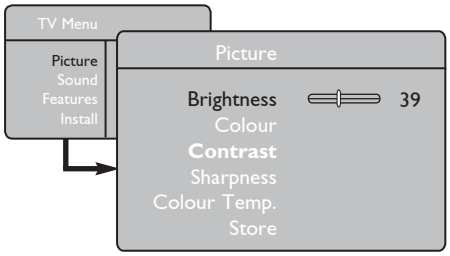
1. Press the MENU key.
2. With the ▼ key, select **Install.** Use the ▶ key to enter the **Install** menu.

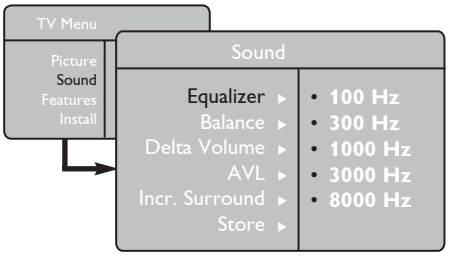


3. Use the ▼ key to select **Name.** Use the ▶ key to enter name mode.
4. Use the ▲ ▼ keys to select the programme you want to name. Use the ▶ key to enter naming mode.
5. Use the ▲ ▼ keys to select the characters (maximum of 5 characters). Use the ◀ ▶ keys to move around the name display area.
6. Press ▶ key until the name appears at the top right hand corner of the TV screen. The name is now stored.

Picture and Sound Settings

1. Press the MENU key.
2. Use the ▲ ▼ keys to select **Picture** or **Sound**.
3. Use the ◀ ▶ keys to enter the **Picture** or **Sound** menu.





4. Use the ▲ ▼ keys to select a Picture or Sound setting. Use the ◀ ▶ keys to adjust the settings.
5. To quit the menu, press the i+ key.

Description of the Picture settings

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 increases or decreases the sharpness level to improve details in the picture.

Colour Temp. : this changes the colour rendering: Cold (bluer), Normal (balanced) or Warm (redder).

Store : to store the picture adjustments and settings.

Description of the Sound settings

Equalizer : to adjust the sound tone (from bass: 100 Hz to treble : 8000 Hz).

Balance : this balances the sound on the left and right speakers.

Delta Volume : this is used to compensate for any volume differences between the different programmes or EXT sockets. **Note** : Programmes 0 to 40 have individual volume setting. Programmes 41 and above share common setting.

AVL (Automatic Volume Leveller) : this is used to limit sudden increases in sound, especially on programme change or advertising slots.

Incr. Surround : select between Incredible Surround and Stereo when in stereo transmission. Select between Mono and Spatial when in mono transmission .
You can also access these settings by using the ⌘ key.

Store : this is used to store the sound settings.

Using the Contrast+ and Sleeptimer Features

1. Press the MENU key.
2. Use the ▼ key, select **Features**. Use the ► key to enter the **Features** menu.
3. Use the ▲ ▼ keys to select a Feature setting. Use the ◄ ► keys to select an option or setting.
4. To quit the menu, press the i+ key.

Definition of the feature settings

Contrast+ :
– optimise the total contrast of the picture for improved picture visibility.
– select **On** option to activate feature.

Sleep :
– select a ***time period** at which you want the set to switch to standby mode automatically.
– select **Off** option to deactivate feature.

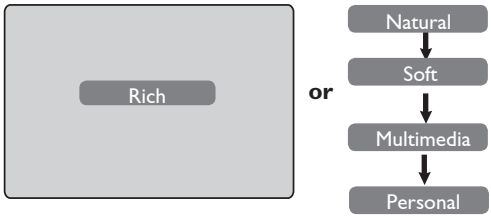
***time period**
• 15, 30, 45 or 60 minutes.
• 90 or 120 minutes.
• 180 or 240 minutes

NOTE : During the last minute of a Sleep time setting, an on-screen countdown will be displayed. Pressing any button on the remote control cancels the Sleep feature.

Using the Smart Picture and Sound Features

The **Smart Picture** feature offers you the following picture settings : **Rich, Natural, Soft, Multimedia,** and **Personal**.

Press the SMART button repeatedly to select your desired mode.



Definition of Picture Settings

Rich : Brilliant and sharp picture settings suitable for bright environment and for use in demonstrations to show off the quality of the TV on good sources.

Natural : Reference mode for living room conditions and average signals.

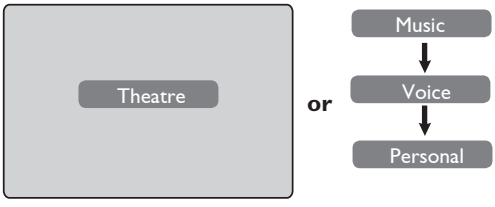
Soft. : Intended for bad-quality signals. Suitable for living room viewing.

Multimedia : Best for graphical applications.

Personal : Pictures settings are set to your preference.

The **Smart Sound** feature offers you the following sound settings : **Theatre**, **Music**, **Voice**, and **Personal**.

Press the SMART button repeatedly to cycle through the settings to select your desired mode.



Definition of Sound Settings

Theatre : Emphasize sensation to action (Bass and Treble boosted).

Music : Emphasize low tone (Bass boosted).

Voice : Emphasize high tone (Treble boosted).

Personal : Sound settings are set to your preference.

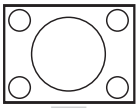
NOTE : The Personal setting is configured by using the Picture/Sound menu in the main menu. This is the only setting in the Smart Picture/Sound settings that can be changed. All other settings are pre-set at the factory.

Screen 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 left and right of the screen. This function allows you to optimise the picture display on screen.

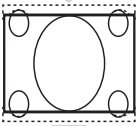
If your television is a 4:3 screen

Press the ⊞ key (or ▲ ▼) to select the different modes.



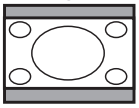
4:3

This format is recommended if you want to display the 4:3 picture using the full surface of the screen.



Expand 4:3

When this format is selected, the picture is vertically expanded, thus reducing the horizontal black bars.

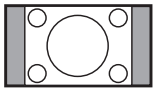


Compress 16:9

The format is recommended if you want to compress full screen movie images into letterbox format. When this format is selected, black horizontal bars can be seen at the top and bottom of the TV screen.

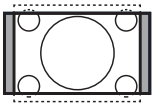
If your television is a wide screen

Press the ⊞ key (or ◄ ►) to select the different modes. This TV set is also equipped with automatic switching which will select the correct screen format, provided that the specific signals are transmitted with the programmes.



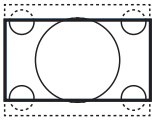
4:3

The picture is reproduced in 4:3 format and a black band is displayed on either side of the picture.



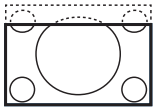
Zoom 14:9

The picture is enlarged to 14:9 format, a thin black band remains on both sides of the picture.



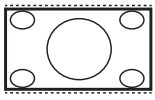
Zoom 16:9

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).



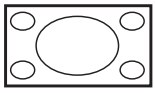
Subtitle Zoom

This mode is used to display 4:3 pictures using the full surface of the screen leaving the sub-titles visible.



Superwide

This mode is used to display 4:3 pictures using the full surface of the screen by enlarging the sides of the picture.

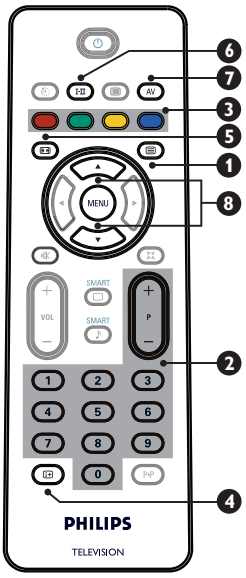


Widescreen

This mode displays images in full screen.

Teletext

Teletext is an information system that is broadcast by certain channels. Teletext can be consulted like a newspaper. Teletext also offers access to subtitles for viewers with hearing problems or who are not familiar with the transmission language.



1 Teletext On/Off and Superimpose teletext page over TV programme

Press the button once to switch on the teletext display. The summary appears with a list of items that can be accessed. Select a channel in which teletext is transmitted. Press the button a second time to superimpose the teletext page over the TV programme. Press the button a third time to exit teletext mode.

2 Selecting a page

Enter the number of the page required by using the **0** to **9** keys or **P – / +** keys. For example, to access page 120, enter 120. The number is displayed at the top left corner of the screen. When the page is located, the counter stops searching. Repeat this operation to view another page. If the counter continues to search, this means that the page is not transmitted. Select another number.

3 Direct access to the items

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

4 Contents

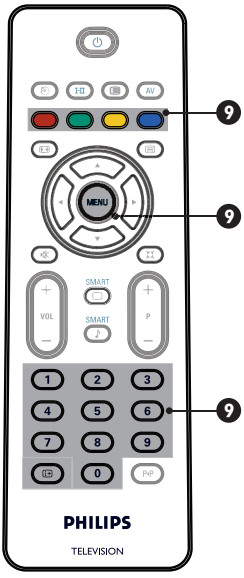
To return you to the contents page (usually page 100).

5 Stop or resume sub-page display

Certain pages contain sub-pages which are automatically displayed successively. This key can also be used to stop or resume sub-page display in teletext mode. The indication appears on the top left side.

6 Double page teletext

To activate or deactivate the double page teletext display mode. The active page is displayed on the left and the following page is displayed on the right. Press to hold a page (i.e. the contents page). The active page is then displayed on the right. To return to normal mode, press the key. **NOTE** : Applicable to 16:9 sets only.



7 Hidden information

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

8 Enlarge a page

To allow you to display the top or bottom part of the page. Pressing again will return the picture to normal size.

9 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. Those can then be accessed by using the coloured keys. Once set, these favourite pages will become the default every time teletext is selected.

1. Press the MENU key to change to favourite pages mode.
2. Use the 0 / 9 keys to enter the teletext page that you want to store as a favourite page.
3. Press the coloured keys of your choice for 3 seconds. The page is now stored.
4. Repeat steps 3 to 4 with the other coloured keys.
5. To exit favourite page mode, press the MENU key.
6. To exit teletext mode, press the key twice.

Using the TV as a PC Monitor

NOTE

- **When using the TV as a PC monitor, slight diagonal interference lines may be observed when it is operated under electromagnetic interference environment. This does not affect the performance of the TV.**
- **For better performance, use a good quality DVI cable.**

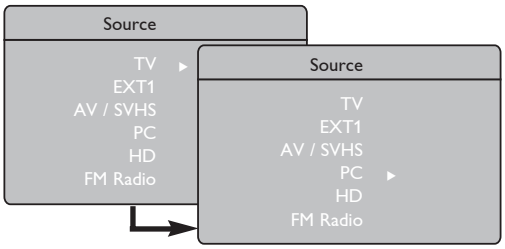
IMPORTANT

For the TV to function as PC monitor, the following step must be taken :

The **DVI-I** input of your TV **MUST** be connected to the **DVI** output of the PC. Device with only VGA connector can be connected with a VGA to DVI adaptor. For more information on connection, see page 16.

Choosing PC mode

1. Press the AV key on the remote control to display the **Source List**.



2. Use the ▲ ▼ key to select **PC.** Use the ► key to switch the TV to PC mode.
3. To return to TV mode, press the AV key, select **TV** and confirm with the ► key.

Using the PC menus

1. Press the MENU key to display the PC menu.
2. Use the ▲ ▼ keys to access the settings. Use the ◄ ► keys to select or adjust the setting. (The settings are automatically saved).

PC menu settings

- **Picture** :
  - **Brightness / Contrast**: to adjust the brightness and contrast.
  - **Horizontal / Vertical***: to adjust the horizontal and vertical placing of the image.
  - **Colour Temp** : this changes the colour rendering : **Cool** (bluer), **Normal** (balance) or **Warm** (redder).
- **Audio Selection** : to choose the sound reproduced on the TV (TV, PC or FM).
- **Features**:
  - **Phase/Clock*** : eliminates the horizontal (**Phase**) and vertical (**Clock**) interfering lines.
  - **Format** : For widescreen set, you can choose between full screen or native format. For 4:3 set, only Native format is available.
  - **Auto Adjust*** : Picture position and Phase/Clock are set automatically.
- **Reset To Factory Setting**: to return to the factory settings (default settings).

* *These adjustments are only available when connected to a computer with VGA output.*

Supported PC display format

Analogue and Digital PC mode		20"/51cm	23"/58cm
		4:3	16:9
		VGA	WXGA
	Resolution		
1	640 x 350	√	X
2	640 x 480	√	√
3	800 x 600	X	√
4	832 x 624	X	X
5	1024 x 768	X	√
6	1280 x 768	X	√

√ Supported X Not Supported

Using the TV in High Definition (HD) Mode

HD Mode

The High Definition (HD) mode allows you to enjoy clearer and sharper pictures through the DVI-I input if you are using a HD receiver/ equipment that can transmit high definition programming.

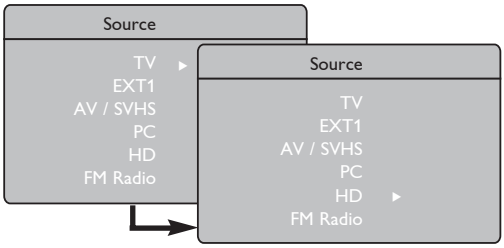
IMPORTANT

For the TV to function in HD mode, the following steps must be taken :

1. Connect the DVI output of your HD receiver to the DVI-I In of the TV.
   If your HD equipment has only a HDMI connector, a DVI to HDMI cable is needed.
2. Connect the Audio (Red and White) outputs of the HD receiver to the DVI Audio Inputs of the TV. For more information about connection, see page 18.

Choosing HD mode

1. Press the AV key on the remote control to display the **Source List**.



2. Use the ▲ ▼ keys to select **HD** and the ► key to switch the TV to HD mode.
3. To return to TV mode, press the AV key, select **TV** and confirm with the ► key.

Using the HD menus

1. Press the MENU key to display the HD menu.
2. Use the ▲ ▼ keys to access the settings. Use the ◄ ► keys the to select or adjust setting.

HD Install menu

NOTE : You cannot access **Install** in the HD menu There is **NO** Install function in HD mode.

HD Picture and Sound settings

HD Picture and Sound settings are the same as the TV Picture and Sound settings. For information about HD Picture and Sound settings, see Picture and Sound settings on page 8..

HD Features

- **Sleep** : Refer to "Using the Sleeptimer feature" on page 9.
- **Horizontal Shift** : to adjust the horizontal position of the image.

Supported HD display format

Analogue and Digital HD mode		20'/51cm		23'/58cm	
		4:3		16:9	
		VGA		WXGA	
	Signal Format	Analogue	Digital	Analogue	Digital
1	SDTV 480i	√	X	√	X
2	SDTV 576i	√	X	√	X
3	EDTV 480p	√	√	√	√
4	EDTV 576p	√	√	√	√
5	HDTV 720p	√	X	√	√
6	HDTV 1080i	X	X	√	√

√ Supported X Not Supported

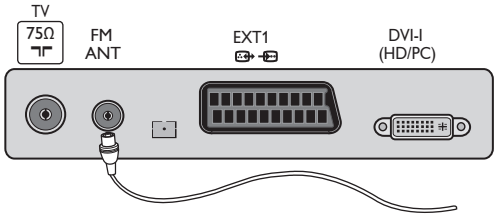
Using the TV as an FM Radio

Your TV can be used as an FM Radio.

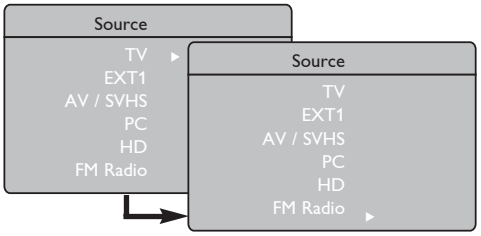
IMPORTANT

For the TV to function as a FM Radio, the following steps must be taken :

1. Connect the Radio aerial lead to the **FM Antenna** at the rear of the TV.



2. Press the AV key on the remote control to display the **Source List**.

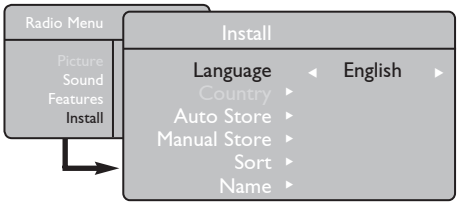


3. Use the ▲ ▼ keys to select **FM Radio**. Use the ► key to switch the TV to FM Radio mode.

4. To return to TV mode, press the AV key, select **TV** and confirm with the ► key.

Using the FM Radio menus

1. Press the MENU key to display the **FM Radio** menu.



2. Use the ▲ ▼ keys to access the settings and the ◄ ► keys to select or adjust the settings.

NOTE : You cannot access the **Picture** setting in the FM Radio menu There is **NO Picture** function in FM Radio menu.

FM Radio menu settings

• **Install**

– **Language** : Select your preferred on-screen menu language.

*** Selecting the language**

If you have selected the wrong language and do not understand the language to operate the set, take the following steps to bring you back to your preferred language.

– **Auto Store** : Install the FM Radio stations automatically (complete search).

NOTE : If you interrupt search during auto store, not all channels will be stored. For all FM Radio channels to be stored, you need to do a complete auto store search again.

– **Manual Store** : Install the FM Radio stations manually (station by station search). Select **Programme No.** with the ▼ key. Enter your preferred programme number with the ◄ ► keys.

To ensure the installation is activated, select **Store** and press the ► key . The FM Radio channel is now stored.

– **Sort** : This feature works in exactly the same way as the TV Sort function (see page 6).

– **Name** : This feature works in exactly the same way as the TV Name function (see page 8).

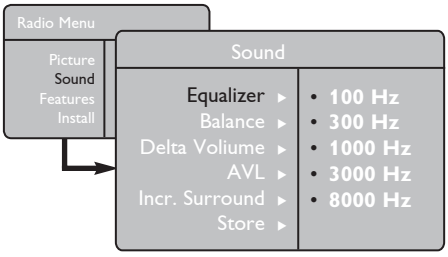
NOTE : You cannot access the **Country** setting in the FM Radio menu. There is no **Country** function in FM Radio Install menu.

Using the TV as an FM Radio

Using the FM Radio menus

• **Sound**

The functions of the FM Radio Sound settings are the same as the TV Sound settings. For information about the TV Sound settings see page 8.



NOTE : You cannot access the **Delta Volume setting** in the FM Radio menu. There is no **Delta Volume** function in FM Radio Sound menu.

• **Features**

– **Screen Saver** : Select the "**On**" option to activate the screen saver function. Select the "**Off**" to deactivate function.

• **Sleep** : Refer to "Using the Sleeptimer feature" on page 9.

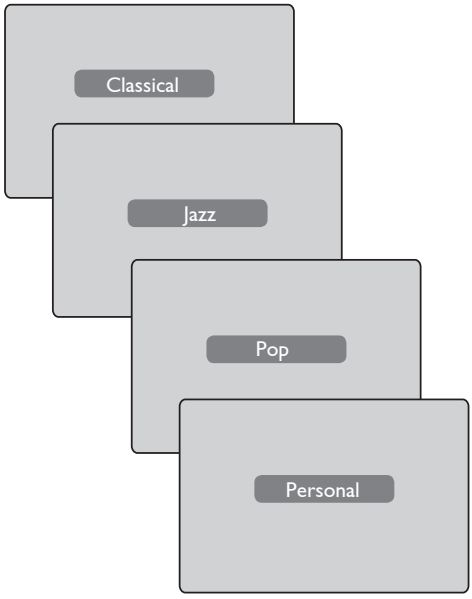
Using the FM Radio Sound Features

The **FM Radio Smart Sound** feature offers the following sound modes : **Classical**, **Jazz**, **Pop** and **Personal**.

The **Classical**, **Jazz** and **Pop** are pre-determined in the factory. The way you select the desired frequencies in the Sound menu is the **Personal** mode. After selecting the desired frequencies, select **Store** and press the ▶ key to store your personal settings.

The functions of FM Radio Sound settings are the same as the TV Sound settings. For information about the TV Sound settings see page 8.

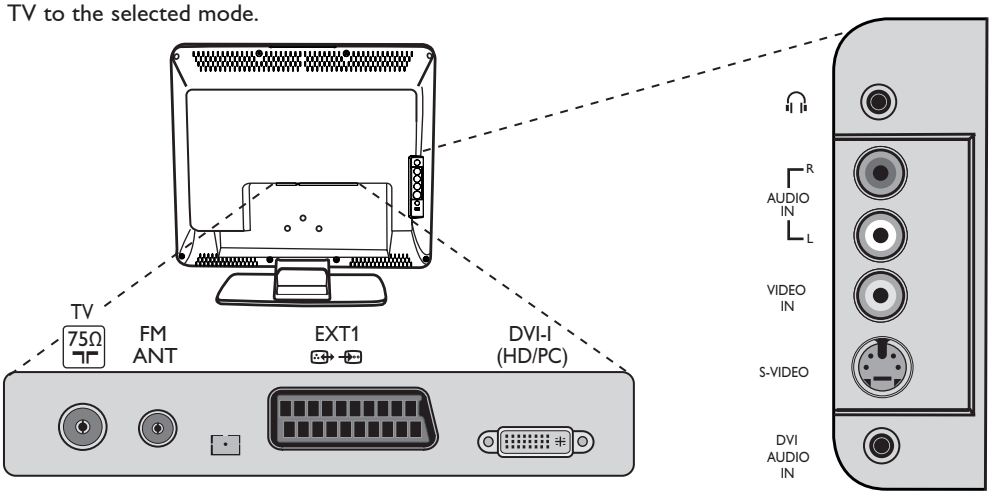
Press the SMART ♪ button repeatedly to cycle through the settings to select your desired mode.



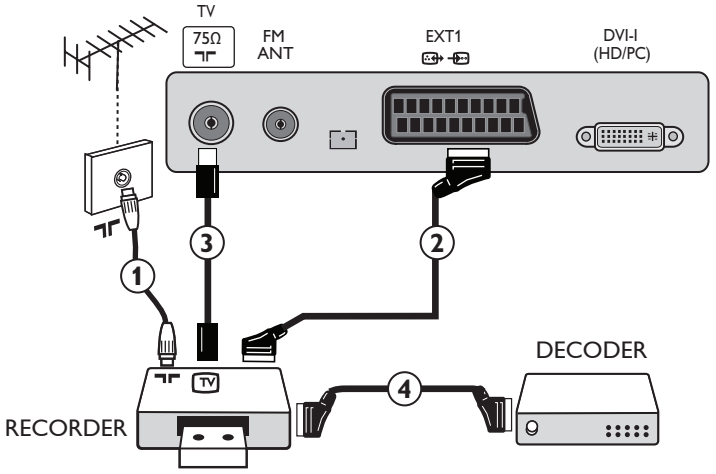
Connecting Peripheral Equipment

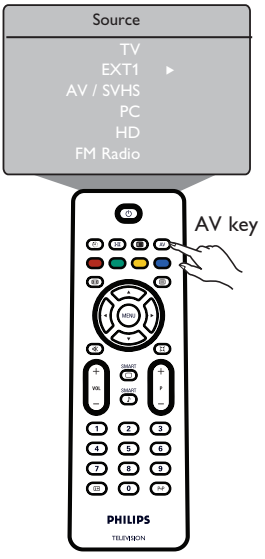
The diagram below shows the sockets on the TV.

Press the AV key on the remote control to display **Source List.** Use the ▲ ▼ keys to select **EXT1**, **AV/SVHS**, **PC**, **HD or FM Radio** according to the equipment you have connected. Use the ▶ key to switch the TV to the selected mode.



Connecting a DVD Recorder or VCR Recorder





Connect the aerial cable ①. Use a good quality euroconnector cable ② to obtain the optimum picture quality. If your recorder does not have a euroconnector socket, the only connection possible is via the aerial cable ③. You will therefore need to tune in your video recorder's test signal and assign it programme number 0 or store the test signal under a programme between 90 and 99 (see Manual Store on page 6). See also the handbook of your recorder.

Press the AV key to display **Source List** and use the ▲ ▼ keys to select **EXT1**. Use the ▶ key to switch to the selected source.

Decoder with Recorder

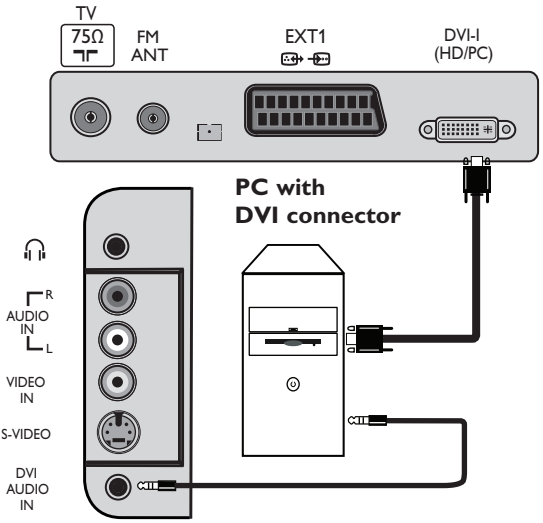
Connect a eurocable ④ to your decoder to the second euroconnector socket of your recorder. See also the handbook of your recoder. You can also connect your decoder directly to **EXT1** with a eurocable.

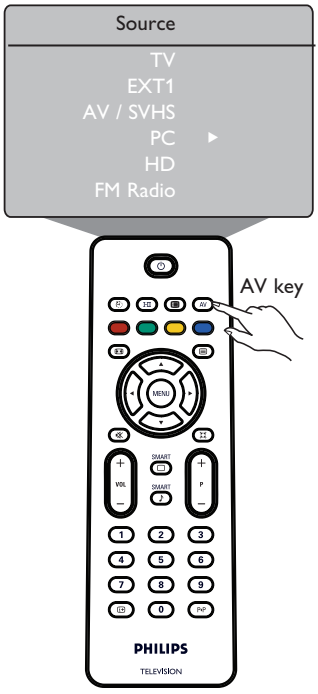
IMPORTANT : In order to connect your Canal + decoder, please use **EXT 1** scart only.

Connecting Peripheral Equipment

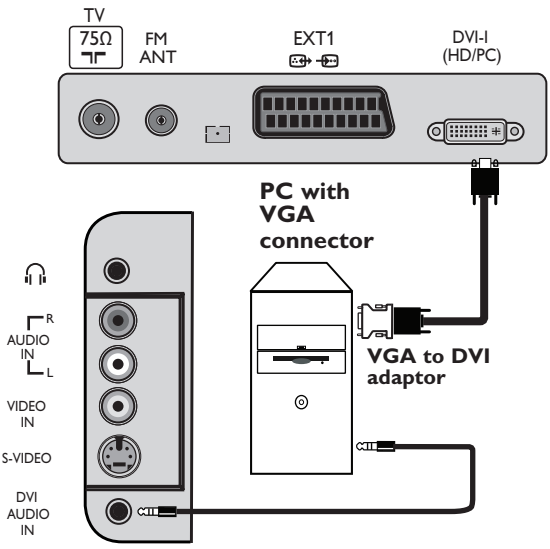
Connecting a Computer

DVI (PC) to DVI-In (TV) connection





VGA (PC) to DVI-In (TV) connection



❶ Connect the DVI output of your computer to the DVI-I In of the LCD TV. If your computer does not have a DVI output, use a DVI to VGA cable to connect to the PC.

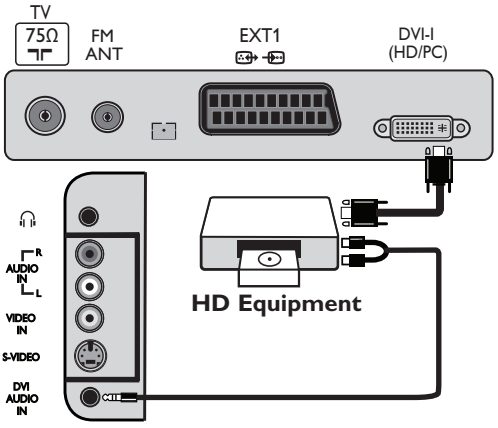
❷ Connect the computer audio output to the DVI AUDIO IN of the TV.

❸ Press the AV key to display **Source List** and the ▲ ▼ keys to select **PC**. Use the ► key to switch to the selected source.

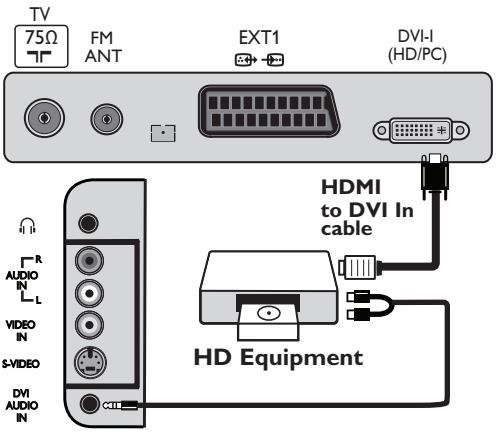
Connecting Peripheral Equipment

Connecting the High Definition (HD) Equipment

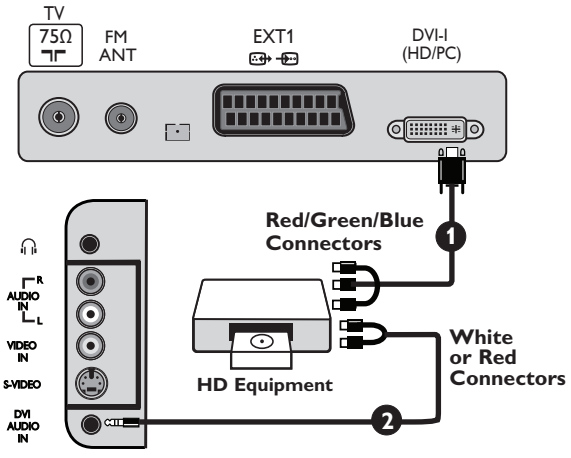
DVI to DVI-In connection

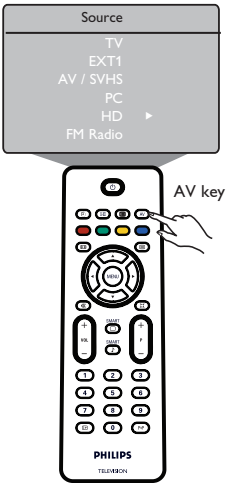


HDMI to DVI-In connection



CVI to DVI-In connection





If you are using a High Definition equipment that can produce high definition signals, the TV can accept those signals by carrying out the connections below.

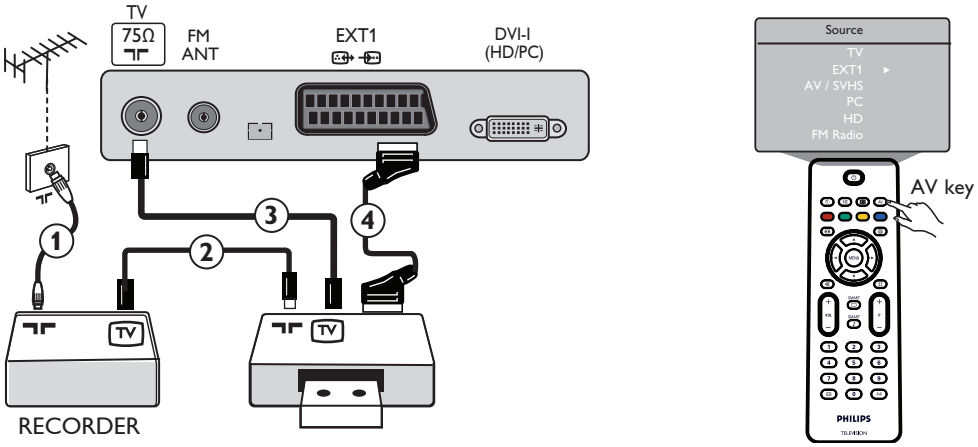
❶ Connect **DVI / CVI** output of your HD equipment to the **DVI-I** input of the LCD TV. If your HD equipment has only a HDMI connector, a DVI to HDMI adaptor cable is needed (see above diagrams).

❷ Connect the Audio (Red and White) outputs of the HD receiver to the **DVI Audio In** of the TV.

❸ Press the AV key to display **Source List** and the ▲ ▼ keys to select **HD**. Use the ► key to switch to the selected source.

Connecting Peripheral Equipment

Connecting Other Equipment (Satellite receiver. decoder, game console, etc.)

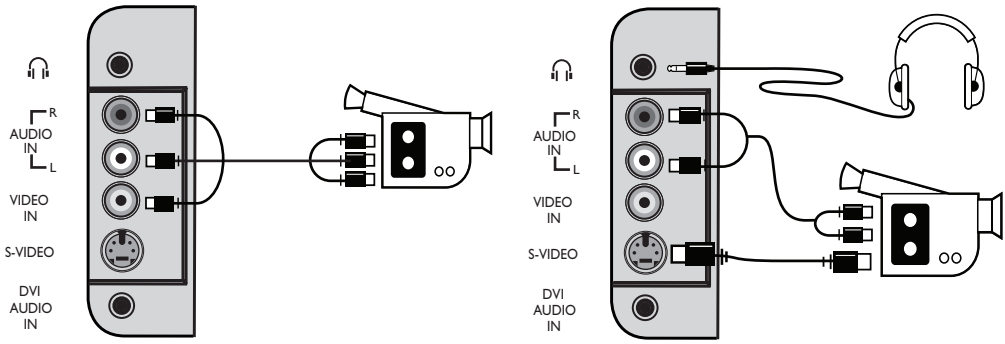


❶ Connect the aerial cables ①, ② and ③ as shown (only if your peripheral has TV aerial in-/output). Connect either equipment with a eurocable ④ to EXT1 to obtain a better picture quality.

❷ Look for the test signal of your peripheral in the same way as you do for your recorder.

❸ Press the AV key to display **Source List** and use the ▲ ▼ keys to select **EXT1**. Use the ▶ key to switch to the selected source.

Connecting the camera, camcorder, headphone



Camera or Camcorder

❶ Connect your camera or camcorder as shown.

❷ Connect to **VIDEO IN** (Yellow) and **AUDIO L** (White) for mono equipment. For stereo equipment, connect the **AUDIO R** (Red) as well. If you have an equipment with **S-VHS** connector, connect the S-Video cable to the **S-VIDEO** input instead of the **VIDEO IN** input.

NOTE : **S-VIDEO** connection will override the **VIDEO IN** connection if both are connected at the same time.

❸ Press the AV key to display **Source List** and use the ▲ ▼ keys to select **AV / SVHS.** Use the ▶ key to switch to the selected source.

Headphone

❶ Insert the plug into the headphone socket as shown.

❷ To achieve optimum performance, headphone impedance should be between 32 and 600 Ohms.

Note : The sound from the TV will be muted. You can only hear the sound from the headphone.

Troubleshooting Tips

Below is a list of symptoms you may encounter with your TV. Before you call for service, make these simple checks.

Symptom	Possible Causes	What you should do
No display on screen	• Faulty power supply • TV's Power not turned on	• Check whether power cord is properly connected into the mains socket and to your TV. If there is still no power, disconnect plug. Wait for 60 seconds and re-insert plug. Switch on TV again. • Press the POWER key on the TV.
Poor reception (snowish picture and noise	• Faulty antenna connection • Weak transmission • Wrong TV system	• Check antenna connection at rear of TV. • Try manually adjusting your picture (refer to page 7). • Have you chosen the right TV system? (refer to page 7).
No picture	• Faulty aerial and cable • Wrong source selected.	• Check whether euroconnector cables or aerial sockets are properly connected. • Check whether the source is correctly selected. Press (AV) button to enter Source list and select the correct source.
No sound on certain channels	• Wrong TV system	• Check whether the correct TV system is selected (refer to page 7).
No sound	• Zero volume level • Sound muted • Headphone is connected.	• Try increasing volume. • Check that the mute (🔇) mode is not on. If mute mode is on, press the (🔇) key to deactivate mute mode. • Aim remote control directly at sensor on front of TV. • Disconnect headphone connection.
Sound interference	• Electrical appliances interference	• Try switching off any electrical appliances, for example, hairdryer, vacuum cleaner that are in use.
Unable to understand the language on screen to operate set	• Wrong language selected accidentally	• Press the (i+) key to exit menu from screen. Press the (MENU) key to enter main menu. Use the ▼ key to select the **fourth** item on the main menu. Use ▶ key to enter into the next menu level and the ◀ ▶ keys to select correct language.
TV not responding to Remote control	• Wrong placement of batteries • Flat batteries	• Check batteries are placed correctly in the right direction. • Try changing the batteries.
Occasional appearance of red, blue, green and black spots on screen	• Characteristic of liquid crystal panel	• This symptom is not a problem. The liquid crystal panel is built with very high precision technology giving you the fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of red, blue, green or black. Note that this does not affect the performance of the set.
Intermittent or flickering picture on in HD mode	• * HDCP (see glossary) authentication failed	• Noise is displayed if the connected digital equipment's (DVD player or set-up box) *HDCP authentication failed. Check user manual for the digital equipment you are connecting. • Use a standard HDMI to DVI cable.
No sound or picture but front panel red light is on	• Set on standby mode	• Press the (⏻) key.

Troubleshooting Tips

Symptom	Possible Causes	What you should do
Cannot access Install menu	• In AV, EXTERNAL or HD mode	• Press AV key and select TV mode. You can now access the Install menu by using the Menu key.
PC modes do not work	• Wrong connections • Wrong source selected. • Wrong display resolution • Wrong setting of PC graphic card	• Check whether connections are correct. (see "Connecting your Computer" on page 17). • Check whether the source is correctly selected. Press (AV) button to enter Source list and select the correct source. • Check whether you have configured the computer on a compatible display resolution (see "Connecting your Computer" on page 17). • Check graphic card setting of PC.
S-Video colour becomes faint	• Wrong detection of signal	• Check whether power cord is properly connected • Press the **P +** key on the remote control to do a channel up and then press up **P –** key control to do a channel down.
Black bar on top and bottom of screen in PC mode	• PC refresh rate too high	• Change PC refresh rate to 60 Hz.

Glossary

DVI (Digital Visual Interface) : A digital interface standard created by the Digital Display Working Group (DDWG) to convert analog signals into digital signals to accommodate both analog and digital monitors.

VGA (Video Graphics Array) : a common standard graphics display system for PCs.

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.

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

HDMI (High-Definition Multimedia Interface) : Provides an uncompressed, all digital audio/video interface between the TV and any HDMI-equipped audio/video component, such as set-top box, DVD player and A/V receiver. HDMI supports enhanced or high-definition video plus two-channel digital audio.

System : Television pictures are not broadcast in the same way in all countries. There are different standards: BG, DK, I, and LL'. The System setting (p. 6) 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.

HDCP (High-bandwidth Digital-Content Protection): HDCP encrypts the transmission of digital content between the video source or transmitter such as a computer, DVD player or set-top box and the digital display or receiver such as a monitor, television or projector.

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