

**Rear-projection TV
with HD Input**

***Your Television's
Directions for Use***

43PP8541

50PP8541

Let's make things better.



PHILIPS

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Thank you for purchasing this television set. You are now the proud owner of a Philips TV, which promises full value to you as a customer. Please read this manual carefully and thoroughly for help with installation and operation.

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SAFETY INFORMATION

Disconnect mains plug when :

- the red light below the TV screen is flashing continuously
- a bright white line is displayed across the screen
- cleaning the TV screen (never use abrasive cleaning agents; use a slightly damp chamois leather or soft cloth)
- a lightning storm is occurring
- the set is left unattended for a prolonged period.

Never attempt to repair a defective TV yourself. Always consult a skilled service person.

Battery Usage CAUTION :

To prevent battery leakage which may result in bodily injury or damage to the remote :

- Install ALL batteries correctly, + and – as marked on the remote control.
- Do not mix batteries : (OLD and NEW or CARBON and ALKALINE, etc.).
- Remove batteries when the remote is not used for a long time.

PRODUCT HIGHLIGHTS

Philips HD Pix Optics System answers the demand for extreme resolution HD with cutting-edge processing and display technology, including microphosphor CRTs, hybrid projection lenses, first-surface mirrors, fine-pitched lenticular screens, and Philips wideband amplifier.

Auto IntelliSense® Focus Automatically adjusts the picture convergence at the push of a key. After reviewing a special test pattern, optical sensors send position information to the controller, which then corrects the picture. Auto IntelliSense® Focus responds to the natural and man-made magnetic field conditions where the projection TV is located, so you always enjoy the best possible picture.

100Hz Digital Scan eliminates picture flickering and line jitter, offering a stable picture for relaxed viewing (no eye strain). The 100Hz digital scan option can be selected in the onscreen menu.

Progressive Scan doubles the number of visible picture lines per field by displaying all picture frame lines at once. This minimizes the visibility of the scan lines. The progressive scan option can be selected in the onscreen menu.

High-definition Inputs allow you to connect digital equipment with 1080i and 480p signals for 60Hz and 576p signals for 50Hz. The AV4 sockets are for YPbPr or RGB+HV sync connections, plus audio. The AV5 sockets are for RGB (or YPbPr with adaptor) DB15 connections, plus audio.

Component Video Inputs support advanced video input—such as DVD video—for superb colour performance.

Active Control™ continuously measures and corrects all incoming signals with automatic digital noise reduction and auto sharpness to provide the best possible picture.

Automatic Phosphor Aging Compensation (APAC™) functions like a screen saver for your TV. Nonmoving images can be bad for a television screen. If a video image remains stationary, it can eventually leave a permanent after-image. Video games and the stationary black bars around some movies are examples of sources of concern. Philips APAC technology addresses this problem. Periodically, APAC automatically shifts your television picture in increments that are very small and yet large enough to blur image retention that can lead to screen burn. Coupled with the Philips Auto Screen Format feature, APAC helps provide you protection from the dreaded screen burn.

Protective Screen Filter (if provided; availability varies) gives the best possible picture while still protecting your investment. Specifically formulated by Philips for HD displays, this protective screen filter helps prevent accidental damage to the delicate front lenticular screen.

Dolby® Virtual Surround uses two speakers to simulate the surround effect produced by a multichannel system.

Digital Comb Filter makes the finest colour details purer and sharper. It eliminates disturbing cross-colour (Moiré) effects between different colours that you normally see with striped clothing worn on camera. The digital comb filter works by electronically separating the chroma (colour) and luminance (black and white) components of the TV signal, preventing cross-colour interference.

Supporting Features

- **Digital Colour Transient Improvement (CTI)**
- **Digital Histogram**
- **Auto Aspect Ratio Adaptation (and 16:9 compress, expand 4:3)**
- **Incredible Surround™**
- **Automatic Volume Leveler (AVL)**
- **Independent Headphone Volume Control**
- **Easy Tune™ (Auto Search, Auto Tune, and Auto Install)**
- **Alternate Channel**
- **Smart Surf**
- **Low-power standby (<1 W)**

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INSTALLING THE TV

- 1 The major benefit of this projection television is its large viewing screen. To see the large screen at its best, test various locations in the room to find the optimal spot for viewing.

Be sure to allow a minimum of 15 cm of space around the TV.

To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot—for example, in direct sunlight or near a heating appliance.

Magnetic fields, such as those of external speakers, may cause the picture to distort if the speakers are placed too close to the television. Move the magnetic field source away from the TV until there is no picture distortion.

- 2 Insert the aerial plug firmly into the ANTENNA IN 75Ω socket at the rear of the set.

- 3 Insert the mains plug in the wall socket. Refer to the back of the TV set for the correct operation voltage. Consult your local dealer if your main supply is different. To prevent damaging the mains (AC) cord, which could cause hazard, do not place the TV on the cord.

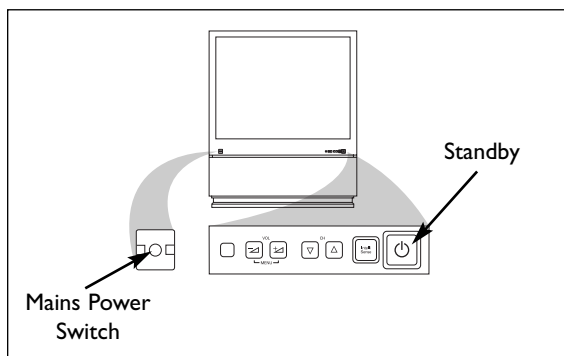
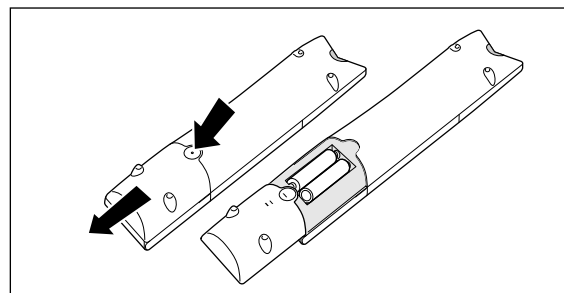
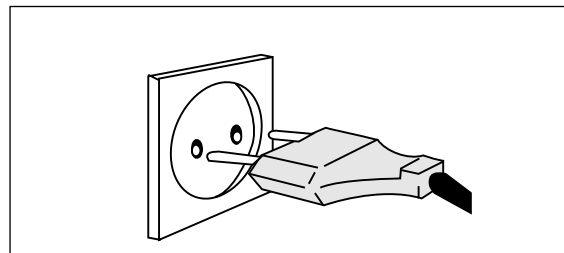
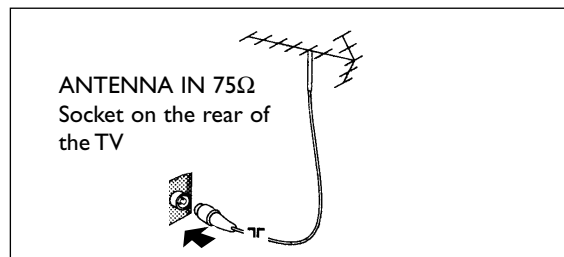
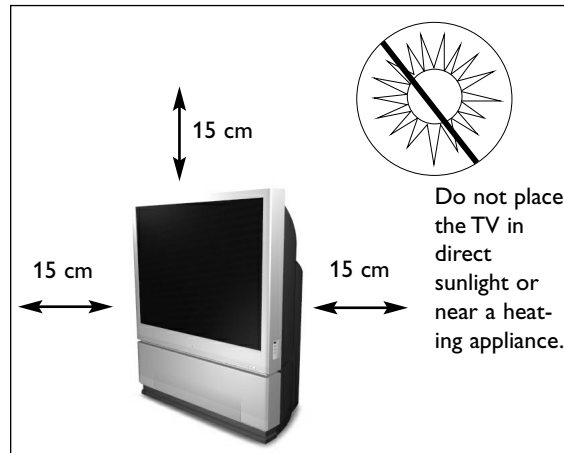
- 4 Remove the cover of the battery compartment on the remote control. Insert the two batteries supplied (Type R6-1.5V).

The batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless, in many countries exhausted batteries may not be disposed of with your household waste. Please check on how to dispose of exhausted batteries according to local regulations.

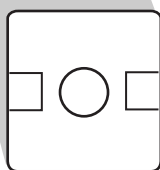
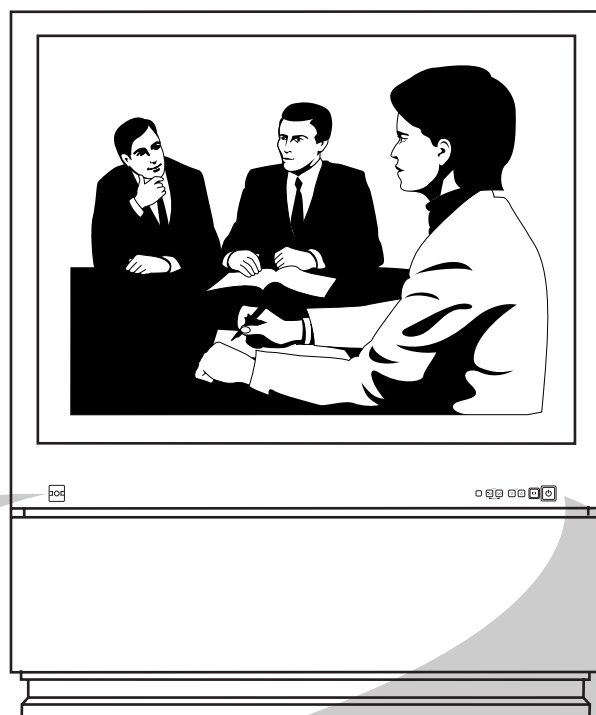
See the battery caution statement on page 2.

Note : This remote control functions with TVs that use the RC5 signalling standard.

- 5 Switch the TV on : Press the mains power switch on the front of the TV. If the Standby key is lighted, press the CH +/- keys, digit keys, or the Standby key on the remote control. Or press the Standby or CH keys on the front of the TV.



USING THE TV KEYS











MAINS POWER KEY

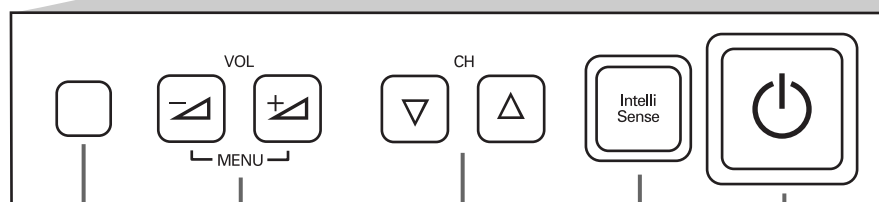
Switches the mains power on or off.

REMOTE SENSOR

Receives infrared commands to activate controls when the remote-control handset is aimed at it and remote keys are pushed.

VOL / MENU

The  key adjusts the sound volume softer. The  key adjusts the sound volume louder. Pressing  and  simultaneously displays the onscreen TV menu. With a menu item selected, pressing the  or  key allows entry to activate the item. Pressing  and  simultaneously and repeatedly exits the onscreen menu.







STANDBY

Switches the TV on or activates standby mode.

IntelliSense

When pressed, automatically adjusts the set's picture convergence using the Auto IntelliSense® focus feature.

CH

The  key selects channels in descending order. The  key selects channels in ascending order. When the onscreen menu is displayed, pressing  or  selects the next item in the menu. Also, use either of these keys to switch the TV on from Standby mode.

USING THE REMOTE CONTROL KEYS

SLEEP TIMER

Allows you to select a time period after which the set will automatically switch to standby mode. Choose 15, 30, 45, 60, 90, 120, 180, or 240 minutes. See page 25.

A/CH (Alternate Channel)

Allows you to alternate between the last viewed channel and the present channel.

No Function

These buttons are not used with your television.

FORMAT

Each press selects another picture format. For AV1, CVI, AV2, or AV3, the options are 4:3, Auto, and Expand 4:3. For AV4 and AV5 1080i signal sources, the options are 4:3, Auto, and Compress 16:9. For AV4 and AV5 480p signal sources, no screen format options are available through the TV. Control the format at the source (DVD player or digital set-top box).

DIGIT (0-9)

Allows you to select a channel. **Note** : For a two-digit number, the second digit must be entered before the “—” sign disappears.

SMART SOUND

Allows you to select from three predefined optimal settings—Voice, Music, and Theatre—and a Personal setting based on your own selections through the onscreen Sound menu. Press the key repeatedly to select a setting. See page 24.

MENU

Displays the main menu. Also allows you to go backwards in the menu system.

CURSOR LEFT

Allows you to access the menus and adjust the settings.

CURSOR UP

Allows you to select the next or previous item in the menu and to select a screen format. See page 22.

VOLUME +/-

Increases or decreases volume.

AV

Allows you to select the different signal sources connected to the TV.

i+ (STATUS/EXIT)

- Displays the channel number, sound and colour transmission modes, status of the sleep timer, channel name (if the channel has been named), and the current time (if the time has been set).
- Allows you to navigate or make adjustments in multipoint-convergence mode.
- Allows you to switch the menu off.

DOLBY V (with Dolby* Surround Signals)

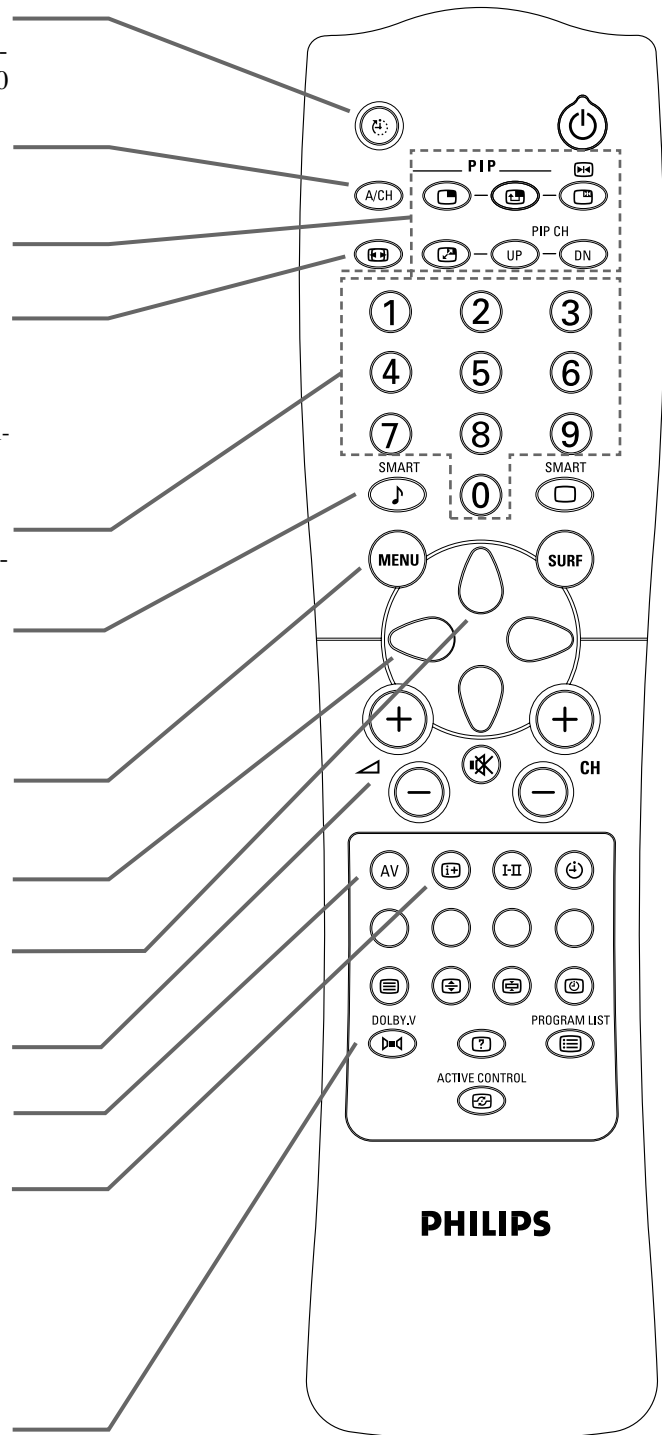
Allows you to select various factory surround-sound listening modes :

Dolby Virtual (Virtual Dolby Surround)

Dolby Virtual uses two speakers to simulate the surround effect produced by a multichannel system.

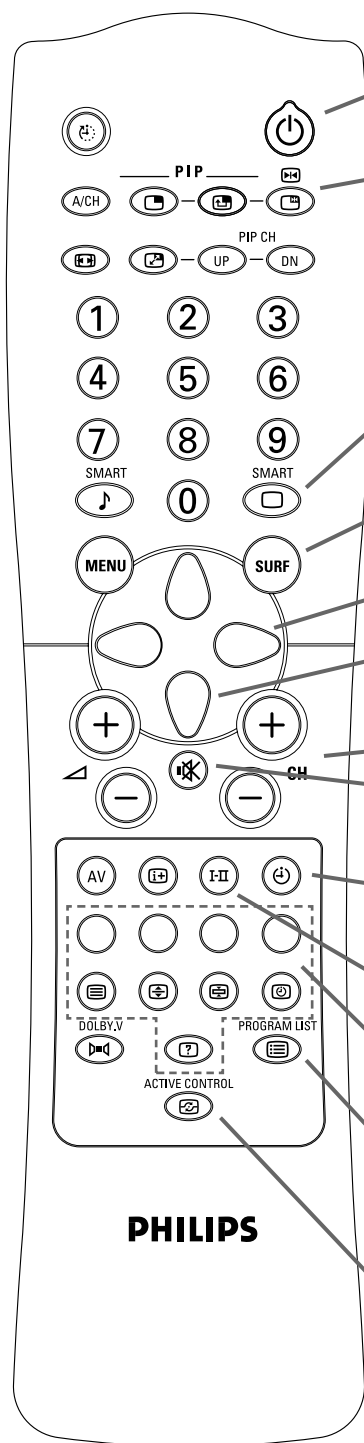
Incredible Surround™

- In **Stereo** sound mode—when switched on, the Incredible Surround™ feature provides the feeling that the speakers are farther apart to enhance the home-cinema effect.
- In **Mono** sound mode—when switched on, the Incredible Surround feature enables you to hear a spatial sound effect.



*Manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

USING THE REMOTE CONTROL KEYS



STANDBY

- Switches the set off temporarily to standby mode. (The red light indicator lights up when the set is in standby mode.)
- To switch the set on from standby mode, press the Standby, Channel +/-, or Digit (0-9) keys.

No Function

This button is not used with your television.

SMART PICTURE

Allows you to select from four predefined optimal settings—Rich, Natural, Soft, and Multimedia—and a Personal setting based on choices you make through the onscreen Picture menu. See page 24.

SURF

Allows you to select up to 10 channels and quickly view them. See page 23.

CURSOR RIGHT

Allows you to access the menus and adjust the settings.

CURSOR DOWN

Allows you to select the next or previous item in the menu or to select a screen format. See page 22.

CHANNEL +/-

Allows you to select channels in ascending and descending order.

MUTE

Allows you to mute the sound. To restore the sound, press the key again.

TIMER

Allows you to access the onscreen Timer menu, through which you can set the TV's clock and the Timer. The Timer can be set to switch to another channel at a specified time while you are watching another channel or when the set is in standby mode.

I-II

Allows you to switch from stereo to mono sound during stereo transmission or to choose between language I or language II during dual sound transmission.

TELETEXT

Allows you to access Teletext information (*if provided*). See pages 27-28.

PROGRAM LIST

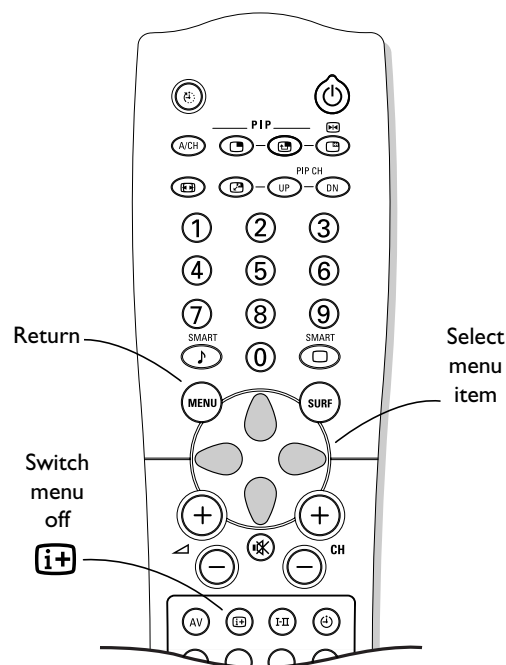
Allows you to navigate through a list of installed programmes for a quick overview of the channels and to activate the channel you have selected. See page 23.

ACTIVE CONTROL™

Allows you to switch the Active Control™ feature on or off. When Active Control™ is on, it measures and corrects all incoming signals to provide the best picture-quality settings, controlling Sharpness and Noise Reduction continuously and automatically. The onscreen Active Control™ display items cannot be selected. See page 22.

USING THE MENUS : OVERVIEW

- 1 Press the **MENU** key to display/cancel the main menu.
- 2 Use the cursor in the up/down directions to select a menu item.
Note : Sometimes not all the menu items are visible on the screen; press the cursor up/down until you can see the item you desire.
- 3 Use the cursor in the left/right directions to display the menu and adjust the settings.
- 4 Press the **MENU** key to return.
- 5 Press the **i+** key to switch the menu off.
Note : If no action is executed, the menu automatically disappears after about 20 seconds.

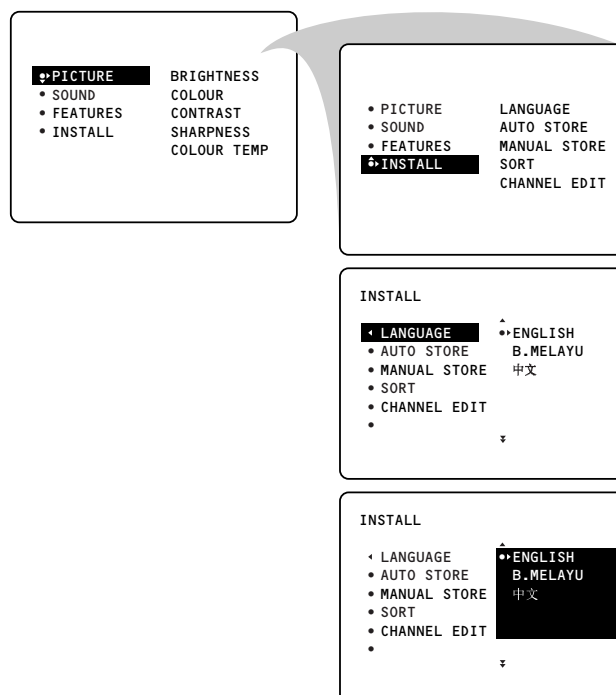


USING THE MENUS : INSTALL

Selecting the Menu Language

Note : The menu languages available vary by model.

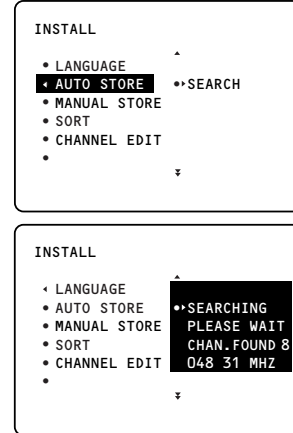
- 1 Press the **MENU** key.
- 2 Select **INSTALL** with the cursor down.
- 3 Press the cursor right to select **LANGUAGE**.
- 4 Press the cursor right again.
- 5 Select your language with the cursor up/down.
From this point on, all onscreen displays will appear in the language that you have chosen.
Now you can search for and store the TV channels in two different ways : with Auto Store or Manual Store (tuning in channel by channel).



Tuning Channels Automatically

- 1 Select **AUTO STORE** in the **INSTALL** menu.
- 2 Press the cursor right to start the searching. All the TV channels are searched for and stored automatically.
- 3 When the tuning is completed, press the **MENU** key to return to the **INSTALL** menu or press the **[+]** key to switch the menu off.

Note : Channel numbers will always be written in Latin characters, even when a language that uses other characters has been selected.



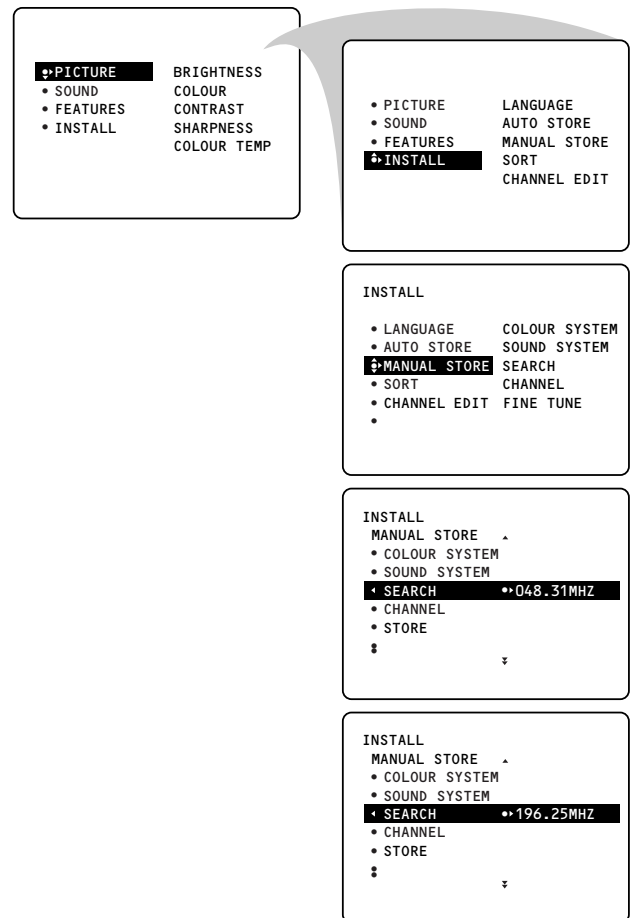
Tuning Channels Manually

Manual tuning allows you to store channel by channel. You must go through every step of the manual store menu.

- 1 Select **MANUAL STORE** in the **INSTALL** menu.
- 2 Press the cursor right to enter the menu.
- 3 Select **COLOUR SYSTEM** and press the cursor right. If **AUTO** is selected, the respective colour system will be automatically selected according to the transmission system.
- 4 Press the **MENU** key or the cursor left.
- 5 Select **SOUND SYSTEM** and press the cursor right. If **AUTO** is selected, the respective sound system will be automatically selected according to the transmission system.
- 6 Press the **MENU** key or the cursor left.
- 7 Select **SEARCH** and press the cursor left or right to start the searching. Searching stops once a transmitting channel is found.

Note : If the reception is poor, select another colour and/or sound system.

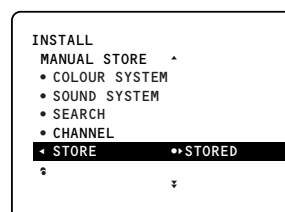
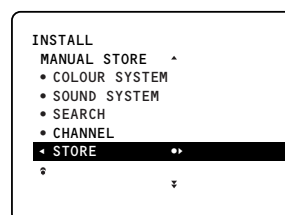
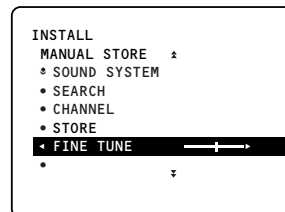
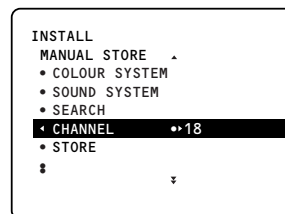
Continue to the next page.



USING THE MENUS : INSTALL

- 8 Select **CHANNEL**.
- 9 Key in the desired channel number with the digit keys or with the cursor left/right.
- 10 Press the cursor down.
In case of poor reception, you can improve the reception by adjusting the frequency using **FINE TUNE**.
- 11 Select **FINE TUNE** and press the cursor left/right to adjust.
- 12 In rare cases, certain TV channels may reproduce distorted or unstable pictures.

Select **PLL** (Phase Locked Loop) to switch to the setting 2 with the cursor left/right to restore the picture for the respective transmission.
- 13 Select **STORE**.
- 14 Press the cursor right.
The message **STORED** appears and the search menu item is highlighted again.
- 15 Now repeat steps 7–14 to continue searching for another transmitting channel.
- 16 Press the **MENU** key to return to the **INSTALL** menu or press the **⏻** key to switch the menu off.

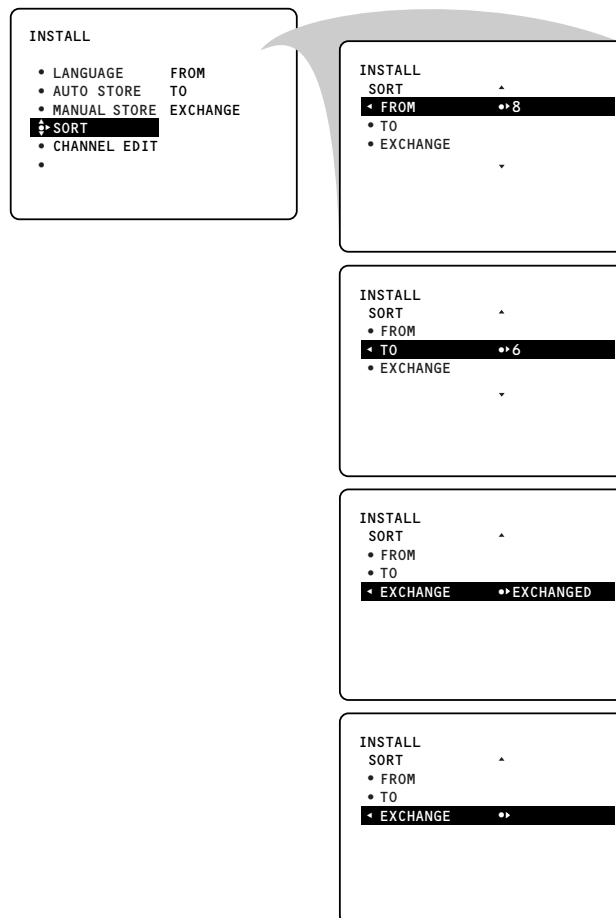


USING THE MENUS : INSTALL

Sorting Channels

According to your preference, you can change the order of the stored TV channels.

- 1 Select **SORT** in the **INSTALL** menu.
- 2 Press the cursor right to enter the menu.
- 3 Key in the channel number in the **FROM** column you want to swap from. Use the digit keys or the cursor left/right.
- 4 Press the cursor down and select **TO**.
- 5 Key in the channel number in the **TO** column you want to swap to.
- 6 Press the cursor down and select **EXCHANGE**.
- 7 Press the cursor right.
The message **EXCHANGED** appears and the selected channels are exchanged.
- 8 Repeat steps 3–7 until all TV channels are allocated as you like.
- 9 Press the **MENU** key to return to the **INSTALL** menu or press the **⏏** key to switch the menu off.



USING THE MENUS : INSTALL

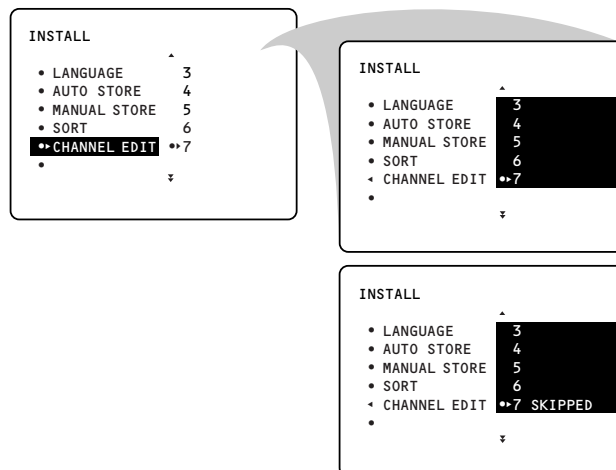
Editing Channels

This feature allows you to edit or skip channels from the channel list that have bad or weak signals or channels that you do not watch often.

Note : Once a channel is skipped, you cannot select it with the CH – or + key. You can only access the channel with the digit keys.

- 1** Select **CHANNEL EDIT** in the **INSTALL** menu.
- 2** Press the cursor right to enter the channel list.
- 3** Select the channel you want to skip with the cursor up/down.
- 4** Press the cursor right to skip the selected channel.
The message **SKIPPED** is displayed.
- 5** Press the cursor up/down to select another channel and repeat step 4.
- 6** Press the cursor left or the **MENU** key to return to the **INSTALL** menu or the **i+** key to switch the menu off.

Note : To add back channels to the list, repeat steps 1–4 and press the **i+** key to switch the menu off.

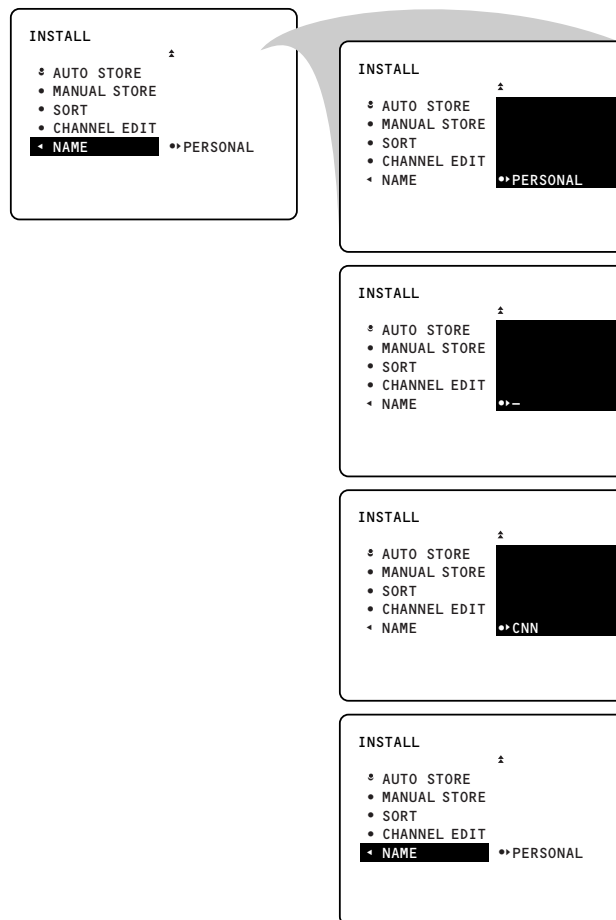


Naming Channels

It is possible to assign a name to a TV channel. This feature allows you to enter a name or modify an existing name of a channel, including peripherals.

Note : Even when you have selected another language in the LANGUAGE menu, only the English language character set is offered to enter names to the TV channels stored.

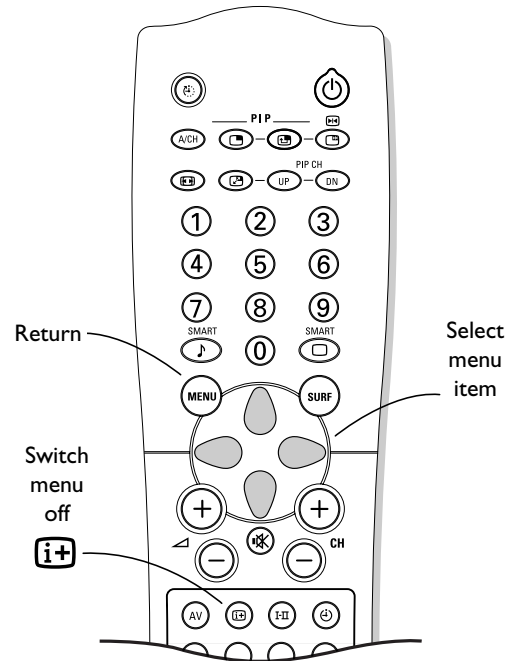
- 1 Select a TV channel or peripheral you want to assign a name or modify the existing name.
- 2 Select **NAME** in the **INSTALL** menu.
- 3 Press the cursor right to enter the menu.
- 4 Key in the selected character with the cursor up/down.
- 5 Move to the next character with the cursor right and key in the next character. You can key in up to a maximum of five characters.
- 6 Press the **MENU** key to store the named channel.



USING THE MENUS : PICTURE

Accessing the Menu

- 1 Press the **MENU** key to display the main menu.
- 2 Select **PICTURE**.
- 3 Press the cursor right to access the **PICTURE** submenu.
- 4 Use the cursor in the up/down directions to select an item.
- 5 Use the cursor in the left/right directions to make adjustments or settings.
- 6 Press the **MENU** key to return or press the **i+** key to switch the menu off.



Picture Menu Items

Brightness

Allows you to adjust the brightness levels of the picture.

Colour

Allows you to adjust the colour saturation of the picture.

Contrast

Allows you to adjust the contrast levels of the picture.

Sharpness

Allows you to adjust the edge definition of the picture to improve details.

Hue (only with NTSC signals)

Allows you to adjust the colour mix of the picture.

Colour Temperature

Offers the options **Normal**, **Warm**, and **Cool**. Make your selection with the cursor left/right. **Normal** keeps whites white. **Warm** makes whites reddish. **Cool** makes whites bluish.

Digital Options

Digital Scan includes **100Hz** plus **Digital Scan**, which together eliminate picture flickering and line jitter, offering a stable picture for relaxed viewing (no eye strain). **100Hz** offers field flicker reduction. **Progressive** doubles the number of visible picture lines per field by displaying all picture frame lines at once. This minimizes the visibility of the scan lines. **Auto** detects the input signal and provides the appropriate mode for the best picture performance. Choose **Digital Scan** for PAL 50Hz signals and **Progressive Scan** for NTSC 60Hz signals.

Dynamic Contrast

Automatically makes the contrast in the darker and the brighter picture areas more noticeable as the image on screen changes. Normally, select **MED**. In certain circumstances it may be preferable to select **MIN**, **MAX**, or **OFF**.

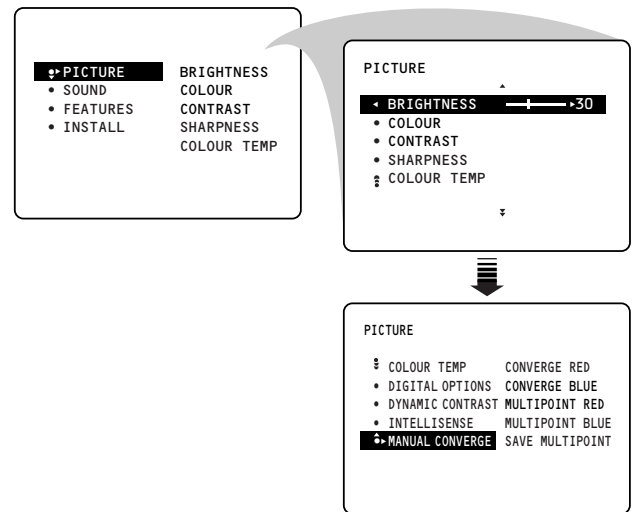
IntelliSense

When activated, automatically adjusts picture convergence in 20 seconds or less.

Manual Converge

Allows you to make additional picture convergence adjustments to suit personal preferences to further fine-tune the picture.

Note : The picture settings *Brightness, Colour, Contrast, Sharpness (Hue), and Colour Temperature* are stored separately for channels 0–11 and for the external sources.



USING THE MENUS : PICTURE

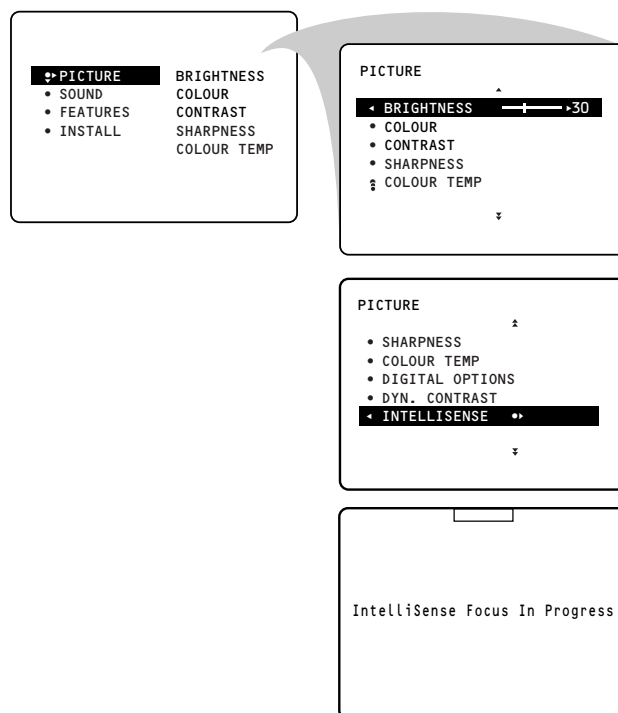
Using Auto IntelliSense®

Your projection TV has three color projection tubes : one for red, one for green, and one for blue. When mixed in proper proportion, the beams of light coming from the tubes can produce any color. To create a clear picture, however, these color beams must be precisely aligned. This alignment is called *convergence*. Bumps and vibrations, moving the set, or the presence of magnetic fields can cause the color beams to become improperly aligned, or misconverged, resulting in a fuzzy picture. Using the Auto IntelliSense® feature, you can automatically adjust convergence in 20 seconds or less.

Note : Allow the TV to warm up for 20 minutes before using Auto IntelliSense®.

Activating Auto IntelliSense® Through the Onscreen Menu

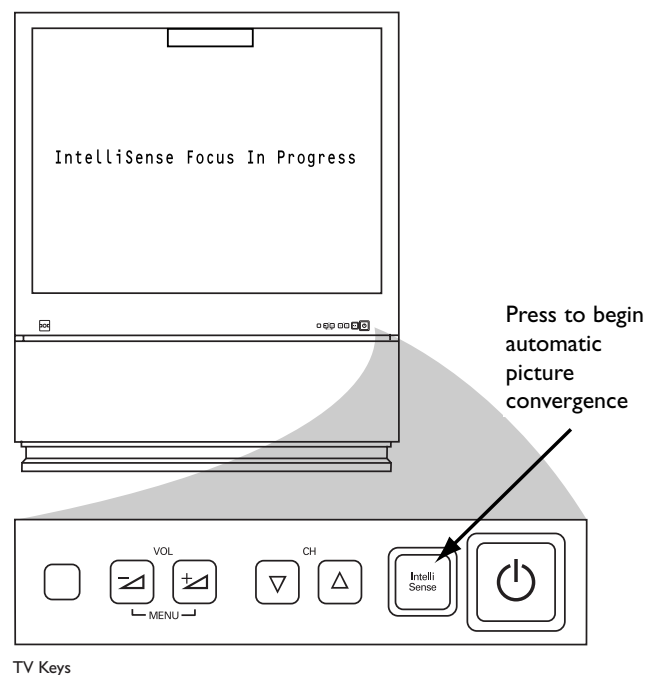
- 1 Select **INTELLISENSE** in the **PICTURE** menu.
- 2 Press the cursor left or right to activate Auto IntelliSense®. Picture convergence will be adjusted automatically in 20 seconds.



Activating Auto IntelliSense® Using the TV Key

With the TV on, press the **INTELLISENSE** key on the front of the TV. Picture convergence will be adjusted automatically in 20 seconds.

Note : You can also manually adjust picture convergence to suit your personal preferences or to further fine-tune the picture. See the next section on using the **MANUAL CONVERGE** controls.

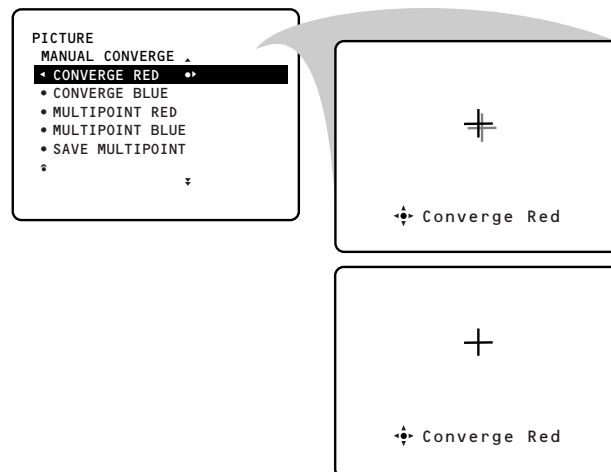


TV Keys

Using Manual Converge : Converge Red/Blue

Using the Auto IntelliSense® feature, you can automatically adjust convergence in 20 seconds or less (see the previous page). Also, if you desire, you can use the Manual Converge controls to make additional convergence adjustments to suit your personal preferences or to further fine-tune the picture.

Note : Allow the TV to warm up for 20 minutes before adjusting convergence.



1 Select **MANUAL CONVERGE** in the **PICTURE** menu.

2 Press the cursor down and select either **CONVERGE RED** or **CONVERGE BLUE**.

Note : If various images in the picture have red outlines, select **CONVERGE RED**. If various images in the picture have blue outlines, select **CONVERGE BLUE**.

3 Use the cursor right, left, up, or down to adjust the cross hair until the color outline is gone. The adjustment is automatically saved in the TV's memory when you exit the adjust mode.

4 Press the **MENU** key to return or the **EXIT** key to switch the menu off.

Check the TV picture. If any color outlines remain around the images, use the **MULTIPOINT RED** (for red outlines) or **MULTIPOINT BLUE** (for blue outlines) control. See the next section for instructions for using those controls.

USING THE MENUS : PICTURE

Using Manual Converge : Multipoint Red/Blue

The Multipoint Red/Blue convergence controls allow you to adjust picture convergence at specific points on the TV screen.

Note : Allow the TV to warm up for 20 minutes before adjusting convergence. Adjust Converge Red or Converge Blue before using the Multipoint Red/Blue controls. See the previous page.

- 1 Select **MULTIPOINT RED** or **MULTIPOINT BLUE** in the **MANUAL CONVERGE** menu.
- 2 Press the cursor right to enter navigate mode.
- 3 Use the cursor left, right, up, or down to move to a cross hair that has a color outline.
- 4 Press the **i+** (Status/Exit) key to enter adjust mode.
- 5 Use the cursor left, right, up, or down to adjust the cross hair until the color outline is gone.
- 6 Press the **i+** key to return to navigate mode.
- 7 Repeat steps 3–6 until all misaligned cross hairs have been adjusted. Then press the **MENU** key.
- 8 For your multipoint adjustments to be stored in the TV's memory, you must activate **SAVE MULTIPOINT**.

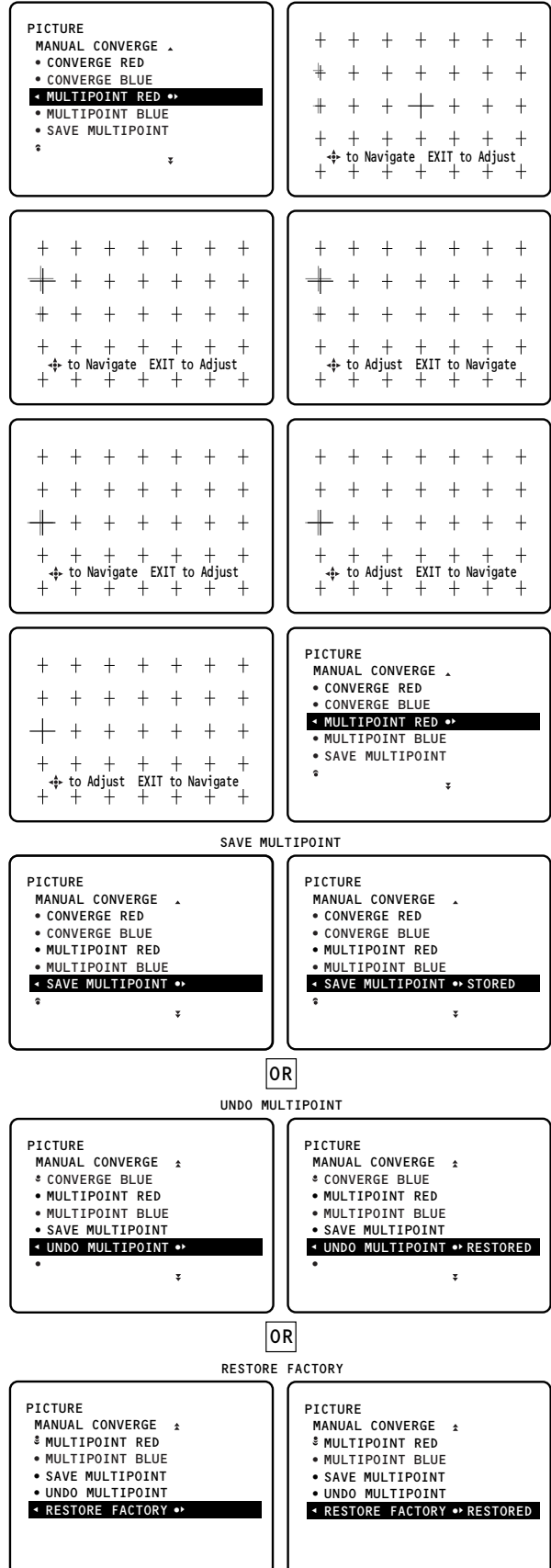
Note : If you are not satisfied with the adjustments you just made and want to start over, you can use the **UNDO MULTIPOINT** control. This control allows you to undo the adjustments, but only if you use it before saving.

To save your multipoint adjustments : Select **SAVE MULTIPOINT** and press the cursor left or right.

To undo your multipoint adjustments : Select **UNDO MULTIPOINT** and press the cursor left or right.

To restore the TV's picture convergence to factory settings, select **RESTORE FACTORY** and press the cursor left or right.

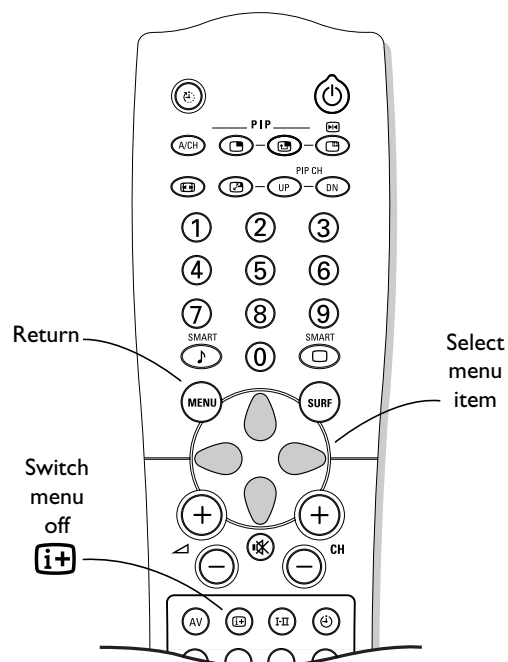
- 9 Press the **MENU** key to return or the **i+** key to switch the menu off.



USING THE MENUS : SOUND

Accessing the Menu

- 1 Press the **MENU** key to display the main menu.
- 2 Select **SOUND** with the cursor down.
- 3 Press the cursor right to access the **SOUND** submenu.
- 4 Use the cursor in the up/down directions to select an item.
- 5 Use the cursor in the left/right directions to make adjustments or settings.
- 6 Press the **MENU** key to return or press the **i+** key to switch the menu off.



Sound Menu Items

Treble

Attenuates or amplifies the high-frequency response of the audio output signal.

Bass

Attenuates or amplifies the low-frequency response of the audio output signal.

Balance

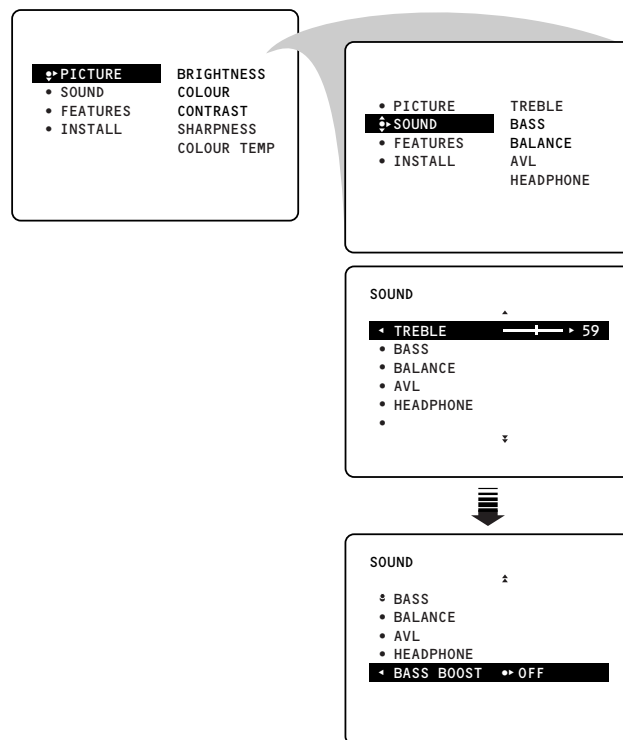
Adjusts the balance of the right and left speaker's sound output.

AVL (Automatic Volume Leveller)

Automatically controls the volume level to avoid excessive level differences, especially when switching to another channel or during commercial breaks.

Headphone

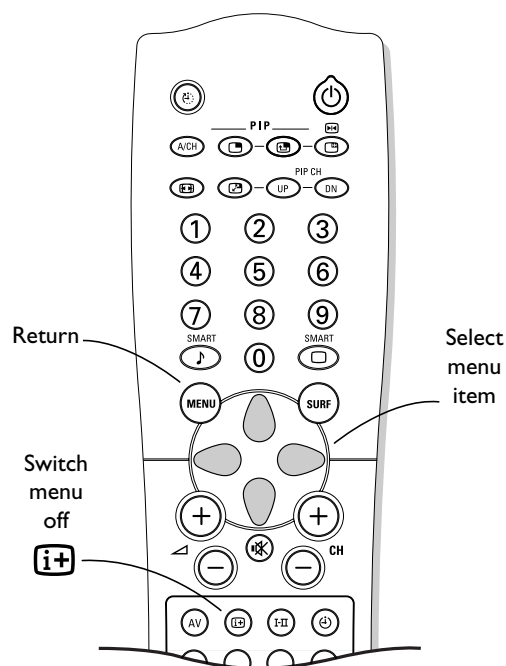
Allows you to adjust the volume and balance of the headphone.



- 1 Select **HEADPHONE**.
- 2 Press the cursor right.
- 3 Select **VOLUME** or **BALANCE** with the cursor up/down.
- 4 Press the cursor left/right to adjust.
- 5 Press the **MENU** key to return.

Accessing the Menu

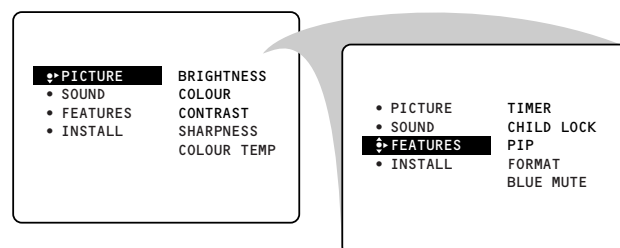
- 1 Press the **MENU** key to display the main menu.
- 2 Select **FEATURES** with the cursor down.
- 3 Press the cursor right to access the **FEATURES** submenu.
- 4 Use the cursor in the up/down directions to select an item.
- 5 Use the cursor in the left/right directions to make settings.
- 6 Press the **MENU** key to return or press the **[+]** key to switch the menu off.



Activating the Timer

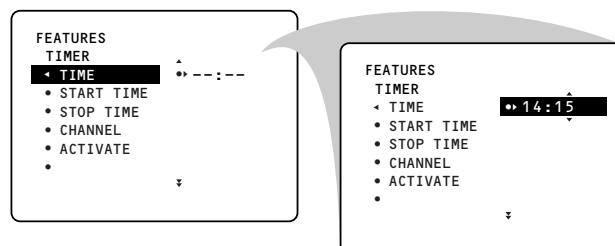
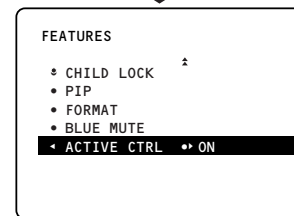
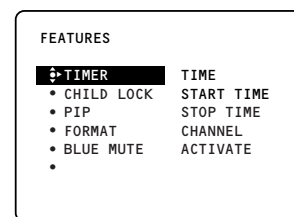
The Timer feature allows you to set the timer to switch to another channel at a specified time while you are watching a channel or when the TV is in standby mode. You can also set the TV to switch off automatically at a specific time by setting a Stop Time.

- 1 Select **TIMER** in the **FEATURES** menu.
- 2 Press the cursor right to enter the Timer.



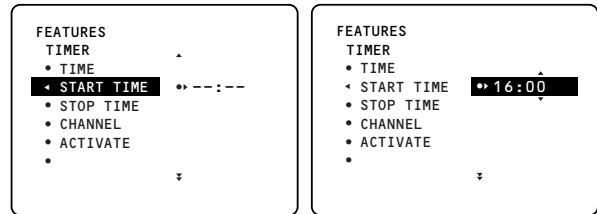
Setting the Timer

- 1 Press the cursor right again to enter **TIME** mode.
- 2 Key in the current time with the digit keys.
You must use 24-hour, or military, time. For example : 2:15 p.m. is 14:15.
If you entered an incorrect digit :
Complete the actual time with arbitrary numbers, then start again.
- 3 Press the cursor left to exit **TIME** mode.
Continue to the next page.



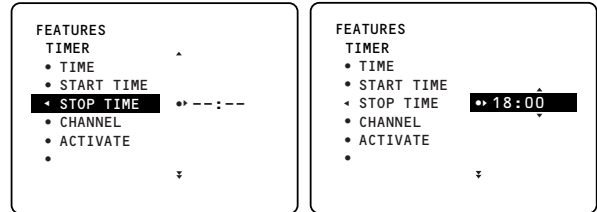
Setting Start Time

- 1 Select **START TIME** with the cursor down.
- 2 Press the cursor right to enter the **START TIME** mode.
- 3 Key in the time you want the programme to be switched on.
- 4 Press the cursor left to exit **START TIME** mode.



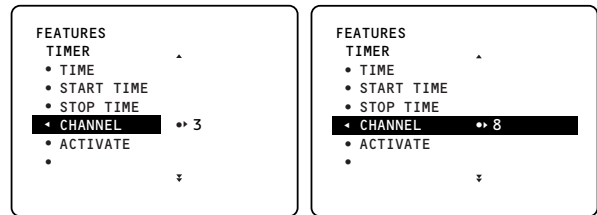
Setting Stop Time

- 1 Select **STOP TIME** with the cursor down.
- 2 Press the cursor right to enter the **STOP TIME** mode.
- 3 Key in the time you want the programme to be switched off.
- 4 Press the cursor left to exit **STOP TIME** mode.



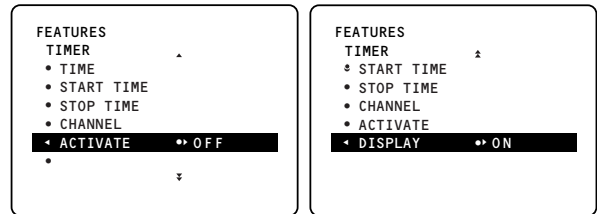
Selecting the Channel

- 1 Select **CHANNEL** with the cursor down.
- 2 Select the channel you want to switch to.



Activating the Timer

- 1 Select **ACTIVATE** with the cursor down.
- 2 Press the cursor right to enter the **ACTIVATE** mode to activate the timer.
- 3 Using the cursor right, select **ONCE** or **DAILY**, according to if you want to activate the timer on the selected channel and the selected time every day or only once.



OR

← ACTIVATE → ONCE

OR

← ACTIVATE → DAILY

Displaying the Time

- 1 Select **DISPLAY** with the cursor down.
- 2 Press the cursor right to select **ON** or **OFF**, according to if you want to display the current time on the TV screen or not.
- 3 Press the **MENU** key to return or the **i+** key to switch the menu off.

Activating the Child Lock

The Child Lock feature allows you to lock channels to prevent children from watching certain programmes.


Entering the Access Code

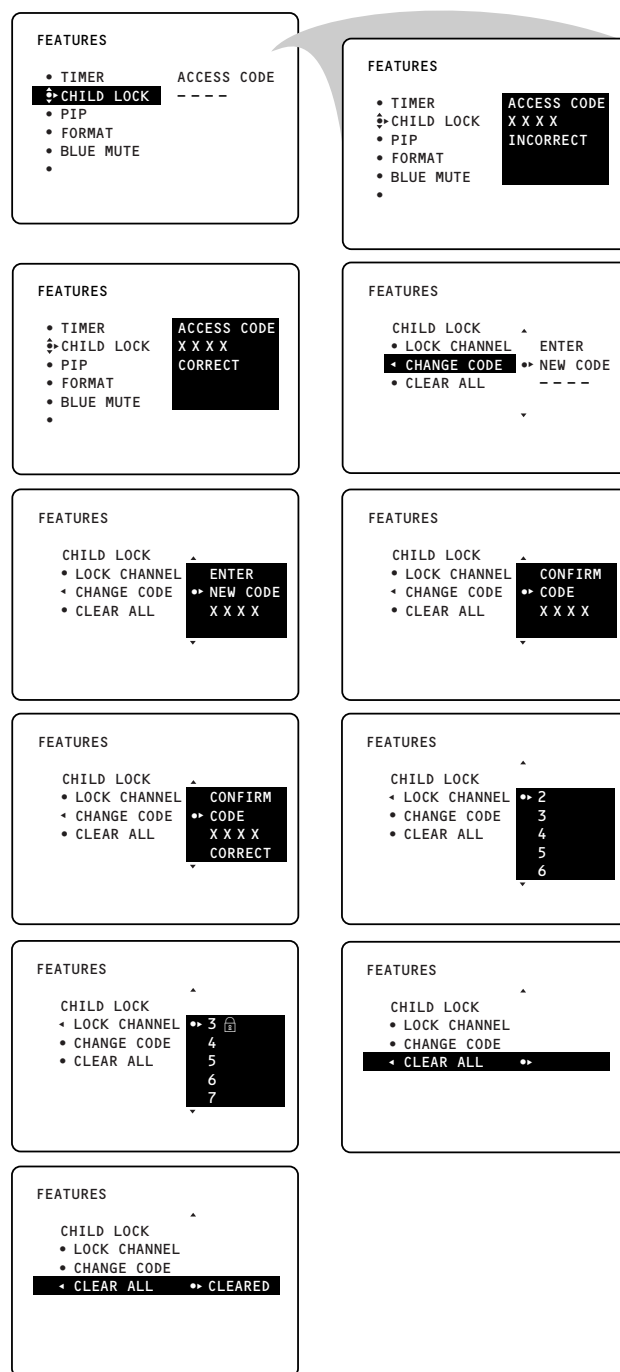
- 1 Select **CHILD LOCK** in the **FEATURES** menu.
- 2 Press the cursor right to enter the **ACCESS CODE**.
- 3 Key in the access code 0711 (the default access code).
A message **INCORRECT** will appear.
- 4 Key in access code 0711 a second time.
The message **CORRECT** will appear and make the Child Lock menu accessible.

Changing the Access Code

- 1 Select **CHANGE CODE** to enter an access code of your choice.
- 2 Press the cursor right to enter the **CHANGE CODE** mode.
- 3 Key in the access code of your choice and confirm it again.
The message **CORRECT** will appear.


Activating the Child Lock

- 1 Select **LOCK CHANNEL** in the **CHILD LOCK** menu.
Note : Enter the access code if requested. See above.
- 2 Press the cursor right to enter the **LOCK CHANNEL** mode.
- 3 Use the cursor up/down to select the channel you want to lock.
- 4 Press the cursor right to lock the channel.
A keylock symbol will appear beside the locked channel.
From now on the locked channel(s) can be accessed only via the remote control.
- 5 Repeat steps 1–4 to unlock a locked channel.
To clear all locked channels at once, select **CLEAR ALL** in the **CHILD LOCK** menu and press the cursor right.
The message **CLEARED** will appear.
- 6 Press the **MENU** key to return or the  key to switch the menu off.



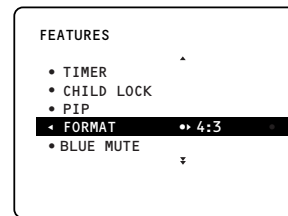
USING THE MENUS : FEATURES

Selecting the Screen Format

The TV's Screen Format options allow you flexibility in viewing video sources. Select a screen format using the  or cursor up/down keys or the onscreen menu. To use the onscreen menu :

- 1 Select **FORMAT** in the **FEATURES** menu.
- 2 Press the cursor right repeatedly to cycle through the different screen formats and select your desired format. The options vary by input source (see specifics to the right) :
 - **4:3** format displays the 4:3 picture using the full surface of the screen.
 - **AUTO** format make the picture fill the screen as much as possible.
 - **EXPAND 4:3** format expands movie images recorded in the letterbox format. The black bars at the top and bottom of the screen are expanded, thus filling the entire TV screen.
 - **COMPRESS 16:9** allows you to show widescreen, high-definition video sources as they were intended for a more natural picture. Black bars are displayed at the top and bottom of the screen.

For AV1, CVI, AV2, or AV3 Sources :



OR



OR



For AV4 and AV5 1080i Sources :



OR



OR




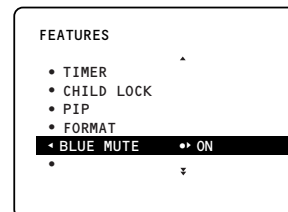
For AV4 and AV5 480p Sources :

No picture format options are available through the TV. Control the screen format at the source (DVD player or digital set-top box).

Switching Blue Mute on

The Blue Mute feature indicates to you the absence of signal in the transmission when BLUE MUTE is activated.


- 1 Select **BLUE MUTE** in the **FEATURES** menu.
- 2 Press the cursor right to select **ON** to activate the blue mute feature.
- 3 Press the  key to switch the menu off.




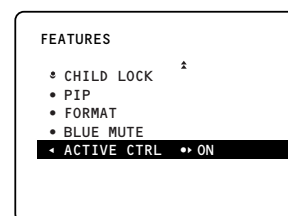
OR



Switching Active Control™ on

Turn Active Control™ on using the  key or the onscreen menu. To use the onscreen menu :

- 1 Select **ACTIVE CTRL** in the **FEATURES** menu.
- 2 Press the cursor right to select **ON** to activate automatic control of Sharpness and Noise Reduction.
- 3 Press the  key to switch the menu off.





OR



Note : Should your remote control be lost or broken, you can still change some of the basic picture and sound settings with the keys on the front of the TV. See page 5.

USING PROGRAM LIST

The Program List feature allows you to navigate a list of installed channels, receive a quick overview of those available, and activate the channel you desire.


- 1 Press the **PROGRAM LIST**  key.
- 2 Cursor down to cycle through the list of installed channels and highlight the channel number you want to activate.
The appearance of lock symbol means that a channel is blocked by the Child Lock feature. See page 21.
- 3 Cursor right to activate the channel you have selected.
- 4 Press the  key to switch the menu off.

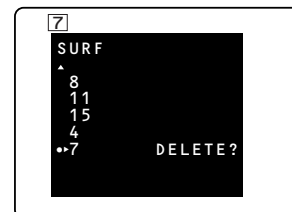
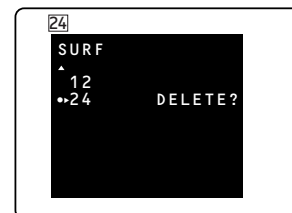
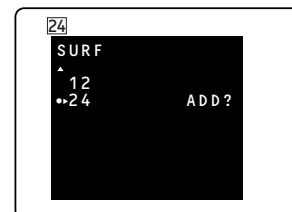
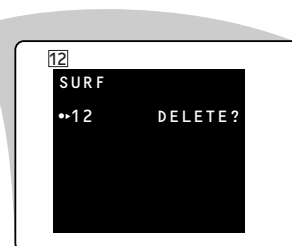
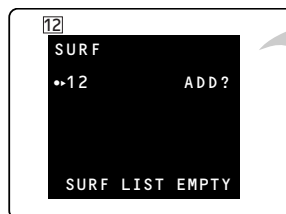


USING SMART SURF

Adding Channels to the Surf List

You can select a list or series of previously viewed channels with the SURF key. This feature allows you to switch between different TV programmes that currently interest you. You can have up to 10 channels in the SURF list. Five channels are shown in the list at one time. Cursor down/up as necessary to see all the channels in the list.

- 1 Select a channel you want to add to the Surf list.
- 2 Press the **SURF** key.
- 3 Cursor right to add the selected channel to the Surf list.
- 4 Repeat steps 1–3 to add more channels to the Surf list.
- 5 Press the  key to switch the menu off.
- 6 Press the **SURF** key repeatedly to cycle through channels.





Deleting Channels to the Surf List

- 1 Press the **SURF** key.
- 2 Press the **SURF** key again as many times as necessary to select the channel you want to delete from the Surf list.
- 3 Cursor right to delete the channel from the list.
- 4 To delete more channels, repeat the steps above.

USING SMART PICTURE AND SMART SOUND

The Smart Picture feature offers you a choice of five picture settings : Personal, Rich, Natural, Soft, and Multimedia. Smart Sound offers you a choice of four sound settings : Personal, Voice, Music, and Theatre.

Press the **SMART**  Picture or **SMART**  Sound key on the remote control repeatedly to cycle through the settings and select your desired mode.

Smart Picture Options

Personal

Picture settings are based on your preference.

Rich

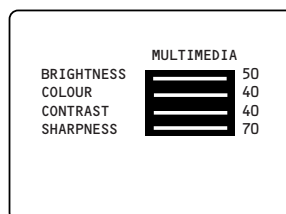
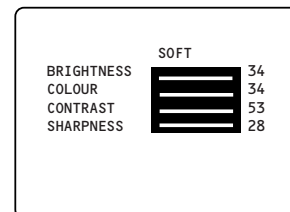
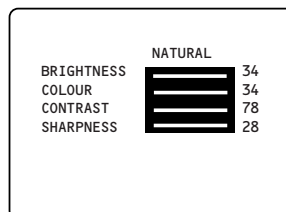
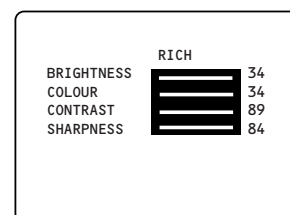
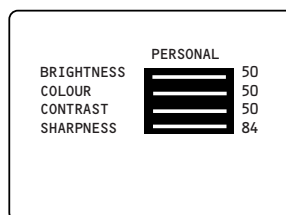
Emphasizes very vibrant colours. This option is desirable for AV mode in a brightly lighted room.

Soft

Emphasizes “warm” colours. This option is desirable for a dimly lighted room and gives a cinema-like effect when the light is switched off.

Multimedia

Emphasizes “soft” colours. This option is desirable for playing computer games.



Smart Sound Options

Personal

Sound settings are based on your preferences.

Voice

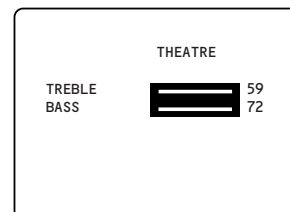
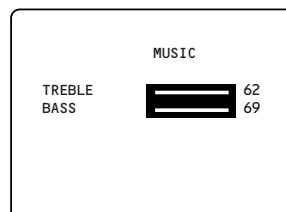
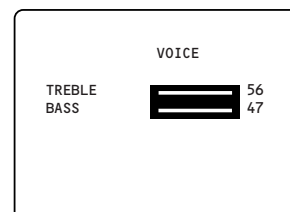
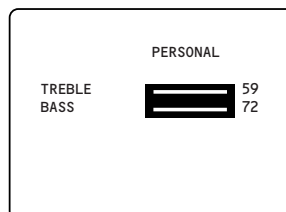
Brings voices to the forefront, emphasizing them. Moves music to the background.

Music

Emphasizes music over voices.

Theatre


Provides a balance between voices and music.



Note : The **PERSONAL** settings are the ones that you make using the **PICTURE** or **SOUND** menus. These are the only Smart Picture and Smart Sound settings that can be changed. All others are set at the factory.


USING THE SLEEP TIMER

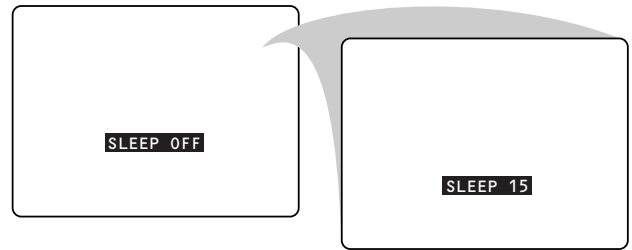
Have you ever fallen asleep in front of the TV? Using the Sleep Timer, you can program your TV to turn off while you sleep. This feature allows you to set your TV to turn off within a certain amount of time : 15, 30, 45, 60, 90, 120, 180, or 240 minutes.

Press the Sleep Timer key  on the remote control. The Sleep Timer onscreen display will appear on screen. Then within five seconds, press the Sleep Timer key again as many times as necessary to select the amount of time you want to pass before the TV will turn itself off.

An onscreen countdown will appear during the last minute before the TV switches off. Ten seconds before the Sleep Timer switches the TV off, GOOD BYE will be displayed on the TV screen.

Notes :

- To see how many minutes remain before the TV shuts itself off, press the  key.
- Changing the channel or volume during the last minute of a Sleep Timer setting will cancel Sleep.



The options are 15, 30, 45, 60, 90, 120, 180, or 240 minutes.



During the last minute of a Sleep Timer setting, a countdown will be displayed on screen.



During the last 10 seconds of a Sleep Timer setting, "GOOD BYE" will be displayed on screen.

USING TELETEXT (IF PROVIDED)

Many TV channels broadcast information via teletext. Each channel that broadcasts teletext transmits a page with information on how to use its teletext system. Look for the teletext page with the main index (usually p. 100).




Depending on the TV channel, teletext is transmitted in different systems. The colours used in the options line correspond with the colour keys of your remote control.

About Teletext

Easy Text considerably reduces the waiting time (on condition that the teletext broadcast of the particular TV channel is received for at least half a minute) by :

- a direct selection of previous and following pages that are in transmission and of the pages referred to in the options line at the bottom of the teletext screen;
- a habit watcher list : frequently used pages are put automatically in a list of preferred pages so that they are immediately available;
- the precapturing of the page numbers referred to in the displayed page; and
- the precapturing of all the subpages.

Switching Teletext on and off

- 1 Press the  key to switch the teletext on.
The main index page appears on the screen together with two information lines at the top and one option line at the bottom of the screen.
- 2 Press the  key again to overlay the teletext page on the TV programme.
- 3 Press the  key once again to switch the teletext off.

Selecting a Teletext Page

With the digit keys

Enter the desired page number with the digit keys.

The page counter seeks the page or the page appears immediately when the page number has been stored in the memory.

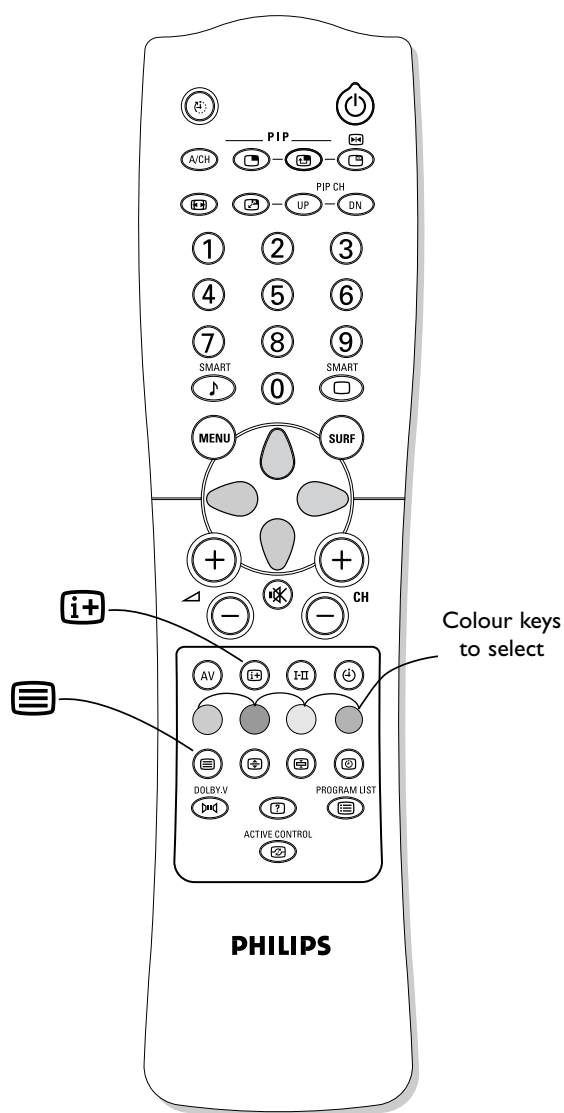
A message appears when you have entered a nonexistent or incorrect page number. Page numbers beginning with 0 or 9 do not exist. Choose another number.

With the option line

Use the colour keys—which correspond to the coloured options at the bottom of the screen—to select the desired subject.

If the option line is not on the screen, press the selected colour key TWICE.

Continue to the next page.



USING TELETEXT (IF PROVIDED)

Quickly Running Through the Teletext Pages

Press the cursor up/down or the **CH +/-** keys to run through the previous or the following pages.

Selecting the Index Teletext Page

Press the **i+** key to return to the main index (usually p. 100).

Selecting Subpages

When a selected teletext page consists of different subpages, one of the subpages appears on the screen.

Arrows in front of the page number indicate that other subpages are available.

The other subpages can be selected in two ways :

With the cursor left/right

The other subpage numbers appear in white as soon as the transmission has found them. They are stored in the memory so that they are available while the teletext page is on screen.

Use the cursor left/right to select the previous or the following subpage.

With the **OK** Key

- Enter the subpage number yourself :

Press **OK**. Enter the desired subpage with the digit keys : for example, 3 for the third page of seven subpages.

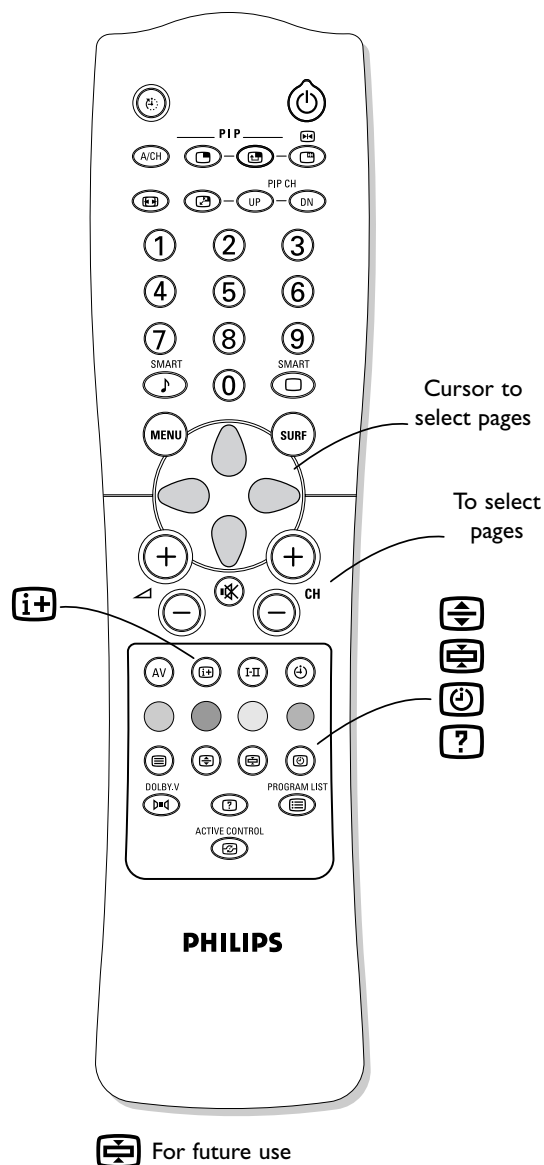
The TV searches for the selected subpage.

- To rotate subpages automatically :

Press **OK** again to cancel the entered digit key for the subpage.

Now the subpages rotate automatically.

Press **OK** again to select the subpages with the cursor left/right again.



Using Special Teletext Functions

Enlarge

Press **ENL** repeatedly to display the upper part and the lower part, and then to return to the normal page size. When the upper part is displayed, you can scroll the text, line by line using the cursor up/down.

Reveal

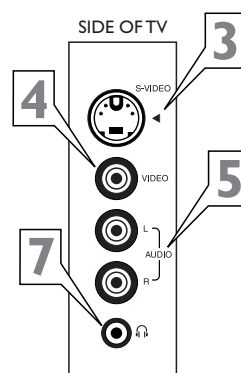
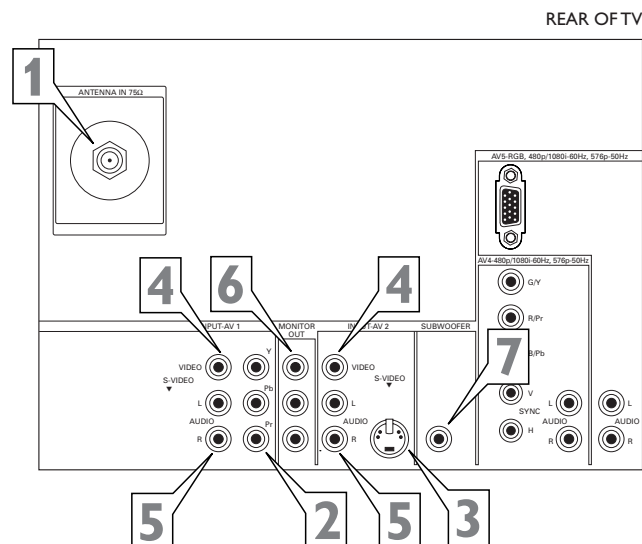
Press **REVEAL** to reveal/conceal the hidden information, such as solutions to riddles and puzzles.

CONNECTING PERIPHERAL EQUIPMENT

You can connect a wide range of video and audio equipment to your TV in various ways. This page and the next one provide an overview of signal compatibilities and the types of equipment you can connect to the sockets. Connection examples follow on subsequent pages. As necessary, also refer to the handbook for peripheral equipment.

Overview : Standard Inputs/Outputs

- 1 ANTENNA IN 75Ω socket**—compatible with the broadcast standard in your area. Use to connect radio-frequency (RF) signals from VHF/UHF antennas or a cable system.
- 2 YPbPr (component video input [CVI] sockets)**—compatible with 480i and 576i signals. Use to connect equipment having component video outputs, such as DVD players, laser-disc players, video-game players, satellite receivers, or other equipment. Use the INPUT-AV 1 L(ef) and R(ight) AUDIO sockets for sound connections.
- 3 S-VIDEO (super video) sockets**—compatible with 480i and 576i signals. Use to connect peripherals having Super VHS (S-VHS) outputs, such as VCRs, DVD players, laser-disc players, video-game players, satellite receivers, or other equipment.
- 4 VIDEO (composite) sockets (INPUT-AV 1, INPUT-AV 2, and TV's side socket panel [AV3])**—compatible with 480i and 576i signals. Use to connect peripherals having composite video outputs, such as VCRs, video-game players, or other equipment.
- 5 AUDIO inputs (INPUT-AV 1, INPUT-AV 2, and TV's side socket panel [AV3])**—use to connect from the audio output sockets on VCRs, DVDs, or other peripherals.
- 6 MONITOR OUT (VIDEO/AUDIO)**—use to connect to a VCR to record programmes from the TV. Or use the AUDIO outputs to connect to an audio hi-fi system.
- 7 Headphone socket (stereo, 3.5 mm)**—use to connect headphones for personal listening. The headphone impedance must be between 8 and 4000 Ohms.



Note : The side panel is AV3.

CONNECTING PERIPHERAL EQUIPMENT

The AV4 and AV5 sockets allow you to connect digital equipment with 1080i/480p (60Hz) or 576p (50Hz) signal output.

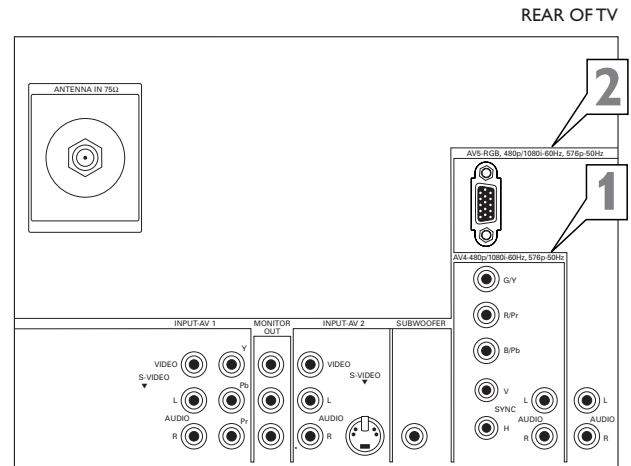
Overview : High-definition Inputs

1 AV4—use to connect digital equipment with a 1080i/480p (60Hz) or 576p (50Hz) signal output, such as digital set-top boxes or DVD players with progressive-scan capability. You can connect equipment with YPbPr component video or RGB outputs to the AV4 sockets. H and V Sync connections may or may not be required for RGB connections. Use the AV4 L(ef) and R(ight) AUDIO sockets for sound connections.

See the handbook for the digital equipment you are connecting.

2 AV5—use to connect digital equipment with a 1080i/480p (60Hz) or 576p (50Hz) signal output, such as digital set-top boxes or DVD players. The AV5 socket accepts a DB15 connector. Note, however, that adaptors can also be used to connect from component video output to this DB15 socket. Use the AV5 L(ef) and R(ight) sockets for sound connections.

See the handbook for the digital equipment you are connecting.



High-definition Inputs—Video Synchronizing Reference

| Input | Video Description | Accepts Video Sync according to : |
|----------|-------------------|-----------------------------------|
| AV4, AV5 | 480p (60Hz) | EIA/CEA-770.2-C |
| | 1080i (60Hz) | EIA/CEA-770.3-C |
| | 576p (50Hz) | ITU-R BT.1358 |

CONNECTING PERIPHERAL EQUIPMENT

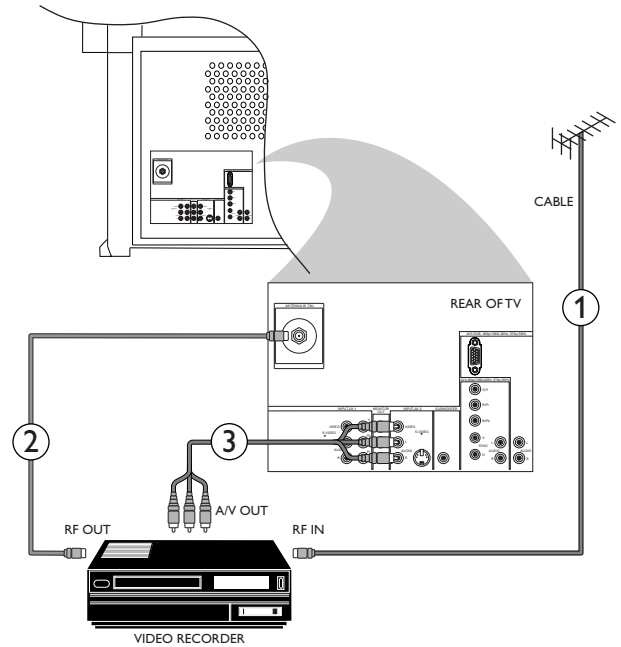
Video Recorder : Playback

- 1 Connect the RF cable to the RF socket on your video recorder.
- 2 Connect another RF cable from the output of your video recorder to the **ANTENNA IN 75Ω** socket on your TV.
- 3 Better playback quality can be obtained if you also connect the Video, Audio Left and Right (only for stereo equipment) cables to the **VIDEO** and **AUDIO L** (mono) and **R** inputs of **INPUT-AV 2**.

Note : In case of mono equipment, only the left loudspeaker reproduces sound. Use a mono-to-stereo adaptor (not supplied) for sound reproduction via the internal loudspeakers.

The **MONITOR OUT** connectors can be used for daisy chaining or recording programmes from your TV. See page 32.

S-VHS-Video quality with an S-VHS video recorder is obtained by connecting the S-VHS-Video cable with the **S-VIDEO** input instead of connecting the video recorder to the **VIDEO** input. See the handbook for the video recorder.



If You Do Not Make the Video and Audio Connections in Step 3 Above :

Search for and store the test signal of the video recorder.

- 1 Unplug the RF cable from the RF socket of your video recorder.
- 2 Switch on your TV and put the video recorder on the test signal or play a prerecorded tape. See the handbook for your video recorder.
- 3 Search for the test signal of your video recorder in the same way you searched for and stored the TV signals. See pages 9 and 10.
- 4 Store the test signal under programme number 0 or between 90 and 99.
- 5 Replace the RF cable in the RF socket of your video recorder after you have stored the test signal.

Video Recorder : Recording

To record S-VHS quality, connect an S-VHS peripheral directly to the video recorder.

Recording a TV Programme

- 1** Select the channel number on your video recorder.
- 2** Set your video recorder to record.
See the handbook for your video recorder.
Switching channel numbers on your TV does not disturb recording.

Recording a Programme on Your Video Recorder Connected to MONITOR OUT from Audio/Video Equipment Connected to AV1, AV2, or to the Sockets on the Side of the TV (AV3)

- 1** Switch on the equipment.
- 2** Select the correct external source on your TV and on your video recorder.
- 3** Set your video recorder to record.
You record what you are watching on the screen.
Do not switch channel numbers and do not switch off your TV when you are recording.

CONNECTING PERIPHERAL EQUIPMENT

Video Recorder and Other A/V Peripherals

- 1 Connect the RF cable to the RF socket on your A/V peripheral equipment.
- 2 To obtain better picture quality, also connect the Video and Audio left and Audio right (only for stereo equipment) cables to the **VIDEO** and **AUDIO L** (mono) and **AUDIO R** input of the **INPUT-AV 2** sockets.

Note : In case of mono equipment, only the left loudspeaker reproduces sound. Use a mono-to-stereo adaptor (not supplied) for sound reproduction via the internal loudspeakers.

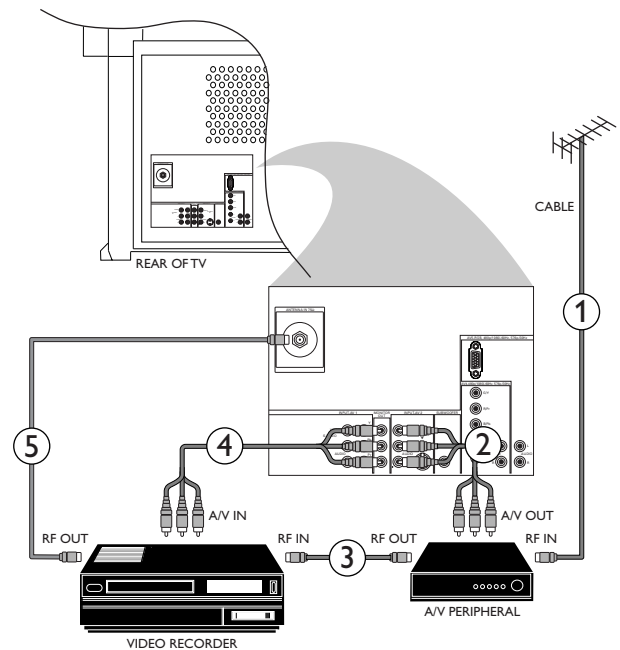
- 3 Connect the RF output of the A/V peripheral equipment to the RF input on the video recorder.

- 4 When a video recorder is not connected to **MONITOR OUT** on your TV, you can record a programme only from the aerial or from the cable system.

Only when a video recorder is connected to **MONITOR OUT** is it possible to record a programme from other equipment connected to the TV. See page 32.

Connect Video and Audio left (mono) and Audio right cables from the video recorder A/V inputs to the **VIDEO** and **AUDIO L** (mono) and **AUDIO R** sockets of the **MONITOR OUT** on your TV.

- 5 Connect from the RF output on the video recorder to the **ANTENNA IN 75Ω** socket on your TV.



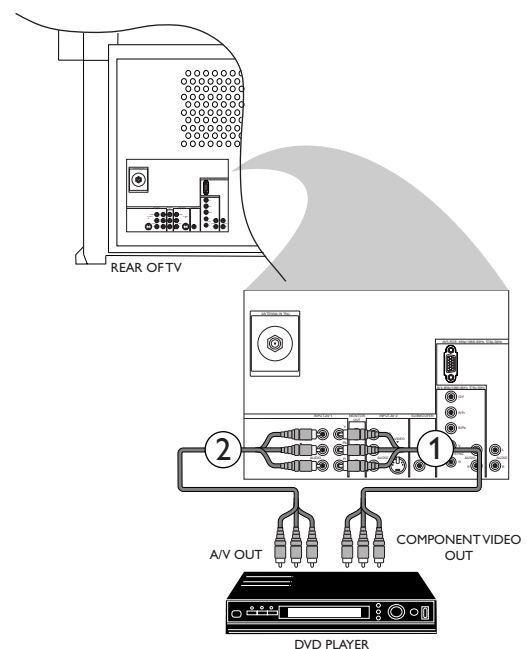
DVD Player

Note : Progressive-scan DVD players can be connected to the **AV4** or **AV5** inputs only.

- 1 Connect the cables of your DVD player with component video output to the **Y-Pb-Pr INPUT-AV 1** sockets on your TV.
- 2 Connect the cables from the Video and Audio (L and R) outputs on the DVD player to the **INPUT-AV 1 VIDEO** and **AUDIO L** (mono) and **R** inputs on your TV.

See the handbook for your DVD player.

Note : The names of the component video sockets may differ depending on the DVD player or digital source equipment used. For example, besides YPbPr, you may see R-Y/B-Y/Y or CrCbY. Although abbreviations and terms may vary, the letters *B* and *R* stand for the blue and red color component signal connectors, respectively. The *Y* indicates the luminance signal. If necessary, see the handbook for the digital equipment for more information.

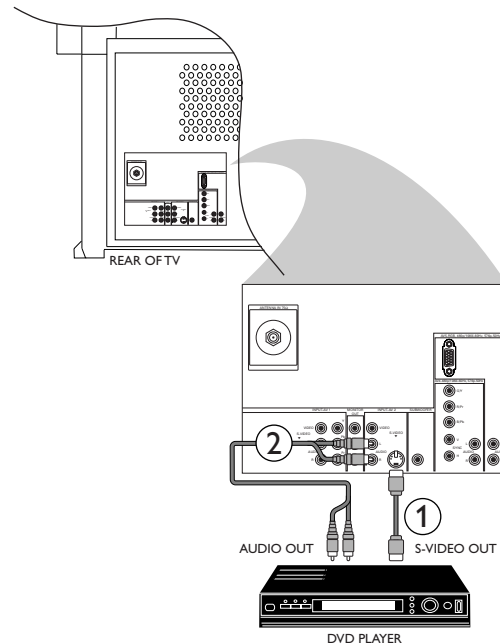


CONNECTING PERIPHERAL EQUIPMENT

S-Video Equipment

Note : Progressive-scan DVD players can be connected to the **AV4** or **AV5** inputs only.

- 1** Connect an **S-VIDEO** cable to the **INPUT-AV 2 S-VIDEO** input.
- 2** Connect the audio cables to the equipment's **AUDIO L** (mono) and **AUDIO R** sockets and to the **INPUT-AV 2 AUDIO L** (mono) and **AUDIO R** sockets on your TV.



AV4 and AV5 Digital High-definition Inputs

When you have digital equipment with 1080i or 480p signal output (60Hz) or 576p signal output (50Hz), connect it to the **AV4** or **AV5** inputs on your TV. Examples of such equipment are digital set-top boxes and progressive-scan DVD players.

Connecting to AV4

Connect digital equipment with component video output (usually labeled **Y-Pb-Pr**) or with **RGB** output (phono-type connectors) to the **AV4** inputs for video and audio left and right. Also connect to the **H** and **V SYNC** inputs on the TV if required for your digital equipment.

Note : The **AV4** sockets are compatible with some digital equipment having RGB outputs with “sync on green” or RGB with “separate H and V sync.” Output standards for digital equipment, however, may vary by manufacturer. No industry standards have been established for HD television RGB signal systems, timing, synchronization, and signal strengths. If the digital equipment you want to connect to your TV offers both component video and RGB outputs, component video is the suggested connection to use. See the handbook for the digital equipment.

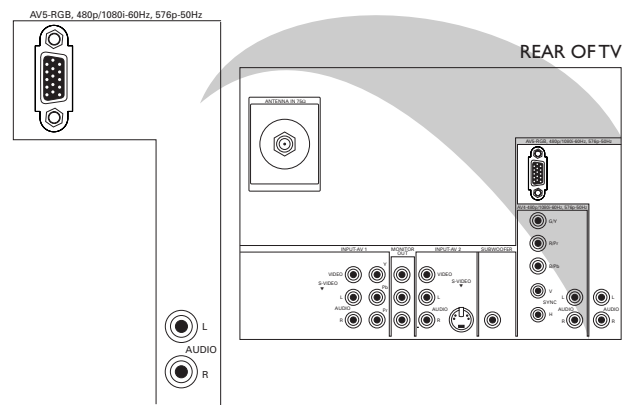
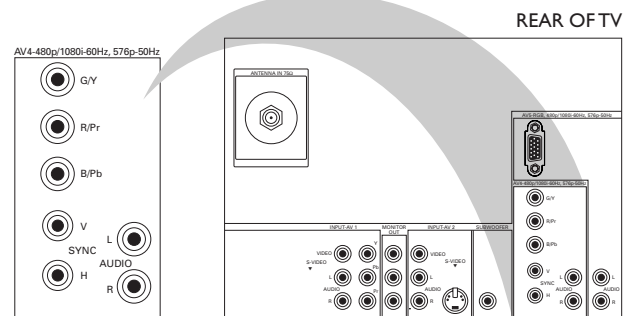
Connecting to AV5

Connect digital equipment with **RGB** or **Y-Pb-Pr** output to the **AV5** inputs for video and audio left and right. A DB15 cable or adaptor cable with a DB15 connector is required.

Note : The **AV5** input cannot be used to connect a computer or any other VGA device.

Notes regarding connecting to either AV4 or AV5 :

- For connections to either **AV4** or **AV5**, be sure the TV's color-space setting matches the output (**Y-Pb-Pr** or **RGB**) of the digital equipment you have connected to the **AV4** or **AV5** inputs. See instructions for setting the TV's color space on page 37.
- See the handbook for the high-definition equipment.
- If you notice scrolling images, wrong colors or no color, no picture or even combinations of these on your screen, check to see if the connections have been done properly.

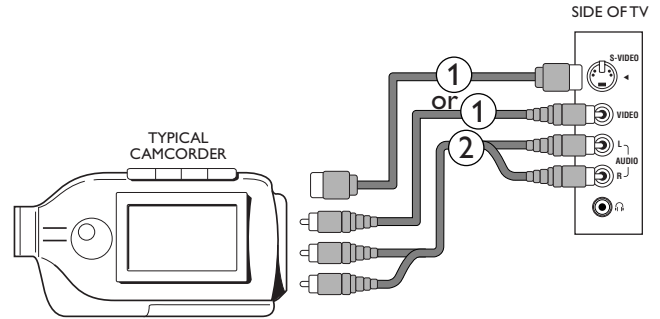


CONNECTING PERIPHERAL EQUIPMENT



Camera and Camcorder

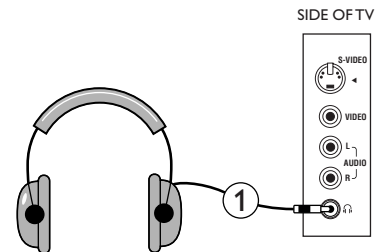
Connect your camera or camcorder to sockets at the side of your TV.

- 1 Connect the equipment to the **VIDEO** or **S-VIDEO** socket.
Note : **S-VHS** quality with an **S-VHS** camcorder is obtained by connecting an **S-VIDEO** cable with the **S-VIDEO** socket instead of making a connection to the **VIDEO** socket.
- 2 Connect the equipment to the **AUDIO L** socket for mono or both the **AUDIO L** and **R** for stereo.



Headphone

- 1 Insert the plug into the headphone socket  at the right side of the TV.
- 2 Press  on the remote control to switch off the internal loudspeakers of the TV.



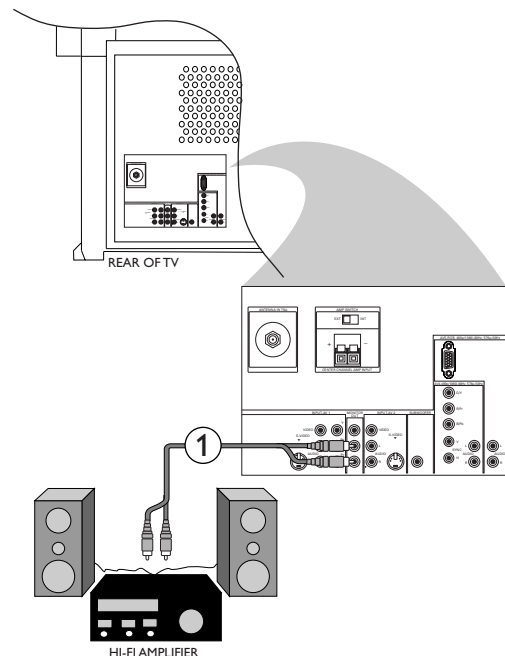
Notes :

- The headphone impedance must be between 8 and 4000 Ohms.
- The headphone socket has a 3.5 mm socket.
- In the **SOUND** menu, select **HEADPHONE** to adjust the headphone volume and balance.

Additional Audio Connections : External Hi-fi

If you would like to hear TV programmes through your audio hi-fi system, your TV offers this capability.

- 1 Connect the audio cables to the **AUDIO L** and **R** input sockets of your amplifier and to the **AUDIO L** (mono) and **R MONITOR OUT** sockets of the TV.
- 2 Turn the TV and audio system on.
- 3 Control the volume of the hi-fi system at the hi-system's amplifier.
 Volume adjustments made to the TV do not affect the volume of the hi-fi system.

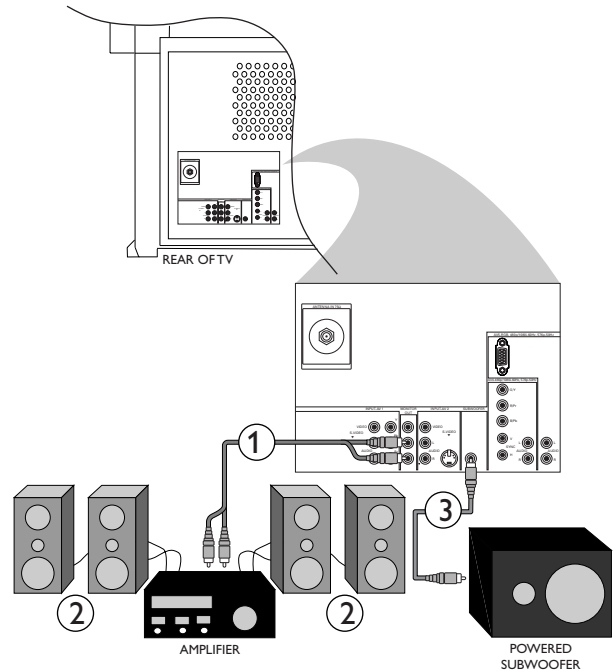


CONNECTING PERIPHERAL EQUIPMENT

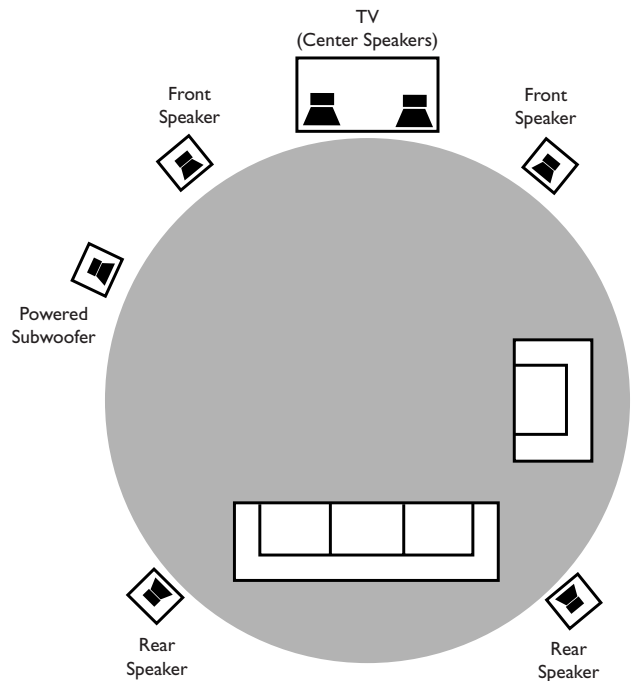
Additional Audio Connections : Surround Sound

Your TV has extra sockets that allow you to connect to an external audio amplifier system and powered subwoofer. This connection will provide a surround-sound experience similar to a movie theatre or concert hall.

- 1 Connect audio cables from the **AUDIO L** and **R MONITOR OUT** sockets of the TV to the **AUDIO L** and **R** inputs sockets on the surround-sound amplifier.
- 2 Connect speaker wires from the surround-sound amplifier's front and surround-sound speaker sockets to the front and surround-sound speakers.
- 3 Connect an audio cable from the **SUBWOOFER** output of the TV to the Low Level Input sockets on the powered subwoofer.
- 4 Adjust volume for the surround-sound amplifier and powered subwoofer at those pieces of equipment.



Note: The gray circle indicates the primary viewing area.

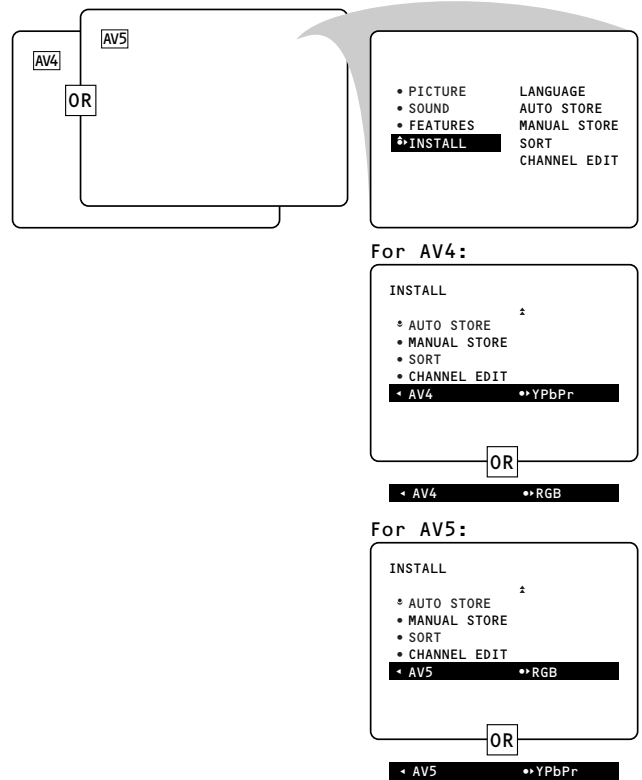


CONNECTING PERIPHERAL EQUIPMENT

Setting the AV4 and AV5 Color Space

The term *colour space* refers to how colours are defined and appear on your TV. When making connections to the **AV4** or **AV5** sockets, you will need to be sure the TV's colour space is set to match the output of the peripheral you have connected.

- 1 Press the **AV** key on the remote control as many times as necessary to select the high-definition input you desire, **AV4** or **AV5**.
- 2 Press the **MENU** key to display the menu.
- 3 Select **INSTALL** with the cursor down.
- 4 Press the cursor right to enter the **INSTALL** menu.
- 5 Cursor down until the high-definition input (**AV4** or **AV5**) is selected.
- 6 The current colour-space setting appears to the right of **AV4** or **AV5**. To change the setting, cursor left or right.
- 7 Press the **[+]** key to switch the menu off.



SELECTING CONNECTED EQUIPMENT FOR VIEWING

Equipment Connected with an Aerial Cable Only

Select the channel number under which you have stored the test signal with the digit keys.

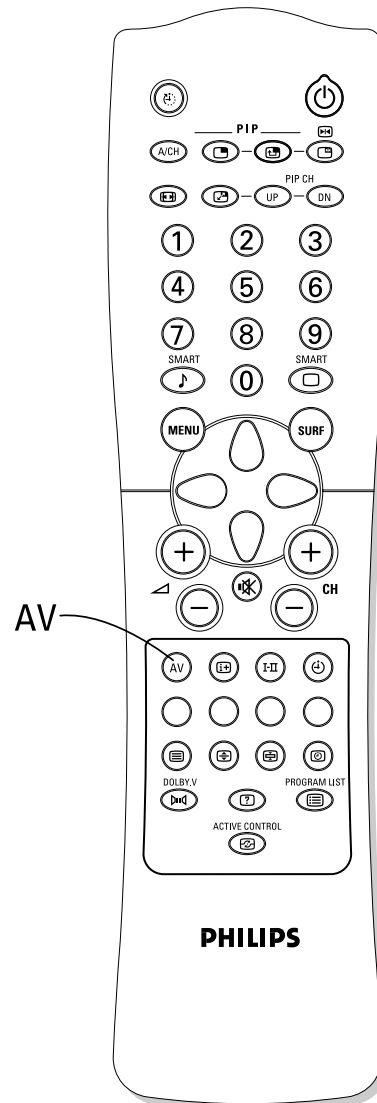
Equipment Connected to the back or to the side of the TV (AV3)

Press the **AV** key repeatedly to select **AV1**, **CVI**, **AV2**, **AV3**, **AV4**, or **AV5**, according to where you connected your equipment at the back or the side of your TV.

Select **CVI** to view the playback of DVD discs if you used the INPUT-**AV 1** component video input sockets (**Y-Pb-Pr** and **AUDIO L** [mono] and **R** inputs).

TV Channels

Enter the channel number of the TV channel you want to watch with the **digit** or **CH +/-** keys.



CARE, CLEANING, AND TIPS

WARNING Concerning Stationary Images on the TV Screen :

Do not leave stationary or “letterbox” images on screen for extended periods of time. This can cause uneven picture-tube aging.

Normal use of the TV should involve the showing of pictures that contain constantly moving and changing images that fill the screen. Be careful not to leave nonmoving images on screen for extended periods of time or to display the same images on screen too frequently, because subtle ghost images can be left on the picture tubes. Avoid showing the same stationary images more than 15 percent of your total viewing in any one week. Sources of stationary images may be DVD discs, laser discs, video games, CD-i discs, videotapes, digital television boxes, broadcast channels, cable channels, satellite channels, and others. **Here are some examples of stationary images (this is not an all-inclusive list; you may encounter others in your viewing) :**

- **DVD menus**—listings of DVD disc content
- **“Letterbox” black borders**—black bars shown along the edges of the picture when a widescreen (16:9) movie is played on TV
- **Video-game images and scoreboards**
- **Television station logos**—present a problem if they are bright and stationary; moving or low-contrast graphics are less likely to cause uneven aging of the picture tube
- **Stock-market tickers**—presented at the bottom of the TV screen
- **Shopping channel logos and pricing displays**—bright and shown constantly or repeatedly in the same location on the TV screen.

All picture tubes age with use, with their light output diminishing over time. But by maintaining normal use—mixing television picture types—you will create conditions for the tubes to age at an even rate. The result will be a TV picture that is evenly bright over the entire screen.

PLACEMENT OF THE TV

- See page 4.

CLEANING

- To avoid possible shock hazard, be sure the TV is unplugged from the electrical outlet before cleaning.
- Regularly dust the TV with a dry, nonscratching duster to keep the TV clean.
- When cleaning the TV, take care not to scratch or damage the screen surface. Avoid wearing jewelry or using anything abrasive. Do not use household cleaners. Wipe the front screen with a clean cloth dampened with water. Use even, easy, vertical strokes when cleaning.
- Gently wipe the cabinet surfaces with a clean cloth or sponge dampened in a solution of cool, clear water and a mild soap or detergent. Use a clean, dry cloth to dry the wiped surfaces.
- Occasionally vacuum the ventilation holes or slots in the back cover of the set.
- Never use thinners, insecticide sprays, or other chemicals on or near the cabinet, as they might cause permanent marring of the cabinet finish.

TIPS

- Do not leave your set on standby mode for a prolonged period of time. Switch the set off to allow it to be demagnetised. A demagnetised set supports good picture quality.
- Do not shift or move the set around when it is switched on. Unevenness in colour in some parts of the screen may occur.


END-OF-LIFE DISPOSAL OF THE TV

Philips is paying much attention to making its products environmentally friendly. Your new TV contains materials that can be recycled and reused. Specialised companies can dismantle your discarded TV at the end of its life, concentrating on the reusable materials and minimising the amount of materials to be disposed. Please be sure to dispose of your old TV according to local regulations.

DISPOSAL OF EXHAUSTED BATTERIES

The batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless, in many countries exhausted batteries may not be disposed of with your household waste. Please ensure you dispose of exhausted batteries according to local regulations.

BEFORE CALLING SERVICE

| Symptom | What to do |
|--|---|
| TV remote control does not work | <ul style="list-style-type: none"> • Check that the batteries are installed correctly. • Replace the batteries, if necessary. • Clean the remote control and the remote-sensor window on the TV. • Be no farther than 6 meters from the TV when using the remote control and aim the remote toward the TV's remote-sensor window. • If the remote still will not work, use the keys on the TV. |
| No power | <ul style="list-style-type: none"> • Check that the TV's power cord is plugged into the mains socket. If there is still no power, disconnect the plug. Wait for 60 seconds and reinsert the plug and then switch on the TV again. • See if the outlet is controlled by a wall switch. • If you are using an AC power strip, be sure the fuse on the power strip is not blown. |
| No picture | <ul style="list-style-type: none"> • Check the antenna connection at the rear of the TV to see if it is properly connected to the TV input terminal. • The broadcast station may be experiencing difficulty. Try another channel. • Adjust the contrast and brightness settings or select another picture setting with the Smart Picture key on the remote control. • If using peripheral equipment through the A/V inputs, be sure it is properly connected. • Be sure you have selected the correct signal source for viewing. • If you are attempting to view a picture from a progressive-scan-capable DVD player connected to the AV4 or AV5 sockets, be sure you have switched the DVD player to progressive-scan mode. • If you are using an HD receiver, be sure its output is set correctly (to HD or SD), based on the connection to the TV you have made. |
| Good picture but no sound | <ul style="list-style-type: none"> • Increase the volume. • Check that the TV is not muted; press the  key on the remote control. • When no signal is detected, the TV automatically switches off the sound. This is proper operation and does not indicate a malfunction. • Check the transmission system's sound settings on the set. |
| Good sound but poor colour or no picture | <ul style="list-style-type: none"> • Adjust the contrast and brightness setting or select another picture setting with the Smart Picture key on the remote control. • Check the transmission system's colour settings on this set. |
| Poor picture | <ul style="list-style-type: none"> • Poor picture quality sometimes occurs when an S-VHS camera or camcorder has been connected to the side panel (AV3) of the TV when another peripheral is connected to AV1 or AV2 simultaneously. In this case, switch off one of the other peripherals. |
| Snowish picture and noise | <ul style="list-style-type: none"> • Check the antenna connection. |
| Colour patch (unevenness) | <ul style="list-style-type: none"> • Switch off the TV by the mains power key. Wait for 20 minutes before switching on again. • Be sure you have made connections correctly. • If you have connected digital equipment to the AV4 or AV5 sockets, check the colour-space setting on the equipment or TV and change the setting on either if necessary. • Check to be sure the TV is not placed too near speakers or magnetic objects. • Adjust the TV's convergence. |
| Horizontal dotted lines | <ul style="list-style-type: none"> • This may be caused by electrical interference from appliances such as hair dryers or vacuum cleaners or other sources such as neon lights. Turn off the appliance or move the TV. |
| Double images or "ghost" images | <ul style="list-style-type: none"> • High-rise building or hills may be obstructing reception. Try using a highly directional antenna to improve the picture. |
| One white line across the screen | <ul style="list-style-type: none"> • Switch the TV off immediately and consult a qualified service person. |
| NICAM sound distortion (crackling noise) | <ul style="list-style-type: none"> • This could be due to antenna siting or reflected signal. • Switch over to "MONO" by pressing the I-II key on the remote control. |

If your problem is not solved, switch the TV off and then back on again once. **Never attempt to repair a defective TV yourself.** Check with your dealer or call a TV technician.

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SPECIFICATIONS

Product Type

Rear-projection TV with HD Input

Picture

- Picture screen diameter :
43PP8420 and 43PP8421 : 109 cm (43 in.)
50PP8421 : 127 cm (50 in.)
- Visible screen size :
43PP8420 and 43PP8421 : 109 cm (43 in.)
50PP8421 : 127 cm (50 in.)
- 100Hz digital scan*
- Progressive scan*
- Digital comb filter
- Dynamic contrast
- Colour enhancements : green/blue stretch
- Digital colour transient improvement (CTI)
- Digital histogram
- Active Control™
 - Auto Sharpness
 - Auto Dynamic Noise Reduction
- Digital Noise Reduction (DNR)
- Tint control (three modes)

Sound

- Dolby[®]* Virtual Surround processing
- Incredible Surround™
- Speakers : 5 cm x 5 cm (2 in. x 2 in.) tweeter
5 cm x 12.7 cm (2 in. x 5 in.) woofer
- Smart Sound (four modes) : Theatre, Voice, Music, Personal
- Stereo : digital NICAM
- Sound output : 2 x 15 W, 50Hz–10 kHz at 5% THD
(flat response) 8-ohm load
- Bass Boost
- Center channel input
- Subwoofer out

Ease of Use

- Smart Picture (five modes)
- Smart Sound (four modes)
- Multi-language onscreen display and menu control
- Sleep timer and Timer
- Childlock
- 100 presets
- Favorite Programme List
- Remote control

Connectivity

- Rear : MONITOR OUT—CVBS and audio L/R
INPUT-AV 1—CVBS, S-Video, and audio L/R
Component video input (CVI)—YPbPr and audio L/R
INPUT-AV 2—CVBS, S-Video, and audio L/R
AV 4—YPbPr (or RGB+HV)
accepting 480p/1080i-60Hz (EIA/CEA-770.2(&3)-C) and
576p-50Hz (ITU-R BT.1358); and audio L/R
AV 5—RGB (or YPbPr with adaptor)
accepting 480p/1080i-60Hz (EIA/CEA-770.2(&3)-C) and
576p-50Hz (ITU-R BT.1358); and audio L/R
ANTENNA IN 75Ω—coaxial
CENTER CHANNEL AMP INPUT and AMP SWITCH
SUBWOOFER output
- Side : AV3—CVBS, S-Video, and Audio L/R; stereo headphone
out (3.5 mm socket)

Reception

- Tuning system : PLL
- Color transmission system (off-air) :
PAL B/G/I/D/K, SECAM B/G/D/K, NTSC M
- A/V connections : NTSC 3.58/4.43, PAL60
- Stereo sound transmissions systems (off-air) :
NICAM B/G/I/D/K, 2CS B/G/D/K
- Channel selections : VHF, UHF, S-channels, hyperband

Miscellaneous

- Ambient temperature : +5/+45°C
- Operation voltage, frequency : refer to the specification at the
back of the TV set
- Power consumption : refer to the specification at the back of
the TV set
- Product dimensions (W x D x H cm) :
43PP8420 and 43PP8421 : 96.1 x 53.1 x 114.6
50PP8421 : 113 x 62 x 148
- Product weight :
43PP8420 and 43PP8421 : 57 kg (125 lb)
50PP8421 : 82 kg (180 lb)
- Carton dimensions (W x D x H cm) :
43PP8420 and 43PP8421 : 106 x 62 x 125
50PP8421 : 125 x 71 x 154
- Carton weight :
43PP8420 and 43PP8421 : 8 kg (18 lb)
50PP8421 : 12 kg (26 lb)

These technical specifications are subject to change without notice.

*The options of Auto, Progressive, Digital Scan, or 100Hz can be selected in the TV's onscreen Picture menu through the Digital Options item.

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INTERNATIONAL GUARANTEE CONDITIONS

This product is guaranteed by Philips for a period of one year after the date of purchase against defects due to faulty workmanship or materials. The guarantee covers both parts and labour.

Service under guarantee is only provided upon presentation of reasonable evidence (e.g., completed guarantee card or purchase receipts) that the date of the claim is within the guarantee period.

The guarantee is not valid if the defect is due to accidental damage (including in transport), misuse or neglect and in case of alterations or repair carried out by unauthorised persons.

The guarantee may not apply if the product requires modifications or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorised or if any damage results from these modifications.

Service (during and after guarantee) is available in all countries where this product is officially distributed by Philips. In countries where Philips does not distribute the product, the local Philips Service organisation will also provide service, although there may be a delay if the appropriate spare parts and technical manual are not readily available.

These statements do not affect your statutory rights as a consumer.

In the event of difficulty, please contact the Philips Information Centre in any country (see enclosed addresses).

CONDICIONES DE GARANTIAS INTERNACIONALES

Philips garantiza este producto durante 1 año, a partir de la fecha de adquisición, contra defectos debidos a una imperfecta fabricación o malos materiales. Esta garantía cubre tanto las piezas de recambio como la mano de obra.

Las reparaciones que pudieran producirse durante el período de vigencia de la presente garantía se efectuarán solo si presenta una razonable evidencia (por ejemplo, mediante la presente garantía, debidamente cumplimentada, o la factura de compra), de que la fecha de la queja está dentro del período de garantía.

Esta garantía no tendrá validez si el defecto es debido a un deterioro accidental; un uso inadecuado o un mal trato y en el caso de modificaciones o reparaciones efectuadas por personal no autorizado.

El servicio (durante y después de la garantía) está disponible en todos los países donde el producto es oficialmente distribuido por Philips.

En países donde Philips no distribuya el producto, la organización local de Servicio Philips dará también el servicio necesario, aunque puede producirse una demora si los adecuados recambios no están fácilmente disponibles.

En todo caso, el titular de la garantía tiene todos los derechos mínimos reconocidos por la Ley. En el caso de cualquier dificultad, por favor dirijase al : Centro de Information al Consumidor (vease lista adjunta).

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