

Return your Warranty Registration card today to ensure you receive all the benefits you're entitled to.

Once your PHILIPS purchase is registered, you're eligible to receive all the privileges of owning a PHILIPS product. So complete and return the Warranty Registration Card enclosed with your purchase at once, and take advantage of these important benefits.

Warranty Verification

Registering your product within 10 days confirms your right to maximum protection under the terms and conditions of your PHILIPS warranty.

Owner Confirmation

Your completed Warranty Registration Card serves as verification of ownership in the event of product theft or loss.

Model Registration

Returning your Warranty Registration Card right away guarantees you'll receive all the information and special offers which you qualify for as the owner of your model.

PHILIPS

Congratulations on your purchase, and welcome to the "family!"

Dear PHILIPS product owner:

Thank you for your confidence in PHILIPS. You've selected one of the best-built, best-backed products available today. And we'll do everything in our power to keep you happy with your purchase for many years to come.

As a member of the PHILIPS "family," you're entitled to protection by one of the most comprehensive warranties and outstanding service networks in the industry.

What's more, your purchase guarantees you'll receive all the information and special offers for which you qualify, plus easy access to accessories from our convenient home shopping network.

And most importantly you can count on our uncompromising commitment to your total satisfaction.

All of this is our way of saying welcome-and thanks for investing in a PHILIPS product.

Sincerely,




Lawrence J. Blanford
President and Chief Executive Officer


P.S. Remember, to get the most from your PHILIPS product, you must return your Warranty Registration Card within 10 days. So please mail it to us right now!



Know these **safety** symbols



 This "bolt of lightning" indicates uninsulated material within your unit may cause an electrical shock. For the safety of everyone in your household, please do not remove product covering.

 The "exclamation point" calls attention to features for which you should read the enclosed literature closely to prevent operating and maintenance problems.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, fully insert.

ATTENTION: Pour éviter les choc électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

For Customer Use

Enter below the Serial No., which is located on the rear of the cabinet. Retain this information for future reference.

Model No. _____

Serial No. _____




PHILIPS

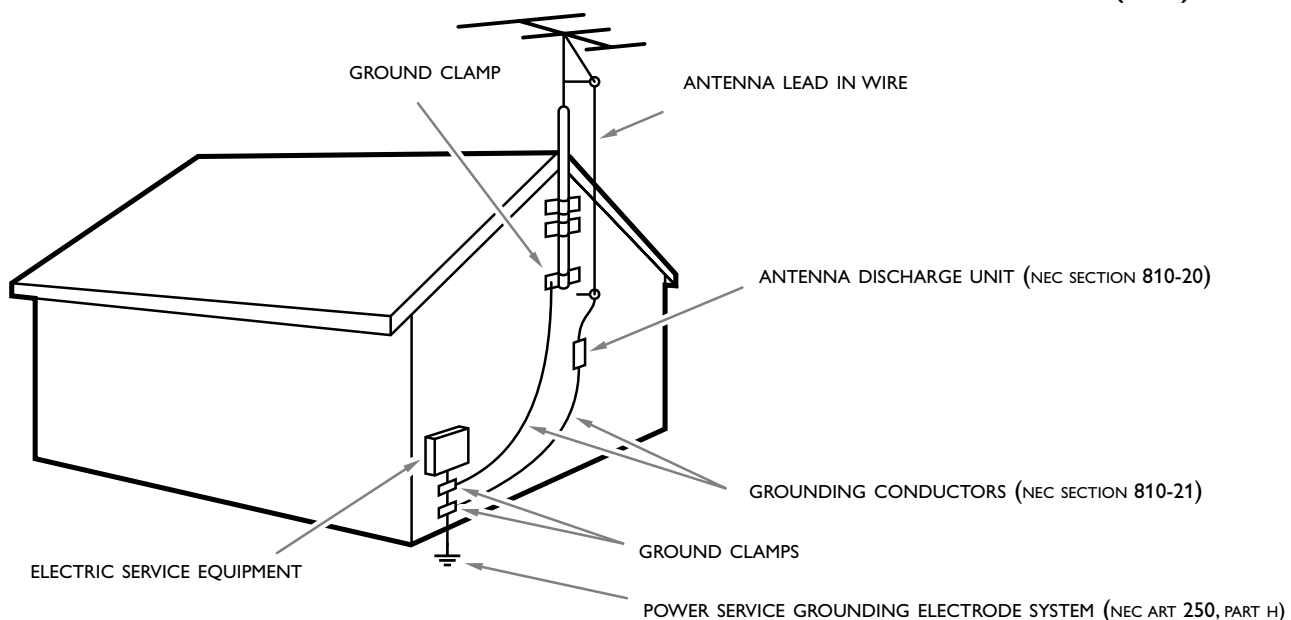
Visit our World Wide Web Site at <http://www.philips.com>

IMPORTANT SAFETY INSTRUCTIONS

Read before operating equipment

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and third grounding prong. The wide blade or third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12.  Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. This product may contain lead or mercury. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance: www.eiae.org.
16. **Damage Requiring Service** - The appliance should be serviced by qualified service personnel when:
 - A. The power supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the appliance; or
 - C. The appliance has been exposed to rain; or
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - E. The appliance has been dropped, or the enclosure damaged.
17. **Tilt/Stability** - All televisions must comply with recommended international global safety standards for tilt and stability properties of its cabinets design.
 - Do not compromise these design standards by applying excessive pull force to the front, or top, of the cabinet which could ultimately overturn the product.
 - Also, do not endanger yourself, or children, by placing electronic equipment/toys on the top of the cabinet. Such items could unsuspectingly fall from the top of the set and cause product damage and/or personal injury.
18. **Wall Mounting** - The appliance should be mounted to a wall only as recommended by the manufacturer.
19. **Power Lines** - An outdoor antenna should be located away from power lines.
20. **Outdoor Antenna Grounding** - If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mats and supporting structure grounding of the lead-in wire to an antenna-discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode. See Figure below.
21. **Objects and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE (NEC)



Note to the CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

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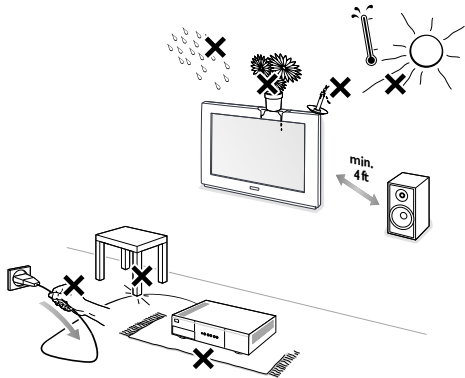
Help?

If this instruction manual does not give an answer or if 'Before Calling Service' do not solve your TV problem, you can call your Local Philips Customer or Service Center. See the supplied World-wide guarantee booklet. Please, have the Model and Product number which you can find at the back of your television set or on the packaging, ready, before calling the Philips helpline (800-531-0039).

Model:
Product No:

Preparation

Do not insert the power plug in a wall socket before all connections are made.



- 1 Place the receiver box wherever you want, but make sure that air can circulate freely through the ventilation slots. Do not install the receiver box in a confined space such as a book case or a similar unit.

To prevent any unsafe situations, no naked flame sources, such as lighted candles, should be placed on or in the vicinity. Avoid heat, direct sunlight and exposure to rain or water.

The equipment must not be exposed to dripping or splashing and no objects filled with liquids, such as vases, should be placed on it.

- 2 Connect the antenna cable ① and the **VGA** cable with trailing audio cinch connectors ② as shown in the inside frontcover of this handbook. Make sure all screws of the cable ② are tightened well.

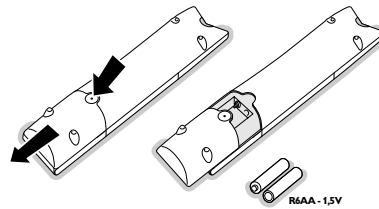
TV receiver box with speakerless monitor

In case you connect your TV receiver box with a speakerless monitor, and without having connected an audio receiver, all references made in this instruction book to sound reproduction, volume control, and audio connections, are not applicable (except for a headphone connection).

The buttons on the remote control referring to sound have no function either.

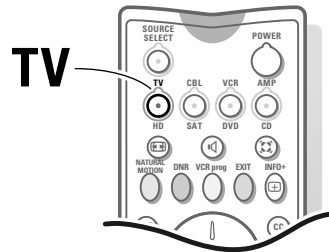
- 3 To connect your computer, see the separate supplied instruction manual with your monitor. To connect other accessory devices, see p. 19. In order to obtain the best result, please use only the supplied antenna cables between the receiver box and videorecorder, and between videorecorder and antenna connector.
- 4 Insert the power cord supplied ③ into the **MAINS** at the back of the monitor and the power cord ④ at the back of the receiver. Put both in the wall sockets with an AC power supply of 110V. Consult your local dealer if your AC power supply is different. Please, only use the power cord ③ supplied with the monitor, for the monitor, and use the power cord supplied with the receiver, only for the receiver.

- 5 Remote control: Remove the cover of the battery compartment. Insert the 2 batteries supplied (Type R6AA-1.5V).

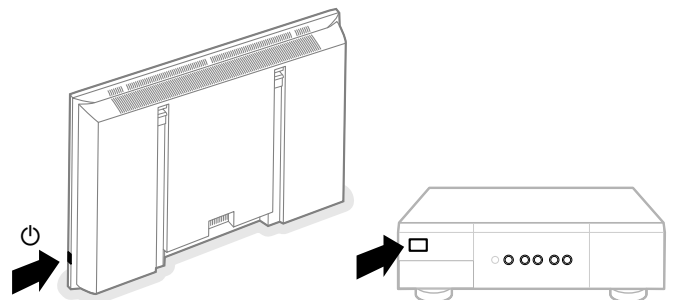


The batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless in many areas exhausted batteries may not be disposed of with your household waste. Please check on how to dispose of batteries according to local regulations.

Press the **TV** button (green indicator) to be sure your remote control is in the TV mode.



- 6 **Turn the receiver on :** Press the power button ① at the right side of the monitor and the one on the front of the receiver box. A green indicator and the screen light up.



The green indicator blinks every time you press a button on the remote control.

When you turn on your set **for the first time**, the menu **LANGUAGE** automatically appears on the screen. Alternately the explanation appears in different languages.

Operation

Use of the remote control

Source Select

Press this button repeatedly to select **AV1, AV2, AV3, AV4, AV5, FRONT, VGA** or **TV Channels** when in TV mode, according to where you connected the accessory devices (p. 24).

Remark: in VGA mode only some buttons are valid. See VGA menu, p. 24.

TV CBL VCR AMP HD SAT DVD CD

Press one of these buttons to use the remote control in the TV, CBL, VCR or Amplifier mode as indicated above the button. A green indicator lights up. Press the same button again more than 1 second to use the remote control in the mode indicated below the button (HD, satellite, DVD or CD). A red indicator lights up.

Press the button again more than 1 second to return to the function named above the button.

Picture format


Press this button to summon a list of **available** picture formats for showing video images in the traditional 4:3 proportions.


Press this button repeatedly or press the cursor up/down to select another picture format: Automatic, Superzoom, 4:3, Movie Expand 14:9, Movie Expand 16:9, 16:9 Subtitle, Widescreen.

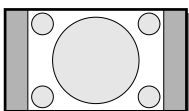
Automatic makes the picture fill the screen as much as possible.

Superzoom removes the black bars on the sides of 4:3 programs with minimal distortion.

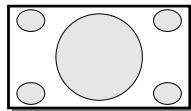
When in Movie Expand 14:9, 16:9 or Superzoom picture format, you can make subtitles visible with the cursor up/down.

Note: In VGA mode press the  button to switch between a 4:3 or a Widescreen picture format.

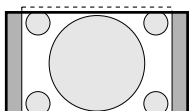
In Dual Screen mode press the  button to switch between a full or a 4:3 letterbox picture format.



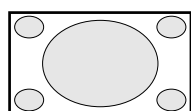
4:3



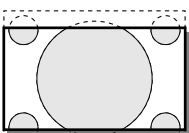
Super zoom



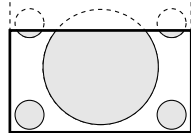
Movie expand 14:9



Wide screen



Movie expand 16:9



16:9 Subtitle

POWER

Press to turn on/off the TV.

The TV is never powered off completely unless it is physically unplugged.

Surround mode on/off

- In **MONO** sound mode, this feature, when switched on, enables you to hear a special effect of sound.
- In **STEREO** sound mode, when **Surround mode** is switched on, it seems as though the loudspeakers are spread further apart from one another.

Alternate audio

When you tune a channel where SAP (Second Audio Program) is available, you can toggle between **Main** and **SAP**. If not available, only Main can be selected.

CC Closed Caption


On/Off/On with Mute see p. 14


Main menu on/off see p. 9

Freeze Format


This function is not available with a VGA or HD source.

See Settings menu, General, Freeze format, p. 10 where you can select among three modes to be displayed when the freeze button is pressed on the remote control: Freeze, Replay, Photo Finish.

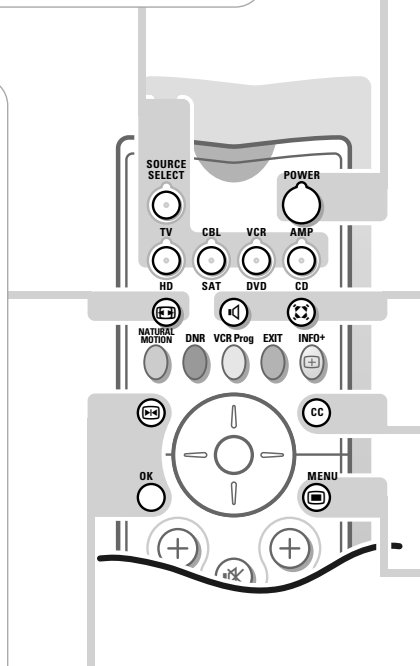
When the mode is **Freeze**: press the  button to activate/de-activate a frozen picture. The audio continues to play.

When the mode is **Replay**: press the  button to redisplay a few seconds of stored video in a single PIP window. Press the **OK** button to display a few seconds of a new stored video picture.

When the mode is **Photo Finish**: press the  button to display 12 PIP windows of stored video pictures. Press the **OK** button to display a new series of frozen pictures.

Note: Continuing to hold the  button down will cycle the TV through the various modes (Freeze, Replay, Photo Finish).

OK Press this button to activate your choice or to confirm when in the menus.



NATURAL MOTION

Press this button repeatedly to select On or Off. See TV menu, Picture menu, Digital Natural Motion, p. 12.

DNR Digital Noise Reduction

Press this button repeatedly to select Off, Minimum, Medium or Maximum. See TV menu, Picture menu, p. 12.

VCR Prog (Only functional in VCR mode.)

Many VCRs have an automatic programming function. If your VCR has this function, the universal code set will assign it to this button.

VOL Volume

Press + or - to adjust the volume.

Mute

Interrupt the sound or restore it.

CH Channel selection

To browse through the TV channels or sources stored.

VCR functions see p. 25

EXIT

Press this button to exit the menus provided by universal devices like VCR, SAT, DVD,...

INFO + Display information

Press this button to display (when available) information about the current channel and program or source.

The information display is divided in two zones.

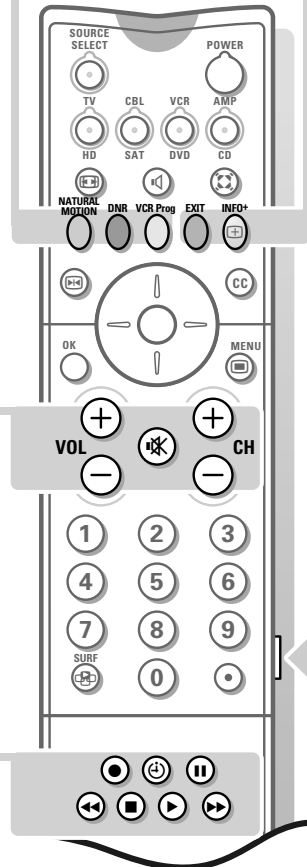
The upper zone may present the local time and information on the current channel: number, name, video and audio formats of the incoming signal, CC availability, availability of alternate or secondary audio programs (a plus sign appears if you have more than one choice), ratings and program title if available.

The lower zone presents information about the currently selected settings: display format, sound mode and (if on) the Sleep Timer icon and the minutes remaining.

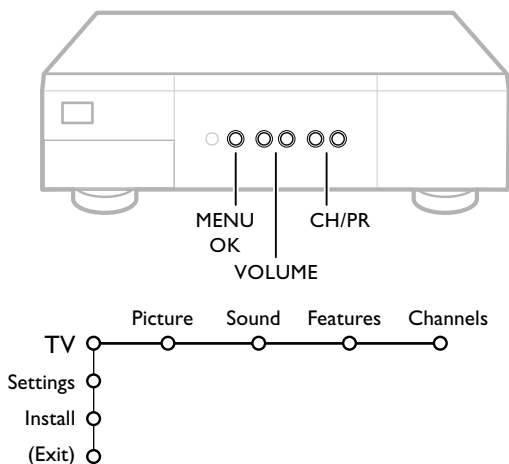
11	WPIX	12:47
4:3	Stereo	
(cc)	MAIN+	
TV-PG-DLSV		
Kids with Guns		
Widescreen		
Surround		
05:22		

Backlighting button

Press this button on the right side of the remote control. The backlighting of the buttons VOL, CH, Mute and the digit buttons stays on for 5 seconds after pressing the button.



Buttons in front of the TV receiver box



Should your remote be lost or broken you can still change television settings by using the buttons on the front of the TV receiver box.

- Press the **VOLUME** - or + button to adjust the volume.
- Press the **CH/PR** - and + button to browse through the TV channels or sources stored and to select them.
- Press the **MENU** button to summon the main menu. Use the **VOLUME** - and + buttons to select the menu item. Use the **CH/PR** - and + buttons to select the TV, Settings, Install menu or Exit, or to select the submenu items.

Note:

- Sometimes not all the menu items are visible on the screen; Press the **CH/PR** + button to reveal all items.
- The **Exit** menu lets you dismiss the menu. Select **Exit** and press the **MENU** button.


Surf

With this feature you can easily switch between different TV channels/sources that currently interest you.


In the menu system, you can set surf to two- or nine-channel. (See Settings, General Surf, p. 10.)

Press this button to select the previously viewed TV channel or source in case of a Two channel surf, or to select the surf ring in case of a Nine channel surf.

In case of a Nine channel surf, a list appears at the right side of the screen. On top, the most recently added. The puck is on the channel number currently viewed.


Press the  button to turn to the next channel in the list or press cursor up/down to immediately select the desired TV channel of the list.

To add a new channel or source: tune to the channel or source you wish to add.

Press the  button. Press the cursor right to add.

If there are already nine channels/sources in the list, the one at the bottom of the list will be removed.

To remove a channel or source: select the channel number you want to remove.

Press the  button. Press the cursor right to remove.


Press the **OK** button or wait for the time out to dismiss the Surf display.

Active Control


Active Control is a pro-active and automatic system. The TV continuously measures and corrects all incoming signals in order to provide the best picture possible.

According to the monitor connected (with or without an Ambient Light Sensor which measures the light conditions of the room), the Active Control functionality may differ.

With a monitor without a light sensor:

Press the  button to select the the Active Control values **Off** or **On**.

With a monitor with a light sensor:

Press the  button repeatedly to select the Active Control values **Off**, **Minimum**, **Medium** or **Maximum** (recommended)

Minimum/On Sharpness, Dynamic Contrast and Noise Reduction are controlled automatically

Medium Sharpness, Colour, Dynamic Contrast and Noise Reduction are controlled automatically

Maximum Sharpness, Colour, Contrast, Dynamic Contrast and Noise Reduction are controlled automatically

Press the cursor in the right direction to select **INFO**.

The Active Control Demo appears.

The picture settings are being adapted continuously and automatically.

The sliders will be moving, showing how the TV is tweaking the current picture.

None of the sliders is user controllable.

Press the **OK** button to switch off the Demo.

Note: Active Control is not available for digital signals via AV4.

Auto Buttons

To select predefined picture and sound settings.

Note: The Auto buttons are disabled when a VGA source is being displayed.

Sound

Press this button to show a list of predefined sound settings, each corresponding with specific factory settings of treble and bass. You can also use the cursor up/down.


Picture

Press this button to show a list of predefined picture settings, each corresponding with specific factory settings of Contrast, Color, Sharpness, DNR, Dynamic Contrast and Color enhancement. You can also use the cursor up/down.


Personal refers to the personal preference settings of picture and sound selected in the picture and sound menu.


Remark: the moment you are in a predefined auto sound or picture setting and you modify a setting in the picture or sound menu, all values of the menu will overwrite the previously made personal settings.

Multi-PIP


Press  to turn on/off Multi-PIP.

The Multi-PIP format that launches on the button press is determined by the selection you made in the Multi-PIP Format list in the General menu, see Settings, General, p. 10 and Multi-PIP, p. 18.

Note: Continuing to hold the  button down will cycle the TV through the various formats (PIP3, PIP8, PIP12), launching a new format after each second the button is held down. Changing the format this way does not store the selected format.

Press the  button again to return to a full main screen picture.

ZOOM

Press the **ZOOM**  button to activate the zoom function.

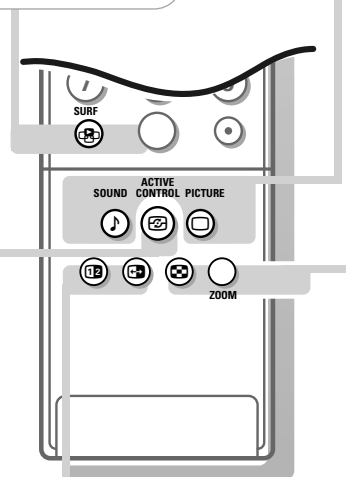
Press the **OK** button repeatedly to select one of the zoom magnifications (x1, x4, x9, x16).

Additionally you can shift the selected zoom window over the screen with the cursor buttons up/down, left/right or in a diagonal way.

The zoom window is reset after selecting another TV channel, another display format or when another display format is selected automatically.

Zooming is disabled in Dual Screen, VGA and HD modes.

Press the **ZOOM**  button again to deactivate the zoom function.



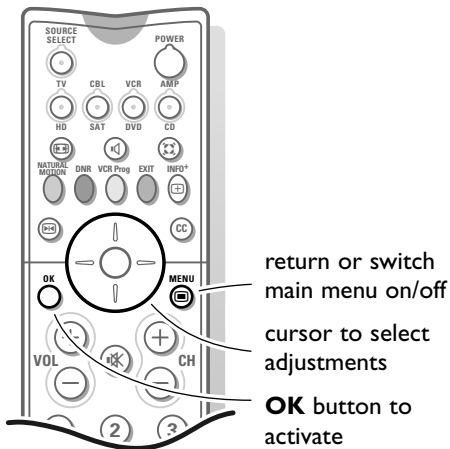
Dual Screen/PIP on/off

See Settings, General menu, p. 10 and Dual Screen/PIP, p. 17



Switching screens in Dual Screen or PIP

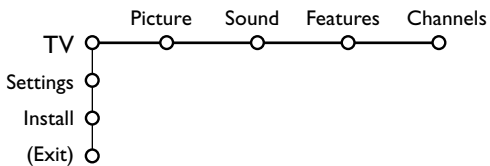
See Settings, General menu, p. 10 and Dual Screen/PIP, p. 17.

To use the menus and the menu system



Attention: point the remote control to the indicator of the monitor.

- 1 Press the **MENU**  button on the remote control to summon the main menu.
*Note: The Main menu contains the item **Exit** to dismiss the menu, only when you turn on your receiver for the first time, or when the Main menu is summoned with the **MENU** button in front of the receiver.*
- 2 Use the cursor in the up/down direction to select the **TV, Settings** or **Install** menu.
Note: Sometimes not all the menu items are visible on the screen. Press the cursor down to reveal all items.
- 3 Use the cursor in the left/right direction to select the menu item.
- 4 Use the cursor up/down again to select the control you want to select or to adjust. For instance, see Picture menu.
- 5 Press the **MENU**  button again to turn off the main menu.



The menu system

Pipes, balls and a puck

The hierarchy of menus and controls is represented by an animated visual mechanism of pipes, balls and a puck. Unlike a map, however, the animated mechanism constantly shows the current whereabouts and continually expands the view of the immediate neighborhood.

The puck represents the user's point of focus, by surrounding the ball indicating the user's current position in the menu hierarchy.

The puck is always present when the menu system is displayed.

The puck is divided into 4 wedge-shaped regions. They correspond to the directional controls (up/down, left/right) on the remote control. The arrows on the cursor indicate which directions to choose.

In this way users can navigate through the menu hierarchy to arrive at the control they wish to adjust.

Pressing a valid button on the remote control shifts focus from the current ball to the next one connected by a pipe in that direction.

Balls represent a branch of the menu hierarchy.

All menu items are represented by balls. Each ball is identified with an identifying text label. When items (balls) of a menu level are more numerous than can fit comfortably on the TV display, only a portion of the items are shown as balls along the pipe. Those omitted are indicated by a cluster of balls which indicates that there are 'more'.

Pipes connect balls together and show the path the user can traverse through the menu structure. Pipes represent individual branches of the menu hierarchy.

Interaction

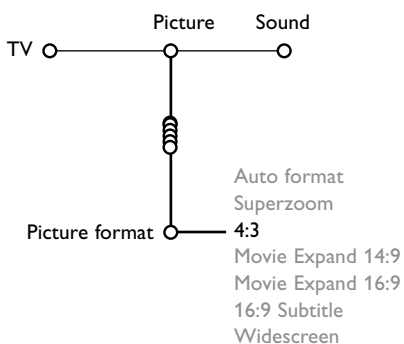
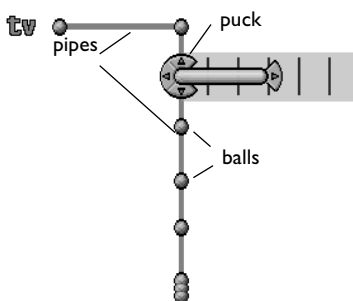
Every pathway in the menu structure leads eventually to a point, where users can set levels, change values or adjust some aspect of system performance.

List controls

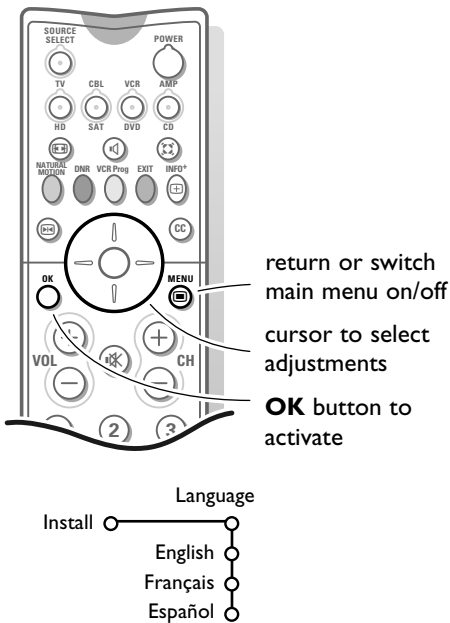
A list control is used to select one or more items from a list of options.


For instance, the display format option list with 4:3, Movie Expand 14:9, etc. Press the right button to move the puck into the list. At least one item is the current value and is highlighted as such.

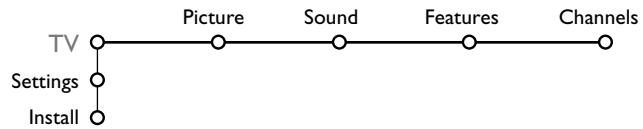
Moving the puck up or down with the up/down button causes the list to move down or up. A single-value list allows only one item to be selected at one time and de-selects another.



Select the menu language



- 1 Press the **MENU**  button on the remote control.

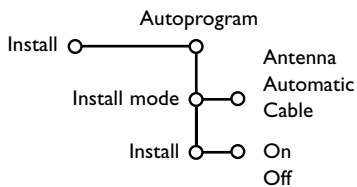


When you turn on your receiver for the first time and no channels are stored so far, the receiver displays a menu nearly identical to the Install menu, but disconnected from the rest of the menu system. This menu also has an additional item **exit** with which the menu can be dismissed.

The menu Language automatically appears on the screen. The explanation appears in different languages one at a time. Choose your preferred language and press the **OK** button on the remote control. Proceed with the Install menu.

- 2 Use the cursor down to select **Install**.
- 3 Use the cursor right to select **Language**. Follow the instructions on screen.
- 4 Use the cursor up/down to select your preferred language and press the **OK** button to confirm your selection.
- 5 Proceed with the **Install** menu.

Store TV channels



- 1 Select **Autoprogram** in the Install menu.
- 2 Press the cursor down to select **Install mode**.
- 3 Press the cursor right.

Note: It is recommended to choose for the **Automatic** way of autoprogramming.

In case of difficulties in autoprogramming with the automatic method, choose for Antenna or Cable whether antenna or cable signals are present.

When **Antenna** is selected, the receiver will detect antenna signals and will search for all antenna TV channels available in your local area.

When **Automatic** is selected, the receiver will automatically detect whether or not cable signal input is present.

When **Cable** is selected, the receiver will detect cable signals and will search for all cable TV channels available in your local area.

- 4 Press the cursor down to select **Install**.
Note: All channels must be unlocked in order to autoprogram. If requested, enter your PIN code to unlock all channels. (See Channels in the TV menu, p. 14.)
- 5 Press the cursor right.
- 6 The message **Searching** appears and the progress of autoprogramming is displayed. When Autoprogramming is complete, the puck navigates to Stop. A message appears confirming the completion together with the total number of channels found.

Note: when you navigate to Stop before autoprogramming is complete, you are given the option to continue.

Available channels: with cable: max. from 1 to 125 - off air: max. from 2 to 69

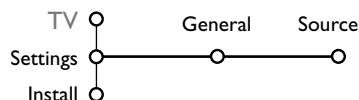
Note: In case a particular channel is too weak for the autoprogramming to identify, after installation is complete, you should tune to that channel by using the digit keys on the remote control.

If the channel is not acquired, a message will appear that the channel is not available.

Select TV settings

The Settings menu allows you to adjust initial settings, i.e. those which are not related to the installation of the TV channels.

It contains items that control the settings of the receiver's functions, features, services and accessory devices you may have connected.

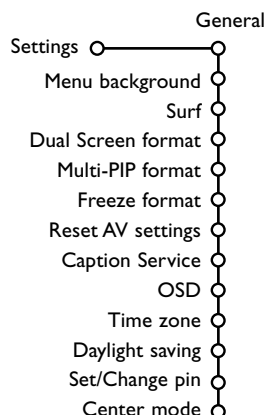


The **General** menu allows you to change settings that will typically be accessed only occasionally.

The **Source** menu allows you to select a source and/or to name each input source.

General

This menu allows you to change various settings that are presumably adjusted less frequently than most other settings.



Menu Background

- 1 Select **Menu Background** with the cursor down.
- 2 Press the cursor right.
- 3 Select **Yes** or **No** to turn the Menu Background on or off.

Surf

- 1 Select **Surf** with the cursor down.
- 2 Select **2 channels** or **9 channels** with the cursor left/right.

Select **2 channels** if you want the P+P button to toggle between the current and the previously selected channel. Select **9 channels** if you want the P+P button to summon a list of up to 9 channels which can be selected. (See Use of the Remote Control, p. 7.)

Dual Screen format *(not available for HD sources)*

The Dual Screen and PIP functions allow you to view two TV channels or sources at one time, hearing audio from the main screen through the speakers and audio from the other screen through the headphones.

This menu allows you to select the preferred format which can then be displayed toggling the **12** button on and off. See Dual Screen/PIP, p. 17.

- 1 Select **Dual Screen format** with the cursor down.
- 2 Press the cursor right.
- 3 Select **Dual Screen, Large PIP, Medium PIP** or **Small PIP** with the cursor up/down.

When **Dual Screen** is selected, and Dual Screen mode is activated with the remote control **12** button, the TV splits the screen into two equally sized screens.

When a **PIP mode** is selected, and Dual Screen mode is activated with the remote control **12** button, the TV shows a full screen of video with a small, medium or large window of video on top of it.

*Note: Continuing to hold the **12** button down will also cycle the TV through the various formats (Dual Screen, Large PIP, Medium PIP, Small PIP) launching a new format after each second the button is hold. Changing the format this way does not store the selected format.*

Multi-PIP format *(not available for HD and VGA sources)*

Multi-PIP format allows you to view multiple channels or sources at one time, hearing audio from the main screen through the speakers.

In this menu you can select which format you prefer to see in Multi-PIP: PIP 3, PIP 8 or PIP 12, referring to the number of PIP screens being displayed pressing the **12** button on the remote control.

*Note: Continuing to hold the **12** button down will also cycle the TV through the various formats. Changing the format this way does not store the selected format.*

- 1 Select **Multi-PIP format** with the cursor down.
- 2 Press the cursor right.
- 3 Select **PIP 3, PIP 8** or **PIP 12** with the cursor up/down.

See Multi-PIP, p. 18 how to operate.

Freeze format *(not available for HD and VGA sources)*

Freeze format allows you to select among three options: Freeze, Replay, Photo finish, to be activated when you press the **12** button on the remote control. See p. 5. In this menu you can select which option you prefer.

*Note: Continuing to hold the **12** button down will also cycle the TV through the various formats. Changing the format this way does not store the selected format.*

- 1 Select **Freeze format** with the cursor down.
- 2 Press the cursor right.
- 3 Select Freeze, Replay, Photo finish with the cursor up/down.

Reset AV settings

This function allows you to reset most of the picture and sound settings to their predefined factory states.

- 1 Select **Reset AV settings** with the cursor down.
- 2 Press **OK** to erase settings and reset them to their default values.

Note: This television receiver provides display of television closed captioning conforming with the EIA-608 standard and in accordance with Sections 15.119 of the FCC rules.

Caption Service

Closed Captioning allows you to read the voice content of television programs on the TV screen. Designed to help the hearing impaired, this feature uses on-screen 'text boxes' to show dialogue and conversations while the TV program is in progress. Captions will appear on the screen during captioned broadcasts.

Note: The captions do not always use correct spelling and grammar.

Not all TV programs and product commercials are made for broadcast with Closed Caption information included. Refer to your area's TV program listings for the TV channels and times of Closed Caption shows. The captioned programs are usually noted in the TV listings with service marks such as 'CC'.

- 1 Select **Caption Service** with the cursor down.
- 2 Press the cursor right.
- 3 Select the desired **Caption Service**
 - **CC 1, 2, 3 or 4**
Dialogue (and descriptions) for the action on the captioned TV program shows on screen. Usually CC 1 is the most used. CC 2 may be used for alternate languages if they are being transmitted.
 - **T 1, 2, 3 or 4**
Often used for channel guide, schedules, bulletin board information for Closed Caption programs, news, weather informations or stock market reports.
Not all Caption Services are necessarily being used by a TV channel during the transmission of a Closed Caption program.
- 4 See Closed Captions in the TV-Features menu, p. 14, to turn the **Caption Service On or Off**.
Note: This television receiver provides display of television Closed Captioning conforming with the EIA-608 standard and in accordance with Sections 15.119 of the FCC rules.

OSD (On Screen Display)

- 1 Select **OSD** with the cursor down.
- 2 Press the cursor right to select **Normal** or **Minimum**.
Normal to activate the continuous display of the channel number and extended display of TV channel and channel information on screen.
Minimum to activate the display of reduced channel information.
See Use of the Remote Control, p. 6, Display information.

Time zone

This function allows you to select your local time zone. Broadcasted time information will correct the clock display for your local time.

- 1 Select **Time zone** with the cursor right.
- 2 Select your local time zone.

Daylight saving

Daylight saving time is automatically set by specially broadcasted signals. This menu item allows you to disable the automatic setting of daylight saving time. This is useful if you live in an area or state where daylight saving is not applied, but you receive channels from other areas where daylight saving signals are broadcasted.

- 1 Select **Daylight saving** with the cursor right.
- 2 Select **Automatic** for automatic clock correction for daylight saving time, based on specially broadcasted signals.
- 3 Select **Off** to disable automatic clock correction based on the specially broadcasted signals.

Center mode

When you have connected a multi channel audio receiver to the receiver box (see Connect peripheral equipment, p. 30) and you have selected **Center mode Yes**, the loudspeakers of the monitor will act as center speaker, making a separate center speaker unnecessary.

Set/Change pin

The Set/Change pin menu item allows you to create or change a Personal Identification Number (PIN).

- 1 Select **Set/Change pin** with the cursor down.
- 2 If no PIN exists yet, the menu item is set to **Set pin**. Follow the instructions on screen.
If a PIN has previously been entered, the menu item is set to **Change pin**. Follow the instructions on screen.
All number combinations from 0000 to 9999 are valid numbers.
- 3 The General menu reappears with a message confirming that the PIN has been created.

Important: You have forgotten your PIN !

- 1 Select **Set/Change pin** in the General menu.
- 2 Press **OK**.
- 3 Press the cursor right.
- 4 Enter the overriding pin 0-7-1-1.
- 5 Press the cursor again and enter a new personal 4-digit pin. The previous pin is erased and the new pin is stored.

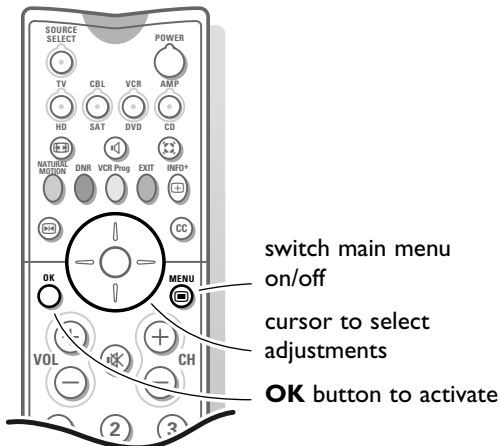
Source


This menu allows you to select the accessory device you connected to one of the AV inputs.

- 1 Select **Source** with the cursor right.
- 2 Press the cursor down to select one of the AV inputs.
- 3 Press the cursor right to enter the list of types of accessory devices attached to the selected input.
- 4 Select the accessory device with the cursor up/down.

Once you have selected the source, e.g. VCR, this source will automatically be selected when your remote control is in VCR mode, see p. 5, and you press the **SOURCE SELECT** button on the remote control.

TV menu

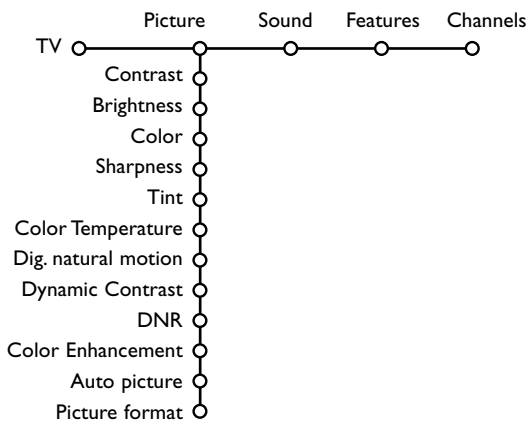


Press the **MENU**  button on the remote control to summon the main menu.

Note: When the main menu is accessed from the keypad in front of the TV receiver box, it has an additional Exit item, which lets you dismiss the menu.

Warning: The main menu is completely different when a VGA source is displayed. See p. 24.

Picture menu



Press the cursor right to select **Picture**.

Select the menu items in the Picture menu with the cursor up/down.

Adjust the settings with the cursor left/right or enter the list of submenu items with the cursor right.

Select a submenu item with the cursor up/down.

Note: To remove the menu background before adjusting the picture settings, see Select Settings, General, p. 10.

Contrast

This control allows you to adjust the contrast level of the picture.

Brightness

This control allows you to adjust the brightness level of the picture.

Color

This control allows you to adjust the color saturation of the picture.

Sharpness *(not available for HD sources)*

This control allows you to adjust the edge definition of a picture.

Tint *(not available for HD sources)*

This control allows you to select the color mix (hue) of the picture.

Color temperature

This control allows you to select from TV channels, the color temperature of the TV picture.

- 1 Press the cursor right to enter the list.
- 2 Select **Normal**, **Warm** or **Cool** with the cursor up/down.
- 3 Press the cursor left to return to the picture menu.

Digital natural motion *(not available for HD sources)*

Line doubling eliminates line flicker; motion compensation reduces judder and offers smooth, yet sharp motion reproduction in movie broadcasts.

Select **On** or **Off** to really see the difference in picture quality.

Dynamic Contrast *(not available for HD and VGA sources)*

This feature automatically makes the contrast in the darker and the brighter picture areas more noticeable as the image on screen changes.

Normally, select **Medium**. It may be preferred to select **Minimum**, **Maximum** or **Off**.

- 1 Press the cursor right to enter the list.
- 2 Select one of the settings with the cursor up/down.
- 3 Press the cursor left to return to the picture menu.

DNR (Digital Noise Reduction)

(not available for HD and VGA sources)

This feature automatically filters out and reduces the image noise and improves picture quality when receiving weak video signals.


- 1 Press the cursor right to enter the list.
- 2 Select **Off**, **Minimum**, **Medium** or **Maximum** according to the image noise.
- 3 Press the cursor left to return to the picture menu.

Color enhancement *(not available for HD sources)*

When activated, this feature automatically controls green enhancement and blue stretch. It makes the colors more vivid.

- 1 Press the cursor right to enter the list.
- 2 Select **On** or **Off** in order to activate/de-activate Color Enhancement with the cursor right.
- 3 Press the cursor left to return to the picture menu.


Auto picture

This menu item performs the same as the **PICTURE**  item on the remote control. See Use of the Remote Control, p. 7.

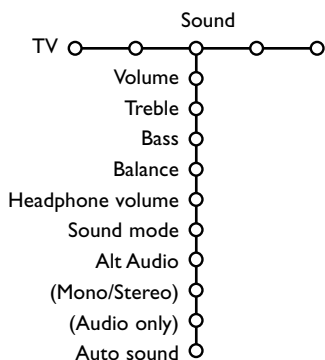
- 1 Press the cursor right to enter the list.
- 2 Select a predefined picture setting with the cursor up/down.
- 3 Press the cursor left to return to the picture menu.

Auto picture settings will be set to **Personal** if the following settings are changed manually: contrast, brightness, color, sharpness, dynamic contrast, color enhancement or DNR.

Picture format *(not selectable for HD sources)*

This menu item performs the same as the  button on the Remote Control. See Use of the Remote Control, p. 5.

Sound menu



Select the menu items in the Sound menu with the cursor up/down and adjust the settings with the cursor left/right. Remember, control settings are at normal mid-range levels when the bar scale is centered.

Volume

This control allows you to adjust the volume level.

Treble

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

Bass

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

Balance

This control allows you to adjust the balance of the right and left speaker's sound output.

Headphone volume

This control allows you to adjust the volume level of the headphone.

Sound mode

Surround Mode can only be selected when the sound of the TV channels is stereo.

When **Sound mode On** is selected, it seems as though the loudspeakers are spread further apart from one another.

Note: In case you have selected Center Mode Yes in the Settings menu (see p. 11), then the items Treble, Bass and Balance are not selectable.

Alt Audio

When you tune a channel where SAP (Second Audio Program) is available, you can toggle between **Main** and **SAP**.

Press the cursor right to enter the list and make your preferred audio selection with the cursor up/down.

If SAP is not available, only Main is selected.

Mono/Stereo *(Only selectable in case of stereo transmission)*

Select **Mono** or **Stereo** with the cursor left/right.

When **Stereo** has been selected, the television will reproduce any stereo broadcast signal it receives.

If Stereo is not present on a selected channel and the TV is placed in Stereo mode, the sound coming from the set will remain monaural.


Your selection is stored per TV channel.

Audio only *(disabled in VGA mode)*


This control enables you to blank the TV picture if the monitor is used as center speaker in a configuration with an audio receiver.

Select **Audio only On** to only hear the sound and to switch off the picture.

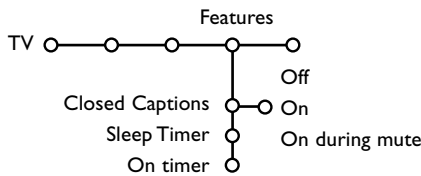
Auto Sound

This menu item performs the same as the **SOUND**  on the remote control. See Use of the Remote Control, p. 7.

- 1 Press the cursor right to enter the list.
- 2 Select a predefined sound setting with the cursor up/down.
- 3 Press the cursor left to return to the sound menu.

To exit the sound menu branch, press the diagonal cursor button upright, or upleft or press the  menu button.

Features menu



Closed Captions

See Caption Service, Settings menu, General, p. 11.

- 1 Select **Closed Captions** with the cursor down.
- 2 Press the cursor right.
- 3 Select **On**, **Off** or **On with Mute**.

When **On** is selected, the TV will display the currently displayed Caption Service, assuming that the service is available in the broadcast.

When **Off** is selected, the TV will not display Closed Captions information.

When **On with Mute** is selected, the TV will display the currently selected Caption Service when the mute function is active. When the mute function is not active, the TV will not display Closed captions information.

Note:

- When Dual screen format is selected, Closed Captioning (if activated) appears for the main screen only, and it covers the full screen;
- When Multipip 12 is activated, Closed Caption is disabled.

Sleeptimer

With the Sleeptimer function you can set a time period after which the TV will turn itself off.

- 1 Select **Sleeptimer** with the cursor down.
- 2 Press the cursor right to set the time. The counter runs from 0 up to 180 mins (in 5-min increments). When set to 0, the sleeptimer is turned off. One minute before the sleeptimer expires, a message appears that the TV will turn off in 60 seconds or you may cancel the sleeptimer by pressing the **OK** button. You can always turn off your TV earlier or change the set time.

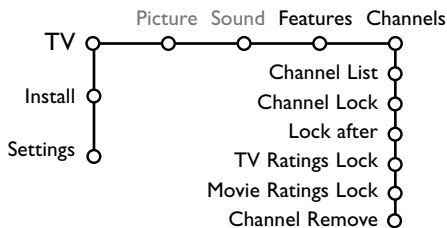
Note: When a VGA source is selected, the TV will not turn off when the sleeptimer expires.

On timer

Note: The On timer function is only available if time information is available via the local PBS channel.

- 1 Select **On timer** with the cursor down.
- 2 Press the cursor right.
- 3 Select **On** or **Off** to set the On timer On or Off.
- 4 When you have selected **On** press the cursor right.
- 5 Select the TV channel or external source you want the On timer to activate with the cursor up/down.
- 6 Press the cursor right to select the day you would like the On timer to become active. Select **Daily** to set the On timer for daily operation on the selected TV channel or source.
- 7 Press the cursor right to select **AM** or **PM**.
- 8 Press the cursor right to enter the time with the digit buttons or with the cursor up/down, left/right.
- 9 Press the **OK** key to activate.

Channels menu



Channel List

The list will display all the stored TV channels.

- 1 Select a channel number with the cursor up/down.
- 2 Press the **OK** button to switch over to the selected TV channel or AV extension.

Channel Lock


This feature provides the ability to prevent the viewing of a selected channel. Blocked channels can still be tuned with the digit buttons only, but the picture is greyed and the audio is muted.

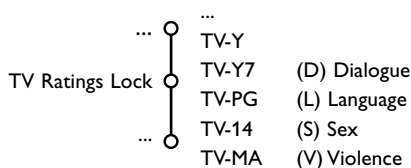
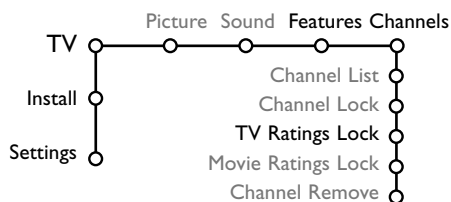
- 1 Select **Channel Lock** with the cursor down.
- 2 Press the cursor right. A list with all stored channel numbers appears.

- 3 Select the channel you want to lock/unlock with the cursor down.
- 4 Press **OK**. This summons a message that prompts you to enter your PIN. (See Set/Change Pin, p. 11) Follow the instructions on screen. If the PIN is correct, the channel list reappears, and the color of the box-graphic of the selected channel changes from blue to yellow to indicate the channel is currently locked. You only have to enter your PIN code once while the menu is active.
- 5 Repeat to lock other channels.

Lock after

This allows you to activate the childlock after a selectable time delay.

- 1 Select **Lock after** with the cursor down.
- 2 Select **On** with the cursor right.
- 3 Press the cursor right again to select **AM** or **PM**.
- 4 Press the cursor right once again to enter the time.
- 5 Enter the time with the digit buttons or with the cursor up/down.
- 6 Press the **MENU**  button to turn off the menu.



Age-based Rating	Content-based Rating
All	none
No Rating	none
TV-Y	none
TV-Y7	(FV) Fantasy Violence
TV-G	none
TV-PG	(D) Dialog (L) Language (S) Sex (V) Violence
TV-14	(D) Dialog (L) Language (S) Sex (V) Violence
TV-MA	(L) Language (S) Sex (V) Violence

TV Ratings Lock

Your TV is equipped with a V-chip. This allows you to control access to individual programs based on their movie and TV ratings. The program content advisory data are sent by the broadcaster or program provider.

- 1 Select **TV Ratings Lock** with the cursor down. A list appears, showing the age-based TV ratings and a corresponding content-based ratings list.
- 2 Press the cursor right to enter the list.
- 3 Select an age-based TV rating with the cursor up/down, and enter, if present, the list with content-based ratings with the cursor right, and select one content-based rating.
- 4 Press **OK** to activate/de-activate the selected rating. You are asked to enter your PIN. (See Set/Change PIN, p. 11) If the PIN is correct, the TV Ratings Lock menu reappears.
- 5 Select another content-based rating if you like and press **OK** again. You need only enter your PIN once while the menu is active. You can lock/unlock any number of ratings on the list without re-entering your PIN.

Each ratings item has a box-graphic in front of it to indicate whether or not programs carrying that rating are currently locked:

- a yellow-colored box: all items in the contents-based list are locked as well;
- a blue-colored box: the item is unselected;
- a half blue, half yellow-colored box: some content-based ratings are selected/unselected.

When **All** has been selected, all items in the age-based and in the contents-based lists are locked.

*Note: When **All** has been selected AV4 and AV5 can not be selected with the **CH-/+** button.*

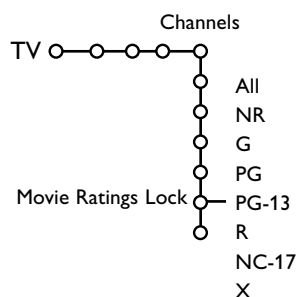
If, while **All** is selected, any other item, either an age-based or content-based item, is unselected, then **All** is automatically unselected.

No Rating is the selection for items that either have no rating information or have a rating of None. When this is selected, programs without a rating will be locked.

When an item on the age-based list is selected, all items below that item of the same group are locked as well.

When you select a content-based rating, all identical content-based ratings in the younger age-based categories are also selected.

- TV-Y appropriate for children of all ages with themes and elements suitable for children aged 2-6
- TV-Y7 programs designed for children age 7 and older
- TV-Y7-FV programs include fantasy violence more intense than other programs in the TV-Y7 category
- TV-G programs suitable for all ages. These programs contain little or no violence, no strong language and little or no sexual dialogue or situations
- TV-PG programs contain elements that some parents may find unsuitable for younger children and which may need parental guidance. The program may contain moderate violence, sexual dialogue and/or situations and some strong language.
- TV-14 programs contain elements that may not be suitable for children under 14 years of age. These programs include one or more of the following: intense violence, intense sexual situations, suggestive dialogue and strong language.
- TV-MA programs are designed to be viewed by adults and may be unsuitable for children under the age of 17. These programs may contain graphic violence, explicit sexual activity and/or crude or indecent language.



Movie Ratings Lock

This function allows you to control access to individual movies based on their MPAA ratings (Motion Picture Association of America).

- 1 Select **Movie Ratings Lock** with the cursor down. A list appears, showing all valid MPAA content ratings.
- 2 Press the cursor right to enter the list.
- 3 Select a movie rating with the cursor up/down.
- 4 Press **OK** to activate/de-activate the selected rating. You are asked to enter your PIN. (See Set/Change PIN, p. 11.) If the PIN is correct, the Movie Ratings Lock menu reappears.

Each rating item has a box-graphic in front of it to indicate whether or not programs carrying that rating are currently locked:

- a yellow-colored box: movies with this rating are locked;
- a blue-colored box: movies with this rating are unlocked.

When **All** has been selected, all items on the movie ratings list become selected. (All movies are locked.)

If, while **All** is selected, any other item is unselected, then **All** is automatically unselected.

When **NR** has been selected, no other item is selected.

When any other item has been selected, all ratings below are selected as well, thus all movies with those ratings will be locked.

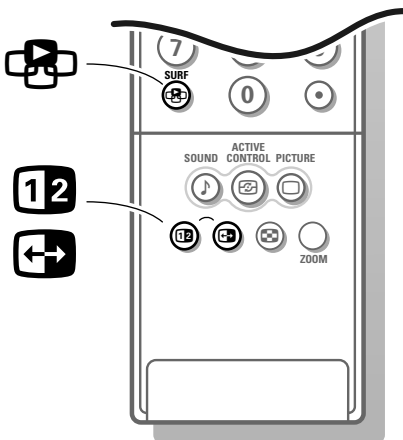
NR	not rated
G	movies with a mild content, suitable for all ages
PG	movies for which parental guidance is recommended. They may contain a few racy or violent scenes or maybe some bad language
PG-13	movies for which parental guidance may be recommended if under age 13
R	restricted. The movies usually contain offensive sex or bad language and may be unsuitable for children under the age of 17. Parental guidance or permission needed.
NC-17	even with parental permission, forbidden under age 17. More offensive sex, violence or bad language.
X	movies which generally focus on sex, violence and/or bad language. Also known as pornography.

Channel Remove

This feature provides the ability to remove a channel number from the channel list.

- 1 Select **Channel Remove** with the cursor down.
- 2 Press the cursor right. A list with all stored channel numbers appears.
- 3 Select the channel you want to remove with the cursor down and press **OK**.
- 4 Repeat to remove other channels.

Dual Screen/PIP



Press the **12** button to turn on or off Dual Screen or Single PIP, according to the format selection made in the Dual Screen Format list in the General menu. See Select TV Settings, General, p. 10.

Audio from the main screen (the left screen in Dual Screen and the full size screen in single PIP) plays to the speakers;
Audio from the right screen or from the single PIP plays to the headphones.

*Note: Continuing to hold the **12** button down will cycle the TV through the various formats (Dual Screen, Large PIP, Medium PIP, Small PIP), launching a new format after each second the button is held down.*

Making the PIP screen movable

When a single PIP format is selected, press the **OK** button to make the PIP screen movable.

Press the cursor up/down, left/right to move the PIP screen in the direction of the cursor press.

Switching screens

Press the **↔** button to swap the main screen and the auxiliary screen.

On-Screen information

The On-Screen information, which appears when changing channels, always refers to the highlighted screen.

To highlight a screen

Pressing the cursor left/right will toggle the highlight between the main screen and the auxiliary screen.

Change TV channels in main screen, auxiliary screen and PIP screen

Press the channel up/down button, the digit buttons or the **↔** button in order to change the TV channels in the highlighted screen.

Deactivating Dual Screen mode

Press the **12** button again to return to a full main screen picture.

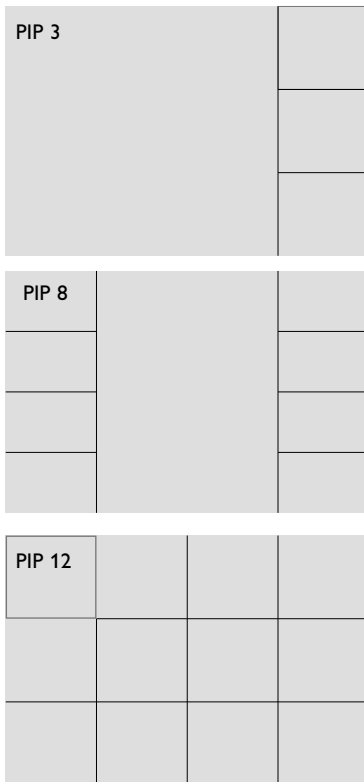
The TV tunes to the picture which was highlighted in Dual Screen mode.


Notes:

- *TV or Movie ratings: When Dual Screen mode is activated, a message with a PIN entry is summoned as TV and Movie ratings locks do not apply in Dual Screen. Select with the cursor button up/down whether you want to suspend V-chip blocking as long as Dual Screen mode is activated, or until the TV is turned off. If **Cancel** is selected, you return to normal TV viewing.*
- *Channel Lock: When Dual Screen mode is activated, and a channel or source is locked, the next channel or source is displayed;*
- *Display formats: When Single PIP is selected but not highlighted, the Display Format control works normally for the Main Screen only. When Single PIP is highlighted the Display Format control in the menu is grayed and the **↔** button has no effect.
When Dual Screen mode is selected, two Display formats are supported: Full Screen or 4:3 Letterbox (4:3 format with black bars above and below the picture).*
- *It is possible to display a VGA source in a Dual Screen/PIP screen, but it is NOT POSSIBLE to activate Dual Screen/PIP when the main screen is a VGA source.*

Multipip

In the Settings menu, General, p. 10 you selected which Multipip format you prefer to see in Multipip.



- 1 Press the  button on the remote control to toggle the selected format on or off.

Notes:

- TV or Movie ratings: when Multipip is activated, a message with a PIN entry is summoned as TV and Movie Ratings locks do not apply in Multipip. Select with the cursor button up/down to indicate whether you want to suspend V-chip blocking as long as Multipip is activated, or until the TV is turned off. If Cancel is selected, you return to normal TV viewing.
- Channel Lock: When Multipip is activated, and a channel or source is locked, this channel or source will not appear.


The main screen displays the channel or source tuned before Multipip was activated and the highlight is on the main screen.

The first PIP screen displays the last channel selected. The following PIP screens display the channels or sources selected in the Surf list (from top to bottom) followed by the channels from the channel map from the lowest to the highest numbered.



- 2 Press the cursor left/right, up/down or in case of PIP 12, also cursor diagonal to highlight a PIP screen. When the highlight is on one of the PIP screens, it begins playing video and the other PIPs freeze. The main screen always continues playing audio and video.

Note:

- Multipip is disabled when a picture is being displayed from HD or VGA sources;
- Pictures from a HD source will never be displayed in Multipip;
- Display Format is disabled when Multipip is active.

- 3 Pressing the **CH +/-** or the  button or the digit buttons changes the channel or source for the currently highlighted screen. If the currently highlighted screen is tuned to a channel or source already in the surf list, then the next channel or source in the surf list is displayed.

Note: channels cannot be added or deleted from the Surf list when Multipip is activated.

- 4 With PIP 3 and PIP 8: Press the  button to swap between main and subscreen.
With PIP 12: Press the  button or the **OK** button to view the highlighted screen full screen. Multipip is dismissed.
- 5 With PIP 3 and PIP 8: press the cursor up/down to display a following series of PIP screens.
With PIP 12: highlight the PIP picture in the bottom right and press the cursor down to display a following series of PIP screens.

Note: Only TV channels which are in the favorite list and pictures from the connected and activated externals are displayed in the PIP screen.

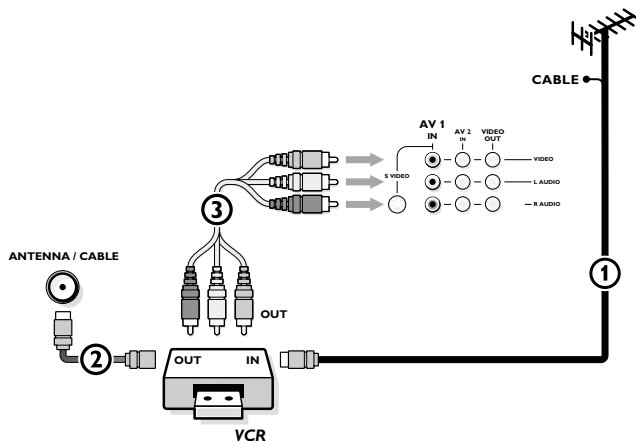
PIP 3 and PIP 8 are not possible when a VGA source is displayed as main screen.

Connect Accessory Devices

There is a wide range of audio and video devices that can be connected to your receiver. The following connection diagrams show you how to connect them to the back or the front side of the receiver.

Note: In case of the monitor in a stand alone situation without the receiver box connected, see the instructions with the monitor.

Video Cassette Recorder



Note: Do not place your video cassette recorder too close to the screen as some video cassette recorders may be susceptible for signals out of the display. Keep a minimum distance of 20" to the screen.

- 1 Connect the cable TV cable ① to the **RF IN** socket of your VCR.
- 2 Connect another RF cable ② from the output **OUT** of your VCR to the receiver's **ANTENNA./CABLE** jack.
- 3 Better playback quality can be obtained if you also connect the Video, Audio Left and Right (only for stereo devices) AV cables ③ to the **VIDEO**, **L** and **R AUDIO** input **AV1 IN** jacks.

The **VIDEO OUT** connectors can be used for daisy chaining or to record programs from your TV. See Record with your VCR, p. 25.

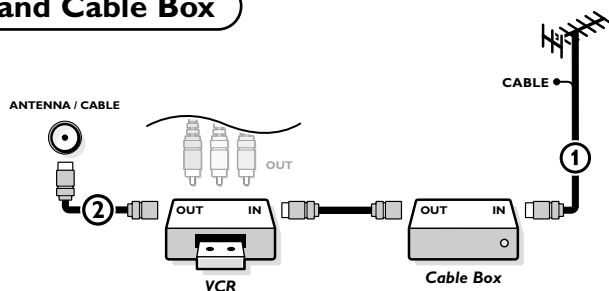
If your VCR has an S-VHS video jack:

For improved picture quality, connect a S-video cable with the **S-VIDEO** input instead of connecting the VCR to the **VIDEO** jack of **AV1 IN**.

S-Video does not provide audio, so audio cables must still be connected to provide sound.

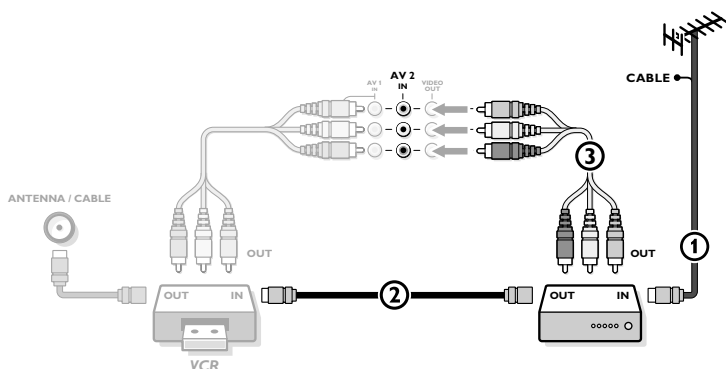
Note: You can also connect your VCR to the AV3 IN jacks.

VCR and Cable Box



- 1 Connect the cable TV antenna ① to the cable box's **IN** jack.
- 2 Connect the cable box's **OUT** jack to the VCR's **RF IN** socket.
- 3 Proceed with the as above described procedure for Video recorder, starting with step ②.

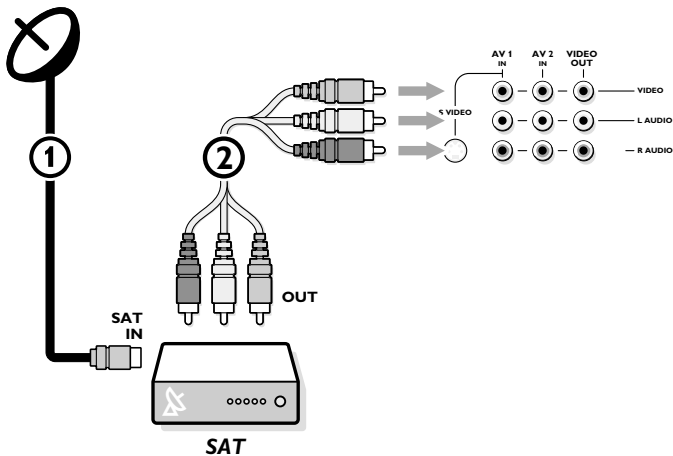
VCR with other AV peripherals



- 1 Interconnect your VCR with an extra RF cable ②.
- 2 To obtain better picture quality, also connect the Video, Audio left and Audio right (only for stereo devices) cables ③ to the **VIDEO**, **L** and **R AUDIO** input **AV2 IN** jacks.

*Note: AV1 IN can handle CVBS and YIC;
AV2 IN CVBS;
AV3 IN CVBS and YIC;
FRONT can handle CVBS and YIC.*

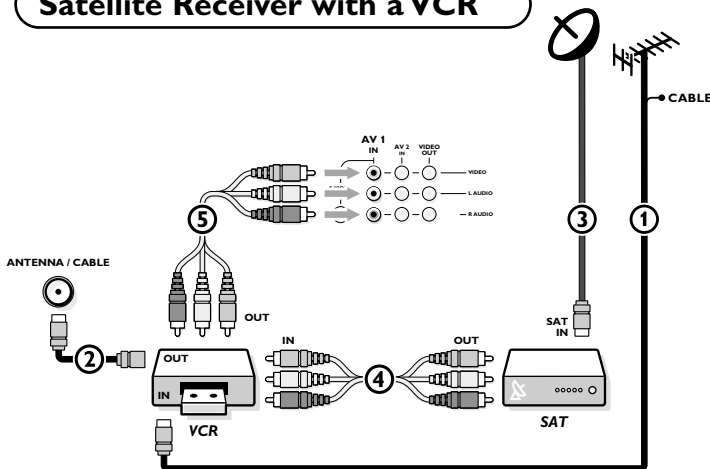
Satellite Receiver



- 1 Connect the satellite antenna cable ① to the satellite receiver's **SATELLITE IN** jack.
- 2 Connect the Video, Audio left and right (only for stereo devices), AV cables ② to the **VIDEO**, **L** and **R AUDIO** input **AV1 IN**, **AV2 IN** or **AV3 IN** jacks.

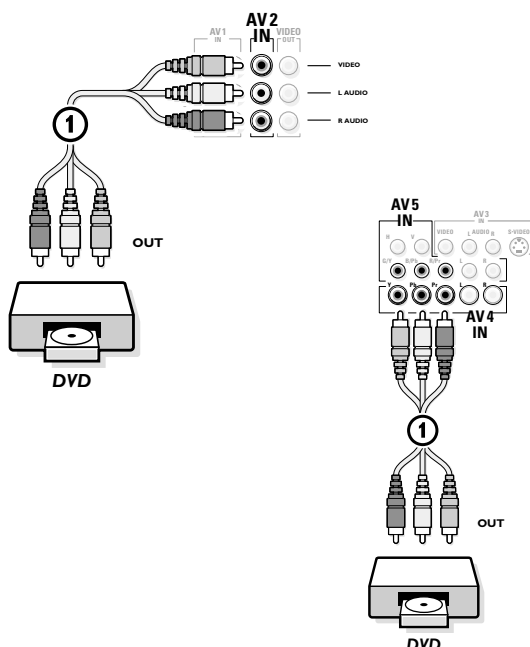
If your satellite receiver has an S-VHS video jack:
For improved picture quality, connect a S-VHS video cable with the **S-VIDEO** input instead of connecting the satellite receiver to the **VIDEO** jack of **AV1 IN** or **AV3 IN**.

Satellite Receiver with a VCR



- 1 Connect the cable TV cable ① to the **RF IN** socket of your VCR.
- 2 Connect another RF cable ② from the output of your VCR to the receiver's **ANTENNA/CABLE** jack.
- 3 Connect the satellite antenna cable ③ to the satellite receiver's **SATELLITE IN** jack.
- 4 Connect the AV cables ④ to the satellite receiver's **AV OUT** jacks and to the VCR's **AV IN** jacks.
- 5 Connect the VCR's **AV OUT** jacks ⑤ to the receiver's **AV1**, **AV2** or **AV3 IN** jacks.

DVD Player



DVD player with AV connectors

Connect the AV cables to the DVD player's **AV OUT** jacks and to the receiver's **AV2 IN** jacks.

If your DVD player has an **S-VIDEO** out(put) jack:
Connect the AV cables to the DVD player's **AV OUT** jacks and to the receiver's **AV3 IN** jacks.
Connect an **S-VIDEO** cable with the **S-VIDEO** input instead of connecting the DVD player to the video jack.

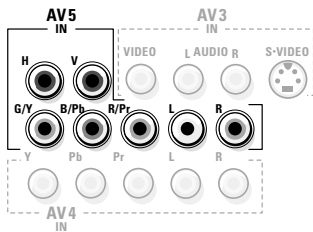
DVD player with Component Video Output Connectors (AV4)

- 1 Connect the three separate component video cables to the DVD player's **Y**, **Pb** and **Pr** jacks and to the **Y**, **Pb** and **Pr** **AV4 IN** jacks on the receiver.
- 2 Connect the audio cable to the DVD player's **AUDIO L** and **R** jacks and to the **L** and **R** audio **AV4** jacks on the receiver.

DVD player with Progressive scan output (480p 2 Fh)

Connect the DVD player to the **AV4** or **AV5 IN** jacks on the receiver. See AV5 Digital HD input, p. 21.

AV5 Digital Set Top Box



Connect your Set top Box to the **AV5** input.

Connect a Set top Box with 2 Fh RGB output to the **H, V, Y, Pb** and **Pr** jacks and to the **L** and **RAUDIO** jacks.

Connect a Set top Box with 2Fh Pr, Pb, Y output to the **Pr, Pb** and **Y** jacks and to the **L** and **RAUDIO** jacks.

See also the manual of your High Definition Set top Box.

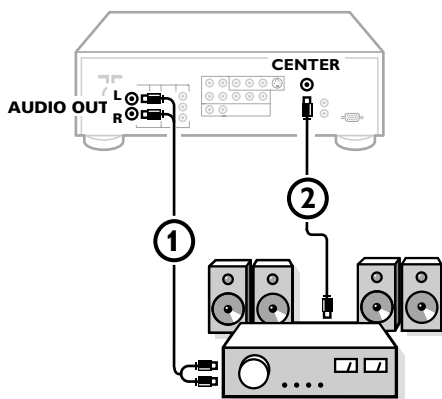
Note: This television is designed to accept high definition signal standards 480p and 1080i, as specified by the Electronic Industries Association standard EIA770.3.

Set-top boxes from different manufacturers have the possibility of differing output standards which may cause difficulties for the television to properly display.

Warning: in case you notice scrolling images, wrong colors or no color, no picture, or even combinations of these on your screen, check if the connections are done in the right way:

- for Y, Pb, Pr 2Fh: check if the cable colors match with the input connector colors
- for RGB-HV 2Fh: check additionally if the H and V cables are connected to the respective H and V input connectors, and if necessary exchange both connections.

Multi channel Surround receiver



- 1 Connect the audio cable to the multi channel Surround receiver and to **AUDIO OUT L** and **R** at the back of your TV receiver box ①.

Note: Turn off the TV and your surround receiver before connecting them. Set the Surround receiver's volume to minimum.

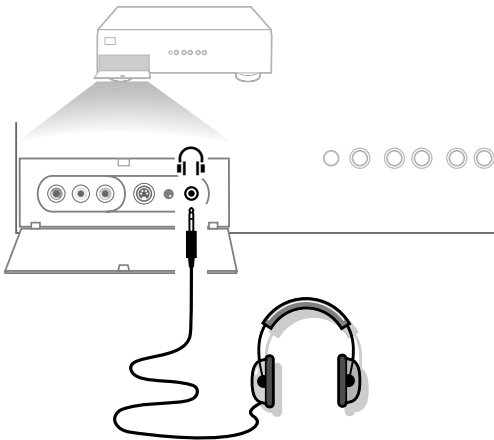
- 2 If you want the loudspeakers of your monitor to act as center speaker, also connect an audiocable to the multi channel Surround receiver and to the **SURROUND SOUND CENTER IN** at the back of your TV receiver box ②.



- 3 Select **Center mode Yes** in the Settings, General menu. See p. 11

The loudspeakers of the monitor will now only produce center sound, the loudspeakers connected to the audio receiver will produce Surround Sound. The volume has to be controlled via the multi channel Surround receiver.

Note: No sound will be heard when a TV channel or external source is blocked via the Channel Lock menu (see p. 14).

Headphone



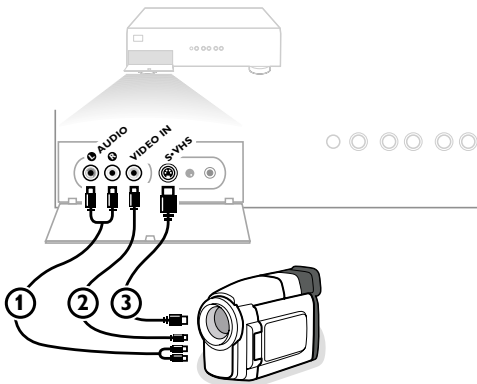
- 1 Insert the plug into the headphone socket  behind the door at the front side of the receiver. Press the center of the door to open.
- 2 Press  on the remote control to switch off the internal loudspeakers of the TV.
*The headphone impedance must be between 8 and 2000 Ohm.
The headphone socket has a 3.5 mm jack.*

In the **SOUND** menu select **Headphone volume** to adjust the headphone volume.

*Note: When a TV channel or external source is blocked via the Channel Lock menu (see p. 14), also the headphone is muted.
When Dual Screen/PIP is activated (see p. 17):*

- if the main screen displays a TV channel picture, you hear the sound from the Dual Screen/PIP picture through your headphone;
- if the main screen displays a picture from an external source, you hear the sound from the main screen through your headphone.

Camera & camcorder



- 1 Connect your camera or camcorder to the front input behind the door at the front side of your receiver. Press the center of the door to open.
- 2 Connect the equipment to **VIDEO IN** ② and **AUDIO L** ① for mono equipment.
- 3 For stereo equipment also connect **AUDIO R** ①.

S-VHS quality with an S-VHS, Hi-8 or Digital camcorder is obtained by connecting the S-VHS cables with the **S-VHS** input ③ (instead of **VIDEO IN** ②) and **AUDIO** inputs ①.

Connect your computer

See the separate supplied instruction manual with your monitor.

Setting the remote control to work accessory devices

Your remote control is set to work your TV and many infrared remote (IR) control VCRs, Cable TV Converter Boxes, DVD players, Satellite Receivers, etc.

Press the **VCR, DVD, SAT, HD, CD, CBL** or **AMP** button according to the accessory device you want to operate with this remote control. Toggle if needed by pressing more than one second until the correct colored LED lights up. See Use of the Remote control, p. 5. If the function buttons on the remote control also work the selected accessory device, then the remote is ready and no further steps are needed.

If the functions buttons do not work the selected accessory device

According to the device(s) you own, you may make your remote control ready for them by a direct entry code. Proceed as following.

Code Setup

- 1 Press the desired mode button (toggle if needed by pressing more than one second) to select the device, which you need to setup.
- 2 Press the **digit buttons 1 and 3 at the same time**, for about 5 seconds, and until the backlighting buttons and the selected mode button light up.
- 3 Enter with the digit buttons and within 30 seconds, the 4 digit remote code no. for your brand of accessory device. See pages 26 and 27.

Note: If no code or an incomplete code is entered within 30 seconds, the backlight and selected mode button will turn off and give a long blink before returning to the previous programmed code.

If a valid 4 digit code is entered the backlight and the selected mode button, will turn off and then blink twice. The remote control will assign that code no. to the mode selected.

Remark: If more than one number is listed for your device, you may have to try the other codes until your device operates with the remote.

If after repeated attempts the code number method does not work for your accessory device, try the Auto Search method following.

Auto Search method

- 1 Turn on the desired device (VCR, Cable box, etc.).
- 2 Press the desired mode button to select the device which you need to search. Point the remote control toward the accessory device. Stand at least six feet away from the front of the device. Make sure you are in the line of sight of the IR receiving eye of your device.
- 3 Press the **digit buttons 1 and 3 at the same time**, for about 5 seconds, and until the backlighting buttons and the selected mode button light up.

- 4 Press and release the red **POWER** button. The backlighting button and the selected mode button will turn off. The remote control will automatically start stepping to the next code in the library simultaneously sending the code for channel up for that particular ID. The backlighting buttons and the selected mode buttons will give a short blink after each search. Watch the channel number indicator on your device. Channel numbers will scan up when the unit has been identified. This may take some minutes.

Note: For devices DVD and CD, insert a disc and press PLAY on the device. The remote control will send the command next track. Switch AV receivers to TUNER function.

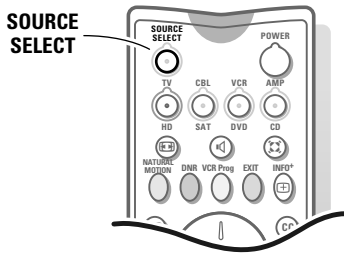
- 5 Press and release the red **POWER** button as soon as the channel numbers start to scan up.

The remote control will assign that code no. to the mode selected. The backlight and the selected mode button will blink twice to indicate the code setup has been completed.

The remote control is ready to operate with the accessory device.

Note: If any other button is pressed, or no button is pressed during Auto Search, the Search will be ended. The backlighting and selected mode button will give a long blink. The remote keeps its previous code.

To select connected devices



Equipment connected to the rear or to the front side of the receiver box
 Press the **SOURCE SELECT** button repeatedly to select **AV1, AV2, AV3, AV4, AV5, FRONT** or **VGA**, according to where you connected your devices at the rear or the front side of your receiver.

Press the **OK** button to confirm.

Remark : Most equipment (decoder, video recorder) carries out the switching itself. This is however never the case with a computer connected to the VGA input.

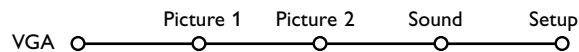
If you want to change to TV channels?

Enter the channel number of the TV channel which you want to watch with the digit buttons.

VGA menu




Only available when a VGA source has been connected and activated. See also the separate supplied instruction manual with your monitor.

- 1 Select **VGA** with the **SOURCE SELECT** button.
- 2 Press the **MENU**  button to switch on the **VGA** menu.









- 3 Select one of the menus with the cursor left/right.
Note: Only when you have chosen the US English language, the menu items will be displayed with additional icons.
- 4 Select one of the menu items with the cursor up/down.
 See the separate booklet supplied with the monitor.

Picture 1

-  Brightness,
-  Contrast,
-  Color temperature,
-  Sharpness,

Picture 2


-  Format,
-  Zoom,
-  Zoom factor,
-  Shift,
-  Clock frequency,
-  Phase

Sound

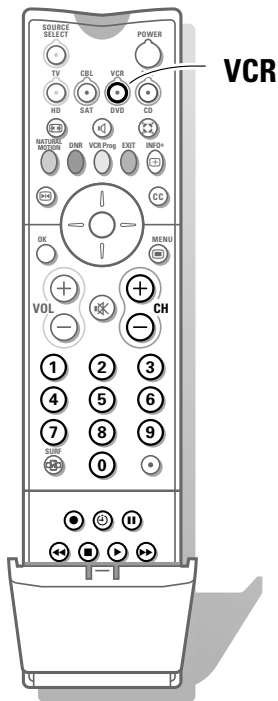
-  Volume,

Setup

-  Language,

- 5 Press the cursor left/right to alter the selected adjustment.
- 6 Press the **MENU**  button again to switch off the **VGA** menu.

VCR Control buttons



Most of the audio and video devices from our range of products can be operated with the remote control of your TV.

Press the **VCR**, **DVD**, **SAT**, **HD**, **CD**, **CBL** or **AMP** button according to the devices you want to operate with this remote control. See Use of the remote control, p. 5.

VCR buttons

After you pressed the **VCR** button, press one of the VCR buttons under the door of the remote control:

- for record,
- ⌚ VCR timer,
- || for pause,
- ◀◀ for rewind,
- for stop,
- ▶▶ for play,
- ▶▶▶ for fast forward,
- CH + for sequential channel selection from the video recorder tuner,
- 0 to 9 to select a channel number from your video recorder tuner,

These buttons function with devices that uses the RC5 signalling standard.

Record with your VCR

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

Record a TV program

You can record a TV program using your VCR's tuner without affecting your TV.

- 1 Select the channel number on your VCR.
- 2 Set your VCR to record.
See the handbook for your VCR.

Switching channel numbers on your TV does not disturb recording !

Record to VCR from VIDEO OUT

You can record a program on your VCR from the TV tuner via **VIDEO OUT**.

- 1 Switch on the device.
- 2 Select the correct channel on your TV and the correct input on your VCR.
- 3 Set your VCR to record.
You record the tuner channel of the TV, even when you switch to an AV input using the **SOURCE SELECT** button on the remote control.

*Do not switch channels or turn off your TV when you are recording through **VIDEO OUT**.*

Note: When a TV channel or AV source is blocked because of a rating set via the Channels menu (see p. 14), also the record output picture and sound are muted.

Remote Control Direct Entry Codes for Accessory Devices

Amplifiers Remote Code No.

Aiwa	.0433
Carver	.0296
Curtis Mathes	.0327
Denon	.0187
GE	.0105
Harman/Kardon	.0919
JVC	.0358
Linn	.0296
Magnavox	.0296
Marantz	.0296, 0348
Nakamichi	.0348
Optimus	.0422
Panasonic	.0335
Philips	.0296, 0919
Pioneer	.0040, 0327
Realistic	.0422
Sansui	.0348
Sony	.0716, 0247
Soundesign	.0105
Technics	.0335
Victor	.0358
Wards	.0040, 0105
Yamaha	.0381

Cable Remote Code No.

ABC	.0030, 0028, 0034, 0035, 0038, .0040, 0041, 0044
Allegro	.0180, 0342
Americast	.0926
Antronix	.0049
Archer	.0049, 0180, 0824
Belcor	.0083
Bell & Howell	.0041
Cable Star	.0083
Cabletenna	.0049
Cableview	.0049
Century	.0180
Citizen	.0180, 0342
Colour Voice	.0052
Comtronics	.0067
Contec	.0046
Eastern	.0029
Emerson	.0824
Everquest	.0042, 0067
Focus	.0427
GC Electronics	.0083
Garrard	.0180
Gemini	.0042
General Instrument	.0303, 0503, 0038, 0837
GoldStar	.0067, 0171
Goodmind	.0824
Hamlin	.0047, 0036, 0286, 0061
Hitachi	.0038
Hytex	.0034
Jasco	.0042, 0180, 0342
Jerrold	.0030, 0039, 0303, 0041, 0038, 0503, .0042, 0837
Memorex	.0027
Movie Time	.0090
NSC	.0090
Oak	.0046, 0034
Optimus	.0048
Panasonic	.0048, 0134, 0027
Paragon	.0027
Philips	.0052, 0180
Pioneer	.0171, 0560, 0904
Popular Mechanics	.0427
Pulsar	.0027
Quasar	.0027
RCA	.0048

Radio Shack	.0042, 0342, 0910, 0824
Recoton	.0427
Regal	.0047, 0286
Regency	.0029
Rembrandt	.0038
Runco	.0027
SL Marx	.0067
Samsung	.0067, 0171
Scientific Atlanta	.0035, 0044, 0504, 0904
Signal	.0042, 0067
Signature	.0038
Sprucer	.0048
Starcom	.0030, 0042
Stargate	.0067, 0042, 0824
Starquest	.0042
Sylvania	.0028
TV86	.0090
Tandy	.0285
Television	.0067
Texscan	.0028
Tocom	.0039, 0040
Toshiba	.0027
Tusa	.0042
Unika	.0180, 0049
United Artists	.0034
Universal	.0049, 0083, 0180, 0218
Viewstar	.0285, 0090
Zenith	.0027, 0552, 0926
Zentek	.0427

CD Players Remote Code No.

Aiwa	.0184
Burmester	.0447
California Audio Labs	.0056
Carver	.0184, 0206, 0464
DKK	.0027
Denon	.0030, 0900
Emerson	.0332
Fisher	.0201, 0206
Garrard	.0420, 0447
Genexxa	.0059, 0332
Harman/Kardon	.0200, 0184
Hitachi	.0059
JVC	.0099
Kenwood	.0055, 0217, 0853, 0064, .0653, 0708
Krell	.0184
LXI	.0332
Linn	.0184
MCS	.0056
MTC	.0447
Magnavox	.0184, 0332
Marantz	.0184, 0056, 0207
Mission	.0184
NSM	.0184
Nikko	.0201
Onkyo	.0128, 0895
Optimus	.0447, 0059, 0206, 0495, .0464, 0332, 0027, 0064, 0172
Panasonic	.0056, 0330
Parasound	.0447
Philips	.0184, 0653
Pioneer	.0059, 0495, 0271, 0332
Proton	.0184
QED	.0184
Quasar	.0056
RCA	.0080, 0332, 0206, 0791
Realistic	.0206, 0207, 0447
Rotel	.0184, 0447
SAE	.0184
Sansui	.0184, 0332

Sanyo	.0206
Scott	.0332
Sears	.0332
Sharp	.0064, 0207, 0888
Sherwood	.0207
Sony	.0027, 0212, 0517
Soundesign	.0172
Tascam	.0447
Teac	.0420, 0447, 0201, 0207
Technics	.0330, 0056
Victor	.0099
Wards	.0080, 0184
Yamaha	.0214, 0063
Yorx	.0488

Receivers Remote Code No.

ADC	.0558
Adcom	.0643
Aiwa	.0148, 0432, 0185, 0216
Akai	.0251, 0103
Capetronic	.0558
Carver	.0035, 0216, 0387, 0069
Casio	.0222
Clarinette	.0222
Curtis Mathes	.0107
Denon	.0031, 0798, 0300
Emerson	.0451
Fisher	.0069, 0246, 0387
Garrard	.0451, 0490
Harman/Kardon	.0137, 0216, 0918
Inkel	.0089
JBL	.0137
JVC	.0101
Kenwood	.0054, 0341, 0104, 0069, .0213, 0340
Koss	.0451
LXI	.0208
Linn	.0216
Lloyd's	.0222
MCS	.0066, 0373
Magnavox	.0216, 0418, 0558, 0155, 0222
Marantz	.0216, 0155, 0066
Modulaire	.0222
NAD	.0347
NEC	.0262
Nakamichi	.0374, 0124
Onkyo	.0162, 0407, 0127
Optimus	.0208, 0204, 0213, 0246, .0558, 0765, 0828, 0069, 0697
Panasonic	.0066, 0336, 0545
Penney	.0222
Philips	.0216, 0418
Pioneer	.0107, 0041, 0177, 0558, 0657
Quasar	.0066
RCA	.0081, 0373, 0558, 0387, 0557
Realistic	.0208, 0222, 0190
Sansui	.0216, 0220, 0373
Sanyo	.0246, 0828
Scott	.0190, 0349
Sharp	.0213
Sherwood	.0529, 0518, 0089
Sony	.0185, 0195, 0501
Soundesign	.0697
Teac	.0490, 0190
Technics	.0336, 0066, 0235, 0545
Victor	.0101
Wards	.0081, 0041, 0107, 0185, 0216
Yamaha	.0203, 0213
Yorx	.0222
Zenith	.0884

Remote Control Direct Entry Codes for Accessory Devices

Satellite Remote Code No.

AlphaStar	.0799
Amplica	.0099
Amway	.0102
Astro Industries	.0122
BSR	.0122
Capetronic	.0122
Channel Master	.0045, 0239
Chaparral	.0080, 0236, 0243
Curtis Mathes	.0088, 0099
DX Antenna	.0068
Drake	.0091, 0272, 0045, 0176
Echostar	.0307, 0802, 0175, 0186, 0296
Expressvu	.0802
General Instrument	.0388, 0896, 0654
HTS	.0802
Hitachi	.0846
Homecable	.0265
Hughes Network Systems	.0776
HYTEK	.0122
IQ	.0237
IQ Prism	.0237
JVC	.0802
Janeil	.0179
Jerrold	.0388, 0654
Legend	.0296
Macom	.0088, 0045
Magnavox	.0749, 0751
Memorex	.0296, 0751
Next Level	.0896
Panasonic	.0179, 0728
Philips	.0227, 0749, 0751
Pico	.0102
Primestar	.0654, 0388
RCA	.0593, 0170, 0882
Radio Shack	.0896
Ramsey	.0102
Realistic	.0079
STS	.0237, 0068
Sony	.0666
Star Choice	.0896
Star Trak	.0207
Toshiba	.0109, 0817, 0088
Uniden	.0265, 0079, 0101, 0397, 0751, .0103, 0749
Zenith	.0091, 0883, 0088

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Admiral	.0075, 0236
Adventura	.0027
Aiko	.0305
Aiwa	.0334, 0027, 0064
Akai	.0133, 0068, 0088
America Action	.0305
American High	.0062
Asha	.0267
Audiovox	.0064
Beaumarck	.0267
Bell & Howell	.0131
Brocksonic	.0236
Broksonic	.0148, 0211, 0029, 0236, 0506
CCE	.0099, 0305
Calix	.0064
Canon	.0062
Caphart	.0047
Carver	.0108
Cineral	.0305
Citizen	.0305, 0064
Colt	.0099
Craig	.0064, 0099, 0074, 0267, 0298
Curtis Mathes	.0062, 0068, 0087, 0189
Cybernex	.0267

Daewoo	.0305, 0588, 0047, 0072
Daytron	.0047
Denon	.0069
Dynatech	.0027
Electrohome	.0064
Electroponic	.0064
Emerex	.0059
Emerson	.0211, 0029, 0236, 0305, 0148, 0235, 0506, 0588, 0088, 0239, 0027, 0064, 0070
Fisher	.0074, 0131, 0081
Fuji	.0060, 0062
Funai	.0027
GE	.0062, 0087, 0075, 0229, 0267
Garrard	.0027
Go Video	.0459, 0553
GoldStar	.0064, 0065
Gradiente	.0035, 0027
HI-Q	.0074
Harley Davidson	.0027
Harman/Kardon	.0065, 0108
Harwood	.0099
Headquarter	.0073
Hitachi	.0069, 0132, 0027, 0068
Hughes Network Systems	.0069
JVC	.0094, 0035, 0068
Jensen	.0068
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Magnin	.0267
Marantz	.0108, 0062
Marta	.0064
Matsushita	.0062, 0189, 0481
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Motorola	.0062, 0075
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NEC	.0065, 0068, 0094, 0131
Nikko	.0064
Nikon	.0061
Noblex	.0267
Olympus	.0062
Optimus	.1089, 1189, 0075, 1289, 0064, .1075, 0131, 0189, 0459, 0481
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Penney	.0062, 0267, 0064, 0069, 0065, 0081
Pentax	.0069, 0132
Philco	.0062, 0236, 0506
Philips	.0108, 0062, 0089, 0645, 1108, 1208
Pilot	.0064
Pioneer	.0094
Portland	.0047
Profitronic	.0267
Proscan	.0087, 0229
Protoc	.0099
Pulsar	.0066
Quarter	.0073


Quartz	.0073
Quasar	.0062, 0189, 0481, 1189
RCA	.0087, 0176, 0229, 0069, 0132, .0062, 0075, 0133, 0267
Radio Shack	.0027, 1064
Radix	.0064
Randex	.0064
Realistic	.0027, 0131, 0074, 0075, 0064, .0062, 0089, 0073
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Ricoh	.0061
Runco	.0066
STS	.0069
Samsung	.0072, 0267
Sanky	.0066, 0075
Sansui	.0068, 0506, 0027, 0094, 0236, 0298
Sanyo	.0074, 0073, 0131, 0267
Scott	.0211, 0148, 0070, 0072, 0239
Sears	.0081, 0132, 0064, 0069, 0027, 0062, .0073, 0074, 0131
Semp	.0072
Sharp	.0075, 0089
Shintom	.0099
Shogun	.0267
Singer	.0099
Sony	.0060, 0061, 0059, 0027, 0062
Sylvania	.0062, 0108, 0027, 0070
Symphonic	.0027
TMK	.0235, 0267
Tatung	.0068
Teac	.0027, 0068
Technics	.0062, 0189
Teknika	.0027, 0062, 0064
Thomas	.0027
Tivo	.0645
Toshiba	.0072, 0239, 0070
Totevision	.0064, 0267
Unitech	.0267
Vector	.0072
Vector Research	.0065
Video Concepts	.0072, 0088
Videosonic	.0267
Wards	.0062, 0087, 0089, 0027, 0074, 0239, .0267, 0069, 0075, 0099, 0108, 0176
White Westinghouse	.0305, 0236
XR-1000	.0099, 0027, 0062
Yamaha	.0065
Zenith	.0066, 0027, 0060, 0061, 0236, 0506

Digital Video Disc Remote Code No.

Harman/Kardon	.0609
JVC	.0650, 0585
Kenwood	.0561
Magnavox	.0530
Mitsubishi	.0548
Onkyo	.0654, 0530
Panasonic	.0517, 0659
Philips	.0530, 0566
Pioneer	.0598, 0552, 0659
Proscan	.0549
RCA	.0549
Samsung	.0600
Sharp	.0657
Sony	.0560
Technics	.0517
Theta Digital	.0598
Toshiba	.0530
Yamaha	.0517, 0572
Zenith	.0618, 0530

Before Calling Service

Please make these simple checks before calling service. These tips may save you time and money since charges for television installation and adjustments of customer controls are not covered under your warranty.

Symptoms	Items to Check and Actions to follow
"Ghost" or double images	<ul style="list-style-type: none"> This may be caused by obstruction to the antenna due to high rise buildings or hills. Using a highly directional antenna may improve the picture.
No power	<ul style="list-style-type: none"> Check that the receiver's AC power cord is plugged into the mains socket. Unplug the television, wait for 60 seconds. Then re-insert plug into the mains socket and turn on the television again.
No picture	<ul style="list-style-type: none"> Check antenna connections at the rear of the receiver to see if it is properly connected to the receiver. Possible broadcast station trouble. Try another channel. Adjust the contrast and brightness settings. Try another auto picture setting. Check the Closed Captions control. Some TEXT modes could block the screen. Switch your VGA-source to a correct display mode. Check the Audio only option.
No picture and power switched on	<ul style="list-style-type: none"> Your TV has a protective mode in case there is too much heat build-up. Check the clearance around the vents of the device to be certain there are no blocking walls or cabinets which would limit the air flow.
No sound	<ul style="list-style-type: none"> Increase the VOLUME. Check that the receiver/monitor is not muted, press the  button on the remote control. When no signal is detected, the receiver automatically switches off the sound. This is proper operation and does not indicate a malfunction. Has the center mode been switched off?
Good sound but poor color or no picture	<ul style="list-style-type: none"> Adjust the contrast, color, tint and brightness setting. Try another auto picture setting.
Poor picture	<ul style="list-style-type: none"> Check the VGA connection.
Snowish picture and noise	<ul style="list-style-type: none"> Check the antenna connection.
Television not responding to remote control	<ul style="list-style-type: none"> Check whether the batteries are working. Replace if necessary. Clean the remote control sensor lens on the monitor. Operating range between receiver and the remote control should not be more than 240". You can still use the buttons at the front of your receiver. Press the TV button to be sure your remote control is in the TV mode (green indicator).
No stable or not synchronized VGA picture	<ul style="list-style-type: none"> Check if you have selected the correct VGA mode in your PC
Control of accessory devices	<ul style="list-style-type: none"> The infrared signals of the screen may influence the reception sensibility of other peripherals. Solution: Replace the batteries of the remote control of other devices. Eg. keep away a wireless headphone from within a radius of 50".

If your problem is not solved

Turn your TV receiver off and then on again once.

Never attempt to repair a defective TV yourself.

Check with your dealer or call a TV technician.

**Telephone number Philips Customer Care Center
800-531-0039**

Tips

Care of the screen

Clean the TV with a slightly damp soft cloth. Do not use abrasive solvent as it can damage the TV screen.

End of life directives

We are paying a lot of attention to using environmentally-friendly production methods. Your new TV contains materials which can be recycled and reused. At the end of its life specialized companies can dismantle the discarded TV to concentrate the reusable materials and to

minimize the amount of materials that must be disposed. Please ensure that you dispose of your old TV according to local regulations.

How to dispose of batteries?

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

TV receiver box with speakerless monitor

In case you connect your TV receiver box with a speakerless monitor, and without having connected an audio receiver, all references made in this instruction book to sound reproduction, volume control, and audio connections, are not applicable (except for a headphone connection). The buttons on the remote control referring to sound have no function either.

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Miscellaneous

- . Ambient temperature: + 5~ + 40°C
- . Mains: 50/60 Hz Auto Voltage ranging from 95 V to 264 V
- . Power consumption: around 35 W
- . Standby consumption: 2 W
- . Weight (excl. packaging): 8,82 lbs
- . Dimensions (wxhxd):
Receiver: 17.2 x 4.2 x 13.0 in.

Regulatory Notices - Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

Modifications -

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Philips Consumer Electronics may void the user's authority to operate the equipment.

Cables -

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

Canadian notice -

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Avis Canadien -

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Glossary

Active Control

A set of automatic picture improvement algorithms applied to the video image.

Aspect Ratio

The proportions of a rectangular display screen. NTSC television has a 4:3 ratio; HDTV is 16:9.

Audio/Video Inputs

Located on the rear of the TV these connectors (RCA phono type plug) are used for the input of audio and video signals. Designed for use with VCRs (or other accessories) in order to receive higher picture resolution and offer sound connection options.

Audio Output

An adjustable audio output which allows for volume variations at the source.

Auto Picture and Sound Controls

Buttons on the remote control to select predefined picture and sound settings.

Coaxial Cable

A single solid antenna wire normally matched with a metal plug (F-type) end connector that screws (or pushes) directly onto a 75 Ohm input found on the Television or VCR.

Color Temperature

TV-function to modify the general color balance between cool and warm and to adjust it according to your personal preference.

CVBS

Stands for Composite Video Blanking Sync. At this level, the color, luminance and synchronization information are combined in one signal. The audio signal is transferred separately.

LED

Light Emitting Diode or indicator.

Menu

An on-screen listing of feature controls shown on the TV screen that are made available for user adjustments.

MPAA

Motion Picture Association of America

Multichannel Television sound (MTS)

The broadcast standard that allows for stereo sound to be transmitted with the TV picture.

Natural Motion

Philips Technology that makes movement on television less jerky and appear more natural.

NTSC (analog video signals)

National Television Standards Committee format devised for TV broadcasting signals in the 1940s (525 lines: 60 Hz.)

On Screen Displays (OSD)

Refers to the wording or messages generated by the TV to help the user with specific feature controls (color adjustment, programming, etc.)

Picture Freeze

TV mode which allows you to "freeze" a certain image in order to study a specific detail at ease, e.g. to make notes of certain program information like phone numbers.

Programming

The procedure of adding or deleting channel numbers into the TV's memory circuits. In this way the TV 'remembers' only the locally available or desired channel numbers and skips over any unwanted channel numbers.

RF

Radio Frequency or modulated signal design used as the carrier for television broadcasts.

Second Audio Program (SAP)

Another or additional audio channel provided for in the Multichannel Television Sound (MTS) broadcast standard. A monaural soundtrack included within the recorded or video signal (usually containing a second language translation for the displayed programming).

Sleptimer

Function with which you can set a time period after which the TV should switch itself to standby.

S-Video Input

Allows direct connection of high-resolution video sources, such as a Super VHS videocassette recorder, Laser Disc player, etc. Provides improved picture resolution, sharpness, and clarity.

Tint

TV-function to modify the general color balance between cool and warm and to adjust it according to your personal preference.

LIMITED WARRANTY

One Year Free Labor One Year Free Service on Parts

WHO IS COVERED?

You must have proof of purchase to receive warranty service. A sales receipt or other document showing that you purchased the product is considered proof of purchase.

WHAT IS COVERED?

Warranty coverage begins the day you buy your product. For one year thereafter, all parts will be repaired or replaced and labor is free. After one year from the day of purchase, you pay for the replacement or repair of all parts, and for all labor charges. All parts, including repaired and replaced parts, are covered only for the original warranty period. When the warranty on the product expires, the warranty on all replaced and repaired parts also expires.

WHAT IS EXCLUDED?

Your warranty does not cover:

- labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna systems outside of the product.
- product repair and/or part replacement because of misuse, accident, unauthorized repair or other cause not within the control of Philips Consumer Electronics Company.
- reception problems caused by signal conditions or cable or antenna systems outside the unit.
- a product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- incidental or consequential damages resulting from the product. (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This includes, but is not limited to, prerecorded material, whether copyrighted or not copyrighted.)
- a product used for commercial or institutional purposes.

WHERE IS SERVICE AVAILABLE?

Warranty service is available in all countries where the product is officially distributed by Philips Consumer Electronics Company. In countries where Philips Consumer Electronics Company does not distribute the product, the local Philips service organization will attempt to provide service (although there may be a delay if the appropriate spare parts and technical manual(s) are not readily available).

MAKE SURE YOU KEEP ...

Please keep your sales receipt or other document showing proof of purchase. Attach it to this owner's manual and keep both nearby. Also keep the original box and packing material in case you need to return your product.

BEFORE REQUESTING SERVICE ...

Please check your owner's manual before requesting service. Adjustments of the controls discussed there may save you a service call.

TO GET WARRANTY SERVICE....

Repair must be performed by an authorized service center or a factory service center. If you do not live near a factory service center, contact your dealer. If your dealer is an authorized service center, he will arrange repair. If your dealer is not an authorized service center he will direct you to the authorized service center engaged by him to service the products he sells.

(In U.S.A., Puerto Rico and U.S. Virgin Islands, all implied warranties, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the duration of this express warranty. But, because some states do not allow limitations on how long an implied warranty may last, this limitation may not apply to you.)

(In Canada, this warranty is given in lieu of all other warranties. No other warranties are expressed or implied, including any implied warranties of merchantability or fitness for a particular purpose. Philips is not liable under any circumstances for any direct, indirect, special, incidental or consequential damages, howsoever incurred, even if notified of the possibility of such damages.)

IF YOU HAVE QUESTIONS IN CANADA

Please contact Philips at:

1-800-661-6162 (French speaking)

1-800-363-7278 (English speaking)

REMEMBER...

Please record the model and serial numbers found on the product below. Also, please fill out and mail your warranty registration card promptly. It will be easier for us to notify you if necessary.

MODEL # _____

SERIAL # _____

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