

# Philips Business Display Solutions

27HT4000D  
27HT7210D

*User Manual*



Thank you for choosing Philips.

## Need help fast?

Read your Quick Use Guide and/or Owner's Manual first for quick tips that make using your Philips product more enjoyable.

If you have read your instructions and still need assistance, you may access our online help at

[www.bds.philips.com](http://www.bds.philips.com)

or call

1-866-358-9601

**while with your product  
(and Model / Serial number)**

### **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

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Note : Specifications in this manual are subject to change without notification.



Recycling Directive – To minimize harm to the environment, the batteries supplied with the TV set do not contain mercury or nickel cadmium. If possible, when disposing of batteries, use recycling means available to you.

Your TV set uses materials which are reusable or which can be recycled. To minimize the amount of waste in the environment, certain companies recover used sets for dismantling and collection of reusable materials (contact your dealer or local recycling resources).

# IMPORTANT SAFETY INSTRUCTIONS

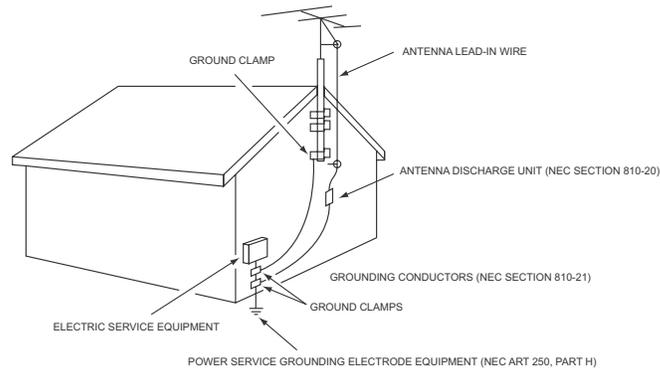
## Read before operating equipment

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 and 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](http://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 cabinet 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 or Ceiling Mounting** - The appliance should be mounted to a wall or ceiling 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 mast 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. **Object and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
  22. **Battery Usage CAUTION** - To prevent battery leakage that may result in bodily injury, property damage, or damage to the unit:
    - Install all batteries correctly, with + and - aligned as marked on the unit
    - Do not mix batteries (old and new or carbon and alkaline, etc.)
    - Remove batteries when the unit is not used for a long time.

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.

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



### Know these safety symbols



This "bolt of lightning" indicates uninsulated material within your unit which 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 reduce the risk of fire or electric shock, this appliance should not be exposed to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.

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

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

# SAFETY INFORMATION AND USEFUL TIPS

## SAFETY INFORMATION

- **Disconnect mains plug when :**
  - the red light below the TV screen is flashing continuously.
  - a bright white line is displayed across the screen.
  - cleaning the TV screen. Do not use abrasive cleaning agents. Use a slightly damp chamios leather or soft cloth.
  - there is lightning or thunder storm
  - the set is left unattended for a prolonged period of time.
- **Do not place open flames near or on the TV.**
- **Do not place TV set under direct sunlight.**
- **Leave at least 4 inches space around each side of the TV for ventilation purpose. This is to avoid over-heating.**
- **Do not expose your TV set to rain or moisture.**

## USEFUL TIPS

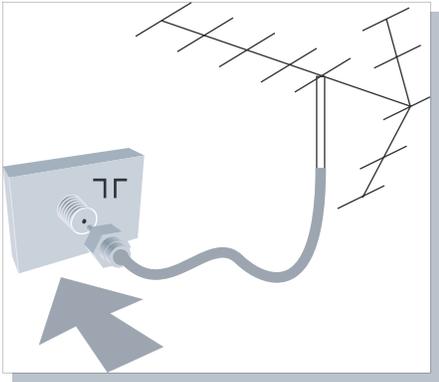
- **Do not leave the TV in standby mode for a prolonged period of time. Switch off TV set to allow the CRT to be de-gaussed (demagnetized). A de-gaussed CRT TV will have optimum picture quality.**
- **Do not re-position the TV while it is switched on. It may cause non-uniformity (uneven color) in display color.**
- **Do not attempt to repair a defective TV. Always consult a skilled service technician.**

## BEFORE CALLING SERVICE

Check this list of symptoms and suggested steps to take before requesting service. You may be able to solve the problem yourself. **Note : Please become familiar with the commercial features as described in TV installation / Setup because the effects of several of these features, if not thoroughly understood might appear as faulty operation.**

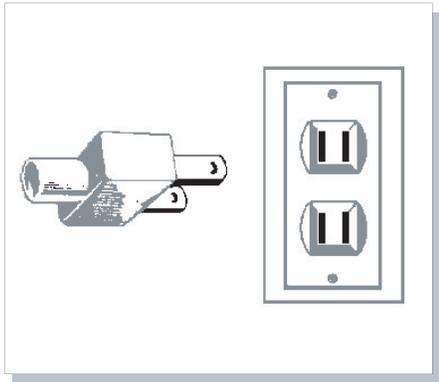
<b>SYMPTOMS</b>		<b>SUGGESTED STEPS TO TAKE</b>
<b>Installation</b>	TV does not respond to commands (volume, channel, power), or cannot be turned on (if it is off). Or cannot be turned off (if TV is on).	1. Check commercial TV setup (TV installation / setup) menu, including power forced on, front keypad lockout, channel ring, volume minimum / maximum features.
<b>Installation</b>	TV turns off by itself.	1. TV automatically turns off after approximately 5 minutes when no RF signal is present (unless POWER ON = FORCED). 2. Check Energy Saving Programmability setting (see ESP) in TV installation / setup.
<b>Picture</b>	No Picture	1. Check that the antenna / cable is connected properly at the rear of the TV. 2. Check CABLE TUNING setting (NO / YES). 3. Possible TV station problem. Try another channel.
<b>Picture</b>	There is picture but no sound.	1. Try increasing the volume. 2. Check that the sound is not muted. If it is, press the MUTE button on the remote control to restore sound.
<b>Picture Display (Color)</b>	Uneven color display.	1. Switch off the TV using the mains power button. Wait approximately 20 minutes before turning on the TV again. 2. Ensure that the TV is not placed near any speakers or magnetic objects.
<b>Picture Display</b>	Double image / "ghost" image	Check antenna, cable or set-top box.
<b>Picture Display</b>	Snowy / noisy picture	1. Check antenna, cable and / or setup box connections. Ensure that they are properly connected. 2. Possible electrical interference from appliances or other sources.
<b>Power</b>	No power	Ensure that the TV's AC power cord is plugged into the main socket. If there is still no power, disconnect the plug. Wait for 60 seconds and re-attach plug. Turn on the TV again.
<b>Remote Control</b>	TV does not respond to remote control	1. Check batteries. 2. Aim remote control directly at remote control sensor lens on TV and try pressing any button on the remote control.
<b>Sound</b>	There is sound but poor or no picture	Check picture adjustments (brightness, contrast, color, tint).

# BASIC TELEVISION CONNECTION



## ANTENNA CONNECTION

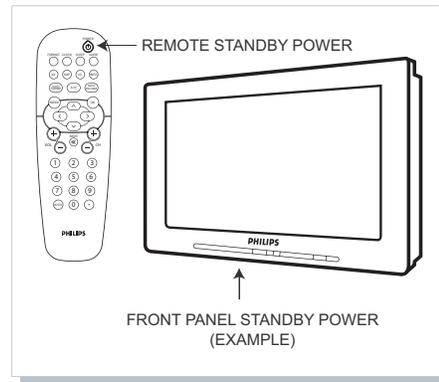
- Connect the antenna or RF cable signal to the 75 ohm RF 'F' connector socket located on the TV's rear jack panel.



## MAINS CONNECTION

- Ensure that the mains voltage and frequency are correct. Please refer to the product labelling and documentation.

**Note :** The power button on the front panel does not disconnect the television from the AC mains. It toggles the TV between on and standby mode. To completely turn off the AC mains power, you must unplug the AC mains plugs from the wall socket.

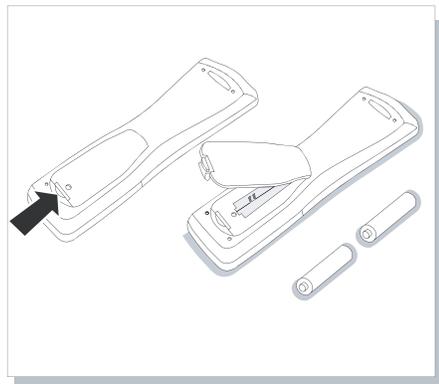


## SWITCHING ON THE SET

- Press the power button on the TV's front panel or on the remote control to switch the TV set on.

**Note :** If the TV is in commercial mode, it might not respond to the front panel or the remote control. Please refer to the section on **TV Installation** and **TV Setup Menu** in this documentation for more informaton.

# USE & CARE OF REMOTE CONTROL



To load the supplied batteries into the remote control ;

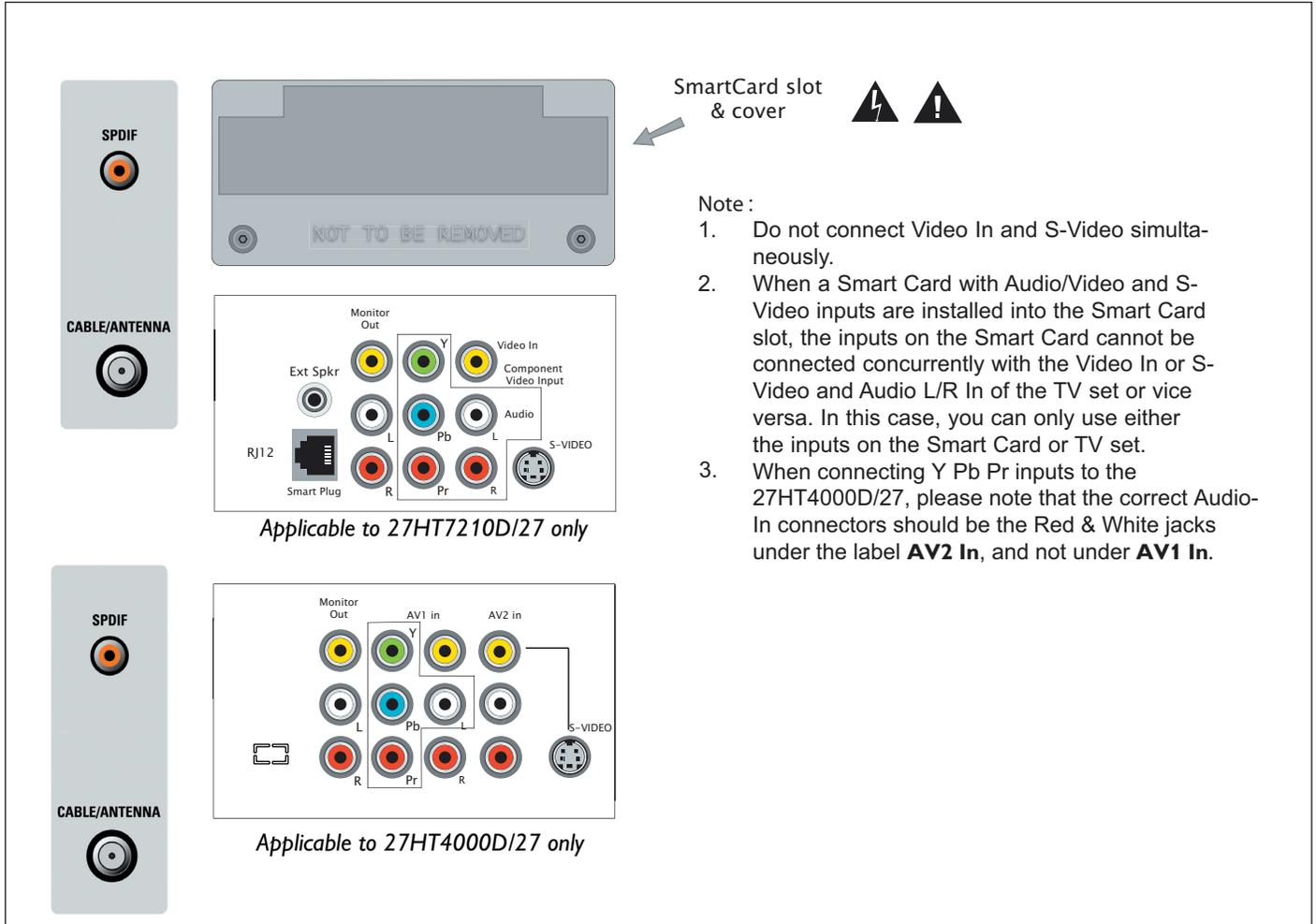
- Remove the battery compartment lid from the back of the remote control.
- Insert two AA-sized batteries into the battery compartment, making sure the positive + and negative - polarity line up correctly as indicated inside the case.
- Reattach the battery compartment lid.

**Note :** Always remove batteries from the remote control if it is not used for a long period of time. This is to prevent damage to the remote control due to battery leakage.

# REAR JACK PANEL CONNECTIONS

**\* WARNING :** 

- Risk of electric shock. Rear jack panel must be removed by qualified personnel only.
- Do not connect telephone cable or equipment to SmartPlug (RJ-12) connector.



# REMOTE CONTROLS

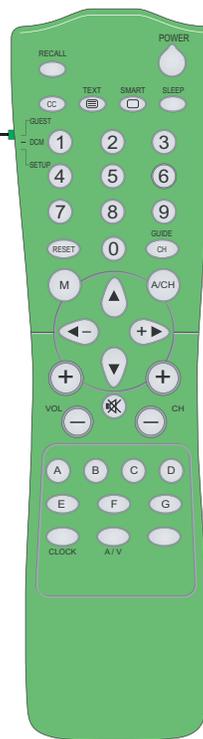
The following remote controls are applicable to Philips Business Display Solutions TV products. These can be used for setup and configuration purposes.



RC2888/01  
Guest-Mode Remote

Slide this button up to enter into **Guest mode**.

Slide this side button down to enter into **Setup mode**.



RC2573GR  
(optional)

## **RC2573GR (optional)**

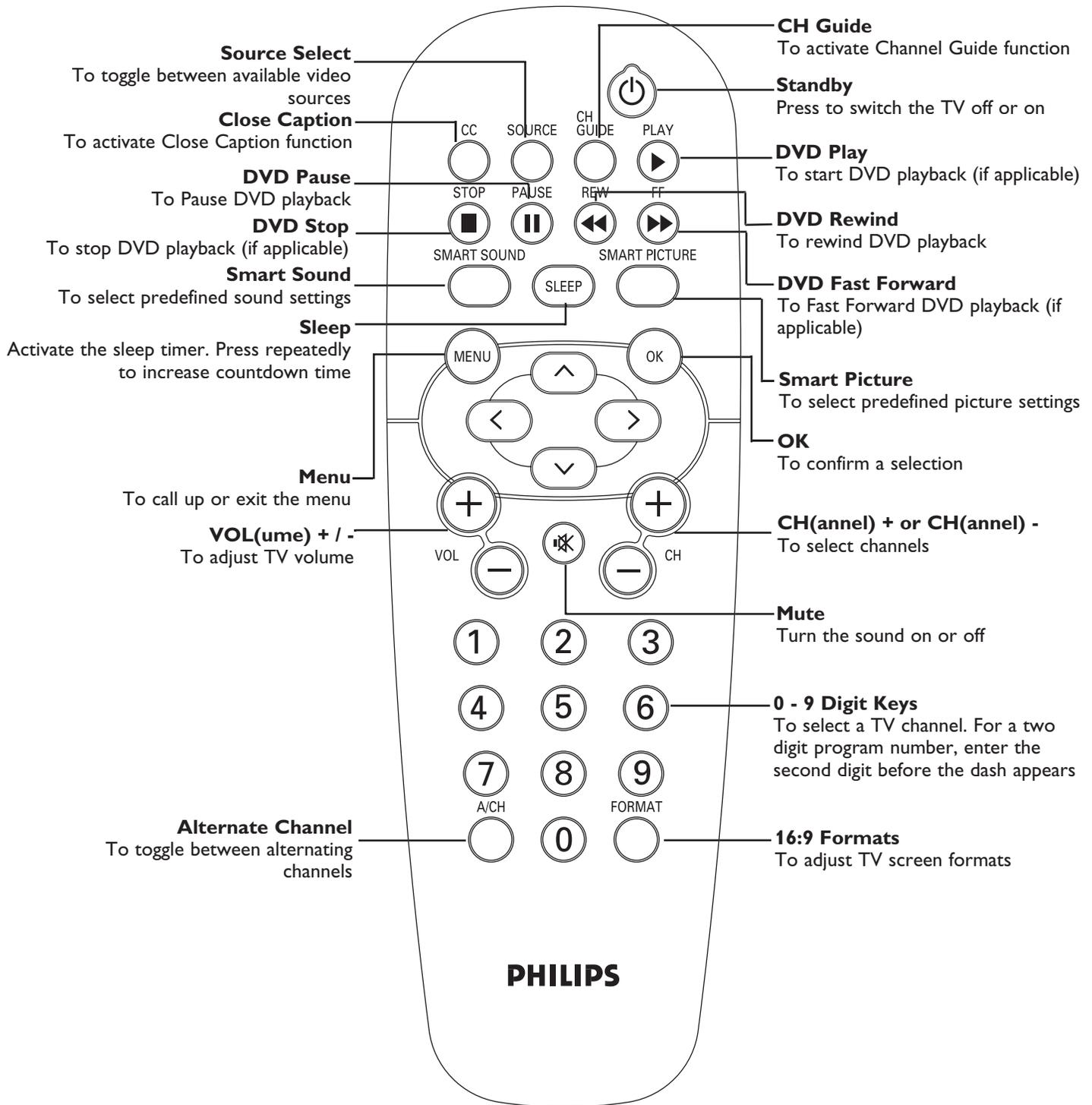
RC2573GR is an optional remote control for Institutional TV / Business Display Solutions features and SmartCard settings. It can be purchased separately. Refer to this document for details of its functions.

- 1 When in setup mode, press **RECALL** on the **RC2573GR** remote control.
- 2 You'll see an information screen that describes the TV chassis firmware version, diagnostic codes, setup information, and other service and technical data regarding the TV's configuration.
- 3 Line#11 indicates whether the TV is in **CONSUMER** or **COMMERCIAL** mode, and whether it is on-line with a SmartPort DCM (such as a **CLON99BK** SmartLoader, **Net1Card**, or **Net01SC** SmartCard). For more information refer to the service documentation for the ITV/BDS LO6 TV Chassis.

```

1 LO6HU1 1.1
2 HRM SW H3.03C
3 CODE 0 0 0 0
4 OP 34 4 161 9 60 117 0
5 AUTO AUTO STEREO
6
7
8 CO 35 CL 31 BR 33 SH 31
9 VL 6 BL 0
10 BS 31 TR 31
11 COMMERCIAL SMARTPORT OFF
12 CHANNEL CVI
    
```

## GUEST REMOTE CONTROL KEYS



## LOW BATTERY CHECK

Press the  key for approximate 5 seconds. The following text appears :

SERVICE

1      REMOTE BATTERY      OK

If the word "**LOW**" appears instead of "**OK**", the batteries are low and must be replaced.

# ACTIVATING TV SETUP MENU

The following remote control commands are applicable to Philips Business Display Solutions TV products. These can be used for setup and configuration purposes.

## **WITH GUEST REMOTE CONTROL RC2888/01**

(only when SECURITY in the TV SETUP MENU is set to STANDARD. Refer to page 19).

### **To activate TV SETUP MENU :**

- 1 Select a channel number
- 2 Key in 3 1 9 7 5 3 followed by the  button on the remote control.

**Note :** All buttons (in step 2) on the remote control 3 1 9 7 5 3  must be pressed successively within 20 seconds or else the TV Setup Menu will not be activated.

## **WITH REMOTE CONTROL RC2573GR (only in TV Commercial Mode).**

### **PART A : To check the TV's mode.**

- 1 Set the remote control selectable switch to SETUP.
- 2 Press **RECALL** key on the remote control. The TV Status menu will appear.
- 3 Check line 11 of the menu to see if the TV is in the Commercial or Consumer mode.
- 4 If the TV is in Commercial mode, proceed to Part B to activate the TV Setup menu. Otherwise follow the sets in Part C to change the TV mode to Commercial.

### **PART B : To activate TV Setup Menu**

- 1 Press the **M** button on the remote control to activate the TV Setup Menu.

### **PART C : To select Commercial mode, if the TV is in Consumer mode or to select Consumer mode if the TV is in Commercial mode.**

- 1 Press 0 2 4 9 9 5 followed by the M button on the remote control. The TV Setup Menu screen will appear.
- 2 Press ◀ or ▶ to select **Commercial** if you are in Consumer Mode but wish to switch to Commercial Mode.  
Select **Consumer** if you are in Commercial mode but wish to switch to Consumer Mode.  
Press ▼ followed by ▶ to store your settings.
- 3 Highlight **STORE** and press the ▶ button on the remote control to store the change. The TV will go to standby mode.
- 4 Press the **Power On** key on the remote control to switch the TV on again. Follow the procedure in **Part B** to activate the TV Setup Menu.

# TV SETUP MAIN MENU

* LANGUAGE	ENGLISH
* CHANNEL INSTALL	>
* CABLE TUNING	NO / YES
• USE CHANNEL TABLE	NO / YES
• DIGITAL TV LABEL	NO / YES
• DTV SETUP	>
* BRIGHTNESS	0 - 63
* COLOR	0 - 63
* CONTRAST	0 - 63
* SHARPNESS	0 - 63
* TINT	-31 - +31
* NOISE REDUCTION	NO / YES
* SOUND MODE	MONO / STEREO
* SAP	NO / YES
* AVL	NO / YES
* BALANCE	-31 - +31
* TREBLE	0 - 63
* BASS	0 - 63
• AUDIO OUT FIXED	NO / YES
• SPEAKER MUTE	NO / YES
* INCREDIBLE STEREO	NO / SPATIAL / DOLBY VIRTUAL
* ULTRA BASS	YES / NO
* VOLUME BAR	YES / NO
• MIN VOLUME	0 - 63
• MAX VOLUME	0 - 63
• SWITCH ON VOLUME	STANDARD /       0 - 63
• SWITCH ON CHANNEL	STANDARD / TV 1 -125 / AV2 / SIDE / S-VIDEO / CVI
• POWER ON	STANDARD / FORCED / RESTORED
• CHANNEL DISPLAY	NONE / NUMBER / LABEL / ALL
• KEYBOARD LOCK	NO / YES
• ESP	OFF / 1 HR / 2 HR / ... / 99 HR
• AUDIO/VIDEO MUTE	OFF / BLUE / BLACK
* AUDIO/VIDEO OUT MUTE	NO / YES
• MONITOR OUT RF	NO / YES
• WELCOME MESSAGE	>
• CHANNEL GUIDE	NO / YES / POWER ON
* REMINDER	NO / YES
• 3 DIGIT ENTRY	NO / YES
• A/CH A/V SWITCH	NO / YES
* CC (Analog)	OFF / CC-1 / CC-2 / CC ON MUTE
* CC (Digital)	OFF / CC1 - CC6 / MUTE
• SAVE CC	NO / YES
• SOURCE MENU ITEM	NO / YES
• V-CHIP MENU ITEM	NO / YES
* SAVED V-CHIP	NO / YES
* V-CHIP SETUP	>
* SLEPTIMER	OFF / 15 MIN / 30 MIN / 45 MIN / 60 MIN / 90 MIN / ... / 240 MIN
• SECURITY	STANDARD / HIGH

Only 8 menu items will be displayed at one time.

- 1) To scroll through the menu, press ▲ or ▼ on the remote control. A highlight indicates that the respective menu item's setting is selected for modification.
- 2) To modify the setting of the selected menu item press ► or ◀.
- 3) To exit, press  or RECALL on the RC2573GR setup remote control.

**Note :** Digital TV Label option will only appear when the  button is pressed in a Digital Channel selection. When the channel is analog, Digital TV Label option will not be available.

**Note :** \* denotes item which appears in both the Commercial and Consumer modes.

**Note :** • denotes item which appears only in Commercial mode.

# TV SETUP MENU & SUB-MENUS

## \* LANGUAGE (ENGLISH / ESPANOL / FRANCAIS)

When you first enter the TV SETUP Menu, LANGUAGE is highlighted. Scroll to the LANGUAGE item, select other languages with the ► or ◀ button on the remote control.

## \* CHANNEL INSTALL >

When selected, **CHANNEL INSTALL** menu appears. Configure the inputs and channels as seen here.

CHANNEL INSTALL	
CHANNEL	TV 2-125 / AV2 / SIDE / S-VIDEO / CVI / DIGITAL
INPUT	ANTENNA / AV2 / SIDE / S-VIDEO/ CVI / DIGITAL >
AUTO PROGRAM	>
CHANNEL RING	SAVED / DELETED
LABEL	MYLABEL >
VIDEO BLANK	NO / YES
AUDIO MUTE	NO / YES

TV Setup - Channel Install (Commercial Mode)

### INPUT

- 1 Select the channel or input you wish to configure.
- 2 Select the channel or input you wish to associate with the specific CHANNEL. This feature enables you to "map" (re-assign) a numeric channel number to a video input, rather than to its normal RF TV channel (i.e. ANTENNA) channel 2.

*Note : Although it is possible to map a given video source (eg CVI) to another video source (eg. S-VIDEO) this is not advisable as it may lead to confusion.*

### AUTO PROGRAM

- 1 When **AUTO PROGRAM** is selected, the TV performs an automatic search for the presence of viable RF signals at its tuner input. An **AUTO PROGRAMMING ACTIVE TABLE** of active numbers will appear. When a viable signal is detected on a given channel, that channel is highlighted in red and is added to the channel ring.
- 2 If **CABLE TUNING** is set to **NO**, channels 2 through 69 will be checked. When a viable signal is detected on a given channel, that channel is highlighted in red and is added to the channel ring.
- 3 Pressing any key on the remote control will terminate the **AUTO PROGRAM** session.

AUTO PROGRAMMING ACTIVE						
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63
DIGITAL CHANNEL SEARCH : 22						
PRESS ANY KEY TO STOP						

AUTO PROGRAM

### CHANNEL RING

Specify whether the current channel or input is to be **SAVED** or **SKIPPED** from the channel ring (i.e. list of channels available for selection with a guest remote control).

### LABEL

Input a maximum number of 8 characters for the channel's label. Press cursor ► to start the first character. Cursor ► or ◀ to navigate between character positions within the label field. Cursor ▲ or ▼ to select characters from the list A-Z or 0 - 9 etc. To exit, press cursor ► or ◀ to navigate out of the label editing field.

### VIDEO BLANK

If **VIDEO BLANK** is set to **NO**. Video will be displayed.  
If **VIDEO BLANK** is set to **YES**. Video will not be displayed.

### AUDIO MUTE

If **AUDIO MUTE** is set to **NO**. The current channel is audible.  
If **AUDIO MUTE** is set to **YES**. The current channel is muted

## \* CABLE TUNING (NO / YES)

If **CABLE TUNING** is set to **NO**. You are selecting standard off-air tuning  
If **CABLE TUNING** is set to **YES**. You are selecting cable offset tuning.

## TV SETUP MENU & SUB-MENUS (CONTINUED)

### ● USE CHANNEL TABLE (NO / YES)

If *USE CHANNEL TABLE* is set to **NO**. The digital tuner will ignore the Virtual Channel Table (VCT) information that is contained in the Program and System Information Protocol (PSIP) during channel installation or Direct Channel Command which is sent by the TV set.

When VCT is ignored, the digital tuner will tune to the physical channel, Radio Frequency (RF) Channel. Program Map Table (PMT), which is stored as channel number Major dot Minor (eg. 2.1) in the TV set. The virtual channels will not be used in this case.

If *USE CHANNEL TABLE* is set to **YES**. Program and System Information Protocol (PSIP) is used during channel installation, and Direct Channel Command.

The digital tuner will use the virtual channel information that is contained in the PSIP, to map the virtual channels to the physical channels, which is also called Major dot Minor channel in this case.

For more information on the PSIP, you can refer to ATSC Standard, Program and System information Protocol for Terrestrial Broadcast and Cable (Revision B), which can be found at the website [http://www.atsc.org/standards/a\\_65b.pdf](http://www.atsc.org/standards/a_65b.pdf).

### ● DIGITAL TV LABEL (NO / YES)

If *DIGITAL TV LABEL* is set to **NO**. The Digital TV channel number will not be displayed on the screen.

If *DIGITAL TV LABEL* is set to **YES**. The Digital TV channel number will be displayed on the top right hand corner of the TV screen for about 5 seconds whenever there is a change in digital TV channel.

For the changes in the Digital TV label to take effect, please conduct a cold / warm start when the setting is changed from Yes to No, vice versa.

### DTV SETUP

Entering the DTV SETUP menu allows you to edit features while you are in Digital TV mode.

#### CHANNEL EDIT

Channel edit allows you to add or skip channels from your favorite list.

1

Press **CURSOR** > or < to toggle between **Added** or **Skipped**. If **Skipped** is selected, the channels will be skipped when scrolling channels with the **CH+** or **CH-**. If **Added** is selected, the channels will not be skipped when scrolling channels with the **CH+** or **CH-**.

**Note :** When you are in Digital Mode you can only add or skip programs in Digital Channels.

#### Weak Dig Sig

Digital broadcasting is still new. Therefore it is not uncommon for a broadcaster to only send out a digital signal for part of a day. The reception could also come and go. If you program your channels when the signal is not being sent or is weak it will not be saved in your channel setup. Using the **Weak Digital Signal** feature here, you can add those channels with weak or no signals to your channel list. **Adding or skipping Weak Digital Signal can ONLY be done in Digital Mode.**

#### AutoLock (not supported)

#### Fact Ch Reset

*Factory Channel Reset* feature lets you erase the contents of the master, user and favorite channel lists. This restores the TV to the initial state before the first Auto Program operation. For instructions on how to Auto Install the TV again, refer to page 12.

#### Digital Audio

*Digital Audio* allows you to switch to another audio language when it is available.

#### Timer (not supported)

#### Closed Caption

*Closed Caption* lets you select the default option or options that you have assigned to your Close captioning service. **This feature is ONLY available in Digital Mode.**

#### Emergency Alert

*Emergency Alert* lets you display or discard emergency alerts for Low or Medium priority.

**Note :** *Emergency Alert will not be visible if no broadcast is received or when the TV is in Standby mode.*

## TV SETUP MENU & SUB-MENUS (CONTINUED)

### \* **BRIGHTNESS / COLOR / CONTRAST / SHARPNESS / TINT** (||||||| 0 - 63, TINT ||||| -31 - 31)

Adjust the respective picture setting using the ► or ◀ cursor.

### \* **NOISE REDUCTION** (NO / YES)

If **NOISE REDUCTION** is set to **NO**. The noise reduction feature is disabled.

If **NOISE REDUCTION** is set to **YES**. Video noise is reduced with minimum reduction in picture sharpness.

### \* **SOUND MODE** (MONO / STEREO)

Select either **STEREO** or **MONO** sound modes.

When **SOUND MODE** is changed, an on-screen display will appear indicating the actual audio status (MONO or STEREO).

**Note** : If **Stereo** is not available on a selected show the sound coming from the TV will remain in the **Mono** mode even if the TV is set to **Stereo** mode.

### \* **AVL - Auto Volume Leveler** (NO / YES)

When turned to **YES**, **AVL** will level out the sound being heard when sudden change in volume occurs during commercial breaks or channel changes.

### \* **SAP** (NO / YES)

Disable or enable the Second Audio Program channel features. SAP is not widely used and most channels do not transmit a SAP signal. Use of the SAP channel include :

- Spanish translation or other language translation
- Descriptive information about the program
- Duplication of main audio (mono)
- Audio unrelated to program

**Note** : When **SAP** is set to **YES**, but **SAP** is not present on the current channel, the primary audio will be audible.

### \* **BALANCE / TREBLE / BASS** (||||||| 0 - 63, BALANCE ||||| -31 - 31)

**Balance** : Level of sound coming from the left and right speakers.

**Treble** : Enhance the high frequency sounds.

**Bass** : Enhance the low frequency sounds.

**Note** : Adjust the respective audio playback setting using the ► or ◀ cursor.

### ● **AUDIO OUT FIXED** (NO/ YES)

If **AUDIO OUT FIXED** is set to **YES**. **MONITOR OUT** audio level is set to a fixed nominal one volt peak-to-peak (0.775 volts RMS at 600 ohm), irrespective of the TV's volume setting.

If **AUDIO OUT FIXED** is set to **NO**. The **MONITOR OUT** audio level will vary with the TV's volume setting.

### ● **SPEAKER MUTE** (NO / YES)

If **SPEAKER MUTE** is set to **NO**. The TV's built-in speakers will operate as they would normally.

If **SPEAKER MUTE** is set to **YES**. The TV's built-in speakers will be set to mute.

### \* **INCREDIBLE STEREO** (NO / SPATIAL / DOLBY VIRTUAL)

If **INCREDIBLE STEREO** is set to **NO**, there will not be any special audio effects applied to the TV sound.

If **INCREDIBLE STEREO** is set to **SPATIAL**, the sound from the TV will be specially processed with audio spatializer algorithms, resulting in a "3D stereo-like" effect.

If **INCREDIBLE STEREO** is set to **DOLBY VIRTUAL**, the sound from the TV will be specially processed with patented Dolby audio algorithms, resulting in a "3D stereo surround" effect that conforms to the acoustic performance level as specified by Dolby.

### \* **ULTRA BASS** (NO / YES)

When **ULTRA BASS** is set to **YES**, the audio frequency equalization is modified such that the bass frequencies are significantly emphasized.

### \* **VOLUME BAR** (NO / YES)

When **VOLUME BAR** is set to **YES**, an OSD graphic appears providing visual verification (eg. "|||||||----15") of volume adjustments made with the remote control or the front panel of the TV.

## TV SETUP MENU & SUB-MENUS (CONTINUED)

### ● **MIN VOLUME** (||||||| 0 - 63)

Specify the lowest volume setting possible by using the remote control or the TV front panel (if it is not locked out). This setting cannot exceed the MAX VOLUME.

### ● **MAX VOLUME** (||||||| 0 - 63)

Specify the highest volume setting possible by using the remote control or the TV front panel (if it is not locked out). This setting cannot be less than the MIN VOLUME.

### ● **SWITCH ON VOLUME** (STANDARD / ||||||| 0 - 63)

Specify the volume setting that takes effect when the TV is powered on.

If **STANDARD**, the volume at power-on will be the volume at which the TV was prior to last power-down.

If specified as **0 - 63**, that will always be the volume at power-on, until **SWITCH ON VOLUME** is changed.

### ● **SWITCH ON CHANNEL** (STANDARD / TV 1 - 125 / AV2 / SIDE / S-VIDEO / CVI)

Specify the channel which the TV will be tuned when it is powered on.

If **STANDARD**, the channel at power-on will be the same as the channel when the TV was tuned at last power-down.

If specified (eg. 2, AV2, CVI etc.), then that will be the channel at power on until **SWITCH ON CHANNEL** is changed.

### ● **POWER ON** (STANDARD / FORCED / RESTORED)

**STANDARD** : The TV will be in standby mode when AC mains power is first applied after being disconnected.

**FORCED** : The TV will turn ON whenever AC mains power is applied. This feature allows the TV's power status to be controlled for example from an AC mains breaker.

**RESTORED** : When AC mains power is first applied after being disconnected, the TV's power status will revert to that when the AC mains power was last removed.

### ● **CHANNEL DISPLAY** (NONE / NUMBER / LABEL / ALL)

Specifies which of the respective channel properties are displayed by the TV's OSD when a channel or input is first selected.

If **REMINDER** (see REMINDER page 17) is **OFF**, these properties will be displayed for a few seconds, then disappear.

If **REMINDER** is **ON**, the channel properties remain on-screen as long as the TV is on.

### ● **KEYBOARD LOCK** (NO / YES)

**NO** : The TV's front panel is enabled.

**YES** : The TV's front panel is disabled.

### ● **ESP - ENERGY SAVING PROGRAMMABILITY** (OFF / 1 HR / 2 HR / ... / 99 HR)

This feature enables the TV to automatically power-down after a specified period of time. If during this period it does not receive any commands from the remote control or TV front panel, this energy-saving feature assumes the TV is inactive, and will automatically power-down.

### ● **AUDIO / VIDEO MUTE** (OFF / BLACK / BLUE)

Also known as "A/V muting". Suppresses audio and video when the TV tuner is not receiving sufficient RF signal. These options produce the following results.

**OFF** : TV screen displays "snow", and the audio appears as white noise ("static").

**BLACK** : TV screen display is black, and the audio is muted.

**BLUE** : TV screen display is blue, and the audio is muted.

### ● **AUDIO / VIDEO OUT MUTE** (NO / YES)

When set to **YES**, it turns off the audio and video MONITOR OUT signals (either demodulated RF input or loop-through video). Intended to prevent recording of pay-per-view content.

### ● **MONITOR OUT RF** (NO / YES)

This feature configures the audio and video monitor outputs (provided the AUDIO / VIDEO OUT MUTE is not set to **YES**).

**NO** : The signals that are present at the monitor outputs are the same as those of the currently selected channels or video input. The monitor outputs "track" what is viewed and heard on the TV.

**YES** : Regardless of the current selected TV source (eg. AV2, S-VIDEO, CVI) input, the signal present at the monitor outputs is always the tuner output (see NOTE below).

**Note** : When The MONITOR OUT RF is initially changed from its current setting, the monitor out signal depends upon the previous MONITOR OUT setting until a different TV source is selected. From then on, the new MONITOR OUT setting will perform as described.

# TV SETUP MENU & SUB-MENUS (CONTINUED)

## ● WELCOME MESSAGE (>)

A welcome message (maximum of 20 characters, 2 lines) can be programmed to appear on the TV screen when the TV is powered on. The message remains on the screen until any button on the TV front panel or remote control is pressed.

This is how to set the Welcome Message :

When the WELCOME MESSAGE setup menu is highlighted.

**1** Press cursor ► or ◀ on the remote control to invoke the WELCOME MESSAGE sub-menu.

**2** Press cursor ▲ or ▼ on the remote control to select the desired MESSAGE sub-menu item (eg. LINE1, LINE2).

**3** When **DISPLAY** is highlighted, press cursor ► or ◀ on the remote control to select YES or NO. When YES is selected, WELCOME MESSAGE is enabled. Choose NO to disable WELCOME MESSAGE.

**Note** : If Welcome Message is enabled but both LINE 1 and LINE 2 are blank (or consist entirely of space characters), no message will appear.

**4** Select message LINE 1 or LINE 2. Press cursor ► on the remote control to start the first character. A blinking "-" will appear indicating that you are in the edit mode. Press cursor ▲ or ▼ to select a character at the given position. To move to a desired character position press ► or ◀.

**Note** : When you cursor to the left or right margins of the edit space, the blinking "-" will disappear and ">" will re-appear at the end of the menu line. You can then cursor ▲ or ▼ to the next or previous line in the MESSAGE sub-menu.

**5** Select **CLEAR** to erase the entire message.

## ● CHANNEL GUIDE (NO / YES / POWER ON)

The channel guide feature provides an on-screen summary listing of the RF (tuner) channels that are currently in the channel ring (see CHANNEL INSTALL -> CHANNEL RING) and have been assigned labels (see CHANNEL INSTALL -> LABEL).

**NO** : Channel Guide is not displayed when **CH GUIDE** on the remote control is pressed and "NOT AVAILABLE" message appears on the TV screen.

**YES** : When **CH GUIDE** button on the remote control is pressed the channel guide is displayed for approximately 10 seconds, or until a command is received from the remote control again. All RF (tuner) channels that are in the same channel ring, and have labels will appear in the channel list.

**POWER ON** : The channel guide appears automatically at power-on, and remains on-screen for approximately 10 seconds or until a remote control command occurs. The channel guide also appears when CH GUIDE button on the remote control is pressed.

**Note 1** : To appear in the channel guide, an RF (tuner) channel must be assigned a label, and must be saved in the channel ring.

**Note 2** : Only RF (tuner) channels will be listed in the channel guide. Video inputs (eg. AV2, S-VIDEO, CVI, FRONT A/V) will not appear.

WELCOME MESSAGE	
DISPLAY	NO / YES
LINE 1	PHILIPS >
LINE 2	INSTITUTIONAL TV >
CLEAR	>

DISPLAY	NO / YES
---------	----------

LINE 1, 2	PHILIPS
-----------	---------

CLEAR	
-------	--

CHANNEL GUIDE	
TV2	PBSETPTV >
TV5	CBS >
TV6	QVC >
TV7	WB >
TV13	ABC >
TV14	WGN >
TV54	C-SPAN >
EXIT	
CH GUIDE TO SCROLL DOWN	

# TV SETUP MENU & SUB-MENUS (CONTINUED)

## REMINDER (NO / YES)

When *REMINDER* is set to **YES**, the current channel or input label will be displayed at the top of the TV screen. (eg. TV2, CVI, etc.). The channel number or input label (if a label has been assigned in CHANNEL INSTALL), and the current MUTE status (i.e. if sound is MUTED) will also be displayed when available.

When *REMINDER* is set to **NO**, the reminder information will appear only when the channel or input label is changed. This reminder information will disappear after ten seconds.

## 3 DIGIT ENTRY (NO / YES)

**YES** : Upon receiving a signal from the remote control, the TV "expects" to receive up to two more successive remote digit commands (eg. 123, 012 etc) before tuning to the intended channel. As the TV receives the signal from the remote control, each digit will be displayed on the top left hand corner of the TV screen. This digit will be followed by a "-" indicating that the TV is "waiting" for the digit input (see Note).

**NO** : Upon receiving a signal from the remote control the TV "expects" to receive one more successive remote control digit command before tuning to the intended channel (see Note).

**Note** : Successive digit commands must occur within two seconds, or the TV will interpret the received digit(s) as the intended channel and tune to it accordingly.

## A/CH A/V SWITCH (NO / YES)

The *A/CH A/V (alternate channel A/V switch)* feature provides the choice to use the remote control A/CH command to toggle between the previously viewed channels / inputs, to step successively through all sources (eg. ANTENNA (tuner), AV2, S-VIDEO, CVI, FRONT) presently in the channel ring.

**YES** : Upon receiving an alternate channel (A/CH) command from the remote control, the TV will tune to the next signal source (eg. tuner, AV2, S-VIDEO, etc), in the channel ring.

**NO** : Upon receiving an alternate channel (A/CH) command from the remote control, the TV will switch to the most recently selected channel / input.

## CS1, CS2, CS3, CS4, CS5, CS6, CC1, CC2, CC3, CC4, OFF, MUTE (for digital channels)

### CC-1, CC-2, OFF, CC ON MUTE (for analog channels)

Since July 1993, TV sets with 13" screens or larger must have built-in caption decoders. Captioning of most broadcast and cablecast programming is mandated under the Telecommunications Act of 1996, except for programs exempted by the FCC. For additional information please visit the U.S. FCC website at : <http://www.fcc.gov/cgb/consumerfacts/closedcaption.html>.

**OFF** : Close captioning text will not be displayed even when it is provided by the broadcaster.

**MUTE or CC ON MUTE** : Close captioning text will appear only when the TV is MUTED.

**CS1, CS2, CS3, CS4, CS5, CS6, CC1, CC2, CC3, CC4, CC-1, CC-2** : Close captioning text will be displayed if it is present in the incoming signal.

## SAVE CC (NO / YES)

This feature enables the CC setting (see CC) to remain in effect after the TV is powered down.

**NO** : When the TV is powered down and turned on again, the closed captioning settings will default to OFF.

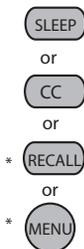
**YES** : When the TV is powered down and turned on again, the closed captioning previously set will remain in effect.

## SOURCE MENU ITEM (NO / YES)

This feature provides the option to specify whether the current signal source (eg. TV-54, AV2, CVI, S-VIDEO, etc.) item is present in the FEATURES MENU that appears when the SLEEP or CC button on the remote control is pressed, or when the MENU or RECALL button on the guest-mode remote control is pressed.

**NO** : The SOURCE line item does not appear in the FEATURES MENU.

**YES** : The SOURCE line item appears in the FEATURES MENU.



FEATURES MENU	
CC	CC-1
SLEEPTIMER	OFF
V-CHIP SETUP	>
SAP	NO
SOURCE	TV-54
EXIT	

Features Menu with SOURCE Menu item = YES

# TV SETUP MENU & SUB-MENUS (CONTINUED)

**Note 1 :** When the **SOURCE** item is highlighted, press **▶** or **◀** on the remote control to step through the **signal sources** (eg. tuner, AV2, S-VIDEO etc.) that are in the **CHANNEL RING**. The **SOURCE** item in the **FEATURES MENU** cannot be used to select RF (tuner)channels.

**Note 2 :** The **SOURCE** item can only be used to select signal sources (eg. tuner, AV2, S-VIDEO, etc) that are in the **CHANNEL RING**.

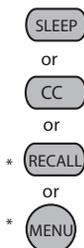
**Note 3 :** If there are no signal sources in the **CHANNEL RING** other than the presently-selected source, the **SOURCE** item is for display purpose only, you cannot select any other source.

## ● V-CHIP MENU ITEM (NO / YES )

This feature provides the option to specify whether the V-CHIP will appear in the **FEATURES MENU**

**NO :** The V-CHIP line item does not appear in the **FEATURES MENU**.

**YES :** The V-CHIP line item appears in the **FEATURES MENU**.



FEATURES MENU	
CC	CC-1
SLEEPTIMER	OFF
V-CHIP SETUP	>
SAP	NO
SOURCE	TV-54
EXIT	

Features Menu with V-CHIP Menu item = YES

**Note :** The **FEATURES MENU** can be activated by pressing the **SLEEP** or **MENU** button on the guest remote control.

## ● SAVED V-CHIP (NO / YES)

This feature provides the option to specify whether the V-CHIP SETUP configuration remains in effect after the TV is powered down.

**NO :** The current V-CHIP setup configuration reverts to defaults (does not appear on the **FEATURES MENU**) when the TV is powered down.

**YES :** The current V-CHIP setup configuration remains in effect when the TV is powered down.

## V-CHIP SETUP (NO / YES)

Configures the V-CHIP program content viewing restriction feature. Please consult the mainstream / consumer product documentation for details about this feature.

**MASTER DISABLE NO :** The TV and Movie Ratings will be effective.

**MASTER DISABLE YES :** All TV and Movie Ratings will be blocked, overwriting all previous settings.

V-CHIP SETUP	
MASTER DISABLE	YES / NO
TV RATINGS	>
MOVIE RATINGS	>
EXIT	>

## TV RATINGS

**1** To select TV Ratings, highlight **TV RATINGS** and press cursor **▶** on the remote control to invoke the TV Ratings sub-menu.

**2** Navigate with cursor **▲**, **▼**, **▶** or **◀** on the remote control to select the ratings you wish to block. When the cursor is in the desired bracket, press **▲** or **▼** to activate it. An "X" will appear indicating that the TV Rating has been selected. To deselect, press **▲** or **▼** where the "X" is. The "X" will disappear indicating that the TV Rating has been deactivated.

TV RATINGS	All	V	S	L	D
TV-Y	[ ]				
TV-Y7	[X] [ ]				
TV-G	[ ]				
TV-PG	[ ] [ ]	[ ]	[ ]	[ ]	[ ]
TV-14	[ ] [ ]	[ ]	[ ]	[ ]	[ ]
TV-MA	[ ] [ ]	[ ]	[ ]		
EXIT					>

TV Ratings Sub-Menu

## MOVIE RATINGS

**1** To select Movie Ratings, highlight **MOVIE RATINGS** and press cursor **▶** on the remote control to invoke the Movie Ratings sub-menu.

**2** Press cursor **▶** or **◀** on the remote control to toggle between View and Blocked.

MOVIE RATINGS	
G	VIEW
PG	VIEW
PG-13	VIEW
R	VIEW
NC-17	VIEW
X	BLOCKED
NR	BLOCKED
EXIT	>

Movie Ratings Sub-Menu

## TV SETUP MENU & SUB-MENUS (CONTINUED)

### SLEEPTIMER (OFF / 15 MIN / 30 MIN / 45 MIN / 60 MIN / 90 MIN / 120 MIN / 180 MIN / 240 MIN)

When the SLEEPTIMER is activated, the TV automatically powers down after the specified period of time.

**Note 1 :** The SLEEPTIMER differs from ESP (Energy Saving Programmability) in that the SLEEPTIMER countdown is unaffected by any command from the remote control or front panel of the TV. ESP timer is reset when it receives a command from the remote control or the front panel of the TV.

**Note 2 :** When the SLEEPTIMER is active, the current SLEEPTIMER countdown timer value appears in the ITV / commercial SETUP MENU as well as the FEATURES MENU. The SLEEPTIMER countdown period can be adjusted or reset from either menu.

FEATURES MENU	
CC	CC-1
SLEEPTIMER	9 MIN
V-CHIP SETUP	>
SAP	NO
SOURCE	TV-54
EXIT	

SLEEPTIMER countdown in progress (example)

### ● SECURITY (STANDARD / HIGH)

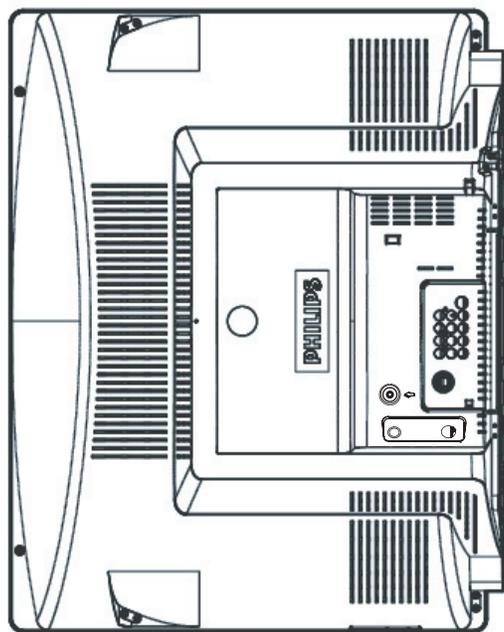
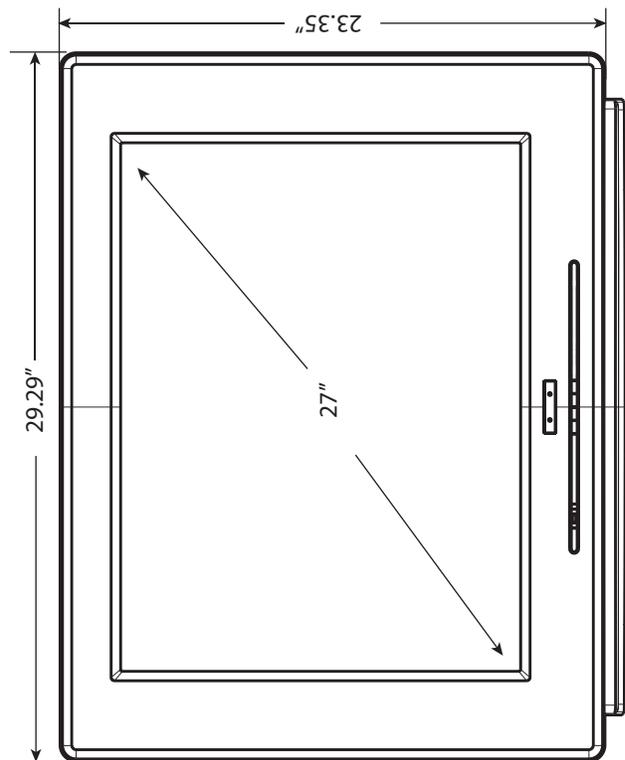
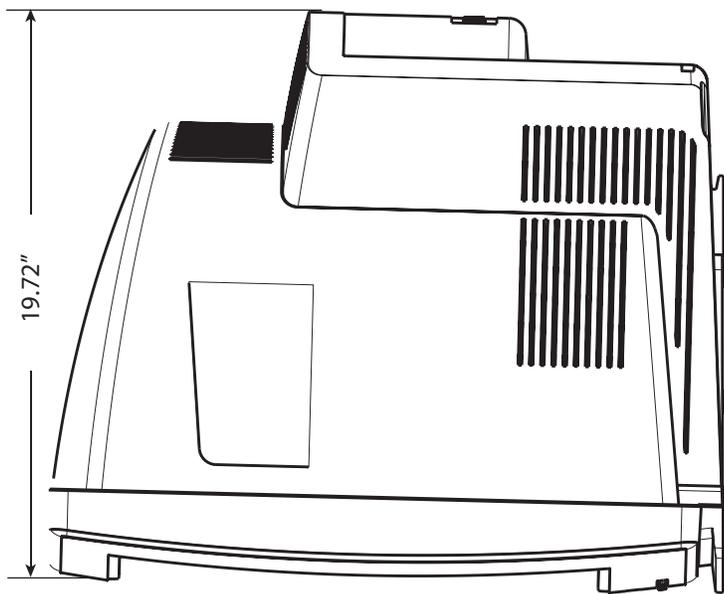
This feature provides the option to enable access to the SETUP MENU without an RC2573GR setup remote control.

**STANDARD :** The TV SETUP MENU can be accessed by entering a special security code with a guest remote control. Refer to Philips sales representative for more details.

**HIGH :** The TV SETUP MENU can be accessed only with an RC2573GR setup remote control in setup mode.

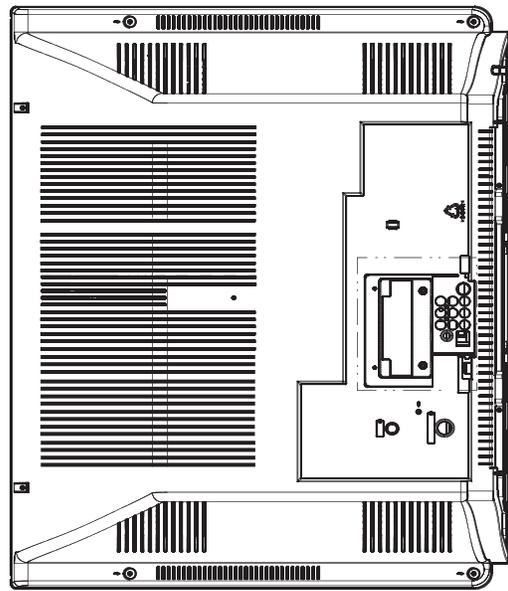
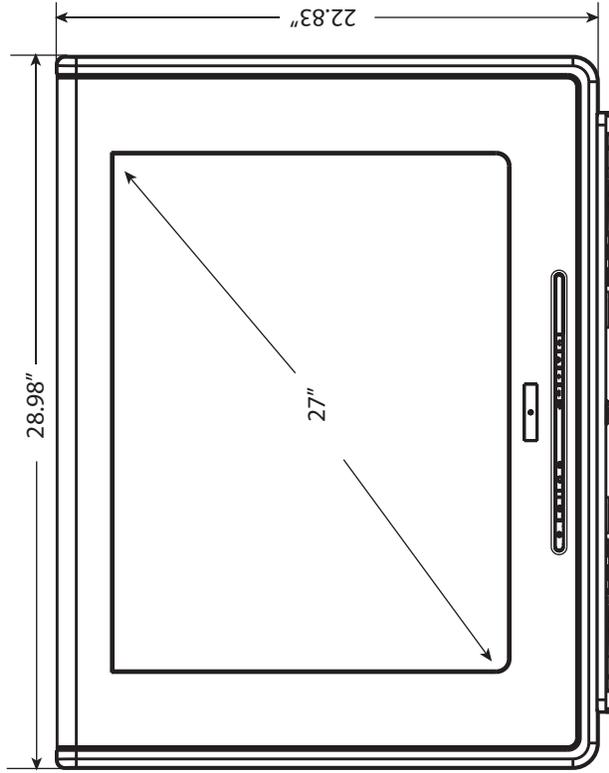
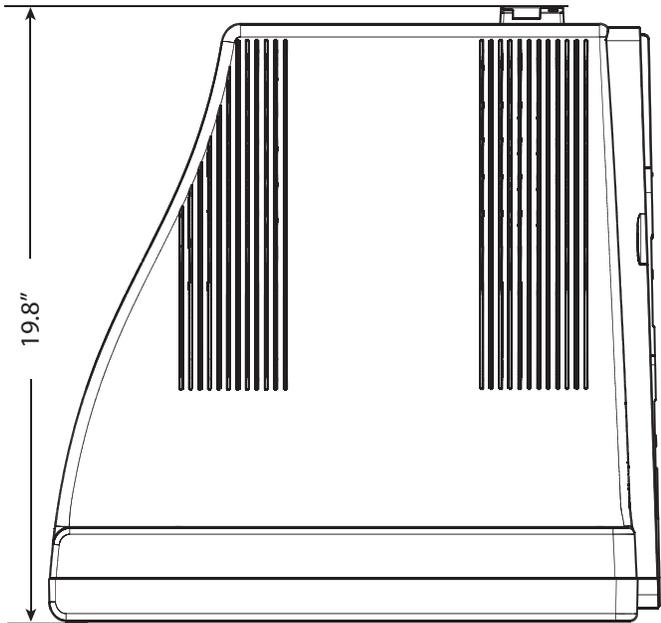
**Note :** The default SECURITY setting for Institutional TV is STANDARD. When SECURITY is in STANDARD mode, the TV is more vulnerable to unauthorized operation.

# 27HT4000D/27 DIMENSIONS



TITLE	27HT4000D/27 DIMENSIONS ref PDF 8670 000 23831		
UNITS	INCHES		
DATE	0104006.1400		
REVISION	0104006.1400		
TOLERANCE	0.125		
DRAWN BY	PBS ITV		
COMMENTS			
PHILIPS BUSINESS SOLUTIONS			
			
			

# 27HT7210D/27 DIMENSIONS



TITLE	27HT7210D /27 DIMENSIONS ref PDF 8670 000 23825		
UNITS	INCHES	COMMENTS	
DATE	0104006.1400	PHILIPS BUSINESS SOLUTIONS	
REVISION	0104006.1400		
TOLERANCE	0.125		
DRAWN BY	PBS ITV	 <b>PHILIPS</b> 	

## DEFINITIONS, ACRONYMS & ABBREVIATIONS

APAC	Automatic Pixel Aging Correction. A technique whereby the image displayed on the television screen is periodically shifted slightly, for the purpose of minimizing plasma panel phosphor "burn-in"
A/V	Audio / video.
BDS	Business Display Solutions. See PBS.
Bit Rate	Sometimes written "bitrate", the frequency at which bits are passing a given (physical or metaphorical) "point", quantified in terms of bits per second (bit/s).
CVI	Component video input. Sometimes used interchangeably with "YPbPr".
CVBS	Composite Video Broadcast Standard. Video signal containing combined color, luminance, and synchronization signals. Also often referred to as "AUX" video.
DB-9	Standardized 9-pin connector, typically used for RS-232 asynchronous serial communications.
DB-15	Standardized 15-pin connector, typically used for VGA / computer display signals.
DCM	Data Communications Module. ITV terminology for devices that communicate with Philips Institutional Television products by means of the Philips ITV SmartPort.
DFU	Directions For Use. Philips Consumer Electronics term for product instruction documentation.
DHCP	Dynamic Host Configuration Protocol. A protocol used on TCP/IP networks. Allows client configuration (TCP/IP address, default gateway, DNS configuration, etc.) to be sent to clients.
DNS	The network service used in TCP/IP networks that translates host names to IP addresses.
DVI	Digital Visual Interface, a digital interface standard created by the Digital Display Working Group (DDWG) to convert analog signals into digital signals to accommodate both analog and digital monitors.
Guest Mode	First data word of a Philips RC-5 / RC-6 remote control code for standard television commands.
HTML	Hypertext Markup Language. The set of markup symbols or codes inserted in a file intended for display on a World Wide Web browser page.
IR	Infra-red, long-wavelength light energy invisible to the human eye. In this context as applied to wireless remote controls.
IR-FACE	ITV interface module that adds ITV features and connectivity to non-ITV televisions.
MP3	A compressed digital audio format. MPEG (Motion Pictures Experts Group) Layer 3 Audio compression.
MPEG	Moving Picture Experts Group. General term for a range of audio and video compression, and the name of the standards organization for digital video and digital audio compression. Operates under the auspices of the International Organization for Standardization (ISO)
ITV	Institutional Television. See PBS. Commercial / non-consumer division of Philips Consumer Electronics Co.
NA	Not available, not applicable.
NC	Not connected, no connection.
Off	See "Standby".
On	A state of operation in which the unit (television) is connected to an AC power source, in active use, and capable of responding to queries or commands from a control device (IR remote control) and/or DCM.
OSD	On-Screen Display. The display of alphanumeric text that appears over the video image. Typically generated by a character generator usually integrated into the television chassis control processor.
PBS	Philips Business Solutions. A commercial / non-consumer division of Philips Consumer Electronics.Co., of which Philips BDS, Business Display Solutions, formerly known as ITV, is a part.
Plug	Connector on a cable that connects to a plug.
RC	Remote control.
RC-5, RC-6	Philips IR remote control communication protocols.
RJ-11	Registered jack 11. Modular telephone-style connector form factor with 4 electrical conductors.

## DEFINITIONS, ACRONYMS & ABBREVIATIONS (CONT.)

RJ-12	Registered jack 12. Modular telephone-style connector form factor with 6 electrical conductors.
Router	Technically, also known as a Layer 2 Switch. A switching hub that operates at the Data Link Layer (Layer 2), and builds a table of the MAC addresses of all the connected stations.
RTSP	Real-Time Streaming Protocol. Allows control of multimedia streams delivered, for example, via RTP (RFC 3389, Real-time Transport Protocol Payload). Control includes absolute positioning within the media stream, recording and possibly device control.
RTP	Real-time Transport Protocol. Defines a standardized packet format for delivering audio and video over the Internet.
Setup Mode	See System 7. Remote control mode used to configure Philips Institutional Televisions for specialized and/or restricted features such as front panel lockout, volume range, channel list, etc.
SmartPort™	Philips proprietary three-wire synchronous serial communications and control interface.
SmartPlug™	See SmartPort.
Socket	Connector on a cable that connects to socket.
SBB	Set-back box. Used interchangeably with "set-top box". General term for a device that adds functionality to, and / or interfaces a television with, a host content- and/or control- environment.
STB	Set-top box. See SBB.
Standby	Generally referred to as "off". A state of operation, characterized by relatively low power consumption, in which the unit (television) is connected to an AC power source, but not in active use, and capable of responding to queries or commands from a control device and/or DCM.
System 0	First data word of a Philips RC-5 / RC-6 remote control code for standard television commands. Synonymous with Business Display Solutions / ITV "guest" mode.
System 7	First data word of a Philips RC-5 / RC-6 remote control code reserved for specialized commands. Used for Business Display Solutions / ITV "setup" mode.
TCP/IP	Transmission Control Protocol / Internet Protocol. De facto standard protocol for Internet communications.
UDP	User Datagram Protocol. A minimal message-oriented transport layer protocol that is currently documented in IETF RFC 768. Used by Philips NetLink to issue device discovery packets.
YPbPr	Component video signals consisting of luminance, and blue and red components.

## CLEANING & CARE

- To avoid possible shock hazard, please be sure that the television is unplugged from the electrical outlet before cleaning.
- When cleaning the television screen, take care not to scratch or damage the screen surface (avoid wearing jewelry or using anything abrasive). Wipe the front of the screen with a clean cloth dampened with water. Use even, easy, vertical strokes when cleaning.
- Gently wipe the cabinet surfaces with a clean cloth or sponge dampened in a solution of cool clear water. Use a clean dry cloth to dry the wiped surfaces.
- Occasionally vacuum the ventilation holes or slots in the cabinet back.
- Never use thinners, insecticide sprays, or other chemicals on or near the cabinet, as they might cause permanent damage of the cabinet finish.

## END-OF-LIFE DISPOSAL

- This Philips Institutional Television product and its packaging contain materials that can be recycled and re-used. Specialized companies can recycle your product to increase the amount of reusable materials and minimize the amounts which need to be properly disposed.
- This product might also use batteries which should not be thrown away when depleted, but should be handed in and disposed of as small chemical waste.
- Please find out about the local regulations regarding the disposal of the television, batteries, and packaging materials whenever you replace existing equipment.

## LIMITED WARRANTY

### COLOR TELEVISION

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. From one to two years from the day of purchase, you pay for the replacement or repair of all parts except the picture tube, and for all labor charges. After two years 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.)

#### 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 IN U.S.A., PUERTO RICO OR U.S. VIRGIN ISLANDS...

Contact a Philips factory service center (see enclosed list) or authorized service center to arrange repair.

(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.)

#### TO GET WARRANTY SERVICE IN CANADA...

Please contact Philips at:

1-866-358-9601

(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.)

#### 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 # \_\_\_\_\_

[www.bds.philips.com](http://www.bds.philips.com)

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