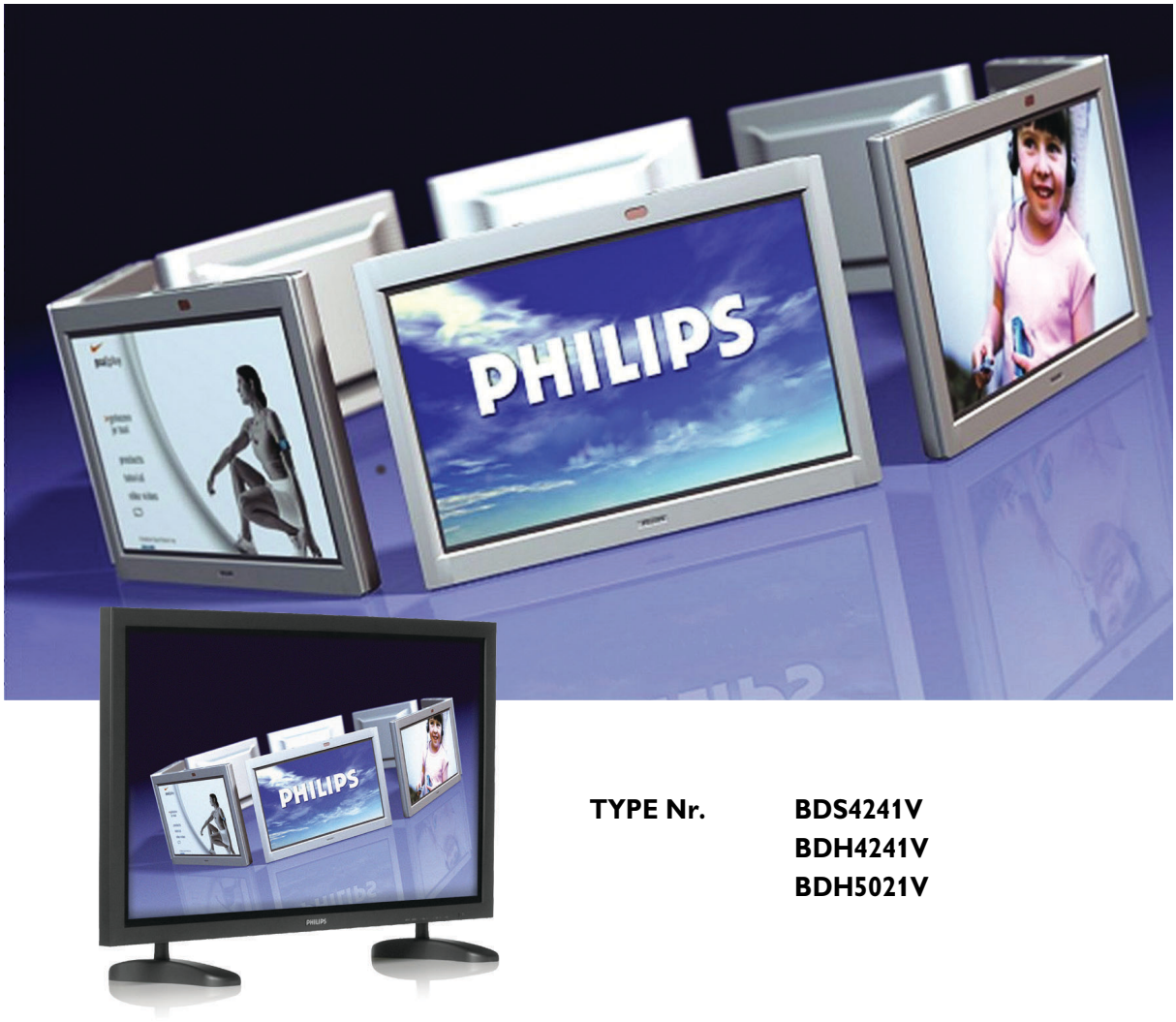
Philips
Business
Solutions

EN **User Manual**



TYPE Nr. **BDS4241V**
BDH4241V
BDH5021V

PHILIPS

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1. IMPORTANT NOTES AND SAFETY INSTRUCTIONS

1.1 Safty Instructions

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol indicates high voltage is present inside. It is dangerous to make any kind of contact with any inside part of this product.

This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

WARNING

- Unplug this product from the wall outlet immediately when it smokes or makes a strange smell.
- Do not block any ventilation openings. (This can result in a risk of re or electric shock.)
- Do not overload wall outlets or extension cords (This can result in a risk of re or electric shock.)
- Connect at the receptacle certainly not to be shaken (This can result in a risk of heat and a re if it is connected to the wall outlet imperfectly.)
- Do not use the uncovered cables. (This can result in a risk of re or electric shock.)
- During a storm conditions (especially when there is lightning) unplug this product from the wall outlet and don't touch the antenna. (This can result in a risk of re or electric shock.)
- Do not expose this product to direct sunlight and extreme. (This can result in a risk of re.)
- Keep children away from this product not to hang on or go up on it.
- Leave batteries for remote control away from your young children. (They may swallow them.)
- Place this product in a well-ventilated place. (This can result in a risk of re.)
- People over 2 persons must move this product. (It can be the reason of the wound because of the weight of goods.)
- Never put objects of any kind into this product and place heavy things on it.
- Place an antenna away from a high-voltage cable.
- Please use a soft and dry cloth (not containing volatile matter) when you clean this product. (This can result in a risk of

CAUTION

-
- Should not be adhered to a power supply plug and receptacle. (This can result in a risk of re)
- Do not use new batteries with old ones together. (This can result in a risk of electric shock)
- Do not place this product in the place to reach children's hands.
- Do not take out a power supply plug with the wet hand. (This can result in a risk of electric shock)
- Bend down the outdoor antenna cable to prevent the rain water ows and not to enter the room. (This can result in a risk of
- Maintain a suitable distance between you and a TV or monitor to protect your eye sight. (Your eye sight can get worse if you watch TV very nearly)
- Place remote control away from a humid or hot place because it is very minute device.
- If this product is not used for a long period of time, unplug the power cord. (This can result in a risk of re or electric shock)
- Do not drop this product. Unplug the power cord and ask to Service Centre when it is broken.
- Do not cover this product with curtains or a tablecloth. (This can result in a risk of re)
- Place the batteries rightly to the both sides (+,-) when you replace them. (The batteries can be explosive and you' re wound)
- Do not place this product on the oor. (Children can press it down)
- Do not damage the power cord. (This can result in a risk of re or electric shock)
- The PDP panel is very high technology product with about million thin lm transistors, giving you ne picture details. Occasionally, a few non-active pixels may appear on the screen as a xed point of blue, green or red. Please note that this does affect the performance of your product.

  Please use a soft and dry cloth when you clean this product. (This can result in a risk of electric shock)

1.2 FCC Information

User Instructions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

NOTE:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

User Information

Changes or modi cations not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If necessary, consult your dealer or an experienced radio/television technician for additional suggestions.

You may and Resolve Radio/TV Interference Problems helpful. This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Of ce, Washington, DC 20402, Stock Number 004-000-00345-4.

Warning

User must use shielded signal interface cables to maintain FCC compliance for the product. Provided with this monitor is a detachable power supply cord with IEC320 style terminations. It may be suitable for connection to any UL Listed personal computer with similar configuration. Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal or exceeds the monitor voltage rating.

For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed detachable power supply cord with NEMA configuration 6015P type (tandem blades) plug cap.

This television receiver provides display of television closed captioning in accordance with Section 15.119 of the FCC rules. (TV broadcast receivers with picture screens 13 inches or larger in diameter models only)

1.3 END-OF-LIFE DISPOSAL

This Philips product and its packaging contain materials that cna 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.

2. UNPACKING AND INSTALLATION

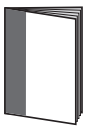
2.1 UNPACKING

- The monitor is packed in a carton, to gether with the standard accessories. Any other optional accessories will be packed separately.
- The weight of the monitor differs-depending on the type-from29 to 43kg. Due to the size and weight it is rccommended to move it by 2 people.
- The protective glass and the glass substrate are installed on the front of the product. Since both glass can be broken and scraped easily the product has to be handled with care. Never place the monitor with the glass faced down unless it is protected with pads.
- After opening the carton ensure that the content is in good condition and complete.

2.2 PACKAGE CONTENTS

Please verify that you received the following items with your package content :

1 Monitor
2 Remote Control with batteries
3 User Manual on CD - ROM
4 Power Cables
5 VGA, DVI cable
6 Table stand(feet)



User Manual

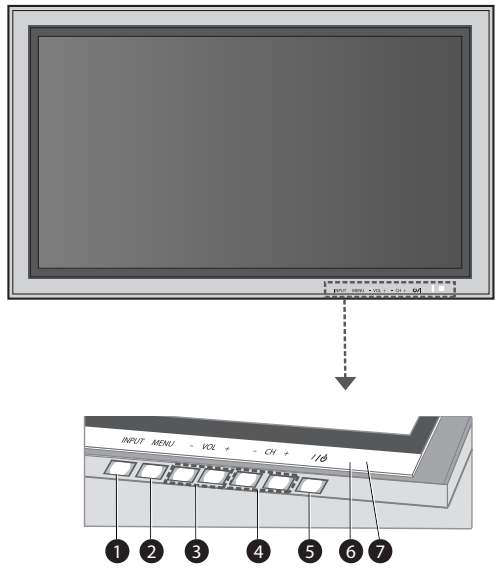
Remote Control/
AAA Batteries

Power Cord

2.3 INSTALLATION NOTES

- Due to the high power consumption, always use the plug exclusively designed for this product. If an extended line is required, please consult your service agent.
- The product should be installed on a flat surface to avoid tipping. The distance between the back of the product and the wall should be maintained for proper ventilation. Avoid installing the product in the kitchen, bathroom or any other places with high humidity so as not to shorten the service life of the electronic components.
- Please ensure the product is installed horizontally. Any 90 degrees clockwise or counter-clockwise installation may induce poor ventilation and subsequent component damage.
- To protect the screen and avoid screen damage, do not display a still picture for a long time.
- The PDP can normally operate only under 2000m in height. It might abnormally function at a place over 2000m in height and do not install and operate there.

3. PARTS AND FUNCTIONS



3.1 FRONT VIEW

1. **Input Button**
   Use this button to switch between available inputs.

2. **Menu Button**
   Use this button to engage the On Screen Display menu.

3. **Volume Adjustment Buttons**
   Use these buttons to adjust volume up and down. These keys also serve as navigation and adjustment keys when On Screen Display menu is engaged.

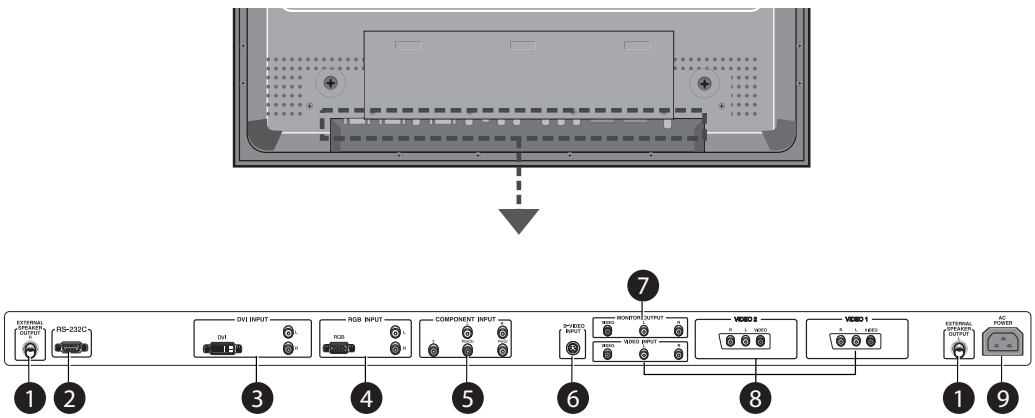
4. **Select Buttons**
   Use these buttons to navigate through the On Screen Display menu. If an optional TV tuner is installed, these buttons also function as Channel Up/Down.

5. **Power(Standly) Button**
   Turns power on/off from standby mode. There is a wait period between on/off cycles.

6. **Status LED**
   - **Not Illumated = No AC Power detected**
     If the main power switch (rear of panel) is turned off, this LED will not illuminate.
   - **Red = Standby (Power OFF) with AC power detected**
     The LED will illuminate in red color if the monitors is shut off but the main power cord is plugged into the back of the unit.
   - **Solid Green = Power ON**

7. **Remote Control Signal Receiver**
   Poinjt the remote control towards this spot on the PDP.

3.2 REAR VIEW



1. **External speaker output**
   Connect to external speakers.

2. **RS-232 Connector**
   Connec to a PC to update software.

3. **Digital DVI Input**
   Connect to digital video signals from a Set-Top box or Computer Audio output.

4. **RGB(VGA) Input**
   Connect to RGB(VGA) output of Computer or Set-Top box.

5. **Component Video Inputs**
   Auto-detecting component video inputs (Y/Pb/Pr or Y/Cb/Cr) for Connecting to the component output jacks of a DVD player or Set-Top Box.

6. **S-Video Input**
   Connect S-Video signals from external sources such as VCRs or DVD players.

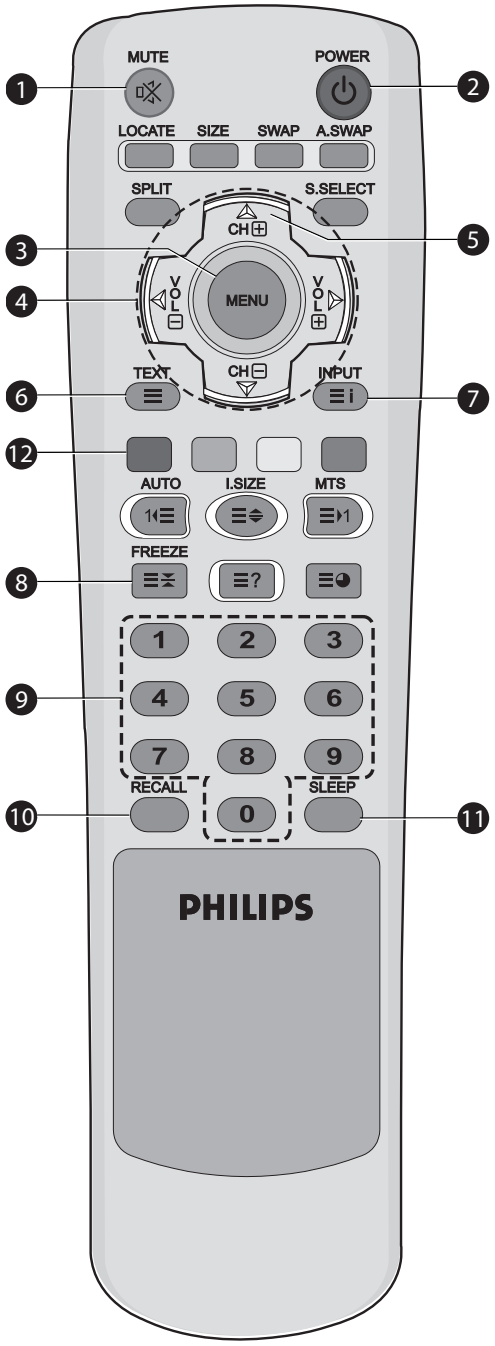
7. **Monitor Output**
   Connect to the video and audio input of a recording VCR or DVD. Connect to the audio input of an audio system.

8. **Video Input**
   Connect to the video and audio output of an external device.

9. **Power Connection**
   Connect to the video and audio output of an external device.

3.3 REMOTE CONTROL

3.3.1 GENERAL FUNCTIONS



1. Sound Mute On/Off

2. Standby Power On/Off
Push this button to switch on the monitor from Standby mode. Push it again to turn it off to Standby mode.

3. Menu
Activates the OSD (On Screen Display) menu

4. Volume +/-
Turns volume up or down.

5. Channel Up/Down
Changes the TV channels sequentially.

6. TEXT
Activates the TELETEXT mode.

7. INPUT
Displays the available input sources.

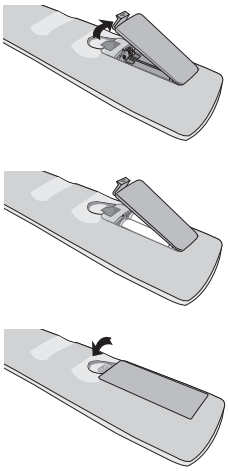
8. FREEZE
Freeze the display on the screen. The playback system will continue playing.

9. Number keypad
Use number keypad to select the TV channel you want to watch

10. RECALL
Display information.

11. SLEEP
Press this button to set timer off.

12. **AUTO**
Auto adjustment with RGB and DVI



3.3.2 INSERTING THE BATTERIES IN THE REMOTE CONTROL

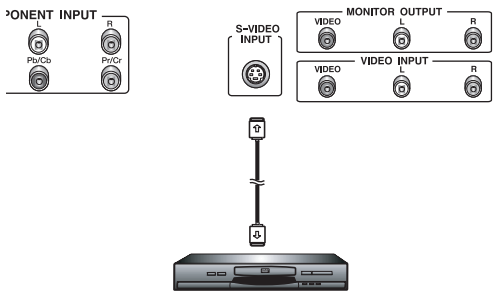
1. Remove the cover on the rear of the remote control.
2. Insert two AAA size 1.5V batteries ensuring that the "+" and "-" ends of the batteries are correctl aligned.
3. Replace the cover.

Note :
Do not mix battery types, e.g. alkaline and managnese.

4. CONNECTIONS TO EXTERNAL EQUIPMENT

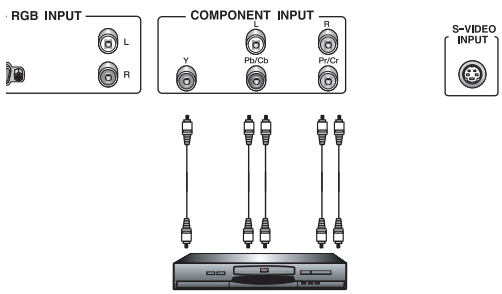
4.1 CONNECTING EXTERNAL EQUIPMENT

4.1.1 USING S-VIDEO INPUT

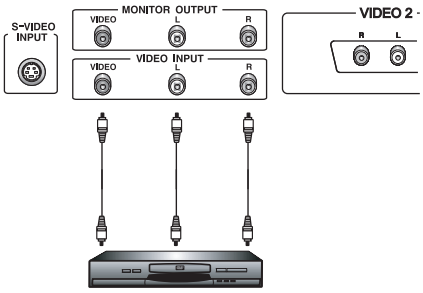


1. Connect the S-Video (4-pin DIN)connector of the external decvice to the "S-VIDEO" input of the monitor.
2. Connect the red (R) and white (L) audio jacks of the device to the R and L audio-in jacks located next to the S-VIDEO connector.

4.1.2 USING COMPONENT VIDEO INPUT



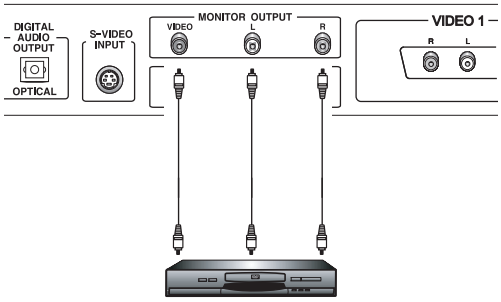
1. Connect the green-colored (labeled as "Y") jack of the device to the green-colored "Y1" jack of the monitor.
2. Connect the red-colored (labeled as "Pr") jack of the device to the red-colored "PR/CR" jack of the monitor.
3. Connect the blue-colored (labeled as "Pb") jack of the device to the blue-colored "PB/CB" jack of the monitor.
4. Connect the red(R) and white (L) audio jacks of the device to the R and L audio-in jacks of the monitor.



4.1.3 USING VIDEO INPUT

1. Connect the jack of the external device to the VIDO INPUT of the monitor.

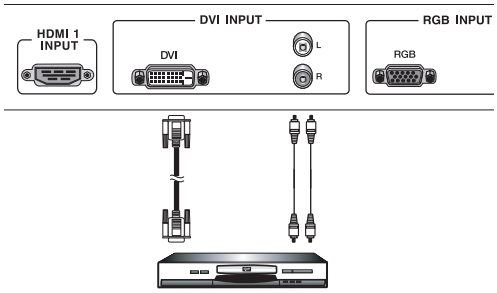
2. Connect the red(R) and white (L) audio jacks to the R and L audio-in jacks located next to the VIDO connector.



4.1.4 USING MONITOR OUTPUT

1. Connect the jack of the DVD or VCR (for recording) or audio system to the MONITOR OUTPUT of the monitor.

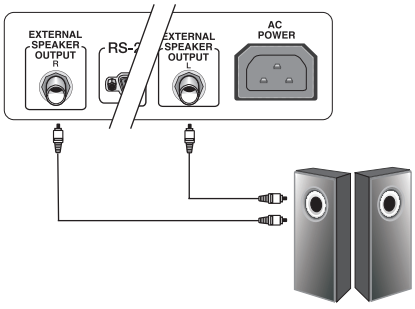
2. Connect the red (R) and white (L) audio jacks to the R and L audio-in jacks located next to the VIDEO connector.



4.1.5 USING DVI INPUT

1. Connect the DVI-jack of the DVD, decoder or satellite receiver to the DVI input.

2. Connect the red (R) and white (L) audio jacks to the R and L audio-in jacks located next to the DVI connector.



4.2 EXTERNAL AUDIO CONNECTION

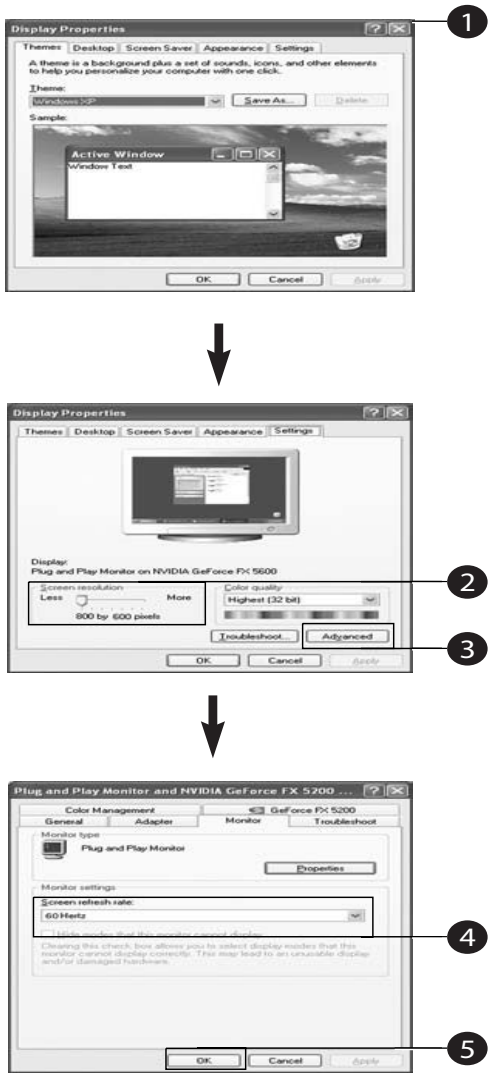
4.2.1 CONNECTING EXTERNAL AMPLIFIED SPEAKERS

This monitor can be connected to an external set of amplified speakers using the ADDIO OUT jacks located on the back of the monitor.

1. Connect the red (R) and white (L) AUDIO OUT jacks to the external amplified speakers.

4.3 CONNECTING A PC

4.3.1 USING RGB (VGA) OR DVI VIDEO INPUT



1. Connect the 15-pin D-Sub RGB(VGA) connector of the PC to the RGB-IN connector of the monitor.
   If you have a PC that is equipped with a DVI (Digital Visual Interface), you may connect the PC DVI connector from the PC to the DVI-IN connector of the monitor.

2. For both RBB(VGA) and DVI, connect the red (R) and white (L) audio jacks of the PC to the R and L (DVI/RGB) AUDIO IN jacks of the monitor.

Settig Up Your Display Using Plug and Play

This display adheres to VESA Plug and Play standard to eliminate complicated and time consuming setup of monitors. This monitor identifies itself to the computer and automatically sends the PC its EXtended Display Identification Data (EDID) using Display Data Channel (DDC) protocols.

How to Set up Your PC for Use with Monitor (Windows)

The display settings for a typical Windows-based computer are shown below. Howerer, the actual screen on your computer will differ depending on the version of windows and video card equipped with the computer. Even though the actual screen may look different from example displayed below, basic set-up routine will apply in most cases.

1. Go to the Window's CONTROL PANEL by clicking START, SETTINGS, CONTROL PANEL.
   > The CONTROL PANEL Window is display.

2. Select the DISPLAY icon from theis window.
   > The DISPLAY PROPERTIES dialog box is displayed.

3. Select the SETTINGS tab to display your computer's video output settings.

4. Set the "Screen Resolution" settings to 1024 x 768 PIXELS. For COLOR QUALITY, select 24 BIT COLOR (might also be expressed as 16 million colors).

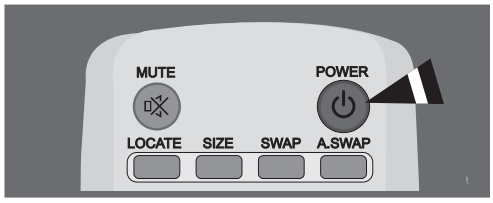
5. If a vertical-frequency option is available, set the value to 60 or 60 Hz.

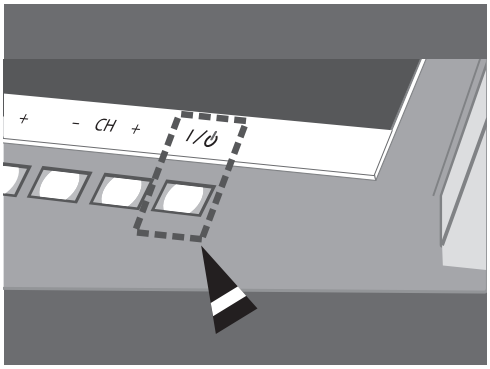
6. Click OK to complete the setting.

Note:

Both screen position and size will vary, depending on the type of PC graphics card and its resolution selected. Sett # for an overview of the supported resolutions.

5. BASIC FUNCTIONS



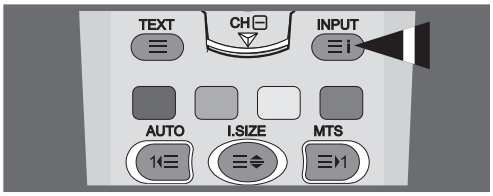


5.1 POWERING ON / OFF

Make sure the monitor is plugged into the wall outlet with the supplied power cord.
If the power is plugged in, the STATUS LED on the control panel will illuminate in red color.

Using Front Panel or Remote Control

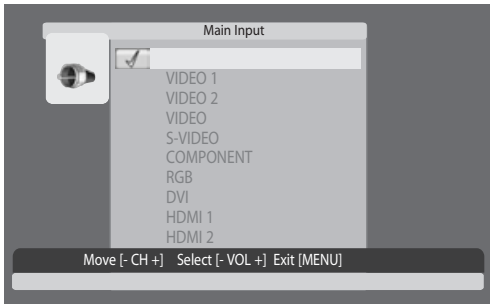
1. Press the POWER key on the front panel or the remote control.
   => The monitor will now turn on after a brief pause. The STATUS LED will now turn green to indicate power on status.
2. Turn off the power by pressing the POWER key on the front panel or the remote control again.

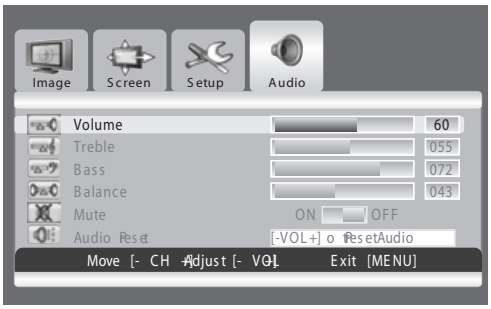


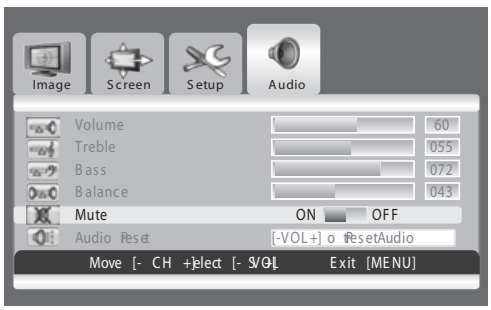
5.2 SELECTING SIGNAL SOURCE

Using Front Panel or Remote Control

1. Press the **INPUT** key on the from panel or the AV key on the remote control.
2. Pressing the **CH+** or **CH-** key will cycle the monitor through all available input signal sources in the following order:
   VIDEO1 - VIDEO2 - VIDEO - S-VIDEO - COMPONENT - RGB - DVI
3. Press the **VOL+** or **VOL-** button to select the source.







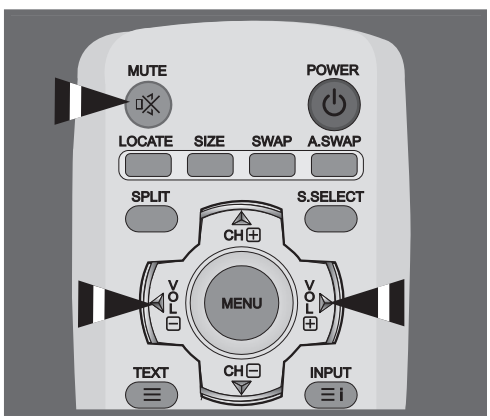
5.3 VOLUME ADJUSTMENT

Using Front Panel or Remote Control

1. Press the **MENU** button on either the front panel or on the remote control.
2. Press the **VOL+** or **VOL-** button to select Audio.
3. Press the **CH-** button to enter the selected menu group.
4. Press the **VOL+** or **VOL-** button to adjust the sound volume.

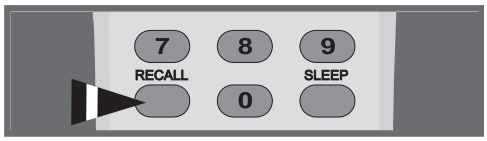
Note:
If the monitor's built-in speakers are turned off, then the volume controls will not affect volume generated by the built-in speaker.

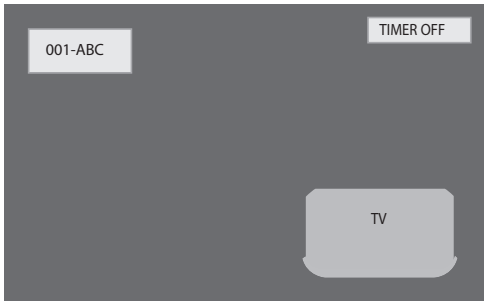
5.4 MUTE



Using Remote Control

1. Press the **MUTE** key on the remote control.
   => The audio is cut off.
2. Press the **MUTE, VOL+** or **VOL-** key to turn the audio back on.





5.5 DISPLAY INFORMATION

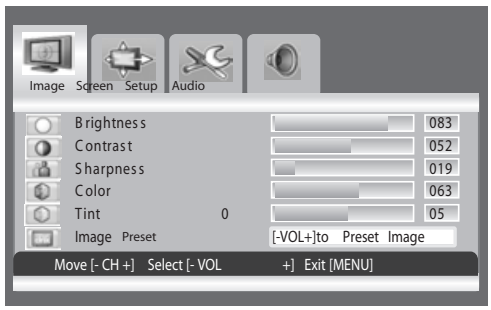
Via Remote Control
Press the RECALL button to display the channel information and setting status. Press again to exit.

Note
The displayed information can differ, depending on the selected source.

6. ADVANCED FUNCTIONS

6.1 PICTURE CONTROLS

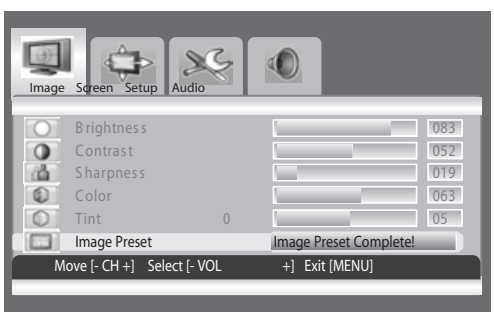
6.1.1 ADJUSTING PICTURE SETTINGS



Various picture adjustments can be set using the Picture Adjustment OSD menu.

1. Press the **MENU** button on the monitor panel or remote control. The **Image** menu is displayed.
2. Press the **CH+** key to enter the selected menu group.
3. Press the **CH-** or **CH+** key to select the option to be adjusted. Depending on the input source, the following menu's appear:
   - Brightness - Contrast - Sharpness - Color - Tint - Image preset
   - Brightness - Contrast - Phase - Frequency - Sharpness (RGB (PC) mode)
4. Press the **VOL+** or **VOL-** key toe select the optimal setting.
5. Press the **MENU** button to reture to the previous menu.

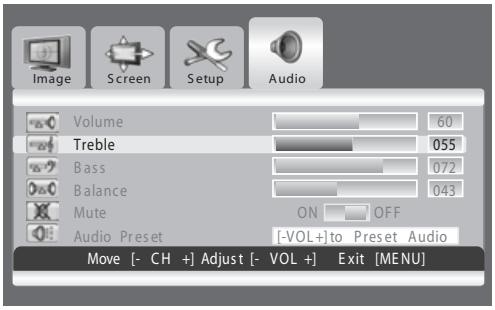
6.1.2 RESET TO THE FACTORY DEFAULTS



1. Press the **CH+** or **CH-** key to select Image Preset.
2. Press the **VOL+** or **VOL-** key to reset the picture settings to the factory defaults.

6.2 SOUND CONTROLS

6.2.1 ADJUSTING SOUND SETTINGS



Various sound adjustments can be set using the Sound Adjustment OSD menu.

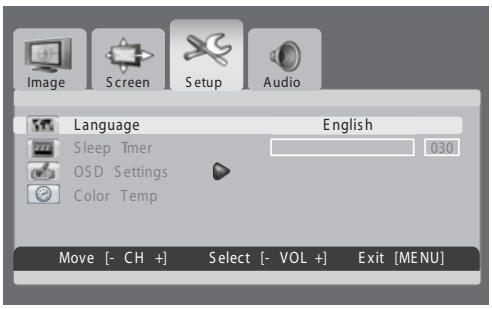
1. Press the MENU button on the monitor panel or remote control.
2. Press the **VOL+** or **VOL-** key to select Audio.
3. Press the **CH-** key to enter the selected menu group.
4. Press the **CH+** or **CH-** key to select the desired option:
   Treble - Bass - Balance
5. Press the **VOL+** or **VOL-** key to adjust the settings.

Note:

You can reset the sound settings to the factory defaults:

1. Press the **CH+** or **CH-** key to select **Audio Preset.**
2. Press the **VOL+** or **VOL-** key.

6.3 OSD MENU LANGUAGE

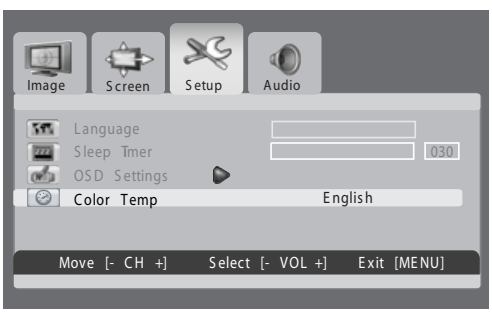


This monitor has multiple OSD Menu languages built-in including English, French, Spanish, Italian, German and Dutch.

Setting OSD Menu Language

1. Press the **MENU** button on the monitor panel or remote control.
2. Press the **VOL+** or **VOL-** key to select **Setup**.
3. Press the **CH-** key to enter the selected menu group.
4. Press the **VOL+** or **VOL-** key to select the required language.

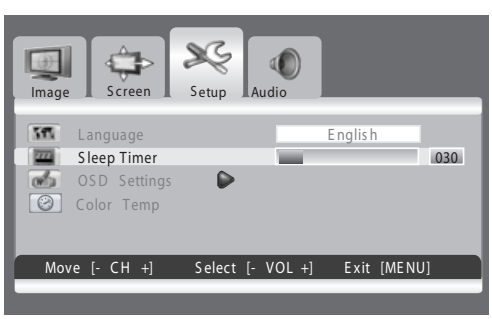
6.4 ADJUSTING THE COLOR TEMPERATURE



You can change tint of the entire screen to suit your requirements.

1. Press the **MENU**.
2. Press the **VOL+** or **VOL-** button to select setup.
   Press the **CH-** button to enter the selected menu group.
   The color temp is selected.
3. Press the **VOL+** or **VOL-** button to select required option.
   WARM - NORMAL - COOL

6.5 POWER SAVE MODE

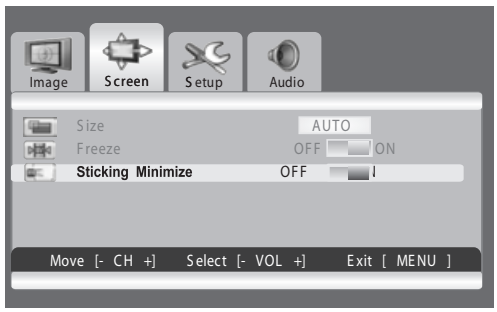


This monitor is equipped with a Power Save mode under RGB(VGA) or DVI input modes. When there are no signals detected by the monitor for a certain time, the monitor will automatically go into sleep mode until signal is restored. You can select a time period between 10 and 180 minutes.

Setting Power Save Mode

1. Press the **MENU** button on the monitor panel or remote control.
2. Press the **VOL+** or **VOL-** key to select Setup.
3. Press the **CH-** key to enter the selected menu group.
4. Press the **CH+** or **CH-** key to select Sleep Timer.
5. Press the **VOL+** or **VOL-** key to select the required time interval.

Note:
You can simply select required time interval by repeatedly pressing the **SLEEP** button on the remote control.

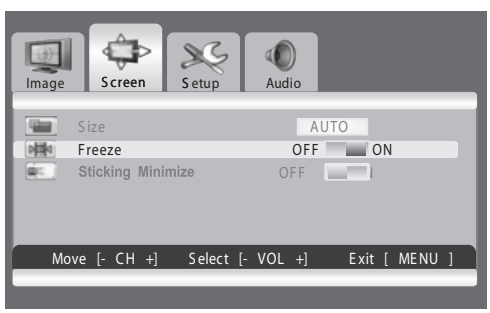


6.6 MINIMIZE SCREEN STICKING

If the fixed pattern is displayed for a long time, a difference in brightness is caused around the lighting area and non-lighting area due to deterioration in the fluorescent substance used in the plasma module. It comes to be recognized as image sticking. This feature allows you to make the occurrence of image sticking as slow as possible.

Minimize screen sticking

1. Press the **MENU** button on the monitor panel or remote control.
2. Press the **VOL+** or **VOL-** key to select **Screen**.
3. Press the **CH-** key to enter the selected menu group.
4. Press the **CH+** or **CH-** key to select **Sticking Minimum**.
5. Press the **VOL+** or **VOL-** key to select the required option (**OFF** or **ON**).

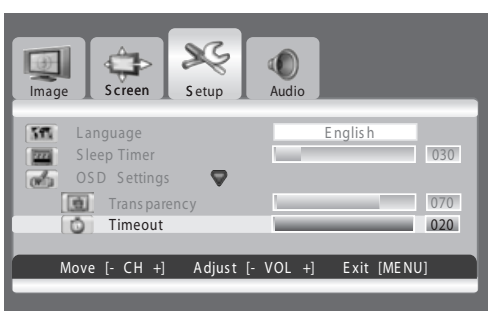


6.7 FREEZING THE CURRENT PICTURE

You can freeze the picture when watching a television program.

1. Press the **MENU** button.
2. Press the **VOL+** or **VOL-** key to select Screen.
3. Press the **CH-** key to enter the selected menu group.
4. Press the **CH-** or **CH+** key to select Freeze.
5. Press the **VOL+** or **VOL-** key to select required option (**OFF** or **ON**).

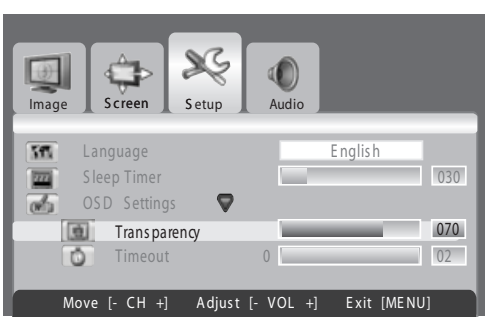
Note:
Simply press the **FREEZE** button on the remote control. then current picture is stilled. To return to normal viewing press it again.



6.8 ON-SCREEN DISPLAY TIMEOUT

You can select for how long the OSD will be snown.

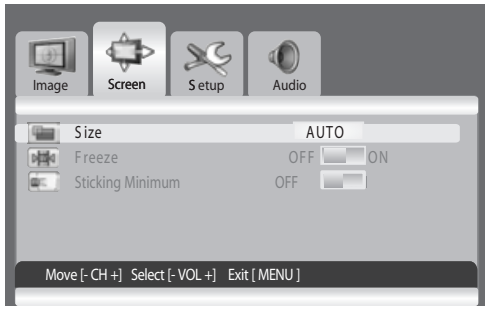
1. Press the **MENU** button.
2. Press the **VOL+** or **VOL-** key to select Setup.
3. Press the **CH-** key to enter the selected menu group.
4. Press the **CH-** or **CH+** key to select OSD Settings.
5. Press the **Vol+** key to enter the selected menu group.
6. Press the **CH-** or **CH+** key to select Timeout.
7. Press the **VOL+** or **VOL-** key until you reach the optimal setting



6.9 ADJUSTING THE MENU TRANSPARENCY

You can give the transparency OSD background.

1. Press the **MENU** button.
2. Press the **VOL+** or **VOL-** key to select Setup.
3. Press the **CH-** key to enter the selected menu group.
4. Press the **CH-** or **CH+** key to select OSD Settings.
5. Press the **VOL+** key to enter the selected menu group.
   > The **Transparency** is selected.
6. Press the **VOL+** or **VOL-** key until you reach the optimal setting.

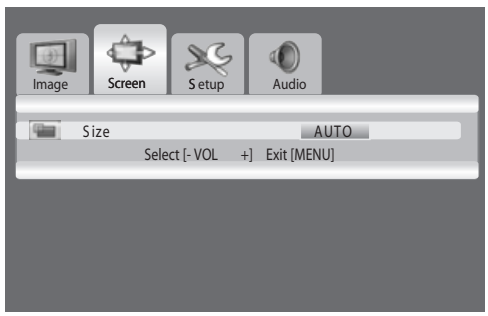


6.10 CHANGING THE SCREEN SIZE

You can select the screen size which best corresponds to your viewing requirements.

1 Press the **MENU** button.
2. Press the **VOL+** or **VOL-** key to select Screen.
3. Press the **CH-** key to enter the selected menu group.
   > The Size is selected.
4. Press the **VOL+** or **VOL-** key to select required screen size.

AUTO - FILL ALL - FILL ASPECT - ZOOM - ANAMORPHIC - *WIDE
(*WIDE is only available when the split screen mode is not selected.)

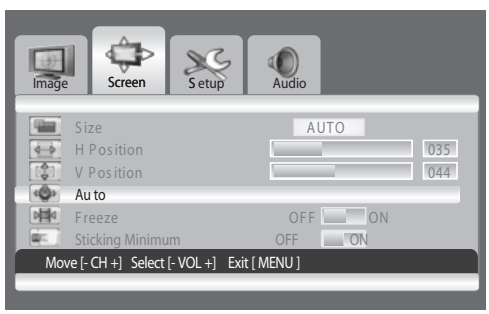


Note:
You can simply select required screen size by repeatedly pressing the I.SIZE (Image SIZE) button on the remote control.

6.11 SETTING UP THE PC INPUT

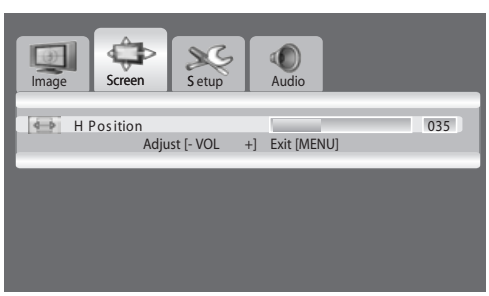
- **Preset to the RGB mode by pressing the INPUT button.**

1. Press the **MENU** button.
2. Press the **VOL+** or **VOL-** key to select **Screen.**
3. Press the **CH-** key to enter the selected menu group.



- **Adjusting the PC screen automatically**

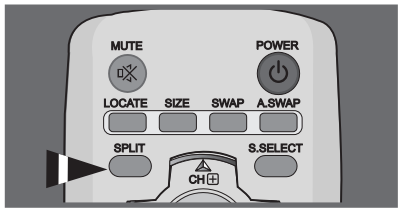
1. Press the **CH-** or **CH+** key to select **Auto**.
2. Press the **VOL+** or **VOL-** key.
   >The screen quality and position are automatically adjusted.

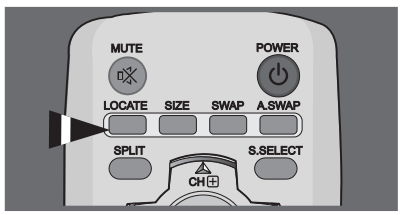


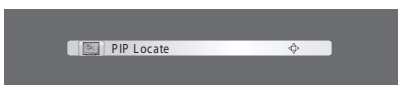
Note:
You can adjust the PC screen automatically by simply pressing the AUTO button on the remote control.

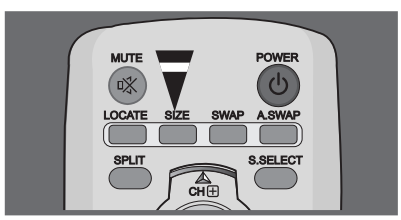
- **Selecting the position of the PC screen if it does not fit the PDP screen**

1. Press the **CH+** or **CH-** button to select **H Position** or **V Positing.**
2. Press the **VOL+** or **VOL-** key to fit the TV screen until you reach the optimal setting.









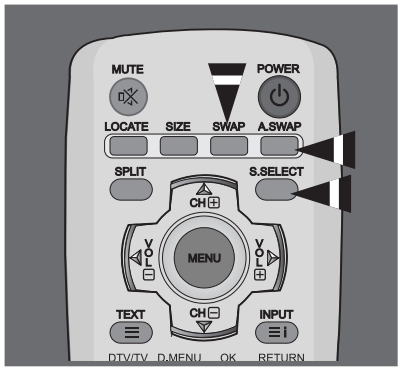
6.12 VIEWING THE PICTURE IN PICTURE (PIP)

You can display a sub-picture with the main picture. In this way you can watch monitor the video input from any connected devices while watching other video input.

- **Selecting a PIP mode**
  Press the **SPLIT** button repeatedly to select required mode.
  The available modes are displayed in the following order.
  NORMAL - PIP - PBP

- **Selecting a location of the sub-picture**
  Press the **LOCATE** button.
  Press the **VOL-, VOL+, CH-,** or **CH+** button to select required location. It is available in PIP mode only.

- **Selecting a size of the sub-picture**
  Press the **SIZE** button.
  Press the **VOL-** or **VOL+** button to select required size.
  It is available in **PIP** mode only.



■ **Swapping the main picture and the sub-picture**
Press the **SWAP** button.
The main picture and the sub picture are interchanged.
It is available in **PIP** and **PBP** mode only.

Main Input \ Sub Input	VIDEO 1	VIDEO 2	Video	S-Video
VIDEO 1	X	O	O	O
VIDEO 2	O	X	O	O
Video	O	O	X	O
S-Video	O	O	O	X
COMPONENT	X	X	X	X
RGB	X	X	X	X
DVI	X	X	X	X

■ **Swapping the audio of the main or sub-picture**
Press the **A.SWAP** (**Audio SWAP**) button repeatedly.
You can hear the audio of the main or sub-picture alternately
It is available in **PIP** and **PBP** mode only.

■ **Selecting the main picture or the sub-picture**
Press the **S.SELECT** button repeatedly.
You can select the main or sub-picture alternately and adjust the status of selected picture.
It is available in **PIP** and **PBP** mode only.

■ **PIP Settings**

Main Input \ Sub Input	VIDEO 1	VIDEO 2	Video	S-Video
VIDEO 1	X	O	O	O
VIDEO 2	O	X	O	O
Video	O	O	X	O
S-Video	O	O	O	X
COMPONENT	O	O	O	O
RGB	O	O	O	O
DVI	O	O	O	O

- It is variable depending on the model.
In the PIP mode, the sub input source is differently defined for the default value (video1 or video2) depending on your PDP model.

6.13 REMOTE MANAGEMNET

This display can be managed remotely through the RS232 9-pin port, by using a Serial Interface Communication Protocol (SICP).
The specifications of the SICP protocol can be found in a separate document, called "SICP User Manual".

7. INPUT MODE

VGA Resolution

Standard resolution	Active Resolution		Refresh Rate	Pixel Rate	Aspect ratio	Stand for Mode
	H Pixels	V Lines				
VGA	640	480	60	25.175 MHz	16:9	Video Graphic Array
			72	31.5 MHz		
			75	31.5 MHz		
WVGA	848	480	60		16:9	Wide Video Graphic Array
SVGA	800	600	60	40 MHz	16:9	Super VGA
			72	50 MHz		
			75	49.5 MHz		
XGA	1024	768	60	65 MHz	16:9	Super VGA Extended Graphic Array
			70	75 MHz		
			75	78.5 MHz		
SXGA	1280	1024	60	108 MHz	16:9	Super XGA

SDTV Resolution

Standard resolution	Active Resolution		Refresh Rate	Pixel Rate	Aspect ratio	Stand for Mode
	H Pixels	V Lines				
480i	720	480	29,97 Hz	13,5 MHz	4:3	Modified DVB Mode
480p			59,94 Hz	27 MHz		
576i	720	576	25 Hz	13.5 MHz	4:3	Modified PAL Standard
576p			50 Hz	27 MHz		

HDTV Resolution

Standard resolution	Active Resolution		Refresh Rate	Pixel Rate	Aspect ratio	Stand for Mode
	H Pixels	V Lines				
720p	1280	720	30 Hz	74,25 MHz	16:9	Normally DVB Mode
			50 Hz			
1080i	1920	1080	25 Hz	74,25 MHz	16:9	Normally ATSC Mode
			30 Hz			
1080p	Not supported					

- The PC text quality is optimumin in XGA mode (1024 x 768, 60Hz).
- When this PDP is used as a PC display, 24-bit color is supported (over 16 million colors).
- Your PC display screen mightapear different depending on the manufacture (and your particular version of Windows). Chec your PC instruction book for information about connecting your PC to a display.
- If a vertical and horizontal frequency-select mode exists, select 60Hz (vertical) and 31.5kHz (horizontal). In some cases, abnormal signals (such as stripes) might appear on the screen when the PC power is turned off (or if the PC is disconnected). If so, press the INPUT button to enter the video mode. Also, make sure that the PC is connected.
- When connecting a notebook PC to the PDP, make sure that the PC screen is displayed through only the PDP (Otherwise, random signals might appear).

- When horizontal synchronous signals seem irregular in RGB mode, check PC power saving mode or cable connections.
- The display settings table complies to the IBM/VESA standards, and based on the analog input.
- The DVI support mode is regarded as same to the PC support mode.
- The best timing for the vertical frequency to each mode is 60Hz.

8. TECHNICALS SPECIFICATIONS

Display

Item	42" SD	42" HD	50" HD
Screen Size (Active Area)	42" (920.1(H) x 518.4(V) ±0.5mm)		50" (1106.5(H) x 622.1(V) ±0.5mm)
Aspect ratio	16:9		
Number of pixels	852 (H) x 480 (V)	1024 (H) x 768 (V)	1366 (H) x 768 (V)
Pixel pitch	1.080(H) x 1.080(V) [mm]	0.900(H) x 0.676(V) [mm]	0.810(H) x 0.810(V) [mm]
Displayable Colors	1 billion (Option)		
Brightness	1500 cd/m2	1000 cd/m2	1000 cd/m2
Contrast Ratio	10.000:1	5000:1	8000:1
Color Temperature	9500 K		
Viewing Angle	Over 160 degrees		

In / Out Terminals

Item		42" SD ; 42" HD ; 50" HD
Speaker Output	Internal speaker (option))	10W (L) + 10W (R) [RMS] / 8Ω 2 Way 2 Speaker
	External speaker (optionn))	10W(L) + 10W (R) [RMS] / 8Ω 2 Way 6 Speaker
RS-232C	D-Sub Jack x 1 (9 pin)	TXD + RXD (1:1)
DVI input	DVI Jack x 1 (24 pin)	Digital RGB : TMDS MAX : 720p, 1080i, 1280 x 1024 / 60 Hz (SXGA)
	RCA Jack x 1	Audio : 0.5V [rms](Normal) / 2 Channel (L + R)
RGB Input	D-Sub Jack x 1 (15 pin)	Analog RGB : 0.7V[p-p](75Ω), H/CS/V : TTL (2.2 kΩ), SOG : 1V[p-p](75Ω) MAX:720p, 1080i, 1280 x 1024 / 60 Hz (SXGA)
	RCA Jack x 1	Audio : 0.5V [rms](Normal) / 2 Channel (L + R)
Component Input	RCA Jack x 1	Y:1V[p-p](75 Ω), Pb/Cb:0.7V[p-p](75Ω) , Pr/ Cr:0.7V[p-p](75Ω) 480i, 576i, 480p, 576p, 720p, 1080i Audio : 0.5V[rms](Normal) / 2 Channel (L + R)
Monitor Output	RCA Jack x 1	Video : 1V[p-p] (75Ω) Audio : 0.5V[rms](Normal) / 2 Channel (L + R)
S-Video Input	Mini DIN Jack x 1 (4 pin)	Y : 1V [p-p] (75Ω), C: 0.286V [p-p] (75Ω)[NTSC] Y : 1V [p-p] (75Ω), C : 0.300V [p-p] (75Ω) [PAL / SECAM]
Video Output	RCA Jack x 1	Video : 1V [p-p] (75Ω) [NTSC / PAL / SECAM] Audio : 0.5V [rms] (Normal) / 2 Channel (L + R)
Scart of Video 1,2	Scart Jack x 2 (21 pin) [Full x 1, Half x 1] or RCA Jack x 1	Video : 1V[p-p] (75Ω)Y : 1V[p-p] (75Ω) , C: 0.3 V[p-p] (75Ω)RGB : 0.7V[p-p] (75Ω)Audio : 0.5V[rms](Normal) / 2 Channel (L + R)

General

Item	42" SD	42" HD	50" HD
Power Supply	AC 100 V ~ 240 V, 50/60 Hz		
Power Consumption	250 W	300 W	440 W
Dimension (With Stand) [W mm x H mm x D mm]	1028 x 625 x 8 9.8 (A)	1028 x 625 x 107.4 (B)	1205 x 721 x 114.3 (D)
Weight (Without Stand)	29 kg	31 kg	43 kg

Environment Condition

Item		42" SD ; 42" HD ; 50" HD
Temperature	Operational	0 ~ 40
	Storage	-20 ~ 6 0
Humidity	Operational	20 ~ 80% RH (No condensation)
	Storage	10 ~ 90% RH (No condensation)
Pressure	Operational	800 ~ 1 100 hPa (Al titude: 0 ~ 2,000 m)
	Storage	700 ~ 1 100 hPa (Al titude: 0 ~ 3,000 m)

External Speaker (Option)

	Specifications	
	42"	50"
Dimension (W x H x D)	113 mm x 626.6 mm x 82.2 mm	90 mm x 721 mm x 68 mm
Weight	5 kg (L + R)	3 kg (L + R)
Type	2 Way 6 Speaker System	
Input	10 W (R MS)	
Impedence	8 Ohm	
Output Sound Pressure	87 dB/W /M	
Frequency Response	45 H z ~ 2 0 KH z	

Internal Speaker (Option)

	Specifications
Type	2 Way 6 Speaker System
Input	10 W (R MS)
Impedence	8 Ohm
Output Sound Pressure	88 dB/W /M
Frequency Response	140 H z ~ 10 KHz

9. CLEANING AND TROUBLESHOOTING

9. 1 CLEANING

Cautions When Using the Plasma Display

- Do not bring your hands, face or objects close to the ventilation holes of the plasma dislay. Top of plasma dislay is usually very hot due to the high temperature of exhaust air being released through the ventilation holes. Burns or personal injuries may occur if any body parts are brought too close. Placing any object near the top of the display could also result in heat related damages to the object as well as the display itself.
- Be sure to disconnect all cables before moving the plasma display. Moving the display with its cables attached may damage the cables and thus case fire or electric shock danger.
- Disconnect the power plug from the wall outlet as a safety precaution before carrying out any type of cleaning or maintenance procedure.

Freont Panel Cleaning In structions

- The front of the display has been specially treated. Wipe the surface gently using only a cleaning cloth or a soft, line-free cloth.
- If the surface is particular dirty, soak a soft, line-free cloth in a mild detergent solution. Wring the cloth to remove excess liquid. Wipe the surface of the display to remove dirt. Then use a dry cloth of the same type to dry.
- Do not scratch or hit the surface of the panel with fingers or hard objects of any kind.
- Do not use volatile substances such as insert sprays, solvents and thinners.

Cabinet Cleaning Instructions

- If the cabinet becomes dirty, wipe the cabinet with a soft, dry cloth.
- If the cabinet is extremely dirty, soak a lint-free cloth in a mild detergent solution. Wring the cloth to remove as much moisture as possible. Wipe the cabinet. Use another dry cloth to wipe over until the surface is dry.
- Do not allow any water or detergent to come into contact with the surface of the display. If water or moisture gets inside the unit, operating problems, electrical and shock hazards may result.
- Do not scratch or hit the cabinet with fingers or hard objects of any kind.
- Do not use volatile substances such as insert sprays, solvents and thiners on the cabinet.
- Do not place anything made from rubber or PVC near the cabinet for any extended periods of time.

9.2 TROUBLESHOOTING

Symptom	Possible Cause	Remedy
No picture is displayed	1. The power cord is disconnected. 2. The main power switch on the back of the monitor is not switched on. 3. The selected input has no connection. 4. The monitor is in standby mode in RGB mode.	1. Plug in the power cord. 2. Make sure the power switch is switched on. 3. Connect a signal connection to the monitor. 4. Press any key on your keyboard.
Interference displayed on the monitor or audible noise is heard	Caused by surrounding electrical appliances, cars/motor cycles or fluorescent lights.	Move the monitor to another location to see is the interference is reduced.
Color is abnormal	The signal cable is not connected properly.	Make sure that the signal cable is attached firmly to the back of the monitor.
Picture is distorted with abnormal patterns	1. The signal cable is not connected properly. 2. The input signal is beyond the capabilites of the monitor.	1. Make sure that the signal cable is attached firmly. 2. Check the video signal source to see if it is beyond the range of the monitor. Please verify its specifications with this monitor's specification section.
Display image doesn't fill up the full size of the screen	1. If under RGB mode, the H-Size and V-Size is incorrectly set. 2. If under AV1, AV2, or Component with 480i input, the 4:3 WIDE mode is switched on.	1. Use H-Size and V-Size to adjust the size of the video. 2. Use the WIDE key to scroll through various full screen modes.
Can hear sound, but no picture	Improperly connected source signal cable.	Make sure that both video inputs and sound inputs are correctly connected.
Can see picture but no sound is heard	1. Improperly connected source signal cable. 2. Volume is turned all the way down. 3. MUTE is turned on.	1. Make sure that both video inputs and sound inputs are correctly connected. 2. Use VOLUME +/- to hear sound. 3. Switch MUTE off by using the MUTE button.
Some picture elements do not light up	Some pixels of the plasma display may not turn on	This monitor is manufactured using an extremely high level of precision technology: however, sometimes some pixels of the monitor may not display. This is not a malfuction. Please see the enclosed warranty card for more information.
After-Images can still be seen on the monitor after the monitor is powered off. (Examples of still pictures include logos, video games, computer images, and images displayed in 4:3 normal mode)	A still picture is displayed for an over extended period of time.	Do not allow a still image to be displayed for an extended period of time as this can cause a permanent after-image to remain on the monitor.

10. LIMITED WARRANTY (USA)

Two Year Free Laber
Two Year Free Parts

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

WHAT IS COVERED?
Warranty cover age begins the day you buy your product. For two years thereafter, all defective parts will be repaired or replaced and labor is free. 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 removal, 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 North America.
- 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.)
- modifications or adaptations to enable the product to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or the repair of products damaged by these modifications.
- normal wear and tear (decreased light output of PDP mudule)over the product's lifetime.
- phosphor burn. Do not display static images for prolonged periods, otherwise phosphor burn might appear on part of the panel.
- limited quantity of cells (fine pixel elements) that do not produce light, or that remain lit after they should have turned off.

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 U.S.A., PUERTO RICO OR US VIRGIN ISLANDS ...

Where IS SERVICE AVAILABLE?
Warranty service is available in all countries where the product is officially distributed by Philips Consumer Electronics.
In countries where Philips Consumer Electronics 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).

Where CAN I GET MORE INFORMATION?
For more information, contact the **Philips Customer Care Center** by calling ***(877) 835-1838 or (919) 573-7855.***
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 the Philips Customer Care Center phone number listed below for product assistance and procedures for servicing:
Philips Customer Care Center
(877) 835-1838 or (919) 573-7855
(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 the Philips Customer Care Center at:
(877) 835-1838 or (919) 573-7855

(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.)