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PLASMA MONITOR TV  
Model P4221TW

# User's Manual



## **Owner's Instructions**

Before operating the unit, please read this manual thoroughly, and retain it for future reference.

## PREFACE

Thank you for purchasing the Plasma Monitor TV. The unit displays sharp and brilliant images of texts and graphics with excellent display resolutions. The unit is designed with the functionalities of both a television as well as a monitor display. It is suitable for a wide variety of applications in the home, office, and corporate environments.

### NOTICES

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#### Trademark Acknowledgement

VGA is a trademark of International Business Machines Corporation.



### CAUTION

**RISK OF ELECTRIC SHOCK  
DO NOT OPEN**



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



The lighting flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## SAFETY

### No. IMPORTANT SAFETY INSTRUCTIONS

- 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 damp cloth.
- 7 Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
- 8 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.  
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 a third grounding prong. The wide blade or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 9
- 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 the attachments/accessories specified by the manufacturer.  
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.

12



- 13 Unplug this apparatus during lightning storms or when unused for long periods of time.  
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 the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 14

"Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus."

**"CAUTION** – These servicing instructions are for use by qualified service personnel only.  
To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so."

**"WARNING** – To reduce the risk of fire or electric shock, Do not expose this apparatus to rain or Moisture."

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## ACCESSORIES

Your purchase includes the following items:



42" Plasma Monitor TV



Power Cable



Component Cable



RCA Audio Cable



User's Manual



AAA Batteries



Remote Control



Mounting Screws x 4



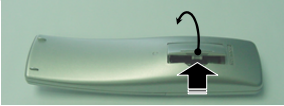
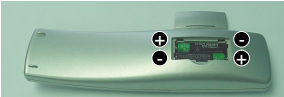

Base Stand (Optional)

Please check to ensure that all of the items listed above are included in the packaging. If there is any missing item, please contact your local dealer.

## SETTING UP THE UNIT

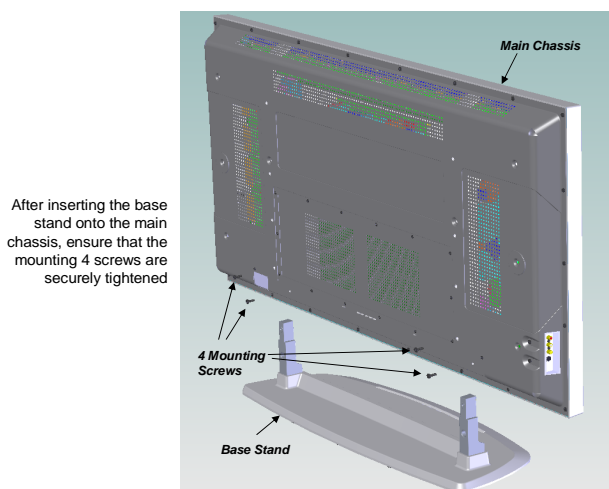
### REMOTE CONTROL BATTERIES PLACEMENT

Insert or replace the batteries in the remote control as follows:

Steps	Actions	Illustrations
1	Remove the cover on the rear of the remote control by pressing the tab according to the direction indicated and then pulling firmly to remove it.	
2	Insert two R03, UM4, "AAA" 1.5V or equivalent batteries. Take note of the polarities: <ul style="list-style-type: none"><li>- on the battery against - on the remote control</li><li>+ on the battery against + on the remote control</li></ul>	
3	Replace the cover by aligning it with the base of the remote control and pressing it back into place.	

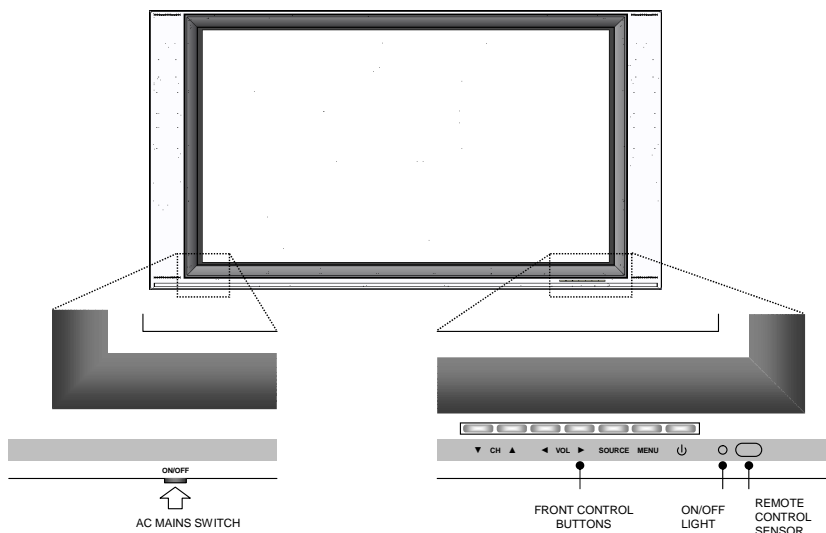
### ASSEMBLING THE STAND BASE

Assemble Base Stand by inserting the two supporting stand arms into the stand openings at the bottom of the Main Chassis. Once the Base Stand is firmly attached to the Main Chassis, insert the four mounting screws to secure the Base Stand onto the Main Chassis.



**NOTE:** Two or more people should carry the PDP. Never lay the PDP on the floor because of possible damage to the screen. Always store the PDP upright.

## THE FRONT PANEL



### AC MAINS SWITCH

This is the main power switch that switches On/Off the unit. If the unit is not used over a long period of time, switch off the AC Mains Switch by de-pressing it.

### SENSORS AND INDICATORS

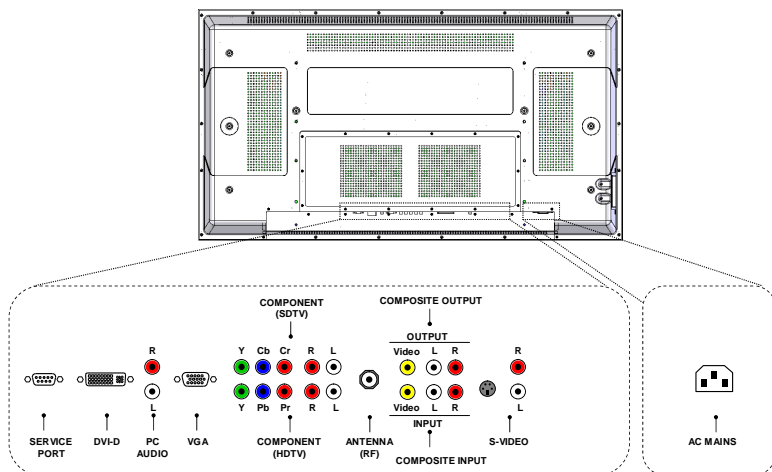
The unit is equipped with an LED indicator and a remote control sensor. A green colour on the LED indicator indicates that the unit is operating normally, while red colour indicates that the unit is in stand-by mode. An unlit LED indicator indicates that the AC Mains Switch is de-pressed. To operate the remote controller effectively, point the remote controller at the sensor opening as indicated in the diagram above.

### FRONT CONTROL BUTTONS

The front control buttons operates in two modes, OSD mode and normal mode. When the OSD menu is turned on, the unit is in OSD mode, and the buttons operates as navigation keys for the OSD menu. When the OSD menu is turned off, the front control buttons functions as normal operational buttons.

Normal Mode		OSD Mode	
▲	Change to next TV channel	▲	Moves the cursor Up
▼	Change to previous TV channel	▼	Moves the cursor Down
◀	Decrease audio volume	◀	Moves the cursor Left
▶	Increase audio volume	▶	Moves the cursor Right
SOURCE	Selects video input source	SOURCE	Exit OSD menu
MENU	Turns on the OSD menu	MENU	Select an item
⏻	Switch the unit to Stand-by mode	⏻	Switch the unit to Stand-by mode

## THE REAR PANEL

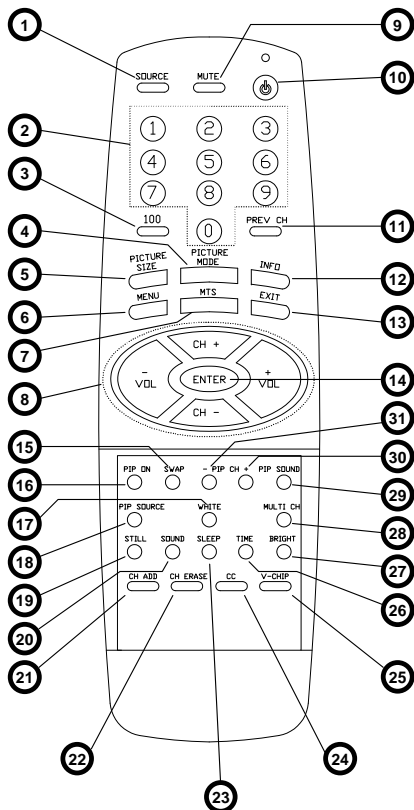


### Connections

### Description

<b>SERVICE PORT</b>	This is an RS-232 serial port for use by authorized service personnel only. For normal operation of the unit, this port should be left unconnected.
<b>DVI-D</b>	This is a computer graphic input for use with computers equipped with a DVI-D digital video output connector. Also referred to as DRGB.
<b>VGA</b>	This is a computer graphic input for use with computers equipped with a VGA (RGB) video output connector. Also referred to as ARGB.
<b>PC AUDIO</b>	This is the audio left and right channel input for use with a computer, when either one of the DVI-D or VGA video input is connected.
<b>COMPONENT (SDTV)</b>	This is the component video input for use with DVD players that supports interlaced video outputs. The modes supported by this video input are limited to 480i and 576i (standard NTSC and PAL).
<b>COMPONENT (HDTV)</b>	This is the component video input for use with DVD players that supports progressive video outputs, and HDTV receivers that delivers HDTV quality programs. The modes supported by this video input are 480p, 576p, 720p, and 1080i.
<b>ANTENNA (RF)</b>	This is the RF tuner input that allows the reception of standard television broadcasts. This input is to be connected to an external RF antenna.
<b>COMPOSITE (INPUT &amp; OUTPUT)</b>	These are the Composite audio/video inputs and outputs for use with standard AV equipments such as a Video Cassette Recorder (VCR) or a satellite receiver.
<b>S-VIDEO</b>	This is the S-Video input for use with AV equipments equipped with S-Video outputs, such as a satellite receiver or a camcorder.
<b>AC MAINS</b>	This is the main AC Power Connector for connection to the Mains AC Outlet.

# THE REMOTE CONTROLLER

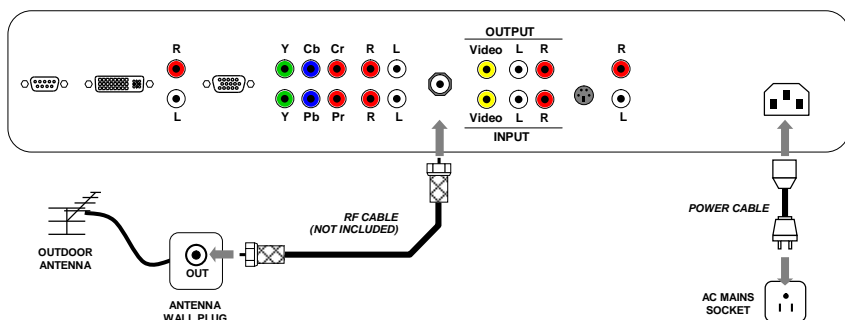


- 1 **Source** : Input Source Selection
- 2 **0 ~ 9** : Numeric Keypad (2-digits selection)
- 3 **100** : Numeric Keypad (3-digits selection)
- 4 **Picture Mode** : Bright/Normal/Dark Select
- 5 **Picture Size** : Panorama/Fill All /Normal/Anamorphic/Letter box/TV Mode
- 6 **Menu** : Select OSD Menu
- 7 **MTS** : TV Sound Mode (Mono/ Stereo/SAP/Bilingual)
- 8 **CH+** : Browse Next Channel  
**CH-** : Browse Previous Channel  
**VOL-** : Decrease Volume  
**VOL+** : Increase Volume
- 9 **Mute** : Volume Mute/Unmute
- 10 **Power** : Power On/Off
- 11 **Prev CH** : Go back to Previous TV Channel
- 12 **Info** : Display Video Input Information
- 13 **EXIT** : Exit OSD
- 14 **Enter** : Select
- 15 **Swap** : Swap between Main Window and Sub Window of PIP and Split Screen
- 16 **PIP ON** : Full Screen/PIP/Split Screen selection
- 17 **White** : White Screen (Help to remove stacking images)
- 18 **PIP Source** : Select PIP Window Source
- 19 **Still** : Freeze Picture
- 20 **Sound** : Sound Mode Selection: Cinema/Flat/News/Normal/User
- 21 **CH Add** : Add Channel
- 22 **CH Erase** : Erase Channel
- 23 **Sleep** : Shutdown Timer (Off/ 30Min/60Min/90Min/120Min/180Min)
- 24 **CC** : Closed Caption Selection Key
- 25 **V-CHIP** : V-Chip Selection Key
- 26 **Time** : Time Display
- 27 **Bright** : Select Brightness/Contrast/ Color/ Sharpness Adjustment
- 28 **Multi CH** : Display POP mode
- 29 **PIP SOUND** : Main/Sub Sound Swap
- 30 **PIP CH+** : Sub Window Channel Up
- 31 **PIP CH-** : Sub Window Channel Down



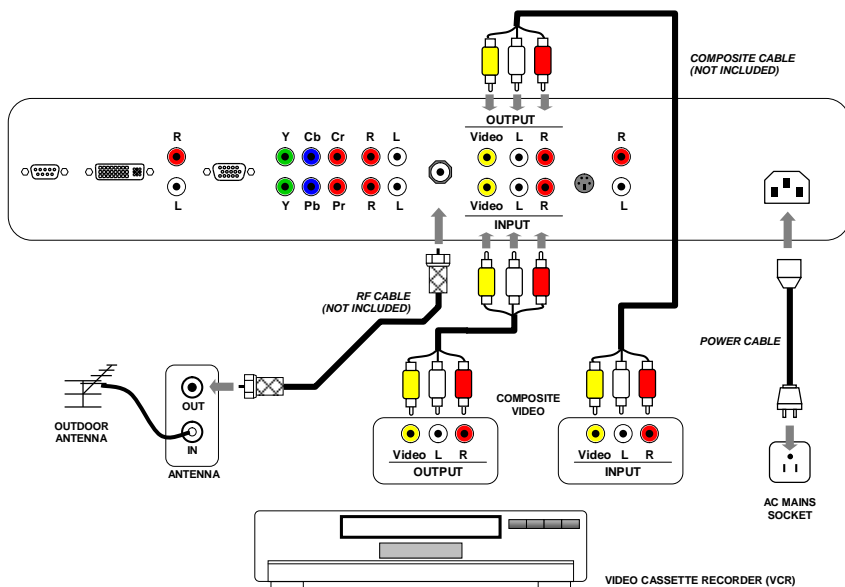
## CONNECTING TO OTHER DEVICES

### CONNECTING TO THE TV ANTENNA



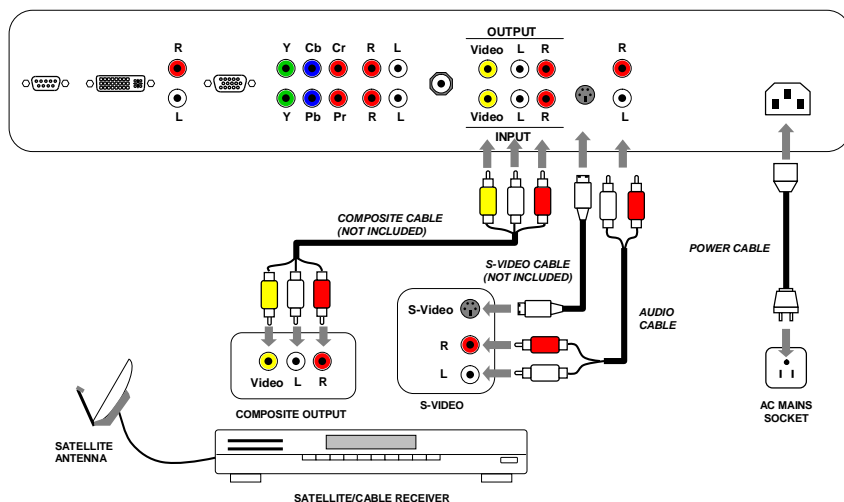
The unit requires an external antenna in order to receive television broadcasts. Use an RF cable to connect the antenna to the unit's Antenna input. You will also need to tune the unit to receive the available off-air channel using the channel tuning function available from the OSD menu.

### CONNECTING TO A VCR



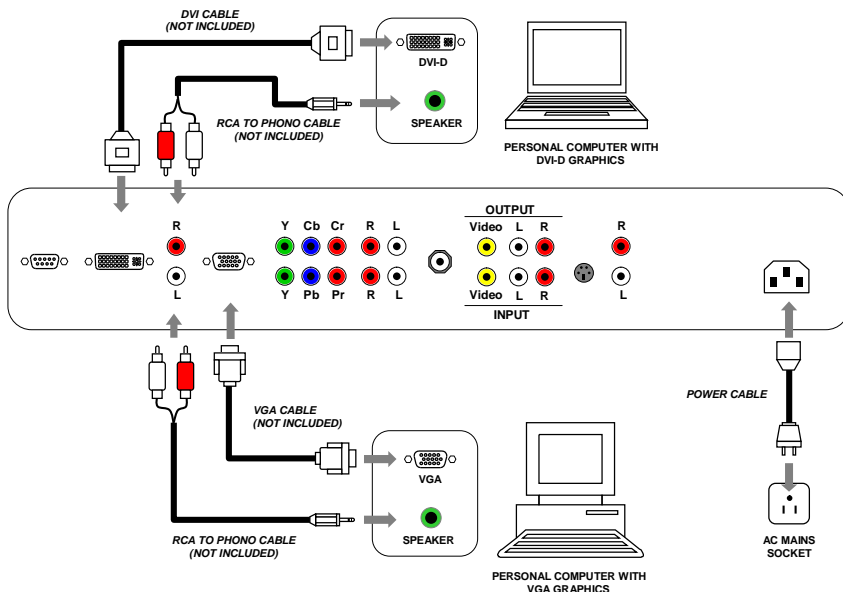
Connections to a VCR generally require three sets of connections. The Composite Video connection consists of Input and output, which allows for the playback of VCR tape images, and recording of other video sources connected to the unit, respectively. The broadcast television signals received by the antenna needs to be looped through the VCR so that the broadcast television channels can be recorded by the VCR, as well as displayed by the unit.

## CONNECTING TO A SATELLITE/CABLE RECEIVER



There are generally two options for satellite or cable receiver connections, namely the Composite and S-Video connections. For simplicity, use Composite connection. For a better picture quality, use the S-Video connection.

## CONNECTING TO A COMPUTER





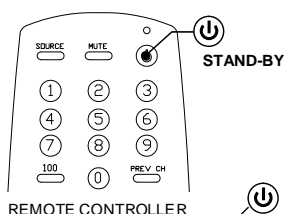
# REMOTE CONTROLLER OPERATIONS

## BASIC OPERATIONS

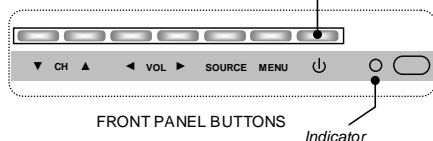
### SWITCHING THE UNIT ON/OFF



AC MAINS SWITCH



REMOTE CONTROLLER



FRONT PANEL BUTTONS

Indicator

The unit is equipped with an AC Mains Switch to cut the power to the unit permanently, and a Stand-By button to turn off the unit temporarily.

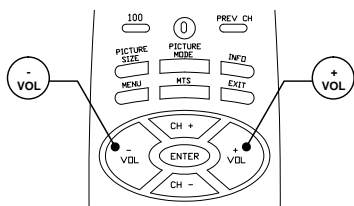
Steps	Actions
1	Ensure that the AC power cord is securely connected to the unit, and the AC outlet wall socket is switched ON
2	Switch ON the unit by pressing the AC Mains Switch on the left bottom corner of the unit. The front panel indicator will light up in green colour.
3	To turn on the unit, you can press the <b>STAND-BY</b> button on either the remote controller or the front panel buttons
4	When the unit has been switched on, the last viewed channel will appear, and the front indicator will turn to green colour
5	To turn off the unit, simply press the <b>STAND-BY</b> button again.

#### NOTES :

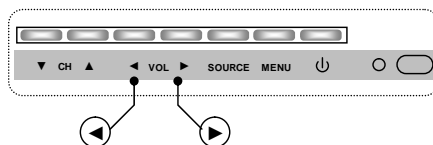
- If the last selected channel is either DVI or VGA, and there are no active signals connected to these video inputs, the unit will remain in stand-by mode, where the front indicator will turn red. This is not a malfunction.
- If the unit is to remain unused for a long duration, switch off the AC Mains Switch for greater power savings.

### ADJUSTING THE AUDIO VOLUME

#### REMOTE CONTROLLER



#### FRONT PANEL BUTTONS

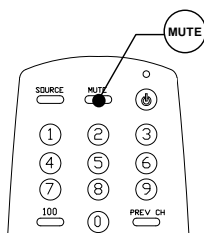


You can adjust the audio volume using either the remote controller or the front panel buttons

Steps	Actions
1	To increase the volume, press the <b>VOL+</b> button on the remote controller or the ► button on the front panel buttons.
2	To decrease the volume, press the <b>VOL-</b> button on the remote controller or the ◀ button on the front panel buttons.

**NOTE :** A volume bar menu will appear whenever the audio volume is being altered.

## MUTING THE AUDIO VOLUME



REMOTE CONTROLLER

You can switch the audio on/off at any instance with a single button press.

- | Steps | Actions  |
|-------|--|
| 1     | To mute the audio signal, press the <b>MUTE</b> button on the remote controller.   |
| 2     | To resume the audio signal, press the <b>MUTE</b> button on the remote controller. |

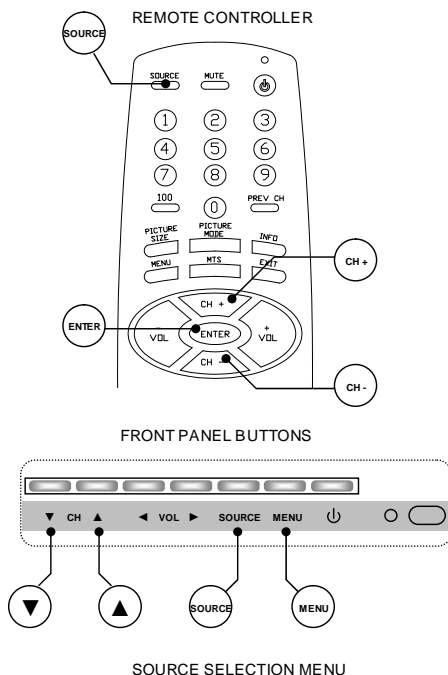


This symbol indicates that the audio signal has been muted.



This symbol indicates that the audio signal has resumed. This symbol will disappear shortly after the audio signal has been resumed.

## CHANGING VIDEO SOURCES



The unit is equipped with multiple audio/video input channels for connections to different audio/video equipments. You can select the desired audio/video source through the remote controller or the front panel buttons.

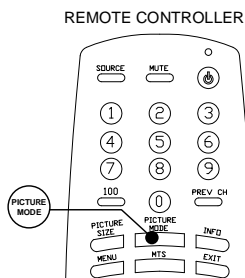
- | Steps | Actions   |
|-------|---|
| 1     | To change the video source, press the <b>SOURCE</b> button on either the remote controller or the front panel buttons. Once activated, a selection menu will appear, as shown herein.   |
| 2     | Select the desired source by navigating the cursor up and down. You can navigate by pressing the CH+ and CH- buttons on the remote controller, or the ▲ and ▼ buttons on the front panel buttons.                                       |
| 3     | Once the desired source channel has been highlighted by the cursor, press the <b>ENTER</b> button on the remote controller or the <b>MENU</b> button on the front panel buttons to activate the selection.                              |
| 4     | The unit will normally take a while to detect and display the incoming signal. In doing so, the message <b>SOURCE CHANGING</b> will appear as shown below.  |
| 5     | In the event that the unit fails to detect any incoming signal (i.e., not connection), the unit will prepare itself to enter stand-by mode within 15 minute. In doing so, the message <b>NO SIGNAL, POWER OFF : 15 MIN</b> will appear. |

### NOTE :

- Analog RGB (ARGB) refers to the VGA connection
- Digital RGB (DRGB) refers to the DVI-D connection

## OPTIONAL OPERATIONS

### PICTURE MODE

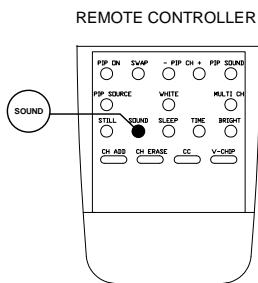


The picture mode function allows you to quickly change the picture colour, contrast, and brightness by means of pre-defined picture modes.

Steps	Actions
1	To change the picture mode, press the <b>PICTURE MODE</b> button on the remote controller.
2	There are three pre-defined picture modes available. By pressing the PICTURE MODE button continuously, you will scroll through the various picture modes sequentially.

NOTE: The available picture modes are Normal, Bright, Dark, and User, where User is the manual settings that you have made using the OSD Display options such as contrast and brightness.

### SOUND MODE

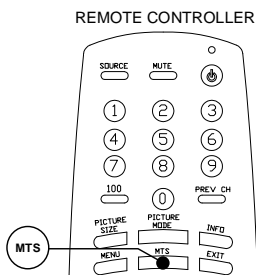


The picture mode function allows you to quickly change the sound settings by means of pre-defined sound modes.

Steps	Actions
1	To change the sound mode, press the <b>SOUND</b> button on the remote controller.
2	There are four pre-defined sound modes available. By pressing the SOUND button continuously, you will scroll through the various sound modes sequentially.

NOTE: The available sound modes are Normal, Flat, News, Cinema, and User, where User is the manual settings that you have made using the OSD Equalizer option.

### MTS SOUND

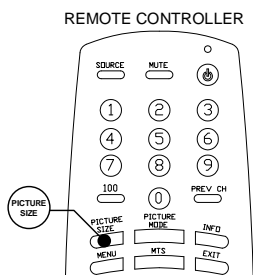


If the television broadcast in your area support MTS stereo signal formats, you will be able to enjoy stereo sound while watching television programs.

Steps	Actions
1	To switch on/off the MTS sound feature, press the <b>MTS</b> button on the remote controller.
2	There generally two MTS sound options, depending on your local broadcast station. By pressing the MTS button continuously, you will scroll through the various MTS options sequentially.

NOTE: MTS sound options are generally Mono and Stereo only. Depending on your local broadcast services, you may also be able to receive SAP and Bilingual options. If the television broadcast in your area does not support MTS sound feature, pressing the MTS button will remain at the Mono option.

## PICTURE SIZE

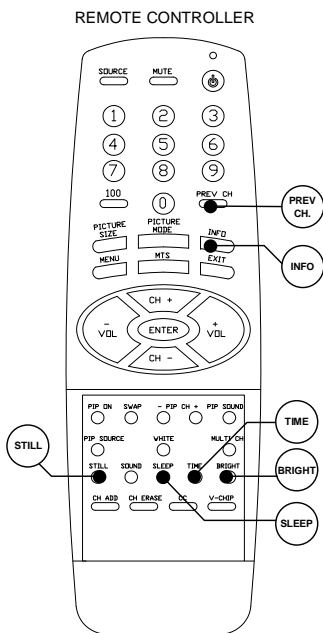


The unit is designed to display a variety of picture formats. Changing the picture size will allow you to adapt the unit's display to match the source signal's picture format.

Steps	Actions
1	To change the picture size, press the <b>PICTURE SIZE</b> button on the remote controller.
2	There are six picture sizes/formats supported. By pressing the <b>PICTURE SIZE</b> button continuously, you will scroll through the various picture sizes sequentially.

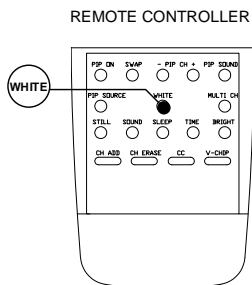
NOTES: The support picture sizes include 16:9 (Fill-screen), Anamorphic, Letter box, TV Mode, Panarama, Normal.

## MISCELLANEOUS FUNCTIONS



Apart from the key functions described, there are other miscellaneous button functions available.

Steps	Actions
1	Press the <b>PREV CH.</b> button to return to the previously selected television channel.
2	Press the <b>INFO</b> button to display the information regarding the currently selected video input.
3	Press the <b>STILL</b> button to freeze and unfreeze the picture being displayed.
4	The unit is equipped with a Sleep function that switches off the unit after a designated period of time. Press the <b>SLEEP</b> button to set the viewing period before the unit switches off. The sleep timer will start to countdown the moment the time duration has been selected. The available time durations are 30, 60, 90, 120, and 180 minutes.
5	Pressing the <b>TIME</b> button will display a digital clock that indicates the current time.
6	Press the <b>BRIGHT</b> button to bring up the OSD Display menu immediately, without the need to navigate through the OSD Main Menu. The OSD Display menu provides you the options to adjust the relevant display quality related adjustments such as contrast and brightness.

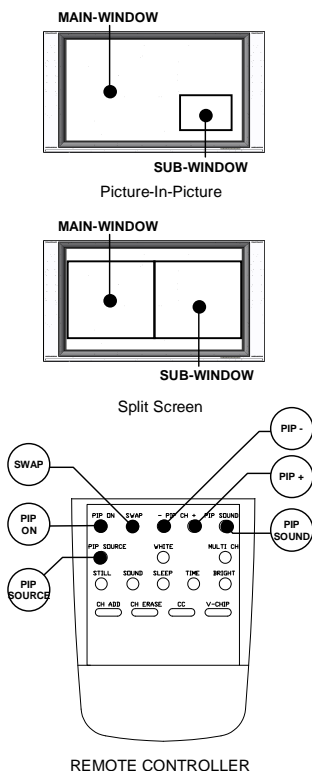


The unit is equipped with a Plasma Display Panel (PDP). You may occasionally encounter the phenomenon of shadow image stuck on the screen after the same image has been displayed for a long duration. This is a normal condition for PDPs, and is not a malfunction. Should such phenomenon occur, use the White function to remove the shadow image.

Steps	Actions
1	To remove the shadow image, press the <b>WHITE</b> button. A screen will turn to white colour.
2	Wait for at least one minute, and press the <b>WHITE</b> button again to resume normal channel viewing. The shadow image should now disappear.

## PICTURE-IN-PICTURE (PIP) OPERATIONS

### PICTURE-IN-PICTURE AND SPLIT SCREEN



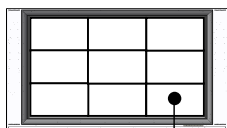
The Picture-In-Picture (PIP) and the Split Screen features allow you to view two different video sources at the same time.

Steps	Actions
1	To turn on the PIP feature, press the <b>PIP ON</b> button once. To turn on the Split Screen feature, press the <b>PIP ON</b> button twice. When PIP or Split Screen is turned on, you will see two video sources displayed in separate windows (Main and Sub) as shown in the diagram.
2	To change the video channels on the sub-window, press the <b>PIP SOURCE</b> button.
3	To view television channels through the sub-window, you have to first press the <b>PIP SOURCE</b> button to select the TV source, followed by the <b>PIP-</b> and <b>PIP+</b> buttons to surf through the stored television channels.
4	You can swap the content of the sub-window and the main-window by pressing the <b>SWAP</b> button.
5	To toggle the sound between the sub-window and the main-window, press the <b>PIP SOUND</b> button.
6	To turn off the PIP or Split Screen feature, press the <b>PIP ON</b> button continuously until the sub-window disappears.

**NOTE :** The PIP feature allows you to view combinations of video inputs only. To view combination of television channels, refer to the POP feature.

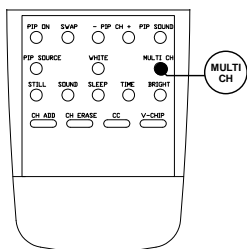


## PICTURE-ON-PICTURE



GRID-WINDOW

Grid Layout



REMOTE CONTROLLER

The Picture-On-Picture (POP) allows you view to multiple video channels and television channels at a glance.

Steps	Actions
1	To turn on the POP feature, press the <b>MULTI CH</b> button. A matrix of nine pictures will appear, with moving pictures cycling across the matrix.
2	If the currently selected video source is not a television source, the grid-windows will contain sequence of still frames.
3	If the currently selected video source is a television source, the grid-windows will contain still images of all the stored television channels.
4	To return to normal viewing, press the <b>MULTI CH</b> button again.

## CLOSED CAPTION AND V-CHIP OPERATIONS

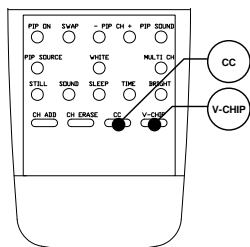
### CC & V-CHIP

The unit is equipped with Closed Caption system that allows you to view conversations, narration and sound effects of TV programs and home videos in the form of subtitles on your screen.

**Note:** Not all the programs and videos offer closed caption. Please look for the "CC" symbol to ensure that the program supports Closed Caption.

The unit is also equipped with V-Chip features. This is a content blocking feature that provides parents a great degree of control over television broadcasts from reaching their children. It allows parents to select programs considered suitable for child viewing, while blocking others that are suitable for adults only.

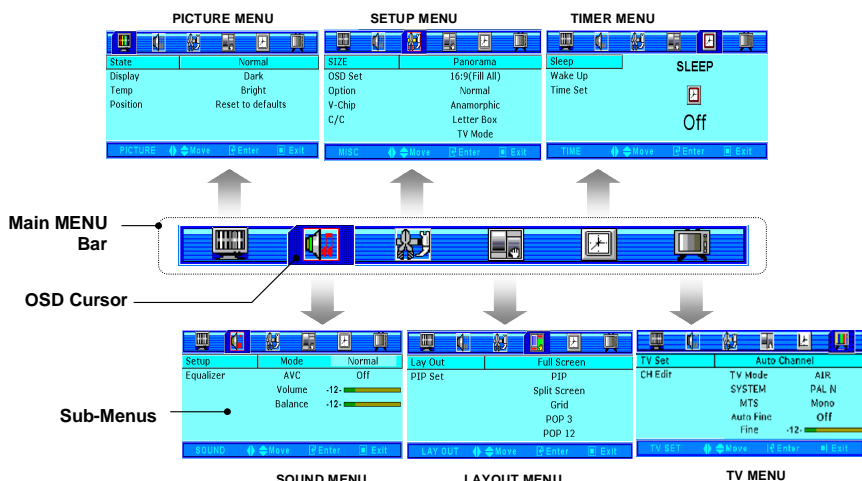
REMOTE CONTROLLER



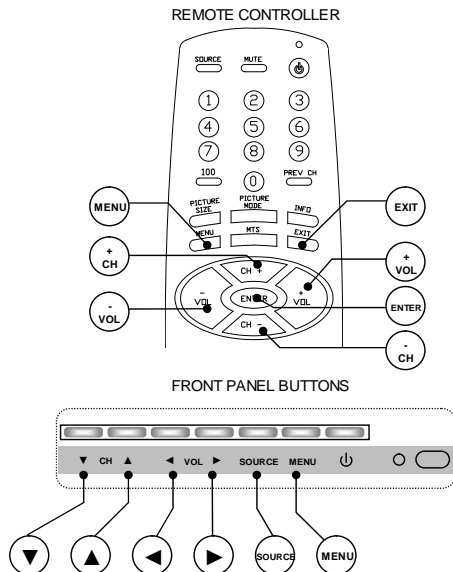
Steps	Actions
1	To view the closed caption information, press the <b>CC</b> button. For details on settings, please refer to Closed Caption setting descriptions in the next chapter.
2	To activate the V-Chip feature, press the <b>V-CHIP</b> button. You must enter the correct password in order to activate and deactivate the V-Chip feature. For details on settings, please refer to V-Chip setting descriptions in the next chapter.

# ON-SCREEN-DISPLAY (OSD) OPERATIONS

## NAVIGATING THE OSD MENU



To navigate the OSD menu, use the following buttons from the remote controller and the front panel buttons.



### Buttons Actions

<b>MENU</b> (Remote Controller)	Turns on the OSD Main Menu
<b>MENU</b> (Front Panel)	When the OSD Menu is off, pressing this button will turn on the OSD Main Menu. When the OSD Menu is ON, pressing this button will select/activate the option pointed to by the OSD cursor
<b>ENTER, SOURCE</b>	Selects/activate the option pointed to by the OSD cursor
<b>EXIT</b>	Return to OSD Main Menu from a sub-menu, or turn off the OSD Main Menu.
<b>CH+, ▲</b>	Moves the OSD cursor upwards
<b>CH-, ▼</b>	Moves the OSD cursor downwards
<b>VOL+, ►</b>	Moves the OSD cursor to the right
<b>VOL-, ◀</b>	Moves the OSD cursor to the left

**NOTE :** The OSD menu navigation buttons and conventions shown above is application to all OSD menu functions as described in the following sections. To simplify the illustrations, the following sections will refer to the remote controller buttons only.

## TUNING AND MANAGING TELEVISION CHANNELS

The unit offers automatic tuning and storage of scanned channels. Once program tuning is completed, you can edit and manage the stored channels improve your viewing experience.

### AUTOMATIC TUNING



Automatic Tuning help to scan and store for all the available television channels in your area.

- | Steps | Actions  |
|-------|--|
| 1     | From the OSD Main Menu, select the TV sub-menu.  |
| 2     | While in the TV sub-menu, use the ▲ and ▼ buttons to navigate to the TV Set option. Once there, press the <b>ENTER</b> button twice to start the automatic tuning process.   |
| 3     | During the automatic tuning process, the AUTO SCAN dialog box will appear. Status information will be shown as new channels are found and stored. Scanned channels are stored incrementally, according to the frequency of the channel carriers. |
| 4     | The automatic tuning process will normally take a few minutes to complete, depending on the number of channels available in your area.   |
| 5     | Upon completion and to return to normal viewing, simply press the <b>EXIT</b> button repeatedly until the OSD menu disappears.   |

**NOTE :**To interrupt the automatic tuning process, simply press the **EXIT** button.

### FINE TUNING THE CHANNEL RECEPTION



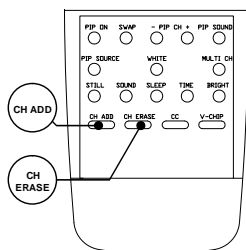
You can fine tune the program reception manually if the reception signal in your area is weak.

- | Steps | Actions  |
|-------|--|
| 1     | From the OSD Main Menu, select the TV sub-menu.  |
| 2     | While in the TV sub-menu, use the ▲ and ▼ buttons to navigate to the TV Set option and press <b>ENTER</b> .                          |
| 2     | Press the ▼ buttons to select <i>Auto Fine</i> option, and press the ► button to turn off the option. A fine tuning bar will appear. |
| 3     | Press the ◀ and ▶ buttons to fine tune the signal manually until a clear and sharp reception is acquired.                            |
| 4     | To return to normal viewing, simply press the <b>EXIT</b> button repeatedly until the OSD menu disappears.                           |

## MANAGING STORED CHANNELS



REMOTE CONTROLLER



You can add or remove individual channels found and stored during the automatic tuning process.

Steps	Actions
1	From the OSD Main Menu, select the TV sub-menu.
2	While in the TV sub-menu, use the ▲ and ▼ buttons to navigate to the <i>CH Edit</i> option, and press the <b>ENTER</b> button twice.
3	Upon seeing the CHANNEL EDIT dialog box, press the ▲ and ▼ buttons to move the OSD cursor to the channels of interest.
4	Press the ► button or <b>CH ADD</b> button to add the current channel into the browse lists.
5	Otherwise, press the ◀ button or <b>CH ERASE</b> button to remove current channel from the browse lists.
6	To return to normal viewing, simply press the <b>EXIT</b> button repeatedly until the OSD menu disappears.

## CUSTOMIZING THE PICTURE

The unit offers many features to enhance the picture quality and viewing experiences. With these features, you can tailor the picture performance to suite your personal viewing preferences.

### PICTURE MODE



Same as the PICTURE MODE feature explained in the BASIC OPERATIONS section, you can also change the picture mode using the OSD menu.

Steps	Actions
1	From the OSD Main Menu, select the PICTURE sub-menu.
2	While in the PICTURE sub-menu, use the ▲ and ▼ buttons to navigate to the <i>State</i> option. Once there, press the <b>ENTER</b> button.
3	Use the ▲ and ▼ buttons to select the desired picture mode.
4	Press the <b>ENTER</b> button to confirm the selection.

### PICTURE DISPLAY



You can adjust various display settings to suite your viewing preference.

Steps	Actions
1	From the OSD Main Menu, select the PICTURE sub-menu.
2	While in the PICTURE sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Display</i> option. Once there, press the <b>ENTER</b> button.
3	Use the ▲ and ▼ buttons to navigate to the various display adjustments bars.
4	For each adjustment bar, press the ◀ and ▶ buttons to vary the settings to your desired level.
5	Press the <b>ENTER</b> button to confirm the level setting of the selected adjustment bar.

### PICTURE TEMPERATURE



You can select the type of picture temperature mode which suites your viewing preference.

Steps	Actions
1	From the OSD Main Menu, select the PICTURE sub-menu.
2	While in the PICTURE sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Temp</i> option. Once there, press the <b>ENTER</b> button.
3	Use the ▲ and ▼ buttons to select the available colour temperature settings.
4	Press the <b>ENTER</b> button to activate the selected temperature setting.

## PICTURE POSITION

In the event that the screen images are shifted away from the center of the screen, you can correct the screen position and sizes automatically or manually. These adjustments are only required for the VGA and YPbPr video inputs.



- | Steps | Actions  |
|-------|--|
| 1     | From the OSD Main Menu, select the PICTURE sub-menu.   |
| 2     | While in the PICTURE sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Position</i> option. Once there, press the <b>ENTER</b> button.                                     |
| 3     | Use the ▲ and ▼ buttons to navigate to the various position adjustments bars.  |
| 4     | For each adjustment bar, press the ◀ and ▶ buttons to vary the settings to your desired level.   |
| 5     | Press the <b>ENTER</b> button to confirm the level setting of the selected adjustment bar.   |
| 6     | To center the image automatically, simply navigate to the <i>Auto Adjust</i> option, and press the <b>ENTER</b> button. The unit will automatically align the image accordingly. |

NOTE : Phase adjustment is intended to correct images that are slightly out of focus, and the occasional appearance of horizontal fuzzy lines on the images. This adjustment is only required for the VGA video input.

## CUSTOMIZING THE SOUND

The unit offers many features to enhance the audio quality. With these features, you can tailor the audio performance to suite your personal listening preferences.

### SOUND MODE

Same as the SOUND MODE feature explained in the BASIC OPERATIONS section, you can also change the sound mode using the OSD menu.



- | Steps | Actions   |
|-------|---|
| 1     | From the OSD Main Menu, select the SOUND sub-menu.  |
| 2     | While in the SOUND sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Setup</i> option. Once there, press the <b>ENTER</b> button. |
| 3     | Use the ◀ and ▶ buttons to scroll through and select the desired sound mode.  |
| 4     | Press the <b>ENTER</b> button to confirm the selection.   |

## SOUND OPTIONS

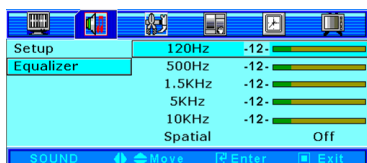
In addition to pre-defined sound modes, you can adjust the audio volume, balance, and activate the automatic volume control.



- | Steps | Actions  |
|-------|--|
| 1     | From the OSD Main Menu, select the SOUND sub-menu.   |
| 2     | While in the SOUND sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Setup</i> option. Once there, press the <b>ENTER</b> button.  |
| 2     | Use the ▲ and ▼ buttons to navigate through the available sound options and adjustments.   |
| 3     | At the <i>Volume</i> adjustment bar, use the ◀ and ▶ buttons to adjust the sound volume, similar to volume adjustment function described in the BASIC OPERATIONS section.  |
| 4     | At the <i>Balance</i> adjustment bar, use the ◀ and ▶ buttons to adjust the sound balance between the left and right speakers.   |
| 5     | At the <i>AVC</i> option, press the ▶ button switch on and off the Automatic Volume Control (AVC) feature, and press <b>ENTER</b> to confirm the setting. The AVC feature automatically adjusts the audio signal levels so as to prevent unwanted signal distortions during high signal levels. The effect will be most apparent during loud scenes like explosions and gun battles. |
| 6     | To return to normal viewing, simply press the <b>EXIT</b> button repeatedly until the OSD menu disappears.   |

## AUDIO EQUALIZER

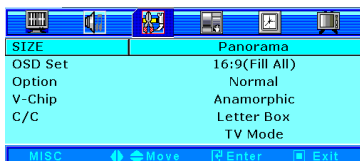
The unit is equipped with a five band audio equalizer to improve and personalize the audio performance.



- | Steps | Actions  |
|-------|--|
| 1     | From the OSD Main Menu, select the SOUND sub-menu.   |
| 2     | While in the SOUND sub-menu, change the <i>Sound Mode</i> option to User as explained earlier. Then press the <b>EXIT</b> button until you return to the SOUND sub-menu.               |
| 3     | Use the ▲ and ▼ buttons to navigate to the <i>Equalizer</i> option. Once there, press the <b>ENTER</b> button.   |
| 4     | Use the ▲ and ▼ buttons to navigate through the five bands of frequency adjustment bar.  |
| 5     | At anyone of the frequency adjustment bar, use the ◀ and ▶ buttons to adjust the audio gain for the selected frequency, and press the <b>ENTER</b> button to confirm the gain setting. |
| 6     | Turning on the <i>Spatial</i> option will provide you with a wider and more spacious listening experience.   |
| 7     | Return to normal viewing by pressing the <b>EXIT</b> button repeatedly until the OSD menu disappears.  |

## SETTING UP THE SCREEN SIZE AND OSD MENU

### PICTURE SIZE



Same as the PICTURE SIZE feature explained in the BASIC OPERATIONS section, you can also change the Picture Size using the OSD menu.

Steps	Actions
1	From the OSD Main Menu, select the SETUP sub-menu.
2	While in the SETUP sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Size</i> option. Once there, press the <b>ENTER</b> button.
3	Use the ▲ and ▼ buttons to select the desired screen format.
4	Press the <b>ENTER</b> button to confirm the selection.

### LANGUAGE SELECTION



The unit is equipped with a multilingual OSD menu. You can choose your preferred language used on all OSD menus and messages.

Steps	Actions
1	From the OSD Main Menu, select the SETUP sub-menu.
2	While in the SETUP sub-menu, use the ▲ and ▼ buttons to navigate to the <i>OSD Set</i> option. Once there, press the <b>ENTER</b> button.
3	Use the ◀ and ▶ buttons to scroll through and select the desired language setting.
4	Return to normal viewing by pressing the <b>EXIT</b> button repeatedly until the OSD menu disappears.

### CUSTOMIZE THE OSD



You can customize the OSD menu to your likings by setting the OSD menu position on the screen and the time duration in which OSD menu will persist before it is automatically turned off when no button press is detected.

Steps	Actions
1	From the OSD Main Menu, select the SETUP sub-menu.
2	While in the SETUP sub-menu, use the ▲ and ▼ buttons to navigate to the <i>OSD Set</i> option. Once there, press the <b>ENTER</b> button.
3	Use the ▲ and ▼ buttons to navigate to the <i>OSD position</i> option, and press the ◀ and ▶ buttons to select the OSD menu position.
4	To adjust the OSD automatic timeout duration, navigate the OSD cursor to the <i>Time Out</i> option by pressing the ▲ and ▼ buttons. Press the ◀ and ▶ buttons to set the timeout duration.
5	Return to normal viewing by pressing the <b>EXIT</b> button repeatedly until the OSD menu disappears.



## BURN PROTECTION



The Burn Protection feature is designed to prevent static images from forming shadows on the screen. However, this Burn Protection feature may not 100% effective, and you may still occasionally need to perform the White wash function.

Steps	Actions
1	From the OSD Main Menu, select the SETUP sub-menu.
2	While in the SETUP sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Option</i> option. Once there, press the <b>ENTER</b> button.
3	Use the ▲ and ▼ buttons to navigate to the Burn Protection option, and press the ◀ and ▶ buttons to activate or deactivate it.
4	Return to normal viewing by pressing the <b>EXIT</b> button repeatedly until the OSD menu disappears.

## FILM



This option allows you to set the display to either a 2:2 or a 2:3 image pull down on the incoming signal.

Steps	Actions
1	From the OSD Main Menu, select the SETUP sub-menu.
2	While in the SETUP sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Option</i> option. Once there, press the <b>ENTER</b> button.
3	Use the ▲ and ▼ buttons to navigate to the <i>Film</i> option, and press the ◀ and ▶ buttons to activate or deactivate the 2:3 image pull down.
4	Return to normal viewing by pressing the <b>EXIT</b> button repeatedly until the OSD menu disappears.

NOTE : This feature is only available on certain models.

## FIRMWARE VERSION



The unit requires a firmware program in order to operate effectively. The firmware version can be identified using the OSD menu.

Steps	Actions
1	From the OSD Main Menu, select the SETUP sub-menu.
2	While in the SETUP sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Option</i> option. Once there, press the <b>ENTER</b> button.
3	The <i>Version</i> option reflects the version number of the firmware currently residing in the unit you have purchased.

NOTE : Firmware version may vary, and the version illustrated herein may not necessary be the same as the unit you have purchased.

## SETTING UP THE PICTURE-IN-PICTURE OPTIONS

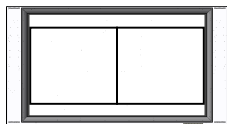
### SCREEN LAYOUT



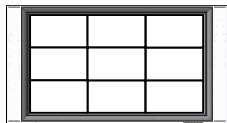
Full Screen



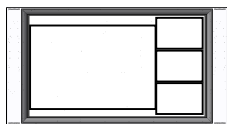
Picture-In-Picture



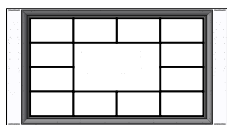
Split Screen



Grid Screen



POP3 Screen



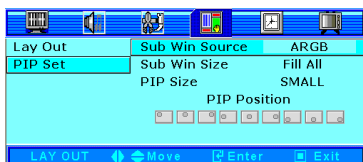
POP12 Screen

Same as the Picture-In-Picture (PIP) features explained in the BASIC OPERATIONS section, you can also change the PIP Layout using the OSD menu.

Steps	Actions
1	From the OSD Main Menu, select the LAYOUT sub-menu.
2	While in the LAYOUT sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Layout</i> option. Once there, press the <b>ENTER</b> button.
3	Use the ▲ and ▼ buttons to select the desired PIP screen layout.
4	Please refer to the illustration shown herein for the different screen layouts available.
5	Press the <b>ENTER</b> button to confirm the selection.

## PIP SET

Same as the Picture-In-Picture (PIP) features explained in the BASIC OPERATIONS section, you can also change the PIP window contents, sizes, and positions using the OSD menu.



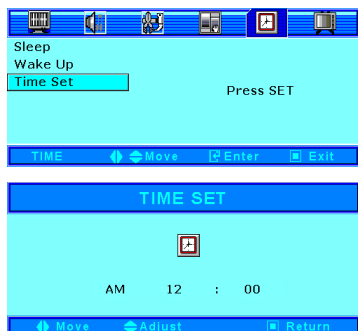
Steps	Actions
1	From the OSD Main Menu, select the LAYOUT sub-menu.
2	While in the LAYOUT sub-menu, use the ▲ and ▼ buttons to navigate to the <i>PIP Set</i> option. Once there, press the <b>ENTER</b> button.
3	To set the sub-window video source, use the ▲ and ▼ buttons to navigate to the <i>Sub Win Source</i> option, and press the ◀ and ▶ buttons to select the desired video source.
4	To set the sub-window picture format, use the ▲ and ▼ buttons to navigate to the <i>Sub Win Size</i> option, and press the ◀ and ▶ buttons to select either Full-Screen or Normal.
5	To set the sub-window's size, use the ▲ and ▼ buttons to navigate to the <i>PIP Size</i> option, and press the ◀ and ▶ buttons to select among the 3 different sizes (large, medium, small).
6	To set the sub-window position, use the ▲ and ▼ buttons to navigate to the <i>Sub Win Position</i> option, and press the ◀ and ▶ buttons to select the desired window position.

NOTE :

- The *PIP Set* option is only available when the current screen layout setting is either PIP or Split Screen.
- The *Sub Win Size*, *PIP Size*, *PIP Position* options are not applicable to the Split Screen screen layout.

## SETTING UP THE SLEEP AND WAKE UP TIMER

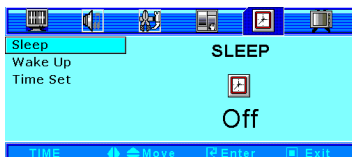
### TIME SETTING



Before you can activate the wake up timer, you are required to set internal clock to the current time.

Steps	Actions
1	From the OSD Main Menu, select the TIMER sub-menu.
2	While in the TIMER sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Time Set</i> option. Once there, press the <b>ENTER</b> button twice.
3	Use the ◀ and ▶ buttons to scroll through hour and minutes setting.
4	Use the ▲ and ▼ buttons adjust the time.
5	Press <b>EXIT</b> to store the time setting

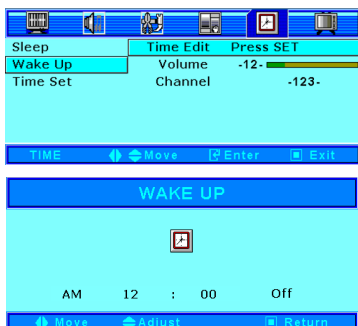
## SLEEP TIMER SETTING



Same as the SLEEP TIMER SETTING feature explained in the BASIC OPERATIONS section, you can also change the SLEEP TIMER using the OSD menu.

Steps	Actions
1	From the OSD Main Menu, select the TIMER sub-menu.
2	While in the TIMER sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Sleep</i> option. Once there, press the <b>ENTER</b> button.
3	Use the ◀ and ▶ buttons to set the sleep timer to the preset time interval of either Off, 30, 60, 90, 120 and 180 minutes.
4	Press <b>EXIT</b> to store the sleep time setting

## WAKE UP TIMER SETTING



Set the wake up timer whenever you want the unit to turn ON automatically at a preset time.

Steps	Actions
1	From the OSD Main Menu, select the TIMER sub-menu.
2	While in the TIMER sub-menu, use the ▲ and ▼ buttons to navigate to the <i>Wake Up</i> option. Once there, press the <b>ENTER</b> button.
3	Use the ▲ and ▼ buttons to scroll through the Wake-up timer, volume and channel setting.
4	Select the TIME EDIT option to set the wake up time for the unit to turn on automatically. While in the Wake Up menu, use the ◀ and ▶ buttons to make the time adjustment.
5	You can also preset the audio volume when the unit wakes up. To do that, move the cursor to the <i>Volume</i> option, and press the ◀ and ▶ buttons to make the volume adjustment.
6	Other than the volume, you can also preset the television program to wake up to. Simply move the cursor to the <i>Channel</i> option, and key in the channel number using the numeric keypad.
7	Press <b>EXIT</b> to store the timer setting

### CLOSED CAPTION SETTING

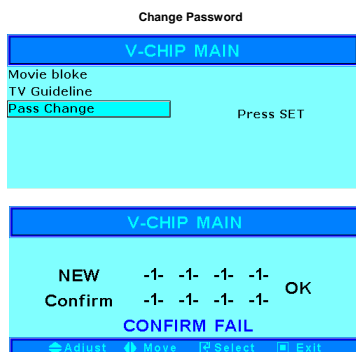
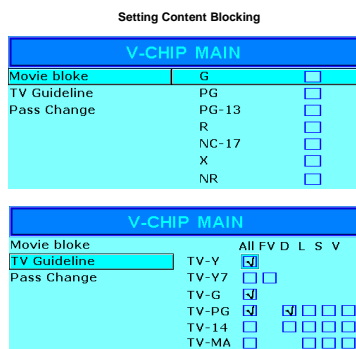
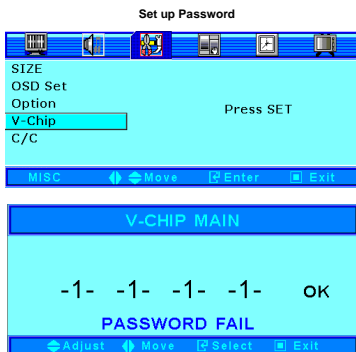
As mention earlier, the Closed Caption system allows you to view conversations, narration and sound effects of TV programs and home videos in the form of subtitles on your screen.

- "CC1" or "CC2" displays the subtitles of TV dramas and news programs while allowing a full picture view.
- "T1" or "T2" superimposes other information (e.g. TV guide, weather) on the screen, which is independent from the program in progress.



Steps	Actions
1	From the OSD Main Menu, select the SETUP sub-menu.
2	While in the SETUP sub-menu, use the ▲ and ▼ buttons to navigate to the C/C option. Once there, press the <b>ENTER</b> button.
3	While in the <i>Mode</i> option, press the ◀ and ▶ buttons to scroll through and select the desired closed caption mode depending on the program-supported mode.
4	To configure the background setting, use the ▲ and ▼ buttons to navigate to the <i>Back Ground</i> option. Once there, use the ◀ and ▶ buttons to scroll through of either Transparent or Opaque depend on your preference.
5	Return to normal viewing by pressing the <b>EXIT</b> button repeatedly until the OSD menu disappears.

## V-CHIP SETTING



Content Blocking is an electronic filtering device built into your system. This tool helps parents to have a great degree of control over the broadcasts from reaching their children. It allows parents to select programs judged suitable to child while blocking the other judged unsuitable program. It does so automatically once you activate the Content Blocking feature in your unit.

- U.S. has two rating systems for viewing program content: TV Parental Guidelines and movie ratings.
- The TV Parental Guidelines work in conjunction with the Content Blocking to help parents to screen out inappropriate television program for their children.
- Movie ratings are used for original movies rated by the Motion Picture Association of America (MPAA) as watched on cable TV and not edited for television. The Content Blocking can also be set to block MPAA-rated movies.

To activate the Content Blocking, first you should configure the password number.

Steps	Actions
1	From the OSD Main Menu, select the SETUP sub-menu.
2	While in the SETUP sub-menu, use the ▲ and ▼ buttons to navigate to the <i>V-Chip</i> option. Once there, press the <b>ENTER</b> button twice.
3	A password menu is displayed and use the number keypad to configure your preference 4-digit number as password.
4	After setting up the password, a content blocking menu is displayed. To set the content blocking on movie, use the ▲ and ▼ buttons to navigate to the <i>Movie bloke</i> option. Once there, press the <b>ENTER</b> button.
5	Press the ▲ and ▼ buttons to select the movie blocking option according to your preference and press <b>ENTER</b> button to confirm the setting.
6	To set the content blocking on TV guide, use the ▲ and ▼ buttons to navigate to the <i>TV Guide</i> option. Once there, press the <b>ENTER</b> button.
7	Press the ▲ and ▼ buttons to select the TV guide blocking option according to your preference and press <b>ENTER</b> button to confirm the setting.
8	You can change the password whenever you want. Press the ▲ and ▼ buttons to navigate to the <i>Pass Change</i> option. Once there, press the <b>ENTER</b> button.
9	A password menu is displayed. Enter the new password (4-digit number) and followed by confirmation.
10	Return to normal viewing by pressing the <b>EXIT</b> button repeatedly until the OSD menu disappears.

## TROUBLESHOOTING GUIDE

These guidelines will assist you to diagnose the unit, prior to making a service call to you nearest authorized service center.

Symptoms	Action
<b>Out of range</b>	<ul style="list-style-type: none"><li>• Either the sync frequency of the video input is beyond the operating range, or the resolution is beyond the supported range of the unit. You should adjust the connecting video equipment to output a signal that is within the operating range of the unit. Please refer to Technical Information section for information on the display modes support by the unit.</li></ul>
<b>Image is not centered</b>	<ul style="list-style-type: none"><li>• Image adjustment has not been configured in the current operating mode. This may happen when using either the VGA or YPbPr inputs, and is not a malfunction. Use the adjustments available from the PICTURE sub-menu of the OSD to make the necessary adjustments</li></ul>
<b>PDP monitor TV does not enter power saving mode (red)</b>	<ul style="list-style-type: none"><li>• Computer video signal is not VESA DPMS standard. Either the PC or the video controller card is not using the VESA DPMS power management function.</li></ul>
<b>POWER LED not light up (NO POWER)</b>	<ul style="list-style-type: none"><li>• Check power cable is properly plug in to power adapter and power outlet.</li></ul>
<b>No video from screen</b>	<ul style="list-style-type: none"><li>• Check if the VGA cable, RF cable, AV cable, S-Video cable or Component cable is properly connected between the PDP Monitor TV and external equipment such as computer, VCR, VCD player, DVD player or DTV receiver.</li><li>• Press the "Sources" button to select sources, the sources input will change from TV→ AV1→ AV2→ S-Video→ YCbCr → YPbPr→ Analog RGB → Digital RGB (Option). The input source setting will be auto saved based on the last setting sources selection.</li></ul>
<b>No signal</b>	<ul style="list-style-type: none"><li>• Check if the VGA cable, DVI cable, AV cable, S-Video cable or Component cable is properly connected between the PDP Monitor TV and external equipment such as computer, VCR, VCD player, DVD player or DTV receiver.</li><li>• Check if the power adapter is properly connected to the power outlet.</li></ul>
<b>OSD buttons not functioning</b>	<ul style="list-style-type: none"><li>• Reset the PDP Monitor TV by power off and power on from the power switch.</li></ul>

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Trouble shooting continues.

Symptoms	Action
<b>No sound</b>	<ul style="list-style-type: none"><li>• In Analog RGB mode, check the RCA (audio L/R) cable is properly connected at both ends.</li><li>• In Component mode, Composite mode and S-video mode, check RCA (audio L/R) cable is properly connected at both ends. Check if the speakers are muted.</li><li>• In TV mode, ensure the RF cable is properly connected and the antenna is fully functional. Check if the speakers are muted.</li><li>• Check whether the 'MUTE' button on the remote control has been pressed.</li></ul>
<b>Fuzzy lines</b>	<ul style="list-style-type: none"><li>• Depending on the images displayed. You may occasionally see some horizontal fuzzy lines appearing on the images. This is a normal condition and can be corrected by activating the Automatic Adjustment feature. This applicable to RGB input mode only.</li></ul>
<b>No picture or black and white picture</b>	<ul style="list-style-type: none"><li>• Adjust the color settings.</li><li>• Check that the broadcast system is correct.</li></ul>
<b>Sound and picture interference</b>	<ul style="list-style-type: none"><li>• Try to identify the electrical appliance that is affecting the TV, and then move it further away.</li><li>• Plug your TV into a different mains socket.</li></ul>
<b>Blurred or snowy picture, distorted sound</b>	<ul style="list-style-type: none"><li>• Check the direction, location and connections of your aerial. This interference often occurs due to the use of indoor aerial.</li></ul>
<b>Remote control malfunction</b>	<ul style="list-style-type: none"><li>• Replace the remote control batteries.</li><li>• Clean the upper edge of the remote control (transmission window).</li><li>• Check the battery terminals.</li></ul>



## TECHNICAL INFORMATION

### COMPUTER DISPLAY RESOLUTION (DVI & VGA)

No.	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Dot Clock Frequency (MHz)
1	640 x 480	31.47	70.08	25.17
2	640 x 480	31.50	60.00	25.18
3	640 x 480	35.00	67.00	30.24
4	640 x 480	37.50	75.00	31.50
5	640 x 480	37.86	72.81	31.50
6	720 x 400	31.47	70.08	28.32
7	800 x 600	35.16	56.25	36.00
8	800 x 600	37.90	60.32	40.00
9	800 x 600	46.90	75.00	49.50
10	800 x 600	48.08	72.19	50.00
11	832 x 624	49.00	74.00	57.27
12	1024 x 768	48.40	60.00	65.00
13	1024 x 768	56.50	70.00	75.00
14	1024 x 768	60.00	75.00	78.75
15	1152 x 864	54.53	61.13	80.37
16	1152 x 864	63.86	70.02	94.51
17	1152 x 864	67.52	75.02	108.03
18	1280 x 960	60.02	60.02	108.04
19	1280 x 1024	64.00	60.01	108.00

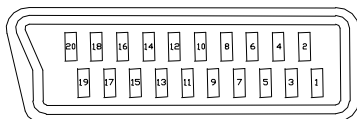
### HDTV DISPLAY RESOLUTION (YCbCr & YPbPr)

No.	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Dot Clock Frequency (MHz)	Component Input
1	480i	15.734	59.94	13.50	YCbCr
2	576i	15.625	50.00	13.50	YCbCr
3	480p (720x480)	31.468	59.94	27.00	YPbPr
4	576p (720x576)	31.25	50.00	27.00	YPbPr
5	720p (1280x720)	37.50	50.00	74.25	YPbPr
6	720p (1280x720)	45.00	60.00	74.25	YPbPr
7	1080i (1920x1080)	28.125	50.00	74.25	YPbPr
8	1080i (1920x1080)	33.75	60.00	74.25	YPbPr

NOTE : When the signal received by the unit exceeds the acceptable range, a warning message "Out Of Range" will appear on the screen. You can confirm the input signal format through the OSD Menu, and readjust the input signal to meet anyone of the resolutions listed above.

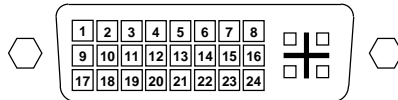
## INPUT CONNECTORS PIN ASSIGNMENTS

### SCART Connector (21 Pin)



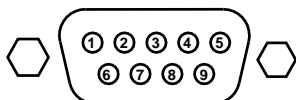
Pin	Function
1	Audio output R
2	Audio input R
3	Audio output L + Mono
4	Audio chassis return
5	Video chassis return (RGB Blue)
6	Audio input L + Mono
7	RGB Blue input
8	Switching Voltage
9	Video chassis return (RGB Green)
10	AV-Link (Ext 1)
11	RGB Green input
12	NC
13	Video chassis return (RGB Red)
14	Data Ground
15	RGB Red input
16	Blanking signal (RGB switching)
17	Video chassis return (Composite Video)
18	Blanking signal ground
19	Composite Video output
20	Composite Video input
21	Screening/chassis return

### DVI Input Connector (24 Pin)



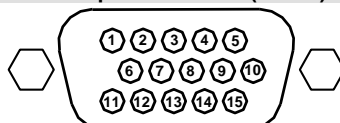
Pin	Function
1	T.M.D.S. Data2-
2	T.M.D.S. Data2+
3	T.M.D.S. Data2/4 Shield
4	T.M.D.S. Data4-
5	T.M.D.S. Data4+
6	Clock (DDC)
7	Data (DDC)
8	Not Connected
9	T.M.D.S. Data1-
10	T.M.D.S. Data1+
11	T.M.D.S. Data1/3 Shield
12	T.M.D.S. Data3-
13	T.M.D.S. Data3+
14	+5V Power
15	+5V Grounding
16	Hot Plug Detect
17	T.M.D.S. Data0-
18	T.M.D.S. Data0+
19	T.M.D.S. Data0/5 Shield
20	T.M.D.S. Data5-
21	T.M.D.S. Data5+
22	T.M.D.S. Clock Shield
23	T.M.D.S. Clock+
24	T.M.D.S. Clock-

### RS-232 Connector (9 Pin)



Pin	Function
1	Data Carrier Detect (DCD)
2	Received Data (RxD)
3	Transmit Data (TxD)
4	Data Terminal Ready (DTR)
5	Signal Ground (SG)
6	Data Set Ready (DSR)
7	Request To Send (RTS)
8	Clear To Send (CTS)
9	Ring Indicator (RI)

### VGA Input Connector (15 Pin)



Pin	Function
1	Red (R)
2	Green (G)
3	Blue (B)
4	Grounding
5	Grounding (DDC)
6	Red (R) Grounding
7	Green (G) Grounding
8	Blue (B) Grounding
9	Reserved
10	Sync Grounding
11	Grounding
12	Data (DDC)
13	Horizontal sync.
14	Vertical sync.
15	Clock (DDC)

## SPECIFICATIONS

Section	Specifications	Value
DISPLAY	Effective Display Size	933.89mm (H) x 532.24mm (V)
	Number of Pixels	1024 (H) x 768 (V)
	Pixel pitch	0.912 mm (H) x 0.693mm (V)
	Picture aspect ratio	16:9
	Brightness	1000 cd/m <sup>2</sup> (nit)
	Contrast ratio	3000:1
	Color	16.7 million colors
	Viewing angle	Over 160°
INPUT TERMINALS	DVI Input	DVI 24-pin x 1 (Digital TMDS)
	VGA Input	D-Sub 15-pin x 1
	RS232 Input	D-Sub 9-pin x 1
	Antenna Input	F type x 1
	S-Video Input	Mini Din 4 pin x 1
	Component Input (Y,Pb,Pr)	RCA 3-pin x 1
	Component Input (Y,Cb,Cr)	RCA 3-pin x 1
	Composite (CVBS) Input	RCA Input x 1
OUTPUT TERMINALS	Audio Input	RCA Stereo Audio Input x 5
	Video Output & Audio Output	Audio Output (RCA), Video Output (RCA)
	PC Resolution Supporting	VGA, SVGA, XGA (Auto Convert to VGA)
	HDTV Compatible	480i, 720p, 1080i
	Progressive Scanning	Yes
	Film Mode Pull Down Conversation	Yes
	"GAMMA" Correction	Yes
	Color Temperature Control	Yes
COMPUTER/ VIDEO SECTION	3D Comb Filter	Yes
	De-interlacer	Yes
	Picture Mode	Zoom (Full Screen 16:9); Normal (4:3); Anamorphic, Panorama; TV Mode; Letter Box
	TV System	NTSC M
	DUAL TUNER System	Optional
	AV Input Color System	PAL/SECAM/NTSC
	Picture-In-Picture	PIP,PBP, and POP for video inputs only

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Specifications Continues.

<b>AUDIO SECTION</b>	Audio Output Power	10W x 2
	Sound Mode	News, Cinema, Normal, Flat, User
	Sound Effect	Spatial(Basic)
	Tone Control	Yes
<b>OTHERS</b>	Stereo Decode	MTS
	Closed Caption/V-Chip	Yes
<b>POWER</b>	AC input (Power Adapter)	AC 100V~240 V, 50/60 Hz
	Power Consumption	350W (max)
<b>DIMENSION</b>	W x H x D (Without Stand)	1180 x 645 x 89.5 (mm)
	W x H x D (With Stand)	1180 x 702.3 x 298 (mm)
<b>WEIGHT</b>	Without Stand	35 kg
	With Stand	41 kg
<b>OPERATING CONDITION</b>	Temperature	0°C to 40°C
	Humidity	20% - 70% (No condensation)
<b>STORAGE CONDITION</b>	Temperature	-5°C to 50°C
	Humidity	20% - 75% (No condensation)

Note : Design and specifications are subject to change without prior notice.

## REGULATORY DECLARATION

### FCC DECLARATION



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 UNDESIRE OPERATION.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

U.S.A. ONLY

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

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

### CE DECLARATION



CE Mark

The manufacturer of this product declares under its responsibility that the product is in conformity with the following standard(s) or other normative document(s)

Safety:

EN60065: 1998

EMC:

EN55022:1998/A1:2000/A2:2003

EN55013:2001

EN61000-3-2: 2000

EN61000-3-3:1995/A1:2001

EN55024:1998/A1:2001/A2:2003

EN55020:2002 +A1: 2003

Following the provisions of 73/23/EEC (Low Voltage Directive), 89/336/EEC (EMC Directive) and 93/68/EEC (Amendment of EMC and Low Voltage Directive).

### Disposal of Used Electrical & Electronic Equipment



The meaning of the symbol on the product, its accessory or packaging indicates that this product shall not be treated as household waste. Please, dispose of this equipment at your applicable collection point for the recycling of electrical & electronic equipments waste. In the European Union and Other European countries which there are separate collection systems for used electrical and electronic product. By ensuring the correct disposal of this product, you will help prevent potentially hazardous to the environment and to human health, which could otherwise be caused by unsuitable waste handling of this product. The recycling of materials will help conserve natural resources. Please do not therefore dispose of your old electrical and electronic equipment with your household waste. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

### Entsorgung von gebrauchten elektrischen und elektronischen Geräten (Anzuwenden in den Ländern der Europäischen Union und anderen europäischen Ländern mit einem separaten Sammelsystem für diese Geräte)



Das Symbol auf dem Produkt oder seiner Verpackung weist darauf hin, dass dieses Produkt nicht als normaler Haushaltsabfall zu behandeln ist, sondern an einer Annahmestelle für das Recycling von elektrischen und elektronischen Geräten abgegeben werden muss. Durch Ihren Beitrag zum korrekten Entsorgen dieses Produkts schützen Sie die Umwelt und die Gesundheit Ihrer Mitmenschen. Umwelt und Gesundheit werden durch falsches Entsorgen gefährdet. Materialrecycling hilft den Verbrauch von Rohstoffen zu verringern. Weitere Informationen über das Recycling dieses Produkts erhalten Sie von Ihrer Gemeinde, den kommunalen Entsorgungsbetrieben oder dem Geschäft, in dem Sie das Produkt gekauft haben.

### Eliminación de equipamiento eléctrico y electrónico usado



Este símbolo en el producto, sus accesorios o embalaje indica que el producto no debe tratarse como un residuo doméstico. Deshágase de este equipamiento en su punto de recogida más cercano para el reciclaje de residuos eléctricos y electrónicos. En la Unión Europea y otros países europeos existen diferentes sistemas de recogida de productos eléctricos y electrónicos usados. Al asegurar la correcta eliminación de este producto ayudará a evitar riesgos potenciales para el medio ambiente y la salud de las personas que podrían tener lugar si el producto no se eliminara de forma adecuada. El reciclaje de materiales ayudará a conservar los recursos naturales. Por consiguiente, no elimine equipamiento eléctrico y electrónico usado junto con residuos domésticos. Para información más detallada acerca del reciclaje de este producto, póngase en contacto con su oficina municipal, el servicio de eliminación de residuos domésticos o el establecimiento donde adquirió el producto.

## Português

### Eliminação de Equipamento Eléctrico e Electrónico Usado



O símbolo no aparelho, nos seus acessórios ou na embalagem indica que este aparelho não deve ser tratado como resíduos domésticos. Deixe deste aparelho no ponto de recolha de material eléctrico e electrónico para reciclagem mais perto de si. Na União Europeia e noutros países europeus existem sistemas de recolha separada para produtos eléctricos e electrónicos usados. Garantindo uma eliminação correcta deste aparelho, ajudará a evitar possíveis danos ambientais e/ou pessoais, que um incorrecto tratamento do aparelho usado poderia provocar. A reciclagem de materiais ajuda a conservar os recursos naturais. Por isso, não deite fora os aparelhos eléctricos e electrónicos junto com os seus resíduos domésticos. Para informação detalhada sobre a reciclagem deste aparelho, contacte a sua Câmara Municipal, o seu serviço de recolha de lixo ou a loja onde comprou o aparelho.

## Nederlands

### Verwijdering van Oude Elektrische en Elektronische Apparaten (Toepasbaar in de Europese Unie en andere Europese landen met gescheiden ophaalsystemen)



Het symbool op het product of op de verpakking wijst erop dat dit product niet als huishoudafval mag worden behandeld. Het moet echter naar een plaats worden gebracht waar elektrische en elektronische apparatuur wordt gerecycled. Als u ervoor zorgt dat dit product op de correcte manier wordt verwijderd, voorkomt u mogelijk voor mens en milieu negatieve gevolgen die zich zouden kunnen voordoen in geval van verkeerde afvalbehandeling. De recyclage van materialen draagt bij tot het vrijwaren van natuurlijke bronnen. Voor meer details in verband met het recyclen van dit product, neemt u het best contact op met de gemeentelijke instanties, het bedrijf of de dienst belast met de verwijdering van huishoudafval of de winkel waar u het product hebt gekocht.

## French

### Traitement des appareils électriques et électroniques en fin de vie (applicable dans les pays de l'union européenne et aux autres pays européens disposant de systèmes de collecte sélective).



Ce symbole, apposé sur le produit ou sur son emballage, indique que ce produit ne doit pas être traité avec les déchets ménagers. Il doit être remis à un point de collecte approprié pour le recyclage des équipements électriques et électroniques. En s'assurant que ce produit est bien mis au rebut de manière appropriée, vous aiderez à prévenir les conséquences négatives potentielles pour l'environnement et la santé humaine. Le recyclage des matériaux aidera à conserver les ressources naturelles. Pour toute information supplémentaire au sujet du recyclage de ce produit, vous pouvez consulter votre municipalité, votre déchetterie ou le magasin où vous avez acheté le produit.

## Italiano



### Trattamento del dispositivo elettrico od elettronico a fine vita (Applicabile in tutti i paesi dell'Unione Europea e in quelli con sistema di raccolta differenziata)

Questo simbolo sul prodotto o sulla confezione indica che il prodotto non deve essere considerato come un normale rifiuto domestico, ma deve invece essere consegnato ad un punto di raccolta appropriato per il riciclo di apparecchi elettrici ed elettronici. Assicurandovi che questo prodotto sia smaltito correttamente, voi contribuirete a prevenire potenziali conseguenze negative per l'ambiente e per la salute che potrebbero altrimenti essere causate dal suo smaltimento inadeguato. Il riciclaggio dei materiali aiuta a conservare le risorse naturali. Per informazioni più dettagliate circa il riciclaggio di questo prodotto, potete contattare l'ufficio comunale, il servizio locale di smaltimento rifiuti oppure il negozio dove l'avete acquistato.

## Poland



### Utylizacja niepotrzebnego sprzętu elektrycznego i elektronicznego

Taki symbol na produkcie lub na jego opakowaniu oznacza, że produkt nie może być traktowany jako odpad komunalny, lecz powinien być dostarczony do odpowiedniego punktu zbiórki sprzętu elektrycznego i elektronicznego, w celu przerobu i odzysku odpadów.

W krajach Unii Europejskiej i w pozostałych krajach europejskich są odrębne systemy segregacji odpadów przeznaczone do utylizacji sprzętu elektrycznego i elektronicznego.

Przez takie pro ekologiczne zachowanie zapobiegają Państwo potencjalnym negatywnym wpływom na środowisko naturalne oraz na zdrowie ludzi, jakie mogłyby wystąpić w przypadku niewłaściwego procesu składowania tego produktu. Przez zagospodarowanie materiałów oszczędzamy również surowce naturalne. Aby uzyskać bardziej szczegółowe informacje na temat przerobu i odzysku materiałów elektronicznych z tego produktu, proszę skontaktować się z urzędem miasta lub gminy, lokalnym zakładem utylizacji sprzętu elektrycznego i elektronicznego lub ze sklepem, w którym produkt został zakupiony.

## Magyar



### Feleslegessé vált elektromos és elektronikus készülékek hulladékként való eltávolítása (Használható az Európai Unió és egyéb európai országok szelektív hulladékgyűjtési rendszereiben)

Ez a szimbólum a készüléken vagy a csomagolásán azt jelzi, hogy a terméket ne kezelje háztartási hulladékként. Kérjük, hogy az elektromos és elektronikai hulladék gyűjtésére kijelölt gyűjtőhelyen adja le. A feleslegessé vált termékének helyes kezelésével segít megelőzni a környezetet és az emberi egészség károsodását, mely bekövetkezhetne, ha nem követi a hulladék kezelés helyes módját. Az anyagok újrahasznosítása segít a természeti erőforrások megőrzésében. A termék újrahasznosítása érdekében további információért forduljon a lakóhelyén az illetékesekhez, a helyi hulladékgyűjtő szolgáltatóhoz vagy ahhoz az üzlethez, ahol a terméket megvásárolta.



**Likvidace použitých elektrických a elektronických zařízení**

Tento symbol na výrobku, jeho příslušenství nebo obalu označuje, že s tímto výrobkem nesmí být zacházeno jako s domovním odpadem. Výrobek zlikvidujte jeho předáním na sběrné místo pro recyklaci elektrických a elektronických zařízení. V zemích evropské unie a jiných evropských zemích existují samostatné sběrné systémy pro shromažďování použitých elektrických a elektronických výrobků. Zajištěním jejich správné likvidace pomůžete prevenci vzniku potenciálních rizik pro životní prostředí a lidské zdraví, která by mohla vzniknout nesprávným zacházením s odpady. Recyklace odpadových materiálů napomáhá udržení přírodních zdrojů surovin - z uvedeného důvodu nelikvidujte prosím vaše stará elektrická a elektronická zařízení s domovním odpadem.

Pro získání podrobných informací k recyklaci tohoto výrobku kontaktujte prosím pracovníka ochrany životního prostředí místního (městského nebo obvodního) úřadu, pracovníky sběrného dvora nebo zaměstnance prodejny, ve které jste výrobek zakoupili.

**Likvidácia použitých elektrických a elektronických zariadení**

Tento symbol na výrobku, jeho príslušenstve alebo obale označuje, že sa s týmto výrobkom nesmie zaobchádzať ako s domovým odpadom. Výrobok zlikvidujte jeho odovzdaním na zbernom mieste pre recykláciu elektrických a elektronických zariadení. V krajinách európskej únie a v iných európskych krajinách existujú samostatné zberné systémy pre zhromažďovanie použitých elektrických a elektronických výrobkov. Zaistením ich správnej likvidácie pomôžete prevencii vzniku potenciálnych rizík pre životné prostredie a ľudské zdravie, ktoré by mohli vzniknúť nesprávnym zaobchádzaním s odpadmi. Recyklácia odpadových materiálov napomáha udržaniu prírodných zdrojov surovín – z uvedeného dôvodu nelikvidujte prosím vaše staré elektrické a elektronické zariadenia s domovým odpadom.

Pre získanie potrebných informácií k recyklácii tohto výrobku kontaktujte prosím pracovníka ochrany životného prostredia miestneho (mestského či obvodného) úradu, pracovníkov zberného dvora alebo zamestnancov predajne, v ktorej ste výrobok zakúpili.

**Oddaja stare električne in elektronske opreme (veljavno v evropski uniji in ostalih evropskih državah s sistemom zbiranja ločenih odpadkov)**

Če se na izdelku ali a njegovi embalaži nahaja ta simbol, pomeni, da z izdelkom ne smete ravnati enako kot z drugimi gospodinjskimi odpadki. Morate ga oddati na ustrezno zbirno mesto za recikliranje električne in elektronske opreme. S pravilno oddajo tega izdelka boste pomagali preprečiti negativne posledice na okolje in zdravje ljudi, do katerih bi prišlo v primeru neustreznega ravnanja ob odstranitvi tega izdelka. Recikliranje materiala bo pripomoglo k ohranjanju naravnih virov. Podrobnejše informacije o recikliranju tega izdelka lahko dobite pri lokalni mestni upravi, službi oddajanja gospodinjskih odpadkov ali v trgovini, kjer ste izdelek kupili. Odpadno električno in elektronsko opremo lahko oddate brezplačno tudi distributerju neposredno ob dobavi električne oz. elektronske opreme.

## Svenska



**Omhändertagande av gamla elektriska och elektroniska produkter (Användbar i den Europeiska Unionen och andra Europeiska länder med separata insamlingssystem)**

Symbolen på produkten eller emballaget anger att produkten inte får hanteras som hushållsavfall. Den skall i stället lämnas in på uppsamlingsplats för återvinning av el- och elektronikkomponenter. Genom att säkerställa att produkten hanteras på rätt sätt bidrar du till att förebygga eventuellt negativa miljöoch hälsoeffekter som kan uppstå om produkten kasseras som vanligt avfall. Återvinning av material hjälper till att bibehålla naturens resurser. För ytterligare om återvinning bör du kontakta lokala myndigheter eller sophämtningstjänst eller affären där du köpte varan.

## Norsk



**Avhending av gamle elektriske og elektroniske apparater (gjelder i den Europeiske Unionen og andre europeiske land med separat innsamlingsystem)**

Dette symbolet på produktet eller innpakningen indikerer at dette produktet ikke må håndteres som husholdningsavfall. I stedet skal det leveres inn til spesielt innsamlingspunkt for gjenvinning av det elektriske og elektroniske utstyret. Ved å sørge for at dette produktet avhendes på korrekt måte, vil du hjelpe til med å forhindre potensielle negative påvirkninger på miljøet og helse, som ellers kan være resultatet av feilaktig avfallshåndtering av dette produktet. Gjenvinning av disse materialene vil hjelpe til med å ta vare på våre naturressurser. For mer informasjon om gjenvinning av dette produktet, kan du kontakte lokale myndigheter.

## Soumi



**Käytöstä poistetun sähkö-ja elektroniikkalaitteen hävitys (Euroopan Unioni ja muiden Euroopan maiden keräysjärjestelmät)**

Symboli, joka on merkitty Tuotteeseen tai sen pakkaukseen, osoittaa, että tätä tuotetta ei saa käsitellä talousjätteenä. Tuote on sen sijaan luovutettava sopivaan sähkö-ja elektroniikkalaitteiden kierrätyksestä huolehtivaan keräyspisteeseen. Tämän tuotteen asianmukaisen hävittämisen varmistamisella autetaan estämään sen mahdolliset ympäristöön ja terveyteen kohdistuvat haittavaikutukset, joita voi aiheutua muussa tapauksessa tämän tuotteen epäasianmukaisesta jätekäsittelystä. Materiaalien kierrätys säästää luonnonvaroja. Tarkempia tietoja tämän tuotteen kierrättämisestä saa paikallisesta kunnantoimistosta.



**Håndtering af udtjente elektriske og elektroniske produkter (Gælder for den Europæiske Union og andre europæiske lande med separate indsamlingssystemer)**

Dette symbol på produktet eller emballagen angiver, at produktet ikke må behandles som husholdningsaffald. Det skal i stedet indleveres på en deponeringsplads specielt indrettet til modtagelse og oparbejdning af elektriske og elektroniske produkter. Ved at sikre at produktet bortskaffes korrekt, forebygges de eventuelle negative miljø-og sundhedsskadelige påvirkninger, som en ukorrekt affaldshåndtering af produktet kan forårsage. Genindvinding af materialer vil medvirke til at bevare naturens ressourcer. Yderligere information om genindvindingen af dette produkt kan fås hos myndighederne, det lokale renovationselskab eller butikken, hvor produktet blev købt.

