



VIZIO

P50 HDM



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Chapter 1 - Introduction

1.1 - Before Use

Congratulations on your VIZIO P50 HDM 50" Plasma monitor purchase. Thank you for your support of VIZIO and its Plasma display product line. The P50 HDM is a precise electronic product and you should read the following instructions carefully to maximize the performance of the product. It has passed the Class-B EMC test and CSA safety certifications and you can be assured of the highest quality display with the utmost reliability. After you have finished reading the instructions, put them away in a safe place for future reference.

Note: In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

1.2 – Specifications

Product	P50 HDM
Panel:	50" Diagonal, 16:9 Aspect Ratio
Resolution:	1366 x 768 pixels
Pixel (Dot) Pitch:	0.81 (H) mm x .81 mm (V)
Display Compatibility:	HDTV (720p)
Signal Compatibility:	480i (SDTV), 480P (EDTV), 720P (HDTV), 1080i (HDTV)
Color:	1 Billion
Brightness:	1000 cd/m2 (typical)
Contrast:	10,000:1 (typical)
Viewing Angle:	>170° (horizontal and vertical)
Inputs:	2x Composite Video plus Stereo Audio, 2x S-Video plus Stereo Audio, 2x Component YPbPr plus Stereo Audio, 1x Analog RGB plus Stereo Audio (shared with Digital Video), 2x Digital Video (HDMI™**) with HDCP plus Stereo Audio (RCA)
Outputs:	1x Audio, 1x Headphone (Stereo Mini-jack)
Features:	Single Scan Technology for Higher Contrast, Reduced Solarisation and Reduced False Contouring, and , PIP, POP, CC, V-Chip, 3D Comb Filter, Zoom, Freeze, DCDi® by Faroudja*** Motion Adaptive De-Interlace, 3-D Noise Reduction, Sharpness Improvement, Non-linear Chroma Enhancement, Closed Color Suppression, Non-Linear Scaling, Adaptive Contrast and Color, NTSC Video decoding via Video (CVBS, S-Video or Component YCbCr), Progressive Scan Video via Component YPbPr, VGA or HDMI™, HDTV via Component YPbPr, VGA or HDMI™ (Set Top Box required), Computer 640 x 480, 800 x 600, 1024 x 768, 1280 x 1024 via VGA or HDMI™, SRS TruSurround XT**** Sound enhancement.
Speakers:	Built-in 10W x 2
Power Input:	IEC Connector for direct power line connection
Voltage Range:	100 ~ 240Vac at 50/60 Hz
Power consumption:	550W Max (490W average)
Dimensions:	48.8" x 34.3" x 12.2" (1241 x 871 x 310 mm) w/stand, 48.8" x 33.5" x 3.89" (1241 x 850 x 99 mm) w/o stand
Net Weight:	122 lbs (55.2 kgs) w/stand, and 110 lbs (49.7 kgs) w/o stand
Gross Weight:	144 lbs (65.2 kgs)
Certifications:	CSA, FCC Class B

**Product specifications may change without notice or obligation. ** HDMI, the HDMI logo and High-Definition Multimedia interface are trademarks or registered trademarks of HDMI™ Licensing LLC.*

****Registered trademark of Genesis Microchip Inc.*

SRS TruSurround XT, SRS and **(●)** symbol are trademarks of SRS Labs, Inc.
TruSurround XT TruSurround XT technology is incorporated under license from SRS Labs, Inc.



1.3 - Opening the Package

- The VIZIO P50 HDM is packaged in a carton together with other standard accessories. Any optional accessories are packed separately in another carton.
- The weight of the Plasma monitor is approximately 122 lbs. Due to the size and weight of the product, it is recommended that it be handled by a minimum of 2 persons, preferably 3 people.
- The glass installed on the front of the product can be easily scratched or broken, please handle the product gently. Never place the unit on a surface with the glass facing downwards unless it is on protective padding.
- When opening the carton, check that the product is in good condition and that all standard accessories and items are included.
- Save the original box and all packing materials for future shipping needs.

1.4 - Installation

- Please read the user manual carefully before performing the installation.
- The power consumption of the display is approximately 550W Max (490W average), significantly higher than a typical television. Please use the power cord designated for the product. When an extension cord is required, use one with the correct power rating. The cord must be grounded and the grounding feature must not be defeated.
- The product should be installed on a flat surface to avoid tipping. Space should be maintained between the back of the product and the wall for proper ventilation. See Section 3.4 - Preparing the Plasma for Wall Mounting, page 23, for additional information.
- Avoid installing the product in the kitchen, bathroom or other places with high humidity dust or smoke, so as not to shorten the service life of the electronic components.
- Please ensure the product is installed with the screen in landscape orientation. Any 90° clockwise or counterclockwise installation may induce poor ventilation and subsequent component damage.
- To protect the screen and avoid screen burn, do not keep a static picture displayed for a prolonged period of time. This can result in "image sticking" (see below for additional details) of the image and is not covered by the warranty.

1.4.1 - Image Sticking

The Plasma monitor illuminates phosphors to display images which have a finite illumination life. After extended periods of illumination, the brightness of the phosphor will be degraded to such an extent that stationary images would burn-in that part of the screen. Displaying the same stationary patterns such as black bars, stock tickers, video games or shopping channel logos and pricing displays, over extended periods of time can leave this type of permanent image sticking. You can avoid this by mixing your viewing patterns. Do not show the same stationary image for more than 15% of the total monitor viewing in any one week.

With the VIZIO VIC (VIZIO Image Cleaner) feature you are able to remove ghosts of previous images. Note that the usual plasma panel precautions of avoiding prolonged display of stationary images must be maintained. This will not remove images that have been displayed for too long.

For additional information, please refer to Section 3.5.2.5 – Setup, page 28 for using the panel protection feature.

NOTE: "Image Sticking" constitutes misuse and is NOT COVERED by the manufacturer's warranty.



1.5 - Important Safety Guidelines

This product is designed and manufactured to operate within defined design limits, and misuse may result in electric shock or fire. To prevent the product from being damaged, the following rules should be observed for the installation, use and maintenance of the product. Read the following safety instructions before operating the display. Keep these instructions in a safe place for future reference.

- To avoid the risk of electric shock or component damage, switch off the power before connecting other components to the P50 HDM Plasma monitor.
- Unplug the power cord before cleaning the P50 HDM Plasma monitor. A damp cloth is sufficient for cleaning the P50 HDM Plasma monitor. Do not use a liquid or a spray cleaner for cleaning the product. Do not use abrasive cleaners.
- Always use the accessories recommended by the manufacturer to insure compatibility.
- When moving the P50 HDM Plasma monitor from an area of low temperature to an area of high temperature, condensation may form on the housing. Do not turn on the P50 HDM Plasma monitor immediately after this to avoid causing fire, electric shock or component damage.
- Do not place the P50 HDM Plasma monitor on an unstable cart, stand, or table. If the P50 HDM Plasma monitor falls, it can injure a person and cause serious damage to the appliance. Use only a cart or stand recommended by the manufacturer or sold with the P50 HDM Plasma monitor.
- A distance of at least 3 feet should be maintained between the P50 HDM Plasma monitor and any heat source, i.e. radiator, heater, oven, amplifier etc. Do not install the product close to smoke. Operating the product close to smoke or moisture may cause fire or electric shock.
- Slots and openings in the back and bottom of the cabinet are provided for ventilation. To ensure reliable operation of the P50 HDM Plasma monitor and to protect it from overheating, be sure these openings are not blocked or covered. Do not place the P50 HDM Plasma monitor in a bookcase or cabinet unless proper ventilation is provided.
- Never push any object into the slot on the P50 HDM Plasma monitor cabinet. Do not place any objects on the top of the product. It could short circuit parts causing a fire or electric shock. Never spill liquids on the P50 HDM Plasma monitor.
- The P50 HDM Plasma monitor should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- The power cable must be replaced when using different voltage from that specified in the User Manual. For more information, contact your dealer.
- The P50 HDM Plasma monitor is equipped with a three-pronged grounded plug, a plug with a third (grounding) pin. This plug will fit only into a grounded power outlet as a safety feature. If your outlet does not accommodate the three-wire plug, have an electrician install the correct outlet, or use an adapter to ground the appliance safely. Do not defeat the safety purpose of the grounded plug.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- The wall socket shall be installed near the equipment and shall be easily accessible.
- Only the marked power source can be used for the product. Any power source other than the specified one may cause fire or electric shock.
- Do not touch the power cord during lightning. To avoid electric shock, avoid handling the power cord during electrical storms.
- Unplug the unit during a lightning storm or when it will not be used for long period of time. This will protect the P50 HDM Plasma monitor from damage due to power surges.
- Do not attempt to repair or service the product yourself. Opening or removing the back cover may expose you to high voltages, the risk of electric shock, and other hazards. If repair is required, please contact your dealer and refer all servicing to qualified service personnel.
- Keep the product away from moisture. Do not expose this appliance to rain or moisture. If water penetrates into the product, unplug the power cord and contact your dealer. Continuous use in this case may result in fire or electric shock.
- Do not use the product if any abnormality occurs. If any smoke or odor becomes apparent, unplug the power cord and contact your dealer immediately. Do not try to repair the product yourself.
- Avoid using dropped or damaged appliances. If the product is dropped and the housing is damaged, the internal components may function abnormally. Unplug the power cord immediately and contact your dealer for repair. Continued use of the product may cause fire or electric shock.
- Do not install the product in an area with heavy dust or high humidity. Operating the product in environments with heavy dust or high humidity may cause fire or electric shock.
- Follow instructions for moving the product. Ensure that the power connector and any other cables are unplugged before moving the product.
- Hold the power connector when removing the power cable. Pulling the power cable itself may damage the wires inside the cable and cause fire or electric shock. When the product will not be used for an extended period of time, unplug the power connector.
- To avoid risk of electric shock, do not touch the connector with wet hands.
- Insert batteries in accordance with instructions. Incorrect polarities may cause damage and leakage of the batteries, operator injury and contamination the remote controller.
- If any of the following occurs please contact the dealer:
 - The power connector fails or frays.
 - Liquid sprays or any object drops into the P50 HDM Plasma monitor.
 - The Display is exposed to rain or other moisture.
 - The Display is dropped or damaged in any way.
 - The performance of the Display changes substantially.



Electrical Warnings

Do not place this product in a location that is subject to heavy vibration, or on an unstable surface such as an inclined surface. The product may fall off or fall over, causing injuries.

When moving the product, be sure to turn off the power and leave 5 seconds then disconnect all the cables. While moving the product, watch your step. The product may be dropped or fall, leading to injuries of electric shock.

This product should be moved by two or more persons. If one person attempts to carry this product alone, he/she may be injured.

This product contains glass. The glass may break, causing injuries, if shock, vibration, heat, or distortion is applied to the product.

This product may be damaged if it is subject to excessive stresses (such as excessive voltage, current, or temperature). The absolute maximum ratings specify the limits of these stresses.

Do not switch AC power on/off in the short time, be sure to turn off the power and leave 5 seconds then AC power on.

If this product is used as a display board to display a static image, "image sticking" occurs. This means that the luminance of areas of the display that remain lit for a long time drops compared with the luminance of areas that are lit for a shorter time, causing uneven luminance across the display. The degree to which this occurs is in proportion to the luminance at which the display is used. To prevent this phenomenon, therefore, avoid static images as much as possible and design your system so that it is used at a low luminance, by reducing signal level difference between bright area and less bright area through signal processing.

Within the warranty period, general faults that occur due to defects in components such as ICs will be rectified by LGE without charge. However, IMAGE STICKING is not included in the warranty. Repairs due to the other faults may be charged for depending on responsibility for the faults.

In case of AC PDP driving mechanism, because the brightness of output is not always proportional to input signals. Therefore the non-linearity of gray can occasionally be observed in certain gray levels as well as Contour and Error Diffusion Noise can be appeared when a dark picture is on the screen especially. These are phenomena that can be observed on the PDP driving mechanism. With simple adjustment to picture brightness control, these can be reduced considerably.

Because of the need to control the power consumption on the PDP driving mechanism, the APL (Average Picture Level) mode was equipped. Thus, as the picture on the screen changes, there can be slightly switched in brightness. This also is a phenomenon that can be observed on the PDP driving mechanism.

HDMI™ Warnings

If you hot-plug the HDMI™ cable, the signal will be unstable for about 2 to 5 seconds.

Only supports timing 640x480 @60Hz DVI



1.6 - Package Contents



VIZIO P50 HDM Plasma Monitor

VIZIO Universal Remote Control

Power Cord

AV Cable

This User Guide

Registration Card

Warranty Card

Quick Connection Guide

Accessory Promotional Flyer

P50 HDM Product Brochure

IMPORTANT: Save the original box and all the packing material for future shipping needs.

Note: Your product may also include various other accessories depending on region of purchase.



1.7 - Front Panel Controls



Power LED - Lights green when powered on.

Remote Control Sensor – This is the window that passes all of the remote signals to the sensor. Point the remote control directly at this window for the best response to the remote signal.

1.8 - Side Panel Controls

Power - Switch the monitor on by pressing the button once. Press the button again to turn the monitor off.

Menu – This button activates the OSD. If a sub-menu is active, pressing this button will return to the previous menu level.

Select ▲/▼ - While the OSD is active, these buttons function as select controls in the OSD menus.

Volume ◀/▶ - These buttons are used to increase or decrease the speaker volume.

Input/Enter - Repeated pressing of this button steps through the input sources in the following sequence: AV1 (S-Video or video*), AV2 (S-Video or video*), Analog HD1, Analog HD2, Digital HD1, Digital HD2, and RGB. Once you have stepped through the entire sequence, you will return to the beginning.

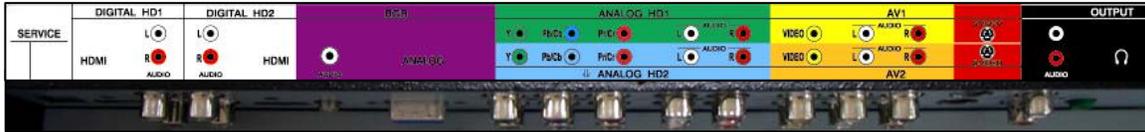
Additionally, when the OSD is active, this button confirms the menu function to be adjusted. When the OSD is not active, pressing this button will display the current input mode.



**S-Video has priority. If a signal is connected to AV1 S-Video by itself or signals are connected to AV1 S-Video and AV1 Video simultaneously, then S-Video will be the only choice for AV1. If a signal is connected to AV1 Video only, then Video will be the only choice for AV1. The same input priority scheme applies to AV2.*



1.9 - Rear Panel Connections



1. **Service** – To be used for factory service **only**.
2. **Digital HD1 (HDMI™)** - Connect the primary source for a DVD multimedia player, computer or set-top box and the audio through this connection. This connection is indicated by the white color band on the back of the display. *Note: This is a digital only connector.*
3. **Digital HD2 (HDMI™)** - Connect the secondary source for a DVD multimedia player, computer or set-top box and the audio through this connection. This connection is indicated by the white color band on the back of the display. *Note: This is a digital only connector.*
4. **RGB (Analog RGB/Audio In)** - Connect the video from a computer or set-top box and the audio from a computer or set-top box to these connections. This connection is indicated by the purple color band on the back of the display.
5. **Analog HD1 (Component YPbPr/YCbCr with Audio L/R)** - Connect the primary source for component video, such as a DVD player or set-top box. Use the connectors indicated by the green, blue, and red for the video input and the white and red connectors for the audio input. This connection is indicated by the green color band on the back of the display.

Note: YPbPr is used for the following signals: 480i, 480p, 720p, and 1080i. YCbCr is used for 480i and 480p only.

6. **Analog HD2 (Component YPbPr/YCbCr with Audio L/R)** - Connect the secondary source for component video, such as a DVD player or set-top box. Use the connectors indicated by the green, blue, and red for the video input and the white and red connectors for the audio input. This connection is indicated by the blue color band on the back of the display.
7. **AV1** – Connect the primary source for composite video devices, such as a VCR or video game. Use the white and red connectors to connect the external audio from the same source. This connection is indicated by the yellow color band on the back of the display.
8. **AV2** – Connect the secondary source for composite video devices, such as a VCR or video game. Use the white and red connectors to connect the external audio from the same source. This connection is indicated by the orange color band on the back of the display.
9. **S-Video1*** - Connect the primary source for S-Video devices, such as a VCR of video games. Use the white and connectors from the AV1 group to connect the external audio from the same source.
10. **S-Video2*** - Connect the secondary source for S-Video devices, such as a VCR of video games. Use the white and red connectors from the AV2 group to connect the external audio from the same source.
11. **Audio Out** - Connect the audio from the plasma monitor to an external device, such as an external amplifier or secondary TV.
12. **Head Phone Jack** - Connect external headphones (not included) to this port. *Note: if headphones are connected, users will need to select speakers off in the Audio Settings menu for sound to be muted through the standard speakers.*

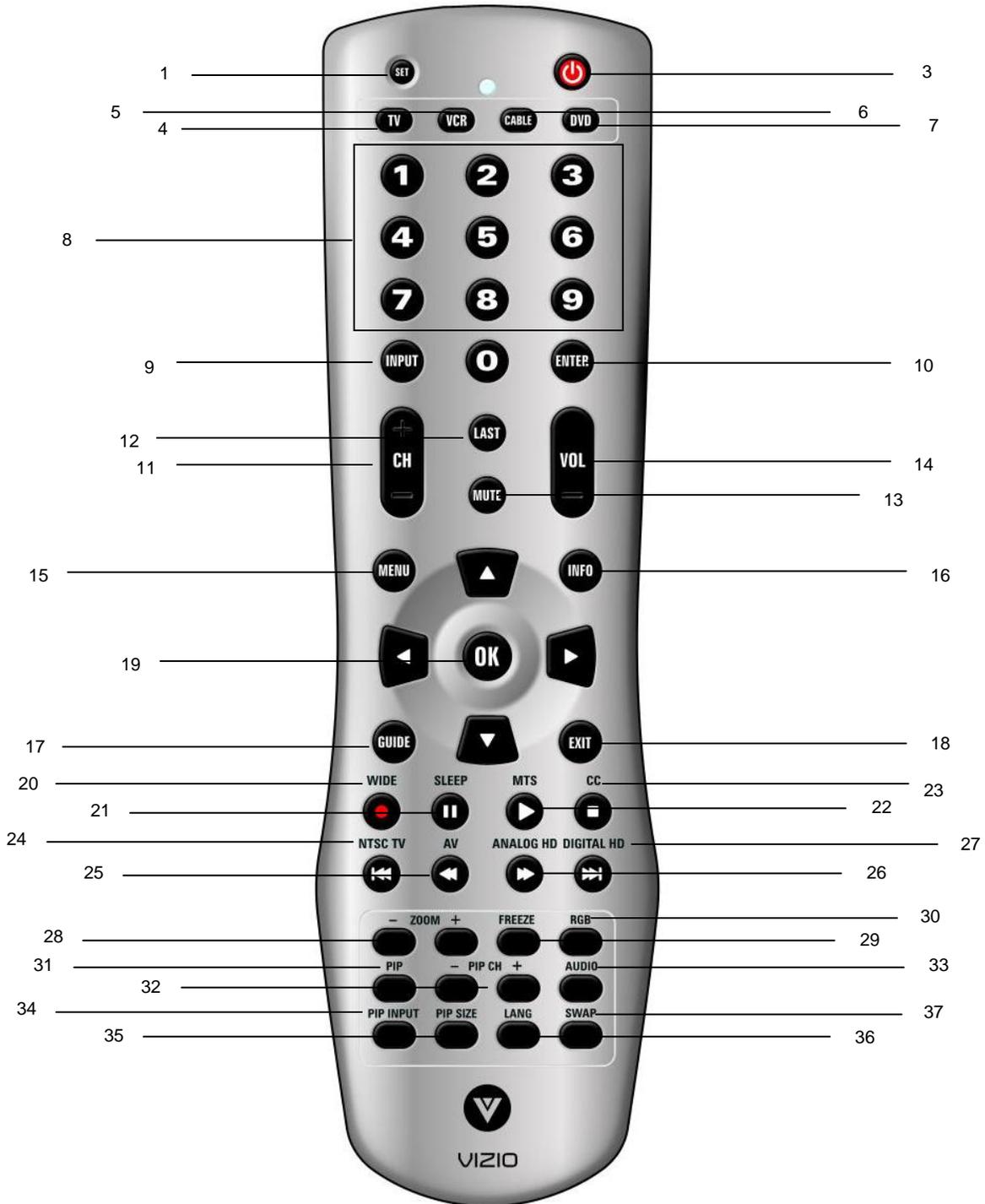
**S-Video has priority. If a signal is connected to AV1 S-Video by itself or signals are connected to AV1 S-Video and AV1 Video simultaneously, then S-Video will be the only choice for AV1. If a signal is connected to AV1 Video only, then Video will be the only choice for AV1. The same input priority scheme applies to AV2.*



1.10 - VIZIO Universal Remote Control

The VIZIO Universal Remote Control is a comprehensive remote that can be used to control up to four different components. The remote control button functions are explained on the following pages.

VIZIO Universal Remote Control Button Description



1.10.1 - Key Remote Control Functions

1. SET – This button starts all programming sequences.
2. Remote LED – Blinks when the remote is being programmed or is sending a signal to your plasma display.
3. POWER – Press this key to turn the plasma display on from standby mode. Press it again to return to the standby mode.
4. TV – This button selects a programmed TV. *Note: this button has been pre-programmed for the VIZIO P50 HDM Plasma monitor.*
5. VCR – This button selects a programmed VCR.
6. CABLE – This button selects a programmed cable TV set-top box or selects a programmed satellite TV set-top box.
7. DVD – This button selects a programmed DVD player.
8. Number Button Pad – Use these buttons to select a channel or enter a password.
9. INPUT – This button allows the user to cycle through the input sources in the following sequence: AV1 (S-Video or video*), AV2 (S-Video or video*), Analog HD1, Analog HD2, Digital HD1, Digital HD2, and RGB.
10. Enter – This button works as an ENTER button in video modes.
11. CH (+ or -) – These buttons change the channels up or down. *Note: these buttons are not functional for the VIZIO P50 HDM.*
12. LAST – This button recalls the previously viewed channel. *Note: this button is not functional for the VIZIO P50 HDM.*
13. MUTE – This button turns the sound on and off.
14. VOL (+ or -) – These buttons turn volume up or down.
15. MENU – This button is used to turn the OSD on.
16. INFO – This button displays the input the user is currently watching.
17. GUIDE – This button displays the electronic program guide. *Note: this button is not functional for the VIZIO P50 HDM.*
18. EXIT – This button exits the OSD menus.
- ▼▲▶◀ - These buttons navigate the on-screen display (OSD) menus.
19. OK – This button works to select your chosen option in on-screen display (OSD) menus.
20. Record/Wide – This button functions as a VCR Record when the component is activated with the remote control. This button also cycles through standard and widescreen viewing modes. Options include Wide, Zoom, and Normal. *Note: in RGB mode, the only options are Normal and Wide.*
21. Pause/Sleep - This button pauses the CD, DVD or VCR when the component is activated with the remote control. Additionally, this button allows the user to select the sleep options by adjusting the timer in 15 minute increments up to 120 minutes.
22. Play/MTS – This button plays the CD, DVD or VCR when the component is activated with the remote control. *Note: this button is not functional for the VIZIO P50 HDM.*
23. Stop/CC – This button stops the CD, DVD or VCR when the component is activated with the remote control. Additionally, this button will select the Closed Caption menu. Options include the following: OFF, CC1, CC2, CC3, CC4, Text1, Text2, Text3, and Text4.



* S-Video has priority. If a signal is connected to AV1 S-Video by itself or signals are connected to AV1 S-Video and AV1 Video simultaneously, then S-Video will be the only choice for AV1. If a signal is connected to AV1 Video only, then Video will be the only choice for AV1. The same input priority scheme applies to AV2.

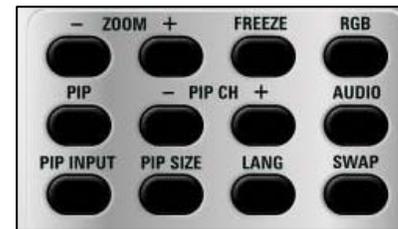


24. Skip Channel Reverse/NTSC TV - This button functions as a DVD "previous chapter" when the DVD player is activated with the remote control. This button also selects a programmed NTSC TV. *Note: this button is not functional for the VIZIO P50 HDM.*



25. Reverse/AV – This button reverses the CD, DVD or VCR when the component is activated with the remote control. Additionally, this button will select the AV component.
26. Forward/Analog HD – This button forwards the CD, DVD or VCR when the component is activated with the remote control. Additionally, this button will select the Analog HD component.
27. Skip Channel Forward/Digital HD – This button functions as a DVD "next chapter" when the component is activated with the remote control. Additionally, this button will select the Digital HD component.

28. ZOOM (- and +) – Use this key to zoom the image in or out. When in ZOOM mode, a small window will appear showing which area of the screen is enlarged. Use the arrow keys to move the zoomed portion. Press the OK repeatedly to return to the standard picture.



29. FREEZE – Press this key to "Freeze-Frame" the current screen. Users may press this key again to continue playing. *Note: play will resume automatically after one minute.*
30. RGB – This button selects a connected RGB component such as a PC.
31. PiP – Use this button to activate the picture-in-picture mode.
32. PiP CH (- and +) – These buttons are used to select the channels within the PiP screen when TV is the input selected. *Note: these buttons are not functional for the VIZIO P50 HDM.*
33. AUDIO – Press this key to switch the audio from the main screen to the sub-screen while in PiP or POP mode.
34. PiP Input – Press this button to choose the PiP input from the OSD menu. Choose from one of the following: AV1 (S-Video or video*), AV2 (S-Video or video*), Analog HD1, Analog HD2, Digital HD1, Digital HD2, and RGB. *Note: Users must be in PiP mode for this button to be functional. For additional information regarding the PiP options, see Section 3.6.2 - Picture-in-Picture (PiP) Mode, page 32.*
35. PiP Size – Press this button to select the size of the PiP screen from one of the following: small or large.
36. LANG – *Note: this button is not functional for the VIZIO P50 HDM.*
37. Swap – Used to swap the inputs from the main screen and the sub-screen while in the PiP mode.

Note: The remote control layout is for reference only.

**S-Video has priority. If a signal is connected to AV1 S-Video by itself or signals are connected to AV1 S-Video and AV1 Video simultaneously, then S-Video will be the only choice for AV1. If a signal is connected to AV1 Video only, then Video will be the only choice for AV1. The same input priority scheme applies to AV2.*



1.10.2 - Insertion of Batteries in the Remote Control

Insert two AA batteries into the remote control. Make sure that you match the (+) and (-) symbols on the batteries with the (+) and (-) symbols inside the battery compartment. Re-attach the battery cover.

Precautionary Tips for Inserting the Batteries:

- Only use the specified AA batteries.
- Do not mix new and old batteries. This may result in cracking or leakage that may pose a fire risk or lead to personal injury.
- Inserting the batteries incorrectly may result in cracking or leakage that may pose a fire risk or lead to personal injury.
- Dispose of the batteries in accordance with local laws and regulations.
- Keep the batteries away from children and pets.



1.10.3 - Remote Control Range

- Point the remote control at the remote control sensor to transmit the commands.
- Do not place any obstacles between the remote control and the receiver window.
- The effective range of the remote control is approximately 32 feet (10 meters) from the front of the receiver window, 30° to the left and right, 20° up and down.

1.10.4 - Precautions for the VIZIO Universal Remote Control

- Remote control should be kept dry and away from heat sources. Avoid humidity.
- If the display responds erratically to the remote control or does not respond at all, check the batteries. If the batteries are low or exhausted, replace them with fresh batteries.
- When not using the remote control for a long period of time, remove the batteries.
- Do not take apart the batteries, heat them, or throw them into a fire.
- Do not subject the remote control to undue physical stress, such as striking or dropping it.
- Do not attempt to clean the remote control with a volatile solvent. Wipe it with a clean, damp cloth.



Chapter 2 - Connecting Components

2.1 - Which Video Connection Should I Use?

The VIZIO P50 HDM Plasma Monitor has four different ways to connect your video equipment from a basic one to the most advanced for digital displays.

Connection Quality	Connector	Color Codes for Rear Panel	Description
Basic		Yellow and Orange	AV1/AV2 (Composite) - The complete video signal is carried through this single pin connector. This is the most commonly used video connection.
Good		Red	S-Video - The video signal is separated into two signals, one containing the black-and-white information and the other containing the color information. Separating the color in this way avoids 'cross color' effects where closely spaced black and white lines are erroneously displayed in color. It also enables text to be displayed more sharply.
Better		Green and Blue	Analog HD1/HD2 (Component) - The video signal is separated into three signals, one containing the black-and-white information and the other two containing the color information. This enhancement over S-Video takes advantage of the superior picture provided by progressive scan DVD players and HDTV formats.
Best		White	Digital HD1/HD2 (HDMI™ - High-Definition Multimedia Interface) - It is the first and only industry-supported, uncompressed, all-digital audio/video interface. HDMI™ provides an interface between any audio/video source, such as a set-top box, DVD player, or AV receiver and an audio and/or video monitor, such as a digital television (DTV), over a single cable.



2.2 - Connecting Your DVD Player

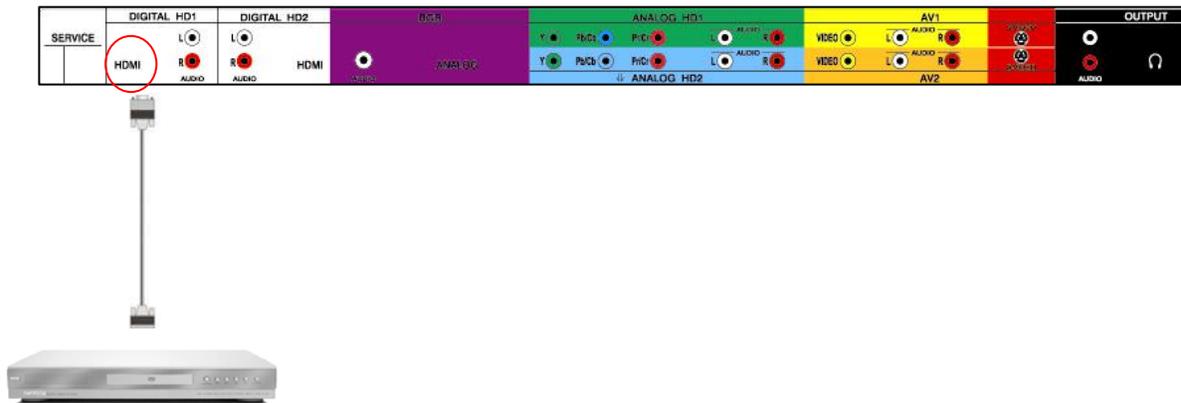
You have several options for connecting your DVD player to your new P50 HDM plasma monitor – HDMI™ (Digital HD), Component (Analog HD), S-Video (AV), and Composite (AV) inputs. Based on your home theater configuration, you can decide which option is the right one for you.

2.2.1 - Using HDMI™ (Digital HD)

DVD players that have a digital interface such as HDMI™ (High-Definition Multimedia Interface) should be connected to the HDMI™ input of the VIZIO P50 HDM plasma monitor for optimal results.

Note: To maintain the display quality, use a VIZIO certified HDMI™ cable that is 10 meters or less. See www.vizioce.com for details.

Installation:



1. Turn off the power to the plasma monitor and DVD player.
2. Connect a HDMI™ cable to the HDMI™ output of your DVD player and the other end to the HDMI™ input (white color band) in the rear of your plasma monitor.
3. Turn on the power to the plasma monitor and your DVD player.
4. Select Digital HD1 using the INPUT button on the side of the plasma monitor, or the “Digital HD” or “Input” button on the remote control.

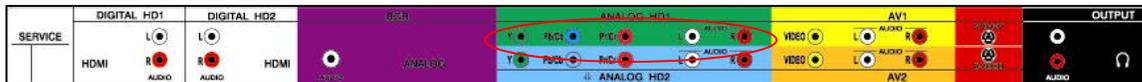
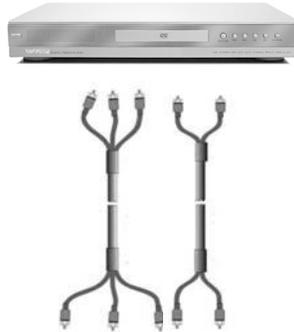
Note:

- a) If you need to connect a DVI device to your P50HDM monitor, we recommend using an HDMI™-DVI cable (contact VIZIO for these cables). We suggest you don't use an HDMI™/DVI adapter since it may physically block the adjacent audio inputs.
- b) The HDMI™ input on your plasma monitor supports High-bandwidth Digital Content Protection (HDCP). HDCP encrypts the transmission between the video source and the digital display for added security and protection.
- c) If you are already using the Digital HD1 input for another component, or you do not want to use the Digital HD1 input for the DVD player, you can connect the DVD player to the Digital HD2 connections coded by the white color band.
- d) Refer to your DVD player user manual for more information about the video output requirements of the product.



2.2.2 - Using Component (Analog HD) Video

Installation:



1. Turn off the power to the plasma monitor and DVD player.
2. Connect the Y (green color) connector on the rear of your DVD player to the corresponding Y (green color) connector in the Analog HD1 group (green color band) in the rear of your plasma monitor.
3. Connect the Pb (blue color) connector on the rear of your DVD player to the corresponding Pb (blue color) connector in Analog HD1 group (green color band) in the rear of your plasma monitor.
4. Connect the Pr (red color) connector on the rear of your DVD player to the corresponding Pr (red color) connector in the Analog HD1 group (green color band) in the rear of your plasma monitor.
5. Connect the R (red color) and L (white color) audio connectors on the rear of your DVD player to the R (red color) and L (white color) audio input connectors in the Analog HD1 group (green color band) in the rear of your plasma monitor.
6. Turn on the power to the plasma monitor and DVD player.
7. Select Analog HD1 using the INPUT button on the side of the plasma monitor, or the "Analog HD" or "Input" button on the remote control.

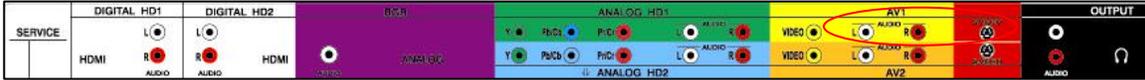
Note:

- a) If you are already using the Analog HD1 input for another component, or you do not want to use the Analog HD1 input for the DVD player, you can connect the DVD player to the Analog HD2 connections coded by the blue color band.
- b) Refer to your DVD player user manual for more information about the video output requirements of the product.



2.2.3 - Using S-Video (AV)

Installation:



1. Turn off the power to the plasma monitor and DVD player.
2. Connect the S-Video jack on the rear of your DVD player to the S-Video1 jack (red color band) on the back of your plasma monitor.
3. Connect the R (red color) and L (white color) audio connectors on the rear of your DVD player to the R (red color) and L (white color) audio input connectors in the AV 1 group (yellow color band) in the rear of your plasma monitor.
4. Turn on the power to the plasma monitor and DVD player.
5. Select AV1 (S-Video) using the INPUT button on the side of the plasma monitor, or the "Analog HD" or "Input" button on the remote control

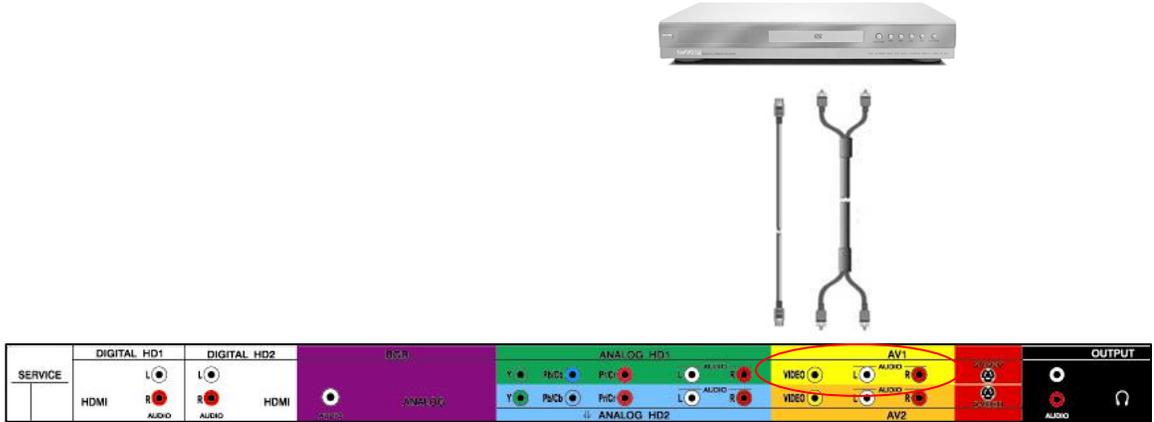
Note:

- a) *If you are already using the S-Video1 input for another component, or you do not want to use the S-Video1 input for the DVD player, you can connect the DVD player to the S-Video2 connections. If you are using S-Video2, then please make sure you connect the audio in the AV2 group.*
- b) *Refer to your DVD player user manual for more information about the video output requirements of the product.*



2.2.4 - Using Composite (AV) Video

Installation:



1. Turn off the power to the plasma monitor and DVD player.
2. Connect the Video (yellow color) connector on the rear of your DVD player to the Video connector in the AV 1 group (yellow color band) in the rear of your plasma monitor.
3. Connect the R (red color) and L (white color) audio connectors on the rear of your DVD player to the R (red color) and L (white color) audio input connectors in the AV 1 group (yellow color band) in the rear of your plasma monitor.
4. Turn on the power to the plasma monitor and DVD player.
5. Select AV1 (video) using the INPUT button on the side of the plasma monitor, or the “AV” or “Input” button on the remote control.

Note:

- a) *If you are already using the AV1 input for another component, or you do not want to use the AV1 input for the DVD player, you can connect the DVD player to the AV2 in (orange color band). If you are using AV2, then please make sure you connect the audio in the AV2 group.*
- b) *Refer to your DVD player user manual for more information about the video output requirements of the product.*



2.3 - Connecting Your HDTV Set-Top Box

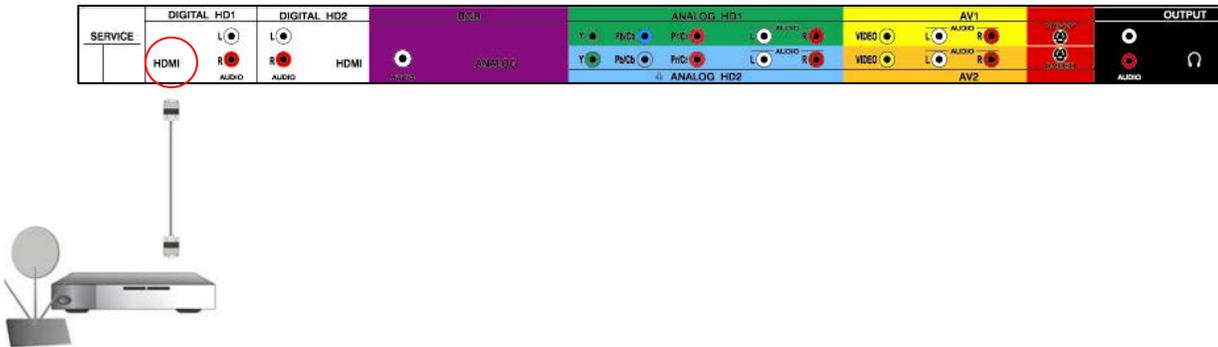
You have several options for connecting your HDTV Set-Top Box to your new P50 HDM plasma monitor: HDMI™ (Digital HD) and RGB inputs. Based on your home theater configuration, you can decide which option is the right one for you.

2.3.1 - Using HDMI™ (Digital HD)

Digital Set-Top boxes that have a digital interface such as HDMI™ (High-Definition Multimedia Interface) should be connected to the HDMI™ input of the VIZIO P50 HDM plasma monitor for optimal results.

Note: To maintain the display quality, use a VIZIO certified HDMI™ cable that is 10 meters or less. See www.vizioce.com for details.

Installation:



1. Turn off the power to the plasma monitor and HDTV Set-Top Box.
2. Connect a HDMI™ cable to the HDMI™ output of your HDTV Set-Top Box and the other end to the HDMI™ input (white color band) in the rear of your plasma monitor.
3. Connect the Audio Out on your HDTV Set-Top Box to the Audio within the Digital HD1 group (white color band) on your plasma monitor (*please see note below*).
4. Turn on the power to the plasma monitor and your HDTV Set-Top Box.
5. Select Digital HD1 using the INPUT button on the side of the plasma monitor, or the “Digital HD” or “Input” button on the remote control.

Note:

- a) If you need to connect a DVI device to your P50HDM monitor, we recommend using an HDMI™-DVI cable (contact VIZIO for these cables). We suggest you don't use an HDMI™/DVI adapter since it may physically block the adjacent audio inputs.
- b) The HDMI™ input on your plasma monitor supports High-bandwidth Digital Content Protection (HDCP). HDCP encrypts the transmission between the video source and the digital display for added security and protection.
- c) If you are already using the Digital HD1 input for another component, or you do not want to use the Digital HD1 input for the HDTV Set-Top Box, you can connect the HDTV Set-Top Box to the Digital HD2 connections coded by the white color band.
- d) Refer to your HDTV Set-Top Box user manual for more information about the video output requirements of the product or consult your satellite or cable operator.

For additional information to use your satellite or cable box remote, please see 3.7.5 – Using Cable Box or Satellite Box Remote, page 36.



2.3.2 - Using RGB Video

Installation:



1. Turn off the power to the plasma monitor and HDTV Set-Top Box.
2. Connect a 15-pin D-Sub RGB cable to the RGB output of your HDTV Set-Top Box and the other end to the RGB input (purple color band) in the rear of your plasma monitor.
3. Connect the Audio Out on your HDTV Set-Top Box to the Audio within the RGB group (purple color band) on your plasma monitor.
4. Turn on the power to the plasma monitor and your HDTV Set-Top Box.
5. Select RGB using the INPUT button on the side of the plasma monitor, or the “RGB” or “Input” button on the remote control.

Note: Refer to your HDTV Set-Top Box user manual for more information about the video output requirements of the product or consult your satellite or cable operator.

2.4 - Connecting Your VCR or Video Camera

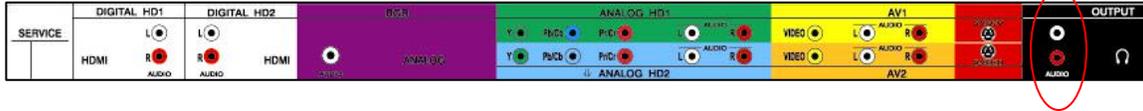
Installation:

1. Turn off the power to the plasma monitor and VCR or video camera.
2. Connect the S-Video jack on your VCR or video camera to the S-Video1 jack (red color band) on the rear of your plasma monitor.
3. Connect the R (red color) and L (white color) audio connectors on the rear of your VCR or Video Camera to the R (red color) and L (white color) audio input connectors in the AV 1 group (yellow color band) in the rear of your plasma monitor.
4. Turn on the power to the plasma monitor and VCR or video camera.
5. Select AV1 (S-Video) using the INPUT button on the side of the plasma monitor, or the “AV” or “Input” button on the remote control.

Note: Refer to your VCR or video camera user manual for more information about the video output requirements of the product.

2.5 - Connecting External Amplified Speakers or Amplifier

Installation:

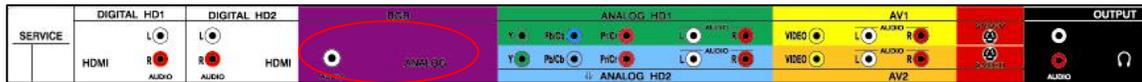


1. Turn off the power to the plasma monitor and external amplifier.
2. Connect the R (red color) and L (white color) audio input connectors on the rear of your amplifier to the R (red color) and L (white color) audio output connectors in the rear of your plasma monitor.
3. Turn on the power to the plasma monitor and amplifier.
4. Then press the menu button on the remote control to open the OSD menu.
5. Press the ▼ on the remote control to select the Audio Settings menu.
6. Press the ► on the remote control to enter into the Audio Settings sub menu.
7. Press the ▼ on the remote control to select SPEAKERS and then press the ► on the remote control OFF to switch to the display over to use external speakers.



2.6 - Connecting a Computer

Installation:



1. Turn off the power to the plasma monitor and Computer.
2. Connect a 15-pin D-sub RGB cable to the RGB output of your computer and the other end to the RGB input (purple band) in the rear of your plasma monitor.
3. Connect the RGB Audio Out on your computer to the RGB Audio (purple band) at the rear of your plasma monitor.
4. Turn on the power to the plasma monitor and your computer.
5. Select RGB using the INPUT button on the side of the plasma monitor, "RGB" or "Input" button on the remote control.

Note:

- a) For the best picture quality when connecting a PC through RGB or DVI, set your product timing mode to VESA 1024 x 768 @60Hz. Please refer to the graphic card's user guide for additional information on how to set the timing mode.
- b) Refer to your computer user manual for more information about the video output requirements of the product.



Chapter 3 - Getting Started

3.1 - Turning your Plasma Monitor On and Off

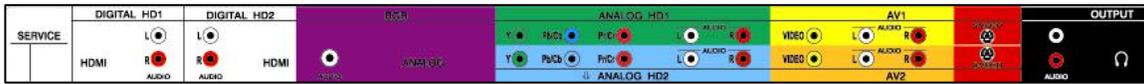
1. Connecting Power Cables

Connect the power cord to the power cord connector on the back of your plasma monitor, and then plug the power cord into an AC wall socket.

2. Connect Audio and Video Cables to the monitor

For AV, S-Video, Analog HD (YPbPr/YCbCr) and HDMI™ compatible devices, connect the video and audio cables to the connectors on the rear panel of the plasma monitor.

For a PC, connect it through the RGB input connection in the back of the plasma monitor. See below for diagram of the rear panel connections.



3. Turning Power On

Once all the components are connected, press the Power button on the side of the plasma monitor, or press the Power (Red) button on the remote control.

4. Select Input Source

Select the input source for the plasma monitor by pressing the INPUT button on the side of the monitor or using the Input button on the remote control.

Pressing this button will cycle you through the following options: AV1 (S-Video or video*), AV2 (S-Video or video*), Analog HD1, Analog HD2, Digital HD1, Digital HD2, and RGB.

**S-Video has priority. If a signal is connected to AV1 S-Video by itself or signals are connected to AV1 S-Video and AV1 Video simultaneously, then S-Video will be the only choice for AV1. If a signal is connected to AV1 Video only, then Video will be the only choice for AV1. The same input priority scheme applies to AV2.*

3.2 - Watching a TV Program

Before you start watching TV, please make sure that any satellite or external tuner, i.e. VIZIO Bravo HD2, connections are secure. Also, verify that the power cord is plugged into a correctly grounded electrical outlet or surge protector.

1. Press the power button on the front of your plasma monitor. The status LED on the front turns green.
2. There are 2 options for selecting your programming:
 - a. Select Digital HD using the Input button on the side of your plasma monitor if you are watching broadcasts through a cable set-top box or satellite dish connected by HDMI™.
 - b. Select Analog HD using the Input button on the side of your plasma monitor if you are watching a cable set-top box or satellite dish connected through the component inputs (YPbPr).

Note: You should be able to see a picture. If you do not, make sure that all connections are secure and you have selected the correct video input source.

To make additional adjustments to your plasma monitor, please see Section 3.3: Adjusting Basic Plasma Monitor Settings” on page 22.



3.3 - Adjusting Basic Plasma Monitor Settings

Volume

To increase the volume, press and hold the VOL + button on the front panel or remote control until the desired level is reached.

To decrease the volume, press and hold the VOL - button on the front panel or remote control until the desired level is reached.

Mute

Press the MUTE button on the remote control to turn off the sound; press the button again to cancel the MUTE feature and turn the sound on.

Wide

Using this feature you can watch video content in Normal, Wide, and Zoom. Press the WIDE button on the remote control to switch among the modes.



3.4 - Preparing the Plasma for Wall Mounting

The VIZIO P50 HDM can either be kept on the base stand or mounted to the wall for viewing. If you choose to mount the P50 HDM to the wall, please follow the instructions below for removing the base stand.

To remove the stand base:

1. Unplug all the cables and cords from the plasma monitor.
2. Place the plasma monitor face down on a soft and flat surface (blanket, foam, cloth, etc) to prevent any damage to the display.
3. Remove the 6 screws on each side of the back panel of the plasma monitor located near the bottom so that the base stand can be removed (see Figure 3.4a).
4. Gently pull the stand away from the display by grasping firmly to the base.
5. Now, the display can fit securely to a mount (sold separately) by utilizing the mounting holes in the center of the back panel of the display (see Figure 3.4b). Please make sure to read the directions of your specific wall mount to properly hang the P50 HDM.

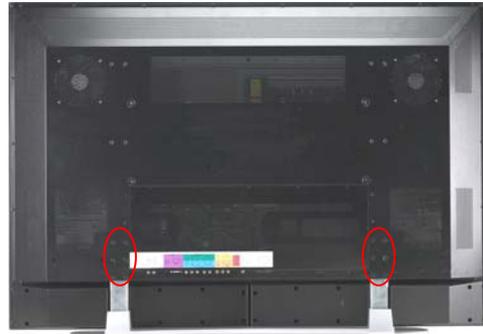


Figure 3.4a

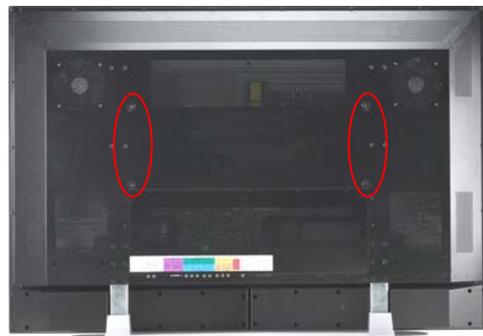


Figure 3.4b

To find the perfect mount for the VIZIO P50 HDM, browse VIZIO's certified mount selection at www.vizioce.com or call directly, 1.888.VIZIOCE (1.888.849.4623).

3.5 - Using the On-Screen Display (OSD)

The remote control or the bottom control keys on the front panel of the Plasma monitor can control all the function settings. The on-screen display (OSD) allows you to adjust and save contrast, brightness and other settings. The Plasma monitor will retain changes made to the settings even if the Plasma monitor is turned off.

3.5.1 - Menu Operations

The OSD consists of a Main Menu of items and each of these items has a Sub Menu associated with it that the OSD will switch to when the item is selected.

1. Press the MENU button on the remote control and the Main Menu will be displayed on the screen, as shown in figure 3.5.1.a. Options include the following: Image, Display, Audio, Parental Controls and Setup.
2. Use the ▲ /▼ buttons on the remote control to highlight the feature you wish to select.
3. Press the OK button on the remote control to select the feature. The Main Menu will now change to the Sub Menu of the feature selected, as shown in figure 3.5.1.b.
4. Use the ▲ /▼ buttons on the remote control to highlight the option you wish to adjust.
5. Adjust the level or change the setting of the selected option by pressing ◀/▶ buttons on the remote control.
6. Press the OK button to confirm the adjustment.
7. Repeat steps 4 through 6 to adjust additional options.
8. Once the adjustments are completed, press the ◀ button on the remote control to exit the sub menu.
9. Use the ▲ /▼ buttons on the remote control to highlight another option you wish to adjust within the main menu or press the EXIT button on the remote control to exit the OSD.



Figure 3.5.1.a

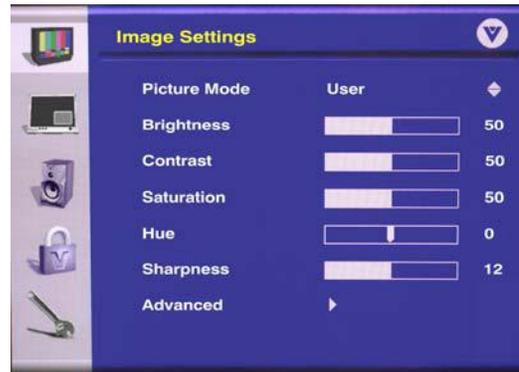


Figure 3.5.1.b



3.5.2 - OSD Menus and Options

The OSD menus and options are used to adjust various settings on your Plasma monitor.

3.5.2.1.1 – Image Settings for Video Inputs

Note: there are different image setting options when the RGB input is selected. Please see section 3.5.2.1.2 – Image Settings (for PC) on page 26 for additional information.

Picture Mode – Options include User, Vivid, Movie, Game, and Sport.

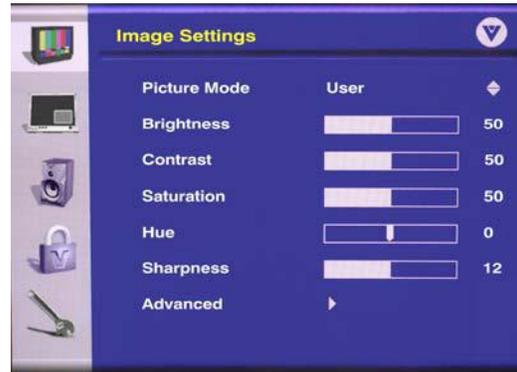
User – allows the user to manually customize individual image settings.

Vivid – automatically increases the saturation level for an optimized picture.

Movie – automatically decreases the brightness and contrast level for an optimized picture.

Game – automatically increases the contrast level and slightly decreases brightness level for an optimized picture.

Sport – automatically increases contrast and saturation levels for an optimized picture.



Brightness - Adjusts the black levels of the picture. Users may need to readjust the brightness after the plasma monitor warms up.

Contrast – Adjusts the level of white between the lightest and darkest portions of an image. If the contrast is too low, the picture appears dark and lacks detail. If the contrast is too high, the picture appears faded and lacks shadow and depth.

Saturation - Adjusts the levels of color in the picture. Highly saturated colors tend to be deep and strong while unsaturated colors are weaker and lighter.

Hue – Adjusts to make the flesh tones more natural.

Sharpness – Adjusts the clarity of the picture. If the sharpness is set incorrectly, the picture appears fuzzy or out of focus.

Advanced – please see below for additional information regarding these options.

Advanced Image Settings for Video inputs

When you select “advanced within the image settings submenu. The following options will appear.

Noise Reduction – when you select Noise Reduction, the following submenu options will appear:

Motion (Motion Noise Reduction - MNR) – This feature helps to remove picture noise caused by fast moving video that may be present in the picture.

Digital (Digital Noise Reduction - DNR) – This feature helps to remove picture noise caused by MPEG compression that may be present in the picture.

Fleshtone – Options include the following: Off, Low, Moderate, and High.

Dynamic Contrast – Changes the level of contrast for each screen. Select from 1 (minor) to 4 (strong).



3.5.2.1.2 – Image Settings (for PC)

The following menu options are available when RGB is the selected input.

Brightness - Adjusts the black levels of the picture. Users may need to readjust the brightness after the plasma monitor warms up.

Contrast – Adjusts the level of white between the lightest and darkest portions of an image. If the contrast is too low, the picture appears dark and lacks detail. If the contrast is too high, the picture appears faded and lacks shadow and depth.



Advanced Image Settings for PC

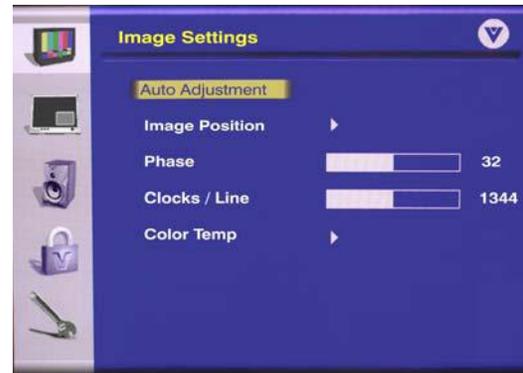
Auto Adjustment - Automatically sets the position and size of the picture.

Image Position - Allows the user to manually set the position of the picture on the display.

Phase – Removes any horizontal distortion and clears or sharpens the displayed characters.

Clock – Removes any vertical distortion and clears or sharpens the displayed characters.

Color Temp - Options include standard, cool, warm or customized by the user.



3.5.2.2 – Display Settings

Aspect Ratio – Options include one of the following: Panoramic (available only in video mode), Normal, Wide and Zoom (not available for RGB input). For additional information, see Section 3.6 - Understanding Viewing Features on page 31.

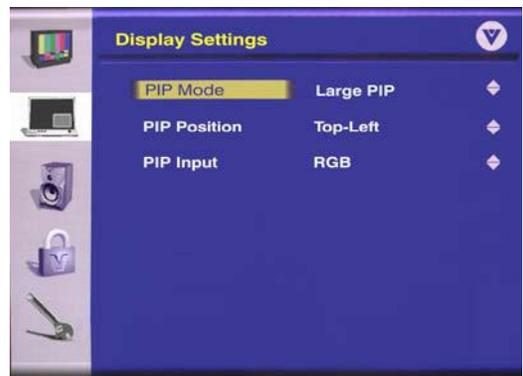
PIP – when you select PIP, the following submenu options will appear:

PIP Mode – Choose from the following: Off, Large PIP, Small PIP and POP.

PIP Position – Choose from the following: Top-Left, Top-Right, Bottom-Left, and Bottom-Right.

PiP input – Choose the input for the PiP source from one of the following: AV1 (S-Video or video*), AV2 (S-Video or video*), Analog HD1, Analog HD2, Digital HD1, Digital HD2, and RGB.

**S-Video has priority. If a signal is connected to AV1 S-Video by itself or signals are connected to AV1 S-Video and AV1 Video simultaneously, then S-Video will be the only choice for AV1. If a signal is connected to AV1 Video only, then Video will be the only choice for AV1. The same input priority scheme applies to AV2.*



For additional information regarding the PiP source options, see section 3.6.2 - Picture-in-Picture (PiP) Mode on page 32.



3.5.2.3 – Audio Settings

Bass - Adjusts the bass.

Treble – Adjusts the treble.

Balance – Adjusts the balance level between the channels.

SRS TS XT – Selects either on or off for surround sound.

Auto Volume – Adjusts the volume so that each input is at the same level.

Speakers - Turns the internal speakers on or off.

Audio out – Options include Fixed Volume or Variable Volume. Note: this option is only available when the internal speakers are turned off.



3.5.2.4 – Parental Controls

Note: you will need to enter in a password to access the submenus. The default password is “0000”. It is advised that you change this password during the initial set up.

TV Rating - Sets the level of television programs that will be blocked without entering in the password. For more information, see Section 3.5.3 - Using the Parental Controls, page 29.

Movie Rating - Sets the level of movies that will be blocked without entering in the password. For more information, see Section 3.5.3 - Using the Parental Controls, page 29.

Block Unrated – Allows for the user to block programs that do not have any movie rating and are classified as “unrated”.



3.5.2.5 – Setup

Close caption – Choose from one of the following:
Off, CC1, CC2, CC3, CC4, TEXT1, TEXT2,
TEXT3, TEXT4

Language: Changes the language of the OSD menu. Options include English, Italian, Spanish and French.

Factory Reset - Resets the display back to the factory default settings.

Image Cleaner (VIC) – Removes ghosts of previous images.



Note: The usual Plasma panel precautions of avoiding prolonged display of stationary images must be maintained. This feature will not remove images that have been displayed for too long. Image sticking is not covered under standard warranty.

Firmware Version – Displays the version of the firmware.

When Close Caption is selected, the following options will appear:

Display – Choose from the following options: Off, CC1, CC2, CC3, CC4, TEXT1, TEXT2, TEXT3, and TEXT4.

Captions on Mute – Enables closed caption when the audio is muted.



3.5.3 - Using the Parental Controls

The Parental Controls feature prevents viewers from watching programs that are not age appropriate, such as programs containing violence or adult language.

1. Press the MENU button on the remote control and the Main Menu will be displayed on the screen.
2. Press **▼** until the Parental Controls menu is highlighted. Then press OK.
3. Enter your password. If you have not set a password, use the Number Buttons to enter the default password "0000". *For more information about setting a password, please see Section 3.5.4 - Setting a Password, page 30.*



4. Settings is highlighted. Press OK.
5. TV Rating is highlighted. Press OK.

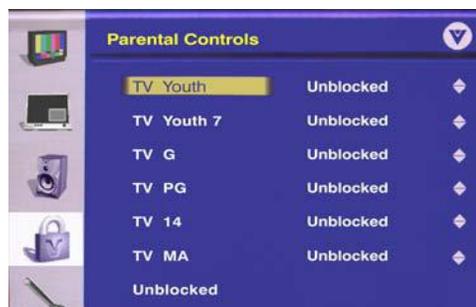


6. Press the **▲**, **▼** buttons to select which rating you want to block or unblock. You can select from the following ratings:



- TV Youth (all children)
- TV Youth 7 (older children)
- TV G (general audience)
- TV PG (guidance suggested)
- TV 14 (strongly cautioned)
- TV MA (mature audience)
- Unblocked

7. Press the **▲**, **▼** buttons to select Blocked or Unblocked. Press OK.
8. Press Menu to back out of the menu.
9. Press **▼** to highlight Movie Rating. Press OK.
10. Press the **▲**, **▼** buttons to select which rating you want to block or unblock. You can select from the following ratings:



- Movie G (General audience)
- Movie PG (Parental guidance suggested)
- Movie PG-13 (Recommended for children 13 years of age and older)
- Movie R (mature audience)
- Movie NC-17 (no one under 17 years of age)
- Movie X (no one under 17 years of age)
- Unblocked

11. Press the **▲**, **▼** buttons to select Blocked or Unblocked. Press OK.
12. Press Menu repeatedly to exit the menu.



3.5.4 – Setting a Password

You control access to the Parental Control features with a password. The default password is “0000”. You can change the password to any four-digit number.

To change the password:

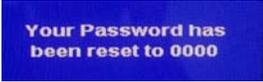
1. Press the MENU button on the remote control and the Main Menu will be displayed on the screen.
2. Press ▼ until the Parental Controls menu is highlighted. Then press OK.
3. Enter your password. If you have not set a password, use the Number Buttons to enter the default password “0000”.
4. Press ▼ to highlight Change Password. Press OK.
5. Enter your new password.
6. Enter the new password again in the Confirm area.
7. Press OK.
8. Press Menu repeatedly to exit the menu.



Note: Please make sure to write down the new password in a safe place.

To reset the password:

1. Press the MENU button on the remote control and the Main Menu will be displayed on the screen, as shown opposite.
2. Press ▼ until the Parental Controls menu is highlighted. Then press OK.
3. When the **first** box is highlighted in the Password option, press the ▲, ▼, ◀, and ▶ in the exact sequence.
4. Then press the OK button.
5. The password has now been reset to “0000” and the following message will appear.



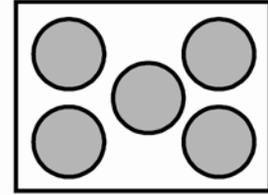
3.6 - Understanding Viewing Features

Your plasma monitor features four viewing modes and Picture-in-Picture (PiP) mode. You can switch viewing modes using the on-screen display (OSD) or the remote control. For more information on using the OSD, see 3.5.2 - OSD Menus and Options, page 25.

3.6.1 - Viewing Modes

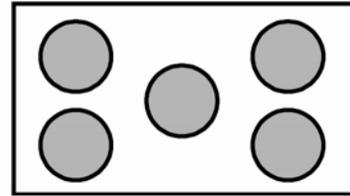
Normal Mode

The original 4:3 aspect ratio (1.33:1 source) is preserved, so black bars are added to the left and right of the display image. Standard TV broadcasts are displayed with a 4:3 Aspect Ratio. Movies in 4:3 Aspect Ratio may be referred to as pan-and-scan or full frame. These movies were originally filmed in 16:9 (widescreen), and then modified to fit a traditional TV screen (4:3). *Warning: Continuous viewing of Standard Definition (4:3) in this mode will result in the appearance of left side and right side vertical bands caused by Image Sticking.*



Wide Mode

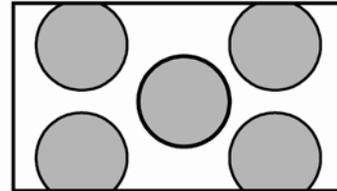
When watching a standard broadcast or full-frame movie in this mode, the display image is stretched proportionately to fill the TV screen. When watching a widescreen (1.76:1 source) program or movie, the display image fills the TV screen. If you are watching a widescreen (1.85:1 or 2.35:1 source) program or movie, there will still be black bars at the top and bottom.



Zoom Mode

Note: this option is not available for Analog HD (except 480i or 480P) or RGB Input.

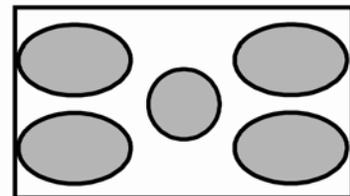
When watching a widescreen (1.76:1, 1.85:1, or 2.35:1 source) program or movie, the display image is zoomed proportionally to fill the width of the screen. The top and bottom are cut off to remove most of the source material's black bars. This mode is good for programs or movies with sub-titles.



Panoramic Mode

Note: this option is not available for Digital HD, Analog HD (except 480i or 480P) or RGB Input.

When watching a standard broadcast or full frame movie in this mode, the 4:3 Aspect Ratio (1.33:1 source) display image is stretched horizontally on the left and right sides to fill the TV screen. The center of the image is not stretched.



Note: Viewing modes and volume settings are saved based on input. For example, you last watched a DVD in widescreen mode and at high volume, and then watched TV in standard mode and low volume. When you switch back to DVD input, the viewing mode will return to widescreen and your volume will be high.



3.6.2 - Picture-in-Picture (PiP) Mode

Your plasma monitor features PiP mode so you can watch two pictures at the same time. When PiP is turned on, you can display two pictures at one time. One picture is displayed as the full screen (main screen) and the other picture is displayed in a small window (sub screen). The sub-screen can be set to small, medium or large.

See below for detailed information regarding the PiP sources.

Main \ Sub	AV1	AV2	Analog HD1	Analog HD2	Digital HD1	Digital HD2	RGB
AV1		x	x	x	x	x	x
AV2	x		x	x	x	x	x
Analog HD1	x	x		x	x	x	x
Analog HD2	x	x	x		x	x	x
Digital HD1	x	x	x	x		x	x
Digital HD2	x	x	x	x	x		x
RGB	x	x	x	x	x	x	

“x” – Indicates which inputs are available for PiP and POP modes.

Adjusting Basic PiP Settings

Swapping PiP Video

You can swap the program that is in the main picture with the program in the PiP sub-picture. To swap the main picture program with the PiP sub-picture program, press SWAP on the remote control. If you press SWAP again, it will return the program to the main picture.



3.7 - Remote Control Operation

3.7.1 - Programming the VIZIO Universal Remote Control

You can program the remote control to work with up to four different components. Listed below are the steps for programming your TV, VCR, Cable Box and DVD Player.

3.7.1.1 - Programming for TV

For your convenience, the TV button on the remote has already been preprogrammed for the P50 HDM. If you would like to program a second TV as the primary TV, please follow the instructions below.

1. Manually turn on the TV.
2. Press the TV button on the remote control.
3. Press and hold the SET button until the LED LIGHT flashes twice.
4. Press "1" using the number buttons on the remote control before entering the appropriate programming code indicating a TV component code is about to be entered.
5. Then find the programming code for your TV in the code list in the back of this book and enter it using the Number Buttons. If the code is accepted, the LED flashes twice after the last digit is entered.

If the LED does not flash twice, repeat Steps 2 through 4 with the next code listed for the component and manufacturer.

6. Point the remote control at the TV and press the POWER button. The TV will turn off.

Note:

- a) *If your TV does not respond, try all the codes for your brand. If the codes do not work, or your brand is not listed, see "Searching for Component Codes", page 35.*
- b) *Sometimes a code listed will only include limited functions. Try other codes that may include more functionality.*

3.7.1.2 - Programming for VCR

1. Manually turn on the VCR.
2. Press the VCR button on the remote control.
3. Press and hold the SET button until the LED LIGHT flashes twice.
4. Press "2" using the number buttons on the remote control before entering the appropriate programming code indicating a VCR component code is about to be entered.
5. Then find the programming code for your VCR in the code list in the back of this book and enter it using the Number Buttons. If the code is accepted, the LED flashes twice after the last digit is entered.

If the LED does not flash twice, repeat Steps 2 through 4 with the next code listed for the component and manufacturer.

6. Point the remote control at the VCR and press the POWER button. The VCR will turn off.

Note:

- a) *If your VCR does not respond, try all the codes for your brand. If the codes do not work, or your brand is not listed, see "Searching for Component Codes", page 35.*
- b) *Sometimes a code listed will only include limited functions. Try other codes that may include more functionality.*



3.7.1.3 - Programming for Cable Box

1. Manually turn on the Cable Box.
2. Press the CBL button on the remote control.
3. Press and hold the SET button until the LED LIGHT flashes twice.
4. Press "0" using the number buttons on the remote control before entering the appropriate programming code indicating a Cable Box code is about to be entered.
5. Find the programming code for your Cable Box in the code list in the back of this book and enter it using the Number Buttons. If the code is accepted, the LED flashes twice after the last digit is entered.

If the LED does not flash twice, repeat Steps 2 through 4 with the next code listed for the component and manufacturer.

6. Point the remote control at the Cable Box and press the POWER button. The Cable Box will turn off.

Note:

- a) *If your Cable Box does not respond, try all the codes for your brand. If the codes do not work, or your brand is not listed, see "Searching for Component Codes", page 35.*
- b) *Sometimes a code listed will only include limited functions. Try other codes that may include more functionality.*

3.7.1.4 - Programming for AUX (DVD Player)

1. Manually turn on the DVD Player.
2. Press the AUX button on the remote control.
3. Press and hold the SET button until the LED LIGHT flashes twice.
4. Press "2" using the number buttons on the remote control before entering the appropriate programming code indicating a DVD player component code is about to be entered.
5. Find the programming code for your DVD player in the code list in the back of this book and enter it using the Number Buttons. If the code is accepted, the LED flashes twice after the last digit is entered.

If the LED does not flash twice, repeat Steps 2 through 4 with the next code listed for the component and manufacturer.

6. Point the remote control at the DVD Player and press the POWER button. The DVD Player will turn off.

Note:

- a) *If your DVD Player does not respond, try all the codes for your brand. If the codes do not work, or your brand is not listed, see "Searching for Component Codes", page 35.*
- b) *Sometimes a code listed will only include limited functions. Try other codes that may include more functionality.*



3.7.2 - Searching for Component Codes

If the user cannot find the manufacturer in the component list or the program code does not work, the user can use the remote control to search for the correct component code.

To search for a component code:

1. Turn on the component.
2. Press the matching component button on the remote control.
3. Press and hold the SET button until the LED flashes twice.
4. Press 9 9 1. The LED flashes twice.
5. Point the remote control at the component and then alternate between pressing the POWER button and the component button on the remote control until the component turns off.

If the component still does not respond, clear the component button, then repeat the search procedure.

To clear the component button:

1. Make sure that the component is turned on.
2. Press and hold the SET button on the remote control until the LED flashes twice.
3. Press 9 9 2, then press the component button on the remote control twice.

3.7.3 - Reassigning Component Buttons

You can reassign the component buttons on the remote control if you have more than one of the same types of component. For example, if you are using the remote to control the cable (CBL), CD, DVD, TV and two VCRs, you can reassign the AV2 button as a second VCR button.

To reassign component buttons:

1. Press and hold the SET button until the LED flashes twice.
2. Press 9 9 2. The LED flashes twice.
3. Press the component button that you want (VCR) once, and then press the component button that you are reassigning (AV2) once. The AV2 button is now reassigned and can be programmed as a VCR component button. See "Programming the VIZIO Universal Remote Control", page 33.

3.7.4 - Changing Volume Lock

The remote control is set to control volume through your TV while in cable (CBL), DVD, satellite (SAT) and VCR component modes. Use the volume lock if you want to control the volume for all components through a specific component. For example, you want to control volume for all components through the tuner (TNR).

To change the volume lock:

1. Press and hold the SET button until the LED flashes twice.
2. Press 9 9 3. The LED flashes twice.
3. Press the component button that you want (TNR) once. The LED flashes twice. Volume will now be controlled through the tuner for all components.



3.7.5 – Using a Cable Box or Satellite Box Remote

Your remote uses code 0178 to work with your 50HDM. To use a cable or satellite remote to work with your 50HDM, refer to your cable or satellite remote users guide for information on how to program their remote.

If your cable or satellite remote uses a 4 digit remote code program in 0178. If your cable or satellite remote is a 5 digit remote (like most Direct TV units) use code 10178. If your cable or satellite remote uses a 3 digit code (for example, Echostar and Dish Network), then use code 627.

Note: Some functions on your cable or satellite remote may not function like expected. Typically Power, volume and mute will work.



Chapter 4 - Maintenance and Troubleshooting

4.1 - Maintenance

Important

1. Make sure that the power cable is removed from the socket before cleaning the display.
2. Do not use volatile solvent (such as toluene, rosin and alcohol) to clean the display. Such chemicals may damage the housing, screen glass and remote control, and cause the paint to peel.

Cleaning the Housing and the Remote Control

1. Use a soft cotton cloth for cleaning.
2. If the housing or remote control is seriously contaminated, use a soft cloth moistened with diluted neutral cleaner to clean the display. Wring water out of the cloth before cleaning to prevent water from penetrating into the housing. Wipe the display with a dry cloth after cleaning.

Cleaning the Screen

1. Use a soft cotton cloth to gently clean the screen.
2. The screen glass is very fragile. Do not scrape it with any sharp object. Do not press or tap the screen to avoid cracking. When the screen is seriously contaminated, use a soft cloth moistened with diluted neutral cleaner to clean the display. Wring water out of the cloth before cleaning to prevent water from penetrating into the housing. Wipe the display with a dry cloth after cleaning.

4.2 - Troubleshooting Guide

If the display fails or the performance changes dramatically, check the display in accordance with the following instructions. Remember to check the peripherals to pinpoint the source of the failure. If the display still fails to perform as expected, contact the dealer for assistance.

Problem	Solution
There is not any power.	Make sure DC power button is ON (Green LED). Make sure AC power cord is securely connected to the AC socket. Plug another electrical device (like a radio) to the power outlet to verify that the outlet is supplying the proper voltage.
There is not any sound.	Check your audio connection Press MUTE on the remote control again, so that MUTE disappears from the screen Press the Volume + (Up) key on your remote control Make sure that speakers are on in the Audio Settings.



Power is ON but no screen image.	<p>Confirm the video cables are properly connected. See section 2.2-2.6.</p> <p>Adjust brightness and contrast.</p> <p>Check Source settings.</p>
Wrong or abnormal colors appear.	<p>If any colors (red, green, or blue) are missing, check the video cable to make sure it is securely connected. Loose or broken pins in the cable connector could cause an improper connection.</p> <p>Connect the plasma display to another source.</p>
Control buttons do not work.	<p>Press only one button at a time.</p>
Remote Control does not work.	<p>Make sure batteries are inserted correctly</p> <p>Batteries could be weak.</p>
There appears to be image quality issues.	<p>Viewing television broadcasts: For best image quality, "Standard Definition" TV should be viewed as 4:3.</p> <p>COMPONENT 480i: For best image quality the "YCbCr" Input should be used.</p>
You cannot see a picture.	<p>Make sure that the power cord is plugged into a grounded electrical outlet.</p> <p>Make sure that the power button is turned on.</p> <p>Make sure that the selected input source is connected to a working input source.</p> <p>If your plasma monitor is connected to your computer in RGB or HDMI™ mode, press any key on your keyboard to "wake" your computer.</p>
You see a distorted picture or hear unusual sound.	<p>You may be getting interference from electrical appliances, cars, motorcycles, or fluorescent lights. Try moving your plasma monitor to another location.</p>
The picture has abnormal patterns.	<p>Make sure that the input source cable is attached securely and correctly to the back of your plasma monitor.</p> <p>Make sure that the video input source is within the range of your plasma monitor. Compare the video input source's specifications with your plasma monitor specifications.</p>
The display image does not cover the entire screen.	<p>If you are using RGB mode, make sure that H Size and V Position in the OSD are set correctly.</p> <p>If you are using AV1, AV2, or component (Analog HD) with 480i input, use the WIDE button on the remote control to scroll through various screen modes.</p>
You can see a picture but you cannot hear sound.	<p>Make sure that the volume is not turned down.</p> <p>Make sure that the sound is not muted; speakers are turned off in the audio settings.</p> <p>Make sure that your audio input source cables are connected securely and correctly.</p>
You see "noise" or "trash" on the screen.	<p>When your plasma monitor's digital capabilities exceed an analog broadcast signal, the signal is up-converted (increased) to match your plasma monitor's display capabilities. Up-converting can cause noise or trash.</p>
You switch to a different input and the volume changes.	<p>The plasma monitor remembers the volume level from the last time you used a particular input (AV1, AV2, Analog HD, and Digital HD).</p>
You switch to a different input and the screen size changes.	<p>The plasma monitor remembers the viewing mode from the last time you used a particular input (AV1, AV2, Analog HD, and Digital HD).</p>



<p>The PiP input is set to DVD but the picture does not look correct.</p>	<p>The PiP DVD source must be 480i (interlaced) and not 480p (progressive scan). Set your DVD player to interlaced or choose a different PiP source.</p>
<p>Tips for High-Definition Users</p>	<p>The plasma monitor is an ideal platform for viewing High Definition Content. Best Image Quality will be achieved by the HDMI™ Input, then YPbPr, then RGB. However, due to variances in broadcast practices, it is possible some image distortions can occur.</p>
<p>Tips for Letterbox Content Users</p>	<p>Letterboxed (or “Widescreen”) versions of DVD movies are most commonly formatted for standard 4:3 Televisions. The plasma monitor has the capability of expanding this content so the entire screen is filled at the expense of image accuracy. To use this function, press the “ZOOM” key on the remote control and cycle among the available options.</p>

4.3 - Telephone & Technical Support

Products are often returned due to a technical problem rather than a defective product that may result in unnecessary shipping charges billed to you. Our trained support personnel can often resolve the problem over the phone. For more information on warranty service or repair, after the warranty period, please contact our Support Department at the number below.

Quality service and consistent technical support are integral parts of V's commitment to service excellence. V's service representatives are dedicated to assist you with the utmost in customer satisfaction. To better assist you, please call toll free or contact us via email.

Tel: (714) 668-0588, 7:30 am – 5:30 pm PST Mon - Fri
 E-mail: techsupport@vinc.com
 VIZIO
 320A Kalmus Drive
 Costa Mesa, CA 92626
 Tel: (714) 668.0588 Fax: (714) 668-9099
 Web: www.vizioce.com



4.4 - Compliance

Caution: Always use a power cable that is properly grounded. Please use the AC cords listed below for each area.

USA	UL
Canada	CSA
Germany	VDE
Britain	BASE/BS
Japan	Electric Appliance Control Act

4.5 - FCC Class B Radio Frequency Interference Statement

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:

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

Notice:

1. The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
2. Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.
3. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. It is the responsibilities of the user to correct such interference.



Appendix A: Limited Product Warranty

Please read this warranty card carefully, it is a "ONE-YEAR LIMITED WARRANTY" on parts and labor.

VIZIO's Responsibility

VIZIO Displays purchased in the United States are warranted to be free from defects in materials or workmanship for a period of one (1) year from the date of their original retail purchase. If the unit fails to conform to this warranty, we will service the monitor using new or refurbished parts.

Service Labor

During a period of one (1) year from the effective warranty date, VIZIO will provide, when needed, service labor to repair a manufacturing defect at its designated Service Center. To obtain warranty service in the United States, you must first call our Customer Support at (714) 668-0588, 7:30 am – 5:30 pm PST. The determination of service will be made by VIZIO Customer Support. PLEASE DO NOT RETURN YOUR UNIT TO VIZIO WITHOUT PRIOR AUTHORIZATION.

Parts

New or remanufactured replacements for defective parts will be used for repairs by VIZIO at its designated Service Center for one (1) year from the effective warranty date. Such replacement parts are warranted for the remaining portion of the original warranty period.

Service

During the one (1) year warranty period, VIZIO will, at its option and sole discretion, repair or replace defective parts, including replacement of the entire Panel. The Customer will be required to ship the unit to the Service Center indicated at the time Customer Support is contacted to make the necessary repairs, you are responsible for all transportation charges to and from the service facility. VIZIO is not responsible for the de-installation or re-installation of the unit.

Packaging and Shipping Instruction

When you send the product to an authorized VIZIO service facility you must use the original carton box and packing material or an equivalent as designated by VIZIO

Not Covered

This warranty does not cover defects, malfunctions or failures resulting from shipping or transit accidents, abuse, misuse, operation contrary to furnished instructions, operation on incorrect power supplies, operation with faulty associated equipment, modification, alteration, improper servicing, tampering or normal wear and tear or TVs on which the serial number has been removed or defaced. Image Sticking caused by operating at excessive brightness levels for extended periods or mishandling are not covered by this warranty.

ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE SHALL BE LIMITED IN DURATION TO THE PERIOD OF TIME SET FORTH ABOVE. OUR LIABILITY FOR ANY AND ALL LOSSES AND DAMAGES RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING OUR NEGLIGENCE, ALLEGED DAMAGE OR DEFECTIVE GOODS, WHETHER SUCH DEFECTS ARE DISCOVERABLE OR LATENT, SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE DISPLAY. WE SHALL NOT BE RESPONSIBLE FOR LOSS OF USE, COMMERCIAL LOSS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This is the only warranty applicable; no one is authorized to extend or modify it or to grant any other warranty.

VIZIO retains the right to assess all warranty claims and to determine if damages are covered by the warranty. In case of a claim that is not covered by the warranty, you will be contacted to determine whether VIZIO should repair the damage for a fee or whether the product should be returned to you as received by the repair center.

Owner's Responsibility

Effective Warranty Date

Warranty begins on the date of sale to the end user. To ensure warranty service, keep the dated bill or sale receipt as evidence of the purchase date.

Warranty Service

For warranty service information, contact VIZIO Customer Support at (714) 668-0588, 7:30 am to 5:30 pm PST or visit www.vizioce.com. Parts and service labor that are VIZIO's responsibility (see above) will be provided without charge. Other service is at the owner's expense. You must provide the model, serial number and date of purchase. Before you ask for warranty service, read your User Manual. You might avoid a service call.

For additional information regarding your warranty, please see complete details online at www.vizioce.com.



Appendix B: Component Program Codes

SETUP CODES FOR CURRENT VIZIO PRODUCTS

*Note: Please use these codes to program the VIZIO products to existing Universal remote controls for products such as cable and satellite boxes.

VIZIO L13	0864	VIZIO P46	1756
VIZIO L6	0885	VIZIO RP56	1756
VIZIO L20	1756	VIZIO HDX 20L	1756
VIZIO L30	1756	VIZIO HDX 42P	1756
VIZIO L30WGU	1756	Bravo D1	1064
VIZIO P42	1756	Bravo D2	1226
VIZIO P42HD	1756	Bravo HD1	1126

SETUP CODES FOR AMPLIFIERS

Aiwa	0406	Optimus	0300
Carver	0269	Panasonic	0308
CurtisMathes	0300	Philips	0269, 0892
Denon	0160	Pioneer	0013, 0300
Harman/Kardon	0892	Sony	0220, 0689
JVC	0331	Technics	0308
Linn	0269	Victor	0331
Magnavox	0269	Wards	0013
Marantz	0269	Yamaha	0354

SETUP CODES FOR CABLE

ABC	0003, 0008, 0014, 0017, 0007, 0011, 0013	Pioneer	0144, 0533, 0877
Allegro	0153, 0315	Popular Mechanics	0400
Archer	0153, 0797	Pulsar	0000
Bell&Howell	0014	Quasar	0000
Century	0153	RCA	0021
Citizen	0153, 0315	Radio Shack	0015, 0315, 0797, 0883
Comtronics	0040	Recoton	0400
Contec	0019	Regal	0020, 0259
Eastern	0002	Regency	0002
Emerson	0797	Rembrandt	0011
Everquest	0015, 0040	Runco	0000
Focus	0400	SLMarx	0040
Garrard	0153	Samsung	0144, 0040
Gemini	0015, 0797	Scientific Atlanta	0008, 0477, 0017, 0877
General Instrument	0476, 0276, 0011, 0810	Signal	0015, 0040
GoldStar	0144, 0040	Signature	0011
Goodmind	0797	Sprucer	0021
Hamlin	0020, 0259, 0009, 0034	Starcom	0003, 0015
Hitachi	0011	Stargate	0015, 0040, 0797
Hytex	0007	Starquest	0015
Jasco	0015, 0153, 0315	TV86	0063
Jerrold	0003, 0012, 0476, 0276, 0014, 0015, 0011, 0810	Televue	0040
Memorex	0000	Tocom	0012, 0013
MovieTime	0063	Toshiba	0000
NSC	0063	Tusa	0015
Oak	0019, 0007	Unika	0153
Optimus	0021	UnitedArtists	0007
Panasonic	0000, 0107, 0021	Universal	0153, 0191
Paragon	0000	Viewstar	0063
Philips	0153	Zenith	0000, 0525
		Zentek	0400

SETUP CODES FOR CD PLAYERS

Aiwa	0157, 0124	Philips	0157, 0626
Burmester	0420	Pioneer	0032, 0305, 0468, 0244
California Audio Labs	0029, 0303	Proton	0157
Carver	0157, 0179, 0437	QED	0157
DKK	0000	Quasar	0029
Denon	0003, 0873	RCA	0179, 0305, 0053, 0764
Emerson	0305	Realistic	0179, 0420, 0180
Fisher	0179, 0174	Rotel	0157, 0420
Garrard	0420, 0393	SAE	0157
Genexxa	0032, 0305	Sansui	0157, 0305
Harman/Kardon	0157, 0173	Sanyo	0179
Hitachi	0032	Scott	0305
JVC	0072	Sears	0305
Kenwood	0028, 0037, 0190, 0626, 0826, 0681	Sharp	0037, 0180, 0861
Krell	0157	Sherwood	0180
LXI	0305	Sony	0000, 0185, 0490
Linn	0157	Soundesign	0145
MCS	0029	Tascam	0420
MTC	0420	Teac	0420, 0393, 0174, 0180
Magnavox	0157, 0305	Technics	0029, 0303
Marantz	0029, 0157, 0180	Victor	0072
Mission	0157	Wards	0157, 0053
NSM	0157	Yamaha	0036, 0187
Nikko	0174	Yorx	0461
Onkyo	0101, 0868		
Optimus	0000, 0032, 0179, 0305, 0037, 0420, 0145, 0468, 0437		
Panasonic	0029, 0303		
Parasound	0420		



SETUP CODES FOR LASER DISK

Denon	0059
Mitsubishi	0059
NAD	0059
Optimus	0059
Pioneer	0059
Sony	0193, 0201

SETUP CODES FOR MISC. AUDIO

Jerrold	0459, 0520
Scientific Atlanta	0460
Starcom	0459

SETUP CODES FOR RECEIVERS

ADC	0531	Optimus	0531, 0670, 0186, 0080,
Aiwa	0158, 0189, 0121, 0405		0042, 0181, 0219, 0738,
Capetronic	0531		0801, 1023
Carver	0189, 0042, 0360	Panasonic	0039, 0309
Casio	0195	Penney	0195
Clarinette	0195	Philips	0189, 0391
Curtis Mathes	0080	Pioneer	0531, 0014, 0150, 0630,
Denon	0004		0080, 1023
Emerson	0424	Quasar	0039
Fisher	0042, 0219, 0360	RCA	0531, 0054, 0360
Garrard	0463, 0424	Realistic	0195, 0181
Harman/Kardon	0110, 0189, 0891	Sansui	0189
JBL	0110	Sanyo	0219, 0801
JVC	0074	Sharp	0186
Kenwood	0027, 0186, 0042	Sherwood	0491, 0502
Koss	0424	Sony	0158, 0474
LXI	0181	Soundesign	0670
Linn	0189	Teac	0463
Lloyd's	0195	Technics	0039, 0309
MCS	0039	Victor	0074
Magnavox	0531, 0189, 0195, 0391	Wards	0158, 0014, 0189, 0080,
Marantz	0039, 0189		0054
Modulaire	0195	Yamaha	0176, 0186
NAD	0320	Yorx	0195
Nakamichi	0097	Zenith	0857
Onkyo	0135		

SETUP CODES FOR SATELLITE

AlphaStar	0772	Next Level	0869
Echostar	0775	Panasonic	0701
Expressvu	0775	Philips	0724, 0722
General Instrument	0627, 0361, 0869	Primestar	0627, 0361
HTS	0775	RCA	0566, 0143, 0392, 0855
Hitachi	0819	Radio Shack	0869
Hughes Network Systems	0749	Sony	0639
JVC	0775	Star Choice	0869
Jerrold	0627, 0361	Toshiba	0749, 0790
Magnavox	0724, 0722	Uniden	0724, 0722
Memorex	0724	Zenith	0856



SETUP CODES FOR TELEVISION

AOC	0030, 0019	Mitsubishi	0093, 0150, 0178, 0019
Admiral	0093, 0463	Motorola	0093
Aiko	0092	Multitech	0180
Akai	0030	NAD	0156, 0178, 0166
Alaron	0179	NEC	0030, 0019, 0056
America Action	0180	NTC	0092
Ampro	0751	Nikko	0030, 0178, 0092
Anam	0180	Onwa	0180
Audiovox	0451, 0180, 0092, 0623	Optimus	0154, 0250, 0166
Baysonic	0180	Optonica	0093, 0165
Belcor	0019	Orion	0236, 0463, 0179
Bell & Howell	0154, 0016	Panasonic	0051, 0250
Bradford	0180	Penney	0047, 0156, 0051, 0060,
Brockwood	0019		0030, 0178, 0021, 0019,
Broksonic	0236, 0463		0056, 0039, 1347
CXC	0180	Philco	0054, 0463, 0030, 0145,
Candle	0030, 0056		0019
Carnivale	0030	Philips	0054
Carver	0054	Pilot	0030, 0019, 0039
Celebrity	0000	Pioneer	0166
Cineral	0451, 0092	Portland	0019, 0039, 0092
Citizen	0060, 0030, 0056, 0039,	Prism	0051
	0092	Proscan	0047
Concerto	0056	Proton	0178, 0466
Contec	0180	Pulsar	0017, 0019
Craig	0180	Quasar	0051, 0250, 0165
Crosley	0054	RCA	0047, 0051, 0093, 0019,
Crown	0180, 0039		0090, 1047, 1147, 1247, 134
Curtis Mathes	0047, 0054, 0154, 0051,		7
	0451, 0093, 0060, 0030,	RadioShack	0047, 0154, 0165, 0180,
	0145, 0056, 0016, 0039,		0030, 0178, 0019, 0056, 003
	0166, 0466, 1147, 1347		9
Daewoo	0451, 0019, 0039, 0092,	Realistic	0154, 0165, 0180, 0030,
	0623, 0624		0178, 0019, 0056, 0039
Daytron	0019	Runco	0017, 0030, 0603
Denon	0145	SSS	0180, 0019
Dumont	0017, 0019	Sampo	0030, 0039
Dwin	0720, 0774	Samsung	0060, 0030, 0178, 0019,
Electroband	0000		0056
Emerson	0154, 0236, 0463, 0180,	Samsux	0039
	0282, 0178, 0019, 0179,	Sansei	0451
	0039, 0623, 0624	Sansui	0463
Envision	0030	Sanyo	0154
Fisher	0154	Scimitsu	0019
Fujitsu	0179	Scotch	0178
Funai	0180, 0179, 0171	Scott	0236, 0180, 0178, 0019,
Futuretech	0180		0179
GE0	0047, 0051, 0451, 0093,	Sears	0047, 0054, 0154, 0156,
	0282, 0178, 0021, 1147,		0178, 0179, 0056, 0171
	1347	Semivox	0180
Gibraltar	0017, 0030, 0019	Semp	0156
Gold Star	0030, 0178, 0019, 0056	Sharp	0093, 0165, 0039
Gradiente	0053, 0056	Shogun	0019
Grunpy	0180, 0179	Signature	0016
Hallmark	0178	Sony	0000
Harley Davidson	0179	Soundesign	0180, 0178, 0179
Harman/Kardon	0054	Squareview	0171
Harvard	0180	Starlite	0180
Hitachi	0145, 0056, 0016	Supreme	0000
Infinity	0054	Sylvania	0054, 0030
Inteq	0017	Symphonic	0171
JBL	0054	TMK	0178, 0056
JCB	0000	Tandy	0093
JVC	0053	Technics	0051, 0250
KEC	0180	Technol Ace	0179
KTV	0180, 0030, 0039	Techwood	0051, 0056
Kenwood	0030, 0019	Teknika	0054, 0180, 0150, 0060,
LGO	056		0019, 0179, 0056, 0016,
LXI	0047, 0054, 0154, 0156,		0039, 0092
	0178	Telefunken	0056
Logik	0016	Toshiba	0154, 0156, 0060
Luxman	0056	Totevision	0039
MGA	0150, 0030, 0178, 0019	Vector Research	0030
MTC	0060, 0030, 0019, 0056	Victor	0053
Magnavox	0054, 0030, 0179	Vidikron	0054
Majestic	0016	Vidtech	0178, 0019
Marantz	0054, 0030	Wards	0054, 0165, 0030, 0178,
Matsushita	0250		0021, 0019, 0179, 0056,
Megatron	0178, 0145		0016
Memorex	0154, 0250, 0463, 0150,	White Westinghouse	0463, 0623, 0624
	0178, 0056, 0016	Yamaha	0030, 0019
Midland	0047, 0017, 0051, 0039	Zenith	0017, 0463, 0016, 0092,
Minutz	0021		0624



SETUP CODES FOR VCR

Admiral	0048,0209	Mitsubishi	0048,0067,0043
Adventura	0000	Motorola	0035,0048
Aiko	0278	Multitech	0000,0072
Aiwa	0037, 0000	NEC	0104,0067,0041,0038
Akai	0041	Nikko	0037
America Action	0278	Noblex	0240
American High	0035	Olympus	0035
Asha	0240	Optimus	0037,0048,0104,0162, 0454,1062,1162,1262
Audiovox	0037	Orion	0184, 0209, 0002
Beaumark	0240	Panasonic	0035,0162,0225,0454, 1062, 1162, 1262
Bell & Howell	0104	Penney	0035,0037,0240,0042, 0038
Broksonic	0184, 0121, 0209, 0002	Pentax	0042
CCE	0072, 0278	Philco	0035, 0209
Calix	0037	Philips	0035, 0081
Canon	0035	Pilot	0037
Carver	0081	Pioneer	0067
Cineral	0278	Profitronic	0240
Citizen	0037, 0278	Proscan	0060
Colt	0072	Protec	0072
Craig	0037,0047,0240,0072, 0271	Pulsar	0039
Curtis Mathes	0060,0035,0041,0162	Quarte	0046
Cybernex	0240	Quartz	0046
Daewoo	0045,0278	Quasar	0035,0162,0454,1162
Denon	0042	RCA	0060,0035,0048,0240, 0042,0149
Dynatech	0000	RadioShack	0000
Electrohome	0037	Radix	0037
Electroponic	0037	Randex	0037
Emerex	0032	Realistic	0035, 0037, 0048, 0047, 0000, 0104, 0046
Emerson	0037, 0184, 0000, 0121, 0043, 0209, 0002, 0278	Runco	0039
Fisher	0047, 0104	STS	0042
Fuji	0035, 0033	Samsung	0240, 0045
Funai	0000	Sanky	0048, 0039
GE	0060, 0035, 0048, 0240	Sansui	0000, 0067, 0209, 0041, 0271
Garrard	0000	Sanyo	0047, 0240, 0104, 0046
GoVideo	0526	Scott	0184, 0045, 0121, 0043
GoldStar	0037, 0038	Sears	0035, 0037, 0047, 0000, 0042, 0104, 0046
Gradiente	0000	Semp	0045
Hi-Q	0047	Sharp	0048
Harley Davidson	0000	Shintom	0072
Harman/Kardon	0081, 0038	Shogun	0240
Harwood	0072	Singer	0072
Headquarter	0046	Sony	0035, 0032, 0000, 0033
Hitachi	0000, 0042, 0041	Sylvania	0035, 0081, 0000, 0043
Hughes Network Systems	0042	Symphonic	0000
JVC	0067, 0041	TMK	0240
Jensen	0041	Tatung	0041
KEC	0037, 0278	Teac	0000, 0041
KLH	0072	Technics	0035, 0162
Kenwood	0067, 0041, 0038	Teknika	0035, 0037, 0000
Kodak	0035, 0037	Thomas	0000
LXI	0037	Toshiba	0045, 0043
Lloyd's	0000	Totevision	0037, 0240
Logik	0072	Unitech	0240
MEI	0035	Vector	0045
MGA	0240, 0043	Vector Research	0038
MGN Technology	0240	Video Concepts	0045
MTC	0240, 0000	Videosonic	0240
Magnasonic	0278	Wards	0060, 0035, 0048, 0047, 0081, 0240, 0000, 0042, 0072, 0149
Magnavox	0035, 0039, 0081, 0000, 0149	White Westinghouse	0209, 0278
Magnin	0240	XR-1000	0035, 0000, 0072
Marantz	0035, 0081	Yamaha	0038
Marta	0037	Zenith	0039, 0000, 0209, 0033
Matsushita	0035, 0162, 0454,		
Memorex	0035, 0037, 0048, 0039, 0047, 0240, 0000, 0104, 0209, 0046, 0454, 1162, 1262		
Minolta	0042		

SETUP CODES FOR DIGITAL VIDEO DISC

Denon	0490	ThetaDigital	0571
GE	0522	Toshiba	0503
Harman/Kardon	0582	Yamaha	0490, 0545
JVC	0558	Zenith	0503, 0591
Kenwood	0534		
Magnavox	0503		
Marantz	0521		
Onkyo	0503		
Optimus	0571		
Panasonic	0490		
Philips	0503, 0539		
Pioneer	0525, 0571		
Proscan	0522		
RCA	0522		
Samsung	0573		
Sony	0533		
Technics	0490		



Appendix C: Glossary - Standard Definitions

Analog TV: Today's TV system using radio frequency waves to transmit and display pictures and sound.

Digital TV (DTV): Television delivered and displayed using radio frequency waves that contain information that is digitally encoded for improved quality and efficiency.

Standard Definition TV (SDTV): Basic digital television transmission that may be displayed with fewer than 480 progressively scanned lines (480p) in 16 x 9 or 4 x 3 format. 480 interlaced (480i) is the quality of today's analog TV system. SDTV provides 150-300,000 pixels.

Enhanced Definition TV (EDTV): A better digital television transmission than SDTV with at least 480p, in a 16 x 9 or 4 x 3 display and Dolby digital surround sound. 480p is the quality used by most DVD players. EDTV provides 300-400,000 pixels.

High-Definition Television (HDTV): The best quality digital picture, widescreen (16 x 9) display with at least 720 progressively scanned lines (720p) or 1080 interlaced lines (1080i) and Dolby digital surround sound. HDTV provides 900,000-2.1 million pixels.

HDTV Monitor (sometimes called HDTV Ready): A set that can display HDTV programming if you have a separate HDTV tuner, HD Cable Set-Top Box or HD Satellite Set-Top-Box Receiver.

HDTV Tuner (also decoder, receiver, set-top box): A device capable of receiving and outputting HDTV signals for display. It may be stand-alone or integrated in the set.

Integrated HDTV: An HDTV that has the digital tuner built into the set. It does not need a separate set-top box to receive over-the-air DTV signals.

Plug-and-Play or Digital Cable Ready: A DTV or other device for digital cable customers that plugs directly into the cable jack and does not require a separate set-top box. Plug and Play TV owners must obtain a CableCARD from their cable company in order to view scrambled programming services.

Interlace Scan: A way to scan vertical lines onto a TV picture by scanning all the odd lines first, then filling in the even lines (this happens instantaneously).

Progressive Scan: A way to scan vertical lines onto a TV picture by scanning all the lines consecutively (progressively).

Aspect ratio (4 X 3): Traditional TV "aspect ratio," that is, the screen's width as compared to its height. For example, a "32 inch TV screen" would be 25 ½ inches wide and 19 inches tall.

Aspect ratio (16 X 9): "Widescreen" TV "aspect ratio" that is more like a movie screen than a traditional TV. For example, a "32 inch TV screen" would be 28 inches wide and 16 inches tall.

Source: Buying a Digital Television, CEA, HDTV Guide, 2005

Note: The Federal Communications Commission (FCC), the Consumer Electronics Association (CEA) and the Consumer Electronics Retailers Coalition (CERC) have made a new tip sheet available for digital television (DTV) retailers to reproduce and distribute to consumers on the sales floor. The file may be downloaded online at www.dtv.gov. While you're there, check out the other useful information the FCC is making available to consumers interested in learning more about the analog to digital transition.





WHERE
VISION
MEETS
VALUE