zenith

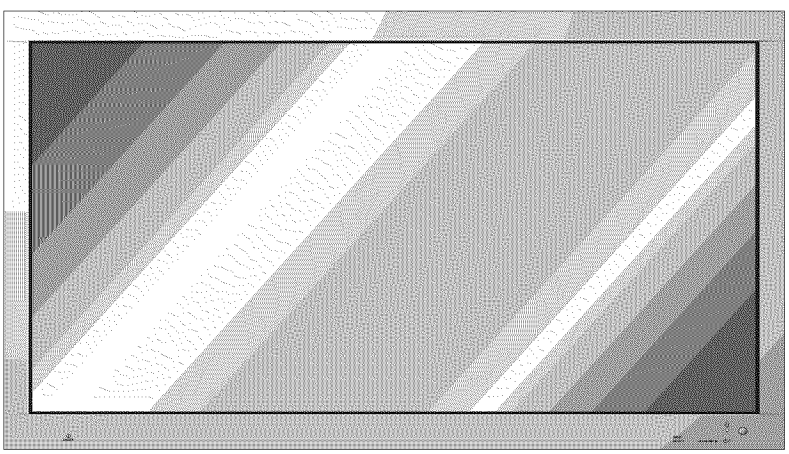
PLASMA DISPLAY PANEL

Please read this operating guide carefully before using the Monitor.
Keep the operating guide with the Monitor.
For future reference, write down the serial number on the back of the Monitor in the space provided below.

Model Number:
Serial Number:

P60W26P
P60W26H

OWNER'S MANUAL



The PDP Manufacturing Process: Why colored dots may be present on the PDP screen

The PDP (Plasma Display Panel) which is the display device of this product is composed of 0.9 to 2.2 million cells. A few cell defects will normally occur in the PDP manufacturing process. Several colored dots visible on the screen should be acceptable. This also occurs in other PDP manufacturers' products and the dots appearing does not mean that this PDP is defective. Thus a few cell defects are not sufficient cause for the PDP to be exchanged or returned. Our production technology is designed to minimize cell defects.

Cooling Fan Noise

In the same way that a fan is used in a PC computer to keep the CPU (Central Processing Unit) cool, the PDP is equipped with cooling fans to cool the Monitor and improve its reliability. Therefore, a certain level of noise could occur while the fans are operating and cooling the PDP.
This noise doesn't have any negative effect on the PDP's efficiency or reliability. The noise from these fans is normal during the operation of this product. We hope you understand that a certain level of noise from the cooling fans is acceptable and is not sufficient cause for the PDP to be exchanged or returned.

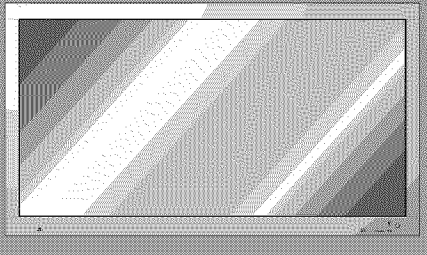
Earth Wire (Ground Wire) should be connected.

(Please refer to Safety Instructions on page 6, Item 12. Power Cord Polarization)

- If the earth wire (ground wire) is not connected, there is a possible danger of electric shock caused by the current leakage.
- If grounding methods are not possible, a separate circuit breaker should be employed and installed by a qualified electrician.
- Do not connect ground wire to telephone wires, lightning rods or gas pipes.

WARNING

TO REDUCE THE RISK OF FIRE AND ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.



Keep this manual with Monitor for future easy reference)

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Setup and Operation Checklist

Setup and Operation Checklist
(See page 9 for available connection and operational setup options.)

1. Unpack Monitor and all accessories.

2. Connect all external video and audio equipment.
   see pages 14 - 20.

3. Install batteries in remote control.
   See page 31.

4. Turn Monitor on.
   See page 32.

5. Turn video source equipment on.

6. Select viewing source for Monitor.
   See page 11.

7. Fine-tune source image and sound to personal preference or as required by source.
   See pages 37, and 39.

8. Additional features Setup
   See Table of Contents.

WARNING

WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING:

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

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

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

WARNING:

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

FCC NOTICE

- **P60W26H, P60W26P : A Class B digital device**
  This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.

CAUTION:

Do not attempt to modify this product in any way without written authorization from Zenith Electronics Corporation. Unauthorized modification could void the user's authority to operate this product.

COMPLIANCE:

The responsible party for this product's compliance is:
Zenith Electronics Corporation
2000 Millbrook Drive
Lincolnshire, Il 60069, USA
Phone: 1-847-941-8000

SAFETY INSTRUCTIONS

Important safeguards for you and your new product

Your product has been manufactured and tested with your safety in mind. However, improper use can result in potential electrical shock or fire hazards. To avoid defeating the safeguards that have been built into your new product, please read and observe the following safety points when installing and using your new product, and save them for future reference.

Observing the simple precautions discussed in this booklet can help you get many years of enjoyment and safe operation that are built into your new product.

This product complies with all applicable U.S. Federal safety requirements, and those of the Canadian Standards Association.

1. Read Instructions
All the safety and operating instructions should be read before the product is operated.

2. Follow Instructions
All operating and use instructions should be followed.

3. Retain Instructions
The safety and operating instructions should be retained for future reference.

4. Heed Warnings
All warnings on the product and in the operating instructions should be adhered to.

5. Cleaning
Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. Water and Moisture
Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

7. Accessories Carts and Stands
Do not place this product on a slippery or tilted surface, or on an unstable cart, stand, tripod, bracket, or table. The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

8. Transporting Product
A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

PORTABLE CART WARNING

9. Attachments
Do not use attachments not recommended by the product manufacturer as they may cause hazards.

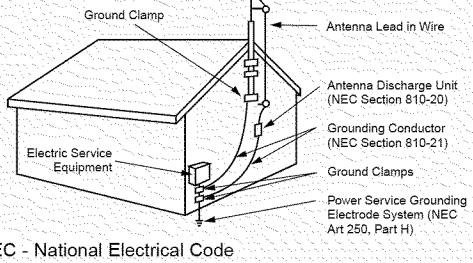
10. Ventilation
Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11. Power Sources
This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

12. Power-Cord Polarization
This product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into the grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

13. Outdoor Antenna Grounding
If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (U.S.A.), ANSI/ NFPA 70 provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Example of Grounding According to National Electrical Code Instructions



NEC - National Electrical Code

(Continued from previous page)

14. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

15. Lightning

For added protection for this product (receiver) during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

16. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

17. Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

18. Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

19. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

a. If the power-supply cord or plug is damaged.
b. If liquid has been spilled, or objects have fallen into the product.
c. If the product has been exposed to rain or water.
d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
e. If the product has been dropped or the cabinet has been damaged.
f. If the product exhibits a distinct change in performance.

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e. If the product has been dropped or the cabinet has been damaged.
f. If the product exhibits a distinct change in performance.

21. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

22. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

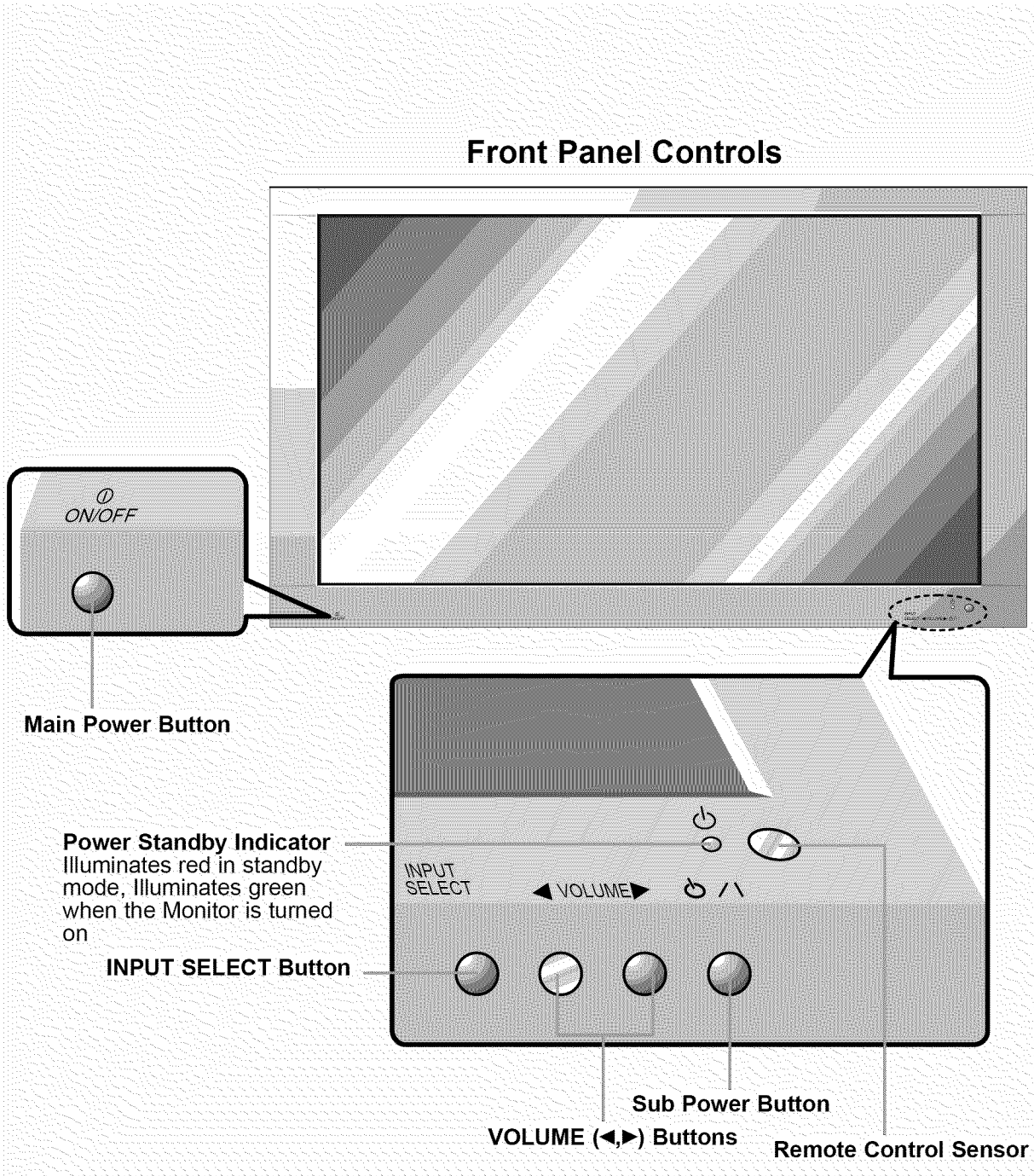
23. Wall or Ceiling Mounting

The product should be mounted to a wall or ceiling only as recommended by the manufacturer. The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product.

24. Heat

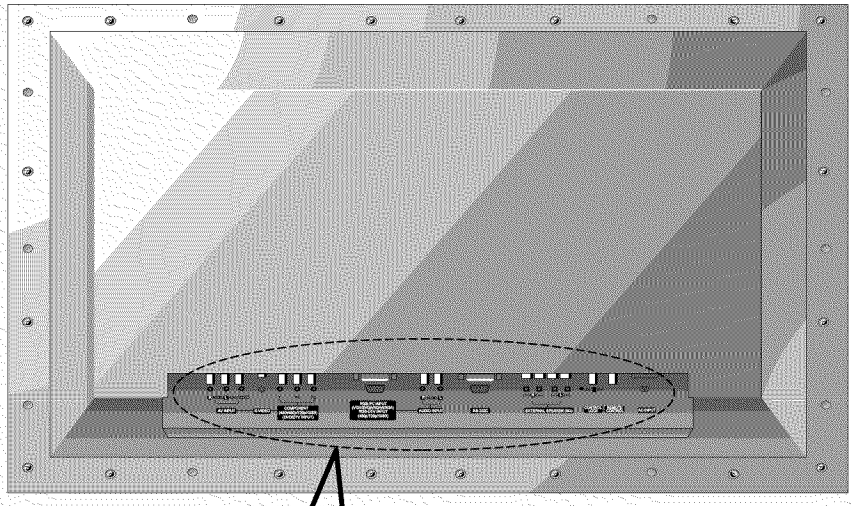
The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

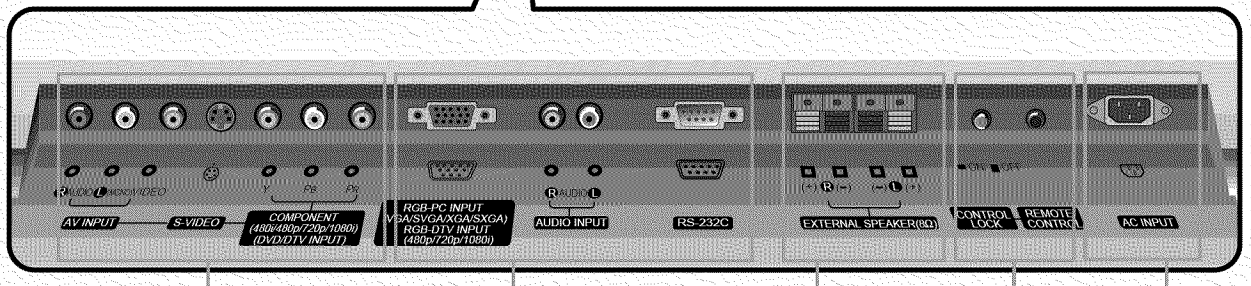
Front Panel Controls



Connection Panel Overview

Back Panel





A/V INPUT /
COMPONENT (480i/480p/720p/1080i)
DVD/DTV INPUT jacks

RGB-PC INPUT (VGA/SVGA/XGA/SXGA)
RGB-DTV INPUT (480p/720p/1080i) /
AUDIO INPUT /
RS-232C jacks

EXTERNAL SPEAKER
(8 ohm output)

CONTROL LOCK /
REMOTE CONTROL

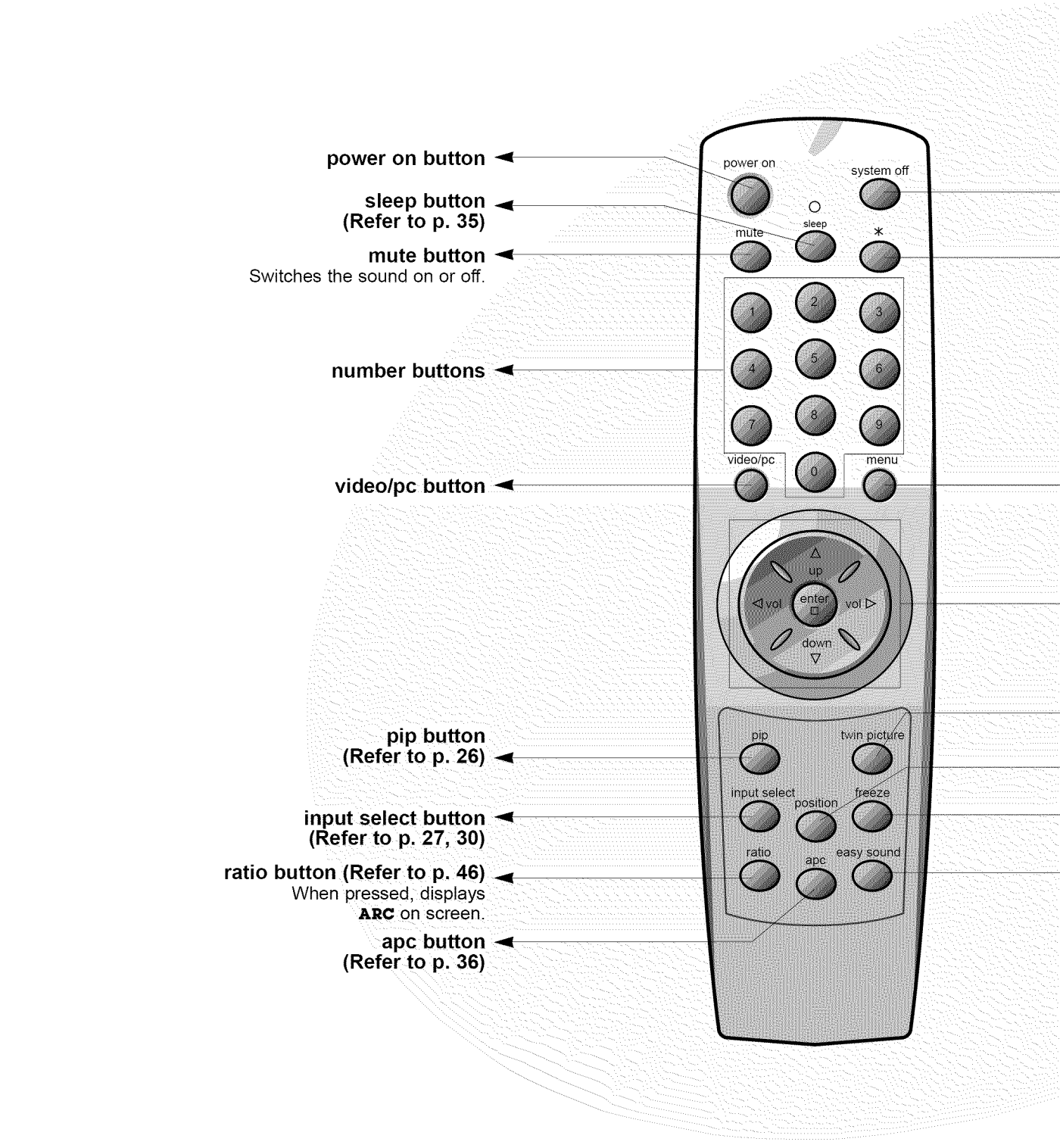
When "CONTROL LOCK" is set "ON", wired remote control mode is operated.

POWER INPUT SOCKET

This Monitor operates on standard AC power: 120 Volt 60 Hz.
Do not attempt to operate the monitor on DC power.

Remote Control Key Functions/Accessories

- When using the remote control, aim it at the remote control sensor on the Monitor.



system off button
(Refer to p. 32)

Not functional

menu button

enter button
up/down buttons
vol buttons

twin picture button (Refer to p. 29)
When pressed, displays **DW** on screen.

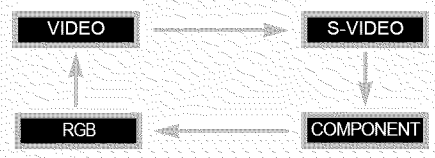
position button
(Refer to p. 27)

freeze button
(Refer to p. 42)

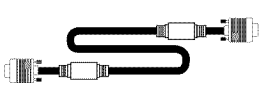
easy sound button (Refer to p. 40)
When pressed, displays **DASP** on screen.

video/pc button on the remote control

Each press of this button changes the mode as shown below.

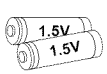


Accessories


D-sub 15 pin cable

Power cord

Owner's Manual



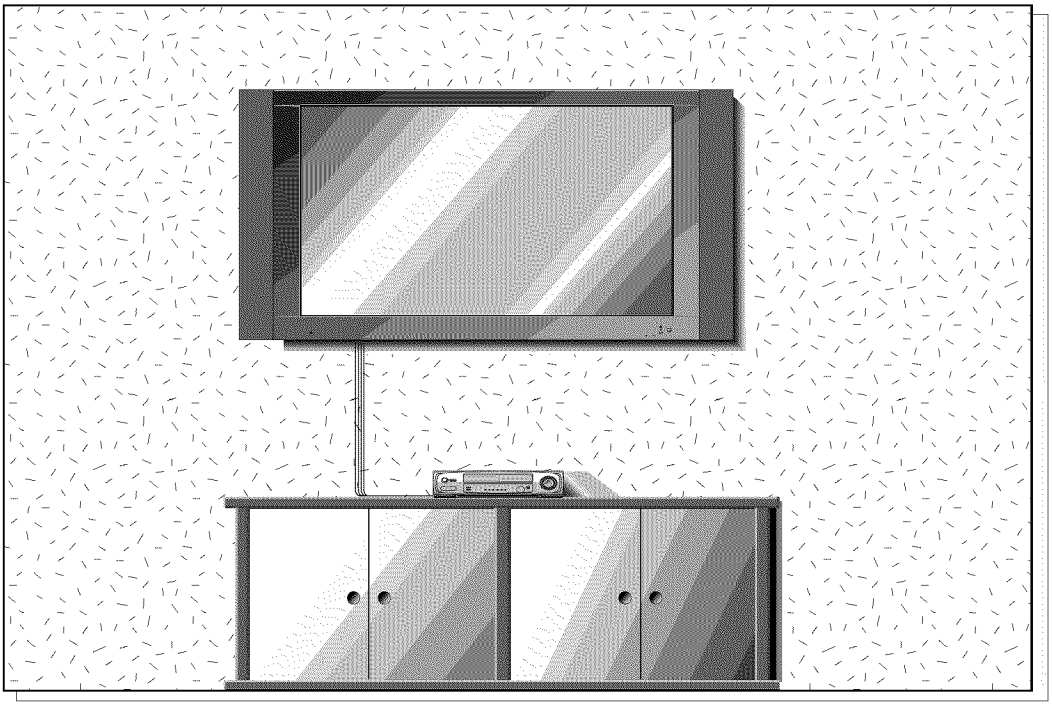
Alkaline batteries

Remote control

Monitor Installation

- **It is recommended that this product only be used at an altitude of less than 6562 feet (2000m) to get the best quality picture and sound.**
- **Your monitor can be installed on a wall as shown below. Wall mount is optional, and is not supplied with the monitor.**
- **This plasma display is designed to be mounted horizontally or vertically.**

Wall Mount: Horizontal Installation

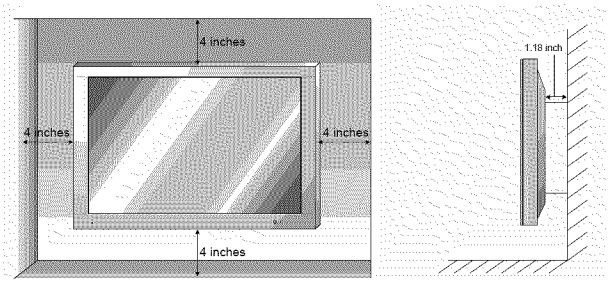


- The monitor can be installed on the wall as shown above. (For further information, refer to the optional 'Wall Mounting Bracket Installation and Setup Guide'.)
- Speakers are optional, and shown for illustration only.

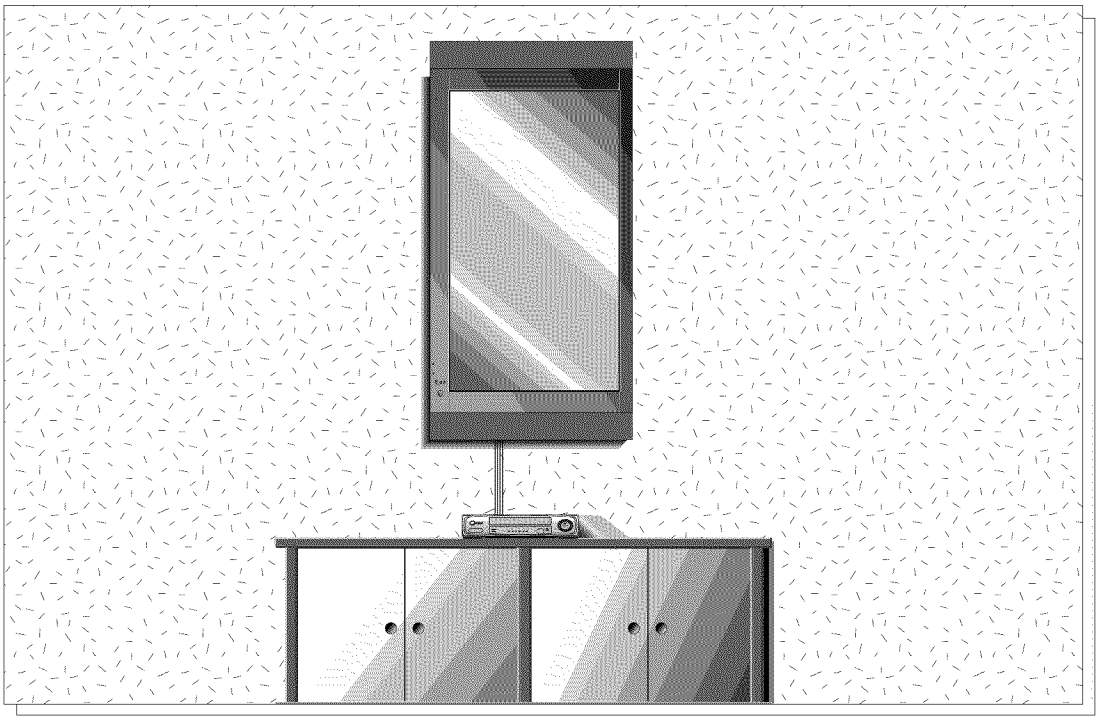
Tip

- Install this monitor only in a location where adequate ventilation is available.

a. (Wall mount minimum allowable clearances for adequate ventilation)



Wall Mount: Vertical Installation



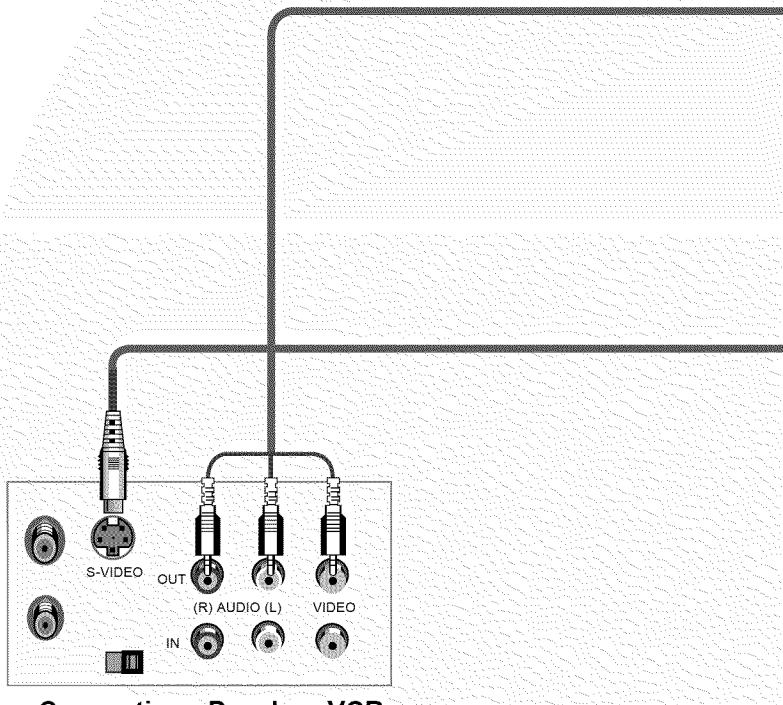
- The monitor can be installed vertically on the wall as shown above.
  Caution: When installing the monitor vertically, the front panel controls must be in the left-down side position as shown above.
  (For further information, refer to the optional 'Wall Mounting Bracket Installation and Setup Guide'.)
- Speakers are optional, and shown for illustration only.

Caution

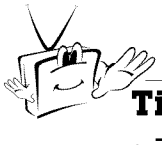
- When installing the monitor vertically, you have to change the OSD display mode so that the menus will appear correctly and also to protect the monitor from over-heating (Refer to P. 33).

VCR Setup

- As shown below, when connecting the Monitor to a VCR, match the colors of AV input jacks on the Monitor with the output jacks on the VCR: Video = yellow, Audio (Left) = white, Audio (Right) = red.
- If you have a mono VCR, connect the audio cable from the VCR to the AUDIO(L/MONO) input on the Plasma Monitor.
- If you connect an S-VIDEO VCR to the S-VIDEO input, the picture quality is improved, compared to connecting a regular VCR to the Video input.
- Avoid having a fixed image remain on the screen for a long period of time. A frozen still picture from a VCR (or a CH label) displayed on the screen for prolonged periods of time, will result in a ghost image remaining even when you change the image. Avoid prolonged display of a still image.

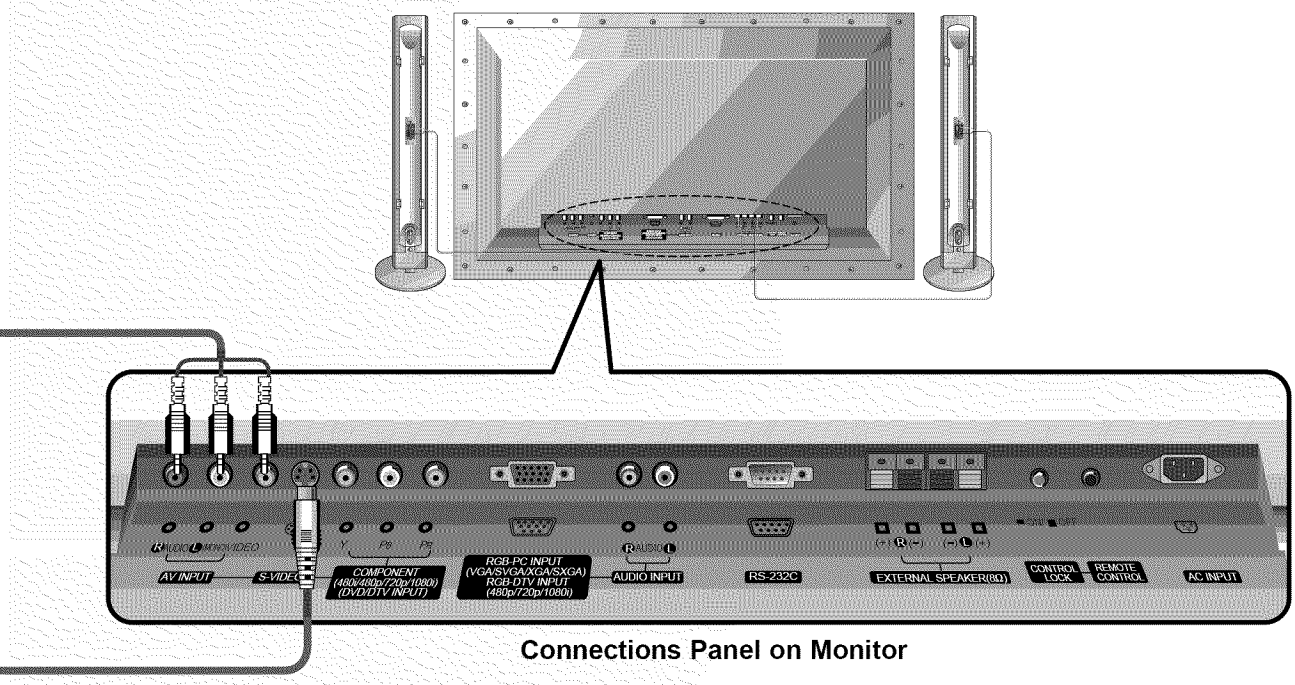


Connections Panel on VCR



Tip

- To avoid picture noise (interference), leave an adequate distance (20 inches or more) between the VCR and monitor.



Connections Panel on Monitor

To Watch a VCR

video/pc

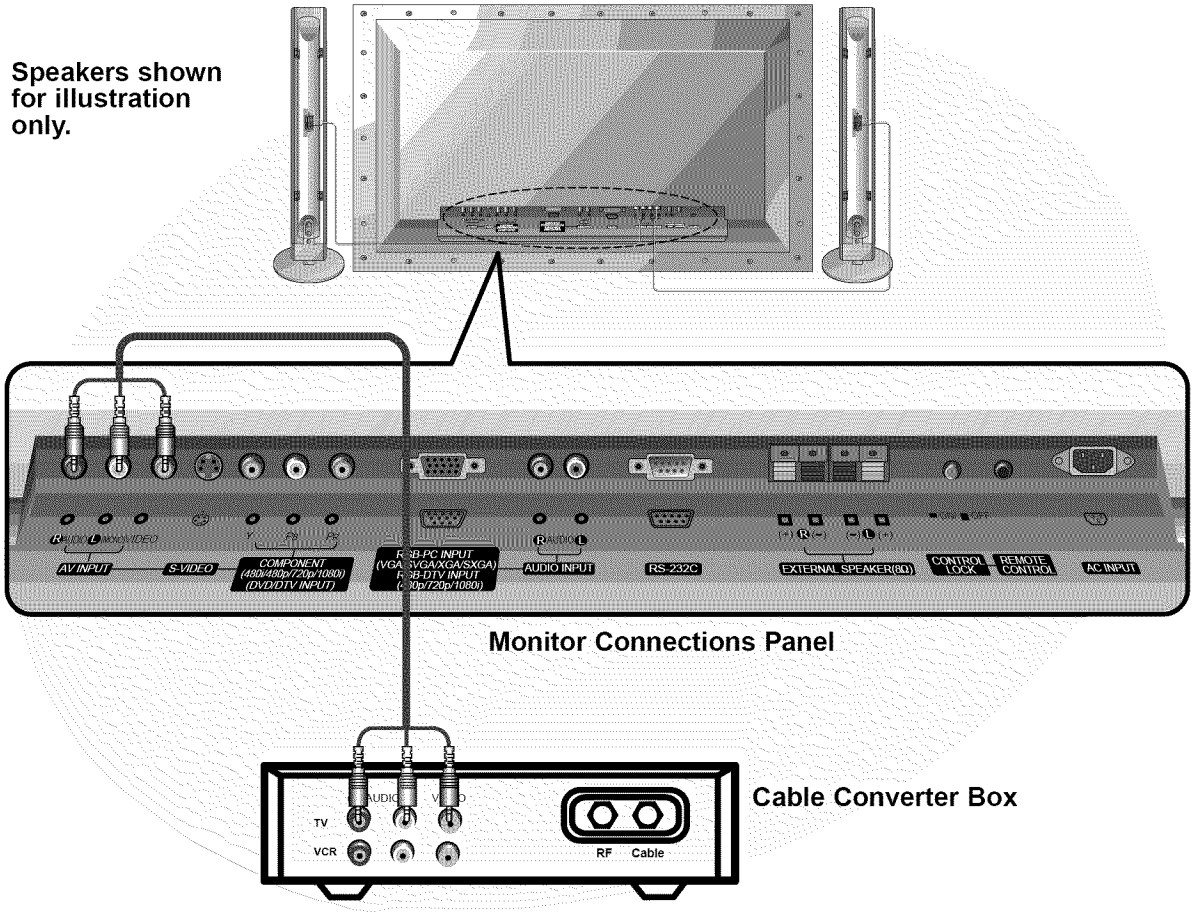
1 Press **video/pc** button on the remote control and select **VIDEO**.
(When connecting with S-Video, select **S-VIDEO**.)

2 Insert a video tape into the VCR and press the **PLAY** button on the VCR. See VCR owner's manual.

Cable TV Setup

- **After subscribing to a cable TV service from a local provider and installing a cable converter box, you can watch cable TV programming. This monitor cannot display TV programming without a TV tuner device or cable TV converter box connected to the monitor.**

Speakers shown for illustration only.



Monitor Connections Panel

Cable Converter Box

To Watch Cable TV Programming

1 Press **video/pc** button on the remote control and select **VIDEO** source.

video/pc

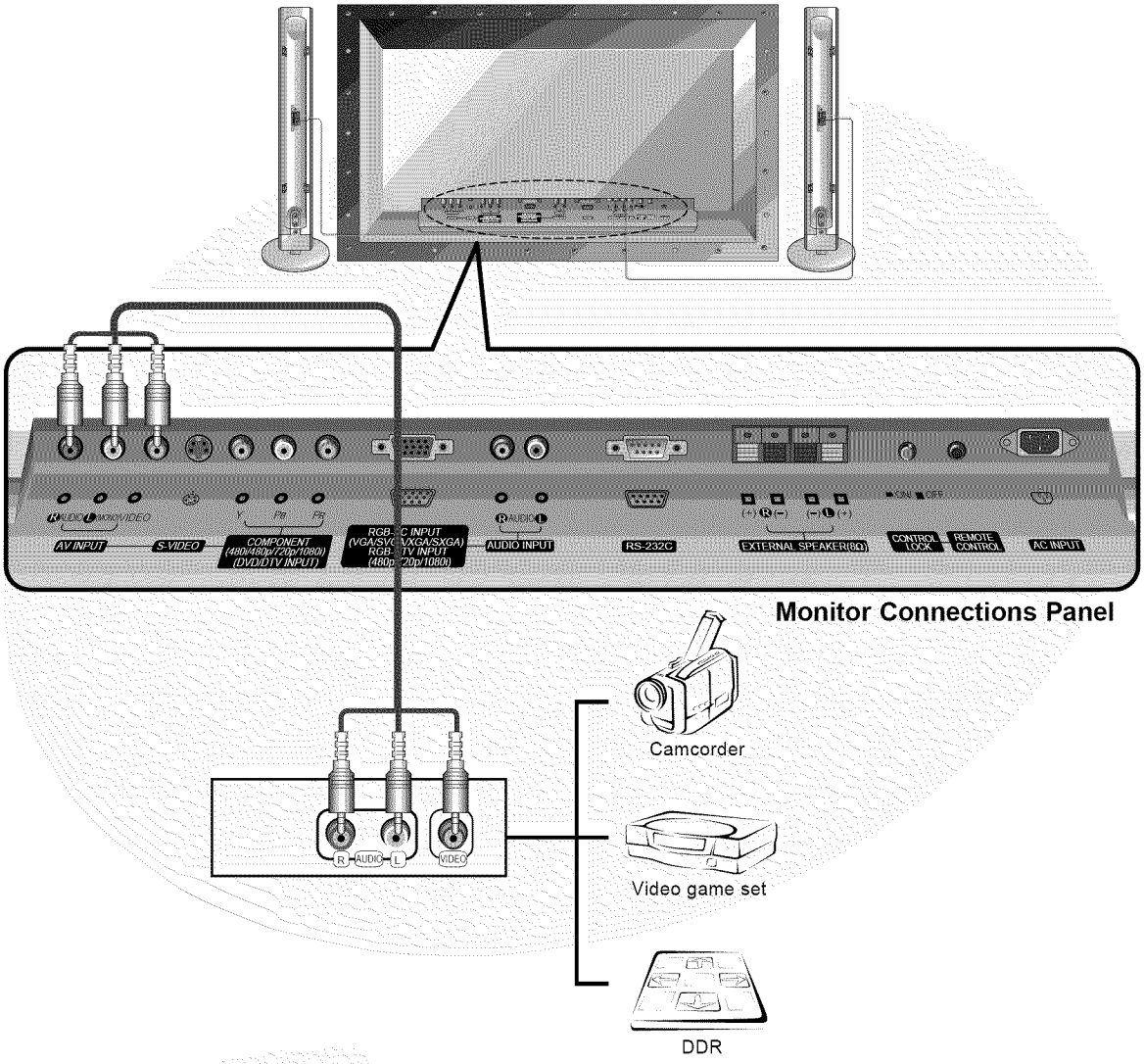
2 Tune to cable service provided channels using the cable box.

Tip

- For further information regarding cable TV service, contact your local cable TV service provider(s).

External A/V Source Setup

- As shown below, when connecting the monitor to an external source, match the colors of A/V input jacks on the monitor with the output jacks on the audio/video equipment: Video = yellow, Audio (Left) = white, Audio (Right) = red.



Monitor Connections Panel

To Watch External A/V Source

1 Use **video/pc** button on the monitor remote control to select **VIDEO**.

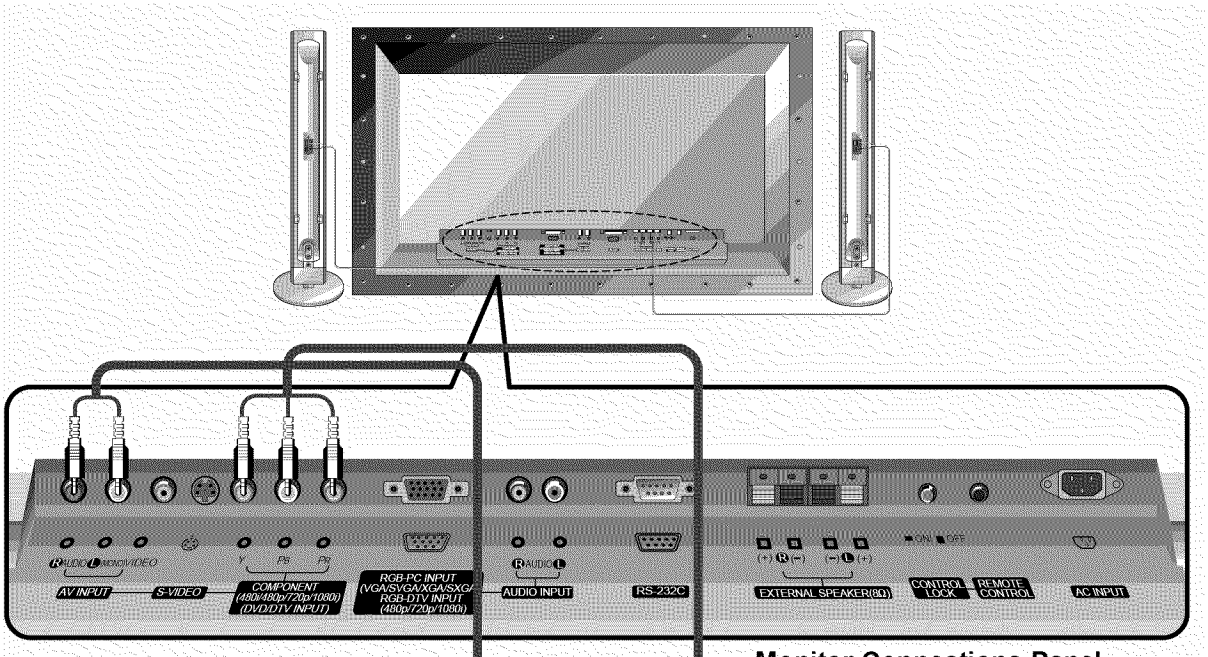
video/pc

2 Operate the corresponding external equipment. See external equipment operating guide.

DVD Setup

How To Connect A DVD (Digital Video Disc) Player

- Connect DVD video outputs to Y, P_B, P_R for COMPONENT (480i/480p/720p/1080i) (DVD/DTV INPUT) and the DVD audio outputs to Audio jacks for A/V INPUT.



To Watch A DVD

- Turn on the DVD player, and insert a DVD.
- Use **video/pc** button on the monitor remote control to select **COMPONENT**.Refer to the DVD player's manual for operating instructions.

- **Component Input Ports**
  Connect DVD player jacks to Monitor Component input jacks as indicated below.

Component input jacks on the Monitor	Y	P_B	P_R

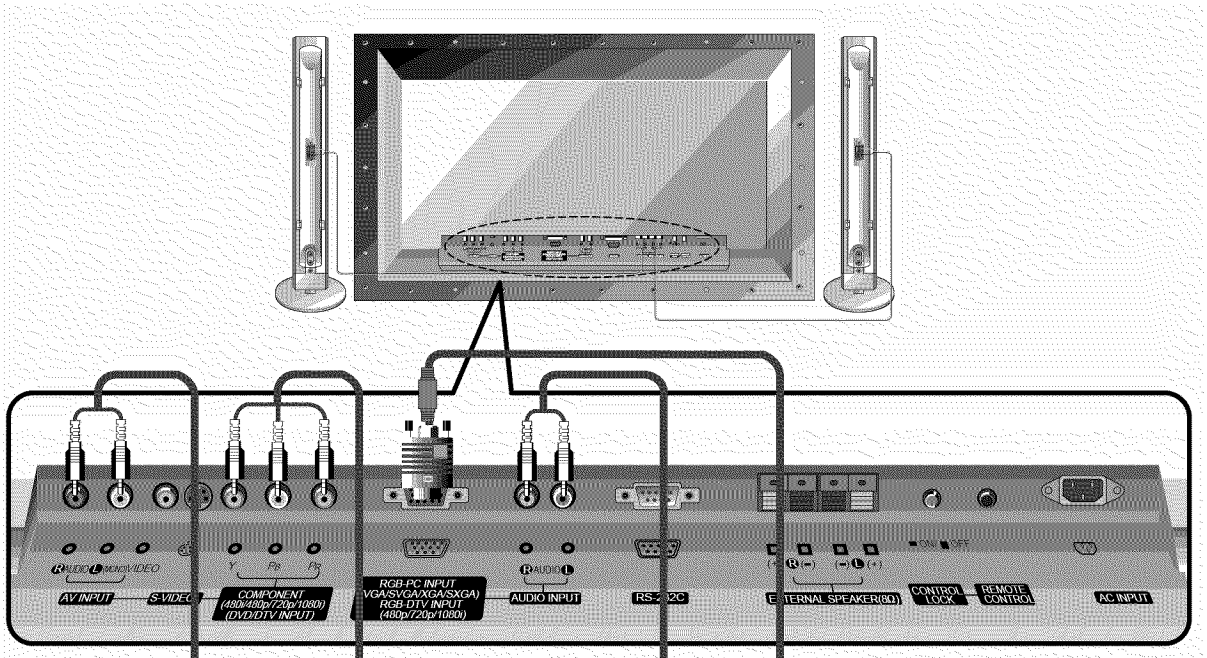
Video output jacks on a typical DVD player	Y	Pb	Pr
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	P_B	P_R

DTV Setup

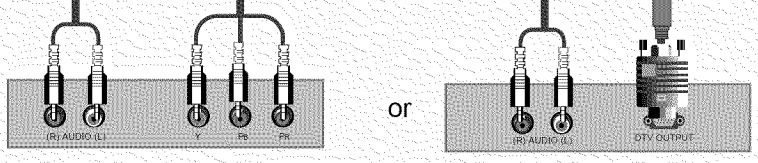
- **To watch digitally broadcast programs, purchase/connect a digital SET-TOP BOX.**
- **You can only select the 16:9 picture format in DTV 720p/1080i mode.**

How To Connect A User-supplied Digital Set-top Box

- You can use either the Monitor's COMPONENT (Y, P_b, P_r) inputs or the single RGB-DTV INPUT for video connections, depending on your Set Top Box connectors. Then, make the corresponding Audio connections. See the diagram below for either setup.



Monitor Connections Panel



Digital SET-TOP BOX Connections Panel

How to use

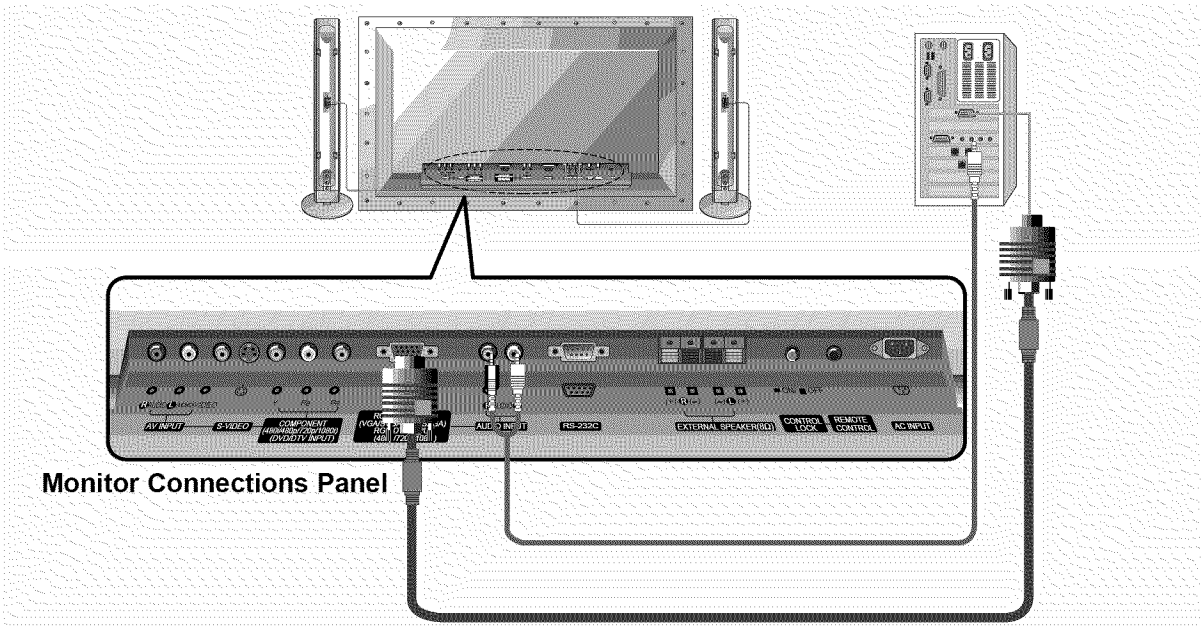
- Turn on the digital SET-TOP BOX.
  (Refer to the instructions in the owner's manual for the digital SET-TOP BOX.)
- Use **video/pc** button on the remote control to select **COMPONENT** or **RGB**.

PC Setup

- **You can easily connect the Plasma Display to your PC for outstanding image and sound.**
- **Use the Monitor to display images and sound from a PC Computer source.**

Setup Instructions: Connecting A PC To Your Monitor

- If the image output of the PC is set higher than UXGA, no picture will appear on the Monitor. (UXGA is not supported.)
- Connect the signal cable from the monitor Output port on the PC to the RGB-PC INPUT (VGA/SVGA/XGA/SXGA) port on the Monitor.
- Connect the audio cable from the PC to the Audio ports of the Monitor. (Audio cables are not supplied with the Monitor.)
- To set up the Monitor to operate within a PC windows environment, select Normal, Standard or Default monitor.
- The Monitor can not be used for Plug and Play functionality.
- If your PC computer is equipped with a sound card, adjust the sound output on the PC.
- It is recommended that the resolution output of the PC should be set to 1280 x 720 to get the best quality picture. (Look for a video card that uses the nVIDIA GeForce 2 pro or similar chipset that supports this resolution)



Monitor Connections Panel

Using The Monitor to View Your PC Output

On The Remote Control

PC Setup

- First, turn on the PC computer and press the **ON/OFF** button on the Monitor to apply power to it. Second, turn on the display by pressing the ⏻/| button on the Monitor or by pressing the **POWER** button on the Monitor's remote control.
- Use the **video/pc** button on the remote control to select the RGB input source.
- Set the resolution output of the PC to SXGA or under (1280 x 1024, 75Hz). (Refer to page 21.)

Tips

- Avoid keeping a fixed image on the Monitor's screen for a long period of time. The fixed image may become permanently imprinted on the screen; use a screen saver when possible.
- If the resolution output of the PC computer is over SVGA, connect the PC to the RGB-PC (VGA/SVGA/XGA/SXGA) input port on the Monitor. Change the PC computer resolution output accordingly.

Monitor Image Display Specifications

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
640x350	31.468	70.09
	37.861	85.08
720x400	31.469	70.08
	37.927	85.03
640x480	31.469	59.94
	35.000	66.66
	37.861	72.80
	37.500	75.00
	43.269	85.00
	45.913	90.03
	53.011	100.04
	64.062	120.00
800x600	35.156	56.25
	37.879	60.31
	48.077	72.18
	46.875	75.00
	53.674	85.06
	56.000	90.00
	64.016	100.00
832x624	49.725	74.55
1024x768	48.363	60.00
	56.476	70.06
	60.023	75.02
	68.677	84.99
1280x720	52.400	69.98
1152x864	54.348	60.05
	63.995	70.01
	67.500	75.00
	77.487	85.05
1152x870	68.681	75.06
1280x960	60.000	60.00
	75.000	75.00
1280x1024	63.981	60.02
	79.976	75.02

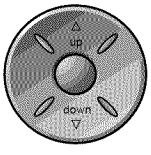
Tip

- Synchronization input form: Separate

PC Mode Feature Check (Overview)

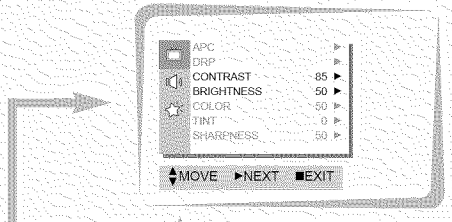
- **Select RGB first by pressing video/pc, see page 11.**
- **Make sure the PC and monitor are both turned on.**
- **Use the monitor's remote control to make adjustments.**

1 Press the **menu** button to show menus on screen.

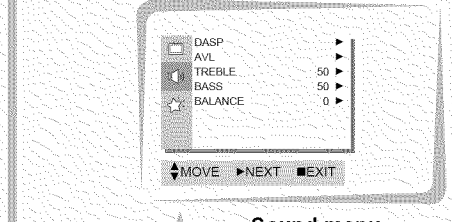


2 Use the **up/down** button to select menus.

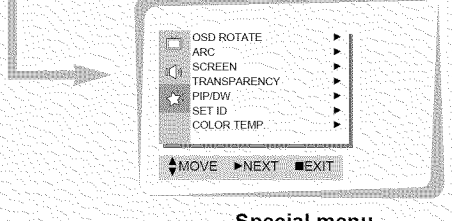
- Each press will cycle through the different menus as shown below.



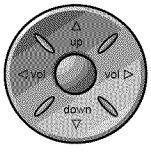
Picture menu



Sound menu



Special menu



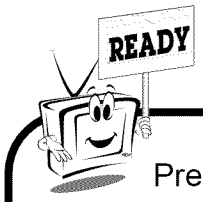
3 Press the **vol** (►) button and then use the **up/down** or **vol** button to select a feature you want to use.

- Press the **enter** button to remove menus.

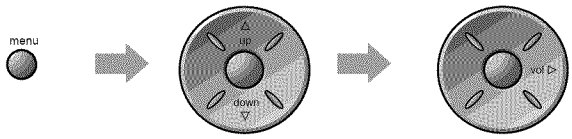
PC Mode Adjustments

Auto Adjustment

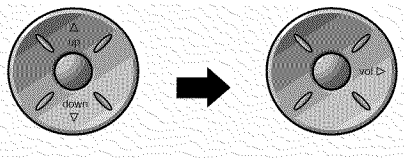
- **Automatically adjusts picture position and minimizes image shaking.**

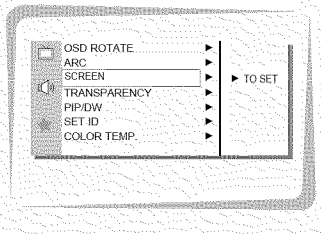


Press the **MENU** button and then use the ▲ / ▼ button to select menu. Press the ► button.

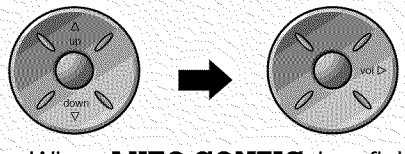


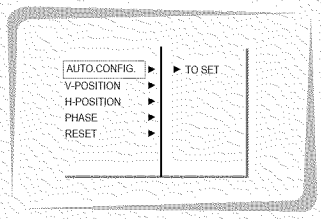
1 Use the **up/down** button to select **SCREEN** and then press the **vol** (►) button.





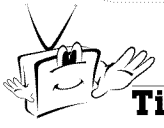
2 Use the **up/down** button to select **AUTO.CONFIG.** and then press the **vol** (►) button.





- When **AUTO.CONFIG.** has finished, "**OK**" will be shown on screen.
- If the position of the image is incorrect, try Auto adjustment again.

3 If picture needs to be adjusted more after Auto adjustment, you can manually adjust the image position and **PHASE**.



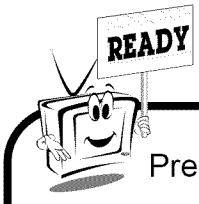
Tip

- If the image is still not correct, your Monitor is functioning properly but needs further adjustment.

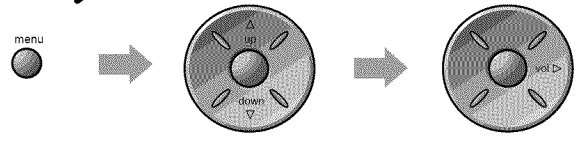
PC Mode Adjustments

Adjusting Horizontal / Vertical Picture Position Manually

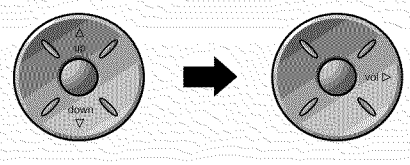
- Only adjust **V-POSITION** and **H-POSITION** in DTV or component 480p/720p/1080i.

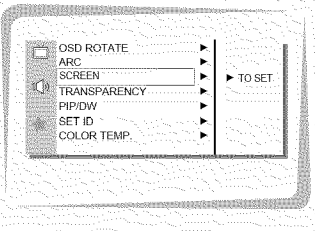


Press the **MENU** button and then use the ▲ / ▼ button to select ☆ menu. Press the ► button.

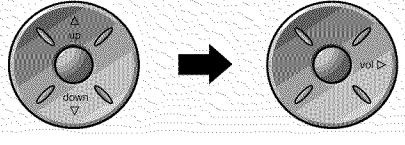


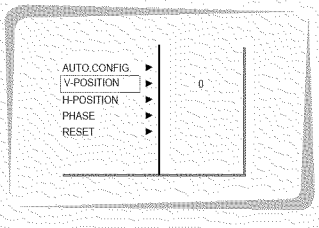
1 Use the **up/down** button to select **SCREEN** and then press the **vol** (►) button.





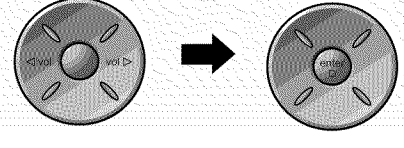
2 Use the **up/down** button to select **V-POSITION** or **H-POSITION** and then press the **vol** (►) button.





3 Press the **vol** button to adjust until you get desired horizontal or vertical position and then press the **enter** button to remove menus.

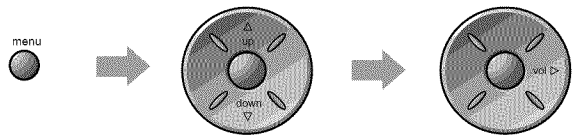
- The adjustment range of **V-POSITION** is -50 ~ +50.
- The adjustment range of **H-POSITION** is -100 ~ +100.
- Based on the input mode, the adjustment range of **V-POSITION/H-POSITION** may change.
- Based on the input signal, the position of the picture may not change even though you have adjusted the horizontal or vertical position with this function.



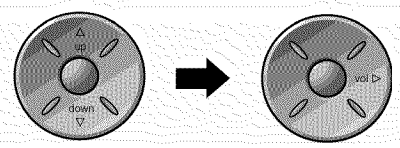
Picture Phase Adjustments

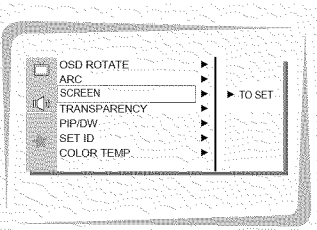
- If the picture isn't clear after auto adjustment and especially if the characters are still trembling, then adjust the picture phase manually.
- When watching PIP/TWIN PICTURE, the **SCREEN** menu option is not available.

Press the **MENU** button and then use the ▲ / ▼ button to select menu. Press the ► button.

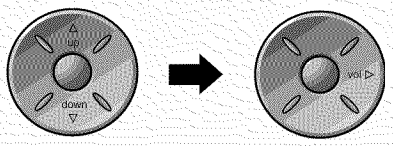


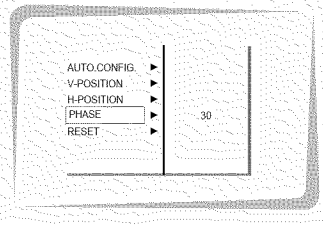
1 Use the **up/down** button to select **SCREEN** and then press the **vol** (►) button.





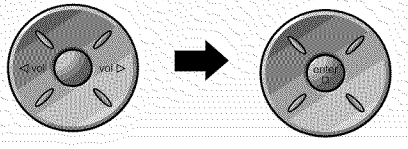
2 Use the **up/down** button to select **PHASE** and then press the **vol** (►) button.





3 Use the **vol** button to adjust phase and then press the **enter** button.

- The adjustment range of **PHASE** is 0 ~ 63.



Initializing (Reset to original factory default value)

- To initialize the adjusted value, select **RESET** with the **up/down** button and then press the **vol** (►) button.

Picture-In-Picture (PIP) Function

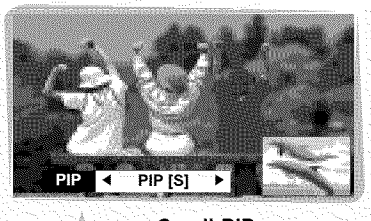
- PIP lets you view 2 different inputs (sources) on your monitor screen at the same time. One source will be large, and the other source will show a smaller (PIP) inset image.
- Select **RGB** input source before pressing PIP.
- This function works only in the following resolutions;
  640x480, 800x600, 1024x768 (only in Vertical frequency 60 Hz)
- When you select RGB or DTV for main picture in PIP/Twin picture, you can watch video, cable TV or DVD for sub picture.
- Color of main picture may be different from PIP's in PIP/Twin picture mode.
- If input source for main picture is changed while in PIP/Twin picture mode, sub picture will disappear.
- When watching PIP/Twin picture, **SCREEN** option is not available in Special menu.
- With PIP active, not all picture formats can be used for the main/sub picture.

Watching PIP (Picture-in-Picture)

Press the **pip** button.

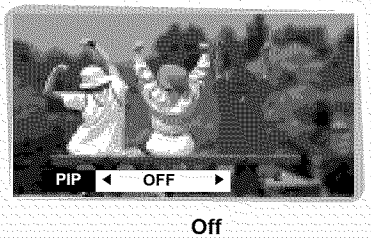
- Each time you press **pip** or **vol** button, you can change the PIP size as below.

PIP[S] ⟷ **PIP [L]** ⟷ **OFF**



Small PIP

Large PIP



Off

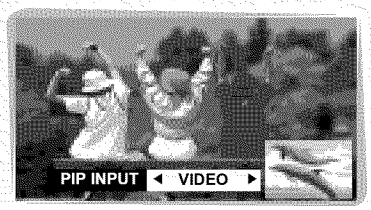
Selecting PIP Sub-Picture Source

Press the **input select** button in PIP mode.

- Each time you press **input select** button, you toggle between **VIDEO**, **S-VIDEO** and **COMPONENT**.

VIDEO → **S-VIDEO** → **COMPONENT**

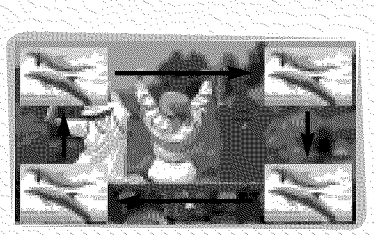
COMPONENT source only works in 480i mode.



Moving The PIP Picture

Press the **position** button in PIP mode.

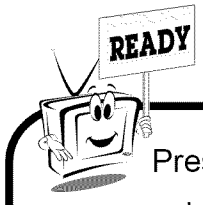
- Each press of the **position** button will change the position of the sub picture on the screen as shown below.



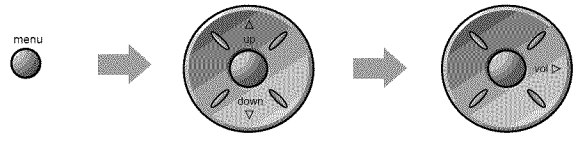
Picture-In-Picture (PIP) Function

Selecting PIP Sound Options

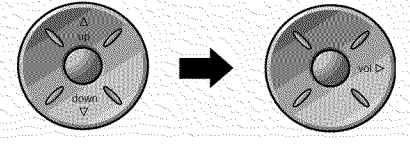
- To select main sound or sub picture (inset) sound
- This function only works with the following resolutions; 640x480, 800x600, 1024x768 (only in Vertical frequency 60 Hz)
- To use this function, connect PC/DTV video output to RGB-PC INPUT/RGB-DTV INPUT and connect PC/DTV audio outputs to AUDIO INPUT.
- **SOUND SELECT** is always the main picture sound (**SOUND**[**M**]) regardless of prior sound choice.

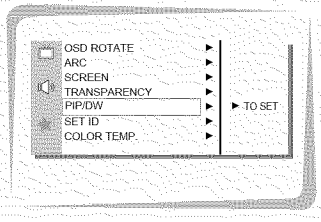


Press the **MENU** button and then use the ▲ / ▼ button to select ☆ menu. Press the ► button.

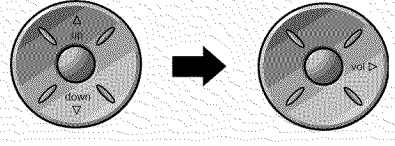


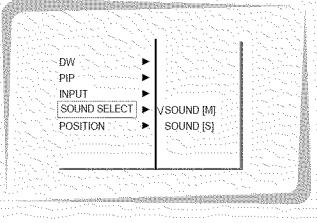
1 Use the **up/down** button to select **PIP/DW** and then press the **vol** (►) button.





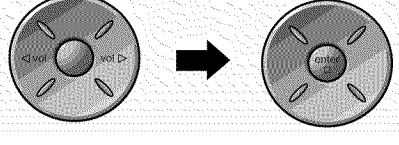
2 Use the **up/down** button to select **SOUND SELECT** and then press the **vol** (►) button.

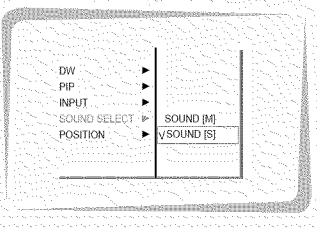




3 Use the **vol** buttons to select main image sound (**SOUND** [**M**]) or PIP (inset image) sound (**SOUND** [**S**]) and then press the **enter** button.

- Each time you press **up/down** button, you toggle between **SOUND** [**M**] or **SOUND** [**S**].



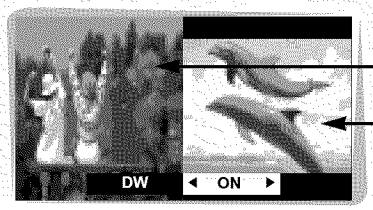


Twin Picture Feature

- As the name suggests, this mode divides the screen into 2, allowing 2 sources to be shown on the monitor screen at the same time. Each source is given half the screen.
- Select **RGB** input source.
- This function works only in the following resolutions;
  DTV 480p/720p/1080i, **RGB** 640x480 (only in Vertical frequency 60 Hz)
- With TWIN PICTURE active, not all picture formats can be used for the main/sub picture.

Press the **twin picture** button.

- Each time you press **twin picture** or **vol** buttons, you select **ON** or **OFF**.



Main picture

Sub picture

ON

OFF

- To avoid a permanent image being burned into the screen, the sub picture will move every 2 hours.

:Center → Upside ↓ Downside ← Center ↑

- The sub picture starts in the center position and then moves as described above.
- A small amount of video noise may appear at the bottom or top of the sub picture. This is normal.

Twin Picture Mode

Selecting A Twin Picture Source

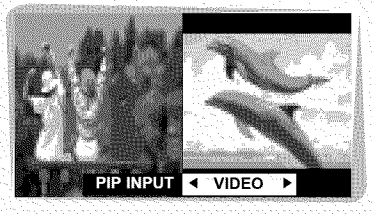
input select

Press the **input select** button in TWIN PICTURE mode.

- Each time you press the **input select** button, you toggle between **VIDEO**, **S-VIDEO** and **COMPONENT**.

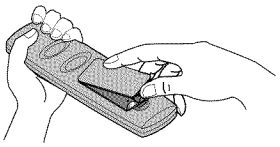
VIDEO → **S-VIDEO** → **COMPONENT**

COMPONENT source only works in 480i input signal.



Using the Remote Control

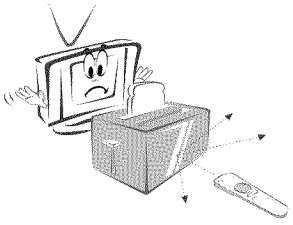
Installing Batteries



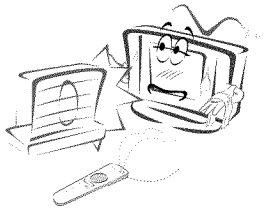
- Open the battery compartment cover on the back of the remote control and insert the batteries with correct polarity, match "+" with "+", and match "-" with "-".
- Install two 1.5V "AA" alkaline batteries.
  Don't mix used batteries with new batteries.

Notes For Remote Control Operation

Make sure these are no objects between the remote control and its sensor.



Don't place the remote control near a heater or damp place. Strong impact on the remote control may cause operation failure.



Signal from the remote control may be disturbed by sunlight or other strong light. In this case, turn the set to other direction.

Turning The Monitor On

- **When using the remote control, aim it at its sensor on the Monitor.**

Turning on the Monitor just after installation

1 Connect power cord correctly.

2 Press the main **ON/OFF** button on the Monitor. At this moment, the Monitor is switched to standby mode. Press the ⏻/I or **INPUT SELECT** button on the Monitor or press the **power on** or **video/pc** button on the remote control and then the Monitor will be turned on.

Turning on the Monitor (power cord is still connected)

1 **If the Monitor is turned off with the ⏻/I button on the Monitor**

Press the ⏻/I or **INPUT SELECT** button on the Monitor or press the **power on** or **video/pc** button on the remote control and then the Monitor will be turned on.

2 **If the Monitor is turned off with the ON/OFF button on the Monitor**

- Press the main **ON/OFF** button on the Monitor to turn on the Monitor.

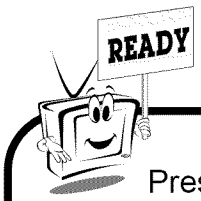
3 **If the Monitor is turned off with the remote control and also the ON/OFF button on the Monitor**

- Press the main **ON/OFF** button on the Monitor and then press the ⏻/I or **INPUT SELECT** button on the Monitor or press the **power on** or **video/pc** button on the remote control and then the Monitor will be turned on.

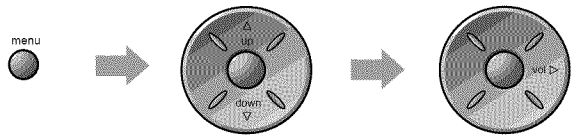
Tip

- **Adjusting volume level**
  The volume (►) button increases the sound and the volume (◄) button reduces the sound level.

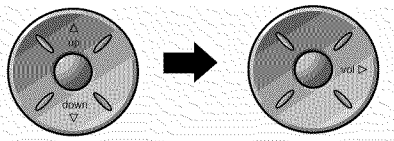
Menu Rotation for Vertical Viewing

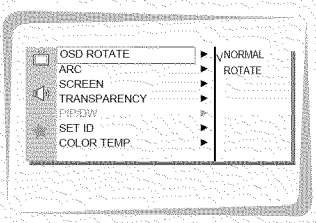


Press the **MENU** button and then use the ▲ / ▼ button to select ☆ menu. Press the ► button.

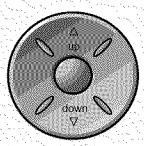


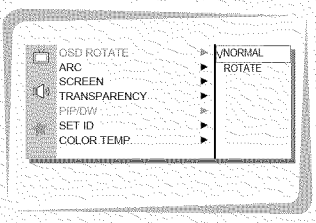
1 Use the **up/down** button to select **OSD ROTATE** and then press the **vol** (►) button.





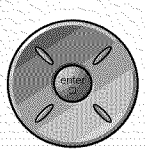
2 Use the **up/down** button to select **NORMAL** or **ROTATE**.





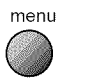
- Select **NORMAL** if the monitor was installed horizontally.
- Select **ROTATE** if the monitor was installed vertically.

3 Press the **enter** button.

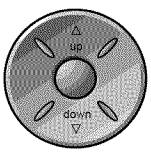


Checking Features

- **Use the remote control to make adjustments.**
- **Select VIDEO input source**

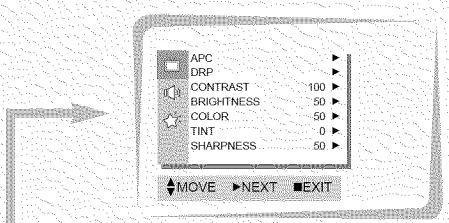


1 Press the **menu** button.

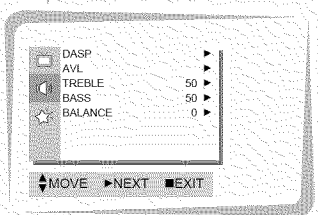


2 Press the **up/down** button.

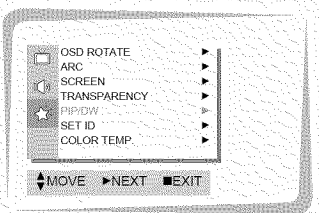
- Each press will cycle through the menus shown below.



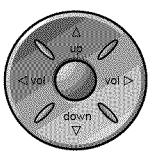
Picture menu



Sound menu



Special menu



3 Use the **vol** (►) button to select a feature to adjust, and then use the **up/down** or **vol** buttons to adjust the selected menu option.

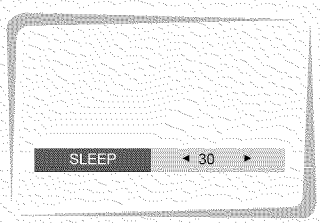
- Press the **enter** button to remove menu.

Sleep Timer Setup

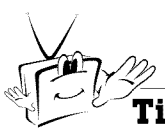
Sleep Timer turns the Monitor off after the preset time expires

Use the **sleep** button to set sleep time.
Each time you press **sleep** button, the next preset setting time is changed as follows:

◄--- ► → ◄10 ► → ◄20 ► → ◄30 ► → ◄60 ► → ◄90 ► → ◄120 ► → ◄180 ► → ◄240 ► → ◄--- ►



- To release sleep time setting, press the **sleep** or **vol** button repeatedly to select ◄--- ►.
- '⚠ **SLEEP 1**' will be displayed one minute before the Monitor is due to switch off.



Tips

- When the sleep time you want is displayed on the screen, don't press the **sleep** button. After 20 seconds, the screen display disappears and sleep time is set.
- To check remaining sleep time after setting, press the **sleep** or **enter** button just once.
- If you turn the Monitor off after setting the sleep timer, the setting is erased.

Auto Picture Control

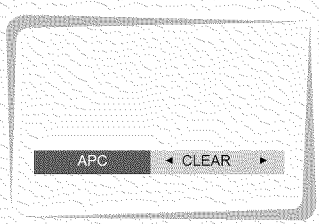
Use APC to set the Monitor for the best picture appearance

- **APC is not available for RGB sources or in PIP/TWIN PICTURE modes.**

APC (Auto Picture Control)

1 Press the **apc** button.

2 Use the **apc** or **vol** buttons to select your desired picture condition.



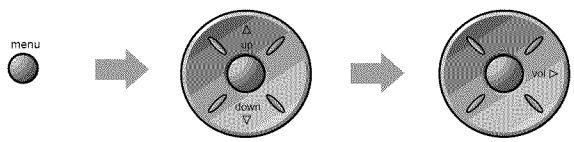
- Each press of **vol** buttons changes the screen display as shown below.

- You can also select **CLEAR**, **SOFT** or **USER** in the **PICTURE** menu. USER settings are adjustments made to the picture menu options. See next page.

Adjusting Picture Appearance

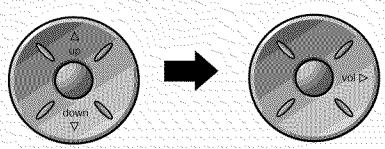
- PIP inset and Twin Picture settings are not adjustable.

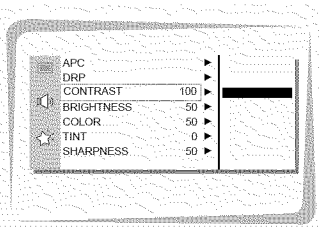
Press the **MENU** button and then use the ▲ / ▼ button to select menu. Press the ► button.



1

Example : Changing the contrast.
Use the **up/down** button to select **CONTRAST** and then press the **vol** (►) button.

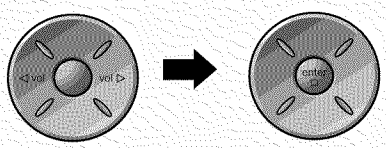


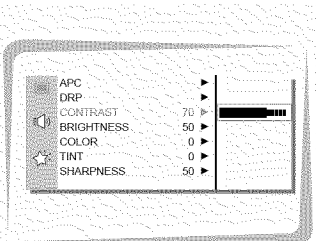


2

Use the **vol** buttons to make appropriate adjustments and then press the **enter** button.

- Use the **up/down** buttons to select other menu options.





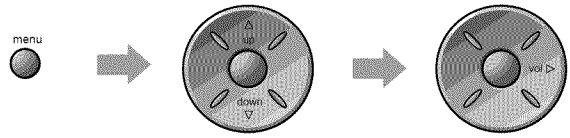
- Adjust **BRIGHTNESS**, **COLOR**, **TINT**, and **SHARPNESS** in the same way.

DRP (Digital Reality Picture)

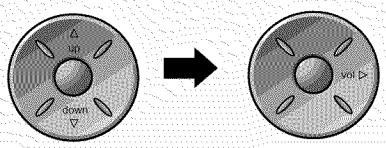
DRP improves image outlines in dark screens.

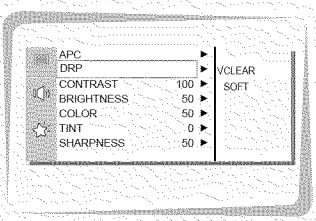
- This function works with Video, S-Video, and Component (480i mode) sources.

Press the **MENU** button and then use the ▲ / ▼ button to select menu. Press the ► button.

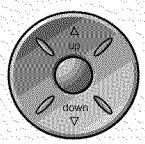


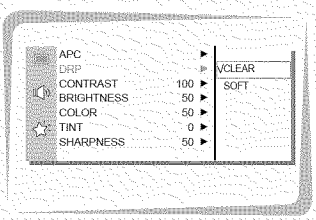
1 Use the **up/down** button to select **DRP** and then press the **vol** (►) button.



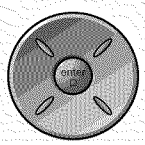


2 Use the **up/down** button to select **CLEAR** or **SOFT**.





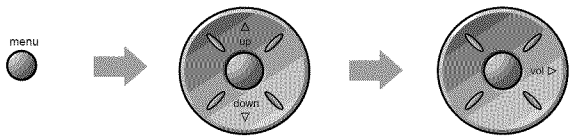
3 Press the **enter** button to remove menu.



Adjusting Sound

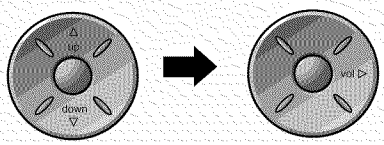
Manual Settings

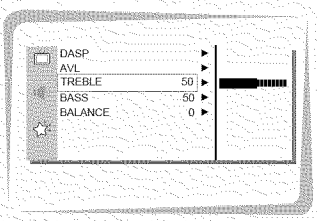
Press the **MENU** button and then use the ▲ / ▼ button to select menu. Press the ► button.



1

Example: Treble adjustment
Use the **up/down** button to select **TREBLE** and then press the **vol** (►) button.

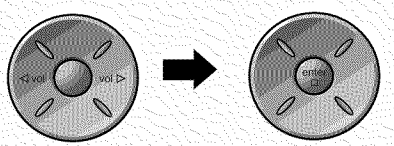


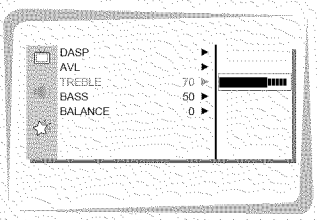


2

Use the **vol** buttons to make appropriate adjustment and then press the **enter** button.

- Use the **up/down** buttons to select other menu options.





- Adjust **BASS** and **BALANCE** in the same way.

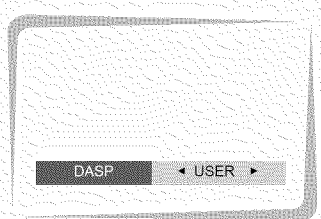
Auto Sound Control

DASP (Digital Auto Sound Processing)

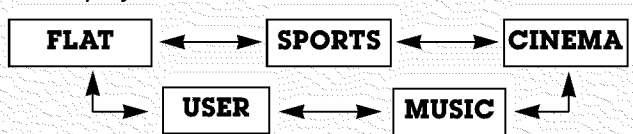
- This function lets you enjoy the best sound without any manual adjustment because the Monitor automatically selects the appropriate audio tone levels based on the program content.

1 Press the **easy sound** button.

2 Use the **easy sound** or **vol** button to select a sound setup.



- Each press of **easy sound** or **vol** buttons changes the screen display as shown below.

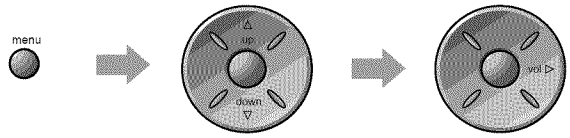


- You can also select **FLAT**, **SPORTS**, **CINEMA**, **MUSIC** or **USER** in the **SOUND** menu.

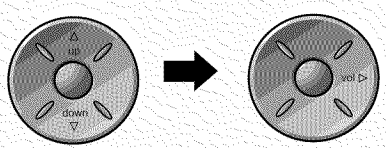
AVL (Auto Volume Leveler)

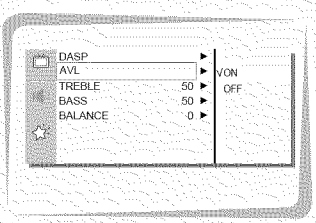
This feature maintains an equal volume level; even if you change channels.

Press the **MENU** button and then use the ▲ / ▼ button to select menu. Press the ► button.

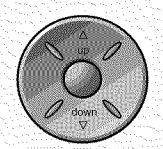


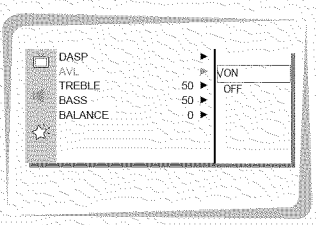
1 Use the **up/down** button to select **AVL** and then press the **vol** (►) button.



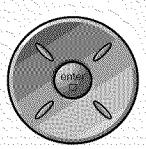


2 Use the **up/down** button to select **ON** or **OFF**.





3 Press the **enter** button to remove menu.



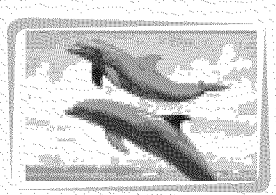
Using Still Function

- **This feature isn't available for RGB input source.**
- **Use with A/V or COMPONENT video input sources.**

1 Press the **freeze** button.

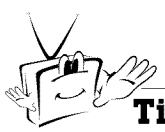
- The image displayed is frozen (still).
- In PIP or TWIN PICTURE modes, the sub (inset) picture is frozen.

Moving image



Still image

2 To return to normal viewing, press the **freeze** button again.

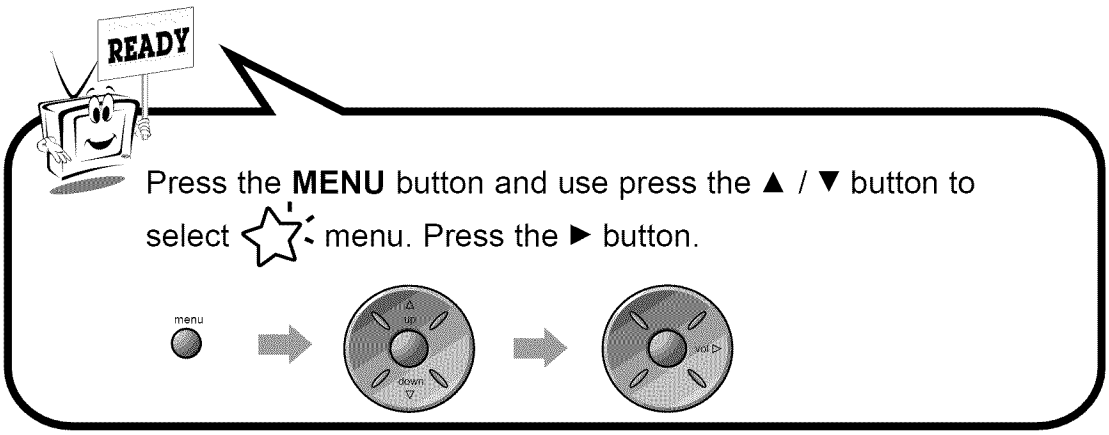


Tips

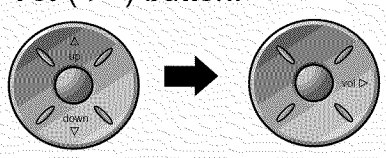
- If still picture is on the screen for more than 5 minutes, the image becomes dark.
  If another function is activated, normal screen brightness is restored.
- This is a protective feature designed to reduce the chance of a ghost image burning onto the monitor screen.

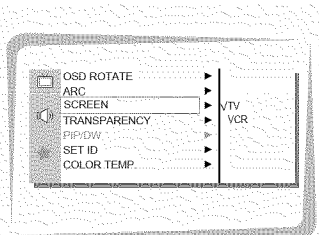
Using the Screen Menu Options

- **This function works only in the video mode.**
- **Use this option to correct trembling or picture instability while viewing a video tape.**



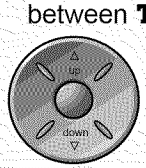
1 Use the **up/down** button to select **SCREEN** and then press the **vol** (►) button.

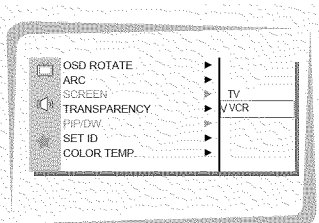




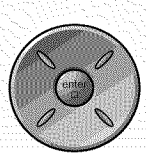
2 Use the **up/down** buttons to select **TV** or **VCR**.

- Select the **VCR** option if watching a VCR.
- Select the **TV** option for other equipment. (Except VCR.)
- Each time you press the ▲ / ▼ button you toggle between **TV** and **VCR**.





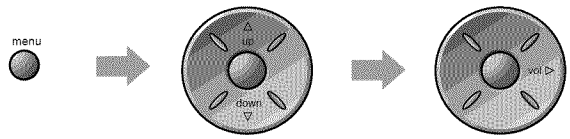
3 Press the **enter** button to remove menu.



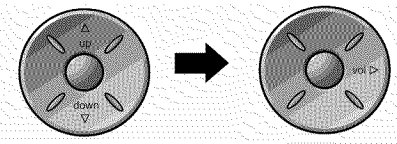
Adjusting Menu Transparency

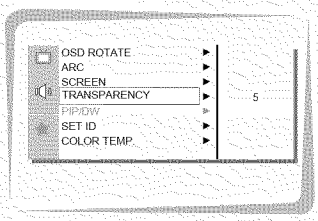
To make the menu backgrounds clear or opaque

Press the **MENU** button and then use the ▲ / ▼ button to select ☆ menu. Press the ► button.



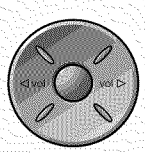
1 Use the **up/down** button to select **TRANSPARENCY** and then press the **vol** (►) button.

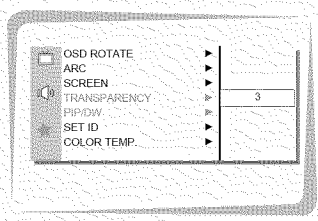




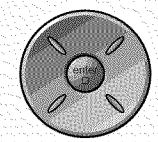
2 Use the **vol** buttons to adjust menu transparency.

- The **TRANSPARENCY** adjustment range is 0 ~ 5.



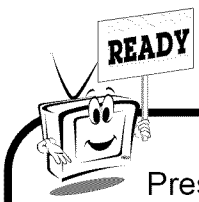


3 Press the **enter** button to remove menu.

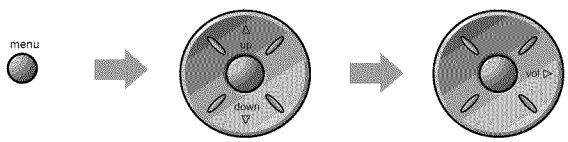


Adjusting Color Temperature

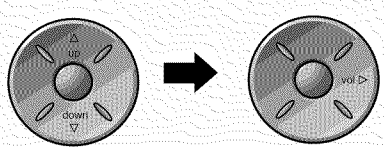
- **You should adjust color temperature for PC mode again if color temperature was adjusted for another input source.**
- **To initialize values (reset to default settings), select '0' for RED, GREEN, and BLUE.**

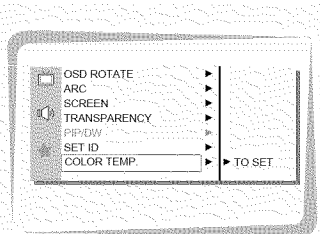


Press the **MENU** button and then use the ▲ / ▼ button to select menu. Press the ► button.

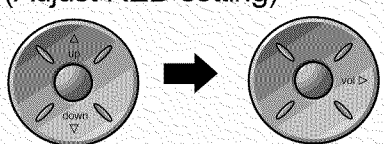


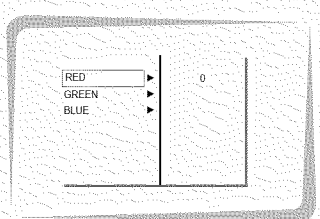
1 Use the **up/down** button to select **COLOR TEMP.** and then press the **vol** (►) button.





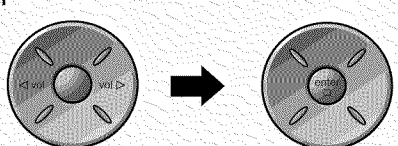
2 Use the **up/down** button to select **RED** and then press the **vol** (►) button. (Adjust RED setting)





• Adjust **GREEN** and **BLUE** in the same way.

3 Use the **vol** buttons to make appropriate adjustments and then press the **enter** button.



• The adjustment range of **RED**, **GREEN**, and **BLUE** is -5 ~ +5.

Setting Picture Format

- You can view RGB-PC sources, in either 16:9 or 4:3 screen aspect ratios.
- A RGB-DTV source can only use the 16:9 screen aspect ratio (720p/1080i).
- If 4:3 aspect ratio mode is used for a long time, the outline of the image may remain on the screen after you change to the 16:9 screen.
- Don't use the 4:3 picture format or show a TWIN PICTURE continuously for more than 10 hours.

Notes: DTV sources are setup specifically to use the 16:9 aspect ratio picture format.

Will Not Accept" appearing indicates that you are trying to select an aspect ratio which is not correct for the source.

Use the **ratio** button to select the appropriate picture format.

- Each time you press **ratio** or **vol** buttons, you select **16:9**, **4:3** or **ZOOM**.

16:9

4:3

Zoom

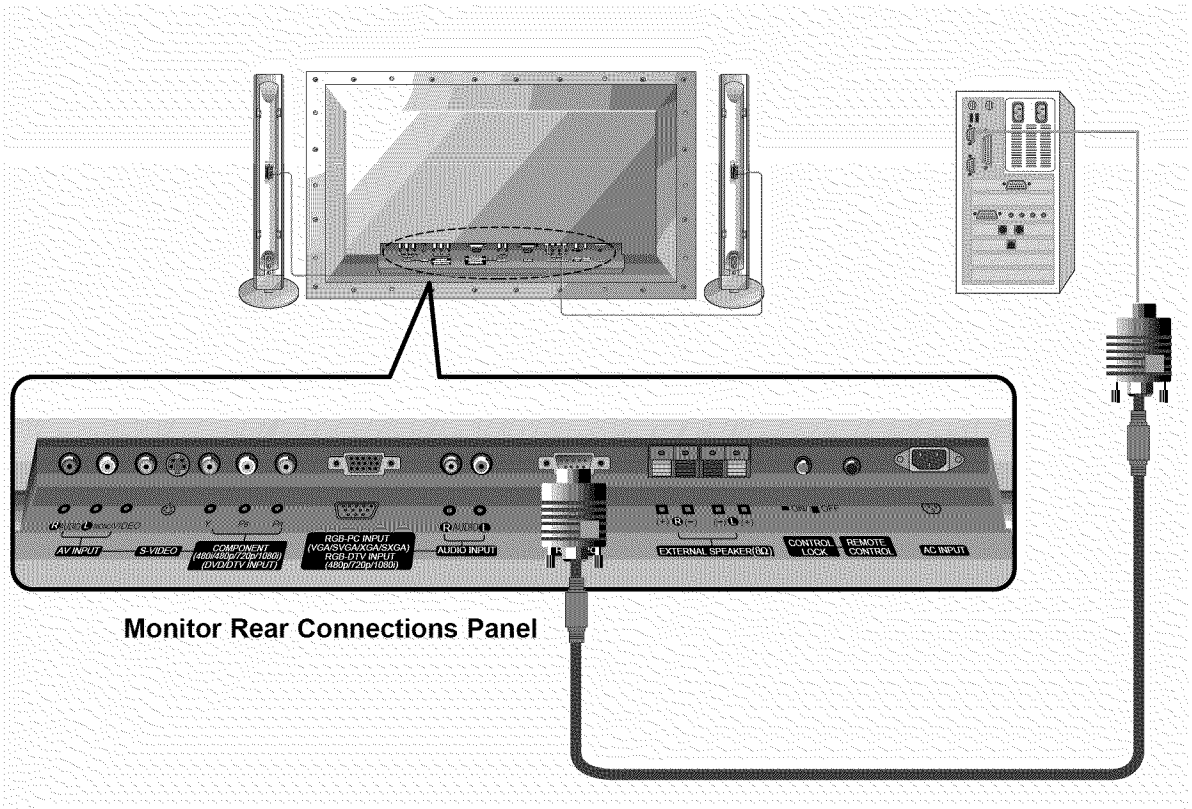
- You can also select **16:9**, **4:3** or **ZOOM** in the **SPECIAL** menu.

External Control Device Setup

- **Connect the RS-232C input jack to an external control device (such as a computer or an A/V control system) and control the Monitor's functions externally.**
- **When you connect a control (RS-232C) cable to this monitor, use a control cable with a ferrite core attached. If you do not do this, this monitor will not conform to mandatory CISPR22 (EN55022) standards.**

How To Connect External Control Equipment

- Connect the serial port of the control device to the RS-232C jack on the Monitor back panel.
- RS-232C connection cables are not supplied with the Monitor.
- The Monitor remote control and front panel controls (except main power) will not be functional if the Monitor is controlled by a PC computer or other external device.

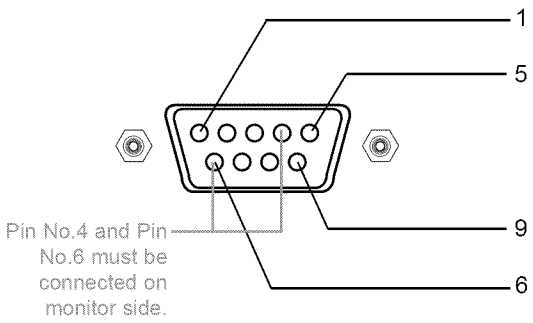


Monitor Rear Connections Panel

External Control Device Setup

Type of Connector : D-Sub 9-pin Male

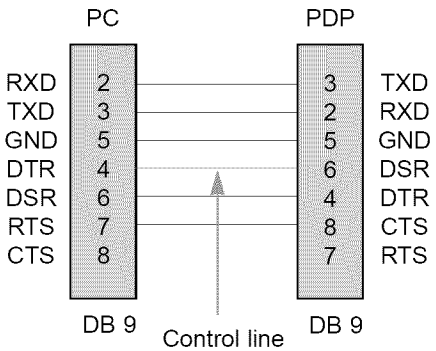
No.	Pin name
1	No connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection



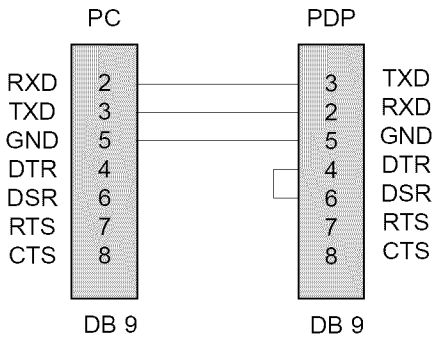
* Use a null modem cable.
  Wire the 7-Wire cable so that each pair of data lines cross between the two devices. These data line pairs are RXD (Receive data) and TXD (Transmit data), DTR (DTE side ready) and DSR (DCE side ready), and RTS (Ready to send) and CTS (Clear to send).
  When using the 3-Wire cable connected to RXD, TXD and GND; Pin No. 4 (DTR) and Pin No. 6 (DSR) must be connected to the monitor. (The cable must be disconnected from the Monitor to be able to use the remote control and Monitor front panel controls.)
* With the RS-232 input connected, the Monitor cannot be controlled by both an external control device and the remote control at the same time. The Monitor can only be controlled by either the remote control or the external control device.

RS-232C Configurations

7-wire configuration
(Standard RS-232C cable)



3-wire configuration
(Not standard)



7-Wire Cable Configuration

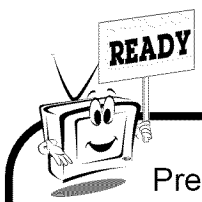
• The Monitor is available to switch between external adjustment and remote control adjustment using a control line.
  Note: If the control line is high, the monitor is controlled by the external control device. If the control line is low, the Monitor is controlled by the Monitor's remote control.

3-Wire Cable Configuration

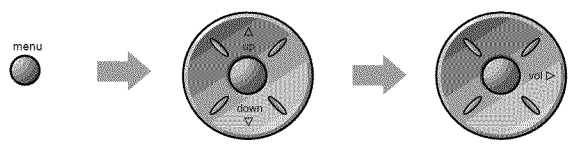
• When using a 3-Wire cable configuration there is no control line. The external control device must put the Monitor into the "change into remote control adjustment mode" (see page 54). The Monitor will then be able to be controlled by the remote control. If the Monitor is turned back on, it will revert back to external device control.

SET ID

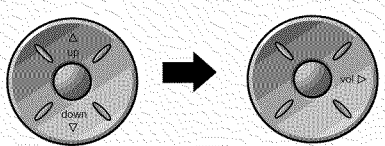
- Use this function to specify a monitor ID number.

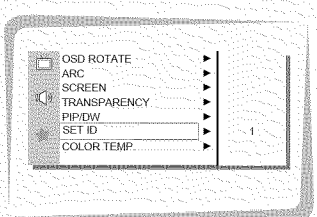


Press the **MENU** button and then use the ▲ / ▼ button to select ☆ menu. Press the ► button.



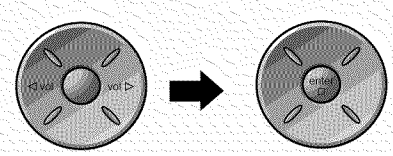
1 Use the **up/down** buttons to select **SET ID** and then press the **vol** (►) button.

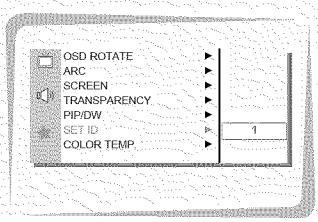




2 Use the **vol** button to adjust **SET ID** to choose the desired monitor ID number and then press the **enter** button.

- The **SET ID** adjustment range is 1 ~ 99.





External Control Device Setup

- **The RS-232C input jack is used to control the Monitor's functions using an external control device.**

Communication Parameters

- Baud rate : 2400 bps (UART)
- Data length : 8 bits
- Parity : None
- Stop bit : 1 bit
- Communication code : ASCII code

* If the command interval is interrupted for more than 4 seconds, only Command 1 will be recognized. Be careful when using the power command.

Command Reference List

NAME	COMMAND	DATA RANGE
01. Power	p	0 ~ 1
02. Input Select	i	0 ~ 3
03. Aspect Ratio	r	0 ~ 2
04. Screen mute	m	0 ~ 1
05. Volume mute	w	0 ~ 1
06. Volume control	v	0 ~ 64
07. Contrast	k	0 ~ 64
08. Brightness	b	0 ~ 64
09. Color	c	0 ~ 64
10. Tint	t	0 ~ 64
11. Sharpness	s	0 ~ 64
12. OSD select	d	0 ~ 1
13. Abnormal state	a	0 ~ 1
14. PIP/DW	z	0 ~ 3
15. PIP input select	e	0 ~ 1
16. PIP sound select	u	0 ~ 1
17. PIP position	x	0 ~ 3
18. remote control adjustment mode	j	0 ~ 1

Transmission / Receiving Protocol

Transmission

[Command][ ][Set ID][ ][Data][Cr]

* [Command] : To control PDP set.
* [Set ID] : You can adjust the set ID to choose desired monitor ID number in special menu. See page 49. Adjustment range is 1 ~ 99.
  When selecting Set ID '0', every connected PDP set is controlled.
* [DATA] : To transmit command data.
  Transmit 'FF' data to read status of command.
* [Cr] : Carriage Return
  ASCII code '0x0D'
* [ ] : ASCII code 'space (0x20)'

OK Acknowledgement

[Set ID][:][OK][x][Data][x]

* The Monitor transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

Error Acknowledgement

[Set ID][:][NG][x]

* The Monitor transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

01. Power (Command:p)

▶ To control Power On/Off of the Monitor.

Transmission

[p][ ][Set ID][ ][Data][Cr]

Data 0 : Power Off
1 : Power On

* Example : Power on for set ID No.3.
Type : P 3 1 '0x0D'

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Power Off
1 : Power On

* In example : Monitor Acknowledges power on for set ID No.3.

▶ To show Power On/Off.

Transmission

[p][ ][Set ID][ ][FF][Cr]

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Power Off
1 : Power On (RGB)
2 : Power On (Video)
3 : Power On (Component)
4 : Power On (S-Video)

* In like manner, if other functions transmit 'FF' data based on this format, Acknowledgement data feed back presents status about each function.

02. Input Select (Command:i)

▶ To select input source for the Monitor.
You can also select an input source using the INPUT SELECT button on the Monitor's remote control.

Transmission

[i][ ][Set ID][ ][Data][Cr]

Data 0 : RGB
1 : AV (Video)
2 : Component
3 : S-AV (S-Video)

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : RGB
1 : AV (Video)
2 : Component
3 : S-AV (S-Video)

03. Aspect Ratio (Command:r)

▶ To adjust the screen format.
You can also adjust the screen format using the ARC (Aspect Ratio Control) button on remote control or in the Special menu.

Transmission

[r][ ][Set ID][ ][Data][Cr]

Data 0 : Wide screen (16:9)
1 : Normal screen (4:3)
2 : Full screen (Zoom)

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Wide screen (16:9)
1 : Normal screen (4:3)
2 : Full screen (Zoom)

* Using the PC input, you select either 16:9 or 4:3 screen aspect ratio.
* Using the DTV 720p/1080i input, you can only select 16:9 screen aspect ratio.

04. Screen Mute (Command:m)

▶ To select screen mute on/off.

Transmission

[m][ ][Set ID][ ][Data][Cr]

Data 0 : Screen mute on (Picture off)
1 : Screen mute off (Picture on)

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Screen mute on (Picture off)
1 : Screen mute off (Picture on)

05. Volume Mute (Command:w)

▶ To control volume mute on/off.
You can also adjust mute using the MUTE button on remote control.

Transmission

[w][ ][Set ID][ ][Data][Cr]

Data 0 : Volume mute on (Volume off)
1 : Volume mute off (Volume on)

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Volume mute on (Volume off)
1 : Volume mute off (Volume on)

External Control Device Setup

06. Volume Control (Command:v)

▶ To adjust volume.
You can also adjust volume with the volume buttons on remote control.

Transmission

[v][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping' as shown below.

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data Min : 0 ~ Max : 64

07. Contrast (Command:k)

▶ To adjust screen contrast.
You can also adjust contrast in the Picture menu.

Transmission

[k][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping' as shown below.

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data Min : 0 ~ Max : 64

08. Brightness (Command:b)

▶ To adjust screen brightness.
You can also adjust brightness in the Picture menu.

Transmission

[b][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping' as shown below.

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data Min : 0 ~ Max : 64

09. Color (Command:c)

▶ To adjust the screen color.
You can also adjust color in the Picture menu.

Transmission

[c][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping' as shown below.

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data Min : 0 ~ Max : 64

10. Tint (Command:t)

▶ To adjust the screen tint.
You can also adjust tint in the Picture menu

Transmission

[t][ ][Set ID][ ][Data][Cr]

Data Red : 0 ~ Green : 64
* Refer to 'Real data mapping' as shown below.

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data Red : 0 ~ Green : 64

11. Sharpness (Command:s)

▶ To adjust the screen sharpness.
You can also adjust sharpness in the Picture menu

Transmission

[s][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping' as shown below.

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data Min : 0 ~ Max : 64

* Real data mapping

0 : Step 0
⋮
A : Step 10
⋮
F : Step 15
10 : Step 16
⋮
64 : Step 100

12. OSD Select (Command:d)

▶ To select OSD (On Screen Display) on/off.

Transmission

[d][ ][Set ID][ ][Data][Cr]

Data 0 : OSD off
1 : OSD on

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : OSD off
1 : OSD on

* The remote control and Monitor front panel controls (except main power) are not operable when the Monitor is set up to be controlled by the PC computer.

13. Abnormal State (Command:a)

▶ To recognize an abnormal state.

Transmission

[a][ ][Set ID][ ][FF][Cr]

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : OK
1 : Fan alarm
2 : 5V down
3 : AC down

* This function is "read only".

14. PIP / DW (Command:z)

▶ To control PIP (Picture-in-Picture) or twin picture (DW). You can also control PIP/DW using the pip/twin picture button on remote control or in the Special menu.

Transmission

[z][ ][Set ID][ ][Data][Cr]

Data 0 : PIP/ DW off
1 : PIP (small)
2 : PIP (large)
3 : Twin picture (DW)

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : PIP/ DW off
1 : PIP (small)
2 : PIP (large)
3 : Twin picture (DW)

* PIP only works in the following resolutions:
RGB PC 640x480 (VGA) / 800x600(SVGA) / 1024x768 (XGA) (only in vertical frequency 60Hz),
Component 480p / 720p / 1080i.
* Twin picture works only in the following resolutions:
RGB PC 640x480 (VGA) (only in vertical frequency 60Hz),
RGB DTV, Component 480p/720p/1080i.

15. PIP Input Select (Command:e)

▶ To select input source for sub picture in PIP mode. You can also select source using PIP input button on the remote control or in the Special menu.

Transmission

[e][ ][Set ID][ ][Data][Cr]

Data 0 : VIDEO
1 : COMPONENT
2 : S-VIDEO

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : VIDEO
1 : COMPONENT
2 : S-VIDEO

* COMPONENT source only works with 480i input signal.

External Control Device Setup

16. PIP Sound Select (Command:u)

▶ To select main or sub (inset) sound for PIP/Twin picture. You can also select sound select in PIP/DW on the special menu.

Transmission

[u][ ][Set ID][ ][Data][Cr]

Data 0 : Main picture sound
1 : Sub picture sound

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Main picture sound
1 : Sub picture sound

* COMPONENT source only works in 480i input signal.

17. PIP Position (Command:x)

▶ To select sub picture position for PIP.
You can also adjust the sub picture position using the position button on the remote control or in PIP/DW on the Special menu.

Transmission

[x][ ][Set ID][ ][Data][Cr]

Data 0 : Right down on screen
1 : Left down on screen
2 : Left up on screen
3 : Right up on screen

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Right down on screen
1 : Left down on screen
2 : Left up on screen
3 : Right up on screen

18. Change Into Remote Control Adjustment Mode (Command:j)

▶ To control the Monitor with the remote control while the cable is still connected.

Transmission

[j][ ][Set ID][ ][Data][Cr]

Data 1 : Remote control adjustment mode

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : PC adjustment mode
1 : Remote control adjustment mode

* If external equipment commands the Monitor to "change into remote control adjustment mode", the Monitor can only be adjusted by the remote control. To revert the Monitor control to external control device adjustment, turn the Monitor off and then on again.

IR CODE (NEC Format)

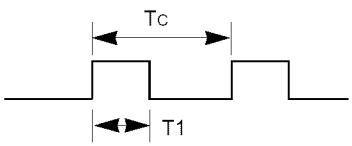
How To Connect

▶ Connect your wired remote control to remote control jack of the monitor.
Set the CONTROL LOCK 'ON' on the monitor back panel to work wired remote control.

Remote Control IR Code (NEC Format)

▶ **Output waveform**

Single pulse, modulated with 37.917KHz signal at 455KHz

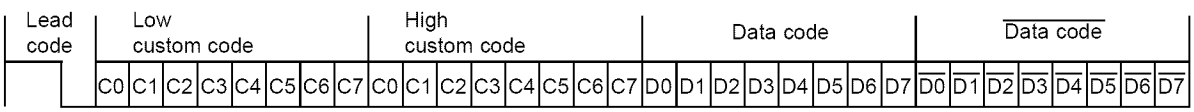


Carrier frequency

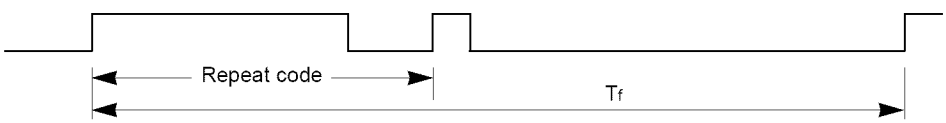
$F_{CAR} = 1/T_C = f_{OSC}/12$
Duty ratio = $T1/T_C = 1/3$

▶ **Configuration of frame**

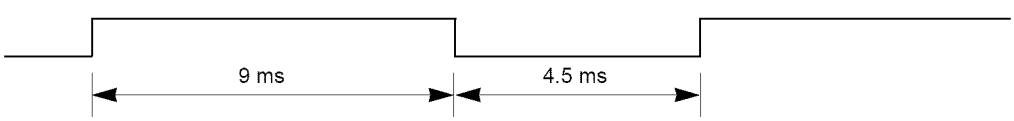
• 1st frame



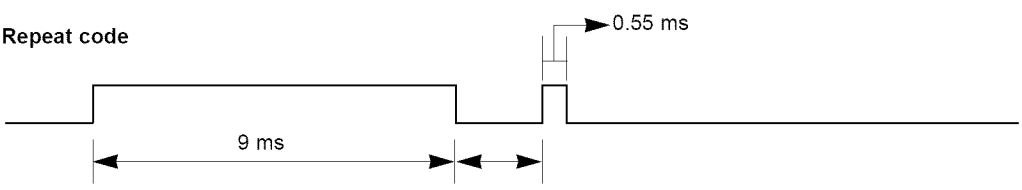
• Repeat frame



▶ **Lead code**

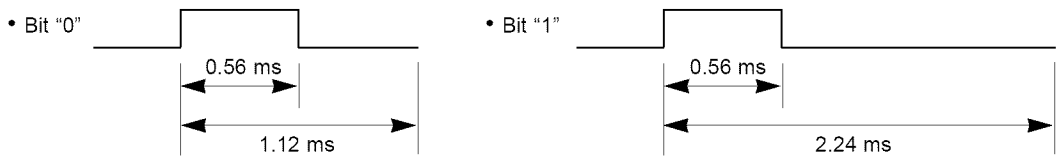


▶ **Repeat code**



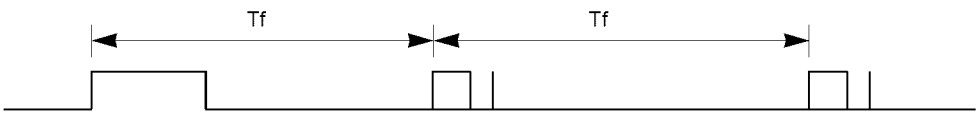
IR CODE (NEC Format)

▶ Bit description



▶ Frame interval : Tf

The waveform is transmitted as long as a key is depressed.



Tf=108ms @455KHz

Code (Hexa)	Function	Note
00H	UP (▲)	R/C Button
01H	DOWN (▼)	R/C Button
02H	VOL+ (▶)	R/C Button
03H	VOL- (◀)	R/C Button
08H	POWER	Discrete (Power toggle)
C4H	POWER ON	R/C Button (Power on)
C5H	SYSTEM OFF	R/C Button (System Off)
09H	MUTE	R/C Button
0BH	VIDEO/PC	R/C Button
98H	RGB	Discrete (Input RGB & Power On)
5AH	VIDEO	Discrete (Input VIDEO & Power On)
51H	S-VIDEO	Discrete (Input S-VIDEO & Power On)
BFH	COMPONENT	Discrete (Input COMPONENT & Power On)
0EH	SLEEP	R/C Button
1BH or 44H	ENTER (■)	R/C Button
43H	MENU	R/C Button
47H	DASP (easy sound)	R/C Button
4DH	APC	R/C Button
60H	PIP	R/C Button
61H	(PIP) INPUT SELECT	R/C Button
62H	(PIP) POSITION	R/C Button
65H or BCH	freeze	R/C Button
6BH	TWIN PICTURE	R/C Button
79H	ARC (ratio)	R/C Button
77H	ratio (16: 9)	Discrete (Only 16:9 mode)
76H	ratio (4 : 3)	Discrete (Only 4:3 mode)
AFH	ratio (ZOOM)	Discrete (Only ZOOM mode)

Maintenance

- **Early malfunctions can be prevented. Careful and regular cleaning can extend the amount of time you will have your new Monitor. Be sure to turn the power off and unplug the power cord before you begin any cleaning.**

Cleaning The Screen

1. Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.

2. Make sure the excess water is off the screen, and then let it air-dry before you turn on your Monitor.

Cleaning The Cabinet

To remove dirt or dust, wipe the cabinet with a soft, dry, lint-free cloth. Please be sure not to use a wet cloth.

Extended Absence

If you leave your Monitor dormant for a long time (such as a vacation), it's a good idea to unplug the power cord to protect against possible damage from lightning or power surges.

Troubleshooting Checklist

No Picture & No Sound	• Check whether the Monitor is turned on. • Power cord inserted into wall outlet? • Plug another product's power cord into the wall outlet where the Monitor's power cord was plugged in, to test it.
Picture Okay, No Sound	• Press the **VOLUME** (►) button. • Sound muted? Press **MUTE** button.
Remote Control Doesn't Work	• Check to see if there is any object between the Plasma Display and the remote control causing obstruction. • Check to see if the batteries are installed with the correct polarities. (Refer to p.31) • Install new batteries. (Refer to p.31)
No Or Poor Color Or Poor Picture	• Select **COLOR** in the **PICTURE** menu and press the **VOLUME** (►) button. (Refer to p.37) • Increase the distance between the Monitor and the VCR. • Activate any function to restore the brightness of the picture. (If a still picture is on the screen for more than 5 minutes, the picture gets darker)
No Output From One Speaker	• Adjust **BALANCE** in the **SOUND** menu. (Refer to p.39)

Product Specifications

MODEL	P60W26H, P60W26P
Width (inches / mm)	57.3 / 1455
Height (inches / mm)	34.8 / 883
Depth (inches / mm)	3.9 / 99
Weight (pounds / kg)	154.3 / 70
Power requirement	AC 120V, 60Hz
Resolution	1280 x 720 (Dot)
Color	16,770,000 (256 steps of each R, G and B)
Temperature (In operation)	32 ~ 104°F (0 ~ 40°C)
Humidity (In operation)	under 80%

- The specifications shown above may be changed without prior notice for quality improvement.

P/NO : 3828VA0277Y ⓐ
(NP00KB)