LG

# PLASMA MONITOR

## OWNER'S MANUAL

**MT-50PZ40/H/A/B/K/R/S**
**MT-50PZ41/H/A/B/K/R/S**
**MT-50PZ43/H/A/B/K/R/S**
**MZ-50PZ42/H/A/B/K/R/S**
**MZ-50PZ43/H/A/B/K/R/S**

Please read this manual carefully before operating your set.
Retain it for future reference.
Record model number and serial number of the set.
See the label attached on the back cover and quote this infor-mation to your dealer when you require service.

Model number :
Serial number :

P/NO : 3828V[illegible]A (RF02CA, 067Y TX, 373-026H)ⓕ

# LG Plasma Monitor

## What is a Plasma Display ?

If voltage is inputted to gas in glass panels, ultraviolet rays is outputted and fused with a fluorescent substance. At this moment, light is emitted. A Plasma Display is a next generation flat Display using this phenomenon.

## 160° - Wide angle range of vision

A Plasma Display provides more than 160° angle range of vision so that you can get a picture without distortion from any direction.

## Easy installation

A Plasma Display is much lighter and smaller than other same class products so that you can install the Plasma Display at the desired place.

## Big screen

The screen of a Plasma Display is 50" so that you can get vivid experience as if you are in a theater.

## Multimedia Plasma Display

A Plasma Display can be connected with a computer so that you can use it as a screen for conference, game, internet and so on.

## The explanation about coloured dots may be present on PDP screen

The PDP which is the display device of this product is composed of 0.9 to 2.2 million cells and a few cell defects can occur in the manufacture of the PDP. Several coloured dots visible on the screen would be acceptable, in line with other PDP manufacturers and would not mean that the PDP is faulty. We hope you will understand that the product which corresponds to this standard is regarded as acceptable. It means that it could not be changed or refunded.
We promise that we'll do our best to develop our technology to minimize the cell defects.

**WARNING**
This is Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**WARNING**
**MT-50PZ40** / **MZ-50PZ42** series : This is Class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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

# Contents


Safety Instructions . . . . . 4

**Equipment Connections and Setup**
Controls of the Monitor . . . . . 6
Watching External Equipments . . . . . 7
Displayable Monitor Specification . . . . . 10
Controls of the Remote control . . . . . 11
Installation of the Simple monitor stand . . . . . 13
Monitor installation . . . . . 13

**Basic Features Setup and Operation**
Turning on the Monitor . . . . . 14
Menu language setup . . . . . 14

**VIDEO Menu**
PSM(Picture Status Memory) . . . . . 15
Adjusting Auto Colour Control . . . . . 15
Manual Colour Temperature Control . . . . . 15
Manual picture Control . . . . . 15

**AUDIO Menu**
SSM(Sound Status Memory) . . . . . 16
AVL(Auto Volume Leveler) . . . . . 16
Adjusting Sound . . . . . 16

**TIME Menu**
Setting the Clock . . . . . 17
Setting the On/Off Timer . . . . . 17
Auto Off . . . . . 17
Sleep Timer . . . . . 17

**SPECIAL Menu**
Child lock . . . . . 18
Orbiter . . . . . 18
White Wash . . . . . 18

**SCREEN Menu**
Auto adjustment . . . . . 19
Setting Picture Format . . . . . 19
Split Zoom . . . . . 19
Screen Position . . . . . 20
Manual Configure . . . . . 20
Screen Adjustments . . . . . 20
Initializing (Reset to factory value) . . . . . 20

**PIP Function**
Watching PIP . . . . . 21
PIP Aspect Ratio . . . . . 21
Moving the PIP . . . . . 21
Main Picture Size Adjustment . . . . . 21
PIP Size . . . . . 21
Swapping the PIP . . . . . 21
Selecting a source input signal for the PIP . . . . . 21
Main Picture Position Adjustment . . . . . 21

**TWIN Picture**
Main Picture Size Adjustment . . . . . 22
Sub Picture Size Adjustment . . . . . 22
Selecting a source for the Twin Picture . . . . . 22
Swapping the Twin Picture . . . . . 22

**External Control Device Setup** . . . . . 23

**Others**
Troubleshooting check list . . . . . 30
Product specifications . . . . . 31


After reading this manual, keep it in the place where the user can always contact easily.

# Safety Instructions

- **Use the Monitor at the place lower than the altitude of 6562 feet (2000m) to get the best quality of picture and sound.**

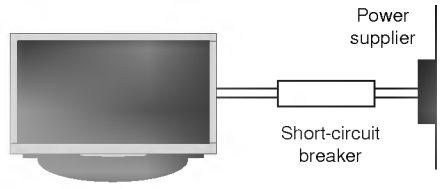
## ⚠ WARNING

**Do not place the Monitor in direct sunlight or near heat sources such as heat registers, stove and so on.**
- This may cause a fire.

**Do not use the Monitor in damp place such as a bathroom or any place where it is likely to get wet.**
- This may cause a fire or could give an electric shock.

**Bend antenna cable between inside and outside building to prevent rain from flowing in.**
- This may cause water damaged inside the Monitor and could give an electric shock.

**Earth wire should be connected.**
- If the earth wire is not connected, there is possible a 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 to telephone wires, lightning rods or gas pipe.

**Do not placing anything containing liquid on top of the Monitor.**
- This may cause a fire or could give an electric shock.

**Do not insert any object into the exhaust vent.**
- This may cause a fire or could give an electric shock.

**Do not place heavy objects on the Monitor.**
- This may cause serious injury to a child or adult.

**Do not use water the Monitor while cleaning.**
- This may cause damaged the Monitor or could give an electric shock.

**In case of smoke or strange smell from the Monitor, switch it off ,unplug it from the wall outlet and contact your dealer or service center.**
- This may cause a fire or could give an electric shock.

**Do not attempt to service the Monitor yourself. Contact your dealer or service center.**
- This may cause damaged the Monitor or could give an electric shock.

**During a lightning thunder, unplug the Monitor from the wall outlet and don't touch an antenna cable.**
- This may cause damaged the Monitor or could give an electric shock.

## ⚠ WARNING **in U.K. only**

* This set is supplied with a BS 1363 approved 13 amp mains plug, fused at 13 amp. When replacing the fuse always use a 13 amp BS 1362, BSI or ASTA approved type. Never use this plug with the fuse cover omitted. To obtain a replacement fuse cover contact your dealer or "LG Electronics U.K. Ltd." If the type of plug supplied is not suitable for the mains sockets in your home, then the plug should be removed and a suitable type fitted.
A mains plug removed from the mains lead of this set must be destroyed. A mains plug with bared wires is hazardous if inserted in a mains socket. Do not connect either wire to the earth pin, marked with the letter E or with the earth symbol ⏚ or coloured green or green and yellow. If any other plug is fitted, use a 13 amp fuse, either in the plug, or at the distribution board.
The wires in this mains lead are coloured in accordance with the following codes: **BLUE: NEUTRAL, BROWN: LIVE**
As the colours of the wires in the mains lead of this set may not correspond with the coloured marking identifying the terminals in your plug, proceed as follows: The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

* Safety instructions have two kinds of information, and each meaning of it is as below.

⚠WARNING **The violation of this instruction may cause serious injuries and even death.**

⚠NOTES **The violation of this instruction may cause light injuries or damage of the product.**

⚠ **Take care of danger that may happen under specific condition.**

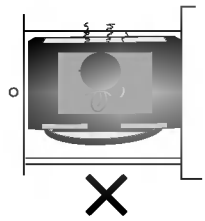
## ⚠ NOTE

**This plasma display is designed to be mounted horizontally (wide viewing).**

**Never touch the power plug with a wet hand.**
- This may cause an electric shock.

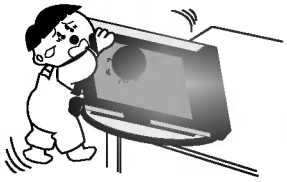
**Disconnect from the mains and remove all connections before moving.**

**Do not place the Monitor in a built-in installation such as a bookcase or rack.**
- Ventilation required.



**When installing the Monitor on a table, be careful not to place the edge of its stand.**
- This may cause the Monitor to fall, causing serious injury to a child or adult, and serious damage to the Monitor.

**Do not place an outside antenna in the vicinity of overhead power lines or other electric light or power circuits.**
- This may cause an electric shock.



**There should be enough distance between an outside antenna and power lines to keep the former from touching the latter even when the antenna falls.**
- This may cause an electric shock.

**Do not pull the cord but the plug when unplugging.**
- This may cause a fire.

**Ensure the power cord doesn't trail across any hot objects like a heater.**
- This may cause a fire or an electric shock.

**Do not plug when the power cord or the plug is damaged or the connecting part of the power outlet is loose.**
- This may cause a fire or an electric shock.

**Dispose of used batteries carefully to protect a child from eating them.**
- In case that it eats them, take it to see a doctor immediately.

**When moving the Monitor assembled with speakers do not carry holding the speakers.**
- This may cause the Monitor to fall, causing serious injury to a child or adult, and serious damage to the Monitor.

**Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.**
- This may cause damaged the Monitor or could give an electric shock.

**Contact the service center once a year to clean the internal part of the Monitor.**
- Accumulated dust can cause mechanical failure.

**The distance between eyes and the screen should be about 5 ~ 7 times as long as diagonal length of the screen.**
- If not, eyes will strain.

**Unplug the Monitor from the wall outlet when it is left unattended and unused for long periods of time.**
- Accumulated dust may cause a fire or an electric shock from deterioration or electric leakage.

**Only use the specified batteries.**
- This make cause damaged the Monitor or could give an electric shock.

# Controls of the Monitor

<Front Panel Controls>



**Power standby indicator**
Illuminates red in standby mode. Illuminates green when the Monitor is turned on

**▲,▼ buttons**

**VOLUME (◄,►) buttons**

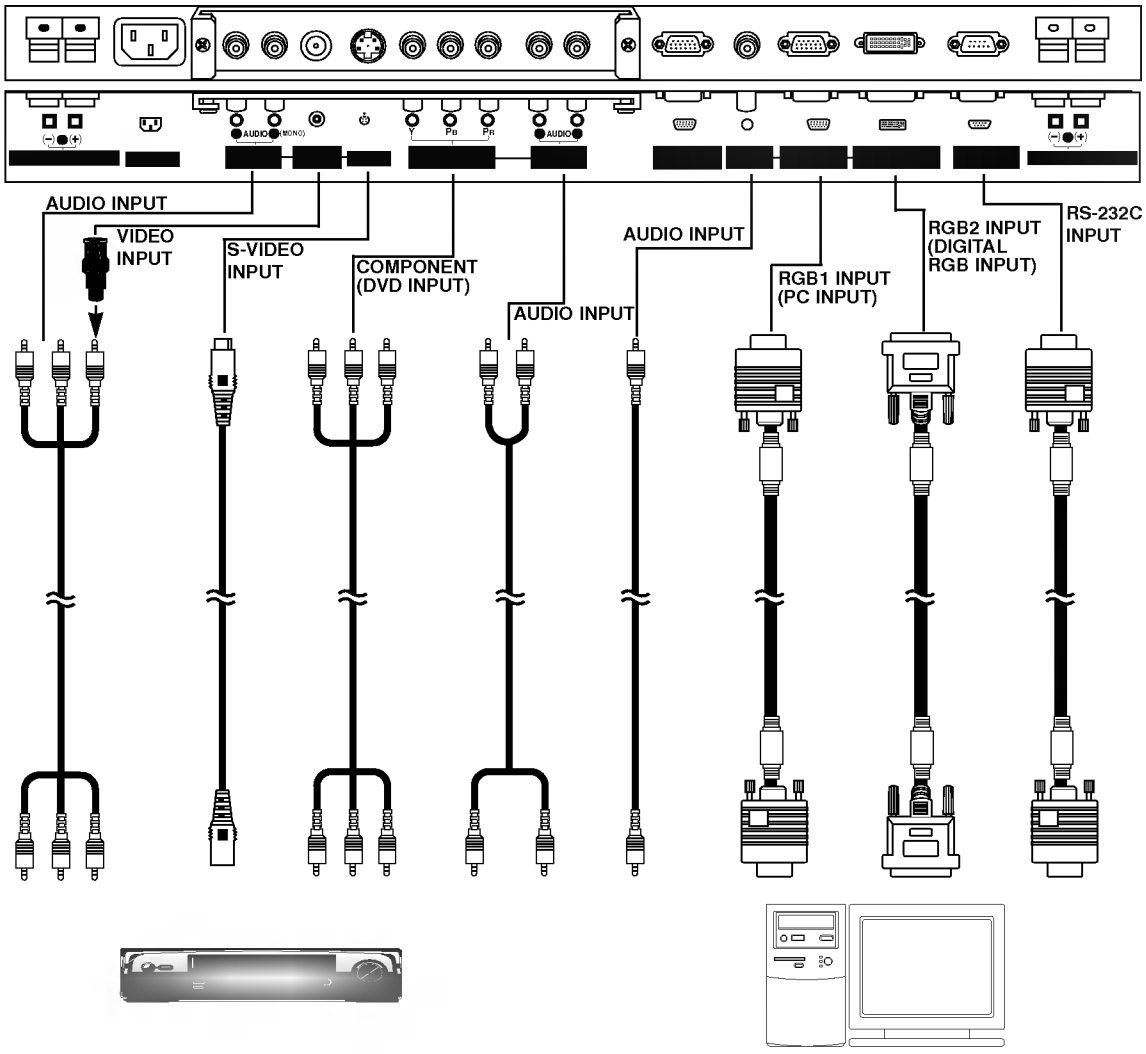
**MENU button**

**INPUT SELECT button**

**Remote control sensor**

**Main power button**

<Back Panel>




Connection to AV equipment

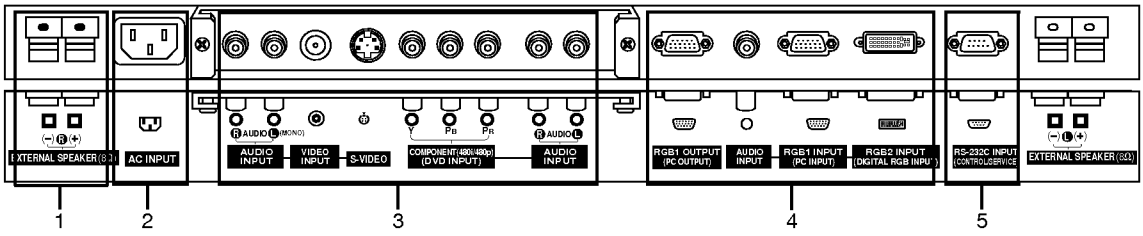
Connection to PC

***Note** : All cables shown are not provided with the Monitor,*
*except : A D-sub 15 pin cable and DVI cable is supplied to connect the Monitor to a PC.*

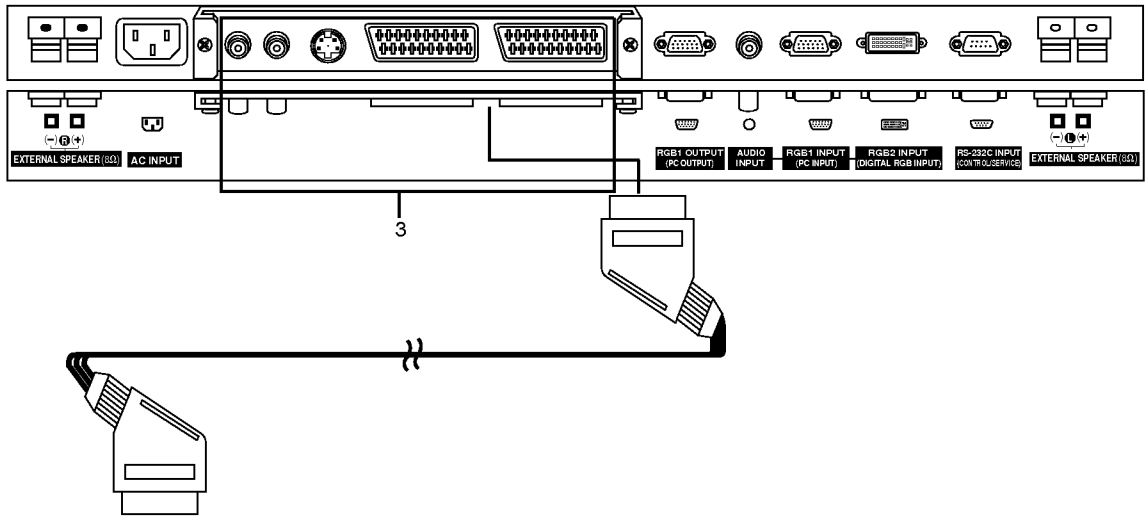
# Watching External Equipments

<Back Panel>

RCA Type




Scart Type




1. **EXTERNAL SPEAKER (8 ohm output)**
   Connect this terminal to the optionally available speaker.
   *For further information, refer to 'Speaker & Speaker stand' manual.

2. **POWER INPUT SOCKET**
   This Monitor operates on an AC mains supply, the voltage is as indicated as inside back cover of this manual. Never apply DC power to the Monitor.

3. **VIDEO/S-VIDEO/COMPONENT(DVD INPUT)/AUDIO INPUT SOCKETS**

   **EURO SCART SOCKET**

   ***Note :*** *The interface board(AP-50EA40/41) is not equipped on MT/MZ-50PZ42/43 series models. Contact your dealer for buying this optional item.*

4. **RGB1 OUTPUT(PC OUTPUT)/AUDIO IN SOCKETS**
   You can watch the RGB1 signal in other monitor by connecting RGB1 OUTPUT(PC OUTPUT) to other monitor's PC input jack.
   ***Note :*** *When you watch after connecting with other monitor,*
   *a. When you select RGB1 or RGB2 for main picture, you can watch AV1, AV2 or S-Video for sub picture.*
   *b. When you select AV1, AV2 or S-Video for main picture, You can watch main picture's viewing.*

   **RGB1 INPUT(PC INPUT)/RGB2 INPUT(DIGITAL RGB INPUT) IN SOCKETS**
   Connect the monitor output socket of the PERSONAL COMPUTER to this socket.

5. **RS-232C INPUT(CONTROL/SERVICE) SOCKET**
   Connect it to the RS-232C socket on the PC.

## Watching VCR (When the Interface board is installed.)

The interface board(AP-50EA40/41) is not equipped on MT/MZ-50PZ42/43 series models.

When connecting the Plasma Monitor with external equipments, match the colours of connecting ports (Video - yellow, Audio(L) - white, Audio(R) -red).
Connect the VIDEO INPUT socket(yellow) with the BNC-RCA adapter to the VIDEO INPUT socket of the set.
If you have a mono VCR, connect the audio cable from the VCR to the AUDIO(L/MONO) input of 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.
Or, connect the Euro scart socket of the VCR to the Euro scart socket of the set.

Avoid having a fixed image remain on the screen for a long period of time. Typically a frozen still picture from a VCR, 4:3 picture format or if a CH label is present; the fixed image may remain visible on the screen.
Use the orbiter function to avoid having a fixed image. (Refer to p.18)

1. Press **INPUT SELECT** button on the remote control and select ***Video*** or (***AV1*** or ***AV2***).
   (When connecting with S-Video, select the ***S-Video***)
2. Insert a video tape into the VCR and press the **PLAY** button on the VCR. (See VCR owner's manual)

## Watching Cable TV (When the Interface board is installed.)

The interface board(AP-50EA40/41) is not equipped on MT/MZ-50PZ42/43 series models.

After subscribing to a cable TV service from a local provider and installing a converter, 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.

1. Press **INPUT SELECT** button on the remote control and select ***Video*** or (***AV1*** or ***AV2***).
2. Tune to cable service provided channels using the cable box.

## Watching external AV source (When the Interface board is installed.)

The interface board(AP-50EA40/41) is not equipped on MT/MZ-50PZ42/43 series models.

When connecting the Plasma Monitor with external equipments, match the colours of connecting ports.
Or, connect the Euro scart socket of the VCR to the Euro scart socket of the set.

1. Press **INPUT SELECT** button on the remote control of the monitor to select ***Video*** or (***AV1*** or ***AV2***).
2. Operate the corresponding external equipment. (See external equipment operating guide.)

## Watching DVD (When the Interface board is installed.)

The interface board(AP-50EA40/41) is not equipped on MT/MZ-50PZ42/43 series models.

**How to connect**

Connect DVD video inputs to Y, $P_B$, $P_R$ of COMPONENT (DVD INPUT) and audio inputs to Audio sockets of AUDIO INPUT.
Or, connect the Euro scart socket of the VCR to the Euro scart socket of the set.

**How to use**

1. Press **INPUT SELECT** button on the remote control of the monitor to select ***Component*** or (***AV1*** or ***AV2***).
2. Try this after turning on the DVD player.
   (Refer to the DVD player's manual for operating instructions.)

- **Component Input ports**
  You can get better picture quality if you connect DVD player with component input ports as below.

| | | |
|---|---|---|
| Component ports of the Monitor | Y | |
| Video output ports of DVD player | Y<br>Y<br>Y<br>Y | Pb<br>B-Y<br>Cb<br>$P_B$ |

## Connecting PC

- To enjoy vivid picture and sound, connect a PC to the Monitor.
- 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.
- Connect PC to the RGB1 INPUT(PC INPUT) or RGB2 INPUT(DIGITAL RGB INPUT) ports of the Monitor after changing the resolution of PC.
- There might be a noise according to some resolution, vertical pattern, contrast or brightness in PC mode. Then change the PC mode into other resolution or change the refresh rate into other rate or adjust the brightness and contrast on the menu until the picture is clean. If the refresh rate of the PC graphic card can not be changed, change the PC graphic card or consult it to the manufacturer of the PC graphic card.
- Synchronization input form; Separate

**Setup Instructions to Connect a PC to your Monitor**

- If the resolution of PC is over UXGA, there will be no picture on the Monitor.
- We recommend 1024x768 60Hz as the PC mode providing the best picture quality.
- Connect the signal cable from the monitor output port of the PC to the RGB1 INPUT(PC INPUT) port of the Monitor or the signal cable from the DVI output port of the PC to the RGB2 INPUT(DIGITAL RGB INPUT) port on the Monitor.
- Connect the audio cable from the PC to the Audio input on the Monitor. (Audio cables are not included with the Monitor).
- If using a sound card, adjust PC sound as required.
- This monitor apply a VESA Plug and Play Solution. The monitor provides EDID data to the PC system with a DDC protocol. The PC adjusts automatically to use this monitor.
- DDC protocol is preset for RGB1 (Analog RGB), RGB2 (DVI, Digital RGB) mode.
- If required, adjust the monitor settings for Plug and Play functionally.
- If graphic card on the PC does not output analog and digital RGB simultaneously, connect only one of both RGB1 and RGB2 to display the PC on the monitor.
  If graphic card on the PC does output analog and digital RGB simultaneously, set the monitor to either RGB1 or RGB2; (the other mode is set to Plug and Play automatically by the monitor.)

**PC Setup**

**1.** Turn on the PC and apply power to the Monitor.
**2.** Turn on the display by pressing the **POWER** button on the Monitor's remote control.
**3.** Use the **INPUT SELECT** button on the remote control to select the RGB1 or RGB2 input source.
**4.** Set the resolution output of the PC to SXGA or under (1280 x 1024, 75Hz).

- For further information regarding cable TV service, contact your local cable TV service provider(s).
- To avoid picture noise (interference), leave an adequate distance between the VCR and monitor.
- To avoid burning an image on the Monitor screen, don't have a still picture on the screen for a long period time.

# Displayable Monitor Specification

**< RGB1 mode >**

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

(Synchronization input form : separate)

**< RGB2 mode >**

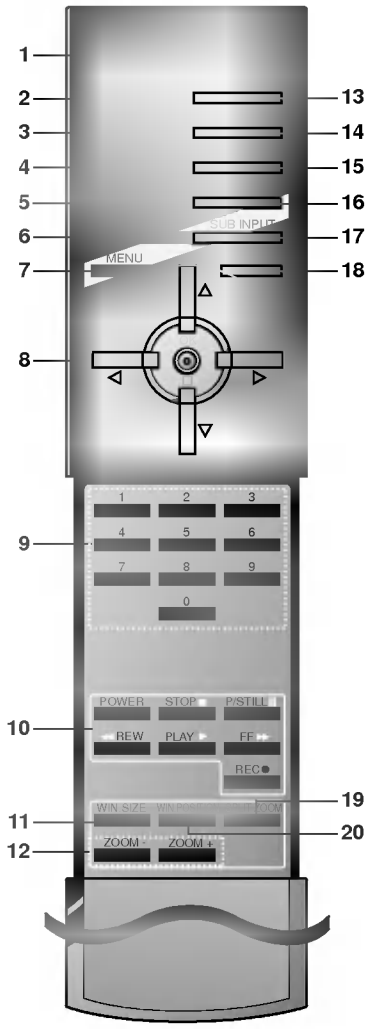
| Resolution | Horizontal Frequency(KHz) | Vertical Frequency(Hz) | DDC | Resolution | Horizontal Frequency(KHz) | Vertical Frequency(Hz) | DDC |
|---|---|---|---|---|---|---|---|
| 640x350 | 31.468 | 70.09 | | 832x624 | 49.725 | 74.55 | o |
| | 37.861 | 85.08 | | 1024x768 | 48.363 | 60.00 | o |
| 720x400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

(Synchronization input form : separate)

- DOS mode may not work depending on video card if using a DVI-I cable.

# Controls of the remote control

- When using the remote control aim it at the remote control sensor of the Monitor.
- There's maybe defect in consecutive operation of remote control in specified brightness according to this monitor feature.




1. **POWER**
   switches the set on from standby or off to standby.
2. **SLEEP**
   sets the sleep timer.
3. **PSM (Picture Status Memory)**
   recalls your preferred picture setting.
4. **ARC (Aspect Ratio Control)**
   changes the picture format.
5. **PIP**
   switches the sub picture on or off.
6. **SWAP**
   alternates between main and sub picture.
7. **MENU Button**
   selects a menu.
8. **▲ / ▼**
   selects a menu item.
   **◄ / ► (Volume Down/Up)**
   adjusts the volume.
   adjusts menu settings.
   **OK**
   displays the current mode.
9. **NUMBER BUTTONS**
10. **VCR BUTTONS**
    control a LG video cassette recorder.
11. **WIN. SIZE**
    adjusts the sub picture size.
12. **ZOOM-/ZOOM+**
13. **INPUT SELECT BUTTON**
    selects TV, AV or PC monitor mode.
14. **SSM (Sound Status Memory)**
    recalls your preferred sound setting.
15. **PIP ARC**
    changes the picture format of PIP.
16. **TWIN PICTURE**
17. **SUB INPUT**
    selects the input mode for the sub picture.
18. **MUTE Button**
    switches the sound on or off.
19. **SPLIT ZOOM**
    enlarge the screen with regular ration.
20. **WIN.POSITION**
    moves the sub picture to ▲ / ▼ or ◄ / ► direction.

## Installing Batteries



- Open the battery compartment cover on the back side and insert the batteries with correct polarity.
- Apply two 1.5V alkaline batteries of AAA type. Don't mix the used batteries with new batteries.
- Install the batteries with the correct polarities.

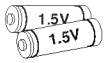
## Accessories



Owner's Manual



Remote control handset




Alkaline batteries



BNC-RCA adapter (optional)



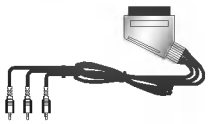
D-sub 15 pin cable



DVI cable



Power cord



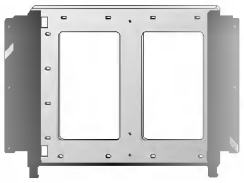
Phone scart cable (Optional)

## Optional Extras

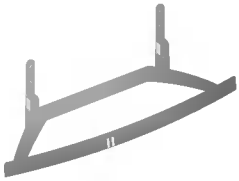
- Optional extras can be changed or modified for quality improvement without any notification new optional extras can be added.
- Contract your dealer for buying these items.



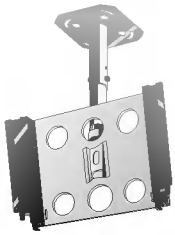
Tilt wall mounting bracket



Wall mounting bracket



Desktop stand



Ceiling mounting bracket

### Optional Extras

- Optional extras can be changed or modified for quality improvement without any notification new optional extras can be added.
- Contract your dealer for buying these items.



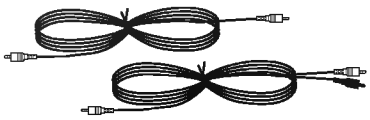
Speakers



Desktop Speaker stand



Video cables



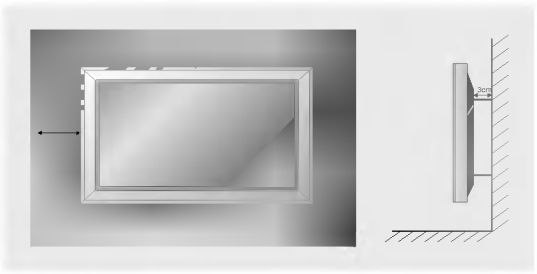
PC audio cables

# Monitor Installation

- The Monitor can be installed in various ways such as wall mounting type, desktop type, etc..
- Install this monitor only in a location where adequate ventilation is available.

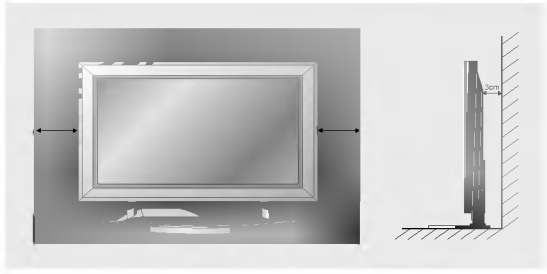
**To install as wall mounting type**

a. Wall mount minimum allowable clearances for adequate ventilation



**To install as desktop type**

b. Pedestal mount minimum allowable clearances for adequate ventilation



# Turning on the Monitor

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

### [redacted]st after installation

1. Connect power cord correctly.
2. Press the ⏻ **ON/OFF** button on the Monitor. At this moment, the Monitor is switched to standby mode. Press the **INPUT SELECT** button on the Monitor or press the **POWER**, **INPUT SELECT** button on the remote control and then the Monitor will be switched on.

### [redacted]wer cord is still connected)

1. **If the Monitor is turned off with the ⏻ON/OFF button on the Monitor**
   • Press the ⏻**ON/OFF** button on the Monitor to turn on the Monitor.
2. **If the Monitor is turned off with the remote control and also the ON/OFF button on the Monitor**
   • Press the ⏻**ON/OFF** button on the Monitor and then press the **INPUT SELECT** button on the Monitor or press the **POWER**, **INPUT SELECT** button on the remote control to turn on the Monitor.

• **Adjusting volume level**
Volume(►) button increases the level of sound and volume(◄) button decreases the level of sound.

# Menu language setup

- The menu can be displayed on the screen in desired language. First select your language.

1. Press the **MENU** button and then ▲ / ▼ button to select the SPECIAL menu.
2.. Press the ► button and then ▲ / ▼ button to select ***Language***.
3. Press the ► button and then ▲ / ▼ button to select your desired language.
   From this point on, the on-screen display will be presented in the language of your choice.
4. Press the **MENU** button.

# VIDEO Menu

### PSM (Picture Status Memory)

- This function adjusts the PDP to the best picture appearance.

1. Press the **PSM** button to select the picture appearance setup.
   - Each press **PSM** button changes the screen display as shown below.

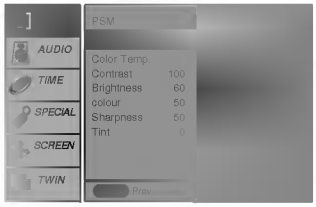



   - You can also select ***Dynamic***, ***Mild*** or ***User*** in the VIDEO menu.
   - The picture ***Dynamic*** and ***Mild*** are programmed for good picture reproduction at the factory and cannot be changed.

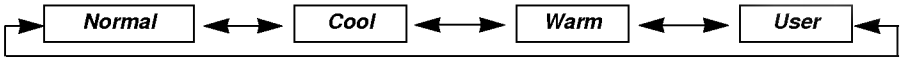
### Adjusting Auto Colour Control

- To initial values (reset to default settings), select the '***Normal***'.

1. Press the **MENU** button and then ▲ / ▼ button to select the VIDEO menu.
2. Press the ► button and then ▲ / ▼ button to select ***CSM***.
3. Press the ▲ / ▼ button to select the desired colour temperature.
4. Press the **MENU** button.



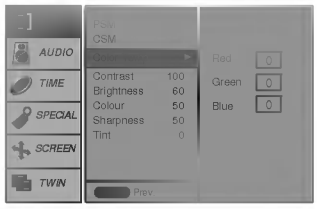

   • Each press of ▲ / ▼ button changes the screen display as shown below.




### Manual Colour Temperature Control(User option)

- You can change red, green and blue to adjust colour temperature you prefer.

1. Press the **MENU** button and then ▲ / ▼ button to select the VIDEO menu.
2. Press the ► button and then ▲ / ▼ button to select the ***Color Temp.***.
3. Press the ► button and then ▲ / ▼ button to select colour temperature items.
4. Press the ◄ / ► button to make appropriate adjustments.
5. Press the **MENU** button.
   • The adjustment range of ***Red***, ***Green*** and ***Blue*** is -10~+10.




### Manual picture control (User option)

- You can adjust picture contrast, brightness, colour, sharpness and tint to the levels you prefer.
- PIP settings are not adjustable.

1. Press the **MENU** button and then ▲ / ▼ button to select the VIDEO menu.
2. Press the ► button and then ▲ / ▼ button to select the desired picture item.
3. Press the ► button and then ◄ / ► button to make appropriate adjustments.
4. Press the **MENU** button.

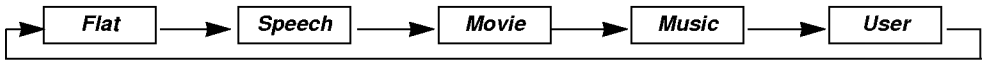


# AUDIO Menu

### SSM (Sound Status Memory)

- This function lets you enjoy the best sound without any special adjustment because the Monitor automatically selects the appropriate sound option based on the program content.

1. Press the **SSM** button to select the picture appearance setup.

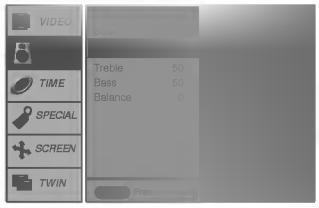



- You can also select ***Flat***, ***Speech***, ***Movie***, ***Music*** or ***User*** in the AUDIO menu.

### AVL (Auto Volume Leveler)

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

1. Press the **MENU** button and than ▲ / ▼ button to select the AUDIO menu.
2. Press the ► button and then ▲ / ▼ button to select ***AVL***.
3. Press the ► button and then ▲ / ▼ button to select ***On*** or ***Off***.
4. Press the **MENU** button.




### Adjusting Sound (Manual Setting)

1. Press the **MENU** button and then ▲ / ▼ button to select the AUDIO menu.
2. Press the ► button and then ▲ / ▼ button to select the desired sound item.
3. Press the ► button and then ◄ / ► button to make appropriate adjustments.
4. Press the **MENU** button.



# TIME Menu

## Setting the Clock

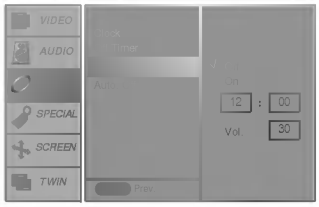
- If current time setting is erased by a power failure, if TV is unplugged or if the monitor is turned off with the ⏻ON/OFF button on the monitor, reset the clock.




1. Press the **MENU** button and then ▲ / ▼ button to select the TIME menu.
2. Press the ► button and then ▲ / ▼ button to select ***Clock***.
3. Press the ► button and then ▲ / ▼ button to adjust the hour.
4. Press the ► button and then ▲ / ▼ button to adjust the minute.
5. Press the **MENU** button.

## Setting the On/Off Timer

- Timer function operates only if current time has been already set.
- Off-timer function overrides on-timer function if they are set to the same time.
- The monitor must be in standby mode for the On timer to work.




1. Press the **MENU** button and then ▲ / ▼ button to select the TIME menu.
2. Press the ► button and then ▲ / ▼ button to select ***Off Timer*** or ***On Timer***.
3. Press the ► button and then ▲ / ▼ button to select ***On***.
4. Press the ► button and then ▲ / ▼ button to adjust the hour.
5. Press the ► button and then ▲ / ▼ button to adjust the minute.
6. **Only *On Timer* function**; Press the ► button and then ▲ / ▼ button to adjust volume level.
7. Press the **MENU** button.

- To cancel ***Off/On Timer*** function
  Press the ▲ / ▼ button to select ***Off*** in step 3.

## Auto Off

- If there is no input signal, the monitor turn off automatically after 10 minutes.




1. Press the **MENU** button and then ▲ / ▼ button to select the TIME menu.
2. Press the ► button and then ▲ / ▼ button to select ***Auto. Off***.
3. Press the ► button and then ▲ / ▼ button to select ***On*** or ***Off***.
4. Press the **MENU** button.

## Sleep Timer

- Sleep timer turns the monitor off at the preset time.
- Press the **SLEEP** button to select the number of minutes. The display ᶻᶻ--- ***Min*** will appear on the screen, followed by ***10***, ***20***, ***30***, ***60***, ***90***, ***120***, ***180*** and ***240***. The timer begins to count down from the number of minutes selected.
- When the sleep time you want is displayed on the screen, press the **OK** button.

a. To check the remaining sleep time, press the **SLEEP** or **OK** button once.
b. To cancel the sleep time, repeatedly press the **SLEEP** button until the display ᶻᶻ--- ***Min*** appears.
c. If you turn the monitor off after setting the sleep timer, the setting will be erased.

# SPECIAL Menu

## Child lock

- The monitor can be set up so that it can only be used with the remote control.

1. Press the **MENU** button and then ▲ / ▼ button to select the SPECIAL menu.
2. Press the ► button and then ▲ / ▼ button to select ***Child lock***.
3. Press the ► button and then ▲ / ▼ button to select ***On*** or ***Off***.
4. Press the **MENU** button.




- This monitor programmed to remember which option it was last set to event if you turn the monitor off.
- In ***Child lock*** '***On***', if the monitor is turned off, press the **INPUT SELECT** button on the monitor or **POWER** and **INPUT SELECT** on the remote control.
- With the ***Child lock On***, the display ' ⚠***Child lock***' appears on the screen if any button on the front panel is pressed while viewing the monitor.

## Orbiter

- Avoid keeping a fixed image remain on the Monitor's screen for a long period of time. A frozen still picture from a PC/video game set displayed on the screen for prolonged periods will result in an image ghost remaining even when you change the image.
- To avoid a permanent image on the screen, the screen will move every 2 minutes.
  :Right → Right → Downside → Downside → Left → Left → Upside → Upside
- This is the function to prolong hour till having a fixed image but it doesn't avoid permanent image perfectly.

1. Press the **MENU** button and then ▲ / ▼ button to select the SPECIAL menu.
2. Press the ► button and then ▲ / ▼ button to select ***Orbiter***.
3. Press the ► button and then ▲ / ▼ button to select ***On*** or ***Off***.
4. Press the **MENU** button.




## White Wash

- This is the function to remove permanent image on the screen.
- Set ***White Wash*** '***On***' until fixed image disappears.

1. Press the **MENU** button and then ▲ / ▼ button to select the SPECIAL menu.
2. Press the ► button and then ▲ / ▼ button to select ***White Wash***.
3. Press the ► button and then ▲ / ▼ button to select ***On*** or ***Off***.
4. Press the **MENU** button.



# SCREEN Menu

### Auto adjustment (RGB1[PC] mode only)

- Automatically adjusts picture position and minimizes image shaking.




1. Press the **MENU** button and then ▲ / ▼ button to select the SCREEN menu.
2. Press the ► button and then ▲ / ▼ button to select ***Auto configure***.
3. Press the ► button to start ***Auto configure***.
   • When ***Auto configure*** has finished, ***OK*** will be shown on screen.
   • If the position of the image is still not correct, try Auto adjustment again.
4. If picture needs to be adjusted more after Auto adjustment in RGB1(PC), you can adjust the ***Manual config.***.

- Although the image is still not correct, your Monitor is functioning properly but needs further adjustment.
- The ***Auto configure*** and the ***Manual config.*** functions don't need to be run for RGB2 mode.
- This function doesn't work in RGB-Digital broadcast.

### Setting Picture Format

- You are available to 4:3 and 16:9 in RGB1,RGB2 and COMPONENT.
- You are available to 16:9, 4:3 and ZOOM in VIDEO (AV1 or AV2) and S-VIDEO.
- If 4:3 is on the screen for a long time, that fixed image may remain visible.

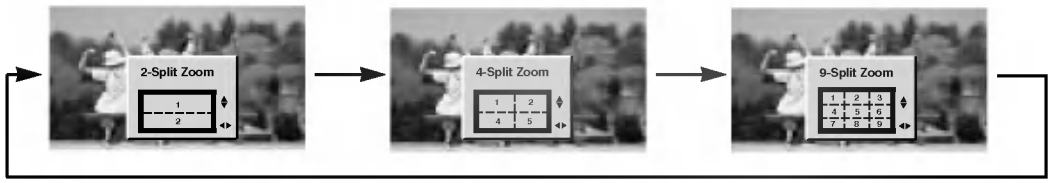
1. Press the **ARC** button to select a desired picture format.
   • Each press of **ARC** button changes the screen display as shown below.
   • You can also select ***4:3***, ***16:9*** or ***Zoom*** in the SCREEN menu.



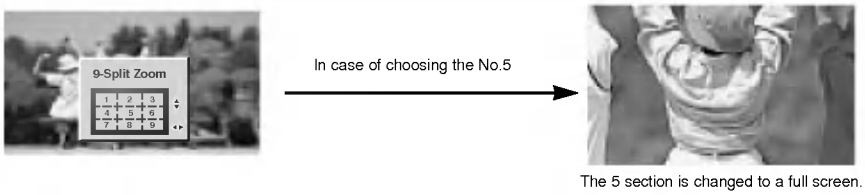
### Split Zoom

- This is the function to enlarge the screen with regular ration.
- It's available to use this function in every input source.
- With 2-SPLIT ZOOM, you can only move the screen into upside or downside.
- If a screen is enlarged, a screen can move without selecting a section of screen.

1. Press the **SPLIT ZOOM** button.
   • Each press of **SPLIT ZOOM** button changes the screen display as shown below.




**In case of 9-Split Zoom:**
Press the number button to select the section you enlarge.
If you choose No.5, the 5 section is enlarged and also can move the enlarged screen with using the ▲ / ▼ or ◄ / ► button.

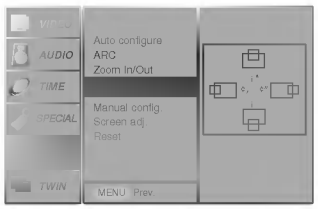



The 5 section is changed to a full screen.

## Screen Position

- This function works in the following mode:
  RGB1-PC or COMPONENT 480p,720p,1080i.

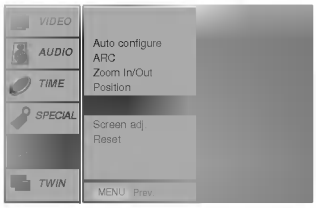
1. Press the **MENU** button and then ▲ / ▼ button to select the SCREEN menu.
2. Press the ► button and then ▲ / ▼ button to select ***Position***.
3. Press the ► button and then ▲ / ▼ or ◄ / ► button to adjust the position.
4. Press the **MENU** button.




## Manual Configure (RGB1[PC] mode only)

- If the picture isn't clear after auto adjustment and especially that characters are still trembling, adjust the picture phase manually.
- To correct the screen size, adjust ***Clock***.

1. Press the **MENU** button and then ▲ / ▼ button to select the SCREEN menu.
2. Press the ► button and then ▲ / ▼ button to select ***Manual config.***.
3. Press the ► button and then ▲ / ▼ button to to select ***Phase*** or ***Clock***.
4. Press the ◄ / ► button to make appropriate adjustments.
   - The adjustment range of ***Phase*** is 0 ~ 31.
   - The adjustment range of ***Clock*** is -50 ~ +50.
5. Press the **MENU** button.




## Screen Adjustments (VIDEO (AV1 or AV2), S-VIDEO and COMPONENT 480i mode only)

- This is the function to correct trembling or picture instability while viewing a video tape.

1. Press the **MENU** button and then ▲ / ▼ button to select the SCREEN menu.
2. Press the ► button and then ▲ / ▼ button to select ***Screen adj.***.
3. Press the ► button and then ▲ / ▼ button to to select ***TV*** or ***VCR***.
   - Select the ***VCR*** option if watching a VCR.
   - Select the ***TV*** option for other equipment.(Except VCR)
4. Press the **MENU** button.




## Initializing (Reset to factory value)

This function operates in every mode.
To initialize the adjusted value

1. Press the **MENU** button and then ▲ / ▼ button to select the SCREEN menu.
2. Press the ► button and then ▲ / ▼ button to select ***Reset***.
3. Press the ► button.
   - You can initialize ZOOM In/Out, Position, SPLIT ZOOM, PIP size, PIP position and sub picture size of twin 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 inset image.
- When you select RGB1 or RGB2 for main picture in PIP, you can watch video (AV1 or AV2), S-Video or Component 480i for sub picture.

### Watching PIP

Press the **PIP** button to switch on the sub pictures.

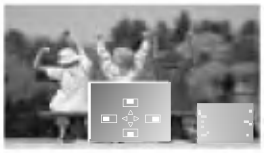
- Press this button again to switch it off.



### Moving the PIP

Press the **WIN.POSITION** button.

Repeatedly press the ▲ / ▼ or ◄ / ► button until desired position is achieved. The sub picture moves up/down or left/right.



### Main Picture Size Adjustment

Press the **ZOOM+/ZOOM-** button to enlarge or reduce the main picture size when viewing the PIP.



### PIP Size

Press the **WIN.SIZE** button and then ◄ / ► button to adjust the sub picture size.

With **WIN.SIZE** button in twin picture mode, main and sub picture is adjusted simultaneously. With **WIN.SIZE** button in PIP mode, sub picture is adjusted.



### PIP Aspect Ratio

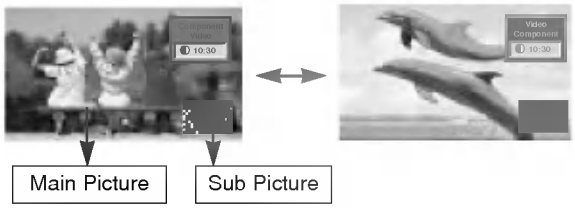
Press the **PIP ARC** button.

- The sub picture appears as below.




### Swapping the PIP

Press the **SWAP** button to exchange the main and sub pictures.




### Selecting a source input signal for the PIP

Press the **SUB INPUT** button to select the input mode for the sub picture.



- In RGB1 and RGB2 for main picture, you can select COMPONENT 480i, VIDEO (AV1 or AV2) and S-VIDEO for sub picture.
- In VIDEO (AV1 or AV2) and S-VIDEO for main picture, you can select COMPONENT 480p/720p/1080i, RGB1 and RGB2 for sub picture.
- In COMPONENT 480p/720p/1080i for main picture, you can select VIDEO (AV1 or AV2) and S-VIDEO for sub picture.
- In COMPONENT 480i for main picture, you can select RGB1 and RGB2 for sub picture.

### Main Picture Position Adjustment

Press the **ZOOM+/ZOOM-** button. Adjust the main picture position with the ▲ / ▼ or ◄ / ► buttons in enlarged main picture.



# TWIN Picture

### Main Picture Size Adjustment

Press the **TWIN PICTURE** button.

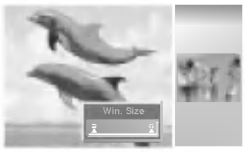
- Each press of **TWIN PICTURE** button changes the screen display as shown below.



### Sub Picture Size Adjustment

Press the **WIN.SIZE** button.

- Press the ◄ / ► button to adjust the sub picture size.
- WIN.POSITION function doesn't operate in twin picture mode.




### Selecting a source for the Twin picture

Press the **SUB INPUT** button to select the input mode for the sub picture.




- In RGB1 and RGB2 for main picture, you can select COMPONENT 480i, VIDEO (AV1 or AV2) and S-VIDEO for sub picture.
- In VIDEO (AV1 or AV2) and S-VIDEO for main picture, you can select COMPONENT 480p/720p/1080i, RGB1 and RGB2 for sub picture.
- In COMPONENT 480p/720p/1080i for main picture, you can select VIDEO (AV1 or AV2) and S-VIDEO for sub picture.
- In COMPONENT 480i for main picture, you can select RGB1 and RGB2 for sub picture.

### Swapping the Twin Picture

Press the **SWAP** button to exchange the main and sub picture in twin picture mode.

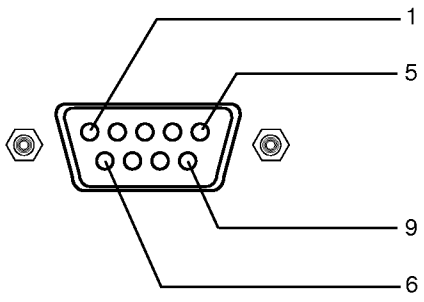


# External Control Device Setup

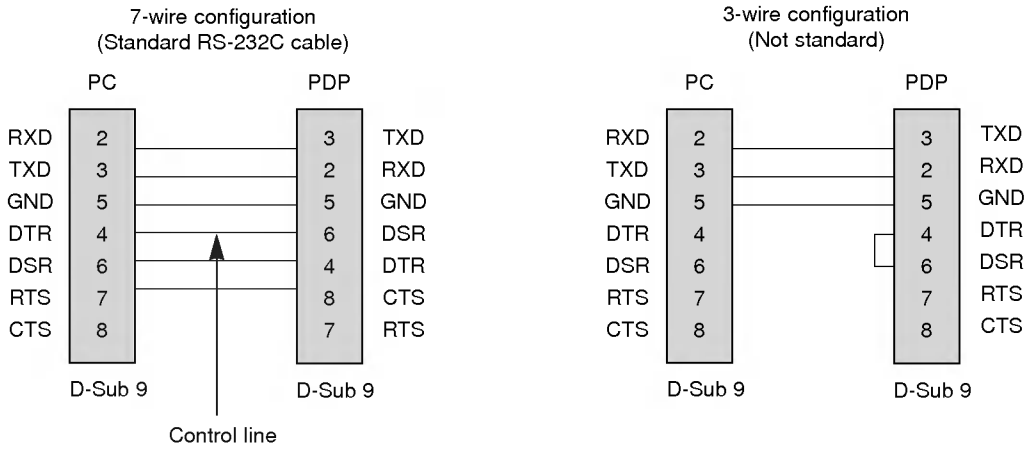
- Connect the RS-232C input jack to an external control device (such as a computer or an A/V control system) and control the Monitor's functions externally.
- Connect the serial port of the control device to the RS-232C jack on the Monitor back panel.
- RS-232C connection cables are not supplied with the Monitor.

### 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 |




### RS-232C configurations




### Set ID

- Use this function to specify a monitor ID number.

1. Press the **MENU** button and then ▲ / ▼ button to select the SPECIAL menu.
2. Press the ► button and then ▲ / ▼ button to select ***Set ID***.
3. Press the ► button and then ◄ / ► button to adjust ***Set ID*** to choose the desired monitor ID number.
4. • The adjustment range of ***Set ID*** is 1 ~ 99.
   Refer to 'Real data mapping1' (See p.28).




### Communication Parameters

- Baud rate : 115200 bps (UART)
- Data length : 8 bits
- Parity : None
- Stop bit : 1 bit
- Communication code : ASCII code

## Command Reference List

| | COMMAND 1 | COMMAND 2 | DATA (Hexadecimal) |
|---|---|---|---|
| 01. Power | k | a | 0 ~ 1 |
| 02. Input Select | k | b | 0 ~ 4 |
| 03. Aspect Ratio | k | c | 0 ~ 2 |
| 04. Screen mute | k | d | 0 ~ 1 |
| 05. Volume mute | k | e | 0 ~ 1 |
| 06. Volume control | k | f | 0 ~ 64 |
| 07. Contrast | k | g | 0 ~ 64 |
| 08. Brightness | k | h | 0 ~ 64 |
| 09. Colour | k | i | 0 ~ 64 |
| 10. Tint | k | j | 0 ~ 64 |
| 11. Sharpness | k | k | 0 ~ 64 |
| 12. OSD select | k | l | 0 ~ 1 |
| 13. Remote control lock mode | k | m | 0 ~ 1 |
| 14. PIP/Twin | k | n | 0 ~ 3 |
| 15. PIP size | k | o | 0 ~ 1 |
| 16. PIP position | k | q | 0 ~ 3 |
| 17. Treble | k | r | 0 ~ 64 |
| 18. Bass | k | s | 0 ~ 64 |
| 19. Balance | k | t | 0 ~ 64 |
| 20. Colour temperature | k | u | 0 ~ 3 |
| 21. Red adjustment | k | v | 0 ~ 64 |
| 22. Green adjustment | k | w | 0 ~ 64 |
| 23. Blue adjustment | k | $ | 0 ~ 64 |
| 24. PIP input source | k | y | 0 ~ 4 |
| 25. Orbiter | j | p | 0 ~ 1 |
| 26. White Wash | j | q | 0 ~ 1 |
| 27. Orbiter Time Setting | j | r | 1 ~ FE |
| 28. Orbiter Pixel Setting | j | s | 0 ~9 |

* When setting the 25 ~ 28, a menu doesn't display on screen.

## Transmission / Receiving Protocol

*Transmission*

[Command1][Command2][ ][Set ID][ ][Data][Cr]

* [Command 1] : k
* [Command 2] : To control PDP set.
* [Set ID] : You can adjust the set ID to choose desired monitor ID number in special menu.
  See previous page.
  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*

[Command2][ ][Set ID][ ][OK][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*

[Command2][ ][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:a)

► To control Power On/Off of the Monitor.

*Transmission*

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

Data 0 : Power Off 1 : Power On

*Acknowledgement*

[a][ ][Set ID][ ][OK][Data][x]

Data 0 : Power Off 1 : Power On

► To show Power On/Off.

*Transmission*

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

Data 0 : Power Off 1 : Power On

*Acknowledgement*

[a][ ][Set ID][ ][OK][Data][x]

Data 0 : Power Off 1 : Power On

* 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:b) (Main picture input)

► 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*

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

Data 0 : RGB 1 3 : S-Video
1 : Component (or AV1) 4 : RGB 2
2 : Video (or AV2)

*Acknowledgement*

[b][ ][Set ID][ ][OK][Data][x]

Data 0 : RGB 1 3 : S-Video
1 : Component (or AV1) 4 : RGB 2
2 : Video (or AV2)

### 03. Aspect Ratio (Command:c) (Main picture format)

▶ 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*

| [k][c][ ][Set ID][ ][Data][Cr] |
|---|

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

*Acknowledgement*

| [c][ ][Set ID][ ][OK][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.

### 04. Screen mute (Command:d)

▶ To select screen mute on/off.

*Transmission*

| [k][d][ ][Set ID][ ][Data][Cr] |
|---|

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

*Acknowledgement*

| [d][ ][Set ID][ ][OK][Data][x] |
|---|

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

### 05. Volume mute (Command:e)

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

*Transmission*

| [k][e][ ][Set ID][ ][Data][Cr] |
|---|

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

*Acknowledgement*

| [e][ ][Set ID][ ][OK][Data][x] |
|---|

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

### 06. Volume control (Command:f)

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

*Transmission*

| [k][f][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping1' (See p.28).

*Acknowledgement*

| [f][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 0 ~ Max : 64

### 07. Contrast (Command:g)

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

*Transmission*

| [k][g][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping1' (See p.28).

*Acknowledgement*

| [g][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 0 ~ Max : 64

### 08. Brightness (Command:h)

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

*Transmission*

| [k][h][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping1' (See p.28).

*Acknowledgement*

| [h][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 0 ~ Max : 64

### 09. Colour (Command:i)

▶ To adjust the screen colour.
You can also adjust colour in the video menu.

*Transmission*

| [k][i][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping1' (See p.28).

*Acknowledgement*

| [i][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 0 ~ Max : 64

### 10. Tint (Command:j)

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

*Transmission*

| [k][j][ ][Set ID][ ][Data][Cr] |
|---|

Data Red : 0 ~ Green : 64
* Refer to 'Real data mapping1' (See p.28).

*Acknowledgement*

| [j][ ][Set ID][ ][OK][Data][x] |
|---|

Data Red : 0 ~ Green : 64

### 11. Sharpness (Command:k)

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

*Transmission*

| [k][k][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping1' (See p.28).

*Acknowledgement*

| [k][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 0 ~ Max : 64

### 12. OSD select (Command:l)

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

*Transmission*

| [k][l][ ][Set ID][ ][Data][Cr] |
|---|

Data 0 : OSD off 1 : OSD on

*Acknowledgement*

| [l][ ][Set ID][ ][OK][Data][x] |
|---|

Data 0 : OSD off 1 : OSD on

### 13. Remote control lock mode (Command:m)

▶ To lock the front panel controls on the monitor and remote control.

*Transmission*

| [k][m][ ][Set ID][ ][Data][Cr] |
|---|

Data 0 : Lock off 1 : Lock on

*Acknowledgement*

| [m][ ][Set ID][ ][OK][Data][x] |
|---|

Data 0 : Lock off 1 : Lock on

* If you're not use the remote control, set this mode.
When main power is on/off, remote control lock is released.

### 14. PIP / Twin (Command:n)

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

*Transmission*

| [k][n][ ][Set ID][ ][Data][Cr] |
|---|

Data 0 : PIP/DW off 2 : DW1
1 : PIP 3 : DW2

*Acknowledgement*

| [n][ ][Set ID][ ][OK][Data][x] |
|---|

Data 0 : PIP/DW off 2 : DW1
1 : PIP 3 : DW2

### 15. PIP Size (Command:o)

▶ To select the PIP picture format.
You can also select the PIP picture format using the WIN.SIZE on the remote control.

*Transmission*

| [k][o][ ][Set ID][ ][Data][Cr] |
|---|

Data 0 : 4:3 1 : 16:9

*Acknowledgement*

| [o][ ][Set ID][ ][OK][Data][x] |
|---|

Data 0 : 4:3 1 : 16:9

### 16. PIP position (Command:q)

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

*Transmission*

| [k][q][ ][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*

| [q][ ][Set ID][ ][OK][Data][x] |
|---|

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

### 17. Treble (Command:r)

▶ To adjust treble.
You can also adjust treble in the audio menu.

*Transmission*

| [k][r][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping1' (See p.28).

*Acknowledgement*

| [r][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 0 ~ Max : 64

### 18. Bass (Command:s)

▶ To adjust bass.
You can also adjust bass in the audio menu.

*Transmission*

| [k][s][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping1' (See p.28).

*Acknowledgement*

| [s][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 0 ~ Max : 64

### 19. Balance (Command:t)

▶ To adjust balance.
You can also adjust balance in the audio menu.

*Transmission*

| [k][t][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping1' (See p.28).

*Acknowledgement*

| [t][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 0 ~ Max : 64

### 20. Colour temperature (Command:u)

▶ To adjust colour temperature.
You can also adjust CSM in the video menu.

*Transmission*

| [k][u][ ][Set ID][ ][Data][Cr] |
|---|

Data 0: Normal 1: Cool 2: Warm 3: User

*Acknowledgement*

| [u][ ][Set ID][ ][OK][Data][x] |
|---|

Data 0: Normal 1: Cool 2: Warm 3: User

### 21. Red Adjustment (Command:v)

▶ To adjust red in colour temperature.

*Transmission*

| [k][v][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping 2' (See p.28).

*Acknowledgement*

| [v][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 0 ~ Max : 64

### 22. Green Adjustment (Command:w)

▶ To adjust green in colour temperature.

*Transmission*

| [k][w][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping 2' (See p.28).

*Acknowledgement*

| [w][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 0 ~ Max : 64

### 23. Blue Adjustment (Command:$)

▶ To adjust blue in colour temperature.

*Transmission*

| [k][$][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping 2' (See p.28).

*Acknowledgement*

| [$][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 0 ~ Max : 64

### 24. PIP input select (Command:y)

▶ To select input source for sub picture in PIP mode.

*Transmission*

| [k][y][ ][Set ID][ ][Data][Cr] |
|---|

Data 0 : RGB1 1 : Component (or AV1)
2 : Video (or AV2) 3 : S-Video
4 : RGB2

*Acknowledgement*

| [y][ ][Set ID][ ][OK][Data][x] |
|---|

Data 0 : RGB1 1 : Component (or AV1)
2 : Video (or AV2) 3 : S-Video
4 : RGB2

### 25. Orbiter (Command:p)

▶ To control the orbiter function on/off.

*Transmission*

| [j][p][ ][Set ID][ ][Data][Cr] |
|---|

Data 0 : Orbiter off
1 : Orbiter on

*Acknowledgement*

| [p][ ][Set ID][ ][OK][Data][x] |
|---|

Data 0 : Orbiter off
1 : Orbiter on

### 26. White Wash (Command:q)

▶ To control the white wash function on/off.

*Transmission*

| [j][q][ ][Set ID][ ][Data][Cr] |
|---|

Data 0 : White Wash off
1 : White Wash on

*Acknowledgement*

| [q][ ][Set ID][ ][OK][Data][x] |
|---|

Data 0 : White Wash off
1 : White Wash on

### 27. Orbiter Time Setting (Command:r)

▶ To adjust orbiter operation time term.

*Transmission*

| [j][r][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 1 ~ Max : FE

* Refer to 'Real data mapping1' as shown below.

*Acknowledgement*

| [r][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 1 ~ Max : FE

### 28. Orbiter Pixel Setting (Command:s)

▶ To adjust pixel number in orbiter function.

*Transmission*

| [j][s][ ][Set ID][ ][Data][Cr] |
|---|

Data Min : 0 ~ Max : 9

* Refer to 'Real data mapping1' as shown below.

*Acknowledgement*

| [s][ ][Set ID][ ][OK][Data][x] |
|---|

Data Min : 0 ~ Max : 9

*** Real data mapping 1**

0 : Step 0
⋮
A : Step 10 (Set ID 10)
⋮
F : Step 15 (Set ID 15)
10 : Step 16 (Set ID 16)
⋮
64 : Step 100

*** Real data mapping 2**

0 : -10
5 : -9
A : -8
⋮
2D: -1
32: 0
37: +1
⋮
5F: +9
64: +10

# NOTE

# Troubleshooting check list

| | |
|---|---|
| **No picture & No sound** | • Check whether the Monitor is turned on.<br>• Power cord inserted into wall outlet?<br>• Plug another product's power cord into the wall outlet where the Monitor's power cord was plugged in. |
| **Picture OK & No sound** | • Press the **VOLUME** (►) button.<br>• Sound muted? Press **MUTE** button. |
| **The remote control doesn't work** | • Check to see if there is any object between the Plasma Display and the remote control causing obstruction.<br>• Check to see if the batteries are installed with the correct polarities. (Refer to p.11)<br>• Install new batteries. (Refer to p.11) |
| **No or Poor colour or Poor picture** | • Select ***Colour*** in the VIDEO menu and press the **VOLUME** (►) button. (Refer to p.15)<br>• Keep a certain distance between the Monitor and the VCR.<br>• Activate any function to restore the brightness of the picture. (If still picture is on the screen for more than 5 minutes, the screen gets dark.) |
| **No output from one of the speakers** | • Adjust ***Balance*** in the AUDIO menu. (Refer to p.16) |
| **Strange sound from the Monitor** | • Typical sound due to normal Monitor operation, Monitor is not faulty. |

# Product specifications

| MODEL | MT-50PZ40/H/A/B/K/R/S MZ-50PZ42/H/A/B/K/R/S<br>MT-50PZ41/H/A/B/K/R/S MZ-50PZ43/H/A/B/K/R/S<br>MT-50PZ43/H/A/B/K/R/S |
|---|---|
| Width (inches / mm) | 48.2 / 1223 |
| Height (inches / mm) | 28.9 / 734 |
| Depth (inches / mm) | 4.1 / 105 |
| Weight (pounds / kg) | 99.2 / 45 |
| Power requirement | AC100-240V ~ 50/60Hz |
| Resolution | 1366 x 768 (Dot) |
| Colour | 16,770,000 (256 steps of each R, G and B) |
| Temperature (In operation) | 0 ~ 40℃ |
| Humidity (In operation) | under 80% |

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

LG