PLASMA MONITOR

OWNER'S MANUAL

MT-42PZ40V/B/R/S
MT-42PZ41V/B/R/S
MT-42PZ41M/B/R/S
MT-42PZ42V/B/R/S
MT-42PZ43V/B/R/S
MZ-42PZ42V/B/R/S
MZ-42PZ43V/B/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 information to your dealer when you require service.

Model number :
Serial number :

P/NO : 3828[illegible]A (RF02RA, 092K 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 42" 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.

The explanation about noise of 42" PDP

In the same way that a fan is used in a PC to keep the CPU cool, the PDP is equipped with cooling fans to improve the reliability of this product. Therefore, a certain level of noise could occur when the fan is operated. This noise doesn't have any negative effect on its efficiency and liability and it's also determined to have no difficulty while using this product. The noise from the fans is normal in the operation of this product. We hope you will understand that a certain level of noise is acceptable. It means that it is not changeable nor refundable.

WARNING

MT-42PZ41/43 / **MZ-42PZ43** series : 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-42PZ40/42 / **MZ-42PZ42** 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.

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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.**

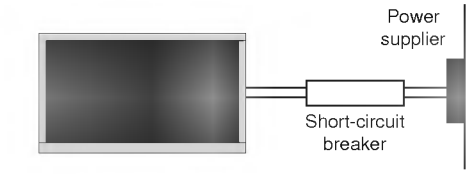
⚠ WARNING

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.**

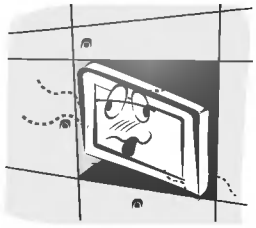
⚠ **Take care of danger that may happen under specific condition.**

⚠ NOTES

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

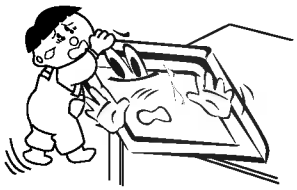
Disconnect from the mains and remove all connections before moving.

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.

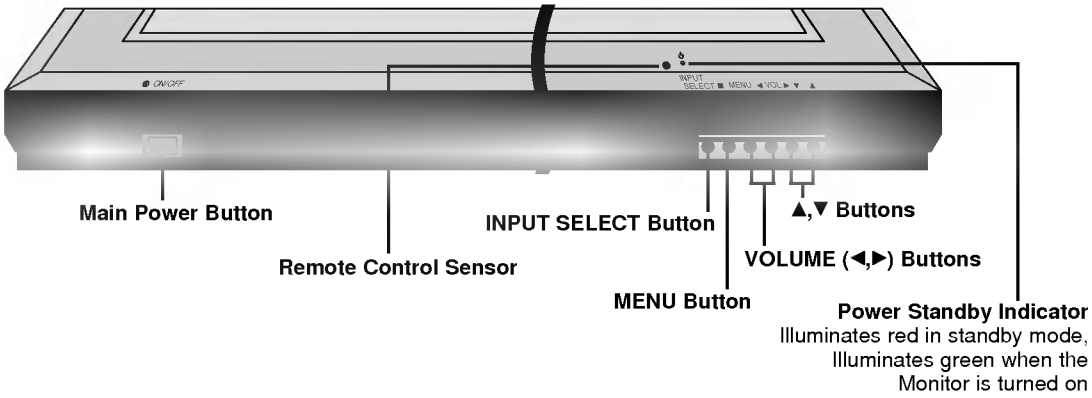
The distance between eyes and the screen should be about 5 ~ 7 times as long as diagonal length of the screen.
- If not, eyes will strain.

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.

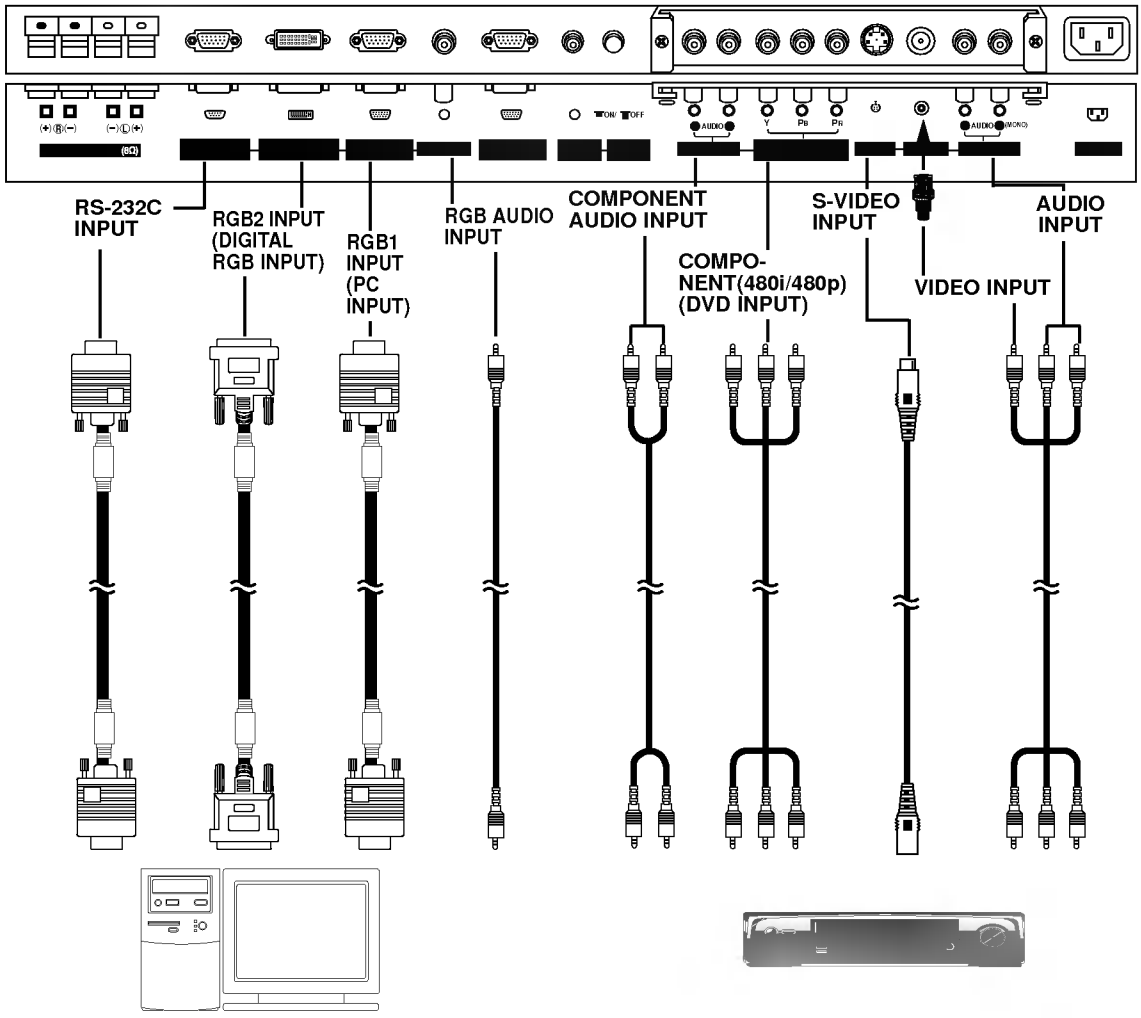
Only use the specified batteries.
- This make cause damaged the Monitor or could give an electric shock.

Controls of the Monitor

<Front Panel Controls>



<Back Panel>



Connection to PC

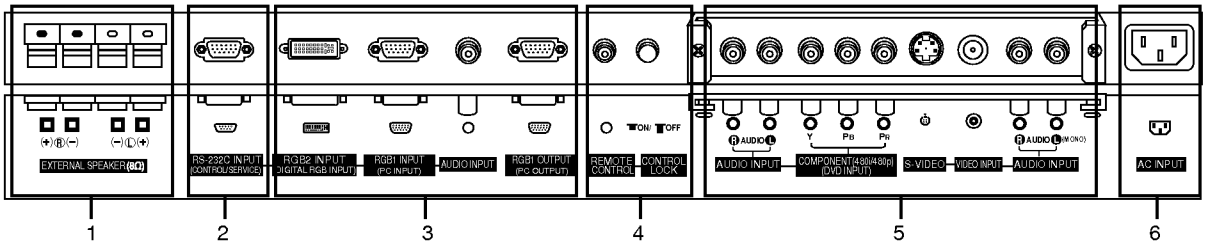
Connection to AV equipment

***Note**: The connection cables shown above to the right are not included with the Monitor.*
A D-sub 15-pin cable and a DVI cable are provided to connect the Monitor to a PC.

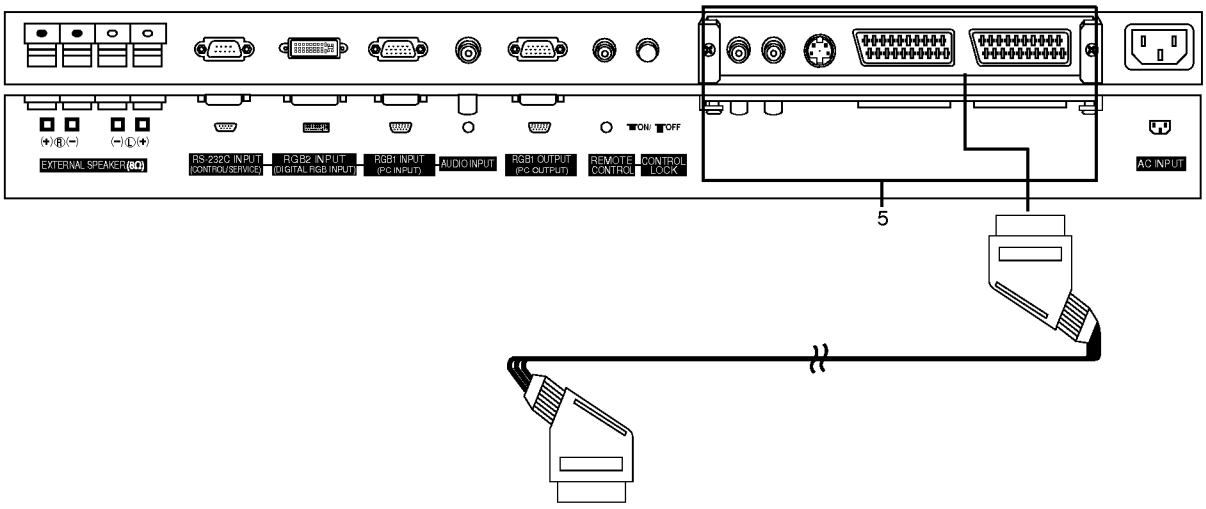
Watching External Equipments

<Back Panel>

RCA Type



Scart Type



1. **EXTERNAL SPEAKER (8 ohm output)**
   Connect to optional external speaker(s).
   * For further information, refer to 'Speaker & Speaker Stand' manual.

2. **RS-232C INPUT(CONTROL/SERVICE) PORT**
   Connect to the RS-232C port on a PC.

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

   RGB1 OUTPUT(PC OUTPUT) SOCKET
   You can watch the RGB1 signal on another monitor, connect RGB1 OUTPUT (PC OUTPUT) to another monitor's PC input port. When the monitor is in standby mode, you can not watch the RGB1 signal on another monitor.

4. **CONTROL LOCK Switch**
   REMOTE CONTROL
   When "CONTROL LOCK" is set "ON", Monitor is operated by the external control device.

5. **AUDIO / COMPONENT(480i/480p)(DVD INPUT) / S-VIDEO / VIDEO INPUT / AUDIO INPUT SOCKETS**

   EURO SCART SOCKET

   Note : *The interface board(AP-42EA40/41) is not equipped on MT/MZ-42PZ42/43 series models. Contact your dealer for buying this optional item.*

6. **POWER CORD SOCKET**
   This Monitor operates on an AC power. The voltage is indicated on the Specifications page. Never attempt to operate the Monitor on DC power.

External Equipment Viewing Setups

Watching VCR (When the Interface board is installed.)

The interface board(AP-42EA40/41) is not equipped on MT/MZ-42PZ42/43 series models.

- When connecting the Monitor to external equipment, match the colours of connecting ports (Video - yellow, Audio (L) - white, Audio (R) -red).
- Connect the VIDEO INPUT socket (yellow) with the BNC-RCA adaptor to the VIDEO INPUT on the Monitor.
- If you have a mono VCR, connect the audio cable from the VCR to the AUDIO (L/MONO) input on the 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.
- Use the orbiter function to Avoid having a fixed image remain on the screen for a long period of time. Typically a frozen still picture from a VCR.
  If a 4:3 picture format is used; the fixed image may remain visible on the screen.
- To avoid picture noise (interference), leave an adequate distance between the VCR and Monitor

1. Use the **INPUT SELECT** button on the remote control to select ***Video*** or (***AV1*** or ***AV2***).
   (If connected to S-VIDEO, select the ***S-Video*** external input source.)
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-42EA40/41) is not equipped on MT/MZ-42PZ42/43 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 unless a TV tuner device or cable TV converter box is connected to the Monitor.
- For further information regarding cable TV service, contact your local cable TV service provider(s).

1. Use the **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-42EA40/41) is not equipped on MT/MZ-42PZ42/43 series models.

- When connecting the monitor to an external source, match the colours of AUDIO/VIDEO input jacks on the monitor with the output jacks on the audio/video equipment: Video = yellow, Audio (Left) = white, Audio (Right) = red.
  Or, connect the Euro scart socket of the VCR to the Euro scart socket of the set.

1. Use the **INPUT SELECT** button on the remote control 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-42EA40/41) is not equipped on MT/MZ-42PZ42/43 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. Turn on the DVD player, and insert a DVD.
2. Use **INPUT SELECT** button on the remote control to select ***Component*** or (***AV1*** or ***AV2***). 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	Y	Pb
	Y	Y	B-Y
	Y	Y	Cb
	Y	Y	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) port of the Monitor; change the resolution output of PC accordingly.
- 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.
- The synchronization input form for Horizontal and Vertical frequencies is separate.

Setup Instructions to Connect a PC to your Monitor

- We recommend using 640x480, 60Hz for the PC mode, they provide the best picture quality.
- If the resolution of PC is over UXGA, there will be no picture on the Monitor.
- 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 INPUT (PC INPUT) or RGB2 INPUT (DIGITAL RGB INPUT) 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.)
- DOS mode may not work depending on video card if using a DVI-I cable.
- To see a normal picture, match the VGA mode and DVI signal (640x480, 852x480, 848x480). (See page 19)

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, 60Hz).

Displayable Monitor Specification

<RGB1 Mode>

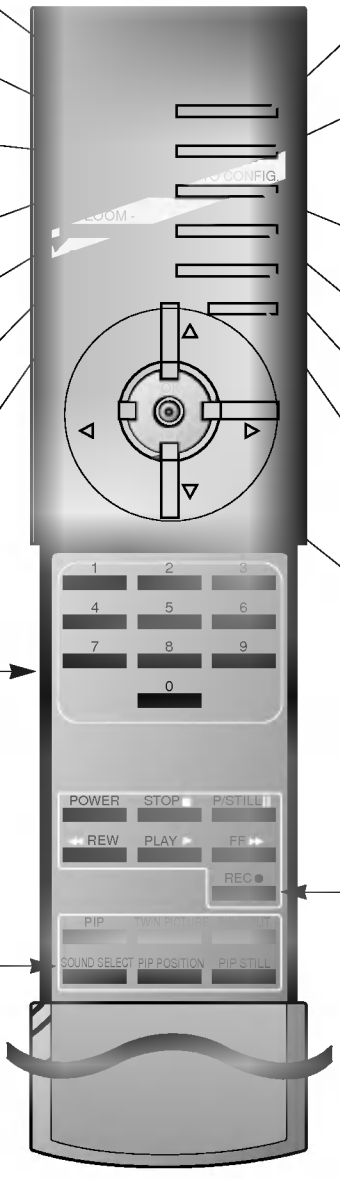
Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)	DDC	Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)	DDC
640x350	31.468	70.09		800x600	64.016	100.00	
	37.861	85.08		832x624	49.725	74.55	o
640x400	31.469	70.08	o	848x480	31.469	59.94	
	37.927	85.03	o	or	35.000	70.06	
640x480	31.469	59.94	o	852x480	37.500	75.00	
	35.000	66.66	o	1024x768	48.363	60.00	o
	37.861	72.80	o		56.476	70.06	o
	37.500	75.00	o		60.023	75.02	o
	43.269	85.00			68.677	84.99	
	45.913	90.03		1152x864	54.348	60.05	o
	53.011	100.04			63.995	70.01	o
	64.062	120.00			67.500	75.00	o
800x600	35.156	56.25	o		77.487	85.05	
	37.879	60.31	o	1152x870	68.681	75.06	o
	48.077	72.18	o	1280x960	60.000	60.000	o
	46.875	75.00	o		75.000	75.00	o
	53.674	85.06		1280x1024	63.981	60.02	o
	56.000	90.00					

<RGB2 Mode>

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)	DDC	Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)	DDC
640x350	31.468	70.09		800x600	64.016	100.00	
	37.861	85.08		832x624	49.725	74.55	o
640x400	31.469	70.08	o	848x480	31.469	59.94	
	37.927	85.03	o	or	35.000	70.06	
640x480	31.469	59.94	o	852x480	37.500	75.00	
	35.000	66.66		1024x768	48.363	60.00	o
	37.861	72.80			56.476	70.06	
	37.500	75.00			60.023	75.02	
	43.269	85.00			68.677	84.99	
	45.913	90.03		1152x864	54.348	60.05	o
	53.011	100.04			63.995	70.01	
	64.062	120.00			67.500	75.00	
800x600	35.156	56.25			77.487	85.05	
	37.879	60.31	o	1152x870	68.681	75.06	o
	48.077	72.18		1280x960	60.000	60.000	o
	46.875	75.00			75.000	75.00	
	53.674	85.06		1280x1024	63.981	60.02	o
	56.000	90.00					

Remote Control Key Functions

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



POWER
Switches the Monitor on from stand-by or off to standby.

SLEEP
Sets the sleep timer.

PSM
Adjusts the factory preset picture according to the room.

ARC
Changes the picture format.

ZOOM-
Reduces the main picture size.

SPLIT ZOOM
Enlarge the screen with regular

MENU
Displays on screen menus one by one.
Exits the current menu.
Memorizes menu changes.

NUMBER buttons

PIP
Switches the sub picture on

TWIN PICTURE

PIP INPUT
Selects the input mode for the sub picture.

SOUND SELECT
Select main picture sound or sub picture sound for PIP.

PIP POSITION
change the sub picture position.

PIP STILL
Freeze sub picture motion.

INPUT SELECT

SSM
To select the sound appropriate to your viewing program character: ***Flat***, ***Speech***, ***Movie***, ***Music***, or ***User***

AUTO CONFIG.

ZOOM+
Enlarges the main picture size.

CHILD LOCK
To operate the monitor with remote control only.

MUTE
Switches the sound on or off.

OK

▲ / ▼
Selects a menu option.

◄ / ► (Volume button)
Increases/decreases sound level.
Adjusts menu settings.

VCR BUTTONS
Controls a LG video cassette recorder.

Installing Batteries

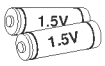


- Open the battery compartment cover on the back side and insert the batteries with correct polarity.
- Install two 1.5V alkaline batteries of AAA type. Don't mix used batteries with new batteries.

Accessories



Owner's Manual



Alkaline batteries



BNC-RCA adaptor (optional)



Remote Control handset



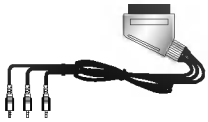
D-sub 15 pin cable



Power Cord



DVI-D Cable



Phone scart cable (Optional)

Optional Extras

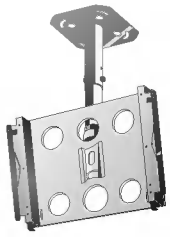
- Optional extras can be changed or modified for quality improvement without any notification new optional extras can be added.
- Contract your dealer for buying these items.



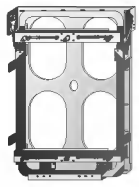
Tilt wall mounting bracket



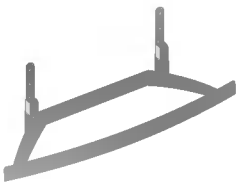
Wall mounting bracket



Ceiling mounting bracket



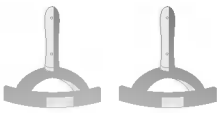
Vertical Wall mounting bracket



Desktop stand



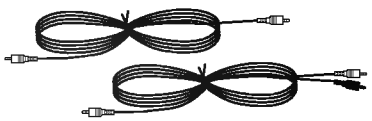
Speakers



Desktop Speaker stand



Video cables

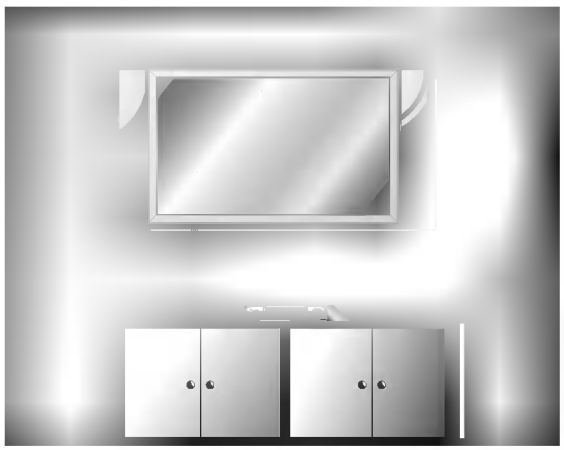


Audio cables

Monitor Installation Options

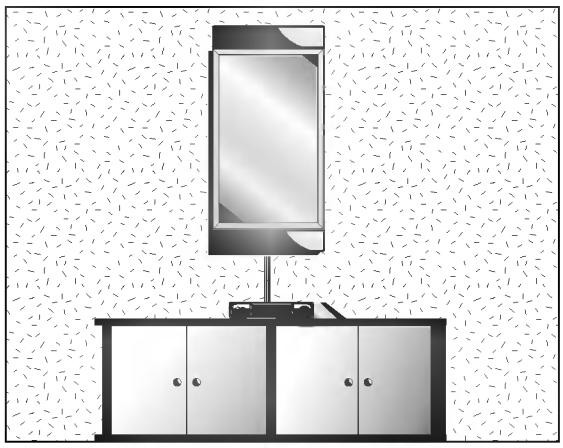
- The Monitor can be installed in different ways such as on a wall, or on a desktop etc.
- Install this monitor only in a location where adequate ventilation is available.
- This monitor is designed so that it can be mounted either horizontally or vertically.

Wall Mount: Horizontal Installation



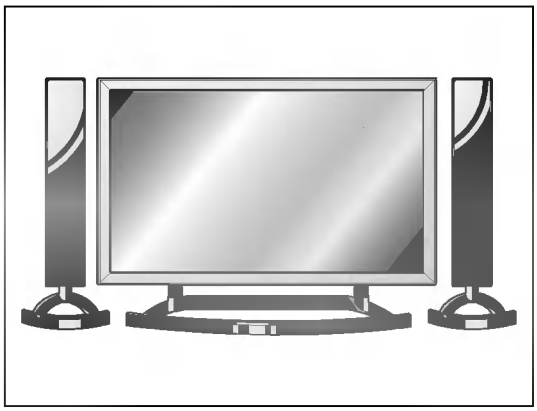
- The monitor can be installed on a wall as shown above. (For further information, refer to the optional 'Wall Mounting Bracket Installation and Setup Guide'.)
- Speakers are optional, and are shown for illustration only.

Wall Mount: Vertical Installation



- The monitor can be installed vertically on the wall as shown above.(For further information, refer to the optional 'Wall Mounting Bracket Installation and Setup Guide'.)
  Caution: When installing the monitor vertically, the front panel controls must be in the left-down side position as shown above.
- Speakers are optional, and are shown for illustration only.
- **Note:** To use the Monitor in a vertical orientation, the source's image must also be in a vertical format.

Desktop Pedestal Installation



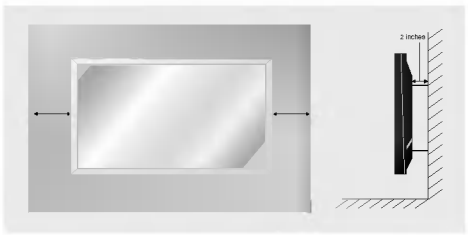
- The Monitor can be mounted on a desk as shown above. (For further information, refer to the optional 'Desktop Stand Installation and Setup Guide'.)
- Speakers and speaker stands shown are optional, and are shown for example only.

Caution

- When installing the monitor vertically, you have to change the menu display mode so that the menus will appear correctly and also to protect the monitor from overheating (Refer to p. 17).
- Install this monitor only in a location where adequate ventilation is available.

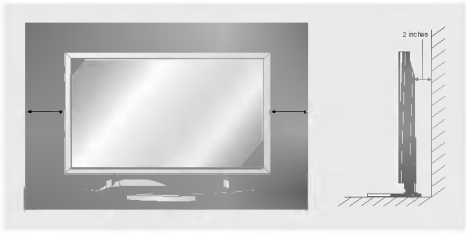
To Mount on a Wall

Wall mount minimum allowable clearances for adequate ventilation.



To Install on a Desktop

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.

[illegible]tallation

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 switch on.

[illegible]nected)

1. If the Monitor was turned off with the ⏻ ON/OFF button on the Monitor

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

2. If the Monitor was turned off with the remote control and 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 the Monitor on.

Menu Language Selection (option)

- The menus can be shown on the screen in the selected language. First select your language.

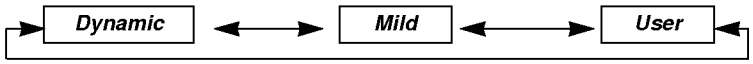
1. Press the **MENU** button and then use ▲ / ▼ button to select the Special menu.
2. Press the ► button and then use ▲ / ▼ button to select ***Language***.
3. Press the ► button and then use ▲ / ▼ button to select your desired language.
   From this point on, the on-screen menus will be shown in the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

Picture Menu Options

PSM (Picture Status Memory)

- This function adjusts the Monitor to the best picture appearance. (This function doesn't work in RGB1/2 mode.)
- When adjusting picture options (contrast, brightness, color, sharpness and tint) manually, PSM is automatically changed to ***User***.

1. Press the **PSM** button
   - Each press of the **PSM** button or ◄ / ► button changes the screen display as shown below.

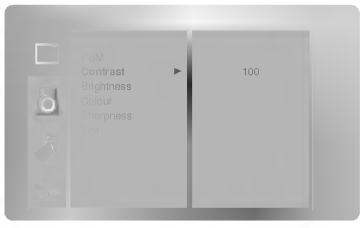


   - You can also select ***Dynamic***, ***Mild*** or ***User*** in the ***Picture*** menu.
   - Picture options ***Dynamic*** and ***Mild*** are preset and programmed for good picture quality at the factory and cannot be changed.

Manual Picture Control (User option)

- You can adjust picture contrast, brightness, colour, sharpness and tint to the levels you prefer.
- In PIP and Twin picture mode, settings are not adjustable.
- In the broadcasting system PAL/SECAM, the picture item TINT doesn't work.

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

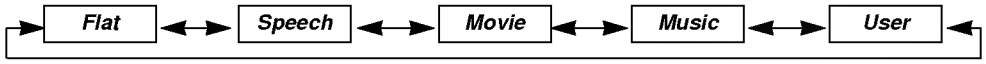


Sound Menu Options

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.
- When adjusting sound options (treble, bass, and balance) manually, SSM is automatically changed to ***User***.

1. Press the **SSM** button.
2. Press the **SSM** button or ◄ / ► button to select your desired sound.

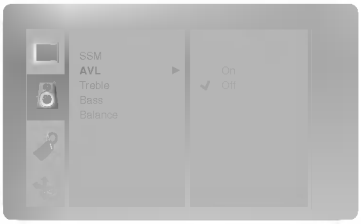


- You can also select ***Flat***, ***Speech***, ***Movie***, ***Music***, or ***User*** in the ***Sound*** menu.

AVL (Auto Volume Leveler)

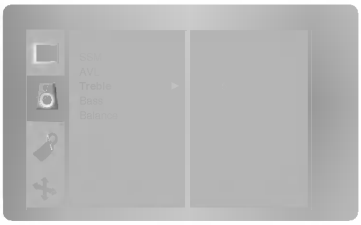
- This feature maintains an equal volume level; even if you change channels.

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



Adjusting Sound Control (User option)

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



Special Menu Options

Menu Rotation for Vertical Viewing

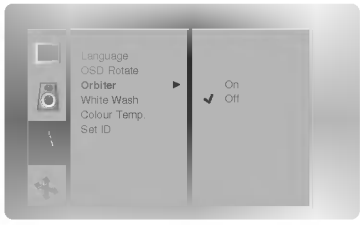
1. Press the **MENU** button and then use ▲ / ▼ button to select the Special menu.
2. Press the ► button and then use ▲ / ▼ button to select ***OSD Rotate***.
3. Press the ► button and then use the ▲ / ▼ button to select ***Normal*** or ***Rotate***.
   • Select ***Normal*** : if the monitor is installed horizontally.
   • Select ***Rotate*** : if the monitor is installed vertically.
4. Press the **MENU** button.



Orbiter

- Avoid allowing a fixed image to remain on the Monitor's screen for a long period of time. A frozen still picture from a PC/video game displayed on the screen for prolonged periods will result in an ghost image remaining even when you change the image.
- To avoid a permanent image on the screen, the screen will move every 2 minutes:
  Left → Downside → Right → Upside → Upside → Right → Downside → Left
- The Orbiter feature may help prevent ghost images. However, it is best not to allow any fixed image to remain on the screen.

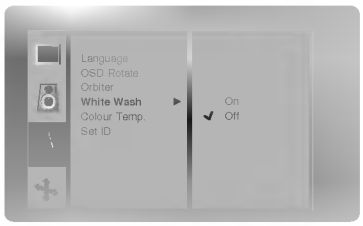
1. Press the **MENU** button and then use ▲ / ▼ button to select the Special menu.
2. Press the ► button and then use ▲ / ▼ button to select ***Orbiter***.
3. Press the ► button and then use ▲ / ▼ button to select ***On*** or ***Off***.
4. Press the **MENU** button.



White Wash

- White Wash removes permanent images from the screen.
- Set ***White Wash*** '***On***' until fixed image disappears. To return the viewing screen, set ***White Wash*** '***On***'.
- A excessive permanent image is impossible to clear with using this function perfectly.

1. Press the **MENU** button and then use ▲ / ▼ button to select the Special menu.
2. Press the ► button and then use ▲ / ▼ button to select ***White Wash***.
3. Press the ► button and then use ▲ / ▼ button to select ***On*** or ***Off***.
   • When you select ***On***, the screen changes to white.
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.

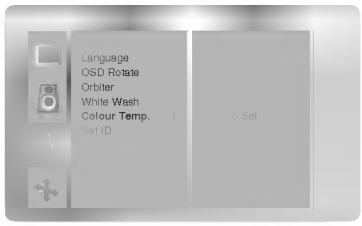
a. To check the remaining sleep time, press the **SLEEP** or **OK** button once.
b. To cancel the sleep time, repeatedly press the **SLEEP** button until the display zZ --- ***min.*** appears.
c. If you turn the monitor off after setting the sleep timer, the setting will be erased.

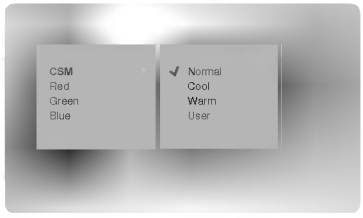
Adjusting Auto Colour Control

- To initialize values (reset to default settings), select the ***Normal*** option.
- When adjusting color temperature options (red, green, or blue) manually, CSM is automatically changed to ***User***.

1. Press the **MENU** button and then use ▲ / ▼ button to select the Special menu.
2. Press the ► button and then use ▲ / ▼ button to select ***Colour Temp.***.
3. Press the ► button and then use ▲ / ▼ button to select ***CSM***.
4. Press the ► button and then use ▲ / ▼ button to select the desired colour temperature.
   • Each press of ▲ / ▼ button changes the screen display as shown.

Normal ◄► ***Cool*** ◄► ***Warm*** ◄► ***User***

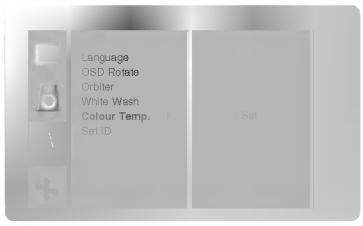




Manual Colour Temperature Control (User option)

- You can adjust red, green, or blue to any colour temperature you prefer.

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



Child lock

- The monitor can be set up so that it can only be used with the remote control.
- This feature can be used to prevent unauthorized viewing.

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

On ◄► ***Off***

   • You can also select ***On*** or ***Off*** in the Special menu.

- This Monitor is programmed to remember which option it was last set to even if you turn the monitor off.
- In ***Child lock*** '***On***', if the monitor is turned off with the remote control, press the **INPUT SELECT** button on the monitor or **POWER**, **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.

Screen Menu Options

Auto Adjustment (RGB1 (PC) mode only)

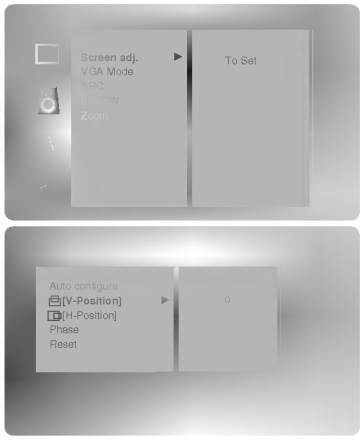
- Automatically adjusts picture position and minimizes image shaking.
- Although the image is still not correct, your Monitor is functioning properly but needs further adjustment.

1. Press the **AUTO CONFIG.** button to run Auto configure.
   • If the position of the image is still not correct, try Auto adjustment again.
2. If picture needs to be adjusted more after Auto adjustment in RGB1 mode, you can manually adjust the image position and ***Phase***.

Adjusting Horizontal/ Vertical Position

- You can only adjust ***V-Position/H-Position*** in COMPONENT (480p) or RGB1(PC).

1. Press the **MENU** button and then use ▲ / ▼ button to select the SCREEN menu.
2. Press the ► button and then use ▲ / ▼ button to select ***Screen adj.***.
3. Press the ► button and then use ▲ / ▼ button to select ***V-Position*** or ***H-Position***.
4. Press the ► button and then use the ◄ / ► button to adjust until you get desired horizontal or vertical position.
   • The adjustment range of ***V-Position*** is -50~+50.
   • The adjustment range of ***H-Position*** is -100~+100.
   • If you install the monitor vertically on the wall, the adjustment range of ***V-Position/H-Position*** may change.
   • Based on the PC resolution, the adjustment range of ***V-Position/H-Position*** may change.
   • Based on input signal, the position of the picture may not change even though you have adjusted the horizontal or vertical position with this function.
5. Press the **MENU** button.



Picture Phase Adjustments (RGB1 (PC) mode only)

- If the picture isn't clear after auto adjustment and especially if characters are still jittery, adjust the picture phase manually.

1. Press the **MENU** button and then use ▲ / ▼ button to select the SCREEN menu.
2. Press the ► button and then use ▲ / ▼ button to select ***Screen adj.***.
3. Press the ► button and then use ▲ / ▼ button to select ***Phase***.
4. Press the ► button and then use the ◄ / ► button to adjust phase.
   • The adjustment range of ***Phase*** is 0 ~ 63.
5. Press the **MENU** button.



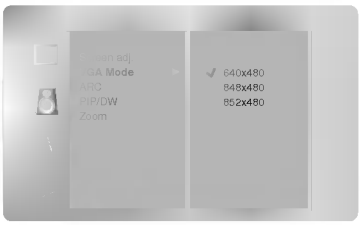
Initializing (Reset to original factory value)

- To initialize the adjusted value, select ***Reset*** with the ▲ / ▼ button and then press the ► button.

Selecting Wide VGA mode (RGB1, RGB2 [PC] mode only)

- To see a normal picture, match the resolution of RGB mode and selection of VGA mode.
- When selecting 852x480 or 848x480, the screen is changed to 16:9 aspect ratio automatically. At this time, Twin picture doesn't work.

1. Press the **MENU** button and then use ▲ / ▼ button to select the SCREEN menu.
2. Press the ► button and then use ▲ / ▼ button to select ***VGA Mode***.
3. Press the ► button and then use ▲ / ▼ button to select the desired VGA resolution.
4. Press the **MENU** button.



Screen Adjustments (Video (or AV1, AV2) and S-Video mode only)

- Use this function to correct jittering or picture instability while viewing a video tape.

1. Press the **MENU** button and then use ▲ / ▼ button to select the SCREEN menu.
2. Press the ► button and then use ▲ / ▼ button to select ***Screen adj.***.
3. Press the ► button and then use ▲ / ▼ button 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.



Luminance Noise Reduction (Video (or AV1, AV2), S-Video and Component 480i/576i mode only)

- To reduce the picture noise which may appear on the screen during watching the TV in a weak signal area.

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



Screen Menu Options

Setting Picture Format

- You are available to 4:3 and 16:9 in RGB1 and RGB2 (PC).
- You are available to 16:9, 4:3 and Zoom in Video (or AV1, AV2), S-Video and Component.
- 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 or ◄ / ► button changes the screen display as shown below.
   - You can also select ***16:9***, ***4:3*** or ***Zoom*** in the Screen menu.



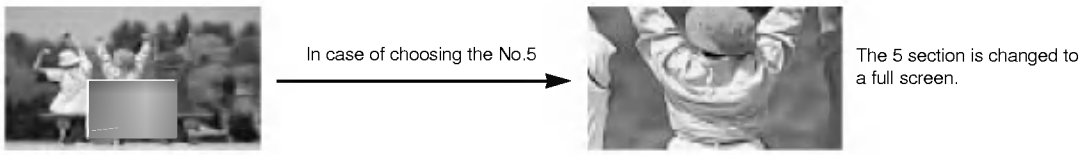
Split Zoom

- This is the function to enlarge the screen with regular ration.
- It's available to use this function in every input source.

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



- Press the number button to select the section you enlarge. If you choose No.5, the 5 section is enlarged.



Picture Size Zoom (Component, Video (or AV1, AV2), S-Video mode only)

- When enlarging or reducing the picture, the screen may be display unnatural picture.

1. Press the **ZOOM+/ZOOM-** button to enlarge or reduce the picture size.
   - The adjustment range of Zoom is 0~20.
2. Adjust the main picture position with the ▲ / ▼ / ◄ / ► buttons in enlarged picture mode.



PIP (Picture-in-Picture) Feature

- 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 PC for main picture in PIP, you can watch Video (or AV1, AV2), S-Video or Component 480i for sub picture.
- If you turn on PIP while viewing Component, Video (or AV1, AV2) or S-Video, these sources are changed to sub picture input source and main picture source is changed to PC (RGB1, RGB2).
- If PIP doesn't work, select PC (RGB1, RGB2) for main picture in PIP and then check it whether PC signal input into the monitor.

Watching PIP (RGB1, RGB2 mode only)

Press the **PIP** button to show the sub picture.

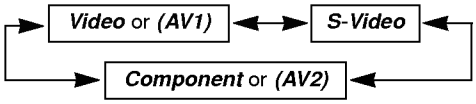
- Each press of **PIP** button or ◄ / ► button changes the screen display as shown below.



Selecting a Input Signal Source for the PIP

Press the **PIP INPUT** button to select the input source for the sub picture.

- Each press of **PIP INPUT** button or ◄ / ► button changes the screen display as shown below.



Using Sub picture Still Function

1. Press the **PIP STILL** button in the PIP mode.

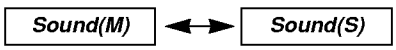
- In PIP or TWIN PICTURE modes, the sub (inset) picture is frozen.
- Frozen picture is released automatically after about 10 minutes.
- If still picture is on the screen for more than 5 minutes, the image becomes dark. If another function is activated, normal screen brightness is restored.

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

Selecting PIP Sound Options

Press the **SOUND SELECT** button to select main image sound (***Sound(M)***) or PIP (inset image) sound (***Sound(S)***).

- Each press of **SOUND SELECT** button or ◄ / ► button changes the screen display as shown below.



Moving the PIP

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

- Each press of the **PIP POSITION** button will move the sub picture to a different position on the screen in a clockwise direction.

Twin Picture Setup Options

- As the name suggests, this mode splits 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.
- When you select PC for main picture in twin picture, you can watch Video (or AV1, AV2), S-Video or Component 480i for sub picture.
- If you turn on twin picture while viewing Component, Video (or AV1, AV2) or S-Video, these sources are changed to sub picture input source and main picture source is changed to PC (RGB1, RGB2).
- If twin picture doesn't work, select PC (RGB1, RGB2) for main picture in twin picture and then check it whether PC signal input into the monitor.
- In wide VGA (848x480, 852x480), twin picture mode is not available.

Watching Twin Picture

Use the **TWIN PICTURE** button.

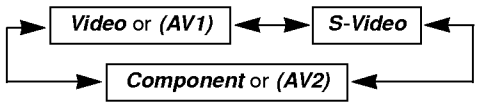
- Each press of the **TWIN PICTURE** button or ◄ / ► button cycles through the screen displays shown below.



Selecting a Input Signal Source for the Twin Picture

Press the **PIP INPUT** button to select the input source for the sub picture.

- Each press of **PIP INPUT** button or ◄ / ► button changes the screen display as shown below.



Selecting Twin Picture Sound Options

Press the **SOUND SELECT** button to select main image sound (***Sound(M)***) or PIP (inset image) sound (***Sound(S)***).

- Each press of **SOUND SELECT** button or ◄ / ► button changes the screen display as shown below.



Using Sub picture Still Function

1. Press the **PIP STILL** button in the PIP mode.

- In PIP or TWIN PICTURE modes, the sub (inset) picture is frozen.
- Frozen picture is released automatically after about 10 minutes.
- 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.

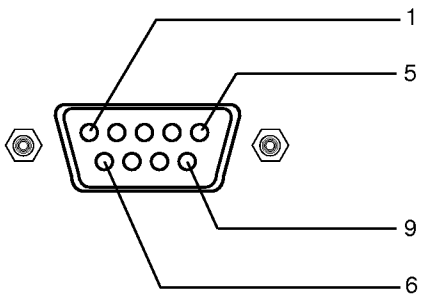
2. To return to normal viewing, press the **PIP STILL** button again.

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.

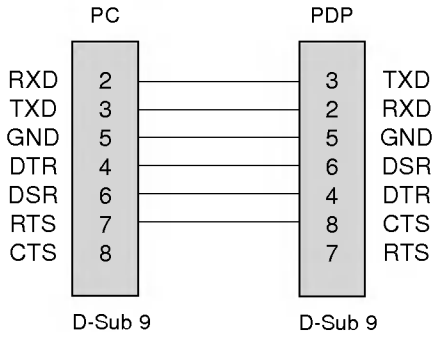
Type of connector; D-Sub 9-pin male

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

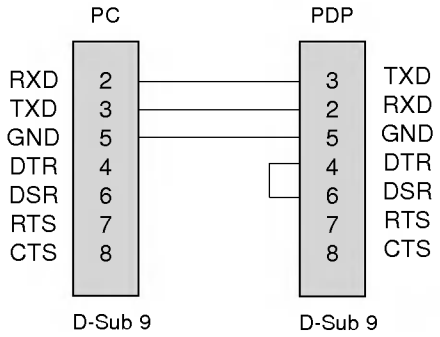


RS-232C configurations

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



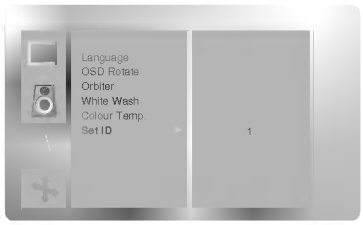
3-wire configuration
(Not standard)



Set ID

- Use this function to specify a monitor ID number.
- Refer to 'Real Data Mapping 1'. See page 28.

1. Press the **MENU** button and then use the ▲ / ▼ button to select the SPECIAL menu.
2. Press the ► button and then use ▲ / ▼ button to select ***Set ID***.
3. Press the ► button and then use ◄ / ► button to adjust ***Set ID*** to choose the desired monitor ID number.
   - The adjustment range of ***Set ID*** is 1 ~ 99.



Communication Parameters

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

* Use a crossed (reverse) cable.

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. External control mode	k	m	0 ~ 1
14. PIP/Twin picture (DW)	k	n	0 ~ 4
15. PIP sound select	k	p	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 (CSM)	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 ~ 3
25. Abnormal State	k	z	0 ~ 7
26. Orbiter	j	p	0 ~ 1
27. White Wash	j	q	0 ~ 1

* When setting the 26 and 27, a menu doesn't display on screen.

Transmission / Receiving Protocol

Transmission

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

* [Command 1] : First command to control PDP set. (j or k)
* [Command 2] : Second command 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. Set ID is indicated as decimal (1~99) on menu and as Hexa decimal (0x0~0x63) on transmission/receiving protocol.
* [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][Data][x]

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

Data 1: Illegal Code
2: not support function
3: Wait more time

01. Power (Command2: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]

▶ 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]

* 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 (Command2:b)

▶ 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]

03. Aspect Ratio (Command2:c)

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

* Using the PC input, you select either 16:9 or 4:3 screen aspect ratio.

04. Screen Mute (Command2:d)

▶ To select screen mute on/off.

Transmission

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

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

Acknowledgement

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

05. Volume Mute (Command2: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]

06. Volume Control (Command2: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 page 28.

Acknowledgement

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

07. Contrast (Command2: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 page 28.

Acknowledgement

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

08. Brightness (Command2:h)

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

Transmission

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

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

Acknowledgement

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

09. Colour (Command2:i)

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

Transmission

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

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

Acknowledgement

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

10. Tint (Command2:j)

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

Transmission

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

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

Acknowledgement

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

11. Sharpness (Command2:k)

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

Transmission

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

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

Acknowledgement

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

12. OSD Select (Command2:l)

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

Transmission

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

Data 0 : OSD off 1 : OSD on

Acknowledgement

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

13. External Control Mode (Command2:m)

▶ To lock the front panel controls on the monitor and remote control. When setting this mode, only control the monitor with RS-232C.

Transmission

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

Data 0 : Lock off 1 : Lock on

Acknowledgement

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

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

14. PIP / Twin (DW) (Command2:n)

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

Transmission

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

Data 0: PIP/DW off 3: DW2
1: PIP (S) 4: PIP (L)
2: DW1

Acknowledgement

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

15. PIP Sound Select (Command2:p)

▶ To select main or sub sound for PIP/Twin picture. You can also adjust main or sub sound for PIP/Twin picture using PIP SOUND button on the remote control or in the screen menu.

Transmission

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

Data 0: Main image sound
1: Sub image sound

Acknowledgement

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

16. PIP Position (Command2:q)

▶ To select sub picture position for PIP. You can also adjust the sub picture position using PIP POSITION button on the remote control or in the screen 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]

17. Treble (Command2:r)

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

Transmission

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

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

Acknowledgement

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

18. Bass (Command2:s)

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

Transmission

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

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

Acknowledgement

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

19. Balance (Command2:t)

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

Transmission

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

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

Acknowledgement

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

20. Colour Temperature (Command2:u)

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

Transmission

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

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

Acknowledgement

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

21. Red Adjustment (Command2: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 page 28.

Acknowledgement

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

22. Green Adjustment (Command2: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 page 28.

Acknowledgement

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

23. Blue Adjustment (Command2:$)

▶ To adjust blue in colour temperature.

Transmission

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

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

Acknowledgement

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

24. PIP Input Select (Command2:y)

▶ To select input source for sub picture in PIP/Twin picture mode. You can also adjust input source for sub picture using PIP INPUT button on remote control.

Transmission

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

Data 0: RGB1
1: COMPONENT (or AV1)
2: VIDEO (or AV2)
3: S-VIDEO

Acknowledgement

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

25. Abnormal State (Command2:z)

▶ To recognize an abnormal state.

Transmission

[k][z][ ][Set ID][ ][FF][Cr]

Data 0: Normal (Power on and signal)
1: No signal (Power on)
2: Turn the monitor off by remote control
3: Turn the monitor off by sleep time function
4: Turn the monitor off by RS-232C function
5: 5V down
6: AC down
7: Fan Alam

Acknowledgement

[z][ ][Set ID][ ][OK][Data][x]

* This function is "read only".

26. Orbiter (Command2:p)

▶ To control the orbiter function on/off. You can also adjust orbiter in special menu.

Transmission

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

Data 0 : Orbiter off
1 : Orbiter on

Acknowledgement

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

27. White Wash (Command2:q)

▶ To control the white wash function on/off. You can also adjust White Wash in special menu.

Transmission

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

Data 0 : White Wash off
1 : White Wash on

Acknowledgement

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

*** 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

IR Code (NEC Format)

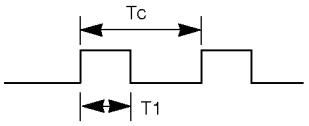
How to connect

▶ Connect your wired remote control to the Remote port on the Monitor.
Set the CONTROL LOCK to 'ON' on the Monitor back panel to operate Monitor with wired remote control.

Remote Control IR Code (NEC Format)

▶ **Output waveform**

Single pulse, modulated with 37.917KHz signal at 455KHz

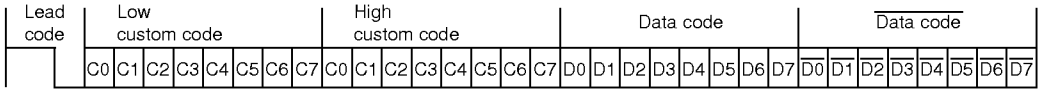


Carrier frequency

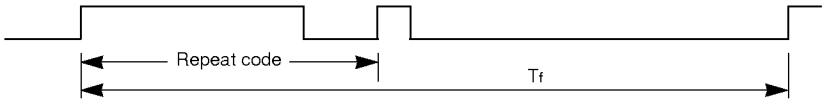
F_{CAR} = 1/Tc = fosc/12
Duty ratio = T1/Tc = 1/3

▶ **Configuration of frame**

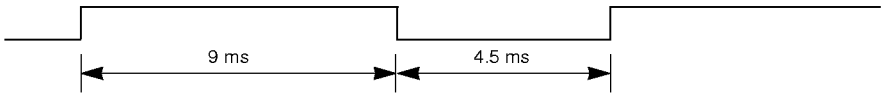
• 1st frame



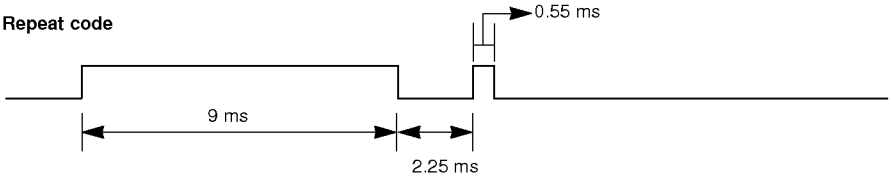
• Repeat frame



▶ **Lead code**

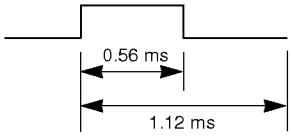


▶ **Repeat code**

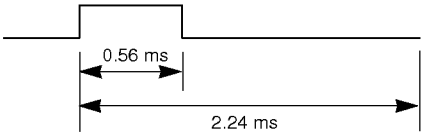


▶ **Bit description**

• Bit "0"

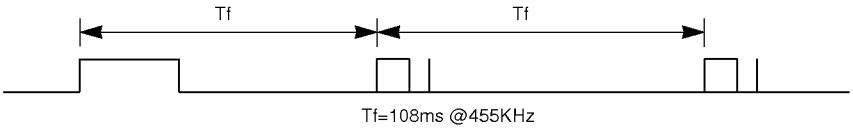


• Bit "1"



▶ **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	R/C Button (Power On/Off)
C4H	POWER ON	Discrete IR Code (Only Power On)
C5H	POWER OFF	Discrete IR Code (Only Power Off)
09H	MUTE	R/C Button
10H	Number Key 0	R/C Button
11H	Number Key 1	R/C Button
12H	Number Key 2	R/C Button
13H	Number Key 3	R/C Button
14H	Number Key 4	R/C Button
15H	Number Key 5	R/C Button
16H	Number Key 6	R/C Button
17H	Number Key 7	R/C Button
18H	Number Key 8	R/C Button
19H	Number Key 9	R/C Button
0BH	INPUT SELECT	R/C Button
98H	RGB 1	Discrete IR Code (Input RGB1 Selection)
C6H	RGB 2 (DVI input)	Discrete (Input RGB2 Selection)
5AH	VIDEO	Discrete (Input VIDEO Selection)
51H	S-VIDEO	Discrete (Input S-VIDEO Selection)
BFH	COMPONENT	Discrete (Input COMPONENT Selection)
0EH	SLEEP	R/C Button
3EH	CHILD LOCK	R/C Button
40H	ZOOM +	R/C Button
41H	ZOOM -	R/C Button
43H	MENU	R/C Button
44H	OK (■)	R/C Button
4DH	PSM	R/C Button
52H	SSM	R/C Button
60H	PIP	R/C Button
61H	PIP INPUT	R/C Button
62H	PIP POSITION	R/C Button
65H	PIP STILL	R/C Button
6BH	TWIN PICTURE	R/C Button
6CH	SOUND SELECT	R/C Button
7BH	Split Zoom	R/C Button
79H	ARC	R/C Button(4:3/16:9/Zoom Mode Selection)
76H	ARC (4:3)	Discrete IR Code (Only 4:3 mode)
77H	ARC (16:9)	Discrete IR Code (Only 16:9 mode)
AFH	ARC (ZOOM)	Discrete IR Code (Only ZOOM mode)
92H	AUTO CONFIG.	R/C Button

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.
Picture OK & No sound	• Press the **VOLUME** (►) button. • 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. • Check to see if the batteries are installed with the correct polarities. (Refer to p.11) • Install new batteries. (Refer to p.11)
Picture appears slowly, after switching on	• This is normal as the image is muted during the startup process of the monitor. Please contact your service centre, if the picture has not appeared after five minutes.
No or Poor colour or Poor picture	• Select ***Colour*** in the ***Picture*** menu and press the **VOLUME** (►) button. (Refer to p.15) • Keep a certain distance between the Monitor and the VCR. • 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.)
Horizontal/vertical bars or picture shaking	• Check for local interference such as an electrical appliance or power tool.
No output from one of the speakers	• Adjust ***Balance*** in the ***Sound*** menu. (Refer to p.16)
Unusual sound from inside the monitor	• A change in ambient humidity or temperature may result in an unusual noise at the time of switching off or on of the monitor and does not indicate a fault with the monitor.

NOTES

NOTES

NOTES

Product Specifications

MODEL	MT-42PZ40V/B/R/S MT-42PZ41V/B/R/S MT-42PZ41M/B/R/S MT-42PZ42V/B/R/S MT-42PZ43V/B/R/S MZ-42PZ42V/B/R/S MZ-42PZ43V/B/R/S
Width (inches / mm)	40.7 / 1033
Height (inches / mm)	24.5 / 622
Depth (inches / mm)	3.2 / 81
Weight (pounds / kg)	75 / 34
Power requirement	AC100-240V, 50/60Hz
Resolution	852 x 480 (Dot)
Colour	16,770,000 (256 steps of each R, G and B)
Operating Temperature Range	32 ~ 104°F (0 ~ 40°C)
Operating Humidity Range	Less than 80%

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

