Contents

Contents

Caution

<table>
<tr>
<td colspan="2">

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

</td>
</tr>
<tr>
<td colspan="2">

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

</td>
</tr>
</table>

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.

CAUTION

- TO PREVENT DAMAGE WHICH MAY RESULT IN FIRE OR SHOCK HAZARD.
- DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
- SHOCK HAZARD DO NOT OPEN.

CAUTION

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

CAUTION

The stand is intended for use with this monitor only.
Use with other products may result in injury.

WARNING

- Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- 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.
- To reduce the risk of fire and electric shock, do not expose this product to rain or moisture.

FCC NOTICE

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

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

Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Connecting of peripherals requires the use of grounded shielded signal cables.

Always be careful when using your the monitor. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your machine.

HEED ALL WARNINGS ON THE MONITOR AND IN THE OPERATING INSTRUCTIONS.

Read all safety and operating instructions before operating your the monitor.
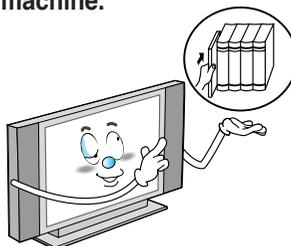
Keep the safety and operating instructions for future reference.

Heed all warnings on the monitor and in the operating instructions.

Caution

Always be careful when using your the monitor. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your machine.

1. Read these instructions.

2. Keep these instructions.

3. Heed all warnings.

4. Follow all instructions.

5. Do not use this apparatus near water.

6. Clean only with a damp cloth.

7. Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Only use the attachments/accessories specified by the manufacturer.

12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Important Safety Information

Follow all operating and use instructions.
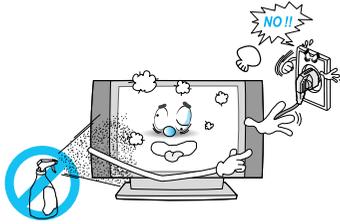
Unplug the monitor from the wall outlet before cleaning. Use a damp cloth; do not use liquid or aerosol cleaners.
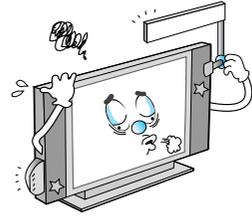
Never add any attachments and/or equipment without approval of the manufacturer. Such additions can increase the risk of fire, electric shock, or other personal injury.

Do not use the monitor where contact with or immersion in water is a possibility, such as near bath tubs, sinks, washing machines, swimming pools, etc.
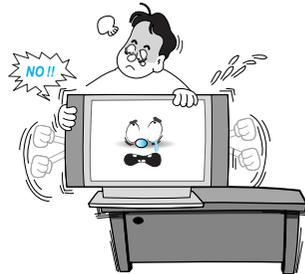
When installing the monitor on a table, be careful not to place it too close to the edge of the table.

- This may cause the monitor to fall, causing serious injury to a child or adult, and serious damage to the monitor.

Important Safety Information

Provide ventilation for the monitor. The unit is designed with slots in the cabinet for ventilation to protect it from overheating. Do not block these openings with any object, and do not place the monitor on a bed, sofa, rug or other similar surface. Do not place it near a radiator or heat register. If you place the monitor on a rack or bookcase, ensure that there is adequate ventilation and that you've followed the manufacturer's instructions for mounting.

AC100-125V   AC200-240V   AC240 (SAA-TYPE)

Use only the accessory cord designed for this product to prevent shock. The power supply voltage rating of this product is AC100-240V, the power cord attached conforms to the following power supply voltage. Use only the power cord designated by our dealer to ensure Safety and EMC.
When it is used by other power supply voltage, power cable must be changed. Consult your product dealer.

Ground Terminal

AC 100~240V
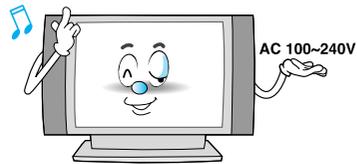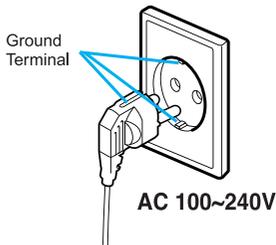
Use only a grounded or polarized outlet. For your safety, this monitor is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still does not fit, contact your electrician to replace your outlet.

Avoid overhead power lines. An outside antenna system should not be placed in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful to keep from touching the power lines or circuits. Contact with such lines can be fatal.
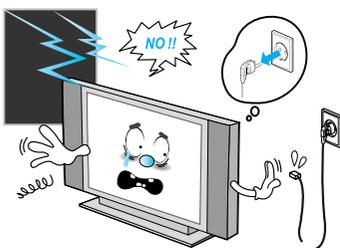
Unplug the monitor from the wall outlet and disconnect the antenna or cable system during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-line surges.
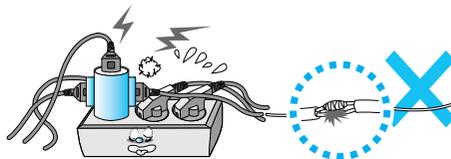
Protect the power cord. Power supply cords should be routed so that they won't be walked on or pinched by objects placed on or against them.
Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
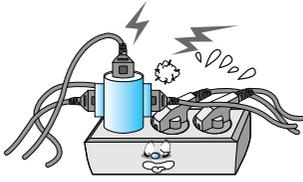
Do not overload the wall outlet or extension cords. Overloading can result in fire or electric shock.
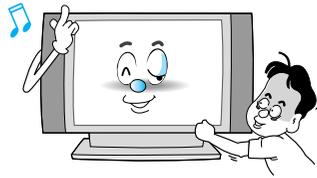
Do not insert anything through the openings in the unit, where they can touch dangerous voltagepoints or damage parts.
Never spill liquid of any kind on the monitor.
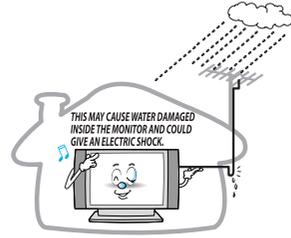
Bend antenna cable between inside and outside building to prevent rain from flowing in.

- This may cause water damaged inside the monitor and could give an electric shock.

THIS MAY CAUSE WATER DAMAGED INSIDE THE MONITOR AND COULD GIVE AN ELECTRIC SHOCK.

Ground outdoor antennas. If an outside antenna or cable system is connected to the monitor, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No.70-1984, provides information about proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
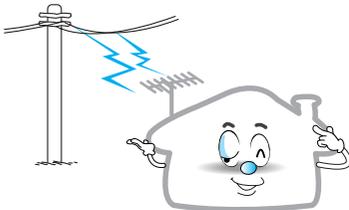
Do not place an outside antenna in the vicinity of overhead power lines or other electric light or power circuits.

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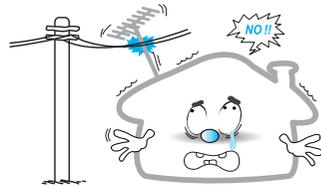
There should be enough distance between an outside antenna and power lines to keep the former from touching the latter even when the antenna falls.

- This may cause an electric shock.

NO !!

Do not attempt to service the monitor yourself. Refer all servicing to qualified service personnel. Unplug the unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:
· When the power-supply cord or plug is damaged
· If liquid has been spilled on the unit or if objects have fallen into the unit
· If the monitor has been exposed to rain or water
· If the monitor does not operate normally by following the operating instructions
· If the monitor has been dropped or the cabinet has been damaged
· When the monitor exhibits a distinct change in performance

Important Safety Information

When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in additional damage to the unit.
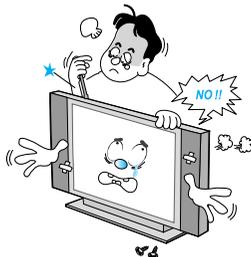
Upon completion of any service or repairs to this the monitor, ask the service technician to perform safety checks to determine that the monitor is in a safe operating condition.

If you make adjustments yourself, adjust only those controls that are covered by the operating instructions. Adjusting other controls may result in damage and will often require extensive work by a qualified technician to restore the monitor to normal.
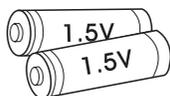
Only use the specified batteries.

- This may cause damage to the monitor or could give an electric shock.
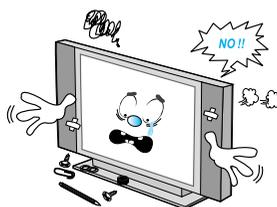
Do not place anything containing liquid on top of the monitor.

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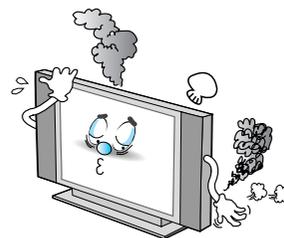
In case of smoke or strange smell from the monitor, switch it off, unplug it from the wall outlet and contact your dealer or service center.

- This may cause a fire or could give an electric shock.
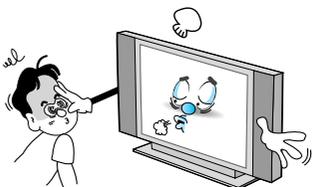
The viewing distance should be about 5~7 times as long as diagonal length of the screen.

- If not, eyes will strain.
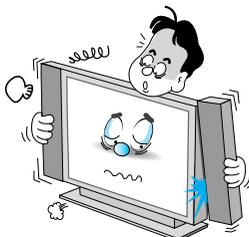
When moving the monitor assembled with speakers do not carry holding the speakers.

- This may cause the monitor to fall, causing serious injury to a child or adult, and serious damage to the monitor.
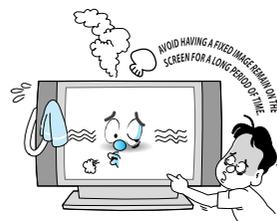
Avoid having a fixed image remain on the sereen for a long period of time. Typically a frozen still picture from a VCR, 4:3 picture format or if a CH label is present; the fixed image may remain visible on the screen.

OSD Button Position

Front Panel
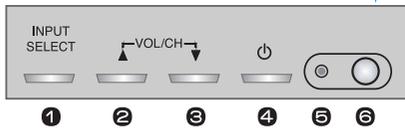
OSD Button & Function
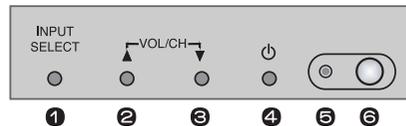
❶ Input Source Select
❷ Up (See the box below)
❸ Down (See the box below)
❹ Power (Standby)
❺ Remote Sensor
❻ Status/Power Indicator LED

INPUT SELECT — VOL/CH ▲ ▼ — ⏻

❶ ❷ ❸ ❹ ❺ ❻

OR

INPUT SELECT — VOL/CH ▲ ▼ — ⏻

❶ ❷ ❸ ❹ ❺ ❻

OSD Button Function

INPUT SELECT

Select the signal source from multiple input sources such as TV, SCART 1, SCART 2, S-Video/AV, Component 1, Component 2, PC and DVI.

VOL / CH ▲ / ▼

To change the CHANNEL, press ▼ button first and change the channel with ▲ , ▼ buttons.
To change the VOLUME, press ▲ button first and change the volume with ▲ , ▼ buttons.

⏻ Power ON/OFF

Turn the monitor on and off.

Accessories

| Remote Control Handset | Power Cord | RF Cable | Alkaline Batteries | Owner's Manual |

1.5V
1.5V

Owner's Manual

Viewing the Connecting Panel

Back Panel and Jacks
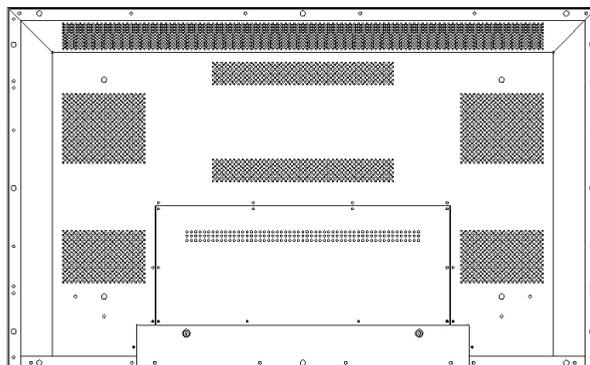
< Back panel of the monitor >
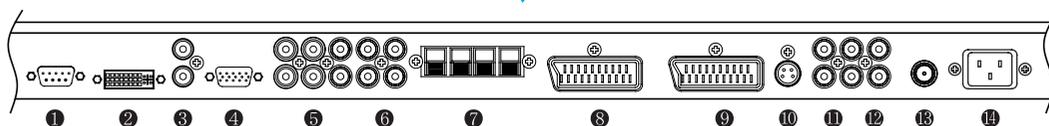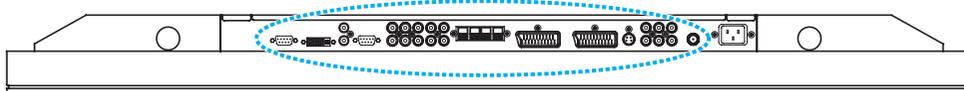
❶	RS-232C	To Control from PC
❷	DVI	For PC, Set Top Box
❸	D-Sub (PC), DVI Sound	PC/DVI Audio Input
❹	D-Sub (PC)	For PC, Set Top Box
❺	Component 1, 2	For DVD, Set Top Box
❻	Component Sound	For Component Audio Input
❼	Speakers	To Connect Speakers (2CH, Stereo)
❽	SCART 1 (Euro connector)	For VCR, DVD, Set Top Box
❾	SCART 2 (Euro connector)	For VCR, DVD, Set Top Box
❿	S-Video	For DVD, Set Top Box, S-VHS
⓫	AV Output	To Connect other TV or Monitor
⓬	AV Input	For VCR, DVD, Set Top Box
⓭	TV Antenna	For TV Antenna Cable (Air)
⓮	AC Power	

・ Refer to the next page for port descriptions.

❶ **RS-232C Jack**
Connects a control signal from a PC.

❷ **DVI Input Jack**
Connects a digital video signal from a DVI output jack of PC or set top box.

❸ **D-Sub (PC), DVI Sound**
Connects a sound signal from PC or DVI.

❹ **RGB PC Input Jack (D-Sub)**
Connects a video signal from a video output jack of PC.
Cables connecting the PC vary according to the type of machine, so contact your product dealer.

❺ **Component Input Jack 1, 2**
Connects a three separate component video signal from a component output jack of a DVD player or set top box.
Supports 480i/p(60Hz), 576i/p(50Hz), 720p(50/60Hz), 1080i(50/60Hz) signals.
(i : interlace, p : progressive)

❻ **Component Sound**
Connects a sound signal from component.

❼ **Speaker Jack**
Connects external speakers by wires, match red/red and black/black of speaker/TV.

❽ **SCART (Euro Connector) Jack 1, 2**
❾ - SCART 1 : Half SCART (CVBS only input/output).
- SCART 2 : Full SCART (CVBS & RGB input/output).
  Connects a SCART (Euro cable) signal from a VCR, DVD player, or set top box.

❿ **S-Video Input Jack**
Connects a S-Video video signals from a S-Video output jack of a S-VHS, VCR or DVD player.

⓫ **Composite (RCA) Output Jack**
Output the signal of the current screen of the monitor. Connects to other TV or monitor.

⓬ **Composite (RCA) Input Jack**
Connects an AV composite video signal from a composite output terminal of a VCR or DVD player.
Unavailable when a S-Video cable is put into the S-Video input jack.

⓭ **ANT. IN (TV Antenna Jack)**
Connects to an TV antenna cable.

⓮ **AC (Power) Input Jack**
Firmly insert the accessory power cord as far as it will go into the power input terminal.
Firmly push the power cord plug as far as it will go into the power socket.

Connectors	
Audio Input	RCA Pin Jack
Video Input	21 Pin Euro AV (SCART)
Video Input	21 Pin Euro AV (SCART)
S-Video Input	Mini Din 4Pin
Component Video Input	RCA Pin Jack
Analog RGB Input	Mini D-Sub 15Pin
Digital Video Input	DVI-D 24Pin

• Cables connecting the PC vary according to the type of machine, so consult your product dealer.

RS-232C Configurations

3-Wire (Non-standard)

	PC		Monitor	
RXD	2	—	3	TXD
TXD	3	—	2	RXD
GND	5	—	5	GND
DTR	4		4	DTR
DSR	6		6	DSR
RTS	7			RTS
CTS	8			CTS
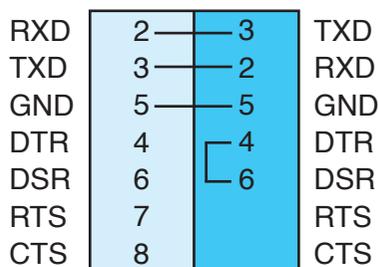
Viewing the Remote Control

Button Description
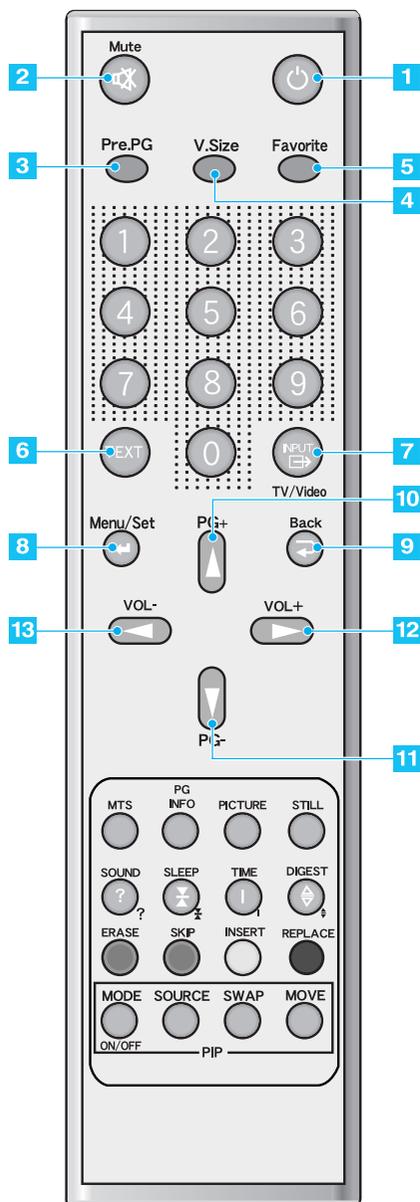
1 **Power**
Turn the monitor on and off.

2 **Mute**
Temporarily cut the sound and restore it.

3 **Pre.PG**
Turn to the previous programme or exit OSD.

4 **V.Size**
Choose the Screen Form.
16:9 ➔ Panorama ➔ Zoom1 ➔ Zoom2 ➔ 4:3

5 **Favorite**
Tune to your next favorite programme.

6 **TEXT**
Teletext ON/OFF.
TTX ➔ TTX/MIX ➔ Normal (TTX off)

7 **INPUT**
Display the input source list.

8 **Menu/Set**
Display the main OSD menu.
Activate your choice in the OSD menu.

9 **Back**
Return to the previous OSD menu.

10 **PG+**
Move to the upper programme.

11 **PG-**
Move to the lower programme.

12 **VOL+**
Increase the volume level.

13 **VOL-**
Decrease the volume level.
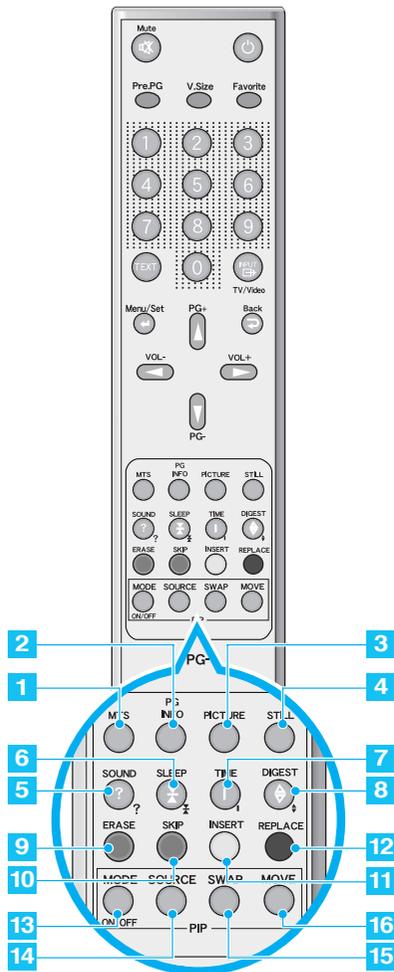
1 MTS
Choose the MTS (Stereo) mode. Each time it is pressed, different mode is selected.
Mono ➔ Stereo ➔ Language A ➔ Language B ➔ Language AB
· You can select only available modes depending on the source.

2 PG INFO
Display the current information about time, screen form, source and MTS mode.

3 PICTURE
There are 4 picture modes.
Standard ➔ Vivid ➔ Mild ➔ User

4 STILL
Temporarily freeze the screen and restore it.

5 SOUND
Choose the sound equalizer settings.
Standard ➔ Movie ➔ Music ➔ News ➔ User

6 SLEEP
Set the preset time interval for automatic turn-off.
OFF ➔ 10 ➔ 20 ➔ 30 ➔ 60 ➔ 90 ➔120 ➔ 150 ➔ 180

7 TIME
Display the current time on the screen.

8 DIGEST
Display 9 TV programmes at the same time.

▶ **TTX/Programme Edit Buttons**

9 ERASE
Erase the current programme.

10 SKIP
Make the programme skipped.

11 INSERT
Add the current programme.

12 REPLACE
Replace the selected programme with the current programme.
· See 29 page.
· These buttons are the colour buttons in TTX also.

▶ **PIP (Picture in Picture) Buttons**

13 MODE (ON/OFF)
Activate PIP function and change the PIP window size and PIP mode.
Small ➔ Large ➔ Twin (Half) ➔ OFF

14 SOURCE
Change the PIP window source.

15 SWAP
Swap the main screen and the PIP window.

16 MOVE
Move the position of the PIP window.

Viewing the Remote Control
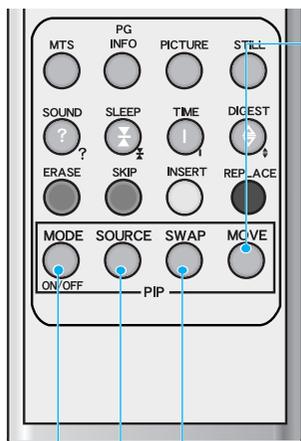
MOVE button : Move the position of PIP window.

Left Up	Right Up(Start)
Left Down	Right Down
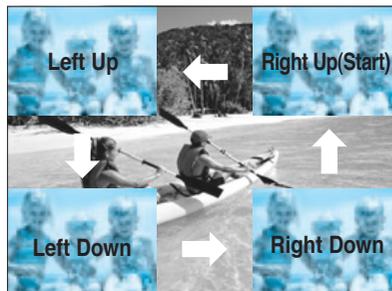
SWAP button : Swap the sources of the main screen and PIP window.

MODE button : Change the PIP window mode.
OFF ➔ Small ➔ Large ➔ Twin

Small   Large   Twin

SOURCE button : Change the source of the PIP window. The available sources are shown as below.

PIP \ Main	TV	SCART 1	SCART 2	S-Video/AV	Component 1	Component 2	PC	DVI
TV	✓	✓	✓	✓	✓	✓	✓	✓
SCART 1	✓	–	✓	✓	✓	✓	✓	✓
SCART 2	✓	✓	–	✓	✓	✓	✓	✓
S-Video/AV	✓	✓	✓	–	✓	✓	✓	✓
Component 1	✓	✓	✓	✓	–	–	–	–
Component 2	✓	✓	✓	✓	–	–	–	–
PC	✓	✓	✓	✓	–	–	–	–
DVI	✓	✓	✓	✓	–	–	–	–

Loading the Batteries

1 Press on the cover and slide in the direction of the arrow.

2 Load two AAA batteries, taking care that the + and - ends face the correct direction.

3 Close the cover until it clicks.
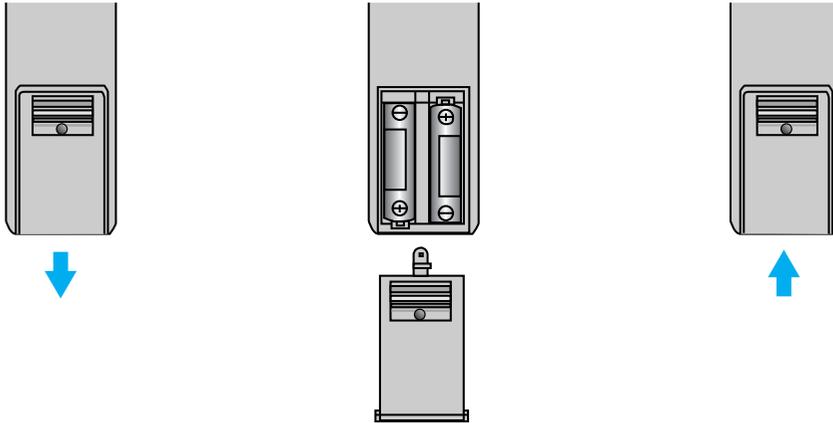
Reception Range of Remote Control

Upper
20º

20º
Lower

30º 30º
Left Right
5m (Front)
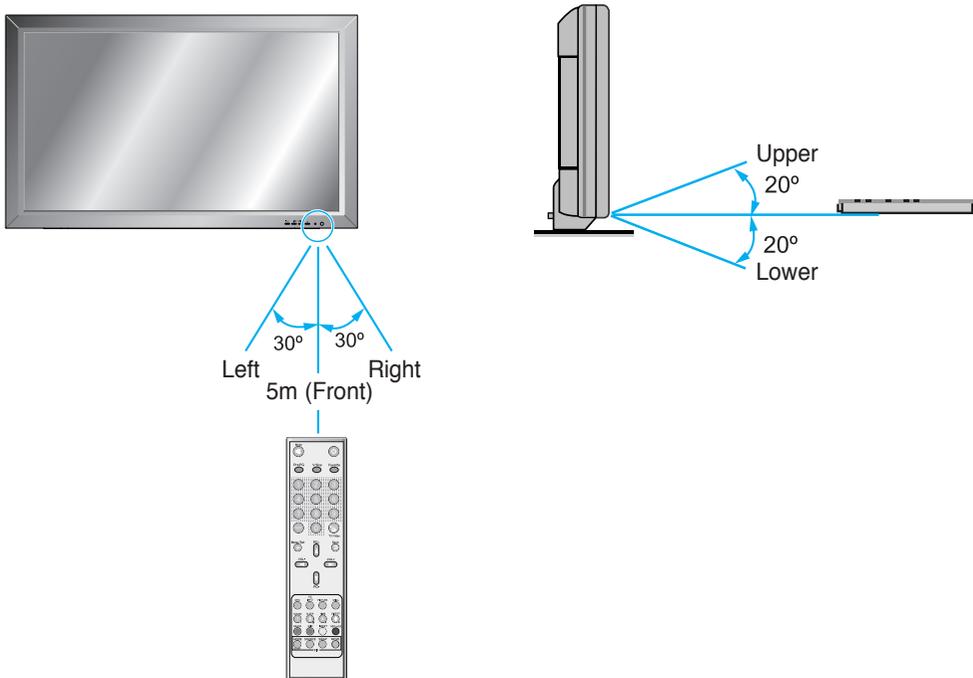
Installation

Table Stand Installation (optional)

< The monitor can be installed on the desk as shown above. >

・Table stand mount minimum allowable clearances for adequate ventilation.

4 inch(10.16cm)

4 inch (10.16cm)

4 inch (10.16cm)

2.36 inch (5.99cm)

1.18 inch (3cm)
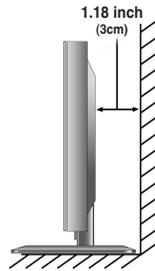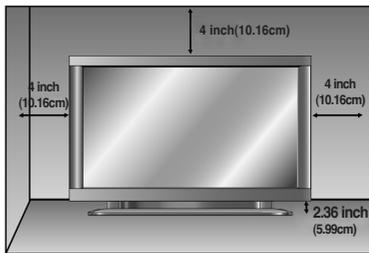
▶ Installation

Table-Stand User's Guide

① Insert Stand Bars into the Stand Base as shown below
② ⓐ− Screw Up (8 x 18)

Screws

ⓐ

2−8×18

Stand Base

Stand Base

ⓐ

ⓐ

Stand Base

ⓐ
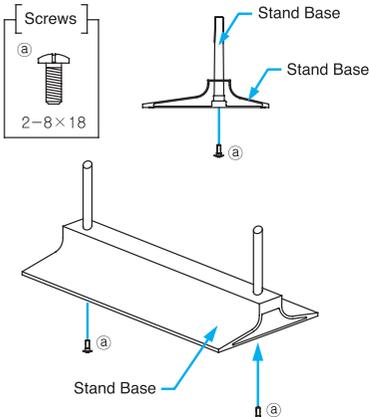
③ Insert a Table-Stand as below
④ ⓑ− Screw Up (4 x 30)

Screws

ⓑ

2−4×30

Stand Hole

ⓑ

ⓑ

Insert

Stand Hole
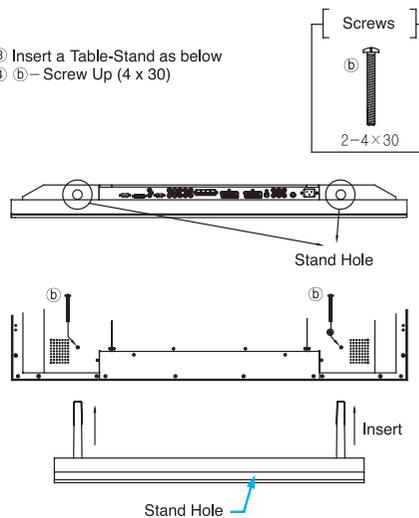
Speaker Installation (optional)

To
Main Unit

8-4X10

To
Speaker

8-4X10

Wire
Saddle

Wire
Saddle

SPEAKER (8Ω)

SPEAKER (8Ω)
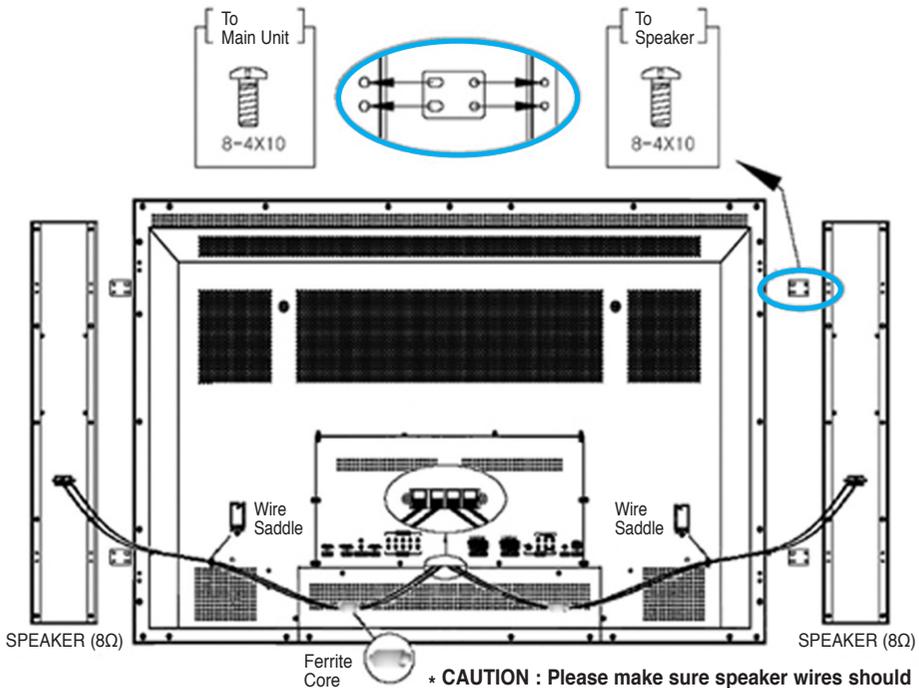
Ferrite
Core

* CAUTION : Please make sure speaker wires should be connected as above, ferrite core are to be nearer to the main unit not to speakers to avoid possible electromagnetic-interference.

Caution

- *Be sure monitor power is turned off before making any connections.*
  Place the speakers in the position you want. Install the speaker wires on the monitor and speaker. Be sure to connect the positive " + " wire to the " + " input and the negative " - " wire to the " - " input. Connect left monitor input to left speaker and right monitor input to right speaker. Any extra speaker wire length remaining can be bunched into the wire holders provided. (Caution: Once installed, the speaker wire holders lock into position and can't be removed.)

- *Always lift the monitor itself (not the speakers) when handling or moving the monitor after speakers have been installed.*

Speaker Accessories

4 - Iron Plates
(Mount speakers to monitor)

16 - 4 x 10 Long Bolts
(Attach iron plates to speakers)

2 - Speaker Wire Holders
(For arranging the speaker wires)

2 - Speaker Wires

Connecting the TV Cable
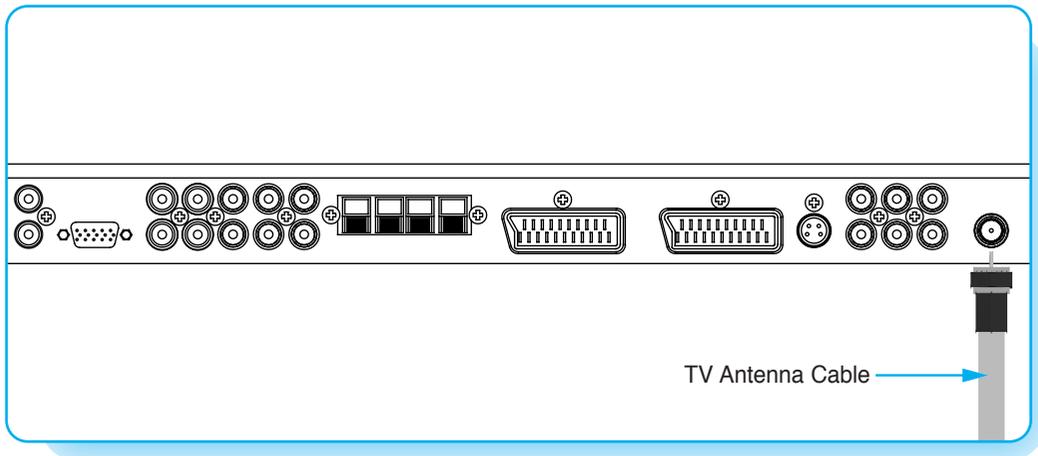
TV Antenna Cable

Connecting the TV Cable

1 Connect the TV Antenna cable to the TV input jack. Press INPUT button on the remote control and select TV on OSD.

2 Use PG+/PG- button or numeric button to change TV programme for your programme selection.

3 Press Pre.PG button on the remote control to tune the previous programme.

4 Also, you can tune to cable service provided programmes using the cable box. For further information regarding cable TV service, contact cable TV service provider(s).

The Function of SCART 2 Port

This signal of SCART 2 port takes first priority over other input signals.

When an outer device which is connected to SCART 2 port is "Power On", the monitor will automatically display the signal of SCART 2 port. The display mode (4:3, 16:9) will be automatically recognized until users purposely change the display mode.

When users operate up/down button or numeric button on the remote control, input source is changed to TV mode automatically.

The SCART 2 recognizes automatically both composite signal and RGB signal.

SCART 2 (Euro connector)

SCART 1 (Euro connector)   S-Video   AV Input   Sound of S-Video/AV
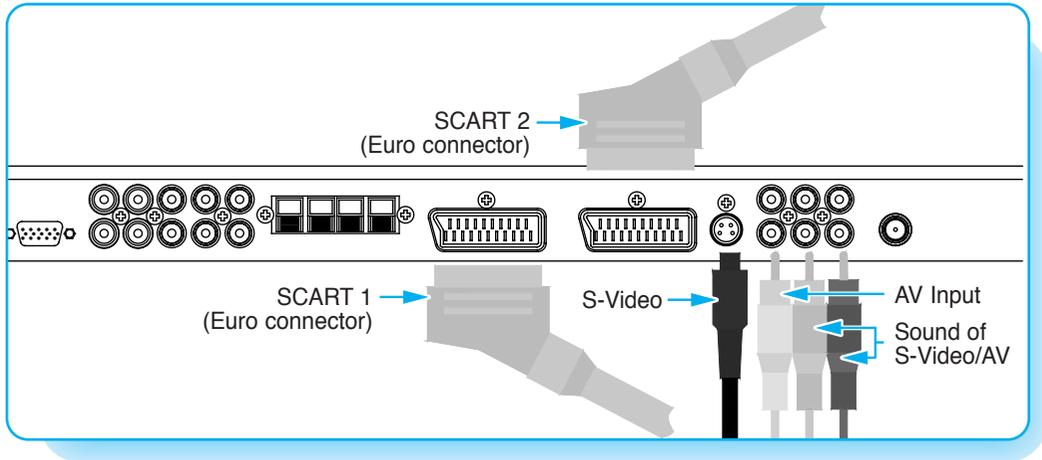
Connecting the VCR

With SCART (Euro cable)
Connect a SCART cable to the SCART jacks of the VCR and the monitor.

With S-Video
Connect a S-Video cable to the S-Video jacks of the VCR and the monitor.
Connect L (White), R (Red) sound cable (Composite) to the sound jacks of the VCR and the monitor.

With AV Input
Connect a composite cable to the AV video jacks of the VCR and the monitor.
Connect L (White), R (Red) sound cable (Composite) to the sound jacks of the VCR and the monitor.

Watching VCR

1 Press INPUT button on the remote control and select video sources.

2 Insert a video tape into the VCR and press the PLAY button on the VCR.

Notes

- **To avoid picture noise** *(interference), leave an adequate distance(over 3m) between the VCR and monitor.*

- *When connecting the monitor with external equipment, match the colour of connecting ports (e.g. Video -Yellow, Audio(L) -White, Audio(R) - Red).*

- *If you have a mono VCR, connect the audio cable from the VCR to the Audio(L/Mono) input of the monitor.*

- *If you connect an S-VHS VCR to the S-Video input socket, you can get a better picture quality than normal video input (AV).*

- *When both S-Video and AV are connected at the same time, S-Video has a priority than AV. (When S-Video is connected and has no Signal, the monitor displays "No Signal" on the screen.). To watch AV mode, you should disconnect S-Video.*

Connecting the DVD

Connecting the DVD

- Connect the three separate component video cables to the DVD player's Y, Pb and Pr jacks and to the component jacks on the monitor.

- Connect the audio cable to the DVD player's audio L (White) and R (Red) jacks and to the L and R audio jacks beside the component jacks on the monitor.

Component 1 & Sound
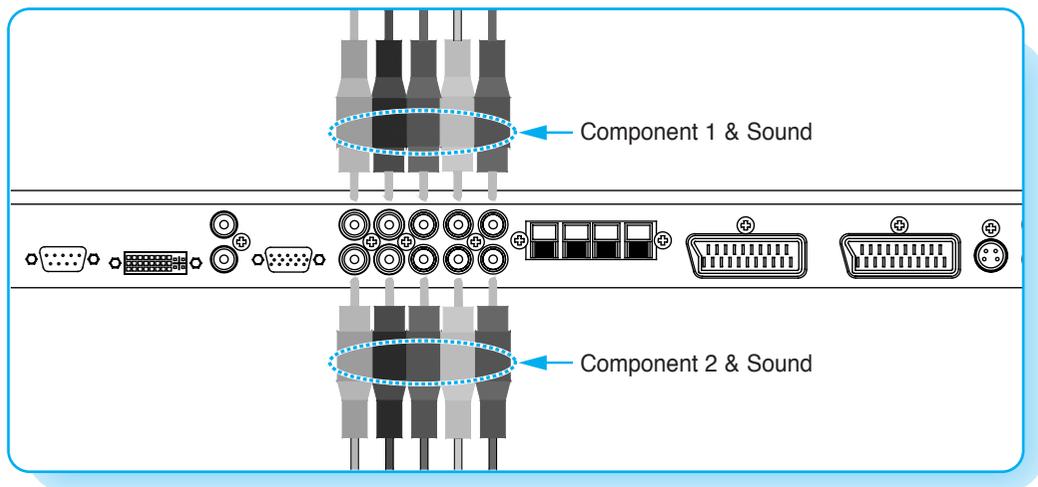
Component 2 & Sound

How to Use

1 Turn on the DVD player.

2 Press INPUT button on the remote control of the monitor and select Component 1 or Component 2.

Supported Signals for Component Ports

	Component 1	Component 2
480i/60Hz	✓	✓
480p/60Hz	✓	✓
576i/50Hz	✓	✓
576p/50Hz	✓	✓
720p/50Hz	✓	✓
720p/60Hz	✓	✓
1080i/50Hz	✓	✓
1080i/60Hz	✓	✓

◗ Component Input Ports

You can get better picture quality if you connect DVD player with component input sockets as below.

Component ports of the monitor	Y	P_B	P_R

Video output ports of DVD player	Y	Pb	Pr
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	P_B	P_R

Notice

- *Normal DVD source is based on 480i, which should be through normal YPbPr of component signal.*

- *Component, PC, DVI ports can be displayed only 1 signal among them. If one of them is being displayed, other ports are unavailable.*

Connecting the Set Top Box

How to Connect

Connect set top box video inputs to SCART, Component, PC or DVI jacks on the monitor.
Audio inputs to Audio sockets beside the L (White) and R (Red) audio jacks which you connect video inputs.
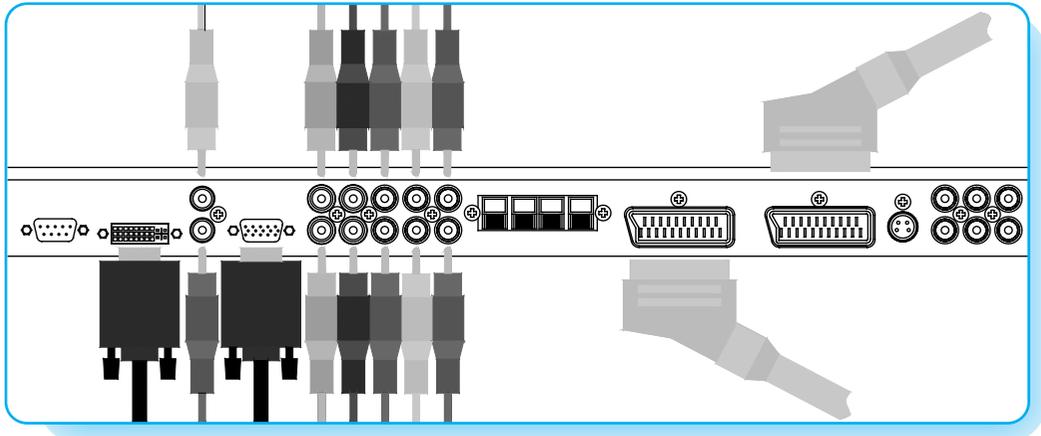
How to Use

1 Turn on the set top box.

2 Press INPUT button on the remote control of the monitor and select Component 1, Component 2, PC or DVI.

Supported Signals				
	Component 1	Component 2	PC	DVI
480i/60Hz	✓	✓	–	–
480p/60Hz	✓	✓	✓	✓
576i/50Hz	✓	✓	–	–
576p/50Hz	✓	✓	✓	✓
720p/50Hz	✓	✓	✓	✓
720p/60Hz	✓	✓	✓	✓
1080i/50Hz	✓	✓	✓	✓
1080i/60Hz	✓	✓	✓	✓

How to Connect

With SCART (Euro cable)
Connect a SCART cable to the SCART jacks of the STB(set top box) and the monitor.

With Component
Connect a three separate component cables to the component jacks of the STB and the monitor.
Connect L (White) and R (Red) sound cables (Composite) to the sound jacks of the STB and the monitor.

With RGB or DVI
Connect a D-Sub or DVI cable to the AV video jacks of the STB and the monitor.
Connect L (White) and R (Red) sound cables (Composite) to the sound jacks of the STB and the monitor.

Notice

• *Component, PC and DVI ports can be displayed only 1 signal among them. If one of them is being displayed, other sockets are unavailable.*

Connecting the PC [D-Sub & DVI]

D-Sub 15pin (VGA) from PC

DVI from PC
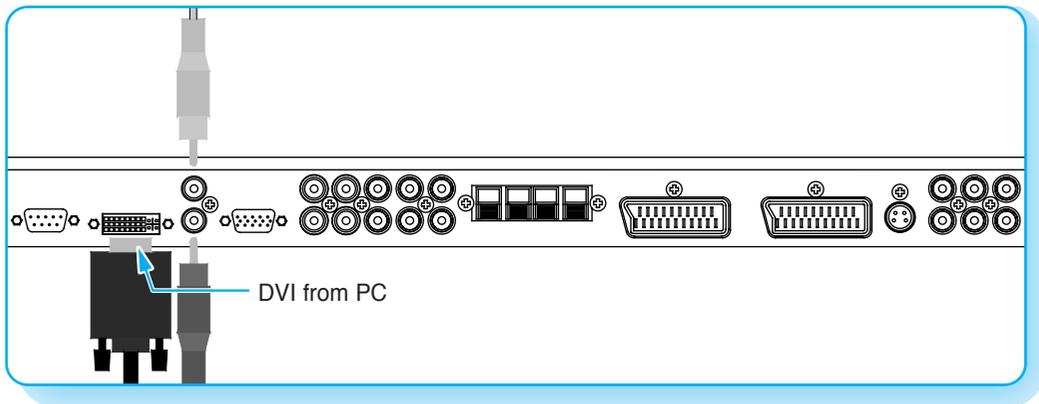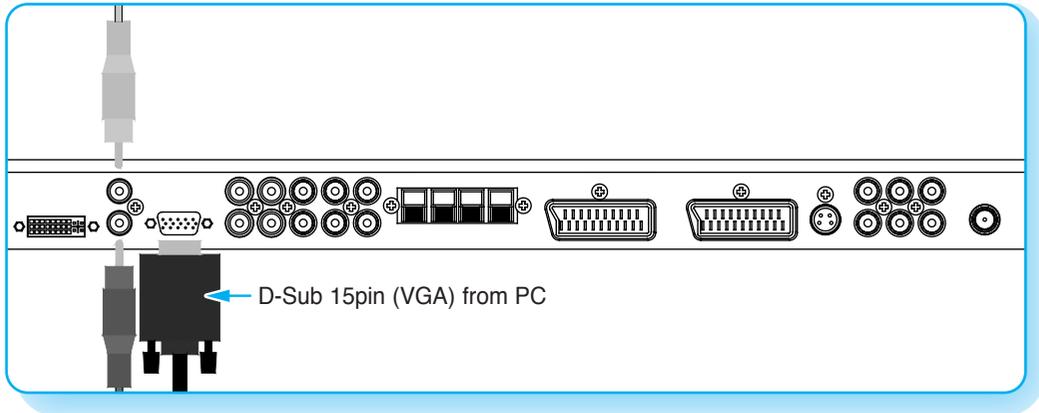
Connecting a PC to the monitor

Connect a PC (15pin) video cable between the video output port on the PC and the PC port on the monitor.

Pin Configuration

15pin signal cable (based on protruded pin).

To watch the PC screen

❶ Turn on the monitor and press Input button to select the PC mode.

❷ Turn on the PC and check for the PC requirement.

❸ Adjust the PC screen in Geometry menu. (See 38 page.)

Pin No.	Description
1	Red (R)
2	Green (G)
3	Blue (B)
4	Grounding
5	Grounding (DDC)
6	Red (R) Grounding
7	Green (G) Grounding
8	Blue (B) Grounding
9	Reserved
10	Sync Grounding
11	Grounding
12	Data (DDC)
13	Horizontal sync.
14	Vertical sync.
15	Clock (DDC)

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
640 x 350	31.468	70.09
	37.861	85.08
640 x 400	31.469	70.08
	37.927	85.03
640 x 480	31.469	59.94
	35.000	66.66
	37.861	72.80
	37.500	75.00
	43.269	85.00
	45.913	90.03
	53.011	100.04
	64.062	120.000
800 x 600	35.156	56.25
	37.879	60.31
	48.077	72.18
	46.875	75.00
	53.674	85.06
	56.000	90.00
	64.016	100.00
832 x 624	49.725	74.55
852 x 480	31.468	60.05
1024 x 768	48.363	60.00
	56.476	70.06
	60.023	75.02
1280 x 768	47.700	60.00
1280 x 1024	64.000	60.00
1366 x 768	48.387	60.00

Notes

- **Synchronization input form : separate**

- The monitor recognizes 640 x 480 @60Hz signal as 480p DTV signal. So the signal is expanded, please try other signals like 640 x 480 @75Hz.

- The monitor operates abnormally if a non-standard video format is selected.

- 852 X 480 : 42" (SD) Native resolution horizontal polarity is positive (+), vertical polarity is negative (-).

- 1366 X 768 : 50/63" Native resolution horizontal polarity is positive (+), vertical polarity is negative (-).

- Depending on the manufacturer, your PC screen might appear differently (and depending on your particular version of Windows). Check your PC instruction book for information about connecting your PC to a the monitor.

- The monitor may operate abnormally if a non-standard video signal.

- "Out of range" message box will appear when an over-spec video signal is input. Change the video settings of PC when the message is displayed.

Basic Operation

Turning the Monitor ON/OFF

Press the Power button on the remote control. The monitor will turn on and you will be ready to use its features. You can also use the Power button on the front panel.

Select Source

Press INPUT button on the remote control. Then you can see the source list menu shown as below.

Source Change
1 TV
2 SCART 1
3 SCART 2
4 S-Video/AV
5 Component 1
6 Component 2
7 PC
8 DVI

Source list menu

Select the source to watch with PG+/PG- button on the remote control and press the Menu/Set button.

TV Programme Selection

1 Connect the signal source (TV antenna) to TV input. Press INPUT button on the remote control and select TV on the source list.

2 Use PG+/PG- button or numeric button to change TV programme you want.

3 Press Pre.PG button on the remote control to watch the previous programme.

4 Also, you can tune the cable service, provided programmes while using the cable box. For further information regarding cable TV service, contact your TV service provider(s).

Volume Control

Use VOL+/VOL- button on the remote control to adjust the volume level.
Press Mute button on the remote control when you need to cut the sound temporarily.

· **OSD (On Screen Display) allows users to control or adjust various features and settings in accordance with his/her preferences.**

· **Press the Menu/Set button on the remote control to see the main OSD menu.**

▶ Example of OSD Menu

```
                        2    A   B    ◀▶ Part

        Picture

        [  ]        Mode              Standard

        [  ]        Temperature        Normal

        [  ]        Video NR        ◀  OFF  ▶
  1
        [  ]        Film Mode       ◀  OFF  ▶

        [  ]        Screen Form        16 : 9

        [TV]        Black Enhancer  ◀  OFF  ▶
```
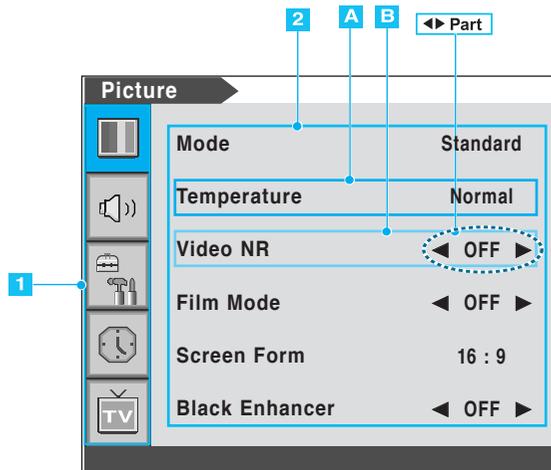
1 **Main Menu**

Press Menu/Set button on the remote control to enter the main OSD menu.
First, select main menu item you need with PG+/PG- button.
To select a main menu items, just press VOL+ or Menu/Set button on the remote control.

2 **Sub Menu**

Each menu item has its own sub menu items to set.

3 **Sub Menu Items**

A : If there is no ◀▶ part, the item has an sub menu.
You can enter the sub menu and adjust an item you need.
Select sub-menu item with PG+/PG- button on the remote control and press VOL+ or Menu/Set button
to enter the sub menu.

B : If there is a ◀▶ part, you can set the item by selecting ◀▶. Ex) ◀ ON ▶ or ◀ OFF ▶
Press VOL+ or Menu/Set button to set a ◀▶ part, and adjust it with PG+/PG- button.

Setting the Channel

Storing Channels Automatically

You can now search for and store the TV channels in two different ways : using Auto Scan or Manual Scan.

1 Press Menu/Set button to display the main OSD menu.

2 Select the TV main menu.

3 Press Menu/Set button to enter the sub menu.

4 Select **Auto Scan** with PG+/PG- buttons and press
Menu/Set button on the remote control.
Then there will appear the Auto Scan sub menu.

5 Select your country. Then the tuning bar will appear.
The scanning will start.

	Auto Scan
	Manual Scan
	Fine Tune
	Edit
TV	
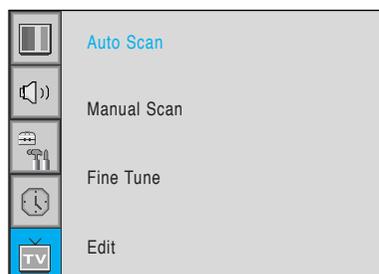
The supported countries are shown as below.

Belgium	Poland
Czech Rep.	Sweden
Denmark	Turkey
Germany	Switzerland
England	East Europe
Spain	Others
Finland	
France	
Great Britain	
Greece	
Hungary	
Ireland	
Italy	
Netherlands	
Norway	

	Belgium
	Czech Rep.
	Denmark
	Germany
	England
	↓ Spain
TV	

Auto Scan	16

Auto Scan for other countries, please refer to the next page.

Notes

- *You can enter the TV menu in TV mode only. (When you watch a TV programme.)*

Auto Scan (Other Countries)

● Asia

Nation	Selection	Nation	Selection
Malaysia	Others	Israel	Others
Pakistan	Others	Kuwait	Others
Singapore	Others	Arab Emirates	Others
Iran	Others	China	Czech Republic
Saudi Arabia	Others		

● Europe

Nation	Selection	Nation	Selection
Albania	Others	Estonian	Hungary
Andorra	Others	Georgia	Hungary
Croatia	Others	Latvia	Hungary
Iceland	Others	Lithuania	Hungary
Macedonia	Others	Russian Fed.	Hungary
Portugal	Spain	Ukraine	Hungary
Armenia	Hungary	Romania	Poland
Azerbaijan	Hungary	Slovakia	Greece
Belarus	Hungary	Luxembourg	Netherlands
Bulgaria	Hungary	Monaco	France

Setting the Channel

Storing Channels Manually

1 Press Menu/Set button on the remote control to display the main OSD menu.

2 Select the TV main menu with PG+/PG- button on the remote control.

3 Press Menu/Set button to enter the sub menu.

4 Select **Manual Scan** with PG+/PG- button and press Menu/Set button.

5 Then you can see the tuning bar. the monitor will scan from channels to the current channel.

	Auto Scan
	Manual Scan
	Fine Tune
	Edit

Manual Scan	VHF	16
	IIIIIIIIIIIIIIIIIIIIII | IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	
◄►:Move		Menu/Set : EXIT
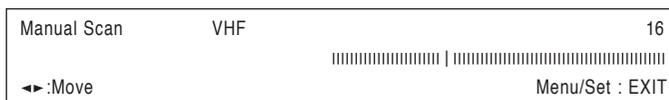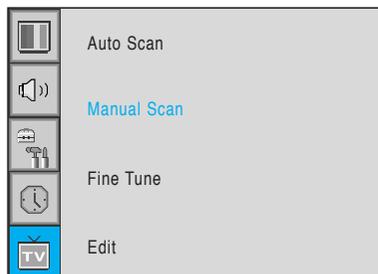
Notes

• *Only scanned programmes can be stored as Favorite programmes.*

Fine Tuning the Channel Reception

The fine tuning function lets you manually adjust the monitor's tuner if you have difficulty tuning analog channels.

1 Press Menu/Set button to display the main OSD menu.

2 Select the TV main menu.

3 Press Menu/Set button to enter the sub menu.

4 Select **Fine Tune** with PG+/PG- button and press Menu/Set button. Then you can see the adjust bar.

5 Adjust the Fine Tune with VOL+/VOL- button.

	Auto Scan
	Manual Scan
	Fine Tune
	Edit

Fine Tune		16
	IIIIIIIIIIIIIIIIIIIIII | IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	
◄►:Move		Menu/Set : EXIT
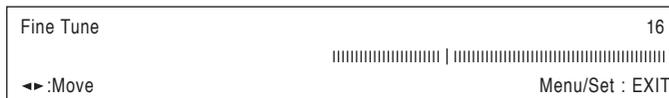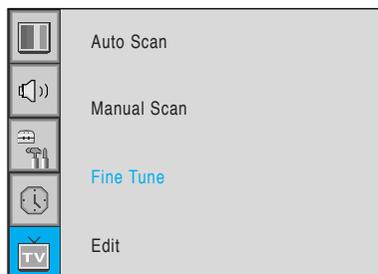
Editing the Channels

Edit Favorite Programme List

You can store of your favorite channels for each available input source (such as TV or CATV).
Then, when you press the Favorite button on the remote control, the monitor display only the favorite channels you previously stored, allowing you to quickly and easily find frequently wanted channels.

1 Press Menu/Set button to display the main OSD menu.

2 Select the TV main menu.

3 Press Menu/Set button to enter the sub menu.

4 Select **Edit** and press the Menu/Set button.
Then you can see the favorite programme list.

5 You can select a programme with PG+/PG- button on the remote control.

▣	Auto Scan
◁))	Manual Scan
🖧	Fine Tune
🕔	
TV	Edit

▷ Edit ▷						
PR	Name	CH	Picture	Sound	Skip	FAV
1	-----	E01	AUTO	AUTO	Yes	No
2	-----	E01	AUTO	AUTO	Yes	No
3	-----	E01	AUTO	AUTO	Yes	No
4	-----	E01	AUTO	AUTO	Yes	No
5	-----	E01	AUTO	AUTO	Yes	No
6	-----	E01	AUTO	AUTO	Yes	No
7	-----	E01	AUTO	AUTO	Yes	No
8	-----	E01	AUTO	AUTO	Yes	No

◀▶ ⬍ Move/Edit ↵Select ↩ Exit

| ERASE | SKIP | INSERT | REPLACE |
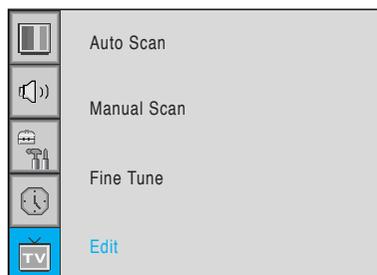
To Edit the List

You can INSERT, ERASE, SKIP and REPLACE the programmes in the list. Refer to the picture of the remote control below.

To Edit the Programme in the List

If you want to edit a programme, press Menu/Set button. Then you can select a field with VOL+/VOL- button. Press Menu/Set button on the field to edit. Adjust the field with PG+/PG- button. To return, press Back button.

➡️
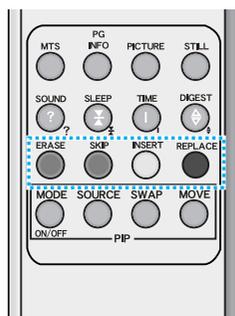
❶ ERASE
Erase the selected programme from the list.

❷ SKIP
Make the selected programme will be skipped.

❸ INSERT
Insert new list item.

❹ REPLACE
Replace the selected programme with the current programmes that you're watching.

Notes

• *Only scanned channels can be set as favorite channels.*

Digest Function

Digest Function

In the digest function, you can watch 9 programmes at the same time. (This function works only in TV mode)

1 Press the DIGEST button on the remote control.

2 By pressing the channel number, the selected channel becomes main window.

3 You can make off the digest function by pressing DIGEST button again.

Only memorized channels can be displayed in the digest function.
13 windows are available for 42(HD) Plasma TV.
15 windows are available for 50" and 63" Plasma TV.
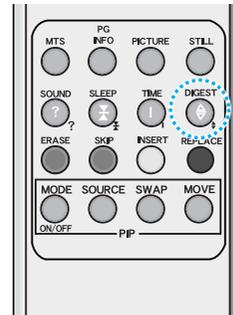
Teletext On/Mix/Off

You can switch on and off teletext function by pressing TEXT button on remote control.

TOP Text

The user guide displays four fields - red, green, yellow and blue - at the bottom of the screen. The yellow field denotes the next group and the blue field denotes next block.

Block/Group/Page Selection

- With the blue button you can move block to block.
- Use the yellow button to proceed to the next group with automatic overflow to the next group.
- With the green button, you can go to the next exiting page. (Use PG+ button as alternate).
- With the red button, you can go to the previous page. (Use PG- button as alternate)

> You can go to the page by pressing the numeric button on the remote control.

FASTEXT

The teletext pages are colour coded along the bottom of the screen and are selected by pressing the corresponding coloured button. Press index button to select the index page. You can go to a page by pressing the numeric button on remote control. You can move a page by pressing PG+/PG- button to select the page you want to see.

Setting the Picture

Changing the Picture Mode

Your the monitor has 3 automatic factory preset picture settings (**Standard**, **Vivid** and **Mild**). You can choose Standard, Vivid or Mild by pressing PICTURE button on the remote control (or by making a selection from the menu). Or you can select User which automatically recalls your personalized picture settings.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Picture main menu.

3 Press Menu/Set button to enter the sub menu.

4 Select **Mode** and press Menu/Set button to enter the sub menu. Then the picture sub mode appear.

5 Select the picture mode and press Menu/Set button.

6 You will see the picture setting bars.
Just press Back button on the remote control.
You can adjust each values of the picture setting, but the changed values are stored as in **User** mode.

> **User mode has additional settings in a sub menu:**
> **See the next page.**

Mode	Standard
Temperature	Normal
Video NR	◄ OFF ►
Film Mode	◄ OFF ►
Screen Form	16 : 9
Black Enhancer	◄ OFF ►

Standard

Vivid

Mild

User

Contrast	|||||||||||||||||||||	||||||||
Brightness	||||||||||||	||||||||||||||||||
Color	||||||||||||||||	||||||||||||||
Sharpness	||||||||	|||||||||||||||||||||||
Recall	

Notes

• **Alternative method :** *Just press the PICTURE button on the remote control. Each time it is pressed, different mode is selected.*

Adjusting the User Mode

You can change the Contrast, Brightness, Color, and Sharpness according to personal preference in User mode.

1 Select the item to adjust with PG+/PG- button.

2 Press Menu/Set button.

3 Adjust the item with VOL+/VOL- button.

4 To cancel all adjust, select **Recall** and press Menu/Set button.

For a more detailed description of these settings, see the next page.

Select User mode (Previous page)

Contrast	|||||||||||||||||||	|||||||
Brightness	|||||||||||	||||||||||||||||
Color	||||||||||||||||	|||||||||||||
Sharpness	||||||	|||||||||||||||||||||
Recall	
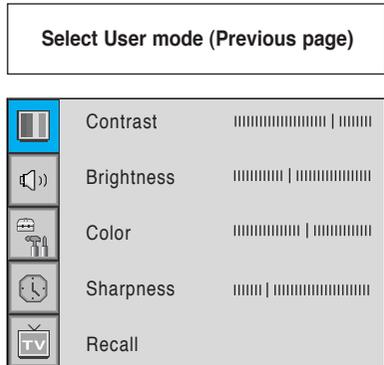
Setting the Picture

Contrast

Adjust brightness difference between bright part of the screen and dark part.
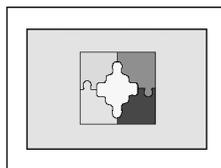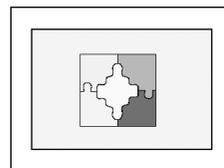
Distinct ◄　　　　　► Vague

Brightness

Adjust brightness of the screen.
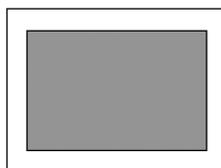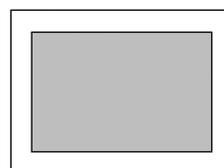
Dark ◄　　　　　► Bright

Color

Adjust deep and light colour of the screen.
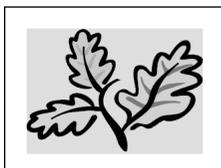
Decrease ◄　　　　　► Increase

Sharpness

Adjust vividness of the screen.
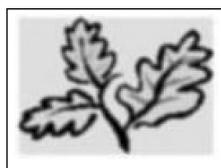
Less sharp ◄　　　　　► Sharp

Changing the Colour Temperature

Your the monitor has 5 screen temperatures (colour settings).

1 Press Menu/Set button to display the main OSD menu.

2 Select the Picture main menu.

3 Press Menu/Set button to enter the picture menu.

4 Select **Temperature** and press Menu/Set button to enter the sub menu. Then the picture-temperature sub menu appear.

5 Select the Temperature mode with PG+/PG- button and press Menu/Set button.

6 Press Back button to return.

Mode	Standard
Temperature	Normal
Video NR	◄ OFF ►
Film Mode	◄ OFF ►
Screen Form	16 : 9
Black Enhancer	◄ OFF ►

Cool2
Cool1
Normal
Warm1
Warm2

● **Cool 1, 2**

Screen seems cool: Strong Blue.

● **Normal**

Normal: Factory default.

● **Warm 1, 2**

Screen seems warm: Strong Red.

Video NR (Noise Reduction)

This function automatically filters out and reduces the image noise and improves picture quality when receiving weak signals.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Picture main menu item.

3 Press Menu/Set button to enter the sub menu.

4 Select **Video NR** and press VOL+ button to enter the ◄► parts. Then the cursor moves into the ◄► parts.

5 Turn on or off Video NR function with PG+/PG- button and press Back button.

Mode	Standard
Temperature	Normal
Video NR	◄ OFF ►
Film Mode	◄ OFF ►
Screen Form	16 : 9
Black Enhancer	◄ OFF ►

Setting the Picture

Selecting the Film Mode

This mode is in order to watch a movie composed of 24 frames smoothly when the movie is converted to 30 frames on TV.

1 Press Menu/Set button to display the main OSD menu. Select the picture main menu item.

2 Press Menu/Set button to enter the sub menu.

3 Select Film Mode and press VOL+ button to enter the ◄► parts. Then the cursor moves into the ◄► parts.

4 Turn on or off Film Mode function with PG+/PG- button and press Back button.

Mode	Standard
Temperature	Normal
Video NR	◄　OFF　►
Film Mode	◄　OFF　►
Screen Form	16 : 9
Black Enhancer	◄　OFF　►

Changing the Screen Form

Your the monitor has four screen forms: **16:9, Panorama, Zoom1, Zoom2, 4:3**.
(For more detail description for these modes, refer to the next page.)

1 Press Menu/Set button to display the main OSD menu.

2 Select the Picture main menu.

3 Press Menu/Set button to enter the picture menu.

4 Select **Screen Form** and press Menu/Set button to enter the sub menu. Then the screen form sub menu appear.

5 Select the Screen Form you want and press Menu/Set button.

Mode	Standard
Temperature	Normal
Video NR	◄　OFF　►
Film Mode	◄　OFF　►
Screen Form	16 : 9
Black Enhancer	◄　OFF　►

16 : 9
Panorama
Zoom1
Zoom2
4 : 3

Screen Form Description

16:9

16:9 video : No change.
4:3 video   : Expands 4:3 video signal horizontally to fit the 16:9 screen.
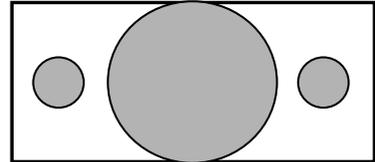
Panorama

16:9 video : No change.
4:3 video   : Expands 4:3 video horizontally to fit the 16:9 screen and to minimize distortion, sides are expanded more than center.
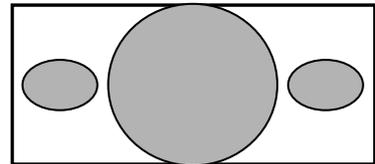
Zoom 1

Expands 16:9 mode screen vertically.
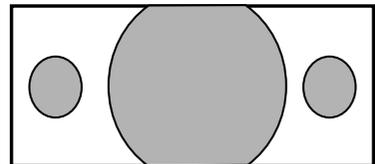
Zoom 2

Expands Zoom 1 mode screen vertically.
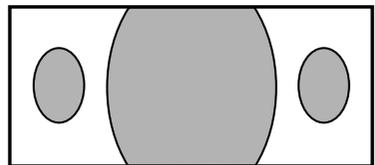
4:3

16:9 video : The image is suppressed.
4:3 video   : No expansion.
                    There are gray areas besides the image.
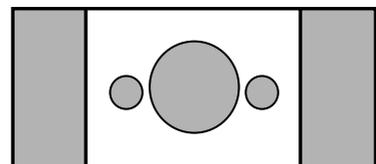
Selecting the Black Enhancer

This will enhance the black level/the contrast of the picture. The dark regions of the picture are made darker, while bright areas remain unchanged. The advantage of this black-level expansion is that the black expansion is performed only if it is noticeable to the viewer.

Mode	Standard
Temperature	Normal
Video NR	◀ OFF ▶
Film Mode	◀ OFF ▶
Screen Form	16 : 9
Black Enhancer	◀ OFF ▶

Setting the Picture [PC]

In PC mode, you can adjust the H, V-Position, Native Mode and Phase. Also you can adjust them automatically.

Adjusting the PC Screen (Geometry)

You can change H, V-Position, Native Mode and Phase in PC mode like usual PC monitors.
You can also adjust them automatically. (Auto adjust function.)

1 Press Menu/Set button to display the main OSD menu.

2 Select the Picture main menu with PG+/PG- button.

3 Press Menu/Set button to enter the sub menu.

4 Select **Geometry** and press Menu/Set button to enter the sub menu. Then the picture-geometry sub menu will appear.

Mode	Standard
Temperature	Normal
Geometry	
Screen Form	16:9
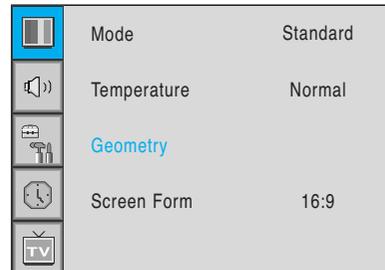
1 Select the item to adjust with PG+/PG- button.

2 Press Menu/Set button.

3 Then the cursor moves on the bar and you can adjust the value with VOL+/VOL- button.

4 To adjust these items, automatically, select **Auto Adjust** and press Menu/Set button.

H-Position	︳︳︳︳︳︳︳︳︳︳︳ | ︳︳︳︳
V-Position	︳︳︳︳︳ | ︳︳︳︳︳︳︳︳
Phase	︳︳︳ | ︳︳︳︳︳︳︳︳︳︳
Native Mode	◄ ON ►
Native H-Size	◄ 852 ►
Auto Adjust	
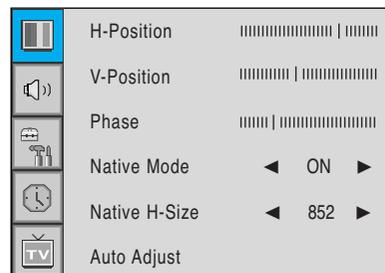
For more detail description refer to the next page.

You can select the H-Size of Native Mode depending on the input timing [42"(SD) : 848/852, 50"/63" : 1360/1366 select]

H-Position

◄   ►

V-Position

◄   ►

Phase

Mismatch   Match
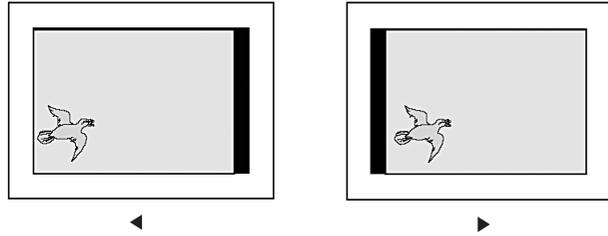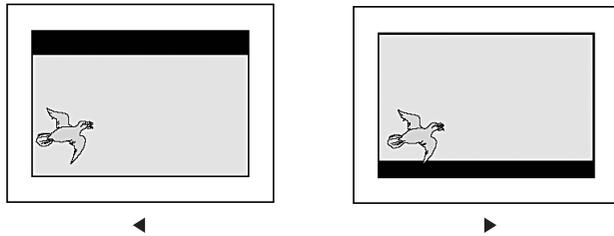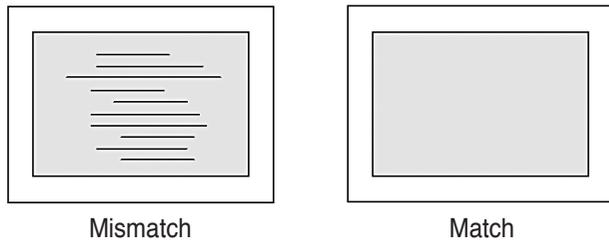
Native Mode

When you use monitor, 42(SD) native mode display all timing to 852 x 480 mode.
When you off native mode, monitor display 640 x 480 mode expect 848 x 480.
When you use monitor, 50/63 native mode display all timing to 1366 x 768 mode.
When you off native mode, monitor display 1366 x 768 mode expect 1360 x 768.

1 Select Native Mode menu and press VOL+ button to enter the ◄► parts. Then the cursor moves into the ◄► parts.

2 Turn the function on or off with PG+/PG- button and press Back button.

	H-Position	||||||||||||||||| | |||||||
	V-Position	|||||||||| | |||||||||||||||
	Phase	||||||| | |||||||||||||||||||
	Native Mode	◄ OFF ►
	Native H-Size	◄ 852 ►
	Auto Adjust	
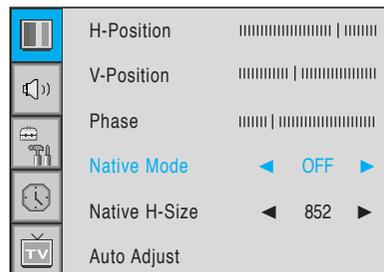
Setting the Sound

In Sound menu, you can adjust balance, MTS (Multi-Track Sound), AVC (Auto Volume Control) and select the equalizer settings.

Adjusting the Sound Balance

This control allows you to adjust the balance of the left and right speaker output.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Sound main menu.

3 Press Menu/Set button to enter the sub menu.

4 Select **Balance** and press Menu/Set button.

5 Adjust the Balance with VOL+/VOL- button and press Menu/Set button.

Balance	IIIIIIIIIIII	IIIIIIII
Sound Mode	User
Spatial Effect	◄ OFF ►
AVC	◄ OFF ►
MTS	Stereo
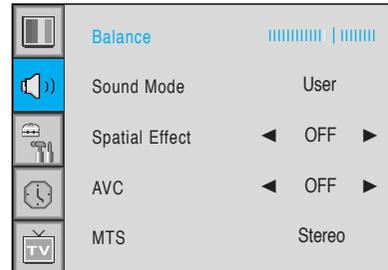
Changing the Sound Mode

Your the monitor has four automatic sound settings (**Standard**, **Movie**, **Music** and **News**) that are preset at the factory. You can activate either Standard, Movie, Music, or News by pressing SOUND on the remote control (or by making a selection from the menu) or you can select **Custom** which automatically recalls your personalized sound settings.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Sound main menu.

3 Press Menu/Set button to enter the sub menu.

4 Select **Sound Mode** and press Menu/Set button to enter the sub menu. Then the mode sub menu appear.

5 Select the **User** setting and press Menu/Set button.

6 You will see the equalizer bars. Just press Back button on the remote control. You can adjust each values of equalizer, but the changed values are stored as in **User** mode.

User mode require more settings. It has sub menu: See next page.

Balance	IIIIIIIIIIIII	IIIIIIII
Sound Mode	User
Spatial Effect	◄ OFF ►
AVC	◄ OFF ►
MTS	Stereo

Standard
Movie
Music
News
User

Equalizer

0.1   0.5   1.5   5.0   10.0kHz
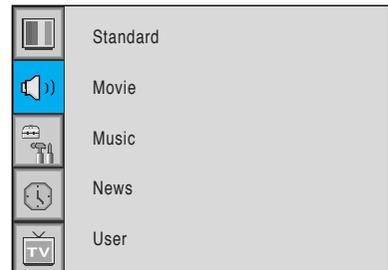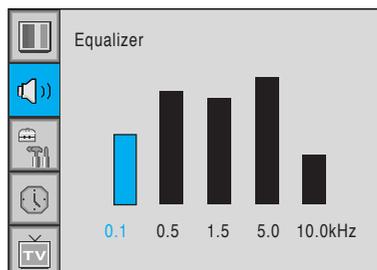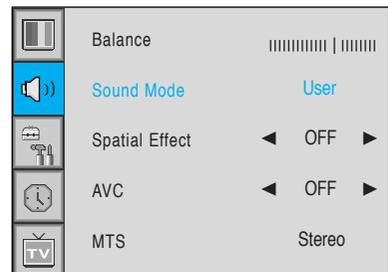
Adjusting User Sound Mode

You can use the OSD menu to change the Treble, Bass, Balance, and DRC according to your preference.

1 Equalizer menu appear when you select User mode.

2 Select a gain bar with VOL+/VOL- button on the remote control and adjust it with PG+/PG- button.

3 Press Back button on the remote control to exit equalizer. The result will be saved automatically.

Select User mode (Previous page)

Equalizer

0.1 0.5 1.5 5.0 10.0kHz
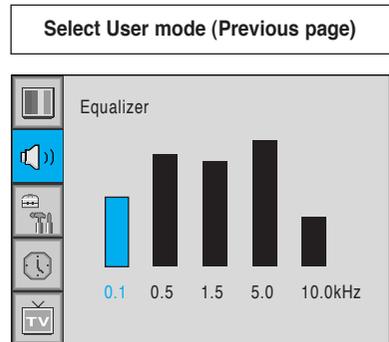
Spatial Effect

This function can create surround effect such as the sound seems to come from all directions.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Sound main menu.

3 Press Menu/Set button to enter the sub menu.

4 Select **Spatial Effect** and press VOL+ button.

5 Turn on or off spatial effect function with PG+/PG- button and press Menu/Set button.

Balance																						
Sound Mode	User
Spatial Effect	◄ OFF ►
AVC	◄ OFF ►
MTS	Stereo
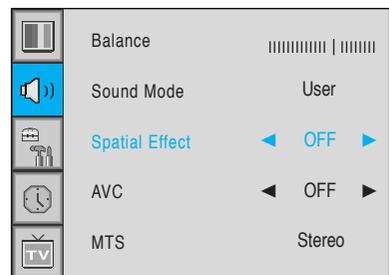
AVC (Auto Volume Control)

This function adjust sound volume level automatically depending on the source.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Sound main menu.

3 Press Menu/Set button to enter the sub menu.

4 Select **AVC** and press VOL+ button to enter the ◄► parts. Then the cursor moves into the ◄► parts.

**5** Turn on or off AVC function with PG+/PG- button and press Back button.

Balance																						
Sound Mode	User
Spatial Effect	◄ OFF ►
AVC	◄ OFF ►
MTS	Stereo
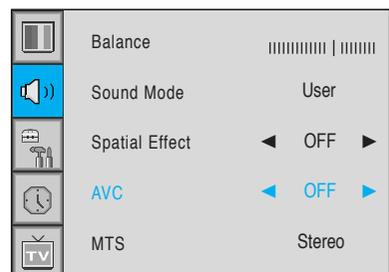
Setting the Sound

MTS (Multichannel Television Sound)

Select sound signal format from the input source. There are Mono, Stereo, Language A, Language B, Language AB sound formats.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Sound main menu with PG+/PG- button on the remote control.

3 Press Menu/Set button to enter the sub menu.

4 Select **MTS** and press Menu/Set button to enter the sub menu. Then the MTS sub menu appear.

5 Select the MTS format with PG+/PG- and press Menu/Set button.

> **The available sound forms are displayed. Usually, you can see mono and stereo.**

Balance	|||||||||||| | |||||||||
Sound Mode	User
Spatial Effect	◄ OFF ►
AVC	◄ OFF ►
MTS	Stereo

Mono	
Stereo	
Language A	
Language B	
Language AB	
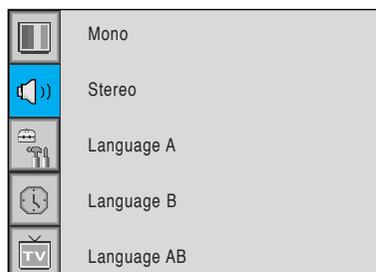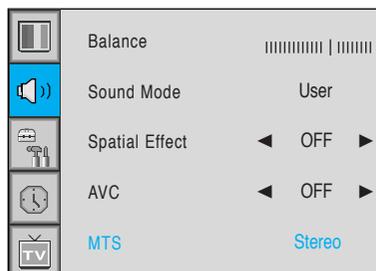
Notes

- **NICAM :** *A Digital stereo sound format for analog TV from BBC. If a channel transmit NICAM sound signal, you can hear high quality digital stereo sound. The monitor recognize NICAM automatically.*

In Setup menu, you can adjust the transparency of the OSD menu and set PIP and others.

Adjusting the Transparency of the OSD Window

Adjust the transparency of the OSD menu. There are 8 step from OFF to 7.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Setup main menu with PG+/PG- button on the remote control.

3 Press Menu/Set button to enter the sub menu.

4 Select **Translucent** and press VOL+ button to enter the ◄► parts. Then the cursor moves into the ◄► parts.

5 Adjust with PG+/PG- button and press Back button.

Translucent	◄ OFF ►	
PIP		
Advanced		
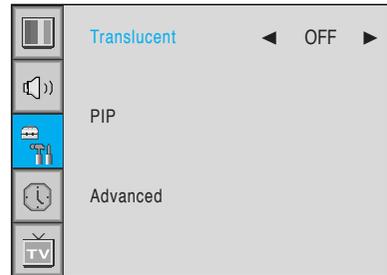
PIP (Picture in Picture)

You can watch two programmes or sources at the same time. And Setup PIP size and position.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Setup main menu with PG+/PG- button on the remote control.

3 Press Menu/Set button to enter the sub menu.

4 Select **PIP** and press Menu/Set button to enter the sub menu. Then the PIP sub menu appear.

PIP Window

Translucent	◄ OFF ►
PIP	
Advanced	

Size	◄ Small ►
Source	
Picture Swap	
Position	

Setting the Others

Changing the Size in PIP

Change the size of the PIP window. There are 3 sizes: Small, Large, Twin.

1 Select **Size** and press VOL+ button to enter the ◄► parts. Then the cursor moves into the parts.

2 Adjust size function with PG+/PG- button and press Menu/Set button.

| Small | Large | Twin |

Choosing the Source in PIP

Change the source of the PIP window.

1 Select **Source** and press Menu/Set button to enter the sub menu. Then the PIP sub menu appear.

2 The available sources will be displayed.
Select the source and press Menu/Set button.

Size	◄ Small ►
Source	
Picture Swap	
Position	
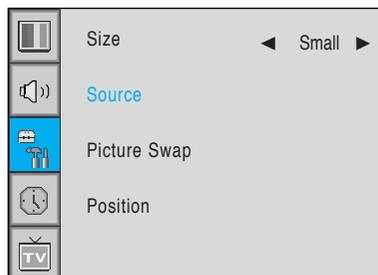
This picture is an example. The displayed sources may be different depending on the main input source.

| TV |
| SCART1 |
| SCART2 |
| S-Video/AV |

PIP \ Main	TV	SCART 1	SCART 2	S-Video/AV	Component 1	Component 2	PC	DVI
TV	✓	✓	✓	✓	✓	✓	✓	✓
SCART 1	✓	–	✓	✓	✓	✓	✓	✓
SCART 2	✓	✓	–	✓	✓	✓	✓	✓
S-Video/AV	✓	✓	✓	–	✓	✓	✓	✓
Component 1	✓	✓	✓	✓	–	–	–	–
Component 2	✓	✓	✓	✓	–	–	–	–
PC	✓	✓	✓	✓	–	–	–	–
DVI	✓	✓	✓	✓	–	–	–	–

● Picture Swap in PIP (Picture in Picture)

Swap the sources of the main screen and the PIP window.

Select Picture Swap and press Menu/Set button.

● Changing the Position in PIP

Change the position of the PIP window.

1 Select **Position** with PG+/PG- button on the remote control and press Menu/Set button to enter the sub menu. Then the PIP sub menu appear.

2 In sub menu, there are four positions.
Select the position with PG+/PG- button on the remote control and press Back button

	Size	◄ Small ►
	Source	
	Picture Swap	
	Position	

	Right Down
	Right Up
	Left Up
	Left Down
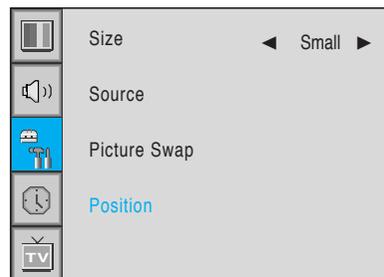
Setting the Others

Advanced

You can Set ID, Burn Protect, Burn Clear, Blue Back, Language and Front Key Lock in Advanced menu.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Setup main menu with PG+/PG- button on the remote control.

3 Press Menu/Set button to enter the sub menu.

4 Select **Advanced** and press Menu/Set button to enter the advanced menu. Then the advanced sub menu appear.

Translucent	◄ OFF ►	
PIP		
Advanced		

Set ID	◄ 99 ►	
Burn Protect	◄ ON ►	
Burn Clear	◄ OFF ►	
Blue Back	◄ OFF ►	
Language	◄ English ►	
Front Key Lock	◄ OFF ►	
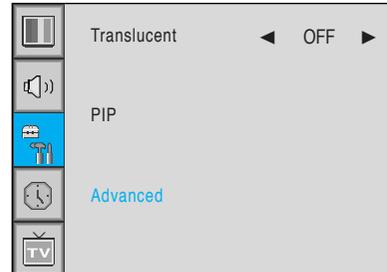
● Set ID in Advanced

Set the ID of the monitor for mass-controlling through the serial port.

1 Select **Set ID** and press VOL+ button to enter the ◄► part. Then the cursor moves into the ◄► part.
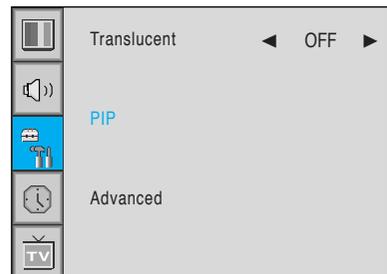
2 Adjust with PG+/PG- button and press Back button.

Set ID	◄ 99 ►	
Burn Protect	◄ ON ►	
Burn Clear	◄ OFF ►	
Blue Back	◄ OFF ►	
Language	◄ English ►	
Front Key Lock	◄ OFF ►	

● Burn Protect in Advanced

The monitor may be damaged from displaying a static image long time (over 30 minutes). It is called as image sticking, and burn protect function moves image regularly to relieve image sticking. You can set the moving range of the burn protection function. (How much the image will move.) Burn Protection function moves image 1 pixel per 2 minutes, and after moving the set range, image starts to go back to the original position.

1 Select **Burn Protect** menu and press VOL+ button to enter the ◄► parts. Then the cursor moves into the ◄► parts.

2 Turn the function on or off with PG+/PG- button and press Back button.

Set ID	◄ 99 ►	
Burn Protect	◄ ON ►	
Burn Clear	◄ OFF ►	
Blue Back	◄ OFF ►	
Language	◄ English ►	
Front Key Lock	◄ OFF ►	

Burn Clear in Advanced

This function will be used for removing sticking image on the screen.

1 Select **Burn Clear** and press VOL+ button to enter the ◄► parts. Then the cursor moves into the ◄► parts.

2 Turn the function on or off with PG+/PG- button and press Back button.

Set ID	◄	99	►
Burn Protect	◄	ON	►
Burn Clear	◄	OFF	►
Blue Back	◄	OFF	►
Language	◄	English	►
Front Key Lock	◄	OFF	►

Setting the Blue Screen Mode

You can set to display blue-colour screen instead of noise screen.

1 Select **Blue Back** and press VOL+ button to enter the ◄► parts. Then the cursor moves into the ◄► parts.

2 Turn the function on or off with PG+/PG- button and press Back button.

Set ID	◄	99	►
Burn Protect	◄	ON	►
Burn Clear	◄	OFF	►
Blue Back	◄	OFF	►
Language	◄	English	►
Front Key Lock	◄	OFF	►

Changing the OSD Language

Set the language to use in OSD.
Supported languages are English, French, German, Spanish, Italian, Portuguese, and Russian.

1 Select **Language** and press VOL+ button to enter the ◄► parts. Then the cursor moves into the ◄► parts.

2 Choose the Language with PG+/PG- button and press Back button.

Set ID	◄	99	►
Burn Protect	◄	ON	►
Burn Clear	◄	OFF	►
Blue Back	◄	OFF	►
Language	◄	English	►
Front Key Lock	◄	OFF	►

Front Key Lock in Advance

Lock the OSD panel of the monitor. It can protect the monitor from children's power On/Off or other operation by miss.

1 Select **Front Key Lock** and press VOL+ button to enter the ◄► parts. Then the cursor moves into the ◄► parts.

2 Turn the function on or off with PG+/PG- button and press Back button

Set ID	◄	99	►
Burn Protect	◄	ON	►
Burn Clear	◄	OFF	►
Blue Back	◄	OFF	►
Language	◄	English	►
Front Key Lock	◄	OFF	►

Setting the Time

In the Time menu, you can set the current time and auto power On/Off.

Setting the Current Time

Set the current time.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Time main menu.

3 Press Menu/Set button to enter the sub menu.

4 Select **Time Set** by pressing VOL+ button.

5 Move the cursor by pressing VOL+/VOL- button and adjust time by PG+/PG- button.

Time Set	AM 03:29
On Time	AM 05:11 ON
On Channel	◄ 99 ►
On Volume	◄ 100 ►
Off Time	AM 05:11 OFF
Sleep	◄ OFF ►
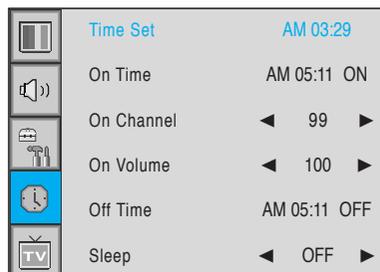
Setting the On Time

This the monitor can be set to turn on automatically at specific time that you choose.
Before using the timer, you must set the monitor's Time as described previously.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Time main menu with PG+/PG- button on the remote control.

3 Press Menu/Set button to enter the sub menu.

4 Select **On Time** with PG+/PG- button and press VOL+ button.

5 Move the cursor by VOL+/VOL- button and adjust time by PG+/PG- button.

Time Set	AM 03:29
On Time	AM 05:11 ON
On Channel	◄ 99 ►
On Volume	◄ 100 ►
Off Time	AM 05:11 OFF
Sleep	◄ OFF ►

On Time	AM 05:11 ON

Item Name

Auto power-on time

Activated

Setting the On Channel

Set the channel when the monitor power turn on automatically.

Available only when the time is set and on time is on.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Time main menu with PG+/PG- button on the remote control.

3 Press Menu/Set button to enter the sub menu.

4 Select **On Channel**.

5 Enter to the ◄► part with VOL+ button.
Then the cursor moves into the ◄► parts.

6 Adjust the channel with PG+/PG- button.
Press Back button to return.

Time Set	AM 03:29	
On Time	AM 05:11 ON	
On Channel	◄ 99 ►	
On Volume	◄ 100 ►	
Off Time	AM 05:11 OFF	
Sleep	◄ OFF ►	

Setting the On Volume

Set the sound volume level when the monitor power on automatically.

Available only when the time is set and on time is on.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Time main menu with PG+/PG- button on the remote control.

3 Press Menu/Set button to enter the sub menu.

4 Select **On Volume**.

5 Enter to the ◄► part by pressing VOL+ button.
Then the cursor moves into the ◄► parts.

6 Adjust the sound volume level with PG+/PG- button.

|		
Time Set	AM 03:29	
On Time	AM 05:11 ON	
On Channel	◄ 99 ►	
On Volume	◄ 100 ►	
Off Time	AM 05:11 OFF	
Sleep	◄ OFF ►	

Setting the Time

Setting the Off Time

This the monitor can be set to turn off automatically at specific times that you choose.
Before using the timer, you must set the monitor's clock as described previously.

1 Press Menu/Set button to display the main OSD menu.

2 Select the Time main menu with PG+/PG- button on the remote control.

3 Press Menu/Set button to enter the sub menu.

4 Select **Off Time** with PG+/PG- button on the remote control and press VOL+ button.

5 Move the cursor with VOL+/VOL- button and adjust time with PG+/PG- button.
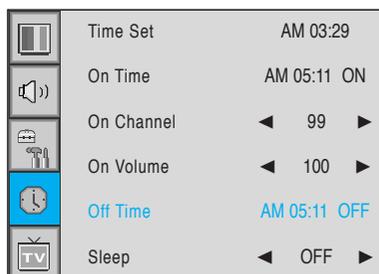
Time Set	AM 03:29
On Time	AM 05:11 ON
On Channel	◄ 99 ►
On Volume	◄ 100 ►
Off Time	AM 05:11 OFF
Sleep	◄ OFF ►

Off Time	AM 05:11 ON

Item Name   Auto power-off time   Activated
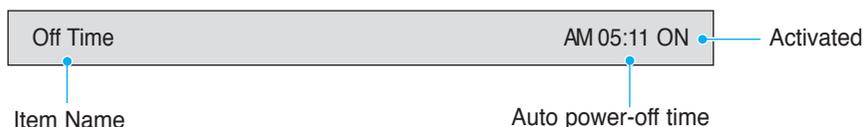
Setting the Sleep Timer

You can set your the monitor to automatically turn off after a preset interval.
If you turn off the monitor in the state of setting up sleep time and turn on again, sleep time erased therefore
Setup again. The time period runs from OFF (0min) to 180min. (OFF, 10min, 20, 30, 60, 90, 120, 150, 180)

1 Press Menu/Set button to display the main OSD menu.

2 Select the Time main menu. with PG+/PG- button on the remote control.

3 Press Menu/Set button to enter the sub menu.

4 Select **Sleep** with PG+/PG- button on the remote control and press VOL+ button.

5 Enter to the ◄► part with VOL+ button. Then the cursor moves into the ◄► parts.

6 Set the time period with PG+/PG- button.

7 Press Back button to return.
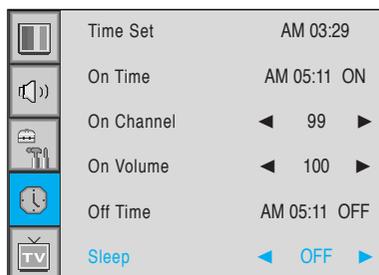
Time Set	AM 03:29
On Time	AM 05:11 ON
On Channel	◄ 99 ►
On Volume	◄ 100 ►
Off Time	AM 05:11 OFF
Sleep	◄ OFF ►

If your monitor is not working properly, please scan this list of problems and possible solutions. It may save you time and money.

Problem	Quick Action for Possible Solution
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. • Check the audio input signal.
The remote control doesn't work	• Check to see if there is any object between the monitor and the remote control causing obstruction. • Check to see if the batteries are installed with the correct polarities.
Digital broadcasting screen problem	• Check the digital signal strength and input antenna.
No or poor color or poor picture	• Select color in the picture and press VOLUME (►) button. • Keep a certain distance between the monitor and the input source. • Activate any function to restore the brightness of the picture. • Check to see that both the monitor and the source are plugged in and turned on.
The image is too light or too dark	• Adjust the brightness or contrast settings.
The image is too large or too small	• Adjust the size settings.
No output from one of the speakers	• Adjust Balance in the sound menu.

Specification

42" Plasma TV (1)	
Function and Specification	
Display Size	42-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 4 Modes (4:3 Mode / 16:9 X 3 Modes)
Pixel Format	852 X 480 Physical Pixel * (SD) ⫶ 1024 X 768 Physical Pixel ** (HD)
Contrast Ratio	3000 : 1
Brightness	1000 cd/m^2
Resolution (RGB)	1280 X 1024 / 60Hz
PIP	Advanced multi-windows viewing PIP(picture in picture) with four selectable window positions on Video mode
Input Compatible	Multiple input compatible
Video	Advanced motion digital / Motion-Adaptive De-interlace process, Digital progressive line scaling.
Tuner Module	TV/CATV (PAL/SECAM)
Programming	Favorite channel programming, Time Set, Set the Sleep timer, TTX
HDTV Input	480i/p(60Hz), 576i/p(50Hz), 720P(50/60Hz),1080i(50/60Hz)
Color Temperature	Selectable 5 Mode (Cool 1, 2 / Normal / Warm 1, 2)
Dimension/Weight	
Main Only	1046(W) X 635(H) X 87.3(D) / 38kg
With Stand	1046(W) X 702(H) X 299(D) / 38.9kg
With Stand and Speaker	1246(W) X 702(H) X 299(D) / 41.5kg
Miscellaneous	
Audio	Built-in amplifier and two speaker(7Watt/Typ.) systems (optional), Selectable fixed/variable audio output(optional)
External Control	Front OSD Key Control, Remote Control, RS232C Control
Power Consumption	
Input Power	AC 110 ~ 240V 50/60Hz
Power Consumption	350 Watt * ⫶ 400 Watt **
Connectivity	
TV Input	RF / CATV (PAL / SECAM)
SCART 1, 2 Input	SCART X 2Port (SCART1 (Half), SCART2 (Full))
Composite Input/Output	RCA X 2Port (AV Input, AV Output)
Component 1, 2 Input	RCA X 2Port (Y, Pb/Cb, Pr/Cr : 480i/p(60Hz) / 576i/p(50Hz) / 720p(50/60Hz) / 1080i(50/60Hz))
S-Video Input	Mini Din 4Pin X 1Port
PC Input	Mini D-Sub 15Pin X 1Port / HDTV Input 480p, 576p, 720P(50/60Hz),1080i(50/60Hz)
DVI Input	Mini D-Sub 29Pin X 1Port / HDTV Input 480p, 576p, 720P(50/60Hz),1080i(50/60Hz) HDCP(Factory option)
Audio In/Output	RCA X 5Port
Speaker Output	Cinch Type X 4Port(Stereo L/R), Head Phone Jack X 1Port(Optional)
External Control Port	Mini D-Sub 9Pin X 1Port

※ Notice : *Model : HP-4200B / **Model : HP-4250B

42" Plasma TV (2)	
Function and Specification	
Display Size	42-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 4 Modes (4:3 Mode / 16:9 X 3 Modes)
Pixel Format	852 X 480 Physical Pixel (SD)
Contrast Ratio	3000 : 1
Brightness	1000 cd/m^2
Resolution (RGB)	1280 X 1024 / 60Hz
PIP	Advanced multi-windows viewing PIP(picture in picture) with four selectable window positions on Video mode
Input Compatible	Multiple input compatible
Video	Advanced motion digital / Motion-Adaptive De-interlace process, Digital progressive line scaling.
Tuner Module	TV/CATV (PAL/SECAM)
Programming	Favorite channel programming, Time Set, Set the Sleep timer, TTX
HDTV Input	480i/p(60Hz), 576i/p(50Hz), 720P(50/60Hz),1080i(50/60Hz)
Color Temperature	Selectable 5 Mode (Cool 1, 2 / Normal / Warm 1, 2)
Dimension/Weight	
Main Only	1035(W) X 635(H) X 95.3(D) / 34kg
With Stand	1035(W) X 698.4(H) X 305(D) / 34.9kg
With Stand and Speaker	1235(W) X 698.4(H) X 305(D) / 37.5kg
Miscellaneous	
Audio	Built-in amplifier and two speaker(7Watt/Typ.) systems (optional), Selectable fixed/variable audio output(optional)
External Control	Front OSD Key Control, Remote Control, RS232C Control
Power Consumption	
Input Power	AC 110 ~ 240V 50/60Hz
Power Consumption	350 Watt
Connectivity	
TV Input	RF / CATV (PAL / SECAM)
SCART 1, 2 Input	SCART X 2Port (SCART1 (Half), SCART2 (Full))
Composite Input/Output	RCA X 2Port (AV Input, AV Output)
Component 1, 2 Input	RCA X 2Port (Y, Pb/Cb, Pr/Cr : 480i/p(60Hz) / 576i/p(50Hz) / 720p(50/60Hz) / 1080i(50/60Hz))
S-Video Input	Mini Din 4Pin X 1Port
PC Input	Mini D-Sub 15Pin X 1Port / HDTV Input 480p, 576p, 720P(50/60Hz),1080i(50/60Hz)
DVI Input	Mini D-Sub 29Pin X 1Port / HDTV Input 480p, 576p, 720P(50/60Hz),1080i(50/60Hz) HDCP(Factory option)
Audio In/Output	RCA X 5Port
Speaker Output	Cinch Type X 4Port(Stereo L/R), Head Phone Jack X 1Port(Optional)
External Control Port	Mini D-Sub 9Pin X 1Port

※ Notice : Model : HP-4210B / Model : HP-4220B

Specification

50" Plasma TV	
Function and Specification	
Display Size	50-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 4 Modes (4:3 Mode / 16:9 X 3 Modes)
Pixel Format	1366 X 768 Physical Pixel
Contrast Ratio	3000 : 1
Brightness	1000 cd/m^2
Resolution (RGB)	1280 X 1024 / 60Hz
PIP	Advanced multi-windows viewing PIP(picture in picture) with four selectable window positions on Video mode
Input Compatible	Multiple input compatible
Video	Advanced motion digital / Motion-Adaptive De-interlace process, Digital progressive line scaling.
Tuner Module	TV/CATV (PAL/SECAM)
Programming	Favorite channel programming, Time Set, Set the Sleep timer, TTX
HDTV Input	480i/p(60Hz), 576i/p(50Hz), 720P(50/60Hz),1080i(50/60Hz)
Color temperature	Selectable 5 Mode (Cool 1, 2 / Normal / Warm 1, 2)
Dimension/Weight	
Main Only	1216(W) X 732(H) X 87.3(D) / 50kg
With Stand	1216(W) X 798(H) X 299(D) / 55kg
With Stand and Speaker	1416(W) X 798(H) X 299(D) / 59kg
Miscellaneous	
Audio	Built-in amplifier and two speaker(7Watt/Typ.) systems (optional), Selectable fixed/variable audio output(optional)
External Control	Front OSD Key Control, Remote Control, RS232C Control
Power Consumption	
Input Power	AC 110 ~ 240V 50/60Hz
Power Consumption	450 Watt
Connectivity	
TV Input	RF / CATV (PAL / SECAM)
SCART 1, 2 Input	SCART X 2Port (SCART1 (Half), SCART2 (Full))
Composite Input/Output	RCA X 2Port (AV Input, AV Output)
Component 1, 2 Input	RCA X 2Port (Y, Pb/Cb, Pr/Cr : 480i/p(60Hz) / 576i/p(50Hz) / 720p(50/60Hz) / 1080i(50/60Hz))
S-Video Input	Mini Din 4Pin X 1Port
PC Input	Mini D-Sub 15Pin X 1Port / HDTV Input 480p, 576p, 720P(50/60Hz),1080i(50/60Hz)
DVI Input	Mini D-Sub 29Pin X 1Port / HDTV Input 480p, 576p, 720P(50/60Hz),1080i(50/60Hz) HDCP(Factory option)
Audio In/Output	RCA X 5Port
Speaker Output	Cinch Type X 4Port (Stereo L/R), Head Phone Jack X 1Port (Optional)
External Control Port	Mini D-Sub 9Pin X 1Port

※ Notice : Model : HP-5000B

63" Plasma TV	
Function and Specification	
Display Size	63-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 4 Modes (4:3 Mode / 16:9 X 3 Modes)
Pixel Format	1366 X 768 Physical Pixel
Contrast Ratio	1000 : 1
Brightness	800 cd/m ^{2}
Resolution (RGB)	1280 X 1024 / 60Hz
PIP	Advanced multi-windows viewing PIP(picture in picture) with four selectable window positions on Video mode
Input Compatible	Multiple input compatible
Video	Advanced motion digital / Motion-Adaptive De-interlace process, Digital progressive line scaling.
Tuner Module	TV/CATV (PAL/SECAM)
Programming	Favorite channel programming, Time Set, Set the Sleep timer, TTX
HDTV Input	480i/p(60Hz), 576i/p(50Hz), 720P(50/60Hz),1080i(50/60Hz)
Color temperature	Selectable 5 Mode (Cool 1, 2 / Normal / Warm 1, 2)
Dimension/Weight	
Main Only	1503(W) X 893(H) X 92.6(D) / 79kg
With Stand	1503(W) X 927(H) X 400(D) / 98kg
With Stand and Speaker	1703(W) X 927(H) X 400(D) / 104.7kg
Miscellaneous	
Audio	Built-in amplifier and two speaker(7Watt/Typ.) systems (optional), Selectable fixed/variable audio output(optional)
External Control	Front OSD Key Control, Remote Control, RS232C Control
Power Consumption	
Input Power	AC 110 ~ 240V 50/60Hz
Power Consumption	580 Watt
Connectivity	
TV Input	RF / CATV (PAL / SECAM)
SCART 1, 2 Input	SCART X 2Port (SCART1 (Half), SCART2 (Full))
Composite Input/Output	RCA X 2Port (AV Input, AV Output)
Component 1, 2 Input	RCA X 2Port (Y, Pb/Cb, Pr/Cr : 480i/p(60Hz) / 576i/p(50Hz) / 720p(50/60Hz) / 1080i(50/60Hz))
S-Video Input	Mini Din 4Pin X 1Port
PC Input	Mini D-Sub 15Pin X 1Port / HDTV Input 480p, 576p, 720P(50/60Hz),1080i(50/60Hz)
DVI Input	Mini D-Sub 29Pin X 1Port / HDTV Input 480p, 576p, 720P(50/60Hz),1080i(50/60Hz) HDCP(Factory option)
Audio In/Output	RCA X 5Port
Speaker Output	Cinch Type X 4Port(Stereo L/R), Head Phone Jack X 1Port(Optional)
External Control Port	Mini D-Sub 9Pin X 1Port

※ Notice : Model : HP-6300B