ATTACHMENT E.

- USER'S MANUAL -

Flat Panel Display
(LCD & PDP)

OWNER'S INSTRUCTION

Before connecting, operating or adjusting this product, please read this instruction booklet carefully and completely.

Contents

Contents

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

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.

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 intended for use only with this TV. Use with other apparatus is capable of resulting in instability causing possible 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 TV. 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 TV AND IN THE OPERATING INSTRUCTIONS.

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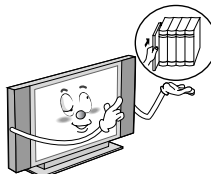
Keep the safety and operating instructions for future reference.

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

Important Safety Instructions

Always be careful when using your the TV. 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 aproduce 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.

15. When installing the LCD TV, do not block the appliance coupler with any structure. User can easily have access to the coupler to disconnect it from AC main power.

In case of the following cases, unplug the unit from the wall outlet and contact qualified service center.

- when power supply cord or plug is damaged.
- If liquid has been spilled on the unit or if alien objects have fallen into the unit.
- If the TV has been exposed to rain or water.
- If the TV does not operate normally by following the operating instructions.
- If the TV dropped or the cabinet has been damaged.
- When the TV exhibits a distinct change in performance.

Setting   ⚠ CAUTION

Follow all operating and use instructions.

Do not use the TV where contact with or immersion in water is a possibility, such as near bath tubs, sinks, washing machines, swimming pools, etc.
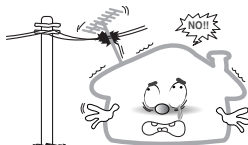
Avoid overhead power lines. An outside antenna system should not be placed in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful to keep from touching the power lines or circuits. Contact with such lines can be fatal.

Ground outdoor antennas. If an outside antenna or cable system is connected to the TV, 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.
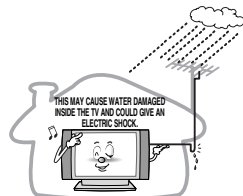
Bend antenna cable between inside and outside building to prevent rain from flowing in.
- This may cause water damaged inside the TV and could give an electric shock.

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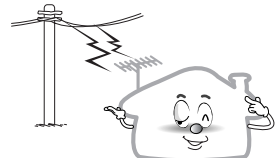
There should be enough distance between an outside antenna and power lines to keep the former from touching the latter even when the antenna falls.
- This may cause an electric shock.

Precaution

Setting

⚠ WARNING

When installing the TV on a table, be careful not to place it too close to the edge of the table.
- This may cause the TV to fall, causing serious injury to a child or adult, and serious damage to the TV.
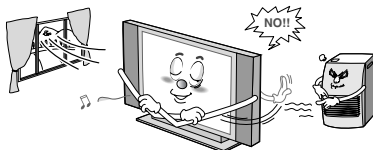
Provide ventilation for the TV. The unit is designed with slots in the cabinet for ventilation to protect it from overheating. Do not block these openings with any object, and do not place the TV on a bed, sofa, rug or other similar surface. Do not place it near a radiator or heat register. If you place the TV on a rack or bookcase, ensure that there is adequate ventilation and that you've followed the manufacturer's instructions for mounting.
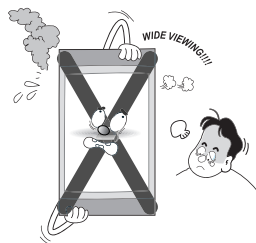
This TV is designed to be mounted horizontally (wide viewing). Any inquiry regarding its vertical position should be forwarded to the manufacture directly.

Power

⚠ **CAUTION**

AC100-240V

AC100-125V   AC200-240V   AC240 (SAA-TYPE)
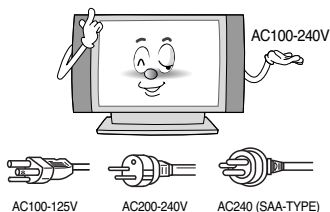
Use only the accessory cord designed for this product to prevent shock. The power supply voltage rating of this product is AC100-240V, the power cord attached conforms to the following power supply voltage. Use only the power cord designated by our dealer to ensure Safety and EMC. When it is used by other power supply voltage, power cable must be changed. Consult your product dealer.

NO!!

Unplug the TV from the wall outlet before cleaning. Use a damp cloth; do not use liquid or aerosol cleaners.

NO!!
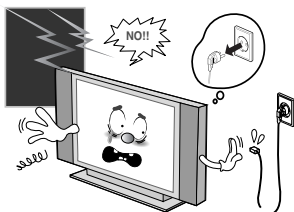
Unplug the TV from the wall outlet and disconnect the antenna or cable system during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-line surges.
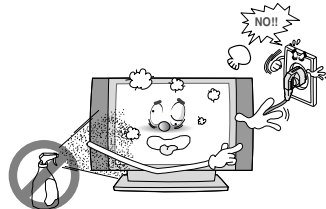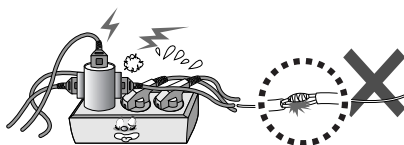
Protect the power cord. Power supply cords should be routed so that they won't be walked on or pinched by objects placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

Ground Terminal

AC100-240V
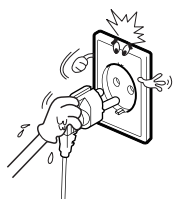
Do not touch the plug with wet hand.

- It can make an electric shock.
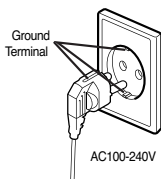
Use only a grounded or polarized outlet. For your safety, this TV is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still does not fit, contact your electrician to replace your outlet.
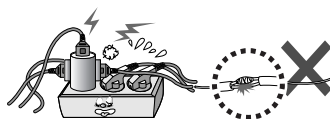
Protect the power cord. Power supply cords should be routed so that they won't be walked on or pinched by objects placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

Precaution
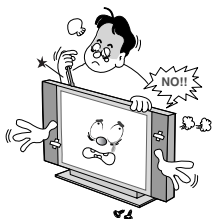
Upon completion of any service or repairs to this the TV, ask the service technician to perform safety checks to determine that the TV is in a safe operating condition.
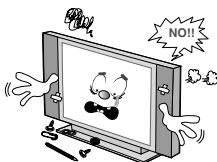
Do not place anything containing liquid on top of the TV.
- This may cause a fire or could give an electric shock.
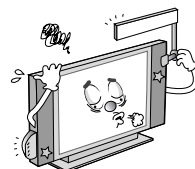
Never add any attachments and/or equipment without approval of the manufacturer. Such additions can increase the risk of fire, electric shock, or other personal injury.
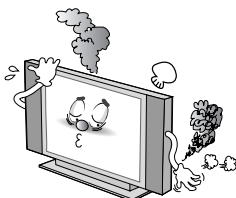
In case of smoke or strange smell from the TV, switch it off, unplug it from the wall outlet and contact your dealer or service center.
- This may cause a fire or could give an electric shock.

Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts. Never spill liquid of any kind on the TV.

Operation   ⚠ WARNING
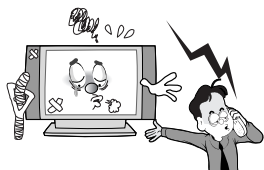
When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in additional damage to the unit.
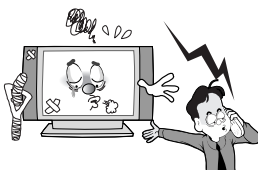
If you make adjustments yourself, adjust only those controls that are covered by the operating instructions. Adjusting other controls may result in damage and will often require extensive work by a qualified technician to restore the TV to normal.

Do not let children hang on or ride on the TV.

Operation

Do not use new battery with old one.
- This can lead a fire or electric shock caused by leakage liquid from abused batteries.
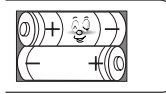
Put the batteries in right direction (+/-).
- Otherwise, it can make a fire, injury and pollution caused by bursting of batteries.
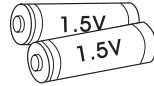
Only use the specified batteries.
- This make cause damaged the TV or could give an electric shock.
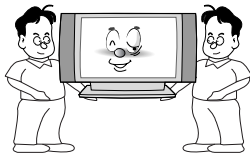
More than two people are necessary to move or take off the package due to the product's weightiness.
- Otherwise, it can cause personal injury.
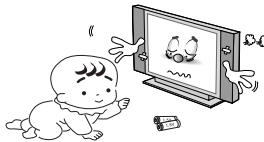
Keep the batteries out of reach of children when exchanged.
- Seek urgent medical advice if child swallows a battery.
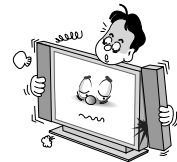
When moving the TV assembled with speakers do not carry holding the speakers.
- This may cause the TV to fall, causing serious injury to a child or adult, and serious damage to the TV.
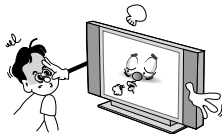
The distance between eyes and the screen should be about 5~7 times as long as diagonal length of the screen.
- If not, eyes will strain.

Viewing the Control Panel

OSD Button Position

Front Panel

❶ Input Source Select
❷ Up
   (See the box below)
❸ Down
   (See the box below)
❹ Stand By
❺ Remote Sensor
❻ Status/Power
   Indicator LED
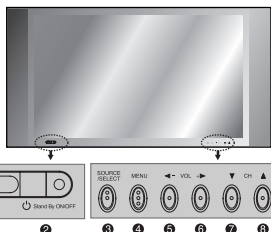
❶ Stand By
❷ Remote Sensor
❸ Source/EXIT
❹ Menu/SET
❺ VOL-
❻ VOL+
❼ CH-
❽ CH+

INPUT SELECT VOL/CH
❶ ❷ ❸ ❹ ❺ ❻

SOURCE SELECT MENU VOL CH
Stand By ON/OFF
❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

AV/TV ❶
+ ❷
VOL
- ❸
▲ ❹
CH
▼ ❺
MENU ❻
❼
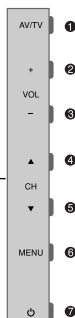
❶ TV/TV
❷ VOL-
❸ VOL+
❹ CH-
❺ CH+
❻ Menu
❼ Stand By

OSD Button Function

◉ **INPUT SELECT**
  Select the signal source from multiple input sources such as TV, ATV, DTV, VIDEO, VIDEO2, S-VIDEO/AV, COMPONENT1, COMPONENT2, PC, DVI and HDMI.

◉ **VOL/CH▲/▼** OR **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.
  To change the **CHANNEL** and **VOLUME**.

◉ ⏻ **Stand By ON/OFF**
  Turn the TV on and off.

◉ **Menu**
  Call the OSD Menu.

Accessories

Remote Control Handset   Power Cord   RF Cable (Optional)   Alkaline Batteries   Owner's Manual

Viewing the Connecting Panel

Types of inputoutput ports.
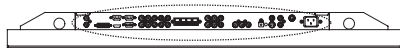
Type 1

Type 2

1. Type 1

❶	DVI & D-Sub (PC) Sound	❽	VIDEO1	⓯	AV/S-VIDEO Sound
❷	DVI (HDCP)	❾	VIDEO OUTPUT2	⓰	TV Antenna
❸	HDMI	❿	VIDEO2	⓱	AC Power
❹	RS-232C(TV)	⓫	SPDIF (Optical)	⓲	Speakers
❺	D-Sub (PC)	⓬	Line Out	⓳	RS-232(DTV)
❻	COMPONENT1, 2	⓭	AV Input		
❼	COMPONENT Sound1, 2	⓮	S-VIDEO Input		

Type 1 is all PDP models and some LCD models.

2. Type 2
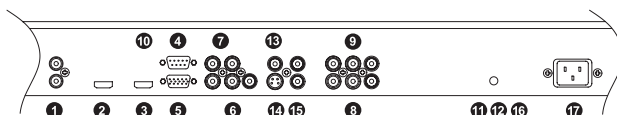
❶	D-Sub (PC) Sound	❼	COMPONENT Sound	⓭	AV Input
❷	HDMI 1	❽	VIDEO1	⓮	S-VIDEO Input
❸	HDMI 2	❾	VIDEO2	⓯	AV/S-VIDEO Sound
❹	RS-232C(TV)	❿		⓰	
❺	D-Sub (PC)	⓫		⓱	AC Power
❻	COMPONENT	⓬	Line Out		

Type 2 is applied for only some LCD models.

Viewing the Connecting Panel
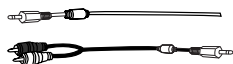
DVI, D-Sub (PC) Sound Cable
Connect (1) port.

DVI Cable
Connect (2) port.

HDMI Cable
Connect (3) port.

RS-232C Cable
Connect (4) port.

D-Sub (PC) Cable
Connect (5) port.

Component Cable
Connect (6) port.

Component & S-Video &
AV Sound Cable
Connect (7) and (15) port.

Line Out Cable
Connect (12) port.

S-Video Cable
Connect (14) port.

AV Cable
Connect (13) port.

RF Cable
Connect (16) port.

AC Power Cord
Connect (17) port.

Connectors	
Audio Input	RCA Pin Jack
Video Input	RCA Pin Jack
Video Output	RCA Pin Jack
S-VIDEO Input	Mini Din 4Pin
Component Video Input	RCA Pin Jack
Analog RGB Input	Mini D-Sub 15Pin
HDMI Input	HDMI Cable
Digital Video Input	DVI-D 24Pin

RS-232C Configurations

3-Wire (Non-standard)

	PC	TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	4	DTR
DSR	6	6	DSR
RTS	7	7	RTS
CTS	8	8	CTS

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

Viewing the Remote Control

● Button Description
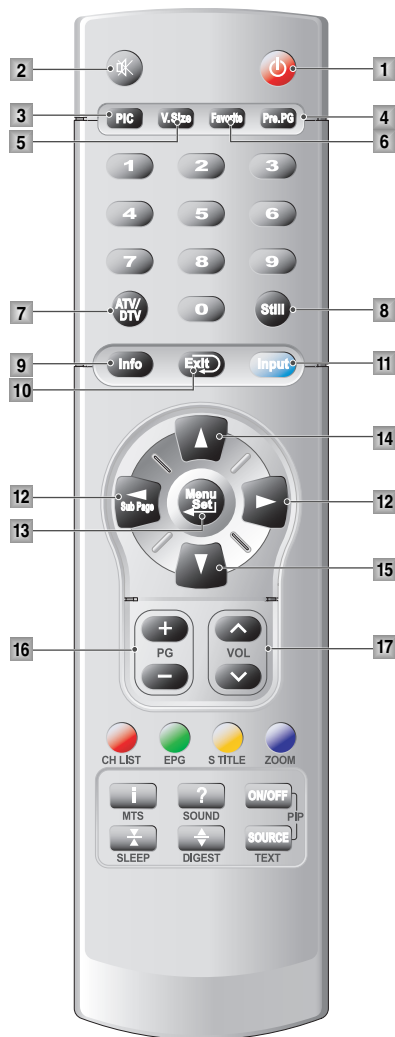
1 POWER
Turn the PDP on and off.

2 MUTE
Temporarily cut the sound and restore it.

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

4 Pre.PG
Turn to the previous programme or exit OSD.

5 V.Size
Choose the Aspect Ratio.
16:9 ➜ 4:3 ➜ Panorama ➜ Zoom1 ➜ Zoom2

6 Favorite (Favourite)
Tune to your next favorite programme.

7 ATV/DTV
Switch the Input Source Analogue TV and
Digital TV. (Analogue TV ↔ Digital TV)

8 STILL
Temporarily freeze the screen and restore it.

9 INFO
Display the current information.

10 Exit
Return to the previous OSD menu.

11 INPUT
Display the input source list.

12 Sub PG
It is for channel change as analog mode in
sub-screen on PIP condition.
Sub-PG change: PG (+/-) after pressing
Sub PG Button.
MAIN-PG change after Sub-PG change:
PG (+/-) after pressing Exit Button.

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

14 Move +

15 Move –

16 PG + / **PG –**
Move to the upper or lower channel.

17 VOL ∧ / VOL ∨
Increase or decrease the volume level.

Viewing the Remote Control

1 CH LIST (HDTV)
Set & display ALL DTV channel list as the default channel list.

2 EPG (Electronic Program Guide) (HDTV)
Activate Electronic Program Guide information broadcast by the DTV networks.

3 SubTitle (HDTV)
Enable / disable program subtitles.

4 ZOOM (HDTV)
Zoom out 4:3 pillar box black bars.

5 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.

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

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

8 TEXT/SOURCE
Teletext on/off.
TEXT➔ MIX ➔ Twin ➔ Normal (TTX off).
Change the PIP window source (PIP Mode).

9 DIGEST
Display 16 TV programs at the same time.

10 SLEEP
Set the preset time interval for automatic turn - off.
OFF (Not work) ➔ 10 min. ➔ 20 ➔ 30 ➔ 60 ➔ 90
➔120 ➔ 150 ➔ 180

ON/OFF 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.

1. Type1

PIP \ Main	ANALOGUE TV	DIGITAL TV	VIDEO1	VIDEO2	S-VIDEO/AV	COMPONENT1	COMPONENT2	PC	DVI	HDMI
ANALOGUE TV	–	✓	✓	✓	✓	✓	✓	✓	✓	✓
DIGITAL TV	✓	–	✓	✓	✓	✓	–	✓	✓	✓
VIDEO1	✓	✓	–	✓	✓	✓	✓	✓	✓	✓
VIDEO2	✓	✓	✓	–	✓	✓	✓	✓	✓	✓
S-VIDEO/AV	✓	✓	✓	✓	–	✓	✓	✓	✓	✓
COMPONENT1	✓	✓	✓	✓	✓	–	✓	✓	✓	✓
COMPONENT2	✓	–	✓	✓	✓	✓	–	✓	✓	✓
PC	✓	✓	–	–	✓	✓	✓	–	–	–
DVI	✓	✓	–	–	✓	✓	✓	–	–	–
HDMI	✓	✓	–	–	✓	✓	✓	–	–	–

2. Type2

PIP \ Main	ANALOGUE TV	DIGITAL TV	VIDEO1	VIDEO2	S-VIDEO/AV	COMPONENT	PC	HDMI1	HDMI2
ANALOGUE TV	–	–	–	–	–	–	–	✓	✓
DIGITAL TV	–	–	–	–	–	–	–	✓	✓
VIDEO1	–	–	–	–	–	–	–	✓	✓
VIDEO2	–	–	–	–	–	–	–	✓	✓
S-VIDEO/AV	–	–	–	–	–	–	–	✓	✓
COMPONENT	–	–	–	–	–	–	–	✓	✓
PC	–	–	–	–	–	–	–	–	–
HDMI1	✓	✓	✓	✓	✓	✓	–	–	–
HDMI2	✓	✓	✓	✓	✓	✓	–	–	–

Viewing the Remote Control

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.
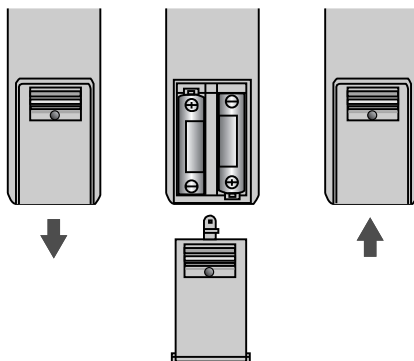
Reception Range of Remote Control

30° 30°
Left   Right
5m (Front)

REGAL

Upper
20°

20°
Lower
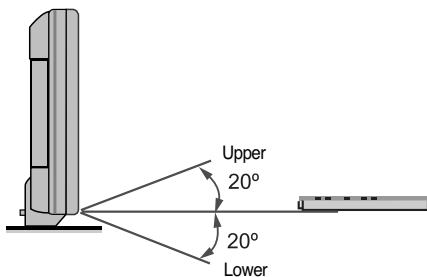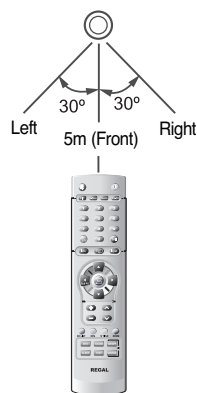
Table Stand Installation (Optional)

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

4 inch (10.16cm)

4 inch (10.16cm)

4 inch (10.16cm)

2.36 inch (5.99cm)

1.18 inch (Min) (3cm)
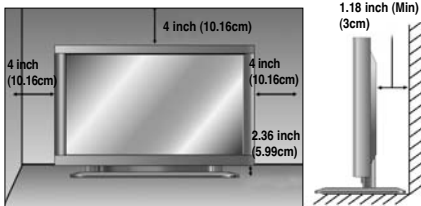
• Table stand mount minimum allowable clearances for adequate ventilation.

Wall Mount Installation (Optional)

< The TV can be installed on the wall as the picture above. >

4 inch (10.16cm)

4 inch (10.16cm)

4 inch (10.16cm)

2.36 inch (5.99cm)

1.18 inch (Min) (3cm)
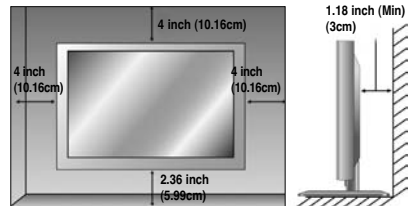
• Install this TV a only in a location where adequate ventilation is available.

◉ Installation

Table-Stand User's Guide

1. Lay the set down.
2. Fit the set with the stand.
4. ⓐ -Screw Up (4 x 12)
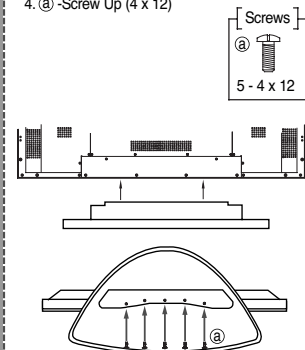
Screws
ⓐ
5 - 4 x 12

Table-Stand User's Guide

1. Insert Stand Bars into the Stand Base as shown below.
2. ⓐ -Screw Up (8 x 25)

Screws
ⓐ
2 - 8 x 25

Stand Bar

Stand Base

ⓐ

ⓐ

Stand Base ⓐ

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

Screws
ⓑ
2 - 4 x 30

Stand Hole

ⓑ

ⓑ

Insert

Insert

Table-Stand
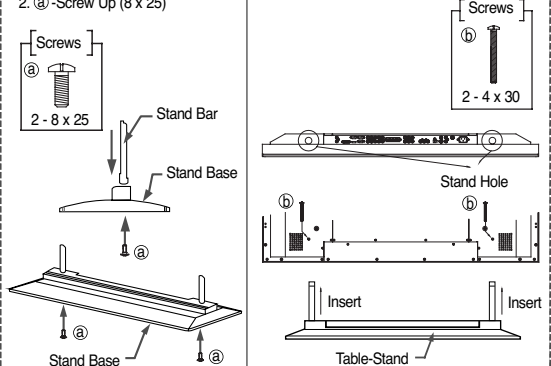
Connecting the TV Cable

1. Type 1
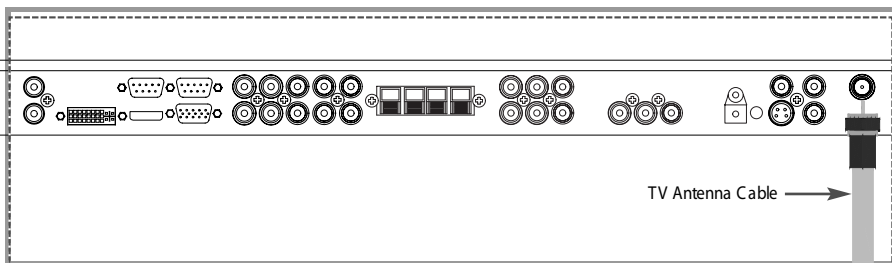
TV Antenna Cable →

2. Type 2
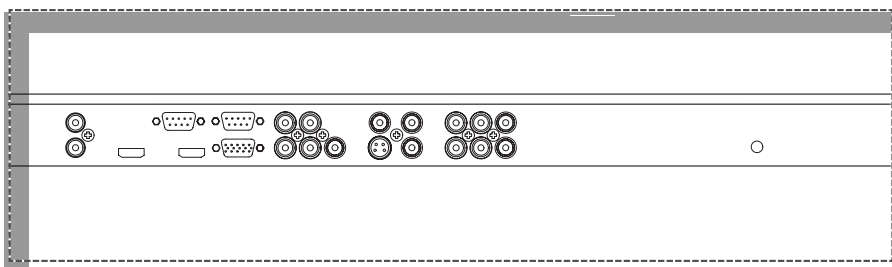
Connection the TV Cable

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).

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 TV.
When connecting the TV 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 TV.
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).

1. Type 1

AV3 Input
SOUND of S-VIDEO/AV
AV Output
AV1 Input
AV2 Input
S-VIDEO

2. Type 2

AV3 Input
AV2 Input
S-VIDEO
SOUND of S-VIDEO/AV
AV1 Input
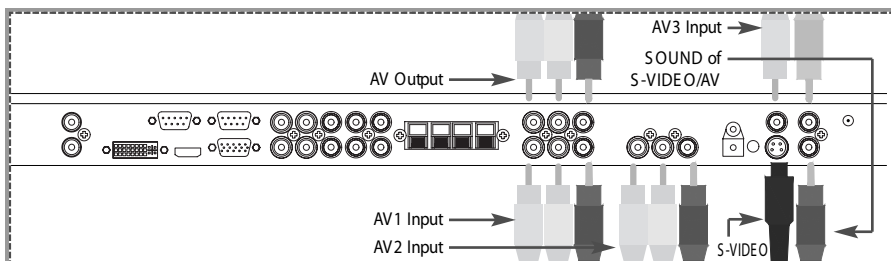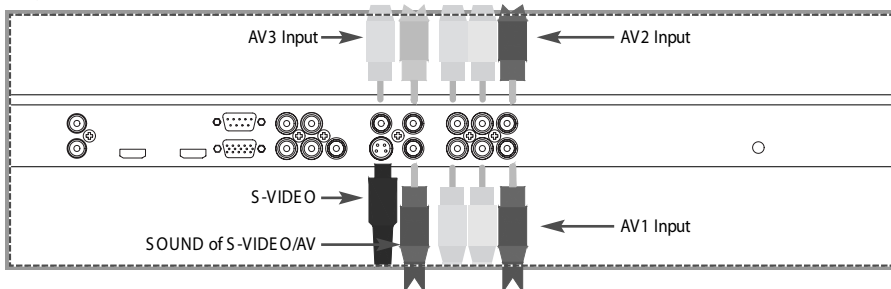
Connecting the VCR

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

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

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 TV.
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 TV.
Connect the HDMI cables to the DVD player·s and to the HDMI cables on the TV.

1. Type 1

COMPONENT1 & SOUND

HDMI

COMPONENT2 & SOUND

2. Type 2

COMPONENT SOUND

HDMI1

HDMI2
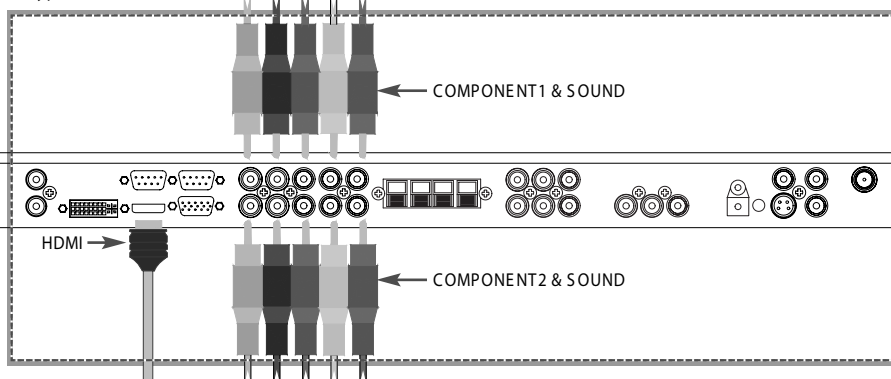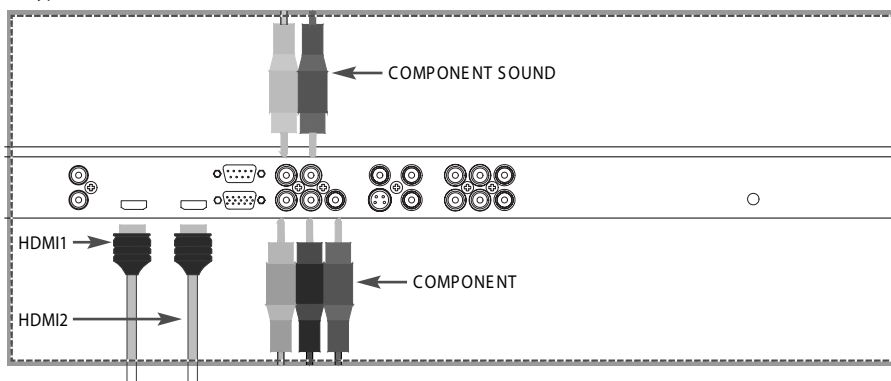
COMPONENT

How to Use

1 Turn on the DVD player.

2 Press INPUT button on the remote control of the TV and select HDMI, COMPONENT1 or COMPONENT2.

◉ **Component Input Ports**

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

Notice

Supported Signals					
	COMPONENT1	COMPONENT2	PC	DVI	HDMI
480i/60Hz	✓	✓	–	–	–
480p/60Hz	✓	✓	✓	✓	✓
576i/50Hz	✓	✓	–	–	–
576p/50Hz	✓	✓	✓	✓	✓
720p/50Hz	✓	✓	✓	✓	✓
720p/60Hz	✓	✓	✓	✓	✓
1080i/50Hz	✓	✓	✓	✓	✓
1080i/60Hz	✓	✓	✓	✓	✓

Component ports of the TV	Y	P_B	P_R

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

• Normal DVD source is based on 480i, which should be through normal Y Pb Pr of component signal.
It may occur screen noise, blank screen in case of using HDMI Cable unauthorized by ATC.
It may easily occur as specially HD signal (720p or 1080i) input. Suggest HDMI Cable only authorized by ATC.

Connecting the Set Top Box

How to Connect

Connect set top box video inputs to AV, COMPONENT, HDMI, PC or DVI jacks on the TV.
Audio inputs to Audio sockets beside the L (White) and R (Red) audio jacks which you connect video inputs.

1. Type 1

2. Type 2

How to Use

1 Turn on the set top box.

2 Press INPUT button on the remote control of the TV and select COMPONENT1, COMPONENT2, HDMI, PC or DVI.

Supported Signals					
	COMPONENT1	COMPONENT2	PC	DVI	HDMI
480i/60Hz	✓	✓	–	–	–
480p/60Hz	✓	✓	✓	✓	✓
576i/50Hz	✓	✓	–	–	–
576p/50Hz	✓	✓	✓	✓	✓
720p/50Hz	✓	✓	✓	✓	✓
720p/60Hz	✓	✓	✓	✓	✓
1080i/50Hz	✓	✓	✓	✓	✓
1080i/60Hz	✓	✓	✓	✓	✓

How to Connect

With AV
Connect a AV cable to the AV jacks of the STB (set top box) and the TV.

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

With HDMI
Connect a HDMI cable to the HDMI jacks of the STB and the TV.

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

1. Type 1-1

D-Sub 15pin (VGA) from PC
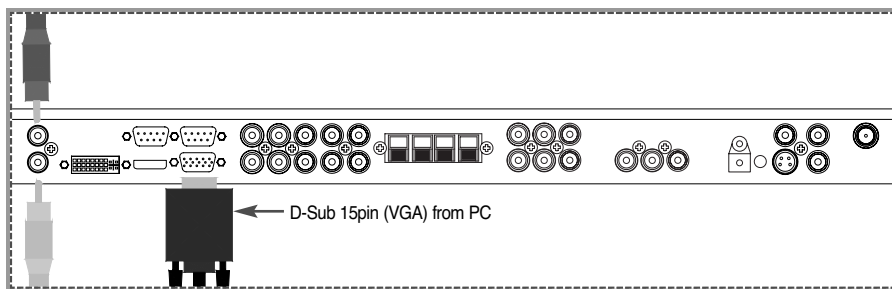
Connecting the PC (D-Sub & DVI)

1. Type 1-1

DVI from PC

2. Type 2

D-Sub 15pin (VGA) from PC
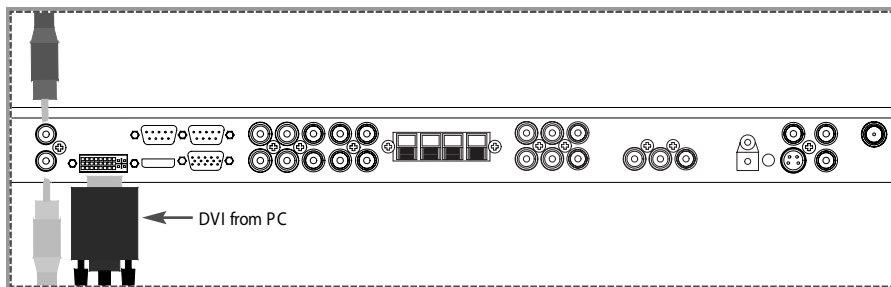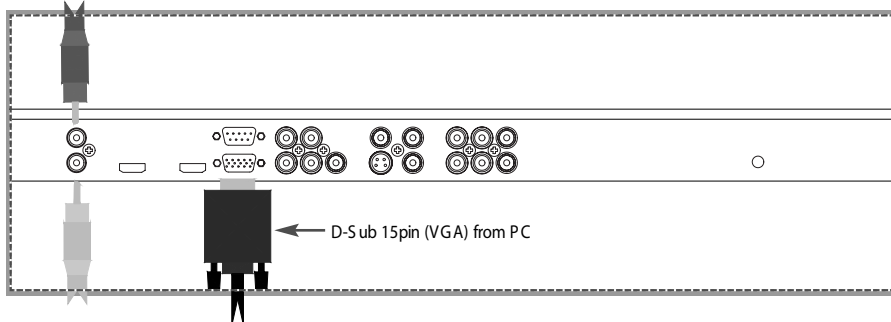
◗ Connecting a PC to the TV

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

◗ Pin Configuration

15pin signal cable (based on protruded pin).

◗ To watch the PC screen

1 Turn on the TV and press INPUT button to select the PC mode.

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

3 Adjust the PC screen in Position menu. (See 38 page.)

Notes

DVI Port support DVI-D. (*DVI-D receive only digital signal)

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)

Displayable TV Specification

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
720 x 400	31.469 37.927	70.08 85.03
640 x 480	31.469 35.000 37.861 37.500 43.269 45.913 53.011	59.94 66.66 72.80 75.00 85.00 90.03 100.04
800 x 600	35.156 37.879 48.077 46.875 53.674 56.000 64.016	56.25 60.31 72.18 75.00 85.06 90.00 100.00
832 x 624	49.725	74.55
1024 x 768	48.363 56.476 60.023 68.677	60.00 70.06 75.029 84.997
1152 x 864	67.50	75.00
1280 x 1024	64.00	60.00

Notes

- **Synchronization input form: separate**
- The TV 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 TV operates abnormally if a non-standard video format is selected.
- 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 TV.
- The TV may operate abnormally if a non-standard video signal inputs.
- "**Not Support**" message box will appear when an over-spec video signal is inputted.
  Change the video settings of PC when the message is displayed.

Basic Operation

Turning the TV ON/OFF

Press the Power button on the remote control. The TV 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.

1. Type 1

INPUT
1. ANALOGUE TV
2. DIGITAL TV
3. VIDEO1
4. VIDEO2
5. S-VIDEO/AV
6. COMPONENT1
7. COMPONENT2
8. PC RGB
9. DVI
0. HDMI

Source list menu

2. Type 2

INPUT
1. VIDEO1
2. VIDEO2
3. S-VIDEO/AV
4. COMPONENT
5. PC RGB
6. HDMI1
7. HDMI2

Source list menu

Select the source to watch with ▯ / ▯ 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

Picture		
Mode	◄ **Custom**	►
Temperature	◄ **Normal**	►	**A**
Color Enhancer	◄ **Off**	►	**B**
Video NR	◄ **On**	►
Aspect Ratio	◄ **16:9**	►	◄► **part**
Black Enhancer	◄ **Off**	►
Move	Enter	Exit

1
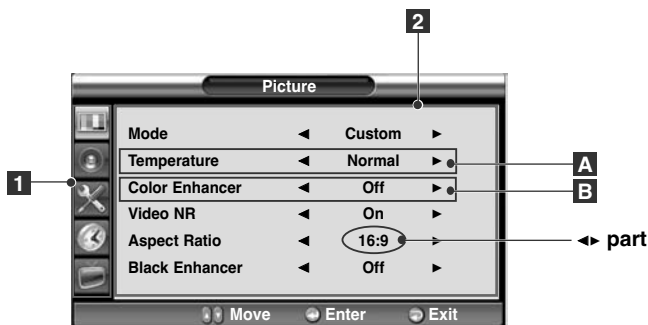
1 Main Menu

Press Menu/Set button on the remote control to enter the main OSD menu.
First, select main menu item you need with ▲ / ▼ button.
To select a main menu items, just press 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 ▲ / ▼ button on the remote control and press 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 Menu/Set button to set a ◄► part, and adjust it with ◄ / ► button.

Setting the Channel

DTV Preferred Audio Type (I-II)

You can select desired audio signal from broadcaster.

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

2 Select the Channel main menu.

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

4 Select the Digital TV Setup and press Menu/Set button to enter the sub menu.

5 Select **Preferred Audio Type**.
Then the cursor moves into the ◄ / ► parts.

6 Select Dolby Digital or MPEG with ◄ / ► button and press Exit button.

Channel		
Digital TV Setup		
Analogue Reception	◄ Enabled	►
Analogue TV Setup		
◦◦ Move	◉ Enter	◉ Exit

Digital TV Setup		
Preferred Audio Type	◄ MPEG	►
Channel Favourites		
Manual Channel Scan		
Test Reception		
Auto Scan		
Preferred audio type when program contains MPEG and Dolby Digital audio.		

DTV Channel Favourites

You can assign any scanned channel to TV Favourite List / Radio Favourite List.

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

2 Select the Channel main menu.

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

4 Select Digital TV Setup and press Menu/Set button to enter the sub menu.

5 Select **Channel Favourites** with ⬆ / ⬇ button and press Menu/Set button.

6 If you want add or exclude individual channel, press Menu/Set button to select to individual channel list.

7 In this sub menu, press INFO button for display selected channel signal status.
For quit signal status, press INFO button again.
It is useful for duplicate channel presence.

8 Press Exit button to return.

Channel		
Digital TV Setup		
Analogue Reception	◄ Enabled ►	
Analogue TV Setup		

◦◦ Move ● Enter ● Exit

Digital TV Setup		
Preferred Audio Type	◄ MPEG ►	
Channel Favourites		
Manual Channel Scan		
Test Reception		
Auto Scan		

Channel Favourites		
⇢ Digital TV	9	NINE DIGITAL
Digital Radio	90	NINE HD
	99	NINE GUIDE

○ : +all   ○ : -all
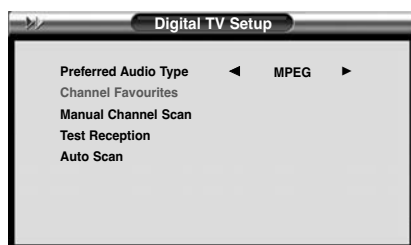
Setting the Channel

Storing Channels Manually (DTV)

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

2. Select the Channel main menu with ▲ / ▼ button on the remote control.

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

4. Select the Digital TV Setup and press Menu/Set button to enter the sub menu.

5. Select **Manual Channel Scan** with ▲ / ▼ button and press Menu/Set button

6. Select Physical Channel and press Menu/Set button to display physical channel table.

7. Select physical channel number with ▲ / ▼ button and press Menu/Set button.

8. Press Exit button to return.

9. Select Start Manual Scan with ▲ / ▼ button and Press Menu/Set button. Also the progress bar will display scanning progress.

Channel

Digital TV Setup
Analogue Reception ◄ Enabled ►
Analogue TV Setup

◊◊ Move ● Enter ● Exit

Digital TV Setup

Preferred Audio Type ◄ MPEG ►
Channel Favourites
Manual Channel Scan
Test Reception
Auto Scan

Manual Channel Scan

Physical Channel ✓ UHF 34 571.5MHz
Start Manual Scan

0%

Manual Channel Scan

Physical Channel UHF 34 571.5MHz
Start Manual Scan

0%

Press Menu/Enter
to begin scanning

DTV Test Reception

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

2 Select the Channel main menu with ▲ / ▼ button on the remote control.

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

4 Select the Digital TV Setup and press Menu/Set button to enter the sub menu.

5 Select **Test Reception** with ▲ / ▼ button and press Menu/Set button. For change physical channel, Press OK or RIGHT again to display physical channel list.

6 Press ▲ / ▼ button to select the physical channel you want to check up the signal strength.

7 Press Menu/Set button to change physical channel.

8 Press Exit button to return. You can check up and review the signal strength, quality and signal related information.

Channel
Digital TV Setup
Analogue Reception ◄ Enabled ►
Analogue TV Setup
◆◆ Move ⊖ Enter ⊖ Exit

Digital TV Setup
Preferred Audio Type ◄ Dolby Digital ►
Channel Favourites
Manual Channel Scan
Test Reception
Auto Scan

Test Reception
⋯ Physical Channel ✓ UHF 34 571.5MHz
COFDM Parameters No Valid Signal
Signal Strenght [ ]
Signal Quality [ ]
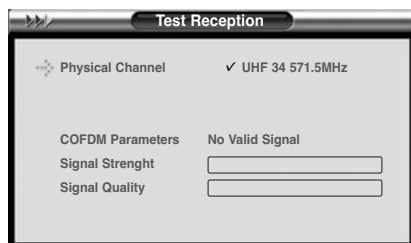
Setting the Channel

Storting Channels Automatically (DTV)

From here, the TV will perform automatic scan the whole channel frequency for available digital channels.

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

2 Select the Channel main menu.

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

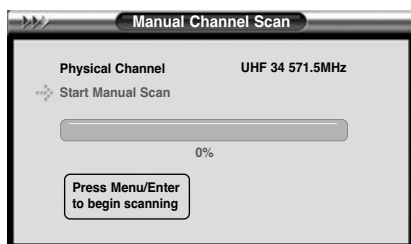**4** Select the Digital TV Setup and press Menu/Set button to enter the sub menu.

5 Select **Auto Scan** with ⬆ / ⬇ buttons and press Menu/Set button on the remote control. Then there will appear the Auto Scan sub menu.

6 Press Menu/Set to Start Automatic Scan procedure.

Channel		
Digital TV Setup		
Analogue Reception	◄ Enabled ►	
Analogue TV Setup		
◉◉ Move	◉ Enter	◉ Exit

Digital TV Setup

Preferred Audio Type ◄ MPEG ►
Channel Favourites
Manual Channel Scan
Test Reception
Auto Scan

Auto Scan

Physical Channel VHF 6 177.5MHz
Start Manual Scan 0

0%

Press Menu/Enter to
begin auto scanning
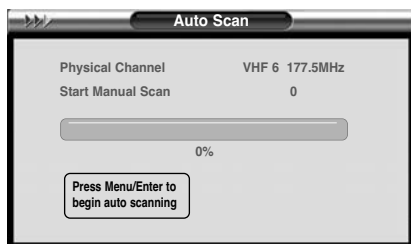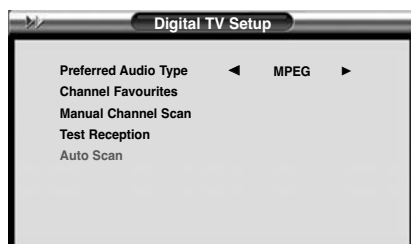
Storing Channels Automatically (ATV)

You can now search for and store the TV channels in two different ways: using Auto Scan or Manual Scan.
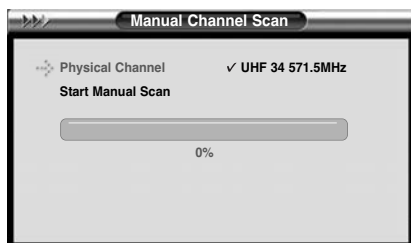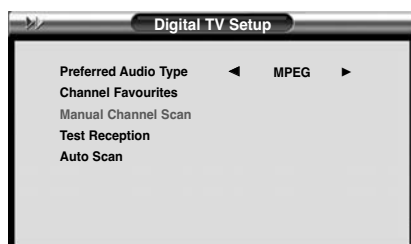
1 Press Menu/Set button to display the main OSD menu.

2 Select the Channel main menu.

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

4 Select the Analogue TV Setup and press Menu/Set button to enter the sub menu.

5 Select **Auto Scan** with ⬆ / ⬇ buttons and press Menu/Set button on the remote control. Then there will appear the Auto Scan sub menu.

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

The supported countries are shown as below.

Australia	Spain
Belgium	Switzerland
Czech Rep.	United Kingdom
Denmark	Others
Finland	
France	
Germany	
Hungary	
Ireland	
Italy	
Netherlands	
Norway	
Poland	
Russia	

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

Channel	
Digital TV Setup	
Analogue Reception	◄ Enabled ►
Analogue TV Setup	

Move   Enter   Exit

Analogue TV Setup
Auto Scan
Manual Scan
Fine Tune
Edit

Move   Enter   Exit

Auto Scan
Australia
Belgium
Czech Rep.
Denmark
Finland
France

Move   Enter   Exit

Auto Scan	
Country	Australia
Channel	– – –
Frequency	101.56MHz
Program	0
Station	– – – – – – – –
	▪ 7

Exit

Notes

You can select Ananlogue TV Setup in Analogue Reception menu enabled.
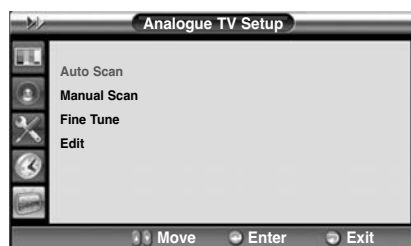
Setting the Channel

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 Rep.
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	Russia
Portugal	Spain	Ukraine	Hungary
Armenian	Hungary	Rumania	Poland
Azerbaijan	Hungary	Slovakian	Others
Belarus	Hungary	Luxembourg	Netherlands
Bulgaria	Hungary	Monaco	France

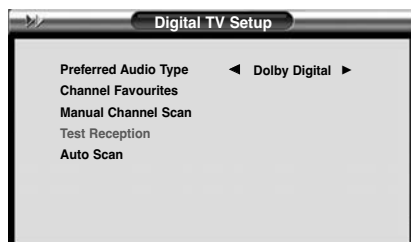## Storing Channels Manually (ATV)

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

2 Select the Channel main menu with ▲ / ▼ button on the remote control.

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

4 Select the Analogue TV Setup and press Menu/Set button to enter the sub menu.

5 Select **Manual Scan** with ▲ / ▼ button and press Menu/Set button

6 Then you can see the tuning bar. TV will scan from channels to the current channel.

Channel

Digital TV Setup
Analogue Reception   ◄   Enabled   ►
Analogue TV Setup

⠿⠿ Move   ⊜ Enter   ⊜ Exit

Analogue TV Setup

Auto Scan
Manual Scan
Fine Tune
Edit

⠿⠿ Move   ⊜ Enter   ⊜ Exit

Manual Scan

Country   Australia
Channel   C04
Frequency   062.25MHz
Station   ABC

◄◄ Scan   ⊜ Exit
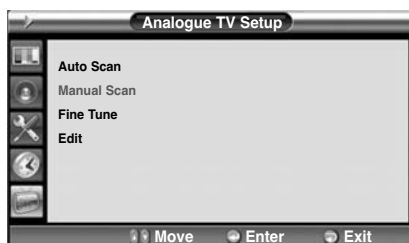
Notes

Only scanned programmes can be stored as Favorite programmes.

35

Setting the Channel

ATV Fine Tuning the Channel Reception

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

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

2 Select the Channel main menu.

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

4 Select the Analogue TV Setup and press Menu/Set button to enter the sub menu.

5 Select **Fine Tune** with ⬆ / ⬇ button and press Menu/Set button. Then you can see the adjust bar.

6 Adjust the Fine Tune with ⬆ / ⬇ button.

Channel

Digital TV Setup
Analogue Reception   ◄   Enabled   ►
Analogue TV Setup

◦◦ Move   ◉ Enter   ◉ Exit

Analogue TV Setup

Auto Scan
Manual Scan
Fine Tune
Edit

◦◦ Move   ◉ Enter   ◉ Exit

Fine Tune

Program   1
Fine Tune   0

◦◦ Adjust   ◉ Save   ◉ Exit
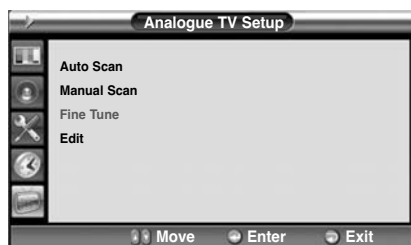
ATV Editing the Channels

⃝ 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 TV 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 Channel 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 ▲ / ▼ button on the remote control.
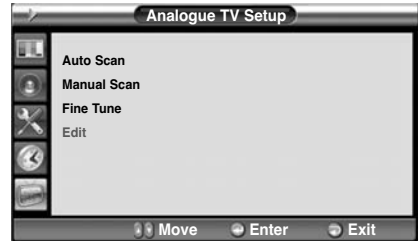
⃝ To Edit the List

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 ◄ / ► button. Press Menu/Set button on the field to edit. Adjust the field with ▲ / ▼ button. To return, press Exit button.

Analogue TV Setup

Auto Scan
Manual Scan
Fine Tune
Edit

◆◆ Move   ● Enter   ● Exit

Edit

Pr	Name	Ch	Picture	Sound	Skip	Fav
1	ABC	C04	PAL	B/G	Yes	No
2	SEVEN	C06	PAL	B/G	Yes	No
3	NINE	C08	PAL	B/G	Yes	No
4	TEN	C10	PAL	B/G	Yes	No
5	SBS	C28	PAL	B/G	Yes	No
6	TVS	C31	PAL	B/G	Yes	No
7	--------	---	Auto	B/G	Yes	No
8	--------	---	Auto	B/G	Yes	No
9	--------	---	Auto	B/G	Yes	No
10	--------	---	Auto	B/G	Yes	No

● Erase   ● Skip   ● Insert   ● Replace

RED (ERASE)
Erase the selected programme from the list.

GREEN(SKIP)
Make the selected programme will be skipped.

YELLOW(INSERT)
Insert new list item.

BLUE(REPLACE)
Replace the selected programme with the current programmes that you're watching.

Notes

Only scanned channels can be set as favorite channels.

Setting the Channel

● Digest Function

With the Digest function, you can select a TV programme watching 16 programme at once. This function works in TV mode only.

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.

16 side windows are renewed clockwise. Next memorized programme appear in the renewed windows.

To choose the programme, press the channel number with the numeric buttons on the remote control.
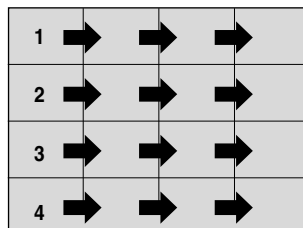
Teletext On/Mix/Off

You can switch on and off teletext function by pressing **TEXT** button on remote control.
Teletext function is available only with TV and S-video/AV input port VIDEO1, VIDEO2 and other port are not support teletext function.

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 colored 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 TV 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 Exit 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 require more settings.
> It has an under menu: See next page.**

> **Tint feature is enabled while input signal
> is NTSC mode.**

Notes

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

Picture		
Mode	◄ Custom	►
Temperature	◄ Normal	►
Color Enhancer	◄ Off	►
Video NR	◄ On	►
Aspect Ratio	◄ 16:9	►
Black Enhancer	◄ Off	►

Move   Enter   Exit

Mode
Standard
Vivid
Mild
User

Move   Select   Exit

User		
Contrast	◄ ███ ►	50
Brightness	◄ █ ►	50
Color	◄ █ ►	50
Sharpness	◄ █ ►	50
Tint	◄ █ ►	0
Recall		

Move   Adjust   Exit

○ 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 ⌃ / ⌄ button.

2 Press Menu/Set button.

3 Adjust the item with ◄ / ► 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)

User		
Contrast	◄ ███ ►	50
Brightness	◄ █ ►	50
Color	◄ █ ►	50
Sharpness	◄ █ ►	50
Tint	◄ █ ►	0
Recall		

Move   Adjust   Exit

○ **Contrast**

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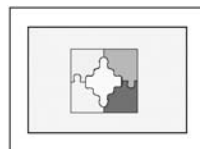
Distinct ◄   ► Vague

○ **Brightness**

Adjust brightness of the screen.
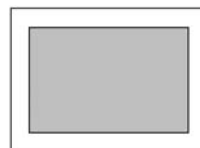
Dark ◄   ► Bright

○ **Color**

Adjust deep and light colour of the screen.

Decrease ◄   ► Increase

○ **Sharpness**

Adjust vividness of the screen.

Less sharp ◄   ► Sharp

○ **Tint**

Adjust the balance between green and yellow.

Green color is deeper ◄   ► Red color is deeper

Setting the Picture

Changing the Colour Temperature

Your TV 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 under menu appear.

5 Select the Temperature mode with ▲ / ▼ button and press Menu/Set button.

6 Press Exit button to return.

◉ **Cool 1, 2**
Screen seems cool: Strong Blue.

◉ **Normal**
Normal: Factory default.

◉ **Warm 1, 2**
Screen seems warm: Strong Red.

Picture			
Mode	◄	Custom	►
Temperature	◄	Normal	►
Color Enhancer	◄	Off	►
Video NR	◄	On	►
Aspect Ratio	◄	16:9	►
Black Enhancer	◄	Off	►
Move　　Enter　　Exit			

Temperature
Cool2
Cool1
Normal
Warm1
Warm2
Move　　Select　　Exit
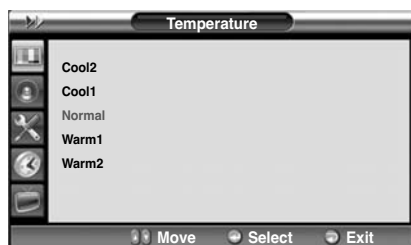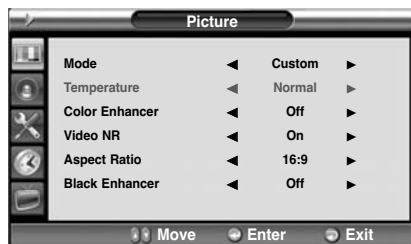
Changing the Color Enhancer

This function will enhance the color level. Green, Blue and Skin color on the picture will enhance, while others areas remain unchanged.

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 **Color Enhancer**. Then the cursor moves into the ◄► parts.

5 Turn on or off Film mode function with [Sub PG] / ► button and press Exit button.

Picture			
Mode	◄	Custom	►
Temperature	◄	Normal	►
Color Enhancer	◄	Off	►
Video NR	◄	On	►
Aspect Ratio	◄	16:9	►
Black Enhancer	◄	Off	►
Move　　Adjust　　Exit			
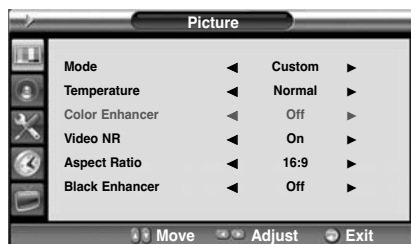
Video NR (Noise Reduction)

This function automatically filters out and reduces the image noise and improves picture quality where receiving weak signals.
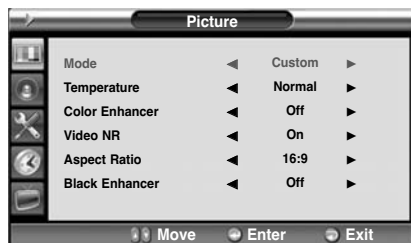
1. Press Menu/Set button to display the main OSD menu.

2. Select the Picture main menu item.

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

4. Select **Video NR**. Then the cursor moves into the ◄► parts.

5. Turn on or off Video NR function with / button and press Exit button.

Picture		
Mode	◄ Custom	►
Temperature	◄ Normal	►
Color Enhancer	◄ Off	►
Video NR	◄ On	►
Aspect Ratio	◄ 16:9	►
Black Enhancer	◄ Off	►

Move Adjust Exit
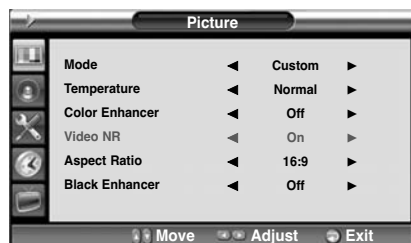
Changing the Aspect Ratio

Your TV has four Aspect Ratio: **16:9**, **4:3**, **Panorama**, **Zoom1**, **Zoom2**. (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 **Aspect Ratio** and press Menu/Set button to enter the sub menu. Then the Aspect Ratio sub menu appear.

5. Select the Aspect Ratio you want and press Menu/Set button.

Picture		
Mode	◄ Custom	►
Temperature	◄ Normal	►
Color Enhancer	◄ Off	►
Video NR	◄ On	►
Aspect Ratio	◄ 16:9	►
Black Enhancer	◄ Off	►

Move Enter Exit

Aspect Ratio
16:9
4:3
Panorama
Zoom1
Zoom2

Move Enter Exit

Notes

- Panorama Aspect Ratio is not available for COMPONENT1-2, PC RGB, DVI, HDMI input source.
- PC RGB, DVI, HDMI input source use 4:3 or 16:9 Aspect Ratio.
- Not Available Aspect Ratio Function In DIGITAL TV input.

● Aspect Ratio Description

16:9
16:9 video : No change.
4:3 video : Expands 4:3 video signal horizontally to fit the 16:9 screen.
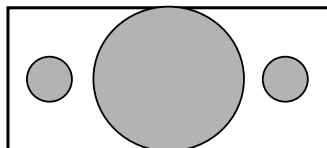
Panorama
16:9 video : No change.
4:3 video : Expands 4:3 video horizontally to fit the 16:9 screen and to minimize distortion, sides are expanded more than center.
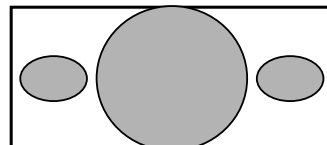
Zoom1
Expands 16:9 mode screen vertically.
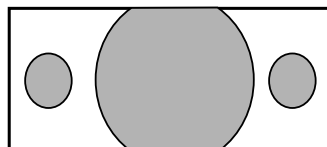
Zoom2
Expands Zoom 1 mode screen vertically.
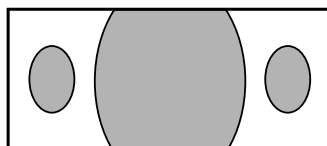
4:3
16:9 video : The image is suppressed.
4:3 video : No expansion.
There are gray areas besides the image.
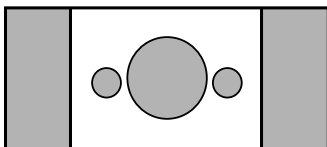
Selecting the Black Enhancer

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.

Picture		
Mode	◄ Custom	►
Temperature	◄ Normal	►
Color Enhancer	◄ Off	►
Video NR	◄ On	►
Aspect Ratio	◄ 16:9	►
Black Enhancer	◄ Off	►
Move	Adjust	Exit
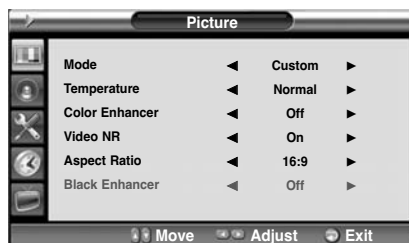
In PC Mode, you can adjust the H, V-Position, H-Size and Phase. Also you can adjust them automatically.

Position

You can change H, V-Position, H-Size 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 ▲ / ▼ button.

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

4 Select **Position** and press Menu/Set button to enter the under menu. Then the picture-position under menu will appear.

```
                    Picture
  Mode              ◄    User    ►
  Temperature       ◄    Normal  ►
  Position
  Aspect Ratio      ◄    16:9    ►

      Move    Adjust    Exit
```
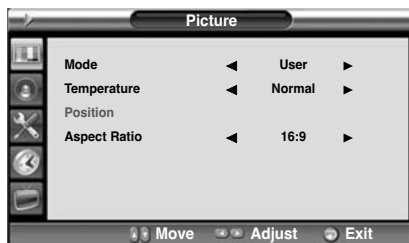
○ Auto Adjust

1 Select the item to adjust with ▲ / ▼ button.

2 Press Menu/Set button.

3 Then the cursor moves on the bar and you can adjust the value with ◄ / ► button.

4 To adjust these items, automatically, select **Auto Adjust** and press Menu/Set button.
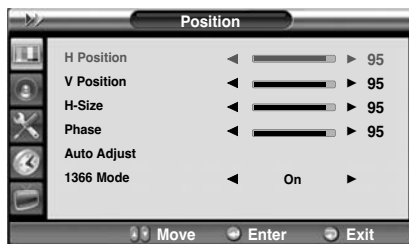
> **For more detail description refer to the next page.**

```
                    Position
  H Position    ◄ ▬▬▬▬▭ ►  95
  V Position    ◄ ▬▭      ►  95
  H-Size        ◄ ▬▬▭     ►  95
  Phase         ◄ ▬▬▬▭    ►  95
  Auto Adjust
  1366 Mode     ◄    On    ►

      Move    Enter    Exit
```

○ 1366 Mode (Native Mode)

The menu is displayed on PC Mode.

1024 x 768 will be recognized under "Off" condition and 1366 x 768 under "On" when 1366 x 768 signal input.

1 Move to 1366 Mode with cursor indicating On/Off mode.

2 Choose "On or Off" by cursor.
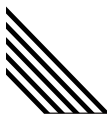
Setting the Picture (PC)

⬤ **H-Position**
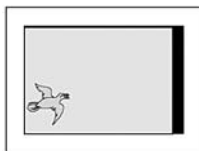
⬤ **V-Position**

◀   ▶
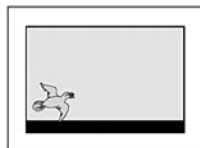
⬤ **Phase**
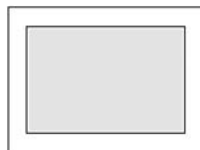
Mismatch   Match

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

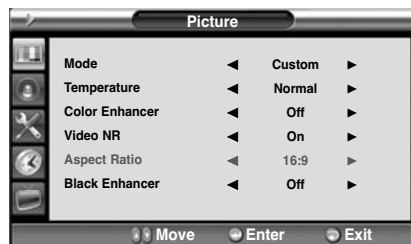This control allows you to adjust the balance of the left and right speaker output.

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 ◀ / ▶ button and press Menu/Set button.

Sound		
Balance	◀ ▬▬▬ ▶	1
Sound Mode	◀ Standard ▶	
Spatial Effect	◀ Off ▶	
AVC	◀ On ▶	
MTS	◀ Stereo ▶	
SRS	◀ Off ▶	
Move	Adjust	Exit

Changing the Sound Mode

Your TV 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 **User** 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 Exit button on the remote control. You can adjust each values of equalizer, but the changed values are values of **User** mode.

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

Sound		
Balance	◀ ▬▬▬ ▶	1
Sound Mode	◀ Standard ▶	
Spatial Effect	◀ Off ▶	
AVC	◀ On ▶	
MTS	◀ Stereo ▶	
SRS	◀ Off ▶	
Move	Enter	Exit

Sound Mode
Standard
Movie
Music
News
User
BBE VIVA
Move   Enter   Exit

Setting the Sound

User

100Hz   500Hz   1.5KHz   5KHz   10KHz

Move   Adjust   Exit

Notes

BBE VIVA: Optional BBE VIVA
SRS: Optional SRS TruSound
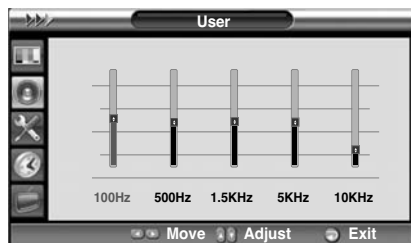
User Adjust

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.

Select User Mode (Previous page)

2 Select a gain bar with ◄ / ► button on the remote control and adjust it with ▲ / ▼ button.

User

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

100Hz   500Hz   1.5KHz   5KHz   10KHz

Move   Adjust   Exit
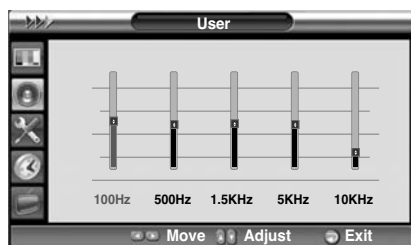
Spatial Effect

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 item with ▲ / ▼ button.

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

4 Select **Spatial Effect**. Then the cursor moves into the ◄► parts.

5 Turn on or off spatial effect function with ◄ / ► button and press Menu/Set button.

Sound		
Balance	◄ ▬ ►	1
Sound Mode	◄ User ►	
Spatial Effect	◄ Off ►	
AVC	◄ On ►	
MTS	◄ Stereo ►	
SRS	◄ Off ►	

Move   Adjust   Exit

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**. Then the cursor moves into the ◄► parts.

5 Turn on or off AVC function with ◄ / ► button and press Exit button.

Sound		
Balance	◄ ▬▬▬ ►	1
Sound Mode	◄ User	►
Spatial Effect	◄ Off	►
AVC	◄ On	►
MTS	◄ Stereo	►
SRS	◄ Off	►
◊◊ Move	◄◄ Adjust	◊ Exit
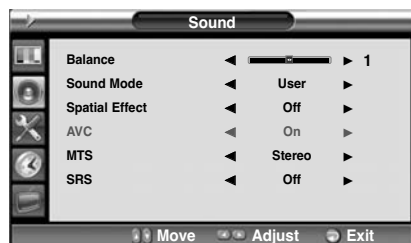
MTS (Multichannel Television Sound)

Select sound signal format from the input source. There are Mono, 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 ▲ / ▼ 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 ▲ / ▼ and press Menu/Set button.
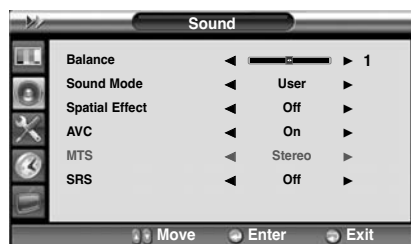
The available sound formats are displayed. Usually, you can see Mono and Stereo.

Sound		
Balance	◄ ▬▬▬ ►	1
Sound Mode	◄ User	►
Spatial Effect	◄ Off	►
AVC	◄ On	►
MTS	◄ Stereo	►
SRS	◄ Off	►
◊◊ Move	◊ Enter	◊ Exit

MTS
Mono
Language A
Language B
Language AB
◊◊ Move   ◊ Select   ◊ Exit

Notes

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

Setting the Sound

SRS (Sound Retrieval System)

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

2 Select the Sound main menu with ⬆ / ⬇ button on the remote control.

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

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

5 Select the TSXT format with ⬆ / ⬇ and press Menu/Set button.

Sound		
Balance	◄ ▬▬▬▬ ►	1
Sound Mode	◄ User ►	
Spatial Effect	◄ Off ►	
AVC	◄ On ►	
MTS	◄ Stereo ►	
SRS	◄ Off ►	

◄► Move ⊕ Enter ⊕ Exit

SRS
Off
TSXT

◄► Move ⊕ Enter ⊕ Exit

TSXT		
Speaker Type	◄ Small ►	
Dialog Clarity	◄ ▬▬▬▬ ►	50
True Bass	◄ ▬▬▬▬ ►	50

◄► Move ⊕ Enter ⊕ Exit
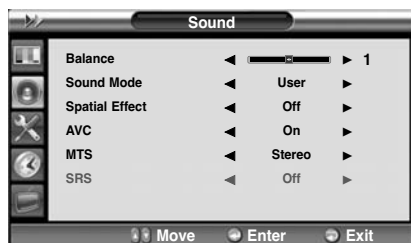
Notes

SRS: This menu is option.

The menu will be deleted in T.V. models that does not support SRS.

This functions is optional as TV model.

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 steps from 0 to 7.

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

2 Select the Setup main menu with ▲ / ▼ button on the remote control.

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

4 Select **Transparency**. Then the cursor moves into the ◄► parts.

5 Adjust with ◄ / ► button and press Exit button.

Setup		
Transparency	◄ 0 ►	
PIP		
Advanced		
Set ID	◄ 0 ►	

Move   Adjust   Exit

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 ▲ / ▼ 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

Setup		
Transparency	◄ 0 ►	
PIP		
Advanced		
Set ID	◄ 0 ►	

Move   Enter   Exit

PIP		
Size	◄ Small ►	
Source	◄ VIDEO ►	
Picture Swap		
Position	◄ Right Down ►	

Move   Enter   Exit

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 Menu/Set button.

2 Adjust size function with ▲ / ▼ button and press Menu/Set button.

| **Small** | **Large** | **Twin** |

Changing 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.

PIP

Size	◄ Small ►
Source	◄ VIDEO ►
Picture Swap	
Position	◄ Right Down ►

Move   Enter   Exit

Source

S-VIDEO / AV
COMPONENT1
COMPONENT2
PC RGB
DVI
HDMI

Move   Select   Exit

Setting the Others

1. Type1

PIP \ Main	ANALOGUE TV	DIGITAL TV	VIDEO1	VIDEO2	S-VIDEO/AV	COMPONENT1	COMPONENT2	PC	DVI	HDMI
ANALOGUE TV	–	✓	✓	✓	✓	✓	✓	✓	✓	✓
DIGITAL TV	✓	–	✓	✓	✓	✓	–	✓	✓	✓
VIDEO1	✓	✓	–	✓	✓	✓	✓	✓	✓	✓
VIDEO2	✓	✓	✓	–	✓	✓	✓	✓	✓	✓
S-VIDEO/AV	✓	✓	✓	✓	–	✓	✓	✓	✓	✓
COMPONENT1	✓	✓	✓	✓	✓	–	✓	✓	✓	✓
COMPONENT2	✓	–	✓	✓	✓	✓	–	✓	✓	✓
PC	✓	✓	–	–	✓	✓	✓	–	–	–
DVI	✓	✓	–	–	✓	✓	✓	–	–	–
HDMI	✓	✓	–	–	✓	✓	✓	–	–	–

2. Type2

PIP \ Main	ANALOGUE TV	DIGITAL TV	VIDEO1	VIDEO2	S-VIDEO/AV	COMPONENT	PC	HDMI1	HDMI2
ANALOGUE TV	–	–	–	–	–	–	–	✓	✓
DIGITAL TV	–	–	–	–	–	–	–	✓	✓
VIDEO1	–	–	–	–	–	–	–	✓	✓
VIDEO2	–	–	–	–	–	–	–	✓	✓
S-VIDEO/AV	–	–	–	–	–	–	–	✓	✓
COMPONENT	–	–	–	–	–	–	–	✓	✓
PC	–	–	–	–	–	–	–	–	–
HDMI1	✓	✓	✓	✓	✓	✓	–	–	–
HDMI2	✓	✓	✓	✓	✓	✓	–	–	–

● 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.

Setting the Others

○ **Position in PIP**

Change the position of the PIP window.

1 Select **Position** with ▲ / ▼ 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 ▲ / ▼ button on the remote control and press Exit button.

```
                    PIP
Size             ◄    Small    ►
Source           ◄    VIDEO    ►
Picture Swap
Position         ◄  Right Down ►

        Move      Enter      Exit
```

```
                  Position
Right Down
Right Up
Left Up
Left Down

        Move      Select      Exit
```

Advanced

You can Set ID, 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 ▲ / ▼ 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.

```
                   Setup
Transparency      ◄    0    ►
PIP
Advanced
Set ID            ◄    0    ►

        Move      Adjust      Exit
```

```
                 Advanced
Language         ◄   English  ►
Blue Back        ◄     Off    ►
Front Key Lock   ◄     Off    ►

        Move      Enter      Exit
```

Setting the Time

○ **Language in Advanced**

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

1 Select **Language** and press Menu/Set button.

2 Choose the Language with [↑] / [↓] button and
press Exit button.

```
                          Advanced
    Language            ◄    English    ►
    Blue Back           ◄    Off        ►
    Front Key Lock      ◄    Off        ►

              Move      ⊕ Enter    ⊕ Exit
```

○ **Blue Back in Advanced**

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

1 Select **Blue Back**. Then the cursor moves into
the ◄► part.

2 Turn the function on or off with [SubPG] / [▶] button
and press Exit button.

```
                          Advanced
    Language            ◄    English    ►
    Blue Back           ◄    Off        ►
    Front Key Lock      ◄    Off        ►

              Move      ⊕ Enter    ⊕ Exit
```

○ **Front Key Lock in Advanced**

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

1 Select **Front Key Lock**. Then the cursor moves
into the ◄► parts.

2 Turn the function on or off with [SubPG] / [▶] button
and press Exit button.

```
                          Advanced
    Language            ◄    English    ►
    Blue Back           ◄    Off        ►
    Front Key Lock      ◄    Off        ►

              Move      ⊕ Enter    ⊕ Exit
```

Set ID

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

1 Select **Set ID**. Then the cursor moves into
the ◄► part.

2 Adjust with [SubPG] / [▶] button and press Exit
button.

```
                          Setup
    Transparency        ◄    0          ►
    PIP
    Advanced
    Set ID              ◄    0          ►

              Move      ⊕ Enter    ⊕ Exit
```

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Setting the Time

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

Time Mode

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 Mode** by pressing Menu/Set button.

5 Set the time mode with / button.

	Time	
Time Mode	◄ Auto	►
Time Zone	◄ NSW/ACT	►
Time Set	AM -- : - -	
On Time	AM -- : - - Off	
On Volume	◄ ▬▬▬	► 10
Off Time	AM -- : - - Off	
Sleep	◄ Off	►
	Move Enter Exit	

Time Zone

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 Zone** by pressing Menu/Set button.

5 Set the time zone with / button.

	Time	
Time Mode	◄ Manual	►
Time Zone	◄ NSW/ACT	►
Time Set	AM -- : - -	
On Time	AM -- : - - Off	
On Volume	◄ ▬▬▬	► 10
Off Time	AM -- : - - Off	
Sleep	◄ Off	►
	Move Enter Exit	

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 Menu/Set button.

5. Move the cursor by pressing ◄ / ► button and adjust time by ▲ / ▼ button.

	Time			
Time Mode	◄	Manual	►	
Time Zone	◄	NSW/ACT	►	
Time Set		AM -- : - -		
On Time		AM -- : - - Off		
On Volume	◄	━	►	10
Off Time		AM -- : - - Off		
Sleep	◄	Off	►	
	Move	Enter	Exit	
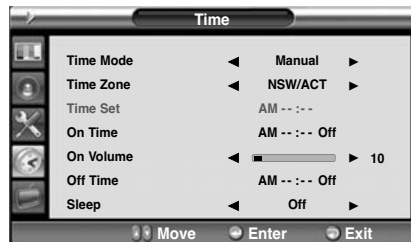
Setting the On Time

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

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

2. Select the Time main menu with ▲ / ▼ button on the remote control.

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

4. Select **On Time** with ▲ / ▼ button and press Menu/Set button.

5. Move the cursor by ◄ / ► button and adjust time by ▲ / ▼ button.

	Time			
Time Mode	◄	Manual	►	
Time Zone	◄	NSW/ACT	►	
Time Set		AM -- : - -		
On Time		AM -- : - - Off		
On Volume	◄	━	►	10
Off Time		AM -- : - - Off		
Sleep	◄	Off	►	
	Move	Enter	Exit	

Setting the Time

Setting the On Volume

Set the sound volume level when TV 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 ▲ / ▼ button on the remote control.

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

4 Select **On Volume**.

5 Enter to the ◄► part. Then the cursor moves into the ◄► parts.

6 Adjust the sound volume level with ◄ / ► button.

Time		
Time Mode	◄ Manual	►
Time Zone	◄ NSW/ACT	►
Time Set	AM -- : - -	
On Time	AM -- : - - Off	
On Volume	◄ ━━ ►	10
Off Time	AM -- : - - Off	
Sleep	◄ Off	►

Move ● **Enter** ● **Exit**

Setting the Off Time

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

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

2 Select the Time main menu with ▲ / ▼ button on the remote control.

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

4 Select **Off Time** with ▲ / ▼ button on the remote control and press Menu/Set button.

5 Move the cursor with ◀ / ▶ button and adjust time with ▲ / ▼ button.

Time		
Time Mode	◀ Manual	▶
Time Zone	◀ NSW/ACT	▶
Time Set	AM -- : --	
On Time	AM -- : -- Off	
On Volume	◀ ▶	10
Off Time	AM -- : -- Off	
Sleep	◀ Off	▶
	Move ● Enter ● Exit	

Setting the Sleep Timer

You can set your the TV to automatically turn off after a preset interval.
If you turn off the TV in the state of setting up sleep time and turn on again, sleep time erased therefore Setup again. The time period runs from OFF (0 min) to 180 min. (OFF, 10 min, 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 ▲ / ▼ button on the remote control.

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

4 Select **Sleep** with ▲ / ▼ button on the remote control.

5 Enter to the ◀▶ part. Then the cursor moves into the ◀▶ parts.

6 Set the time period with ◀ / ▶ button.

7 Press Exit button to return.

Time		
Time Mode	◀ Manual	▶
Time Zone	◀ NSW/ACT	▶
Time Set	AM -- : --	
On Time	AM -- : -- Off	
On Volume	◀ ▶	10
Off Time	AM -- : -- Off	
Sleep	◀ Off	▶
	Move ● Enter ● Exit	

OSD Menu Tree

Picture

Mode

- **Standard**
- **Vivid**
- **Mild**
- **User**
  - → Contrast
  - → Brightness
  - → Color
  - → Sharpness
  - → Tint (Only For NTSC)
  - → Recall

Temperature → WARM2, WARM1, NORMAL, COOL1, COOL2

Color Enhancer → Color Enhancer On/Off

Video NR → Video NR On/Off

Aspect Ratio → 16:9, PANORAMA, ZOOM1, ZOOM2, 4:3

Black Enhancer → Black Enhancer On/Off

Sound

Balance

Sound Mode

- **Standard**
- **Movie**
- **Music**
- **News**
- **User**
  - **Equalizer (Press Set)** → 100Hz, 500Hz, 1.5KHz, 5KHz, 10KHz
- **BBE VIVA (Optional)**

Spatial Effect → Spatial Effect On/Off

AVC → AVC On/Off

MTS → Mono, Stereo, SAP

SRS (Optional) → Off, TSXT

Setup

- **Transparency**
- **PIP**
  - **Size** → Off, Small, Large, Twin
  - **Source**
  - **Picture Swap**
  - **Position** → Right Down, Right Up, Left Up, Left Down
- **Advanced**
  - **Language** → National Selections
  - **Blue Back** → Blue Back On/Off
  - **Front Key Lock** → Front Key Lock On/Off
- **Set ID** → 0 ~ 99

Time

- **Time Mode**
- **Time Zone**
- **Time Set**
- **On Time** → On Time On/Off
- **On Volume** → 1 ~ 100
- **Off Time** → Off Time On/Off
- **Sleep** → Off, 10, 20, 30, 60, 90, 120, 150, 180 min

Channel

- **Digital TV Setup** → Preferred Audio Type, Channel Favourites, Manual Channel Scan, Test Reception, Auto Scan
- **Analogue Reception** → Enabled/Disabled
- **Analogue TV Setup** → Auto Scan, Manual Scan, Fine Tune, Edit

OSD Menu Tree

● **PC MODE**

Picture

- **Mode**
  - **Standard**
  - **Vivid**
  - **Mild**
  - **User**
    - ➤ Contrast
    - ➤ Brightness
    - ➤ Color
    - ➤ Sharpness
    - ➤ Tint (Only For NTSC)
    - ➤ Recall
- **Temperature** ➤ WARM2, WARM1, NORMAL, COOL1, COOL2
- **Position** ➤ Video NR On/Off
  - **H-Position**
  - **V-Position**
  - **H-Size**
  - **Phase**
  - **Auto Adjust**
  - **1366 Mode**
- **Aspect Ratio** ➤ 16:9, 4:3

Sound

- **Balance**
- **Sound Mode**
  - **Standard**
  - **Movie**
  - **Music**
  - **News**
  - **User**
    - **Equalizer (Press Set)** ➤ 100Hz, 500Hz, 1.5KHz, 5KHz, 10KHz
  - **BBE VIVA (Optional)**
- **Spatial Effect** ➤ Spatial Effect On/Off
- **AVC** ➤ AVC On/Off

OSD Menu Tree

```
Setup
├─ Transparency
├─ PIP
│   ├─ Size ──────────► Off, Small, Large, Twin
│   ├─ Source
│   ├─ Picture Swap
│   └─ Position ──────► Right Down, Right Up, Left Up, Left Down
├─ Advanced
│   ├─ Language ──────► National Selections
│   ├─ Blue Back ─────► Blue Back On/Off
│   └─ Front Key Lock ─► Front Key Lock On/Off
├─ Set ID ────────────► 0 ~ 99
└─ Scroll Mode ───────► On/Off
```

```
Time
├─ Time Mode
├─ Time Zone
├─ Time Set
├─ On Time ──────► On Time On/Off
├─ On Volume ────► 1 ~ 100
├─ Off Time
└─ Sleep ────────► Off, 10, 20, 30, 60, 90, 120, 150, 180 min
```

Troubleshooting

**Before you call a service technician, 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 TV is turned on. • Power cord inserted into wall outlet? • Plug another product's power cord into the wall outlet where the TV's power cord was plugged in.
Picture Ok & No sound	• Press the VOL (∧) button. • Check the audio input signal.
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.
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 ▶ button. • Keep a certain distance between the TV and the VCR. • Activate any function to restore the brightness of the picture. • Check to see that both the TV 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.
Strange sound from the TV	• Typical sound due to normal TV operation, TV is not faulty.

Specification - 26" LCD

26" LCD TV

Function and Display Specification

Display Size	26-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 5 Modes (4:3 Mode / 16:9 X 4 Modes)
Pixel Format	1366 X 768 Physical Pixel
Contrast Ratio	1200 : 1
Brightness	600 cd/m²
Max Input Resolution	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 (Warm1, 2, Normal, Cool1, 2)

Dimension/Weight

Main Only	681mm (W) X 471mm (H) X 93mm (D)
With Stand	681mm (W) X 527mm (H) X 245mm (D)
With Stand and Speaker	681mm (W) X 527mm (H) X 245mm (D)

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 100 ~ 240V 50/60Hz
Power Consumption	120 Watt (Max)

Connectivity

TV Input	RF/CATV (PAL/SECAM)
COMPOSITE Input	RCA X 3Port (AV Input 1, 2, 3)
COMPONENT Input	RCA X 1Port
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))
AUDIO Input/Output	RCA X 3Port
Speaker Output	Cinch Type X 4Port (Stereo L/R), Head Phone Jack X 1Port
External Control Port	Mini D-Sub 9Pin X 1Port
HDMI 1, 2 Input	HDMI X 2Port

Specification - 32" LCD

32" LCD TV
Function and Display Specification

Function and Display Specification

Display Size	32-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 5 Modes (4:3 Mode / 16:9 X 4 Modes)
Pixel Format	1366 X 768 Physical Pixel
Contrast Ratio	3000 : 1
Brightness	500 cd/m²
Max Input Resolution	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 (Warm1, 2, Normal, Cool1, 2)

Dimension/Weight

Main Only	812mm (W) X 560mm (H) X 106mm (D)
With Stand	812mm (W) X 617mm (H) X 245mm (D)
With Stand and Speaker	812mm (W) X 617mm (H) X 245mm (D)

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 100 ~ 240V 50/60Hz
Power Consumption	150 Watt (Max)

Connectivity

TV Input	RF/CATV (PAL/SECAM)
COMPOSITE Input	RCA X 3Port (AV Input 1, 2, 3)
COMPONENT Input	RCA X 1Port
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))
AUDIO Input/Output	RCA X 3Port
Speaker Output	Cinch Type X 4Port (Stereo L/R), Head Phone Jack X 1Port
External Control Port	Mini D-Sub 9Pin X 1Port
HDMI1, 2 Input	HDMI X 2Port

Specification - 37" LCD (Plastic Model)

37" LCD TV (Plastic Model)

Function and Display Specification

Display Size	37-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 5 Modes (4:3 Mode / 16:9 X 4 Modes)
Pixel Format	1366 X 768 Physical Pixel
Contrast Ratio	5000 : 1
Brightness	500 cd/m^2
Max Input Resolution	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 (Warm1, 2, Normal, Cool1, 2)

Dimension/Weight

Main Only	1108mm (W) X 577.5mm (H) X 103mm (D) / 30 kg
With Stand	1108mm (W) X 645.5mm (H) X 270mm (D) / 31.5 kg

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 100 ~ 240V 50/60Hz
Power Consumption	180 Watt (Max)

Connectivity

TV Input	RF/CATV (PAL/SECAM)
COMPOSITE Input	RCA X 3Port (AV Input 1, 2, 3)
COMPONENT 1, 2 Input	RCA X 2Port (Y, Pb/Cb, Pr/Cr: 480i, 480p, 576i, 576p, 720p, 1080i)
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 (DVI-D)	Mini D-Sub 29Pin X 1Port / HDTV Input (480p, 576p, 720p (50/60Hz), 1080i (50/60Hz))
AUDIO Input/Output	RCA X 3Port
Speaker Output	Cinch Type X 4Port (Stereo L/R), Head Phone Jack X 1Port
External Control Port	Mini D-Sub 9Pin X 1Port
HDMI Input	HDMI X 1Port

Specification - 42" LCD

42" LCD TV

Function and Display Specification

Display Size	42-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 5 Modes (4:3 Mode / 16:9 X 4 Modes)
Pixel Format	1366 X 768 Physical Pixel
Contrast Ratio	5000 : 1
Brightness	500 cd/m^2
Max Input Resolution	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 (Warm1, 2, Normal, Cool1, 2)

Dimension/Weight

Main Only	1013mm (W) X 692mm (H) X 121mm (D)
With Stand	1013mm (W) X 625mm (H) X 270mm (D)
With Stand and Speaker	1108mm (W) X 692mm (H) X 121mm (D)

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 100 ~ 240V 50/60Hz
Power Consumption	180 Watt (Max)

Connectivity

TV Input	RF/CATV (PAL/SECAM)
COMPOSITE Input	RCA X 3Port (AV Input 1, 2, 3)
COMPONENT Input	RCA X 1Port
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))
AUDIO Input/Output	RCA X 3Port
Speaker Output	Cinch Type X 4Port (Stereo L/R), Head Phone Jack X 1Port
External Control Port	Mini D-Sub 9Pin X 1Port
HDMI1, 2 Input	HDMI X 2Port

42" Plasma TV

Function and Display Specification

Display Size	42-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 5 Modes (4:3 Mode / 16:9 X 4 Modes)
Pixel Format	852 X 480 Physical Pixel
Contrast Ratio	10000 : 1
Brightness	1500 cd/m^2
Max Input Resolution	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 (Warm1, 2, Normal, Cool1, 2)

Dimension/Weight

Main Only	1046mm (W) X 635mm (H) X 87.3mm (D) / 38 kg
With Stand	1046mm (W) X 702mm (H) X 299mm (D) / 38.9 kg
With Stand and Speaker	1246mm (W) X 702mm (H) X 299mm (D) / 41.5 kg

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 100 ~ 240V 50/60Hz
Power Consumption	350 Watt (Max)

Connectivity

TV Input	RF/CATV (PAL/SECAM)
COMPOSITE Input	RCA X 3Port (AV Input 1, 2, 3)
COMPONENT 1, 2 Input	RCA X 2Port (Y, Pb/Cb, Pr/Cr: 480i, 480p, 576i, 576p, 720p, 1080i)
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 (DVI-D)	Mini D-Sub 29Pin X 1Port / HDTV Input (480p, 576p, 720p (50/60Hz), 1080i (50/60Hz))
AUDIO Input/Output	RCA X 3Port
Speaker Output	Cinch Type X 4Port (Stereo L/R), Head Phone Jack X 1Port
External Control Port	Mini D-Sub 9Pin X 1Port
HDMI Input	HDMI X 1Port

Specification - 42" PDP (Plastic Model)

42" Plasma TV (Plastic Model)

Function and Display Specification

Display Size	42-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 5 Modes (4:3 Mode / 16:9 X 4 Modes)
Pixel Format	852 X 480 Physical Pixel
Contrast Ratio	10000 : 1
Brightness	1500 cd/m^2
Max Input Resolution	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 (Warm1, 2, Normal, Cool1, 2)

Dimension/Weight

Main Only	1220mm (W) X 645mm (H) X 87mm (D) / 30 kg
With Stand	1220mm (W) X 708.4mm (H) X 305mm (D) / 31.5 kg

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 100 ~ 240V 50/60Hz
Power Consumption	350 Watt (Max)

Connectivity

TV Input	RF/CATV (PAL/SECAM)
COMPOSITE Input	RCA X 3Port (AV Input 1, 2, 3)
COMPONENT 1, 2 Input	RCA X 2Port (Y, Pb/Cb, Pr/Cr: 480i, 480p, 576i, 576p, 720p, 1080i)
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 (DVI-D)	Mini D-Sub 29Pin X 1Port / HDTV Input (480p, 576p, 720p (50/60Hz), 1080i (50/60Hz))
AUDIO Input/Output	RCA X 3Port
Speaker Output	Cinch Type X 4Port (Stereo L/R), Head Phone Jack X 1Port
External Control Port	Mini D-Sub 9Pin X 1Port
HDMI Input	HDMI X 1Port

42" Plasma TV	

Function and Display Specification

Display Size	42-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 5 Modes (4:3 Mode / 16:9 X 4 Modes)
Pixel Format	1024 X 768 Physical Pixel
Contrast Ratio	10000 : 1
Brightness	1500 cd/m^2
Max Input Resolution	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 (Warm1, 2, Normal, Cool1, 2)

Dimension/Weight

Main Only	1046mm (W) X 635mm (H) X 87.3mm (D) / 38 kg
With Stand	1046mm (W) X 702mm (H) X 299mm (D) / 38.9 kg
With Stand and Speaker	1246mm (W) X 702mm (H) X 299mm (D) / 41.5 kg

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 100 ~ 240V 50/60Hz
Power Consumption	400 Watt (Max)

Connectivity

TV Input	RF/CATV (PAL/SECAM)
COMPOSITE Input	RCA X 3Port (AV Input 1, 2, 3)
COMPONENT 1, 2 Input	RCA X 2Port (Y, Pb/Cb, Pr/Cr: 480i, 480p, 576i, 576p, 720p, 1080i)
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 (DVI-D)	Mini D-Sub 29Pin X 1Port / HDTV Input (480p, 576p, 720p (50/60Hz), 1080i (50/60Hz))
AUDIO Input/Output	RCA X 3Port
Speaker Output	Cinch Type X 4Port (Stereo L/R), Head Phone Jack X 1Port
External Control Port	Mini D-Sub 9Pin X 1Port
HDMI Input	HDMI X 1Port

Specification - 42" PDP (Plastic Model)

42" Plasma TV (Plastic Model)

Function and Display Specification

Display Size	42-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 5 Modes (4:3 Mode / 16:9 X 4 Modes)
Pixel Format	852 X 480 Physical Pixel
Contrast Ratio	10000 : 1
Brightness	1500 cd/m^2
Max Input Resolution	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 (Warm1, 2, Normal, Cool1, 2)

Dimension/Weight

Main Only	1220mm (W) X 645mm (H) X 87mm (D) / 30 kg
With Stand	1220mm (W) X 708.4mm (H) X 305mm (D) / 31.5kg

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 100 ~ 240V 50/60Hz
Power Consumption	400 Watt (Max)

Connectivity

TV Input	RF/CATV (PAL/SECAM)
COMPOSITE Input	RCA X 3Port (AV Input 1, 2, 3)
COMPONENT 1, 2 Input	RCA X 2Port (Y, Pb/Cb, Pr/Cr: 480i, 480p, 576i, 576p, 720p, 1080i)
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 (DVI-D)	Mini D-Sub 29Pin X 1Port / HDTV Input (480p, 576p, 720p (50/60Hz), 1080i (50/60Hz))
AUDIO Input/Output	RCA X 3Port
Speaker Output	Cinch Type X 4Port (Stereo L/R), Head Phone Jack X 1Port
External Control Port	Mini D-Sub 9Pin X 1Port
HDMI Input	HDMI X 1Port

Specification - 50" PDP

50" Plasma TV

Function and Display Specification

Display Size	50-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 5 Modes (4:3 Mode / 16:9 X 4 Modes)
Pixel Format	1366 X 768 Physical Pixel
Contrast Ratio	3000 : 1
Brightness	1000 cd/m^2
Max Input Resolution	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 (Warm1, 2, Normal, Cool1, 2)

Dimension/Weight

Main Only	1216mm (W) X 732mm (H) X 87.3mm (D) / 50 kg
With Stand	1216mm (W) X 798mm (H) X 299mm (D) / 55 kg
With Stand and Speaker	1416mm (W) X 798mm (H) X 299mm (D) / 59 kg

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 100 ~ 240V 50/60Hz
Power Consumption	520 Watt (Max)

Connectivity

TV Input	RF/CATV (PAL/SECAM)
COMPOSITE Input	RCA X 3Port (AV Input 1, 2, 3)
COMPONENT 1, 2 Input	RCA X 2Port (Y, Pb/Cb, Pr/Cr: 480i, 480p, 576i, 576p, 720p, 1080i)
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 (DVI-D)	Mini D-Sub 29Pin X 1Port / HDTV Input (480p, 576p, 720p (50/60Hz), 1080i (50/60Hz))
AUDIO Input/Output	RCA X 3Port
Speaker Output	Cinch Type X 4Port (Stereo L/R), Head Phone Jack X 1Port
External Control Port	Mini D-Sub 9Pin X 1Port
HDMI Input	HDMI X 1Port

Specification - 50" PDP (Plastic Model)

50" Plasma TV (Plastic Model)

Function and Display Specification

Display Size	50-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 5 Modes (4:3 Mode / 16:9 X 4 Modes)
Pixel Format	1366 X 768 Physical Pixel
Contrast Ratio	3000 : 1
Brightness	1000 cd/m^2
Max Input Resolution	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 (Warm1, 2, Normal, Cool1, 2)

Dimension/Weight

Main Only	1390mm (W) X 737.8mm (H) X 82mm (D) / 45.5 kg
With Stand	1390mm (W) X 801.2mm (H) X 305mm (D) / 47 kg

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 100 ~ 240V 50/60Hz
Power Consumption	520 Watt (Max)

Connectivity

TV Input	RF/CATV (PAL/SECAM)
COMPOSITE Input	RCA X 3Port (AV Input 1, 2, 3)
COMPONENT 1, 2 Input	RCA X 2Port (Y, Pb/Cb, Pr/Cr: 480i, 480p, 576i, 576p, 720p, 1080i)
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 (DVI-D)	Mini D-Sub 29Pin X 1Port / HDTV Input (480p, 576p, 720p (50/60Hz), 1080i (50/60Hz))
AUDIO Input/Output	RCA X 3Port
Speaker Output	Cinch Type X 4Port (Stereo L/R), Head Phone Jack X 1Port
External Control Port	Mini D-Sub 9Pin X 1Port
HDMI Input	HDMI X 1Port

63" Plasma TV

Function and Display Specification

Display Size	63-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 5 Modes (4:3 Mode / 16:9 X 4 Modes)
Pixel Format	1366 X 768 Physical Pixel
Contrast Ratio	1000 : 1
Brightness	800 cd/m^2
Max Input Resolution	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 (Warm1, 2, Normal, Cool1, 2)

Dimension/Weight

Main Only	1503mm (W) X 893mm (H) X 92.6mm (D) / 79 kg
With Stand	1503mm (W) X 927mm (H) X 400mm (D) / 98 kg
With Stand and Speaker	1703mm (W) X 927mm (H) X 400mm (D) / 104.7 kg

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 100 ~ 240V 50/60Hz
Power Consumption	580 Watt (Max)

Connectivity

TV Input	RF/CATV (PAL/SECAM)
COMPOSITE Input	RCA X 3Port (AV Input 1, 2, 3)
COMPONENT 1, 2 Input	RCA X 2Port (Y, Pb/Cb, Pr/Cr: 480i, 480p, 576i, 576p, 720p, 1080i)
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 (DVI-D)	Mini D-Sub 29Pin X 1Port / HDTV Input (480p, 576p, 720p (50/60Hz), 1080i (50/60Hz))
AUDIO Input/Output	RCA X 3Port
Speaker Output	Cinch Type X 4Port (Stereo L/R), Head Phone Jack X 1Port
External Control Port	Mini D-Sub 9Pin X 1Port
HDMI Input	HDMI X 1Port