ATTACHMENT E.

- USER'S MANUAL -

Contents

Contents

Caution

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

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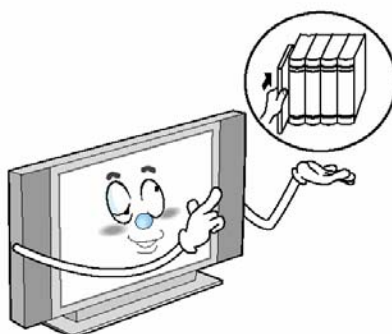
Keep the safety and operating instructions for future reference.

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

OWNER'S MANUAL

Important Safety Instructions

Always be careful when using your 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 dry cloth.

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

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

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

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

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

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


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

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

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.

Follow all operating and use instructions.

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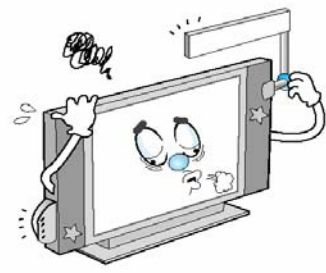
Never add any attachments and/or equipment without approval of the manufacturer. Such additions can increase the risk of fire, electric shock, or other personal injury.

Do not use the Monitor where contact with or immersion in water is a possibility, such as near bath tubs, sinks, washing machines, swimming pools, etc.

Do not place the Monitor on an unstable cart, stand, tripod, bracket, table, or floor where it can fall. A falling Monitor can cause serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the Monitor. Move the Monitor and cart with care. Quick stops, excessive force,and uneven surfaces can make the unit and cart unsteady and likely to overturn.

This plasma display is designed to be mounted horizontally (wide viewing). Any inquiry regarding its vertical position should be forwarded to the manufacture directly
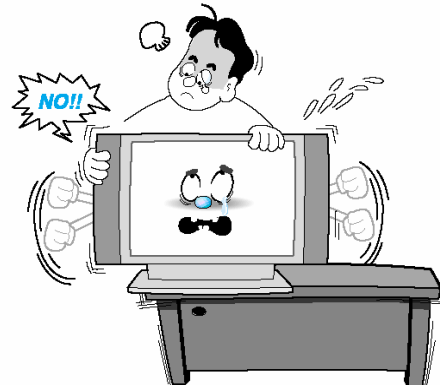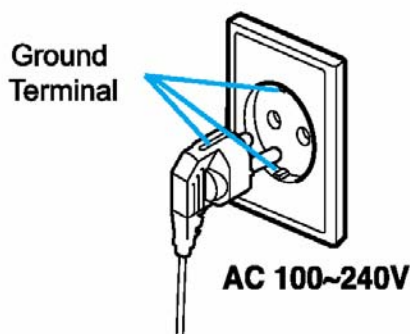
When installing the Monitor on a table, be careful not to place the edge of its stand.

- This may cause the Monitor to fall, causing serious injury to a child or adult, and serious damage to the Monitor.
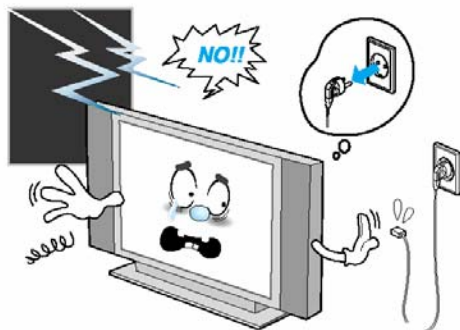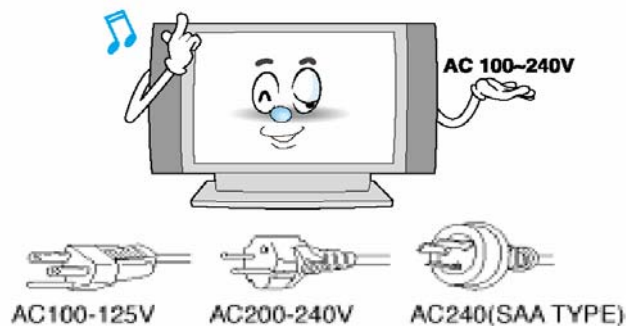
OWNER'S MANUAL

Precaution

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

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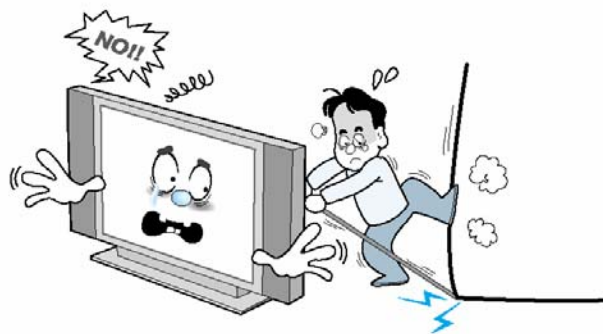
Use only a grounded or polarized outlet. For your safety, this Monitor is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the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

Avoid overhead power lines. An outside antenna system should not be placed in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful to keep from touching the power lines or circuits. Contact with such lines can be fatal.
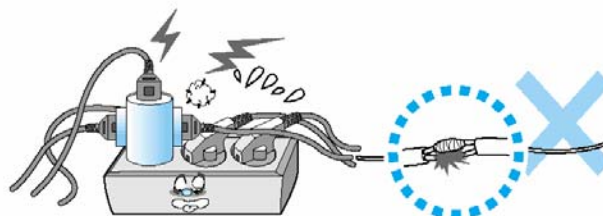
Unplug the Monitor from the wall outlet and disconnect the antenna or cable system during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-line surges.

Protect the power cord. Power supply cords should be routed so that they won't be walked on or pinched by objects placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

OWNER'S MANUAL
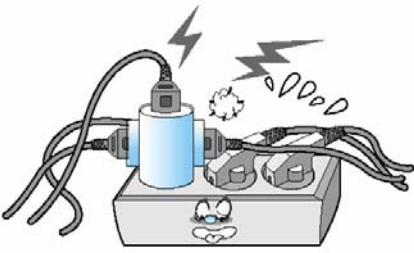
Do not overload the wall outlet or extension cords. Overloading can result in fire or electric shock.
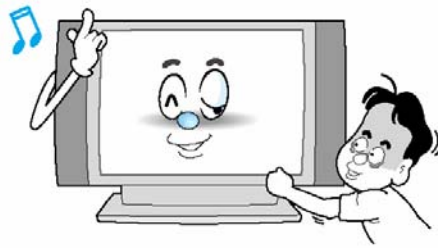

Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts. Never spill liquid of any kind on the Monitor.
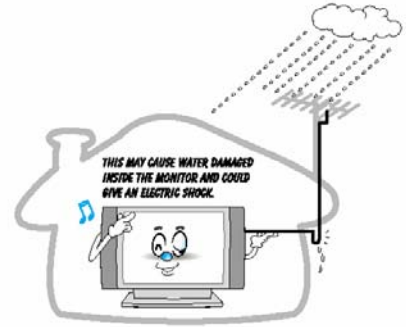

Bend antenna cable between inside and outside building to prevent rain from flowing in.

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

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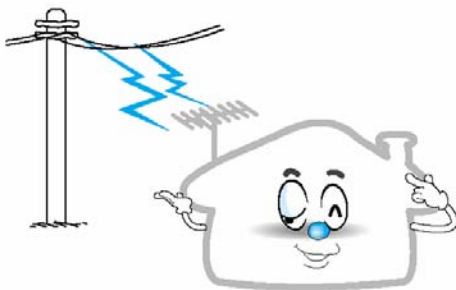
Do not place an outside antenna in the vicinity of overhead power lines, other electric light or power circuits.
- This may cause an electric shock.
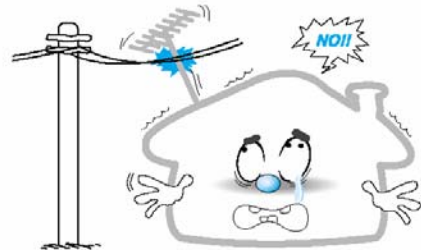
There should be enough distance between an outside antenna and power lines to keep the former from touching the latter even when the antenna falls.
- This may cause an electric shock.

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

Precaution

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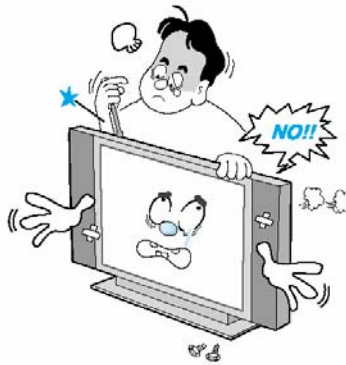
Upon completion of any service or repairs to this Monitor, ask the service technician to perform safety checks to determine that the Monitor is in a safe operating condition.

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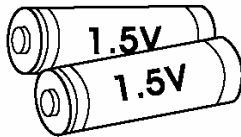
Only use the specified batteries.

-This make cause damaged the Monitor or could give an electric shock.
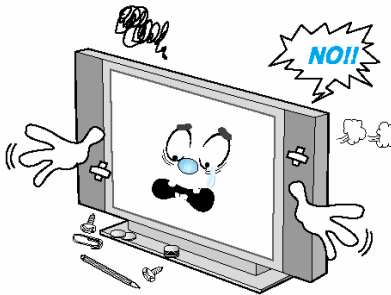
Do not place anything containing liquid on top of the Monitor.

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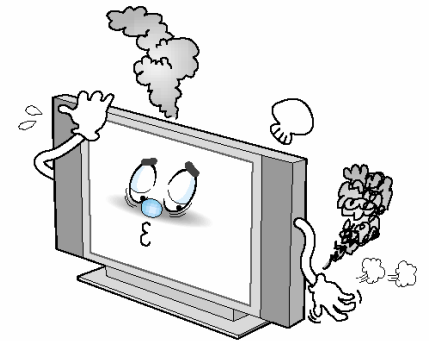
In case of smoke or strange smell from the Monitor, switch it off, unplug it from the wall outlet and contact your dealer or service center.

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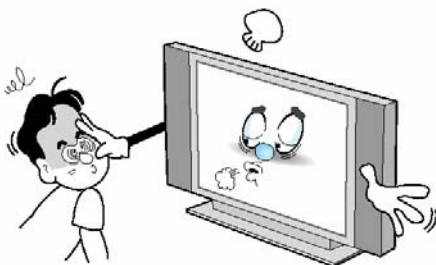
The distance between eyes and the screen should be about 5~7 times as long as diagonal length of the screen.

- If not, eyes will strain.

When moving the Monitor assembled with speakers do not carry holding the speakers.

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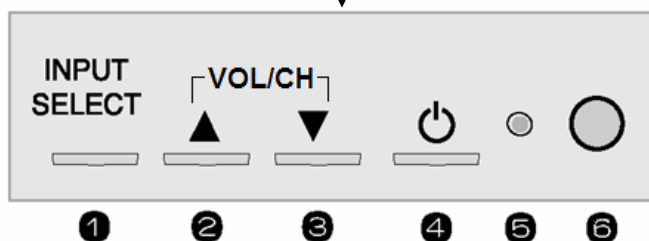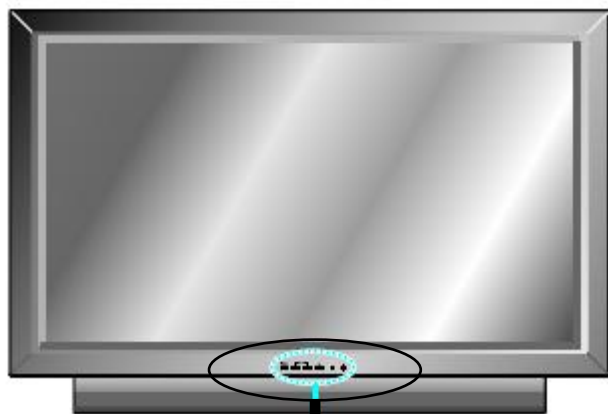
Avoid having a fixed image remain on the screen for a long period of time. Typically a frozen still picture from a VCR, 4:3 picture format or if a CH label is present; the fixed image may remain visible on the screen.

OWNER'S MANUAL

OSD Key Position

Front Panel

OSD key & Function

❶ **Input Source Select**
❷ **UP**
❸ **DOWN (See the box below.)**
❹ **On / Off** (**Stand By)**
❺ **Remote Sensor**
❻ **Status / Power Indicator LED**

OSD Key Function

▶ **INPUT SELECT**
   Select the signal source from multiple input sources such as TV, SCART 1, SCART 2, S-Video / AV, Component1, Component2, PC and DVI.

▶ **VOL/CH ▲ / ▼**

To change the CHANNEL, Press ▲ key first and change the CHANNEL with ▲, ▼ keys.
To change the VOLUME, Press ▼ key first and change the VOLUME with ▲, ▼ keys.

▶ ⏻ **/ I : On / Off (Stand By)**
   Turn the TV on and off.

Accessories

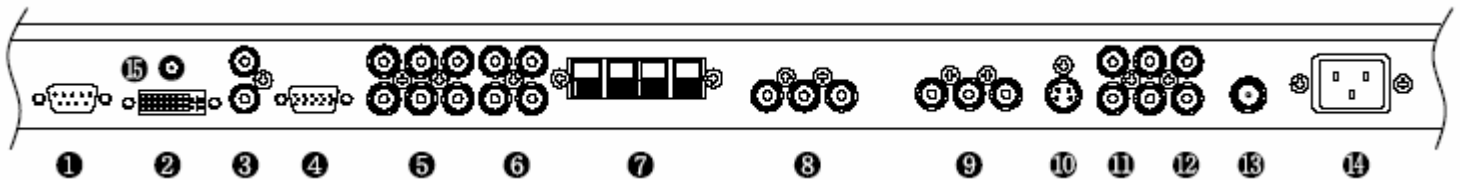**Remote Control Handset**   **Power Cord**   **RF Cable**   **Alkaline Batteries**   **Owner's Manual**
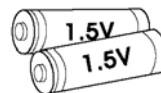
Viewing the Connecting Panel

Back Panels and Jacks
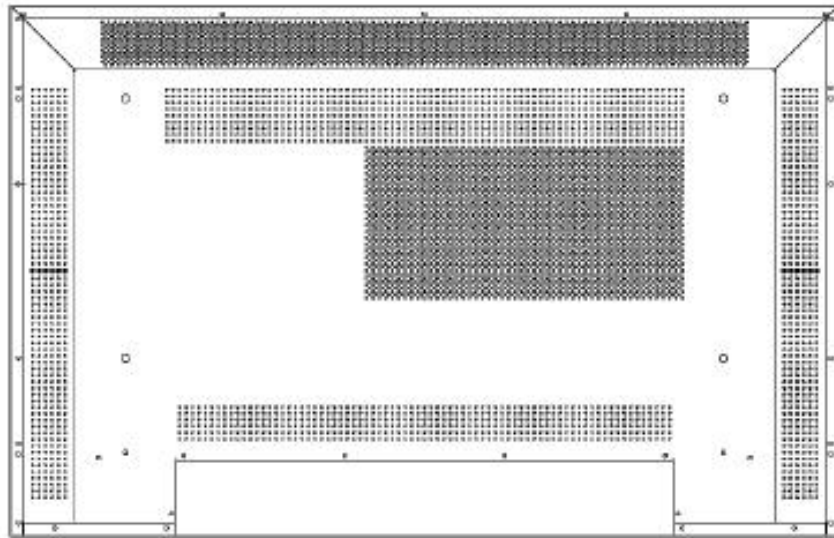
Back panel of the monitor
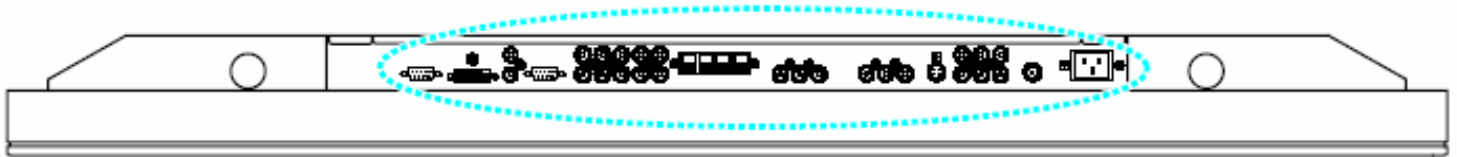
①	RS-232C	To control from PC
②	DVI	For PC,Set top box.
③	DVI,D-Sub Sound Input	PC/DVI Audio Input
④	D-Sub(PC)	For PC,Set top Box
⑤	Component 1,2	For DVD,Set top Box
⑥	Component Sound	For Component Audio Sound
⑦	Speaker	To Connect speakers(2CH,Stereo)
⑧	SCART1 (Euro connector)	For VCR,DVD,Set Top Box
⑨	SCART2 (Euco connector)	For VCR,DVD,Set Top Box
⑩	S-Video	For DVD, Set Top Box,S-VHS
⑪	AV Output	To Connector other TV or Monitor
⑫	AV Input	For VCR,DVD,Set top,Box
⑬	TV Antenna	For TV antenna cable.(Air)
⑭	AC Power	

OWNER'S MANUAL

Viewing the Connection Panel

1. RS-232C JACK

   Connects a control signal from a PC.

2. DVI Input JACK

   Connects a digital video signal from a DVI output jack of PC or Set Top box.

3. D-SUB(PC),DVI Sound

4. RGB PC Input JACK (D-SUB)

   Connects a video signal from a video output jack of PC.

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

5. COMPONENT INPUT JACK 1, 2

   Connects a three separate component video signal from a component output jack of a DVD
   player or Set Top box.

   Supports 480i/p60Hz, 576i/p50Hz, 720p/(50/60Hz), 1080i(50/60Hz) signals.

   (i: interlace, p: progressive)

6. COMPONENT SOUND

   Connects a sound signal from component

8, 9. SCART (EURO CONNECTOR) Jack 1, 2

   - SCART 1: Half SCART (CVBS only input / output).
   - SCART 2: Full SCART (CVBS & RGB input / output).
   Connects a SCART (eurocable) signal from a VCR, DVD player, or Set Top Box.

10. S-VIDEO INPUT JACK

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

11. COMPOSITE(RCA) Output JACK

   Output the signal of the current screen of the Monitor. Connects to other TV or Monitor

12. COMPOSITE(RCA) Input JACK

   Connects an AV composite video signal from a composite output terminal of a VCR or
   DVD Player. Unavailable when a S-Video cable is put into S-Video input jack.

13. TV Antenna

   Connects to an TV antenna cable.

14.AC(POWER) Input Terminal

 Firmly insert the accessory power cord as far as it will go into the power input terminal.
 Firmly push the power cord plug as far as it will go into the power socket.

| Connectors	
AUDIO INPUT	RCA Pin Jack
VIDEO INPUT	21 Pin Euro AV (SCART)
VIDEO OUTPUT	21 Pin Euro AV (SCART)
S-VIDEO INPUT	Mini Din 4 Pin
COMPONENT VIDEO INPUT	RCA Pin Jack
ANALOG RGB INPUT	Mini D-Sub 15pin
DIGITAL VIDEO INPUT	DVI-D 24 pin

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

### 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

Remote Control
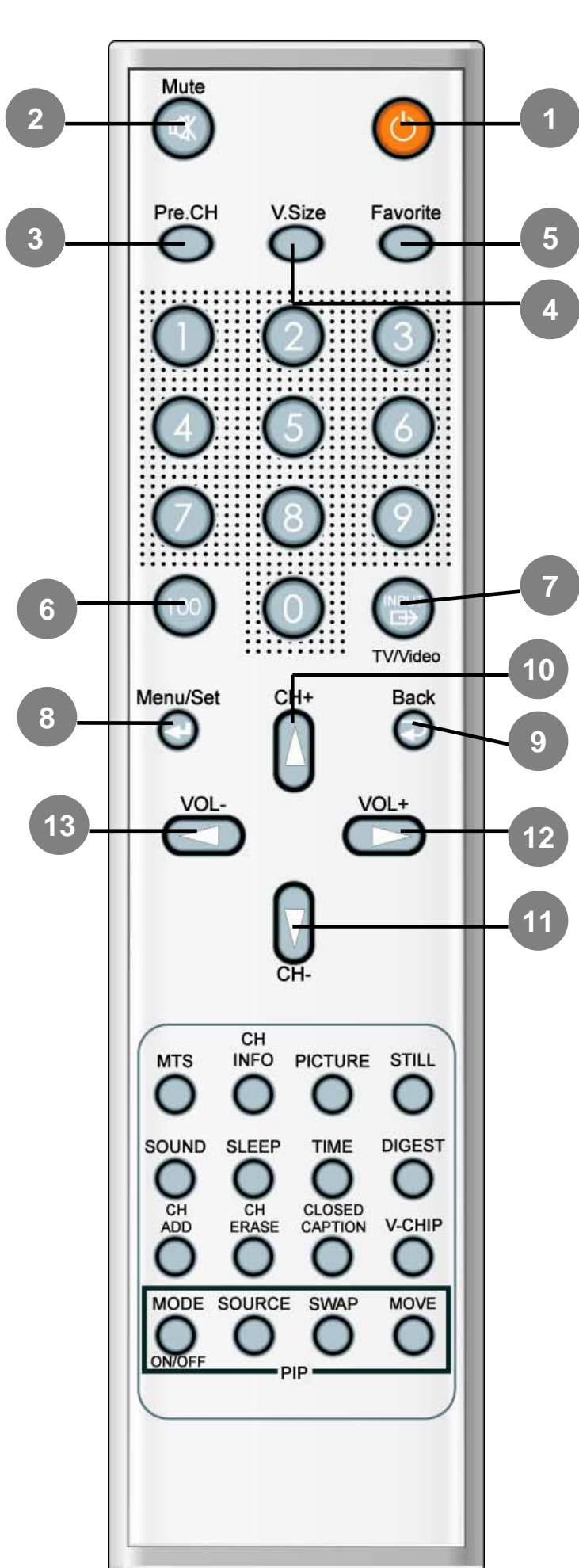
1. **Stand by**

   Turn the PDP on and off.

2. **Mute**

   Temporarily cut the sound and restore it.

3. **Pre.CH**

   Turn to the previous channel or exit OSD.

4. **V.Size**

   Choose the screen form.

   16:9 > Panorama > Zoom1 > Zoom2 > 4:3

5. **FAVORITE (FAVOURITE)**

   Tune to your next favorite channel.

6. **100**

   Press to tune the channels over 100.

7. **INPUT**

   Display the input source list.

8. **Menu / Set**

   Display the main OSD menu.

   Activate your choice in the OSD menu.

9. **Back**

   Return to the previous OSD menu.

10. **CH+**

    Move to the upper channel.

11. **CH-**

    Move to the lower channel.

12. **VOL+**

    Increase the volume level.

13. **VOL-**

    Decrease the volume level.

Remote Control
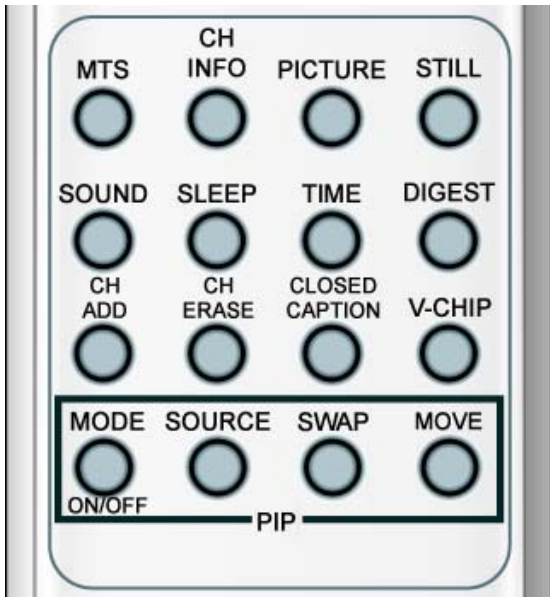
PIP (Picture In Picture) Keys

1. MODE (On / Off)

Activate PIP function and change the

PIP window size and PIP mode.

Small > Large > Twin (Half) > OFF

2. SOURCE

Change the PIP window source.

3. SWAP

Swap the main screen and the PIP
    window.

4. MOVE

Move the position of the PIP window.

1. MTS

Choose the MTS (Stereo) mode. Each time it is

pressed, different mode is selected.

Mono > Stereo > Nicam > Bilingual

* You can select only available modes depending on
    the source.

2. CH INFO

Display the current information about time,

screen form, source and MTS mode.

3. PICTURE

There are 4 picture modes.

STANDARD > Vivid > Mild > USER

4. STILL

Temporarily freeze the screen and restore it.

5. SOUND

Choose the sound equalizer settings.

STANDARD > Movie > Music > News > USER

6. SLEEP

Set the preset time interval for automatic turn-off.

OFF(Not work) > 30min. > 60 > 90 > 120 > 180

7. Bright

8. TIME

Display the current time on the screen.

9. CH ADD

Add the current channel to memory.

10. CH ERASE

Erase the current channel from memory.

11. CLOSE CAPTION

Set the close caption.

OFF > Close Caption1 > Close Caption2 > Text1 > Text2

12. V-CHIP

Get into V-Chip menu.

Viewing the Picture-in-Picture
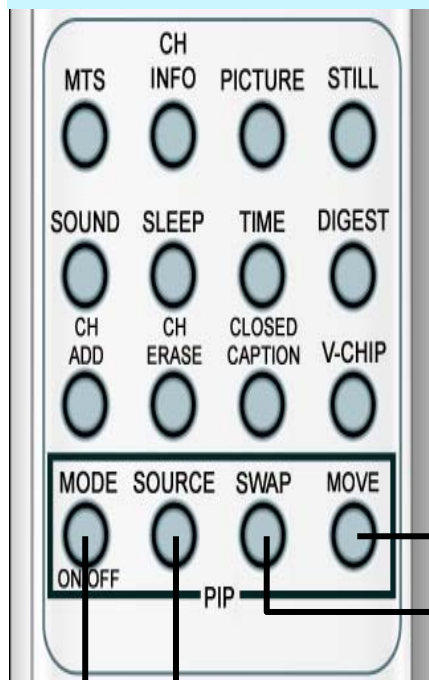
MOVE KEY : Move the position of PIP

| Left Up | ← | Right Up (Start) |
| Left down | → | Right Down |
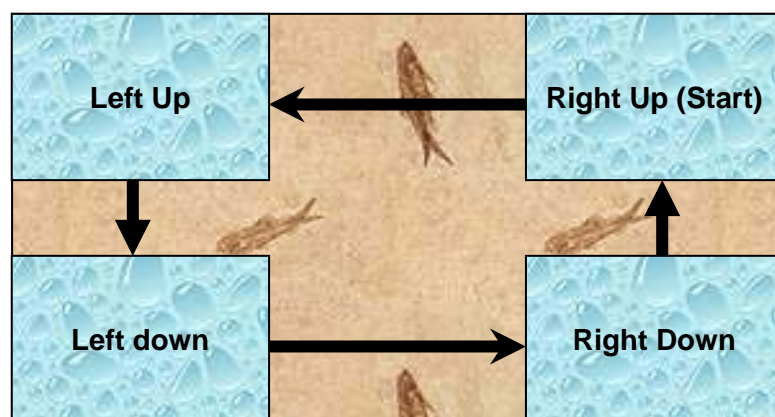
SWAP KEY : Swap the sources of the main screen and PIP Window.
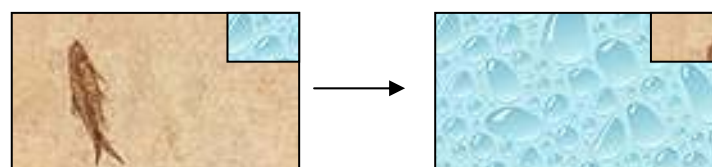
MODE KEY : Change the PIP window mode.

OFF→SMALL→LARGE→TWIN

SMALL   LARGE   TWIN

Source Key : Change the source of the PIP window. The available sources are shown as below

PIP \ Main	TV	SCART 1	SCART 2	S-Video / AV	Component1	Component2	PC	DVI
TV	O	O	O	O	O	O	O	O
SCART 1	O	X	O	O	O	O	O	O
SCART 2	O	O	X	O	O	O	O	O
S-Video	O	O	O	X	O	O	O	O
Component1	O	O	O	O	X	X	X	X
Component2	O	O	O	O	X	X	X	X
PC	O	O	O	O	X	X	X	X
DVI	O	O	O	O	X	X	X	X

Controls Of 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.
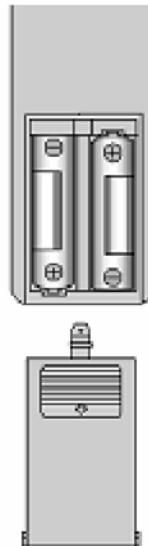
3 Close the cover until it clicks.

Reception range of remote control

Upper
20°
20°
Lower

Left 30° 30° Right
5m(Front)

Table Stand Installation(optional)

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

• **Table Stand mount minimum allowable clearances for adequate ventilation.**

4inch

4inch

4inch

1.18inch

12.36 inch
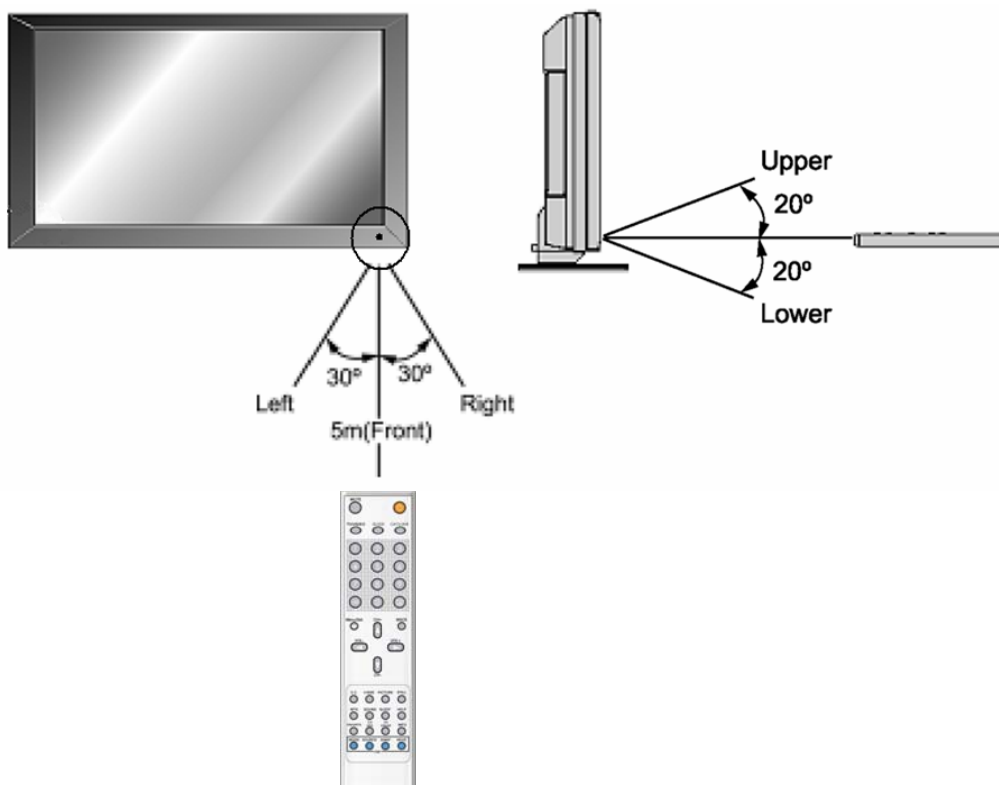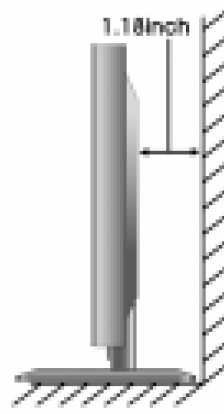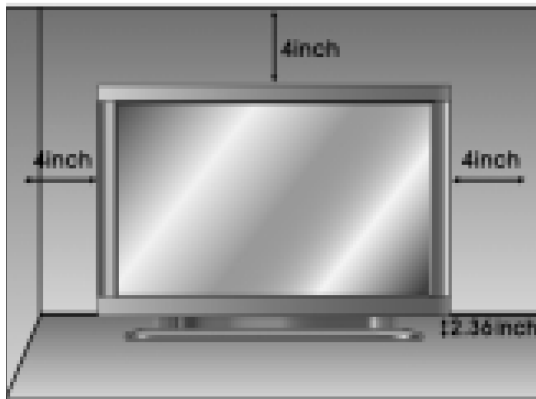
• **Installation**

Table-Stand User's Guide

① Insert Stand Bars into the Stand Base as shown below
② ⓐ - Secure with Screw A (8 x 18)

Screws

A

2-8×18

Stand Bar

Stand Base

ⓐ

Stand Base

ⓐ

③ Insert a Table-Stand as below
④ ⓑ - Secure with Screw B (4 x 30)

Screws

B   2-4×30

Stand Hole

ⓑ   ⓑ

Insert   Insert

Table-Stand
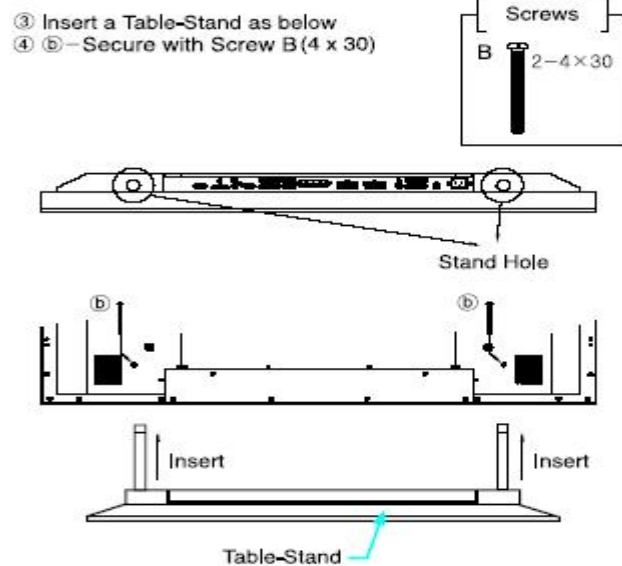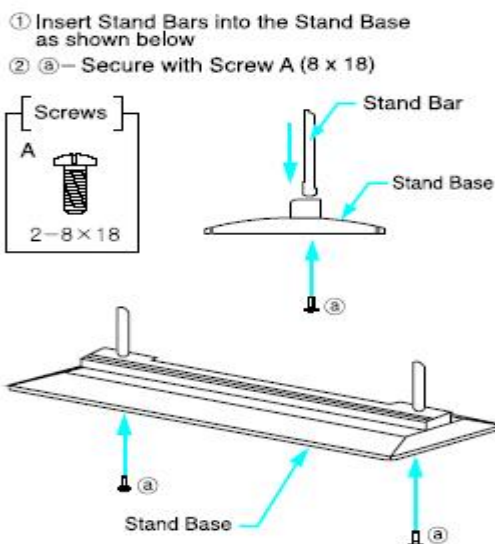
Monitor Installation

Speaker Installation(optional)
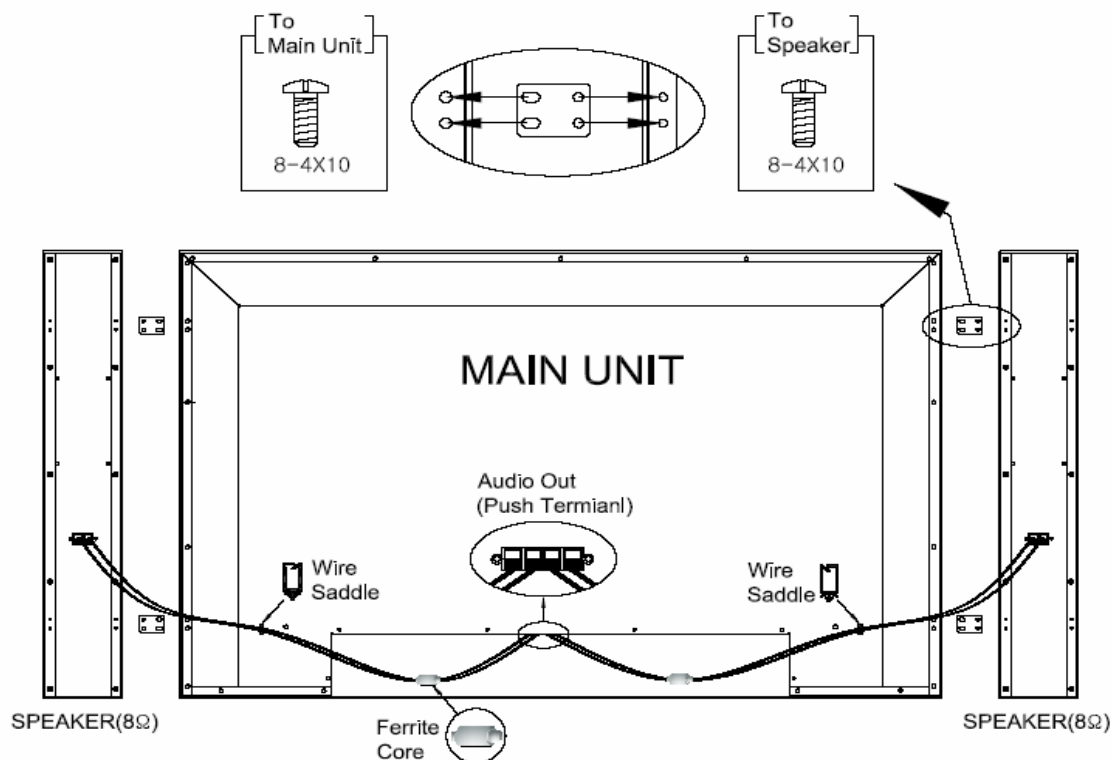
•**CAUTION**: Please make sure Speaker Wires should be connected as above, ferrite core are to be nearer to the main unit not to speakers to avoid possible electromagnetic-interference.

Caution

• **Be sure monitor power is turned off before making any connections.**

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

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

• **Speaker Accessories**
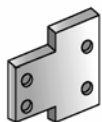
4-Iron Plates	16 -4 x 10 Long Bolts	2-Speaker Wire Holders	2-Speaker Wires
(Mount speakers to monitor)	(Attach iron plates to speakers)	(For arranging the speaker wires)	

Watching TV
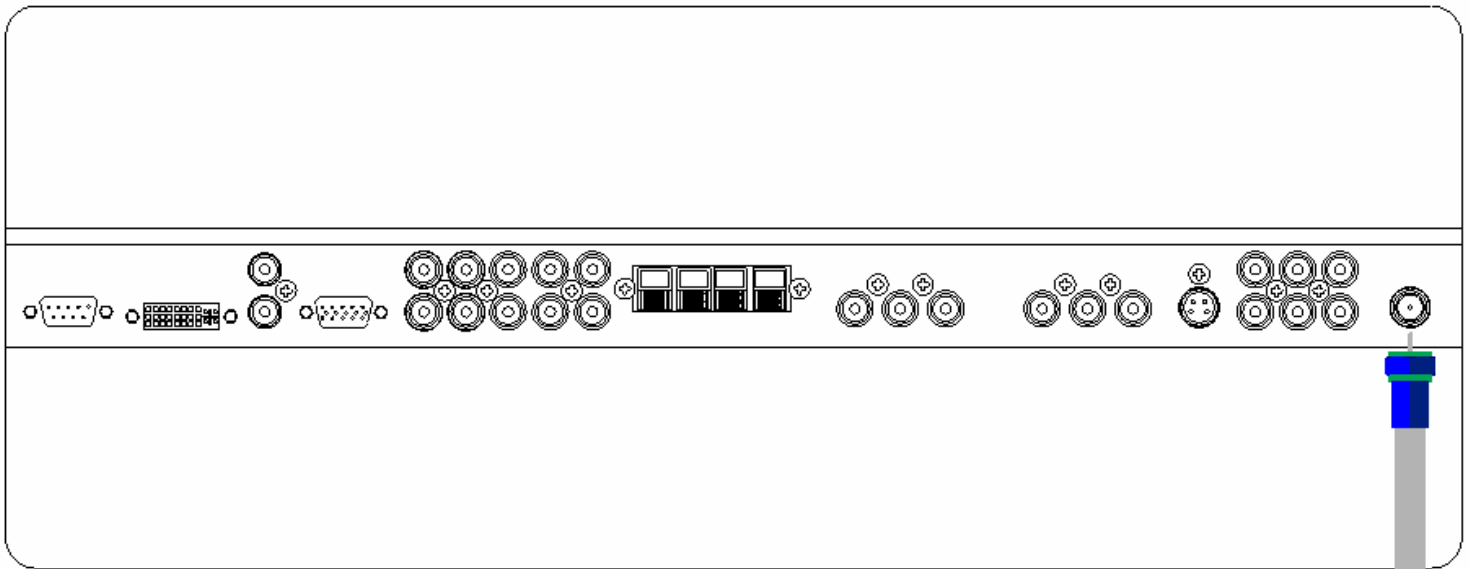
TV Antenna Cable

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 CH+, CH- button or numeric key to change TV programme for your programme selection.

3 Press Pre CH key 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).

OWNER'S MANUAL

Watching VCR

AV 2

AV 1

S-Video

AV 3 input

Sound of
S-Video /
AV
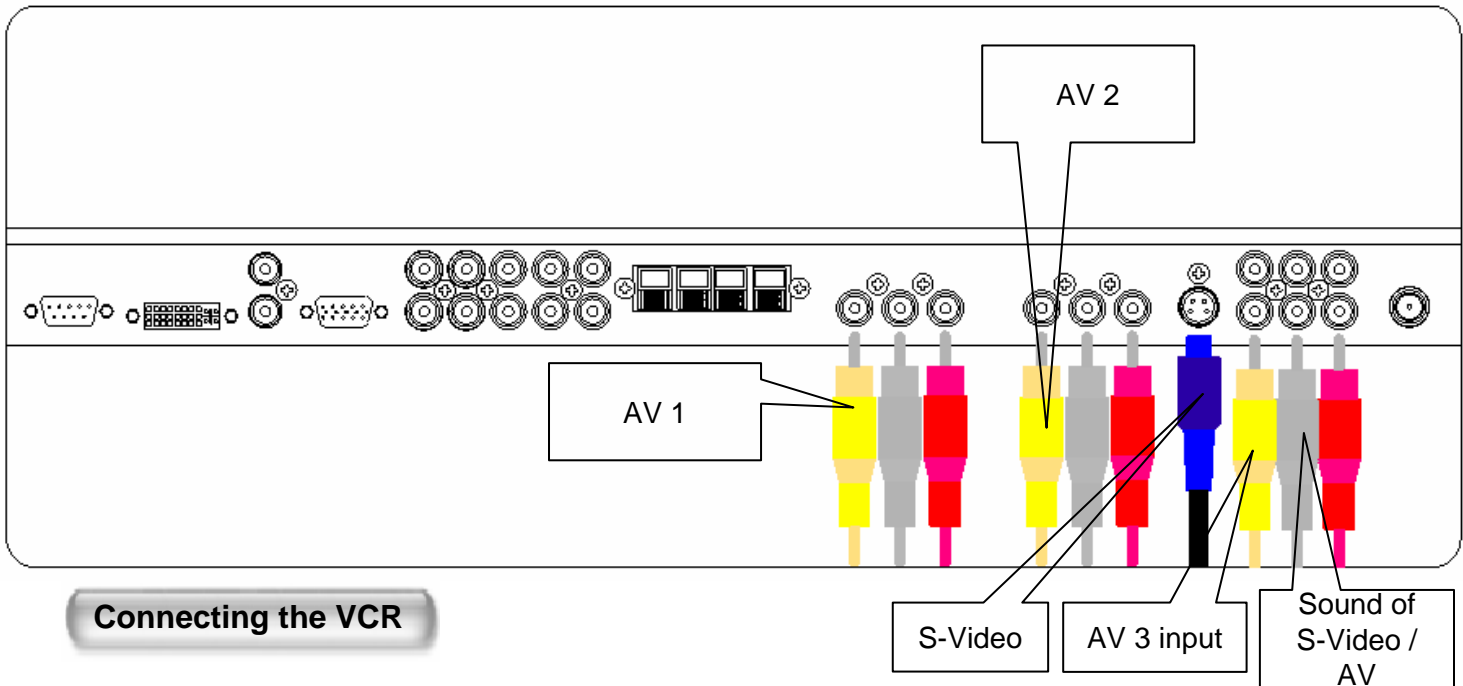
Connecting the VCR

With SCART (Eurocable)

Connect a SCART cable to the SCART jacks of the VCR and the TV.

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.

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 key on the VCR.

Notes

• **To avoid picture noise** (interference), leave an adequate distance(over 3m) between the VCR
and monitor.
• When connecting the TV with external equipments, 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).
• **Avoid having a fixed image remain on the screen for a long period of time**. Typically
a frozen still picture from a VCR 4:3 picture format or if a programme information is present.

OWNER'S MANUAL

Watching 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.

COMPONENT 1 & SOUND
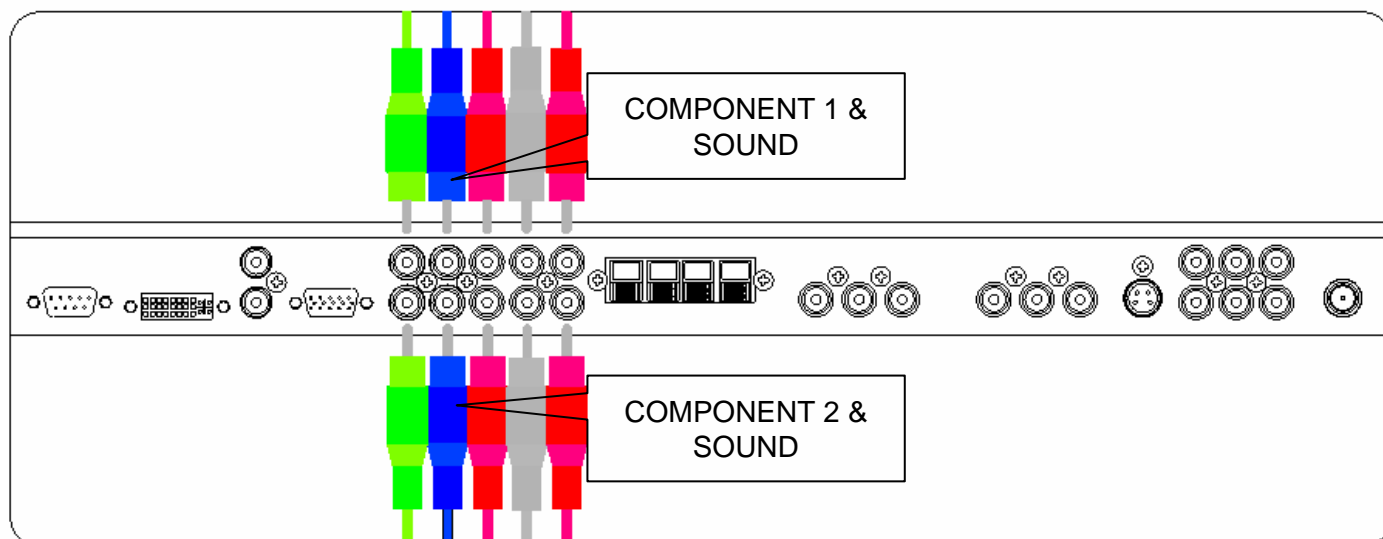
COMPONENT 2 & SOUND

How to use

1. Turn on the DVD player.

2. Press INPUT button on the remote control of the TV and select Component1 or Component2.

Supported Signals for Component ports		
	Component1	Component2
480i/60Hz	O	O
480p/60Hz	O	O
576i/50Hz	O	O
576p/50Hz	O	O
720p/60Hz	O	O
1080i/50Hz	O	O
1080i/60Hz	O	O

• Component Input ports

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

Component ports of the Monitor	Y	P_B	P_R

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

Notice

- Normal DVD source is based on 480i, which should be through normal YPbPr of Component signal.
- Component, PC, DVI ports can be displayed only 1 signal among them. If one of them is being displayed, other ports are unavailable.

OWNER'S MANUAL

Watching Set Top Box

Connect Set Top Box video inputs to SCART, COMPONENT, 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..
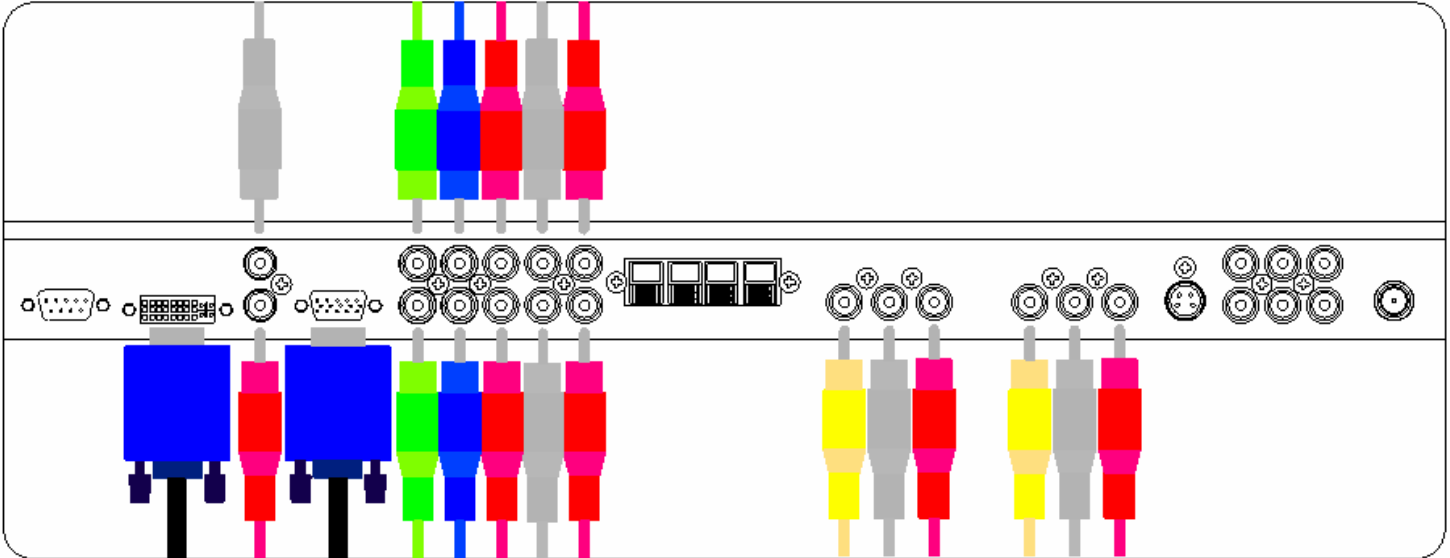
How to use

1. Turn on the Set Top Box.

2. Press INPUT button on the remote control of the TV and select Component1, Component2, PC or DVI.

How to connect

With SCART (Eurocable)

Connect a SCART cable to the SCART jacks of the STB 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 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.

Supported Signals				
	Component1	Component2	PC	DVI
480i/60Hz	O	O	O	O
480p/60Hz	O	O	O	O
576i/50Hz	O	O	O	O
576p/50Hz	O	O	O	O
720p/60Hz	O	O	O	O
1080i/50Hz	O	O	O	O
1080i/60Hz	O	O	O	O

Notice

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

OWNER'S MANUAL

Connecting The PC (D-Sub and DVI)

D-Sub 15 pin (VGA)
from PC

DVI from PC
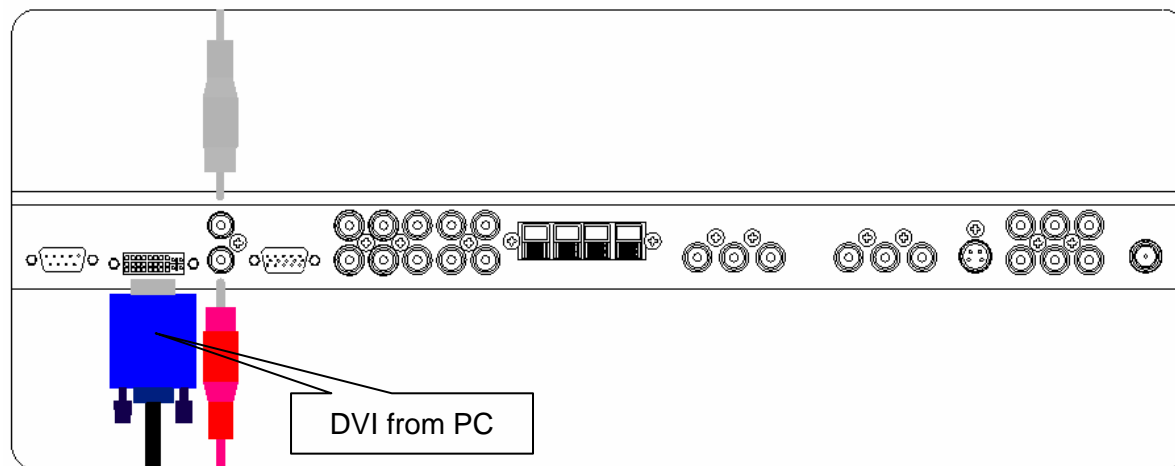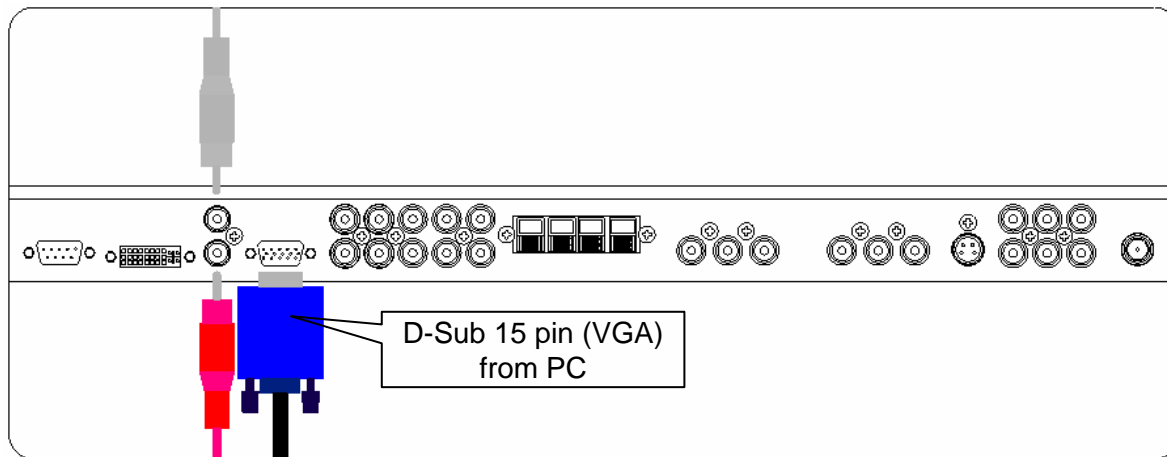
▶ **Connecting a PC to the TV**

• 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 requirements.

3. Adjust the PC screen in Geometry menu.
   (See 43 page.)
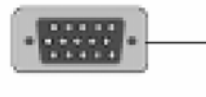
Pin No.	Description
1	Red (R)
2	Green (G)
3	Blue (B)
4	Grounding
5	Grounding (DDC)
6	Red (R) Grounding
7	Green (G) Grounding
8	Blue (B) Grounding
9	Reserved
10	Sync Grounding
11	Grounding
12	Data (DDC)
13	Horizontal sync.
14	Vertical sync.
15	Clock (DDC)

OWNER'S MANUAL

Displayable Monitor Specification

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

• The PC signal is supported by DVI also.

Notes

• **Synchronization input form : separate**

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

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

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

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

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

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

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

Basic Operation

Turning the Monitor On And Off

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

Select Source

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

Source Change
1 TV
2 AV 1
3 AV 2
4 S-VIDEO / AV 3
5 COMPONENT 1
6 COMPONENT 2
7 PC
8 DVI
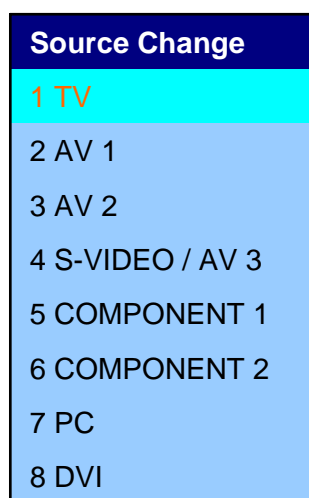
Source list menu

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

TV program 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 CH+, CH- key or numeric key to change TV programme you want.

3 Press Pre CH key 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- key on the remote control to adjust the volume level.
Press MUTE key on the remote control when you need to cut the sound temporarily.

OWNER'S MANUAL

OSD Menu Structure

- 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
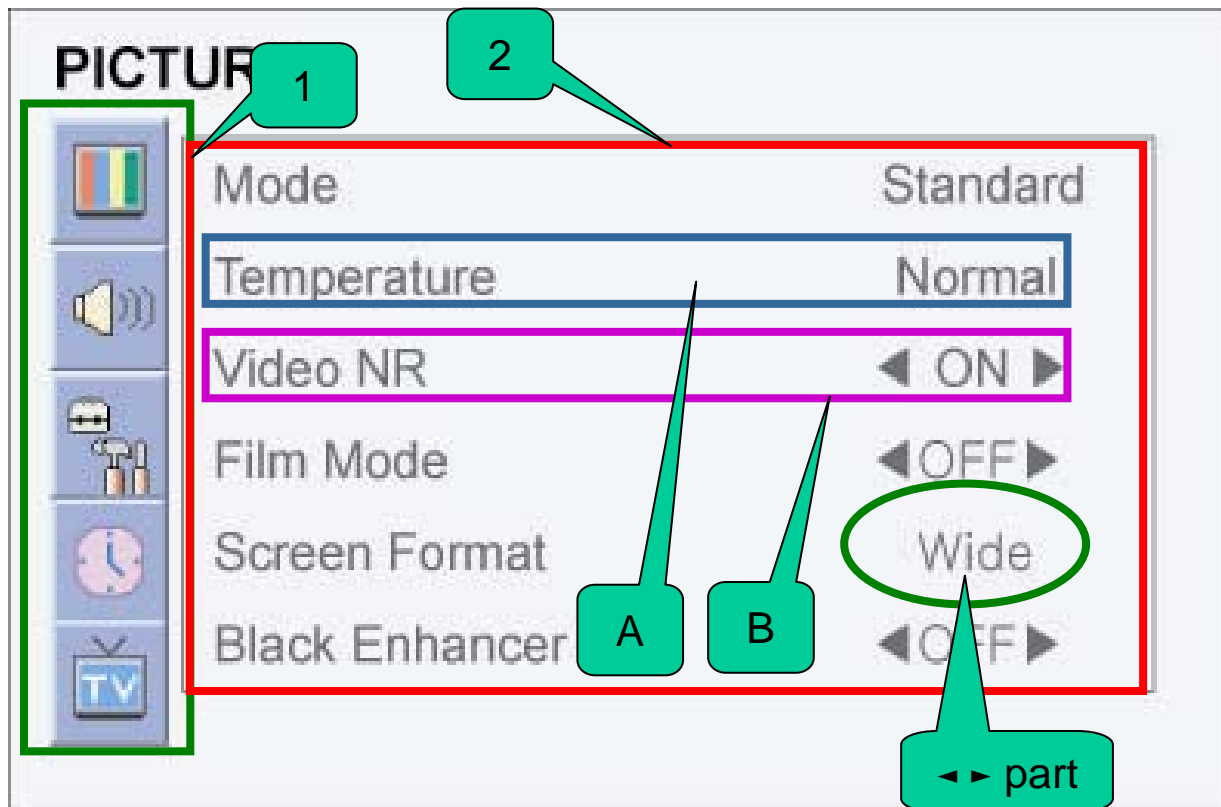
1. **Main Menu**

    Press Menu / Set key on the remote control to enter the main OSD menu.

    First, select Main menu item you need with CH+ & CH- key.

    To select a main menu items, just press VOL+ or Menu/Set button on

    the Remote Control.

2. **Sub Menu**

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

3. **Sub Menu items**

    A : If there is no ◄ ► part, the item has an sub menu.

    You can enter the under menu and adjust an item you need.

    Select sub-menu item with CH+ / CH- keys on the remote control and press VOL+ or

    Menu/Set button

    to enter the submenu.

    B : If there is a ◄ ► part, you can set the item by selecting ◄ ►. Ex) ◄ ON ► or ◄ OFF ►

    Press VOL+ or Menu/Set key to set a ◄ ► part, and adjust it with CH+ / CH- keys.

OWNER'S MANUAL

CHANNEL (TV)

Store TV channels

• Channel Type

Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the TV (i.e., an antenna, a standard cable system, an HRC, or an IRC).

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

2. Select the TV main menu item.

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

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

5. Select the channel type with CH+/CH- button and press BACK button. You can select AIR, CATV (Cable TV), IRC or HRC.

Channel Type	◄ CATV ►
Auto Scan	
Fine tune	
C H	◄ CATV 5 ►

Channel Type	◄ CATV ►
Auto Scan	
Fine tune	
C H	◄ CATV 5 ►
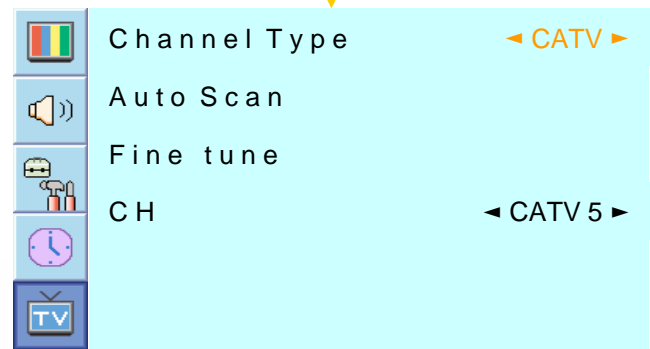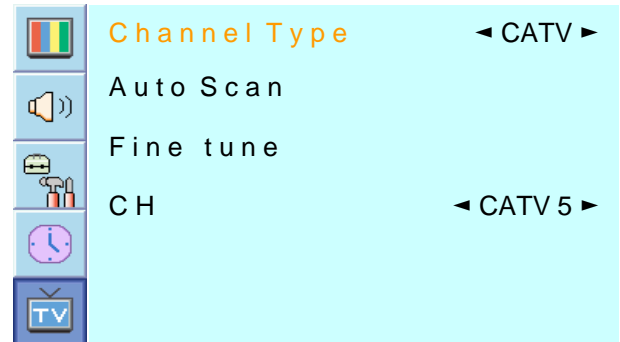
Notes

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

• Auto Scan

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

2. Select the TV main menu with CH+ / CH- key on the remote control.

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

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

Channel Type	◄ CATV ►
Auto Scan	
Fine tune	
C H	◄ CATV 5 ►

Manual Scan	16
◄► : Move	Menu/Set: EXIT
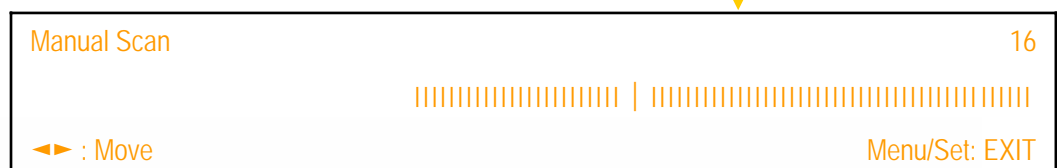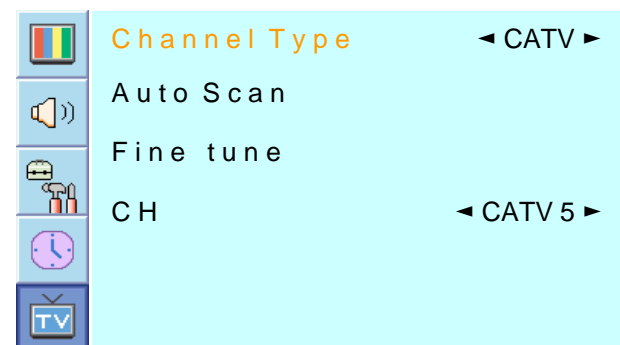
Notes

Only scanned programmes can be stored as Favorite programmes.

OWNER'S MANUAL

CHANNEL (TV)

• Fine Tune

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 TV main menu.

3. Press Menu/Set to enter the Fine tune sub menu.

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

5. Adjust the fine tune with VOL+ or VOL- button.

Auto Scan

Manual Scan

Fine tune

Edit

Fine tune	\0
‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖	‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖
◄► : Move	Menu/Set: EXIT
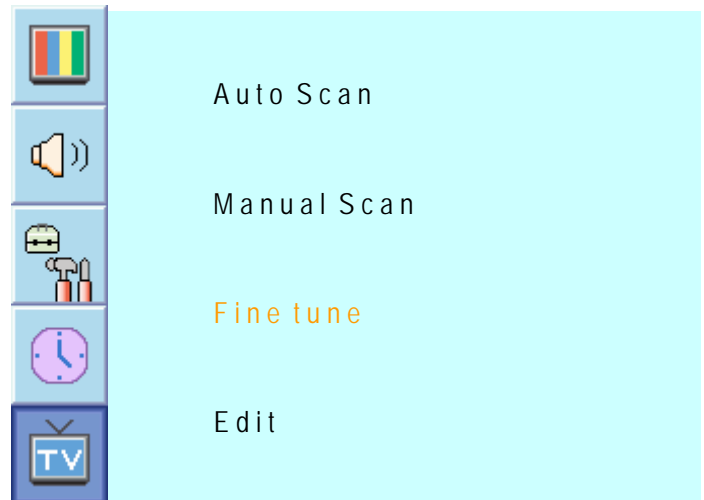
• Digest

In the Digest function, you can watch 15 programs at the same time. (This function works only in TV mode)

1. Press the DIGEST button on the remote control.

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

3. You can make off the Digest Function by pressing Digest button again.

Center Window
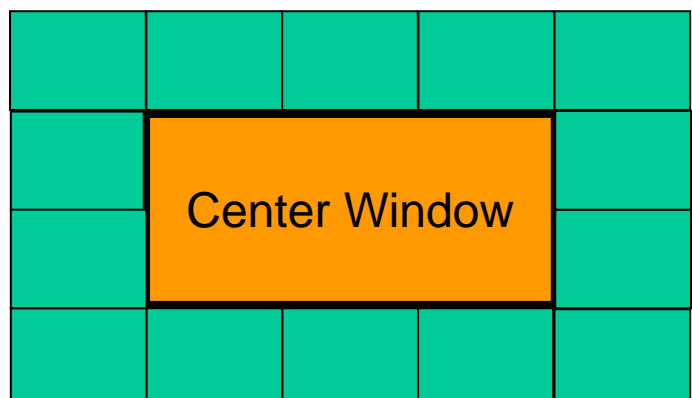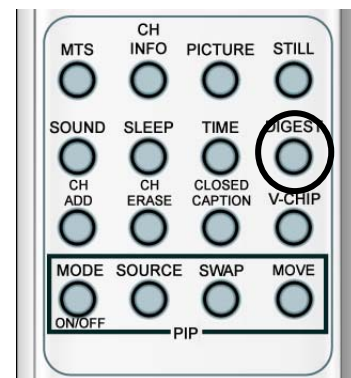
CHANNEL (TV)

• Set the favorite channel.

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 PDP display only the favorite channels you previously stored, allowing you to quickly and easily find frequently wanted channels.

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

2. Select the TV main menu.

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

4. Select **CH** and press the Menu/Set button. Then the cursor moves into the ◄► parts and the **Skip** and **Fav** menu appear.

5. In the ◄► parts , select the channel to skip or set as the favorite channels.

6. Then press CH- key on the remote control to enter the sub menu.

7. In sub menu, move with CH- and CH+ keys and set the values with VOL+ and VOL- keys.

Channel Type		◄ CATV ►
Auto Scan		
Fine tune		
CH		◄ CATV 5 ►

Channel Type		◄ CATV ►
Auto Scan		
Fine tune		
CH		◄ CATV 5 ►
Skip		Yes
Fav		Yes
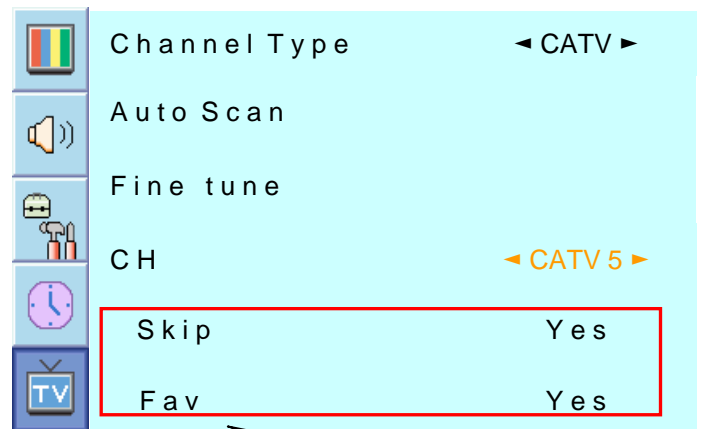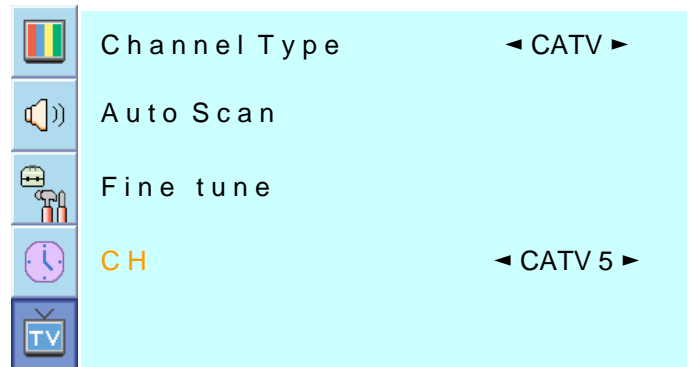
Sub menu appears
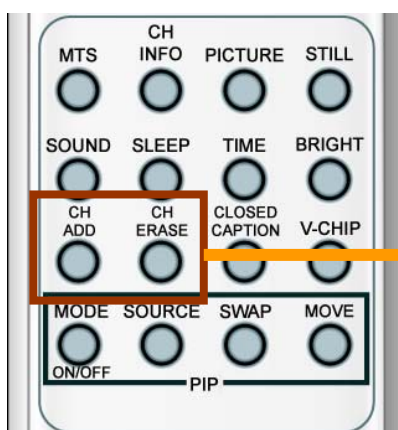
You can add or erase the current channel by the remote control.

1. CH ADD

   Add the current channel into the scanned channel list.

2. CH ERASE

   Remove the current channel from the scanned channel list..

Notes

Only scanned channels can be set as Favorite Channels.

OWNER'S MANUAL

PICTURE

• Mode

- Your TV has 3 automatic factory preset picture settings ("**Standard**", "**Sharp**" and "**Mild**"). You can choose **Standard**, **Vivid** or **Mild** by pressing "Picture" key 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 to enter the sub menu.

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

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

6. You will see the picture setting bars. Just Press BACK button on the remote control. You can adjust each values of the picture setting, but the changed values are stored as in USER mode.

* **USER** mode require more settings.

It has an under menu: See next page.

Mode	Standard
Temparature	Normal
VIdeo NR	◄ OFF ►
Film Mode	◄ OFF ►
Screen Format	16 : 9
BlackEnhancer	◄ OFF ►

Standard

Vivid

Mild

User

Contrast	IIIIIIIIIIIIIIIIIIIII | IIIIIIII
Brightness	IIIIIIIIIIII | IIIIIIIIIIIIIIIIII
Color	IIIIIIIIIIIIIII | IIIIIIIIIIIIII
Sharpness	IIIIIII | IIIIIIIIIIIIIIIIIIIIII
Recall	

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

OWNER'S MANUAL

PICTURE

Picture Mode is to set CH+ or adjust Picture Adjust, Mode, Video Noise Reduction, Screen Format and Burn Protection.

• Adjust USER Mode

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

| Select **USER** mode (Previous page) |

1. Select the item to adjust with CH-, CH+ button.

2. Press Menu/Set button.

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

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

To more detail description about

these item, refer to the next page.

	Contrast	IIIIIIIIIIIIIIIIIIII	IIIIIIII
	Brightness	IIIIIIIIIIII	IIIIIIIIIIIIIIIIII
	Color	IIIIIIIIIIIIIIII	IIIIIIIIIIIII
	Sharpness	IIIIIIII	IIIIIIIIIIIIIIIIIIIIIII
	Recall	

PICTURE

• Contrast

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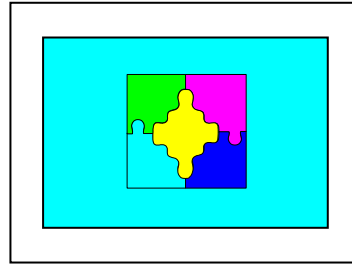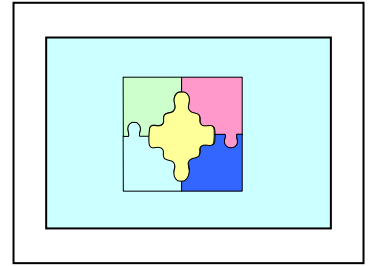
Distinct ◄   ► Vague

• Brightness

Adjust brightness of the screen.
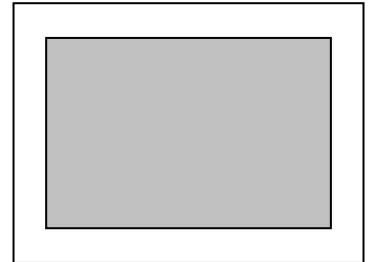
Dark ◄   ► Bright

• Color

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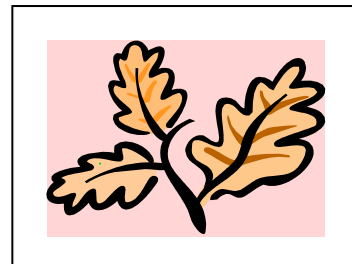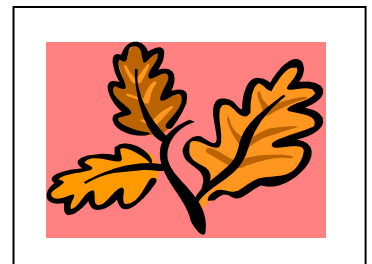
Decrease ◄   ► Increase

• Sharpness

Adjust vividness of the screen.

Less sharp ◄   ► Sharp

PICTURE

• Temperature

- Your TV has 5 screen temperatures (color settings):

1. Press Menu/set key to display the main OSD menu.

2. Select the picture main menu.

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

4. Select **Temperature** and press Menu/Set to enter the under menu. Then the Picture-Temperature under menu appear.

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

6. Press BACK button to return.

   • Cool 1,2

      Screen seems warm: Strong Blue

   •NORMAL

      Normal: Factory default.

   • Warm 1,2

      Screen seems cool: Strong Red

Mode	Standard
Temparature	Normal
VIdeo NR	◄ OFF ►
Film Mode	◄ OFF ►
Screen Format	16 : 9
BlackEnhancer	◄ OFF ►

Cool 2
Cool1
Normal
Warm 1
Warm 2

• Video NR

- 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 to enter the sub menu.

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

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

Mode	Standard
Temparature	Normal
VIdeo NR	◄ OFF ►
Film Mode	◄ OFF ►
Screen Format	16 : 9
BlackEnhancer	◄ OFF ►

Mode	Standard
Temparature	Normal
VIdeo NR	◄ OFF ►
Film Mode	◄ OFF ►
Screen Format	16 : 9
BlackEnhancer	◄ OFF ►

OWNER'S MANUAL

PICTURE

• Film Mode

- This Mode is in order to watch a movie composed 24 frames smoothly when the movie is converted to 30 frames on TV

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

2. Select the picture main menu item.

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

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

5. Turn on or off Film mode function with CH+/CH- button and press BACK button.

Mode	Standard
Temparature	Normal
VIdeo NR	◄ OFF ►
Film Mode	◄ OFF ►
Screen Format	16 : 9
BlackEnhancer	◄ OFF ►

• Screen Format

- Your TV has four Screen Formats: **16:9, PANORAMA, ZOOM1, ZOOM2, 4:3.**
(For more detail description for these modes, refer to the next page.)

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

2. Select the picture main menu.

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

4. Select **Screen Format** and press Menu/Set to enter the under menu. Then the Screen Format under menu appear.

5. Select the screen format you want and press Menu/Set button.

Mode	Standard
Temparature	Normal
VIdeo NR	◄ OFF ►
Film Mode	◄ OFF ►
Screen Format	16 : 9
BlackEnhancer	◄ OFF ►

16:9
PANORAMA
ZOOM1
ZOOM2
4:3

OWNER'S MANUAL

PICTURE

• Screen Format Description

16 : 9

16:9 video: No change.

4:3 video: Expands 4:3 video signal horizontally to fit the 16 : 9 screen.
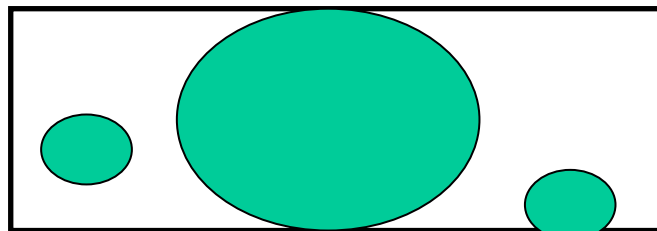
Panorama

16:9 video: No change.

4:3 video: Expands 4:3 video horizontally to fit the 16 : 9 screen and to minimize distortion, sides are expanded more than center.
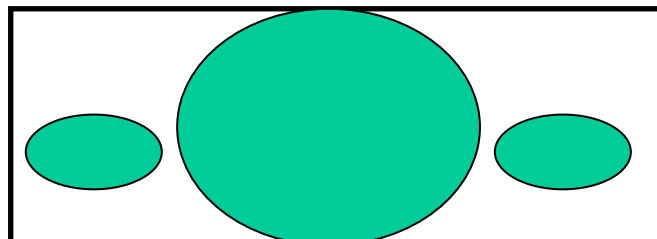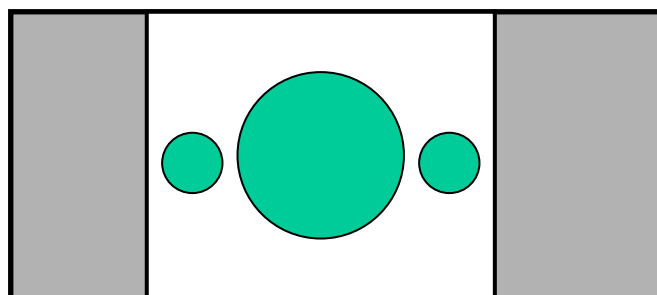
Zoom 1

Expands 16 : 9 mode screen vertically.
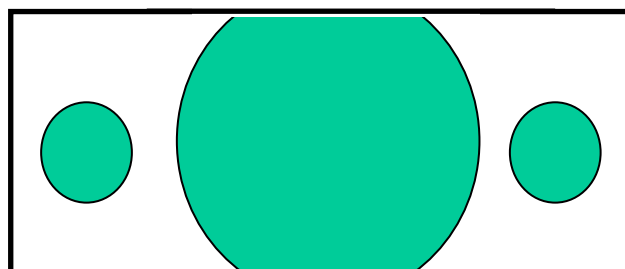
Zoom 2

Expands zoom 1 mode screen vertically.
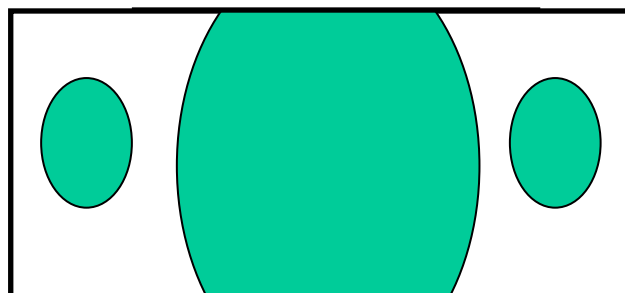
4:3

16:9 video: The image is suppressed.

4:3 video: No expansion. There are gray areas besides the image.

• Black Enhancer

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

Mode	Standard
Temparature	Normal
VIdeo NR	◄ OFF ►
Film Mode	◄ OFF ►
Screen Format	16 : 9
BlackEnhancer	◄ OFF ►

OWNER'S MANUAL

PICTURE (PC)

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

• Geometry

You can change H, V-Position, Clock 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 CH+, CH- button.

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

4. Select **Geometry** and press Menu/Set to enter the under menu. Then the picture Geometry under menu will appear.

M o d e	S t a n d a r d
T e m p e r a t u r e	N o r m a l
G e o m e t r y	
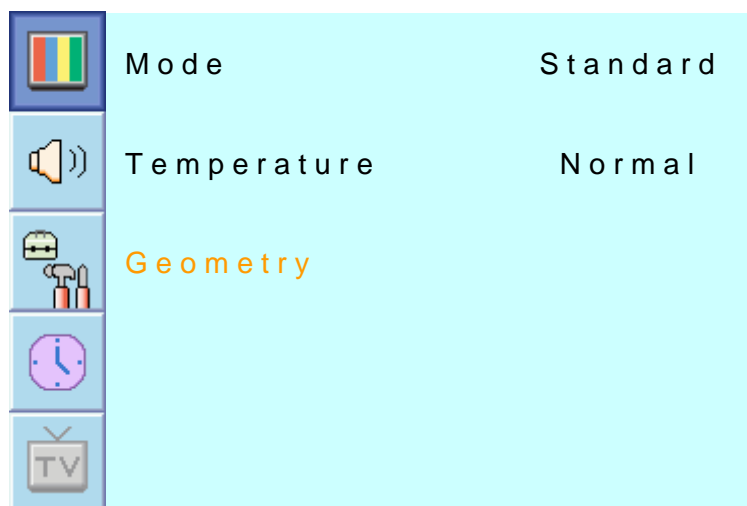
1. Select the item to adjust with CH-, CH+ button.

2. Press Menu/Set button.

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

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

H-Position	IIIIIIIIIIIIIIIIIIII I IIIIIIII
V-Position	IIIIIIIIIII I IIIIIIIIIIIIIIIII
P h a s e	IIIIIII I IIIIIIIIIIIIIIIIIIIIII
N a t i v e Mode	◄ O N ►
N a t I v e H − S I z e	◄ 1366 ►
A u t o A d j u s t	
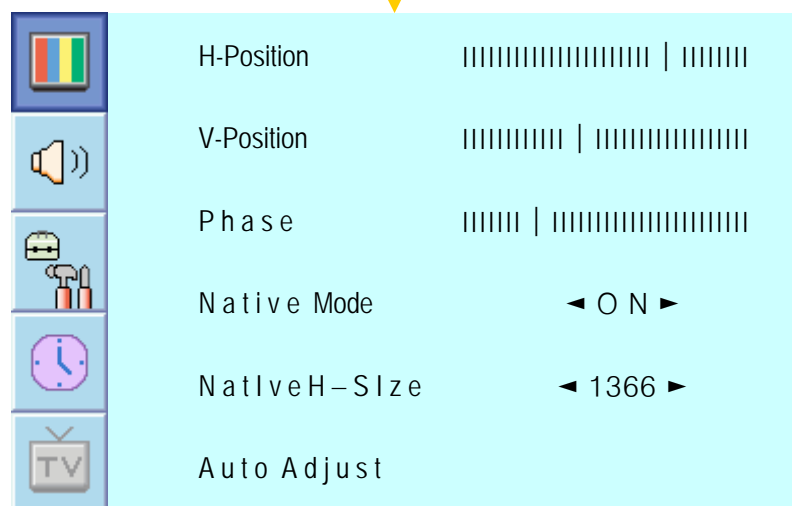
* For more detail description refer to the next page.

*You can select the H-Size of Native Mode depending on the input timing (1360/1366 selection)

OWNER'S MANUAL

PICTURE (PC)

H-POSITION

◄   ►

V-POSITION

◄   ►

PHASE

Mismatch   Match
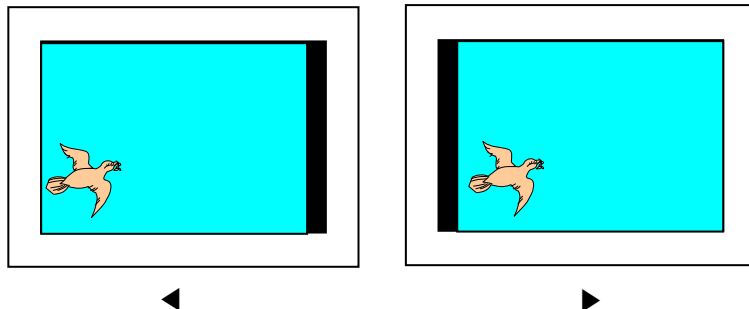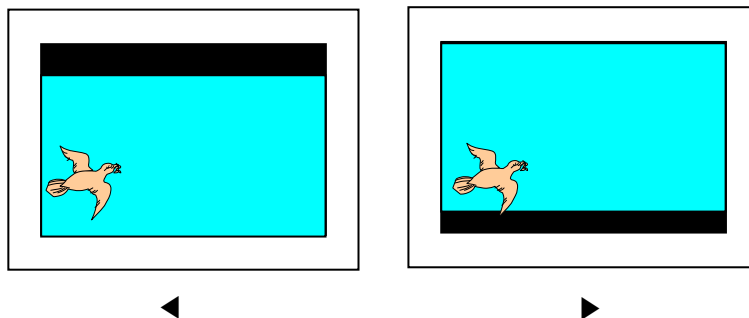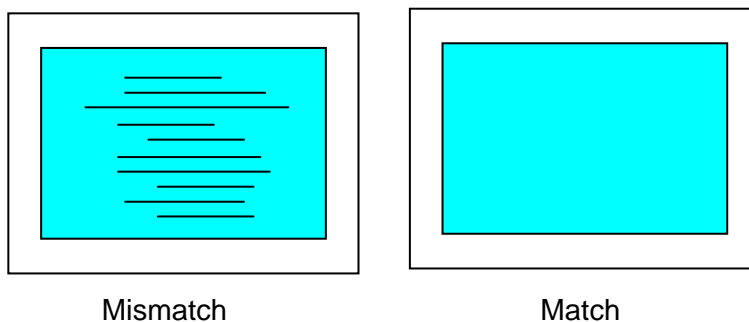
• Native Mode

- When you use TV, Native Mode display all timing to 1366 x 768 mode.
- When you off Native Mode, TV display 1366 x 768 mode expect 1360 x 768.

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

2. Turn the function on or off with CH+ / CH- button and press BACK button.

H-Position	IIIIIIIIIIIIIIIIIIIIII | IIIIIIII
V-Position	IIIIIIIIIIIII | IIIIIIIIIIIIIIIIIII
Phase	IIIIIIII | IIIIIIIIIIIIIIIIIIIIIIII
Native Mode	◄ OFF ►
Native H-Size	◄ 1366 ►
Auto Adjust	

SOUND

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

• 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 to enter the sub menu.

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

5. Adjust the balance with VOL-, VOL+ keys and press Menu/Set button.

	Balance	IIIIIIIIII | IIIIIIII
	Sound Mode	User
	Spatial effect	◄ OFF ►
	AVC	◄ OFF ►
	MTS	Stereo
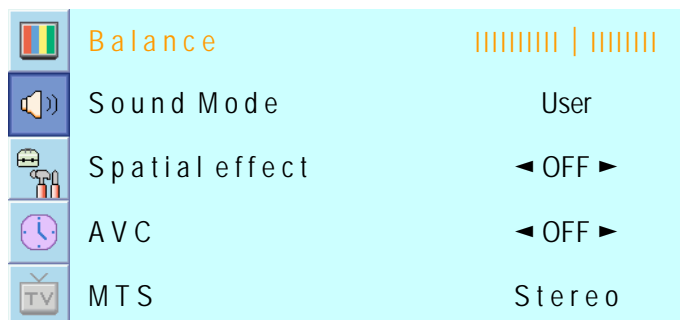
• Sound Mode

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 "Custom" which automatically recalls your personalized sound settings.

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

2. Select the SOUND main menu.

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

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

5. Select the equalizer setting and press Menu/Set button.

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

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

	Balance	IIIIIIIIII | IIIIIIII
	Sound Mode	User
	Spatial effect	◄ OFF ►
	AVC	◄ OFF ►
	MTS	Stereo

	Balance	IIIIIIIIII | IIIIIIII
	Sound Mode	User
	Spatial effect	◄ OFF ►
	AVC	◄ OFF ►
	MTS	Stereo

Equallzer

0.1   0.5   1.5   5.0   10.0 kHz

OWNER'S MANUAL
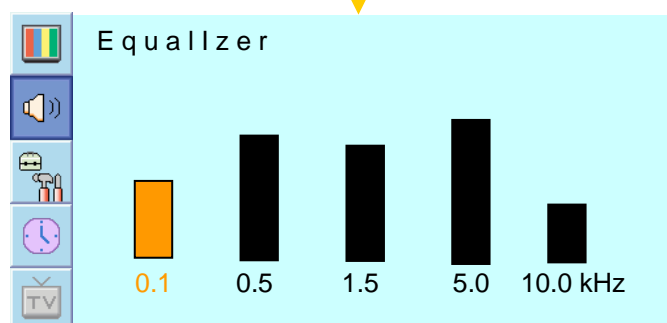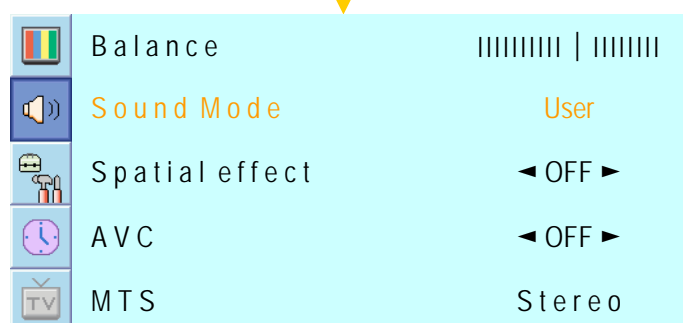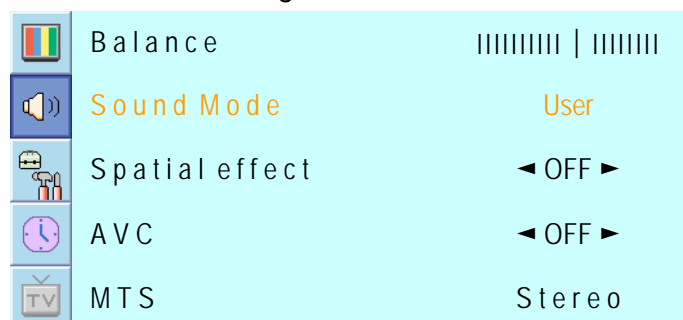
SOUND

• User Adjust

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

| Select **USER** mode (Previous page) |

1. equalizer menu appear when you select USER mode.

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

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

Equalizer

| | 0.1 | 0.5 | 1.5 | 5.0 | 10.0 kHz |
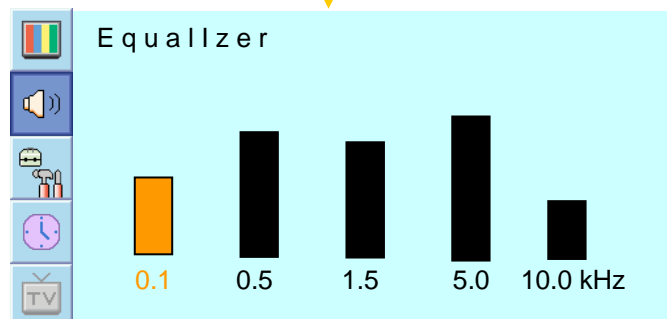
• Spatial Effect

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

1. Press Menu/set key to display the main OSD menu.

2. Select the SOUND main menu item with CH+/CH- button.

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

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

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

Balance	IIIIIIIIII	IIIIIIII
Sound Mode	User
Spatial effect	◄ OFF ►
AVC	◄ OFF ►
MTS	Stereo

• AVC (Auto Volume Control)

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

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

2. Select the SOUND main menu.

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

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

5. Turn on or off AVC function with CH+/CH- button and press BACK button.

Balance	IIIIIIIIII	IIIIIIII
Sound Mode	User
Spatial effect	◄ OFF ►
AVC	◄ OFF ►
MTS	Stereo

OWNER'S MANUAL

SOUND

• MTS

- Select sound signal format from the input source. There are Mono, Stereo, NICAM and Bilingual sound formats.

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

2. Select the SOUND main menu with CH+ / CH- button on the remote control.

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

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

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

Balance	IIIIIIIIIIIII | IIIIIIII
Sound Mode	USER
Spatial effect	◄ OFF ►
AVC	◄ OFF ►
MTS	Stereo

** The available sound formats are displayed. Usually, you can see Mono and Stereo.

Mono
Stereo
Language A
Language B
Language AB

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.

SET UP

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

• Translucent

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

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

2. Select the SET UP main menu with CH+ / CH- keys on the remote control.

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

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

5. Adjust with CH+ & CH- button and press EXIT button.

Translucent	◄ OFF ►
PIP	
Advanced	
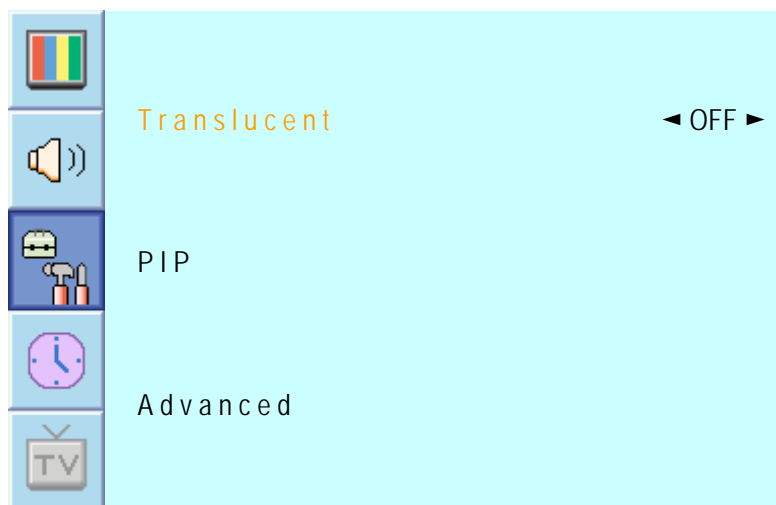
• PIP (Picture In Picture)

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

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

2. Select the SET UP main menu with CH+ / CH- keys on the remote control.

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

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

PIP Window

Translucent	◄ OFF ►
PIP	
Advanced	

Size	◄ SMALL ►
Source	
PIcture Swap	
Position	

OWNER'S MANUAL
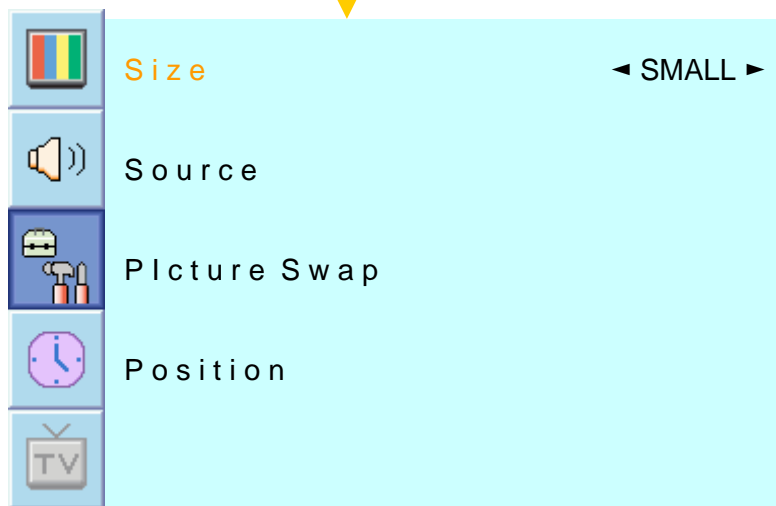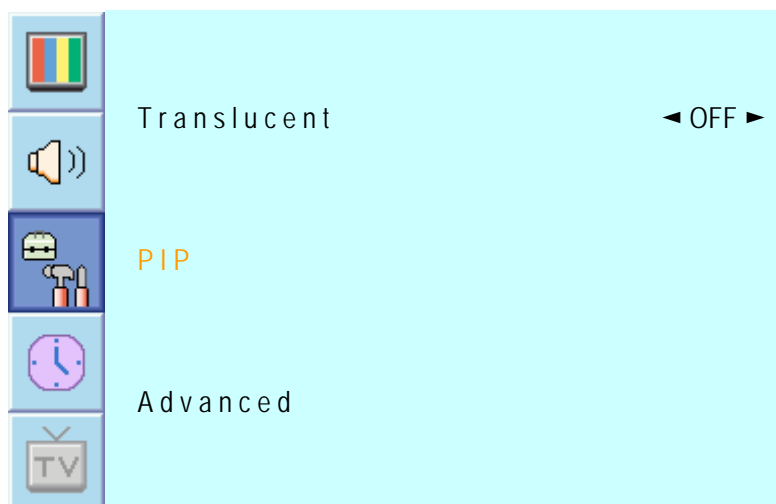
SET UP

• Size in PIP (Picture In Picture)

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

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

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

SMALL	LARGE	TWIN

• Source in PIP

- Change the source of the PIP window.

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

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

Size   ◄ SMALL ►

Source

Picture Swap

Position

TV

TV

SCART 1
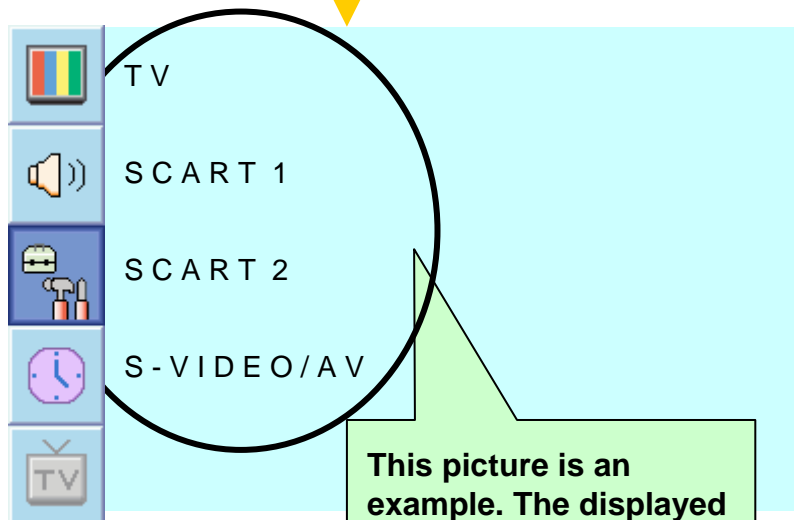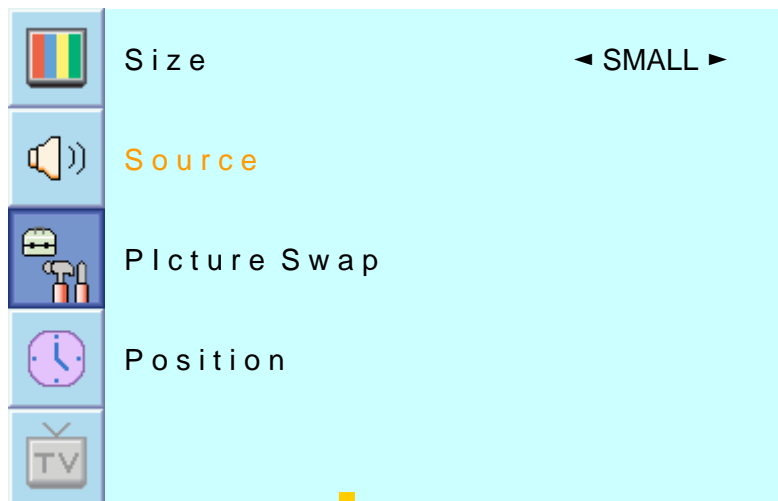
SCART 2

S-VIDEO/AV

This picture is an example. The displayed sources may be different depending on the main input source.

SET UP

Main PIP	TV	SCART 1	SCART 2	S-Video / AV	Component1	Component2	PC	DVI
TV	O	O	O	O	O	O	O	O
SCART 1	O	X	O	O	O	O	O	O
SCART 2	O	O	X	O	O	O	O	O
S-Video	O	O	O	X	O	O	O	O
Component1	O	O	O	O	X	X	X	X
Component2	O	O	O	O	X	X	X	X
PC	O	O	O	O	X	X	X	X
DVI	O	O	O	O	X	X	X	X

• 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.

• Position in PIP

- Change the position of the PIP window.

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

2. In Sub Menu, there are four positions. Select the position with CH+ / CH- button on the remote control and press BACK button.

Size	◄ SMALL ►
Source	
PIcture Swap	
Position	
TV	

Right Down	
Right Up	
Left Up	
Left Down	
TV	

OWNER'S MANUAL
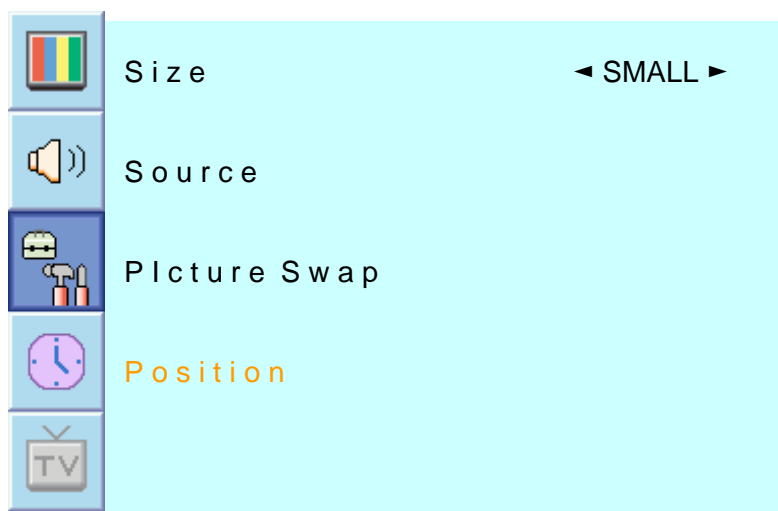
SET UP

• Advanced

- You can se up ID, Burn Protect, Blue Back, Language and Child Lock in Advanced Menu.

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

2. Select the SET UP main menu with CH+ / CH- button on the remote control.

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

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

Translucent	◄ OFF ►
PIP	
Advanced	

SetID	◄ 99 ►
BlueBack	◄ OFF ►
Language	◄ ENGLISH ►
Front key Lock	◄ OFF ►
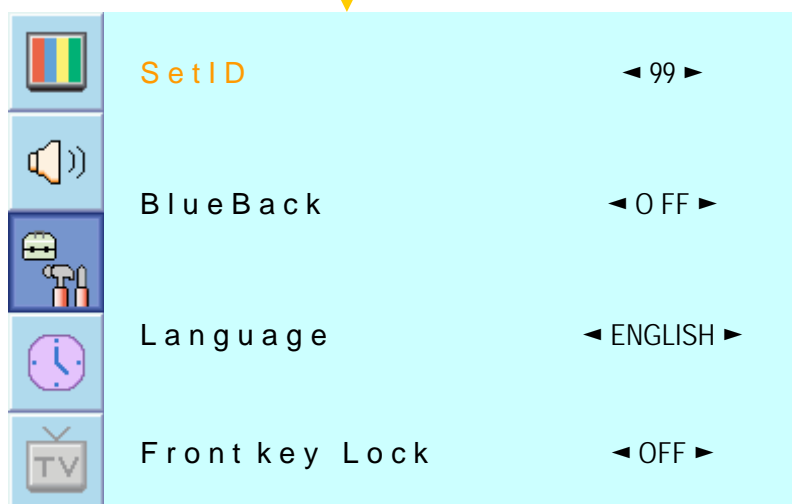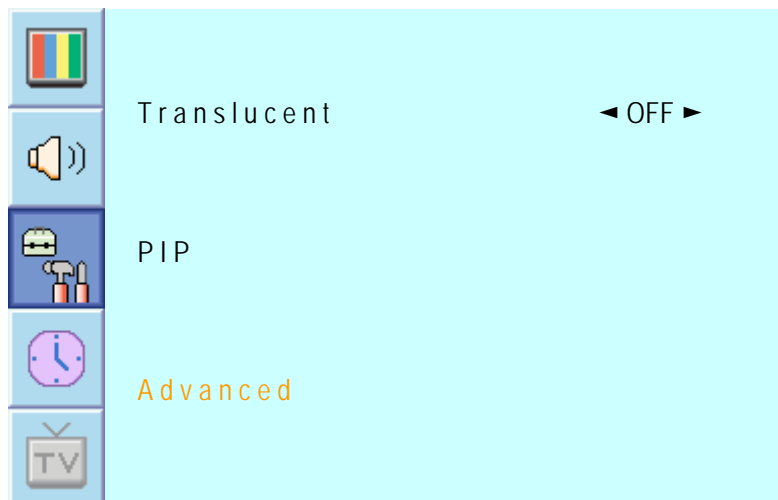
• Set ID in Advanced

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

1. Select **Set ID** and press VOL+ button to enter the ◄► part. Then the cursor moves into the ◄► part.

2. Adjust with CH+ / CH- button and press BACK button.

SetID	◄ 99 ►
BlueBack	◄ OFF ►
Language	◄ ENGLISH ►
Front key Lock	◄ OFF ►

OWNER'S MANUAL
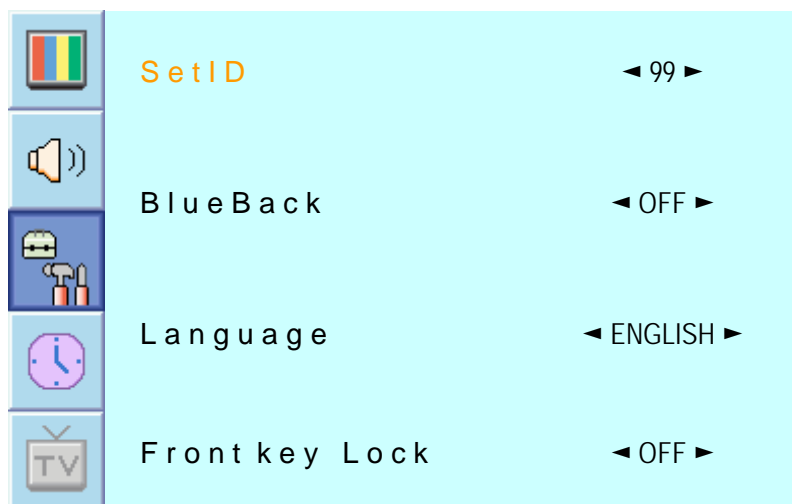
SET UP

• Blue Back in Advanced

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

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

2. Turn the function on or off with CH+ / CH- button and press BACK button.

	S e t I D	◄ 99 ►
	B l u e B a c k	◄ O FF ►
	L a n g u a g e	◄ ENGLISH ►
	F r o n t k e y Lock	◄ OFF ►

• Language in Advanced

Set the language to use in OSD.

Supported languages are English, French, German, Spanish, Italian.

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

2. Choose the Language with CH+ / CH- button and press BACK button.

	S e t I D	◄ 99 ►
	B l u e B a c k	◄ O FF ►
	L a n g u a g e	◄ ENGLISH ►
	F r o n t k e y Lock	◄ OFF ►

• Front key Lock in Advanced

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

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

2. Turn the function on or off with CH+ / CH- button and press BACK button.

	S e t I D	◄ 99 ►
	B l u e B a c k	◄ O FF ►
	L a n g u a g e	◄ ENGLISH ►
	F r o n t k e y Lock	◄ OFF ►

OWNER'S MANUAL

• V-Chip (TV parental Guidelines)

- Parental restrictions can be set up using either of two methods: The TV guidelines or the MPAA rating.

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

2.   Select the SET UP main menu with CH+ / CH- keys on the remote control.

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

4.   After enter the password, the V-Chip sub menu appear.

Trucelant	◄ OFF ►
PIP	
Advanced	
V-Chip	
Caption	◄ OFF ►

Pass Word

_ _ _ _

TV Blocking	
Movie Blocking	
Change Password	
V-Chip Bocking	◄ OFF ►
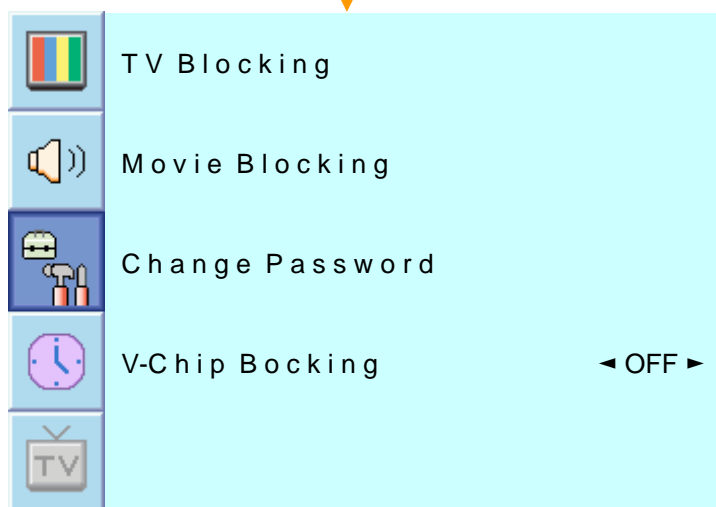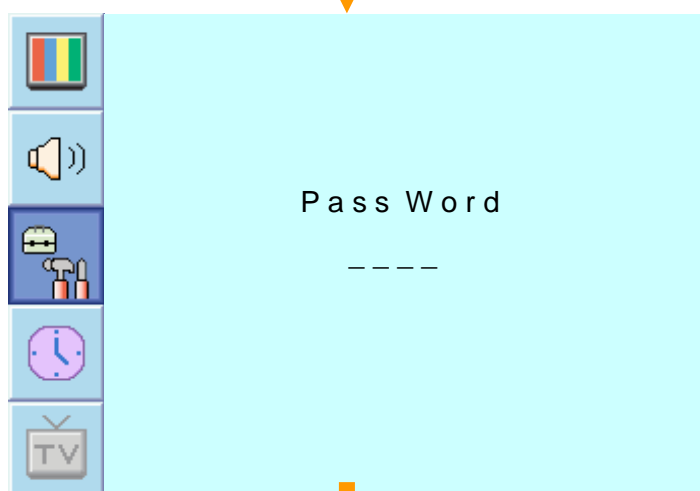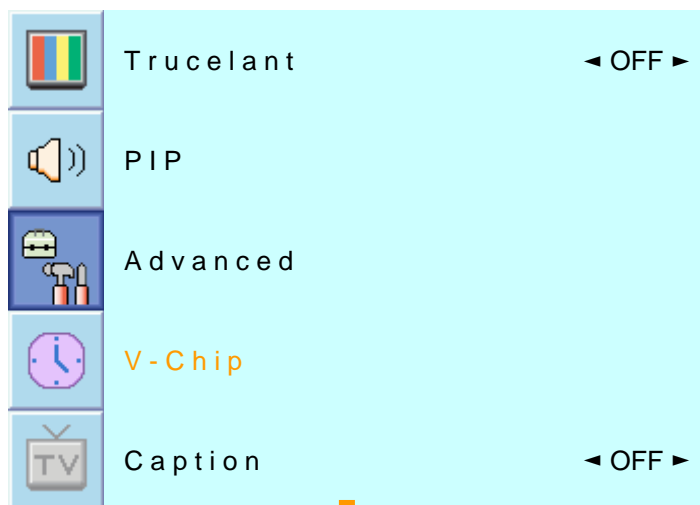
Caution

The factory default number is 0000 and the master key number is 9673.

SET UP

• TV Blocking in V-Chip (Continued from 60 page)

- You can set up Restrictions Using the "TV Parental Guidelines" of FCC.

1. Select **TV Blocking** with CH+ / CH- button on the remote control and press Menu/Set to enter the sub menu. Then the TV Blocking sub menu appear.

2. You can independently lock the TV ratings. The locked TV (FCC) ratings are indicated by the symbol 🔒 .

3. Press CH+/CH-/VOL+/VOL- buttons and the Menu/Set button to activate the appropriate restrictions for TV (FCC) rating system.

	T V B l o c k i n g
	M o v i e B l o c k i n g
	C h a n g e P a s s w o r d
	V - C h i p B l o c k i n g ◄ OFF ►
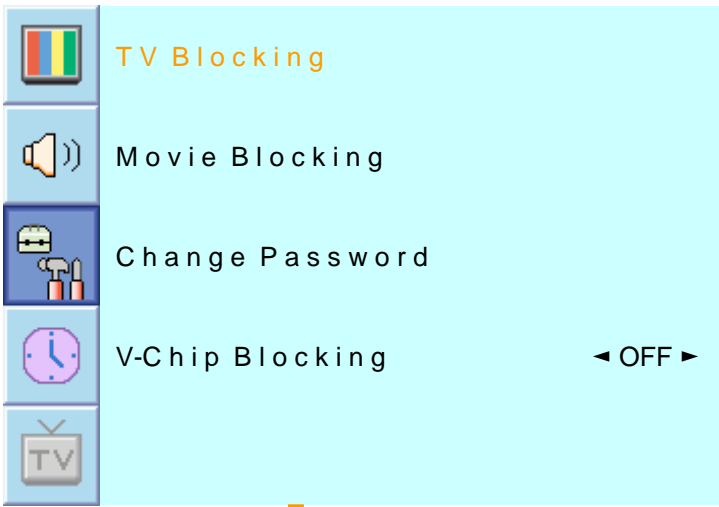
Note: These categories consist of two separate groups: TV-Y and TV-Y7 (young children through age 7), and TV-G through TV-MA (everybody else).

The restrictions for these two groups work independently: If a household includes very young children as well as young adults, the TV guidelines must be set up separately for each age group.

|	Block	FV	D	L	S	V
TV-Y						
TV-Y7	🔒	🔒	🔒			
TV-G	🔒		🔒	🔒	🔒	🔒
TV-CH	🔒		🔒	🔒	🔒	🔒
TV-14	🔒		🔒	🔒	🔒	🔒
TV-MA	🔒		🔒	🔒	🔒	🔒

OWNER'S MANUAL

SET UP

• Movie Blocking in V-Chip (Continued from 60 page)

The Movie Blocking uses the Motion Picture Association of America (MPAA) system, and its main application is for movies. When the Rating Controls is on, the TV will automatically block any programs that are coded with objectionable ratings (either MPAA or TV-Ratings).

1. Select **Movie Blocking** with CH+ / CH- button on the remote control and press Menu/Set to enter the sub menu. Then the Movie Blocking sub menu appear.

2. You can independently lock the TV ratings. The locked Movie (FCC) ratings are indicated by the symbol 🔒 .

3. Press CH+/CH- buttons and the Menu/Set button to activate the appropriate restrictions for MPAA rating system.

T V B l o c k i n g	
M o v i e B l o c k i n g	
C h a n g e P a s s w o r d	
V-C h i p B l o c k i n g	◄ OFF ►
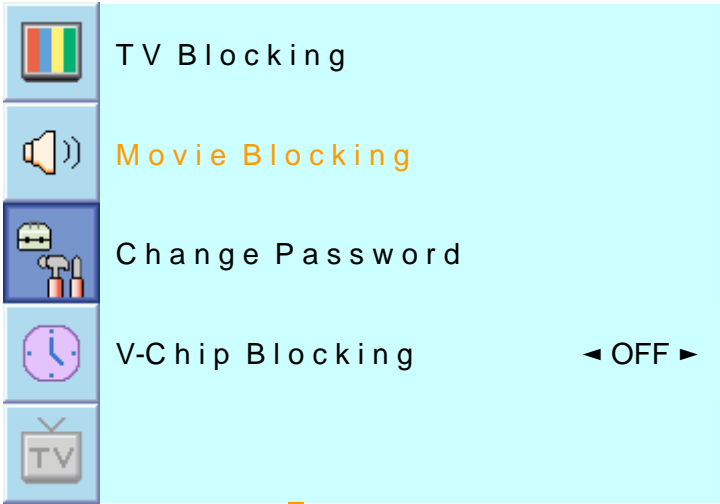
	Block
MPAA-G	🔒
MPAA-CH	🔒
MPAA-CH-B	🔒
MPAA-R	🔒
MPAA-R	🔒
MPAA-NC	🔒
MPAA-X	🔒
MPAA-NR	🔒

OWNER'S MANUAL

SET UP

• Change Password in V-Chip (Continued from 60 page)

1. Select **Change Password** with CH+ / CH- button on the remote control and press Menu/Set to enter the sub menu. Then the Pass Word change sub menu appear.

2. Enter the new password with numeric keys on the remote control.

T V B l o c k i n g

M o v i e B l o c k i n g

C h a n g e P a s s w o r d

V - C h i p B l o c k i n g   ◄ OFF ►

P a s s W o r d

_ _ _ _
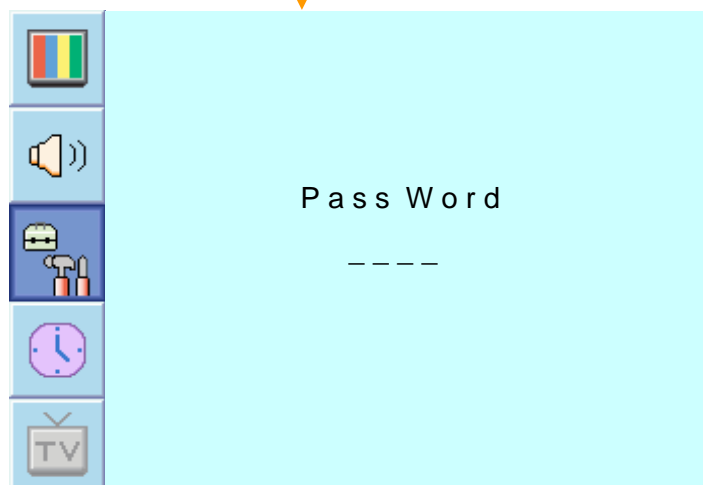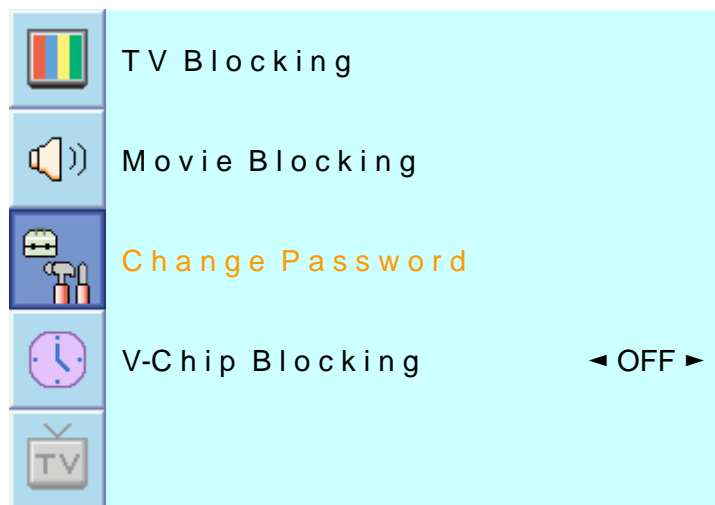
• V-Chip Blocking in V-Chip (Continued from 60 page)

1. Select **V-Chip Blocking** with CH+ / CH- buttons on the remote control.

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

3. ON / OFF the V-Chip Blocking with CH+ / CH- buttons.

4. Exit with Back button on the remote control.

T V B l o c k i n g

M o v i e B l o c k i n g

C h a n g e P a s s w o r d

V - C h i p B l o c k i n g   ◄ OFF ►

OWNER'S MANUAL
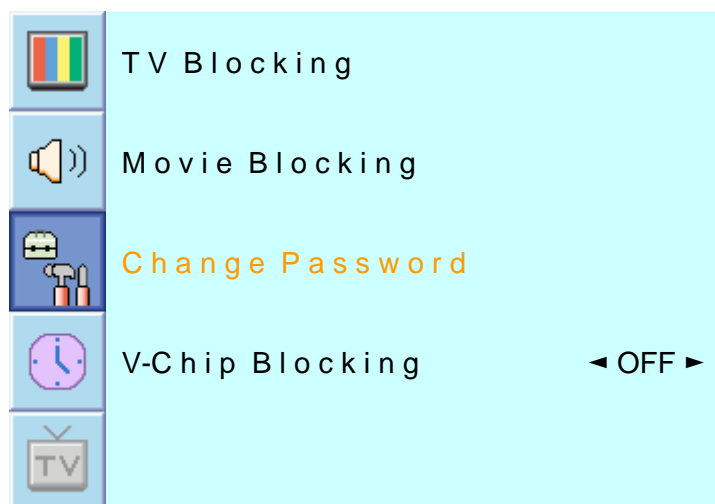
TIME

In the TIME menu, you can set the current time and auto power on / off.

• Time Set

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 to enter the sub menu.

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

5. Move the cursor by pressing VOL-, VOL+ button and adjust time by CH+, CH- button.

T i m e S e t	AM 03:29
O n T i m e	AM 05:11 ON
O n C h a n n e l	◄ 99 ►
O n V o l u m e	◄ 100 ►
O f f T i m e	AM 05:11 OFF
S l e e p	◄ OFF ►

• 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 CH+ / CH- button on the remote control.

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

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

5. Move the cursor by VOL-, VOL+ button and adjust time by CH+, CH- button.

T i m e S e t	AM 03:29
O n T i m e	AM 05:11 ON
O n C h a n n e l	◄ 99 ►
O n V o l u m e	◄ 100 ►
O f f T i m e	AM 05:11 OFF
S l e e p	◄ OFF ►

O n T i m e	AM 05:11 ON

Item Name	Auto power-on time	Activated

OWNER'S MANUAL
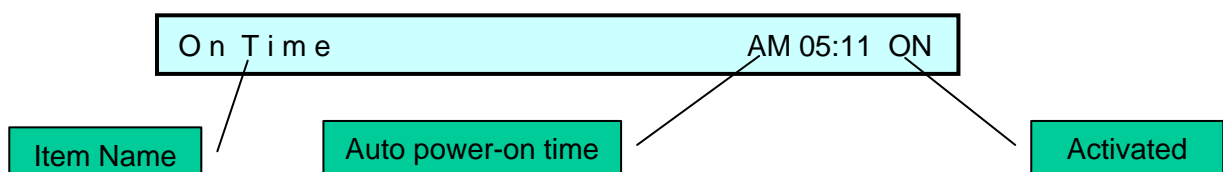
TIME

• On Channel

Set the channel when TV power turn on automatically.

** Available only when the Time is set and **On Time** is ON.

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

2. Select the **TIME** main menu with CH+ / CH- button on the remote control.

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

4. Select **On Channel.**

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

6. Adjust the channel with CH+/ CH- button. Press BACK button to return.

	T i m e S e t	AM 03:29
	O n T i m e	AM 05:11 ON
	O n C h a n n e l	◄ 99 ►
	O n V o l u m e	◄ 100 ►
	O f f T i m e	AM 05:11 OFF
	S l e e p	◄ OFF ►

• 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 CH+ / CH- button on the remote control.

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

4. Select **On Volume**.

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

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

	T i m e S e t	AM 03:29
	O n T i m e	AM 05:11 ON
	O n C h a n n e l	◄ 99 ►
	O n V o l u m e	◄ 100 ►
	O f f T i m e	AM 05:11 OFF
	S l e e p	◄ OFF ►

OWNER'S MANUAL

TIME

• 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 CH+ / CH- button on the remote control.

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

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

5. Move the cursor with VOL- / VOL+ button and adjust time with CH+ / CH- button.

	T i m e S e t	AM 03:29
	O n T i m e	AM 05:11 ON
	O n C h a n n e l	◄ 99 ►
	O n V o l u m e	◄ 100 ►
	O f f T i m e	AM 05:11 OFF
	S l e e p	◄ OFF ►

O f f   T i m e   AM 05:11 ON

Item Name   Auto power-off time   Activated
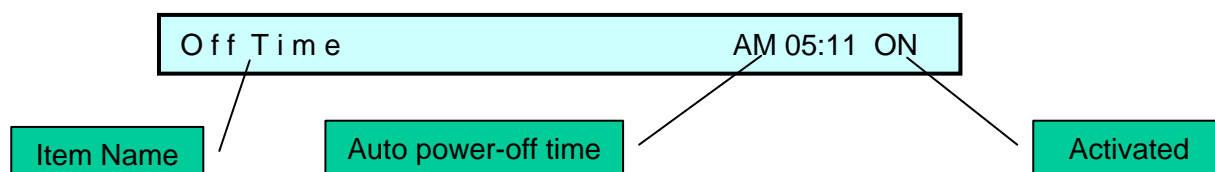
• Sleep

You can set your 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 set up again. The time period runs from OFF(0min) to 180min. (OFF, 10min, 20, 30, 60, 90, 120, 150, 180)

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

2. Select the **TIME** main menu. with CH+ / CH- button on the remote control.

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

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

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

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

7. Press BACK button to return.

	T i m e S e t	AM 03:29
	O n T i m e	AM 05:11 ON
	O n C h a n n e l	◄ 99 ►
	O n V o l u m e	◄ 100 ►
	O f f T i m e	AM 05:11 OFF
	S l e e p	◄ OFF ►

OWNER'S MANUAL

Specification – 32 Inch LCD

Function and Display Specification

Display Size	32-Inch 16 : 9 Diagonal Screen
Display Mode	Variable 4 Modes (4:3 Mode/ 16:9 X 3 Modes)
Pixel Format	1366x768 Physical Pixel
Contrast Ratio	500:1* , 1000:1**
Brightness	500* , 450** 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 (NTSC)
programming	Favorite channel programming, Time Set, Set the Sleep timer, TTX
HDTV Input	480i/p(60Hz) , 576ip(50Hz), 720p(60Hz) , 1080i(50,60Hz)
Color temperature	Selectable 6 Mode (Warm1,2, Normal, Cool1,2, User)

Dimension / Weight

Main Only	791.8(W) X 592.4(H) X 102(D) / 18 kg
With Stand	791.8(W) X 615.4(H) X 250(D) / 20 kg
With Stand and Speaker	991.8(W) X 645.4(H) X 250(D) / 24 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

OWNER'S MANUAL

Specification – 32 Inch LCD

Power Consumption	
Input Power	AC 100 ~ 240V 50/60Hz
Power consumption	150 Watt

Connectivity	
TV1,2 Input	RF/CATV (PAL/SECAM)
Scat1,2 Input	SCART X 2Port (SCART1 (HALF), SCART2 (FULL))
Composite Input/Output	RCA X 2Port (AV INPUT, AV OUTPUT)
Component1,2 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	Mini D-Sub 29Pin X 1Port / HDTV Input(480p, 576p, 720P(50/60Hz), 1080i(50/60Hz))
Audio In/Output	RCA X 5Port
Speaker Output	Cinch Type X 4Port(Stereo L/R), Head Phone Jack X 1Port(Optional)
External Control Port	Mini D-Sub 9Pin X 1Port

※ Notice : *Model : HL-3211B Model / **Model : HL-3210B Model

Specification – 40 Inch LCD

Function and Display Specification

Display Size	40-Inch 15:9*, 16:9** Diagonal Screen
Display Mode	Variable 4 Modes (4:3 Mode/ 16:9 X 3 Modes)
Pixel Format	1280x768*, 1366x768** Physical Pixel
Contrast Ratio	500:1* , 800:1**
Brightness	450* , 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(60Hz), 1080i(50,60Hz)
Color temperature	Selectable 6 Mode (Warm1,2, Normal, Cool1,2, User)

Dimension / Weight

Main Only	*966(W)X617.4(H)X102(D)/29 kg **985(W)X598(H)X101.5(D)/29Kg
With Stand	*966(W)X675.1(H)X305(D)/30.8 kg **985(W)X661(W)X305(D)/30.8kg
With Stand and peaker	*1166(W)X675.1(H)X305(D)/34.8 **1185(W)X661(W)X305(D)/34.8kg

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

Specification – 40 Inch LCD

Power Consumption

Input Power	AC 100 ~ 240V 50/60Hz
Power consumption	300 Watt

Connectivity

TV1,2 Input	RF/CATV (PAL/SECAM)
Scat1,2 Input	SCART X 2Port (SCART1 (HALF), SCART2 (FULL))
Composite Input/Output	RCA X 2Port (AV INPUT, AV OUTPUT)
Component1,2 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	Mini D-Sub 29Pin X 1Port / HDTV Input(480p, 576p, 720P(50/60Hz), 1080i(50/60Hz))
Audio In/Output	RCA X 5Port
Speaker Output	Cinch Type X 4Port(Stereo L/R), Head Phone Jack X 1Port(Optional)
External Control Port	Mini D-Sub 9Pin X 1Port

※ Notice : *Model : Wide Model(W1) / **Model : 16:9 Model(W2)

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 Monitor is turned on.** Power cord inserted into wall outlet? Plug another product's power cord into the wall outlet where the Monitor's power cord was plugged in.
Picture OK & No sound	Press the VOLUME(▶) key. 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 VOLUME(▶) key. Keep a certain distance between the Monitor and the VCR. Activate any function to restore the brightness of the picture. Check to see that both the monitor and the source are plugged in and turned on.
The image is too light or too dark	Adjust the Brightness or Contrast settings.
The image is too large or too small	Adjust the Size settings.
No output from one of the speakers	Adjust Balance in the Sound Menu.
Strange sound form the Monitor	Typical sound due to normal Monitor operation, Monitor is not faulty.

OWNER'S MANUAL