

Color Television

Owner's Manual

Please read this manual carefully before operating your set.
Retain it for future reference.

Record model number and serial number of the set. See the label attached on the back cover and quote this information to your dealer when you require service.

Model number :

Serial number :



WARNING:

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



The lightning flash with arrowhead symbol, within an equilateral triangle, 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.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

NOTE TO CABLE/TV INSTALLER:

This reminder is provided to call the CATV system installer’s attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

REGULATORY INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

Important safeguards for you and your new product

Your product has been manufactured and tested with your safety in mind. However, improper use can result in potential electrical shock or fire hazards. To avoid defeating the safeguards that have been built into your new product, please read and observe the following safety points when installing and using your new product, and save them for future reference.

Observing the simple precautions discussed in this booklet can help you get many years of enjoyment and safe operation that are built into your new product.

This product complies with all applicable U.S. Federal safety requirements, and those of the Canadian Standards Association.

1. Read Instructions

All the safety and operating instructions should be read before the product is operated.

2. Follow Instructions

All operating and use instructions should be followed.

3. Retain Instructions

The safety and operating instructions should be retained for future reference.

4. Heed Warnings

All warnings on the product and in the operating instructions should be adhered to.

5. Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. Water and Moisture

Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

7. Accessories Carts and Stands

Do not place this product on a slippery or tilted surface, or on an unstable cart, stand, tripod, bracket, or table. The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a

cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

8. Transporting Product

A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



PORTABLE CART WARNING

9. Attachments

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

10. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11. Power Sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

12. Power-Cord Polarization

This product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into the grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

13. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

14. Lightning

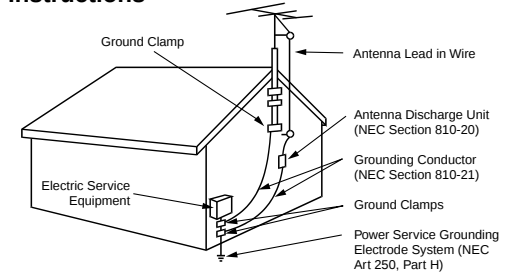
For added protection for this product (receiver) during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

15. Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (U.S.A.), ANSI/ NFPA 70 provides information with regard to 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.

Example of Grounding According to National Electrical Code Instructions



NEC - National Electrical Code

16. Power Lines

An outside antenna system should not be located 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, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

17. Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

18. Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

19. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. If the power-supply cord or plug is damaged.
- b. If liquid has been spilled, or objects have fallen into the product.
- c. If the product has been exposed to rain or water.
- d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e. If the product has been dropped or the cabinet has been damaged.
- f. If the product exhibits a distinct change in performance.

21. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

22. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

23. Wall or Ceiling Mounting

The product should be mounted to a wall or ceiling only as recommended by the manufacturer. The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product.

24. Heat

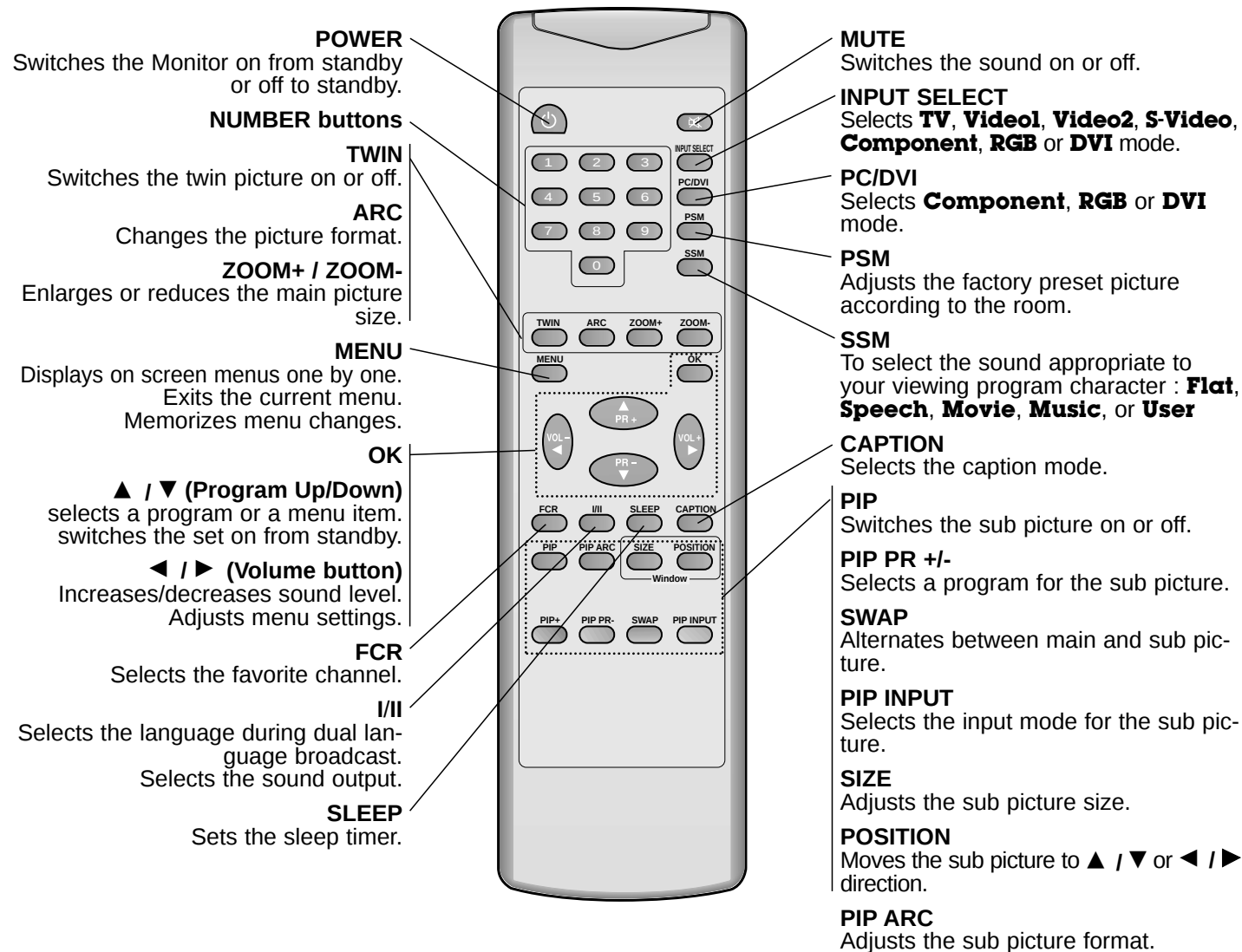
The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

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Remote control handset Controls

- All the functions can be controlled with the remote control handset.
- Some functions can also be adjusted with the buttons on the front panel of the set.



Before you use the remote control handset, please install the batteries.

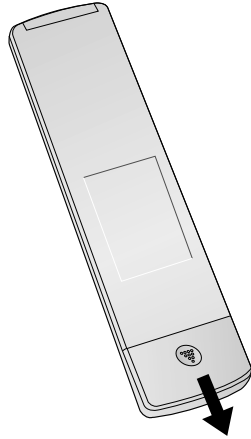
Remote control handset

Battery Installation

- Your remote control handset is powered by two AAA type batteries.

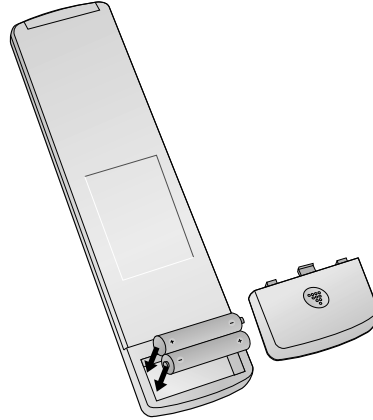
1

To insert batteries, turn the remote control handset over and remove the battery cover.



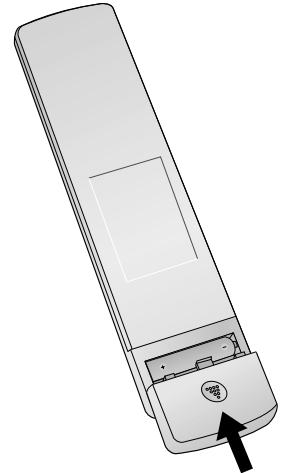
2

Put the two batteries into the compartment observing battery polarity.



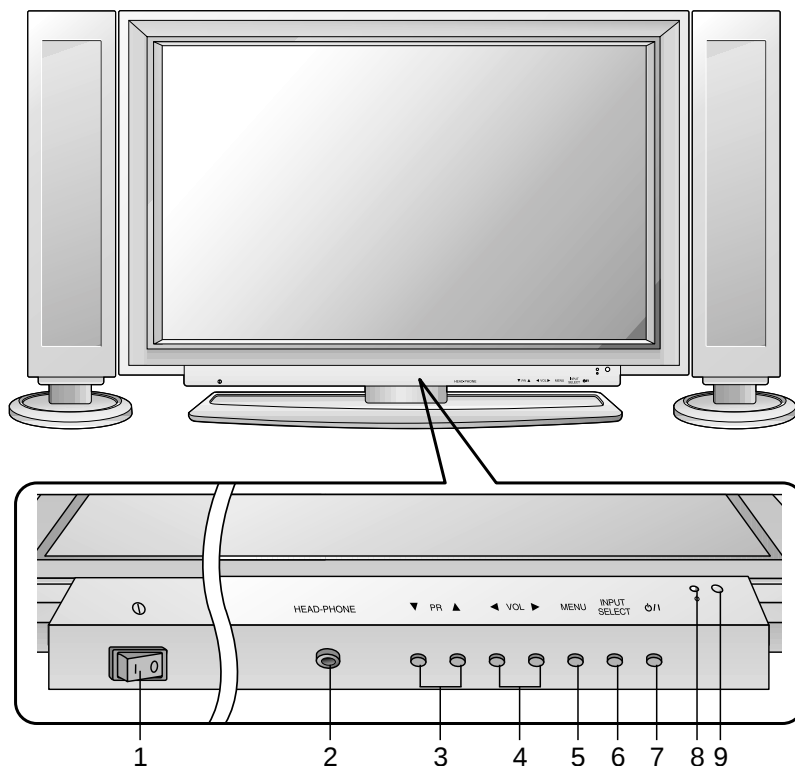
3

Replace the cover.



To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the remote control handset for an extended period time. Do not use batteries of differing age or type. Always discard of batteries safely.

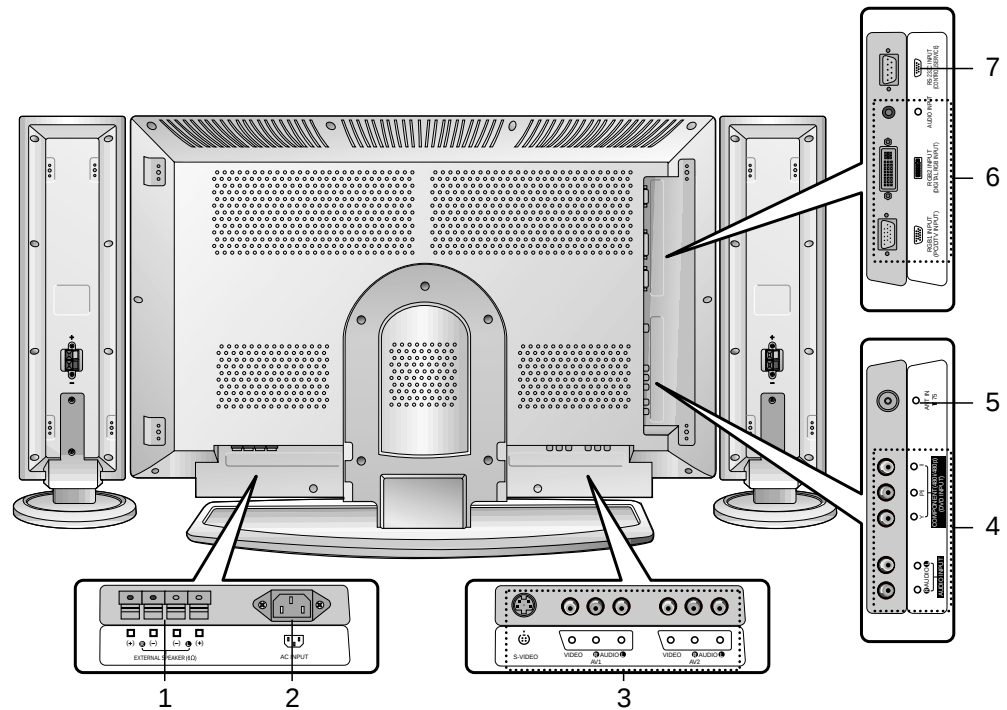
Controls of Front Panel



(Front panel)

1. **MAIN POWER**
switches the set on or off.
2. **HEADPHONE SOCKET**
connects the headphone plug to this socket.
3. **▲ / ▼ (Program Up/Down)**
selects a program or a menu item.
switches the set on from standby.
4. **◀ / ▶ (Volume Down/Up)**
adjusts the volume.
adjusts menu settings.
5. **MENU**
selects a menu.
6. **INPUT SELECT**
selects **TV**, **Video1**, **Video2**, **S-Video**,
Component, **RGB**, **DVI** mode.
switches the set on from standby.
7. **POWER (⏻/⏻)**
switches the set on from standby or off to
standby.
8. **POWER/STANDBY INDICATOR (⏻)**
illuminates red in standby mode.
illuminates green when the set is switched on.
9. **REMOTE CONTROL SENSOR**

Connections of Back Panel



1. EXTERNAL SPEAKER (6 ohm output)

Connect to optional external speaker(s).

2. POWER CORD SOCKET

This set operates on an AC power. The voltage is indicated on the Specifications page. Never attempt to operate the set on DC power.

3. AUDIO/VIDEO INPUT (AV1 or AV2)

Connect audio/video out from external equipment to these sockets.

S-VIDEO INPUT

Connect S-VIDEO out from external equipment to this socket.

4. AUDIO INPUT / COMPONENT (480i/480p) (DVD INPUT) SOCKETS

5. AERIAL SOCKET

6. RGB1 INPUT (PC/DTV INPUT) / RGB2 INPUT (DIGITAL RGB INPUT) / AUDIO INPUT SOCKETS

Connect the set output socket of the PERSONAL COMPUTER to this socket.

7. RS-232C INPUT (CONTROL/SERVICE) PORT

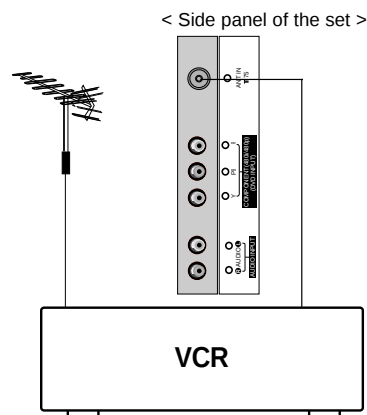
Connect to the RS-232C port on a PC.

Connection to External equipment

- You can connect additional equipment, such as VCRs, camcorders etc. to your set. However please check with your manufacturers instruction books for specific information. Make sure all connections are made with both your set and additional appliance unplugged from the mains to avoid damaging your equipment. Here shown may be somewhat different from your set.

1

Connect to Aerial socket

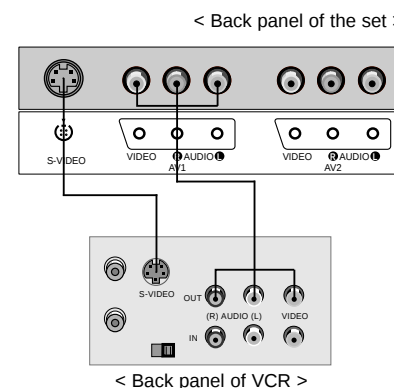


1. Connect the RF out socket of the VCR to the aerial socket on the back of the set.
2. Connect the aerial cable to the RF aerial in socket of the VCR.
3. Store the VCR channel on a desired program number using the 'Manual program tuning' section.
4. Select the program number where the VCR channel is stored.
5. Press the **PLAY** button on the VCR.

2

Watching VCR

- When connecting the set to external equipment, match the colors of connecting ports (Video - yellow, Audio (L) - white, Audio (R) - red).
- Connect the VIDEO INPUT socket (yellow) to the **VIDEO** on the set.
- If you connect an S-VIDEO VCR to the S-VIDEO input, the picture quality is improved; compared to connecting a regular VCR to the Video input.
If a 4:3 picture format is used; the fixed image may remain visible on the screen.

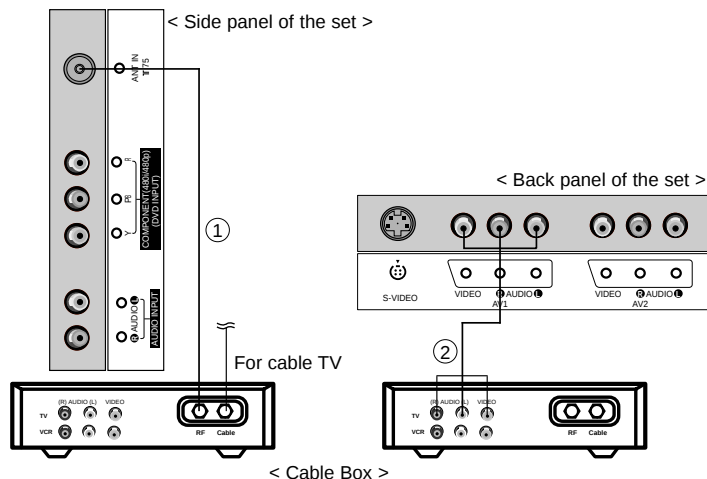


- To avoid picture noise (interference), leave an adequate distance between the VCR and set.
1. Use the **INPUT SELECT** button on the remote control to select **Video1** or **Video2**.
(If connected to S-VIDEO, select the **S-Video** external input source.)
 2. Insert a video tape into the VCR and press the **PLAY** button on the VCR. (See VCR owner's manual)

Connection to External equipment

3

Watching Cable TV



- After subscribing for a local cable TV station and installing a converter you can watch cable TV.
- For further information of cable TV, contact the local cable TV station.

In using connection 1

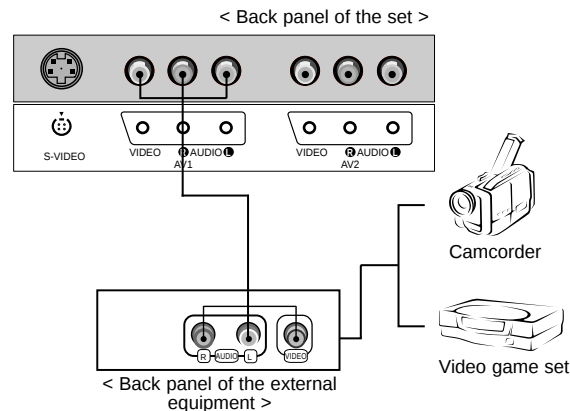
1. Select program number in program switch of cable box.
2. Match the set program with selected program of cable box.
3. Select your desired program with the remote control for cable box.

In using connection 2

1. Use the **INPUT SELECT** button on the remote control and select **Video1** or **Video2**.
2. Tune to cable service provided channels using the cable box.

4

Watching external AV source



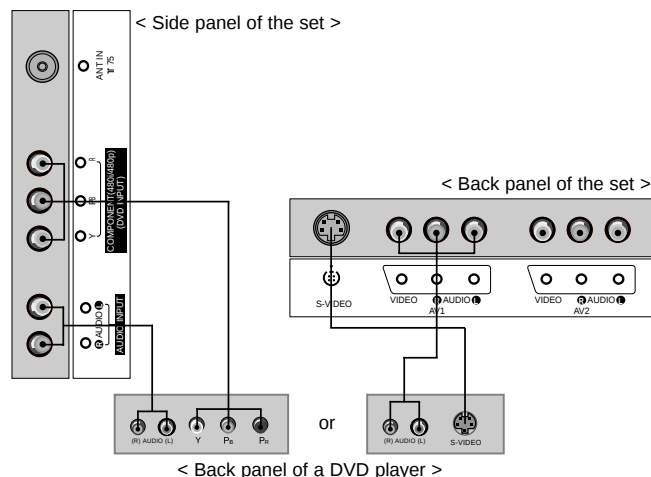
- When connecting the set to an external source, match the colors of AUDIO/VIDEO input jacks on the set with the output jacks on the audio/video equipment: Video = yellow, Audio (Left) = white, Audio (Right) = red.

1. Use the **INPUT SELECT** button on the remote control to select **Video1** or **Video2**.
2. Operate the corresponding external equipment. See external equipment operating guide.

Connection to External equipment

5

Watching DVD



How to connect

Connect DVD video inputs to Y, PB, PR of COMPONENT (DVD INPUT) and audio inputs to Audio sockets of AUDIO INPUT.

How to use

1. Turn on the DVD player, and insert a DVD.
2. Use **INPUT SELECT** or **PC/DVI** button on the remote control to select **Component**. Refer to the DVD player's manual for operating instructions.

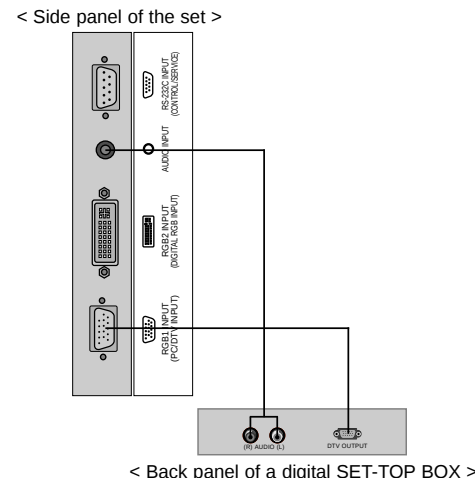
• Component Input ports

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

Component ports of the set	Y	P _B	P _R
Video output ports of DVD player	Y	P _b	P _r
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	P _B	P _R

6

Watching DTV



- To watch digitally broadcast programs, purchase and connect a digital set-top box.

How to connect

1. Use the set's RGB jack for video connections, depending on your set-top box connector. Then, make the corresponding audio connections.

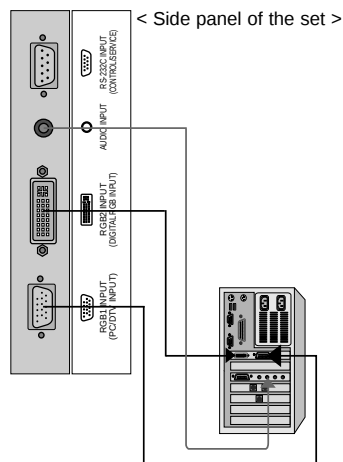
How to use

1. Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
2. Use **INPUT SELECT** or **PC/DVI** button on the remote control to select **Component**, **RGB** or **DVI**.

Connection to External equipment

7

Connecting PC



1. Connect the signal cable from the monitor output socket of the PERSONAL COMPUTER to the **RGB1 INPUT (PC/DTV INPUT)** or **RGB2 INPUT (DIGITAL RGB INPUT)** socket of the set.
2. Connect the audio cable from the PC to the **AUDIO INPUT** sockets of the set.
3. Press the **INPUT SELECT** or **PC/DVI** button to select **RGB** or **DVI**.
4. Switch on the PC, and the PC screen appears on the set.
The set can be operated as the PC monitor.

DTV / DVD input signal

MODE	Resolution	H/V Frequency	Aspect Ratio	Remarks
480i	704x480	15 kHz, 60/50 Hz	4:3	858x525
	720x480	15 kHz, 50/60 Hz	16:9	858x525
480p	704x480	31 kHz, 60 Hz	4:3	858x525
	720x480	31 kHz, 60 Hz	16:9	858x525
720p	1280x720	33.75 kHz, 60 Hz	16:9	1650x750
1080i	1920x1080	33.75 kHz, 60 Hz	16:9	2200x1125

1

On and Off

Press the main power button to switch the set on.

If the set is in standby mode, press the **POWER**, **▲ / ▼**, **INPUT SELECT**, **PC/DVI** or **NUMBER** buttons on the remote control handset to switch it on fully.

Press the **POWER** button on the remote control handset.
The set reverts to standby mode.

Press the main power button again to switch the set off.

2

Program selection

You can select a program number with the **▲ / ▼** or **NUMBER** buttons.

3

Volume adjustment

Press the **◀ / ▶** button to adjust the volume.

*If you want to switch the sound off, press the **MUTE** button.*

*You can cancel it by pressing the **MUTE**, **◀ / ▶**, **SSM** or **I/II** button.*

4

On screen language selection (option)

Press the **MENU** button and then use **▲ / ▼** button to select the **FUNCTION** menu.

Press the **▶** button and then use **▲ / ▼** button to select **Language**.

Press the **▶** button and then use **▲ / ▼** button to select your desired language.
All the on screen displays will appear in the selected language.

Press the **OK** button to select the **FUNCTION** menu.

Repeatedly press the **MENU** button to return to normal TV viewing.

On screen menus

Menu selection

- The dialogue between you and your set takes place on screen with an operator menu. The buttons required for the operating steps are also displayed.

1

Press the **MENU** button and then use **▲ / ▼** button to display each menu.

2

Press the **▶** button and then use **▲ / ▼** button to select a menu item.

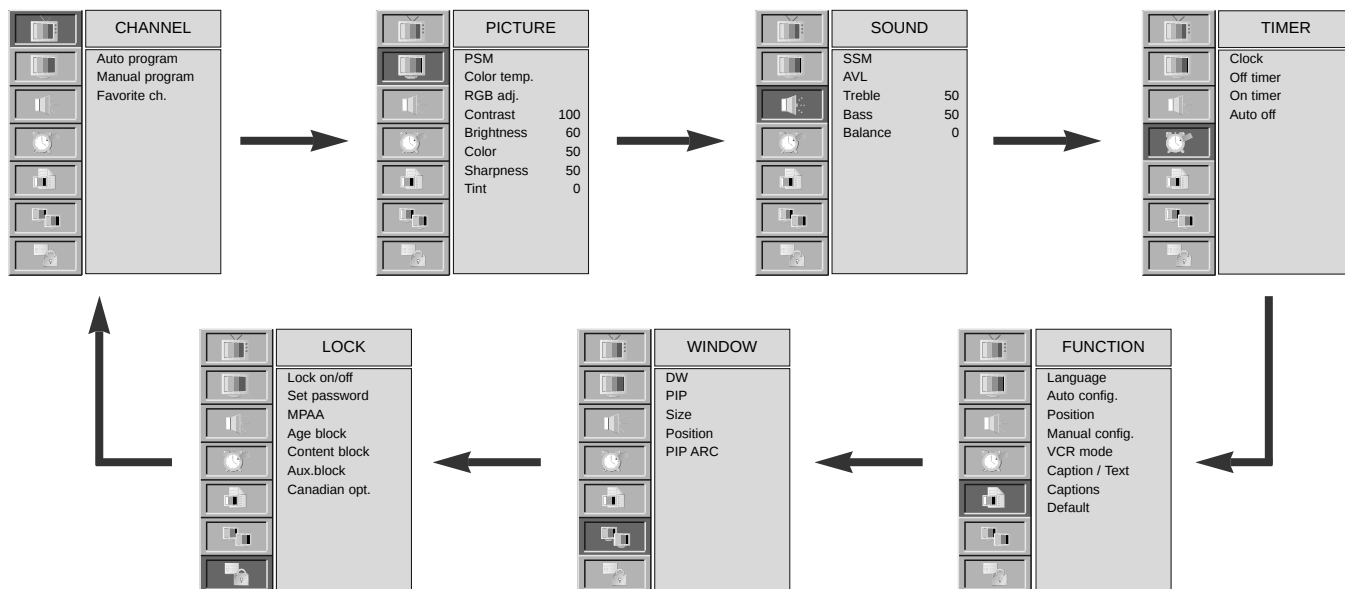
3

Press the **▶** button to display the sub menu or the pull-down menu.

4

Change the setting of an item in the sub or pull-down menu with **◀ / ▶** or **▲ / ▼**.

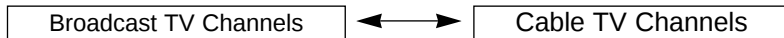
You can move to the higher level menu with **OK** or **◀** button and to move to the lower level menu press the **▶** button.



Setting up TV stations

Auto program : Channel Search

- Redo Auto Program if the TV is ever moved to another location.
- Auto Program will only operate with the ANT. connected.
- If channels numbers for broadcast over-the air TV and cable TV are duplicated where different channels have the same number, press the same number buttons again to toggle between:



: (For example, press 17 to go to the channel, press 17 again to go to the duplicated channel.)

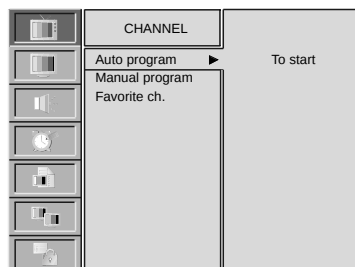
1

Press the **MENU** button and then use **▲ / ▼** button to select the CHANNEL menu.



2

Press the **▶** button and then use **▲ / ▼** button to select **Auto program**.



3

Press the **▶** button to begin the channel search.

When the channel search is complete, use the channel (**▲ / ▼**) buttons to review the memorized channels.

If you press the **OK** button in auto programming, the function will stop and only channels programming up to that time will remain.

Auto programming function can memorize only the channels which are being received at that time.



Setting up TV stations

Manual program

- You can memorize or erase channels manually.

1

Press the **MENU** button and then use **▲ / ▼** button to select the **CHANNEL** menu.



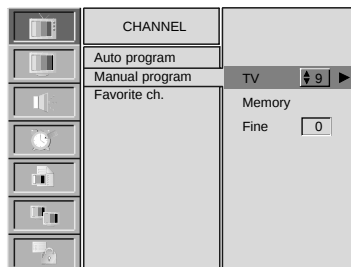
2

Press the **►** button and then use **▲ / ▼** button to select **Manual program**.

Press the **►** button to display the **Manual program** pull-down menu.

Repeatedly press the **◀ / ►** button to select **TV**.

Press the **▲ / ▼** button to select the channel number you want to memorize or erase.

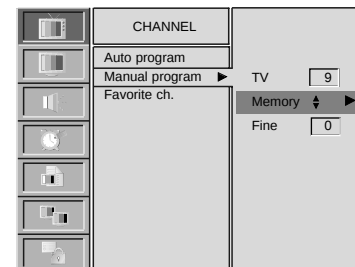


3

Press the **◀ / ►** button to select **Memory**.

Press the **▲ / ▼** button to select **Erase** or **Memory**.

Repeatedly press the **MENU** button to return to normal TV viewing.



Setting up TV stations

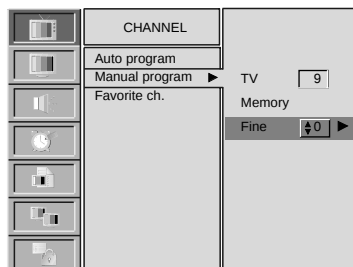
Manual program

4

Press the ◀ / ▶ button to select **Fine**.

Press the ▲ / ▼ button to adjust the picture to your preference.

Fine function adjusts the pictures stability and condition when it is poor.



5

Repeatedly press the **MENU** button to return to normal TV viewing.

Setting up TV stations

Favorite Channel Memory

- Favorite channel memory is a convenient feature that lets you quickly scan up to 5 channels of your choice without having to wait for the TV to scan through all the in-between channels.

1

Press the **MENU** button and then use **▲ / ▼** button to select the CHANNEL menu.



2

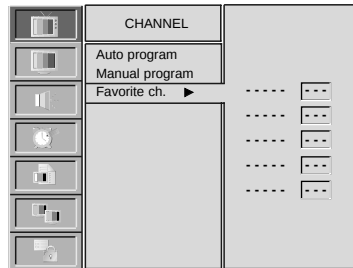
Press the **▶** button and then use **▲ / ▼** button to select **Favorite ch.**

Press the **▶** button to display the **Favorite ch** pull-down menu.

Press the **▲ / ▼** button to select the favorite channel position.

Press the **◀ / ▶** button to select the desired channel number for favorite channel.

Repeat this step to memorize other channels.



3

Repeatedly press the **MENU** button to return to normal TV viewing.

To tune to a favorite channel, press the **FCR** (Favorite channel) button repeatedly. The five favorite channels appear on the screen in numerical order.

1

PSM (Picture Status Memory)

Press the **MENU** button and then use **▲ / ▼** button to select the PICTURE menu.

Press the **►** button and then use **▲ / ▼** button to select **PSM**.

Press the **►** button and then use **▲ / ▼** button to select a picture setting on the **PSM** pull-down menu.

PICTURE
PSM
Color temp.
RGB adj.
Contrast 100
Brightness 60
Color 50
Sharpness 50
Tint 0

Repeatedly press the **MENU** button to return to normal TV viewing.

*You can also recall a desired picture (**Dynamic**, **Standard**, **Mild** or **User**) with **PSM** button on the remote control. The picture **Dynamic**, **Standard** and **Mild** are programmed for good picture reproduction at the factory and cannot be changed.*

PICTURE
PSM → Dynamic
Color temp.
RGB adj.
Contrast 100
Brightness 60
Color 50
Sharpness 50
Tint 0
Standard
Mild
User

2

Adjusting Auto Color Control

Press the **MENU** button and then use **▲ / ▼** button to select the PICTURE menu.

Press the **►** button and then use **▲ / ▼** button to select **Color temp.**.

Press the **►** button and then use **▲ / ▼** button to select the desired color temperature.

Repeatedly press the **MENU** button to return to normal TV viewing.

*To initialize values (reset to default settings), select the **Normal** option.*

*When adjusting color temperature options (red, green, or blue) manually, **Color temp.** is automatically changed to **User**.*

PICTURE
PSM
Color temp.
RGB adj.
Contrast 100
Brightness 60
Color 50
Sharpness 50
Tint 0

PICTURE
PSM
Color temp. → Normal
RGB adj.
Contrast 100
Brightness 60
Color 50
Sharpness 50
Tint 0
Cool
Warm
User

3

Manual Color Temperature Control

Press the **MENU** button and then use **▲ / ▼** button to select the PICTURE menu.

Press the **▶** button and then use **▲ / ▼** button to select **RGB adj.**

Press the **▶** button and then use **▲ / ▼** button to select a color.

Use the **◀ / ▶** button to make appropriate adjustments.
The adjustment range of **Red**, **Green** and **Blue** is **0 ~ +100**.

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

PICTURE
PSM
Color temp.
RGB adj.
Contrast 100
Brightness 60
Color 50
Sharpness 50
Tint 0

PICTURE
PSM
Color temp.
RGB adj. ▶
Contrast 100
Brightness 60
Color 50
Sharpness 50
Tint 0
Red +50
Green +50
Blue +50

4

Manual Picture Control

Press the **MENU** button and then use **▲ / ▼** button to select the PICTURE menu.

Press the **▶** button and then use **▲ / ▼** button to select the desired picture option.

Press the **▶** button and then use **◀ / ▶** button to make appropriate adjustments.

You can adjust picture contrast, brightness, color, sharpness and tint (NTSC input only) to the levels you prefer.

PICTURE
PSM
Color temp.
RGB adj.
Contrast 100
Brightness 60
Color 50
Sharpness 50
Tint 0

PICTURE
PSM
Color temp.
RGB adj.
Contrast 100
Brightness 60
Color 50
Sharpness 50
Tint 0

Picture adjustment

Picture Format

- You can watch TV in various picture formats; 4:3, 16:9 or Zoom.
Repeatedly press the **ARC** button to select your desired picture format.

1

4:3

This is the standard TV picture format.

2

16:9 (Wide)

You can enjoy the cinema screen experience in the 16:9 picture format when receiving wide screen (16:9) or standard (4:3) programs.
Standard (4:3) programs are expanded to the left and right so that the TV wide-screen is full.

3

Zoom

You can enjoy the cinema screen experience in the Zoom mode. A 4:3 picture is magnified so that the TV wide-screen is full. Part of the bottom and top of the picture may be lost.

Sound adjustment

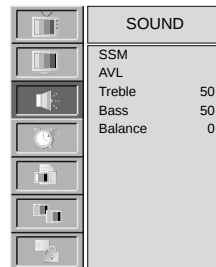
1

SSM (Sound Status Memory)

Press the **MENU** button and then use **▲ / ▼** button to select the **SOUND** menu.

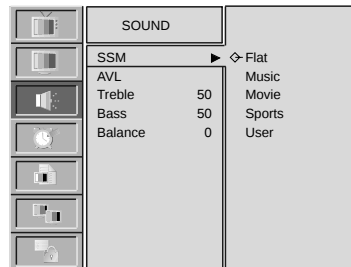
Press the **▶** button and then use **▲ / ▼** button to select **SSM**.

Press the **▶** button and then use **▲ / ▼** button to select a sound setting on the **SSM** pull-down menu.



Repeatedly press the **MENU** button to return to normal TV viewing.

*You can also recall a desired sound (**Flat**, **Movie**, **Music**, **Sports** or **User**) with **SSM** button on the remote control. The sound **Flat**, **Movie**, **Music** and **Sports** are programmed for good sound reproduction at the factory and cannot be changed.*



2

AVL (Auto Volume Leveler)

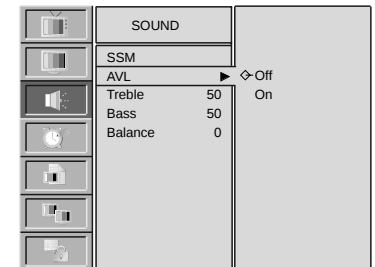
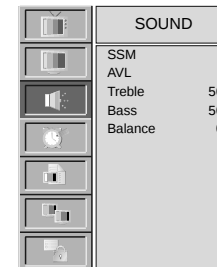
Press the **MENU** button and then use **▲ / ▼** button to select the **SOUND** menu.

Press the **▶** button and then use **▲ / ▼** button to select **AVL**.

Press the **▶** button and then use **▲ / ▼** button to select **On** or **Off**.

Repeatedly press the **MENU** button to return to normal TV viewing.

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



3

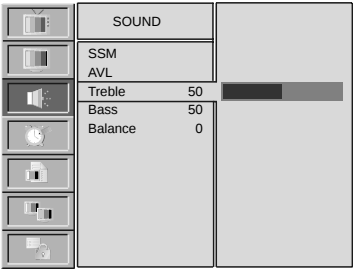
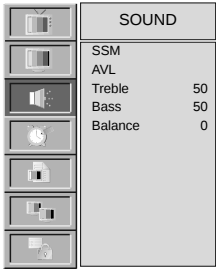
Adjusting Sound Control

Press the **MENU** button and then use ▲ / ▼ button to select the SOUND menu.

Press the ► button and then use ▲ / ▼ button to select the desired sound item.

Press the ► button and then use ◀ / ▶ button to make appropriate adjustments.

Repeatedly press the **MENU** button to return to normal TV viewing.



Timer Setup

Auto Clock Setup

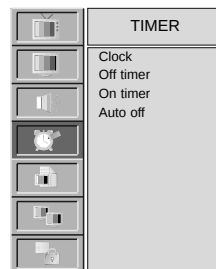
- The time is set automatically from the PBS broadcast signal.
- The PBS channel signal includes information for the correct time and daylight saving time.

1

Press the **MENU** button and then use **▲ / ▼** button to select the **TIMER** menu.

Press the **►** button and then use **▲ / ▼** button to select **Clock**.

Press the **►** button and then use **▲ / ▼** button to select **Auto**.

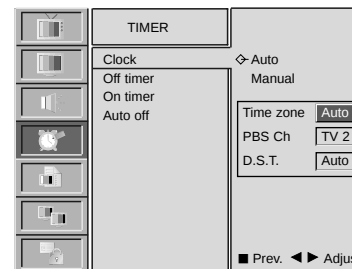


2

Press the **►** button and then use **◀ / ▶** button to select your viewing area time zone. Your choices are: **E.S.T.** (Eastern Standard Time), **C.S.T.** (Central Standard Time), **M.S.T.** (Mountain Standard Time), **P.S.T.** (Pacific Standard Time), **Alaska**, or **Hawaii**.

Press the **▲ / ▼** button and then use **◀ / ▶** button to set **PBS channel**.

Press the **▲ / ▼** button and then use **◀ / ▶** button to set **D.S.T.** (Daylight Savings Time) **Auto**, **On**, or **Off** depending on whether or not your viewing area observes Daylight Savings Time.



3

Repeatedly press the **MENU** button to return to normal TV viewing.

Timer Setup

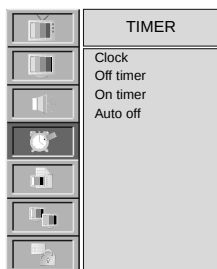
Manual Clock Setup

1

Press the **MENU** button and then use ▲ / ▼ button to select the **TIMER** menu.

Press the ► button and then use ▲ / ▼ button to select **Clock**.

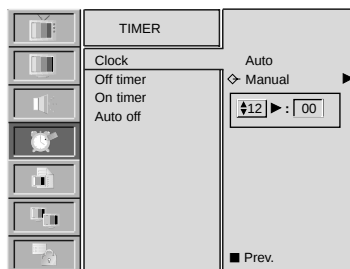
Press the ► button and then use ▲ / ▼ button to select **Manual**.



2

Press the ► button and then use ▲ / ▼ button to set the hour.

Press the ► button and then use ▲ / ▼ button to set the minutes.



3

Repeatedly press the **MENU** button to return to normal TV viewing.

28

- | | |
|---|--|
|  | <h2>TIMER</h2> <p> Clock
 Off timer
 On timer
 Auto off </p> |
|  | |
|  | |
|  | |
|  | |
|  | |
|  | |
|  | |

2

TIMER

- Clock
- Off timer
- On timer
- Auto off

Off

◀ On ▶

12 : 30

Vol. 30

On

12 : 30

Vol. 30

Timer Setup

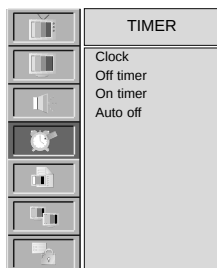
Auto Off

- If there is no input signal, Auto off can be set to turn the TV off automatically after 10 minutes.

1

Press the **MENU** button and then use ▲ / ▼ button to select the **TIMER** menu.

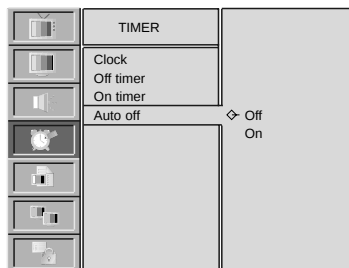
Press the ► button and then use ▲ / ▼ button to select **Auto off**.



2

Press the ► button and then use ▲ / ▼ button to select **On** or **Off**.

Repeatedly press the **MENU** button to return to normal TV viewing.



1

Auto Adjustment (RGB[PC] mode only)

Press the **MENU** button and then use **▲ / ▼** button to select the **FUNCTION** menu.

Press the **▶** button and then use **▲ / ▼** button to select **Auto config.**

Press the **▶** button to start **Auto config.**

Repeatedly press the **MENU** button to return to normal TV viewing.

FUNCTION
Language
Auto config.
Position
Manual config.
VCR mode
Caption / Text
Captions
Default

When **Auto configure** has finished, **OK** will be shown on screen.

If the position of the image is still not correct, try Auto adjustment again.

If picture needs to be adjusted more after Auto adjustment in RGB (PC), you can adjust the **Manual config.**

Although the image is still not correct, your set is functioning properly but needs further adjustment. The **Auto config.** and **Manual config.** functions don't need to be run for **DVI** mode.

FUNCTION
Language
Auto config. ▶ To set
Position
Manual config.
VCR mode
Caption / Text
Captions
Default

2

Screen Position (RGB[PC] mode only)

Press the **MENU** button and then use **▲ / ▼** button to select the **FUNCTION** menu.

Press the **▶** button and then use **▲ / ▼** button to select **Position.**

Press the **▶** button and then use **▲ / ▼** or **◀ / ▶** button to adjust the position.

Repeatedly press the **MENU** button to return to normal TV viewing.

FUNCTION
Language
Auto config.
Position
Manual config.
VCR mode
Caption / Text
Captions
Default

FUNCTION
Language
Auto config.
Position ▶
Manual config.
VCR mode
Caption / Text
Captions
Default

3

Manual Configure (RGB[PC] mode only)

Press the **MENU** button and then use **▲ / ▼** button to select the **FUNCTION** menu.

Press the **▶** button and then use **▲ / ▼** button to select **Manual config.**

Press the **▶** button and then use **▲ / ▼** button to select **Phase** or **Clock**.

Press the **▶** button and then use **◀ / ▶** button to make appropriate adjustments.

*The adjustment range of **Phase** is 0 ~ 31.*

*The adjustment range of **Clock** is -50 ~ +50.*

Press the **OK** button.

Repeatedly press the **MENU** button to return to normal TV viewing.

*To correct the screen size, adjust **Clock**.*

FUNCTION
Language
Auto config.
Position
Manual config.
VCR mode
Caption / Text
Captions
Default

FUNCTION
Language
Auto config.
Position
Manual config. ▶
VCR mode
Caption / Text
Captions
Default

Phase 0
 Clock 0

4

Screen Adjustment

Press the **MENU** button and then use **▲ / ▼** button to select the **FUNCTION** menu.

Press the **▶** button and then use **▲ / ▼** button to select **VCR Mode**.

Press the **▶** button and then use **▲ / ▼** button to select **TV** or **VCR**.

Repeatedly press the **MENU** button to return to normal TV viewing.

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

FUNCTION
Language
Auto config.
Position
Manual config.
VCR mode
Caption / Text
Captions
Default

FUNCTION
Language
Auto config.
Position
Manual config.
VCR mode ▶ ↔ TV
Caption / Text
Captions
Default

Closed captioning is a process which converts the audio portion of a television program into written words which then appear as subtitles on the television screen. Closed captions allow viewers to read the dialogue and narration of television programs.

Using Closed Captions

Captions are the subtitles of the dialogue and narration of television programs. For prerecorded programs, program dialogue can be arranged into captions in advance. Its possible to caption a live program by using a process called real-time captioning, which creates captions instantly. Real-time captioning is normally done by professional reporters using a machine shorthand system and computer for translation into English.

Captioning is an effective system for the hearing-impaired, and it can also aid in teaching language skills.

- The picture at left shows a typical caption.

Caption Tips

- Not all TV broadcasts include closed caption signals.
- Sometimes TV stations broadcast four different caption signals on the same channel. By selecting **From CC 1 to CC 4**, you can choose which signal you view. **CC 1** is usually the signal with the captions, while **Another mode** might show demonstration or programming information.
- Your TV might not receive caption signals normally in the following situations.

1. Poor reception conditions are encountered:



• IGNITION:

Picture may flutter, drift, suffer from black spots, or horizontal streaking. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills, and other

electrical appliances.

• GHOSTS:

Ghosts are caused when the TV signal splits and follows two paths. One is the direct path and the other is reflected off tall buildings, hills or other objects. Changing the direction or position of the antenna may improve reception.

• SNOW:

If your receiver is located at the weak, fringe area of a TV signal, your picture may be marred by small dots. It may be necessary to install a special antenna to improve the picture.2. An old, bad, or illegally recorded tape is being played.

3. Strong, random signals from a car or airplane interfere with the TV signal.
4. The signal from the antenna is weak.
5. The program wasn't captioned when it was produced, transmitted, or taped.

5

Caption / Text

Press the **MENU** button and then use **▲ / ▼** button to select the **FUNCTION** menu.

Press the **▶** button and then use **▲ / ▼** button to select **Caption/Text**.

FUNCTION
Language
Auto config.
Position
Manual config.
VCR mode
Caption / Text
Captions
Default

Press the **▶** button and then use **▲ / ▼** button to select your caption selection. Your choices are: **CC1**, **CC2**, **CC3**, **CC4**, **Text 1**, **Text 2**, **Text3** or **Text4**.

Repeatedly press the **MENU** button to return to normal TV viewing.

FUNCTION
Language
Auto config.
Position
Manual config.
VCR mode
Caption / Text ▶
Captions
Default

◀ CC 1
 CC 2
 CC 3
 CC 4
 Text 1
 Text 2
 Text 3
 Text 4

6

Captions

Press the **MENU** button and then use **▲ / ▼** button to select the **FUNCTION** menu.

Press the **▶** button and then use **▲ / ▼** button to select **Captions**.

FUNCTION
Language
Auto config.
Position
Manual config.
VCR mode
Caption / Text
Captions
Default

Press the **▶** button and then use **▲ / ▼** button to select **On** or **Off**.

Repeatedly press the **MENU** button to return to normal TV viewing.

FUNCTION
Language
Auto config.
Position
Manual config.
VCR mode
Caption / Text
Captions ▶
Default

◀ On
 Off

7

Initializing (Reset to original factory value)

Press the **MENU** button and then use **▲ / ▼** button to select the **FUNCTION** menu.

Press the **►** button and then use **▲ / ▼** button to select **Default**.

FUNCTION	
Language	
Auto config.	
Position	
Manual config.	
VCR mode	
Caption / Text	
Captions	
Default	

Press the **►** button to initialize the adjusted value.

FUNCTION		
Language		
Auto config.		
Position		
Manual config.		
VCR mode		
Caption / Text		
Captions		
Default	►	To Set

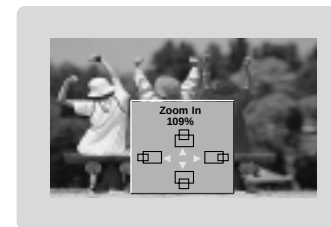
8

Picture Size Zoom

Press the **ZOOM+/ZOOM-** button to enlarge or reduce the picture size.

Adjust the main picture position with the **▲ / ▼ / ◀ / ▶** buttons in enlarged picture mode.

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

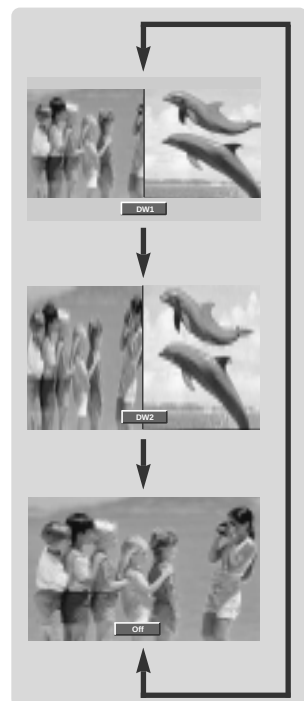


- As the name suggests, this mode splits the screen into 2, allowing 2 picture sources to be shown on the monitor screen at the same time. Each source is given half the screen.

1

Main Picture Size Adjustment

Use the **TWIN** button repeatedly to select one of the Twin Picture options.



2

Sub Picture Size Adjustment

Use the **SIZE** button.

Use the ◀ / ▶ button to adjust the sub picture size.

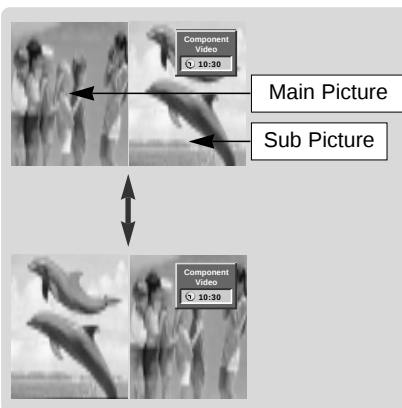
Using WINDOW SIZE function in Twin Picture mode, main and sub picture are adjusted simultaneously. Using WINDOW SIZE function in PIP mode, sub picture is adjusted. WINDOW POSITION is not functional in twin picture mode.



3

Swapping the Twin Picture

Use the **SWAP** button to switch the main and sub pictures in twin picture mode.



4

Selecting a Source for the Twin Picture

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



5

Program selection for sub picture

Press the **PIP PR +/-** button. The selected program number is displayed just below the program number of main picture.

PIP (Picture-In-Picture) Feature

- PIP lets you view 2 different inputs (sources) on your monitor screen at the same time. One source will be large, and the other source will show a smaller inset image.

1

Watching PIP

Press the **PIP** button repeatedly to select turn PIP on or off.



2

PIP Size

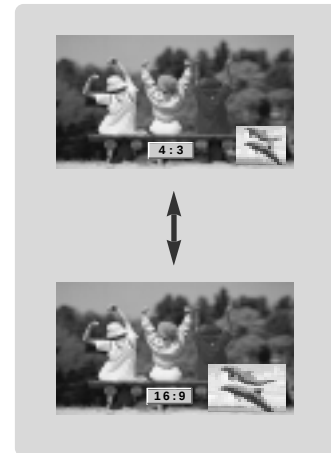
Press the **SIZE** button and then use **◀ / ▶** button to change the sub picture size.



3

PIP Aspect Ratio

Press the **PIP ARC** button. The sub picture appears as shown.



4

Moving the PIP

Press the **POSITION** button.

Press the **▲ / ▼ / ◀ / ▶** button repeatedly until desired position is achieved. The sub picture moves up/down/left/right.

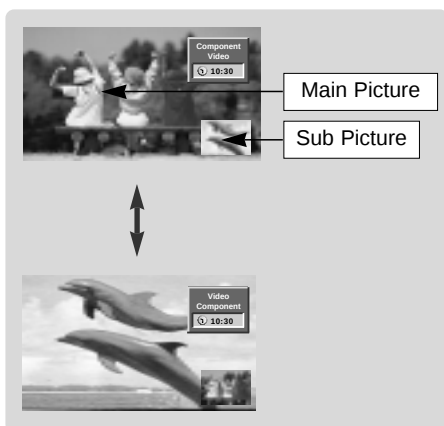


PIP (Picture-In-Picture) Feature

5

Swapping the PIP

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



6

Selecting a Input Signal Source for the PIP

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



7

Program selection for sub picture

Press the **PIP PR +/-** button. The selected program number is displayed just below the program number of main picture.

Parental Control

- Parental Control can be used to block specific channels, ratings and other viewing sources.
- The password will be required to gain access to Parental Control.

The Parental Control Function (V-Chip) is used to block program viewing based on the ratings sent by the broadcasting station. The default setting is to allow all programs to be viewed. Viewing can be blocked by the type of program and by the categories chosen to be blocked. It is also possible to block all program viewing for a time period. To use this function, the following must be set :

1. Ratings and categories to be blocked.
2. Specifying a password
3. Enabling the lock

V-Chip rating and categories

Rating guidelines are provided by broadcasting stations. Most television programs and television movies can be blocked by TV Rating and/or Individual Categories. Movies that have been shown at the theaters or direct-to-video movies use the Movie Rating System (MPAA) only.

For Movies previously shown in theaters:

Movie Ratings :

- Blocking off
- G (general audience)
- PG (parental guidance suggested)
- PG-13 (13 years and up)
- R (restricted)
- NC-17 (18 years and up)
- X (adult)

If you set PG-13 and Above : G and PG movies will be available , PG-13, R, NC-17 and X will be blocked.

For Television programs including made-for-TV movies:

General TV Ratings :

- Blocking off
- TV-G (general audience) (individual categories do not apply)
- TV-PG (parental guidance suggested)
- TV-14 (14 years and up)
- TV-MA (mature audience)

Children TV Ratings :

- Blocking off
- TV-Y (youth) (individual content categories do not apply)
- TV-Y7 (youth, 7 years and up)

Content Categories :

- Dialog - sexual dialogue (applies to TV-PG, TV-14)
- Language - adult language (applies to TV-PG, TV-14, TV-MA)
- Sex scenes - sexual situations (applies to TV-PG, TV-14, TV-MA)
- Violence (applies to TV-PG, TV-14, TV-MA)
- F Violence - fantasy violence (applies only to TV-Y7)
- No Rating (blocks all viewing)

Aux.Block Ratings :

- Video 1 (Blocking On/off)
- Video 2 (Blocking On/off)
- S-Video (Blocking On/off)

For Canadian English/French language rating system:

Canadian English language rating system:

- Blocking off
- C (Children)
- C8+ (8 years and up)
- G (General programming. Suitable for all audiences.)
- PG (Parental guidance suggested)
- 14+ (Viewer 14 years and up)
- 18+ (Adult programming)

Canadian French language rating system:

- Blocking off
- G (General)
- 8 ans+ (8 years and up)
- 13 ans+ (13 years and up)
- 16 ans+ (16 years and up)
- 18 ans+ (Adults only)

Parental Control

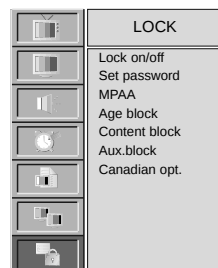
1

Press the **MENU** button and then use **▲ / ▼** button to select the LOCK menu.

Press the **▶** button.

If **Lock** is already set, enter the password then requested.

The TV is set with the initial password "0-0-0-0".



2

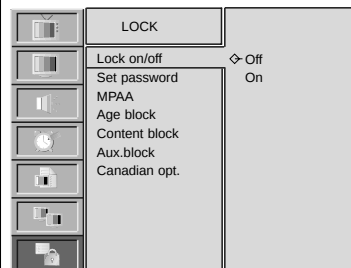
Press the **▲ / ▼** button to select **Lock on/off**.

Press the **▶** button and then use **▲ / ▼** button to select **on** or **off**.

Press the **◀** button and then use **▲ / ▼** button to select **Set password**.

Press the **▶** button and then enter a four digit password.

Enter it again when requested.



3

Press the **▲ / ▼** button to select type of blocking to be set.

Press the **▶** button and then use **▲ / ▼** button to select type of ratings to block.

Age block, Content block, and Canadian opt. options, also have sub menus. So repeat this step in the sub menu, to set the types of blocking and rating.

4

Repeatedly press the **MENU** button to return to normal TV viewing.

Displayable Monitor Specification

RGB Mode

MODE	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	MODE	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
EGA	640x350	31.468	70.09	XGA	1024x768	48.363	60.00
		37.861	85.08			56.476	70.06
DOS	720x400	31.469	70.08			60.023	75.02
		37.927	85.03			68.677	84.99
VGA	640x480	31.469	59.94	SXGA	1152x864	54.348	60.05
		37.861	72.80			67.500	75.00
		37.500	75.00			77.487	85.05
		43.269	85.00	WXGA	1280x768	47.7	60.00
		53.011	100.04			60.15	75.00
		64.062	120.00			68.596	85.00
SVGA	800x600	35.156	56.25	SXGA	1280x960	60.000	60.00
		37.879	60.31			75.000	75.00
		48.077	72.18		1280x1024	63.981	60.02
		46.875	75.00			79.676	75.02
		53.674	85.06	MAC	832x624	49.725	74.55
		56.000	90.00				
		64.016	100.00				

(Synchronization input form : separate)

Note:

- If the set is cold, there may be a small "flicker" when the set is switched on. This is normal, there is nothing wrong with the set.
- If possible, use the VESA 1,024x768@60Hz video mode to obtain the best image quality for your LCD monitor. If used to PC vertical frequency 85Hz, some

noise can be seen when PIP is on. In this case, set the PC vertical frequency to 60Hz. The set has been pre-adjusted to the mode VESA 1,024x768@60Hz.

Displayable Monitor Specification

- c. Some dot defects may appear on the screen, like Red, Green or Blue spots. However, this will have no impact or effect on the monitor performance.
- d. Do not press the LCD screen with your finger for a long time as this may produce some temporary distortion effects on the screen.
- e. When the PC screen appears on the set, a message may appear on the screen, and the message will differ according to the Window system version (Win98, 2000). If a message appears click "Next" until the message finishes.
- f. If the message "**Not accepted**" appears on the screen, adjust the PC as in the 'Displayable Monitor Specification' section.

DVI Mode

MODE	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	MODE	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
EGA	640x350	31.468	70.09	XGA	1024x768	48.363	60.00
		37.861	85.08			56.476	70.06
DOS	640x400	31.469	70.08			60.023	75.02
		37.927	85.03			68.677	84.99
VGA	640x480	31.469	59.94	SXGA	1152x864	54.348	60.05
		37.861	72.80			67.500	75.00
		37.500	75.00			77.487	85.05
		43.269	85.00	WXGA	1280x768	47.7	60.00
SVGA	800x600	35.156	56.25			60.15	75.00
		37.879	60.31			68.596	85.00
		48.077	72.18	SXGA	1280x960	60.000	60.00
		48.875	75.00			75.000	75.00
		53.674	85.06	MAC	832x624	63.981	60.02
						49.725	74.55

(Synchronization input form : separate)

30" LCD TV

Function and Specification

30-inch diagonal screen

Variable Auto / 4:3 / Wide / 14:9 / Zoom image aspect ratios (5 modes)

1280 x RGB x 768 pixels

400 : 1 contrast ratio

Brightness : 450cd/m²

PC monitor support up to WXGA (1280 x 768)

Advanced Double Window viewing : Variable window size

Picture-In Picture (PIP) : Variable window Position / Size

Multiple input compatible

Advanced Motion digital processor

Motion-Adaptive Deinterlace Processor

Digital progressive line scaling

Digital 4H Comb Filter (Pseudo 3D)

Tuning : NTSC 3.58/4.43

Auto / Manual Programming

Progressive Component inputs with 480i, 480p, 720p, 1080i

Automatic frequency detection

Selectable color temp. settings : Normal, Warm, Cool, User

PSM : Dynamic, Standard, Mild, User (Picture Status Memory)

SSM : Flat, Music, Movie, Sports, User (Sound Status Memory)

Sleep Timer

OSD : Enhanced OSD (icon type), menu, multi Language

OSD (English, French, Spanish), Favorite channel

Centre Zoom : 50 times

Connectivity:

Composite video signal : RCA-pin Type x 2

Component video signal : YPbPr x 1

S-video : Mini DIN 4-pin x 1

RGB input : D-sub 15-pin x 1 (480i/p, 720p, 1080i)

Audio input : RCA-pin Type (L/R) x 3,

PC Audio IN x 1 (Stereo, Phone Jack)

Speaker output : 10W + 10W

Audio system : Stereo

Control Ports : RS-232C D-sub 9-pin x 1

DVI input : DVI Cable / Optional

Head Phone output

Accessories



Owner's Manual



Alkaline batteries
(AAA)



Remote Control handset



PC Sound cables



DVI Cable



Power Cord



Component cables



D-sub 15 pin cable



S-VHS cables

30" LCD TV

Dimensions : (W x H x D) unit : mm

Weight :

Working Environment

Power : AC 100~240V, 50/60Hz

Power Consumption : 170 Watts

Temperature

Operation : 0°C ~ 40°C (40°C humidity 50%)

Storage : -20°C ~ 60°C

Humidity

Operation : 80%

Storage : 90%

Pressure

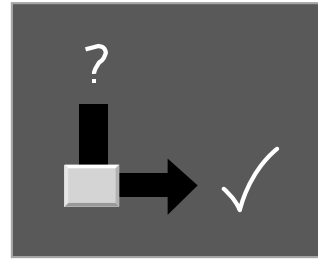
Operation : 800 ~ 1114hPa

Storage : 600 ~ 1114hPa

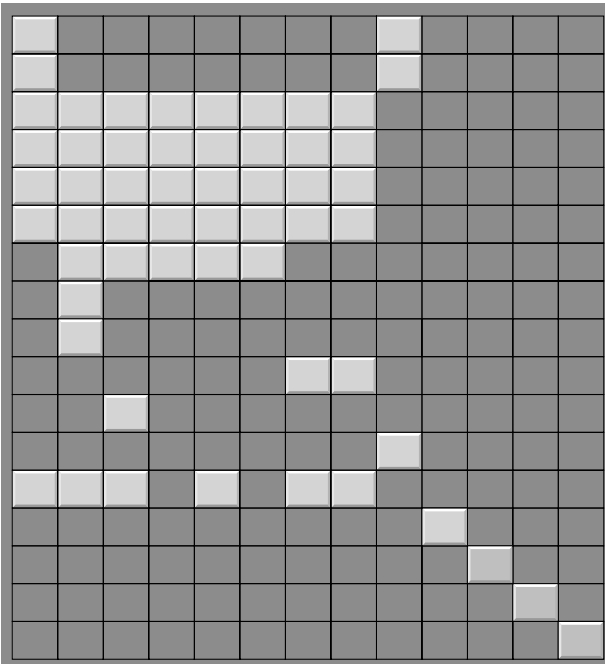
Troubleshooting Checklist

Symptoms

No picture, no sound
 Sound OK, poor picture
 Picture OK, poor sound
 Picture blurred
 Lines or streaks in picture
 Poor reception on some channels
 No color
 Poor color
 Remote control does not work
 Incorrect position
 Vertical bars or stripes on background
 Horizontal noise
 Signal Cable message appears



Check these items and try to adjust these



- The mains plug-(plugged in and switched on)
- Is the TV switched on
- Try another channel (weak signal)
- Check aerial (plugged into TV?)
- Check aerial (broken lead?)
- Check aerial
- Check for local interference
- Adjust contrast
- Adjust brightness
- Adjust color
- Adjust volume
- Check the batteries in remote control
- Check Audio/Video sockets (VCR only)
- Auto-configure or adjust the H/V position
- Auto-configure or adjust Clock
- Auto-configure or adjust Clock Phase
- Is the Signal Cable connected or loose

