



Color Television OWNER'S MANUAL

MODEL : CP-29Q12P

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.

Internet Home Page <http://www.lge.co.kr>

Safety Precautions

WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

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

Cleaning

Unplug this television receiver from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning. Do not use attachments not recommended by the television receiver manufacturer as they may cause hazards.

Power Supply

This television receiver 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 supplied to your home, consult your television dealer or local power company.

Installation

Do not use this television receiver near water, for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.

Do not place this television receiver on an unstable cart, stand, or table. The television receiver may fall, causing serious injury to a child or an adult, and serious damage to the appliance. Use only with a cart or stand recommended by the manufacturer, or sold with the television receiver. Wall or shelf mounting should follow the manufacturer's instructions and should use a mounting kit approved by the manufacturer.

Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to insure reliable operation of the television receiver, and to

protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the television receiver on a bed, sofa, rug, or other similar surface. This television receiver should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.

It is recommended not to operate this unit near speakers or big metallic furnitures in order to keep their magnetism from disturbing colors purity (uniformity) on the screen.

Use

Do not allow anything to rest on the power cord. Do not locate this television receiver where the cord will be abused by persons walking on it.

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

Never push objects of any kind into this television receiver through cabinet slots 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 television receiver.

Service

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

Writing Model And Serial Numbers

The serial number and model number are found on the back of this unit. The serial number is unique to this unit. You should record requested information here and retain this guide as a permanent record of your purchase. Please retain your purchase receipt as your proof of purchase.

Date of Purchase _____

Dealer Purchased from _____

Dealer Address _____

Dealer Phone No. _____

Model No. _____

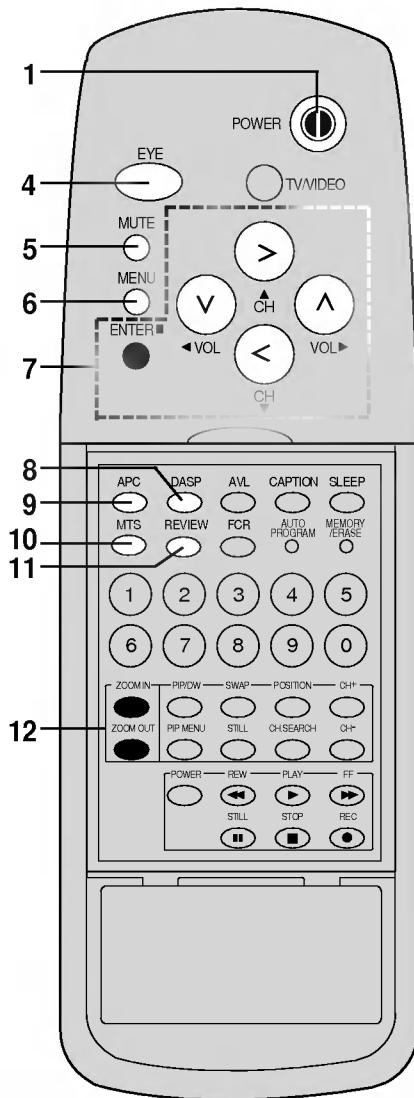
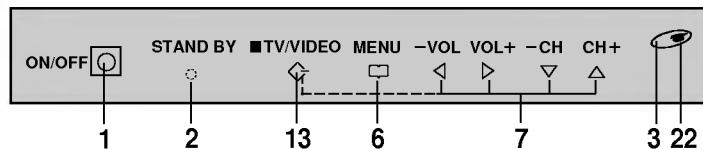
Serial No. _____

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This is a simplified representation of front panel.



1. POWER BUTTON

Refer to "Turning on/off the TV".

2. STAND BY INDICATOR

Illuminates green when the TV is in standby mode.

3. REMOTE CONTROL SENSOR

4. EYE BUTTON

To switch on or off eye picture.

5. MUTE BUTTON

To mute the sound. Again to restore the muted sound.

6. MENU BUTTON

To display on screen menus one by one.

7. CHANNEL UP/DOWN (▲/▼) BUTTONS

- To select the desired channel.
- To select the desired menu item when menu is displayed on the screen.

VOLUME UP/DOWN (►/◀) BUTTONS

- To increase or decrease volume level.
- To enter or adjust the selected menu when menu is displayed on the screen.

ENTER (■) BUTTON

- To exit from the displayed menu.
- To memorize the adjusted menu.
- To recall the current TV mode (by remote control only).

8. DASP BUTTON

To select the sound appropriate to your viewing program character ; **NEWS, CINEMA, MUSIC** or **USER**.

9. APC (Auto Picture Control) BUTTON

To adjust the factory preset pictures corresponding to the lighting around.

10. MTS BUTTON

To listen to the MTS sound ; **MONO, STEREO** or **SAP**.

11. REVIEW BUTTON

To return to the previous channel.

12. ZOOM IN/OUT BUTTON

To select the desired picture format (NORMAL, ZOOM IN or ZOOM OUT).



13. TV/VIDEO BUTTON

To select TV or VIDEO mode.

14. AVL (Auto Volume Leveler) BUTTON

To keep on equal volume level of each channels.

15. CAPTION BUTTON

To select the CAPTION mode.

Refer to "Closed caption function".

16. SLEEP BUTTON

To set the desired sleep time.

17. MEMORY/ERASE BUTTON

To memorize or erase the desired channel.

18. AUTO PROGRAM BUTTON

To memorize channels by AUTO PROGRAM.

19. FCR (Favorite Channel Review) BUTTON

To select the favorite channel.

Refer to "Favorite channel memory".

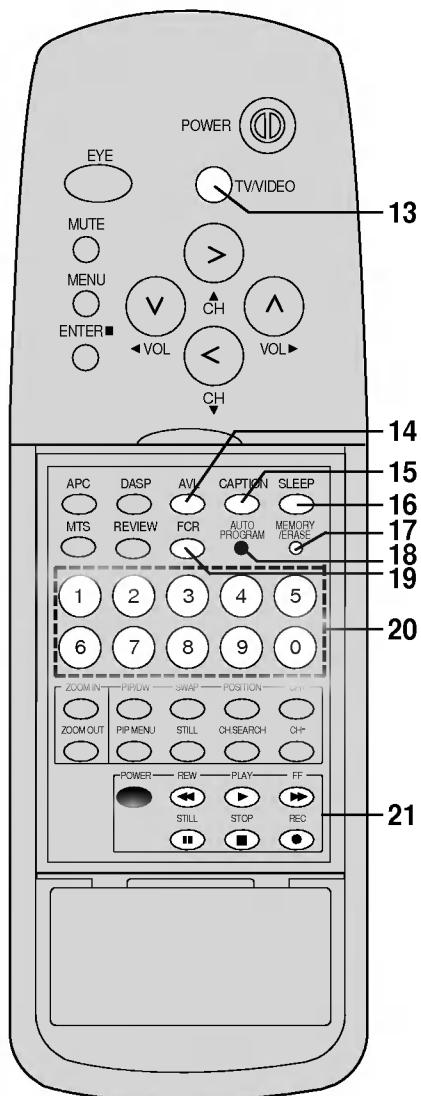
20. NUMBER BUTTONS

To select the desired channel directly.

21. VCR BUTTONS

To control LG video cassette recorder.

22. EYE SENSOR



23. PIP (Picture in Picture) BUTTONS

PIP/DW BUTTON

To select the PIP mode or double window mode.

SWAP BUTTON

To exchange the main picture and sub picture.

POSITION BUTTON

To move the sub picture to another corner of the main picture.

PIP MENU BUTTON

To display various menu in the PIP mode or double window mode.

STILL BUTTON

To stand still the picture in sub picture.

CH. SEARCH BUTTON

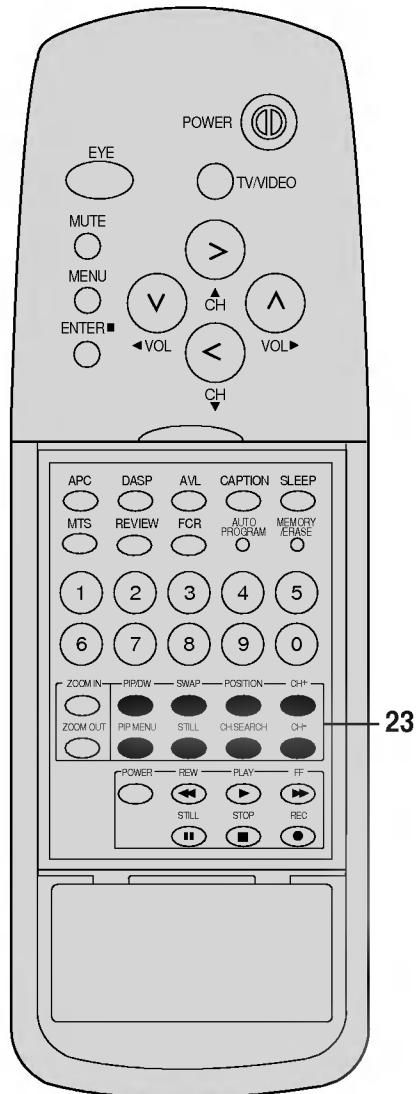
To search one by one the pictures of all the programmed channels through the sub picture while the main picture remains as a current channel.

CH +/- BUTTONS

To select the desired channel of the sub picture.

Fitting Batteries in the Remote Control Unit

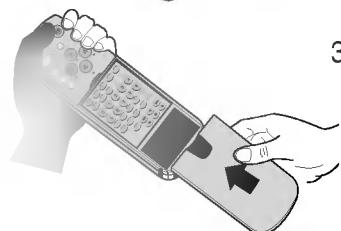
The remote control is powered by batteries. This requires AA type batteries for operation. To ensure consistent operation, change the batteries about once a year.



1. Remove the battery compartment cover by sliding it after pushing down slightly in the arrowhead direction.



2. Insert new batteries as indicated by the polarity markings (+ and -) inside the compartment.



3. Replace the battery compartment cover.



Before operating your TV, make sure the following instructions have been completed.

- Your TV has been connected to an antenna or a cable system.
- Your TV has been plugged in a power outlet.

Turning on/off the TV

To turn on the TV, press any button on the set or remote control.

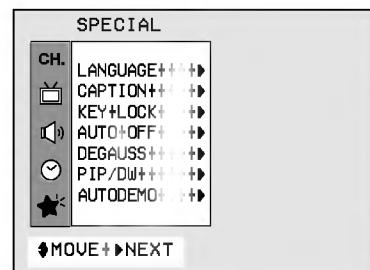
A channel number will be displayed on the screen. The on-screen display will disappear after a few seconds.

To turn the TV off, press the **POWER** button.

Selecting the on screen language

1. Press the **MENU** button until the menu is displayed as shown right.
2. Press the **►** and then **▲/▼** button to select **LANGUAGE**.
3. Press the **►** button to enter the language menu.
4. Press the **▲/▼** button to select the desired language.
5. Press the **ENTER (■)** button to exit.

From this point on, the on-screen display will be presented in the language of your choice.



Memorizing Channels

This is the function to memorize all the active channels in your area before you can use the TV.

There are two ways of memorizing channels. You can use either.

One is called **AUTO PROGRAM** and the other is called **MANUAL PROGRAM**.

In **AUTO PROGRAM** the TV will memorize the channels in ascending order. If there are additional channels you want to add or delete, you can manually add or delete those channels.

Memorizing the Channels by AUTO PROGRAM

AUTO PROGRAM searches and memorizes all the active channels in your area then you can select the desired channel with the ▲ / ▼ buttons.

Using the AUTO PROGRAM button

You can conveniently perform AUTO PROGRAM using the **AUTO PROGRAM** button on the remote control.

1. Press the **AUTO PROGRAM** button.
2. Press the ▲/▼ button to select **TURBO** or **NORMAL**.
3. Press the ► or **AUTO PROGRAM** button.

The AUTO PROGRAM starts now.

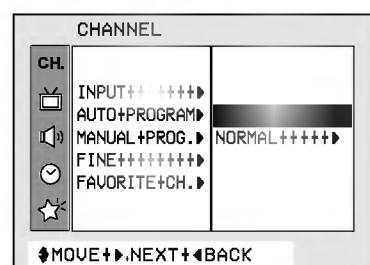
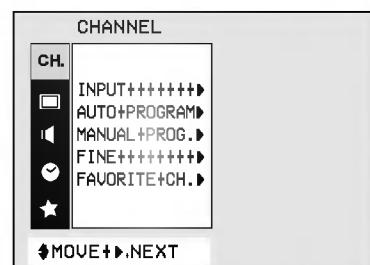
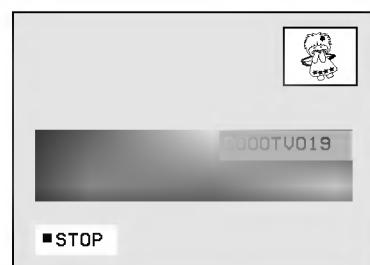
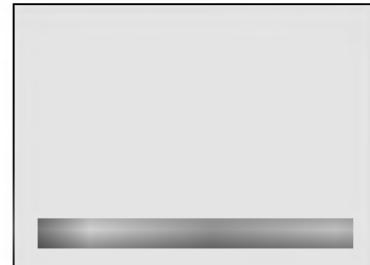
If you want to stop auto programming, press the **ENTER** (■) button.
Only the channels searched up to that time are memorized.

TURBO AUTO PROGRAM is further faster than **NORMAL AUTO PROGRAM**.

Note : If the programmed signal has poor quality or the certain CH is not memorized, memorize again in the **NORMAL AUTO PROGRAM**.

Using the MENU button

1. Press the **MENU** button until the menu is displayed as shown right.
2. Press the ▲/▼ button to select **AUTO PROGRAM**.
3. Press the ► button to enter the **AUTO PROGRAM** mode.
4. Press the ▲/▼ button to select **TURBO** or **NORMAL**.
5. Press the ► button. The AUTO PROGRAM starts now.



Memorizing the Channels by MANUAL PROGRAM

Using the MEMORY/ERASE button

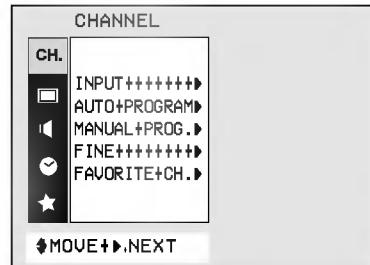
You can conveniently perform MANUAL PROGRAM using the **MEMORY / ERASE** button on the remote control.

1. Press the **▲/▼** or NUMBER buttons to select the channel number you want to memorize or erase.
2. Press the **MEMORY/ERASE** button.
The on screen display appears as shown right.
3. Press the **VOL ▲ / ▼** or **MEMORY/ERASE** button to select **MEMORY** or **ERASE**.
4. Press the **ENTER (■)** button to exit.



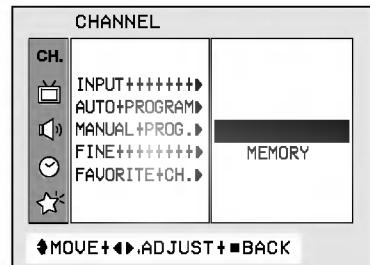
Using the MENU button

1. Press the **MENU** button until the menu is displayed as shown right.
2. Press the **▶** and then **▲ / ▼** button to select the **MANUAL PROG.**.
3. Press the **▶** button to enter the **MANUAL PROG.** mode.
4. Press the **▲/▼** or NUMBER buttons to select the channel number you want to memorize or erase.
5. Press the **▲/▼** button to select **MEMORY** or **ERASE**.
6. Repeat process 3 to 4 to memorize or erase another channels.
7. Press the **ENTER (■)** button to exit.



Selecting the Channel

Press the **▲/▼** button to conveniently select the upper or lower channel than the channel being viewed, or NUMBER buttons to directly select the desired channel.



Adjusting the Volume

Press the **▶** button to increase the volume level or **◀** button to decrease the volume level.



To mute the sound, press the **MUTE** button.

The word **MUTE** is displayed (It's not displayed in the Caption mode). It's convenient when you get the telephone calls.

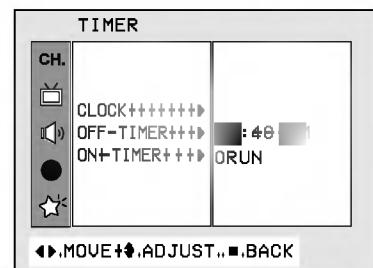
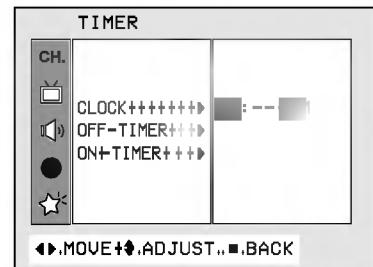
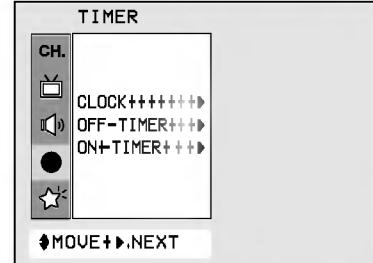
To restore the muted sound, press the **MUTE** button again or **VOL ▲/▼** button.



Setting the Clock

Before setting the on/off timer, first you should set the current time.

1. Press the **MENU** button until the menu is displayed as shown right.
2. Press the **►** and then **▲ / ▼** button to select **CLOCK**.
3. Press the **►** button to enter the **CLOCK** mode.
4. Press the **▲/▼** button to adjust the hour.
5. Press the **◀/▶** button to select the minute position and then press the **▲/▼** button to adjust the minute.
6. Press the **ENTER (■)** button to exit.



Setting the OFF TIMER

This is the function to automatically switch the TV off at a preset time.

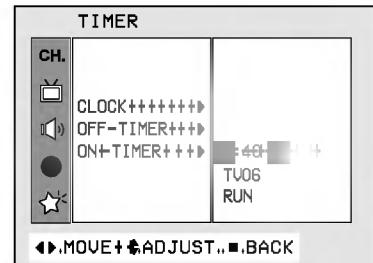
1. Press the **MENU** button until the **TIMER** menu is displayed.
2. Press the **►** and then **▲ / ▼** button to select **OFF-TIMER**.
3. Press the **►** button to enter the **OFF-TIMER** mode.
4. Press the **▲/▼** button to adjust the hour.
5. Press the **◀/▶** button to select the minute position and then press the **▲/▼** button to adjust the minute.
6. **RUN/HOLD** is used to activate or deactivate preset on/off times.
Press the **◀ / ▶** button to select **HOLD** or **RUN** position and then press the **▲ / ▼** button to select **HOLD** or **RUN**.
7. Press the **ENTER (■)** button to exit.

Note: If the same time is set for the on time and off time, only the off time operates.

Setting the ON TIMER

This is the function to automatically turn the TV on at a preset time and channel.

1. Press the **MENU** button until the **TIMER** menu is displayed.
2. Press the **►** and then **▲ / ▼** button to select **ON-TIMER**.
3. Press the **►** button to enter the **ON-TIMER** mode.
4. Repeat OFF TIMER process 4 to 5.
5. Press the **◀/▶** button to select the channel position and then press the **▲/▼** button to adjust the desired channel.
6. Press the **◀/▶** button to select **HOLD** or **RUN** position and then press the **▲/▼** button to select **HOLD** or **RUN**.
7. Press the **ENTER (■)** button to exit.



Note: Two hours after the set is switched on by the on timer function, it will automatically switch off unless a button has been pressed.

Setting the Sleep Time

You don't have to remember to switch the TV off before you go to sleep. The sleep timer automatically turns the TV off after the preset time elapses.

Press the **SLEEP** button to select the desired sleep time.

Each time you press this button, the sleep time is displayed one by one on the top right-hand corner of the screen as shown below.

The timer begins to count down from the number of minutes selected.

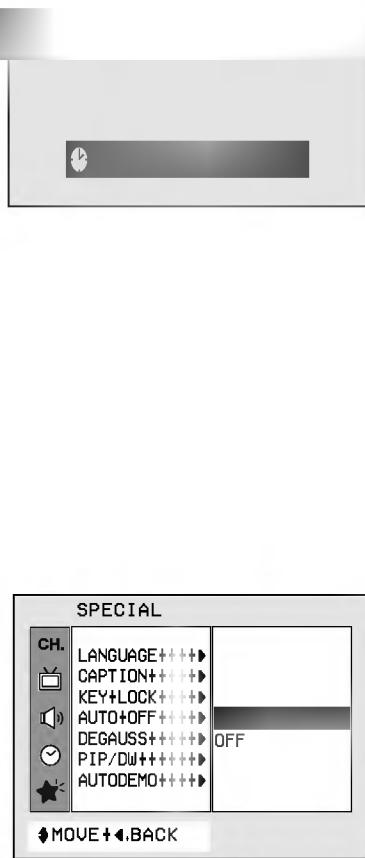
→ --- → **10** → **20** → **30** → **60** → **90** → **120** → **180** → **240**

- Notes:**
- After 3 seconds, the desired sleep time will disappear and be operated automatically.
 - To view the remaining sleep time, press the **SLEEP** button once and the remaining sleep time will be displayed.
 - To cancel the sleep time, select the **SLEEP ---** mode by using the **SLEEP** button.

Auto Off

If there is no input signal, the TV is switched off automatically in 10 minutes.

1. Press the **MENU** button until the **SPECIAL** menu is displayed.
2. Press the **►** and then **▲/▼** button to select **AUTO OFF**.
3. Press the **►** button to enter the **AUTO OFF** mode.
4. Press the **▲/▼** button to select **ON** or **OFF**.

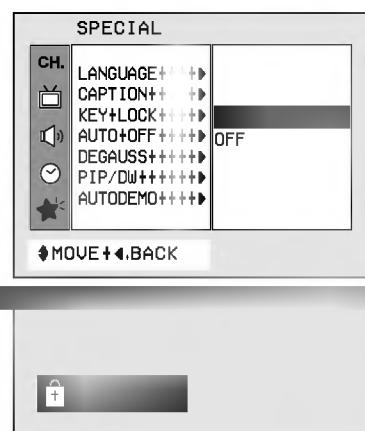


Key Lock

The TV can be set so that the remote control is needed to control it. This feature can be used to prevent unauthorized viewing.

1. Press the **MENU** button until the **SPECIAL** menu is displayed.
2. Press the **►** and then **▲/▼** button to select **KEY LOCK**.
3. Press the **►** button to enter the **KEY LOCK** mode.
4. Press the **▲/▼** button to select **ON** or **OFF**.
5. Press the **ENTER (■)** button to exit.

With the key lock on, the display **KEY LOCK** appears on the screen if any button on the front panel is pressed while viewing the TV. This function won't work anymore after plugging-in the TV again.





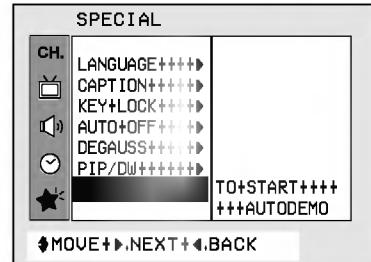
Auto Demonstration

Auto demonstration allows you to review all the menus programmed in the TV set.

1. Press the **MENU** button until the **SPECIAL** menu is displayed.
2. Press the **►** and then **▲/▼** button to select **AUTODEMO**.
3. Press the **►** button to enter the **AUTODEMO** mode.
4. Press the **►** button, and the demonstration starts.

When the demonstration reaches the last display, it starts again from the beginning.

To stop auto demonstration, press any button.

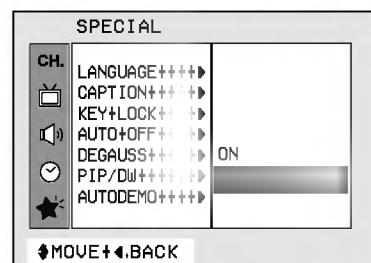


Operating the degauss

In this TV set the magnetic field of the earth may influence on the color purity of picture by neighbor magnetic substance or installation direction of the TV set. The stripes may appear on the screen or the color may not be equal in the corner. You can enjoy the program in high color quality by operating the Degauss.

1. Press the **MENU** button until the **SPECIAL** menu is displayed.
2. Press the **►** and then **▲/▼** button to select **DEGAUSS**.
3. Press the **►** button to enter the **DEGAUSS** mode.
4. Press the **▲/▼** button to select **ON** or **OFF**.
After the degaussing function works, **ON** mode switches to **OFF** mode.
5. Press the **ENTER (■)** button to exit.

Note: Do not operate this function often because the lifetime of CPT may be shorten.

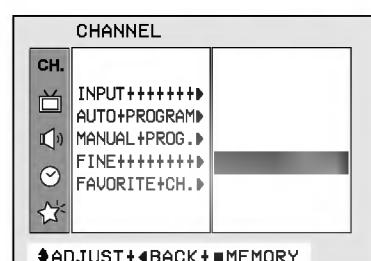


Adjusting the Fine Tuning

This function is to adjust the picture to stable condition when it is poor, for example, a horizontal stripe, twisted picture or no color in broadcasting.

1. Press the **MENU** button until the **CHANNEL** menu is displayed.
2. Press the **►** and then **▲/▼** button to select **FINE**.
3. Press the **►** button to enter the **FINE** mode.
4. Press the **▲/▼** button to tune the desired picture condition.
5. Press the **ENTER (■)** button to memorize.

Notes : • To release the memorized fine tuning, program again the fine-tuned channel by AUTO PROGRAM or MANUAL PROGRAM.
• If the finely tuned channel is memorized, the color of the channel number changes to yellow.





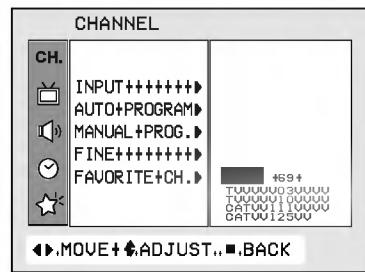
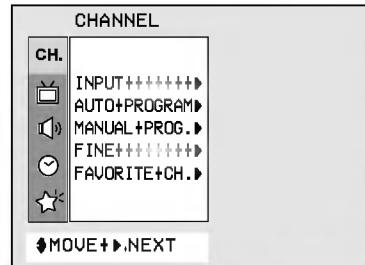
Favorite channel memory

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

Using the MENU button

1. Press the **MENU** button until the menu is displayed as shown right.
2. Press the **►** and then the **▲/▼** button to select **FAVORITE CH.**.
3. Press the **►** button to enter the **FAVORITE CH.** mode.
4. Press the **▲/▼** button to memorize a favorite channel.
5. Press the **►** and then **▲/▼** button to select the input signal ; **TV** or **CATV**.
6. Press the **►** button to select channel position and then **▲/▼** button to select the desired channel number.
7. Press the **ENTER (■)** button.
8. Repeat steps 4 to 7.
9. Press the **ENTER (■)** button to exit.

To select the favorite channel, repeatedly press the **FCR** (Favorite Channel Review) button. Five channels programmed appear on the screen one by one.

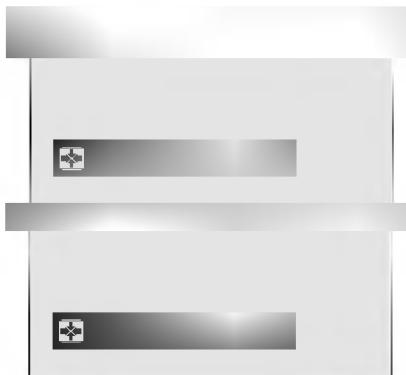


Zoom Picture

You can select the desired picture format (NORMAL, ZOOM IN or ZOOM OUT).

- **NORMAL** : This picture format is 4 to 3 of general TV.
- **ZOOM IN** : This screen is magnified to the upper/lower sides through ZOOM screens one by one.
Each time press this button, the screen is more magnified than the previous screen.
The bottom and top of the picture may be lost.
- **ZOOM OUT** : This works in the opposite way of ZOOM IN.

1. Press the **ZOOM IN/OUT** button.
2. Press the **< / >** or **ZOOM IN/OUT** button to select your desired picture format.





Enjoying the Eye Function

The set will automatically adjust the picture according to the surrounding conditions with the display **MAGIC EYE**.

1. Press the **EYE** button on the remote control.
2. The display **MAGIC EYE** appears and the picture is adjusted automatically.



Auto Picture Control

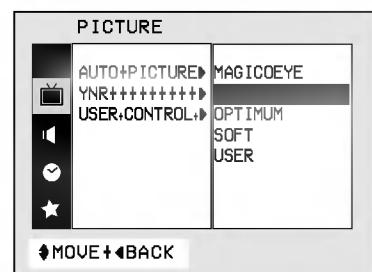
You can select picture modes programmed at factory as you prefer.

Using the APC button

1. Press the **APC** button.
2. Press the **▲ / ▼** or **APC** button to select **MAGIC EYE**, **CLEAR**, **OPTIMUM**, **SOFT** or **USER**.
3. Press the **ENTER (■)** button to exit.

Using the MENU button

1. Press the **MENU** button until the **PICTURE** menu is displayed.
2. Press the **►** and then **▲/▼** button to select **AUTO PICTURE**.
3. Press the **►** button to enter the **AUTO PICTURE** mode.
4. Press the **▲ / ▼** button to select **MAGIC EYE**, **CLEAR**, **OPTIMUM**, **SOFT** or **USER**.
5. Press the **ENTER (■)** button to exit.



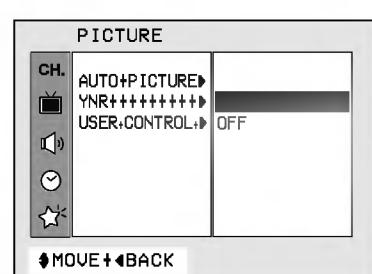
YNR (Luminance Noise Reduction)

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

1. Press the **MENU** button until the **PICTURE** menu is displayed.
2. Press the **►** and then **▲/▼** button to select **YNR**.
3. Press the **►** button to enter the **YNR** mode.
4. Press the **▲/▼** button to select **ON** or **OFF**.
5. Press the **ENTER (■)** button to exit.

YNR ON : The picture noise is reduced, on the other hand the resolution is poor.

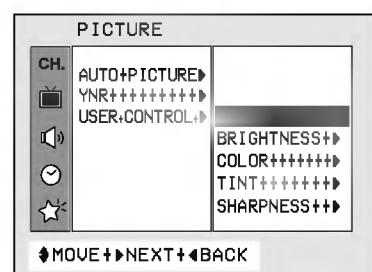
YNR OFF : The resolution is good when there is no picture noise.



Adjusting the Picture

This is the function to manually adjust the desired picture levels (**CONTRAST**, **BRIGHTNESS**, **COLOR**, **TINT**, **SHARPNESS**) of the screen as you like. If the picture you set is not satisfactory, you can select a factory preset picture.

1. Press the **MENU** button until the **PICTURE** menu is displayed.
2. Press the **►** and then **▲/▼** button to select **USER CONTROL**.
3. Press the **►** button to enter the **USER CONTROL** mode.
4. Press the **▲/▼** button to select the desired picture mode.
5. Press the **►** button to enter the desired picture mode.
6. Press the **◀/▶** button to adjust the level.
The level of displayed picture mode is adjusted.
7. Press the **ENTER (■)** button to exit.



Enjoying the Stereo/SAP Broadcast

This TV set can receive MTS stereo programs and any SAP (Secondary Audio Program) that accompanies the stereo program, as the system to be transmitted one additional sound signal as well as the original one. MTS function doesn't operate in the video mode.

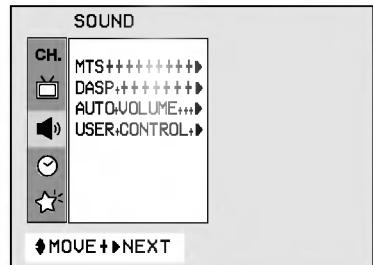
Using the MTS Button

1. Press the **MTS** button to select your desired MTS mode.
Each time you press this button or the **▲ / ▼** button, the **MONO**, **STEREO** or **SAP** mode appears in turn.
2. Press the **ENTER (■)** button to exit.



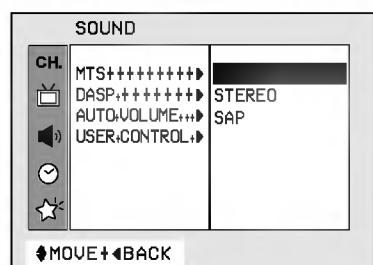
Using the MENU Button

1. Press the **MENU** button until the menu is displayed as shown right.
2. Press the **►** and then **▲/▼** button to select **MTS**.
3. Press the **►** button to enter the **MTS** mode.
4. Press the **▲/▼** button to select **MONO**, **STEREO** or **SAP**.
5. Press the **ENTER (■)** button to exit.



Notes:

- The stereo or SAP can be broadcast only when the TV station transmits its signal even though you have selected **STEREO** or **SAP**.
- The mono sound is automatically broadcast in case of mono broadcast even when the **STEREO** or **SAP** has been selected.
- Select **MONO** if you want to listen to the mono sound in the fringe area during stereo/SAP broadcasting.



AVL (Auto Volume Leveler)

AVL automatically keeps on an equal volume level even if you change channels.

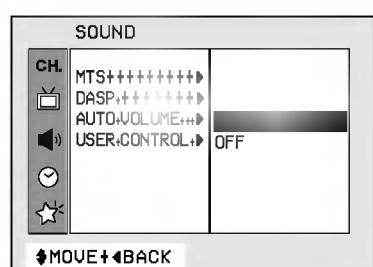


Using the AVL Button

1. Press the **AVL** button.
2. Press the **▲/▼** button to select **ON** or **OFF**.
3. Press the **ENTER (■)** button to exit.

Using the MENU Button

1. Press the **MENU** button until the **SOUND** menu is displayed.
2. Press the **►** and then **▲/▼** button to select **AUTO VOLUME**.
3. Press the **►** button to enter the **AUTO VOLUME** mode.
4. Press the **▲/▼** button to select **ON** or **OFF**.
5. Press the **ENTER (■)** button to exit.

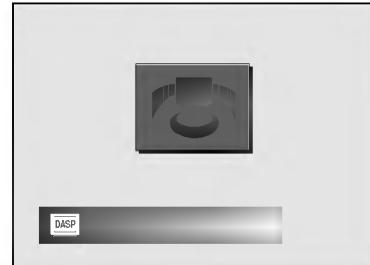


Auto Sound Control

You can enjoy the best sound without any special adjustment because this TV set automatically adjusts the sound appropriate to viewing program character by self-intelligence.

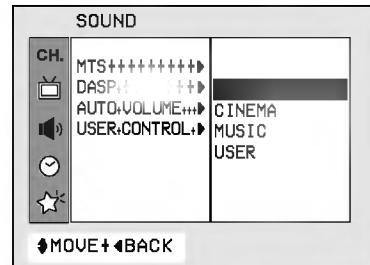
Using the DASP Button

1. Press the **DASP** button.
2. Press the **▲ / ▼** button to select **NEWS, CINEMA, MUSIC** or **USER**.
3. Press the **ENTER (■)** button to exit.



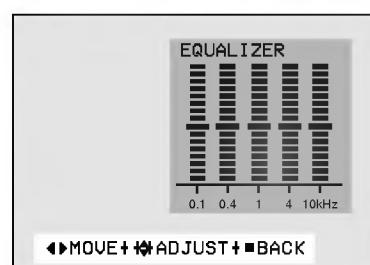
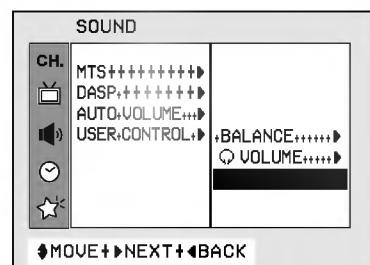
Using the MENU Button

1. Press the **MENU** button until the **SOUND** menu is displayed.
2. Press the **▶** and then the **▲/▼** button to select **DASP**.
3. Press the **▶** button to enter the **DASP** mode.
4. Press the **▲ / ▼** button to select **NEWS, CINEMA, MUSIC** or **USER**.
5. Press the **ENTER (■)** button to exit.



Adjusting the equalizer (OFF mode in ASC)

1. Press the **MENU** button until the **SOUND** menu is displayed.
2. Press the **▶** and then the **▲/▼** button to select **USER CONTROL**.
3. Press the **▶** button to enter the **USER CONTROL** menu.
4. Press the **▲/▼** button to select **EQUALIZER**.
5. Press the **▶** button to enter the **EQUALIZER** mode.
6. Press the **◀/▶** button to select the sound band and then press the **▲/▼** button to adjust the desired level.
7. Press the **ENTER (■)** button to exit.



Adjusting the balance

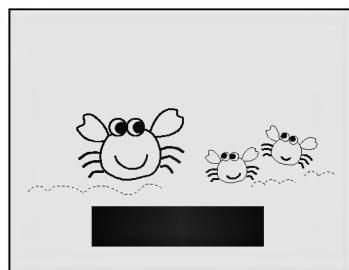
1. Repeat 'Adjusting the equalizer' steps 1 to 3.
2. Press the **▲/▼** button to select **BALANCE**.
3. Press the **▶** button to enter the **BALANCE** mode.
4. Press the **◀/▶** button to adjust the balance level.
5. Press the **ENTER (■)** button to exit.





Closed captioning is a process which converts the audio portion of a television program into written words, which then appear on the television screen in a form similar to subtitles. 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. It's 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 two different caption signals on the same channel. By selecting MODE 1 or MODE 2, you can choose which signal you view. MODE 1 is usually the signal with the captions, while MODE 2 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 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.



Using the Text Function

Text services give a wide variety of information on all kind of subjects (ex. captioned program lists, weather forecasts, stock exchange topics, news for hearing-impaired---) through the full TV screen. But not all stations offer text services, even though they might offer captioning.

Note: In the event you receive a poor signal, an empty black box may appear and disappear, even when the text mode is selected. This is normal function in such an event.

Operating the Caption and Text

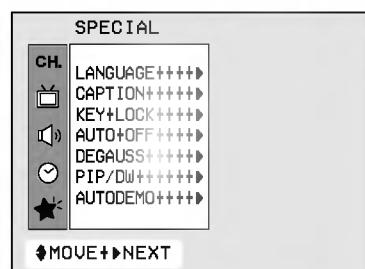
Using the CAPTION button

1. Press the **CAPTION** button.
2. Press the **▲/▼** or **CAPTION** button to select **MODE 1, MODE 2, TEXT 1, TEXT 2** or **OFF**.
3. Press the **ENTER (■)** button to exit.

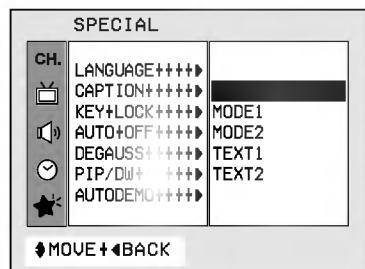


Using the MENU button

1. Press the **MENU** button until the menu appears as shown right.
2. Press the **►** and then **▲/▼** button to select **CAPTION**.
3. Press the **►** button to enter the **CAPTION** mode.
4. Press the **▲ / ▼** button to select **MODE 1, MODE 2, TEXT 1, TEXT 2** or **OFF**.
5. Press the **ENTER (■)** button to exit.



Note: This TV is programmed to remember which mode it was last set to, even if you switch the set off.



Watching the PIP (Picture in Picture)

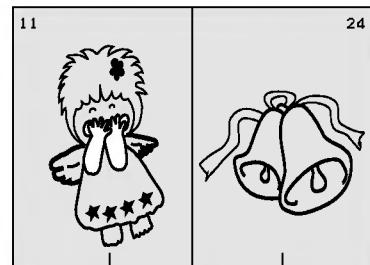
This is the function to call up a little picture (PIP : picture in picture) within the main picture. Thus at the same time you can watch two different programs.

1. Press the **PIP/DW** button to select PIP mode or double window mode.
2. Press the **CH +/−** button of the PIP buttons to select the desired channel in the sub picture.

Note: In the Double window mode, press the **▲/▼** button to select the upper or lower channel in main picture and press the **CH +/−** button of the PIP buttons to select the upper or lower channel in sub picture.



Main Picture Sub Picture
< PIP mode >

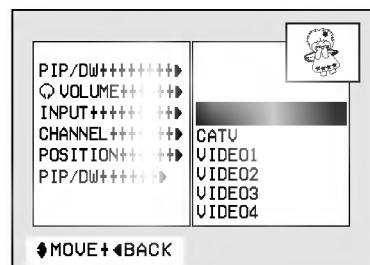


Main Picture Sub Picture
< Double window mode >

Selecting the input signal (in PIP and Double window mode)

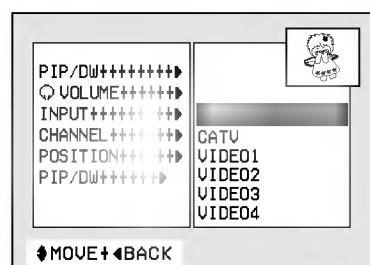
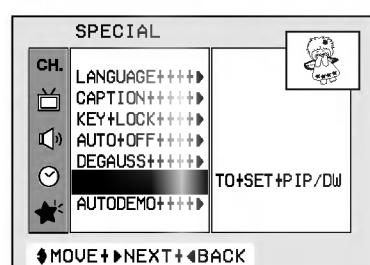
Using the PIP MENU Button

1. Press the **PIP MENU** button.
2. Press the **▲/▼** button to select **INPUT**.
3. Press the **▶** and then **▲/▼** button to select **TV, CATV, VIDEO 1, VIDEO 2, VIDEO 3** or **VIDEO 4**.
4. Press the **ENTER (■)** button to exit.



Using the MENU Button

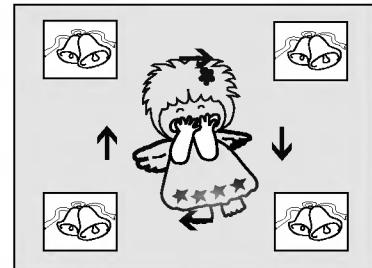
1. Press the **MENU** button until the **SPECIAL** menu is displayed.
2. Press the **▶** and then the **▲/▼** button to select **PIP/DW**.
3. Press the **▶** button to enter the **PIP/DW** mode.
4. Press the **▲/▼** button to select **INPUT**.
5. Press the **▶** and then **▲/▼** button to select **TV, CATV, VIDEO 1, VIDEO 2, VIDEO 3** or **VIDEO 4**.
6. Press the **ENTER (■)** button to exit.





Moving the Sub Picture (in PIP mode)

Press the **POSITION** button to select the desired position of sub picture. The sub picture moves clockwise.



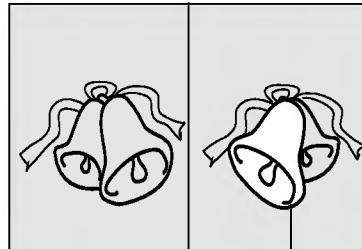
Swapping Screens

Press the **SWAP** button. Each time you press this button, the main picture and sub picture exchange places.

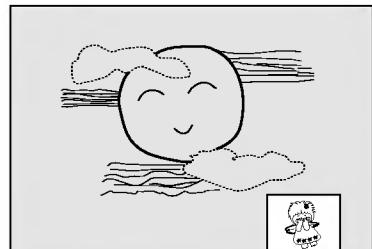
Still Picture

Press the **STILL** button. The still picture is displayed in the sub picture.

To cancel the still picture, press the **STILL** button again.



Still picture
< Double window mode >

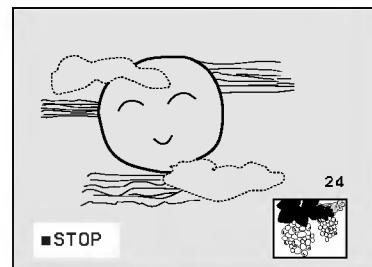


Still picture
< PIP mode >

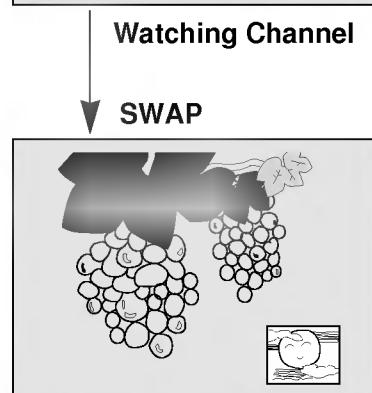
Channel Search

This is the function to search one by one the pictures of all the programmed channels through the PIP screen while the main screen remains as a current channel.

Press the **CH. SEARCH** button. The pictures of all the programmed channels are searched through one PIP screen, as shown right.



Watching Channel



SWAP

By pressing the **SWAP** button, you can see the channel being searched on the PIP screen through the main screen.

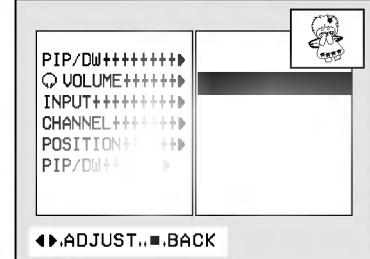
To release the channel search, press the **CH. SEARCH** or **ENTER (■)** button.



Adjusting the Volume (in PIP and Double window mode)

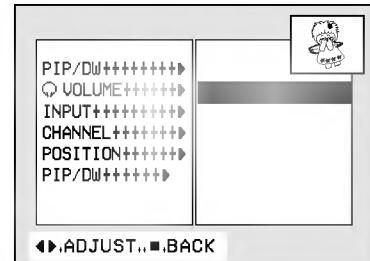
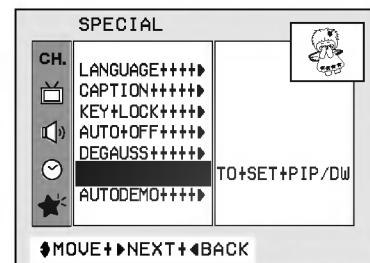
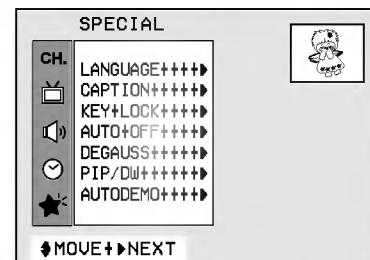
Using the PIP MENU Button

1. Press the **PIP MENU** button.
2. Press the **▲/▼** button to select **Q VOLUME**.
3. Press the **►** and then **▲/▼** button to adjust volume level.
4. Press the **ENTER (■)** button to exit.

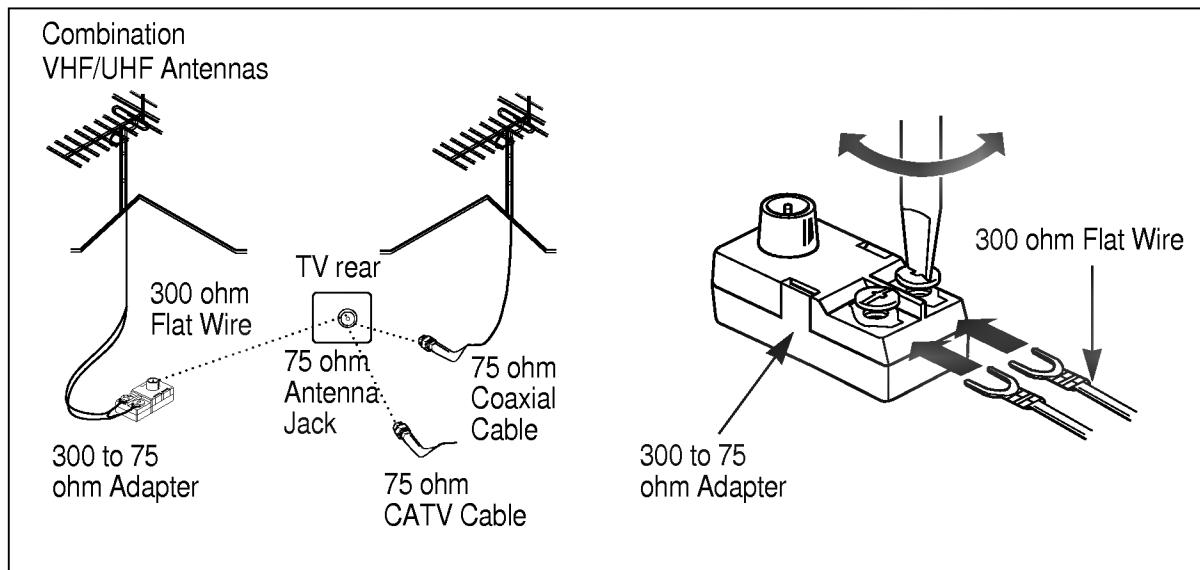


Using the MENU Button

1. Press the **MENU** button until the menu is displayed as shown right.
2. Press the **►** and then the **▲/▼** button to select **PIP/DW**.
3. Press the **►** button to enter the **PIP/DW** mode.
4. Press the **▲/▼** button to select **Q VOLUME**.
5. Press the **►** and then **▲/▼** button to adjust volume level.
6. Press the **ENTER (■)** button to exit.



Antenna Connections



Connecting an Outdoor Antenna

For the best reception, we recommend you use an outdoor antenna.

Severely weathered antennas and antenna cables can reduce the signal quality. Before connecting it, necessarily inspect them. Any service center can explain the various outdoor antennas available to you.

300 Ohm Flat Wire

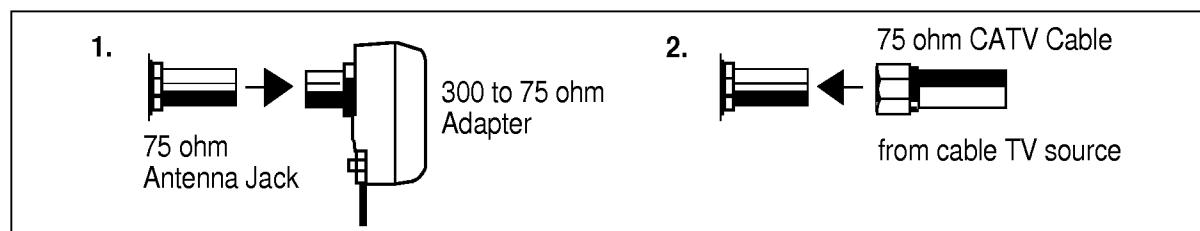
1. Connect the 300 ohm flat wire to screws on the 300 ohm to 75 ohm adapter.
2. Push the end of 300 ohm to 75 ohm adapter into 75 ohm antenna jack.

75 Ohm Coaxial Cable

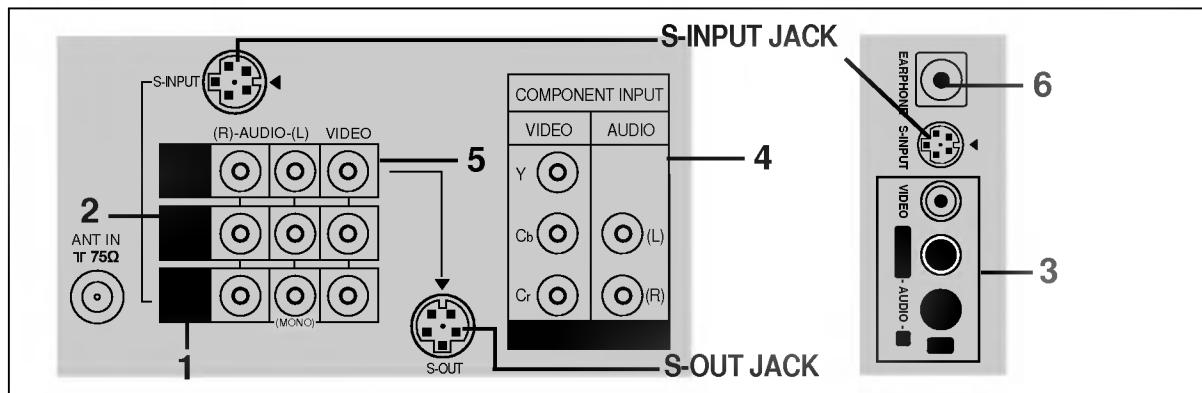
1. Connect the 75 ohm coaxial cable directly to the 75 ohm antenna jack.

Connecting a CATV Cable

If you subscribe to a CATV system, change the antenna connection as described below.



1. Remove the 300 to 75 ohm adapter or the cable from the set if attached.
2. Connect the CATV cable (75 ohm coaxial cable) to the 75 ohm antenna jack.



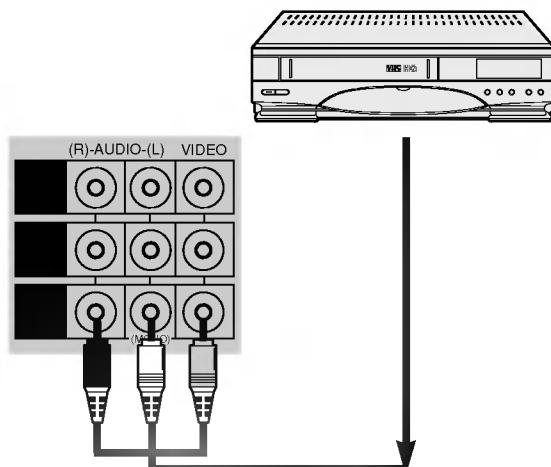
1. **IN 1 JACKS** : Connect external equipment outputs (VCR, LASER DISC, CAMCORDER) to these inputs. Press the **TV/VIDEO** button to select **VIDEO-1**.
2. **IN 2 JACKS** : Connect external equipment outputs (VCR, LASER DISC, CAMCORDER) to these inputs. Press the **TV/VIDEO** button to select **VIDEO-2**.
3. **IN 3 JACKS** : Connect external equipment outputs (VCR, LASER DISC, CAMCORDER) to these inputs. Press the **TV/VIDEO** button to select **VIDEO-3**.
4. **IN 4 JACKS** : Connect component output jacks to these outputs. Press the **TV/VIDEO** button to select **VIDEO-4**.
5. **OUT JACKS**: Connect external equipment inputs (VCR, Audio amplifier) to these outputs for recording or monitoring the selected program.
6. **EARPHONE JACK** : This jack is located on the side of TV.
You can hear the mono sound from the TV.

Connecting AUDIO/VIDEO IN Jacks

1. Connect the audio/video output jacks of the VCR to **IN 1 (A/V)** jacks on the back.
2. Press the **TV/VIDEO** button to select **VIDEO-1**.

Note: If you connect the audio/video output jacks of the VCR to the **IN 3 (A/V)** jacks on the side of TV, select **VIDEO-3**.

3. Press the **PLAY** button on the VCR.
The video playback is on the TV screen.

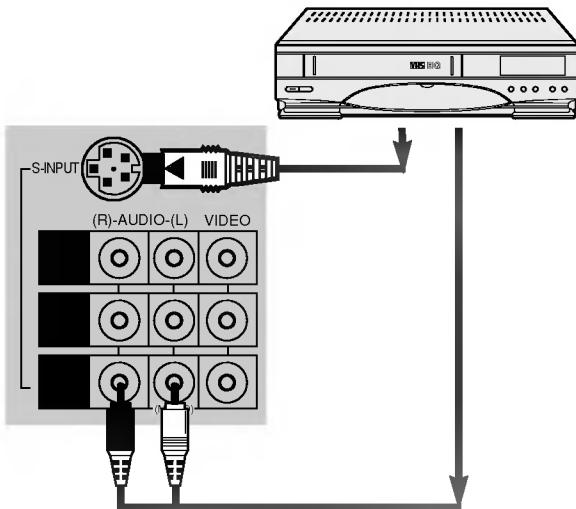


Note: In case of MONO VCR, connect the output jack of VCR to the **AUDIO-(L)/(MONO) IN** jack of TV so that the sound can be heard from both speakers. If you connect it to the **AUDIO-(R) IN** jack of TV the sound is heard only from right speaker.

Connecting the S-VHS VCR

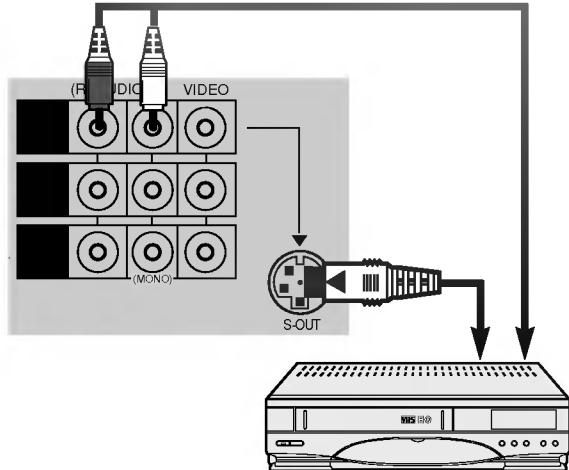
Connecting the S-INPUT jacks

1. Connect the S-VHS output jacks of the VCR to the **S-INPUT** jacks on the back.
Remember to connect the audio cables from the VCR to the **IN1** audio jacks on the TV.
2. Press the **TV/VIDEO** button to select **VIDEO-1**.
3. Press the **PLAY** button on the VCR.
The video playback is on the TV screen.



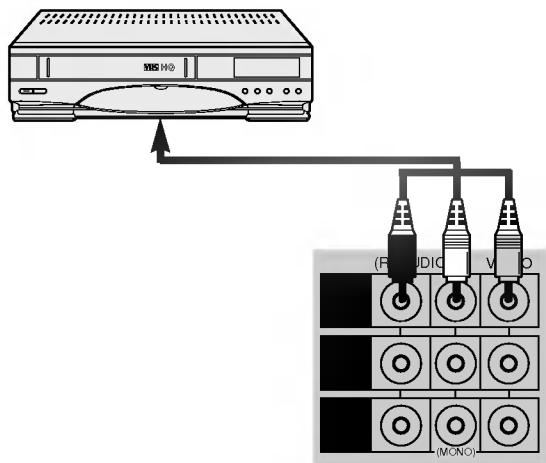
Connecting the S-OUT jacks

1. Connect the S-VHS inputs jacks of the VCR to the **S-OUT** jacks on the back.
2. Select the program number on the TV.
3. Set the recording VCR to record.



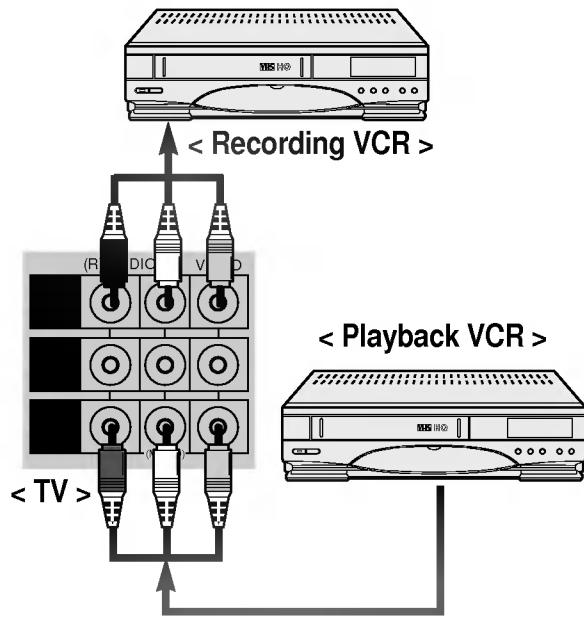
Recording Onto VCR

1. Connect the audio/video input jacks of the recording VCR to the **OUT** (A/V) jacks on the back.
2. Select the program number on the TV.
3. Set the recording VCR to record.



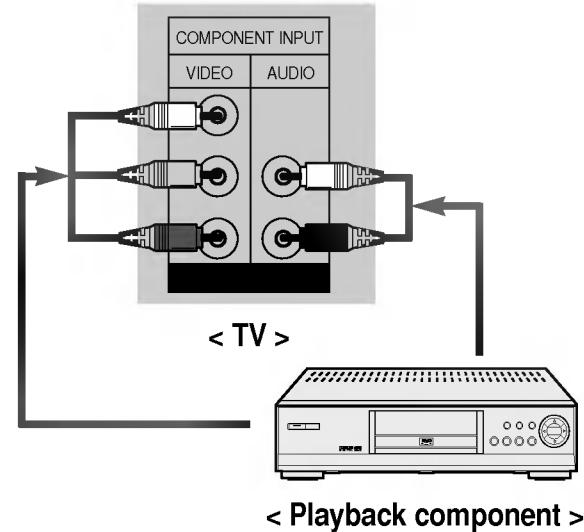
Recording a program from connected other equipment

1. Connect the output jacks of the playback VCR to the **IN 1** (A/V) jacks on the back of TV (or **IN 3** jacks on the side of TV).
2. Connect the input jacks of the recording VCR to the **OUT** (A/V) jacks on the back of TV.
3. Press the **TV/VIDEO** button to select **VIDEO-1**.
If you connect it to the **IN 3** (A/V) jacks on the side of TV, you should select **VIDEO-3**.
4. Press the **PLAY** button on the playback VCR and set the recording VCR to record.



Connecting the COMPONENT INPUT jacks

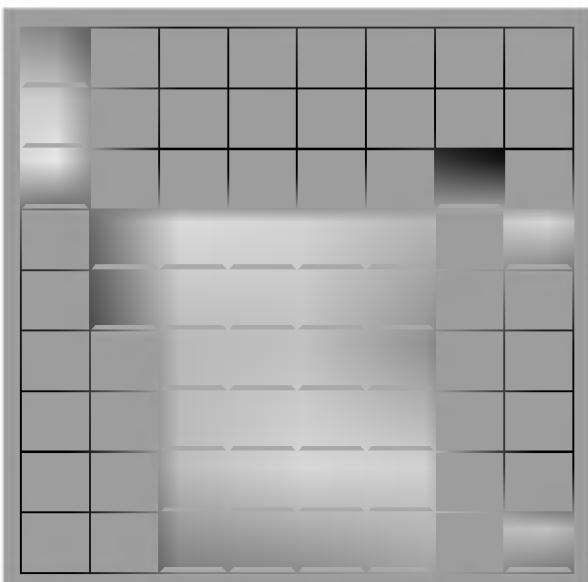
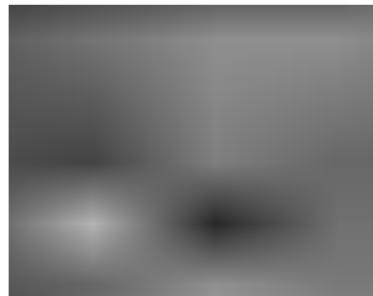
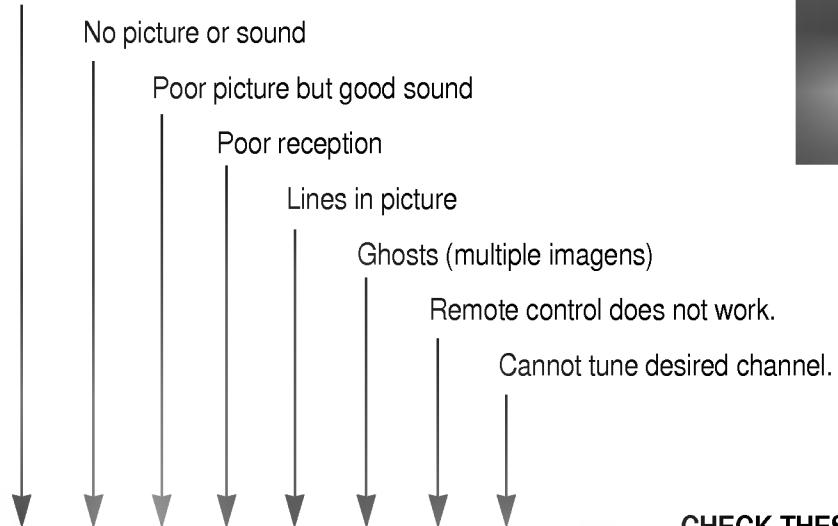
1. Connect the component video/audio output jacks of the component.
2. Connect the **COMPONENT VIDEO/AUDIO INPUT** jacks on the back.
3. Press the **TV/VIDEO** button to select **VIDEO-4**.
4. Press the **PLAY** button on the component.
The component playback is on the TV screen.





SYMPTOMS

No power



CHECK THESE THINGS

- Is power cord plugged in?
- Is television turned on?
- Check batteries in remote control.
- Try another channel (station trouble).
- Check antenna connectings.
- Check for local interference.
- Adjust the antenna.
- Adjust the picture control.
- Program channel using AUTO PROGRAM.