

# Panasonic®

## LCD TV Operating Instructions

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Model No. **CT-L1400**  
**CT-L2000**



Before connecting, operating or adjusting this product, please read these instructions completely.  
Please keep this manual for future reference.

**English**

TQBC0631

# Important Safety Instructions



The lightning flash with arrow head within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.



The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.

■ **Note to CATV System Installer:** This reminder is provided to direct the CATV system installer's attention to Article 820–40 of the NEC that 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 cable entry as practical.

## ■ Important Safety Instructions for LCD TV

- 1) Read these instructions and apply them with your LCD TV.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water. For example: Avoid placing it near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.
- 6) Clean only with dry cloth. Unplug this LCD TV from the wall outlet before cleaning. Do not use liquid or aerosol cleaners.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to ensure reliable operation of the LCD TV and to protect it from overheating. These openings must not be blocked or covered. There should be at least 10 cm of space from these openings. The openings should never be blocked by placing the LCD TV on a bed, sofa, rug or other similar surface. This LCD TV should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 10) Only use attachments/accessories specified by the manufacturer. Otherwise it may cause hazards.
- 11) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 12) Unplug this apparatus during lightning storms or when unused for long periods of time. This will prevent damage to the receiver due to lightning and power-line surges.
- 13) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.  
Upon completion of any service or repairs to this LCD TV, ask the service technician to perform routine safety checks to determine that the television is in safe operating condition.
- 14) Operate 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.
- 15) Follow all warnings and instructions marked on the LCD TV.
- 16) Never push objects of any kind into this LCD TV 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 LCD TV.



# Important Safety Instructions

17) If an outside antenna is connected to the television equipment, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. In the U.S. Selection 810-21 of the National Electrical Code provides information with respect 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.

18) 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.

19) Unplug this LCD TV from the wall outlet, and refer servicing to qualified service personnel under the following conditions:

- a. When the power cord or plug is damaged or frayed.
- b. If liquid has been spilled into the LCD TV.
- c. If the LCD TV has been exposed to rain or water.
- d. If the LCD TV does not operate normally by following the operating instructions.

Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the LCD TV to normal operation.

- e. If the LCD TV has been dropped or the cabinet has been damaged.
  - f. When the LCD TV exhibits a distinct change in performance - this indicates a need for service.
- 20) When replacement parts are required, be sure the service technician to use replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

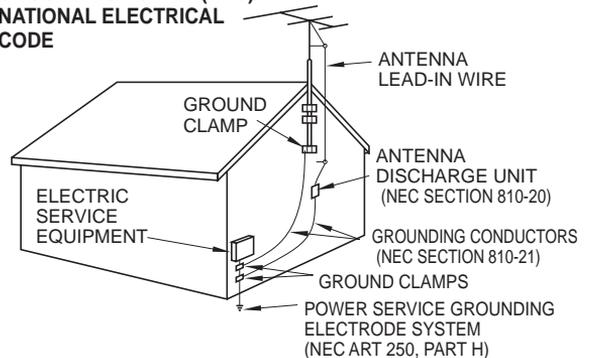
21) **WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.**

22) **CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS PLUG WITH A RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.**

23) **CAUTION: USE WITH OTHER STAND MAY RESULT IN INSTABILITY CAUSING POSSIBLE INJURY.**

24) **CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE.**

## EXAMPLE OF ANTENNA GROUNDING AS PER (NEC) NATIONAL ELECTRICAL CODE



**NOTE:** ● This equipment is designed to operate in the U.S.A. and other countries where the broadcasting system and AC house current is exactly the same as in the U.S.A.

- The marking or retained image on the LCD panel resulting from fixed image use is not an operating defect and as such is not covered by Warranty. This product is not designed to display fixed image patterns for extended periods of time.

### ■ Important Information Regarding Use of Video Games, Computers, Captions or Other Fixed Image Displays.

The extended use of fixed image program material can cause a permanent "shadow image" on the LCD panel. This background image is viewable on normal programs in the form of a stationary fixed image. This type of irreversible LCD panel deterioration can be limited by observing the following steps:

- A. Reduce the brightness/contrast setting to a minimum viewing level.
- B. Do not display the fixed image for extended periods of time.
- C. Turn the power off when not in actual use.

■ This product utilizes tin-lead solder, and has a fluorescent lamp containing a small amount of mercury. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: [www.eiae.org](http://www.eiae.org).

# *Dear Panasonic Customer*

*Welcome to the Panasonic family of customers.*

*We hope that you will have many years of enjoyment from your new LCD TV.*

*To obtain maximum benefit from your set, please read these instructions before making any adjustments, and retain them for future reference.*

*Retain your purchase receipt, and record the model number and serial number of your set in the space provided on the rear cover of these instructions.*

Federal Communication Commission Information
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This equipment has been tested and found to comply with the limits for a TV Broadcast Receiver, 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. If this equipment does cause or receive interference, which can be determined by turning equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the TV antenna.
- Increase the separation between TV and other equipment.
- Connect TV into separate outlet from other equipment.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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# Installation

## Receiver Location

Locate for comfortable viewing. Avoid placing where sunlight or other bright light (including reflections) will fall on the screen. Use of some types of fluorescent lighting can reduce remote control transmitter range. Adequate ventilation is essential to prevent internal component failure. Keep away from areas of excessive heat or moisture.

## Optional External Equipment

The Video/Audio connection between components can be made with shielded video and audio cables. For best performance, Antenna cables should utilize 75 ohm coaxial shielded wire. Cables are available from your dealer or electronic supply store.

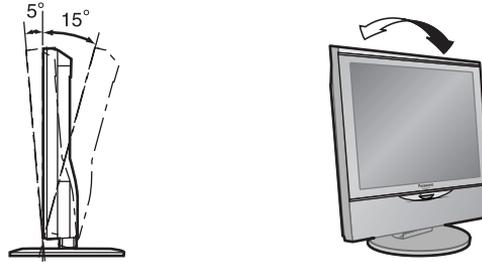
Before you purchase any cables, be sure you know what type of output and input connectors your various components require. Also determine the length of cable you'll need.

## For optimum quality picture

When the LCD is exposed to light from outdoors or lighting fixtures, high-contrast pictures may not be displayed clearly. Turn off florescent lamps near the LCD and place in a location not exposed to outdoor light.

## How to use the LCD stand

Adjust the stand to your desired angle. The stand angle can be adjusted between 5 ° forward to 15 ° back.



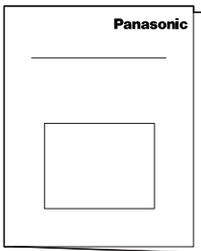
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## SUPPLIED ACCESSORIES

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Check the accessories before installations.

- Operating Instruction book



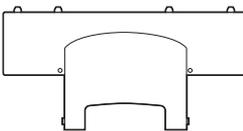
- Remote Control Transmitter



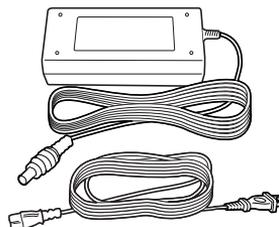
- Batteries for the Remote Control Transmitter (2 × AA size)



- Tuner Cable Cover



- AC Adaptor & AC Cord



- Warranty Card



[The illustration shows only a basic view; actual appearance may differ.]

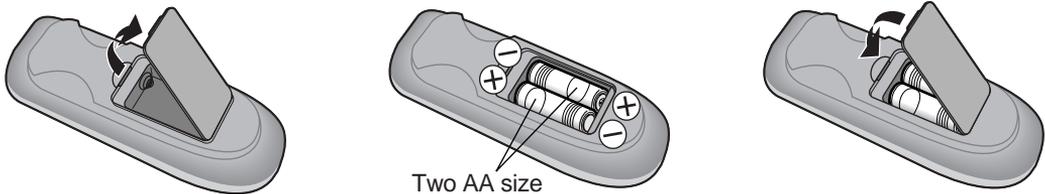
## Remote control battery installation

### Replacing batteries

Replace batteries by following the steps below:

#### Requires two AA batteries.

1. Open the battery cover.
2. Install the batteries as shown in the battery compartment. (Polarity + or – must match the markings in the compartment).
3. Replace the cover.



### ⚠️ Precaution on battery use

Incorrect installation can cause battery leakage and corrosion that will damage the remote control transmitter.

#### Observe the following precautions:

1. Always use new batteries when replacing the old set.
2. Do not attempt to charge, short-circuit, disassemble, heat or burn used batteries.
3. Battery replacement is necessary when remote control acts sporadically or stops operating this unit.

#### Notes:

- Do not drop, apply shock to or step on the remote control.
- Do not spill water on the remote control.
- Do not place objects between the remote control and remote control receiver.
- Do not use remote controls for other equipment at the same time.
- If the TV does not operate even when operating the remote control from a close range, it is time to replace the batteries.  
Refer to the label on back of the remote control for directions on replacing batteries.

## Maintenance

### To clean this unit, wipe with a soft, dry cloth.

If the surfaces are extremely dirty, use a soft cloth dipped in a soap and water solution or a weak detergent solution.

- Use eyeglass cleaner to remove stubborn dirt from the LCD.
- Never use alcohol, paint thinner or benzene to clean this unit.
- Before using a chemically treated cloth, read the instructions that came with the cloth carefully.

#### CAUTION :

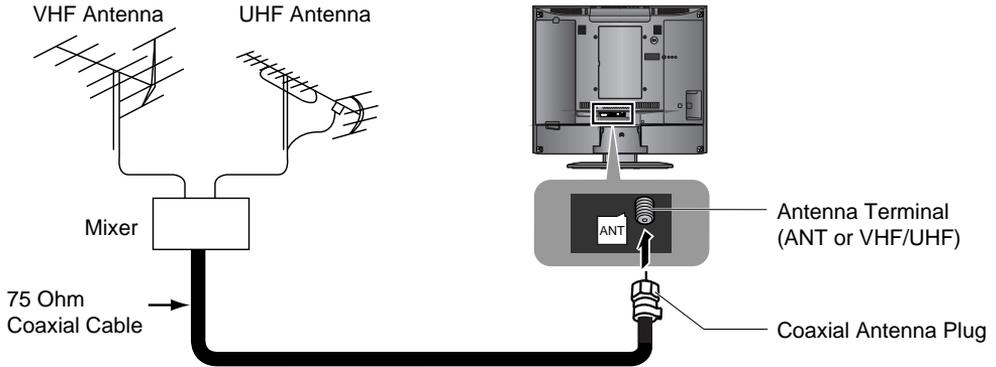
If water or similar substances get inside the monitor via the liquid crystal panel surface, a malfunction may result.



# Connections

## Connecting the Antenna Cable to the Antenna Terminal

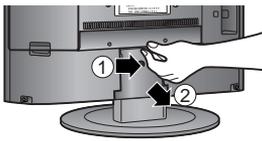
**Antenna Connection** - For proper reception of VHF/UHF channels, an external antenna is required. For best reception an outdoor antenna is recommended. Antenna Mode must be set to TV.



## Antenna cover removal and fitting

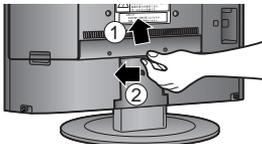
### CT-L1400

#### Removal



1. Grasp the cover at the bottom end and initially remove by pulling slightly toward yourself.
2. Slowly pull out in the downward direction.

#### Fitting



1. Insert the claws (at 4 points) at the top end.
2. Push the claws in (at 4 points) at the bottom end.

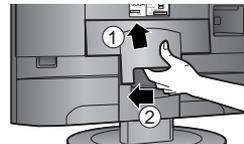
### CT-L2000

#### Removal



1. Grasp the opening and initially pull the cover slightly towards yourself to disengage the claws (at 2 points on both the left and right).
2. Slowly pull out in the downward direction.

#### Fitting

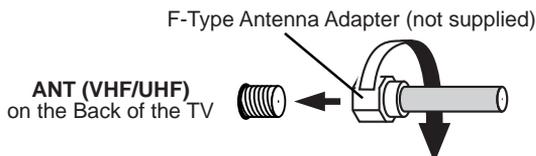


1. Insert the claws (at 4 points) at the top end.
2. Push the claws in (at 4 points) at the bottom end.

**Note:** To avoid interference appearing on the screen, do not bundle the antenna wire and AC adapter wire together.

## Antenna / Cable Connection

### Incoming 75 Ohm Cable from Home Antenna / Cable Company



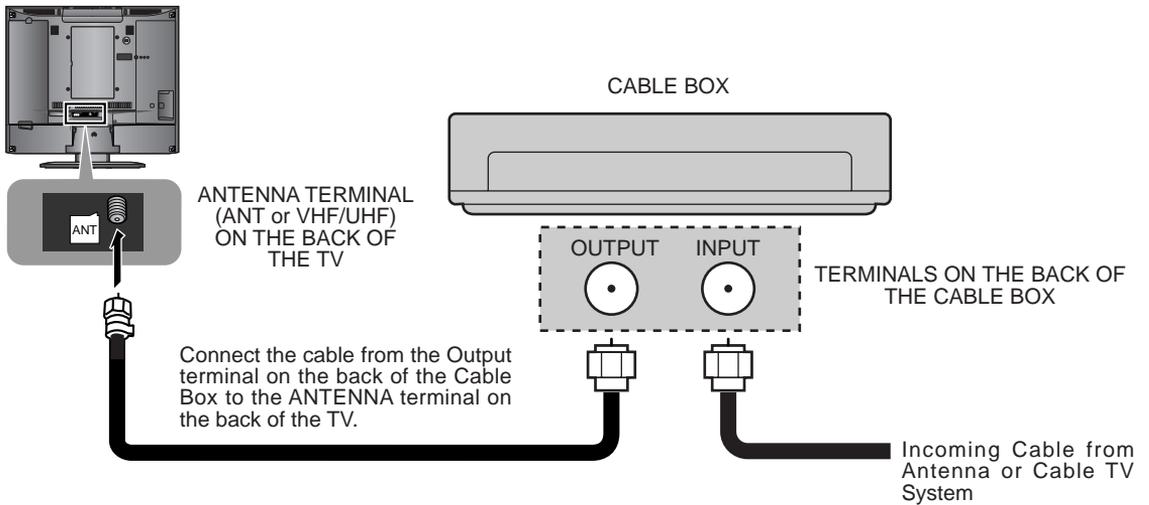
**Cable Connection** - For reception of cable channels (01 - 125) connect the cable supplied by your local cable company. Antenna Mode must be set to CABLE. (Refer to Antenna Mode section.)

#### Note:

Certain cable systems offset some channels to reduce interference or have Premium (scrambled) channels. A cable converter box is required for proper reception. Check with your local Cable company for its compatibility requirements.

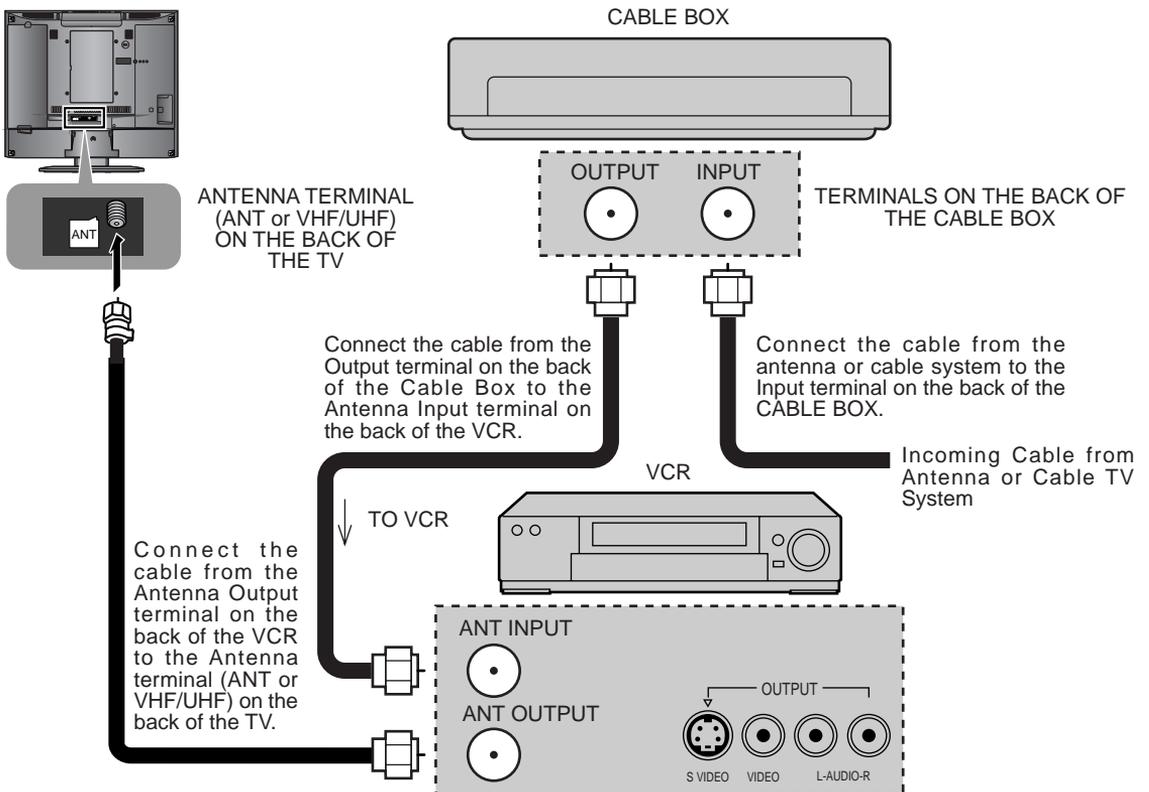
## Antenna Connection (Cable Box, no VCR)

Use this configuration when connecting the TV to a cable TV system using a Cable Box.



## Antenna Connection (Cable Box, and VCR)

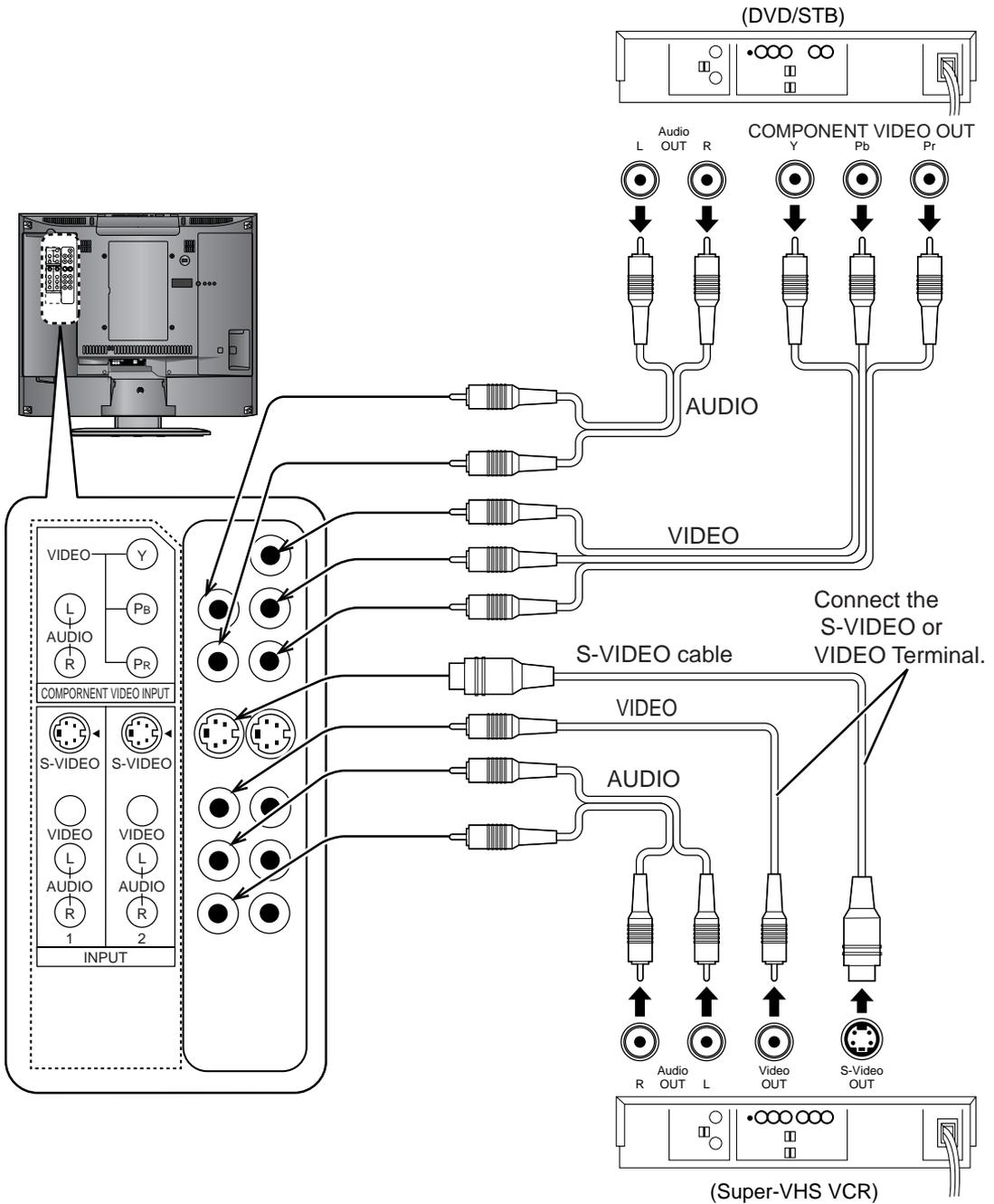
Use this configuration when connecting the TV to a cable TV system using a Cable Box and VCR.



**Note:** When the antenna cable is connected to the TV antenna terminal via a cable box or VCR, set the TV channel to CH3 or CH4, cable. This does not apply when signal is input from VIDEO INPUT.

## How to connect the input terminals

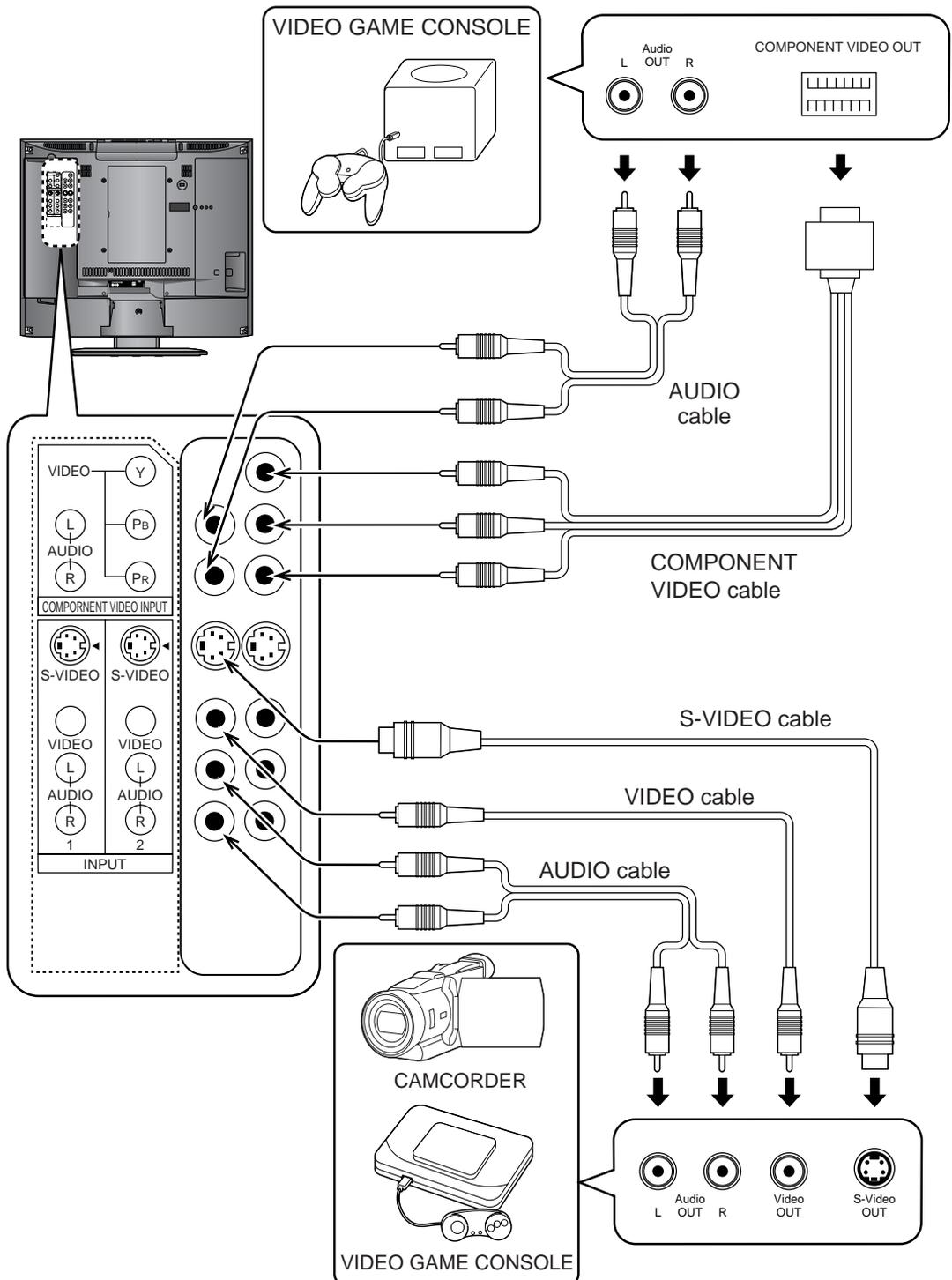
### Connect VCR and other peripheral equipment



**Notes:**

- (1) When a monaural VCR is used, connect the monaural audio cable to the AUDIO-L (Left) terminal.
- (2) Similar connections are available at the INPUT terminals.  
Select the desired VIDEO input position by pushing the TV/VIDEO button. (See page 14)
- (3) When connecting VCRs, priority is given to the S- Video cable when the S- Video input terminal and the video input terminal are connected at the same time.

## Connect CAMCORDER and VIDEO GAME CONSOLE



### Notes:

- When connecting video cables, priority is given to the S-Video cable when the S-Video input terminal and the video input terminal are connected at the same time.
- Please make inquiries to the VIDEO GAME PLAYER manufacture concerning component cables to connect with video games.

## Cable cover removal and fitting

### Removal



1. Disengage the claws at the uppermost end.
2. Slowly pull out in the upward direction.

### Fitting

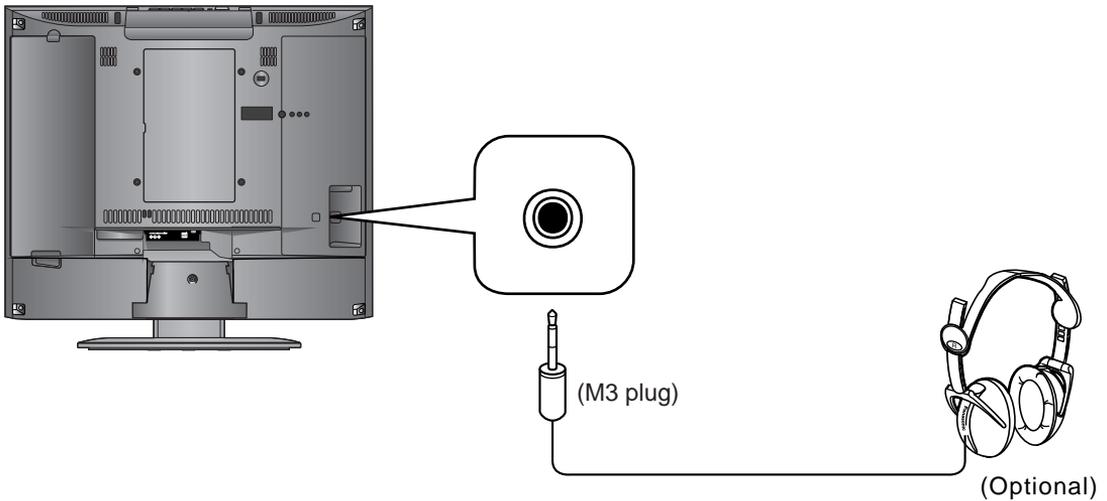


1. Insert the claws (at 2 points) at the bottom.
2. Push in the TOP.

**Note:** Depending on the type of cable used it may not be possible to close the cover. In such cases the cable may be routed through the antenna cover.

## Connecting Headphones / Earphones

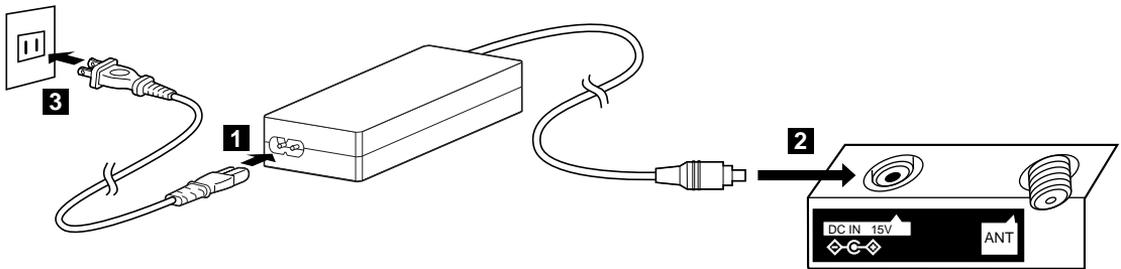
Connect headphones / earphones as follows.



Use Volume Up  or Down  button to control volume level. (See page 15)

# Power ON / OFF

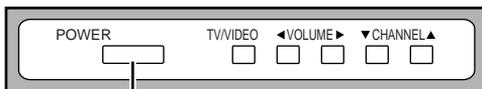
## Connecting the Plug to the Wall Outlet



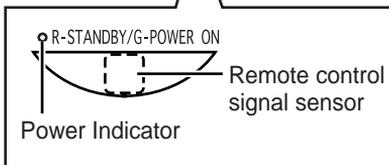
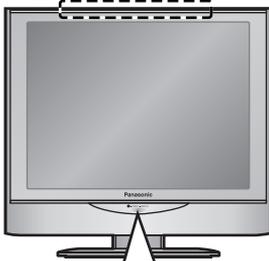
### Note:

- The TV and AC adaptor will still consume some power as long as the power cord is still inserted into the wall outlet.
- Be sure to use the power cord and AC adaptor included in the accessories.
- Usage of AC adaptors other than specified may cause malfunctions.

## How to Turn the Power On



Main Power switch



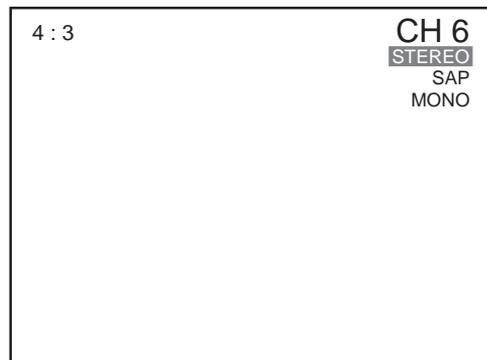
Power Indicator



Press the Main POWER switch on the TV to turn the set on.  
POWER-ON: Green

When the set is on or in standby mode press the Main POWER switch on the TV to turn the set off.  
POWER-OFF: No light

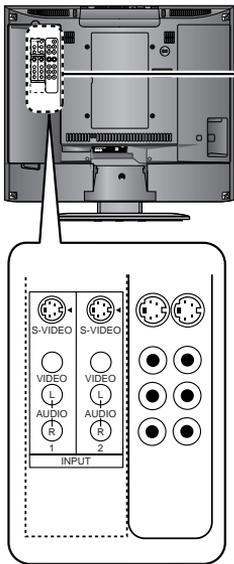
Example: The screen below is displayed for a while after the TV is turned on. (setting condition is an example.)



Press the POWER button on the remote control to turn the TV off: Red (standby)

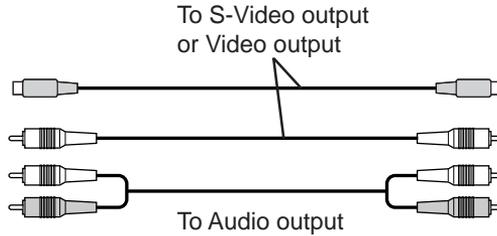
Press the POWER button on the remote control to turn the TV on: Green

# Playing a VCR or other peripheral equipment



## Confirming connections

Confirm that the TV is in standby mode.



Camcorder



VCR



Laser Disc Player



DVD player

This equipment can also be connected to the rear terminals. (See page 10,11)



## Turning the power on and switching input modes

1

POWER



Turn the TV on.

2

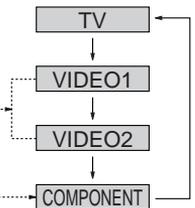
TV/VIDEO



The input mode changes each time this button is pressed.

• When playing a VIDEO

• When playing a DVD



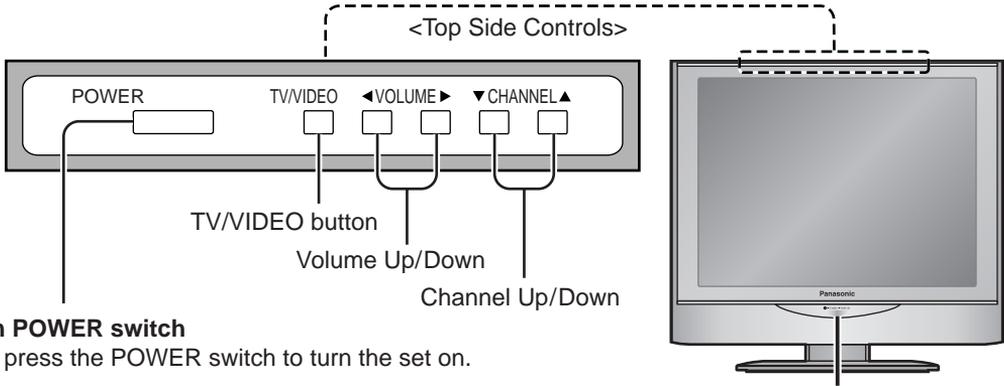
### Note:

When the remote control is unavailable, input modes can also be switched using the TV/VIDEO button on the TV set.

3

Operate the connected equipment.

# Basic Controls



## Main POWER switch

First press the POWER switch to turn the set on.

## Operate your Remote control pointed to the Remote control sensor

(Within about 6 meters in front of the TV set.)

### Power button

Press to turn this set ON or OFF. (See page 13)

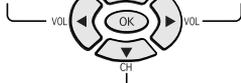
#### Note:

The LCD TV's power cord must first be plugged into the wall outlet and then turned on at the Main POWER switch.

**Changes to the next channel up**  
Moves cursor upward during menu mode.

**Reduces volume**  
Moves cursor to the left during menu mode.

**Increases volume**  
Moves cursor to the right during menu mode.



**Changes to the next channel down**  
Moves cursor downward during menu mode.

### TV/VIDEO button

The input mode changes each time this button is pressed.

### MUTE button

Press to mute the sound. Press again to reactivate sound. Sound is also reactivated when power is turned off or volume level is changed.

### RETURN button

Press to return to the previous screen.

### RECALL button

Press to display time, channel, sleep timer and other options.

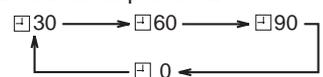
### SAP button

Selects Audio mode (See page 21).



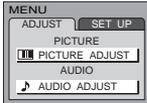
### SLEEP button

The LCD TV may be preset to switch to stand-by after a fixed period. The setting changes to 30 minutes, 60 minutes, 90 minutes and 0 minutes (SLEEP timer cancelled) each time this button is pressed.



### MENU button

Press to display MENU screen, press again to clear.

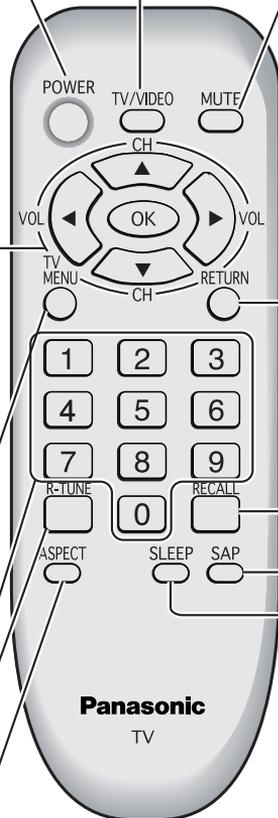


### Direct program number Selection buttons

### R-TUNE button

Switches to previously viewed channel or video mode.

### ASPECT button



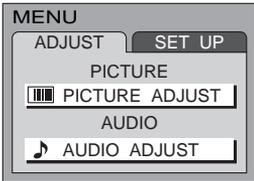
When 3 minutes remain, "3" will flash. The SLEEP timer is cancelled if a power interruption occurs. Before the timer automatically turns the power off, the remaining time will blink on the screen ("3" for 3 minutes, "2" for 2 minutes and "1" for 1 minute before the power goes off).

# Flow Chart of MENU

All adjustments and setting functions equipped in this set can be made using the menu buttons. The menu screen is composed of 2 menus, the ADJUST menu and the SET UP menu.

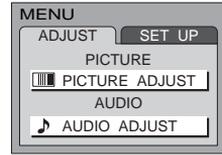
**1**

Press to display MENU screen, press again to clear.

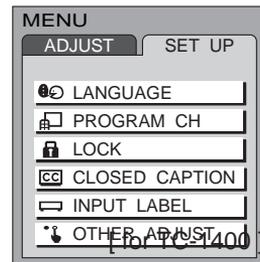
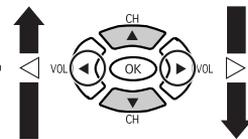
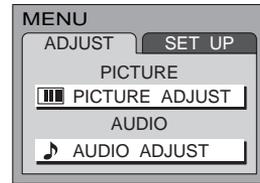
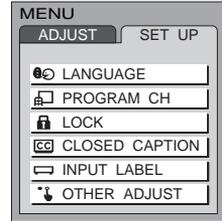


**2**

MENU selection



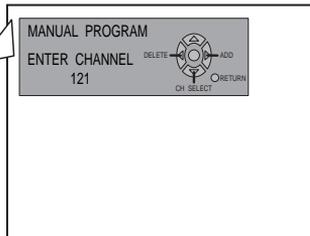
OR

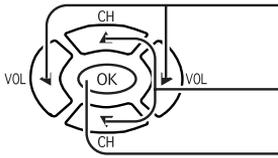


## Please refer to the On Screen Help

An On Screen Help box is displayed whenever a menu is displayed on the TV. This Help box indicates which keys on the remote control are used to navigate the menu shown, see above for descriptions of button functions.

**ON SCREEN HELP**  
**'Instruction' box**





Press to select the desired MENU (ADJUST or SET UP).

Press to select each item.

Press to display each adjustment screen.



Proceed to the adjustment.

● To return to previous screen :



Press to return.

● To end adjustments :



Press to exit from the MENU screen.

This returns the set to the normal viewing condition.

Press to display each adjustment screen.

OK

RETURN

Press the RETURN button to return to previous screen.

**TO PICTURE ADJUST menu**

PICTURE ADJUST	
NORMAL	
PIC MODE	STANDARD
BACK LIGHT	+ 30
PICTURE	0
BRIGHTNESS	0
COLOR	0
TINT	0
SHARPNESS	0
AI PICTURE	OFF ON

(See page 20)

**TO AUDIO ADJUST menu**

AUDIO ADJUST	
NORMAL	
MODE	AUTO
BASS	+ 5
TREBLE	+ 2
BALANCE	0
SURROUND	OFF ON
STEREO	SAP MONO

(See page 21)

**TO LOCK selection screen**

LOCK	
BLOCK PROGRAMS:	
U. S. MOVIES	
STATUS	OFF ON
CHANGE SETTING	
ENTER CODE FIRST	

(See page 22 - 25)

Press to display each adjustment screen.

OK

RETURN

Press the RETURN button to return to previous screen.

**TO LANGUAGE**

LANGUAGE	
LANGUAGE	ENGLISH
Allows you to select the language used for On Screen Displays.	
ENGLISH ↔ FRANÇAIS	
↔ ESPAÑOL	

**TO CLOSED CAPTION**

CLOSED CAPTION	
CC ON MUTE	NO
CC MODE	OFF

(See page 26)

**TO PROGRAM CHANNELS**

PROGRAM CHANNELS	
MODE	TV CABLE
AUTO PROGRAM	
MANUAL PROGRAM	

(See page 18,19)

**TO INPUT LABEL selection screen**

INPUT LABEL	
VIDEO1	VIDEO1
VIDEO2	VIDEO2
COMPONENT	COMPONENT

(See page 27)

**TO OTHER ADJUST screen**

OTHER ADJUST	
3D Y/C FILTER	OFF ON
COLOR MATRIX	SD HD

[ for TC-2000 ]

OTHER ADJUST	
COLOR MATRIX	SD HD

[ for TC-1400 ]

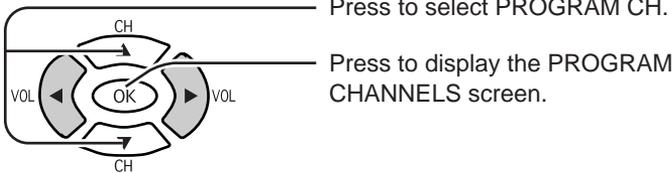
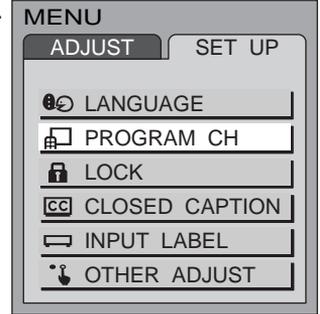
(See page 27)

# Tuning channels (Automatic channel programming)

Automatically scans all TV channels and stores them in memory.

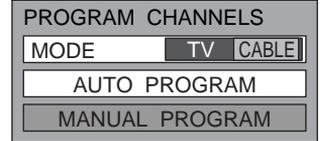
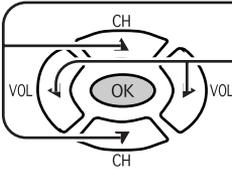
**1** Turn the Power on and press the TV/VIDEO button to display the TV channel.

**2** Press the MENU button to display the MENU screen and select SET UP.

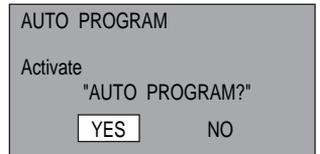
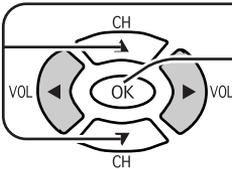


Press to select PROGRAM CH.  
Press to display the PROGRAM CHANNELS screen.

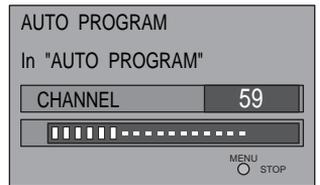
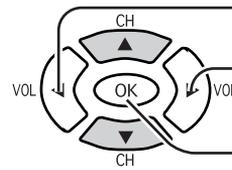
**3** Press to select MODE.  
Press to select TV or CABLE.



**4** Press to select AUTO PROGRAM.  
Press to display the confirmation screen.



**5** Press to select YES.  
Press to select NO.  
If YES selection press to run AUTO PROGRAM.



Channels will automatically advance until all channels have been scanned. Channel numbers with a video signal present will be stored in the Channel Scan Memory.



Press to exit from the MENU screen.  
This returns the set to the normal viewing condition.

## Notes:

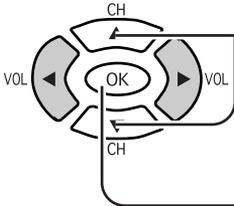
- When buttons are pressed with AUTO PROGRAM running, the TV set will return to normal viewing. (Channels searched up to this point are added.)
- After AUTO PROGRAM is finished, the lowest channel number added will be received.
- When there are no receivable channels, channel 69 is displayed for TV and channel 125 is displayed for cable TV.

# Tuning channels (Manual channel programming)

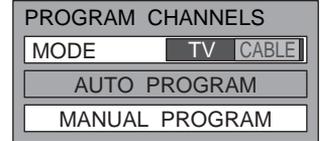
Use this setting when changing setting of receiving channels or changing the channel display.

Turn the TV on and select the broadcast channel. Follow the steps on the previous page to display the PROGRAM CHANNELS screen.

1



Press to select MANUAL PROGRAM.

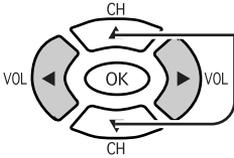


Press to display the MANUAL PROGRAM screen.



## Adding or deleting channels

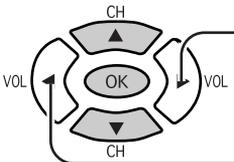
2



Press to select channel (or number keys).



3



Press to add channels to memory (Channel number turns blue).

Press to delete channels from memory (Channel number turns yellow).

4 Repeat steps 2 and 3 to continue adding or deleting channels.

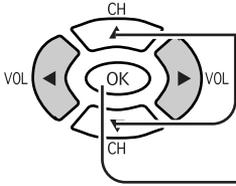


Press to exit from the MENU screen.

This returns the set to the normal viewing condition.

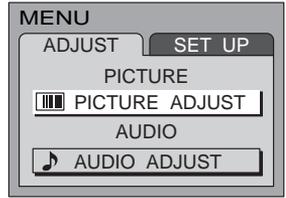
# Picture Adjustments

**1** Press the MENU button to display the MENU screen and select ADJUST.

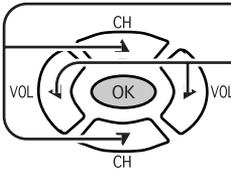


Press to select PICTURE ADJUST.

Press to display the PICTURE ADJUST screen.



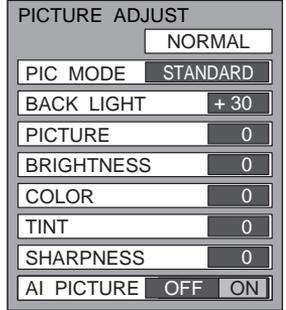
**2**



Press to select the menu to adjust.

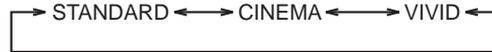
Select the desired level by looking at the picture behind the menu.

NORMAL is displayed at default.



## PIC MODE

PICTURE MODE is stored for TV, VIDEO1, VIDEO2 and COMPONENT individually.



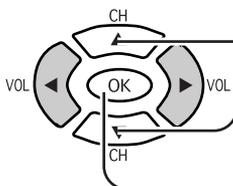
MODE	Function
<b>STANDARD</b>	Displays standard image.
<b>CINEMA</b>	Ideal for watching movies in a dark room.
<b>VIVID</b>	Displays a clear screen with contrast of light and dark.

## BACK LIGHT, PICTURE, BRIGHTNESS, COLOR, TINT, SHARPNESS, AI PICTURE

You can change the level of each item (BACK LIGHT, PICTURE, BRIGHTNESS, COLOR, TINT, SHARPNESS and AI PICTURE) for each MENU (STANDARD, CINEMA, and VIVID) according to your personal preference.

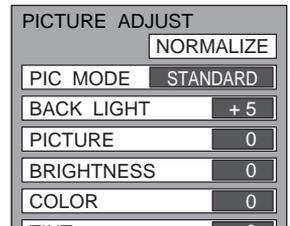
Item	Function
<b>BACK LIGHT</b>	Luminance of the back light is adjusted.
<b>PICTURE</b>	Selects proper brightness and density for the room.
<b>BRIGHTNESS</b>	Adjusts for easier viewing of dark pictures such as night scenes.
<b>COLOR</b>	Adjusts the level of color.
<b>TINT</b>	Adjusts for flesh tone color.
<b>SHARPNESS</b>	Adjusts the degree of sharpness.
<b>AI PICTURE</b>	Displays black and white colors more clearly when turned ON.

● To reset to standard setting :



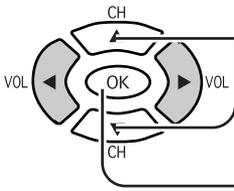
Press to Select NORMALIZE.

Press OK.



# Audio Adjustments

**1** Press the MENU button to display the MENU screen and select ADJUST.

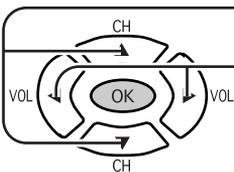


Press to select AUDIO ADJUST.

Press to display the AUDIO ADJUST screen.



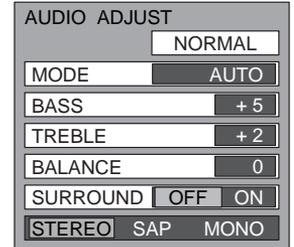
**2**



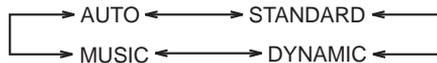
Press to select the menu to adjust.

Select the desired level by listening to the sound.

NORMAL is displayed at default.



## MODE



MODE	Function
<b>AUTO</b>	Automatically adjusts quiet sound and loud sound for ease of listening.
<b>STANDARD</b>	Emits the original sound.
<b>DYNAMIC</b>	Gives contrast to sound.
<b>MUSIC</b>	For programs consisting mainly of music. Enhances high sounds (around 4 kHz).

## BASS, TREBLE, BALANCE, SURROUND

You can change the level of each Item (BASS, TREBLE, BALANCE and SURROUND) for each MODE (AUTO, STANDARD, DYNAMIC and MUSIC) according to your personal preference.

Item	Function
<b>BASS</b>	Adjusts low sounds
<b>TREBLE</b>	Adjusts high sounds
<b>BALANCE</b>	Adjust left and right volume
<b>SURROUND</b>	To enjoy a concert hall effect, turn SURROUND to ON when stereo is playing.

## Selecting STEREO/SAP/MONO

STEREO ↔ SAP ↔ MONO

### Note:

- Red display : With signal
- White display : No signal
- White display : MONO

MODE	Function
<b>STEREO</b>	Two channel Audio reception.
<b>SAP</b>	Second Audio Programming (typically used for bilingual audio).
<b>MONO</b>	Use when stereo signal is weak.

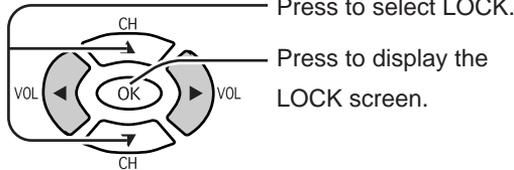
● To reset to standard setting : See previous page.

# Lock Feature

In the United States, the V-CHIP consists of two rating systems, which are MPA (MOTION PICTURE) and TV PARENTAL GUIDELINES. Its function is to block programs by the rating data in the XDS data packets sent from broadcasting stations. The user can select which rating programs should be blocked by the LOCK MENU options.



Press the MENU button to display the MENU screen and select SET UP.



## Input code

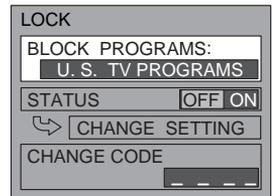
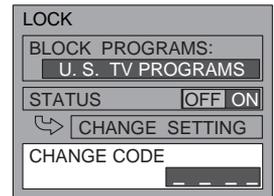
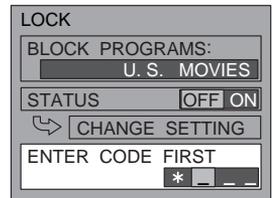
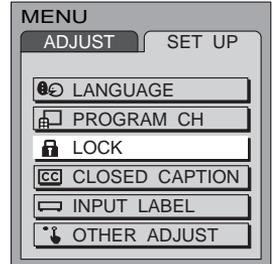
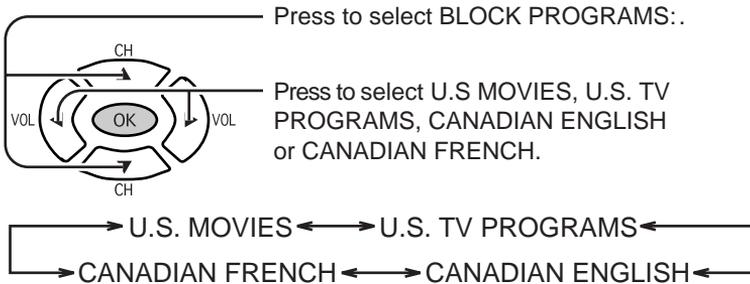
Enter any 4-digit number as a password. These numbers will be needed when deactivating the LOCK function.

While entering a code, by pressing the up or down buttons you can input a new code again.

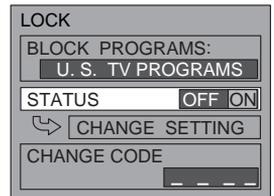
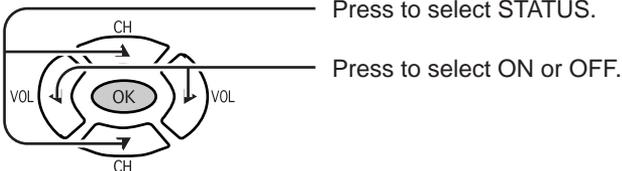
After entering your secret code for the first time, the onscreen display will change to CHANGE CODE. And you can change the Input code.

**Note:** Use a code that is easy to remember and record it in a safe place.

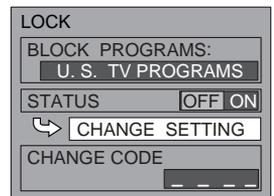
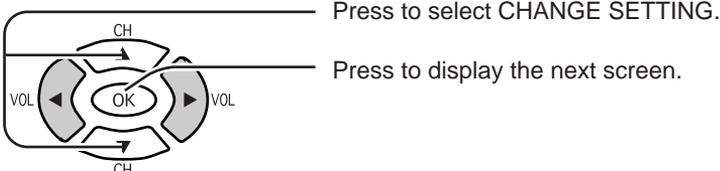
## 1 Selecting broadcasts to lock.



## 2

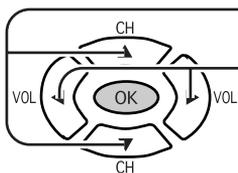


## 3



## for U.S.TV PROGRAM to lock

1

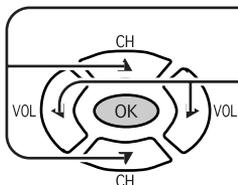


Press to select VIEW NR PROGRAMS?.

Press to select NO or YES.

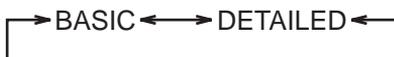
NO : Cannot view programs with NR signals.  
YES : Can view programs with NR signal.

2

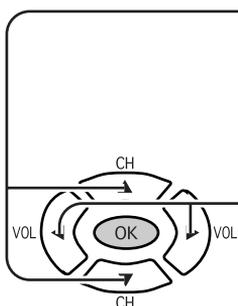


Press to select SETTING.

Press to select BASIC or DETAILED.



3

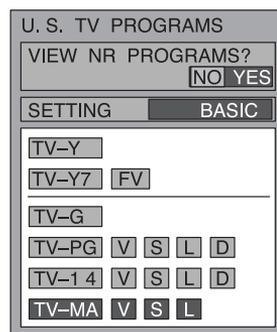
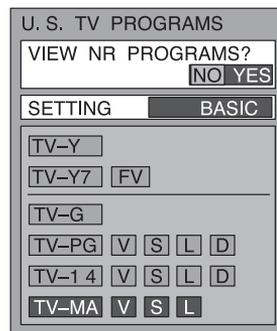


Press to select rating.

BASIC : Change the selected title.  
DETAILED : The cursor selecting the title can be moved to select options displayed on the right.

Press to lock or unlock the rating.

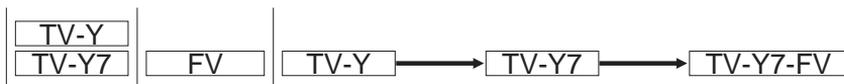
Lock : Red  
Unlock : Green



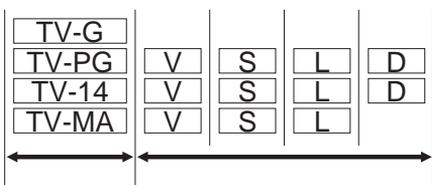
## Locking and unlocking

- When a title field is selected, all ratings below this rating are selected.
- When options within an option field are selected, ratings below this rating within the same field are selected.
- Ratings displayed in green are unlocked and those displayed in red are blocked programs.

1. Ratings for children: These ratings are divided into ranks as follows.



2. Ratings for teenagers: These ratings can be created out of these major categories to form various combinations. These combinations are described in the below diagram. Ratings for all ages are on top and ratings for adults are on the bottom.



- To return to previous screen :

RETURN  
○ Press to return.

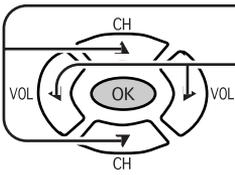
- To end adjustments :

TV MENU  
○ Press to exit from the MENU screen.  
This returns the set to the normal viewing condition.

# Lock Feature

## for U.S.MOVIES to lock

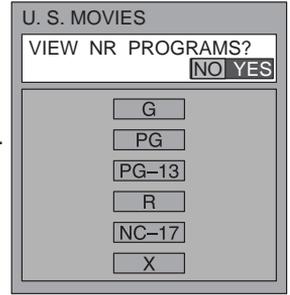
1



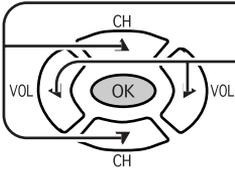
Press to select VIEW NR PROGRAMS?.

Press to select NO or YES.

NO : Cannot view programs with NR signals.  
YES : Can view programs with NR signal.



2



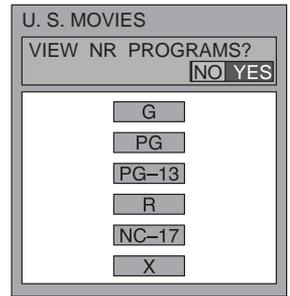
Press to select rating.

Press to lock or unlock the rating.

Lock: Red  
Unlock : Green

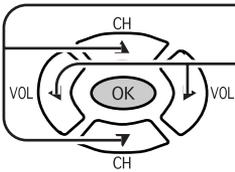
### Rating

G : General audience  
PG : Parental guidance suggested  
PG-13 : Parental guidance needed  
under 13 years old  
R : Restricted  
NC17 : No one under 17 is admitted  
X : Pornography



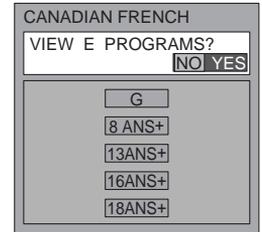
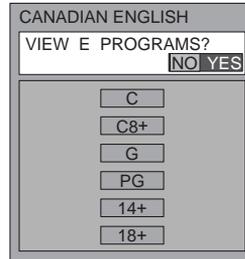
## for CANADIAN ENGLISH / CANADIAN FRENCH to lock

1

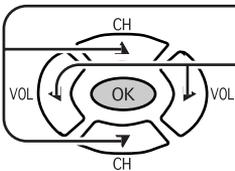


Press to select VIEW E PROGRAMS?.

Press to select NO or YES.



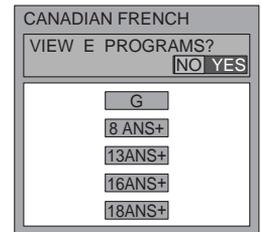
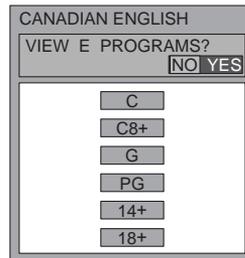
2



Press to select rating.

Press to lock or unlock the rating.

Lock: Red  
Unlock : Green



## CANADIAN ENGLISH RATINGS CHART

<b>E</b>	Exempt - Exempt programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.
<b>C</b>	Programming intended for children under age 8. No offensive language, nudity or sexual content.
<b>C8+</b>	Programming generally considered acceptable for children 8 years and over. No profanity, nudity or sexual content.
<b>G</b>	General programming, suitable for all audiences.
<b>PG</b>	Parental Guidance suggested. Some material may not be suitable for children.
<b>14+</b>	Programming contains themes or content which may not be suitable for viewers under the age of 14. Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens.
<b>18+</b>	General programming, suitable for all audiences.

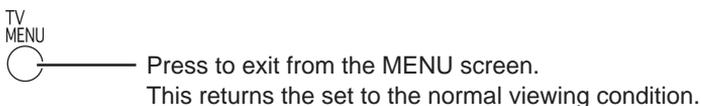
## CANADIAN FRENCH RATINGS CHART

<b>E</b>	Exempt - Exempt programming.
<b>G</b>	General - Programming intended for audience of all ages. Contains no violence, or the violence content is minimal or is depicted appropriately.
<b>8 ANS+</b>	8+ General - Not recommended for young children. Programming intended for a broad audience but contains light or occasional violence. Adult supervision recommended.
<b>13ANS+</b>	Programming may not be suitable for children under the age of 13 - Contains either a few violent scenes or one or more sufficiently violent scenes to affect them. Adult supervision strongly suggested.
<b>16ANS+</b>	Programming may not be suitable for children under the age of 16 - Contains frequent scenes of violence or intense violence.
<b>18ANS+</b>	18+ ans Programming restricted to adults. Contains constant violence or scenes of extreme violence.

- To return to previous screen :



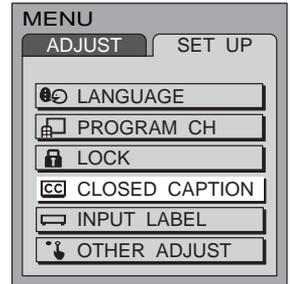
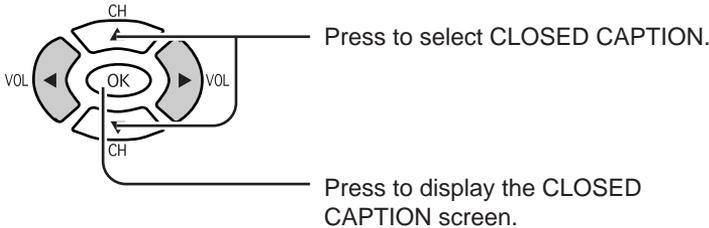
- To end adjustments :



# Closed Captions

This unit has a built in decoder that provides a visual depiction of the audio portion of a television program in the form of written words across the screen (white or colored letters on a black background). It allows the viewer to read the dialogue of a television program or other information.

**1** Press the MENU button to display the MENU screen and select SET UP.

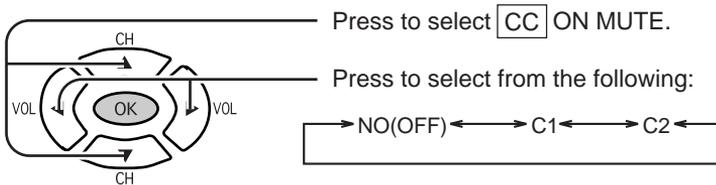


## 2 **CC** ON MUTE

Activates the On-Screen Closed Caption feature, when the MUTE button on the Remote Control is pressed. To deactivate, press the MUTE button again.

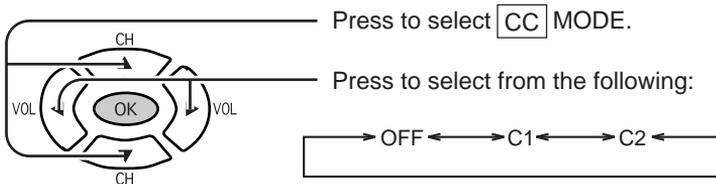
**Note:**

This feature functions when the Closed Caption Mode is in the "OFF" position. The program being viewed must be broadcast with Closed Caption.



## 3 **CC** MODE

Activates the On-Screen Closed Caption feature. When activated this feature will remain on until OFF is selected in this menu.



- **CAPTION OFF** - Recommended mode when Closed Caption is not being used.
- **CAPTION C1** - For video related information that can be displayed (up to 4 lines of script strategically placed on the television screen so that it does not obstruct relevant parts of the picture).
- **CAPTION C2** - Another mode used for video related information.

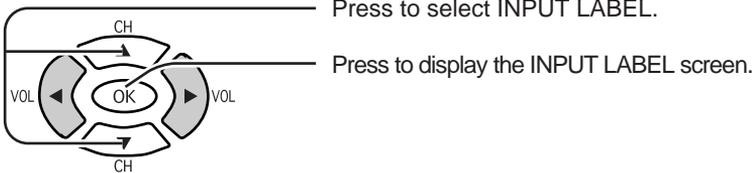
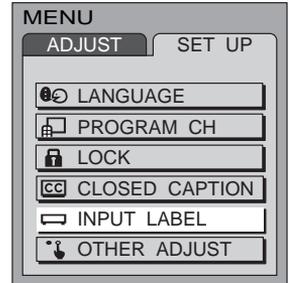
● To return to previous screen :  Press to return.

● To end adjustments :  Press to exit from the MENU screen.  
This returns the set to the normal viewing condition.

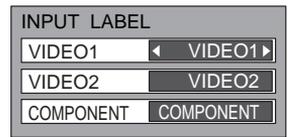
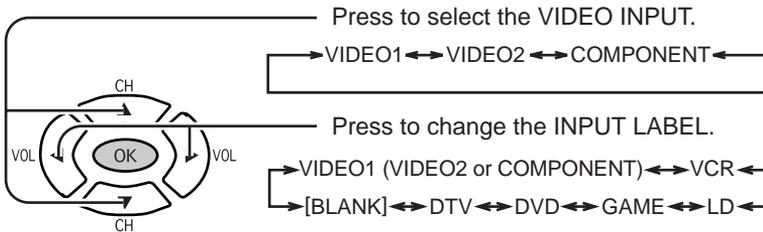
# Customizing the VIDEO INPUT labels

Display for each VIDEO INPUT can be changed to match with the connected device (VCR, DVD Player etc.).

**1** Press the MENU button to display the MENU screen and select SET UP.

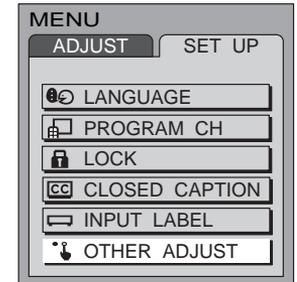


**2**

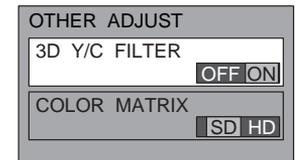
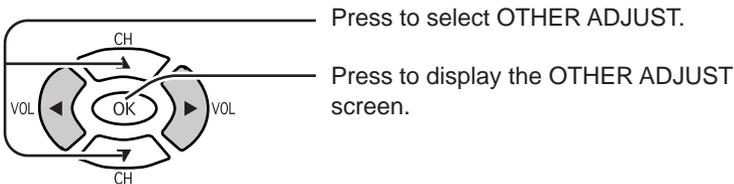


## 3D Y/C FILTER / COLOR MATRIX

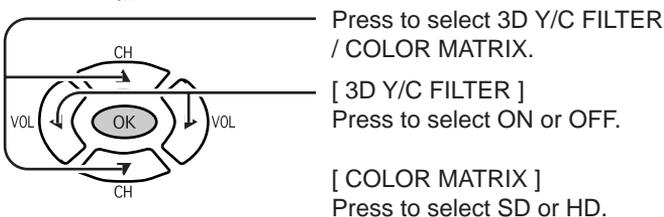
**1** Press the MENU button to display the MENU screen and select SET UP.



**2**



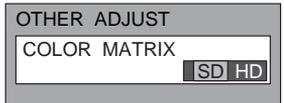
**3**



SD : When the input signal is a normal TV system (NTSC).

HD : When the input signal is a High-Definition system (ATSC).

[ for CT-L2000 ]



[ for CT-L1400 ]

**Note:** ●3D Y/C FILTER is not available for CT-L1400.

Item	Mode	Explanations
<b>3D Y/C FILTER</b> [ for CT-L2000 ]	ON ↔ OFF	Minimizes noise and cross color in the picture. Not available for COMPONENT VIDEO.
<b>COLOR MATRIX</b>	SD ↔ HD	Displays input signals (480p signals) in a natural color. Automatically adjusts color parameters for HD (high definition) and SD (standard definition).

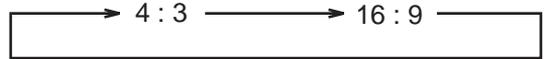
# ASPECT Controls

The TV will allow you to enjoy viewing the picture at its maximum size, including wide screen cinema format picture.



## ASPECT button

The aspect mode changes each time the ASPECT button is pressed.



### Notes:

- In TV mode, the aspect mode is set to 4:3, and ASPECT controls are not available.
- The ASPECT mode settings are stored for VIDEO1, VIDEO2 and COMPONENT individually.

Mode	Picture	Explanation
4 : 3		4:3 mode will display a 4:3 picture at its standard 4:3 size without any stretching.
16 : 9 (not available in TV mode)		16:9 mode will display 16:9 aspect ratio picture. Bars can be seen at the top and bottom of the image.

# Troubleshooting

Before requesting service for this LCD TV, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, consult your dealer for instructions.

Symptom	Cause and remedy	Page
Power supply does not go on	<ul style="list-style-type: none"> <li>● Is power supply plug unplugged from the outlet?</li> <li>● If power will not go on with the remote control, is the power supply of the TV "Off"?</li> </ul>	<p>– 13</p>
Remote control cannot be operated	<ul style="list-style-type: none"> <li>● Is battery exhausted, or is battery polarity wrong?</li> <li>● Is the remote control receiver illuminated with strong light from a fluorescent lamp etc.?</li> <li>● Are you using the special-purpose remote control for this equipment? (The unit will not operate with another remote control.)</li> </ul>	<p>7 – –</p>
Image shakes, or image is unclear	<ul style="list-style-type: none"> <li>● Is there deterioration, breakage or disconnection of the antenna or antenna wire?</li> <li>● Is the antenna wire connected correctly?</li> </ul>	<p>– 8, 9</p>
There are spots on the picture, or the screen shakes	<ul style="list-style-type: none"> <li>● Is the system affected (by radio wave interference or induced electromagnetic waves) by external sources (automobiles or trains, high-voltage wires, neon, motors, magnetized steel frame, or iron rain shutters, etc.)?  <ul style="list-style-type: none"> <li>▣ Turn off the power supply, and try changing the equipment setup location. If that has no effect, separate magnet-proofing will be required.</li> </ul> </li> </ul>	<p>–</p>
The image appears doubled or tripled	<ul style="list-style-type: none"> <li>● Is the antenna direction shifted?</li> <li>● Are reflected electromagnetic waves being received from mountains or buildings?</li> </ul>	<p>–</p>
A color pattern appears, or colors disappear	<ul style="list-style-type: none"> <li>● Is the equipment being affected by another TV (electromagnetic interference)?  <ul style="list-style-type: none"> <li>▣ Changing the TV setup location may lead to improvement.</li> </ul> </li> </ul>	<p>–</p>
The channel number disappears from the screen	<ul style="list-style-type: none"> <li>● Has the RECALL button been pressed?  <ul style="list-style-type: none"> <li>▣ Press the "RECALL button" again.</li> </ul>                     If the system is switched to external input and there is no external signal video, the number will disappear.                 </li> </ul>	<p>15</p>
When the image is not stable, the screen turns completely white for a moment	<ul style="list-style-type: none"> <li>● This occurs when the signal driving the liquid crystal is lost, and is not a malfunction.</li> </ul>	<p>–</p>
The screen goes dark momentarily when the channel is changed.	<ul style="list-style-type: none"> <li>● The screen is darkened for a moment to conceal noise generated when changing channels.</li> </ul>	<p>–</p>
The TV makes a hissing noise occasionally	<ul style="list-style-type: none"> <li>● If the screen and audio are not abnormal, this sound is caused by slight expansion and contraction of the cabinet due to changes in room temperature. It has no effect on performance.</li> </ul>	<p>–</p>
The screen display shakes with video input	<ul style="list-style-type: none"> <li>● When input is switched to "video input", this may occur if there is no signal at the video/audio input terminal.</li> </ul>	<p>10, 11</p>
A black band appears momentarily when selecting channels with video	<ul style="list-style-type: none"> <li>● This is due to noise generated when changing channels.</li> </ul>	<p>–</p>
Both edges of the screen, or columns or window frames, appear bent	<ul style="list-style-type: none"> <li>● They may appear bent due to the received channel or some DVD software. This is not a malfunction.</li> </ul>	<p>–</p>
The image from the connected equipment does not appear	<ul style="list-style-type: none"> <li>● Are plugs securely inserted into each terminal?  <ul style="list-style-type: none"> <li>▣ Securely insert plugs all the way.</li> </ul> </li> </ul>	<p>10, 11</p>
The main unit is hot to the touch	<ul style="list-style-type: none"> <li>● The main unit radiates heat, so some parts of the console reach a high temperature. This is not a problem for performance or quality.</li> <li>● Set up at a location with good ventilation.                      Do not cover the ventilation holes of the console with a tablecloth, etc., and do not place on top of other equipment (like a video deck).</li> </ul>	<p>–</p>



# Specifications

	CT-L1400	CT-L2000
<b>Power Source</b>	AC 120 V, 60 Hz	
<b>Power Consumption</b>	Average use : 48W Stand-by condition : 0.6 W TV set DC 15 V, 2.8 A max.	Average use : 67 W Stand-by condition : 0.8 W TV set DC 15 V, 3.8 A max.
<b>LCD</b>	14-inch (356 mm), 4 : 3 aspect ratio LCD panel	20-inch (510 mm), 4 : 3 aspect ratio LCD panel
<b>Screen Size</b>	11.23 ≤ (285.1 mm) (W) × 8.42 ≤ (213.8 mm) (H)	16.06 ≤ (408.0 mm) (W) × 12.05 ≤ (306.0 mm) (H)
<b>Channel Capability</b>	VHF-12 : UHF-56 : Cable-125	
<b>Sound</b>		
<b>Speaker</b>	φ 4 cm, 2pcs, 16 Ω	
<b>Headphones</b>	M3 (3.5 mm) Jack × 1	
<b>FEATURES</b>		
	CLOSED CAPTION	3D Y/C Digital Comb Filter V-Chip
<b>Operating Conditions</b>	Temperature : 41 °F - 95 °F (5 °C - 35 °C) Humidity : 5 % - 90 % RH (non-condensing)	
<b>Connection Terminals</b>		
<b>INPUT</b>	VIDEO (RCA PIN Type × 1) × 2	1.0 Vp-p (75 Ω)
	S-VIDEO (MINI DIN 4pin × 1) × 2	Y : 1 Vp-p (75 Ω), C : 0.286 Vp-p (75 Ω)
	AUDIO L-R (RCA PIN Type × 2) × 2	0.5 Vrms
<b>COMPONENT VIDEO INPUT</b>	Y	1.0 Vp-p (including synchronization)
	P <sub>B</sub> / P <sub>R</sub>	±0.35 Vp-p
	AUDIO L-R (RCA PIN Type × 2)	0.5 Vrms
<b>Dimensions ( W × H × D )</b>		
<b>Including TV Stand</b>	14.37 ≤ (365 mm) ×	19.45 ≤ (494 mm) ×
	14.34 ≤ (364.2 mm) ×	18.17 ≤ (461.4 mm) ×
	8.46 ≤ (215 mm)	10.04 ≤ (255 mm)
<b>TV Set Only</b>	14.37 ≤ (365 mm) ×	19.45 ≤ (494 mm) ×
	13.01 ≤ (330.5 mm) ×	16.63 ≤ (422.3 mm) ×
	2.51 ≤ (63.7 mm)	3.21 ≤ (81.5 mm)
<b>Mass (Weight)</b>	9.701 lb. (4.4 kg) Net	15.87 lb. (7.2 kg) Net

**Note:** ●Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.

**Customer' Record**

The model number and serial number of this product can be found on its rear panel. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

Model Number

Serial Number

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Unit of Matsushita Electric Corporation of America

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