

SHARP®

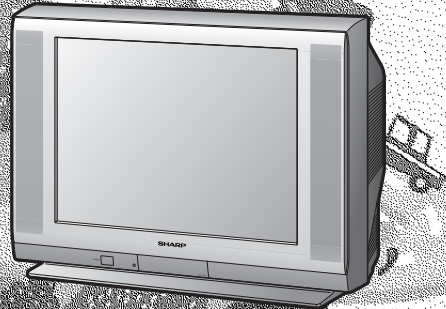
C133 WJ

COLOR TELEVISION

MODEL

27SF560

OPERATION MANUAL



Products that have earned the ENERGY STAR® are designed to protect the environment through superior energy efficiency.

CONTENTS

	PAGE		PAGE
• IMPORTANT INFORMATION/IMPORTANT SAFEGUARDS	2-4	• Closed Caption	19-20
• Trademarks	5	• Parent Control	21-31
• Supplied Accessories	5	V-CHIP Operation	21-28
• Before Operating Your Television	5	VIEW TIMER	29-31
• Antenna Connections	6-7	• Energy Save	32
• Quick Reference Control Operation	8-9	• Set Up	33-40
• EZ SETUP during First Use	10-11	EZ Setup	33-34
• Antenna Setup DIGITAL	11-12	Channel Setting	34-36
• Accessing the MAIN MENU screen without Remote Control	12	Blue Screen	37
• Channel Call	12	Personal Preference	38-39
• Changing Viewing Channel	13	Universal Plus Function	39-40
• Language	14	• Auto Input	40
• Sleep Timer	14	• CH/Input ID	41-42
• Video Adjust	15	• Screen Format	43
• Audio Select	16-17	• Using the Video and Audio Input Terminals	44-45
MTS (Multichannel TV Sound)	16	• Using the Audio Output Terminals	46
SPEAKER (Internal Speaker Switch)	16	• Operation of Universal Remote Control	47-50
FAO (Fixed Audio Output)	16	• Before Calling for Service	51
AUDIO ADJUST	17	• Calling for Service	51
• Digital Audio	18	• Warning message for Digital broadcasting	52
		• Specifications	52
		• Limited Warranty	65

This operation manual includes basic operating instructions in Spanish and French.
SPANISH is on page 53-58.
FRENCH is on page 59-64.

DOLBY
DIGITAL

SDTV
STANDARD DEFINITION TELEVISION

Welcome to the SHARP Family. We are pleased that you are now the owner of a SHARP Color Television – built for outstanding quality, reliability and performance.

Every SHARP Color Television set is tuned and adjusted for proper color and sound, and has passed through the most stringent quality control tests at the factory. We have prepared this OPERATION MANUAL so that you may adjust the picture and color to your personal viewing preference.

We sincerely hope that you receive the greatest satisfaction and enjoyment from your new SHARP Color Television set for years to come.

Please read these instructions carefully, and keep them handy for your future reference.

IMPORTANT

To aid reporting in case of loss or theft, please record the TV's model and serial numbers in the space provided. The numbers are located at the rear of the TV.

Model No.:

Serial No.:

IMPORTANT INFORMATION

There are two important reasons for prompt warranty registration of your new SHARP television set. Use the REGISTRATION CARD packed in with the set.

FIRST – WARRANTY

This is to assure that you will immediately receive the full consumer benefit of the parts, service and labor warranty applicable to your purchase.

SECOND – CONSUMER PRODUCT SAFETY ACT

To assure that you will promptly receive any safety notification on inspection, modification or recall that SHARP may be required to give under the 1972 Consumer Product Safety Act. PLEASE READ CAREFULLY THE IMPORTANT "LIMITED WARRANTY" CLAUSE ON THE LAST PAGE.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO WET LOCATIONS.



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



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

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



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 call the CATV system installer's attention to Article 820-40 of the National Electrical Code 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."

WARNING – FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

PRODUCT DISPOSAL

This product utilizes a Cathode Ray Tube (CRT) containing lead and tin-lead solder. Disposal of these materials may be regulated due to environment considerations. For disposal or recycling information, please contact your local authorities or the Electronics Industries Alliance: www.eiae.org

IMPORTANT INFORMATION (Continued)

CAUTION:

- Do not place the AC power cord under the TV set or other heavy items.
- To prevent fire, never place any type of candle or naked flames on the top or near the TV set.
- To prevent fire or shock hazard, do not expose this products to dripping or splashing. No objects filled with liquids, such as vases, should be placed on the product.

IMPORTANT SAFEGUARDS

CAUTION: Please read all of these instructions before you operate your television and save these instructions for later use.

Electrical energy can perform many useful functions. This unit has been engineered and manufactured to assure your personal safety. **BUT IMPROPER USE CAN RESULT IN POTENTIAL ELECTRICAL SHOCK OR FIRE HAZARDS.** In order not to defeat the safeguards incorporated in this equipment, observe the following basic rules for its installation, use and servicing.

1. Unplug this television equipment from the wall outlet before cleaning.
2. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
3. Do not use attachments not recommended by the television equipment manufacturer as they may cause hazards.
4. Do not use this television equipment near water — for example, near a bath tub, washbowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool, etc.
5. Do not place this equipment on an unstable cart, stand, or table. The television equipment may fall, causing serious injury to a child or an adult, and serious damage to the equipment. Use only with a cart or stand recommended by the manufacturer or sold with the television equipment.
6. Television equipment and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the equipment and cart combination to overturn.
7. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.
8. Slots and openings in the cabinet and the back or bottom are provided for ventilation. To insure reliable operation of the television equipment and to protect it from overheating, these openings must not be blocked or covered. This television equipment should not be placed in a built-in insulation such as a bookcase unless proper ventilation is provided.
9. The openings should never be covered with a cloth or other material, and the bottom openings should not be blocked by placing the television equipment on a bed, sofa, rug, or other similar surface. This television equipment should never be placed near or over a radiator or heat register.
10. This television equipment 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.

For television equipment designed to operate from battery power, refer to the operating instructions.

11. As a safety feature, television equipment is equipped with a 2-wire polarized plug (one plug blade bigger than the other). The 2-wire polarized plug will fit only one way into the power outlet.

If the plug does not fit, ask your electrician to replace your obsolete outlet. Do not modify the plug and defeat this safety feature.

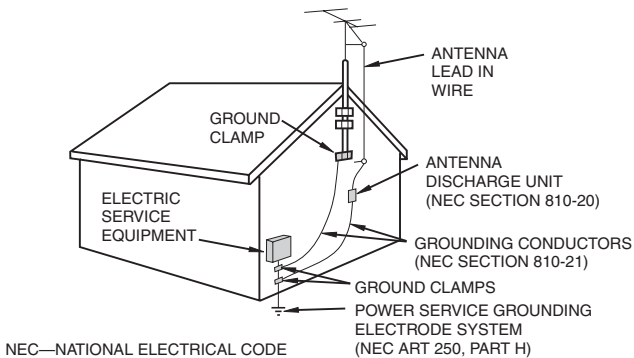
12. Do not allow anything to rest on the power cord. Do not locate this television equipment where the cord will be abused by persons walking on it.



IMPORTANT SAFEGUARDS (Continued)

13. Follow all warnings and instructions marked on the television equipment.
14. 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. Section 810 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.

EXAMPLE OF ANTENNA GROUNDING AS PER
NATIONAL ELECTRICAL CODE



15. For added protection for this television equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to the equipment due to lightning and power-line surges.
16. An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
17. Do not overload wall outlets and extension cords as this can result in fire or electric shock.
18. Never push objects of any kind into this television equipment 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 equipment.
19. Do not attempt to service this television equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
20. Unplug this television equipment 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 television equipment.
 - C. If the television equipment has been exposed to rain or water.
 - D. If the television equipment 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 television equipment to normal operation.
 - E. If the television equipment has been dropped or the cabinet has been damaged.
 - F. When the television equipment exhibits a distinct change in performance — this indicates a need for service.
21. Upon completion of any service or repairs to this television equipment, ask the service technician to perform routine safety checks to determine that the television is in safe operating condition.
22. When replacement parts are required, be sure the service technician has used 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.

Trademarks



Dolby and the double-D symbol are registered trademarks of Dolby Laboratories.

Supplied Accessories



Infrared Remote Control
RRMCGA447WJSA



Size AA
Dry Batteries

Before Operating Your Television

Location

- For normal operation, your TV should be located in an area of the room where cool adequate ventilation is provided. Do not place the back of the television set in a place where free airflow will be restricted.
- Any magnetic force may disturb the color picture. Make sure that magnets, electric clocks, toys using magnets or any other magnetic substance, such as iron are kept well away from the TV set.

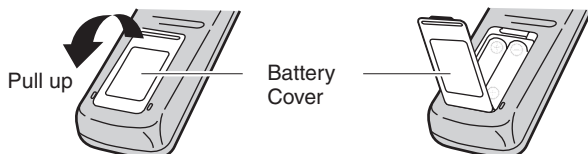
Power

Your TV operates on 120 Volts, 60 Hz (normal household current) and has a polarized plug. If you are unable to insert the plug fully into the outlet, try reversing the plug. Should it fail to fit, contact an electrician. Do not defeat the safety feature of the polarized plug.

Note:

- If the set is not going to be used for a long period, such as during a vacation, unplug the set from the wall outlet to economize power. (If the TV set is plugged in, a slight current still flows, even with the POWER BUTTON in the OFF position.)
- Lines and other noise may appear in TV broadcast images when an FM tuner or radio is located near the TV and both radio and TV broadcasts are being received. Should such noise appear, turn off the radio.
- If you are listening to an AM broadcast, turn the TV off. AM broadcast signals may not be received due to interference from the TV.
- **Before using the television, prepare the Remote Control**
To use the remote control, insert batteries first.

Inserting the batteries



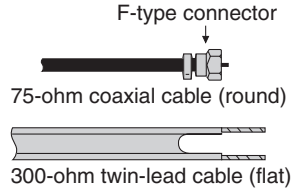
- With your thumbnail, pull up the slit as indicated by the arrow to remove the battery cover. Insert two batteries (size "AA"). Be sure to match the battery \oplus/\ominus terminals with the \oplus/\ominus marks inside the compartment.

Antenna Connections

Antennas

- The antenna requirements for good color television reception are more important than those for black & white television reception. For this reason, a good quality outdoor antenna is strongly recommended. The following is a brief explanation of the type of connections that are provided with the various antenna systems:

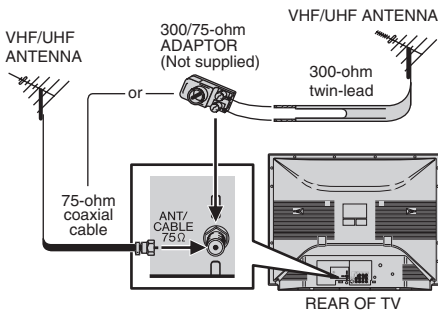
1. A 75-ohm system is generally a round cable with F-type connector that can easily be attached to a terminal without tools (not supplied).
2. A 300-ohm system is a flat "twin-lead" cable that can be attached to a 75-ohm terminal through a 300/75-ohm ADAPTOR (not supplied).



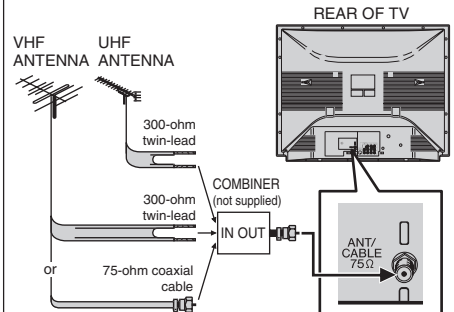
OUTDOOR ANTENNA CONNECTION

- Refer to one of the following two diagrams when connecting to an outdoor antenna.
A: Using a VHF/UHF combination outdoor antenna.
B: Using separate VHF and/or UHF outdoor antenna.
- Connect an outdoor antenna cable lead-in to the ANT/CABLE terminal on the rear of the TV set.

A. Combination VHF/UHF Antennas

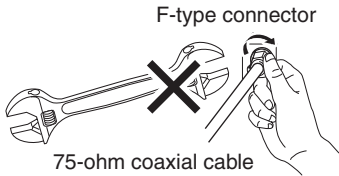


B. Separate VHF/UHF Antenna



Antenna Connections (Continued)

NOTICE



F-type connector should be finger-tightened only.

When connecting the RF cable to the TV set, do not tighten F-type connector with tools. If tools are used, it may cause damage to your TV set.
(The breaking of internal circuit, etc.)

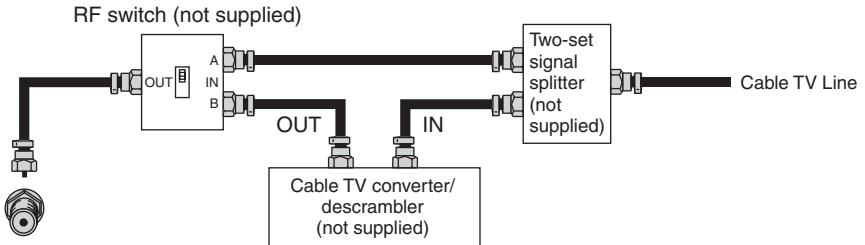
CABLE TV (CATV) CONNECTION

- A 75 ohm coaxial cable connector is built into the set for easy hookup. When connecting the 75 ohm coaxial cable to the set, screw the 75 ohm cable to the COAXIAL CABLE CONNECTOR.
- Some cable TV companies offer "premium pay channels". Since the signals of these premium pay channels are scrambled, a cable TV converter/descrambler is generally provided to the subscriber by the cable TV company. This converter/descrambler is necessary for normal viewing of the scrambled channels. (Set your TV on channel 3 or 4. Typically one of these channels is used. If this is unknown, consult your cable TV company.) For more specific instructions on installing cable TV, consult your cable TV company. One possible method of utilizing the converter/descrambler provided by your cable TV company is explained below.

Please note: RF switch equipped with position A/B (not provided) is required.

"A" position on the RF switch (not supplied) : You can view all unscrambled channels using the TV's channel keys.

"B" position on the RF switch (not supplied) : You can view the scrambled channels via the converter/descrambler using the converter's channel keys.



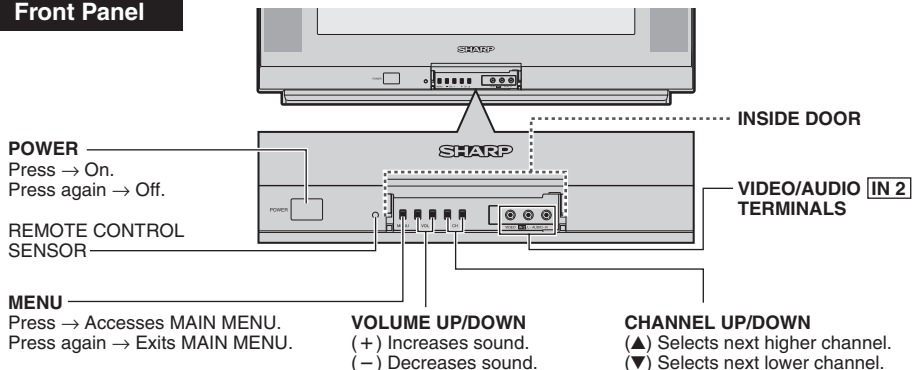
Note:

- Consult your SHARP Dealer or Service Center for the type of splitter, RF switch or combiner that might be required.

Quick Reference Control Operation

● Part Names

Front Panel



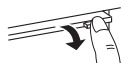
To open the door

Using the projection located under the "PULL-OPEN" indication, pull and lift the door open.



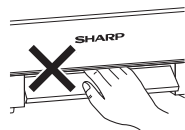
To close the door

Using the projection, lower the door until closed.

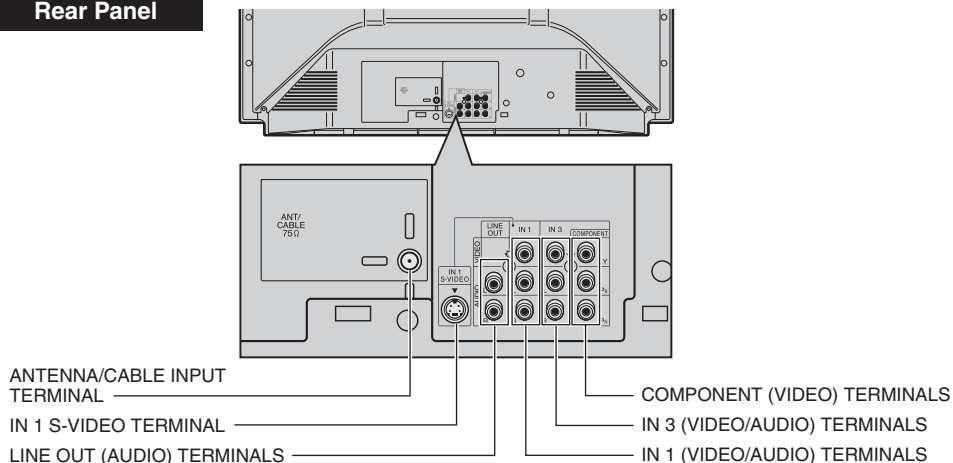


Caution:

- When opening or closing the door, do not insert your fingers into the gap between the door and front panel. This may result in an injury.



Rear Panel



Note:

- The TV set and remote control illustrations and the on-screen displays in this manual may differ from their actual appearance.

Quick Reference Control Operation (Continued)

Basic Remote Control Functions

POWER

Press → On.
Press again → Off.

REMOTE KEYPAD (0 - 9)

Sets the channel.

FLASHBACK

Returns to previous channel.

• (DOT)

Sets the channel.

PERSONAL PREFERENCE

With the Personal Preference buttons, you can program your favorite programs by using the 4 categories A, B, C and D. The channels can be accessed quickly by using these buttons. (See page 38, 39.)

VOLUME UP/DOWN

(+) Increases sound.

(-) Decreases sound.

- Changes or selects the TV adjustments on On-Screen Display.

MENU

Press → Accesses MAIN MENU.
Press again → Exits MAIN MENU.

CATV/DVD-TV/VCR MODE SELECT SWITCH

In TV/VCR position, signals sent will be for TV and VCR control.

In CATV/DVD position, signals sent will be for cable TV converter and DVD control.

DVD/VCR CONTROL

See page 47.

Infrared Transmitter Window

DISPLAY

Press → Displays receiving channel for 4 seconds.

Press again → Removes display.

- Temporarily displays receiving channel when in Closed Caption mode.

INPUT

Press → Switches to external video INPUT 1 mode.

Press twice → Switches to external video INPUT 2 mode.

Press 3 times → Switches to external video INPUT 3 mode or COMPONENT mode.

Press 4 times → Switches back to the original TV mode. See page 45.

ENTER

- Used to confirm the channel selection and Personal Preference channel.

- Used in some instances where a Cable Converter Box requires an "enter" command after selecting channels, when using the REMOTE KEYPAD button. See page 47.

CHANNEL UP/DOWN

(▲) Selects next higher channel.

(▼) Selects next lower channel.

• See pages 34-36 for Channel Setting.

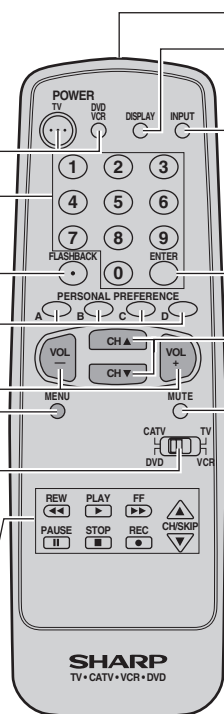
- Moves the "●" mark on the MENU screens.

MUTE

Press → Mutes sound.

Press again → Restores sound.

- When sound is muted, CLOSED CAPTION appears if available.

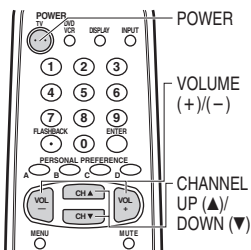


Note:

- The above shaded buttons on the Remote Control glow in the dark. To use the glow-in-the-dark display on the remote control, place it under a fluorescent light or other lighting.
- The phosphorescent material contains no radioactive or toxic material, so it is safe to use.
- The degree of illumination will vary depending on the strength of lighting used.
- The degree of illumination will decrease with time and depending on the temperature.
- The time needed to charge the phosphorescent display will vary depending on the surrounding lighting.
- Sunlight and fluorescent lighting are the most effective when charging the display.
- The TV set and remote control illustrations and the on-screen displays in this manual may differ from their actual appearance.

EZ SETUP during First Use

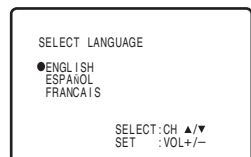
- When you turn on the TV for the first time, it will automatically memorize the broadcasting channels.
Please perform the following instructions before pressing the **POWER** button.
 - Insert the batteries into the remote control. (See page 5)
 - Connect the antenna cable to the TV set. (See pages 6, 7)
 - Plug in the AC POWER cord to the wall outlet.



- Press the **POWER** button on the TV set or on the Remote Control to turn on the TV. The SELECT LANGUAGE screen will be displayed.

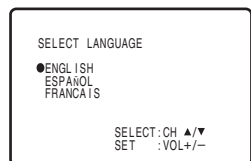
(On the Set)

(On the Remote Control)

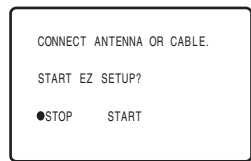
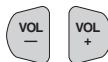


(SELECT LANGUAGE screen)

- Press **CH ▲/▼** to select "ENGLISH", "ESPAÑOL (SPANISH)" or "FRANCAIS (FRENCH)".



- Press **VOL +/-** to access the EZ SETUP screen.



(EZ SETUP screen)

- Press **VOL +**.

(START)

The tuner will automatically search for the broadcasting or cable TV channels for ANALOG. (The CH No. will automatically increase when it appears.)

Once tuning for analog broadcasting channel is finished, tuning for digital channel will start.

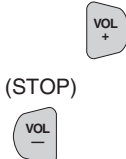
If you want to stop the EZ SETUP process once it has started, press **VOL -** and it will be canceled.

If you stop the EZ SETUP process before it finish tuning analog channels, the tuning for digital channels will started to process.

If you want to SET UP again, please refer to page 33, 34 on SET UP.

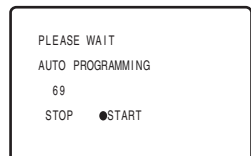
To cancel EZ SETUP

Press **VOL -**.

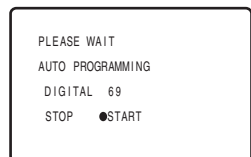


(STOP)

(Analog channel tuning)



(Digital channel tuning)



EZ SETUP during First Use (Continued)

- 5 Once EZ SETUP is complete, the lowest channel number memorized will be displayed. (e.g. Channel 2)

2

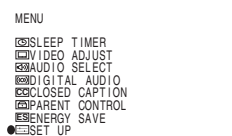
Note:

- If EZ SETUP does not memorize all the channels in your region, please refer to pages 34–36 for more information on manually memorizing the channels using CHANNEL SETTING.
- It may be difficult to PRESET when the broadcast signals are weak, the channel cycle frequency is incorrect or frequency jamming is occurring around the area. Please refer to pages 34–36 for more information on manually memorizing the channels using CHANNEL SETTING.

Antenna Setup DIGITAL

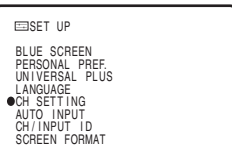
- In order to receive digital air broadcasts, you need a digital broadcast antenna. You can set the antenna configuration through the Antenna Setup Digital screen.

- 1 Press **MENU** to access the MAIN MENU screen.
2 Press **CH ▲/▼** to move the “●” mark to “SET UP”.



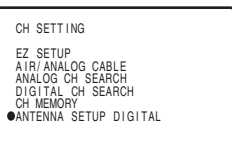
(MAIN MENU screen)

- 3 Press **VOL +/-** to access the SET UP screen, then press **CH ▲/▼** to move the “●” mark to “CH SETTING”.



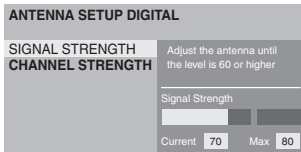
(SET UP screen)

- 4 Press **VOL +/-** to access the CH SETTING screen, then press **CH ▲/▼** to move the “●” mark to select “ANTENNA SETUP DIGITAL”.



(CH SETTING screen)

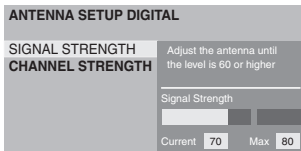
- 5 Press **VOL +/-** to access ANTENNA SETUP DIGITAL screen.



(ANTENNA SETUP DIGITAL screen)

SIGNAL STRENGTH

- (i) Press **CH ▲/▼** to select “SIGNAL STRENGTH”.
(ii) Adjust the direction of the antenna to obtain the signal strength level 60 or higher.

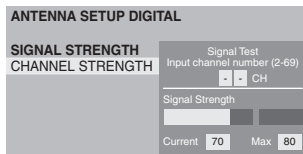
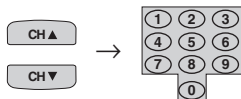


Antenna Setup DIGITAL (Continued)

CHANNEL STRENGTH

Make sure the signal strength of each channel received is finely adjusted.

- (i) Press **CH ▲/▼** to select "CHANNEL STRENGTH".
- (ii) Input channel number (2–69) using **REMOTE KEYPAD** (0–9) button.
- (iii) Adjust the direction of the antenna to obtain the signal strength level 60 or higher.



Note:

- This function is available for DIGITAL channel only.

6 Press **MENU** to exit.



Accessing the MAIN MENU screen without Remote Control

- If you misplaced your Remote Control you can still access most settings via the MAIN MENU screen by pressing **MENU** on the TV set.
- Some features of your TV set are not accessible without the Remote Control. If you lost your Remote Control, contact a Sharp Service Center for a replacement.

(On the Set)

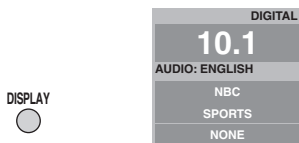


Channel Call

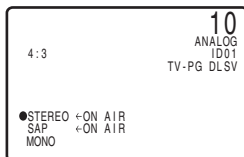
- To display receiving channel information.

1 Press **DISPLAY** once. The display appears as shown on right.

- If the viewing channel is a digital channel, the information of channel number, audio service type, broadcast station, program information and V-Chip rating will appear.

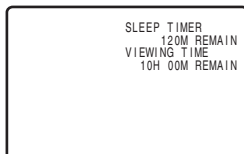


(while viewing digital channel)



(while viewing analog channel)

2 Press **DISPLAY** twice. The timer information screen will appear.

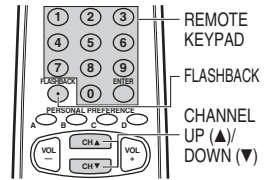


3 Press **DISPLAY** again to return to normal screen.



Changing Viewing Channel

- **Please note: your new Television is capable of receiving the full range of AIR-TV channels available today, from the most advanced digital channels, to the more traditional analog channels. As the transition toward full digital TV continues, some AIR-TV systems in the USA will have a mixture of analog and digital channels in their lineups.**



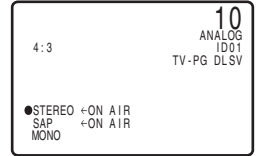
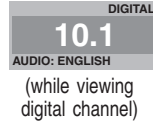
■ You can change channels in several ways.

Method 1

Using **CH ▲/▼** on the remote control unit or on the TV set.



(On the Set)



Method 2

- Press **FLASHBACK** to switch to the previously tuned channel.
- Press **FLASHBACK** again to switch back to the currently tuned channel.



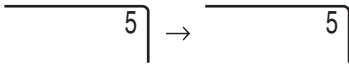
Note:

- **FLASHBACK** will not work if no channel has been changed after TV is turned on.

Method 3

Using **REMOTE KEYPAD** buttons (**0-9** and **ENTER**) to select up to 125 channels for VHF/UHF/CATV.

To select a 1 or 2-digit analog channel number (e. g., Channel 5):



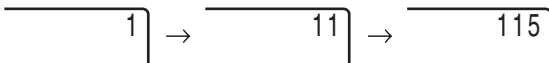
Press **5** → **ENTER**



Note:

- When selecting a 1-digit channel number, it is not necessary to press 0 before the number.
- When you enter 0-9 only, channel selection will be made if there is no operation for a few seconds.

To select a 3-digit analog channel number (e. g., Channel 115):

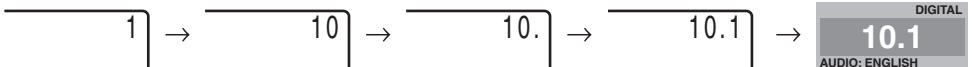


Press **1** → **1** → **5** → **ENTER**

Note:

- When you enter 0-9 only, channel selection will be made if there is no operation for a few seconds.
- If you push "0" by itself, nothing will happen.

To select a digital channel number (e. g. Channel 10.1):



Press **1** → **0** → **• (DOT)** → **1** → **ENTER**

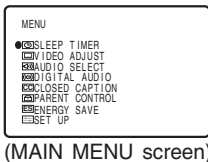
Note:

- Complete the above steps within a few seconds.
- When you enter 0-9 and **• (DOT)**, channel selection will be made if there is no operation for a few seconds.

Language

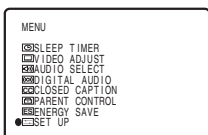
- The language for the ON SCREEN DISPLAY can be set to ENGLISH, SPANISH or FRENCH.

1 Press **MENU** to access the MAIN MENU screen.

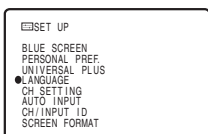


(MAIN MENU screen)

2 Press **CH ▲/▼** to move the “●” mark to “SET UP”.

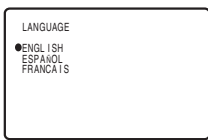
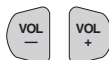


3 Press **VOL +/-** to access the SET UP screen, then press **CH ▲/▼** to move the “●” mark to “LANGUAGE”.



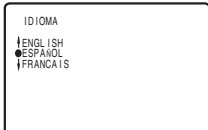
(SET UP screen)

4 Press **VOL +/-** to access the LANGUAGE select screen.



(LANGUAGE select screen)

5 Press **CH ▲/▼** to select “ENGLISH”, “ESPAÑOL (SPANISH)” or “FRANCAIS (FRENCH)”.



6 Press **MENU** to exit.

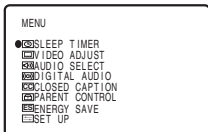


Sleep Timer

- You can preset your television to turn off automatically in increments of 30, 60, 90 or 120 minutes.

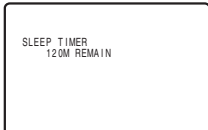
1 Press **MENU** to access the MAIN MENU screen.

2 Press **VOL +/-** to access the SLEEP TIMER screen.



3 Press **VOL +/-** to set a sleep time of 30, 60, 90 or 120 minutes.

4 Press **MENU** to exit.



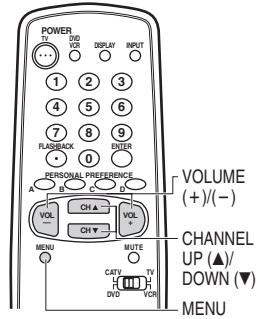
(SLEEP TIMER screen)

- To turn off the SLEEP TIMER, repeat the above SLEEP TIMER steps and select “--- M REMAIN” during step 3.
- While SLEEP TIMER is active, the time remaining will be briefly displayed on-screen at regular intervals or when the Remote’s **DISPLAY** key is pressed twice. 5 minutes before the SLEEP TIMER turns off the TV, the screen prompts the time remaining for 4 seconds. The SLEEP TIMER shows a similar display for each remaining minute and a 10-second display right before shutting off the TV.
- If you turn the POWER OFF, the SLEEP TIMER will automatically reset.

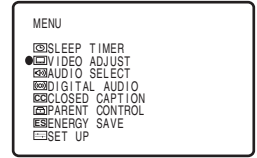
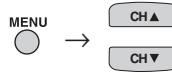
Video Adjust

● Description of Adjustment Items

Selected item	VOL + button	VOL - button
PICTURE	To increase contrast	To decrease contrast
TINT	To make skin tones greenish	To make skin tones purplish
COLOR	To increase color intensity	To decrease color intensity
BRIGHT	To increase brightness	To decrease brightness
SHARP	To increase sharpness	To decrease sharpness
COLOR TEMP.	To choose a LOW, ML, MH or HIGH color tone.	
RESET	To return all adjustments to factory preset levels.	

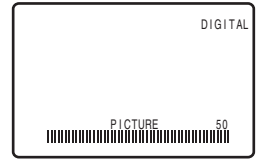
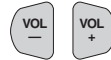


- 1 Press **MENU** to access the MAIN MENU screen.
- 2 Press **CH ▲/▼** to move the “●” mark to “VIDEO ADJUST”.



(MAIN MENU screen)

- 3 Press **VOL +/-** to access the PICTURE adjust screen.
 - The word “DIGITAL” will appear to show viewing channel is a digital channel.

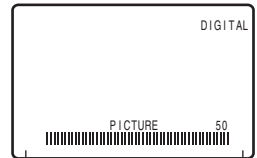
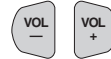


(PICTURE adjust screen)

- 4 Press **CH ▲/▼** to select the desired adjustment item. (Refer to the diagram below.)



- 5 Press **VOL +/-** to adjust the setting.



VOL +
increases contrast

VOL -
decreases contrast

- 6 Repeat steps 4 to 5 to adjust other settings.

- 7 Press **MENU** to exit.



Note:

- VIDEO ADJUST setting, once set, is shared among AIR/CABLE, INPUT 1, INPUT 2, and INPUT 3 modes.
- VIDEO ADJUST setting for INPUT 3 when used as COMPONENT can be set independently.
- VIDEO ADJUST setting for Digital Channel can be set independently.

Audio Select

■ MTS (Multichannel TV Sound) (For Analog Channel only)

This function allows reception of stereo or bilingual TV sound.

- You can enjoy Hi-Fi stereo sound or SAP broadcasts where available.

Stereo broadcasts

Live television broadcasts of sports, shows, concerts, etc. can be received in dynamic stereo sound.

SAP broadcasts

Television broadcast can be received with either MAIN or SAP sound.

MAIN sound: The normal program soundtrack. (Monaural or stereo where available.)

SAP sound: Second language, supplementary commentaries, etc. (SAP sound is monaural.)

- If stereo sound is difficult to hear;

You can obtain clearer sound by manually switching to fixed monaural mode.

■ SPEAKER (Internal Speaker Switch)

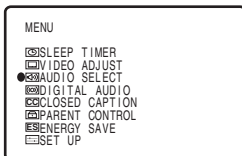
This function turns the TV's internal speakers "ON" or "OFF" when listening to sound from external speakers by using the AUDIO OUTPUT Terminals. (See page 46).

■ FAO (Fixed Audio Output)

This function turns the TV's internal speakers "OFF" and allows fixed audio output from the AUDIO OUTPUT Terminals. (See page 46). With FAO, the TV's volume control is disabled.

- 1 Press **MENU** to access the MAIN MENU screen.

- 2 Press **CH ▲/▼** to move the "●" mark to "AUDIO SELECT".



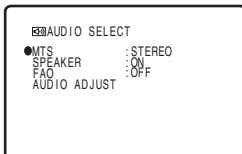
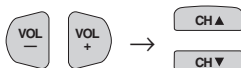
(MAIN MENU screen)

- 3 Press **VOL +/-** to access the AUDIO SELECT screen.

- 4 Press **CH ▲/▼** to move the "●" mark to "MTS", "SPEAKER", "FAO" or "AUDIO ADJUST".

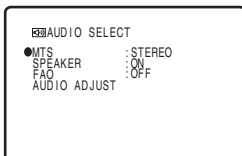
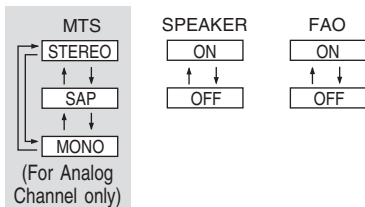
Note:

- If the viewing channel is a digital channel, MTS cannot be selected.



(AUDIO SELECT screen)

- 5 Press **VOL +/-** to select "STEREO", "SAP" or "MONO" when the "●" mark is at "MTS" position.

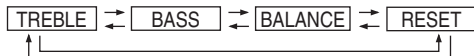


(AUDIO SELECT screen)

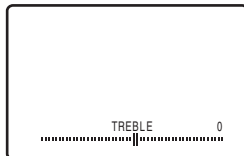
Audio Select (Continued)

AUDIO ADJUST

When the "●" mark is at "AUDIO ADJUST", press **VOL +/-** to access the AUDIO ADJUST screen. To access the desired item, press **CH ▲/▼**. To adjust the audio setting, press **VOL +/-**.



Selected item	VOL + button	VOL - button
TREBLE	To increase treble response.	To decrease treble response.
BASS	To increase bass response.	To decrease bass response.
BALANCE	To emphasize the right speaker's volume.	To emphasize the left speaker's volume.
RESET	To return all adjustments to factory preset levels.	



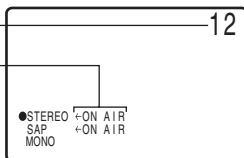
6 Press **MENU** to exit.



An example screen displaying ON AIR Analog Channel when receiving stereo broadcasts

Current channel number _____

"← ON AIR" will appear next to STEREO or SAP when receiving STEREO or SAP broadcasts.



(Analog CHANNEL call on screen)

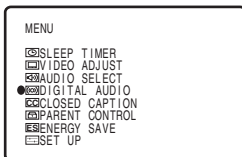
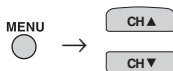
Note:

- Once MONO mode is selected, the TV sound remains monaural even if the TV set receives a stereo broadcast. You must switch the mode back to STEREO if you want to hear stereo sound again.
- Selecting MTS while receiving video signals from INPUT terminals does not change the type of sound; in this case, sound is determined by the video source.
- If "FAO" mode is on, "SPEAKER" mode will automatically turn off. Changing "SPEAKER" setting will not affect "FAO" mode.

Digital Audio

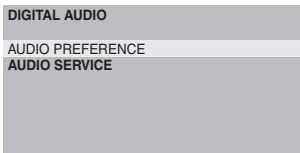
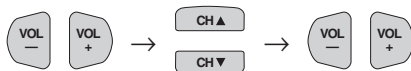
- This feature allows you to select the Primary and Secondary language and as well the type of audio transmitted in a digital broadcast. If the viewing channel is an analog channel, Digital Audio cannot be selected.

- 1 Press **MENU** to access MAIN MENU screen.
- 2 Press **CH ▲/▼** to move the “●” mark to “DIGITAL AUDIO”.



(MAIN MENU screen)

- 3 Press **VOL +/-** to access the DIGITAL AUDIO screen.
- 4 Press **CH ▲/▼** to select “Audio Preference” or “Audio Service”, then press **VOL +/-** to access to the selected mode.

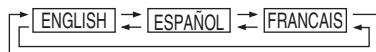


(DIGITAL AUDIO screen)

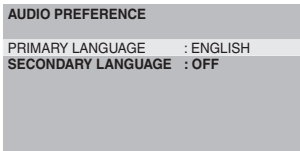
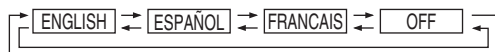
AUDIO PREFERENCE

- Press **CH ▲/▼** to select “PRIMARY LANGUAGE” or “SECONDARY LANGUAGE”.
- Press **VOL +/-** to change the setting.

PRIMARY LANGUAGE



SECONDARY LANGUAGE

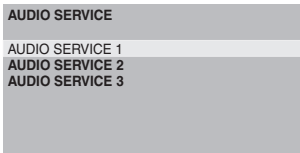
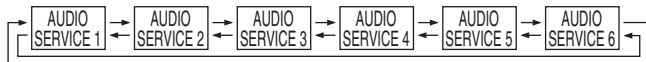


Note:

- The language which is selected in Primary Language will not appear in Secondary Language selection mode.

AUDIO SERVICE

- Press **CH ▲/▼** to select the AUDIO SERVICE. Six kinds of audio service are available to be selected. However, selectable service are depends on the programs contains. The services are toggles as shown on below:



If a program has three services, audio service toggles like below:



Note:

- AUDIO SERVICE: The type of audio transmitted in a digital broadcast signal.
- In additional, it is possible for multiple audio tracks to accompany a signal video track.

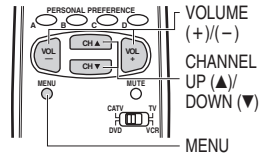
- 5 Press **MENU** to exit.



Closed Caption

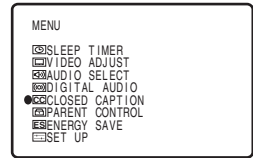
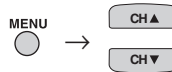
● How to set CLOSED CAPTION

- Your TV is equipped with an internal Closed Caption decoder. "Closed Caption" is a system which allows conversations, narration, and sound effects in TV programs and home videos to appear as captions on the TV screen (see the illustration).
- Not all the programs and videos will offer closed captioning. Please look for the "CC" symbol to ensure that captions will be shown.
- Closed Caption broadcast for Analog Channel can be viewed in two modes: CAPTION and TEXT. For each mode, two channels are available, CH1 and CH2.
- Closed Caption broadcast for Digital Channel can be viewed in 10 modes (maximum).
The CAPTION mode shows subscripts of dialogs and commentaries of TV dramas and news programs while allowing clear view of the picture.
The TEXT mode displays over the picture other various information (such as TV program schedule, weather forecast, etc.) that is independent of the TV programs.



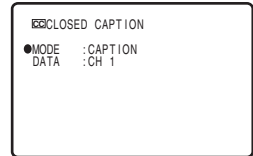
■ During viewing analog channel

- Press **MENU** to access the MAIN MENU screen.
- Press **CH ▲/▼** to move the "●" mark to "CLOSED CAPTION".



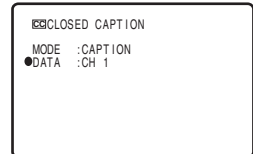
(MAIN MENU screen)

- Press **VOL +/-** to access the CLOSED CAPTION setting screen.

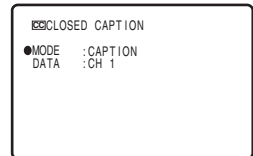
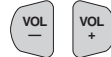
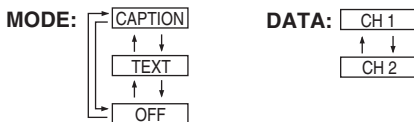


(CLOSED CAPTION setting screen)

- Press **CH ▲/▼** to move the "●" mark to either "MODE" or "DATA".



- Press **VOL +/-** to change the CLOSED CAPTION setting.



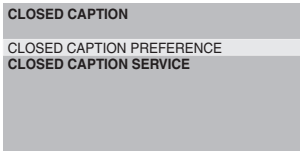
- Press **MENU** to exit.



Closed Caption (Continued)

During viewing digital channel

- Repeat steps 1 to 2 of **During viewing analog channel**.
- Press **VOL +/-** to access the CLOSED CAPTION screen.
- Press **CH ▲/▼** to select "CLOSED CAPTION PREFERENCES" or "CLOSED CAPTION SERVICE" and then press **VOL +/-** to enter to the selected mode screen.

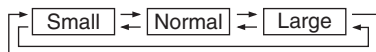


(CLOSED CAPTION screen)

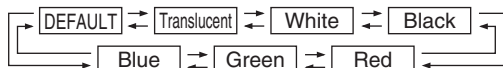
CLOSED CAPTION PREFERENCE

- Press **CH ▲/▼** to select "FONT SIZE", "FONT COLOR", "BACKGROUND COLOR" or "RESET DEFAULTS".
- Press **VOL +/-** to select desired setting. The setting toggles as shown below:

FONT SIZE

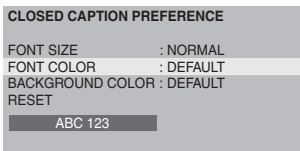
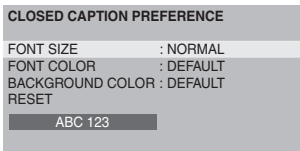
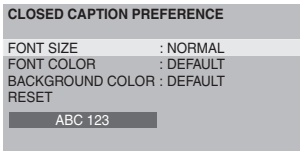


FONT COLOR/BACKGROUND COLOR



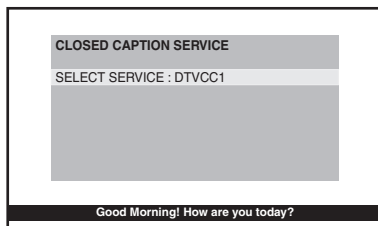
RESET

- For resetting all adjustment items to the factory preset values.



CLOSED CAPTION SERVICE

- Press **CH ▲/▼** to select "CLOSED CAPTION SERVICE". Closed caption services toggles like below:



(CLOSED CAPTION SERVICE screen)

Note:

- If a broadcast contains CLOSED CAPTION and the **MUTE** button is pressed, the set enters CAPTION mode automatically. Pressing **MUTE** again will return the set to its previous condition.
- Closed Caption may malfunction (white blocks, strange characters, etc.) if signal conditions are poor or if there are problems at the broadcast source. This does not necessarily indicate a problem with your TV.
- If any button is pressed to call up the ON SCREEN DISPLAY while viewing a CLOSED CAPTION broadcast, the closed captions will disappear momentarily.
- If no TEXT broadcast is being received while viewing in the TEXT mode, the screen may become dark and blank for some programs. Should this occur, switch the Closed Caption mode to "OFF".

Parent Control (V-CHIP Operation)

V-CHIP

- This function allows you to restrict TV programs and also allows you to control TV usage based on FCC data. This function is to prevent your children from watching violence or sexual scenes that may be harmful.
- Restriction of TV programs includes two characters that contain information about the program's MPAA rating and the TV Parental Guidelines. MPAA is restricted by age. TV Parental Guidelines are restricted by age and contents.
- Since a TV program may use either the MPAA rating or the TV Guidelines you should adjust both for complete control.

[1] MPAA RATING

RATING		
age based	G	GENERAL AUDIENCES. All ages admitted.
	PG	PARENTAL GUIDANCE SUGGESTED. Some material may not be suitable for children.
	PG-13	PARENTS STRONGLY CAUTIONED. Some material may be inappropriate for children under 13.
	R	RESTRICTED. Under 17 requires accompanying parent or adult guardian.
	NC-17	NO ONE 17 AND UNDER ADMITTED.
	X	X Rating is an older rating that is unified with NC-17 but may be encoded on older movie's data.

MPAA RATING

Example 1:

"PG-13" in the age-based rating is blocked, this will automatically block the higher ratings "R", "NC-17", "X" also.

1. User setting	2. Block table
G -----	G not to block
PG -----	PG not to block
PG-13 BLOCK	PG-13 Select block
R BLOCK	R auto-block
NC-17 BLOCK	NC-17 auto-block
X BLOCK	X auto-block

Example 2:

"R" in the age-based rating is blocked, this will automatically block the higher rating "NC-17", "X" also.

1. User setting	2. Block table
G -----	G not to block
PG -----	PG not to block
PG-13 -----	PG-13 not to block
R BLOCK	R Select block
NC-17 BLOCK	NC-17 auto-block
X BLOCK	X auto-block

Note:

- MPAA RATING is only age-based.

[2] TV PARENTAL GUIDELINES

RATING		⇔ content based ⇔					
		AGE	D (Sexually Suggestive Dialog)	L (Adult Language)	S (Sexual Situation)	V (Violence)	FV (Fantasy Violence)
age based ↑ ↓	TV-Y (All children)	<input checked="" type="checkbox"/>	-	-	-	-	-
	TV-Y7 (Direct to Older Children)	<input checked="" type="checkbox"/>	-	-	-	-	<input checked="" type="checkbox"/>
	TV-G (General Audience)	<input checked="" type="checkbox"/>	-	-	-	-	-
	TV-PG (Parental Guidance Suggested)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-
	TV-14 (Parents Strongly Cautioned)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-
	TV-MA (Mature Audience Only)	<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-

: Content Rating can be set.

- : Content Rating cannot be set (not normally broadcast by TV station).

Parent Control (V-CHIP Operation) (Continued)

• TV PARENTAL GUIDELINES (Example)

Example 1.1 : Age Based setting

Clear s (block) from each "AGE" box for all ratings.
This will automatically unblock everything.

	AGE	D	L	S	V	FV	<input type="checkbox"/> VIEW BLOCK
TV-Y	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-Y7	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-G	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-PG	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-14	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-MA	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>

MENU: RETURN

Example 1.2 : Age Based setting

For "TV-G" put a in the "AGE" box. This will automatically block the higher age ratings "TV-PG", "TV-14" and "TV-MA" as well as "TV-G". Please note the content ratings "D", "L", "S", "V" are automatically blocked as well.

	AGE	D	L	S	V	FV	<input type="checkbox"/> VIEW BLOCK
TV-Y	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-Y7	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-G	<input checked="" type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-PG	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TV-14	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TV-MA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

MENU: RETURN

Example 2.1 : Content Based setting

If you choose to unblock every content-based items ("D", "L", "S", "V"), clear the (block) from each "AGE" box of "TV-PG", "TV-14" and "TV-MA".

	AGE	D	L	S	V	FV	<input type="checkbox"/> VIEW BLOCK
TV-Y	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-Y7	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-G	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-PG	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-14	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-MA	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>

MENU: RETURN

Example 2.2 : Content Based setting

Put a in the box corresponding to "TV-PG" (row) and "V (Violence)" (column). This will automatically block the "V" boxes for "TV-14" and "TV-MA". Setting only "TV-PG-V", "TV-14-V" or "TV-MA-V" will not block all programs rated "TV-PG", "TV-14" or "TV-MA".

	AGE	D	L	S	V	FV	<input type="checkbox"/> VIEW BLOCK
TV-Y	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-Y7	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-G	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-PG	<input checked="" type="checkbox"/>	-	-	-	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>
TV-14	<input type="checkbox"/>	-	-	-	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>
TV-MA	<input type="checkbox"/>	-	-	-	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>

MENU: RETURN

Example 3 : Resetting an Age Based setting

For "TV-14", put a (block) in the "AGE" box.
This will again automatically block the content ratings "D", "L", "S", "V" for "TV-MA" as well as "TV-14" ("D" is not available for "TV-MA").
Please note that the lower age rating "TV-PG" does not change from its previous settings after this.

	AGE	D	L	S	V	FV	<input type="checkbox"/> VIEW BLOCK
TV-Y	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-Y7	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-G	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-PG	<input type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-14	<input checked="" type="checkbox"/>	-	-	-	-	-	<input type="checkbox"/>
TV-MA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

MENU: RETURN

Note:

- Content ratings can be modified but only in the combinations indicated by in the table on page 21.
- Changing a lower age rating's content setting to "BLOCK" automatically changes the same higher age rating's content setting to "BLOCK" regardless of their previous settings.
- Changing a lower rating's "AGE" setting to "BLOCK" automatically changes all higher ratings to "BLOCK" regardless of their previous settings.
- For "TV-Y7", "TV-PG", "TV-14" and "TV-MA", if you clear the in the "AGE" box (unblock) you can still change settings based on content.
Clearing a higher rating's age or content setting will not clear lower settings. Make sure that all undesired boxes are blocked.

Parent Control (V-CHIP Operation) (Continued)

[3] Canadian Rating Systems

- The TV rating systems in Canada are based on the Canadian Radio-Television and Telecommunications Commission (CRTC) policy on violence in television programming.
- While violence is the most important content element to be rated, the structure developed takes into consideration other program content like language, nudity, sexuality and mature themes.
- When setting the V-CHIP on the Canadian system you can choose either the Canadian English ratings or the Canadian French ratings.

[i] Canadian English ratings

Rating		Description
Age	C	Children: Intended for younger children under the age of 8 years. Pays careful attention to themes that could threaten their sense of security and well-being.
	C8+	Children over 8 years old: Contains no portrayal of violence as the preferred, acceptable, or only way to resolve conflict; nor encourage children to imitate dangerous acts which they may see on the screen.
	G	General: Considered acceptable for all age groups. Appropriate viewing for the entire family, contains very little violence, physical, verbal or emotional.
	PG	Parental Guidance: Intended for a general audience, but may not be suitable for younger children (under the age of 8) because it could contain controversial themes or issues.
	14+	Over 14 Years: Could contain themes where violence is one of the dominant elements of the storyline, but it must be integral to the development of plot or character. Language usage could be profane and nudity present within the context of the theme.
	18+	Adults: Intended for viewers 18 years and older and might contain depictions of violence, which while related to the development of plot, character or themes, are intended for adult viewing. Could contain graphic language and portrayals of sex and nudity.

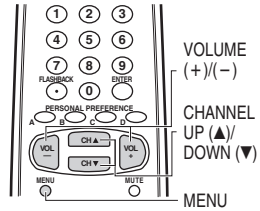
[ii] Canadian French ratings

Rating		Description
Age	G	General: All ages and children, contains minimal direct violence, but may be integrated into the plot in a humorous or unrealistic manner.
	8ans+	General but inadvisable for young children: May be viewed by a wide public audience, but could contain scenes disturbing to children under 8 who cannot distinguish between imaginary and real situations. Recommended for viewing with parent.
	13ans+	Over 13 years: Could contain frequent violent scenes and therefore recommended for viewing with parent.
	16ans+	Over 16 years: Could contain frequent violent scenes and intense violence.
	18ans+	Over 18 years: Only for adult viewing. Could contain frequent violent scenes and extreme violence.

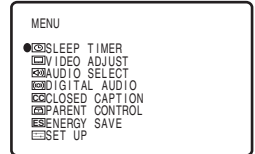
Parent Control (V-CHIP Operation) (Continued)

● How to set V-CHIP

[1] MPAA RATING

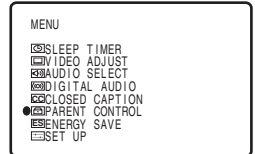


1 Press **MENU** to access the MAIN MENU screen.

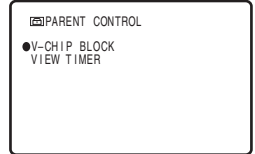
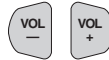


(MAIN MENU screen)

2 Press **CH ▲/▼** to move the “●” mark to “PARENT CONTROL”.



3 Press **VOL +/-** to access the PARENT CONTROL screen.

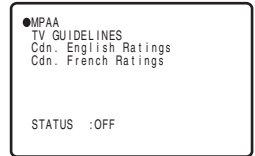


(PARENT CONTROL screen)

4 Press **VOL +/-** to access the V-CHIP select screen.

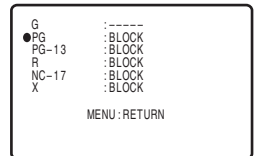
Note:

- If SECRET No. is already set, enter the SECRET No. (See **To change the V-CHIP BLOCK after registering a secret No.** on page 28.).



(V-CHIP select screen)

5 Press **VOL +/-** to select “MPAA”. Press **CH ▲/▼** to move the “●” mark to “PG”, then press **VOL +/-** to select BLOCK. If you set “PG” to BLOCK, “PG-13”, “R”, “NC-17” and “X” are automatically blocked.



6 Press **MENU** to return to the V-CHIP select screen.

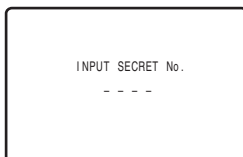


Parent Control (V-CHIP Operation) (Continued)

7 Press **MENU**, then "INPUT SECRET No." will be displayed.

Note:

- If SECRET No. is already set, skip to step 9.



8 Enter a 4-digit SECRET No. using the **REMOTE KEYPAD**.



9 When done, press **MENU** to exit.

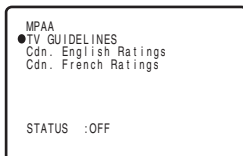
Note:

- If you set "G" to BLOCK, all ratings are automatically blocked.
- If you set "X" to BLOCK, "G", "PG", "PG-13", "R" and "NC-17" are not blocked.

[2] TV GUIDELINES

1 Repeat steps 1 to 4 of [1] **MPAA RATING**.

2 Press **CH ▲/▼** to move the "●" mark to "TV GUIDELINES".

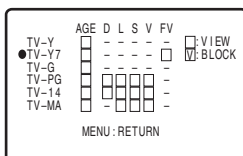
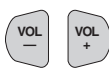


(V-CHIP select screen)

3 Press **VOL +/-** to access the TV GUIDELINES screen.

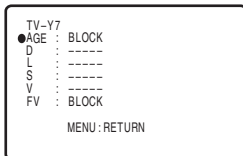
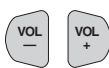


4 To change AGE and CONTENT SETTING, press **CH ▲/▼** to move the "●" mark to the desired rating and then press **VOL +/-** to select.



(TV GUIDELINES screen)

5 Press **CH ▲/▼** to move the "●" mark to the desired content item and then press **VOL +/-** to select either "BLOCK" or "-----" (unblock).



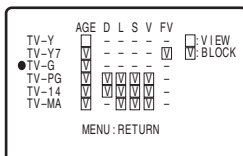
(CONTENT RATING screen)

6 Press **MENU** to return to the TV GUIDELINES screen.

7 Repeat steps 4 to 6 until all ratings and their contents are set.

8 When done, press **MENU** to return to V-CHIP select screen.

9 Press **MENU** to exit.



Note:

- If SECRET No. is not set, enter a SECRET No. as show in steps 7 and 8 of [1] **MPAA RATING**.

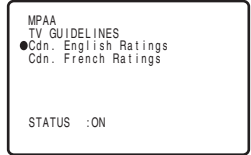
Parent Control (V-CHIP Operation) (Continued)

• How to set Canadian Rating System

Setting for Canadian English ratings and Canadian French ratings.

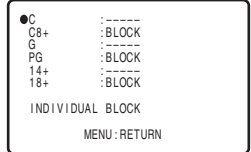
1 Repeat steps 1 to 4 of [1] MPAA RATING.

2 Press **CH ▲/▼** to move the "●" mark to "Cdn. English Ratings", then press **VOL +/-**.



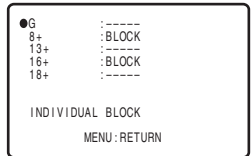
(After downloading the rating data)

3 You can select "BLOCK" or "-----" (unblock) for each rating item by pressing **CH ▲/▼** and **VOL +/-**.



(ENGLISH INDIVIDUAL BLOCK screen)

4 You can select "BLOCK" or "-----" (unblock) for each rating item by pressing **CH ▲/▼** and **VOL +/-** if you select "Cdn. French Ratings" in step 2.



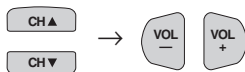
(FRENCH INDIVIDUAL BLOCK screen)

Parent Control (V-CHIP Operation) (Continued)

● Activating the V-CHIP BLOCK

1 Repeat steps 1 to 4 of [1] **MPAA RATING**.

2 Press **CH ▲/▼** to move the "●" mark to "STATUS". Press **VOL +/–** to activate the V-CHIP BLOCK. (If STATUS is OFF, V-CHIP BLOCK will not operate.)



MPAA
TV GUIDELINES
Cdn. English Ratings
Cdn. French Ratings

●STATUS : ON

(V-CHIP select screen)

3 Press **MENU**, then "INPUT SECRET No." will be displayed.

Note:

- If SECRET No. is already set, skip to step 5.



INPUT SECRET No.
- - - -

4 Enter a 4-digit secret No. using the **REMOTE KEYPAD**.



INPUT SECRET No.
1 2 3 4

5 Press **MENU** and the secret No. will be registered.



● To temporarily cancel the V-CHIP BLOCK

1 "V-CHIP HAS BEEN ACTIVATED" appears if you view a program with the same program rating data you configured.

Note:

- "V-CHIP HAS BEEN ACTIVATED" will not be displayed if STATUS is not configured to "ON".

22

V-CHIP HAS BEEN ACTIVATED

TV-Y7
FV

2 Press **MENU**, then "INPUT SECRET No." will be displayed.



INPUT SECRET No.
- - - -

3 Enter the 4-digit secret No. using the **REMOTE KEYPAD**, then V-CHIP BLOCK will be canceled temporarily. If the wrong secret No. is chosen, "SECRET No. IS INCORRECT" will be displayed. Input the secret No. again in this case.



INPUT SECRET No.
* * * *

Note:

- If you turn the power ON from OFF, the V-CHIP BLOCK will be activated again.

Parent Control (V-CHIP Operation) (Continued)

● To change the V-CHIP BLOCK after registering a secret No.

- 1 Repeat steps 1 to 4 of [1] **MPAA RATING**, then "INPUT SECRET No." will be displayed.



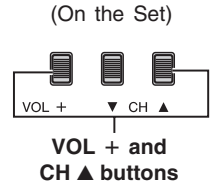
- 2 Enter the 4-digit secret No. using the **REMOTE KEYPAD** and the V-CHIP select screen will be displayed. Set V-CHIP BLOCK again.



● If you forget or need to change your secret No., clear the original secret No. and set up a new one.

- 1 Repeat steps 1 to 4 of [1] **MPAA RATING**, or 1 to 2 of **To temporarily cancel the V-CHIP BLOCK**, then "INPUT SECRET No." will be displayed.

- 2 Press and hold both **VOL +** and **CH ▲** on the TV set simultaneously until the message "INPUT SECRET No." disappears.



- 3 Press the **MENU** button twice to exit.



Parent Control (VIEW TIMER)

VIEW TIMER

This function allows you to restrict TV viewing time and also allows you to control TV usage. This function is to prevent your children from watching too much TV.

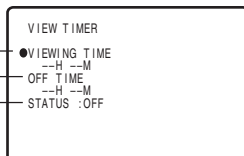
VIEWING TIME (an accumulative timer: counts only the time duration while the TV power is on.)

- VIEWING TIME can be set from 30M (30 minutes) to 10H00M (10 hours) in 30 minutes intervals.

OFF TIME (Restricts TV viewing after the VIEWING TIME reaches zero.)

- OFF TIME can be set from 30M (30 minutes) to 10H00M (10 hours) in 30 minutes intervals.

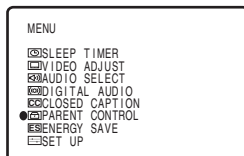
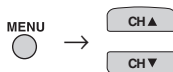
STATUS (Select ON to activate VIEW TIMER)



How to set VIEW TIMER

1 Press **MENU** to access the MAIN MENU screen.

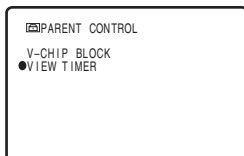
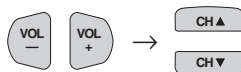
2 Press **CH ▲/▼** to move the “●” mark to “PARENT CONTROL”.



(MAIN MENU screen)

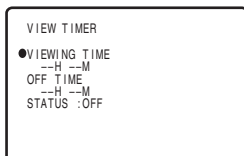
3 Press **VOL +/-** to access the PARENT CONTROL screen.

4 Press **CH ▲/▼** to move the “●” mark to “VIEW TIMER”.

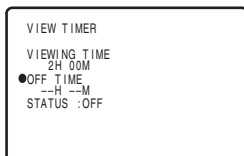
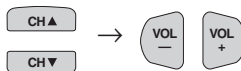


(PARENT CONTROL screen)

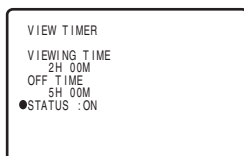
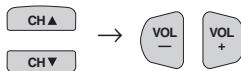
5 Press **VOL +/-** to access “VIEW TIMER”.



6 Press **CH ▲/▼** to select “VIEWING TIME” and “OFF TIME”. For each selection, press the **VOL +/-** to set the time duration.



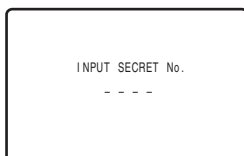
7 Press **CH ▲/▼** to select “STATUS”. Press the **VOL +/-** to turn ON the “VIEW TIMER”. (If STATUS is OFF, VIEW TIMER will not operate.)



8 Press **MENU**. “INPUT SECRET No.” will be displayed.

Note:

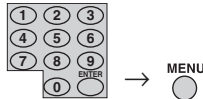
- If SECRET No. is already set, skip to step 10.



Parent Control (VIEW TIMER) (Continued)

9 Enter a 4-digit secret No. using the **REMOTE KEYPAD**.

10 Press **MENU** to exit.



INPUT SECRET No.
1 2 3 4

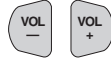
Example:

- To restrict anybody from watching TV for more than 5 hours, after watching the TV for 2 hours, your settings would look like the one on the right.
- You can choose to watch the 2 hours of TV as you wish. For example, you could watch 1 hour of TV, turn the TV off for 30 minutes, then turn the TV on and watch the remaining 1 hour of the VIEWING TIME.

VIEW TIMER
VIEWING TIME
2H 00M
OFF TIME
5H 00M
●STATUS :ON

- To change the **VIEW TIMER** setting after registering a secret No.

1 Repeat steps 1 to 4 of **How to set VIEW TIMER**. Press **VOL +/-**, and "INPUT SECRET No." will be displayed.



INPUT SECRET No.
- - - -

2 Enter the 4-digit secret No. using the **REMOTE KEYPAD**, and the **VIEW TIMER** access screen will be displayed. Repeat steps 5, 6.



INPUT SECRET No.
* * * *

Note:

- When you choose the correct secret No., the **VIEW TIMER** access screen is displayed. If the wrong secret No. is chosen, "SECRET No. IS INCORRECT" is displayed. Input the secret No. again in this case.

SECRET No. IS INCORRECT

- To cancel the **VIEW TIMER** (While the TV set is OFF but the **VIEW TIMER** is set.)

1 Turn on the TV; a blue screen message "TIME OVER" will appear. If you do nothing, the TV will turn off in approximately 30 seconds.

TIME OVER
INPUT SECRET No.
- - - -

2 Enter the 4-digit secret No. using the **REMOTE KEYPAD**. When you choose the correct secret No., the **VIEW TIMER** is canceled. If the wrong secret No. is chosen, "SECRET No. IS INCORRECT" is displayed. Input the secret No. again in this case.

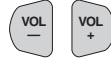


TIME OVER
INPUT SECRET No.
* * * *

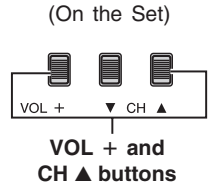
Parent Control (VIEW TIMER) (Continued)

- To cancel the VIEW TIMER setting or change the secret No. (If you forget the SECRET No.)

- Repeat steps 1 to 4 of **How to set VIEW TIMER**. Press **VOL +/-**, and "INPUT SECRET No." will be displayed.

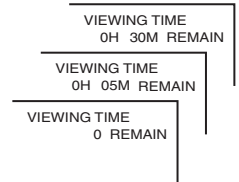


- Press and hold both **VOL +** and **CH ▲** on the TV set simultaneously until the VIEW TIMER access screen is displayed. Now you can cancel the VIEW TIMER settings or change the secret No. while "INPUT SECRET No." is displayed.



- Notice of Remaining VIEWING TIME**

- For every 30 minute interval, the remaining time will be displayed for 4 seconds. For the last 5 minutes, the remaining time will be displayed every minute.
- "0 REMAIN" will be displayed for 10 seconds just before the VIEWING TIME expires.



Energy Save

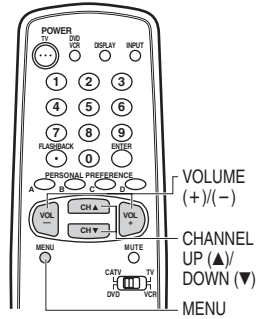
SCREEN

This feature lets you lower the power consumption of your TV set which in turn saves you money and minimizes the impact on the environment. When this feature is turned on, it reduces the brightness of the TV to a level that consumes approximately 20 percent less energy than when the feature is turned off. The reduction in brightness will be less noticeable under low room lighting conditions.

STANDBY

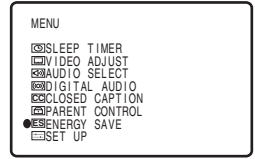
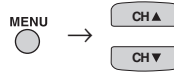
If set to OFF: No power save during standby mode.

ON: With power save during standby mode. When change your TV channel to a digital channel will take approximately 10 seconds to display.



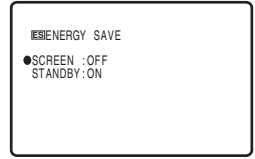
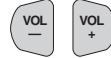
1 Press **MENU** to access the MAIN MENU screen.

2 Press **CH ▲/▼** to move the “●” mark to “ENERGY SAVE”.



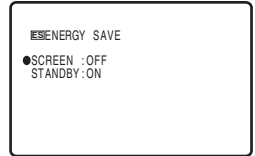
(MAIN MENU screen)

3 Press **VOL +/-** to access the ENERGY SAVE select screen.



(ENERGY SAVE select screen)

4 Press **CH ▲/▼** to move the “●” mark to either “SCREEN” or “STANDBY”.

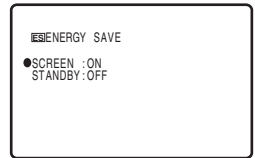


5 Press **VOL +/-** to select “ON” or “OFF”.

SCREEN:



STANDBY:



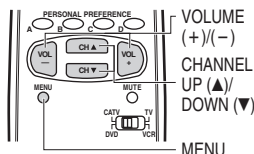
6 Press **MENU** to exit.



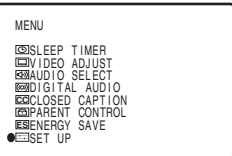
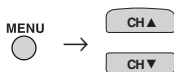
Set Up

EZ Setup

By operating the channel preset functions, you can preset your TV to the desired channels for viewing.

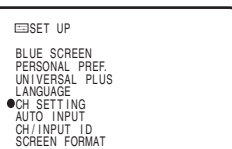
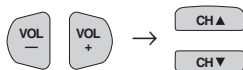


- 1 Press **MENU** to access the MAIN MENU screen.
- 2 Press **CH ▲/▼** to move the “●” mark to “SET UP”.



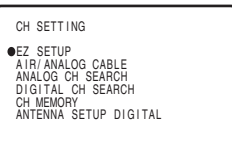
(MAIN MENU screen)

- 3 Press **VOL +/-** to access the SET UP screen, then press **CH ▲/▼** to move the “●” mark to “CH SETTING”.



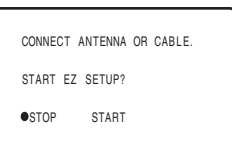
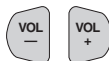
(SET UP screen)

- 4 Press **VOL +/-** to access the CH SETTING screen.



(CH SETTING screen)

- 5 Press **VOL +/-** to access the EZ SETUP screen.



(EZ SETUP screen)

- 6 Press **VOL +**.
The tuner will automatically search for the broadcasting and cable TV channels for ANALOG. (The CH No. will automatically increase when it appears.)

(START)

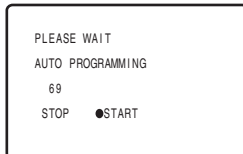


(Analog channel tuning)

Once tuning for analog AIR channel is finished, tuning for digital channel will start.

If you want to stop the EZ SETUP process once it has started, press **VOL -** and it will be canceled.

(STOP)

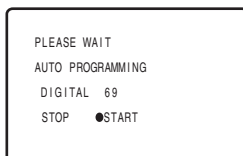


(Digital channel tuning)

If you stop the EZ SETUP process before it finish tuning analog channels, the tuning for digital channels will started to process.

To cancel EZ SETUP

Press **VOL -**.



Set Up (Continued)

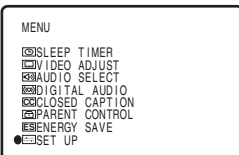
- 7 Once EZ SETUP is complete, the lowest channel number memorized will be displayed.

2

Channel Setting

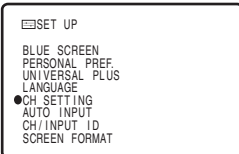
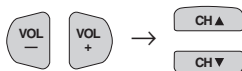
If EZ SETUP does not memorize all the channels in your region, follow the instructions below to manually memorize the channel.

- 1 Press **MENU** to access the MAIN MENU screen.
2 Press **CH ▲/▼** to move the “●” mark to “SET UP”.



(MAIN MENU screen)

- 3 Press **VOL +/-** to access the SET UP screen.
4 Press **CH ▲/▼** to move the “●” mark to “CH SETTING”.

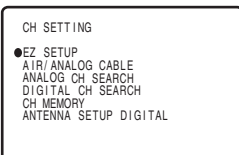


(SET UP screen)

- 5 Press **VOL +/-** to access the CH SETTING screen.

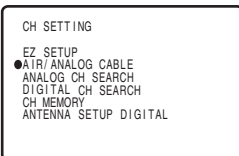
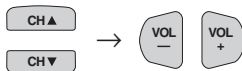
Note:

- If the viewing channel is an analog channel, Antenna Setup Digital cannot be selected.
- During Cable mode, Digital Channel Search and Antenna Setup Digital cannot be selected.

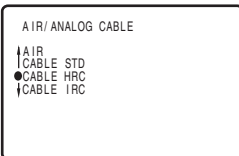
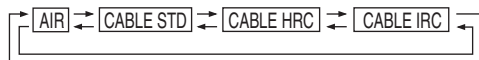


(CH SETTING screen)

- 6 Press **CH ▲/▼** to move the “●” mark to “AIR/ANALOG CABLE”, then press **VOL +/-** to access the AIR/CABLE screen.



- 7 Press **CH ▲/▼** to move the “●” mark to the desired mode.



(AIR/CABLE screen)

- 8 Press **MENU** to exit.



Note:

- Receivable channels of your TV set are:
AIR channels:
VHF: 2 through 13.
UHF: 14 through 69.

- CABLE channels:
1 (HRC and IRC mode only)
2 through 125 (STD, HRC and IRC)

Set Up (Continued)

ANALOG CH SEARCH

Saving ANALOG broadcast TV channels into memory

- 1 Repeat step 1 to step 5 of **Channel Setting**. (See page 34)
Press **CH ▲/▼** to move the “●” mark to “ANALOG CH SEARCH”.



```
CH SETTING
EZ SETUP
AIR/ANALOG CABLE
●ANALOG CH SEARCH
DIGITAL CH SEARCH
CH MEMORY
ANTENNA SETUP DIGITAL
```

(CH SETTING screen)

- 2 Press **VOL +/-** to access the ANALOG CH SEARCH screen.



```
CH SEARCH
AIR 10
●STOP START
```

(CH SEARCH screen)

To start:

Press **VOL +**. The tuner will search through all available channels in your area and add them into the TV memory.

(START)



To stop:

Press **VOL -**. CH SEARCH will stop at the current channel and will not add any higher channels.

(STOP)



- 3 Press **MENU** to exit.



Note:

- If you press **VOL +** again while in the CH SEARCH mode, auto-program will start again, and the previously memorized channels will be lost.

DIGITAL CH SEARCH

Saving DIGITAL broadcast TV channels into memory

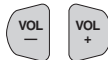
- 1 Repeat step 1 to step 5 of **Channel Setting**. (See page 34)
Press **CH ▲/▼** to move the “●” mark to “DIGITAL CH SEARCH”.



```
CH SETTING
EZ SETUP
AIR/ANALOG CABLE
ANALOG CH SEARCH
●DIGITAL CH SEARCH
CH MEMORY
ANTENNA SETUP DIGITAL
```

(CH SETTING screen)

- 2 Press **VOL +/-** to access the DIGITAL CH SEARCH screen.



```
CH SEARCH
DIGITAL 10
●STOP START
```

(CH SEARCH screen)

To start:

Press **VOL +**. The tuner will search through all available channels in your area and add them into the TV memory.

(START)



To stop:

Press **VOL -**. CH SEARCH will stop at the current channel and will not add any higher channels.

(STOP)



- 3 Press **MENU** to exit.



Set Up (Continued)

CH MEMORY

Adding weak or additional channels or erasing unwanted channels from TV memory

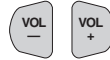
- 1 Repeat step 1 to step 5 of **Channel Setting**. (See page 34)
Press **CH ▲/▼** to move the “●” mark to “CH MEMORY”.



```
CH SETTING
EZ SETUP
AIR/ANALOG CABLE
ANALOG CH SEARCH
DIGITAL CH SEARCH
●CH MEMORY
ANTENNA SETUP DIGITAL
```

(CH SETTING screen)

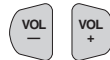
- 2 Press **VOL +/-** to access the CH MEMORY screen.
3 Use **CH ▲/▼** to select each desired channel to add or erase.



```
CH MEMORY
AIR 10
●ERASE  ADD
```

(CH MEMORY screen)

- 4 Press **VOL +** to add a channel to the TV memory or press **VOL -** to erase a channel from the TV memory.



```
CH MEMORY
AIR 10
●ERASE  ADD
```

(CH MEMORY
unmemorized channel)

VOL +
To add channel 10 to
the TV memory

VOL -
To erase channel 10 from
the TV memory

```
CH MEMORY
AIR 10
ERASE ●ADD
```

(CH MEMORY
memorized channel)

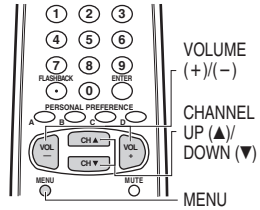
- 5 Press **MENU** to exit.



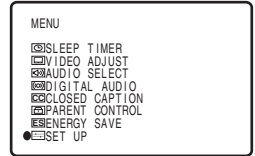
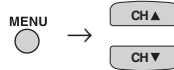
Set Up (Continued)

■ BLUE SCREEN

Automatically turns the screen blue if a broadcast signal is not received. After 15 minutes of non-reception, the TV will turn off automatically.

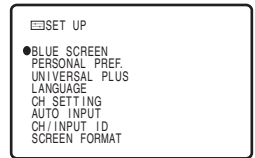
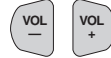


- 1 Press **MENU** to access the MAIN MENU screen.
- 2 Press **CH ▲/▼** to move the "●" mark to "SET UP".



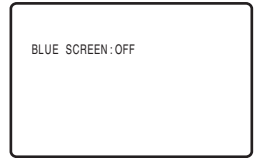
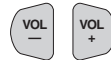
(MAIN MENU screen)

- 3 Press **VOL +/-** to access the SET UP screen.



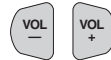
(SET UP screen)

- 4 Press **VOL +/-** to access the BLUE SCREEN select screen.



(BLUE SCREEN select screen)

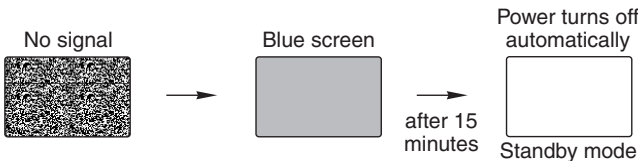
- 5 Press **VOL +/-** to select "ON".



- 6 Press **MENU** to exit.



When the BLUE SCREEN is set to "ON"



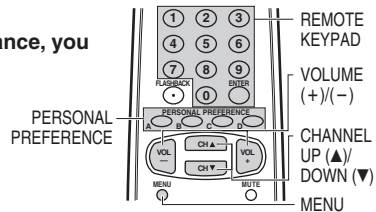
Note:

- Poor reception due to weak signals, or too much noise might activate the BLUE SCREEN function despite the presence of a broadcast signal. To continue watching TV under these conditions, switch the BLUE SCREEN "OFF".
- While INPUT 1, 2, or 3 (COMPONENT) is selected, the BLUE SCREEN will not be shown even if BLUE SCREEN is turned on.

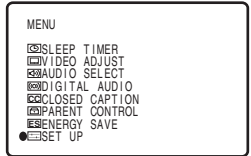
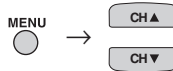
Set Up (Continued)

Personal Preference

By setting **PERSONAL PREFERENCE** channels in advance, you can select your favorite channels easily.

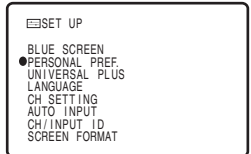
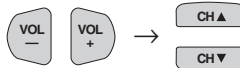


- 1 Press **MENU** to access the MAIN MENU screen.
- 2 Press **CH ▲/▼** to move the "●" mark to "SET UP".



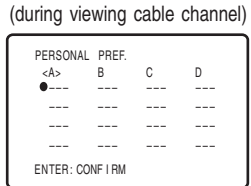
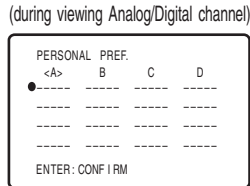
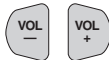
(MAIN MENU screen)

- 3 Press **VOL +/-** to access the SET UP screen, then press **CH ▲/▼** to move the "●" mark to "PERSONAL PREF.".



(SETUP screen)

- 4 Press **VOL +/-** to select the **PERSONAL PREFERENCE** select screen in which you can program 4 favorite channels, in 4 different categories. (total of 16 channels)

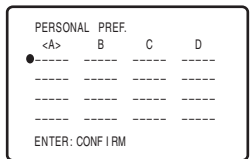


(PERSONAL PREFERENCE select screen)

Note:

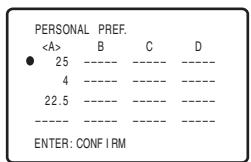
- Below is using Analog/Digital channel OSD to explain.

- 5 Press **VOL +/-** and **CH ▲/▼** to move the "●" mark to the desired position.



- 6 To input CHANNEL Number, press **REMOTE KEYPAD** on the Remote. Then press **ENTER** to register the CHANNEL Number into memory.

- Press **INPUT** to register the INPUT mode into memory.



- Example:** 25 — Press "2", "5" and "ENTER".
 4 — Press "0", "4" and "ENTER".
 22.5 — Press "2", "2", "•", "5" and "ENTER".
 To reset a registered CHANNEL Number, input "•" twice.

Note:

- "•" can not be enter as channel number but will function as reset registered Channel Number when input twice.
- Only 3 digit numbers are allow to input for cable channel.

Set Up (Continued)

7 Repeat steps 5 and 6 to register the next CHANNEL Number or INPUT mode.

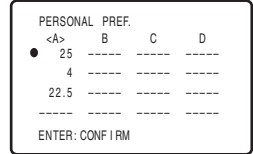
8 Press **MENU** to exit.



To select the PERSONAL PREFERENCE channel.

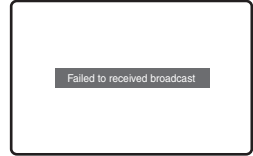
If the channels are memorized as shown on the right, press the Remote's "A" button to select the channels below.

→ 25 → 4 → 22.5



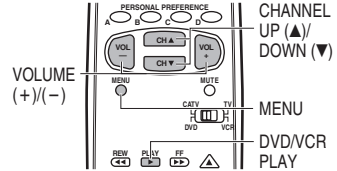
Note:

- If the channel number input does not exist, warning message as shown on the right will appear.

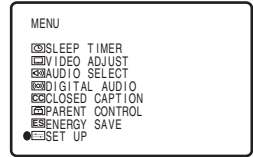


Universal Plus Function

VCR or DVD input mode will be selected automatically by pressing the VCR/DVD PLAY button on the Remote Control

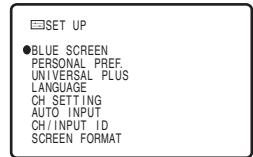
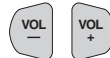


- 1 Press **MENU** to access the MAIN MENU screen.
- 2 Press **CH ▲/▼** to move the "●" mark to "SET UP".



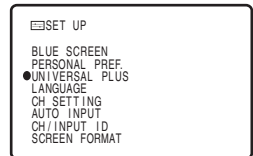
(MAIN MENU screen)

3 Press **VOL +/-** to access the SET UP screen.

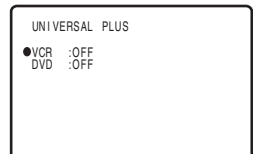


(SET UP screen)

4 Press **CH ▲/▼** to move the "●" mark to "UNIVERSAL PLUS".



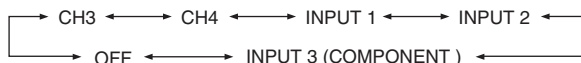
5 Press **VOL +/-** to access the UNIVERSAL PLUS select screen to select VCR or DVD mode.



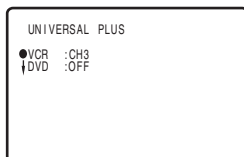
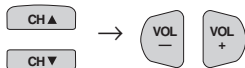
(UNIVERSAL PLUS select screen)

Set Up (Continued)

- 6 Press **CH ▲/▼** to select the VCR or DVD, and press **VOL +/-** to select “CH3”, “CH4”, “INPUT 1”, “INPUT 2”, “INPUT 3 (COMPONENT)” or “OFF”.



Switch to the input mode your VCR or DVD is connected to. If connected through RF (antenna terminal), select either CH3 or CH4 to match the setting of the VCR or DVD.

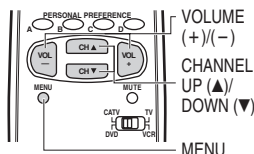


- 7 Press **MENU** to exit.

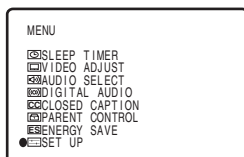


Auto Input

- The unit is preset to switch to the INPUT 2 screen automatically when VIDEO equipment is connected to the INPUT 2 terminal. Do the following to switch this feature off:

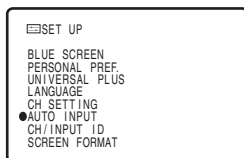


- Press **MENU** to access the MAIN MENU screen.
- Press **CH ▲/▼** to move the “●” mark to “SET UP”.



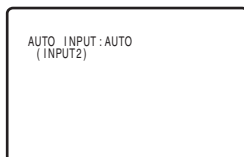
(MAIN MENU screen)

- Press **VOL +/-** to access the SET UP screen, then press **CH ▲/▼** to move the “●” mark to “AUTO INPUT”.



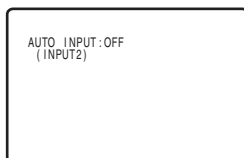
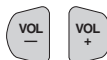
(SET UP screen)

- Press **VOL +/-** to access the AUTO INPUT select screen. Press **VOL +/-** to select “AUTO”.



(AUTO INPUT select screen)

- You may turn off “AUTO INPUT” when it is not in use. Press **VOL +/-** to select “OFF”.

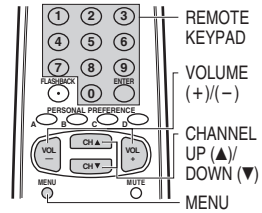


- Press **MENU** to exit.

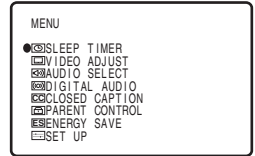


CH/Input ID

- You can assign an ID label to each Analog channel or input mode. These ID labels can be 4 characters long maximum and will be displayed along with the channel number/input mode when the labeled channel is selected. (Example: labeling air channel 10 "TV12".)
- During viewing Digital Channel, the CH/INPUT ID cannot be selected.

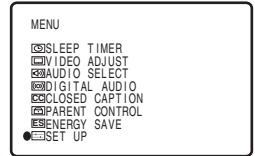


1 Press **MENU** to access the MAIN MENU screen.

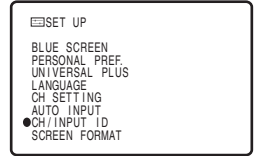
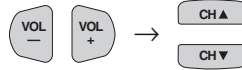


(MAIN MENU screen)

2 Press **CH ▲/▼** to move the "●" mark to "SET UP".



3 Press **VOL +/-** to access the SET UP screen then press **CH ▲/▼** to move the "●" mark to "CH/INPUT ID".

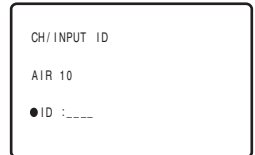
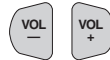


(SET UP screen)

Note:

- If you are viewing a digital channel, "CH/INPUT ID" cannot be set.

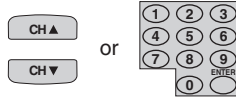
4 Press **VOL +/-** to access the CH/INPUT ID screen.



(CH/INPUT ID screen)

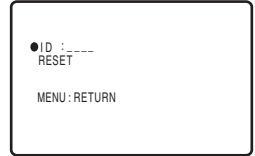
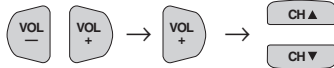
CH/Input ID (Continued)

- 5** Use **CH ▲/▼** or **REMOTE KEYPAD** to select each desired channel to label.
Press **INPUT** on the Remote to label the INPUT mode.



ID: Labeling the channel name

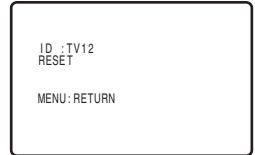
Press **VOL +/-** to select "ID" then press **VOL +** to select the first character. Press **CH ▲/▼** to enter a desired letter. Press **VOL +/-** to enter the next desired letter. Press **MENU** to return to the CH/INPUT ID screen.



(ID Input screen)

Selectable characters:

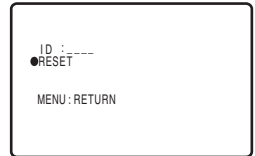
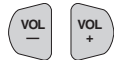
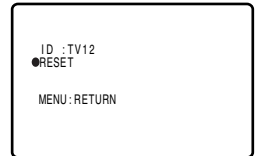
- Space: _
- Alphabets: A-Z
- Numbers: 0-9
- Symbols: — . & () / +



Example TV 12

RESET: Resetting the ID to “_ _ _ _”

Press **CH ▲/▼** to move the “●” mark to “RESET”, then press **VOL +/-**. The previously set ID will return to “_ _ _ _”.



- 6** Press **MENU** to exit.



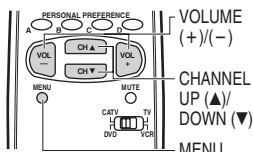
Note:

- The maximum number of ID labels available to register Analog channel names is 20 for AIR channels and 40 for CABLE channels.
- If you wish to register a new ID when all the available ID labels are assigned, delete a registered ID to make room.

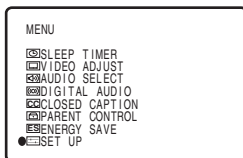
Screen Format

- The format of the picture can be adjusted to either of the two screen formats.

(This function allows you to view 16:9 pictures recorded on DVD or by camcorders that are once saved using the 4:3 aspect ratio to be played back in the original high-density 16:9 format.)

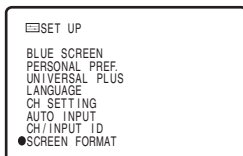
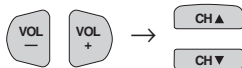


- Press **MENU** to access the MAIN MENU screen.
- Press **CH ▲/▼** to move the “●” mark to “SET UP”.



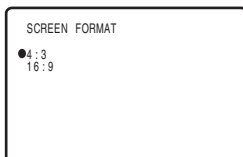
(MAIN MENU screen)

- Press **VOL +/-** to access the SET UP screen, then press **CH ▲/▼** to move the “●” mark to “SCREEN FORMAT”.



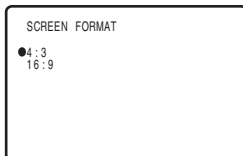
(SET UP screen)

- Press **VOL +/-** to access the SCREEN FORMAT select screen.



(SCREEN FORMAT select screen)

- Press **CH ▲/▼** to select “4:3” or “16:9”.



- Press **MENU** to exit.

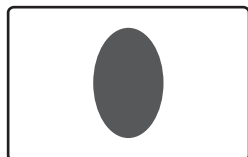


Note:

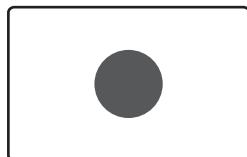
- During viewing a digital channel, please set this function to “4:3”.
- The 16:9 screen format will be cancelled when the power is turned off.

Example:

While in 4:3 mode, if the picture appears stretched vertically as in screen A below, switch to 16:9 mode. The picture will return to normal as shown in screen B.



Screen A (4:3)



Screen B (16:9)

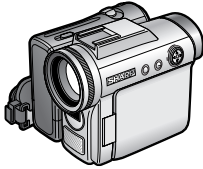
Using the Video and Audio Input Terminals

- Connecting video equipment for playback of video material.
- To view video material from external video equipment, make sure to connect the equipment properly to the input terminals on the TV set.

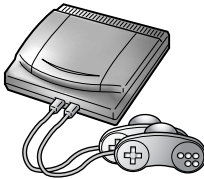
Connecting video device equipped with video output terminals

CONNECTIONS

VIDEO EQUIPMENT



CAMCORDER



TV GAME



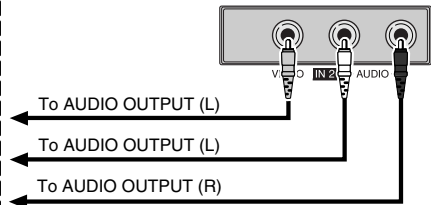
VCR



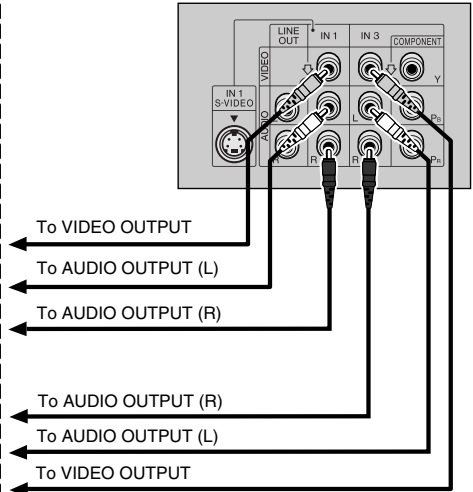
DVD

Yellow : To video input terminal
White : To audio input (L) terminal
Red : To audio input (R) terminal

(Front connection terminals of TV) Pull open the front door



(Rear connection terminals of TV)

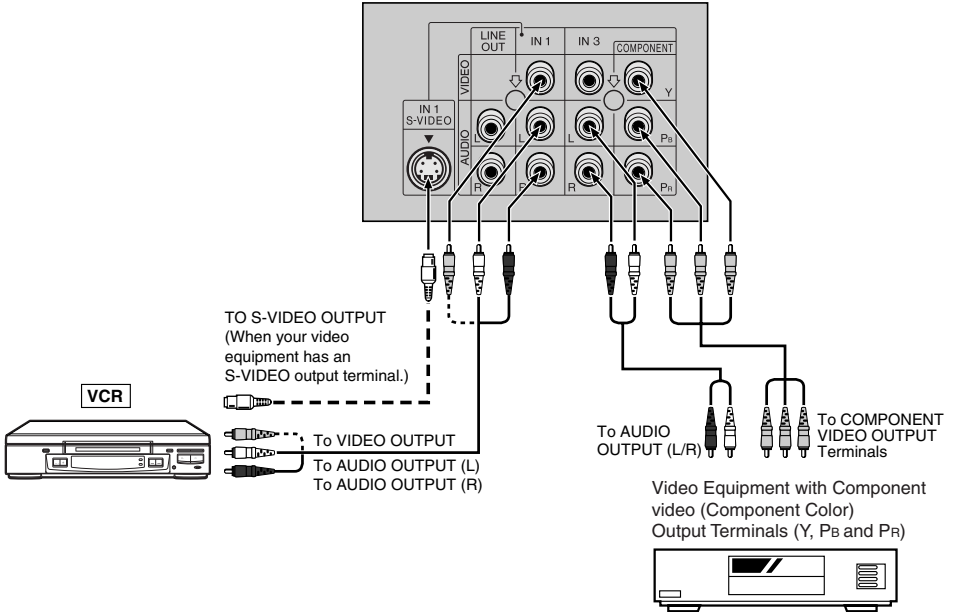


Using the Video and Audio Input Terminals (Continued)

Notes:

- COMPONENT terminals are DVD compatible, allows you to enjoy the highest quality playback image than the image from IN 1 S-VIDEO terminal.
- The IN 1 S-VIDEO terminal is used to obtain a higher quality image by importing image signals.
- The S-VIDEO terminal is for the video image only. To receive an audio signal, connect the audio cable to the IN 1 AUDIO terminals (left and right).

(Rear connection terminals of TV)



● To watch video material playback

- Press the Remote's **INPUT** button to select the VIDEO INPUT mode for the video equipment you wish to play.
- The external VIDEO INPUT mode will change as follows each time the **INPUT** button is pressed.



- When the AV cables are connected to the VIDEO INPUT 3 and COMPONENT Y, P_B and P_R terminals simultaneously, the COMPONENT terminal has priority over the VIDEO terminal.
- INPUT mode can be selected by pressing either the **CH ▲** on the TV remote control when the TV is set to the highest channel stored in memory, or by pressing the **CH ▼** when it is set to the lowest channel.

Note: ➤

- When connecting video or audio equipment to the television, be sure that the power is turned off in order to prevent damage to either the television or the equipment being connected.
- The S-Video terminal has priority over the VIDEO terminal (IN 1). When you wish to use video equipment connected to the VIDEO terminal (IN 1), unplug equipment connected to the S-VIDEO terminal.
- For detailed information on the connection and use of auxiliary equipment, refer to the instruction manuals of the equipment being used.
- The connection cables/cords can be obtained from your local video store.

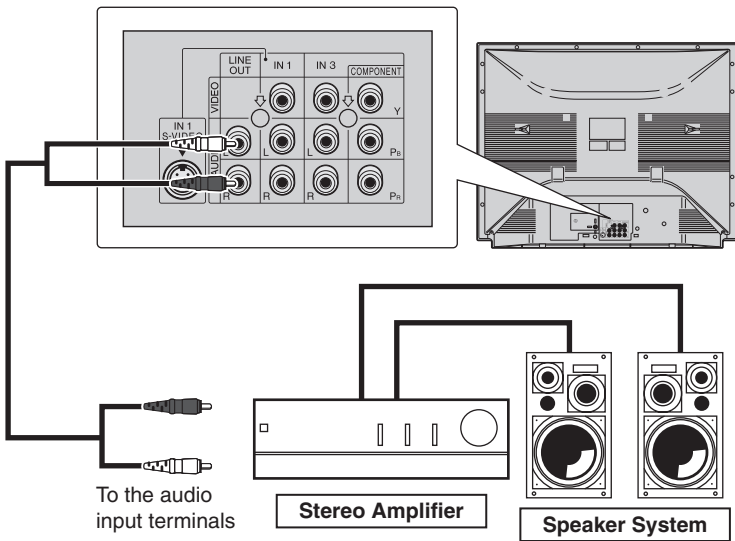
Using the Audio Output Terminals

- These terminals are used for connecting an external audio amplifier. The STEREO/MONO/SAP, VOLUME, MUTE and FAO functions can all be controlled via the television's remote control or directly on the TV itself. These terminals relay the audio signal of all programs being displayed on the TV screen.

(AUDIO OUTPUT terminals are located on the rear of the cabinet.)

CONNECTIONS

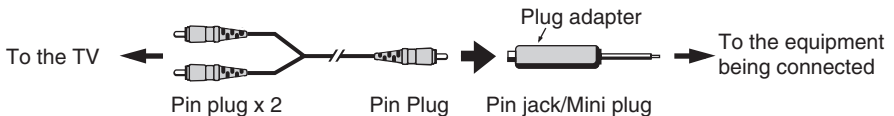
(Rear connection terminals of TV)



- (1) Before connecting the cables, turn on the TV and adjust the TV volume for a moderate listening level.
- (2) Turn off the TV and connect the audio cables to the AUDIO LINE OUTPUT terminals on the TV.
- (3) Turn the TV set and stereo amplifier on.
- (4) If you desire, you can turn off the sound of the TV's internal speakers by accessing the TV's AUDIO SELECT screen. See pages 16, 17.
- (5) Adjust the volume control on the stereo amplifier to a moderate listening level.
- (6) Control of the audio can be adjusted using the audio controls (STEREO/MONO/SAP, VOLUME, MUTE and FAO), from either the remote control, or directly from the TV set.

Note:

- For detailed information on the connection and use of auxiliary equipment, refer to the operation manuals of the equipment being used.
- When connecting monaural equipment to the AUDIO INPUT or OUTPUT of this set, use an audio connection cord and plug adaptor as shown below.
- When FAO is set to "OFF", we recommend you to keep the TV's audio output level high for optimal sound quality. (see page 16.)



Operation of Universal Remote Control

● Universal Remote Control

With the purchase of your television set you also have received the latest innovation in remote control technology. With its easy-to-use push button keyboard, your Remote can control your television set and most infrared remote controlled VCRs, cable TV converters and DVDs as well.

Note:

- Depending on the model year produced, brand and type of VCR, cable TV converter and DVD, some models may not be compatible with the remote control.
- Some brands may not enable channel selection until the **ENTER** is pressed. In such case, try the following.

Example:

- When you select channel 24,
- (1) Press **REMOTE KEYPAD** "2".
 - (2) Press **REMOTE KEYPAD** "4".
 - (3) Press **ENTER**.

For detailed information on the use of the Cable TV converter Box refer to their operating manuals.

● Using your Remote with your TV

After installing the batteries, set the **CATV/DVD-TV/VCR** on the Remote to the TV position. (If you can change the channel of the TV by pressing **CH ▲/▼** on the Remote Control, it is in the TV position.)

● "Identifying" VCRs, cable TV converters and DVDs

Your Remote Control has been set at the factory to operate your TV and many remote controlled VCRs, cable TV converters and DVDs. However, in some cases an easy one-time set-up step may be necessary before the Remote will operate accessory VCRs, cable TV converters and DVDs.

- In this set-up step, the Remote locates and memorizes the remote control transmitter code for the VCR, cable TV converters and DVDs.
- Once "identified", the Remote sends proper signals to operate your accessory.
- This identifying step will not have to be repeated until power to the Remote is interrupted due to a battery failure.

● Using your remote control with a VCR

Once you make certain the Remote Control has "identified" your remote controlled VCR or DVD, the Remote is ready to operate your unit. The various VCR or DVD function buttons on the Remote will not operate your VCR or DVD if those features are not already found on your unit.

- All VCR buttons will operate whether the Remote is in TV or VCR modes.
- For detailed information on the use of the VCR or DVD, refer to the operation manual of the VCR or DVD.

DVD/VCR POWER

Press to turn the VCR or DVD on and off.

PLAY ►

Press to playback a tape or disc.

REWIND ◀◀

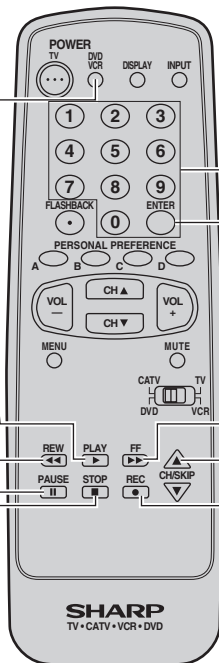
Press to rewind a tape or reverse a disc. For some VCRs or DVDs you may need to press **STOP** first, then **REWIND**.

PAUSE II

Press to temporarily stop the tape or disc during playback or recording (VCR only). Press again to release **PAUSE**.

STOP ■

Press to stop the tape or disc.



REMOTE KEYPAD

Use to enter two-digit code numbers when identifying your VCR, DVD and CATV converter.

ENTER

FF ►►

Press to rapidly advance the tape or disc. For some VCRs or DVDs, you may need to press **STOP** first, then **FF**.

VCR CHANNEL

UP (▲) / DOWN (▼)

Press to scan up or down through channels on the VCR.

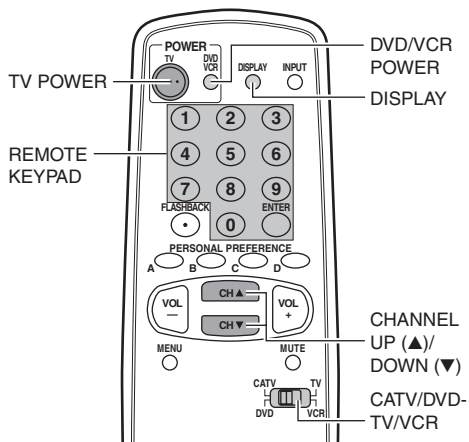
DVD SKIP

Press to jump forward to the beginning of the next chapter/track, or backward to the beginning of the current chapter/track, and automatically start to play that chapter/track.

RECORD ●

Press to begin recording. (VCR only)

Operation of Universal Remote Control (Continued)



● How to identify a VCR

The remote control may already be set to operate your VCR. Try this initial check before going on to the following "identifying" section.

- (1) Slide **CATV/DVD-TV/VCR** switch to VCR.
- (2) Point the Remote towards VCR and press **POWER (DVD/VCR)**.
- (3) Does the Remote turn the VCR ON and OFF?
 - If yes, the Remote is ready to operate the VCR and no further steps are needed.
 - If no, continue to the "identifying" section.

Setting Method

Refer to the following steps and list to quickly find the remote control code for your accessory VCR.

- First look up your VCR's remote control code number before going through the Setting Method.
- (1) Slide **CATV/DVD-TV/VCR** switch to VCR.
 - (2) Press and hold down **DISPLAY** and **CH ▼** on your remote control. Then release both buttons.
 - (3) Within 10 seconds after releasing **DISPLAY** and **CH ▼**, enter your VCR's two-digit remote control code number using the **REMOTE KEYPAD** (refer to the list).
 - The remote control is now ready to send commands to your VCR.

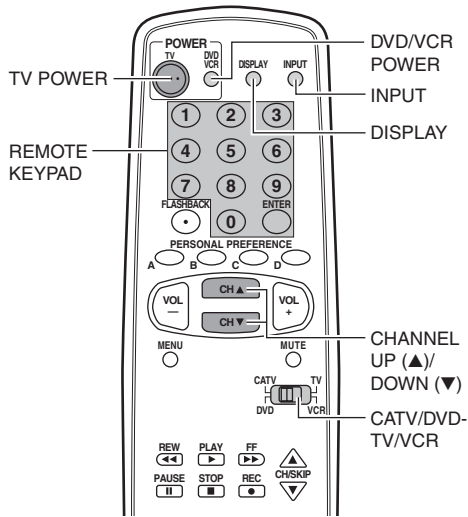
Some brands have more than one remote code listed, due to changes in the remote codes from early to later model years, or due to format differences (VHS/BETA). In such cases, you may have to try more than one code to find the code your VCR accepts.

Note: ➤

Depending on the model, year produced, brand, and type of VCR, some models may not be compatible with the remote control.

VCR BRAND	REMOTE CONTROL CODE NUMBER
Akai	25, 26, 37
Audio Dynamics	15, 22, 30
Broksonic	32
Canon	04
Capehart	34
Craig	10, 31
Curtis Mathis	04
Daewoo	34
DBX	15, 22, 30
Dynatech	29
Emerson	21, 32, 35
Fisher	09, 10, 11
Funai	28, 29
GE	04
Goldstar	24
Hitachi	06
Instant Replay	04
JC Penney	04, 06, 24, 30
JVC	15, 41, 42
Kenwood	14, 15
Lloyds	29
Magnavox	04, 05, 08
Magnin	31
Marantz	30
Memorex	04, 10, 24, 29
Minolta	06
Mitsubishi	17, 18, 39, 40
Montgomery Ward	02, 43
Multitech	29
NEC	15, 22, 30
Panasonic	04, 44, 45
Pentax	05, 06
Philco	04, 05
Philips	04, 05, 08
Quasar	04
RCA	06, 07, 33
Realistic	01, 02, 10, 24
Samsung	23, 31
Sanyo	14, 10
Scott	20
Sears	06, 11, 24
Sharp	01, 02, 03
Shintom	36
Sony	12, 13, 38
Sound Design	29
Sylvania	04, 05, 08
Symphonic	29
Tatung	15
Teac	15, 29
Teknika	27, 29
Thomas	29
TMK	21
Toshiba	19, 20
Video Concepts	30
Yamaha	15, 29, 30
Zenith	16

Operation of Universal Remote Control (Continued)



• How to identify a DVD

The remote control may already be set to operate your DVD. Try this initial check before going on to the following “identifying” section.

- (1) Slide **CATV/DVD-TV/VCR** switch to DVD.
- (2) Point Remote towards DVD and press **DVD/VCR POWER**.
- (3) Does the Remote turn the DVD ON and OFF?
 - If yes, the Remote is ready to operate the DVD and no further steps are needed.
 - If no, continue to the “identifying” section.

Setting Method.

Refer to the following steps and list to quickly find the remote control code for your accessory DVD.

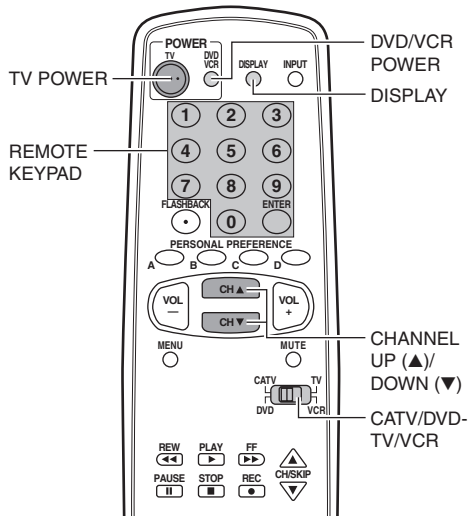
- First look up your DVD’s remote control code number before going through the Setting Method.
- (1) Slide **CATV/DVD-TV/VCR** switch to DVD.
 - (2) Press and hold down **INPUT** and **CH ▼** on your remote control. Then release both buttons.
 - (3) Within 10 seconds after releasing **INPUT** and **CH ▼**, enter your DVD’s two-digit remote control code number using **REMOTE KEYPAD** (refer to the list).
- The remote control is now ready to send commands to your DVD.

DVD BRAND	REMOTE CONTROL CODE NUMBER
Denon	02
JVC	09
Magnavox	04
Marantz	04
Mitsubishi	06
Panasonic	02
Philips	04
Pioneer	08
Proscan	03
RCA	03
Samsung	07
Sharp	01, 10
Sony	05
Toshiba	04
Yamaha	02
Zenith	04

Note: ➤

Depending on the model, year produced, brand, and type of DVD, some models may not be compatible with the remote control.

Operation of Universal Remote Control (Continued)



● How to identify a cable converter

Setting Method.

Refer to the following steps and list to quickly find the remote control code for your cable TV converter.

- First look up your converter's remote code number before going through the Setting Method below.
- (1) Slide **CATV /DVD-TV/VCR** switch to CATV.
- (2) Press and hold down **DISPLAY** and **CH ▼** on your remote control. Then release both buttons.
- (3) Within 10 seconds after releasing **DISPLAY** and **CH ▼**, enter your converter's two-digit code number using **REMOTE KEYPAD** (refer to the list).
- The remote control is now ready to send commands to your converter.
- Some brands have more than one remote code listed due to changes in the remote codes from early to later model years. In such cases, you may have to try more than one code to find the code your converter accepts.

CATV CONVERTER BRAND	REMOTE CONTROL CODE NUMBER
Anvision	07, 08
Cable Star	07, 08
Eagle	08
General Instrument	04, 05, 15, 23, 24, 25, 30, 36
Jerrold	04, 05, 15, 23, 24, 25, 30, 36
Magnavox	07, 08, 19, 25, 28, 29, 32, 33, 40, 41
Oak Sigma	18
Panasonic	27, 39
Philips	07, 08, 19, 26, 28, 29, 32, 33, 40, 41
Pioneer	18, 20
Randtek	07, 08
RCA	27, 43
Scientific Atlanta	03, 22, 42
Sony	44
Viewstar	07, 08, 19, 26, 28, 29, 32, 33, 40, 41
Zenith	14

Note: ➤

Depending on the model, year produced, brand, and type of CATV converter, some models may not be compatible with the remote control.

Before Calling for Service

Check these items and see if you can correct the trouble with a slight adjustment of the controls.

QUICK SERVICE CHECK LIST	PROBLEM																			
POSSIBLE REMEDY	No Playback of VCR and Disc Player	No Picture or Sound from External Video/Audio Products	Remote Control Doesn't Work	Bars on Screen	Picture Distorted	Picture Rolls Vertically	No Color	Poor Reception on Some Channels	Weak Picture	Lines or Streaks in Picture	Ghosts in Picture	Picture Blurred	Sound OK, Picture Poor	Picture OK, Sound Poor	No Picture or Sound	Dark and Blank Picture	External Electrical Noise Interfering with TV's Operation	Color on Part of the Screen Appears Distorted		
Try a new channel, if OK, then there is a possible station trouble.					X	X	X	X	X	X	X	X	X	X						
Is TV plugged in? Power at outlet?		X	X												X					
Is TV's POWER button on?		X													X					
Is antenna connected to terminal on the back of the set?							X	X	X		X		X	X						
If outside antenna is being used, check for broken wire.				X	X	X	X	X	X	X	X	X	X		X					
Check for local interference or external electrical noise.				X		X		X		X	X		X	X			X			
Turn off the POWER and then turn it on after about a minute.		X													X					
Adjust COLOR control.							X													
Adjust PICTURE control.									X				X							
Check external Video/Audio products: look for loose/broken connection leads. (Refer to pages 44-46)	X	X											X	X	X					
Check batteries of Remote Control.			X																	
Slide CATV/DVD-TV/VCR Select Switch to TV position.			X																	
Are audio cables connected firmly? Check the volume level.															X					
Is SPEAKER ON? See pages 16, 17.															X					
Change Closed Caption mode to "OFF"/Energy Save mode to "OFF".																	X			
Unplug the TV and plug it in again after 2 minutes or longer.			X			X	X	X	X				X	X	X	X	X	X		X

Note: ➔

- If no TEXT broadcast is being received while viewing in the TEXT mode, the screen may become dark and blank for some programs. Should this occur, switch the Closed Caption mode to "OFF".



(Dark and Blank Picture)

Calling for Service

For location of the nearest Sharp Authorized Servicer, or to obtain product literature accessories, supplies, or customer assistance, please call 1-800-BE-SHARP.

Warning message for Digital broadcasting

The warning message about reception of digital broadcast

The example of an warning message displayed on a screen	Possible Solution
<ul style="list-style-type: none"> Failed to receive broadcast. 	<ul style="list-style-type: none"> Check the antenna cable. Check that the antenna is correctly antenna setup.
<ul style="list-style-type: none"> No broadcast now. 	<ul style="list-style-type: none"> Check the broadcast time in the program guide.

Specifications

MODEL	27SF560	
Receiving System	American TV standard ATSC/NTSC system	
Stereo Broadcast	MTS/SAP	
Reception Channels		
AIR	VHF	2-13 ch
	UHF	14-69 ch
CATV	1-125 ch	
Digital Terrestrial Broadcast (8 VSB)	2-69 ch	
Channel Tuning	181-channel Reception PLL tuning system	
Antenna Input Impedance	VHF/UHF 75 ohm Unbalanced	
Screen Size	27" Diagonally Measured	
Terminals	Audio/Video input x 3 (Front x 1, Rear x 2) S-Video input x 1 (Rear) COMPONENT x 1 (Rear) Audio output x 1 (Rear) Antenna x 1 (Rear)	
Sound Output	5 W (RMS) x 2	
Power Source	AC 120 V, 60 Hz	
Power Consumption	XXX W	
Dimensions [(W) x (H) x (D)] mm	29 ³¹ / ₃₂ " (W) × 23 ⁹ / ₁₆ " (H) × 20 ¹⁷ / ₆₄ " (D) [761 mm (W) × 598.5 mm (H) × 515 mm (D)]	
Weight (approx.)	92.6 lbs. (42 kg)	

- Design and specifications are subject to change without notice.

Limited Warranty

CONSUMER LIMITED WARRANTY

SHARP ELECTRONICS CORPORATION warrants to the first consumer purchaser that this Sharp brand product (the "Product"), when shipped in its original container, will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for parts or labor for the period(s) set forth below.

This warranty does not apply to any appearance items of the Product nor to the additional excluded item(s) set forth below nor to any Product the exterior of which has been damaged or defaced, which has been subjected to improper voltage or other misuse, abnormal service or handling, or which has been altered or modified in design or construction.

In order to enforce the rights under this limited warranty, the purchaser should follow the steps set forth below and provide proof of purchase to the servicer.

The limited warranty described herein is in addition to whatever implied warranties may be granted to purchasers by law. ALL IMPLIED WARRANTIES INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE PERIOD(S) FROM THE DATE OF PURCHASE SET FORTH BELOW. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Neither the sales personnel of the seller nor any other person is authorized to make any warranties other than those described herein, or to extend the duration of any warranties beyond the time period described herein on behalf of Sharp.

The warranties described herein shall be the sole and exclusive warranties granted by Sharp and shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period of time described herein, shall constitute complete fulfillment of all liabilities and responsibilities of Sharp to the purchaser with respect to the Product, and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise. In no event shall Sharp be liable or in any way responsible, for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than an authorized servicer. Nor shall Sharp be liable or in any way responsible for any incidental or consequential economic or property damage. Some states do not allow the exclusion of incidental or consequential damages, so that above exclusion may not apply to you.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Model Specific Section

Your Product Model Number & Description:

27SF560, 27 inch Color Television
(Be sure to have this information available when you need service for your Product.)

Warranty Period for this Product:

One (1) year parts and labor. The warranty period continues for an additional one (1) year, for a total of two (2) years, with respect to the picture tube(s) in the Product for parts only. Labor and service are not provided free of charge for this additional period.

Additional Item(s) Excluded from Warranty Coverage (if any):

Non-rechargeable batteries.

Where to Obtain Service:

From a Sharp Authorized Servicer located in the United States. To find the location of the nearest Sharp Authorized Servicer, call Sharp toll free at 1-800-BE-SHARP.

What to Do to Obtain Service:

Contact your Sharp Authorized Servicer to obtain in-home service for this Product. The Servicer will come to your home and if it is necessary to remove the Product, the Servicer will reinstall it. Be sure to have **Proof of Purchase** available.