

## FUNAI CORPORATION LIMITED WARRANTY

FUNAI CORP. will repair this product, free of charge in the USA in the event of defect in materials or workmanship as follows:

### DURATION:

**PARTS:** FUNAI CORP. will provide parts to replace defective parts without charge for one (1) year from the date of original retail purchase. Two (2) years for Picture Tube. Certain parts are excluded from this warranty.

**LABOR:** FUNAI CORP. will provide the labor without charge for a period of ninety (90) days from the date of original retail purchase.

### LIMITS AND EXCLUSIONS:

THIS WARRANTY IS EXTENDED ONLY TO THE ORIGINAL RETAIL PURCHASER. A PURCHASE RECEIPT OR OTHER PROOF OF ORIGINAL RETAIL PURCHASE WILL BE REQUIRED TOGETHER WITH THE PRODUCT TO OBTAIN SERVICE UNDER THIS WARRANTY.

This warranty shall not be extended to any other person or transferee.

This warranty is void and of no effect if any serial numbers on the product are altered, replaced, defaced, missing or if service was attempted by an unauthorized service center. This FUNAI CORPORATION Limited warranty does not apply to any the product not purchased and used in the United States.

This warranty only covers failures due to defects in material or workmanship which occurs during normal use. It does not cover damage which occurs in shipment, or failures which are caused by repairs, alterations or product not supplied by FUNAI CORP., or damage which results from accident, misuse, abuse, mishandling, misapplication, alteration, faulty installation, improper maintenance, commercial use such as hotel, rental or office use of this product or damage which results from fire, flood, lightning or other acts of God.

THIS WARRANTY DOES NOT COVER PACKING MATERIALS, ANY ACCESSORIES (EXCEPT REMOTE CONTROL), ANY COSMETIC PARTS, COMPLETE ASSEMBLY PARTS, DEMO OR FLOOR MODELS.

FUNAI CORP. AND ITS REPRESENTATIVES OR AGENTS SHALL IN NO EVENT BE LIABLE FOR ANY GENERAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR OCCASIONED BY THE USE OF OR THE INABILITY TO USE THIS PRODUCT. THIS WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND OF ALL OTHER LIABILITIES ON THE PART OF FUNAI, ALL OTHER WARRANTIES INCLUDING THE WARRANTY OF MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED BY FUNAI AND ITS REPRESENTATIVES IN THE UNITED STATES. ALL WARRANTY INSPECTIONS AND REPAIRS MUST BE PERFORMED BY FUNAI AUTHORIZED SERVICE CENTER. THIS WARRANTY IS VALID WHEN THE UNIT IS CARRIED-IN TO FUNAI AUTHORIZED SERVICE FACILITY.

THE PRODUCT MUST BE ACCOMPANIED BY A COPY OF THE ORIGINAL RETAIL PURCHASE RECEIPT. IF NO PROOF OF PURCHASE IS ATTACHED, THE WARRANTY WILL NOT BE HONORED AND REPAIRS COSTS WILL BE CHARGED.

### IMPORTANT:

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE. IF, AT ANY TIME DURING THE WARRANTY PERIOD, YOU ARE UNABLE TO OBTAIN SATISFACTION WITH THE REPAIR OF THIS PRODUCT, PLEASE CONTACT FUNAI CORP.

### ATTENTION:

FUNAI CORP. RESERVES THE RIGHT TO MODIFY ANY DESIGN OF THIS PRODUCT WITHOUT PRIOR NOTICE.

To locate your nearest FUNAI Authorized Service Center or general service procedure, please call 1-800-242-7158 or write to the following:

FUNAI CORPORATION, INC.  
SERVICE CENTER  
19900 Van Ness Avenue, Torrance, CA 90501  
Tel :1-800-242-7158  
<http://www.funai-corp.com>

Head Office: 100 North Street, Teterboro, NJ 07608

PLEASE DO NOT SHIP YOUR UNIT TO THE TETERBORO ADDRESS.

OEMN02332

Printed in Malaysia  
L2200UA / L2300UA \* \* \* \* \*

# Owner's Manual

# Symphonic

## COLOR TELEVISION

### 6413TE (13 inch)

### 6419TE (19 inch)

## FEATURES

### ● Tinted, Bright Black Matrix Picture Tube

● **181 Channel Selection-** All VHF/UHF channels plus up to 125 cable channels.

● **PLL Frequency Synthesized Tuning-** The latest PLL frequency synthesized electronic tuning system provides free and easy channel selection, and lets you tune directly to any channel using the channel number buttons (0~9 and +100-key) on the remote control.

### ● On-Screen Function Display.

### ● Full-Function Remote Control

### ● Sleep Timer

● **Closed Caption Decoder-** You may view specially labeled (cc) TV programs, movies, news, prerecorded tapes, etc. with either a dialogue caption or text display added to the program.

● **Auto Shut Off Function-** If there is no air signal input from the antenna terminal and no operation for 15 minutes, the TV will turn itself off automatically.

● **V-CHIP-** Enables parents to prevent their children from watching inappropriate material on TV.

## PRECAUTION

● Place your TV in a room with adequate ventilation.

● Keep your TV set away from sources of direct heat, such as heat registers or direct sunlight.

● Do not place your TV on soft surfaces, such as rugs or blankets.

● Leave enough room for air to circulate around the bottom, top and back of the set.

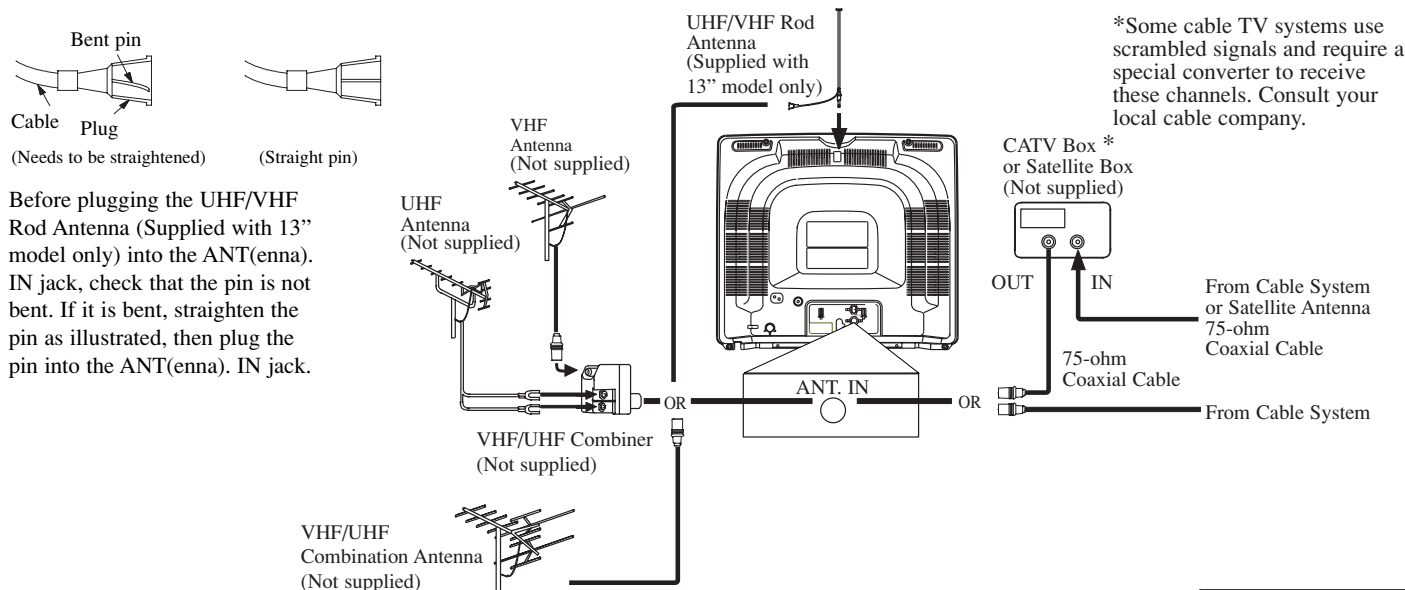
The serial number of this product may be found on the back of the TV. No others have the same serial number as yours. You should record the number and other vital information here and retain this book as a permanent record of your purchase to aid identification in case of theft.

|                      |  |                  |  |
|----------------------|--|------------------|--|
| Date of Purchase     |  | Dealer Phone No. |  |
| Dealer Purchase from |  | Model No.        |  |
| Dealer Address       |  | Serial No.       |  |

This Owner's Manual is made of recycled paper.

IF YOU NEED ADDITIONAL ASSISTANCE FOR SET-UP OR OPERATING  
AFTER READING OWNER'S MANUAL, PLEASE CALL TOLL FREE  
1-800-242-7158, OR VISIT OUR WEB SITE AT <http://www.funai-corp.com>

## ANTENNA/CABLE CONNECTIONS



**FCC WARNING-** This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

**CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.**

**ATTENTION:**  
**POUR ÉVITER LES CHOC ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.**

### Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

## CLOSED CAPTION

This TV can receive C1 and C2 of Caption and Text.

### Caption Mode

(1) Characters can be displayed on the TV screen when the received broadcast signal contains the Caption Signals.

(2) **Paint-on mode:** Displays input characters on the screen immediately.

**Pop-on mode:** Once characters are stored in memory, it is displayed all at once.

**Roll-up mode:** Displays the characters continuously by scrolling (max. 4 lines)

**Note:** If the CAPTION C1 or C2 is selected but the caption signal is not included, characters will not be displayed.

### Text Mode

(1) Displays the text on the screen by scrolling (max. 7 lines)

(2) If the received broadcast signal does not contain the caption or text signal, no change will occur.

### Notes:

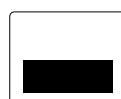
(1) When your TV receives a special effects playback signal (i.e., Search, Slow, Still) from a VCR's video output channel (CH3 or CH4), your TV may not display the correct caption or text.

(2) Captions and texts may not match the TV voice exactly.

(3) Interference may cause the closed caption system not to function properly.

(4) The caption or text characters will not be displayed while the menu display or function's display is shown.

(5) **If you see this screen :**



If your TV displays a black box on the screen, this means that your TV is set to TEXT mode. To clear screen, select CAPTION C1, C2 or CAPTION [OFF].

**WARNING:**  
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLI-  
ANCE TO RAIN OR MOISTURE.



**CAUTION**  
**RISK OF ELECTRIC SHOCK**  
**DO NOT OPEN**

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

The important note is located on the rear of the cabinet.



THIS SYMBOL INDICATES THAT DAN-  
GEROUS VOLTAGE CONSTI-TUTING A  
RISK OF ELECTRIC SHOCK IS PRE-  
SENT WITHIN THIS UNIT.



THIS SYMBOL INDICATES THAT  
THERE ARE IMPORTANT OPERATING  
AND MAINTENANCE INSTRUCTIONS  
IN THE LITERATURE ACCOMPANY-ING  
THE APPLIANCE.

# IMPORTANT SAFEGUARDS

1. Read instructions-All the safety and operating instruc-  
tions should be read before the appliance is operated.

2. Retain Instructions-The safety and operating instruc-  
tions should be retained for future reference.

3. Heed Warnings-All warnings on the appliance and in  
the operating instructions should be adhered to.

4. Follow Instructions-All operating and use instructions  
should be followed.

5. Cleaning-Unplug TV from the wall outlet before clean-  
ing. Do not use liquid cleaners or aerosol cleaners. Use  
a damp cloth for cleaning.  
**EXCEPTION:** A product that is meant for uninterrupt-  
ed service and, that for some specific reason, such as  
the possibility of the loss of an authorization code for a  
CATV converter, is not intended to be unplugged by  
the user for cleaning or any other purpose, may  
exclude the reference to unplugging the appliance in  
the cleaning description otherwise required in item 5.

6. Attachments-Do not use attachments not recommended  
by the TV manufacturer as they may cause hazards.

7. Water and Moisture-Do not use this TV near water, for  
example, near a bath tub, wash bowl, kitchen sink, or  
laundry tub, in a wet basement, or near a swimming  
pool, and the like.

8. Accessories-Do not place this TV on an unstable cart,  
stand, tripod, bracket, or table. The TV may fall, caus-  
ing serious injury to someone, and serious damage to  
the appliance. Use only with a cart, stand, tripod,  
bracket, or table recommended by the manufacturer, or  
sold with the TV.  
Any mounting of the appliance should follow the man-  
ufacturer's instructions and should  
use a mounting accessory recom-  
mended by the manufacturer. An  
appliance and cart combination  
should be moved with care. Quick  
stops, excessive force, and uneven  
surfaces may cause the appliance  
and cart combination to overturn.

9. Ventilation-Slots and openings in the cabinet and the  
back or bottom are provided for ventilation and to  
ensure reliable operation of the TV and to protect it  
from overheating, these openings must not be blocked  
or covered. The openings should never be blocked by  
placing the TV on a bed, sofa, rug, or other similar sur-  
face. This TV should never be placed near or over a  
radiator or heat register. This TV should not be placed  
in a built-in installation such as a bookcase or rack  
unless proper ventilation is provided or the manufac-  
turer's instructions have been adhered to .

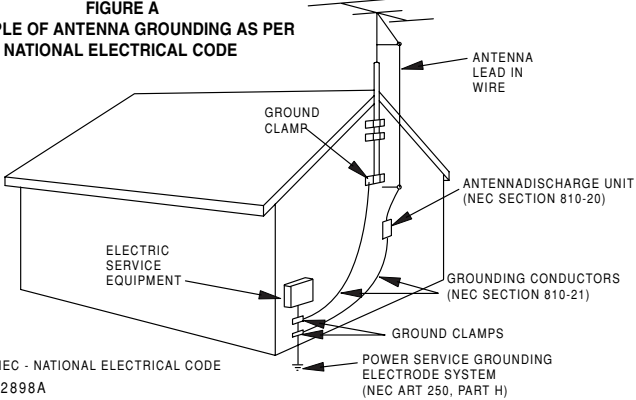
10. Power Sources-This TV should be operated only from  
the type of power source indicated on the marking  
label. If you are not sure of the type of power supply to  
your home, consult your appliance dealer or local  
power company. For TVs intended to operate from bat-  
tery power, or other sources, refer to the operating  
instructions.

11. Grounding or Polarization-This TV is equipped with a  
polarized alternating-current line plug(a plug having  
one blade wider than the other). This plug will fit into  
the power outlet only one way. This is a safety feature.  
If you are unable to insert the plug fully into the outlet,  
try reversing the plug. If the plug should still fail to fit,  
contact your electrician to replace your obsolete outlet.  
Do not defeat the safety purpose of the polarized plug.

12. Power-Cord Protection-Power-supply cords should be  
routed so that they are not likely to be walked on or

SYMBÔLE D'AVERTISSEMENT POUR  
LES COMPOSANTES  
APPAREIL ET MEUBLE À ROULETTES  
  
SST26A

**FIGURE A**  
**EXAMPLE OF ANTENNA GROUNDING AS PER**  
**NATIONAL ELECTRICAL CODE**



ANTENNA LEAD IN WIRE

GROUND CLAMP

ANTENNADISCHARGE UNIT  
(NEC SECTION 810-20)

ELECTRIC SERVICE EQUIPMENT

GROUNDING CONDUCTORS  
(NEC SECTION 810-21)

GROUND CLAMPS

POWER SERVICE GROUNDING  
ELECTRODE SYSTEM  
(NEC ART 250, PART H)

NEC - NATIONAL ELECTRICAL CODE  
S2898A

13. Outdoor Antenna grounding-If an outside antenna or  
cable system is connected to the TV, be sure the anten-  
na or cable system is grounded so as to provide some  
protection against voltage surges and built-up static  
charges. Article 810 of the National Electrical Code,  
ANSI/NFPA No. 70, provides information with respect  
to proper grounding of the mast and supporting struc-  
ture, grounding of the lead-in wire to an antenna dis-  
charge unit, size of grounding conductors, location of  
antenna-discharge unit, connection to grounding elec-  
trodes, and requirements for the grounding electrode.  
(Fig. A)

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

15. Power Lines-An outside antenna system should not be  
located in the vicinity of overhead power lines or other  
electric light of 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.

16. Overloading-Do not overload wall outlets and exten-  
sion cords as this can result in a risk of fire or electric  
shock.

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

18. Servicing-Do not attempt to service this TV yourself as  
opening or removing covers may expose you to dan-  
gerous voltage or other hazards. Refer all servicing to  
qualified service personnel.

19. Damage Requiring Service-Unplug this TV from the  
wall outlet and refer servicing to qualified service per-  
sonnel under the following conditions:  
a. When the power supply cord or plug is damaged or  
frayed.  
b. If liquid has been spilled, or objects have fallen into  
the TV.  
c. If the TV has been exposed to rain or water.  
d. If the TV does not operate normally by following the  
operating instructions. Adjust only those controls that  
are covered by the operating instructions, as improper  
adjustment of other controls may result in damage and  
will often require extensive work by a qualified techni-  
cian to restore the TV to its normal operation.  
e. If the TV has been dropped or damaged in any way.  
f. When the TV exhibits a distinct change in perfor-  
mance-this indicates a need for service.

20. Replacement Parts-When replacement parts are  
required, be sure the service technician uses replace-  
ment parts specified by the manufacturer that have the  
same characteristics as the original part. Unauthorized  
substitutions may result in fire, electric shock, injury to  
persons or other hazards.

21. Safety Check-Upon completion of any service or  
repairs to this TV, ask the service technician to perform  
routine safety checks to determine that the TV is in  
proper operating condition.

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

This manual covers 13" and 19". The operation of the two models are exactly the same except the appearance. 19" model is illustrated in this manual.

## OPERATING CONTROLS AND FUNCTIONS

### - FRONT PANEL -

### - REMOTE CONTROL -

1. **VIDEO (in) jack-** Connect to the video  
output jack of a video camera or VCR.

2. **AUDIO (in) jack-** Connect to the audio  
output jack of a video camera or VCR.

3. **EARPHONE jack-** To connect earphone  
(not supplied) for personal listening.  
**NOTE:** Do not connect earphones that have  
an L-shaped plug. The plug may interfere  
with the cabinet.

4. **MENU button-** Press to display the menu  
on the TV screen.

5. **VOLUME ▲/▼ buttons-** Press to control  
the volume level.  
Press to determine a setting mode from the  
menu on the TV screen. (only the VOL ▲  
button)  
Press to select or adjust from a particular  
menu. (for example: Language Selection,  
Channel Presetting, Closed Caption Selection,  
Picture Adjustment, V-CHIP Set Up)

6. **CHANNEL ▲/▼ buttons-** Press to select  
memorized channel.  
**NOTE:**You MUST PRESET channels  
BEFORE using CHANNEL ▲/▼ button.  
(See CHANNEL PRESETTING)  
Press to select a setting mode from the  
menu on the TV screen.  
Press to select item you want to adjust in  
the picture control mode.

7. **POWER button-** Press to turn the TV ON  
and OFF.

### - REAR PANEL -

8. **Infrared Sensor Window-** Receives the  
infrared control signals from the remote  
control unit.

9. **CHANNEL NUMBER buttons-** Press two  
digits to directly access the desired channel.  
Remember to press a "0" before a single  
digit channel.  
**+100 button-** Press to select cable channels  
which are equal or greater than number 100.

10. **MUTE button-** Press the MUTE button to  
turn off the sound portion of the TV pro-  
gram. (Volume level display turns LIGHT  
RED from LIGHT BLUE.) Press the  
MUTE button again or press the VOL(ume)  
▲ or ▼ button to restore sound.

11. **CHANNEL RETURN button-** Press this  
button to go back to the previously viewed  
channel. For example, pressing the CHAN-  
NEL RETURN button once will change  
channel display from CH 3 (present chan-  
nel) to CH 10 (previously viewed channel),  
and pressing it second time will return from  
CH 10 to CH 3.

12. **DISPLAY button-** Press to display the  
channel number on the screen. If you press  
it again, the channel number will disappear.

13. **SLEEP button-** Press the SLEEP button to  
display the sleep timer and start the func-  
tion. The shut off time can be determined  
by the number of times you press the but-  
ton. (0, 10, 20, 30,...90, 0 minutes)

14. **GAME button-** Press to set the Game  
mode and external input mode at the same  
time. Press the GAME button again to exit  
the mode.

15. **ANT(enna). IN jack-** Connect to an anten-  
na, cable system, or satellite system.

16. **AC cord-** Connect to a standard AC outlet  
(120V/60Hz).  
**NOTE:** Remove the AC cord from the  
hook to avoid breaking a wire before you  
connect to a standard AC outlet.

**INSTALLING THE BATTERIES**

1 Slide the battery compartment cover on  
the remote unit.

2 Insert 2 "AA" penlight batteries into bat-  
tery compartment in the direction as indicated  
by the polarity (+ / -) markings. Batteries  
installed with incorrect polarity may damage  
the remote unit.

3 Replace the cover.



**EXTERNAL INPUT MODE**

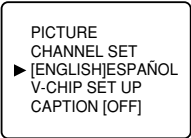
When using an external input signal (VCR or  
camcorder), connect the player's audio/video  
output cables to the AUDIO IN/ VIDEO IN  
jacks of your TV. Then press the GAME button.  
For details, see "USING THE GAME BUT-  
TON" in PICTURE ADJUSTMENT section.

PREPARATION FOR USE

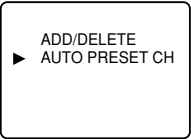
LANGUAGE SELECTION

If you want to change the language of the on-screen menu, follow the procedure below.

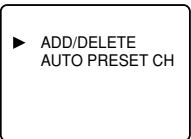
- 1
- Connect the power cord to a standard AC outlet.
- 2
- Press the POWER button to turn on the TV.
- 3
- Press the MENU button so that the menu display appears on the TV screen.
- 4
- Press the CH(annel) ▲ or ▼ button to point to "[ENGLISH]".
- 5
- Select "ENGLISH" or "ESPAÑOL" = Spanish by using the VOL(ume) ▲ or ▼ button.
- 6
- Press the MENU button to exit the menu.



- 4
- Press the CH(annel) ▲ or ▼ button to point to "AUTO PRESET CH". Then, press the VOL(ume) ▲ button.
- The tuner scans and memorizes all active channels in your area.
- The TV distinguishes between standard TV channels and cable channels.
  - When AUTO PRESET CH action is completed, the lowest memorized channel reappears on the screen.
  - When you press the CH(annel) ▲ or ▼ button after selecting AUTO PRESET CH, the tuner will stop at the memorized channels only.
  - The TV may recognize TV channels to be CATV channels by the receiving conditions. In this case, try AUTO PRESET CH action again in the fine receiving conditions.
  - When AUTO PRESET CH is activated where there is no TV signal input, "NO TV SIGNALS" will appear on the display after the completion of the channel scanning.



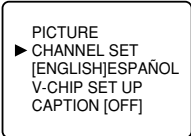
- [ADD/DELETE FUNCTION]
- 1) Press the MENU button so that the menu display appears on the TV screen.
  - 2) Press the CH(annel) ▲ or ▼ button to point to "CHANNEL SET". Then, press the VOL(ume) ▲ button.
  - 3) Press the VOL(ume) ▲ button so that "ADD/DELETE" is selected.
  - 4) Use the CH(annel) ▲ or ▼ button to select the channel you wish to put into memory or to erase from memory.  
**Note:** The display will return to the screen in about 10 seconds. Perform "ADD/DELETE" function while this display appears on the screen.
  - Press the VOL(ume) ▲ or ▼ button to light up the channel number in LIGHT BLUE if you wish to add the channel into memory.
  - Press the VOL(ume) ▲ or ▼ button to light up the channel number in LIGHT RED if you wish to erase the channel from memory.
  - 5) Press the MENU button to exit the menu.



CHANNEL PRESETTING

**NOTE:**You MUST PRESET channels BEFORE using CHANNEL ▲ or▼ button. To preset a channel or to change a preset channel, follow the procedure below.

- 1
- Press the POWER button to turn on the TV.
- 2
- Press the MENU button so that the menu display appears on the TV screen.
- 3
- Press the CH(annel) ▲ or ▼ button to point to "CHANNEL SET". Then, press the VOL(ume) ▲ button.



OPERATIONS

WATCHING A TV PROGRAM

- 1) Press the POWER button to turn on the TV.
- 2) Select the desired channel with the CH(annel) ▲ or ▼ button.
- 3) Adjust the volume to the desired listening level using the VOL(ume) ▲ or ▼ button.
- 4) Adjust picture controls for a natural looking image. (See "PICTURE ADJUSTMENT".)

SETTING THE SLEEP TIMER

The sleep timer function enables you to shut off the power without pressing the POWER button after a desired time period.

- 1) Press the POWER button to turn on the TV and press the SLEEP button on the remote control .
- 2) You may change the sleep time with pressing the SLEEP button on the remote control repeatedly. The timer is set up to 90 minutes, 10 minutes each time the SLEEP button is pushed. (The timer display counts up and sleep timer will be displayed on the screen when you press the SLEEP button on the remote control.)



**To cancel the sleep timer:**  
Press the SLEEP button repeatedly until "SLEEP 0" is displayed.

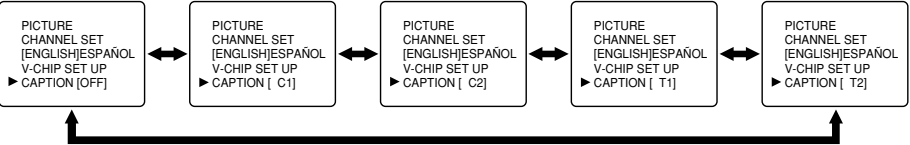
**Note:** When you disconnect the unit from the AC outlet, or if you have a power failure, the sleep time will be lost.

CLOSED CAPTION SELECTION

You may view specially labeled (cc) TV programs, movies, news, prerecorded tapes, etc. with either a dialogue caption or text display added to the program.

- 1) Press the MENU button so that the menu display appears on the TV screen.
- 2) Press the CH(annel) ▲ or ▼ button to point to "CAPTION".
- 3) Press the VOL(ume) ▲ or ▼ button to select the mode you wish.
- 4) When done, press the MENU button to exit the menu.

↔ : Press the VOL(ume) ▲ or ▼ button.



PICTURE ADJUSTMENT

- 1) Press the MENU button so that the menu display appears on the TV screen.
- 2) Press the VOL(ume) ▲ button so that "PICTURE" is selected.
- 3) Select the feature you wish to adjust with the CH(annel) ▲ or ▼ button and adjust it with the VOL(ume) ▲ or ▼ button.

**GAME MODE**  
Set to the most suitable position for TV GAME.

- [+] : ON
- [-] : OFF

**BRIGHT**  
Adjust until the whitest parts of the picture are as bright as you prefer.

- [+] : increase brightness
- [-] : decrease brightness

**CONTRAST**  
Adjust to increase or decrease contrast.

- [+] : increase contrast
- [-] : decrease contrast

**COLOR**  
Adjust to be brilliant or pale color.

- [+] : be brilliant color
- [-] : be pale color

**TINT**  
Adjust to obtain natural skin tones.

- [+] : greenish tone
- [-] : reddish tone

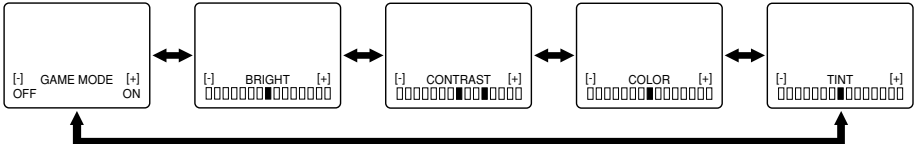
**Notes:**

- "+" is achieved by pressing the VOL(ume) ▲ button and "-" by pressing the VOL(ume) ▼ button.

- In the above steps, the picture adjustment display will disappear from the TV screen after about 10 seconds unless you press any buttons, even though you may not be finished. Press the MENU and VOL(ume) ▲ button so that "PICTURE" is selected. Then, press the CH(annel) ▲ or ▼ button repeatedly until the display returns to the screen.
- If you adjust the other Picture control after you set the Game mode to [ON], the Game mode is set to [OFF] automatically.

- [USING THE GAME BUTTON]
- You may also set the Game mode and external input mode at the same time by pressing the GAME button on the remote control. "GAME" appears on the TV screen.
- To exit the Game mode and external input mode, press the GAME button on the remote control again.
  - To cancel the Game mode only, adjust the picture control. The Game mode will be set to [OFF] automatically as explained in the previous section. In this case, "VIDEO"(external input mode) instead of "GAME" appears on the TV screen.
  - When you press the GAME button if the TV is off, the TV turns on and will be in the Game mode and external input mode automatically.

↔ : Press the CH(annel) ▲ or ▼ button.



OPERATIONS (Continued)

V-CHIP SET UP

V-CHIP enables parents to prevent their children from watching inappropriate material on TV. V-CHIP reads the ratings for programming (except for news and sports programs, unedited movies on premium cable channels, and Emergency Broadcast System signals), then denies access to programming if the program's rating meets the limitations you select. In this case, "PROTECTED PROGRAM by ..." message appears on the TV screen. To block ratings, follow the steps below.

- Programming may be rated by the Motion Picture Association of America (MPAA) or according to the Television Parental Guidelines. In order to block any inappropriate programming, set your limits in both places (MPAA RATING and TV RATING).
- You cannot access the menu when the "PROTECTED PROGRAM by ..." message appears. In this case, change to the unblocked channel, then press the MENU button.

[MPAA RATING SET UP]

1 Press the MENU button so that the menu display appears on the TV screen.

2 Press the CH(annel) ▲ or ▼ button to point to "V-CHIP SET UP". Then, press the VOL(ume) ▲ button.

3 Press the CH(annel) ▲ or ▼ button to point to "MPAA RATING". Then, press the VOL(ume) ▲ button.

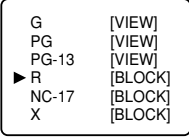
4

Press the CH(annel) ▲ or ▼ button to point to your desired item. Then, press the VOL(ume) ▲ button to select [BLOCK] or [VIEW].

| <Selection> | <Rating Category Explanations>                                      |
|-------------|---------------------------------------------------------------------|
| • G:        | General Audience                                                    |
| • PG:       | Parental Guidance suggested.                                        |
| • PG-13:    | Unsuitable for children under 13                                    |
| • R:        | Restricted; under 17 requires accompanying parent or adult guardian |
| • NC-17:    | No one under 17 admitted                                            |
| • X:        | Mature audience only                                                |

- When you select the rating category and turn it [BLOCK], the higher rating will turn [BLOCK] automatically. Also, the lower rating will turn [VIEW] automatically.
- When you turn "G" to [BLOCK] or [VIEW], the all ratings will turn to [BLOCK] or [VIEW] automatically.
- When you turn "X" to [VIEW], the all ratings will turn to [VIEW] automatically.

5 Press the MENU button to exit the menu.



[TV RATING SET UP]

1 Press the MENU button so that the menu display appears on the TV screen.

2 Press the CH(annel) ▲ or ▼ button to point to "V-CHIP SET UP". Then, press the VOL(ume) ▲ button.

3 Press the CH(annel) ▲ or ▼ button to point to "TV RATING". Then, press the VOL(ume) ▲ button.

4

Press the CH(annel) ▲ or ▼ button to point to your desired item. Then, press the VOL(ume) ▲ button to select [BLOCK] or [VIEW].

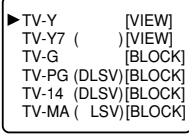
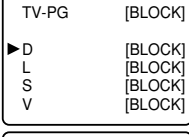
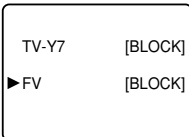
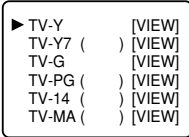
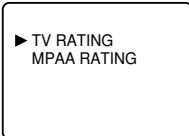
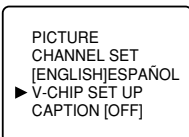
| <Selection> | <Rating Category Explanations>           |
|-------------|------------------------------------------|
| • TV-Y:     | Appropriate for all children             |
| • TV-Y7:    | Appropriate for children seven and older |
| • TV-G:     | General Audience                         |
| • TV-PG:    | Parental Guidance suggested.             |
| • TV-14:    | Unsuitable for children under 14         |
| • TV-MA:    | Mature audience only                     |

- When you select the rating category and turn it [BLOCK], the higher rating will turn [BLOCK] automatically. Also, the lower rating will turn [VIEW] automatically.
- When you turn "TV-Y" to [BLOCK] or [VIEW], the all ratings will turn to [BLOCK] or [VIEW] automatically.
- When you turn "TV-MA" to [VIEW], the all ratings will turn to [VIEW] automatically.

When you select TV-Y7, TV-PG, TV-14, or TV-MA and you press the VOL(ume) ▲ button, the sub-ratings will appear on the TV screen. If you select the rating category (example: TV-PG) and turn it [BLOCK] or [VIEW], the sub-ratings (example: V for Violence) will turn [BLOCK] or [VIEW] automatically. You can set the sub-ratings to [BLOCK] or [VIEW] individually when the rating category is set to [BLOCK]. To set the sub-ratings individually, follow the steps below.

- **When you select [TV-Y7]:**  
Press the CH(annel) ▲ or ▼ button to select "FV" (Fantasy Violence). Then, press the VOL(ume) ▲ button to select [BLOCK] or [VIEW].
- **When you select [TV-PG], [TV-14] or [TV-MA]:**  
Press the CH(annel) ▲ or ▼ button to select "D"(Suggestive Dialog), "L"(Coarse Language), "S"(Sexual Situation), or "V"(Violence). Then, press the VOL(ume) ▲ button to select [BLOCK] or [VIEW].  
**Note:** When you select [TV-MA], "D" does not appear on the TV screen.
- The sub-ratings which set to [BLOCK] appears next to the rating category in the TV RATING menu.

5 Press the MENU button to exit the menu.



TROUBLESHOOTING GUIDE

Sometimes a performance problem can be easily solved by checking seemingly apparent but often overlooked possibilities. Before arranging for service, check these items. It could save your time and money.

| QUICK SERVICE CHECK LIST                                                                                                                                                                                                                             | PROBLEM | 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 | Different color marks on screen |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------------------|----------------|-------------------|--------------------------|----------|---------------------------------|--------------|-----------------------------|-------------------|-----------------|------------------------|------------------------|---------------------|---------------------------------|
| POSSIBLE REMEDY                                                                                                                                                                                                                                      |         |                             |                |                   |                          |          |                                 |              |                             |                   |                 |                        |                        |                     |                                 |
| Try a new channel, if OK, then possible station trouble.                                                                                                                                                                                             |         |                             | X              | X                 | X                        | X        | X                               | X            | X                           | X                 | X               | X                      | X                      | X                   | X                               |
| Is TV plugged in?<br>Power at outlet?                                                                                                                                                                                                                | X       |                             |                |                   |                          |          |                                 |              |                             |                   |                 |                        |                        | X                   |                                 |
| Is TV's POWER button on?                                                                                                                                                                                                                             |         |                             |                |                   |                          |          |                                 |              |                             |                   |                 |                        |                        | 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                      | X                      | X                   |                                 |
| Check for local interference.                                                                                                                                                                                                                        |         | X                           |                | X                 |                          | X        |                                 |              | X                           | X                 |                 | X                      | X                      |                     |                                 |
| Turn off with POWER button and then turn it on after about a minute.                                                                                                                                                                                 |         |                             |                |                   |                          |          |                                 |              |                             |                   |                 |                        |                        | X                   |                                 |
| Adjust COLOR control.                                                                                                                                                                                                                                |         |                             |                |                   |                          | X        |                                 |              |                             |                   |                 | X                      |                        |                     |                                 |
| Adjust CONTRAST & BRIGHT control.                                                                                                                                                                                                                    |         |                             |                |                   |                          |          |                                 | X            |                             |                   |                 | X                      |                        |                     |                                 |
| Check batteries in Remote Control.                                                                                                                                                                                                                   | X       |                             |                |                   |                          |          |                                 |              |                             |                   |                 |                        |                        |                     |                                 |
| Move the TV away from the nearby appliances which have Magnetism.<br>19" model: Turn off using the power button, then turn it on again 30 minutes or so later.<br>13" model: Unplug the TV power cord, then plug it in again 30 minutes or so later. |         |                             |                |                   |                          |          |                                 |              |                             |                   |                 |                        |                        |                     | X                               |

| Closed Caption Problem                                                                                | Possible Remedy                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| My TV is showing captions that are misspelled.                                                        | You are watching a live broadcast and spelling errors made by the closed captioning production company may pass through uncorrected. A prerecorded program will not show any misspelled words because of the normal time available for editing the captions.                                                                                       |
| My TV will not show the text in its entirety or there is a delay of what is being said.               | Captions that are delayed a few seconds behind the actual dialogue are common for live broadcasts. Most captioning production companies can display a dialogue to a maximum of 220 words per minute. If a dialogue exceeds that rate, selective editing is used to insure that the captions remain up-to-date with the current TV screen dialogue. |
| My captions are scrambled with white boxes on the TV screen.                                          | Interference caused by building, power lines, thunderstorms, etc. may cause scrambled or incomplete captions to appear.                                                                                                                                                                                                                            |
| My program guide listed a TV show as being closed captioned but none of the captions were displayed.  | Broadcasters may at times use a time compression process to the actual program so that additional advertising time can be given. Since the decoder cannot read the compressed information, captions will be lost.                                                                                                                                  |
| My prerecorded videotape does not show any captions. The tape box mentions it being closed captioned. | The videotape was either an illegal copying or the tape duplicating company accidentally left out the captioning signals during the copying process.                                                                                                                                                                                               |
| My TV screen shows a black box on certain channels.                                                   | You are in the TEXT mode. Select CAPTION mode or CAPTION [OFF].                                                                                                                                                                                                                                                                                    |

MAINTENANCE

CABINET CLEANING

- Wipe the front panel and other exterior surfaces of the TV with a soft cloth immersed in lukewarm water and wrung dry.
- Never use a solvent or alcohol. Do not spray insecticide liquid near the TV. Such chemicals may cause damage and discoloration to the exposed surfaces.

PICTURE TUBE CLEANING

Wipe the picture tube of the TV with a soft cloth. Before cleaning the picture tube, disconnect the power cord.

SPECIFICATIONS

GENERAL SPECIFICATIONS

|                        |                                                                               |
|------------------------|-------------------------------------------------------------------------------|
| Television system:     | NTSC-M<br>TV Standard                                                         |
| Closed Caption System: | §15.119/FCC                                                                   |
| Channel coverage       | VHF: 2 ~ 13<br>UHF: 14 ~ 69<br>CATV: 2 ~ 13, A ~ W, W+1 ~ W+84, A-5 ~ A-1, 5A |
| Tuning System          | 181 channel frequency synthesized tuning system                               |
| Channel access:        | Direct access keyboard, programmable scan and up/down                         |
| Terminals              |                                                                               |
| Antenna input:         | VHF/UHF/CATV<br>75 ohm unbalanced (F-type)                                    |
| Video input:           | RCA connector x 1                                                             |
| Audio input:           | RCA connector x 1                                                             |
| Earphone:              | 1/8" monaural (3.5mm)                                                         |

ELECTRICAL SPECIFICATIONS

Sound output: 1W, 8 ohm

SUPPLIED ACCESSORIES

|                                                                                             |  |
|---------------------------------------------------------------------------------------------|--|
| Remote control unit (N0132UD or N0108UD)                                                    |  |
| Batteries ("AA" x 2)                                                                        |  |
| Rod Antenna [13" model only supplied<br>19" model not supplied]<br>(0EMN00673 or 0EMN01599) |  |
| Owner's Manual (OEMN02332)                                                                  |  |

OTHER SPECIFICATIONS

|                              |                                                                |
|------------------------------|----------------------------------------------------------------|
| Remote control:              | Digital encoded infrared light system                          |
| Operating temperature:       | 5°C to 40°C<br>(41°F~104°F)                                    |
| Power requirements:          | AC120V, 60Hz                                                   |
| [ 13" model ]                |                                                                |
| Power consumption (Maximum): | 53W                                                            |
| Picture tube:                | 13"                                                            |
| Dimensions:                  | H : 12-3/4"(323mm)<br>W : 14-1/8"(358mm)<br>D : 14-4/9"(367mm) |
| Weight:                      | 19.0 lbs. (8.5kg)                                              |
| [ 19" model ]                |                                                                |
| Power consumption (Maximum): | 72W                                                            |
| Picture tube:                | 19"                                                            |
| Dimensions:                  | H : 16-3/4"(428mm)<br>W : 18-3/4"(475mm)<br>D : 18" (454mm)    |
| Weight:                      | 37.5 lbs. (17kg)                                               |

As an ENERGY STAR® Partner, our company has determined that this product meets the ENERGY STAR® guidelines for energy efficiency. ENERGY STAR® is a U.S. registered mark. (19" model only)

•Designs and specifications are subject to change without notice and without our legal obligation.  
•If there is a discrepancy between languages, the default language will be English.