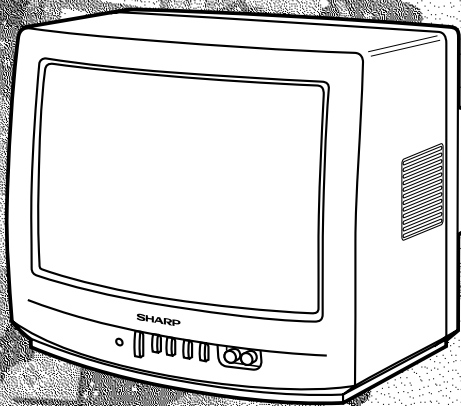# SHARP®

COLOR TELEVISION

MODELS
13N-M100
13N-M150

B

■ OPERATION MANUAL ■

As an ENERGY STAR ® Partner, SHARP has determined that this product meets the ENERGY STAR ® guidelines for energy efficiency. ENERGY STAR ® is a U.S. registered trademark.

CONTENTS

This operating manual includes basic operating instructions in Spanish and French.
SPANISH is on page 6, 27.
FRENCH is on page 7.

7209 PE

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, using 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.

WHAT IS ENERGY STAR $^{®}$

TVs and VCRs use energy both when they are on and when they are off. Americans spend more than $1 billion a year on energy consumed by TVs and VCRs when they are not in use. The new ENERGY STAR $^{®}$ models will reduce that energy "leakage" by up to 75 percent. Ultimately, this will mean more than $500 million a year in energy savings for consumers.

The energy savings will help reduce the burning of fossil fuels and the related carbon dioxide pollution that contributes to global warming. If every American family replaced their TVs and VCRs with ENERGY STAR $^{®}$ models, it would reduce carbon dioxide emissions by five million tons every year — equivalent to eliminating the pollution from more than one million cars.

By using ENERGY STAR $^{®}$ products, you will save money on your electric bills and use less energy. That makes good economic sense and it's good for our environment.

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."

Important Information (Continued)

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.

Supplied Accessories
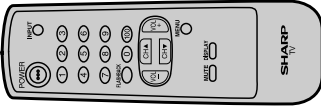
Infrared Remote Control/Part Number
RRMCG1324CESA (13N-M100)
RRMCG1324CESB (13N-M150)

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 this TV set.

Power
Your TV operates on 120 Volts, 60 Hertz (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 will not 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 either the TV or the radio.
- If you are listening to an AM broadcast, turn the TV off. AM broadcast signals may not be received due to the interference of the TV.

■ **Before using the television, prepare the Remote Control**
To use the remote control, insert batteries first.

Insert the batteries   Pull up
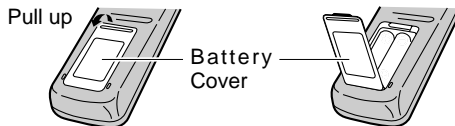
Battery Cover

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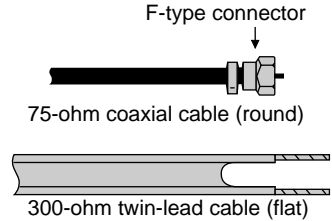
Antenna Connections

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:
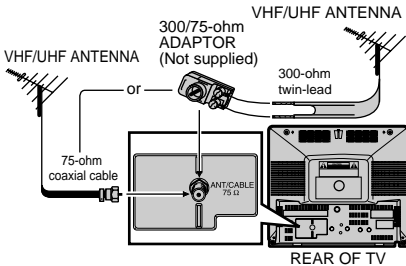
Antenna Connections (Continued)

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).
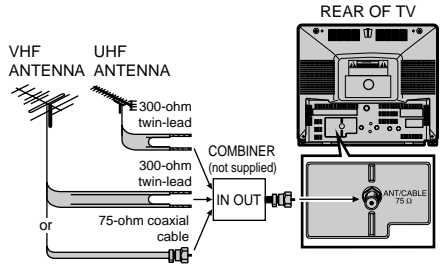
F-type connector

75-ohm coaxial cable (round)

300-ohm twin-lead cable (flat)

OUTDOOR ANTENNA CONNECTION

- Use one of the following two diagrams if you connect 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 COAXIAL CABLE CONNECTOR on the rear of the TV set.

A. Combination VHF/UHF Antennas

VHF/UHF ANTENNA

VHF/UHF ANTENNA

300/75-ohm ADAPTOR (Not supplied)

or

300-ohm twin-lead

75-ohm coaxial cable

ANT/CABLE 75 Ω

REAR OF TV

B. Separate VHF/UHF Antenna

REAR OF TV

VHF ANTENNA   UHF ANTENNA

300-ohm twin-lead

COMBINER (not supplied)

300-ohm twin-lead

IN OUT

or

75-ohm coaxial cable
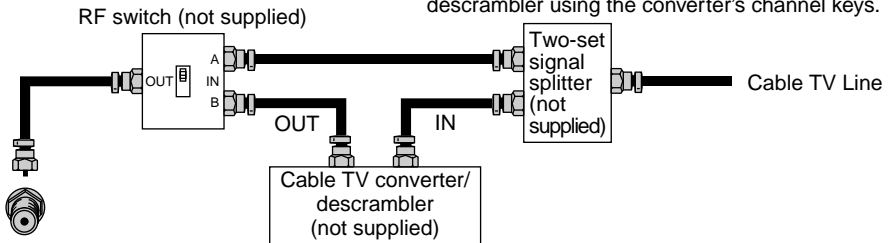
ANT/CABLE 75 Ω

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.

RF switch (not supplied)

OUT   IN

A

B

OUT   IN

Two-set signal splitter (not supplied)

Cable TV Line

Cable TV converter/ descrambler (not supplied)
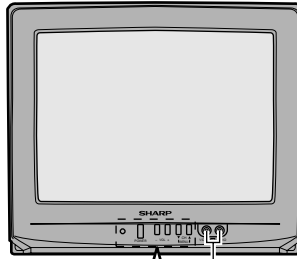
Note:

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

Quick Reference Control Operation

■ Location of Controls   (ENGLISH)

VIDEO/AUDIO IN TERMINALS

SENSOR AREA FOR
REMOTE CONTROL

POWER
Press → On.
Press again → Off.

VOLUME UP/DOWN
(+) Increases sound.
(–) Decreases sound.

CHANNEL UP/DOWN – MENU
(▲) Selects next higher channel.
(▼) Selects next lower channel.
• Press both at the same time to access the MAIN MENU screen.

Basic Remote Control Functions

Infrared Transmitter Window

POWER
Press → On.
Press again → Off.

REMOTE KEYPAD
Accesses any channel from keypad.

FLASHBACK
Returns to previous channel.

VOLUME UP/DOWN
(+) Increases sound.
(–) Decreases sound.
• In menu mode, changes or selects the TV adjustments.

MUTE
Press → Mutes sound.
Press again → Restores sound.
• CLOSED CAPTION appears when sound is muted.

INPUT
Press → Switch to external video input mode.
Press again → Switch to TV mode.
See page 25.

CHANNEL UP/DOWN
(▲) Selects next higher channel.
(▼) Selects next lower channel.
• See pages 22 ~ 24 for channel presetting.
• Moves the " ◆ " mark of the MENU screen.

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

DISPLAY
Press → Displays receiving channel for four seconds.
Press again → Removes display.
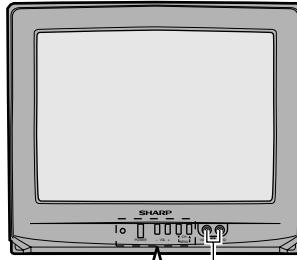• Temporarily displays receiving channel when in Closed Caption mode.

SHARP
TV

5
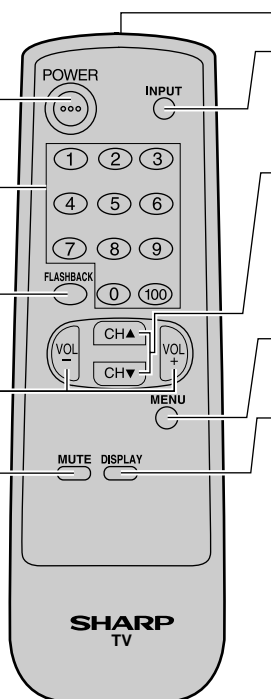
Referencia rápida de los controles de operación

■ Ubicación de los controles (ESPAÑOL)

Panel Delantero

ZONA DEL SENSOR DEL MANDO A DISTANCIA

TERMINALES DE ENTRADA VIDEO/AUDIO

ALIMENTACION (POWER)
Pulsando → Enciende (On).
Pulsando nuevamente → Apaga (Off).

AUMENTO/DISMINUCION DEL VOLUMEN (VOL)
(+) Aumenta el sonido.
(–) Disminuye el sonido.

CANAL SUPERIOR/INFERIOR (CH) – MENU
(▲) Selecciona el siguiente canal superior.
(▼) Selecciona el siguiente canal inferior.
• Pulse ambos al mismo tiempo para acceder a la pantalla de MENU PRINCIPAL.

Funciones Basicas Del Control Remoto

Ventanilla del transmisor de infrarrojos

ALIMENTACION (POWER)
Pulsando → Enciende (On).
Pulsando nuevamente → Apaga (Off).

TECLADO A DISTANCIA
Para tener acceso a cualquier canal empleando las teclas.

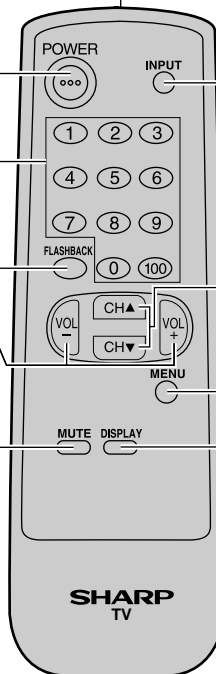**RETORNO AL CANAL ANTERIOR (FLASHBACK)**
Para volver al canal anterior.

AUMENTO/DISMINUCION DEL VOLUMEN (VOLUME UP/DOWN)
(+) Aumenta el sonido.
(–) Disminuye el sonido.
• En modo de MENU cambia o selecciona el ajuste del televisor.

SILENCIAMIENTO (MUTE)
Pulsando → Silencia el sonido.
Pulsando nuevamente → Restaura el sonido.
• CLOSED CAPTION aparece automáticamente cuando el sonido es silenciado. Siempre y cuando la transmisión tenga esta señal.

ENTRADA (INPUT)
Pulsando → Cambìa al modo de entrada de video externo.
Pulsando nuevamente → Cambìa al modo de TV.

CANAL SUPERIOR/INFERIOR (CHANNEL UP/DOWN)
(▲) Selecciona el siguiente canal superior.
(▼) Selecciona el siguiente canal inferior.
• En el modo de MENU, mueve la marca " ◆ ".

MENU (MENU)
Pulsando → Accede al MENU PRINCIPAL.
Pulsando nuevamente → Sale del MENU PRINCIPAL.
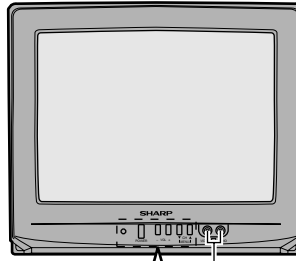
VISUALIZACION (DISPLAY)
Pulsando → Aparece el canal de recepción por cuatro segundos.
Pulsando nuevamente → Elimina la visualización.
• En el modo de "Closed Caption" se muestra el canal de recepción por un corto tiempo.

6

Référence rapide sur les commandes

■ Emplacement des touches (FRANÇAIS)

Panneau Avant

ZONE DE DETECTION DU CAPTEUR

PRISES D'ENTRÉE VIDÉO/AUDIO

ALIMENTATION (POWER)
Appuyer pour mettre sous tension.
Appuyer de nouveau pour mettre
hors tension.

**AUGMENTATION/RÉDUCTION
DU VOLUME SONORE (VOL)**
(+) Pour augmenter le volume du son.
(−) Pour diminuer le volume du son.

**TOUCHES DES CANAUX
CROISSANT/DÉCROISSANT (CH) –
MENU**
(▲) Sélectionne le canal supérieur
suivant.
(▼) Sélectionne le canal inférieur
précédent.
• Appuyez simultanément sur ces deux
touches pour accéder à l'écran
MENU PRINCIPAL.

Fonctions de base de la télécommande

Fenêtre d'émission du signal infrarouge

ALIMENTATION (POWER)
Appuyer pour mettre sous tension.
Appuyer de nouveau pour mettre hors
tension.

**PAVE NUMERIQUE DE
COMMANDE A DISTANCE**
Sélectionne directement le canal
voulu sur le pavé numérique.

RETOUR (FLASHBACK)
Rappelle le canal regardé précédent.

**AUGMENTATION/RÉDUCTION DU
VOLUME SONORE
(VOLUME UP/DOWN)**
(+) Pour augmenter le volume du son.
(−) Pour diminuer le volume du son.
• Pour changer ou sélectionner les
réglages du téléviseur en mode
menu.

SOURDINE (MUTE)
Appuyer → Mise en sourdine du son.
Appuyer de nouveau → Rétablisse-
ment du son.
• CLOSED CAPTION apparaît lorsque
le son est mis en sourdine.

ENTRÉE (INPUT)
Appuyer pour sélectionner le mode
vidéo externe.
Appuyer de nouveau pour sélectionner
la télévision.

**TOUCHES DES CANAUX CROIS-
SANT/DÉCROISSANT
(CHANNEL UP/DOWN)**
(▲) Sélectionne le canal supérieur
suivant.
(▼) Sélectionne le canal inférieur
précédent.
• Déplace le curseur " ✦ " sur l'écran
du MENU.

RÉGLAGE (MENU)
Appuyer → Accès au MENU
PRINCIPAL.
Appuyer de nouveau → Sortie du
MENU PRINCIPAL.

AFFICHAGE (DISPLAY)
Appuyer pour afficher le canal reçu
pendant quatre secondes.
Appuyer de nouveau pour faire
disparaître le canal.
• Pour afficher temporairement le
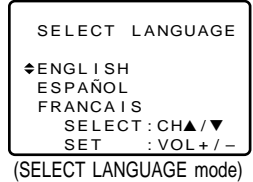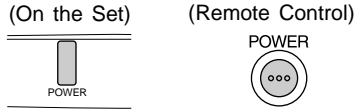canal reçu en le mode Sous-titres.
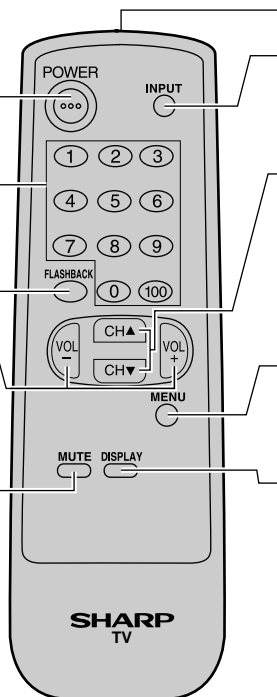
EZ SETUP during First Power On

■ **When you turn on the TV for the first time, it will automatically memorize the broadcasting channels.**
Please perform the following instructions before you press the power button.
(1) Insert the batteries into the remote control. (See page 3)
(2) Connect the antenna cable to the TV set. (See page 3 ~ 4)
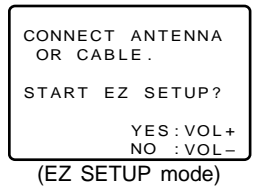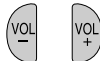**(3) Plug in the AC POWER cord to the wall outlet.**
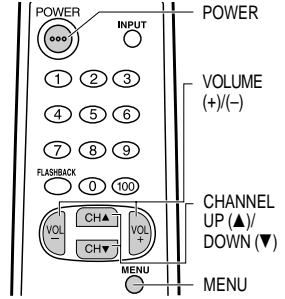
1 Press the **POWER** button on the TV set or on the Remote Control to turn on the TV. The SELECT LANGUAGE mode will be displayed.

(On the Set)   (Remote Control)

POWER

POWER

```
SELECT LANGUAGE

⬍ENGLISH
 ESPAÑOL
 FRANCAIS
   SELECT : CH▲/▼
   SET    : VOL+/–
```
(SELECT LANGUAGE mode)

2 Press **CH UP (▲)** or **DOWN (▼)** to select "ENGLISH", "SPANISH (ESPAÑOL)" or "FRENCH (FRANÇAIS)".

CH▲

CH▼

```
SELECT LANGUAGE

⬍ENGLISH
 ESPAÑOL
 FRANCAIS
   SELECT : CH▲/▼
   SET    : VOL+/–
```

3 Press **VOL (+)** or **(–)** to access EZ SETUP mode.

VOL –   VOL +

```
CONNECT ANTENNA
 OR CABLE.

START EZ SETUP?

        YES : VOL+
        NO  : VOL–
```
(EZ SETUP mode)

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

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

If you want to SETUP again, please refer to page 21 on SETUP.
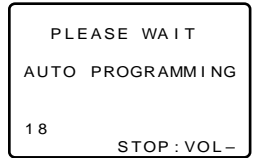
VOL +

```
PLEASE WAIT

AUTO PROGRAMMING


18
        STOP : VOL–
```

5 Once EZ SETUP is completed, the lowest channel number memorized will be displayed.

```
             2
```

Note:

• If EZ SETUP does not memorize all the channels in your region, please refer to page 22 for more information on manually memorizing the channels using CHANNEL SETTING.

• It may be difficult to PRESET when the broadcasting signals are weak, the channel cycle frequency is incorrect or the frequency jamming is occuring around the area. Please refer to pages 22 ~ 24 for more information on manually memorizing the channels using CHANNEL SETTING.

Demo Mode

- To quickly learn more about the TV set, press and hold for more than three seconds both *CH UP (▲)* and *DOWN (▼)* on the TV set. The TV set will go into DEMO mode and briefly explain the various features.
- To cancel DEMO mode, again press both *CH UP (▲)* and *DOWN (▼)* on the TV set.

Example:
DEMO mode display

(On the Set)

**CHANNEL
UP (▲)/DOWN (▼)
buttons**

SHARP

From SHARP Minds
Come SHARP Products

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 when you press both *CH UP (▲)* and *DOWN (▼)* on the TV set.
- Some features of your TV set will not be accessible without the Remote Control. If you lost your Remote Control, contact a Sharp Service Center for a replacement.

(On the Set)

**CHANNEL
UP (▲)/DOWN (▼)
buttons**

9

Language

■ **The language for the ON SCREEN DISPLAY can be set to ENGLISH, SPANISH or FRENCH.**
■ **Setting the ON SCREEN DISPLAY Language.**

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

MENU ○

```
♦SLEEP TIMER
 VIDEO ADJUST
 CLOSED CAPTION
 PARENT CONTROL
 ENERGY SAVE
 SET UP
```
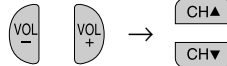(MAIN MENU screen)

2 Press **CH UP (▲)** or **DOWN (▼)** to move the "♦" mark to "SET UP".

CH▲
CH▼

```
 SLEEP TIMER
 VIDEO ADJUST
 CLOSED CAPTION
 PARENT CONTROL
 ENERGY SAVE
♦SET UP
```

3 Press **VOL (+)** or **(–)** to access SET UP mode, then press **CH UP (▲)** or **DOWN (▼)** to move the "♦" mark to "LANGUAGE".

VOL– VOL+ → CH▲ CH▼

```
 BLUE SCREEN
♦LANGUAGE
 CH SETTING
```
(SET UP mode)

4 Press **VOL (+)** or **(–)** to access LANGUAGE change mode.

VOL– VOL+
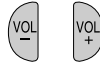
```
 LANGUAGE

♦ENGLISH
 ESPAÑOL
 FRANCAIS
```
(LANGUAGE change mode)

5 Press **CH UP (▲)** or **DOWN (▼)** to select "ENGLISH", "SPANISH (ESPAÑOL)" or "FRENCH (FRANÇAIS)".

CH▲
CH▼

```
 IDIOMA

↨ENGLISH
♦ESPAÑOL
↨FRANCAIS
```

6 Press **MENU** to exit.

MENU ○

Sleep Timer

■ **You can set the number of minutes for your TV to automatically turn off.**

1 Press **MENU** to access MAIN MENU screen.
2 Press **VOL (+)** or **(–)** to access TIMER SET mode.
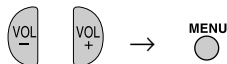
MENU ○ → VOL– VOL+

```
♦SLEEP TIMER
 VIDEO ADJUST
 CLOSED CAPTION
 PARENT CONTROL
 ENERGY SAVE
 SET UP
```
(MAIN MENU screen)

3 Press **VOL (+)** or **(–)** to set a sleep time of 30, 60, 90 or 120 minutes.
4 Press **MENU** to exit.

VOL– VOL+ → **MENU** ○

```
 SLEEP TIMER
        120 REMAIN
```
(TIMER SET mode)

Note:
• To turn off the Sleep Timer, repeat the above SLEEP TIMER steps and select "– – – 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.

10

Video Adjust

Description of Adjustment Items

| Selected item	VOL UP (+) button	VOL DOWN (–) 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
FAVORITE COLOR	To choose a RED, BLUE or STANDARD COLOR TONE.	
RESET	To return all adjustments to factory preset levels.	

VOLUME (+)/(–)

CHANNEL UP (▲)/ DOWN (▼)
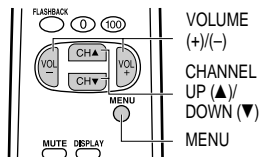
MENU

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

2 Press **CH UP (▲)** or **DOWN (▼)** to move the " ⬍ " mark to "VIDEO ADJUST".
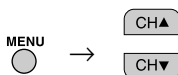
MENU → CH▲ CH▼

```
  SLEEP TIMER
⬍ VIDEO ADJUST
  CLOSED CAPTION
  PARENT CONTROL
  ENERGY SAVE
  SET UP
```

(MAIN MENU screen)

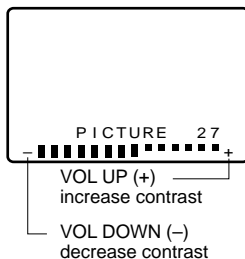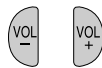**3** Press **VOL (+)** or **(–)** to access PICTURE adjust mode.

VOL – VOL +

PICTURE   27

– ▮▮▮▮▮▮▮▪▪▪▪▪ +
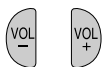
(PICTURE adjust mode)

4 Press **CH UP (▲)** or **DOWN (▼)** to select the desired mode. (Refer to the diagram below.)

PICTURE ⇄ TINT ⇄ COLOR ⇄ BRIGHT

RESET ⇄ FAVORITE COLOR ⇄ SHARP

←: CH UP (▲)   →: CH DOWN (▼)

CH▲ CH▼

5 Press **VOL (+)** or **(–)** to adjust the setting.

VOL – VOL +

PICTURE   27

– ▮▮▮▮▮▮▮▪▪▪▪▪ +

VOL UP (+) increase contrast

VOL DOWN (–) decrease contrast

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

7 Press **MENU** to exit.

MENU

11

Closed Caption

■ **HOW TO SET CLOSED CAPTION**

- Your TV is equipped with an internal Closed Caption decoder. "Closed Caption" is a system which allows you to view conversations, narration, and sound effects in TV programs and home videos as subscript on your TV screen as shown on the right.
- Not all the programs and videos will offer closed caption. Please look for the " [CC] " symbol to ensure that captions will be shown.
- Closed Caption broadcast can be viewed in two modes: CAPTION and TEXT. For each mode, two channels are available, CH1 and CH2:

  The [CAPTION] mode subscripts dialogues 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.

Good morning. How are you?

FLASHBACK

VOLUME (+)/(−)

CHANNEL UP (▲)/ DOWN (▼)

MENU

MUTE DISPLAY
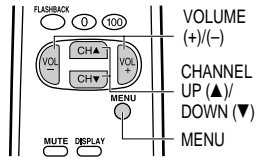
1 Press **MENU** to access MAIN MENU screen.

2 Press **CH UP (▲)** or **DOWN (▼)** to move the " ♦ " mark to "CLOSED CAPTION".
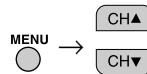
MENU → CH▲ / CH▼

```
 SLEEP  TIMER
 VIDEO  ADJUST
♦CLOSED  CAPTION
 PARENT  CONTROL
 ENERGY  SAVE
 SET  UP
```

(MAIN MENU screen)

3 Press **VOL (+)** or **(−)** to access CLOSED CAPTION setting mode.

VOL − VOL +

```
 CLOSED  CAPTION

♦MODE    : CAPTION
 DATA    : CH 1
```

(CLOSED CAPTION setting mode)

4 Press **CH UP (▲)** or **DOWN (▼)** to move the " ♦ " mark to either "MODE" or "DATA".

CH▲ / CH▼

```
 CLOSED  CAPTION

 MODE    : CAPTION
♦DATA    : CH 1
```

5 Press **VOL (+)** or **(−)** to change the CLOSED CAPTION setting.

MODE : CAPTION ↕ TEXT ↕ OFF

DATA : CH 1 ↕ CH 2

VOL − VOL +

```
 CLOSED  CAPTION

♦MODE    : CAPTION
 DATA    : CH 1
```

6 Press **MENU** to exit.

MENU

Note:

- If a broadcast has 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 set.
- If any button is pressed to call up the ON SCREEN DISPLAY while viewing a CLOSED CAPTION broadcast, the closed captions will disappear momentarily.
- When viewing in TEXT mode, if no TEXT broadcast is being received, for some programs the screen may become dark and blank. Should this occur, set the Closed Caption mode to "OFF".

12

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 base	G	GENERAL AUDIENCES. All ages admitted.
	PG	PARENTAL GUIDANCE SUGGESTED. Some material may not be suitable for children.
	PG-13	PARENTAL 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)

Example 1.
"PG-13" in the age based RATING is blocked, this will automatically block the high ratings "R", "NC-17", "X" also.

1. User setting

G	-----
PG	-----
PG-13	BLOCK
R	BLOCK
NC-17	BLOCK
X	BLOCK

2. Block table

age base

G	not to block
PG	not to block
PG-13	Select block
R	auto-block
NC-17	auto-block
X	auto-block

Example 2.
"R" in the age based RATING is blocked, this will automatically block the high rating "NC-17", "X" also.

1. User setting

G	-----
PG	-----
PG-13	-----
R	BLOCK
NC-17	BLOCK
X	BLOCK

2. Block table

age base

G	not to block
PG	not to block
PG-13	not to block
R	Select block
NC-17	auto-block
X	auto-block

Note:
- MPAA RATING is only age based ratings.

[2] TV PARENTAL GUIDELINES

RATING		AGE	D (Sexually Suggestive Dialog)	L (Adult Language)	S (Sexual Situation)	V (Violence)	FV (Fantasy Violence)
			⇐ content base ⇒				
age base	TV-Y (All children)	V	–	–	–	–	–
	TV-Y7 (Direct to Older Children)	V	–	–	–	–	V
	TV-G (General Audience)	V	–	–	–	–	–
	TV-PG (Parental Guidance Suggested)	V	V	V	V	V	–
	TV-14 (Parents Strongly Cautioned)	V	V	V	V	V	–
	TV-MA (Mature Audience Only)	V	–	V	V	V	–

V : Content Rating can be set.
– : Content Rating can not be set (not normally broadcast by TV station).

13

Parent Control (V-CHIP Operation Continued)

• **TV PARENTAL GUIDELINES (Example)**

Example 1.1 : Age Based setting
Go through all select ratings and select unblocked for "AGE".
This will automatically unblock everything.

Example 1.2 : Age Based setting
For "TV-G" select "BLOCK" for "AGE". This will automatically block the higher age ratings "TV-PG", "TV-14" and "TV-MA" as well as "TV-G". Furthermore, the content ratings "D", "L", "S", "V", "FV" are automatically blocked as well for "TV-PG", "TV-14" and "TV-MA" as well as "TV-G".

Example 2.1 : Content Based setting
For "TV-PG", "TV-14" and "TV-MA" select unblocked for each content ratings ("D", "L", "S", "V", "FV") by leaving "AGE" unblocked for "TV-PG", "TV-14" and "TV-MA". If you choose to unblock for each one in content base.

Example 2.2 : Content Based setting
Then for "TV-PG" and select "BLOCK" for only "V" (Violence). This will automatically block the higher ratings "TV-14-V" and "TV-MA-V" ("TV-14" and "TV-MA" for Violence content only).
Please note that with these settings blocking does NOT occur. If a program is rated only "TV-MA"; it must be rated "TV-MA-V" to be blocked.

Example 3 : Reset an Age Based setting
For "TV-14" and select again "BLOCK" for "AGE".
This will again automatically block the content ratings "D", "L", "S", "V", "FV" for "TV-MA" as well as "TV-14".
Please note that the lower age rating "TV-PG" did not change from its previous settings.

Note:

• Content ratings can be modified but only in the combinations indicated by an $\boxed{V}$ in the table left.
• 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.
• Any rating's "AGE" set to unblocked must have its content settings individually set.

[3] ADDITIONAL MODE
Besides the above "MPAA RATINGS" and "TV PARENTAL GUIDELINES" new ratings system's data can be downloaded when they become available. (See page 18.)

Parent Control (V-CHIP Operation Continued)

■ HOW TO SET V-CHIP

```
①  ②  ③        REMOTE
④  ⑤  ⑥        KEYPAD
⑦  ⑧  ⑨        VOLUME
FLASHBACK          (+)/(–)
   ⓪  ⑩⓪
        CH▲       CHANNEL
VOL        VOL    UP (▲)/
        CH▼       DOWN (▼)
      MENU
        ○         MENU
```
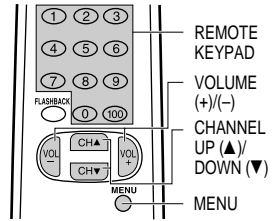
[1] MPAA RATING

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

MENU
○

```
⬍SLEEP  TIMER
 VIDEO  ADJUST
 CLOSED  CAPTION
 PARENT  CONTROL
 ENERGY  SAVE
 SET  UP
```
(MAIN MENU screen)

2 Press **CH UP (▲)** or **DOWN (▼)** to move the " ⬍ " mark to "PARENT CONTROL".

CH▲

CH▼

```
 SLEEP  TIMER
 VIDEO  ADJUST
 CLOSED  CAPTION
⬍PARENT  CONTROL
 ENERGY  SAVE
 SET  UP
```

3 Press **VOL (+)** or **(–)** to access PARENT CONTROL mode, then "PARENT CONTROL V-CHIP BLOCK" is displayed.

VOL −   VOL +
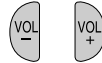
```
 PARENT  CONTROL

 V–CHIP  BLOCK
```
(PARENT CONTROL mode)

4 Press **VOL (+)** or **(–)** to access V-CHIP select mode, then press **VOL (+)** or **(–)** to select "MPAA RATING".

VOL − VOL + → VOL − VOL +
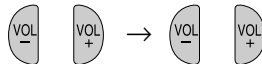
```
⬍MPAA
 TV  GUIDELINES


 DOWNLOAD : OFF
 STATUS    : OFF
```
(V-CHIP select mode)

5 Press **CH UP (▲)** or **DOWN (▼)** to move the " ⬍ " mark to "PG", then press **VOL (+)** or **(–)** to select BLOCK. If you set "PG" to BLOCK, "PG-13", "R", "NC-17" and "X" are automatically blocked.

CH▲

CH▼ → VOL − VOL +
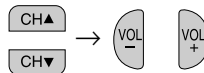
```
 G        : _ _ _ _ _
⬍PG       : BLOCK
 PG–13    : BLOCK
 R        : BLOCK
 NC–17    : BLOCK
 X        : BLOCK

     MENU : RETURN
```

6 Repeat pressing **MENU** to return V-CHIP select mode exit.

MENU
○

Note:

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

Parent Control (V-CHIP Operation Continued)

[2] TV PARENTAL GUIDELINES

1 Repeat steps **1** to **3** of **[1] MPAA RATING**.

2 Press **CH UP (▲)** or **DOWN (▼)** to move the " ⇕ " mark to "TV GUIDELINES".

CH▲

CH▼

```
   M P A A
⇕ T V   G U I D E L I N E S


   D O W N L O A D : O F F
   S T A T U S     : O F F
```

3 Press **VOL (+)** or **(–)** to access TV GUIDELINES mode.

VOL –   VOL +
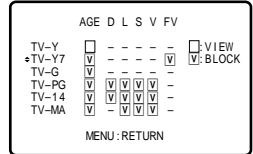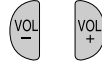
4 To change CONTENT SETTING, press **CH UP (▲)** or **DOWN (▼)** to move the " ⇕ " to the desired rating and then press **VOL (+)** or **(–)** to select.

CH▲

CH▼   →   VOL –   VOL +

```
           AGE D L S V FV
   TV−Y     □ − − − − −    □ : V I EW
 ⇕ TV−Y7    V − − − − V    V : BLOCK
   TV−G     V − − − − −
   TV−PG    V V V V V −
   TV−14    V V V V V −
   TV−MA    V − V V V −

         MENU : RETURN
```

(TV GUIDELINES mode)

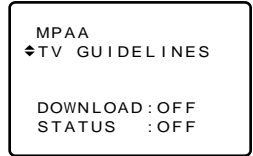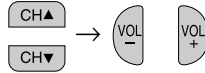**5** Press **CH UP (▲)** or **DOWN (▼)** to move the " ⇕ " to the desired content and then press **VOL (+)** or **(–)** to select either "BLOCK" or unblock ("– – – –").

CH▲

CH▼   →   VOL –   VOL +

```
   TV−Y7
 ⇕ AGE : BLOCK
   D   : −−−−−
   L   : −−−−−
   S   : −−−−−
   V   : −−−−−
   FV  : BLOCK

       MENU : RETURN
```
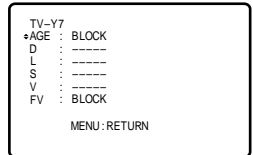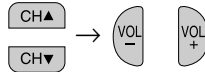
(CONTENT RATING mode)

6 Press **MENU** to return to TV GUIDES mode.

MENU

7 Repeat steps **4** to **5** until all ratings and their contents are set.

```
           AGE D L S V FV
   TV−Y     □ − − − − −    □ : V I EW
   TV−Y7    □ − − − − □    V : BLOCK
 ⇕ TV−G     V − − − − −
   TV−PG    V V V V V −
   TV−14    V V V V V −
   TV−MA    V − V V V −

         MENU : RETURN
```
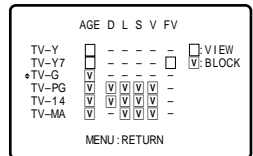
8 When done, press **MENU** to exit.

MENU

Parent Control (V-CHIP Operation Continued)

• **ACTIVATE ON TO TURN ON V-CHIP BLOCK**

1 Press **CH UP (▲)** or **DOWN (▼)** to move the "⬍" mark to "STATUS", then press **VOL (+)** or **(–)** to activate ON the V-CHIP BLOCK. (If STATUS is OFF, V-CHIP BLOCK will not be operated.)
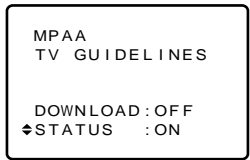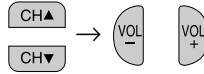
CH▲ / CH▼ → VOL – VOL +

```
MPAA
TV GUIDELINES

DOWNLOAD:OFF
⬍STATUS   :ON
```

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

MENU

```
INPUT SECRET No.

     – – – –
```

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

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪ ⑩⓪

```
INPUT SECRET No.

    1  2  3  4
```
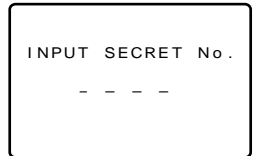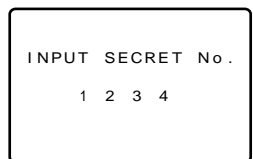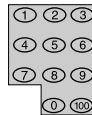
4 Press **MENU** and SECRET No. is registered.

MENU

• **To cancel the V-CHIP BLOCK screen while V-CHIP BLOCK has been activated.**

1 "V-CHIP HAS BEEN ACTIVATED" will be displayed if you watch the program with Program Rating data as same as you configured.

```
              23
V–CHIP HAS BEEN
   ACTIVATED

     TV–Y7
     FV
```

Note:

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

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

MENU

```
INPUT SECRET No.

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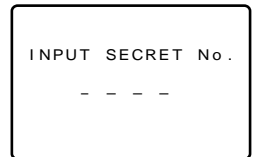
3 Enter the 4-digit SECRET No. using the **REMOTE KEYPAD**, then V-CHIP BLOCK temporarily will be canceled. If the wrong SECRET No. is chosen, "SECRET No. IS INCORRECT" will be displayed. Input the SECRET No. again in this case.

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪ ⑩⓪

```
INPUT SECRET No.

    *  *  *  *
```

Note:

• If you change Power from OFF to ON, then V-CHIP BLOCK will be activated ON again.

Parent Control (V-CHIP Operation Continued)

- **To change the V-CHIP BLOCK setting. (Secret No. is registered.)**

1 Repeat steps **1** to **3** of **[1] MPAA RATING**, then "INPUT SECRET No." will be displayed.

```
INPUT  SECRET  No.

   –  –  –  –
```

2 Enter the 4-digit SECRET No. using the **REMOTE KEYPAD** and the V-CHIP select mode will be displayed. Repeat configuration of the V-CHIP BLOCK.

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪ ⑩
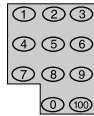
```
INPUT  SECRET  No.

   *  *  *  *
```

- **If you intend to change or forget your Secret No., clear the original Secret No. and set up a new one.**

1 Repeat steps **1** to **3** of **[1] MPAA RATING**, or **1** to **2** of **[To cancel the V-CHIP BLOCK screen while V-CHIP BLOCK has been activated]**, then "INPUT SECRET No." will be displayed.

2 Press and hold both **VOL (+)** and **CH DOWN (▼)** on the TV set simultaneously until the message "INPUT SECRET No." disappears.

(On the Set)
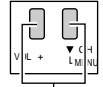
VOL (+)/CHANNEL DOWN (▼) buttons

3 Press **MENU** two times to exit.

MENU

[3] ADDITIONAL MODE (DOWNLOAD)
There will be an additional new rating system. In that case, please set up as follows. Subsequently the new rating system will set up automatically.

1 Repeat steps **1** to **3** of **[1] MPAA RATING**.
2 Press **CH UP (▲)** or **DOWN (▼)** to move the " ⬍ " mark to "DOWNLOAD".

CH▲

CH▼

```
MPAA
TV  GUIDELINES


⬍DOWNLOAD:OFF
 STATUS   :OFF
```

3 Press **VOL (+)** or **(–)** to "DOWNLOAD : ON".

VOL –   VOL +
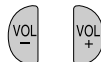
```
MPAA
TV  GUIDELINES


⬍DOWNLOAD:ON
 STATUS   :OFF
```

4 Repeat pressing **MENU** to return exit.

MENU

18

Parent Control (V-CHIP Operation Continued)

• **DOWNLOAD V-CHIP DATA**

REMOTE KEYPAD
VOLUME (+)/(−)
CHANNEL UP (▲)/ DOWN (▼)
MENU
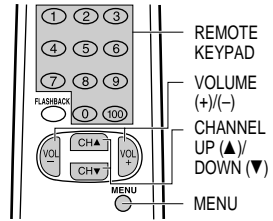
1 If you watch the program with "New Rating System Data", DOWNLOAD screen will be displayed.

```
PLEASE  WAIT

NOW  DOWNLOADING
  V−CHIP  DATA
```

(DOWNLOAD screen)

2 DOWNLOAD screen will disappear, if DOWNLOAD is finished.

Note:

• DOWNLOAD would not be started, if you don't watch the program with "New Rating System Data".

• **ADDITIONAL MODE (Example)**

1 Repeat steps **1** to **2** of **[3] ADDITIONAL MODE**.

2 Press *CH UP (▲)* or *DOWN (▼)* to move the " ⬍ " mark to "Cdn. English Ratings", then press *VOL (+)* or *(−)*.

CH▲ / CH▼ → VOL − / VOL +

```
MPAA
 TV GUIDELINES
⬍Cdn. English Ratings
 Cdn. French Ratings


DOWNLOAD : ON
STATUS   : ON
```
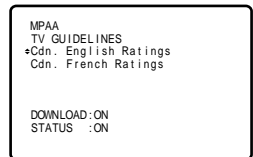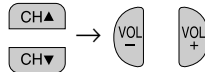
(After download the rating data)

3 You can select "BLOCK" or "−−−−−" (unblock) from each RATING mode by pressing *CH UP (▲)* or *DOWN (▼)* and *VOL (+)* or *(−)*.

CH▲ / CH▼   VOL − / VOL +

```
⬍C        : −−−−−
 C8+       : BLOCK
 G         : −−−−−
 PG        : BLOCK
 14+       : −−−−−
 18+       : BLOCK

 INDIVIDUAL BLOCK
        MENU : RETURN
```
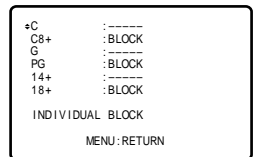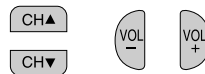
(ENGLISH INDIVIDUAL BLOCK mode)

4 You can select "BLOCK" or "−−−−−" (unblock) from each RATING mode by pressing *CH UP (▲)* or *DOWN (▼)* and *VOL (+)* or *(−)* if you select "Cdn. French Ratings" in step **2**.

CH▲ / CH▼   VOL − / VOL +

```
⬍G        : −−−−−
 8+        : BLOCK
 13+       : −−−−−
 16+       : BLOCK
 18+       : −−−−−

 INDIVIDUAL BLOCK
        MENU : RETURN
```
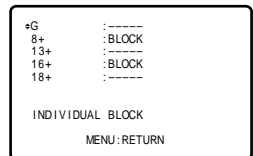
(FRENCH INDIVIDUAL BLOCK mode)

Note:

• **In additional mode**
Including two types (English mode, French mode), altogether you are able to download 4 kinds of mode.

19

Energy Save

■ **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.

VOLUME (+)/(−)

CHANNEL UP (▲)/ DOWN (▼)
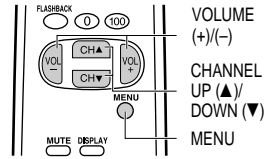
MENU

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

2 Press **CH UP (▲)** or **DOWN (▼)** to move the " ⬍ " mark to "ENERGY SAVE".

MENU → CH▲ CH▼

```
  SLEEP  TIMER
  VIDEO  ADJUST
  CLOSED  CAPTION
  PARENT  CONTROL
⬍ ENERGY  SAVE
  SET  UP
```
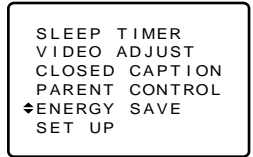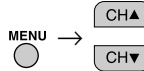
(MAIN MENU screen)

3 Press **VOL (+)** or **(−)** to access ENERGY SAVE select mode.

VOL − VOL +

```
  ENERGY  SAVE
          : OFF
```
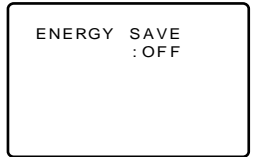
(ENERGY SAVE select mode)

4 Press **VOL (+)** or **(−)** to select "ON".

VOL − VOL +

```
  ENERGY  SAVE
          : ON
```
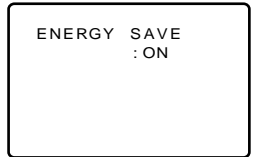
5 Press **MENU** to exit.

MENU

20

Set Up

■ **EZ SETUP**
By operating the channel presetting functions, you can preset your TV to the desired channels for viewing.
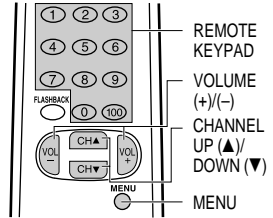
REMOTE KEYPAD
VOLUME (+)/(–)
CHANNEL UP (▲)/ DOWN (▼)
MENU

---

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

2 Press **CH UP (▲)** or **DOWN (▼)** to move the " ⬥ " mark to "SET UP".

MENU ○ → CH▲ CH▼

```
  SLEEP  TIMER
  VIDEO  ADJUST
  CLOSED  CAPTION
  PARENT  CONTROL
  ENERGY  SAVE
⬥SET  UP
```
(MAIN MENU screen)

---

3 Press **VOL (+)** or **(–)** to access SET UP mode, then press **CH UP (▲)** or **DOWN (▼)** to move the " ⬥ " mark to "CH SETTING".

VOL– VOL+ → CH▲ CH▼

```
  BLUE  SCREEN
  LANGUAGE
⬥CH  SETTING
```
(SET UP mode)

---

4 Press **VOL (+)** or **(–)** to access CH SETTING mode.

VOL– VOL+
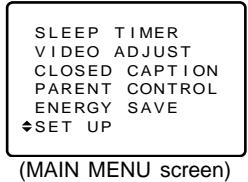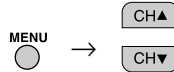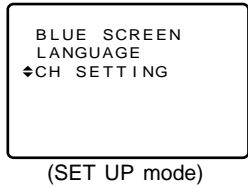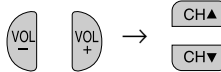
```
⬥EZ  SETUP
  AIR/CABLE
  CH  SEARCH
  CH  MEMORY
```
(CH SETTING mode)

---

5 Press **VOL (+)** or **(–)** to access EZ SETUP mode.

VOL– VOL+
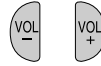
```
CONNECT  ANTENNA
  OR  CABLE.

START  EZ  SETUP?

        YES:VOL+
        NO  :VOL–
```
(EZ SETUP mode)

---

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

If you want to stop the EZ SETUP process once it has started, press **VOL (–)**. Search will be canceled.

VOL+

```
  PLEASE  WAIT

AUTO  PROGRAMMING

18
        STOP:VOL–
```

---

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

```
        2
```
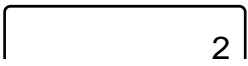
Set Up (Continued)

■ **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 MAIN MENU screen.
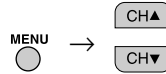
2 Press *CH UP (▲)* or *DOWN (▼)* to move the " ✦ " mark to "SET UP".

MENU → CH▲ / CH▼

```
  SLEEP  TIMER
  VIDEO  ADJUST
  CLOSED  CAPTION
  PARENT  CONTROL
  ENERGY  SAVE
✦SET  UP
```

(MAIN MENU screen)

---

3 Press *VOL (+)* or *(–)* to access SET UP mode.

4 Press *CH UP (▲)* or *DOWN (▼)* to move the " ✦ " mark to "CH SETTING".

VOL– VOL+ → CH▲ / CH▼
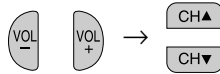
```
  BLUE  SCREEN
  LANGUAGE
✦CH  SETTING
```

(SET UP mode)

---

5 Press *VOL (+)* or *(–)* to access CH SETTING mode.

VOL– VOL+
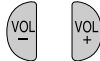
```
✦EZ  SETUP
  AIR/CABLE
  CH  SEARCH
  CH  MEMORY
```

(CH SETTING mode)

---

6 Press *CH UP (▲)* or *DOWN (▼)* to move the " ✦ " mark to "AIR/CABLE", then press *VOL (+)* or *(–)* to access AIR/CABLE mode.

CH▲ / CH▼ → VOL– VOL+
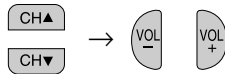
```
  EZ  SETUP
✦AIR/CABLE
  CH  SEARCH
  CH  MEMORY
```

---

7 Press *CH UP (▲)* or *DOWN (▼)* to move the " ✦ " mark to the desired mode.

AIR ⇄ CABLE STD ⇄ CABLE HRC ⇄ CABLE IRC

CH▲ / CH▼
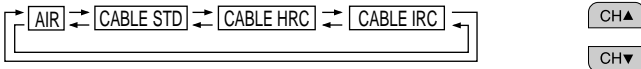
```
  AIR/CABLE

 │AIR
 │CABLE  STD
✦│CABLE  HRC
 │CABLE  IRC
```

(AIR/CABLE mode)

---

8 Press *MENU* to exit.

MENU

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)

22

Set Up (Continued)

■ **Saving broadcast TV channels into memory.**

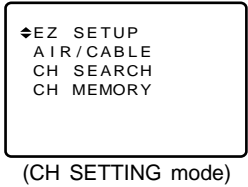**1.1** Press *MENU* to access MAIN MENU screen, then press *CH UP (▲)* or *DOWN (▼)* to move the "✦" mark to "SET UP".

MENU ○ → CH▲ CH▼
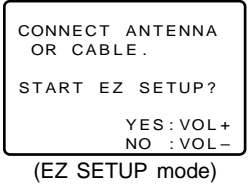
```
EZ SETUP
AIR/CABLE
✦CH SEARCH
CH MEMORY
```
(CH SETTING mode)

1.2 Press *VOL (+)* or *(–)* to access SET UP mode, then press *CH UP (▲)* or *DOWN (▼)* to move the "✦" mark to "CH SETTING".

VOL – VOL + → CH▲ CH▼

1.3 Press *VOL (+)* or *(–)* to access CH SETTING screen.

VOL – VOL +

1.4 Press *CH UP (▲)* or *DOWN (▼)* to move the "✦" mark to "CH SEARCH", then press *VOL (+)* or *(–)* to access CH SEARCH screen.

CH▲ CH▼ → VOL – VOL +
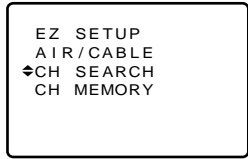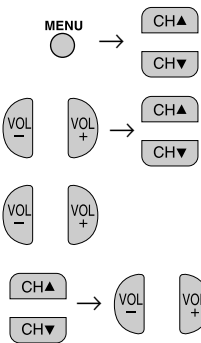
START

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

(START) VOL +

```
CH SEARCH

AIR  12

            START:+
            STOP :–
```
(CH SEARCH mode)

STOP

2.2 Press *VOL (–)*. CH SEARCH will stop at the current channel and will not add any higher channels.

(STOP) VOL –

2.3 Press *MENU* to exit.

MENU ○

■ **Adding weak or additional channels or erasing unwanted channels from TV memory.**

1.1 Press *MENU* to access MAIN MENU screen, then press *CH UP (▲)* or *DOWN (▼)* to move the "✦" mark to "SET UP".

MENU ○ → CH▲ CH▼
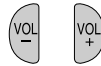
```
EZ SETUP
AIR/CABLE
CH SEARCH
✦CH MEMORY
```
(CH SETTING mode)

1.2 Press *VOL (+)* or *(–)* to access SET UP mode, then press *CH UP (▲)* or *DOWN (▼)* to move the "✦" mark to "CH SETTING".

VOL – VOL + → CH▲ CH▼

1.3 Press *VOL (+)* or *(–)* to access CH SETTING mode, then press *CH UP (▲)* or *DOWN (▼)* to move the "✦" mark to "CH MEMORY".

VOL – VOL + → CH▲ CH▼
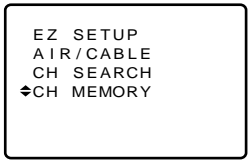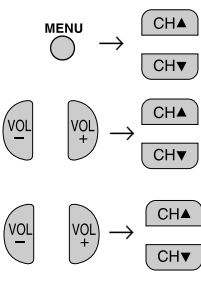
2.1 Press *VOL (+)* or *(–)* to access CH MEMORY.

VOL – VOL +
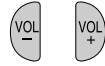
2.2 Use *CH UP (▲)* or *DOWN (▼)* or *REMOTE KEYPAD* to select each desired channel to add or erase.

CH▲ CH▼ or
```
① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪ ⑩⓪
```
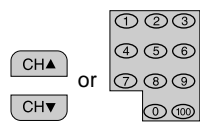
2.3 Press *VOL (+)* to add a channel to the TV's memory or press *VOL (–)* to erase a channel from the TV's memory.

VOL – VOL +
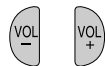
Set Up (Continued)

2.4 Press *MENU* to exit.

```
CH MEMORY

AIR 12

   TO ADD   : +
```
(CH MEMORY
unmemorized channel)

VOL (+)
To add channel 12 to
the TV memory
⟶
⟵
VOL (–)
To erase channel 12 from
the TV memory

```
CH MEMORY

AIR 12

   TO ERASE: –
```
(CH MEMORY
memorized channel)

FLASHBACK 0 100 — VOLUME (+)/(–)

CH▲ — CHANNEL UP (▲)/ DOWN (▼)

MENU — MENU

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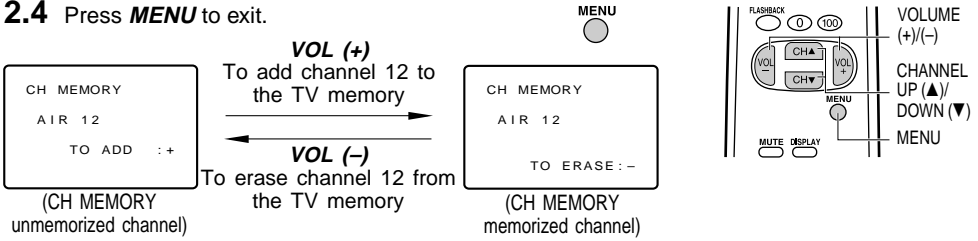
Note:
- If you press *VOL (+)* again while in the CH SEARCH mode, auto-program will start again, and the previously memorized channels will be lost.

■ **BLUE SCREEN**
Automatically turns the screen blue if a broadcast signal is not received.

---

1 Press *MENU* to access MAIN MENU screen.

2 Press *CH UP (▲)* or *DOWN (▼)* to move the "⬥" mark to "SET UP".

MENU ◯ → CH▲ CH▼

```
  SLEEP  TIMER
  VIDEO  ADJUST
  CLOSED  CAPTION
  PARENT  CONTROL
  ENERGY  SAVE
⬥SET  UP
```
(MAIN MENU screen)

---

3 Press *VOL (+)* or *(–)* to access SET UP mode.

VOL – VOL +

```
⬥BLUE  SCREEN
  LANGUAGE
  CH  SETTING
```
(SET UP mode)

---
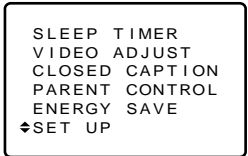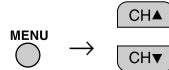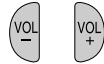
4 Press *VOL (+)* or *(–)* to access BLUE SCREEN select mode.

VOL – VOL +
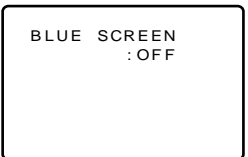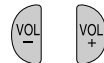
```
  BLUE  SCREEN
       : OFF
```
(BLUE SCREEN select mode)

---

5 Press *VOL (+)* or *(–)* to select "ON".

VOL – VOL +

```
  BLUE  SCREEN
       : ON
```

---
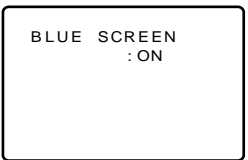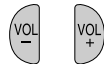
6 Press *MENU* to exit.

MENU ◯

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 VCR input mode is selected, the BLUE SCREEN will not be shown on your TV even if the BLUE SCREEN is turned on.

Using the Video and Audio Input Jacks

■ **Connecting video equipment for playback of video material.**
  • When the television is connected to video equipment as shown below, the material being played back on the video equipment can be seen on the television screen.

Connecting video device equipped with video output terminal.

CONNECTIONS

VIDEO EQUIPMENT

(Front connection terminals of TV)

VIDEO IN AUDIO

CAMCORDER

To VIDEO OUTPUT

To AUDIO OUTPUT

TV GAME

VCR
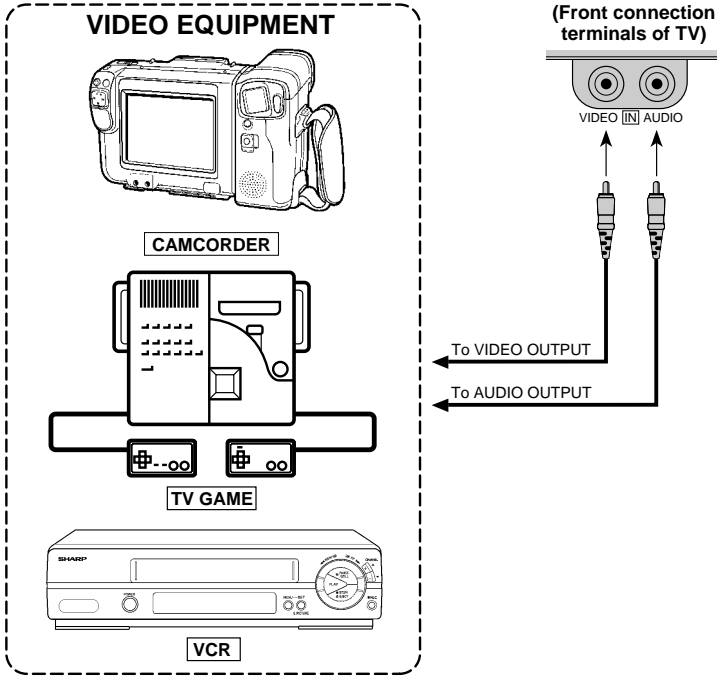
■ **To watch video material playback.**
  • Press the Remote's *INPUT* to select VIDEO INPUT mode to which the video equipment you want to playback is connected**.**
  • The external VIDEO INPUT mode will change as follows each time the *INPUT* is pressed.

  AIR → INPUT
  or (Front)
  CABLE
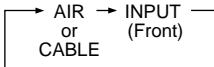
  • INPUT mode can be selected by pressing either the *CH UP (▲)* on the TV remote control when the TV is set to the highest channel stored in memory, or by pressing the *CH DOWN (▼)* when it is set to the lowest channel.

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.
  • It is the intent of SHARP that this product be used in full compliance with the copyright law of the United States and that prior permission be obtained from copyright owners whenever necessary.
  • For detailed information on the connection and use of auxiliary equipment, refer to the instruction manuals of the equipment being used.
  • The connection cords can be obtained from your local video store.

Before Calling for Service

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

POSSIBLE REMEDY	No Playback of VCR and Disk 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
Try a new channel, if OK, then possible station trouble.				X	X	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 with POWER button 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 page 25)	X	X											X	X	X		
Check batteries of Remote Control.			X														
Change Closed Caption mode to "OFF" / Energy Save mode to "OFF".																X	
Unplug the TV and plug it in again after two minutes.			X			X	X	X	X				X	X	X	X	X

Note:

• When viewing in TEXT mode, if no TEXT broadcast is being received, the screen may become dark and blank. Should this occur, set the Closed Caption mode to "OFF".

(Dark and Blank Picture)

Antes de llamar al servicio de reparaciones

Verifique estos items para ver si usted mismo puede solucionar el problema.

POSIBLE SOLUCIÓN / LISTA DE COMPROBACIONES DE SERVICIO RAPIDO	El vídeo o el reproductor de discos de video no reproducen imágenes	El equipo de video/audio externo no produce imágenes ni sonido	El mando a distancia no funciona	Barras en la pantalla	Imagen distorsionada	La imagen se desplaza verticalmente	No hay color	Mala recepción de algunos canales	Imagen débil	Franjas en la imagen	Imagen fantasma	Imagen borrosa	Sonido adecuado, imagen mala	Imagen adecuada, sonido malo	No hay imagen ni sonido	Imagen oscura y en blanco	Interferencia de ruido eléctrico externo con el funcionamiento del televisor
Pruebe con otro canal y si todo está bien, el problema puede ser de la emisora.						X	X	X	X	X	X	X	X	X	X	X	
Está conectado el televisor? Llega electricidad al tomacorrientes?		X	X												X		
Está conectado el interruptor del televisor?		X													X		
Está conectado la antena al terminal del panel posterior del televisor?								X	X	X		X			X		
Si utiliza una antena exterior, cerciórese de que el cable no esté dañado.						X	X	X	X	X	X	X	X	X	X		
Compruebe si hay interferencia local.					X		X		X		X	X		X	X		X
Desconecte el interruptor POWER y vuelva a conectarlo después de transcurrir un minuto.		X													X		
Ajuste el control de COLOR.							X										
Ajuste el control de MATIZ.									X				X				
Verifique los productos externos de Video/Audio, revise si hay fugas de conexiones sueltas o rotas.	X	X											X	X	X		
Compruebe el estado de las pilas del mando a distancia.			X														
Desactive (OFF) el modo CLOSED CAPTION / Desactive (OFF) el modo Ahorro de Energía (Energy Save)																X	
Desenchufe el televisor y vuelva a enchufarlo despúes de dos minutos.					X		X	X	X	X			X	X	X	X	X

Nota:

- Cuando se ve en modo TEXTO sin recibir emisiones de TEXTO, la pantalla puede ponerse en blanco y negro. Si ocurriera ésto, ponga el modo CLOSED CAPTION en OFF.

(Imagen oscura y en blanco)

Calling for Service

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

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:	13N-M100B, 13N-M150B, 13N-M100, 13N-M150,13 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 90 days 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:	Ship prepaid or carry in your Product to a Sharp Authorized Servicer. Be sure to have **Proof of Purchase** available. If you ship the Product, be sure it is insured and packaged securely.

TO OBTAIN ACCESSORY OR PRODUCT INFORMATION, CALL **1-800-BE-SHARP** OR VISIT www.sharp-usa.com

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SHARP ELECTRONICS CORPORATION

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