



20GT 425

**GE Color Television**

# *Owner's Manual*

*Warranty Information  
Operating Instructions*

*Please read completely before attempting  
to operate your new equipment.*

**Frank-Lin Premiums, Inc.**

**Frank-Lin Electronics**

P.O. Box 1944



Elkhart, Indiana 46515

(219) 294-5761

# Safety Precautions

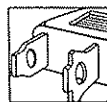
**WARNING:** To prevent fire or shock hazard, do not expose this TV to rain or moisture.

**CAUTION:** Avoid placing drinks or vases with water on top of your TV. If you suspect that liquid has entered the TV, unplug it immediately and have it inspected by a GE TV Servicenter. Turning it off is not enough—your TV and many other modern electronic devices have power applied to some circuits even when the *POWER* switch is turned off.

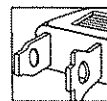
 <p>The lightning flash and arrowhead within the triangle is a warning sign alerting you of "dangerous voltage" inside the product that presents a risk of electric shock.</p>	<p><b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN</p> <p><b>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</b></p>	 <p>The exclamation point within the triangle is a warning sign alerting you of important instructions accompanying the product.</p>
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**CAUTION:** Maintain electrical safety. Powerline-operated equipment or accessories connected to this unit should bear the UL listing mark or CSA certification mark on the accessory itself and should not have been modified so as to defeat the safety features. This will help avoid any potential hazard from electric shock or fire. If in doubt, contact qualified service personnel.

- Your TV operates on 120 volts, 60 Hz AC power (normal house power) and has a polarized AC plug. Because one blade of the plug is wider than the other, the plug fits in the wall socket only one way. Do not defeat the safety feature of this plug. If you need an extension cord, make sure it is polarized.



**CAUTION:** To prevent electric shock, do not use the polarized plug on this TV with an extension cord, receptacle, or other outlet unless both blades can be fully inserted to prevent blade exposure.



**MISE EN GARDE:** Pour prévenir les chocs électriques, ne pas utiliser la fiche polarisée de cet appareil avec une rallonge, une prise de courant ou une autre sortie, à moins que les lames ne puissent être insérées à fond sans qu'aucune partie ne soit laissée à découvert.

- All operating controls and their functions are identified and explained in this manual. For warranty service or routine maintenance, contact the nearest Authorized GE TV Servicenter. All servicing and adjustments to electrical components should be done by a qualified service technician.

**Note to Cable TV Installer:** This reminder is provided to call your attention to Article 820-22 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part 1) which 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

Record Necessary Product Data here.

- No other set has the same serial number as yours. You will find the serial number and the TV model number on the back of your set.
- Make sure you have recorded both numbers so that you will have them in case your set is stolen or in case you need a complete description for any other reason.

MODEL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

PURCHASE DATE: \_\_\_\_\_

PURCHASED FROM: \_\_\_\_\_

Mail the enclosed Product Safety

Registration Card today so that we can contact you should there be a need for a safety adjustment to your TV.

**Save your sales slip.** To receive full warranty coverage, you will be required to show evidence of the date you purchased your TV. Do not mail your sales slip to us.

We suggest you attach your sales slip, or proof of purchase, to this page so you will have all the information you need in one place should service ever be needed.

Attach Sales Slip here.

# Introduction

## Thank you for choosing GE

Congratulations on your purchase of a GE TV. You have selected a high-quality, precision-engineered instrument designed to give you years of video and audio enjoyment.

Despite its sophistication, your new TV is amazingly simple to operate because it has so many automatic features. To simplify operation even more, the TV provides on-screen prompts that guide you thru each step of the special functions. The remote control allows adjustment of major operating controls and special features from the comfort of your favorite easy chair.

## About This Manual

To take full advantage of all the features and benefits of this unique TV, be sure to read this owner's manual carefully and then keep it in a safe place for future reference.

A simplified operating guide is printed for convenient quick reference.

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# Television Features

**Square-corner COTY picture tube (on 20-inch diagonal\* models)**—COTY (Combined Optimum Tube and Yoke) picture tube technology produces a sharp, brilliant color picture. The square-corner screen delivers a noticeably larger viewing area than a conventional round-cornered picture. The COTY design also improves reliability and picture definition. High-Contrast picture tube screen is tinted to enhance contrast when set is on and add a dramatic high-tech look when set is off. Dark screen absorbs room light for a vivid color picture.

\*21-inch diagonal in Canada

**High-Contrast Picture Tube (on 13-inch diagonal\* models)**—Experience a brilliant color picture with sharp, lifelike detail. High-Contrast screen tinting enhances contrast when set is on—adds a dramatic high-tech look when set is off. Dark screen absorbs room light for a vivid color picture.

\*14-inch diagonal in Canada

**Cable-compatible Quartz Tuning**—receives up to 147 channels in the USA including 91 non-scrambled cable channels. (In Canada, up to 145\* channels can be received including 89\* non-scrambled cable channels.) Quartz synthesizer tunes the channels, and digital counters and comparators automatically lock the tuning system to the signal.

\*For models with separate UHF antenna screws, up to 120 channels can be received in Canada including 64 non-scrambled cable channels.

**Total Electronic Convenience by Digital Remote Control**—Now you can control virtually *all* of your TV's functions and adjustments—not just channel change and volume—by remote control. With this sophisticated all-electronic control system, on-screen prompts and displays are available on command to provide a visual guide for precise adjustment and quick, simple operation.

**Channel Change Controls**—Remote options include direct push-button access, scanning through channels programmed into memory, or instant recall of the last channel viewed. On-screen channel and time display.

**Audio System Controls**—Raise or lower the set's volume level, or mute and restore sound at the touch of a single button—all from across the room.

**Electronic Video System Controls**—Color, Tint, Contrast, Brightness, and Sharpness adjustments are accessible via remote control. If you decide you prefer the picture at its original factory settings, simply touch the *RESET* button on the remote control.

**Special On-screen Displays**—This TV delivers an array of additional convenience features, all accessed via the *SETUP* button on the remote control. Special purpose features include:

- **Sleep Timer**—lets you program the set to turn itself off—up to 4 hours in advance. Watch late night programs without worrying about waking up with the set still on.
- **AutoProgramming**—Auto-start AutoProgramming locks in active channels the very first time the set is turned on, so there are no cumbersome set-up procedures. For added convenience, tuner automatically selects cable or off-air mode. The tuner will reprogram automatically in the event the memory is erased (due to a power failure or other cause).

TV automatically programs itself the first time you turn it on.

- **Channel Memory**—conveniently alter the AutoProgramming scan list in the electronic tuner memory to eliminate those channels you wish to skip or add channels not present during AutoProgramming (such as a VCR on channel 3 or 4).

- **Cable/Air Switching**—instantly switch from cable to off-air broadcast mode to tune in local channels not carried by your cable system. For added convenience, tuner automatically selects cable or off-air mode.

- **Clock Set**—set the clock by remote control and forget it. Your TV will retain the correct time and display it on command.

**On-screen Time Display**—after you set the clock, the time will appear on the screen whenever you press the *ON* or *DISPLAY* button on the remote control or change channels.

**Automatic Picture Reset**—lets you quickly change all picture settings back to the levels preset at the factory.

**Automatic Contrast/Color Tracking**—Once the picture is set to your preference, the unified contrast/color tracking circuitry balances contrast, color, and overall brightness with a single contrast adjustment.

**BlackLock Contrast Circuit**—enhances the picture by preserving detail, controlling distortion when the picture is very bright, and preventing dark areas from fading to shades of gray.

**Unitized Chassis**—features advanced technology, including several microchips that replace dozens of color processing components. Cool-operating electronic regulation circuits enhance reliability and efficiency for outstanding performance, longer life expectancy, and lower power consumption.

# General Installation Information

## Unpacking TV

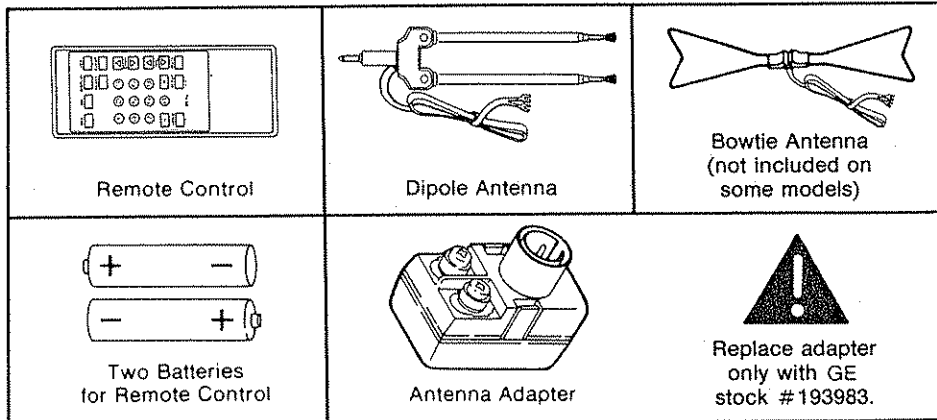
Shown here are the accessories that come packed with your TV. When you unpack your new set, be sure you have removed all the accessories and information sheets. We recommend that you save the packing materials and box in case you ever need to ship or store your TV.

## Choosing the Best Location

- Choose a location that is convenient but away from sources of heat such as direct sunlight and heating units.
- Allow for air circulation around the set. This is especially important if you install it in a cabinet with several other components. Cleaning the ventilation slots on the cabinet

at regular intervals will assure adequate ventilation.

- To prevent electric shock, avoid wet areas such as kitchens or bathrooms.
- Try to avoid direct light on the screen during operation. Because the picture tube emits light, direct light on the screen will weaken picture contrast and intensity.
- If you are using an indoor antenna, an outside wall is a good location. You may want to try a few different locations to find the best possible spot for reception.



**Note:** Your TV operates on 120 volts, 60 Hz (normal household current) and has a polarized plug. Because one blade of the plug is wider than the other, the plug fits into the wall socket only one way. Do not defeat the safety feature of this plug. If you need to use an extension cord, make sure it is polarized.

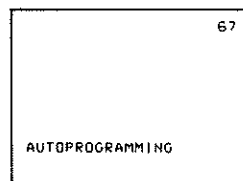
# First-Time Operation

Your TV has been designed with a special convenience feature that will automatically program active channels into your television's memory the first time you turn it on. To use this feature:

1. Attach antenna(s) or cable-TV system to back of TV.
2. Then plug power cord into wall outlet.
3. Press **POWER** button to turn on TV. Your TV will automatically cycle through all channel numbers and place active channels into the Channel Scan Memory.

The Channel Scan Memory is the list of channels your TV will stop on when you press the **CHANNEL**  $\wedge$  or  $\vee$  buttons.

This display will appear on the screen while your TV is autoprogramming active channels.



When your TV is finished autoprogramming, it will tune to the lowest channel number in its Channel Scan Memory. You can check the channels in memory by pressing the **CHANNEL**  $\wedge$  or  $\vee$  buttons. Your TV will stop on each channel in memory.

You can also add or erase individual channels as desired. Details are on page 17.

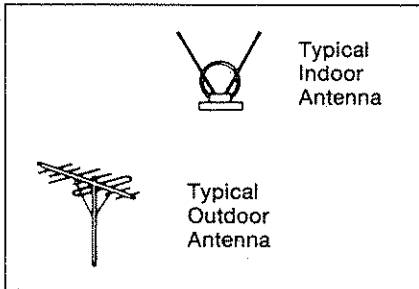
## Helpful Hint

If you did not have your home antenna(s) or cable-TV system connected to the TV when it automatically programmed channels into memory, many channels were probably missed. Instructions for reprogramming the Channel Memory are on page 16.

**Note:** You will not be able to receive channels (especially VHF) if you don't connect your antenna or cable lead first.

# Antenna/Cable Information

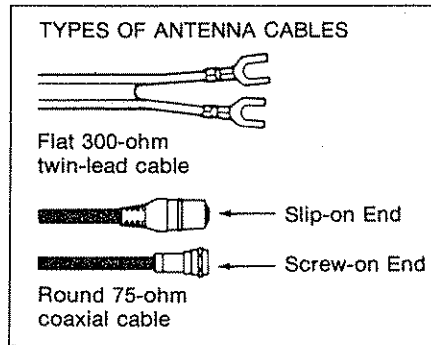
The antenna is the "signal receiver" for television. Most modern TV antennas receive both VHF (*Very High Frequency*) and UHF (*Ultra High Frequency*) channels. Channels 2-13 are VHF channels and channels 14-69 are UHF channels.



In most situations you will get better picture quality if you use an outdoor antenna or connect your TV to a cable-TV system. If this is not possible, connect the indoor antenna(s) supplied with your TV.

Cable-TV (CATV) supplies television signals directly by cable without the need for a home antenna. Cable-TV delivers both VHF and UHF channels and other channels not available from your antenna.

Shown below are two basic types of antenna cables. Signals from a home antenna may be conducted through either type. Cable-TV signals, however, are always conducted through round, 75-ohm coaxial cable.



● Follow the instructions below if you intend to connect the indoor antenna(s) supplied with your TV.

—or—

● Follow the instructions on page 5 if you intend to connect another type of home indoor or outdoor antenna to your TV.

—or—

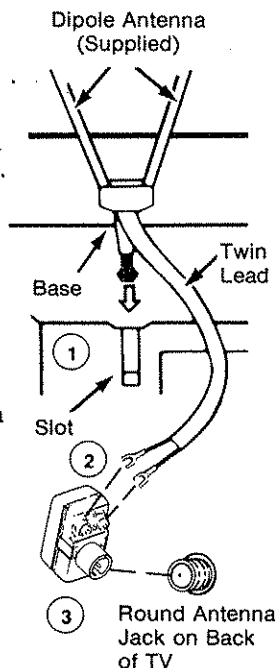
● Follow the instructions on page 6 if you intend to connect a cable-TV system to your TV.

## Connecting Antenna(s) Supplied with TV

Follow these steps to connect the *indoor* antenna(s) supplied with your TV (only if you do not connect an outdoor antenna or a cable-TV system).

### Dipole Antenna (supplied)

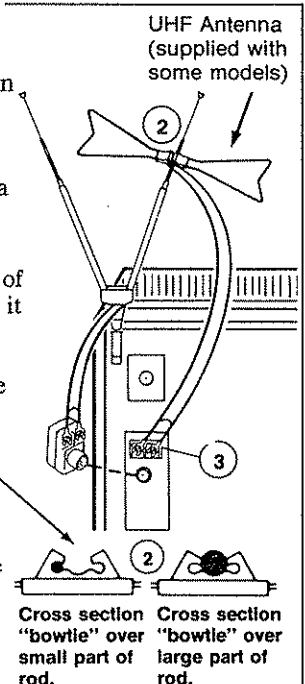
1. Insert the antenna base into the pocketed slot on the back of your set. Stand at the back of your set, with the antenna twin-lead facing you, press the base of the antenna into the slot until it locks in place.
2. Connect the ends of the twin-lead to the Antenna Adapter (supplied).
3. Connect the Antenna Adapter to the round antenna connector on the back of the TV.
4. Later, after you've turned on the TV, adjust the length and position of the antenna rods for best reception.
  - For viewing VHF channels, extend the rods fully.
  - For viewing UHF channels (only for models without separate UHF screws), shorten the rods for best reception.



### For Selected Models With Bowtie Antenna

Bowtie Antenna (not required on models with single CABLE/ANTENNA jack)

1. Extend one of the dipole antenna rods.
2. Insert the center slot of the "bowtie" antenna over a section of the dipole antenna rod and slide it down the rod until it fits snugly on the bottom section ... or ... you may also position the bowtie over a small part of the dipole antenna rod as shown in the diagrams at the right.
3. Connect the twin lead from the bowtie to the UHF screws.
4. Later, after you've turned on the TV, rotate the bowtie until you find the position that gives you the best UHF reception.

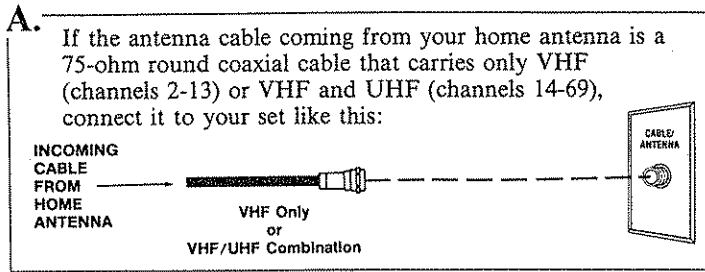


# Home Antenna Connections

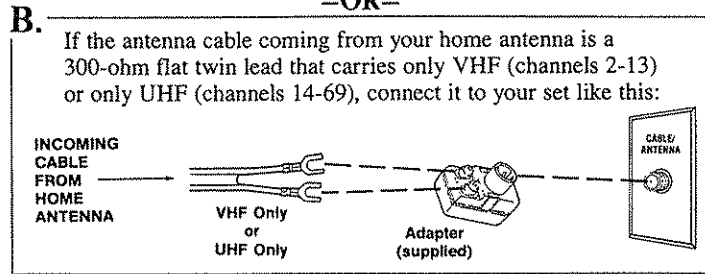
Follow one of the steps below to connect an indoor or outdoor antenna to your TV (only if you do not have a cable-TV system).

If the back of your TV looks like this:

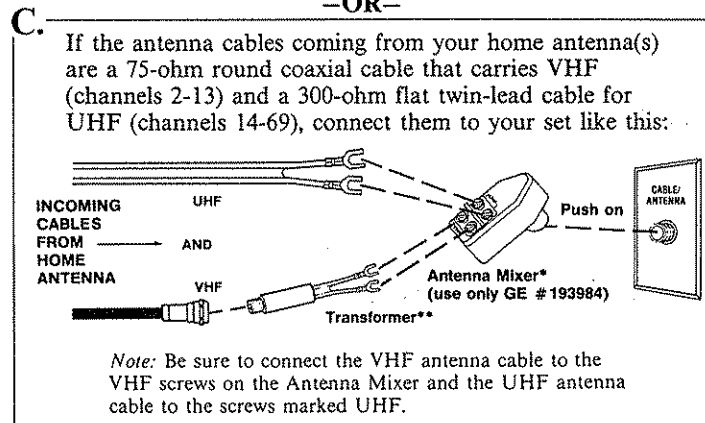
Refer to one of the steps below.



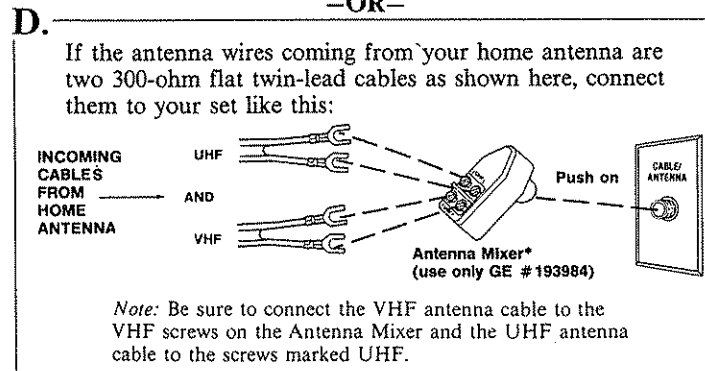
—OR—



—OR—

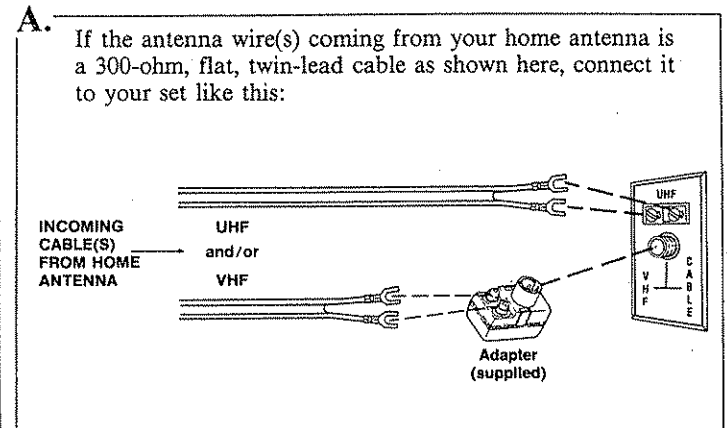
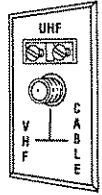


—OR—

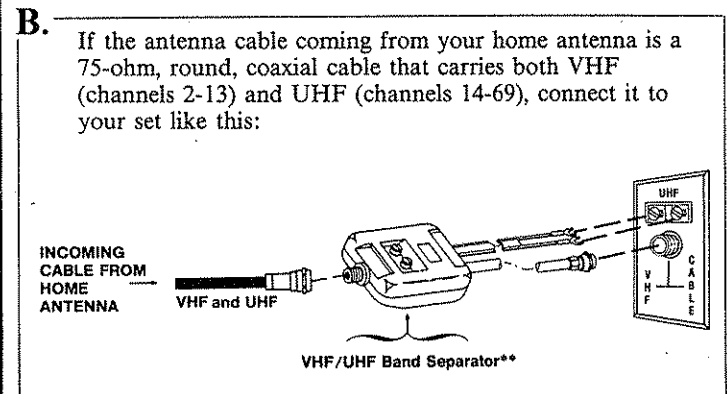


If the back of your TV looks like this:

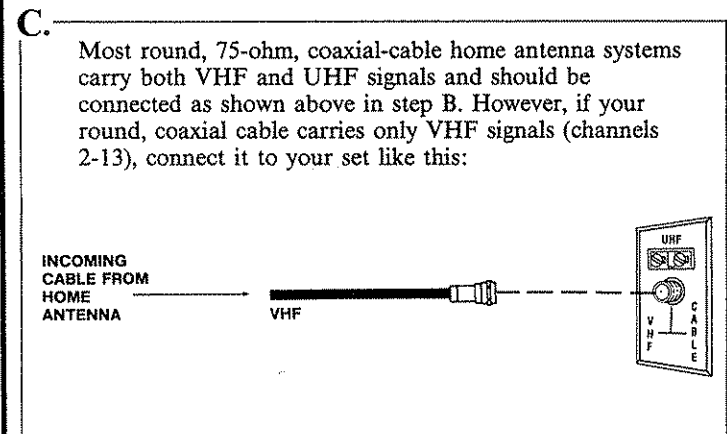
Refer to one of the steps below.



—OR—



—OR—



\* Optional accessory available from your GE Dealer. Only use GE Antenna Mixer (Stock #193984).

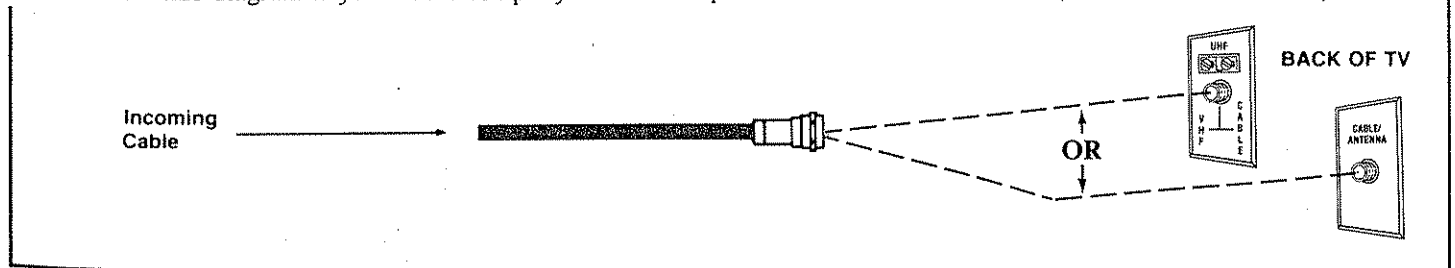
\*\*Optional accessory available from your GE dealer or electronic supply store.

# Cable-TV Connections

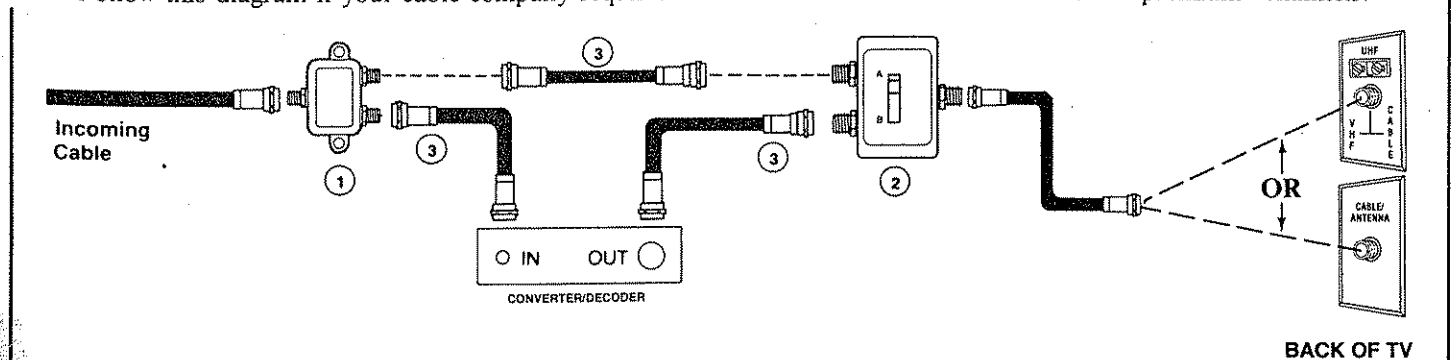
Follow one of these steps to connect a cable-TV system to your TV instead of a home antenna.

Note: Since cable-TV systems vary, you may wish to consult your local cable-TV company for additional information.

**A** Follow this diagram if your cable company does not require a converter/decoder box (no scrambled channels):



**B** Follow this diagram if your cable company requires a converter/decoder box for scrambled "premium" channels:



**Note:** These optional accessories (2-way splitter ①, A/B switch ②, three coaxial cables ③) are available from most electronics parts stores.

- The "A" position on the A/B switch lets you select all non-scrambled channels by remote control.
- The "B" position allows you to select scrambled channels via the converter box. Place your TV on channel 3 or 4 when selecting channels via the converter box.



# Cable-TV Operation

Your new TV is designed to receive up to 147 channels in the USA including 91 non-scrambled cable channels. (In Canada, up to 145\* channels can be received including 89\* non-scrambled cable channels.) To use this TV on a cable-TV system, confirm that the cable-TV system is properly connected to your TV. Since cable systems vary, you may wish to consult your local cable-TV company for additional information.

If your cable-TV company follows EIA/NCTA channel-identification standards, most of the channels offered by your cable company will be identified by channel numbers that are identical to those on your TV. For example, if your cable-TV system has programs on cable channel 20, you can choose this channel by selecting channel 20 on your TV. If your cable company offers cable channels A-1 or A-2, you can tune them by selecting TV channels 99 or 98. (Cable channels A-1 and A-2 are not available in Canada.)

\*For models with separate UHF antenna screws, up to 120 channels can be received in Canada including 64 non-scrambled cable channels.

Some cable-TV companies do not follow the EIA/NCTA standards and instead assign their own channel identification. For example, some use the standard broadcast channel numbers (2-13) for channels 2-13, but identify their other channels with letters. If your cable company does not follow the EIA/NCTA standards, ask them for a cross reference that shows to which channels you should tune your TV to receive their cable-TV channels.

Not all cable-TV channels will be active on your particular cable-TV system. Also some cable companies may require the use of a decoder with their cable-TV system. Consult your cable company or local GE dealer for details.

## Scrambled Cable-TV Channels

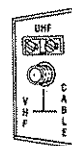
Some cable companies offer "premium-pay" channels in which the signal is scrambled. Descrambling these signals for normal viewing requires the use of a descrambler device which is generally provided by the cable company.

The descrambler device may or may not be a part of the cable converter. Diagram B on page 6 shows how to connect this type of converter/descrambler device to the TV.

To do so, you'll need a 2-way splitter, an A/B switch, and suitable lengths of coaxial antenna cables. These accessories are available from your GE dealer or electronic supply store.

Since cable systems vary, you may wish to consult your local cable company for additional information.

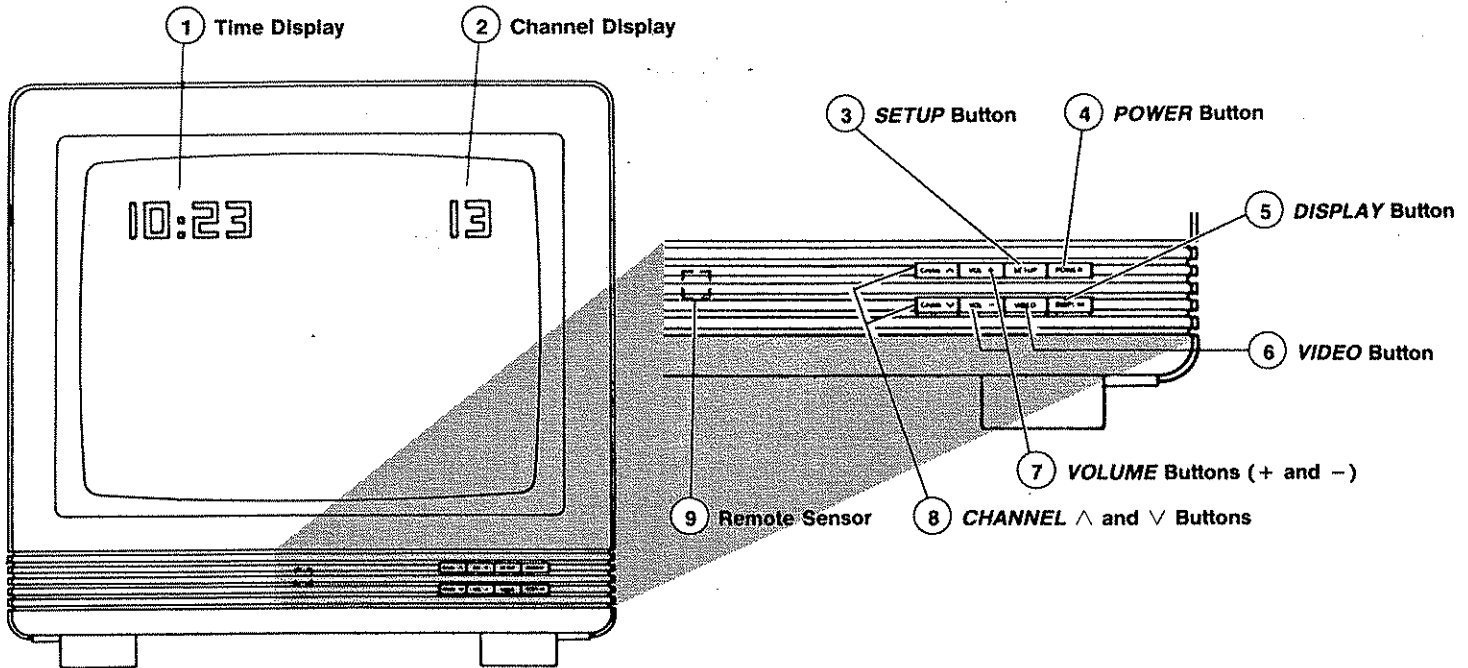
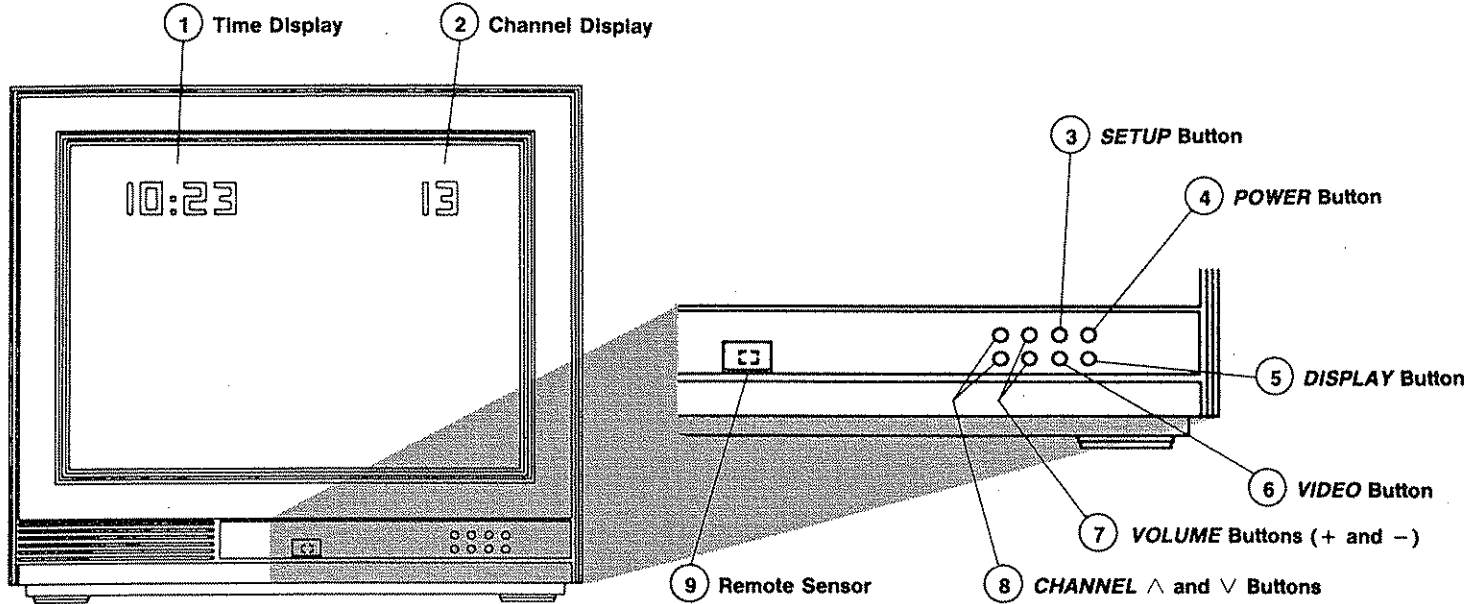
### Note for models with separate UHF antenna screws:



In the U.S.A., if your cable company offers ultra-band cable channels 65-89, you can tune them by adding the optional accessories in GE Kit No. AH056 to the incoming cable. Check with your local GE dealer for more complete information.

# Front Panel Controls

Shown here are the front-panel controls. The controls on your set will resemble one of the pictures shown below. You can use either the front-panel controls or the remote control to operate the TV.



① **Time Display**

- Once set, displays the current time whenever you turn on the TV, change channels, or press the *DISPLAY* button.
- The time is also displayed whenever you change volume with the *VOLUME* buttons on the TV.

② **Channel Number Display**

- Shows the number of the channel you're watching.
- Appears whenever TV is turned on, channel is changed, or *DISPLAY* button is pressed.
- Also appears whenever you change volume with the *VOLUME* buttons on the TV.

③ **SETUP Button**

- Press repeatedly until the function you want appears on the screen.
- Function choices will appear in this order:
  - 1) Setting the Sleep Timer,
  - 2) AutoProgramming Channel Memory,
  - 3) Adding or Erasing Channels in Channel Memory,
  - 4) Setting the Clock, and

5) Changing Cable/Air Setting.

- Details about using each function begin on page 14.

④ **POWER Button**

- Press once to turn on TV.
- Press again to turn off TV.

⑤ **DISPLAY Button**—Press to display current time and channel number on the TV screen. Instructions for setting clock are on page 18.

⑥ **VIDEO Button**

- Press repeatedly until the video function you want appears on the screen.
- Function choices will appear in this order:
  - 1) Color Adjustment,
  - 2) Tint Adjustment,
  - 3) Contrast Adjustment,
  - 4) Brightness Adjustment,
  - 5) Sharpness Adjustment,
  - 6) Resetting Picture Controls to Factory Settings.
- Details about using each function begin on page 12.

⑦ **VOLUME Buttons (Also “-” and “+” Buttons)**

- Press *VOLUME +* to increase volume.
- Press *VOLUME -* to decrease volume.
- The - and + buttons are used to make adjustments after the *VIDEO* or *SETUP* button is pressed.

⑧ **CHANNEL ^ and v Buttons**

- Press *CHANNEL ^* to see the next higher channel in memory.
- Press *CHANNEL v* to see the next lower channel in memory.

⑨ **Remote Sensor**—Receives commands from the remote control. When using the remote control, point it toward this sensor.

# Basic Remote Operation

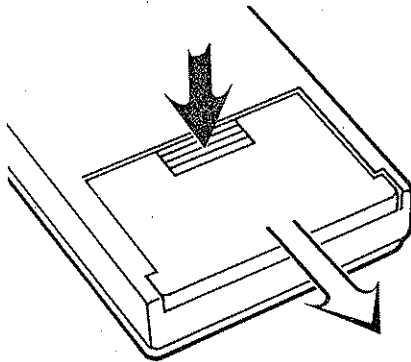
Before attempting to operate your remote control, install the batteries as shown here.

## Helpful Hint

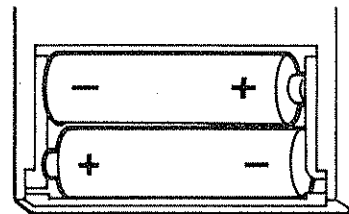
The remote control produces an invisible (infrared) beam that travels in a straight line much as the beam of a flashlight. For this reason, when operating the remote control, you must point it directly at the front of the TV without objects between that can block the infrared light beam.

## Installing/Replacing Batteries

1. Turn the remote control face down.
2. Press down on the ridged area of the battery cover and slide it off.



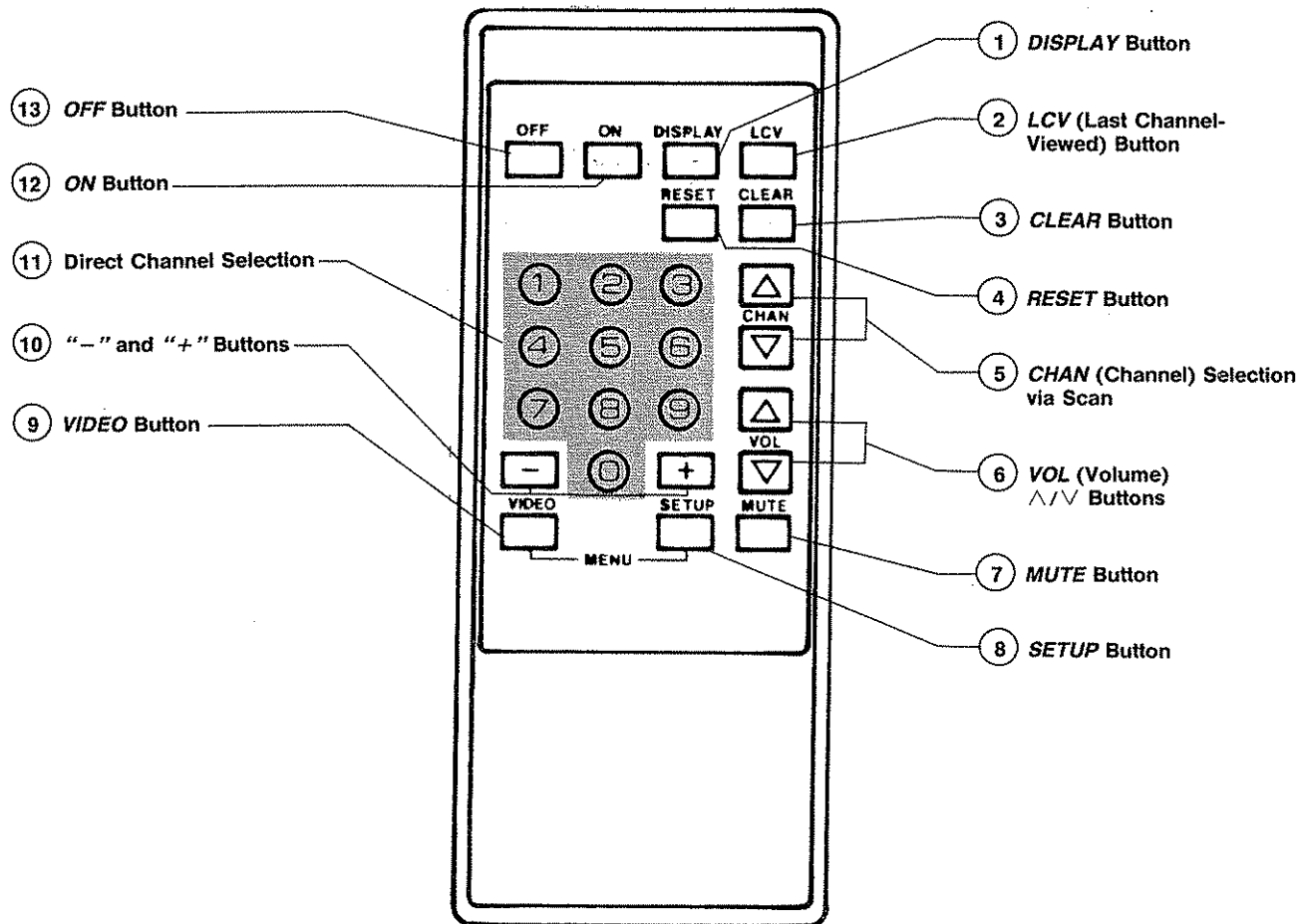
3. Install two "AAA" batteries as shown. Make sure you match the + end of each battery to the + end of the battery compartment.



4. Replace the cover and turn remote over--face up.

### Notes:

- Never place anything heavy on top of the remote control or lay it upside-down. This may accidentally depress the buttons for a long time and discharge the batteries.
- Replace the batteries when the TV fails to respond to the remote control.
- Remove the batteries from the remote control if it will not be used for a month or more. This will prevent possible damage from battery leakage.

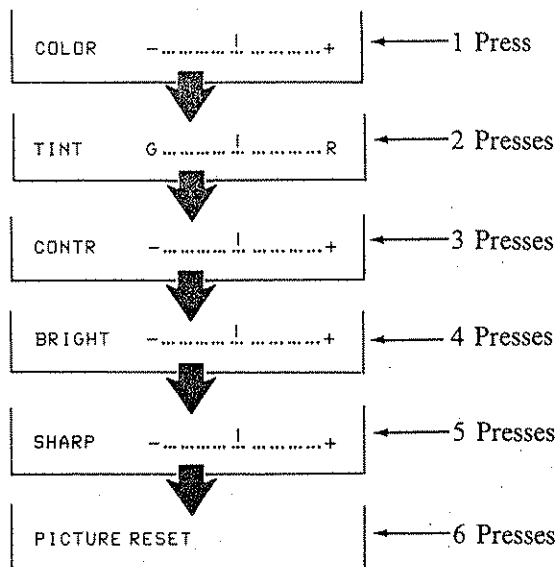
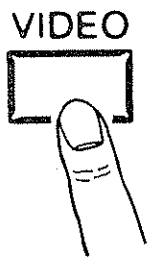


# Basic Remote Operation (cont)

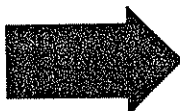
- ① **DISPLAY Button**
  - Press while TV is on to display the time (if set) and channel number on the screen.
- ② **LCV (Last Channel Viewed) Button**
  - Pressing the *LCV* button causes the TV to change back to the last tuned channel. This is useful should you want to monitor two channels.
  - To operate, select the first channel you wish to watch. Then select the other channel by pressing two number buttons (for example, press 0 then 6 for channel 6).
  - The TV will now change back and forth between the two channels each time you press the *LCV* button.
- ③ **CLEAR Button**
  - Pressing *CLEAR* clears the screen of on-screen display messages (except Mute).
- ④ **RESET Button**
  - Press the *RESET* button to return the Video Adjustments (Color, Tint, Contrast, Brightness, and Sharpness) to the original factory settings.
- ⑤ **CHAN (Channel) Selection via Scan**
  - Press *CHANNEL*  $\wedge$  to select the next higher channel in channel memory.
  - Press *CHANNEL*  $\vee$  to select the next lower channel in channel memory.
- ⑥ **VOL (Volume)  $\wedge/\vee$  Buttons**
  - Press *VOLUME*  $\wedge$  to increase volume.
  - Press *VOLUME*  $\vee$  to decrease volume.
- ⑦ **MUTE Button**
  - Press *MUTE* to quickly reduce sound to minimum level without affecting the picture.
  - This is very useful during telephone calls or other interruptions.
  - When sound is muted, the word "MUTE" will be displayed in the bottom left corner of the screen.
  - To restore sound, press *MUTE* again or press *VOL*  $\wedge$ .
- ⑧ **SETUP Button**
  - Press repeatedly until the function you want appears on the screen.
  - Function choices will appear in this order:
    - 1) Setting the Sleep Timer,
    - 2) AutoProgramming Channel Memory,
    - 3) Adding or Erasing Channels in Channel Memory,
    - 4) Setting the Clock, and
    - 5) Changing Cable/Air Setting.
  - Details about using each function begin on page 14.
- ⑨ **VIDEO Button**
  - Press repeatedly until the video function you want appears on the screen.
  - Function choices will appear in this order:
    - 1) Color Adjustment,
    - 2) Tint Adjustment,
    - 3) Contrast Adjustment,
    - 4) Brightness Adjustment,
    - 5) Sharpness Adjustment,
    - 6) Resetting Picture Controls to Factory Settings.
  - Details about using each function begin on page 12.
- ⑩ **"-" and "+" Buttons**
  - Use these buttons after you have pressed the *VIDEO* or *SETUP* button.
  - Press "+" to increase (or change) a function.
  - Press "-" to decrease (or change) a function.
- ⑪ **Direct Channel Selection**
  - Always press two number buttons (first one, then another) to select a channel. For example, press "0" then "6" for Channel 6. Press "1" then "3" for Channel 13.

**Note:** After you have pushed the first number of your channel selection, you have five seconds to press the second. If you do not make your selection within five seconds, the display will go back to the previously selected channel.

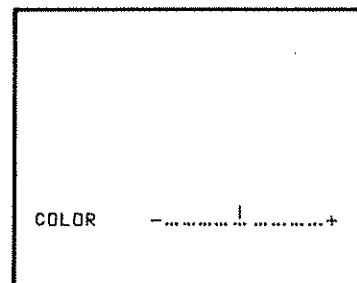
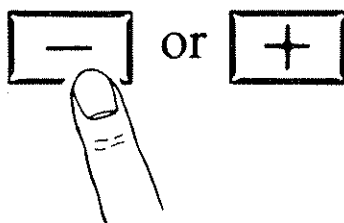
  - If you should select an invalid channel by mistake, simply select another channel.
- ⑫ **ON Button**
  - Press the *ON* button to turn on the TV.
- ⑬ **OFF Button**
  - Press the *OFF* button to turn off the TV.



1. Repeatedly press the *VIDEO* button on the front of the TV or on the remote control until the function you want appears on the screen.



The on-screen displays will appear in this order as you press the *VIDEO* button.



2. Press the “-” or “+” button on the front of the TV or remote control to adjust the function appearing on the TV screen.

**Notes:**

- The on-screen display will automatically disappear from the screen if you do not press “-” or “+” within eight seconds.
- Whenever a display disappears from the screen, the “-” and “+” buttons on the TV become the *VOLUME* adjustment buttons.

- Press the “-” button to decrease a function.
- Press the “+” button to increase a function.

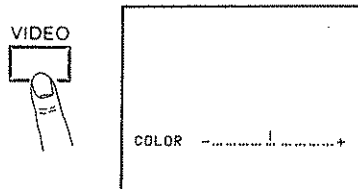
The display will automatically disappear in a few seconds unless you press “-” or “+” again.

**Note:** The Picture Reset function is explained on the next page.

### Color Adjustment

The Color function adjusts the amount of color in the picture.

1. Press the *VIDEO* button once. The Color graph will appear on the TV screen.

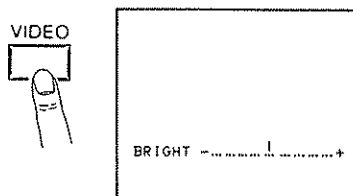


2. Press “-” button to decrease color, or press “+” button to increase color.

### Brightness Adjustment

The Brightness function adjusts the brightness of the dark portions of the picture.

1. Press *VIDEO* button repeatedly until the Brightness graph appears on the TV screen.



2. Press the “-” button to decrease brightness, or press the “+” button to increase brightness.

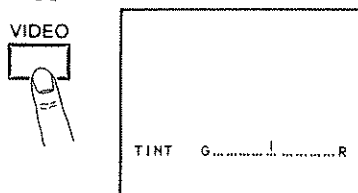
### How to Adjust for a Color Picture that Pleases You

1. Decrease Color to minimum. This will leave a black-and-white image on the screen.
2. Adjust Contrast until the picture pleases you.
3. Adjust Brightness until the black parts of the picture appear black. You may need to wait until the picture shows something you're sure is black to make this adjustment. Be careful not to lose the details in darkly shaded areas.
4. Increase Color until you reach a pleasing level of intensity.
5. Adjust Tint until flesh tones or other color objects appear natural.
6. Adjust Sharpness for a pleasing level of picture sharpness.
  - For normal viewing, adjust to midrange.
  - For a sharper picture, increase Sharpness.
  - For weak signals, the picture may be more pleasing with Sharpness decreased.

### Tint Adjustment

The Tint function adjusts the color of flesh tones.

1. Press the *VIDEO* button repeatedly until the Tint graph appears on the TV screen.

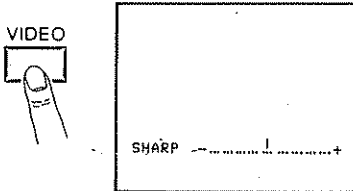


2. Press “-” to add more green tint, or press “+” to add more red tint.

### Sharpness Adjustment

The Sharpness function adjusts picture sharpness.

1. Press the *VIDEO* button repeatedly until the Sharpness graph appears on the TV screen.



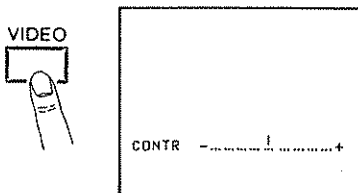
2. Press the “-” button to decrease sharpness, or press the “+” button to increase sharpness.

**CAUTION:** When using TV games, computers, and similar products with your TV, keep the Brightness and Contrast functions at low settings. If a fixed (non-moving) pattern is left on the screen for long periods of time at a high Brightness or Contrast setting, the image can be permanently imprinted onto the screen. These types of imprints are not covered by your warranty because they are the result of misuse.

### Contrast Adjustment

The Contrast function adjusts the overall brightness and contrast of the picture.

1. Press the *VIDEO* button repeatedly until the Contrast graph appears on the screen.



2. Press “-” button to decrease contrast, or press “+” button to increase contrast.

### Picture Reset

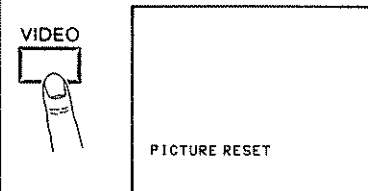
The Picture Reset function lets you quickly change the video functions (Color, Tint, Contrast, Brightness, and Sharpness) back to the factory settings.

#### With Remote Control

1. Press the *RESET* button on the remote control. The video settings will automatically change back to the factory settings.

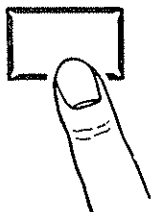
#### Without Remote Control

1. Press the *VIDEO* button repeatedly until the Picture Reset display appears on the TV screen.

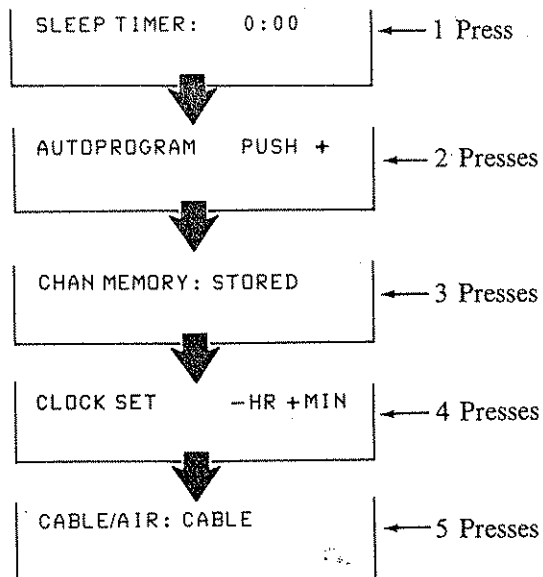


2. Press either “-” or “+” to reset the Video functions back to the factory settings.

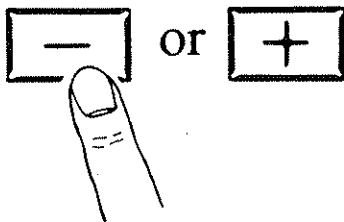
SETUP



1. Repeatedly press the *SETUP* button on the front of the TV or on the remote control until the function you want appears on the screen.



The on-screen displays will appear in this order as you press the *SETUP* button.



2. Press the “-” or “+” button on the front of the TV or remote control to adjust (or change) the function appearing on the TV screen.



Detailed instructions about each function begin on the next page.

### Notes:

- The on-screen display will automatically disappear from the screen if you do not press “-” or “+” within eight seconds.
- Whenever a display disappears from the screen, the “-” and “+” buttons on the TV become the *VOLUME* adjustment buttons.

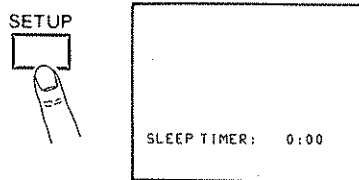


By setting the Sleep Timer, you can program your TV to turn itself off after a certain period of time (up to four hours).

This is useful whenever you want to watch TV for an hour or so before going to sleep.

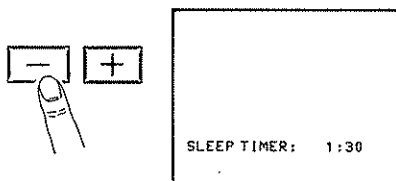
### Setting Sleep Timer (with or without remote)

1. Press the *SETUP* button once. The Sleep Timer display will appear on the TV screen.



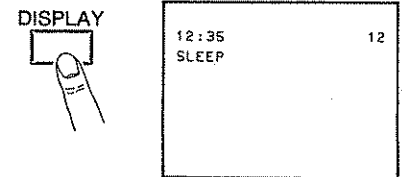
2. Press the "+" or "-" button to select the length of time (up to four hours) you want the TV to stay on.

- Each time you press the "+" or "-" button, the time will increase 30 minutes (up to 4 hours). Then the time display will start over with 0:00.

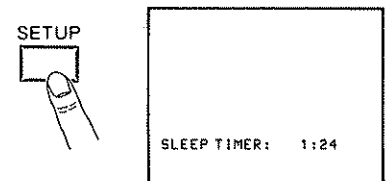


3. When finished, the display will automatically disappear from the screen in about eight seconds. To make it disappear more quickly, press the *CLEAR* or *DISPLAY* button.

4. The Sleep Timer will begin to count down to zero. The word "Sleep" will appear on the screen whenever you change channels or press the *DISPLAY* button to let you know the Sleep Timer is activated.



The amount of time remaining before the TV shuts itself off will appear in the Sleep Timer display whenever you press the *SETUP* button.



5. When the Sleep Timer counts down to 0:00, the Sleep Timer display will appear on the screen for eight seconds. Then the TV will turn itself off.

If you want the TV to stay on when this display appears, press the *ON* button on the remote. The Sleep Timer will be cancelled.

### Clearing Sleep Timer (before it turns off TV)



To cancel the sleep timer before it turns off the TV, first press the *SETUP* button to enter the Sleep Timer function and then press the "+" or "-" button until the screen shows 0:00.

The Channel Memory is the list of channel numbers your TV will stop on when you press the *CHANNEL*  $\wedge$  or  $\vee$  button. You can program any list of channels into the Channel Memory.

Your TV is so automatic that you will probably never need to manually operate this feature.

The first time you turn on your TV, it will automatically cycle through all channels and place active channels into the Channel Memory. You can then add or erase channels as desired by following the instructions on the next page.

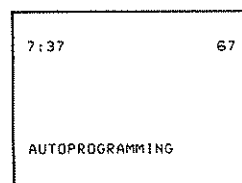
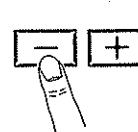
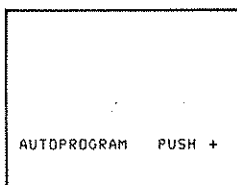
## Helpful Hints

- The AutoProgramming feature will place into memory active channels that have a valid signal at the time you autoprogram your TV.
- An active channel may be missed occasionally if its signal is very weak or if the channel happens to be "off the air" when the TV is autoprogrammed.
- An inactive channel may be included in the channel memory if there happens to be some sort of "noise" or "stray signal" on the channel when the TV is autoprogrammed.
- Signals from scrambled cable channels can not be autoprogrammed.

## 1. AutoProgramming Channels into Channel Memory

(with or without remote)

1. Connect home antenna(s) or cable-TV to your set.
2. After you have turned on the TV and adjusted the volume, repeatedly press the *SETUP* button until the AutoProgram display appears on the screen.
3. Press either "-" or "+" to begin programming. The TV will cycle thru available channels in your area and place active channels into memory. If all available channels are of reasonable signal strength and you prefer not to add or erase any channels from memory, programming is complete.



4. When the TV is finished cycling, you can check to see what channels are in memory by pressing the *CHANNEL*  $\wedge$  or  $\vee$  button. Your set will stop on each of the channels in memory.

### Notes:

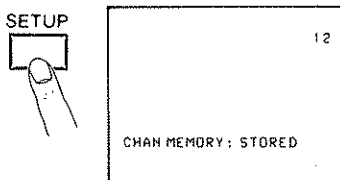
- Make sure the outlet you plug your TV into is "on" all the time (not on a wall switch) to prevent the TV from losing its channel memory.
- If there is an extended power failure, your TV will automatically reprogram active channels the first time you turn it on after the power failure.

## 2. Erasing/Adding Channels in Channel Memory

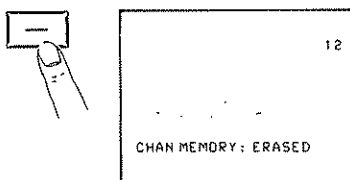
### Erasing Channels

1. To erase a channel, first press the *CHANNEL*  $\wedge/\vee$  button until the channel number you want to erase appears on the screen.

2. Then repeatedly press the *SETUP* button until the Channel Memory display appears on the screen.



3. Then push the “-” button to erase that channel from memory.

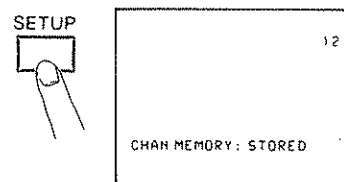


4. Wait until Channel Memory display disappears from the screen. You can then check channels in memory by pressing the *CHANNEL*  $\wedge$  or  $\vee$  button. If you want to erase another channel, repeat steps 1 thru 3.

**Note:** The Channel Memory display will automatically disappear from the screen in a few seconds after you have finished erasing or adding channels.

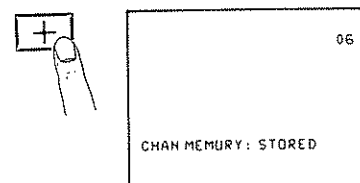
### Adding Channels

1. Repeatedly press the *SETUP* button until the Channel Memory display appears on the screen.



2. To add a channel, first enter two number buttons (using remote control) for the channel you want to add. For example, press “0” then “6” for Channel 6.

3. Then push the “+” button to add that channel to the memory.



4. If you want to add another channel, repeat steps 2 and 3.

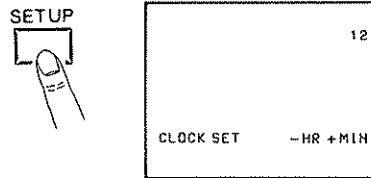
## Setting the Clock

After you set the clock, you'll be able to see the on-screen time display whenever you change channels or press the *ON* or *DISPLAY* button.

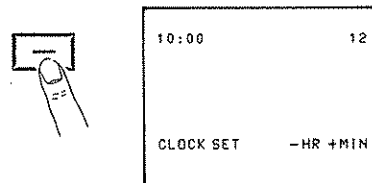
If power is interrupted for an extended period of time, you will need to reset the clock.

## Setting the Clock (with or without remote)

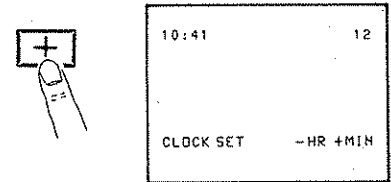
1. Repeatedly press the *SETUP* button until the Clock Set display appears on the screen.



2. Press and hold the “-” button until the correct hour appears in the display.



3. Press and hold the “+” button until the correct minute appears in the display.



# Changing Cable/Air Function

Your TV is so automatic that you will probably never need to change this function. That's because when your set autoprograms the Channel Memory, it automatically adjusts the Cable/Air setting for you.

The Cable/Air function tells your TV whether you have a cable-TV system or a home antenna connected to it.

During AutoProgramming the TV automatically determines whether cables signals or antenna (air) signals are being received. It will then automatically set the Cable/Air function.

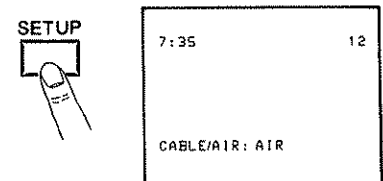
When the Cable/Air function is set to Cable, it allows the TV to receive cable channels. When the Cable/Air function is set to Air, it allows the TV to receive whatever TV channels (VHF and UHF) are broadcast in your area.

Normally you will never need to use this function because your TV automatically autoprograms itself and selects the Cable/Air setting the first time you turn it on (and after each extended power interruption). The Cable/Air function allows you to override the automatic settings and thus provides maximum flexibility should you desire to use your TV for special applications.

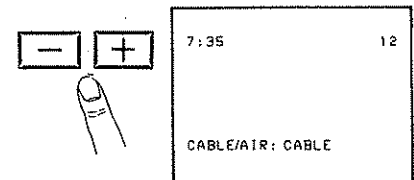
## Changing the Cable/Air Function

(with or without remote)

1. Repeatedly press the *SETUP* button until the Cable/Air display appears on the TV screen.



2. Press either “-” or “+” to change the Cable/Air function.



**Note:** The Cable/Air function will change each time you press the “-” or “+” button.

# Additional Operating Notes

## Using “-” and “+” Buttons on Front of TV



The “-” and “+” buttons are used after you have pressed either the *VIDEO* or

*SETUP* button to change settings or make adjustments.

Whenever a display disappears from the screen, the “-” and “+” buttons *on the front of the TV* automatically become the *VOLUME* adjustment buttons. If the “-” or “+” button on the TV is pressed after the display has disappeared, the TV will change volume level.

If you want to make additional adjustments after a display has disappeared, press the *VIDEO* or *SETUP* button again to bring the display back to the screen. This will automatically activate the “-” and “+” buttons again.

## Power Failures

The functions outlined below are not affected by brief power interruptions. After longer interruptions, the following occurs when power is restored:

Function	Condition After Extended Power Failure
• On/Off: .....	Set stays off when power comes back.
• Volume: .....	Volume returns to 1/3 of full volume.
• Channel Memory:.....	Set will automatically reprogram channel memory the first time it is turned on after an extended power failure.
• Last Channel Viewed: ..	LCV information must be reset.
• Color, Tint, Sharpness Contrast, Brightness: ...	Set goes to original Factory settings.
• Clock: .....	Clock is cleared, must be reset.
• Sleep Timer: .....	Timer turns off, must be reset.

## Quickly Removing Displays from Screen



The Video and Setup displays automatically disappear from the TV screen a few

seconds after you have finished making your adjustments.

To make them disappear more quickly, press the *CLEAR* or *DISPLAY* button on the remote control.

If you want to make another adjustment, however, you can press either the *VIDEO* or *SETUP* button again without waiting for the displays to disappear.

## Last Function Memory



The TV has a special memory for the *VIDEO* and *SETUP* functions that appear on the screen.

Via remote control your TV “remembers” which function you displayed last—even after its display has disappeared from the screen. So, if you want to adjust the same function again, simply press the “-” or “+” button on the remote control. The last function you displayed will reappear on the TV screen.

# Problems You Can Solve

- Problems sometimes are caused by simple “faults” that you can easily correct without the help of a service technician by checking a few basic remedies.
- Before you call or take your TV to an Authorized GE TV Servicenter, look below in the left-hand column for the type of problem you are experiencing. Then perform the simple checks and adjustments listed for that problem.
- If your TV is still in warranty, these checks and adjustments could save you time and the cost of unneeded service. They also could save you the cost of a diagnosis not covered by your warranty. (See “*What does your warranty not cover*” on the back cover page.)
- If your TV is out of warranty, these checks and adjustments could save you the cost of an unneeded diagnosis.
- If service should be necessary, the warranty information on the back cover page tells you what your warranty covers and how to get service.

Trouble	Checks and Adjustments
TV will not turn on	<ul style="list-style-type: none"> <li>● Check to make sure it is plugged in.</li> <li>● Check the wall receptacle (or extension cord) to make sure it is “live” by plugging in something else.</li> <li>● Maybe batteries in remote control are “dead”.</li> <li>● Maybe remote control was not aimed at remote sensor.</li> </ul>
Intermittent or no remote	<ul style="list-style-type: none"> <li>● Maybe something was between the remote and the remote sensor.</li> <li>● Maybe the remote was not aimed directly at the TV.</li> <li>● Maybe batteries in remote are weak or dead. Try replacing batteries.</li> </ul>
Turns off while playing	<ul style="list-style-type: none"> <li>● Sleep Timer function may have been activated.</li> <li>● Electronic protection circuit may have been activated because of a power surge. Wait 30 seconds and then turn on again. If this happens frequently, the voltage in your house may be abnormally high (especially if you burn out a lot of light bulbs).</li> </ul>
Blank Screen	<ul style="list-style-type: none"> <li>● Try another channel.</li> </ul>
No sound, picture okay	<ul style="list-style-type: none"> <li>● Maybe sound is muted. Try pressing <i>VOLUME</i> ^ button to restore sound.</li> </ul>
Can't select certain channel	<ul style="list-style-type: none"> <li>● Channel may not be in Channel Memory. If you wish to select a channel not in channel memory, use the number buttons.</li> <li>● If using VCR, check to make sure <i>TV/VCR</i> button on VCR is in correct position.</li> </ul>
No picture, no sound	<ul style="list-style-type: none"> <li>● Maybe someone changed <i>CABLE/AIR</i> function to wrong position.</li> <li>● Maybe a vacant channel is tuned.</li> <li>● If watching VCR (connected only through antenna input), make sure TV is tuned to channel 3 or 4—same as <i>CH3/CH4</i> switch on VCR. Also check to make sure <i>TV/VCR</i> button on VCR is in correct position.</li> </ul>
Sound okay, picture poor	<ul style="list-style-type: none"> <li>● Check antenna connections.</li> <li>● Try adjusting <i>SHARPNESS</i> function to improve weak signals.</li> </ul>
Picture okay, sound poor	<ul style="list-style-type: none"> <li>● Try another channel.</li> </ul>
Controls don't work	<ul style="list-style-type: none"> <li>● Try unplugging set for 30 seconds and then turning it on again.</li> </ul>

## Cleaning and Care

- Dust TV as required, using a soft cloth or the dusting attachment for your vacuum cleaner.
- Occasionally vacuum the ventilation slots in the cabinet to assure adequate ventilation.
- Take care not to scratch the plastic surfaces.
- Do not use cleaning solutions with alcohol or ammonia on the plastic or wood surfaces.
- To restore the original sparkle to plastic surfaces, apply Glass Wax with a soft cloth.
- Avoid using an oil-based furniture polish on the cabinet since the residue will accumulate more dust.
- Turn the TV off before cleaning the front.
- Clean the face of the picture tube occasionally with a soft cloth or paper towel and a small quantity of liquid glass cleaner.
- While cleaning, do not allow liquid to run down the screen and inside the instrument.
- Avoid placing drinks or vases with water on top of your TV.
- If you suspect that liquid has entered the TV, unplug it immediately and have it inspected by a GE TV Servicenter. Turning it off is not enough—your TV and many other modern electronic devices have power applied to some circuits even when the *POWER* switch is turned off.

## Quick-Reference Operating Guide

### Video (Picture) Adjustments

1. Press *VIDEO* button repeatedly until the function you want to adjust appears on the screen.
2. Press “-” or “+” to adjust function.

### Setting Clock

1. Press *SETUP* button repeatedly until the “Clock Set” display appears.
2. Press and hold the “-” button to set hour.
3. Press and hold the “+” button to set minute.

### Resetting Picture Controls to Factory Settings

#### (With Remote Control)

1. Press the *RESET* button. TV will automatically reset video functions to the factory settings.

#### (Without Remote Control)

1. Repeatedly press the *VIDEO* button until the “Picture Reset” display appears.
2. Press “-” or “+” to reset video functions to factory settings.

### Setting Sleep Timer

1. Press *SETUP*.
2. Press “+” to select length of time.

### Cancelling Sleep Timer

1. Press *SETUP*.
2. Repeatedly press “+” or “-” to change time to 0:00.

### Autoprogramming Channels into Channel Memory

1. Press the *SETUP* button repeatedly until the “Autoprogram” display appears.
2. Press “-” or “+”.

### Erasing/Adding Channels in Memory

1. Select channel you want to add or erase.  
**Note:** To add channels, you must use the Number Buttons on the remote control.
2. Press the *SETUP* button until the “Chan Memory” display appears.
3. Press “-” to erase, or press “+” to add.

## GE Limited Warranty (20" Screen Size)

### What does your warranty cover?

- Any defect in material or workmanship.

### For how long after your purchase?

- Ninety days for labor charges.
- One year for parts.
- Two years for the picture tube.

The warranty period for rental sets begins with the first rental.

### What will we do?

- Pay any Authorized GE Television Servicenter the labor charges to repair the set in your home or, if required, at the service facility.
- Provide new or, at our option, rebuilt replacement parts and picture tube for the Authorized GE Television Servicenter to make the repairs.

### How do you get service?

- Contact any Authorized GE Television Servicenter. For their names and locations, ask your dealer or look in the Yellow Pages.
- Show the service technician your evidence of purchase date.

### What does your warranty *not* cover?

- Customer instruction. Your Owner's Manual provides information regarding operating instructions and user controls. For additional information ask your dealer.
- Installation and set-up service adjustments.
- Signal reception problems caused by external antenna or cable systems.
- Damage from misuse or neglect.
- Remote control batteries.
- Sets which have been modified or incorporated into other products.
- Sets purchased or serviced outside the USA.

### How does state law relate to this warranty?

- This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

### What if you purchased your set in Canada?

- Refer to the Canadian Warranty.

## GE Limited Warranty (13" Screen Size)

### What does your warranty cover?

- Any defect in material or workmanship.

### For how long after your purchase?

- Ninety days for labor charges.
- One year for parts.
- Two years for picture tube.

The warranty period for rental sets begins with the first rental.

### What will we do?

- Pay any Authorized GE Television Servicenter the labor charges to repair your set.
- Provide new or, at our option, rebuilt replacement parts and picture tube for the Authorized GE Television Servicenter to make the repairs.

### How do you get service?

- Take your television to any Authorized GE Television Servicenter. For their names and locations, ask your dealer or look in the Yellow Pages.
- Show the service technician your evidence of purchase date.
- Pick up your set when repairs are completed.

### What does your warranty *not* cover?

- Customer instruction. Your Owner's Manual provides information regarding operating instructions and user controls. For additional information ask your dealer.
- Installation and set-up service adjustments.
- Signal reception problems caused by external antenna or cable systems.
- Damage from misuse or neglect.
- Remote control batteries.
- Sets which have been modified or incorporated into other products.
- Sets purchased or serviced outside the USA.

### How does state law relate to this warranty?

- This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

### What if you purchased your set in Canada?

- Refer to the Canadian Warranty.



Thomson Consumer Electronics, Inc.  
600 North Sherman Drive  
P.O. Box 1976  
Indianapolis, IN 46206-1976

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