Advanced Video Imaging
Direct View Color TV
VCR+C^3 Remote
MTS Stereo
2-Tuner PIP

Operating Guide & Warranty

**for Models
Z27H41, Z32H41, Z36H41,
Z27H96, Z32H96, Z36H92,
Z36H96**

ZENITH

THE QUALITY GOES IN BEFORE THE NAME GOES ON ®

Return the Product Registration Card and your TV could be FREE!

¡Aviso para nuestros clientes de habla hispana: consulte la información que aparece al final de este manual!

SAFETY WARNINGS

SAFETY TIPS

Refer to the "Important Safety Instructions" section of this operating guide for important safety considerations.

WARNING

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

NOTE TO CABLE TV SYSTEM INSTALLER

This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electrical Code (U.S.A.). The code 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 the cable entry as practical.

POWER-CORD POLARIZATION

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

Caution

To prevent electric shock, match wide blade of plug to wide slot; fully insert.

Attention

Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

REGULATORY INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician.

CAUTION: Do not attempt to modify this product in any way without written authorization from Zenith Electronics Corporation. Unauthorized modification could void the user's authority to operate this product.

This class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

"Ce appareil numérique de la class b repecte toutes les exigences du Règulement sur le matériel brouillier du Canada."

IMPORTANT SAFETY INSTRUCTIONS

Your product has been manufactured and tested with your safety in mind. However, improper use can result in potential electrical shock or fire hazards. To avoid defeating the safeguards that have been built into your new product, please read and observe the following safety points when installing and using your new product, and save them for future reference.

Observing the simple precautions discussed in this section of the operating guide can help you get many years of enjoyment and safe operation from your new product.

1. **Read Instructions**
   Read all the safety and operating instructions before operating the product.

2. **Follow Instructions**
   Follow all operating and use instructions.

3. **Retain Instructions**
   Keep the safety and operating instructions for future reference.

4. **Heed Warnings**
   Follow all warnings on the product and in the operating instructions.

5. **Cleaning**
   Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. **Water and Moisture**
   Do not use this product near water — for example, near a bath tub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

7. **Accessories**
   Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

8. **Transporting Product**
   Move product and cart combinations with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

9. **Attachments**
   Do not use attachments not recommended by the product manufacturer as they may cause hazards.

10. **Ventilation**
    Slots and openings in the cabinet must not be blocked or covered. They are provided for ventilation, to ensure reliable operation, and to protect from overheating. Never block the openings by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11. **Power Sources**
    Operate this product only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power or other sources, refer to the operating instructions.

12. **Line-Cord Polarization**
    This product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). As a safety feature, this plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

13. **Power-Cord Protection**
    Route power-supply cords so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
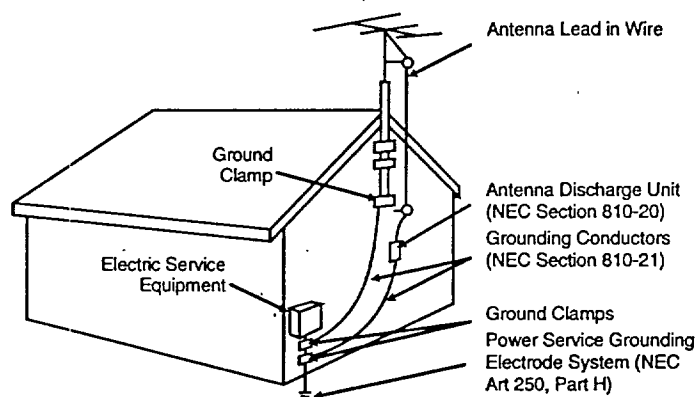

PORTABLE CART WARNING

14. Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (U.S.A.), ANSI/ NFPA 70 provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF GROUNDING ACCORDING TO NATIONAL ELECTRICAL CODE INSTRUCTIONS

Antenna Lead in Wire

Ground Clamp

Antenna Discharge Unit (NEC Section 810-20)

Grounding Conductors (NEC Section 810-21)

Electric Service Equipment

Ground Clamps

Power Service Grounding Electrode System (NEC Art 250, Part H)

NEC - NATIONAL ELECTRICAL CODE

15. Lightning

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

16. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, take extreme care to keep from touching such power lines or circuits, as contact with them might be fatal.

17. Overloading

Do not overload wall outlets and extension cords, as this can result in a risk of fire or electric shock.

18. Object and Liquid Entry

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

19. Servicing

Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

a. If the power-supply cord or plug is damaged.

b. If liquid has been spilled, or objects have fallen, into the product.

c. If the product has been exposed to rain or water.

d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions; improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.

e. If the product has been dropped or the cabinet has been damaged.

f. If the product exhibits a distinct change in performance.

21. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

22. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

23. Wall or Ceiling Mounting

Mount the product to a wall or ceiling only as recommended by the manufacturer.

24. Heat

Keep the product away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat. .

CONTENTS

FEATURES PROVIDED WITH YOUR TV

This operating guide describes a family of TV models. Not all models have all of the features described in this guide. Most models include the following features:

• On-Screen Menus Accessed By Remote or TV Controls	• Sleep Timer and On/Off Timer
• 2-Tuner Picture-In-Picture	• Automatic Channel Programming
• VCR Plus+³ C3 Multi-Brand Programmable Remote	• English/ Spanish/ French On-Screen Menus
• Parental Control	• Audio/Video Input Jacks for Stereo VCR
• MTS Stereo	• 181 Channel Tuning, STD/ HRC/ ICC Bands
• Front Channel Surround Sound	• Antenna/Cable Input Jack
• Closed Caption and Text Modes	• Variable Audio Output Jacks
• Channel Labels for Easy Channel Identification	

(Design and specifications are subject to change without prior notification.)

CONNECTION CENTER

VARIABLE AUDIO OUTPUT
Connect a stereo amplifier to these jacks to listen to your TV through your stereo system. Do not connect speakers directly to these jacks.

Variable audio output is always present regardless of the position of the SPEAKER EXT/INT switch.

AUX (Auxiliary) INPUT
Jacks for Audio and Video (A/V) connections to your TV from video equipment like a VCR

Make A/V connections to these jacks in order to hear stereo sound from your video equipment.
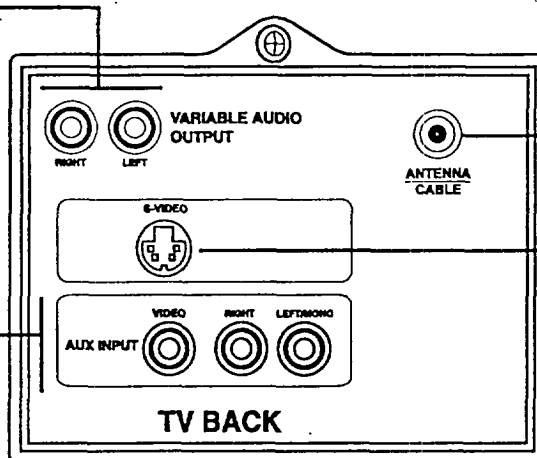
ANTENNA/CABLE
Attach your VHF-UHF antenna, cable-TV system, or VCR to this jack.

S-VIDEO IN
Jack for video input from a Super-VHS component.
Note: Use the Right, Left/Mono audio jacks with the S-Video jack.

TV BACK

⚠ **Turn off power or unplug TV before making any connection.**

CHOOSING THE CONNECTION DIAGRAM THAT'S RIGHT FOR YOU

Find your type of equipment by matching the items shown in this chart. Then refer to the last column to choose the Diagram Number you need to make the proper connections for your system.

ANTENNA	DIRECT CABLE (WITHOUT BOX)	CABLE BOX	STEREO VCR	PICTURE -IN- PICTURE	VARIABLE AUDIO OUTPUT	DIAGRAM NUMBER
●						1
	●					1
		●				1
●			●	●		2
	●		●	●		2
		●	●	●		3
					●	4

DIAGRAM #1. BASIC CONNECTION TO TV

Cable TV
Wall Jack

OR

Cable TV
Wall Jack

OR

Antenna

Flat Wire
(300 ohm)

IN — Cable Box — OUT

300/75 ohm
Adaptor

OR

CH 3/4
to TV

Round Wire
(75 ohm)

VARIABLE AUDIO
OUTPUT

RIGHT LEFT

ANTENNA
CABLE

Note: Cables are not
supplied with TV.

S-VIDEO

VIDEO RIGHT LEFT/MONO

AUX INPUT

TV BACK
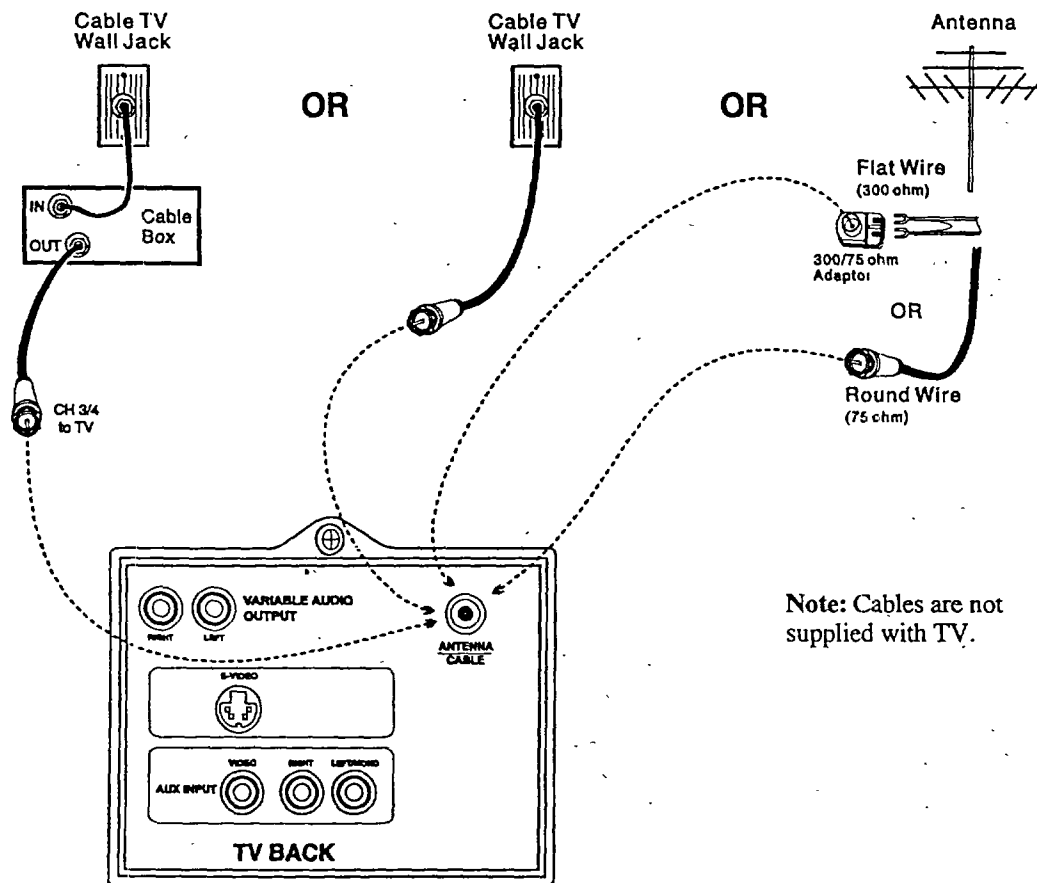
Operating Your TV	
With Cable Box	**Without Cable Box**
☐ Select cable box output channel (usually channel 3 or 4) at TV. ☐ Select channels for viewing at cable box.	☐ Select channels for viewing at TV.

DIAGRAM #2. CONNECTIONS REQUIRED FOR PICTURE-IN-PICT ⎯⎯)PERATIONS WITH ANTENNA OR DIRECT CABLE, AND VCR
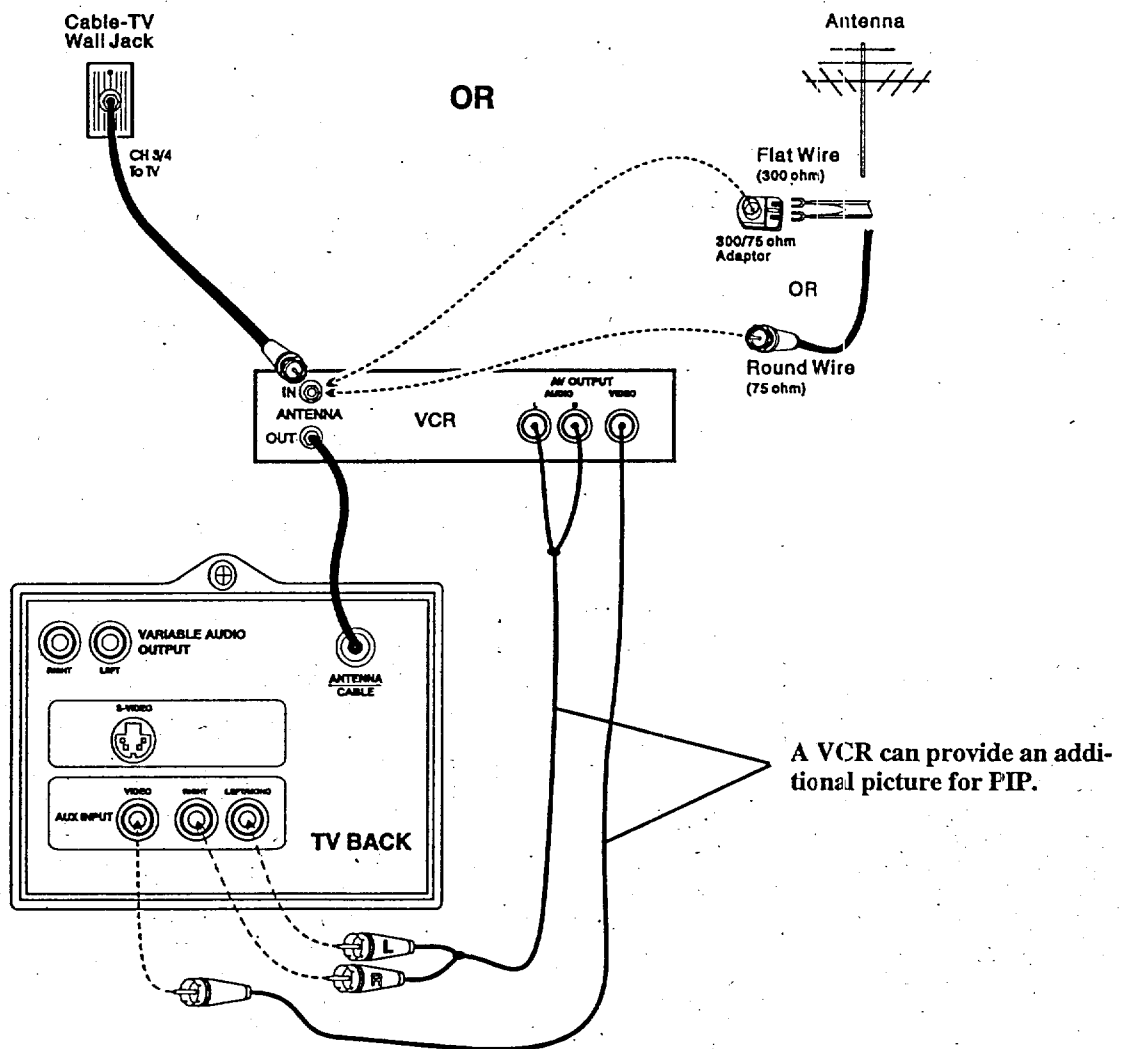
Cable-TV
Wall Jack

Antenna

OR

CH 3/4
to TV

Flat Wire
(300 ohm)

300/75 ohm
Adaptor

OR

Round Wire
(75 ohm)

AV OUTPUT
AUDIO   VIDEO

IN
ANTENNA   **VCR**
OUT

VARIABLE AUDIO
OUTPUT

RIGHT   LEFT

ANTENNA
CABLE

S-VIDEO

VIDEO   RIGHT   LEFT/MONO

AUX INPUT

TV BACK

L

R

A VCR can provide an addi-
tional picture for PIP.

With PIP You Can
❑ Watch 2 TV Channels.
❑ Simultaneously watch a videotape playing in the VCR and a TV channel.
❑ Simultaneously watch a channel using the VCR's selector and another using the TV's channelselector.

DIAGRAM #3. CONNECTIONS REQUIRED FOR PICTURE-IN-PICTURE OPERATIONS WITH CABLE BOX AND VCR

Cable-TV
Wall Jack

Signal Splitter

IN
OUT   OUT

IN
OUT   Cable Box

CH 3/4
To VCR

IN
ANTENNA   VCR   AUX INPUT
OUT   AUDIO   VIDEO

VARIABLE AUDIO
OUTPUT
RIGHT   LEFT

ANTENNA
CABLE

S-VIDEO

VIDEO   RIGHT   LEFT/MONO
AUX INPUT

TV BACK

L

R

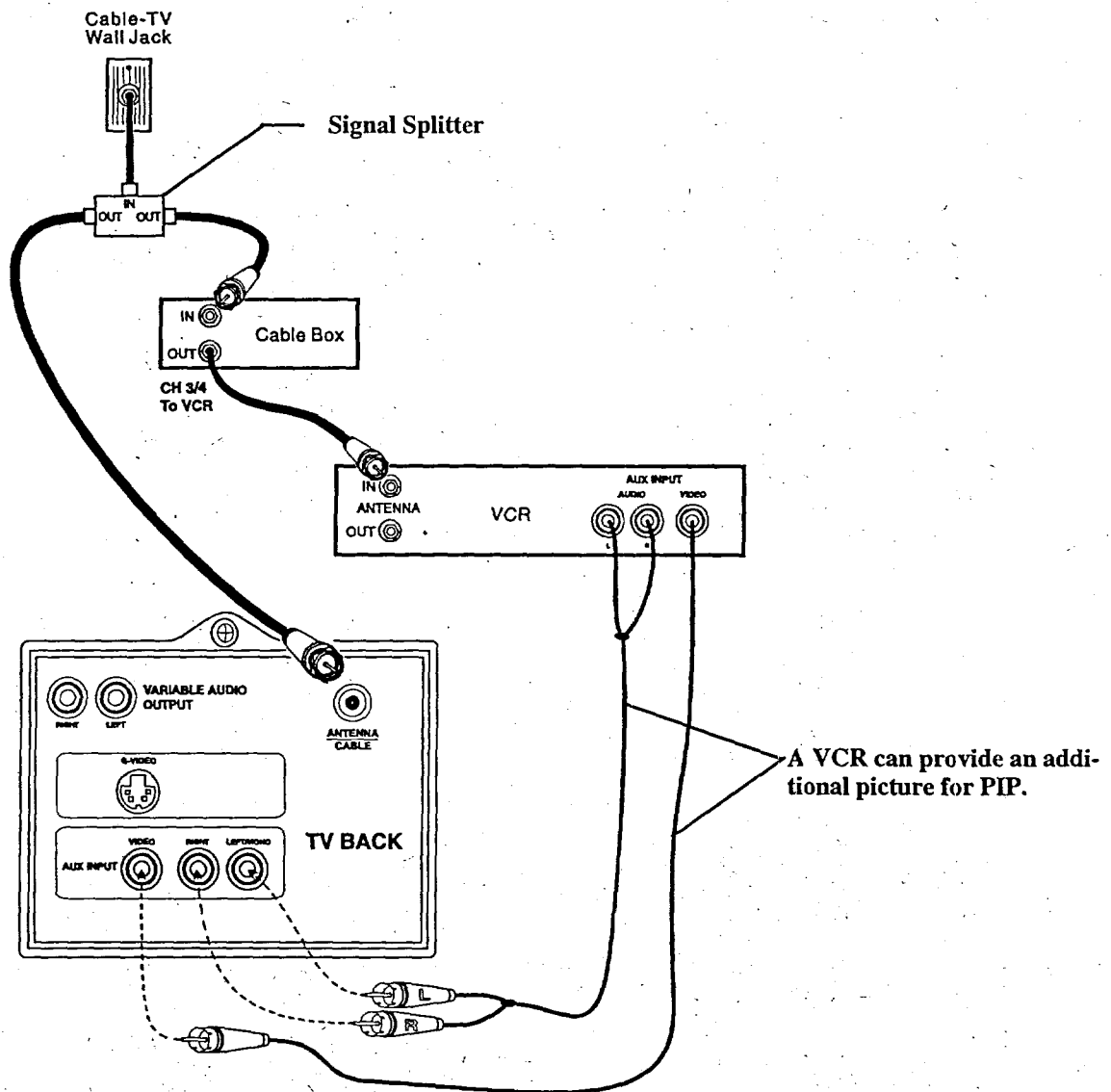A VCR can provide an additional picture for PIP.

With PIP You Can
❑ Watch 2 TV Channels.
❑ Simultaneously watch a videotape playing in the VCR and a TV channel.
❑ Simultaneously watch a channel using the VCR's selector and another using the TV's channelselector.

DIAGRAM #4. AUDIO AMPLIFIER CONNECTION TO TV

To listen to your TV through your sound system, connect the stereo amplifier to the VARIABLE AUDIO OUTPUT jacks on the TV as shown.

Note: Cables are not supplied with TV.

To Speakers

AUX INPUT
R
L
L   R
SPKR OUTPUT

Back of your
Stereo Amplifier

Optional
Customer
Provided
Sound
System

⚠ **Do not connect speaker(s) directly to the VARIABLE AUDIO OUTPUT jacks.**

VARIABLE AUDIO
OUTPUT
RIGHT   LEFT

ANTENNA
CABLE

S-VIDEO

AUX INPUT   VIDEO   RIGHT   LEFT/MONO

TV BACK
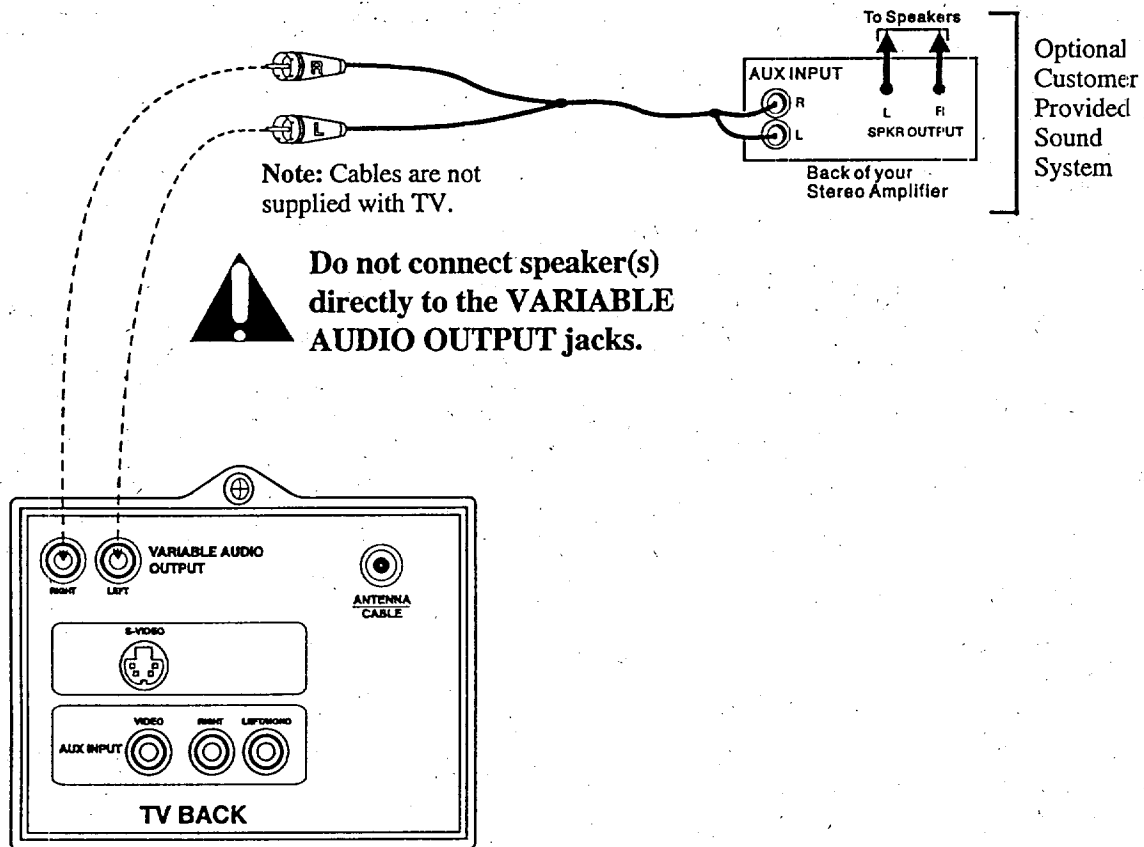
QUICK SET UP GUIDE

1. CONNECT THE POWER

AFTER you have connected the necessary cable(s) to the jacks on the back of the TV, plug your TV's power cord into a standard AC power outlet for 120 volt, 60Hz. AC current. Make sure you do not plug the TV into an outlet controlled by a switch.
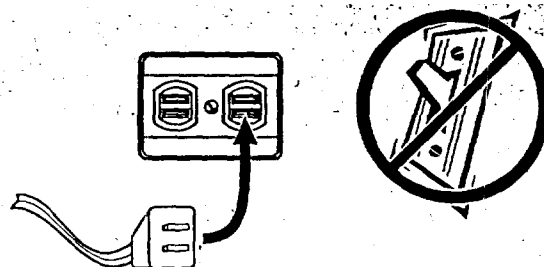
Turn on the TV by using the On/Off switch on the TV.

2. INSTALL THE BATTERIES INTO THE REMOTE

Install the batteries that are provided with your remote.

The remote comes set with Zenith codes. If you'd like to use the remote to operate other brands of equipment, you will need to program the codes for that equipment into the remote.

To Install the Batteries
1. Open the battery compartment by pressing in on the tab and lifting the cover off.
2. Place the batteries into the compartment, matching plus with plus (+ with +) and minus with minus (- with -).
3. Replace the cover.

Push tab in
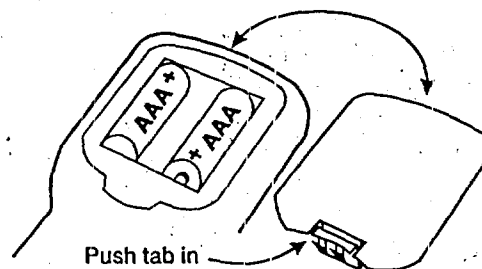
Use 2 size AAA batteries

3. (Required) USE AUTO PROGRAM

The first time you turn on your TV, use Auto Program to find all available channels.

To Start Auto Program
1. Press MENU repeatedly to view the Setup Menu.
2. Select Auto Program using the Up/Down arrows.
3. Use the Left/Right arrows to advance to the next menu.
4. Select OFF AIR ANTENNA if you have an antenna or CABLE TV if you have cable TV.
5. Use the Left/Right arrows to begin the channel search.

Setup Menu

Auto Program   ◄► To Program
Add/Del/Surf
Ch. Labels
Clock Set
Timer Setup
Parental Ctl
Captions
Caption/Text
Language
Auto Demo
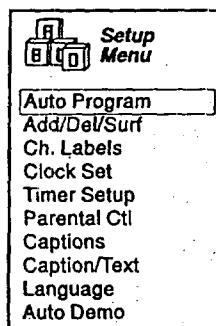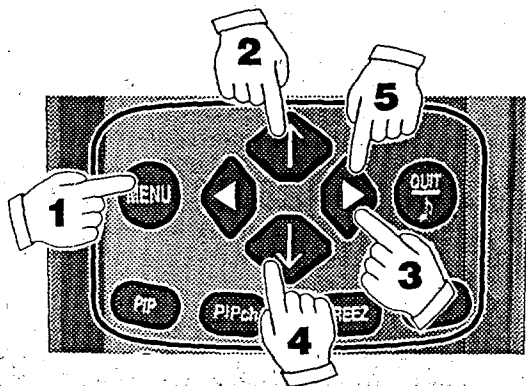
Setup Menu with Auto Program Highlighted
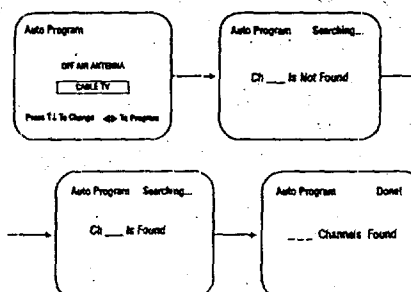
These typical screens appear while the channel search is in process.

4. SET THE CLOCK

To Set the Clock
1. Press MENU repeatedly to view the **Setup Menu**.
2. Select Clock Set using the Up/Down arrows.
3. Use the numbers on your remote to enter the time and press **TIMER** to select AM or PM. (You can also use the Left/Right arrows to set the clock to the current time.)
4. Press **QUIT** to remove the menu from view.

Setup Menu

Auto Program
Add/Del/Surf
Ch. Labels
Clock Set   10:30 AM◄TIMER
Timer Setup
Parental Ctl
Captions
Caption/Text
Language
Auto Demo
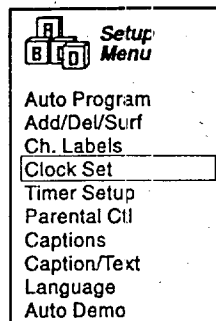
Setup Menu with Clock Set Highlighted
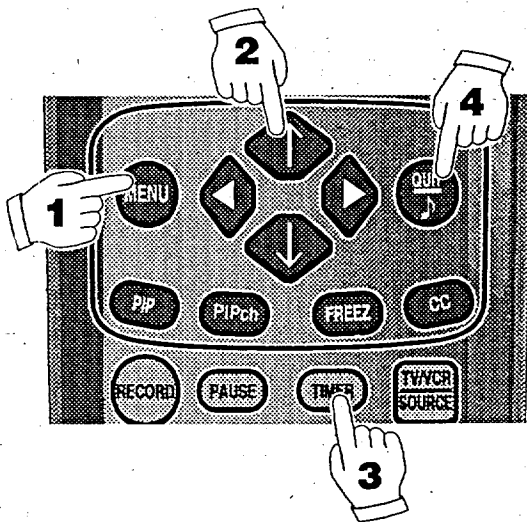
5. USE OTHER MENU OPTIONS

Setup Menu

Auto Program
Add/Del/Surf
Ch. Labels
Clock Set
Timer Setup
Parental Ctl
Captions
Caption/Text
Language
Auto Demo

Press MENU

Audio Menu

Bass
Treble
Balance
Audio Mode
Surround ♪
SoundRite
Speakers

Press MENU

Video Menu

Contrast
Brightness
Color
Tint
Sharpness
Color Temp
Picture Pref

Press MENU

PIP Menu

Color
Tint
Size

Press MENU

Source Menu

Main Source
PIP Source

Press MENU

MENU OPERATION


```
      ┌──────────────────────────┐
      │  ▣▫  Setup               │
      │  ▣▣  Menu                │
      │ * [Auto Program      ]   │   [◀▶  To Program  ]
      │ * Add/Del/Surf           │
      │ * Ch. Labels             │
      │   Clock Set              │
      │   Timer Setup            │
      │   Parental Ctl           │
      │   Captions               │
      │   Caption/Text           │
      │   Language               │
      │   Auto Demo              │
      └──────────────────────────┘
```

*** These options are not available if you choose
VIDEO for Source Menu Options.**

Menu Operation
1. Press **MENU** repeatedly to choose **Setup Menu**.
2. Press an Up/Down arrow repeatedly to *select* an option.
3. Press a Left/Right arrow repeatedly to *adjust* an option.
4. Press **QUIT** to remove a menu from view, or wait a few seconds and the menu will disappear.

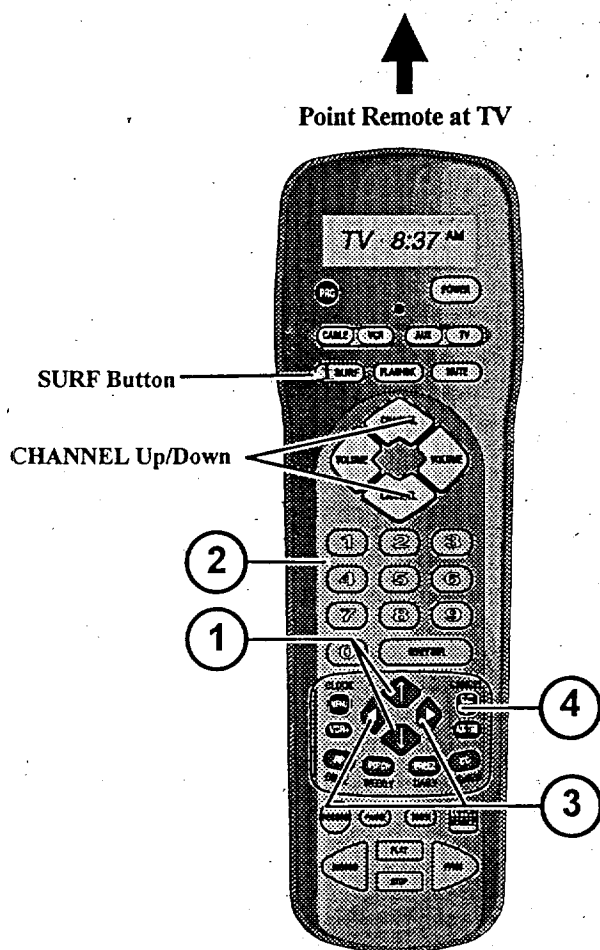| Menu Option	Function
Auto Program	Finds and stores active channels to use with the CHANNEL Up/Down arrows.
Add/Del/Surf	Creates a list of favorite channels to use with CHANNEL Up/Down arrows.
Channel Labels	Assigns a network/station label, name, or call letters to channels. Example: If you assign **ABC** to channel 13, then **ABC** will appear when you select channel 13.
Clock Set	Sets the TV's clock to the current time.
Timer Setup	Note: The clock in the TV must be set before you can use the timers. 1. Sets the TV's Sleep Timer and On/Off Timer. 2. The Sleep Timer programs the TV to turn off after a period from 15 minutes up to 4 hours. 3. The On/Off Timer programs the TV to turn on and off at specific times.
Parental Ctl	Blocks undesirable channels, including the VIDEO input source.
Captions	Turns Caption/Text On or Off. Options are On, Off, or Captions When Muted.
Caption/Text	Displays closed captions or text when available on the selected channel. Options are: **Caption 1, Caption 2, Caption 3, Caption 4, Text 1, Text 2, Text 3,** and **Text 4.**
Language	Selects **English, Spanish,** or **French** for on-screen menus.
Auto Demo	Shows on-screen menus.

USING ADD/DEL/SURF

Point Remote at TV

SURF Button

CHANNEL Up/Down

②

①

④

③

Surf's Up! 🏃

No Surfing ⊘

To Add Channels

These channels are selected by using the CHANNEL Up/Down arrows. Channels found by Auto Program are set as "Added" channels:

1. Use the Up/Down arrows to choose Add/Del/Surf.
2. Select a channel using the numbers on the remote.
3. Use the Left/Right arrows to show Added.
4. Press QUIT to remove the menu from view.

To Delete Channels

These channels are not selected when you use the CHANNEL Up/Down arrows. Select them directly by using the numbers on the remote.

1. Use the Up/Down arrows to choose Add/Del/Surf.
2. Select a channel using the numbers on the remote.
3. Use the Left/Right arrows to show Deleted.
4. Press QUIT to remove the menu from view.

To Set Up Surf Channels

"SURF" channels form a list of your favorite channels. When the "SURF" mode is On, **these are the only channels that you'll see with the CHANNEL Up/Down arrows.**

1. Use the Up/Down arrows to choose Add/Del/Surf.
2. Select a channel using the numbers on the remote.
3. Use the Left/Right arrows to show Surf.
   Repeat steps 2 and 3 to make your most frequently watched channels "Surf" channels.
4. Press QUIT to remove the menu from view.

To turn On "SURF,", press SURF on the remote.

Surf's Up! 🏃 appears on the screen.

To turn off "SURF," press SURF again.

No Surfing ⊘ appears on the screen.

USING CHANNEL LABELS

To Assign Channel Labels
1. Select Channel Labels.
2. Select a channel using the numbers on the remote.
3. Use the Left/Right arrows to see your choices until the desired label appears. If you don't wish to create a channel label, select the dashes (—— —— —— ——).

```
┌──────────────┐
│ ▣▢  Setup    │
│ ▣▢▢  Menu    │
├──────────────┤
│ Auto Program │
│ Add/Del/Surf │
│ Ch. Labels   │        ┌──────────────┐
│ Clock Set    │        │  Ch  2   CBS │
│ Timer Setup  │        └──────────────┘
│ Parental Ctl │
│ Captions     │
│ Caption/Text │
│ Language     │
│ Auto Demo    │
└──────────────┘
```

Setup Menu with Ch. Labels Highlighted

TIMER SETUP: Sleep Timer

The Sleep Timer programs the TV to turn off after a period from 15 minutes to 4 hours.

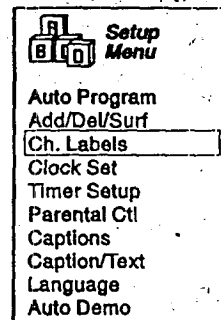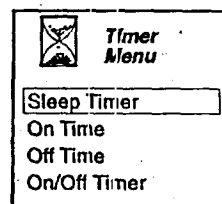| From Setup Menu	Direct From Timer Button
1. Make sure the TV's clock is set.	1. Press **TIMER** on the remote.
2. Select Timer Setup and press a Left/Right arrow to view the **Timer Menu**.	2. Press **TIMER** repeatedly to set how long the TV will remain on.
3. Select Sleep Timer.	
4. Press a Left/Right arrow repeatedly to set how long the TV will remain on.	

Note: To cancel the Sleep Timer, turn off the TV or press **TIMER** repeatedly until Off is showing.

```
┌──────────────┐
│ ▨  Timer     │
│ ▨  Menu      │
├──────────────┤
│ Sleep Timer  │        ┌──────────────┐
│ On Time      │        │        :30   │
│ Off Time     │        └──────────────┘
│ On/Off Timer │
└──────────────┘
```

Sleep Timer set to turn TV off in 30 minutes

TIMER SETUP: On/Off Timer

The On/Off Timer programs the TV to turn on and off at specific times.

Set On/Off Timer
1. Make sure the TV's clock is set.
2. Select Timer Setup and press a Left/Right arrow to view the **Timer Menu**.
3. Select On Time and use the numbers on your remote to enter a time for the TV to turn On. Press **TIMER** on the remote to select AM or PM.
4. Select Off Time and use the numbers on your remote to enter a time for the TV to turn Off. Press **TIMER** on the remote to select AM or PM.
5. Select On/Off Timer and use a Left/Right arrow to show On.
6. Press **QUIT** on your remote to remove the menu from view.
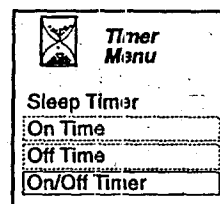
```
┌──────────────┐
│ ▨  Timer     │
│ ▨  Menu      │
├──────────────┤
│ Sleep Timer  │   ┌──────────────────┐
│ On Time      │   │ 11:00  AM ◀TIMER │
│ Off Time     │   │  1:00  PM ◀TIMER │
│ On/Off Timer │   │       On         │
└──────────────┘   └──────────────────┘
```

On/Off Timer set to turn TV On at 11:00 am and Off at 1:00 pm

Note: You must set an Off Time before you can set the On/Off Timer to On.

USING PARENTAL CONTROL

To Block Channels or the Video/S-Video Input Sources

1. Select Parental Ctl and press a Left/ Right arrow to view the Parental Control menu.
2. Select Block Ch. (channel).
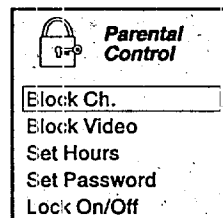3. Use the numbers on the remote to enter a channel number and press a Left/ Right arrow to show Blocked.
4. Repeat steps 3 and 4 for each channel you want blocked.
5. Select Block Video to block the Video/S-Video sources inputs and press a Left/ Right arrow to show Sources Blocked.
6. After you block all desired channels and/or the Video/S-Video sources, select Set Hours and use the Left/Right arrows to choose the time period you want Parental Control to be active: from 1 hour to 99 hours.
7. Select Set Password.
8. Press a Left/Right arrow and enter a 4-digit password when prompted. (Verify the password by entering it a second time.)
9. Select Lock On/Off and use the Left/ Right arrows to show On.
10. Press QUIT to remove the menu from view.

Parental Control

Block Ch.	Ch 9 Blocked
Block Video	Sources Blocked
Set Hours	◄► 01 Hours
Set Password	Enter Code: x x x x
Lock On/Off	On

Parental Control Menu

STOP Remember your password! To re-enter parental control while it's on, you must enter this number. Otherwise, you'll have to wait for the specified time period to elapse.

Notes:

❑ Do not try to deactivate the Parental Control by unplugging your TV. This only restarts Parental Control lock time.
❑ Parental Control cannot be turned On (Lock On/Off) until the Hours and Password have been set.

USING AUTO DEMO

Your new TV demonstrates on-screen menus that control the TV's setup and operational features. Turn on Auto Demo, to show the on-screen menus one-by-one.

To Start Auto Demo

1. Select Auto Demo using the Up/Down arrows.
2. Use the Left/Right arrows to set Auto Demo to On.
3. Press QUIT to remove the menu from view.

STOP Note: Auto Demo will continue to operate until you set it to Off in the Setup Menu.

Setup Menu
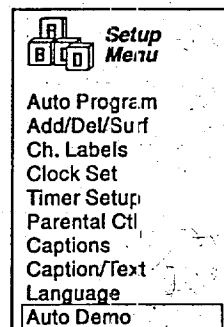
Auto Program
Add/Del/Surf
Ch. Labels
Clock Set
Timer Setup
Parental Ctl
Captions
Caption/Text
Language
Auto Demo   On

Setup Menu with Auto Demo Highlighted

AUDIO MENU

MENU OPERATIO

Audio Menu adjustments are optional. You don't have to adjust these features to use your TV.

```
🔊 ♪  Audio
   ♪  Menu

Bass
Treble
Balance
Audio Mode
Surround ♪
SoundRite
Speakers
```

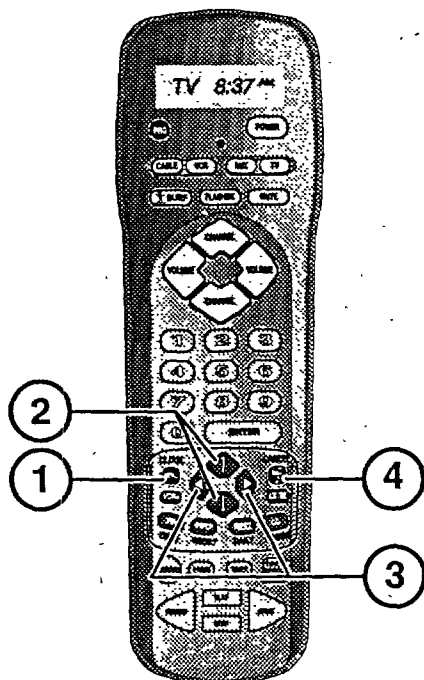| Menu Operation |
| --- |
| 1. Press MENU repeatedly to choose Audio Menu. |
| 2. Press an Up/Down arrow repeatedly to *select* an option. |
| 3. Press a Left/Right arrow repeatedly to *adjust* an option. |
| 4. Press QUIT to remove a menu from view, or wait a few seconds and the menu will disappear. |

Menu Option	Function
Bass	Adjusts the low frequency level.
Treble	Adjusts the high frequency level.
Balance	Adjusts the sound balance between the two speakers.
Audio Mode	Selects Stereo, Mono (Monoaural), or 2nd Audio/SAP speaker operation. See information following this chart for more details.
	Stereo: Directs the sound to the Left and Right speakers as supplied by your TV, VCR, etc.
	Mono: Directs the same sound to both Left and Right speakers, even if the program is in stereo.
	2nd Audio/ SAP: Directs the sound for the Second Audio Program to both the Left and Right speakers. SAP sound is always monaural. (SAP is not available if Video is your viewing source.)
Surround ♪	Lets you hear front channel surround sound from the TV's speakers. (You'll hear Surround sound only if the program is in stereo and is encoded with surround sound.)
SoundRite	Maintains the TV's volume at a constant level (including commercials and audio from the auxiliary input source)
Speakers	Turns internal speakers On and Off. (Off indicated by "EXT Volume" on Volume bar.)

Notes:

❏ If you select stereo as the Audio Mode, the TV switches between Stereo and Mono (Monoaural) sound depending on the audio signal received.

❏ If you select SAP as the Audio Mode, you'll hear SAP (usually a second language) on stations broadcasting two audio signals. When the SAP broadcast ends, the TV switches between Stereo and Mono modes depending on the audio signal received. The TV switches back to 2nd Audio/SAP when the SAP broadcast resu~~~

MENU OPERATION

Video Menu adjustments are optional. You don't have to adjust these features to use your TV.

	Video Menu
Contrast	◄———————┼———————►
Brightness	
Color	
Tint	
Sharpness	
Color Temp	
Picture Pref	
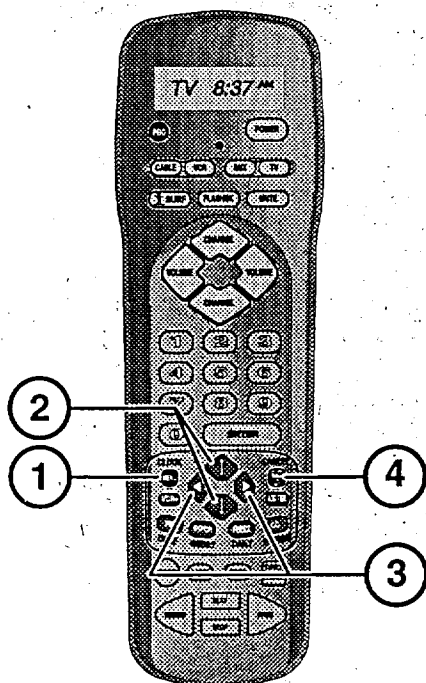
Menu Operation	
1.	Press MENU repeatedly to choose Video Menu.
2.	Press an Up/Down arrow repeatedly to *select* an option.
3.	Press a Left/Right arrow repeatedly to *adjust* an option.
4.	Press QUIT to remove a menu from view, or wait a few seconds and the menu will disappear.

Menu Option	Function
Contrast	Adjusts the picture's overall contrast and color level.
Brightness	Adjusts the picture's brightness level of black areas.
Color	Adjusts the picture's color intensity.
Tint	Adjusts flesh tones to more red or more green.
Sharpness	Adjusts object-edge definition for best picture quality.
Color Temp (Temperature)	Changes the "color temperature" or picture white balance between cooler whites and warmer reds.
Picture Pref. (Preference)	Selects the video adjustments to be used. PRESET restores the factory preset adjustments.

Note: Adjustments you make to the Video Menu settings are stored as Custom settings.

MENU OPERATION

PIP
Menu

Color
Tinte
Size
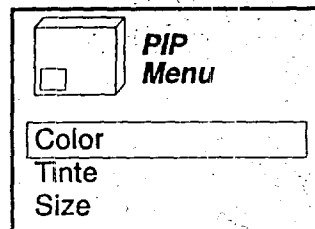
Selecting the Menú PIP does not turn On PIP.
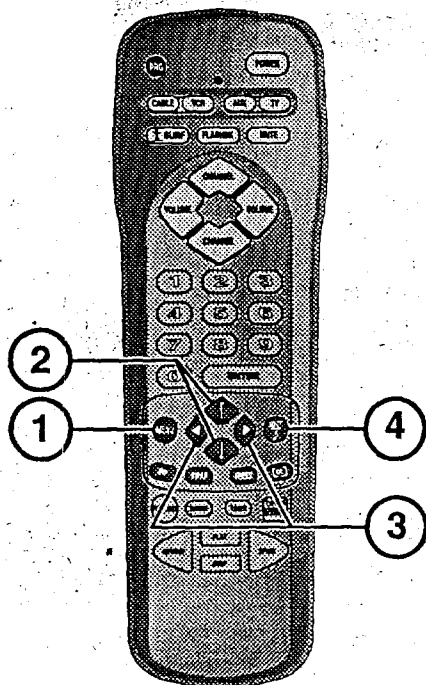Press PIP to access the PIP feature.

Menu Operation
1. Press MENU repeatedly to choose PIP Menu.
2. Press an Up/Down arrow repeatedly to *select* an option.
3. Press a Left/Right arrow repeatedly to *adjust* an option.
4. Press QUIT to remove a menu from view, or wait a few seconds and the menu will disappear.

Menu Option	Function
Color	Adjusts the color of the PIP inset.
Tint	Adjusts the flesh tones of the PIP picture to more Green or more Red.
Size	Adjusts the size of the PIP inset. Choose between Small or Large.

MENU OPERATION

Source Menu	
Main Source	Antenna/Cable
PIP Source	
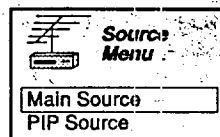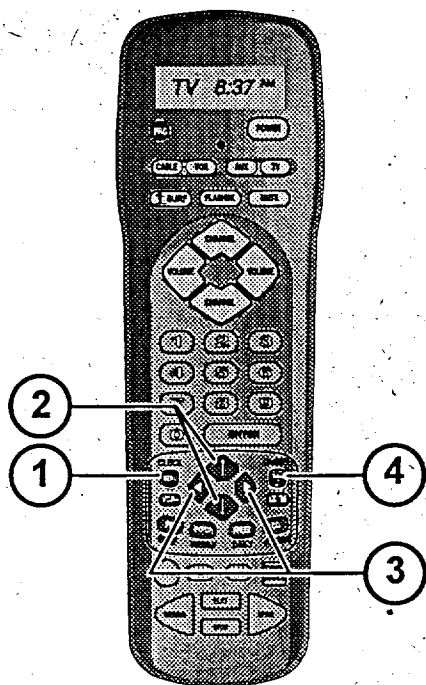
Source Menu	
Main Source	
PIP Source	Video

Menu Operation
1. Press **MENU** repeatedly to choose Source Menu.
2. Press an Up/Down arrow repeatedly to *select* an option.
3. Press a Left/Right arrow repeatedly to *adjust* an option.
4. Press **QUIT** to remove a menu from view, or wait a few seconds and the menu will disappear.

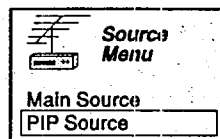| Menu Option	Function
Main Source	Select either **Antenna/Cable**, **Video**, or **S-Video** for the source that is providing the picture for the main picture. It can be the antenna or cable box connected to the Antenna/Cable jack or perhaps a VCR connected to the Aux Input A/V jacks.
PIP Source	Select either **Antenna/Cable**, **Video**, or **S-Video** for the source that is providing the picture for the PIP window.

Note: You can change sources by pressing **TV/VCR SOURCE** on the remote. If no PIP window is on, press **TV/VCR SOURCE** to select the main picture source. If the PIP window is on, press **PIPch** to highlight the PIP source in the Channel/Time display, then press **TV/VCR SOURCE** repeatedly to select the PIP window source.

Source Menu	
Main Source	
PIP Source	
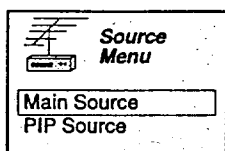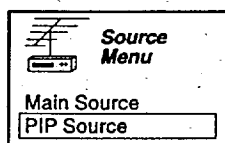
PIP Window
Use the PIP Source
to select the picture
for the PIP window.

Source Menu	
Main Source	
PIP Source	

Main Picture
Use the Main Source
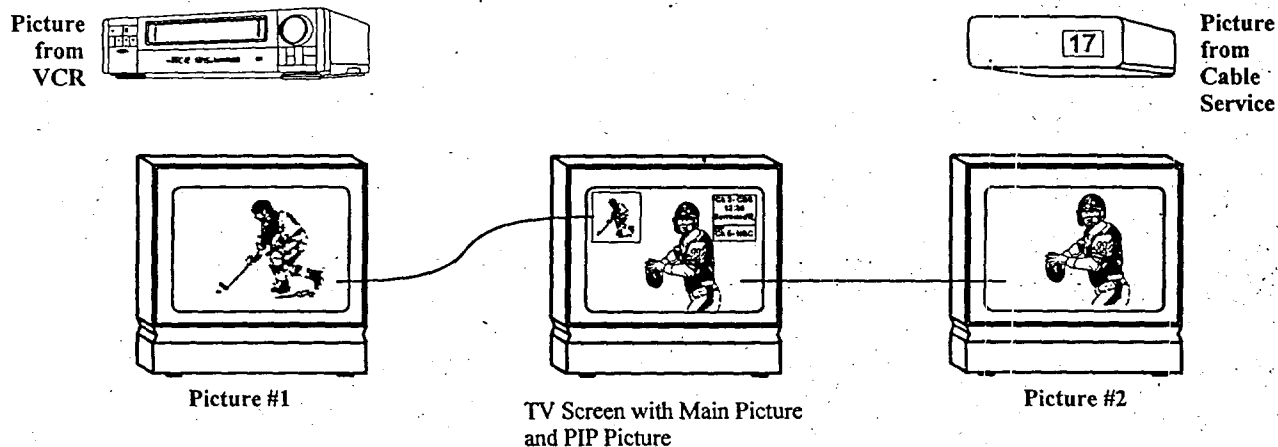to select the picture
for the main picture.

To watch two different pictures at the same time, one source (antenna, cable box, etc.) must be connected to the Antenna/Cable jack. A different source (VCR, Laser Disc, etc.) can be connected to the Aux Input A/V jacks.

OVERVIEW

Picture-in-Picture (PIP) lets you see two different pictures on your TV at the same time. The pictures visible on the TV screen are determined by the equipment sources connected to the TV. You can specify one input source for the main picture and a different input source for the PIP. Input sources are selected by using the **Source Menu**. PIP must be turned On for the PIP picture to be seen.

Picture
from
VCR

Picture
from
Cable
Service

17

Picture #1

TV Screen with Main Picture
and PIP Picture

Picture #2

TWO TUNER PIP

Your TV is designed with two tuners. That means that there are two internal devices that can select the available channels. This also means that the operation of PIP is easier than ever: With a single antenna or direct cable-TV connection to the Antenna/Cable jack on the back of the TV, as shown below, you can watch one channel as the Main Picture of the TV while a completely different channel is showing in the PIP picture.

VARIABLE AUDIO OUTPUT

RIGHT   LEFT

S-VIDEO

ANTENNA
CABLE

VIDEO   RIGHT   LEFT/MONO

AUX INPUT

TV BACK

Example of Antenna or Direct Cable-TV Connection

TURNING ON PIP

Turn PIP on:
VCR+C^3 Remote
Control

Point the remote at the TV, and press **TV**. Press **PIP** to see the PIP picture.

PIP

Viewing two different channels using one antenna input:

1. Turn the TV ON.
2. Press the **MENU** key repeatedly to view the Source Menu.
3. Select Antenna/Cable for both the Main Source and the PIP Source.
4. Press **PIP** to turn on the PIP window.
5. Use the channel up and down controls to change channels in the PIP picture.
6. Press **PIP ch** repeatedly until the Main Picture Channel Display is highlighted. Use the channel up or down controls to change channels in the main TV picture.

SELECTING MAIN PICTURE SOURCE AND PIP WINDOW INSET PICTURE SOURCE

PIP Window Picture

Main Picture

Ch 2- CBS
12:30
Surround
PIP Ch 5

Channel of Main Picture shows here.

Channel of PIP Picture shows here.
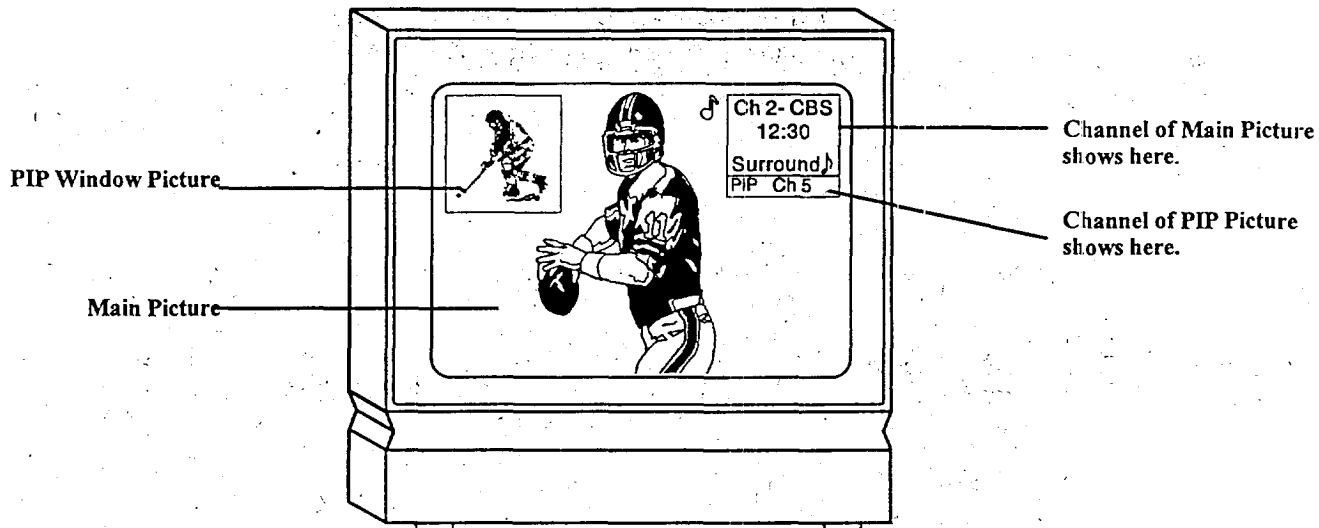
Selecting Main Picture and PIP Picture Sources
1. Press TV on remote.
2. Press MENU repeatedly on your remote to view the Source Menu.
3. Press Left or Right arrow key repeatedly to select the source you want for the Main picture.
4. Press the Up or Down arrow key to select the PIP Source.
5. Press Left or Right arrow key repeatedly to select the source you want as the PIP picture.
6. Press QUIT to remove the menu.

Source Menu

| Main Source | Antenna/Cable |
| PIP Source | |

Source Menu
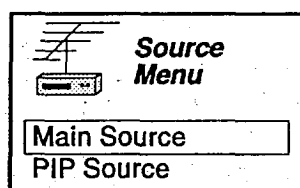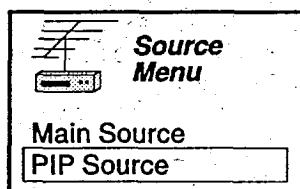
| Main Source | |
| PIP Source | Video |

You can choose any source listed for the Main picture and the PIP picture, as long as you have equipment connected to the corresponding jacks on the Connection Panel of the TV.

PIP FEATURES/CONTROLS OPTIONS

Up/Down/Left/Right Arrows

PIP (On/Off)

PIP ch

FREEZE
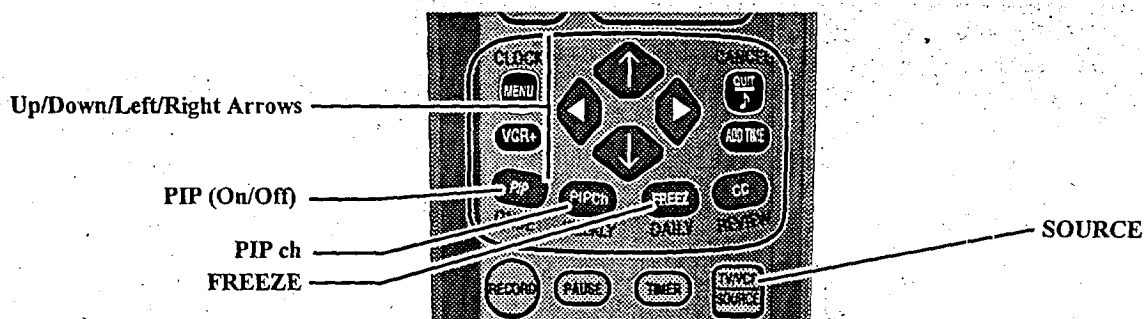
SOURCE

PIP Active Features

The highlighted area of the Channel/Time display shows which window (Main or PIP) is "active." The active window (in this case PIP) will be the source that the remote will operate. For example, Channel Up/Down, Flashback, Numbered keys for direct channel entry, Source key etc., will control the PIP Window source.

When PIP is turned On, the remote keys operate in the PIP mode. PIP functions such as: Channel Up/Down, Channel Flashback, Numbered keys for direct channel entry and Source will be functioning and operate on the source of the PIP Window.

To change the active window:

Press **PIP ch** to switch Channel Up/Down to the Main Picture source, press again to return to PIP operation mode (change channels of the PIP Picture source).

### PIP (On/Off)

Press PIP to turn the Picture-In-Picture feature On and Off.

PIP ch

Press to switch the channel selection from the PIP Picture to select channels of the Main Picture.

Note: Feature only works with Antenna/Cable source.

PIP Freeze

Use to stop action (freeze) the image in the PIP Picture. Press FREEZ again to return to live action.

Note: If PIP is not active, pressing this key will turn PIP on and freeze the Main Picture in the PIP window.

Source

Press to switch to a different source for the PIP Picture.

PIP Active Arrow Keypad

When you press PIP on the Universal remote a Help Menu will appear. This is an an on-screen reference defining which arrow keypad keys perform what function.

Main Picture Channel Display

Ch 20
3:56
Stereo
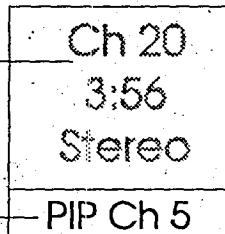
PIP Channel Display: "Highlighted" indicating the PIP window is active.

PIP Ch 5

PIP Channel display appears while PIP is turned On.

PIP Move

Press the Left or Right arrow key repeatedly to move the PIP Picture to any of the four corners of the TV screen.

PIP Swap

Press the Up/Down arrow key to swap the Main picture with the PIP picture. Press again to restore.

Press ↑↓ to Swap, ◄►to Move

CHANGING CHANNELS IN PIP WINDOW

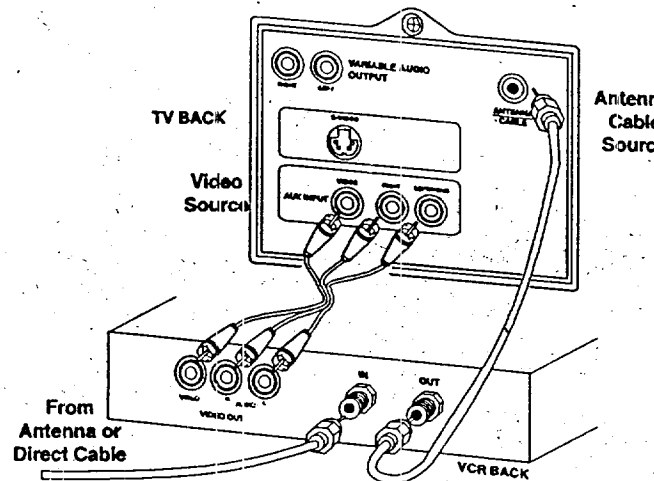| PIP Operation With Antenna or Direct Cable, and VCR	
Watching Two Different Channels	**Watching a Videotape and a TV Channel**
1. Set VCR's TV/VCR* switch to TV.	1. Set VCR's TV/VCR* switch to TV.
2. Select Main Source in the Source Menu.	2. Select Main Source in the Source Menu.
3. Press a Left/Right arrow to select Antenna/Cable.	3. Press a Left/Right arrow to select Antenna/Cable.
4. Select PIP Source in the Source Menu.	4. Select PIP Source in the Source Menu.
5. Press a Left/Right arrow to select Video.	5. Press a Left/Right arrow to select Video.
6. Press QUIT to remove the menu from view.	6. Press QUIT to remove the menu from view.
7. Press PIP to activate PIP.	7. Press PIP to activate PIP.
8. Select a TV channel using the TV's selector.	8. Select a TV channel using the TV's selector.
9. Select a PIP channel using the VCR's selector.	9. Play a videotape in the VCR and watch it in the PIP window.

Antenna or Direct Cable, and VCR to TV

CHANGING CHANNELS IN PIP WINDOW

PIP Operation with Cable Box and VCR	
Watching Two Different Channels	**Watching a Videotape and a TV Channel**
1. Select Main Source in the Source Menu.	1. Select Main Source in the Source Menu.
2. Press a Left/Right arrow to select Antenna/Cable.	2. Press a Left/Right arrow to select Antenna/Cable.
3. Select PIP Source in the Source Menu.	3. Select PIP Source in the Source Menu.
4. Press a Left/Right arrow to select Video.	4. Press a Left/Right arrow to select Video.
5. Press QUIT to remove the menu from view.	5. Press QUIT to remove the menu from view.
6. Press PIP key to activate PIP.	6. Press PIP key to activate PIP.
7. Select a TV channel using the TV's channel selector.	7. Select a TV channel using the TV's selector.
8. Select a PIP channel using the cable box.	8. Play a video tape in the VCR and view it in the PIP window.

Signal Splitter
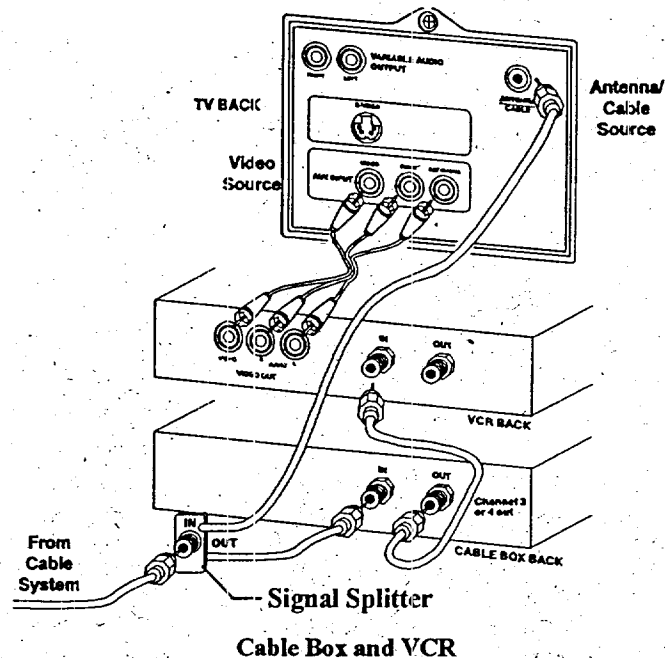
Cable Box and VCR

TV MODE FUNCTIONS

To select TV mode , press the TV key on the remote control.

Point Remote at TV.

Mode/Time Display

Displays remote control mode and time, if set. Press TV key twice to see Time display.

FLASHBK (Flashback)

Returns to the last TV channel you were watching.

CHANNEL (Up)

Selects the next channel in the TV's memory. Press and hold to repeat.

SURF

Turns Surf Channel On/Off.

VOLUME (Left)

Decreases sound level.

NUMBER PAD

Selects channels directly.

MENU

Displays menus for TV and other options.

LEFT and RIGHT ARROWS

Chooses and shows the desired menu option.

PIP, PIPCh, FREEZ

Picture-in-Picture functions.

TIMER

Displays the SLEEP TIMER menu. Press repeatedly to set desired TV shut-off time.

POWER

Turns TV On or Off.

TV

Selects TV mode.

MUTE

Turns sound off and on.

VOLUME (Right)

Increases sound level.

CHANNEL (Down)

Selects the previous channel in the TV's memory. Press and hold to repeat.

ENTER

Shows Channel/Time, enters channels and removes any on-screen menus.

QUIT/♪ (Three Function Key)

Exits from on-screen display, turns the sound enhancement feature on or off and switches audio between Main source and PIP source.

UP and DOWN ARROWS

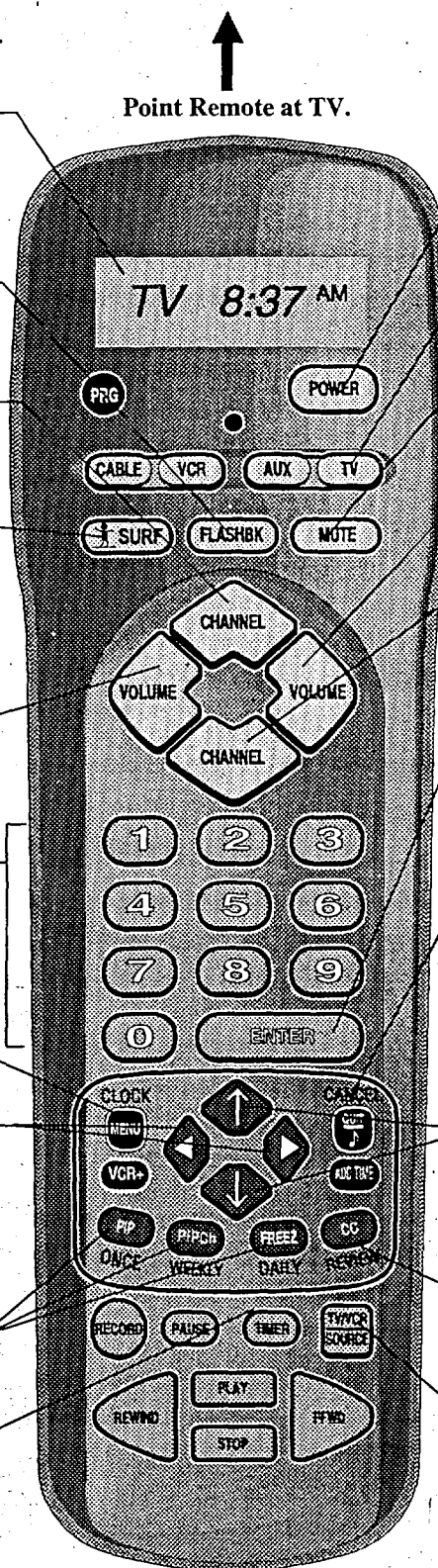Moves the highlight bar within the menu to select an option.

CC

Turns Closed Captions On or Off.
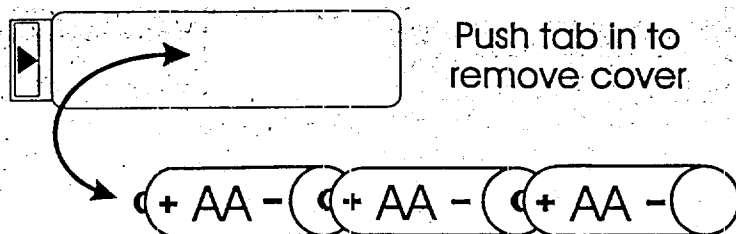
TV/VCR SOURCE

Steps through source options.

TV Operations

Note:

VCR function keys can operate your VCR while the remote is in TV mode

INSTALL THE BATTERIES

Install 3 AA batteries, matching + with + (positive with positive), and - with - (negative with negative), as shown in the battery compartment.

Push tab in to remove cover

PROGRAMMING CABLE, VCR, AND AUX MODES

Follow these steps for each piece of equipment:

1. Locate the 3-digit code for your brand (such as Zenith) and type of equipment (such as VCR) in the "Equipment Codes" list on the following pages.

2. Press PRG; remote displays PROGRAM.

3. Press VCR, CABLE, or AUX to select the piece of equipment you want your remote to control. (Use CABLE or AUX to program your remote for a second VCR or Cable Box. Use AUX, to program your remote for a video disc player or audio equipment.)

4. Enter the three-digit code for your equipment, then press ENTER.
   If valid, Remote displays "OK."
   If invalid, Remote displays "ERR: ENTRY."

5. Press POWER repeatedly to verify that your equipment turns On and Off. If none of the brand codes works, try the Auto Find Option.

Notes:

- If you do not press any key on your remote within 30 seconds, the programming process stops and you will have to start again.

- You may cancel programming mode at any time by pressing CANCEL, or by waiting 30 seconds.

- The TV mode is not programmable.

- Code 911 will erase all clock settings and delete all brand and special features.

- If no code is programmed into the VCR, CABLE, or AUX modes and that mode key is pressed, you will see the "Err: Setup" message. Program a code(s) to use the VCR, CABLE, or AUX modes.

AUTO FIND OPTION

If none of the codes listed in the table operates your equipment, you can use Auto Find to search for the code you need.

Follow these steps for each piece of equipment you are using:

1. Turn the equipment On and point the remote toward it.

2. Press PRG with a small blunt object, like a pen.

3. Press the key on the remote for the piece of equipment you want to control: VCR, CABLE, or AUX.

4. Enter 0-0-0, then press ENTER within 2 seconds. Auto Find is active when AUTO appears in display.

5. Press and hold POWER, then release it, repeating this action about once a second until the product turns OFF.

6. Press ENTER immediately to save the code. If your remote fails to operate the functions you use most often, re-enter Auto Find and search for a better code.

Notes:

- Press CANCEL at any time during the use of Auto Find to cancel Auto Find.

- If the display reads END when you press POWER, Auto Find has tried all available codes. If you finish Auto Find and the equipment does not turn off, your remote will not work with that piece of equipment.

CABLE BOX VOLUME MUTING

Cable/Volume Muting (Code 399)

Your remote can control cable box volume and muting if available on your equipment. First, program your remote using the CABLE key. Then repeat the programming steps, again using the CABLE key, but enter 399.

To restore TV volume/mute to the CABLE mode, simply re-enter your cable brand code into that mode.

SET THE CLOCK IN THE REMOTE

Use the numbers on the remote and other keys as listed below.

Steps	Remote Display	Next Prompt
1. Press PRG (Program)	PROGRAM	
2. Press CLOCK (MENU)	Hr - _ _	Hr - _ _
3. Enter the hour (1-12), press ENTER	Hr - x x	Min - _ _
4. Enter the minutes (0-59), press ENTER	Min - x x	1 AM 2 PM
5. Enter 1 for AM or 2 for PM	1 AM 2 PM	MO - _ _
6. Enter the month (1-12), press ENTER	MO - x x	DA - _ _
7. Enter the date (1-31), press ENTER	DA - x x	YR - _ _
8. Enter the year (00-99), press ENTER	YR - x x	O K •

SPECIAL FEATURES CODES

If you have problems recording when using the VCR Plus+C³ recording system with your VCR and/or cable box, see if these can be resolved by programming in one of the special features codes. These codes may enable the remote to control your brand of equipment.

Notes:

- To erase these special features, simply reprogram each brand code you are using into the CABLE, VCR, and AUX modes.

- These special features codes are only transmitted during VCR Plus+C³ recording, not regular TV operations.

- For future reference, write the codes you are using here:

Cable Code _____

VCR Code _____

Aux Code _____

Code 599, Add ENTER

Some cable boxes and VCRs require an ENTER code to select a channel. When you program 599 into either the CABLE or VCR mode, the remote transmits the ENTER code for either the cable box or the VCR during a VCR Plus+C³ recording.

This feature cannot be active at the same time as the 699 CH100 feature described below.

Code 699, Send CH100

Some cable boxes and VCRs require a CH100 code to tune a 3-digit channel. When you program 699 into either the CABLE or VCR mode, the remote transmits a CH100 code, if required, during a VCR Plus+C³ recording.

This feature cannot be active at the same time as the 599 Add ENTER feature, described above.

Code 799, Increase Digit Separation

This feature, when programmed into either the CABLE or VCR mode, increases the time between digit transmissions to 1 second during VCR Plus+ recording. Use this feature if the default time between digit transmissions is too short for the VCR or cable box.

Code 899, Digit Override

If a VCR brand code has been programmed into the VCR mode but the CABLE mode has no brand code programmed into it, the remote will transmit VCR digits during a VCR Plus+C³ recording. If a cable brand code has been programmed into the CABLE mode, the remote will transmit cable digits (it selects channels on the cable box) during a VCR Plus+C³ recording. Programming 899 into the CABLE or VCR mode forces the remote to transmit VCR channel numbers during a VCR Plus+C³ recording even if a cable box code has been programmed into the CABLE mode.

Code 999, Decrease Digit Separation

This feature, when programmed into either the CABLE or VCR modes, decreases the time between digit transmissions to 0.2 seconds during a VCR Plus+C³ recording. Use this feature if the default time between digits transmission is too long for the VCR or cable box.

GEM4002 VCR PLUS+C ® REMOTE CONTROL

KEY FUNCTIONS FOR ZENITH MODES

These are the operations provided when using Zenith codes.

Name of Key	TV Mode Zenith Code 101	VCR Mode Zenith Code 201	Cable Mode Zenith Code 353	AUX Mode Zenith Code 401
POWER	TV Power On/Off	VCR Power On/Off	Cable Power On/Off	AUX TV/Disc
CABLE	Selects Cable Mode	Selects Cable Mode	Selects Cable Mode	Selects Cable Mode
VCR	Selects VCR Mode	Selects VCR Mode	Selects VCR Mode	Selects VCR Mode
AUX	Selects AUX Mode	Selects AUX Mode	Selects AUX Mode	Selects AUX Mode
TV	Selects TV Mode	Selects TV Mode	Selects TV Mode	Selects TV Mode
SURF	Surf ON/OFF	VCR AM/PM	CABLE FC/Fav Ch	AUX Audio
FLASHBK	TV Flashback	VCR Flashback	CABLE Flashback	AUX Frame/Time
MUTE	TV Mute	TV Mute	TV Mute *	TV Mute
CHANNEL UP	TV Channel Up	VCR Channel Up	CABLE Channel Up	AUX Skip >>
CHANNEL DN	TV Channel Down	VCR Channel Down	CABLE Channel Dn	AUX Skip <<
VOLUME (Right)	TV Volume Up	TV Volume Up	TV Volume Up *	TV Volume Up
VOLUME (Left)	TV Volume Down	TV Volume Down	TV Volume Dn *	TV Volume Down
1	TV Digit 1	VCR Digit 1	CABLE Digit 1	AUX Digit 1
2	TV Digit 2	VCR Digit 2	CABLE Digit 2	AUX Digit 2
3	TV Digit 3	VCR Digit 3	CABLE Digit 3	AUX Digit 3
4	TV Digit 4	VCR Digit 4	CABLE Digit 4	AUX Digit 4
5	TV Digit 5	VCR Digit 5	CABLE Digit 5	AUX Digit 5
6	TV Digit 6	VCR Digit 6	CABLE Digit 6	AUX Digit 6
7	TV Digit 7	VCR Digit 7	CABLE Digit 7	AUX Digit 7
8	TV Digit 8	VCR Digit 8	CABLE Digit 8	AUX Digit 8
9	TV Digit 9	VCR Digit 9	CABLE Digit 9	AUX Digit 9
0	TV Digit 0	VCR Digit 0	CABLE Digit 0	AUX Digit 0
ENTER	TV Enter	VCR Enter	CABLE Enter	AUX Display
MENU	TV Menu	VCR Menu	CABLE Menu	AUX Program
UP ARROW	TV Select Up	VCR Select Up	CABLE Up Arrow	AUX Part
DOWN ARROW	TV Select Down	VCR Select Down	CABLE Down Arrow	AUX Random
LEFT ARROW	TV Adjust Left	VCR Adjust Left	CABLE Left Arrow	AUX x3 FAST <
RIGHT ARROW	TV Adjust Right	VCR Adjust Right	CABLE Right Arrow	AUX x3 FAST >
QUIT/♪	TV Quit/Sound Enhance	VCR Quit	CABLE Quit	AUX Clear
PIP	TV PIP	VCR VCR+	CABLE Day Up	AUX Repeat-Side
PIPCh	PIP/Main Ch Mode	VCR Channel Map	CABLE Day Down	AUX Repeat-A-B
FREEZ	PIP Freeze	VCR Search	CABLE Pg Up	AUX Repeat-Chap
CC	TV Closed Captions	VCR Memory	CABLE Pg down	AUX Memory
TIMER	TV Timer	VCR Timer	CABLE Timer	AUX Still > <
TV/VCR/SOURCE	TV Source	VCR TV/VCR Tuner	CABLE Info	AUX TV/Disc
RECORD	VCR Record	VCR Record	CABLE Buy	AUX Edit
PAUSE	VCR Pause	VCR Pause	CABLE Guide	AUX Pause
REWIND	VCR Rewind	VCR Rewind	VCR Rewind	AUX Scan <<
PLAY	VCR Play	VCR Play	VCR Play	AUX Play
STOP	VCR Stop	VCR Stop	VCR Stop	AUX Stop/Eject
FFWD	VCR Fast Forward	VCR Fast Forward	VCR Fast Forward	AUX Scan >>
VCR+	Enters VCR Plus+ Mode	Enters VCR Plus+ Mode	Enters VCR Plus+ Mode	Enters VCR Plus+ Mode
ADD TIME	Only functions in VCR Plus+ Mode. Adds additional time when programming for recording.			

*You can override this with Cable Volume/Muting by entering 399.

Reference: 124-215 and
µP 221-952-02A

Equipment Codes

TVS	
Zenith	101

VCRS	
Admiral	208, 261
Adventura	231
Aiwa	231
Akai	223, 238, 241
Audio Dynamics	202, 218
Bell & Howell	206, 247
Broksonic	221, 226, 250, 255
Canon	214
Citizen	209
Craig	212
Curtis Mathes	214, 259
Daewoo	244, 246, 248, 254
Daytron	236, 246
DBX	202, 218
Emerson	203, 209, 221, 223, 226, 233, 235, 243, 250
Fisher	211, 212, 213, 247
Funai	231
General Electric	214, 216, 220
Goldstar	209
Go Video	256, 262, 263
Hitachi	215, 257
Instant Replay	214, 227
J.C. Penney	214, 215, 218, 227
JVC	202, 224, 225, 258
Kenwood	202
Logik	239
LXI	209, 231
Magnavox	207, 214, 231
Marantz	207, 218
Marta	209
Memorex	206, 212, 214, 231

Mitsubishi	204, 222, 252, 264
Montgomery Ward	208, 214, 216, 219, 231, 249
Multi Tech	239
NEC	202, 218
Orion	250
Panasonic	214, 251, 259
Pentax	215
Philco	207, 214
Philips	207, 214, 227
Pioneer	210, 215
Portland	246
Pro Scan	216, 260
Quasar	214, 259
RCA	215, 216, 220, 227, 240, 242, 260
Realistic	206, 208, 212, 214, 231
Samsung	220, 230, 238
Sansui	239
Sanyo	206, 212, 247
Scott	204, 205, 233, 243
Sears	206, 209, 211, 212, 215
Sharp	208, 261
Shintom	239
Signature 2000	208, 214, 216, 219, 231, 249
Sony	217, 232, 237
Sylvania	207, 214, 227
Symphonic	231
Tashiko	209
Tatung	202
Teac	202, 231
Teknika	209, 234
Toshiba	205, 215
XR1000	239
Vector Research	204, 218
Yamaha	202, 218

Zenith	201, 224, 225, 229, 237

CABLE/SATELLITE	
Allegro	358, 362
Allegro A/B Switch	361
Gemini	305, 331, 338
General Electric	367
General Instrument	304, 305, 306, 307, 308, 309, 310, 318
Hamlin	302, 303, 345, 365, 366
Jerrold	304, 307, 308, 309, 310, 318, 360, 363
Kale Vision	335
Macom	314, 321
Magnavox	334
NSC	335, 339, 368, 369, 370
Oak	311, 332, 342
Panasonic	313, 320
Paragon	333
Philips	347, 350, 352, 354, 355
Pioneer	315, 343
RCA DSS	373
Regency	329
Samsung	335
Scientific Atlanta	316, 323, 336, 364
Sprucer	313
Standard Comp.	335
Texscan	339, 356, 371
Tocom	317, 318, 346
Unika	348, 362
United Satellite	344
Universal	358, 362
Vid Tech	340
Video Way	349

Viewstar	354, 355, 372
Zenith	301, 353, 374
Zenith Satellite	312, 328, 330, 351, 378

VIDEO DISK PLAYERS	
Pioneer	402, 403
Sanyo	401
Sony	404
Zenith	401

AUDIO CD PLAYERS	
Akai	409, 424
Crown	410
Denon	411
Fisher	412, 438
Goldstar	460
Harman/ Kardon	413
JVC	415
Kenwood	412, 416, 417, 441
Magnavox	421, 422, 433, 434
Mitsubishi	423, 424
NAD	425, 426, 447
Nakamichi	427, 428
NEC	429
Onkyo	430
Panasonic	431, 432
Philips	421, 433, 434
Pioneer	431, 435
Quasar	432
Radio Shack	431, 436, 439, 440, 441
RCA	437
Sanyo	438, 439
Scott	440
Sharp	441, 442
Sony	443, 444, 445
Soundesign	461, 498, 501, 502
Sylvania	433
Teac	445
Technics	432, 459
Toshiba	447
Yamaha	448

Zenith	460, 461, 498, 501, 502

AUDIO TAPE DECKS	
Denon	455
Harman/ Kardon	456
JVC	457
Kenwood	450
Onkyo	458
Philips DCC	454
Pioneer	451, 478
Sony	452
Technics	454, 497
Yamaha	453

AUDIO TUNERS AND AMPLIFIERS	
Denon	462, 463
Fisher	464
Goldstar	460
Harman/ Kardon	465
JVC	466
Kenwood	468, 469
Marantz	472, 503
Onkyo	473
Philips	475, 476
Pioneer	477, 478, 479
Radio Shack	487, 488
Realistic	480
Sanyo	481
Scott	482
Sharp	483
Sherwood	487, 488
Sony	489, 490, 491, 492
Soundesign	461, 498, 501, 502
Teac	494, 495
Technics	497
Yamaha	496
Zenith	460, 461, 498, 501, 502

Ref: 124-215 and
µP 221-952-02A

VCR PLUS+C³® MODE KEY FUNCTIONS

These descriptions apply to functions and operations of your remote control in VCR Plus+C³ Mode. To select VCR Plus+ C³ Mode, press the VCR+ key on the remote.

↑

After you have programmed your VCR Plus+C³ remote, set it down so it points in a clear path toward your VCR and cable box.

Current Mode/Time Display

Displays the mode you are in and time, if set. Note: Press any mode key twice to see Clock/Date Display.

PRG (Program)

Begins VCR Plus+ C³ Programming Setup.

NUMBER KEY PAD

Selects channels directly.

CLOCK

Adjusts clock time in VCR+ or PRG modes.

VCR+

Enters VCR Plus+ C³ recording mode.

ONCE, WEEKLY, DAILY

Specifies recording options.

CABLE, VCR, AUX, TV

Selects remote control's operation mode.

ENTER

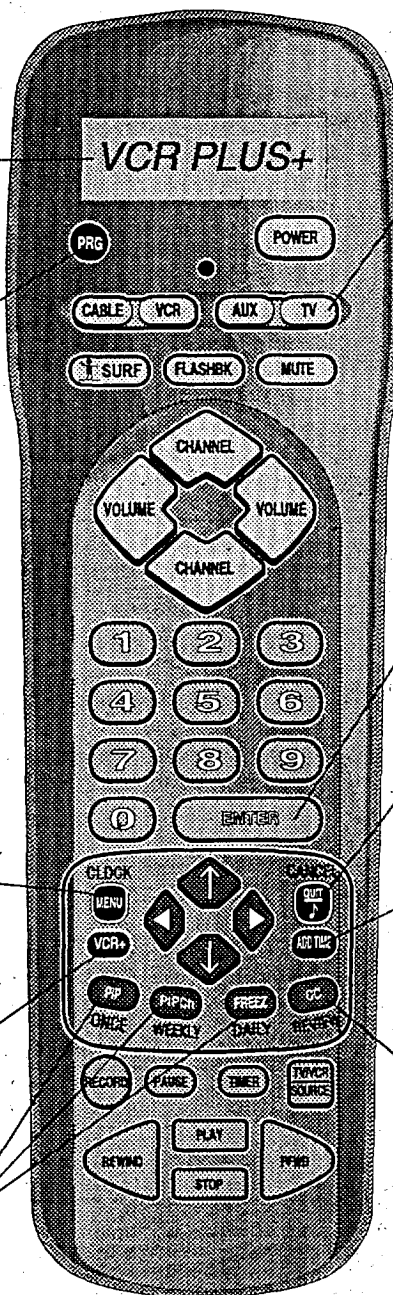Enters channels; use where indicated when programming.

CANCEL

In Review Mode, deletes a program scheduled for recording.

ADD TIME

When programming for recording, each press extends recording time 15 minutes.

REVIEW

Shows programs scheduled for recording or to view any modifications to the VCR Plus+ Channel Mappings.

VCR Plus+ C³ Operations

VCR Plus+ is a registered trademark of Gemstar Corp.
VCR Plus+ C³® system is manufactured under license from Gemstar Development Corp.

VCR PLUS+ CHANNEL MAPPING

Channel Mapping Overview

The VCR Plus Guide channel numbers listed in Column 2 on the worksheet below are used on a nationwide basis, for the most part. In contrast, your local TV stations and cable networks usually assign different numbers to the TV channels you receive. In order for the remote to accurately tune your cable box (or VCR), your local channel numbers must be "Mapped" to the VCR Plus+ GUIDE CH Numbers.

Complete the Channel Mapping Worksheet

Refer to your local TV guide. Using a pencil, mark your local TV channel numbers in Column 3 on the worksheet.

To do this, look up your channel numbers in the worksheet below. If the channel number in Column 2 (GUIDE CH) is the same as the number you view that channel on, do nothing. If the number is different, write it in Column 3 (TV CH). Do this for all the channels you receive, including the Broadcast Channels (ABC, NBC, etc.)

For example, if you receive Gala Vision at home on TV Channel 20, write 20 in Column 3 on the GALA line. If you receive HBO at home on TV Channel 4, write 04 in Column 3 in the HBO line as shown at the right.

Example: Writing in TV CH Numbers for Gala and HBO

Column 1 Cable Channels	Column 2 GUIDE CH	Column 3 TV CH
GALA	13	
HBO	33	

Notes:

- Be sure to "Channel Map" the Guide Ch or PlusCode numbers to your local area's TV channel numbers, or your VCR will record a different channel than the one you intended.

- Once you complete the Worksheet below, you must change the default channels on the remote see next page.

- The broadcast channels (ABC, CBS etc.), vary in different areas. Write in the VCR Plus Guide channel numbers in the spaces provided on the Worksheet below for any channels not listed but available to you in your local area. The ✦ channels (defaults) on your remote are "mapped" to the channel numbers shown on the worksheet. In other words, Channel 2 is mapped as Channel 2, Channel 3 is mapped as Channel 3, etc.

VCR PLUS+ CHANNEL MAPPING WORKSHEET

Column 1	Column 2 GUIDE CH	Column 3 TV CH
Cable Channels	VCR Plus+ PlusCode Channels	Write in your local area Channel Number
A&E	39	
AMC	35	
BET	57	
BRAV	54	
Cinemax	45	
Cinemax 2	98	
CNN	42	
COM/	21	
DSC	37	
DIS	53	
E!	63	
ESPN	34	
ESPN2	85	
FAM	47	
FOOD	78	
GALA	13	
HBO	33	
Home Box Office 2	58	
Home Box Office 3	95	
HIST	96	

LIFE	46	
MTV	48	
NICK	38	
Nostalgia	64	
QVC	99	
SHO	41	
Showtime 2	97	
SC	59	
SCFI	88	
TLC	51	
TMC	58	
TNN/	49	
TBS	43	
TNT	52	
TOON	87	
TRAV	10	
USA	44	
VH-1	62	
Viewer's Choice 1	93	
Viewer's Choice 2	94	
WGN	55	
WWOR	60	
(Others)		

Column 1	Column 2 GUIDE CH	Column 3 TV CH
Broadcast Channels	Write in VCR Plus+ Channels	Write in your local area Channel Number
ABC		
CBS		
NBC		
PBS		
PBS (Others)		

Note: As stated above, channels that are the same number in both Columns 2 and 3 do not need to be "Mapped" on the remote.

Once worksheet is complete, proceed to next page.

VCR PLUS+ CHANNEL MAPPING (Continued)

Changing Default Channel Numbers on Remote

Refer to your completed worksheet on the previous page. You will key-in the GUIDE CH numbers that need to be mapped to the TV CH numbers listed in Column 3 on the worksheet. Follow the instructions below for each channel number that needs to be mapped.

Steps	Remote Display
1. Press PRG.	PROGRAM
2. Press VCR+.	GUIDE CH - TV CH — — — — — —
3. Key-in the GUIDE CH number from Column 2 you need to channel map.	GUIDE CH - TV CH X X X — — —
4. Press ENTER.	GUIDE CH - TV CH X X X — — —
5. Key-in TV CH number from Column 3.	GUIDE CH - TV CH X X X Y Y Y
6. Press ENTER.	GUIDE CH - TV CH — — — — — —
7. Repeat Steps 3 - 6 for other channel number mapping.	
8. Press ENTER when finished.	
XXX,YYY=Your entered information	

Channel Mapping Review

When finished Channel Mapping the Guide Channel Numbers to your TV Channel Numbers, follow the instructions below to review your changes.

Channel Mapping Review

Steps	Remote Display
1. Press PRG.	PROGRAM
2. Press VCR+.	GUIDE CH - TV CH — — — — — —
3. Press REVIEW repeatedly to view the VCR Plus+ GUIDE CH numbers you have mapped.	GUIDE CH - TV CH X X X Y Y Y
4. Press ENTER when finished.	
XXX,YYY=Your entered information	

When you are finished reviewing your channel mapping changes, your remote will be ready to use for recording programs that have VCR PlusCode numbers. See VCR Plus Recording on the next page.
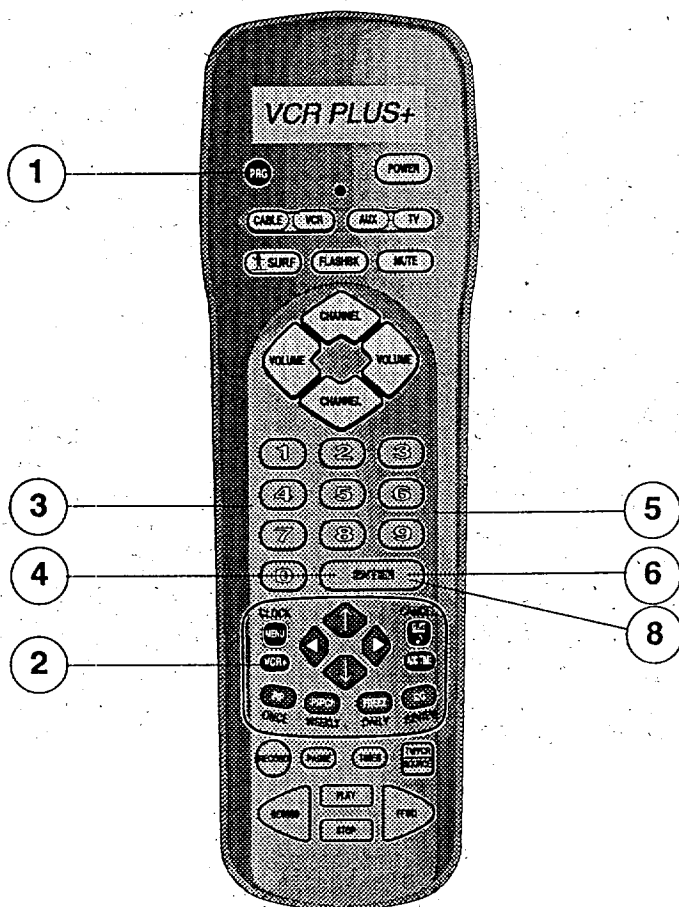
VCR PLUS+C³ RECORDING

Note: The channel mapping must be completed before you can record using VCR Plus+. See previous page for details.

This remote control can: turn your VCR on and off; tune your cable box or VCR to the channel you wish to record, and begin recording.

Note: VCR PlusCode Numbers for programs in your area are usually included in your local TV guide.

Recording Options

Once: Records program once.

Weekly: Records program one time each week at the same time, for up to 30 days.

Daily: Records program Monday - Friday at the same time each day.

Steps	Remote Display
1. Press VCR+	VCR Plus+
2. Key-in the program PlusCode® number of the broadcast you wish to record.	Numbers
3. Press: ONCE, WEEKLY or DAILY.	(Record) Interval/Channel/Time then displays VCR Plus+. If "CLASH" appears, another program has been scheduled for the same time period.
4. If desired, press ADD TIME while program data is displayed to add 15 minutes to the recording time. Pressing ADD TIME more than once extends your already extended recording time.	
5. Repeat Steps 2 - 4 to program a total of 8 programs up to 30 days in advance.	
6. Press TV to exit VCR Plus+ mode or press CANCEL to return to the previous mode.	
7. Turn VCR Off.	
8. Leave Cable Box On, if used.	+
9. Place remote in a position where it will have an unobstructed path to your VCR and cable box.	Note: You can program additional recordings while recording. However, the PRG key will be inactive; you will not be able to enter any brand codes or change the VCR+ setup. Wait until recording is complete before making any changes.

Reviewing Your Recording Schedule

1. Press VCR+.

2. Press REVIEW repeatedly to view your recording schedule.

3. Press CANCEL to delete a program from recording schedule or during an in-progress recording.

4. Press ENTER when finished.

PlusCode® is a registered trademark of Gemstar Development Corp.
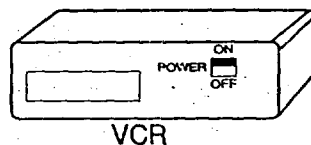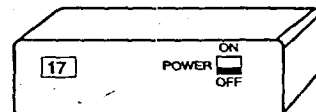
VCR   Cable Box

After programming and prior to recording, place remote so it points in direction of VCR and cable box.

Remote Display
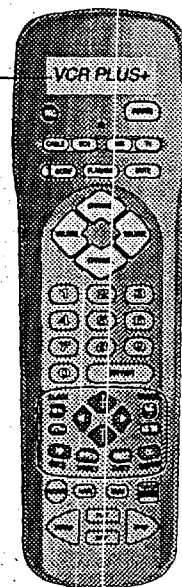
GEM4002 VCR PLUS+C ® REMOTE CONTROL

TROUBLESHOOTING

Before calling for service, try these simple solutions to resolve difficulties with VCR Plus+ Operations

Problem	Possible Solution
Operating Problems	
Remote does not respond to key presses, display does not change.	Are batteries installed? Remove batteries for a minimum of 30 seconds to clear remote's memory. Reinstall batteries and reprogram your equipment's brand codes, if necessary.
Remote displays "ERR SETUP."	Enter brand codes first before using VCR, CABLE, or AUX modes.
Recording Problems	
VCR records a channel other than the one specified.	Channel Mapping was not performed or is incorrect.
VCR recording stops before end of sporting event.	Specify additional time using ADD TIME when programming to record sporting events to adequately extend recording time.
Remote does not operate equipment.	Be sure proper brand code was used. Try a different code. Check **Special Features** section to see if a special code will solve problem.
Cable Box does not turn On when recording begins.	Do not turn cable box off. Cable box must be left on prior to VCR Plus+ recording.
VCR shuts Off when recording is scheduled to begin.	VCR must be turned off prior to VCR Plus+ recording.
Channel Mapping Problems	
Cannot display default channel mapping numbers.	Remote will only display changes made to default GUIDE CH numbers.
Programming Problems	
Cannot enter Brand Codes while remote is in Record mode.	It is not possible to use the PRG key while remote is in Record mode. Wait until current recording is complete before programming any new brand codes.
Remote displays "CLASH."	Another program is already scheduled for that time slot or portion thereof.

CARING FOR YOUR TV

Your TV will look better, have a longer life, and perform better if you care for it properly.

⚠️ First, check to see that the TV is off. For added safety, unplug the TV from the power outlet.

Note: If you unplug your TV, you may have to reset the clock to the current time.

Cabinet Care

Non-Wood Cabinet or Cabinet Components

Moisten a soft cloth with a mild soap solution. Wipe the surface with a damp cloth. Then rinse the cloth in clean water and wipe the surface again. Allow the TV to air-dry before turning it on.

Wood Cabinets or Cabinet Components

Use any good furniture cleaner and polish. Regular care will help preserve the finish.

Picture Glass Cleaning

The picture tube face attracts dust particles and should be cleaned regularly. To clean the face, spray a small amount of glass cleaner on a cloth and wipe the glass face until clean. Repeat if necessary.

To prevent dust accumulation, wet a soft cloth in lukewarm water mixed with a little fabric softener or a mild soap solution. Wring the cloth almost dry. Wipe the glass face. Make sure no drops of moisture are squeezed onto the glass. Do not wipe the glass dry. Allow the glass to air-dry before you turn the TV on again.

EXTENDED ABSENCE

Before an extended absence (such as a vacation) you may want to unplug the power cord from the electrical wall outlet. This will protect the TV from possible damage from lightning or power line surges. If you have an outdoor antenna, you may also want to disconnect the antenna lead-in wires on the back of the TV.

Note: If you unplug your TV, you may have to reset the clock to the current time.

TV PICTURE INTERFERENCE

Your TV picture may be affected by interference such as:

Speckled or Streaked Picture

Can be caused by nearby automobile ignition, electrical appliances, etc. Most noticeable in weak signal areas.

Snow in Picture

Caused by insufficient signal. Usually caused by the TV being located too far from the TV station or by improper antenna installation.

Ghosts or Reflections

Caused by signals being reflected from surrounding buildings, water tanks, or other high structures.

Radio Signal

Caused by police, amateur, or CB radio transmitters.

These interference problems can often be corrected by using a better antenna, signal amplifiers, or various filter devices. See your TV dealer for additional information and available TV accessories.

VIDEO GAMES AND OTHER FIXED PATTERN DISPLAY CAUTION

If you use your TV for video games or other fixed displays, avoid setting the Brightness control for an excessively bright picture. A fixed display is any image that doesn't change frequently, such as a channel/network identification or other symbol that remains in the same location for long periods of time. A bright, fixed pattern, if left on for long periods of time, can result in a permanent imprint on the TV picture tube. You can reduce this possibility by alternating the use of the fixed pattern display with normal TV picture viewing, by turning down the Contrast control for sustained fixed pattern use, and by turning off the fixed pattern display when not in use.

RECORD MODEL NUMBER OF YOUR TV

The model and serial numbers of your new TV are located on the back of the TV cabinet. For your future convenience and protection, we suggest that you record these numbers here:

Model No. _____

Serial No. _____

BEFORE CALLING FOR SERVICE

Making these simple checks before calling for service, you may save time and money.

Problem	Try This
Picture OK. Poor sound.	Re-orient antenna. Try another channel — possible station trouble. Adjust **Audio Menu** options. Check for local interference. Is antenna/cable connection loose?
Sound OK. Poor picture.	Re-orient antenna. Try another channel — possible station trouble. Adjust **Video Menu** options. Trouble with cable-TV system? Is antenna/cable connection loose?
No picture or sound.	Is TV on? Is there power in wall outlet? Is TV plugged in? Is antenna hooked up? Is cable hooked up? Is the channel blocked by the Parental Control? Trouble with cable-TV system? Check auxiliary audio/video equipment. Check channel selection.
Picture blurred or distorted. Ghost in picture.	Check antenna or cable hookup for broken wires. Try another channel — possible station trouble. Check for local interference.
Poor or no color.	Is it a color program? Check antenna or cable hookup for broken wires. Adjust **Video Menu** options.
No sound.	Volume setting may be too low. Check **MUTE on remote. Check Audio Mode in Audio Menu:** Audio Mode may be set to SAP, but no SAP signal is detected on the channel.
Cannot select certain channels.	Add/Del/Surf of the **Setup Menu** may skip channels.
No closed captions.	Are captions available? Is Caption 1, 2, 3, or 4 selected using the Caption/Text option of the **Setup Menu**?
Black box covers half of screen.	Is text available? Is Text 1, 2, 3, or 4 selected in the Caption/Text option of the **Setup Menu**?
No picture or sound when you select Video source.	Is audio/video source hooked up properly? Are all wires connected to VIDEO IN jacks on connection center?
Weak or no stereo sound when using a stereo VCR.	Check Audio mode. Was stereo sound present before you selected Video source?
PIP window is black or lacks contrast when you select Video for PIP inset.	Adjust PIP Color and Tint settings in **PIP Menu**. Are all wires connected to VIDEO IN jacks on connection center?
PIP window is "snowy" when using Antenna/Cable for PIP and Video for main picture.	Is TV/VCR switch on the VCR in the TV position?
Complete picture loss when using Video for PIP and Antenna/Cable for main picture.	Is TV/VCR switch on the VCR in the TV position?
TV appears to remain on the same channel when you use the Channel Up/Down arrows.	Check Add/Del/Surf in **Setup Menu**: Is only one channel labeled as "Added?" If operating TV in Surf mode, is only one channel labeled as "Surf?"
Remote does not work.	Are batteries good? Is TV turned On? Is TV plugged in?
Auto Demo does not turn Off.	Set Auto Demo to Off in the **Setup Menu**.
Menu options cannot be changed or selected.	Reset the TV by disconnecting the AC power cord from the power outlet, wait a few minutes, then plug the TV back into the outlet. You will have to reset the clock to the current time.

REPLACEMENT PRODUCT REGISTRATION CARD

You could win a full refund on your new Zenith product!

Look for the Product Registration Card on your new video product.

Each month Zenith holds a drawing from the completed Product Registration Cards received during the preceding month. Zenith will reimburse the winner for the full purchase price of the product.

To participate, simply complete and return the Product Registration Card today.

The odds of winning the free drawing described above depend on the number of participants. Free drawing offer is void in Canada and other places where restricted or prohibited by law. Offer is void for Hotel/Motel and Institutional models. Rental models are not eligible.

Product Card lost or misplaced?

The Product Registration Card furnished with your video product is pre-printed with its Model and Serial numbers. Please fill out the card and mail it at your earliest convenience. It is imperative that Zenith know how to reach you promptly if we discover a safety problem that would affect you. If the original card has been lost or misplaced, use the replacement card below. Either card will qualify you for the free drawing, but you are limited to only one entry in the drawing. Complete the card, place it in an envelope, and mail it to:

Zenith Electronics Corporation
P. O. Box 173257
Denver, CO 80217-3257

Use the replacement Product Registration Card below
only if the original card has been misplaced or lost.

Zenith Product Registration Card   H5Z01-01

① **Please Print Clearly or Type**   ② **Area Code Telephone**

1. ☐ Mr.   2. ☐ Mrs.   3. ☐ Ms.   4. ☐ Miss

First Name   Initial Last Name

Street   Apt. No.

City   ③ Date of Purchase

State   Zip Code   Mo.   Day   Yr.

MODEL NUMBER

**Copy Numbers Here
From Label on Set**

SERIAL NUMBER

Please record the model number and serial number from the sticker on the back of your set.

PHOTOCOPY AND CUT ALONG DASHED LINE

AVISO PARA NUESTROS CLIENTES DE HABLA HISPANA

Zenith publica muchos de sus manuales de instrucciones en idioma español. Si le interesa pedir la versión en español de este manual, llene el formulario provisto a continuación, fotocópielo y envíelo a la dirección indicada.

No todos los manuales de instrucciones están disponibles en español. Sin embargo, podemos proporcionarle el manual que corresponde a un modelo similar a este, en el cual se describen casi todas las características del producto que usted utiliza.

El manual en español es gratis.

Instrucciones:

1. Llene el formulario proporcionado a continuación con la información solicitada.

2. Haga una fotocopia del formulario de pedido y envíela a:

> **Service Literature Department**
> **Zenith Electronics Corporation**
> **1000 Milwaukee Avenue**
> **Glenview, IL 60025-2493**

Fotocopie la página y corte la línea punteado

Formulario de pedido de su manual de instrucciones   206-3227 Z-GHLEV2

(Este formulario de pedido es solo válido para el producto descrito en este manual

Número de modelo: _____ (lo encontrará en la parte posterior del aparato)

Número de serial: _____ (lo encontrará en la parte posterior del aparato)

Dia de Compra: ___/___/___
            diá   mes   año

Nombre _____

Dirección _____ Apartamento _____

Ciudad _____ Estado_____ Código postal _____

País _____

ZENITH QUESTIONNAIRE

HELP US HELP YOU

We want you to get the most out of your new Zenith product. Thanks for taking a few moments to complete the following question-naire; we value your input!

|		Agree				Disagree
1.	The operating guide is well-organized.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
2.	I can find the information I want.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
3.	The text is clearly written.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
4.	This operating guide is written in language that I understand.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
5.	The examples are clear and useful.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
6.	Diagrams and illustrations are easy to follow.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
7.	The quality of this operating guide would influence whether I'd buy a Zenith product again.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
8.	I would recommend this product based on the quality of the operating guide.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
9.	Instructions are clear and helpful.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
10.	This operating guide meets my expectations.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

Z-GH   206-3202

COMMENTS

Your comments help us determine if we should give greater emphasis to certain topics in the operating guide.
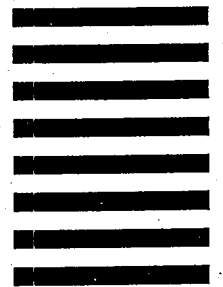
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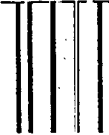
BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 203 GLENVIEW, IL

POSTAGE WILL BE PAID BY ADDRESSEE

**ZENITH ELECTRONICS CORPORATION
ATTN: TECHNICAL PUBLICATIONS
1000 MILWAUKEE AVE.
GLENVIEW, IL 60025-9852**

Fold Along This Line First.

Name _____   _____
                        First   Last

Street _____

City _____

State _____ Zip Code _____

Daytime Telephone _____ - _____ - _____

Date Questionnaire Completed

ZENITH SERVICE CENTERS

Zenith Consumer Services

801 East Roosevelt Road
Lombard, IL 60148
Telephone - 630-705-2830
FAX   - 630-705-9810

Can provide in-home service
for the following Zip Codes:

42300, 42399, 42400, 42499

60000, 60099, 60100, 60199, 60200, 60299, 60300,
60399, 60400, 60499, 60500, 60599, 60600, 60699,
60700, 60799, 60800, 60899

Hours of Operation:

Monday-Friday   8 a.m. - 6 p.m.
Saturday   9 a.m. - 2 p.m.

DIRECT-VIEW COLOR TV

Welcome into the Zenith family! We believe you'll be pleased with your new Zenith Color TV. Please read this warranty carefully. It is a "LIMITED WARRANTY" as defined under Federal Law. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state within the U.S.A.

Zenith's Responsibility

Service Labor — During a period of 90 days from effective warranty date, Zenith will pay for service labor by a Zenith authorized service center when needed as a result of manufacturing defects.

Parts — New or remanufactured replacements for factory-defective parts will be supplied by a Zenith authorized service center for one year from effective warranty date (color picture tube — two years). Such replacement parts are warranted for the remaining portion of the original warranty period.

Home Service — Warranty service for 21" diagonal (U.S.A.) or larger screen size models is provided in the home in most cases. (Some repairs may require the unit to be taken by the servicer to the repair facility and returned, at no additional charge.)

Not Covered — This warranty covers manufacturing defects and does not cover installation, adjustment of customer controls in the home, installation or repair of home antenna systems, cable converters, or cable company-supplied equipment; it also does not cover damage due to misuse, abuse, negligence, acts of God, or other causes beyond the control of Zenith. Any alteration of the product after manufacture voids this warranty in its entirety.

Owner's Responsibility

Effective Warranty Date — Warranty begins on the date of original consumer installation. For your convenience, keep the dealer's dated bill of sale or delivery ticket as evidence of the purchase date.

Operating Guide — Read your Operating Guide carefully so that you'll understand your set's operation and how to adjust the customer controls.

Carry-In Service — Models under 21" diagonal (U.S.A.) screen size must be taken to a Zenith authorized service center for warranty service and must be picked up by the owner.

Antenna — Reception problems caused by inadequate home antennas or faulty antenna connections are the owner's responsibility.

Important: Product Registration — Please fill out and mail your Product Registration Card. It is imperative that Zenith know how to reach you promptly if we should discover a safety problem that could affect you.

Warranty Service — For warranty service information, contact any Zenith authorized service center. Parts and service labor that are Zenith's responsibility (see above) will be provided without charge. Other service is at the owner's expense. If you have any problem obtaining satisfactory warranty service, call or write the Customer Response Center. You must provide the model number, serial number and date of purchase or date of original installation.

Before you ask for Warranty service, check the operating guide section entitled, "Maintenance And Troubleshooting." You might avoid a service call.

Zenith Electronics Corporation
Zenith Response Center
1000 Milwaukee Avenue
Glenview, IL 60025-2493
Telephone: (847) 391-8752
Mon-Fri, 7:00 a.m. - 8:00p.m. Central Time
WWW.ZENITH.COM

ADDITIONAL ZENITH PROTECTION PLAN AVAILABLE

Zenith offers you the opportunity to obtain additional long-term protection against failure of the picture tube in your new TV. Our Picture Tube Protection Plan enables you to avoid any unexpected picture tube repair expenses and keep your television in top condition. It guarantees you a genuine Zenith replacement picture tube and service from a Zenith authorized service center.

Be sure to send in the **Product Registration Card**. We will send you an application for the Protection Plan near the expiration of the two year manufacturer's warranty on the picture tube. For additional information, call (847) 391-8757.