

 Advanced Video Imaging

**Projection/Direct View
Color TV
MTS Stereo
2-Tuner
Picture-In-Picture
StarSight®**

**Operating Guide
& Warranty**

for Models
SY2745, SY2788, SY3247,
SY3288, SY3547, SY3588,
PVY4665, PVY5265,
PVY5270, PVY6067



THE QUALITY GOES IN BEFORE THE NAME GOES ON[®]

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Product
Registration
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SAFETY WARNINGS



WARNING

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



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

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



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

POWER-CORD POLARIZATION

This product is equipped with a three-wire grounding-type alternating-current line plug. This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the power outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the three-wire grounding-type plug.

CAUTION

To prevent electric shock, do not use this three-wire, grounding-type plug with an extension cord, receptacle or other outlet unless all three of the blades of the plug can be fully inserted to prevent blade exposure.

REGULATORY INFORMATION

Note: 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 for help.

CAUTION

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

CAUTION

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than those contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified personnel.

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 that are built into your new product.

1. Read Instructions

All the safety and operating instructions should be read before the product is operated.

2. Follow Instructions

All operating and use instructions should be followed.

3. Retain Instructions

The safety and operating instructions should be retained for future reference.

4. Heed Warnings

All warnings on the product and in the operating instructions should be adhered to.

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, wash bowl, kitchen sink, or 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

A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



PORTABLE CART WARNING

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 are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked 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

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your 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). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

13. Power-Cord Protection

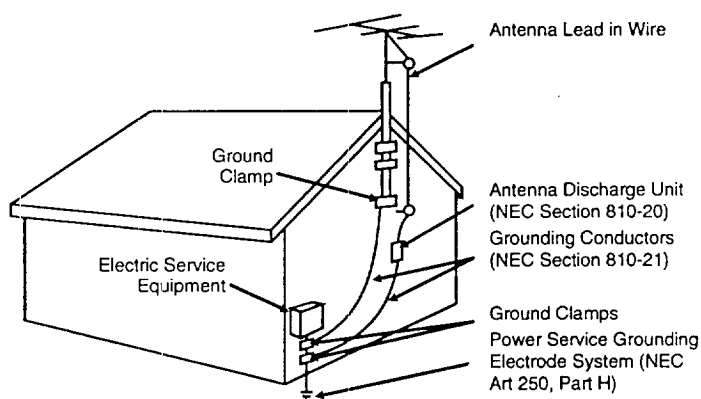
Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

IMPORTANT SAFETY INSTRUCTIONS

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



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, extreme care should be taken 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:

- If the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an 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.
- If the product has been dropped or the cabinet has been damaged.
- 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 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

The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

24. Heat

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

INTRODUCTION

WELCOME

Welcome into the family of Zenith Color Television owners. This guide provides instructions on how to operate your new TV. In addition, we strongly advise you to read and observe the precautions listed in the Safety Tips section of this operating guide. Read this publication carefully so that you will receive full enjoyment from your new Zenith TV for many years to come.

Your new TV has been designed and built to give you the very best in quality, features and performance. There are many regional Zenith authorized service centers throughout the U.S., Canada and Mexico who can attend promptly and effectively to ordinary service needs.

If you should have an unusual performance or service problem that cannot be satisfactorily resolved by your Zenith authorized service center, call or write:

Zenith Electronics Corporation

Customer Service Department

1000 Milwaukee Avenue

Glenview, IL 60025-2493

Telephone: (847) 391-8752

Mon-Fri, 8:00 a.m. - 4:30 p.m. Central Time

Send the model number, serial number, and date of purchase or original installation, with a full explanation of the problem and the service history. We will welcome the opportunity to look into your specific question or problem and to be of assistance in resolving it promptly.

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. _____

INSTALLATION CONSIDERATIONS

Before you install your TV...



Ventilation — Proper ventilation keeps your TV running cool. Air circulates through perforations in the back and bottom of the cabinet. Do not block these vents or you will shorten the life of your TV.



Power Source — Your TV is designed to operate on normal household current, 120 volt 60 Hertz AC. Do not attempt to operate it on DC current.



Power Cord — Your power cord has a polarized plug as required by Underwriters' Laboratories. It has one regular blade and one wide blade and fits only one way into a standard electrical outlet. If the blades will not enter either way, your outlet is very old and non-standard. A new outlet should be installed by a qualified electrician.



Safe Operation — Your TV is manufactured and tested with your safety in mind. However, unusual stress caused by dropping or mishandling, exposure to flood, fire, rain or moisture, or accidental spilling of liquids into the TV, can result in potential electrical shock or fire hazards. If this happens, have your TV checked by a service technician before using it again.

Please read and observe each safety point in the "Safety Tips" section when installing and using your TV.

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 which does not 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.

PLUGGING IN YOUR TV — Be sure to plug your TV into an "unswitched" AC power source. The "switched" AC outlets found on some video equipment will not continue supplying power to the TV once the equipment is turned off. If the power to the TV is interrupted, you will have to reset the clock in the TV to the current time.

INTRODUCTION

METHODS OF TV AND ACCESSORY EQUIPMENT OPERATION

Your new Zenith TV is a very sophisticated, High-Tech electronic appliance. TV operation, video picture adjustments and audio sound adjustments are performed through on-screen menus and displays. Self-explanatory menu icons are used throughout. Most features can be selected and adjusted from the comfort of your favorite chair by using either of the infrared remote controls, the Universal (7 Mode) remote or the Z-Trak trackball (TV/VCR) remote. Either of the two remote controls can be used to operate the TV.

Use the multi-brand (7 Mode) programmable remote if you have different brands and types of equipment in your video system which you need to control remotely. Use the Z-Trak (TV/VCR) programmable remote if you feel comfortable using trackball access similar to that provided by the familiar computer mouse device. Also, many features can be selected and adjusted by using the control panel on the TV, except for StarSight.

StarSight provides an electronic programming guide which is updated with new scheduling information automatically while the TV is Off. StarSight allows you to rapidly scan through the channel programming guide to find a program for viewing or recording. Programs can be searched and selected by category, theme, subject, etc. if desired.

FEATURES PROVIDED ON YOUR TV

This operating guide describes a family of TV models. Not all models have all of the features described in this guide. In addition, different control panels may be used from model to model. Most models include the following features:

GENERAL FEATURES	AUDIO FEATURES
Optional StarSight® Program Guide Capability	2-Level Audio Mute Control
Automatic TV Operation Demonstration	On-Screen Captions when Audio Muted
On-Screen Menus accessed by Remote Controls or TV Control Panel	Variable Audio Output jacks
Universal (7 Mode) Programmable Remote Control	External Surround Sound Speaker(s) Output Jacks
Z-Trak Trackball (TV/VCR Modes) Programmable Remote Control	Front and Rear Surround Sound Speaker Controls
Closed Captions and Text Modes	Preset Surround Sound
181 Channel Tuning	Surround Sound Speaker Hook-Up Jacks
Automatic Channel Search Programming	On-Screen Audio Adjustments
Parental Control, Block Channel(s)	MTS Stereo
Channel Labels (ABC, NBC, MAX, SHO, etc. or create your own custom labels)	SoundRite Auto Volume Control
Source Identification (VCR, Cable Box, etc.)	PIP (Picture-In-Picture) FEATURES
Sleep Timer	Video Swap PIP Window/Main Screen Picture
On/Off Timer (Vacation Timer)	PIP/Main Screen Pictures Freeze
Activate/Deactivate On/Off Timer selection	Picture-In-Picture Capability with 2 Direct-Source TV Tuners
On-Screen Icon Identifiers	1-Minute Commercial Break Surf-to-PIP Channel Scanning
Antenna/Cable and Loop-Out to Cable Box Jacks	Audio Swap PIP Window/Main Screen Picture
Rear Chassis In/Out Audio/Video (A/V) Jacks	Move PIP Window anywhere on-screen with Z-Trak Remote
Front Chassis In Audio/Video (A/V) Jacks (Available on some models only)	Channel Surf-to-PIP
On-Screen Video Adjustments	ADDITIONAL PROJECTION TV ONLY FEATURES
Channel Scan Add Channels	VCR Shelf
Channel Scan Delete Channels	Built-in Screen Protector (Available on Some Models)
Select Channel Surfing Channels	Optional Screen Protector (Available on Some Models)
Z-Trak Icons Menu	Larger TV/Source Connections Jack Panel on back of TV
Adjustable Pointer Speed Control for Trackball Remote	Front Video/S-Video Input Jacks

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How to use this operating guide

Standard TV installation and operation is given in this portion of the operating guide. Follow the procedures given if you will not be using StarSight®. Two remote controls are provided, each with its own set of on-screen menus. Refer to the appropriate sections of this guide when using the different remote controls.



Refer to the StarSight® portion of this operating guide for StarSight® activation and operation.

SETUP CHECKLIST



Note: Turn off the power on all system components before making connections. Do not disconnect your cable box power cord, it may interfere with your cable service.



Connect All Source Equipment to TV

Connect your Antenna or Cable service line as well as any accessory equipment such as a VCR. Do not connect this TV or other system component equipment to an electrical outlet that is controlled by a wall switch.



Install Batteries in the Remote Controls

Batteries are provided but must be installed in both the universal and trackball remote controls.



Turn on All Source System Components

The TV and other Source equipment you connected to the TV/Source Connection Panel or, if available, the TV Front Panel.



Select Main Picture Source and PIP Inset Picture Source

The Main Picture Source and the PIP Inset Window Picture Source can be any source listed and available in the Source Menu.



Subscribe to StarSight Service (Optional)

You do not have to subscribe to StarSight to operate this TV.

Refer to the StarSight portion of the operating guide for StarSight subscription information.



Perform Projection TV Setup (Projection TV Models Color Convergence)

This procedure should be performed when the TV is first installed and if it is moved later to a different location.



Perform Auto Program Procedure (Not required with StarSight Service)

This procedure finds and stores the available channels from your local broadcast area in the TV's memory.



Options

You may consider using the following options: Surf Channel Scan, Channel Labels, Channel Add/Delete/Surf, Source ID, and make changes to the Audio and Video settings to your personal preference.

Two Tuner Capability

Using either Ant/Cable 1 or 2 sources gives you two-tuner capability; one Tuner for the Main Picture, and a second Tuner for the PIP Inset Picture. (Use the TV to tune 2 live TV channels, depending on hookup.)

Options Quick Overview

Surf Channel Scan — Create a list of only the channels you view frequently for access by Chan Up/Down.

Channel Labels — Include a channel or network name such as HBO, Max etc., for the channels you receive or give a channel a custom name of your own.

Channel Add/Delete/Surf — Allows to you include or omit any available channel from the channel scan accessed by Chan Up/Down.

1-Minute Commercial Surf-to-PIP — Allows you to transfer temporarily your surf channels to the Main screen picture for viewing while a commercial is being broadcast.

Source ID — Allows you to label and identify your system component by type of equipment such as VCR, Photo CD, etc.,

Audio/Video Adjustments — You can set the video and audio adjustments to your personal preferences.

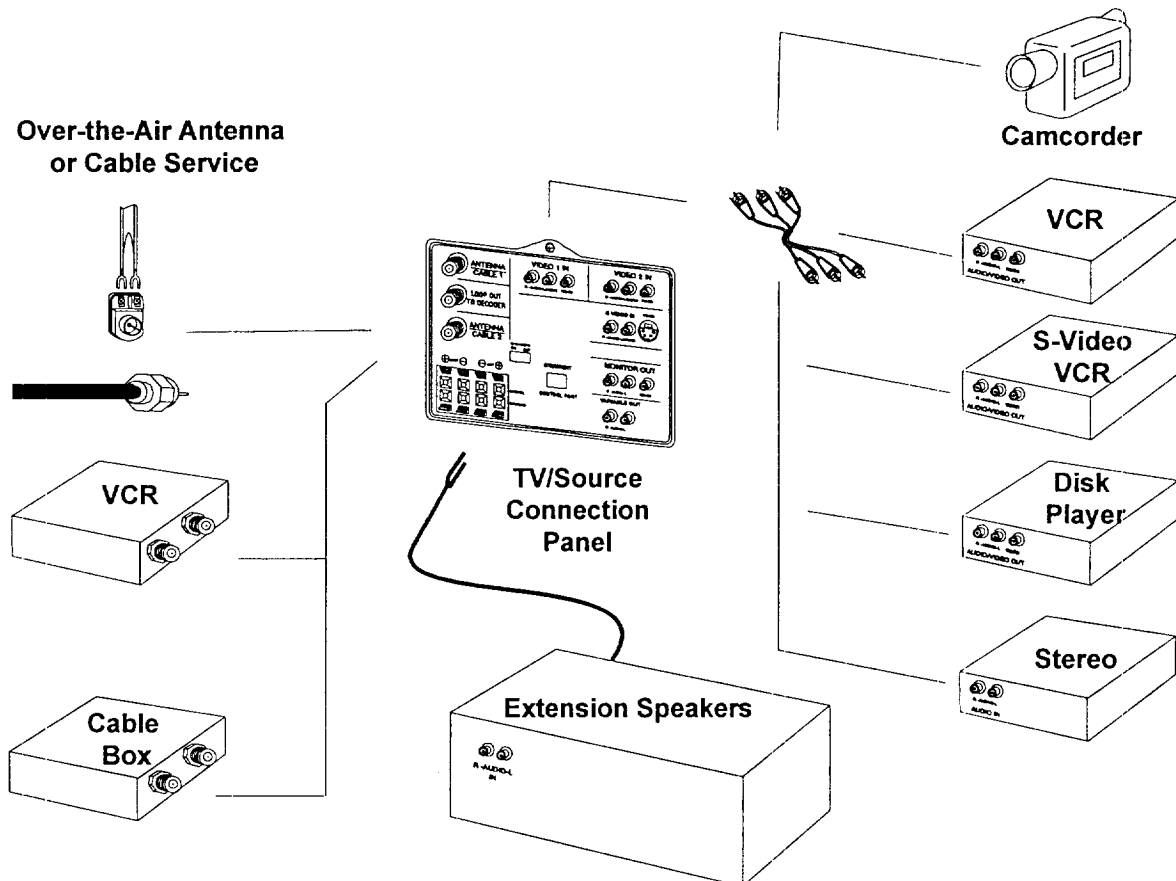
Color Convergence — Projection TVs only. Aligning Red and Blue colors over Yellow yields the ultimate in picture appearance. There are some TV models that have built-in and optional screen protectors, be sure to follow instructions when cleaning them becomes necessary.

STANDARD TV/SOURCE CONNECTIONS

INTRODUCTION TV/SOURCE CONNECTION PANEL

Shown below are examples of the type of "Source" equipment you can connect to your TV. Your antenna or cable service line should be connected to Antenna/Cable 1. If you have a Cable Box, connect it to Antenna/Cable 2. Use the Audio/Video connections for accessory equipment like a VCR. To hear stereo audio from your stereo VCR during tape playback, you must use the Audio/Video connections. Note: Additional Audio/Video Input jacks are provided (on some TVs) on the front of the TV for your convenience.

OVERVIEW: SOURCE EQUIPMENT CONNECTION OPTIONS



Input Source jacks on TV/Source Connection Panel on back of TV and A/V inputs on front.

Antenna/Cable 1 In Jack
Antenna/Cable 2 In Jack
Video 1 In Jacks
Video 2 In Jacks
S-Video In Jacks
Front Audio/Video (In) Jacks

Speaker On/Off Switch

Speaker Internal/External Switch

Output Jacks on TV/Source Connections Panel to Accessory Equipment

Loop-Out to Cable Box
Monitor Out Jacks
Variable Audio Out Jacks
Surround Speakers Out Jacks
External Speakers Out Jacks
StarSight Emitter Output Jack

Example list of accessory equipment that can be connected to the TV/Source Connections Panel and front of TV.

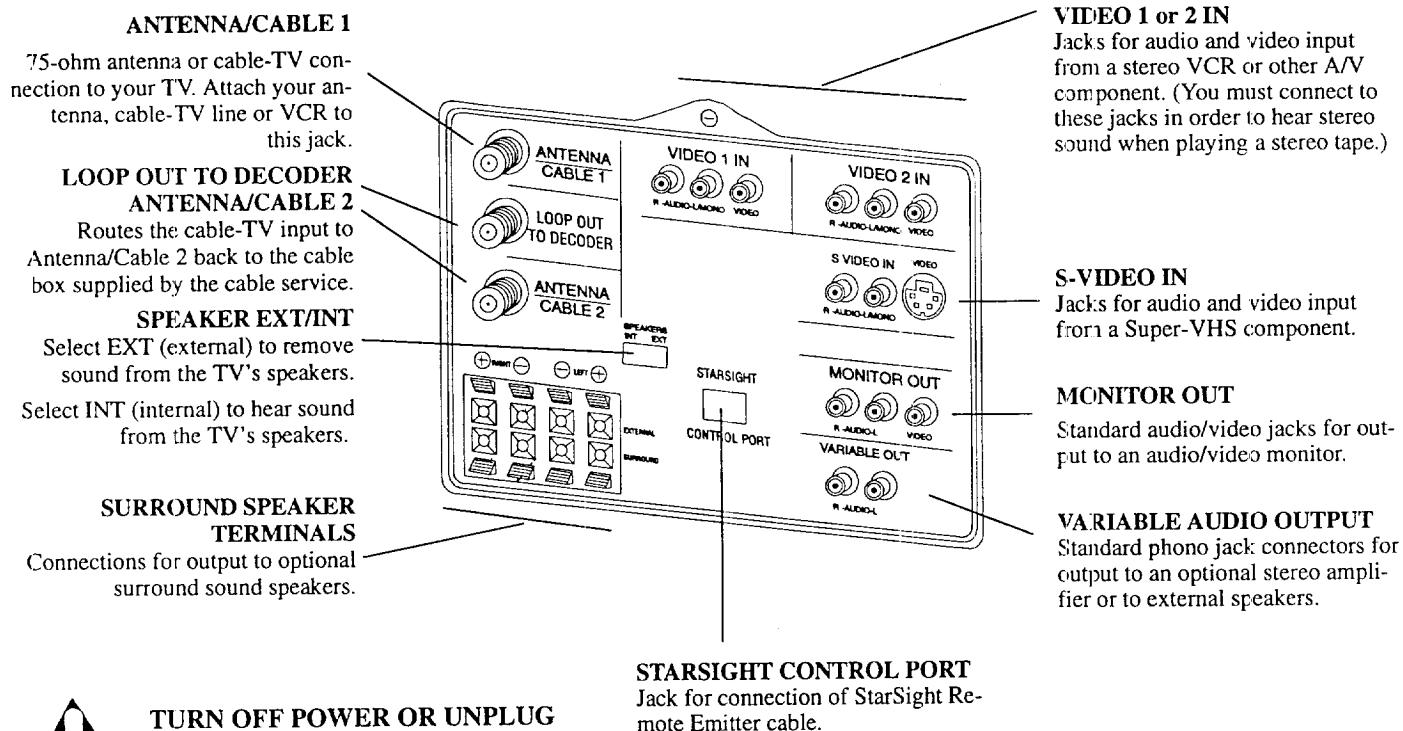
VCRs, S-Video Equipment, Camcorders, Laser Video Disk Players, Video/Surveillance Cameras, Various Audio Equipment such as an Audio Amplifier or Stereo System, External Speaker, Surround Sound Speakers etc. Use Audio/Video Cables to make the connections shown above.

Note: Cables shown above are not supplied with your TV and can be purchased at your local Zenith dealer. Measure each cable length needed.

STANDARD TV/SOURCE CONNECTIONS

TV/SOURCE CONNECTIONS PANEL

Locate the TV/Source Connection Panel on the back of the TV.



TURN OFF POWER OR UNPLUG TV POWER CORD BEFORE MAKING ANY CONNECTIONS.

FRONT CHASSIS TV/SOURCE CONNECTIONS PANEL (Available on Some Models)

If your TV model is equipped with front TV/Source A/V input jacks, they are located behind a small door on the control panel on the front of the TV. Although two types of panels are used on the front of the TV (as shown below), in the on-screen menus, both Type 1 and Type 2 are referred to as "Front Video" and "Front S-Video."

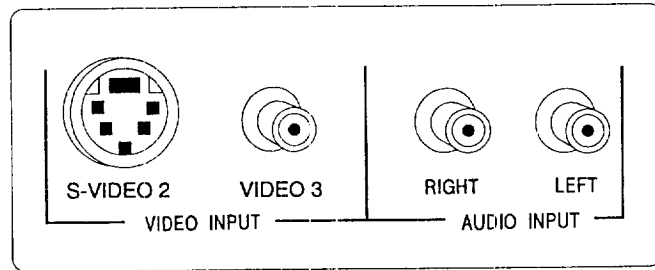
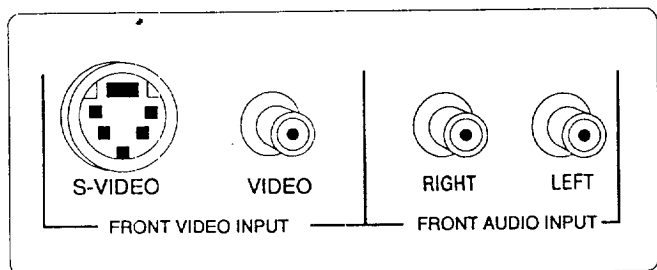
Note: Use the Right and Left Audio jacks with either Video or S-Video jacks.

Type I, S-VIDEO (In)

Jacks for audio and video input from a Super-VHS VCR.

Type II, S-VIDEO 2 (In)

Jacks for audio and video input from a Super-VHS VCR.



Type I, VIDEO (In)

Jacks for audio and video input from a stereo VCR or other A/V component.

Type II, VIDEO 3 (In)

Jacks for audio and video input from a stereo VCR or other A/V component.

STANDARD TV/SOURCE CONNECTIONS

SETUP 1: TV ONLY

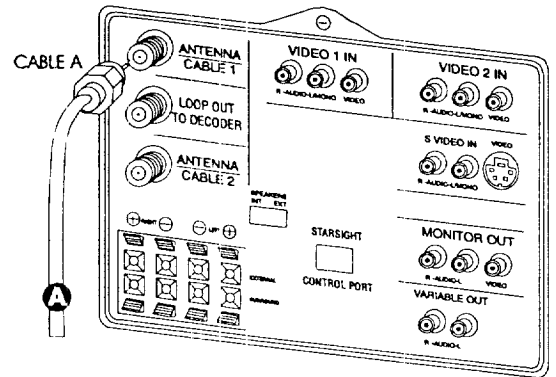
If you receive your television signal by antenna or basic cable-TV (no cable box), connect your television as shown here.



TURN OFF POWER OR UNPLUG TV BEFORE MAKING ANY CONNECTIONS TO YOUR TV.

Cable	Leading from..	Connected to..
A 75 ohm Antenna Cable	Wall Jack— From Antenna or Cable Service.	TV— "Antenna/Cable 1."

Note: All cables shown are not supplied with this TV.



Antenna or Cable-TV Connection

SETUP 2: TV AND CABLE BOX

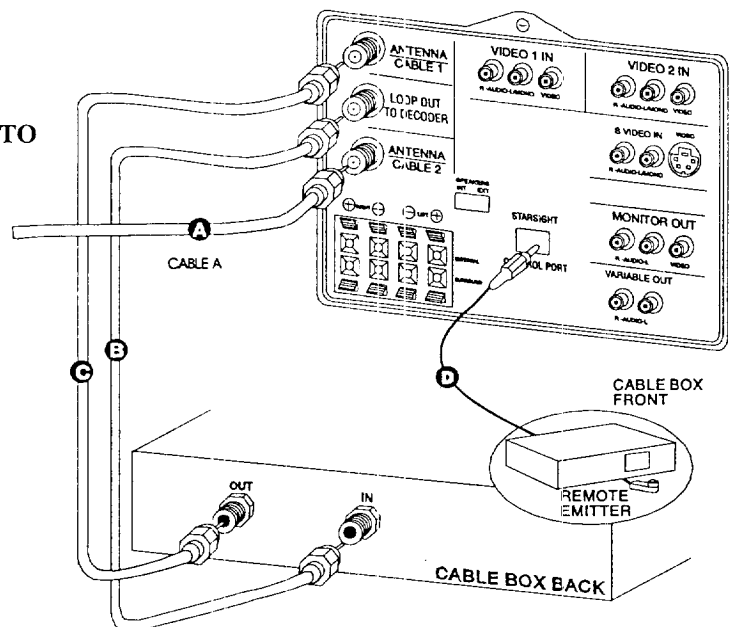
If you receive your television signal from a cable box, connect your television as shown in the illustration.



DO NOT UNPLUG YOUR CABLE BOX POWER CORD AT ANY TIME!
DO NOT PLUG YOUR TV POWER CORD INTO THE BACK OF YOUR CABLE BOX!

Cable	Leading from..	Connected to..
A 75 ohm Antenna Cable	Wall Jack— From Antenna or Cable Service.	TV— "Antenna/Cable 2."
B 75 ohm Antenna Cable	TV— "Loop Out To Decoder."	Cable Box— "In."
C 75 ohm Antenna Cable	Cable Box— "Out."	TV— "Antenna/Cable 1."
D (Supplied) Remote Emitter Cable.	TV— "StarSight Control Port."	Cable Box— Front panel.

Note: All cables shown are not supplied with this TV.



Cable Box Connection

StarSight Note: Do not adhere the Remote Emitter until after you have completed activating StarSight and you have confirmed the correct code that operates your Cable Box. Once the code is confirmed, peel off the backing of the sticker on the Remote Emitter and adhere it in place.

If you want to activate StarSight, proceed to the StarSight section of the operating guide.

Note: Cables shown above can be purchased at your local Zenith dealer. Measure each cable length needed.

StarSight Note:
The Remote Emitter is only necessary if you are planning to activate StarSight.

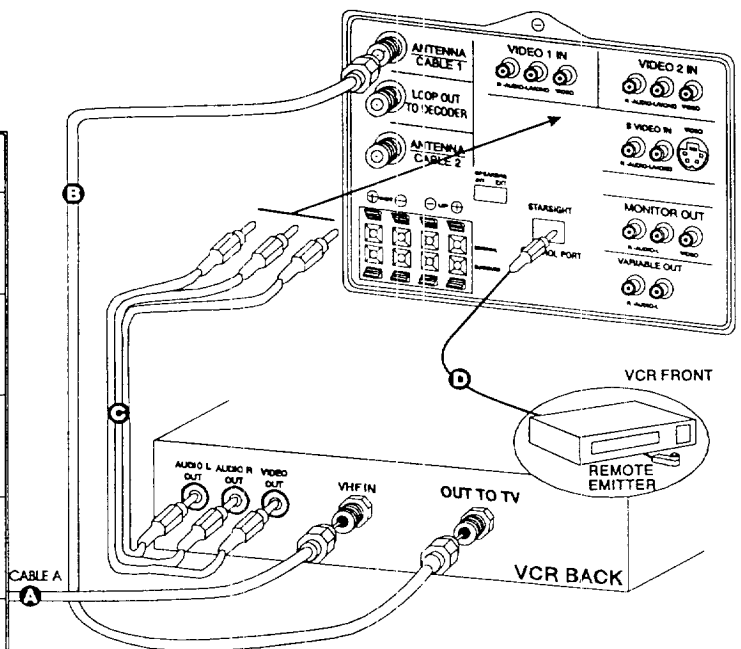
STANDARD TV/SOURCE CONNECTIONS

SETUP 3: TV AND VCR

If you receive your television signal through your VCR, connect your television as shown here.

Cable	Leading from..	Connected to..
A 75 ohm Antenna Cable	Wall Jack— From Antenna or Cable Service.	VCR— "VHF In."
B 75 ohm Antenna Cable	VCR— "Out to TV."	TV— "Antenna/Cable 1."
C Audio/Video Cables	VCR— "R-Audio-L/Video Out."	TV— "Video 1 or 2 In."
D (Supplied) Remote Emitter Cable	TV— "StarSight Control Port."	VCR— Front panel.

Notes: Use the Audio/Video connections if you wish to hear Stereo sound from your VCR in tape playback mode. If you have a Super-VHS VCR, see connections diagram for that type of equipment at lower right of page. All cables shown are not supplied with this TV.



Standard VHS VCR Connection

StarSight Note: Do not adhere the Remote Emitter until after you have completed activating StarSight and you have confirmed the correct code that operates your VCR. Once the code is confirmed, peel off the backing of the sticker on the Remote Emitter and adhere it in place.

If you want to activate StarSight, proceed to the StarSight section of the operating guide.

Note:

The Remote Emitter is only necessary if you are planning to activate StarSight.

Notes to above:

Your VCR Input jack may be called;

VHF, VHF In, Ant In, RF In, UHF/VHF/CABLE IN, In from Ant, Antenna In, From Antenna.

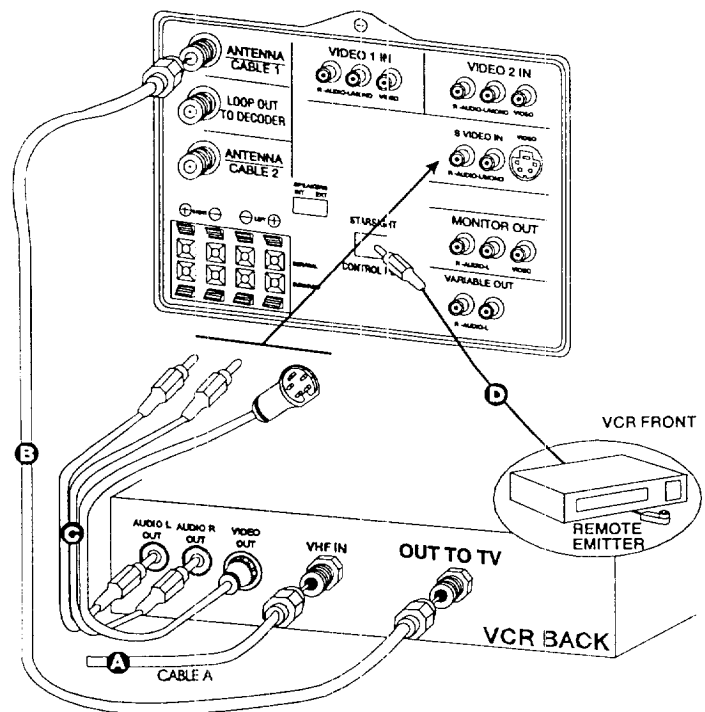
Your VCR Output jack may be called;

Out To TV, VHF Out, Ant Out, RF Out.

Your Cable Box Input and Output jacks may be called;

Cable In, Cable Out, Out to TV, CATV In, CATV Out.

Note: Cables shown above can be purchased at your local Zenith Dealer. Measure each cable length needed.



Super-VHS VCR Connection

STANDARD TV/SOURCE CONNECTIONS

SETUP 4: TV WITH VCR AND CABLE BOX

If you receive your television signal through your Cable Box and VCR, connect your television as shown here.



DO NOT UNPLUG YOUR CABLE BOX POWER CORD AT ANY TIME!
DO NOT PLUG YOUR TV POWER CORD INTO THE BACK OF YOUR CABLE BOX!

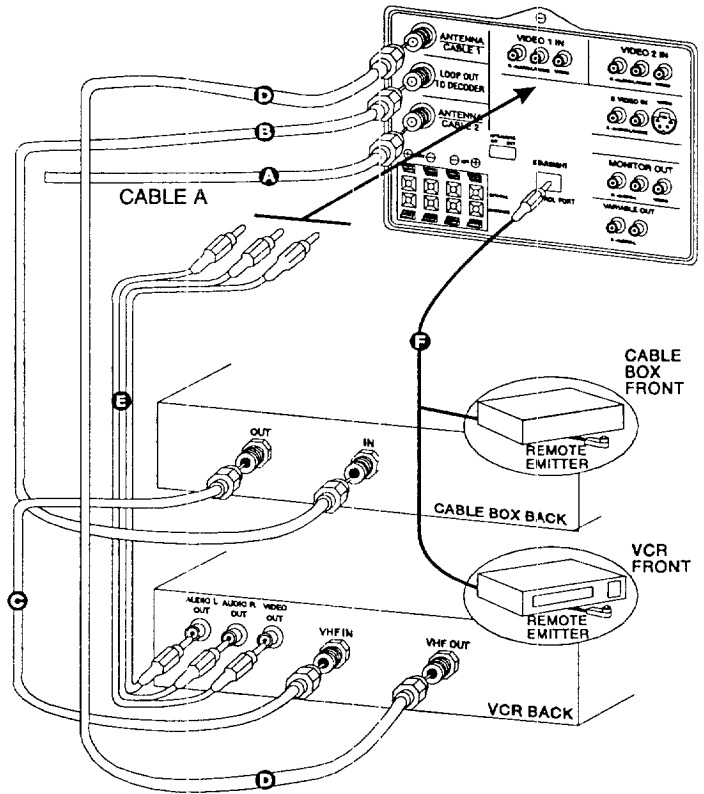
Cable	Leading from..	Connected to..
A 75 ohm Antenna Cable	Wall Jack— From Antenna or Cable Service.	TV— "Antenna/Cable 2."
B 75 ohm Antenna Cable	TV— "Loop Out to Decoder."	Cable Box— "In."
C 75 ohm Antenna Cable	Cable Box— "Out."	VCR— "VHF In."
D 75 ohm Antenna Cable	VCR— "Out To TV."	TV— "Antenna/Cable 1."
E Audio/Video Cables	VCR— "R-Audio-L/Video Out."	TV— "Video 1 or 2 In."
F (Supplied) Remote Emitter Cable	TV— "StarSight Control Port."	VCR/Cable Box— Front Panels.

Notes: Use the Audio/Video connections if you wish to hear Stereo sound from your VCR in tape playback mode.

StarSight Note: Do not adhere the Remote Emitters until after you have completed activating StarSight and you have confirmed the correct codes that operate your equipment. Once the codes are confirmed, peel off the backing of the sticker on the Emitters and adhere it in place.

If you want to activate StarSight, proceed to the StarSight section of the operating guide.

Note:
 The Remote Emitter is only necessary if you are planning to activate StarSight.



Cable Box and VCR Connection

Notes to above:

Your VCR Input jack may be called;

VHF, VHF In, Ant In, RF In, UHF/VHF/CABLE IN, In from Ant, Antenna In, From Antenna.

Your VCR Output jack may be called;

Out To TV, VHF Out, Ant Out, RF Out.

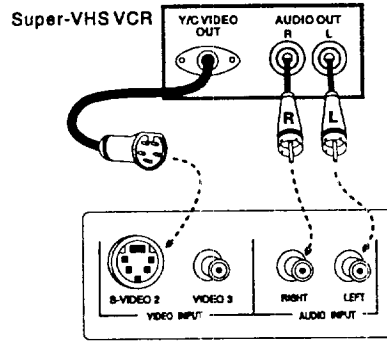
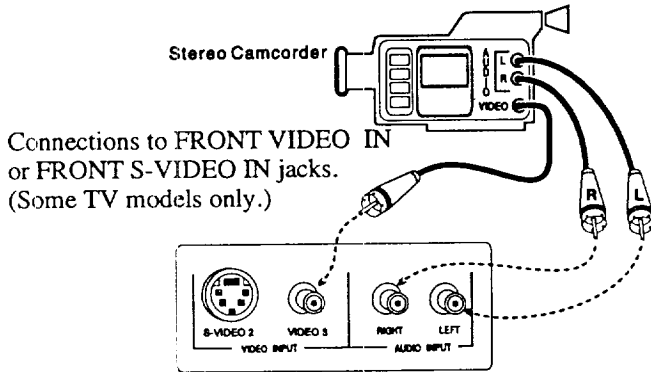
Your Cable Box Input and Output jacks may be called;

Cable In, Cable Out, Out to TV, CATV In, CATV Out.

Note: Cables shown above can be purchased at your local Zenith dealer. Measure each cable length needed.

STANDARD TV/SOURCE CONNECTIONS

FRONT TV AUDIO/VIDEO (A/V) CONNECTIONS FOR OPTIONAL VIDEO EQUIPMENT

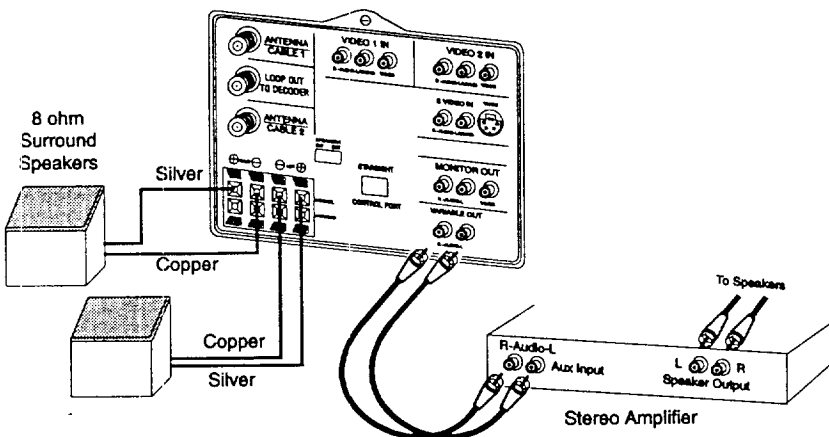


OPTIONAL AUDIO AMPLIFIER/SURROUND SOUND CONNECTIONS TO TV

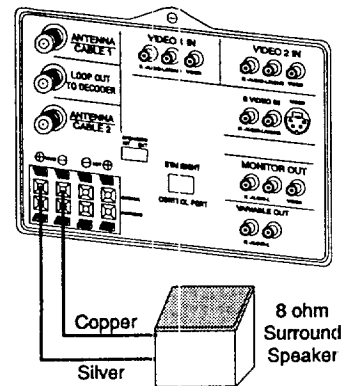
If you wish to listen to the TV audio through an external amplifier or stereo system, or listen to surround sound audio, make the connections to the TV shown in the illustration below.



TURN OFF POWER OR UNPLUG TV BEFORE MAKING ANY CONNECTIONS TO YOUR TV.



Amplifier and Dual Surround Speaker Connections



Single Surround Speaker Connection

DIFFERENT WAYS TO LISTEN TO YOUR TV

TV Speakers On (Some Models Only)	TV Speakers Off (Some Models Only)	Surround Sound
<ul style="list-style-type: none"> <input type="checkbox"/> SPEAKER EXT/INT switch in the INT (internal) position — TV speakers are ON. Sound is heard from both the TV's speakers and the external amplifier's speakers. <input type="checkbox"/> Use TV's volume control to raise and lower the level of sound being heard from both sets of speakers. 	<ul style="list-style-type: none"> <input type="checkbox"/> SPEAKER EXT/INT switch in the EXT (external) position — TV speakers are OFF. Sound is only heard from the speakers connected to the external amplifier. <input type="checkbox"/> Use TV's volume control to raise and lower the level of sound being heard from the amplifier's speakers. 	<ul style="list-style-type: none"> <input type="checkbox"/> Connect surround sound speakers as shown. The level of surround sound will vary, depending on the program being viewed. Note that not all programs have surround sound audio. <input type="checkbox"/> The SURROUND SPKR terminals are always active. The SPEAKERS EXT/INT switch does not affect the operation of surround sound speakers. <input type="checkbox"/> If you want to connect only one surround speaker to your TV, connect the speaker wires to the terminals adjacent to the positive (+) and negative (-) symbols that are circled.

THE FIRST TIME YOU OPERATE YOUR TV

TYPICAL CONTROL PANEL

The control panel on your TV may differ from the one shown but its operation is the same.

ENTER (ENT)

Press to see the Channel/Time display, or to remove any on-screen display or menu.

SELECT (SEL)

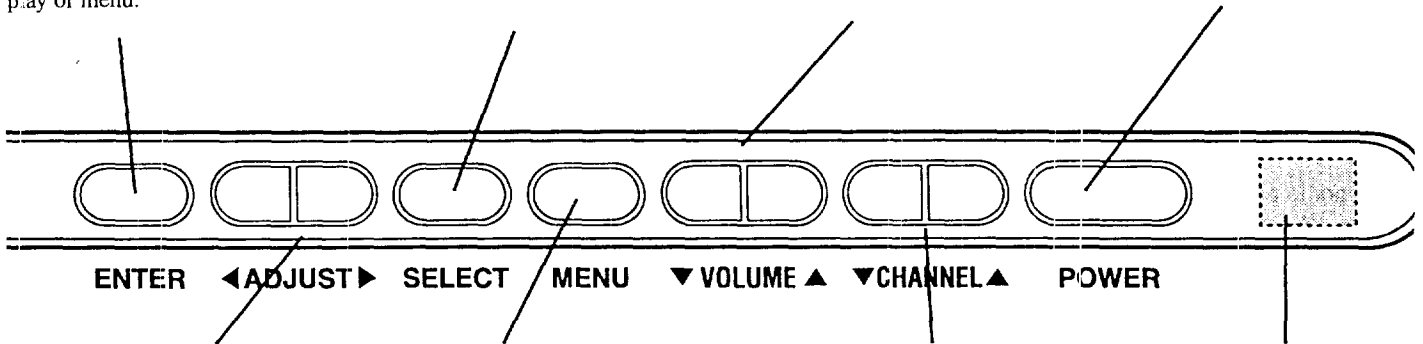
Press during on-screen menu operations to select a menu option.

VOLUME (VOL) Down/Up

Press to decrease or increase the sound level.

POWER

Press to turn TV power ON or OFF.



ADJUST (ADJ) Left/Right

Press during on-screen menu operation to see information/status display for selected option. Press again to adjust the selected menu option.

MENU

Press once to see a menu. Press repeatedly to sequence through the available menus.

CHANNEL (CH) Down/Up

Press to select channels lower or higher than the current channel.

Remote Window

Point the remote control towards this window to operate the TV.

PROJECTION TV CONTROL PANEL

The control panel on your TV may differ from the one shown but its operation is the same.

SELECT (SEL)

Press during on-screen menu operations to select a menu option.

ENTER (ENT)

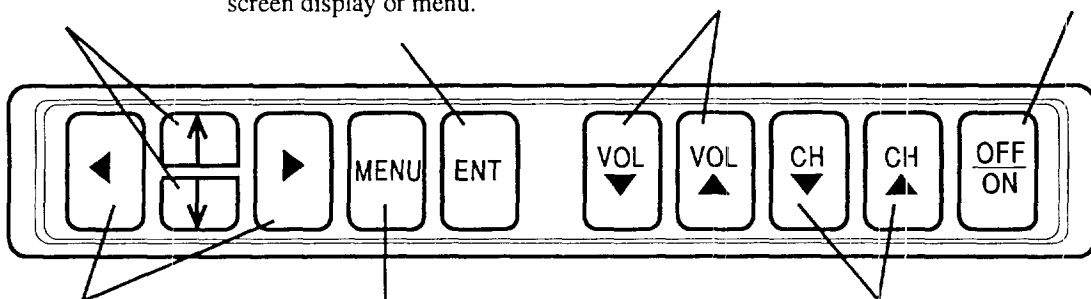
Press to see the Channel/Time display, or to remove any on-screen display or menu.

VOLUME (VOL) Up/Down

Press to increase or decrease the sound level.

OFF-ON

Press to turn TV power ON or OFF.



ADJUST (ADJ) Left/Right

Press during on-screen menu operation to see information/status display for selected option. Press again to adjust the selected menu option.

MENU

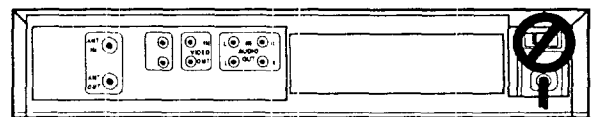
Press once to see a menu. Press repeatedly to sequence through the available menus.

CHANNEL (CH) Up/Down

Press to select channels higher or lower than the current channel. To add or delete channels stored in the scanning sequence, see CH. ADD/DEL option.

CONNECT THE POWER

1. Plug your TV into an unswitched AC power source. (Normal household current outlet that is not controlled by a wall switch.)
2. Turn the TV On by pressing POWER.



Do not plug TV into switched outlet on a VCR or cable-TV decoder

THE FIRST TIME YOU OPERATE YOUR TV

STEP 2. INSTALL THE BATTERIES INTO THE REMOTE CONTROLS

Batteries are provided but they must be installed before using the remote controls. When a remote no longer functions normally, or when it loses memory, replace the batteries with high-quality, alkaline batteries. Match plus with plus (+ with +), minus with minus (- with -), as shown in the battery compartment.

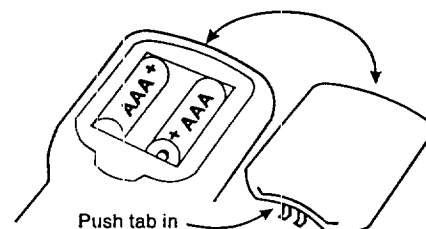
Unless your equipment responds to the factory preset codes, you will need to reprogram the remote controls with the codes of your particular equipment each time you replace batteries.

Notes:

- ❑ Do not to place heavy objects on top of the remote control keys. Prolonged unintentional operation of the remote shortens battery life.
- ❑ Remove the batteries if the remote control will not be used for a month or more. **THE MANUFACTURER IS NOT RESPONSIBLE FOR DAMAGE CAUSED BY BATTERY LEAKAGE.**

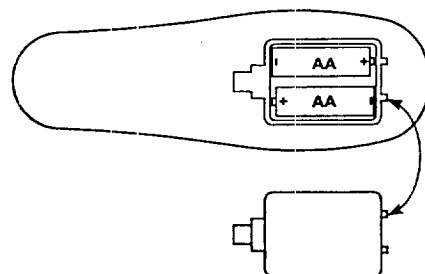
Universal Remote

(Uses 2 size AAA batteries.)



Z-Trak Remote

(Uses 2 size AA batteries.)



STEP 3. SELECT YOUR MAIN SOURCE & PIP (Picture-in-Picture) SOURCE

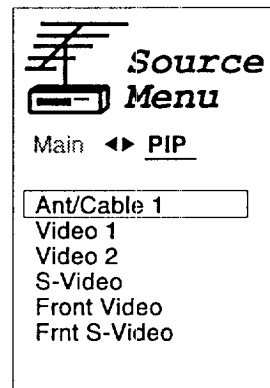
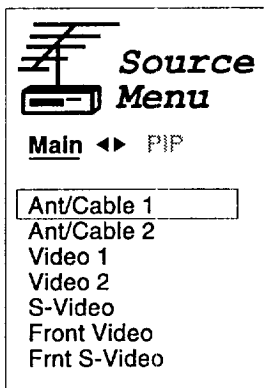
A TV source refers to the equipment connected to the TV/Source Connections Panel that supplies the picture and sound to your TV. You select the viewing source by using the **Source Menu**. Use the universal remote control.

Main Picture Source

1. Press SOURCE on your remote to view the **Source Menu**.
2. Use Up or Down arrow key to select the Main Picture source —which corresponds to the jack(s) on the TV/Source Connection Panel.
3. Press QUIT to remove the menu.

PIP Inset Picture Source

1. Press SOURCE on your remote to view the **Source Menu**.
2. Use the Left or Right arrow key to select **PIP Source** column.
3. Use the Up or Down arrow key to select the PIP Window Inset Picture source.
4. Press QUIT to remove the menu.



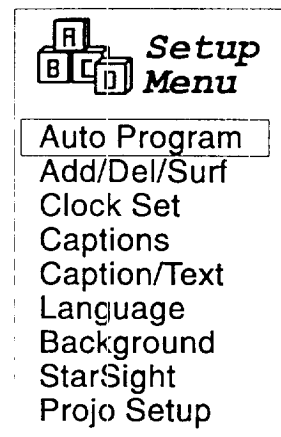
Source Menu with Main Source and PIP Source set to Ant/Cable 1. Connections must be made to the corresponding jack(s) on the TV/Source Connection Panel. Note: If you select Ant/Cable 1 or 2 for the Main Source, the TV will automatically select it also for the PIP Source.

THE FIRST TIME YOU OPERATE YOUR TV

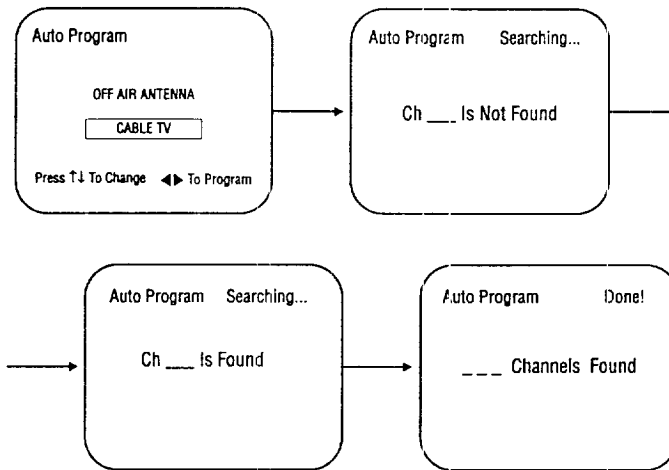
STEP 4. USE AUTO PROGRAM (Available Channels Search)

Auto Program finds all available channels on the currently selected source and stores them in the memory of the TV. To start the Auto Program procedure press the Left or Right arrow key. Follow the instructions on the TV.

1. Press \uparrow/\downarrow to select OFF AIR ANTENNA or CABLE TV.
2. Press \leftarrow/\rightarrow to begin channel search.
3. Wait for the TV to complete search, press QUIT.



Setup Menu with Auto Program Highlighted



* Message appears only if TV has not been authorized for StarSight.

STEP 5. SET THE CLOCK

Press MENU repeatedly on your universal remote until the SETUP icon is selected and the Setup Menu is displayed.

Press the Up or Down arrow key to select **Clock Set**, then press the left or right arrow key.

Choose Auto or Manual mode:

Auto, TV sets Clock, (while TV is turned off).

Manual, Use the numbered keys on the universal remote control to key-in the correct time or press the Left or Right arrow keys repeatedly to advance the clock. Press TIMER to select AM or PM.

Press QUIT to remove the menu.

Note: If StarSight is active it automatically sets the clock.

STEP 6. USE OTHER OPTIONS

You may want to consider using the following options:

- Create a Surf Channel Scan: "Surf" scan only your most tuned or favorite channels, refer to the Setup Menu for details.
- Delete channels or add additional channels: Refer to the **Ch. (Channel) Add/Del/Surf** option, Setup Menu for details.
- Apply "labels" to available channels: Refer to the **Ch. Labels** option, Special Features Menu for details.
- Label the input sources with descriptive names, such as "VCR." Refer to the **Source ID** option, Special Features Menu for details.
- Adjust options in the **Audio and Video Menus**.

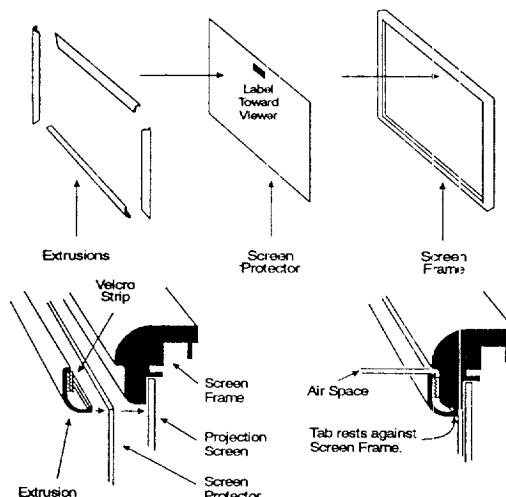
SCREEN PROTECTOR (Some Projection TV Models Only)

Some projection TVs are equipped with a pre-installed Screen Protector. If it should be necessary to remove or adjust the protector, "peel" the extrusions away from the TV to separate the two-part Velcro fastener, being careful not to damage or pull away the adhesive backing strips from the Screen Frame.

Clean the TV Screen (Under the protector)

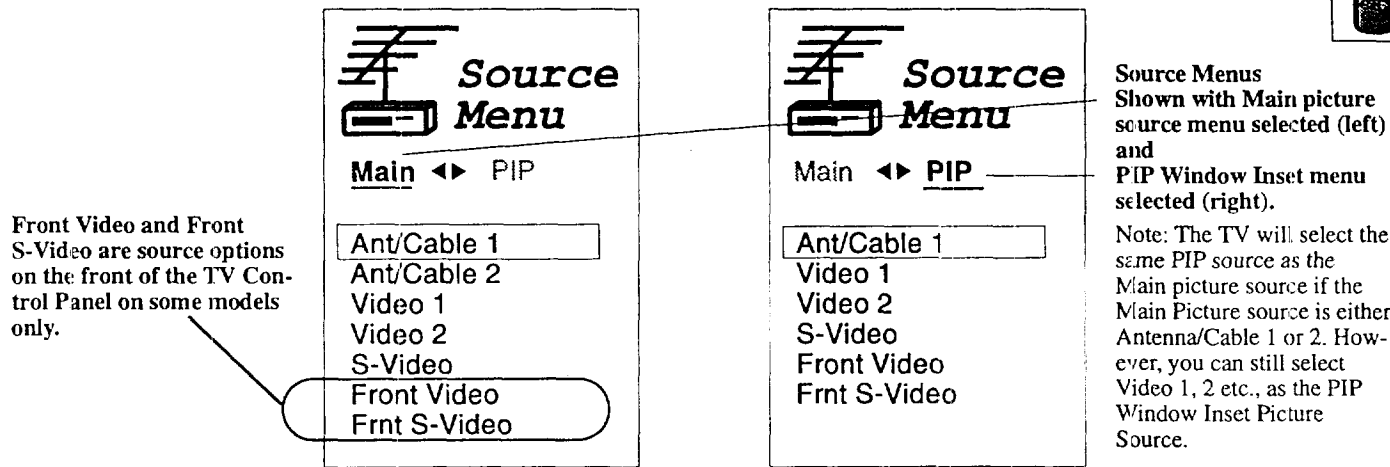
Use a soft cloth moistened with warm water and rub lightly in soiled areas of the projection screen. **DO NOT USE A BRUSH OR PAPER TOWEL AS THESE MAY DAMAGE THE SCREEN SURFACE.**

Clean only in a vertical, up and down direction (along the grooves in the screen). If there is a dirt buildup, a mild solution of warm water and Ivory dish washing detergent may be used. Use a dry soft cloth to dry the Projection Screen and Screen Protector. Care should be taken to avoid scratches or damage to the screen surface.

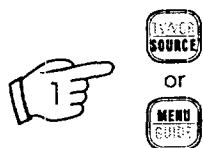


Note:
The TV screen is easily damaged. Avoid accidental contact with the screen.

UNIVERSAL REMOTE SOURCE MENU



MENU OPERATION



Press SOURCE for direct entry to the Source Menu, or press MENU repeatedly until the Source Menu is selected.



Press SOURCE repeatedly until the desired Source is selected. Or use Up/Down arrow.



Use the Left/Right arrow key to select either Main Picture Source menu or PIP Picture Source menu.



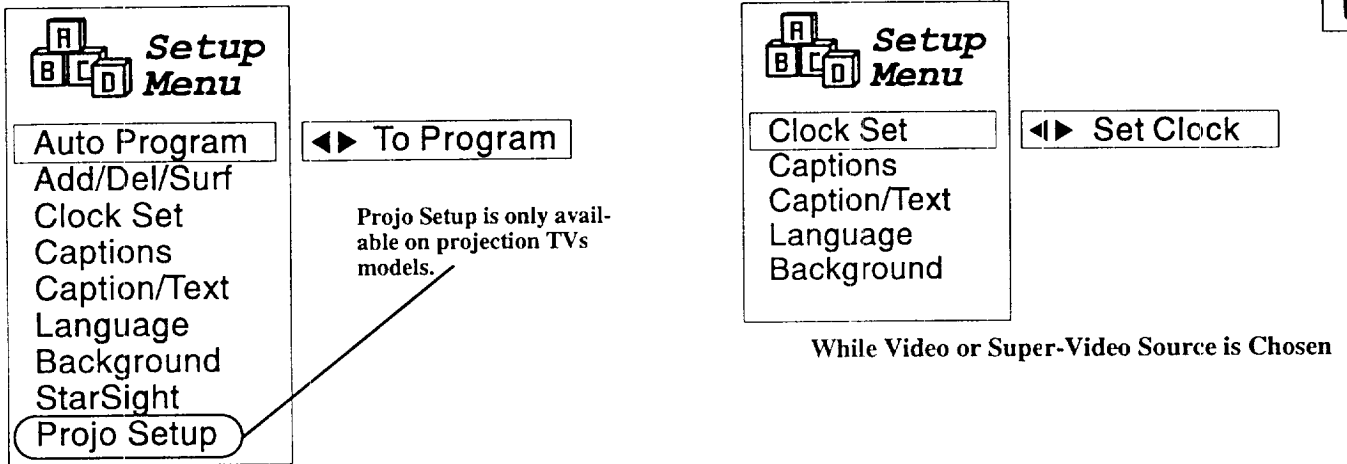
Press QUIT or wait a few seconds for the TV to return to normal operation.

SOURCE SELECTION

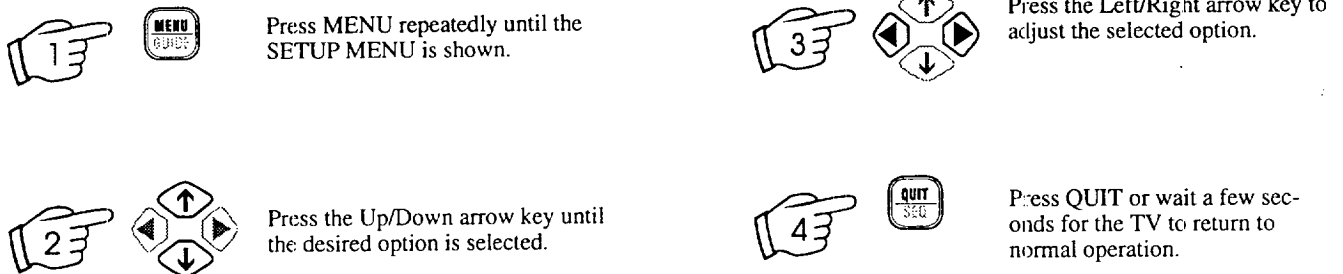
ANT/CABLE 1 or 2	Routes the antenna or cable-TV source to the TV for viewing. You see program material from the source equipment connected to the ANT/CABLE 1 or 2 jack. (If the signal is from a VCR or a cable box, tune the TV to either channel 3 or 4.)
VIDEO 1 or 2	Routes the audio and video from an A/V source (such as a VCR or a video disc player) to the TV for viewing. The source equipment must be connected to the corresponding VIDEO 1 or 2 IN jacks.
S-VIDEO	Routes the audio and video from an auxiliary Super-VHS video source (such as a VCR or a video disc player) to the TV for viewing. The source equipment must be connected to the corresponding S-VIDEO IN jacks.
FRONT VIDEO or FRNT S-VIDEO	Routes the audio and video from an auxiliary A/V, or Super VHS video source (such as a VCR or a video disc player) to the TV for viewing. The source equipment must be connected to the corresponding FRONT VIDEO or FRNT S-VIDEO IN jacks.

Refer to the "Standard TV/Source Connections" section to make the proper equipment connections to the TV. For information about PIP sources, refer to the "PIP Operation" section.

UNIVERSAL REMOTE SETUP MENU



MENU OPERATION



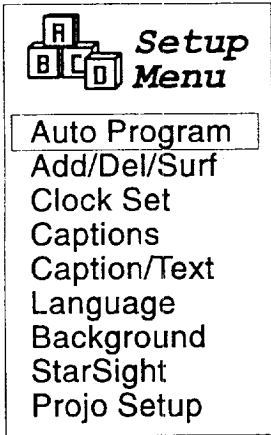
Auto Program	Finds all active channels and stores them in the TV's memory for use by CHANNEL up/down. See "THE FIRST TIME YOU OPERATE YOUR TV" for more details.
(Channel) Add/Del/Surf	Edit the channels found by Auto Program to create your own personal list of channels using the Channel Add or Delete feature. You may want to add (or delete) a weak-signal channel to the channel scan. Create your own "Surf" Channel Scan to scan your most tuned, favorite channels using Chan Up/Down. See the information following this chart for more details
Clock Set	Use to set the clock in the TV to the correct time, manually or automatically. See the information following this chart for more details.
Captions	Use to turn on-screen Caption/Text On or Off. Options are: On, Off or Captions When Muted.
Caption/Text	Select from the options available when Captions is turned on above. Displays closed captioning or informational text when available on the selected channel. Options are: CAPTION 1, CAPTION 2, CAPTION 3, CAPTION 4, TEXT 1, TEXT 2, TEXT 3, or TEXT 4. See the information following this chart for more details.
Language	Selects language for on-screen menus. Options are: English, Spanish or French.
Background	Adds or removes a background from behind the on-screen menus.
StarSight	Begins the StarSight Setup procedure. Refer to the StarSight section for details.
Projo Setup	Lets you verify and adjust, if needed, the dynamic color convergence of the TV picture. See the information following this chart for more details.

continued on next page

UNIVERSAL REMOTE SETUP MENU

AUTO PROGRAM

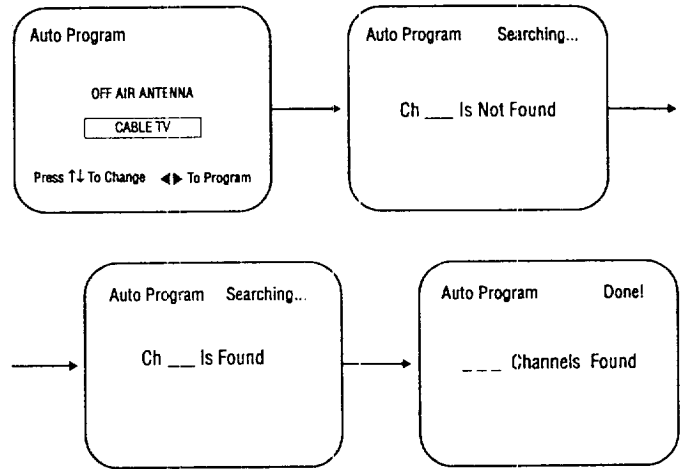
Auto Program finds all available channels on the currently selected source and stores them in the memory of the TV. To start the Auto Program procedure, press the Left or Right arrow key. Follow the instructions on the TV.



◀▶ To Program

Setup Menu with Auto Program Highlighted

1. Press $\uparrow\downarrow$ to select OFF AIR ANTENNA or CABLE TV.
2. Press $\leftarrow \rightarrow$ to begin channel search.
3. Wait for the TV to complete search, press QUIT.



* Message appears only if TV has not been authorized for StarSight.

USING (CHANNEL) ADD/DEL/SURF

Add/Delete and Surf Channels to Scan

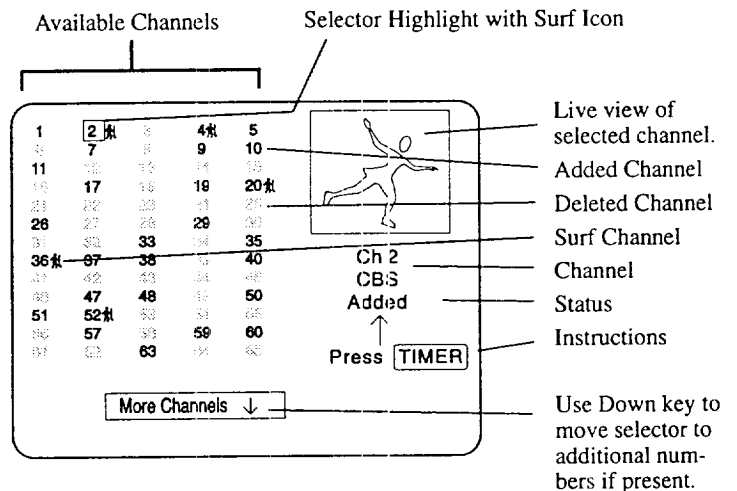
1. Use the Up/Down arrow key to highlight Add/Del/Surf menu.
2. Press Left/Right arrow key to view the Add/Delete/Surf menu.
3. Use the Left/Right/Up/Down arrow key to move channel selector to the channel being Added/Deleted or included in Surf Channel Scan.
4. Press TIMER repeatedly to select Add, Delete or Surf.
 Add = Channel will be added to scan when Channel Up/Down key is pressed.
 Delete = Channel will not be included in scan when Channel Up/Down key is pressed.
 Surf = Channel will be added to Surf Channel scan when Surf is active and Channel Up/Down key is pressed.
 Repeat Steps 3 through 4 to add, delete or include channels to Surf Channel Scan.
5. Press QUIT to remove the menu.

Notes:

Add/Del/Surf can only be used with ANT/CABLE 1 or 2 Source.

Surf Scan channel numbers are shown with the Surf Icon on the Add/Del/Surf menu as shown at the right.

The audio of deleted channels is muted.



Available channels are:

Broadcast Band — VHF 2 to 13, UHF 14 to 69

Cable-TV Band — 1 to 125

UNIVERSAL REMOTE SETUP MENU

USING CLOCK SET

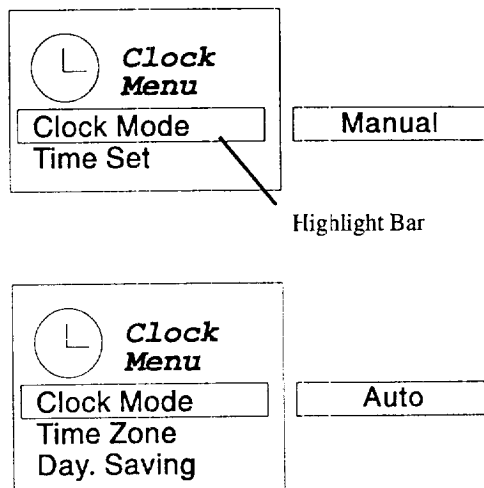
Set The Clock

1. Press MENU repeatedly on your remote until the Setup Menu is displayed.
2. Use Up/Down arrow key to highlight Clock Set.
3. Use Left/Right arrow key to access Clock Menu.
4. Use Left/Right arrow key to select Auto or Manual.

Auto, TV sets the clock; while the TV is turned off. Manual, user keys-in time, etc. Use the numbered keys on the universal remote control to enter the correct time or press the Left or Right arrow key to advance the clock. Press TIMER to select AM or PM.

7. Press QUIT to remove the menu.

Notes: If StarSight is active, the time is automatically set and updated. You can specify a Time Zone and Daylight Savings time even if clock is in Auto mode. *See StarSight Clock Set Note below.



TURNING CAPTIONS ON AND OFF

Turn Captions Feature On and Off

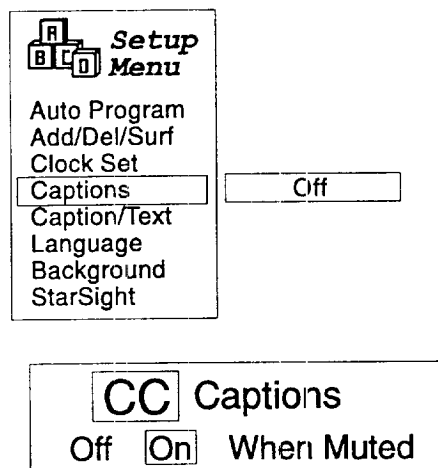
(If you select On, proceed to Choosing Captions/Text.)

1. In the Setup Menu, use the Up/Down keys to highlight Captions.
2. Use the Left/Right arrow key to select: Off, On or Captions When Muted.
3. Press QUIT to remove the menu.

Turn Captions Feature On and Off with TO DO Key

1. Press TV, press TO DO key on remote.
2. Press TO DO repeatedly to cycle through the options: Off, On or Captions When Muted.

Note: If you select Captions When Muted, Closed Captions will appear when the Audio is Muted.



CHOOSING CAPTIONS OR TEXT OPTIONS

Activating Captions/Text (From the Setup Menu)

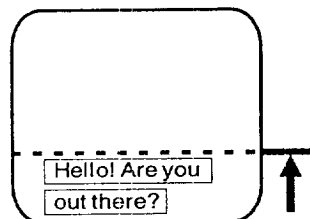
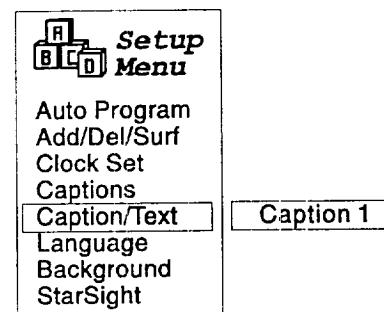
1. Use the Up/Down arrow key to highlight Caption/Text.
2. Use the Left/Right arrow key to cycle through the choices: Caption 1, Caption 2, Caption 3, Caption 4, Text 1, Text 2, Text 3, or Text 4.
3. Press QUIT to remove the menu.

Note:

At present, very few TV programs or video tapes offer text captioning for any option other than CAPTION 1. Therefore, CAPTION 1 is the only recommended choice, unless you know that a specific program is providing captioning using one of the other selections.

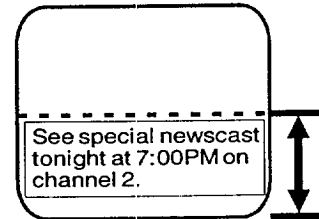
StarSight Clock Set Note:

*After StarSight is authorized for your TV it can take up to 48 hours for all StarSight information to be provided, while the TV is Off. As a consequence of that process, the Clock time (which is automatically set by StarSight) may be set incorrectly. If this becomes a problem, you can use the Clock Set menu to set the TV's time manually.



Typical Captions Display

Captions may be shown anywhere on the screen.



Typical Text Display

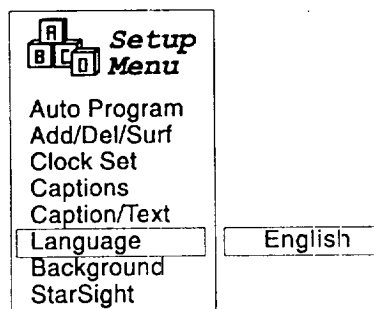
Fixed size text window fills lower half of screen.

UNIVERSAL REMOTE SETUP MENU

LANGUAGE

Select the On-Screen Menus Language

1. Press MENU repeatedly on your remote until the Setup Menu is displayed.
2. Use Up/Down arrow key to highlight **Language**.
3. Use Left/Right arrow key to choose: English, Español or Français. (English, Spanish or French)
4. Press QUIT to remove the menu.

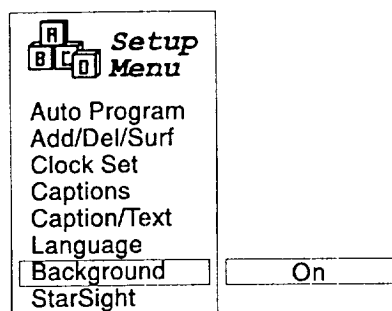


BACKGROUND

Provides a background for all on-screen displays, making them easier to read.

Turn On-Screen Menus Background On or Off

1. Press MENU repeatedly on your remote until the Setup Menu is displayed.
2. Use Up/Down arrow key to highlight **Background**.
3. Use Left/Right arrow key to turn On or Off.
4. Press QUIT to remove the menu.

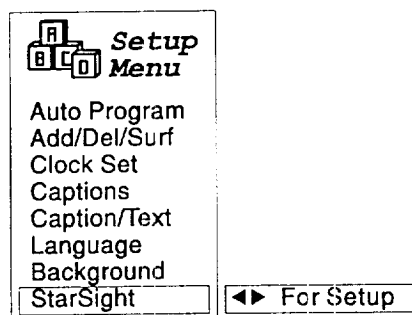


STARSIGHT

Note: Before you activate the StarSight feature, review the StarSight section for the information about your system components you will need to complete the StarSight activation process.

StarSight Subscription Procedure

1. Press MENU repeatedly on your remote until the the Setup Menu is displayed.
2. Use Up/Down arrow key to highlight **StarSight**.
3. Use Left/Right arrow key to begin the StarSight Setup procedure.
4. Press QUIT to remove the menu.



PROJO SETUP: COLOR CONVERGENCE (For Projection TVs Only)

When you first install your projection TV, or if after time, you notice color "fringes" around objects in the picture, you may need to realign the colors by adjusting the convergence as described in the following steps.

To Converge Colors

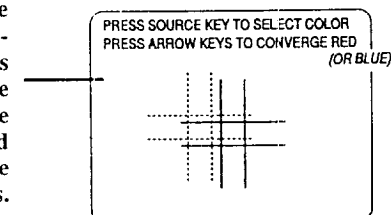
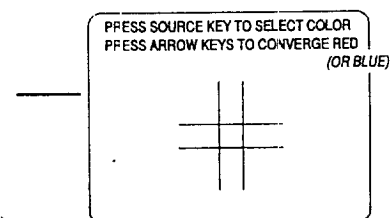
1. From the Setup Menu, use Up/Down arrows to choose Projo Setup.
2. Press Left/Right keys to view the converge lines.
3. Press Source key to select either RED or Blue lines to converge.
4. Press the Up/Down and Left/Right arrow keys to place the RED (or BLUE) lines directly on top of the reference lines. (Do this for both colors as necessary.)

Notes:

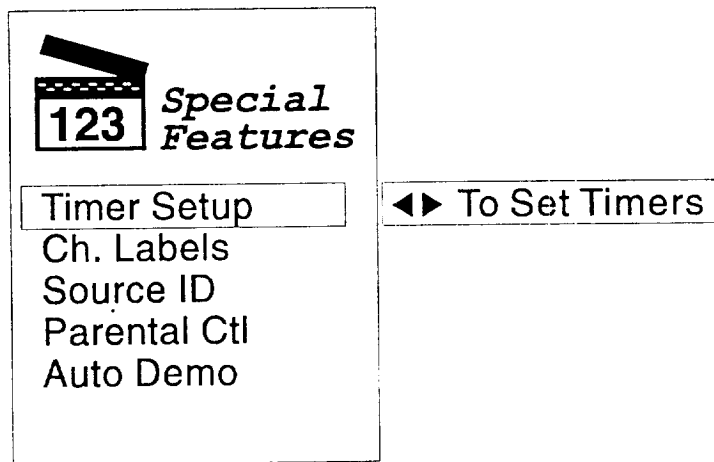
Any adjustments made to the Video Menu settings while Picture Pref. is in the PRESET mode will automatically be stored in the Custom setting.

Four intersecting WHITE lines indicate the TV is properly converged. No adjustment is necessary.

Four RED (or Blue) lines offset from the WHITE lines indicate converging is necessary. Follow the steps to align the color lines (Red and Blue) with the white lines.



UNIVERSAL REMOTE SPECIAL FEATURES



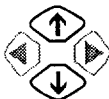
MENU OPERATION



Press MENU repeatedly until the SETUP MENU is shown.



Use the Left/Right arrow key to adjust the selected option.



Press the Up/Down arrow key until the desired option is selected.



Press QUIT or wait a few seconds for the TV to return to normal operation.

Timer Setup	Sets the TV's Sleep Timer and On/Off Timer features. See the information following this chart for more details.
Ch (Channel) Labels	Assigns a network/station label, name or call letters to specified channels. For example, if you choose the label "ABC" for channel 7, then "ABC" will appear in the Channel/Time display whenever channel 7 is selected. See information following this chart for more details.
Source ID	Assigns a descriptive "name" to the input sources. For example, the Video 1 source may be named VCR. "VCR" will now appear in the Source Menu as a reminder that your VCR is connected to the Video 1 input jacks.
Parental Ctl (Control)	Use this feature to block viewing of any undesirable channels or the entire video signal. See the information following this chart for more details.
Auto Demo	Use to view a demonstration of the on-screen menus and features available on this TV.

continued on next page

UNIVERSAL REMOTE SPECIAL FEATURES

TIMER SETUP: Sleep Timer

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

From Setup Menu

1. Make sure the time on the TV's clock is set.
2. Use the Up/Down arrow key to highlight **Timer Setup** and view the **Timer Menu**.
3. Use the Up/Down arrow key to highlight **Sleep Timer**.
4. Use the Left/Right arrow key to set the period of time the TV will remain on.

Direct Access

1. With no menus showing on the TV, press **TIMER** on your remote to directly access the **Sleep Timer**.
2. Press **TIMER** repeatedly to set the period of time the TV will remain on.

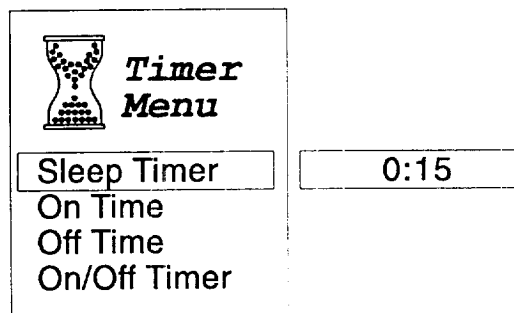
One minute before the TV turns off, the **GOOD NIGHT** display appears on the screen. At this time you have a choice of the following two actions:

- A. Do nothing. The **GOOD NIGHT** display remains on the screen. The TV will turn off in one minute.
- B. Delay the turn-off by resetting the timer with a new time period.

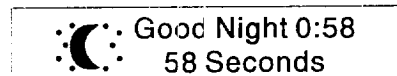
Notes:

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

As the **Good Night** display counts down the final 60 seconds, the audio and video of the TV also "dim" for a soft, discreet turn-off.



**Sleep Timer Set to Turn TV
OFF in 15 Minutes**



**"Good Night" Display Appears 60
Seconds Before Shut-Off**

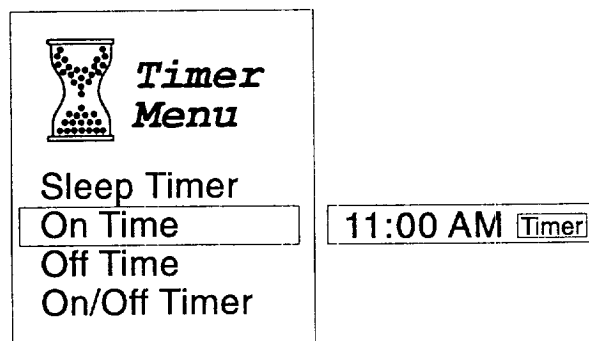
TIMER SETUP: On/Off Timer

The **On/Off Timer** programs the TV to automatically turn itself on at a specific time then turn itself off at another time.

Set On/Off Timer

1. Make sure the time on the TV's clock is set.
2. Use the Up/Down arrow key to highlight **Timer Setup**.
3. Use the Up/Down arrow key to highlight **On Time** and use the numbered keys on your remote to key-in a time for the TV to turn itself ON. Press **TIMER** on the remote to select AM or PM. (You can also use the Left/Right arrow key to advance the time.)
4. Use Up/Down key to highlight **Off Time** and use the numbered buttons on your remote to enter a time for the TV to turn itself OFF. Press **TIMER** on the remote to select AM or PM. (You can also use the Left/Right arrow key to advance the time.)
5. Use Up/Down key to highlight **On/Off Timer** and use the Left/Right arrow key to turn timer ON (or OFF).

Note: To use the On/Off Timer you must specify an Off time.



**On/Off Timer Set to Turn
TV On at 11:00 am**

UNIVERSAL REMOTE SPECIAL FEATURES

USING CHANNEL LABELS

Assign Labels to Channels

1. From the Special Features menu, press the Up/Down arrow key to highlight **Ch. (Channel) Labels**.
2. Press Left/Right arrow key to view Channel Label screen.
3. Select a channel by using CHANNEL Up/Down key or key-in channel number with numbered keys.
4. Use the Left/Right/Up/Down arrow keys to move label selector to appropriate channel label which will add label to channel number.
5. To create a custom label, press **Timer** to access custom labels screen. Use Up/Down/Left/Right arrow keys to select each digit and customize your channel label. Press **TIMER** to exit menu and return to Ch. Labels menu.
Repeat steps 3 through 5 for each channel.
6. Press **QUIT** to remove menu.

Notes:

Ch. Labels can only be used with ANT/CABLE 1 or 2 Source. Selecting the four dashes (---) specifies that no channel label is assigned and that the broadcaster may supply a channel label. Or, in addition to not assigning a label, **NONE** blocks the station or network labels that are transmitted by some television stations.

Live view of selected channel.

The screenshot shows a grid of channel labels. The 'Timer' button is highlighted. A label selector points to the 'WGN' label in the grid.

----	NONE	A&E	ABC	ACTS
ADC	AMC	BCC	BET	BRAV
CA	CBC	CBN	CBS	CMTV
CNBC	CNN	COM	CSPN	CSP2
CTN	CTV	DIS	DISC	EI
ENC	ESPN	ESPN2	ET	EWTN
FAM	FNN	FOX	F&V	FX
GALA	HBO	HN	HSE	HSN
IC	INSP	JCN	LIFE	MAX
ME/U	MMT	MTV	NBC	NICK
NOS	PBS	PLAY	PTL	QVC
RDS	REQ	SC	SCFI	SHOW
SIN	TBS	TBN	TELE	TLC
TMC	TNN	TNT	TRAV	TWC
UPN	TSA	VC	VCR	VH-1
VISN	WB	WGN	WTBS	WWOR

Ch 9
WGN

Press **Timer** to edit

The screenshot shows a custom label screen with a grid of characters. The 'Timer' button is highlighted.

-	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P	Q	R	S	T	U	V	W	X	Y	Z	0	1	2	3	4
5	6	7	8	9	0	-	/	&	#	.	!	?	*	N	E

Use Arrows to Select Character
Press ENTER To Add Character
Press TIMER To Return

USING SOURCE ID

Assign Identifying Names To Your Sources

1. In the Setup Menu, press the Up/Down arrow key to highlight **Source ID**.
2. Press the Left/Right arrow key to view the Source ID screen.
3. Press the Up/Down arrow key to highlight a Source.
4. Press the Left/Right arrow key repeatedly to choose a label for the chosen Source.
5. Press **QUIT** to remove menu.

Optional names for ANT/CABLE 1 or 2 Sources are: ----, Disabled, Antenna, Cable, Cable Box, VCR, Satellite, StarSight, Video Game, Laser Disc or DVD.

Optional names for VIDEO and S-Video Sources are: ----, Disabled, VCR, VCR 1, VCR2, Satellite, Camcorder, Video Game, Laser Disc, DVD, Photo CD or Audio Only.

Note:

Disabling a Source prevents it from appearing in the Source Menu.

Live view of highlighted Source.

The screenshot shows a list of sources and their corresponding labels. The 'Ant/Cable 1' source is highlighted, and its label 'StarSight' is also highlighted.

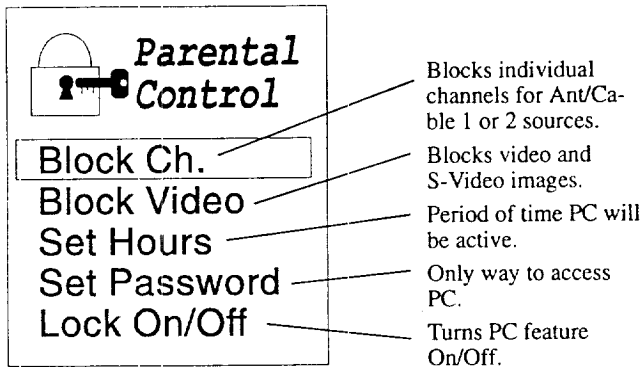
Source	Label
Ant/Cable 1	StarSight
Ant/Cable 2	---
Video 1	VCR
Video 2	Video Game
S-Video	---
Front Video	---
Frnt S-Video	---

UNIVERSAL REMOTE SPECIAL FEATURES

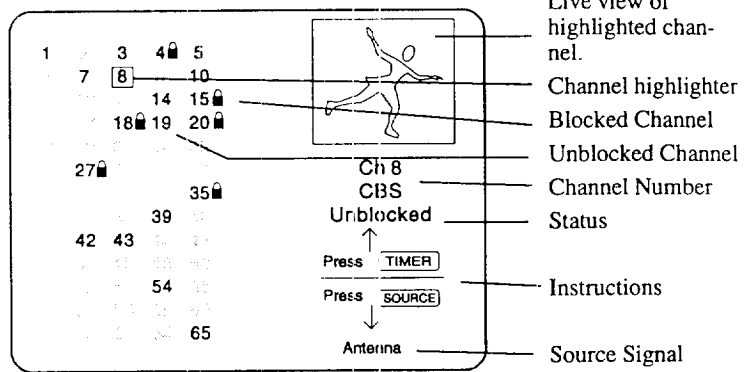
USING PARENTAL CONTROL (PC)

Parental Control allows you to be selective about viewing, on your particular TV, the programming which is being televised in your local broadcast area. If there are undesirable programs or channels you wish to block, you can use Parental Control; block out particular channels or the entire video image. You can also specify the hours Parental Control will be active. To access the Parental Control Menu from the Special Features Menu, press Up/Down arrow key to highlight Parental Control.

Use Up/Down/Left/Right arrow keys to specify your Parental Control preferences.



Parental Control Menu



Block Channels Menu

Block Ch. (Channel)

Use to block an individual channel's video and audio. A padlock symbol will appear next to the channel numbers that are blocked, as shown in the example at the right. The grayed numbers are inactive channels, no signal. The solid numbers are active channel numbers and the channel numbers with the padlock next to them are the blocked channels.

Block Video

Use to block the image for all video and S-Video sources. The video image will be missing from the TV screen when Block Video is active.

Set Hours

Use to specify the number of hours Parental Control will be activated. Once Parental Control is active, the TV cannot be viewed unless the Password is used to unlock the TV or the time period elapses.

Set Password

Use to set your Parental Control Password.

Note: Remember your Password or you will have to wait until the specified time has elapsed before you can operate the TV.

Lock On/Off

Use to turn the Parental Control feature On and Off. The parental control settings will remain but can be activated, (On) or deactivated (Off).

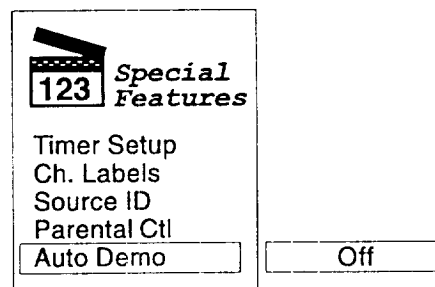
AUTO DEMO

When active sets in motion a series of on-screen demonstrations of the features that are available on this TV. Shows examples of the trackball remote control menus and the different features available with the trackball, and with the universal remote. Once selected, Auto Demo will begin after a short delay. Options are: On or Off.

Notes:

To turn Auto Demo Off, you must choose the Off option from the Special Features menu as shown at the right.

If you press any key during Auto Demo operation it will disappear from the TV screen, and then begin again after about 20 seconds.

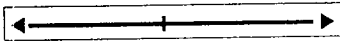


UNIVERSAL REMOTE AUDIO MENU



Audio Menu

 Bass
 Treble
 Balance
 Audio Mode
 SoundRite
 Front Surr
 Rear Surr
 Speakers



With PIP active, to select the audio (sound) from the Main Picture source or the PIP Inset, press the note key repeatedly.

(Selected note symbol (Audio Source) will be a white color.) Unselected audio source note will be a gray color.

With no menus on-screen press the note key to turn Surround Sound effect On and Off.



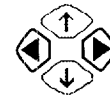
Ch 11-WTTW
 1:17
 Stereo



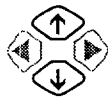
MENU OPERATION



Press MENU repeatedly until the AUDIO MENU is shown.



Press the Left/Right arrow keys to adjust the selected option.



Press the Up/Down arrow keys until the desired option is either highlighted or selected.



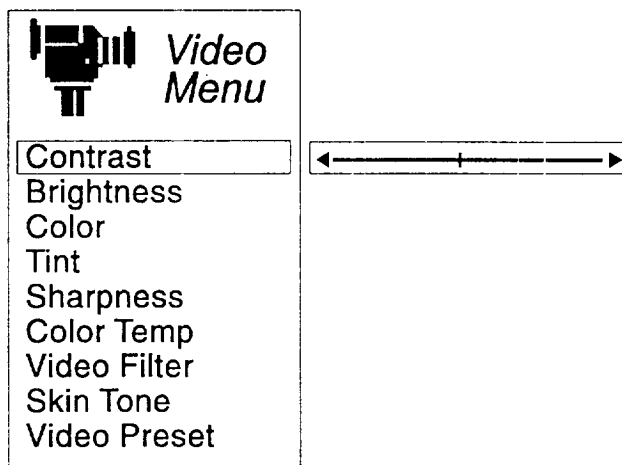
Press QUIT or wait a few seconds for the TV to return to normal operation.

Bass	Adjusts the BASS (low-frequency) level.
Treble	Adjusts the TREBLE (high-frequency) level.
Balance	Adjusts the balance of sound between the two speakers.
Audio Mode (SAP is not an option for the Video or S-Video sources. Audio signals into a video source are assumed to be monaural or stereo.)	<p>Allows you to select STEREO, MONO or 2ND AUDIO/SAP operation.</p> <p>STEREO: Directs the sound to the Left and Right speakers as supplied by the program. Stereo is the recommended choice: The TV switches automatically between the STEREO and MONO modes depending on the type of signal being received.</p> <p>MONO: Directs the same sound to both Left and Right speakers, even if the program being received is in stereo.</p> <p>2ND AUDIO/SAP: Directs the sound for the Second Audio Program (second language) to both the Left and Right speakers. SAP sound is always monaural. If SAP is selected, you hear the SAP (usually a second language). When the SAP broadcast ends, the TV switches automatically (defaults) to the type of signal being received, STEREO or MONO. The TV switches back to 2ND AUDIO/SAP when the SAP broadcast resumes.</p>
SoundRite	When channels are changed, automatically adjusts the sound level to the prevailing sound level. Sound from newly selected channel will be the same volume as the previously tuned channel.
Front Surr	Turns On and Off the Front Surround effect. Front Sound is only available if a surround encoded stereo signal is being received.
Rear Surr	Adjusts the level of Surround Sound provided to the optional rear surround sound speakers.
Speakers	Turns internal speakers On and Off. (Off indicated by "EXT Volume" on Volume bar.)

Note:

□ All adjustments on the Audio Menu are optional. You do not have to adjust these features in order to use your TV.

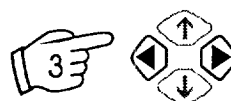
UNIVERSAL REMOTE VIDEO MENU



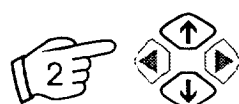
MENU OPERATION



Press MENU repeatedly until the VIDEO MENU is shown.



Press the Left/Right arrow keys to adjust the selected option.



Press the Up/Down arrow keys until the desired option is selected.



Press QUIT or wait a few seconds for the TV to return to normal operation.

Contrast	Adjusts the overall contrast and color level of the picture.
Brightness	Adjusts the brightness level of black areas in the picture.
Color	Adjusts the intensity of the colors in the picture.
Tint	Adjusts the color of the flesh tones to more Green or more Red.
Sharpness	Adjusts the definition of the object edges for best picture quality.
Color Temp (Temperature)	Changes the "color temperature" or picture white balance between cooler natural whites and warmer (red) colors.
Video Filter	Reduces video "noise" or interference in dark picture areas resulting in clearer overall pictures.
Skin Tone	Automatically maintains natural skin tones under changing scene and video source conditions.
Video Preset	Adjusts the picture to different light environments. Options are: Custom, Preset, Movie, Video Game, Sports, Daylight or Weak Signal.

Notes:

All adjustments on the Video Menu are optional. It is not necessary to adjust these features in order to operate the TV.

Any adjustments made to the Video Menu settings while Video Preset is not in the CUSTOM mode, will automatically store the current settings as the CUSTOM setting.

UNIVERSAL REMOTE PIP VIDEO MENU



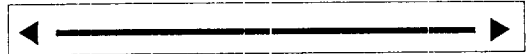
PIP Menu

Contrast

Tint

Size

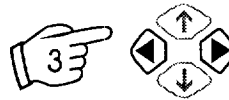
Selecting the PIP Menu does not “activate” PIP. However, a PIP window will appear during menu operation to show the effect of any setting changes. Press PIP to access PIP feature.



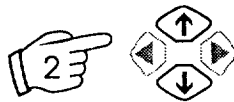
MENU OPERATION



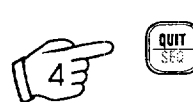
Press MENU repeatedly until the PIP MENU is shown.



Press the Left/Right arrow keys to adjust the selected option.



Press the Up/Down arrow keys until the desired option is either highlighted or selected.



Press QUIT or wait a few seconds for the TV to return to normal operation.

Contrast	Adjusts the intensity of the colors in the PIP inset.
Tint	Adjusts the color of the flesh tones in the PIP inset to more Green or more Red.
Size	Adjusts the size of the PIP inset. Choose between small or large.

Z-TRAK TRACKBALL REMOTE CONTROL



INTRODUCTION

This multi-brand remote control operates the common features of most, but not all, models and brands of IR (infrared) controlled VCRs. Some functions of your particular VCR may not be controlled by this remote. In such cases, use the original remote control for your VCR.

BATTERY INSTALLATION

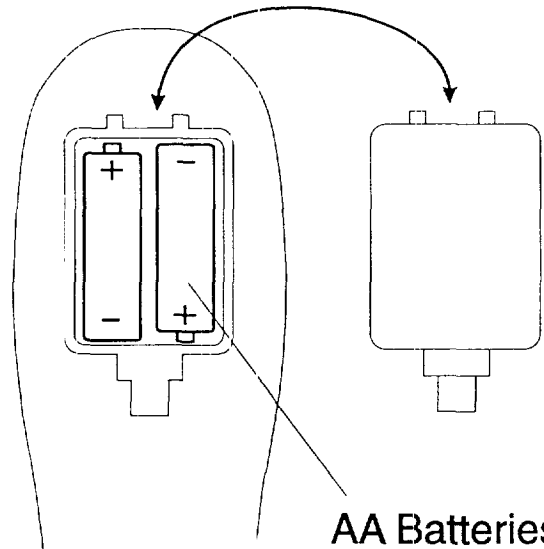
Batteries are provided, but must be installed before using the remote control. When it no longer functions normally, or if it loses memory, replace the batteries with two high-quality, alkaline, size AA batteries. Match positive with positive (+ with +), negative with negative (- with -) as shown inside the battery compartment.

VCR Brand Code Auto Find Option

Unless your VCR responds to the factory preset code commonly used for Zenith VCRs, you may need to use Auto Find to program the VCR code whenever you replace batteries. See following pages for remote programming Auto Find instructions.

Notes:

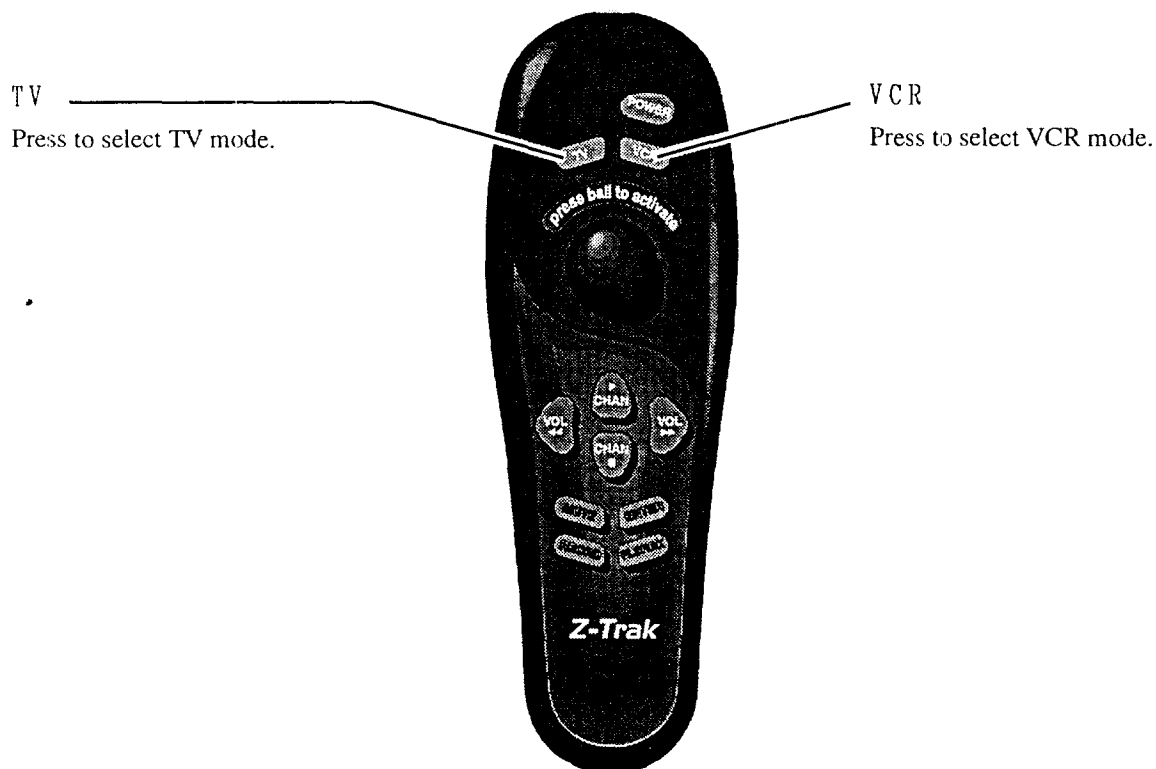
- Do not place heavy objects on top of the remote control keys; prolonged unintentional operation of the remote shortens battery life.
- Remove the batteries if the remote control will not be used for a month or more. **Battery leakage can permanently damage the remote, for which Zenith is not responsible.**



CHOOSING OPERATING MODE

To control your TV or VCR with this remote, you must first choose the mode of operation.

Press the TV mode key to control the TV or press the VCR mode key to control the VCR.

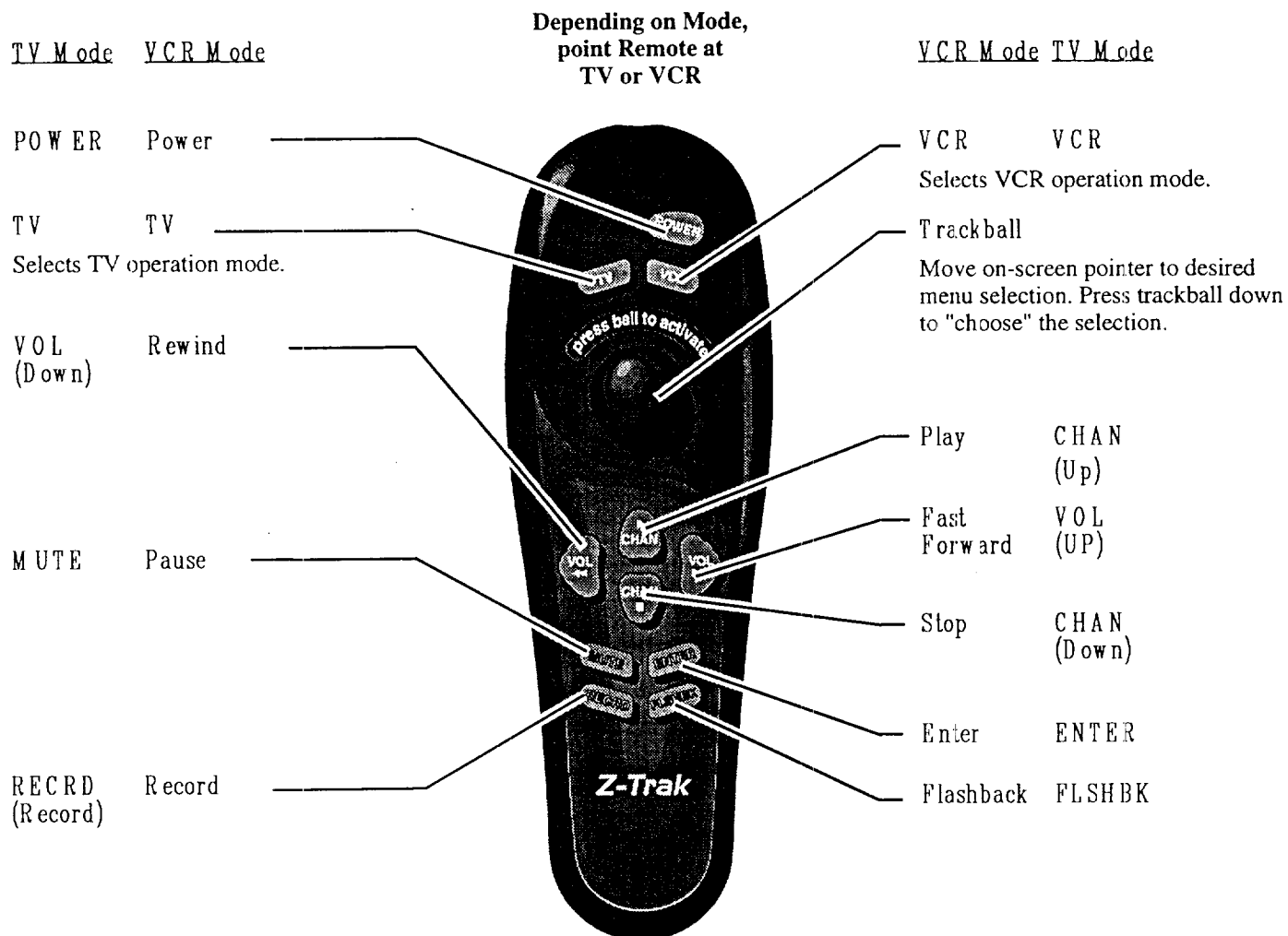


Z-TRAK TRACKBALL REMOTE CONTROL



BASIC OPERATIONS

Point remote at TV, press POWER. Press down on trackball to activate on-screen pointer. Rotating trackball will move pointer around screen to access on-screen menus. Click on highlighted menu or option. (See Quick Reference to On-screen Menus section.)



TV AND VCR KEY FUNCTIONS BY MODE

TV Mode Function Keys

Press **TV** to access TV functions

- TV** — Selects TV Mode.
- VCR** — Selects VCR Mode.
- POWER** — Turns TV On.
- CHAN (Up)** — Tunes to next higher channel.
- VOL (Up)** — Increases sound level.
- VOL (Down)** — Decreases sound level.
- CHAN (Down)** — Tunes to next lower channel.
- MUTE** — Turns Sound Off.
- RECRD** — Begins VCR Recording.
- ENTER** — Shows Channel/Time/Audio Mode Display.
- FLSHBK** — Tunes to previous TV channel.

VCR Mode Play/Record Function Keys

Press **VCR** to access VCR functions

- TV** — Selects TV Mode.
- VCR** — Selects VCR Mode.
- Power** — Turns VCR On.
- Play** — Begins tape playback.
- Fast Forward** — Advances tape rapidly.
- Record** — Begins recording.
- Pause** — Momentarily ceases tape movement.
- Enter** — Shows VCR Status display.
- Stop** — Halts tape movement.
- Flashback** — Shows image from VCR tuner instead of image from tape playing in VCR.
- Rewind** — Rewinds tape rapidly.

Z-TRAK TRACKBALL REMOTE CONTROL



PROGRAMMING YOUR Z-TRAK TRACKBALL REMOTE

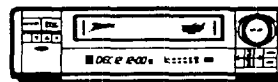
The Zenith Trackball remote is already programmed to work with most Zenith VCRs. If your VCR is not a Zenith, or if your Zenith VCR does not respond to the trackball remote, you will need to program your remote as follows:

1. Refer to the VCR Codes by Brand Name Listing table on the next page. Locate the 3-digit number which corresponds to your brand of VCR.
2. Make sure the TV is On.
3. While pointing the Zenith Z-Trak remote towards your TV, simultaneously hold the MUTE and ENTER keys until the TV displays a "VCR Setup" menu screen (takes about 3 seconds). The VCR key will light upon entering the Programming Mode.
4. Notice that the current VCR brand code (initially 201) is displayed on the screen. Roll the trackball up or down (or use Chan Up/Down) to choose the 3-digit number of your VCR.
5. When the correct 3-digit number is displayed on the TV screen, press the POWER key to see if your VCR turns On and Off properly. If the VCR does not respond, refer to the VCR Code Brand Listing table to select a different 3-digit number.
6. If your VCR turns On and Off successfully, press the trackball (or ENTER) to save the current VCR brand code. The VCR Setup screen will disappear from the TV. Also the VCR key will blink 3 times upon exiting the Programming Mode. The remote will be in the VCR mode.
7. Now try other controls on your VCR, such as PLAY, REWIND, etc., to make sure that the correct VCR brand code number was selected. (If not, repeat steps 1 to 7.)
8. The MUTE key can be pressed at any time to cancel programming mode.
9. Note: Only the VCR Mode can be programmed. Pressing the VCR or TV mode key will have no effect in the Programming Mode. Similarly VOL Up/Down RECRD, and FLSHBK will have no function in the Programming Mode.
10. The remote will exit Programming Mode automatically after 60 seconds if no key or trackball movement is detected.

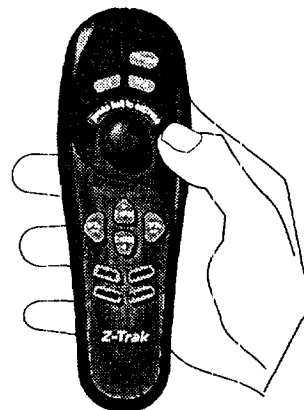
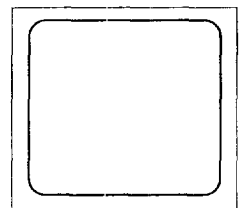
AUTO FIND: PROGRAMMING YOUR Z-TRAK REMOTE TO CONTROL VCR

If you have tried all 3-digit codes listed for your VCR manufacturer, and none of them operate your VCR, you will need to try "AutoFind" to see if a different code will operate your VCR. Proceed as follows:

1. Make sure your VCR and TV are turned on.
2. Simultaneously hold the MUTE and ENTER keys until the VCR key lights up (about three seconds).
3. Point the Z-Trak trackball remote towards your VCR. Press CHAN (Up) followed by POWER. If your VCR did not turn off, keep repeatedly pressing CHAN (Up) followed by POWER until the VCR responds.
4. If your VCR turned off, press ENTER to save the code. (Write it down for future reference.) The VCR key will flash three times after ENTER is pressed.
5. Now try other controls on your VCR, such as Play, Rewind, etc., to make sure that the correct VCR brand code number was selected. (If not, repeat steps 2 to 4.)
6. The MUTE key can be pressed at any time to cancel AutoFind mode. The original VCR brand code will remain unchanged.
7. The remote will exit AutoFind mode automatically after 60 seconds, if no key press or trackball movement is detected.



Point at VCR



Z-TRAK TRACKBALL REMOTE CONTROL

VCR CODES BY BRAND NAME LISTING

VCRS			
Admiral	208, 261	JVC	202, 225, 258
Adventura	231	Kenwood	202
Aiwa	231	Logik	239
Akai	223, 238, 241	LXI	209, 231
Audio Dynamics	202, 218	Magnavox	207, 214, 231
Bell & Howell	206, 247	Marantz	207, 218
Broksonic	221, 226, 250, 255	Marta	209
Canon	214	Memorex	206, 212, 214, 231
Citizen	209	Mitsubishi	204, 222, 252, 264
Craig	212	Montgomery Ward	208, 214, 216, 219, 231, 249
Curtis Mathes	214, 259	Multi Tech	239
Daewoo	244, 246, 248, 254	NEC	202, 218
Daytron	236, 246	Orion	250
DBX	202, 218	Panasonic	214, 251, 259
Emerson	203, 221, 223, 226, 233, 235, 243, 250	Pentax	215
Fisher	211, 212, 213, 247	Philco	207, 214
Funai	231	Philips	207, 214, 227
General Electric	214, 216, 220	Pioneer	210, 215
Goldstar	209	Portland	246
Go Video	256, 262, 263	ProScan	216, 260
Hitachi	215, 257	Quasar	214, 259
Instant Replay	214, 227	RCA	215, 216, 220, 227, 240, 242, 260
J.C. Penney	214, 215, 218, 227	Realistic	206, 208, 212, 214, 231
		Samsung	220, 230
		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	234, 217, 237
		Sylvania	207, 214, 227
		Symphonic	231
		Tashiko	209
		Tatung	202
		Teac	202, 231
		Teknika	234
		Toshiba	205, 215
		Vector Research	204, 218
		XR-1000	239
		Yamaha	202, 218
		Zenith	201, 224, 225, 229, 237

Ref: 124-207 and
µP 221-939A

CLEANING THE TRACKBALL

To keep the Z-Trak remote functioning properly, it is necessary to occasionally clean the TRACKBALL device. To do this:

1. Use a solution of mild dish washing detergent and water.
2. Moisten a clean soft cloth with the solution and lay the cloth flat on a table.
3. Turn the Z-Trak remote upside down and gently roll the TRACKBALL on the cloth.

4. Allow the remote to air-dry before using it again.

CAUTION:

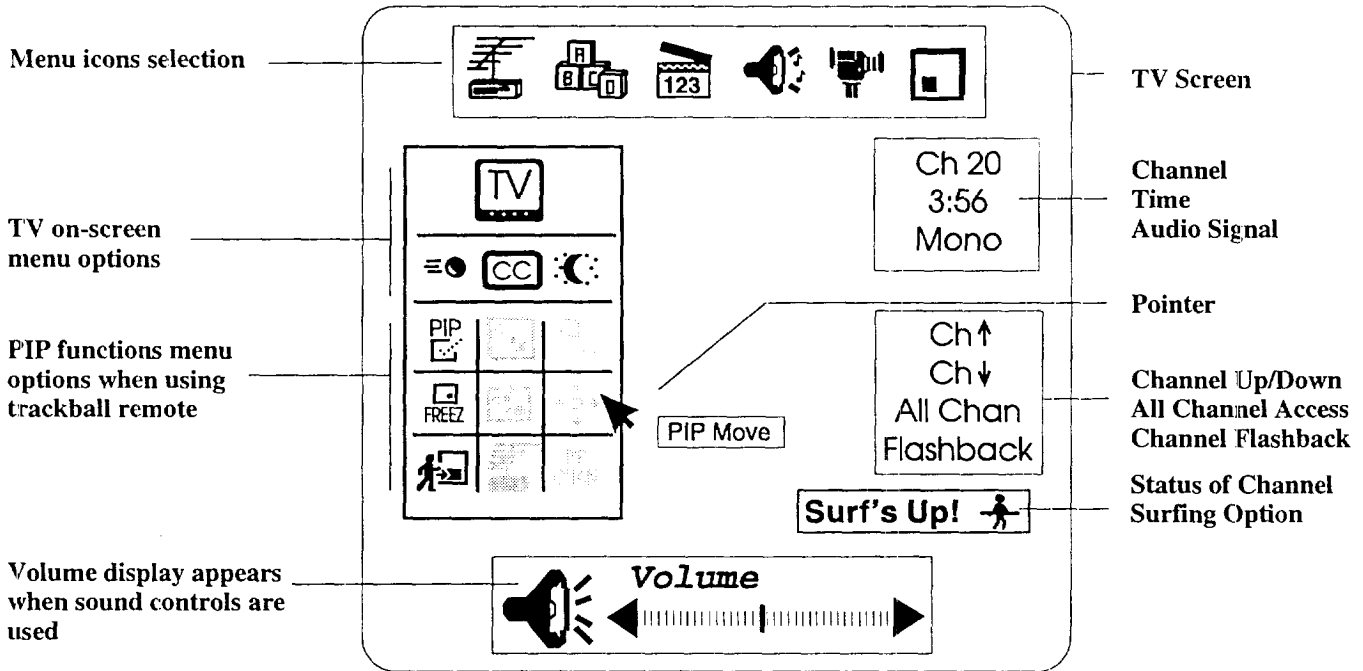
- DO NOT USE ALCOHOL OR OTHER CLEANING FLUIDS TO CLEAN THE TRACKBALL AS THESE MAY DAMAGE THE REMOTE.

Z-TRAK REMOTE MENUS OVERVIEW



AVAILABLE ON-SCREEN MENUS

Shown below are the on-screen menus as they will appear when you use the trackball remote. As you move the pointer up/down/left/right on-screen, these menus will appear. Place pointer over icon or menu option and TV will identify it.



BASIC MENU OPERATION

To access the trackball menus you must use the trackball remote.

Step 1. To activate TV mode on the remote, press the TV key.

Step 2. Press trackball to place pointer arrow on-screen.

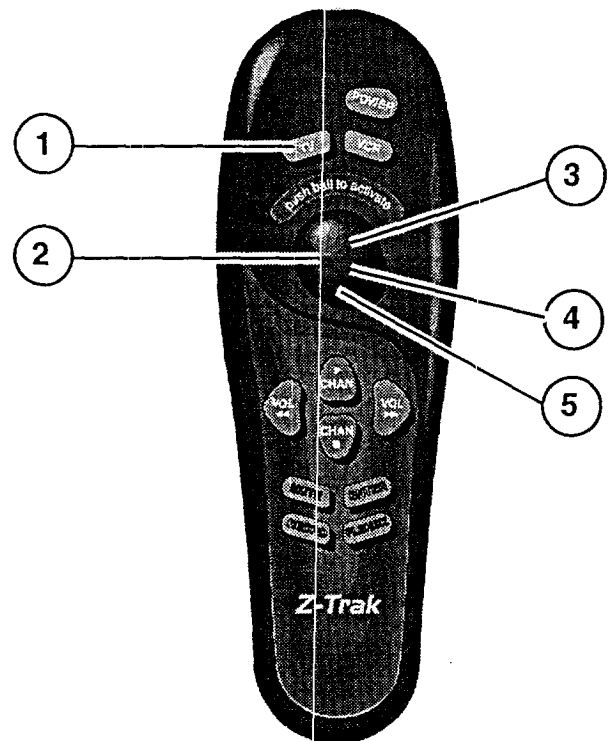
Step 3. Move cursor by rolling the trackball in the desired direction of one of the menus that are shown above.

Step 4. When the pointer is over the desired menu option, press trackball. A list of options will appear, make your selection or change.

Step 5. Move pointer to center of screen and press trackball to remove it or wait a few seconds and the TV will return to normal operation.

For example, to access Channel/Time/Audio Signal display, press TV. Point Remote at TV. Press trackball to place pointer on-screen, rotate trackball to move pointer to middle-right side of TV screen until Channel/Time/Audio display appears.

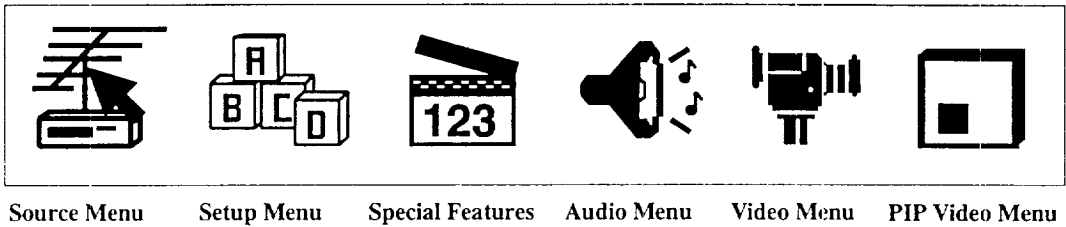
Note: Moving the on-screen pointer to a menu option will produce a display identifying the option. For example, if you move the arrow to the middle/left portion of the screen so that it rests on the arrows icons, the on-screen display will show the words "PIP Move" (see example above.)



Z-TRAK REMOTE MENUS OVERVIEW



Move pointer to any menu icon, press trackball to access menu as shown. With the pointer on any menu title, press trackball repeatedly to scan available menus.



Source Menu Setup Menu Special Features Audio Menu Video Menu PIP Video Menu

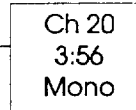
ON-SCREEN DISPLAYS

Channel/Time/Audio Mode Display

Channel - Reveals the currently tuned channel.

Time - Reveals the time set on the TV.

Audio Mode Display - Reveals the audio signal currently being received.

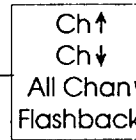


Channel Up/Down, All Channel, Flashback Display

Channel Up/Down - Use to move one channel higher or lower in channel selection.

All Channel - Display a listing of all channels available. Simply place pointer over desired channel number then press the trackball.

Flashback - Tune TV to previously viewed channel.



Move pointer over option and press trackball to access option or make a change.

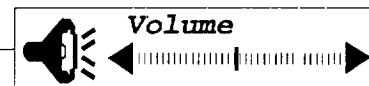
Channel Surfing Display

Reveals if the Channel Surfing option is active or not.



Audio Volume Display

Use the pointer to increase or decrease sound level. You can choose the level of sound by pointing and pressing the trackball. Point and press on the Speaker Icon to soften sound, press again to turn off sound, press again to restore sound.



TV Mode Icon

Place pointer over icon and press trackball to switch to Star-Sight Mode.



Captions Icon

Use to turn Captions On/Off. Options are: On, Off or Captions when muted. Use Setup menu to specify Captions/Text choice, either Caption 1, Caption 2, Caption 3, Caption 4, Text 1, Text 2, Text 3 or Text 4.



Trackball Speed Icon

Use to specify trackball speed. Options are: Slow, Medium or Fast.



Sleep Timer Icon

Use to set the Sleep Timer, which turns off the TV after a specified period of time. Options are in hours and minutes: Off, 15, 30, 1:00, 1:30, 2:00, 2:30, 3:00, 3:30, 4:00.

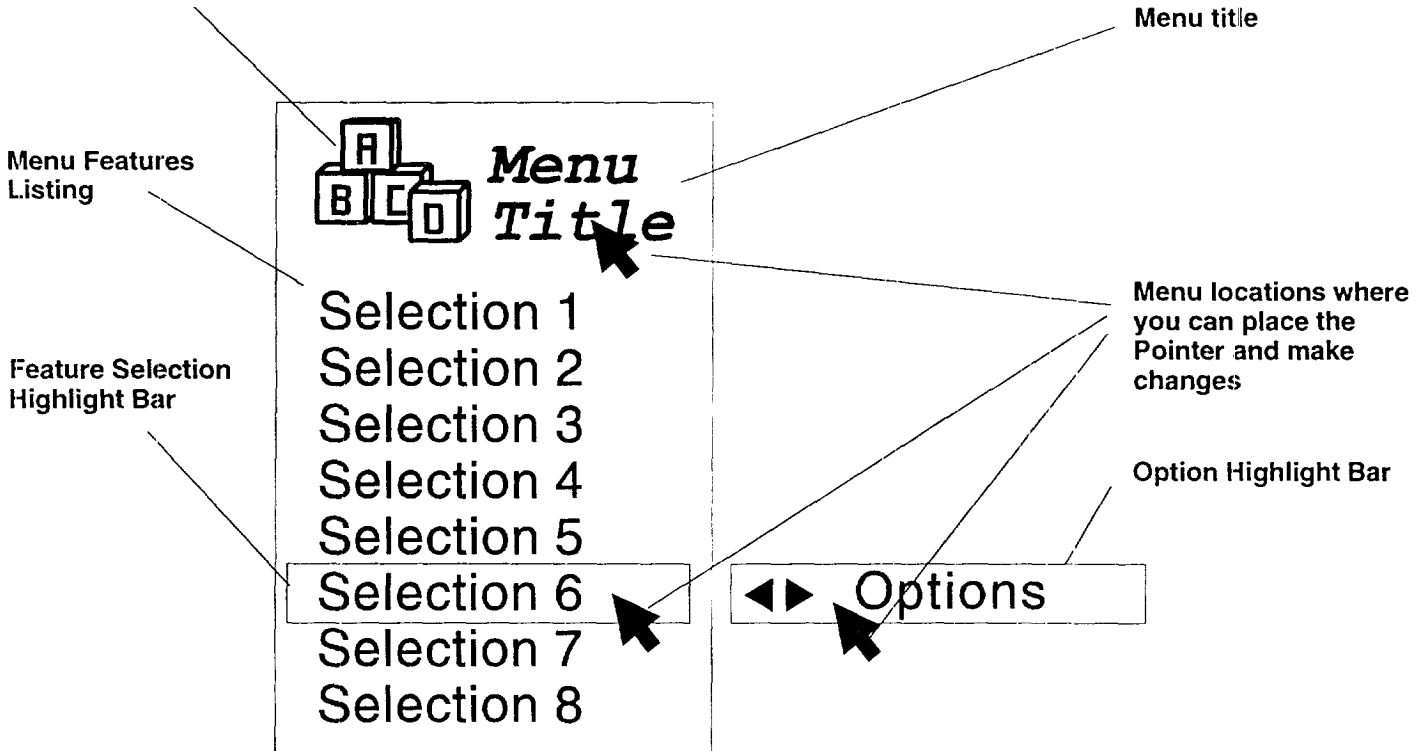
Z-TRAK REMOTE MENU OPERATION



POINT AND PRESS OPERATION

Shown below is a typical on-screen menu as it would appear when you use the trackball remote. Press TV. Press trackball to place pointer on the TV screen. Rotate trackball to move pointer to an area of the TV screen where your desired menu can be accessed. (See Typical On-Screen Menus section) Rotate trackball to move pointer over icon or menu option. Press trackball to access menu or option. See example below.

Typical Menu Icon



Menu Operation Options

Use the trackball remote to point and press on the feature selection you wish to access, press on the trackball to highlight the feature selection.

Using the Pointer to Access/Change Menus or Options

The Pointer can be placed in several places to access a menu or make a change to an option:

The Menu Title

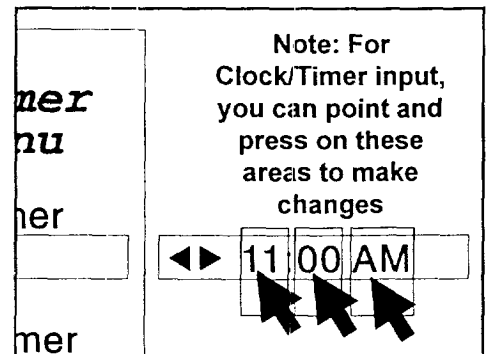
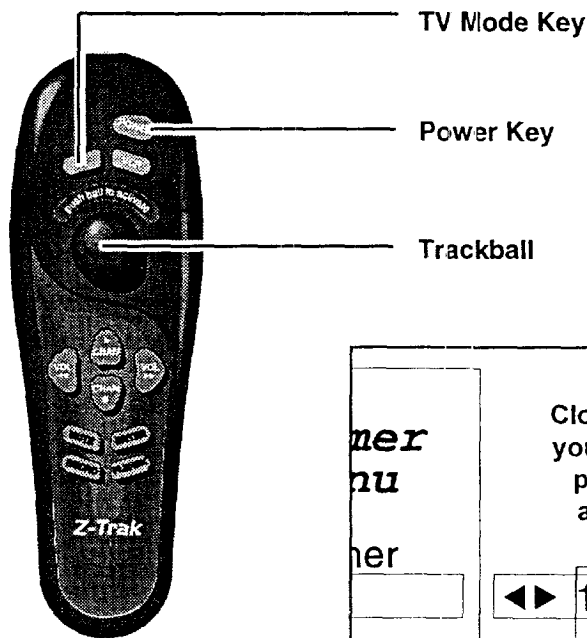
Press Trackball repeatedly to scroll through available menus.

The Feature Selection Highlight Bar

Press Trackball repeatedly to make changes to the feature or to scroll through the available options.

The Option Highlight Bar or Arrows

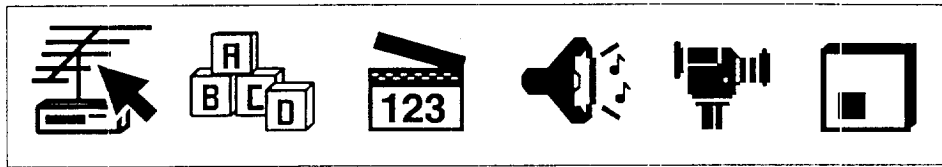
Press Trackball repeatedly to make changes to the feature or to scroll through the available options.



Z-TRAK REMOTE SOURCE MENU



Move pointer to Source Icon, press trackball to access menu

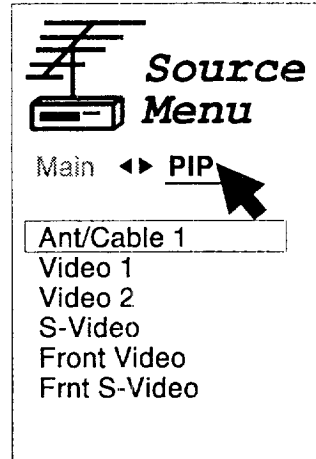
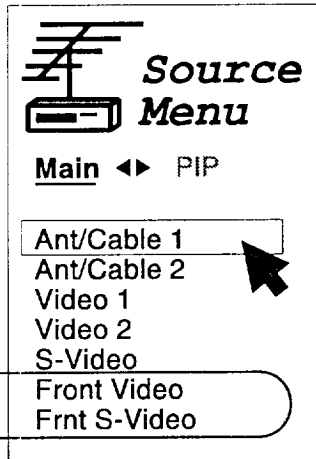


Source Menu

MENU OPERATION

Point and press on desired feature to first highlight it, then press trackball repeatedly to select the option and/or make a change.

Front Video and Front S-Video are source options on some TV models only.



Source Menus shown with Main picture source menu and selected (left) and PIP insert menu selected (right).

SOURCE SELECTION (Refers to TV/Source Connections Panel as illustrated below)

Ant/Cable 1 or 2	Routes the antenna or cable-TV source to the TV for viewing. You see program material from whichever signal source is connected to the ANT/CABLE 1 or 2 jack. (If the signal is from a VCR or a cable box, tune the TV to either channel 3 or 4.)
Video 1 or 2	Routes the audio and video from an A/V source (such as a VCR or a video disc player) to the TV for viewing. The source must be connected to the corresponding VIDEO 1 or 2 IN jacks.
S-Video	Routes the audio and video from an auxiliary Super-VHS video source (such as a VCR or a video disc player) to the TV for viewing. The source must be connected to the corresponding S-VIDEO jacks.
Front Video and Front S-Video	Routes the audio/video from an auxiliary video source (such as a VCR or a video disc player) to the TV for viewing. The source must be connected to the corresponding front Video or S-Video IN jacks.

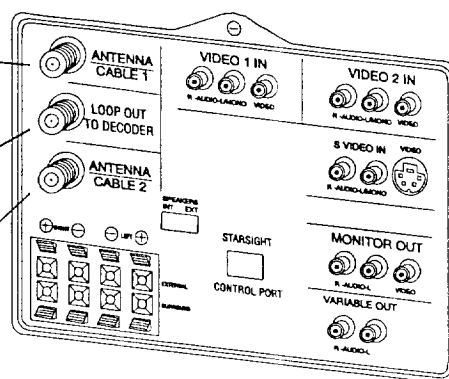
See the "Standard Connections for Your TV" section to make the proper equipment connections to the TV. For information about PIP sources, refer to the "PIP Operation" section.

Note: The term "Source" refers to the equipment and antenna wires connected to these jacks on the TV/Source Connection Panel, located on the back of the TV. To place the picture/sound being received by these jacks (or Source) on the TV screen, you "Select" the appropriate "Source" Antenna/Cable 1, Video 1, etc. using the Source menu as shown above.

ANTENNA/CABLE 1
75-ohm antenna or cable-TV connection to your TV. Attach your antenna, cable-TV line or VCR to these jacks.

LOOP OUT TO DECODER
Routes the cable-TV input to Antenna/Cable 2 back to the cable box supplied by the cable service.

ANTENNA/CABLE 2
75-ohm antenna or cable-TV connection to your TV. Attach your Antenna, cable-TV line, cable box or VCR to these jacks.



VIDEO 1 or 2 IN

Jacks for audio and video input from a stereo VCR or other A/V component. (You must connect to these jacks in order to hear stereo sound when playing a stereo tape.)

S-VIDEO IN

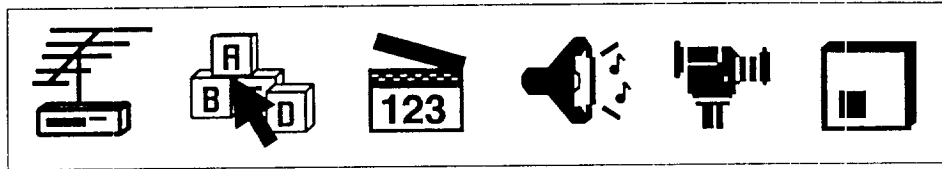
Jacks for audio and video input from a Super-VHS VCR.

Note: If you select Ant/Cable 1 or 2 as the Main picture source, the TV will automatically select it as the PIP Window Inset Picture source. The selection will appear as you choose the PIP Source menu. If desired, you can then manually choose one of the Video Source options for the PIP Window Inset Picture.

Z-TRAK REMOTE SETUP MENU



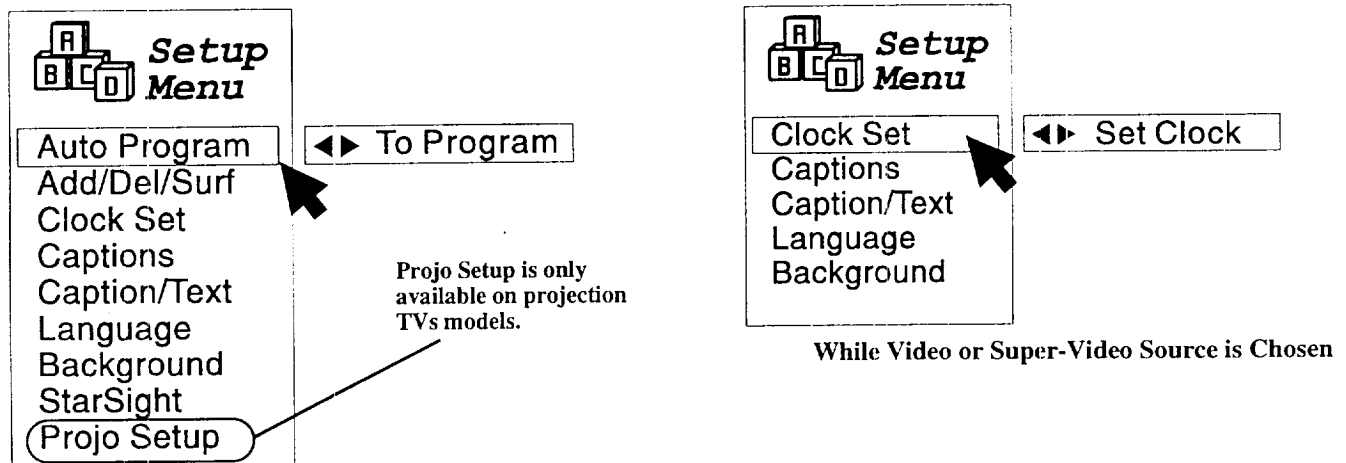
Move Pointer to Setup icon, press trackball to access menu



Setup Menu

MENU OPERATION

Point and press on desired feature to first highlight it, then press trackball repeatedly to select the option and/or make a change.



Auto Program	Finds all active channels and stores them in the TV's memory for use by CHANNEL up/down. See "THE FIRST TIME YOU OPERATE YOUR TV" for more details.
(Channel) Add/Del/Surf	Edit the channels found by Auto Program to create your own personal list of channels using the Channel Add or Delete feature. You may want to add (or delete) a weak-signal channel to the channel scan. Create your own "Surf" Channel Scan to scan your most tuned, favorite channels using CHAN Up/Down. See the information following this chart for more details.
Clock Set	Use to set the clock in the TV to the correct time, manually or automatically. See the information following this chart for more details.
Captions *	Use to turn on-screen Caption/Text On or Off. Options are: On, Off or Captions When Muted.
Caption/Text	Select from the options available when Captions is turned on above. Displays closed captioning or informational text when available on the selected channel. Options are: CAPTION 1, CAPTION 2, CAPTION 3, CAPTION 4, TEXT 1, TEXT 2, TEXT 3, or TEXT 4. See the information following this chart for more details.
Language	Selects language for on-screen menus. Options are: English, Spanish or French.
Background	Adds or removes a background from behind the on-screen menus.
StarSight	Begins the StarSight Setup procedure. Refer to the StarSight section for details.
Projo Setup	Lets you verify and adjust, if needed, the dynamic color convergence of the TV picture. See the information following this chart for more details.

continued on next page

Z-TRAK REMOTE SETUP MENU

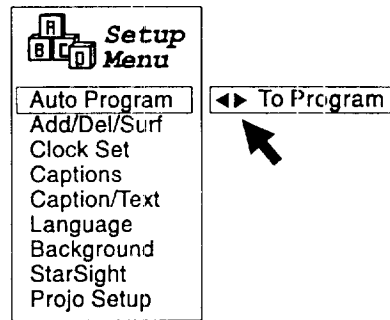


AUTO PROGRAM

Auto Program finds all available channels on the currently selected source and stores them in the memory of the TV. To start the Auto Program procedure from the Setup Menu, point and press to highlight Auto Program. Point and press on the Left or Right arrow, (as shown to the right) follow the on-screen instructions.

Available channels are:

Broadcast Band — VHF 2 to 13, UHF 14 to 69
Cable-TV Band — 1 to 125



USING (CHANNEL) ADD/DEL/SURF

This feature allows you to edit the channels that can be viewed on your TV. Add, Channel will be included in channel scan. Del, Channel will be removed from channel scan. Surf, Channel will be added to Surf channel scan.

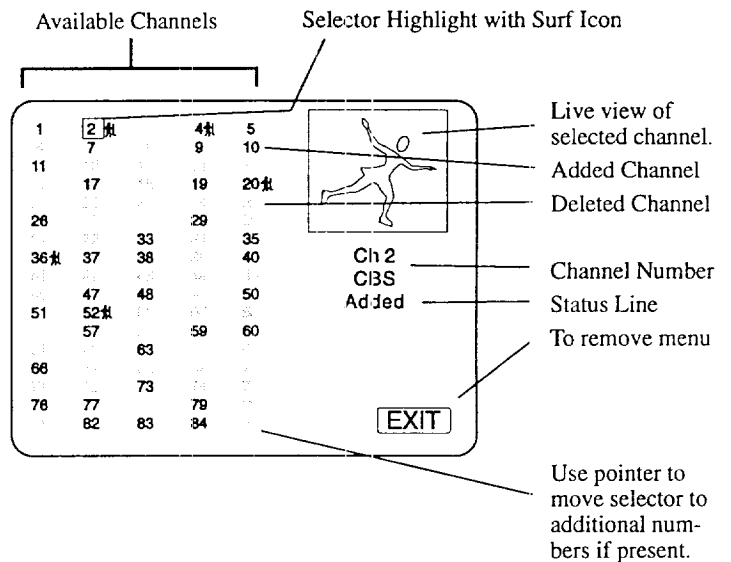
Channel Surf scan is intended to contain your favorite channels or the channels that you tune to most often.

Add/Delete Channels or Include Channels in Surf Scan

1. From the Setup menu, point and press on **Add/Del/Surf**.
2. Point and press on a channel number.
3. Point and press on the status line beneath the channel number. Press repeatedly to choose: Add, Del or Surf.
4. Point and press on another channel to make changes or to the Exit icon and press trackball to remove menu from screen.

Notes:

- Add/Del/Surf can only be used with Ant/Cable 1 or 2 Source.
- The audio of deleted channels is muted.
- Surf Scan channels are shown with the Surf Icon on menu as shown to the right.

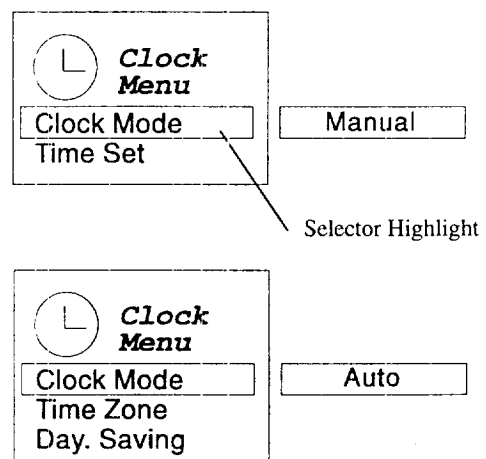


USING CLOCK SET

Set The Clock

Note: If StarSight* Mode is active, clock is set automatically. You can specify a Time Zone and Daylight Savings time even if clock is in Auto mode.

1. From the Setup menu, point and press to highlight **Clock Set**.
2. Point and press on Left/Right arrow to access Clock Menu.
Clock Mode = Use to choose clock operating mode, Auto or manual. Auto, the clock time is set automatically while TV is Off.
Manual, the current time and related information must be keyed-in by the user.
3. Point and press to highlight Time Set.
4. Point and press to change time setting.
5. Move pointer off menu and press trackball to remove menu from screen.



StarSight Clock Set Note:

*After StarSight is authorized for your TV it can take up to 48 hours for all StarSight information to be provided, while the TV is Off. As a consequence of that process, the Clock time (which is automatically set by StarSight) may be set incorrectly. If this becomes a problem, you can use the Clock Set menu to set the TV's time manually.

Z-TRAK REMOTE SETUP MENU



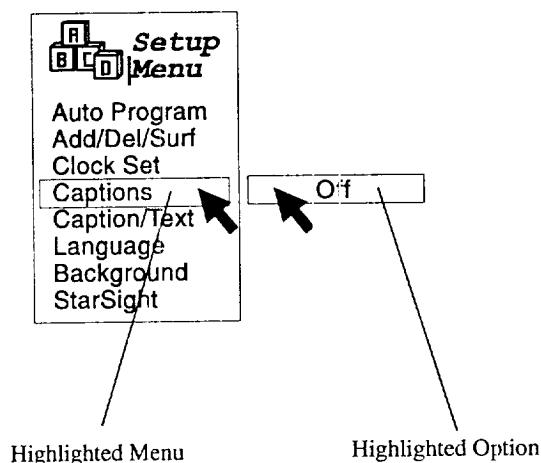
USING CAPTIONS

Provides to the hearing-impaired words (Captions) on-screen of the audio portion of the broadcast. If a program has captions included, the CC or captions notice will appear for 2 or 3 seconds before the broadcast begins.

Turn Captions On and Off

1. From the Setup menu, point and press to highlight **Captions** selection.
2. Point and press on highlighted menu or highlighted option to select: On, Off or Captions when muted.
3. Move pointer off menu and press trackball to remove menu from screen.

Note: If you select Captions When Muted, Closed Captions will appear when the sound is muted.



USING CAPTIONS/TEXT

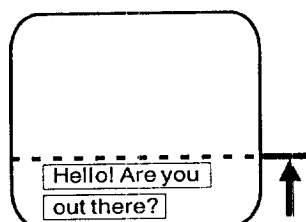
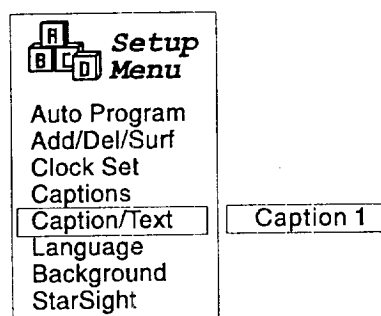
If Captions are turned on, provides a menu of available Caption/Text options.

Accessing Closed Captions/Text

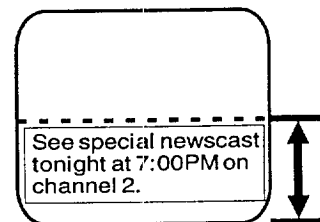
1. From the Setup menu, point and press to highlight **Caption/Text** selection.
2. Point and press on highlighted menu or highlighted option repeatedly (as shown above) to select: Caption 1, Caption 2, Caption 3, Caption 4, Text 1, Text 2, Text 3, or Text 4.
3. Move pointer off menu and press trackball to remove menu from screen.

Note:

At present, very few TV programs or video tapes offer text captioning for any option other than **CAPTION 1**. Therefore, **CAPTION 1** is the only recommended choice, unless you know that a specific program is providing captioning using one of the other selections.



Typical Captions Display
Captions may be shown anywhere on the screen.



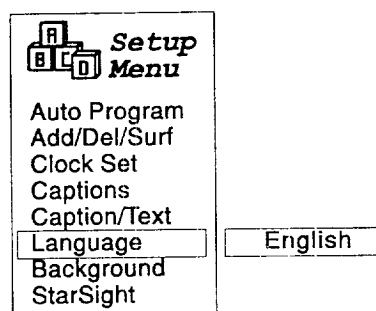
Typical Text Display
Fixed size text window fills lower half of screen.

Language

Provides foreign language options for the on-screen menus to appear in a language other than English.

Choose Language for On-Screen Menus

1. From the Setup menu, point and press to highlight **Language**.
2. Point and press on highlighted menu or highlighted option (as shown above) repeatedly to select: English, Español or Français. (English, Spanish or French.)
3. Move pointer off menu and press trackball to remove menu from screen.



Z-TRAK REMOTE SETUP MENU

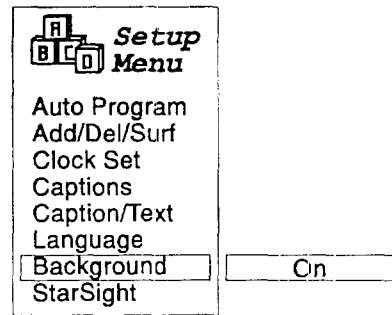


BACKGROUND

Provides a background for the on-screen menus to make them easier to read.

Turn On-Screen Menus Background On or Off

1. From the Setup menu, point and press to highlight **Background** selection.
2. Point and press on highlighted menu or highlighted option to select: On or Off.
3. Move pointer off menu and press trackball to remove menu from screen.

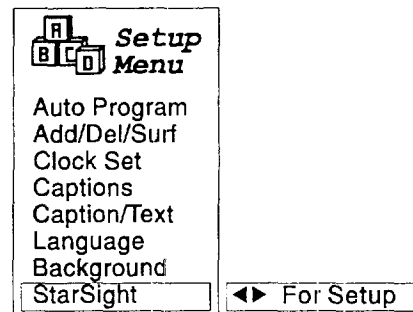


STARSIGHT

Note: Before you activate the optional StarSight feature, review the StarSight section so you will have at hand the information you will need to complete the StarSight activation process.

Accesses the StarSight Setup Menu

1. From the Setup menu, point and press to highlight **StarSight** selection.
2. Point and press on Left/Right arrow to select **For Setup**. The TV will enter the StarSight Setup Menu, follow on-screen instructions.
3. Point and press on EXIT if you wish to leave the StarSight Setup Procedure menu.



PROJO SETUP

When you first install your projection TV, or if after time, you notice color "fringes" around objects in the picture, you may need to realign the colors by adjusting the convergence as described in the following steps.

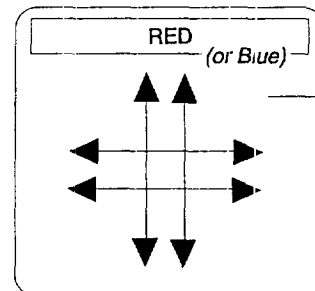
To Converge Colors

1. From the Setup Menu, choose Projo Setup.
2. Use the point and press method to view the "Converge" lines.
3. Use the point and press method to select either RED or Blue lines to converge.
4. Use the point and press method to place the RED (or BLUE) lines directly on top of the reference lines. (Do this for both colors of necessary.) Move pointer off menu and press trackball to exit menu.

Notes:

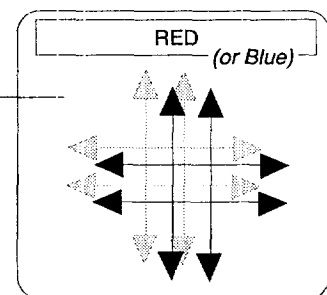
Any adjustments made to the Video Menu settings while Picture Pref. is in the PRESET mode will automatically be stored in the Custom setting.

Each time the TV is moved to a different location, the convergence should be checked.



Four intersecting WHITE lines indicate the TV is properly converged. No adjustment is necessary.

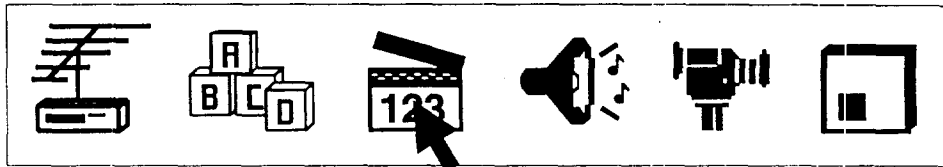
Four RED (or Blue) lines offset from the WHITE lines indicate converging is necessary. Follow the steps to align the color lines (Red and Blue) with the white lines.



Z-TRAK REMOTE SPECIAL FEATURES



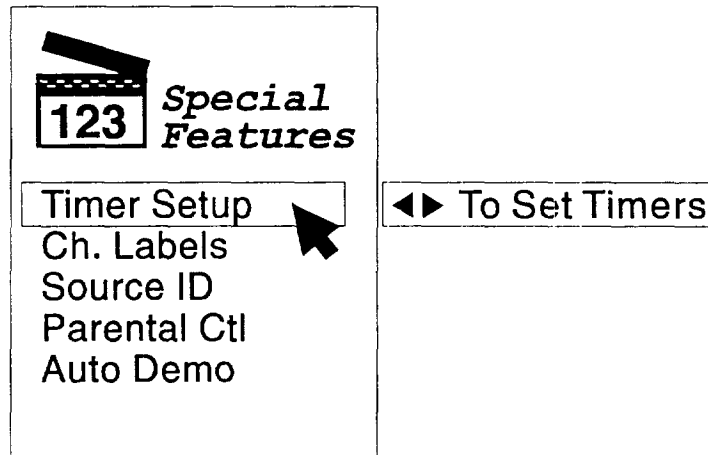
Move Pointer to Special Features Icon, press trackball to access menu



Special Features

MENU OPERATION

Point and press on desired feature to first highlight it, then press trackball repeatedly to select options or make a change.



Timer Setup	Sets the TV's Sleep Timer and On/Off Timer features. See the information following this chart for more details.
Ch. Labels	Assigns a network/station label, name or call letters to specified channels. For example, if you choose the label "ABC" for channel 7, then "ABC" will appear in the Channel/Time display whenever channel 7 is selected. See information following this chart for more details.
Source ID	Assigns a descriptive "name" to the input sources. For example, the Video 1 source may be named VCR. "VCR" would then appear in the Source Menu as a reminder that your VCR is connected to the Video 1 input jacks.
Parental Ctl (Control)	Use this feature to block viewing of any undesirable channels or the entire video signal. See the information following this chart for more details.
Auto Demo	Use this feature to view a demonstration of the on-screen menus available on this TV.

continued on next page

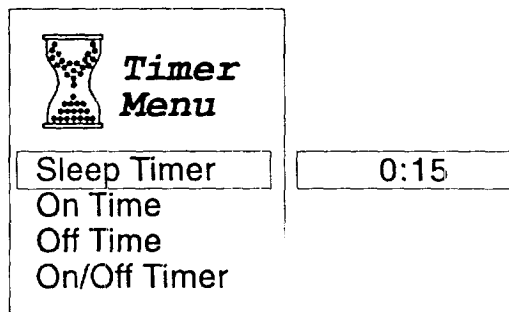
Z-TRAK REMOTE SPECIAL FEATURES



TIMER SETUP: Sleep Timer

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

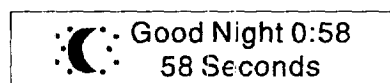
1. From the Special Features menu, point and press to highlight **Timer Setup**.
2. Point and press on Left/Right arrow to access Timer Menu.
3. Point and press on Sleep Timer to access Sleep Timer option.
Press trackball repeatedly to choose time the TV will turn off. Options are: Off, 0:15, 0:30, 1:00, 1:30, 2:00, 2:30, 3:00, 3:30 or 4:00.
4. Move pointer off menu and press trackball to remove menu from screen.



Sleep Timer Set to Turn TV
OFF in 15 Minutes

One minute before the TV turns off, the **GOOD NIGHT** display appears on the screen. At this time you have a choice of the following two actions:

1. Do nothing. The **GOOD NIGHT** display remains on the screen. The TV will turn off in one minute.
2. Delay the turn-off by resetting the timer with a new time period.



"Good Night" Display Appears 60
Seconds Before Shut-Off

Notes:

- To cancel the Sleep Timer, turn off the TV or point and press on Sleep Timer repeatedly until OFF is showing.
- As the Good Night display counts down the final 60 seconds, the audio and video of the TV also "dim" for a soft, discreet turn-off.
- The clock must be set before the Sleep Timer can be set.

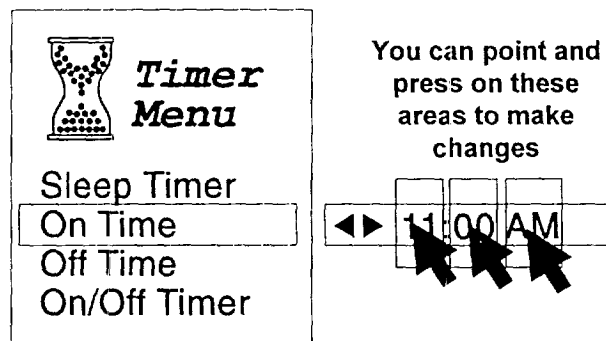
TIMER SETUP: On/Off Timer

The **On/Off Timer** programs the TV to automatically turn itself on at a specific time then turn itself off at another time.

Make sure the TV's clock is set.

Set On/Off Timer

1. From the Special Features menu, point and press to highlight **Timer Setup**.
2. Point and press on Left/Right arrow to access Timer Menu.
3. Point and press on On Time to access On Time option.
Point and press on hours/minutes/AM, PM digits to set the TV turn On time.
4. Point and press on Off Time Option.
Point and press on hours/minutes/AM, PM digits to set the TV turn Off time.
5. Point and press on Off/Off Timer Option.
Point and press repeatedly to specify On or Off.
On- On/Off Timer will be activated.
Off- On/Off Timer will be deactivated.
6. Move pointer off menu and press trackball to remove menu from screen.



On/Off Timer Set to Turn
TV On at 11:00 am

Note:

A time must be set for Off Time in order to use the On/Off Timer.

Z-TRAK REMOTE SPECIAL FEATURES



USING CHANNEL LABELS

Channel labels make it easier to identify on-screen programming.

Assign Labels to Your Channels

1. From the Special Features menu, point and press to highlight **Ch. (Channel) Labels**.
2. Point and press on Ch Up/Ch Down arrow repeatedly to select channel number you want to label.
3. Point and press on the appropriate label (A&E, ABC, etc.) you want for the selected channel.
4. Point and press on Ch Up/Ch Down arrow repeatedly to select another channel number you want to label or move pointer to EXIT and press trackball to remove menu from screen.

To make a custom label

Select channel number, point on any label, press trackball twice to access Custom Labels menu. Using the point and press method, select each digit. Point and press EXIT when finished to return to Ch. Label menu.

Notes:

Ch. Labels can only be used with ANT/CABLE 1 or 2 Source. Selecting the four dashes (---) specifies that no channel label is assigned, although the broadcaster may supply a channel label. Or, in addition to not assigning a label, **NONE** blocks the station or network labels that are transmitted by some television stations.

Live view of selected channel.

----	NONE	A&E	ABC	ACTS
ADC	AMC	BCC	BET	BRAV
CA	GBC	CBN	CBS	CMTV
CNBC	CNN	COM	CSPN	CSP2
CTN	CTV	DIS	DISC	E!
ENC	ESPN	ESPN2	ET	EWTN
FAM	FNN	FOX	F&V	FX
GALA	HBO	HN	HSE	HSN
IC	INSP	JCN	LIFE	MAX
ME/U	MMT	MTV	NBC	NICK
NOS	PBS	PLAY	PTL	QVC
RDS	REQ	SC	SCFI	SHOW
SIN	TBS	TBN	TELE	TLC
TMC	TNN	TNT	TRAV	TWC
UPN	TSA	VC	VCR	VH-1
VISN	WB	WGN	WTBS	WWOR

Selector Highlight

USING SOURCE ID

Assign Names To Your Sources

1. From the Special Features menu, point and press to highlight **Source ID**.
2. Point and press on source you want to identify.
3. Point and press on highlighted label repeatedly to select identifier label (VCR, Laser disc, etc.) you want for an ID.
4. Select another source you want to add an identifier label to or move pointer to EXIT and press trackball to remove menu from screen.

Selectable names for ANT/CABLE 1 or 2 Sources are: ---, Disabled, Antenna, Cable, Cable Box, VCR, Satellite, StarSight, Video Game, Laser Disk or DVD.

Selectable names for VIDEO and S-Video Sources are: ---, Disabled, VCR, VCR 1, VCR2, Satellite, Camcorder, Video Game, Laser Disc, Photo Cd or Audio Only.

Note:

Disabling a Source prevents it from appearing in the Source Menu.

Highlighted Source Highlighted Label Live view of selected Source.

EXIT	
Source	Label
Ant/Cable 1	StarSight
Ant/Cable 2	---
Video 1	VCR
Video 2	Video Game
S-Video	---
Front Video	---
Frnt S-Video	---

Only available on some models.

Z-TRAK REMOTE SPECIAL FEATURES



USING PARENTAL CONTROL (PC)

Parental Control allows you to be selective about viewing, on your particular TV, the programming which is being televised in your local broadcast area. If there are undesirable programs or channels you wish to block, you can use Parental Control; block out particular channels or the entire video image. You can also specify the hours Parental Control will be active. To access the Parental Control Menu, use the "Point and Press" method of menu access described on the previous pages.

Parental Control

- Block Ch.** Blocks individual channels for Ant/Cable 1 or 2 sources.
- Block Video** Blocks video and S-Video images.
- Set Hours** Period of time PC will be active.
- Set Password** Only way to access PC.
- Lock On/Off** Turns PC feature On/Off.

Parental Control Menu

Block Channels Menu

- Live view of selected channel.
- Channel Selector
- Channel Number
- Channel Label
- Status Line
- Source Signal
- To remove menu

Block Channels Menu

Block Ch. (Channel)

Use to block an individual channel's video and audio. A padlock symbol will appear next to the channel numbers that are blocked, as shown in the example at the right. The grayed numbers are inactive channels, no signal. The solid numbers are active channel numbers and the channel numbers with the padlock next to them are the blocked channels.

Block Video

Use to block the images for Video and S-Video sources.

Set Hours

Use to specify the number of hours Parental Control will be activated. Once Parental Control is active, the TV cannot be viewed unless the Password is used to unlock the TV or the time specified has elapsed.

Set Password

Use to set your Parental Control Password.

Note: Remember your Password or you will have to wait until the specified time has elapsed before you can operate the TV.

Lock On/Off

Use to turn the Parental Control feature On and Off. The parental control settings will remain but can be activated, (On) or deactivated (Off).

AUTO DEMO

When active sets in motion a series of on-screen demonstrations of the features that are available on this TV. Shows examples of the trackball remote control menus and the different features available with the trackball, and with the universal remote.

Once you activate the Auto Demo feature it will take several seconds for it to begin.

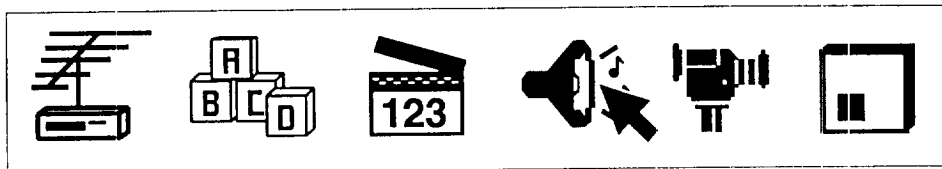
Special Features

- 123
- Timer Setup
- Ch. Labels
- Source ID
- Parental Ctl
- Auto Demo
- Off

Z-TRAK REMOTE AUDIO MENU



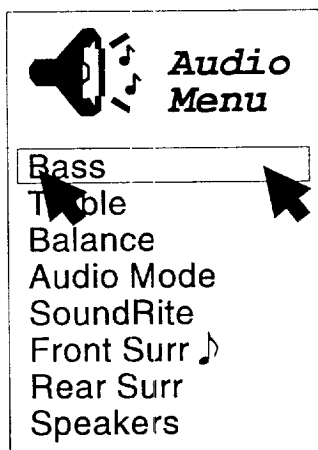
Move pointer to Audio Menu Icon, press trackball to access menu



Audio Menu

MENU OPERATION

Point and press on desired feature to first highlight it, then press trackball repeatedly to select an option or make a change.



Note: Point and press on any place of the adjustment bar, highlighted option or either arrow to choose your audio preferences as shown. You can also move the center adjustment mark to choose your preference.

Choose Main/PIP Audio: Ch 11-WTTW 1:17 Stereo
To select the audio (sound) from the Main Picture source, point and press on the note symbol.

To select audio from the PIP Source, (If PIP is active) point and press on the PIP note symbol. (Selected note symbol for Audio source will be a white color.) Unselected audio source note will be a gray color.

Bass	Adjusts the BASS (low-frequency) level.
Treble	Adjusts the TREBLE (high-frequency) level.
Balance	Adjusts the balance of sound between the two speakers.
Audio Mode (SAP is not an option for the Video or S-Video sources. Audio signals into a video source are assumed to be monaural or stereo.)	Allows you to select STEREO, MONO or 2ND AUDIO/SAP operation. STEREO: Directs the sound to the Left and Right speakers as supplied by the program. Stereo is the recommended choice: The TV switches automatically between the STEREO and MONO modes depending on the type of signal being received. MONO: Directs the same sound to both Left and Right speakers, even if the program being received is in stereo. 2ND AUDIO/SAP: Directs the sound for the Second Audio Program (second language) to both the Left and Right speakers. SAP sound is always monaural. If SAP is selected, you hear the SAP (usually a second language). When the SAP broadcast ends, the TV switches automatically (defaults) to the type of signal being received, STEREO or MONO. The TV switches back to 2ND AUDIO/SAP when the SAP broadcast resumes.
SoundRite	When channels are changed, automatically adjusts the sound level to the prevailing sound level. Sound from newly selected channel will be the same volume as the previously tuned channel.
Front Surr	Turns On and Off the Front Surround effect. Front Surround Sound is only available if a surround encoded stereo signal is being received and STEREO is either selected using the AUDIO Mode option or selected by default.
Rear Surr	Adjusts the level of Surround Sound provided to the optional rear surround sound speakers. Surround Sound is only available if a surround encoded stereo signal is being received.
Speakers	Turns internal speakers On and Off. (Off indicated by "Ext. Volume" appearing on Volume bar.)

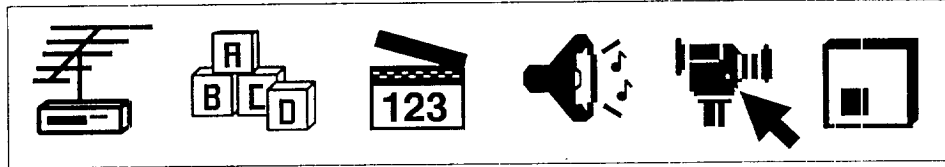
Note:

All adjustments on the Audio Menu are optional. You do not have to adjust these features in order to use your TV.

Z-TRAK REMOTE VIDEO MENU



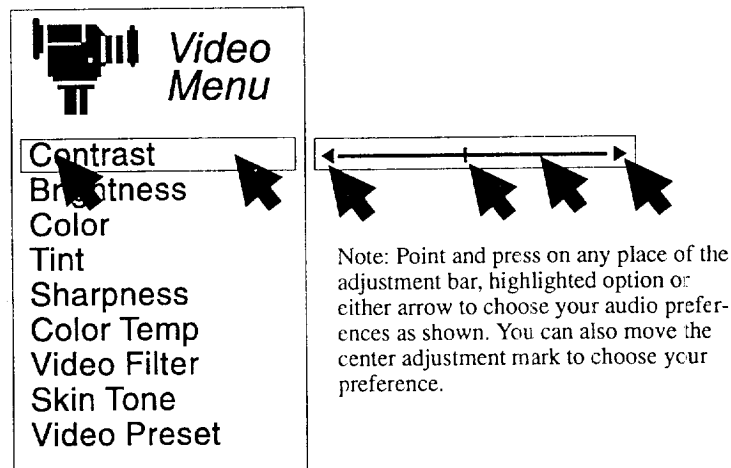
Move pointer to Video Menu Icon, press trackball to access menu



Video Menu

MENU OPERATION

Point and press on desired feature to first highlight it, then press trackball repeatedly to select the option or make a change.



Contrast	Adjusts the overall contrast and color level of the picture.
Brightness	Adjusts the brightness level of black areas in the picture.
Color	Adjusts the intensity of the colors in the picture.
Tint	Adjusts the color of the flesh tones to more Green or more Red.
Sharpness	Adjusts the definition of the object edges for best picture quality.
Color Temp (Temperature)	Changes the "color temperature" or picture white balance between cooler, natural whites and warmer (red) colors.
Video Filter	Reduces video "noise" or interference in dark picture areas resulting in clearer overall pictures.
Skin Tone	Automatically maintains natural skin tones under changing scene and video source conditions.
Video Preset	Adjusts the picture to different light environments. Options are: Custom, Preset, Movie, Video Game, Sports, Daylight or Weak Signal.

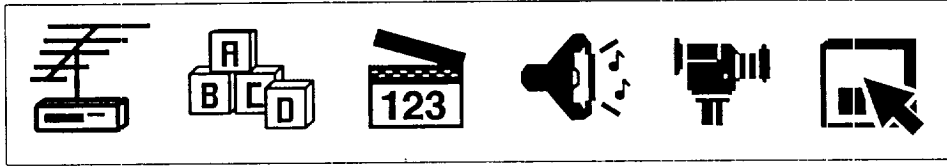
Note:

All adjustments on the Video Menu are optional. It is not necessary to adjust these features in order to operate the TV.

Z-TRAK REMOTE PIP VIDEO MENU



Move pointer to PIP Video Menu Icon, press trackball to access menu



PIP Video Menu

MENU OPERATION

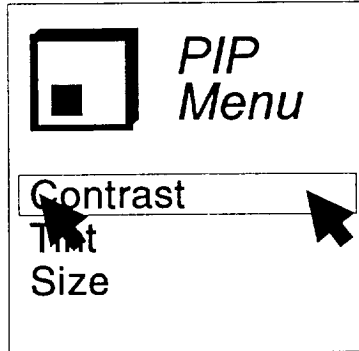
Point and press on desired feature to first highlight it, then press trackball repeatedly to select the option or make a change.

Note: Selecting the PIP Video Menu does not "activate" PIP. However, a PIP window will appear during menu operation to show the effect of any setting changes.

To activate PIP inset, move the pointer to left/center of TV screen so it rests on PIP On/Off Icon, press trackball.



See PIP Operation section



Note: Point and press on any place of the adjustment bar, highlighted option or either arrow to choose your audio preferences as shown. You can also move the center adjustment mark to choose your preference.

Contrast	Adjusts the intensity of the colors in the PIP inset.
Tint	Adjusts the color of the flesh tones in the PIP inset to more Green or more Red.
Size	Adjusts the size of the PIP inset. Choose between small or large.

MAINTENANCE AND TROUBLESHOOTING

CARING FOR YOUR PROJECTION TV

Your projection 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, disconnect AC power to your TV.

NOTE: If you unplug your TV, you will 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 or Ivory dishwashing detergent. 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 SCREEN CLEANING

Use a soft cloth moistened with warm water and rub lightly in the soiled areas of the screen. **DO NOT USE A TISSUE OR PAPER TOWEL, AS THESE MAY DAMAGE SURFACE.** Wipe only in the vertical (up/down) direction (along the grooves). If there is a dirt buildup, a mild solution of warm water and Ivory dishwashing detergent may be used. Use dry soft cloth to dry the screen. Care should be taken to avoid scratches or damage to the screen surface.

NOTE: THE TV SCREEN IS EASILY DAMAGED. AVOID ACCIDENTAL CONTACT WITH THE SCREEN.

EXTENDED ABSENCE

Before an extended absence (such as a vacation) you may want to disconnect AC power to your TV. This will protect the projection TV from possible damage from lightning or power line surges. If you have an outdoor antenna, you may also want to disconnect the antenna from the wall plate connection center

NOTE: If you unplug your TV, you will have to reset the clock to the current time.

PICTURE INTERFERENCE

Your picture may be affected by interference caused by one or a number of factors. These include:

Speckled or Streaked Picture Can be caused by nearby automobile ignition, electrical appliances, etc. This is 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 an improper antenna installation.

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

Radio Signal Police, amateur or CB radio transmitters may cause interference.

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

MAINTENANCE AND TROUBLESHOOTING

BEFORE CALLING FOR SERVICE

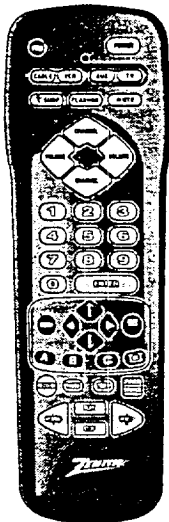
Check these items and see if you can correct the trouble by changing the adjustment of a control or a menu setting. By making these simple checks before calling for service, you may save time and money.

Problem	Try This
Picture OK. Poor sound.	Re-orient antenna. Try another channel — possible station trouble. Adjust AUDIO MENU options. Check Mute feature? 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? Trouble with cable-TV system? Check auxiliary audio/video equipment. Check channel selection. Is the channel blocked by PARENTAL CONTROL?
Picture blurred or distorted. Ghost in picture.	Check antenna or cable hook up for broken wires. Try another channel — possible station trouble. Check for local interference.
No color, or poor color.	Is it a color program? Check antenna or cable hook up for broken wires. Adjust VIDEO MENU options.
No sound or sound is low.	VOLUME (VOL) setting may be too low. Check MUTE key operation on remote control. Is Speaker EXT/INT switch set to EXT?
Cannot select certain channels or other channels.	Channels may be skipped in CH. ADD/DEL/SURF option of SETUP MENU. Use AUTO PROGRAM a second time. Is TV in Surf Channel Scan mode with only one channel specified as a Surf channel?
No closed captions	Are captions available? Is CAPTION 1, CAPTION 2, CAPTION 3 or CAPTION 4 selected using the CAPTIONS option on the SETUP MENU?
Black or blue box covers half of screen.	Is text information available? Is TEXT 1, TEXT 2, TEXT 3 or TEXT 4 selected in the CAPTIONS option of the SETUP MENU.
No picture or sound when VIDEO 1 or VIDEO 2 source is selected.	Is audio/video source hooked up properly? Are all wires connected to VIDEO 1 IN or VIDEO 2 IN jacks on connection center?
No stereo sound or weak stereo sound when using a stereo VCR.	Check AUDIO mode. Was stereo sound present before selecting VIDEO 1 or VIDEO 2 source?
Cannot select desired PIP source.	If Ant/Cable 1 or 2 is Main Source, TV makes it PIP source also.
PIP inset frame is black or lacks contrast when selecting VIDEO 1 for PIP inset.	Adjust PIP COLOR AND CONTRAST settings in PIP MENU. Are all wires connected to VIDEO 1 IN jacks on connection center?
PIP inset frame is "snowy" when using ANT/CABLE 1 or 2 for PIP and VIDEO 1 for main picture.	Is TV/VCR switch on the VCR (or remote) in the TV position?
No picture when using VIDEO 1 for PIP inset source and ANT/CABLE 1 or 2 for main picture.	Is TV/VCR switch on the VCR (or remote) in the TV position?
Remote control does not work.	Are batteries okay? Does Indicator light turn On? Is TV turned ON? Is remote in TV mode?

Notes:

If your TV fails to respond to the VIDEO PRESET selection, or to any other menu selection, you must reset the TV. Simply disconnect the AC power cord from the power outlet. Wait a few minutes, then plug the TV back into the power outlet. You may have to reset the clock to the current time.

Recommended Accessories For Your Television

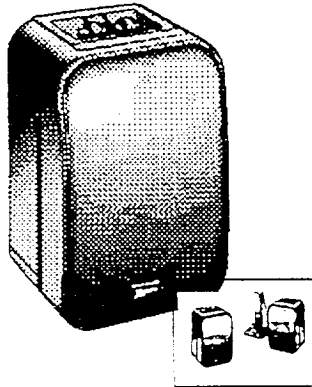


Broken or Lost Remote Control?
For an **exact replacement remote control** for your new Zenith television, see your local Zenith dealer or order direct by calling **1-800-255-6790**.

To assure the correct remote for your new Zenith TV, please have your television's model number ready when you call!

Only \$39.95

Wireless Speakers



Listen to your stereo inside or outside with these wireless speakers

Prolong the life of your expensive VCR or camcorder with this one-way rewriter:

- Receivers sound from TV, VCR or stereo through walls, floors or outside.
- Create a home theater system.
- Sleek, contemporary design and no "cord clutter."
- Works up to 150 feet.

ZEN800
Wireless Speaker System

Only \$199.95

Wireless Headphones



Complete Cordless Stereo Headphones

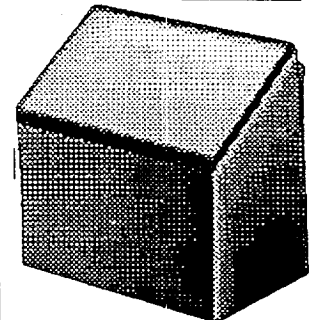
Relax and enjoy your favorite music or TV programs without disturbing others.

- Operates with any TV, VCR or Stereo System.
- Works up to 50 feet — Indoors or Outdoors.
- Separate left and right volume controls.
- Great for the hard of hearing.

ALG2032
Wireless Headphone System

Only \$69.95

Surround Sound Speakers



A sound so real... almost as if you were part of the action!

- An ideal addition to any Home Theater system.
- For use with any Surround Sound compatible TV.
- Contemporary black finish complements any room.
- Bookshelf size, can be wall-mounted or set on a shelf.

CV4000
Stereo Speakers

Only \$99.95

Photocopy Page and Detach Here

To order these fine accessories, please complete this order form and return a photocopy with your payment to:

Accessory Offers
Zenith Video Tech Corporation
1000 Milwaukee Avenue
Glenview, Illinois 60025-2493

Or Call 1-800-255-6790

Check or Money Order
(Made Payable to Zenith Video Tech Corp.)



Account # _____

Expiration Date _____ Signature _____

IMPORTANT: PLEASE BE SURE TO COMPLETE THE INFORMATION BELOW

TV Model Number _____ TV Serial Number _____ Month _____ Day _____ Year _____
(from sticker on back of unit) (from sticker on back of unit) (Approx. date of purchase)

PLEASE ALLOW 2-3 WEEKS FOR DELIVERY

Item Number	Description	Quantity	Price per Item	Total Price
Sales Tax: Please add your state sales tax if you live in one of the following states.			Sub Total	
CA 7.75%, GA 6%, IL 8.75%, KS 4.9%, KY 6%, ME 6%, NJ 6%, PA 6%, RI 7%, TX 7.75%, VA 4.5%, WA 8.2%			State Sales Tax	
			Shipping and Handling	\$4.50
			Total Amount of Order	

(Note: Orders can only be sent to customers within the United States.)

Ship To: _____

Name _____

Address _____

Ap# _____ City _____

State _____ Zip/Postal Code _____

Telephone (_____) _____

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 a drawing is held by Zenith from the completed Product Registration Cards received during the preceding month. Zenith will reimburse the winner for the full purchase price of the product purchased.

In order to participate, simply complete and return the Product Registration Card at once, even if you choose not to complete the information and interests portion of the questionnaire.

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, you may use the replacement card provided 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.

PHOTOCOPY AND CUT ALONG DASHED LINE

Zenith Product Registration Card		H5Z01-01																																				
① Please Print Clearly or Type		② Area Code Telephone																																				
1. <input type="checkbox"/> Mr. 2. <input type="checkbox"/> Mrs. 3. <input type="checkbox"/> Ms. 4. <input type="checkbox"/> Miss		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> -- <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>																																				
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YOUR ZENITH TV WARRANTY

DIRECT-VIEW COLOR TV

Welcome into the Zenith family! We believe that you will 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.



Before you ask for Warranty service, check the operating guide section entitled, "**Maintenance And Troubleshooting.**" It may be possible to avoid a service call.

Owner's Responsibility

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

Operating Guide — Read your Operating Guide carefully so that you will understand the operation of your set 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 in obtaining satisfactory warranty service, call or write:

Zenith Electronics Corporation
Customer Service Department
1000 Milwaukee Avenue
Glenview, IL 60025-2493
Telephone: (847) 391-8752
Mon-Fri, 8:00 a.m. - 4:30 p.m. Central Time

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 television. 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.

YOUR ZENITH TV WARRANTY

PROJECTION COLOR TV

Welcome into the Zenith family! We believe that you will be pleased with your new Zenith Projection TV. Please read this warranty carefully. It is a "ONE YEAR FULL WARRANTY," plus a limited second year picture tube 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 and Parts — During a period of one year from effective warranty date, Zenith will supply new or remanufactured replacement picture tubes or other parts, and will pay for service labor by a Zenith authorized service center, when such parts or service labor are needed to repair the product as a result of manufacturing defects. Further, Zenith will supply a new or remanufactured replacement for any picture tube which fails during the second year after effective warranty date because of a manufacturing defect. Replacement parts are warranted for the remaining portion of the original warranty period. The above service labor warranty applies only in the U.S.A.

On-Site Service — Warranty service is provided where the Projection TV is installed.

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.



Before you ask for Warranty service, check the operating guide section entitled, "**Maintenance And Troubleshooting.**" It may be possible to avoid a service call.

Owner's Responsibility

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

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

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 Owner 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 in obtaining satisfactory warranty service, call or write:

Zenith Electronics Corporation
Customer Service Department
1000 Milwaukee Avenue
Glenview, IL 60025-2493
Telephone: (708) 391-8752
Mon-Fri, 8:00 a.m. - 4:30 p.m. Central Time

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 television. 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.

ZENITH ELECTRONICS CORPORATION
1000 MILWAUKEE AVENUE
GLENVIEW, ILLINOIS 60025-2493

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