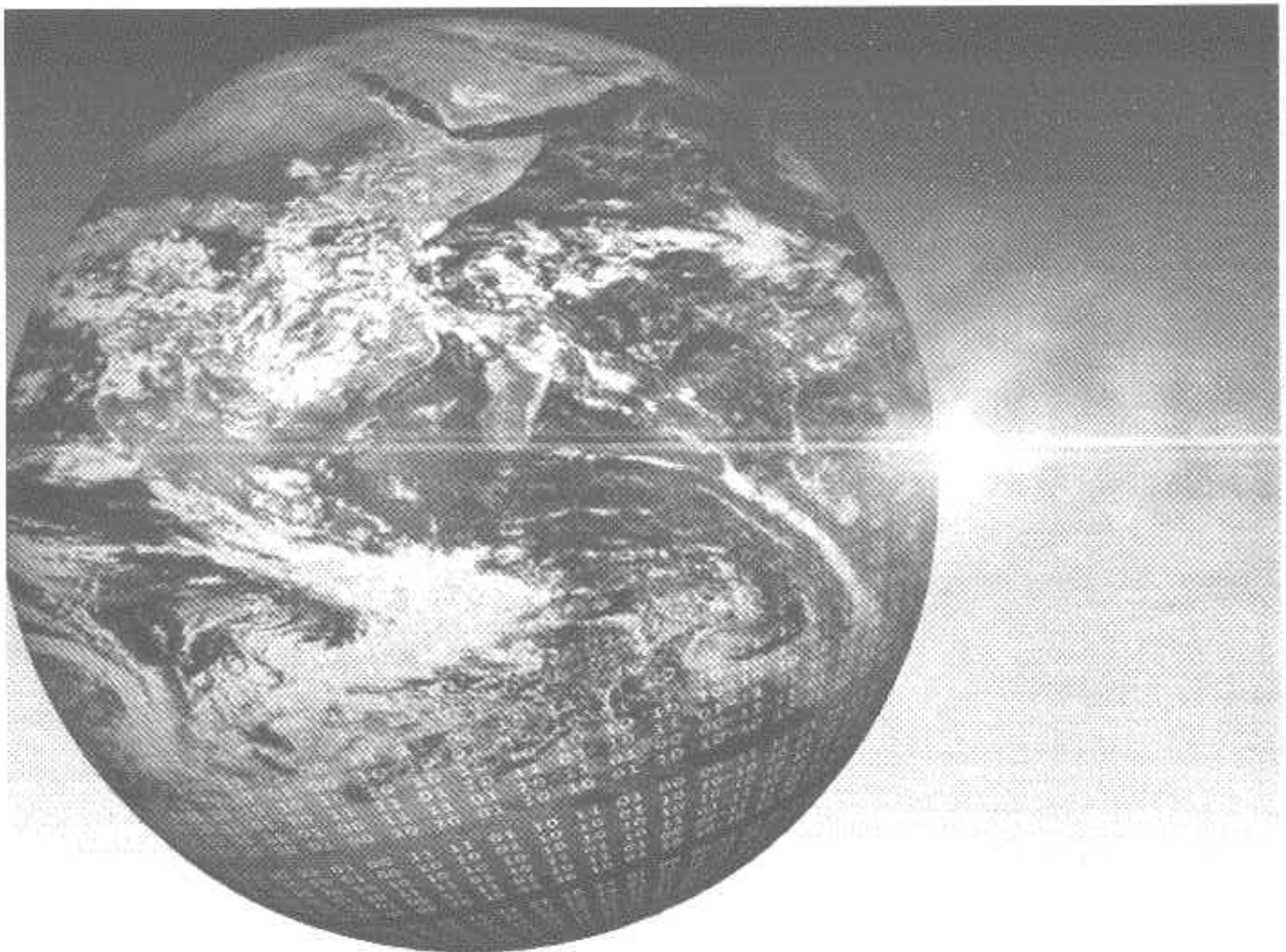


Panasonic

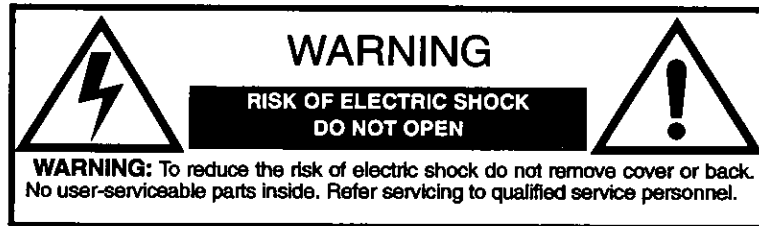
Interactive Television Operating Instructions

CT-27D42



For assistance, please call: 1-800-211-PANA (7262) or
send e-mail to: consumerproducts@panasonic.com (USA only)

TQB2AA393-0 10710
PRINTED IN USA



The lightning flash with arrow head within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.



The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

ENVIRONMENTAL NOTICE: THIS PRODUCT UTILIZES BOTH A CATHODE RAY TUBE (CRT) AND OTHER COMPONENTS THAT CONTAIN LEAD. DISPOSAL OF THESE MATERIALS MAY BE REGULATED IN YOUR COMMUNITY DUE TO ENVIRONMENTAL CONSIDERATIONS. FOR DISPOSAL OR RECYCLING INFORMATION PLEASE CONTACT YOUR LOCAL AUTHORITIES, OR THE ELECTRONICS INDUSTRIES ALLIANCE: <[HTTP://WWW.EIAE.ORG](http://www.eiae.org)>

Read these instructions completely before operating television.

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IMPORTANT INFORMATION

Important Information

FCC INFORMATION

This equipment complies with part 68 of the FCC rules and the requirements adopted by the Administrative Council for Terminal Attachments (ACTA). On the back cover of this equipment is a label that contains, among other information, a product identifier in the format US: AAAEQ## TXXXX. If requested, this number must be provided to the telephone company.

Radio Interference

This equipment has been tested and found to comply with the limit for a Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against radio and television 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 you can determine by turning the equipment off and on, try to correct the interference by one or more of the following measures.

- Reposition or relocate the receiving antenna for the radio or television that is "receiving" the interference.
- Change the position of the Receiver with respect to the radio or television equipment that is receiving interference.
- Move the Receiver away from equipment receiving interference.
- Plug the Receiver into a different wall outlet so the Receiver and equipment receiving the interference are on different branch circuits.

If these measures do not eliminate interference, please consult your dealer or an experienced radio/television technician for assistance.

FCC CAUTION:

Pursuant to 47 CFR, Part 15.21 of the FCC rules, any changes or modifications to this Receiver not expressly approved by Matsushita Electric Corporation of America could cause harmful interference and would void the user's authority to operate this device.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

Ringer Equivalence Number

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. The REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by the ## are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

Notes: This equipment may not be used on coin service provided by the telephone company. Connection to party line service is subject to state tariffs, and therefore, you may not be able to use your own telephone equipment if you are on a party line. Contact the State Public Utility Commission, Public Service Commission, or Corporate Commission For Information. Notice must be given to the telephone company upon permanent disconnection of your Receiver from your line.

Rights of the Telephone Company

Should this interactive television receiver cause harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But, where prior notice is not practicable and the circumstances warrant such action, the telephone company may temporarily discontinue service immediately. In case of such temporary discontinuance, the telephone company must: (1) promptly notify you of such temporary discontinuance (2) afford you the opportunity to correct the situation which gave rise to the temporary discontinuance and (3) inform you of your right to bring a complaint to the Commission pursuant to procedures set forth in Subpart E of Part 68, FCC Rules and Regulations if you believe it is necessary. If trouble is experienced with this interactive television receiver, for repair or warranty information, please refer to the information provided at the rear of this manual.

The telephone company may make changes in its communications facilities, equipment, operations or procedures where such action is required in the operation of its business and not inconsistent with the rules and regulations in Part 68. If these changes are expected to affect the use or performance of your telephone equipment, the telephone company must give you adequate notice, in writing, to allow you to maintain uninterrupted service.

Alarm Dialing Equipment Caution:

If your home has specially wired alarm equipment connected to the telephone line, ensure that the installation of this interactive television receiver does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

Congratulations

Your new Interactive TV Receiver features a solid state chassis that is designed to give you many years of enjoyment. It was thoroughly tested and tuned at the factory for best performance.

Introduction

The Interactive TV Powered by Telecruz Technology and the Earthlink service is intended to support the growing Interactive TV market. This TV has built-in features including: a) access to the Internet, b) enable consumers to quickly access daily "cached" information (news, sports, weather, customized user preferred information, etc.), c) e-mail capability, d) shopping convenience, e) ATVEF compliant content.

Note: *This interactive TV is not capable of downloading software from the internet. Some web pages on the internet may not be viewable if the contents requires a specified software to view them.*

Consumers will be required to subscribe to Earthlink, the number two Internet service provider, for the dial-up or broadband service for at least 12 months. The dial-up service is priced at \$21.95 per month, and the DSL (Broadband) is priced at \$49.95 per month. The option exists to use the same account for the PCs as well as this new TV based product.

Customer Record

The model and serial number of this product are located on the back of the television. You should note the model and serial number in the space provided and retain as a permanent record of your purchase. This will aid in identification in the event of theft or loss. Product registration for U.S. customers is available at www.prodreg.com/panasonic.

Model Number	
Serial Number	

Care and Cleaning

Screen (Turn TV Off)

- Use a mild soap solution or window cleaner with a soft clean cloth. **DO NOT USE ABRASIVE CLEANERS.**
- Avoid excessive moisture and wipe dry.

Note: *Do not spray any type of cleaning fluid directly on the screen.*

Cabinet, Wireless Keyboard and Remote Control

- For cabinets, keyboard and remote control, use a soft cloth dampened with water or a mild detergent solution. Avoid excessive moisture and wipe dry.
- Do not use benzene, thinner or other petroleum based products.

Specifications

Power Source	120V AC, 60Hz
CT-27D42 (2.2A) CT-27D42U (2.2A)	
Channel Capability - 181	VHF-12; UHF-56; Cable-113
Video Input Jacks	1Vp-p, 75 Ohm, Phono Jack Type
Audio Input Jacks	500mV RMS 47K Ohm
Audio Output Jacks	0-2.0V RMS 4.7K Ohm
Component Input (Y / P_B / P_R)	75 Ohms, Phono Jack Type
S-Video Input Jacks	S-Video (Y-C) Connector
Modem Jack	USOC RJ-11C, 4 Conductor
Ethernet I/O Base-T Jack	USOC RJ-45, 8 Conductor

Specifications are subject to change without notice or obligation.

INSTALLATION

Installation

Television Location

Follow these recommendations before deciding the location of your Interactive television.

- Avoid excessive sunlight or bright lights, including reflections.
- Keep away from excessive heat or moisture. Inadequate ventilation may cause internal component failure.
- Fluorescent lighting may reduce remote control transmitting range.
- Keep away from magnetic equipment, including motors, fans and external speakers.

CAUTION: Use this television receiver only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over. In order to avoid injury to children, never place your television receiver on a piece of furniture that is capable of being tilted by a child leaning on it, pulling on it, standing on it, or climbing on it.



Optional Cable Connections

Shielded audio and video cables should be used between components. For best results:

- Use 75-ohm coaxial shielded cables.
- Use appropriate input and output connectors that match your component connectors.
- Avoid long cables to minimize interference.

AC Power Supply Cord

CAUTION: TO PREVENT ELECTRIC SHOCK MATCH WIDE BLADE OF PLUG TO WIDE SLOT OF AC OUTLET AND FULLY INSERT. DO NOT USE A PLUG WITH A RECEPTACLE OR OTHER OUTLET UNLESS THE BLADE CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.



PROTECT POWER CORDS FROM BEING WALKED ON, ROLLED OVER, CRIMPED, BENT OR PINCHED, PARTICULARLY AT PLUGS, CONVENIENCE RECEPTACLES, AND THE POINT WHERE THEY EXIT FROM THE APPARATUS.

Cable / Antenna Connection

For proper reception, either a cable or antenna connection is required.

Cable Connection

Connect the cable supplied by your local cable company.

Note: A cable converter box may be required for proper reception. Check with your local cable company for compatibility requirements.

Incoming Cable from
Cable Company



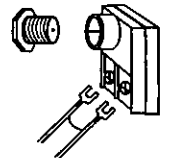
75 Ohm VHF/UHF
on back of TV

Antenna Connection

- For proper reception of VHF/UHF channels, an external antenna is required. For best reception, an outdoor antenna is recommended.
- Connect home antenna to ANT on the back of television.

Note: Cable Mode is preset at the factory. Antenna users must change to TV mode in the Set Up Menu under Prog Chan.

Incoming Cable from
Home Antenna



Battery Installation

Remote Control and Wireless Keyboard

Use two AA batteries:

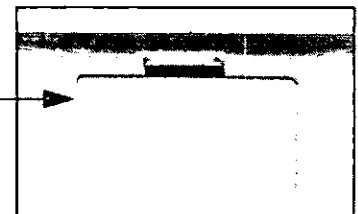
- Battery cover is located on back of keyboard and remote.
- Remove battery cover.
- Install batteries matching (+) and (-) polarity signs.
- Replace the battery cover.

Note: Incorrect installation can cause battery leakage and corrosion that will damage the Remote Control or Wireless Keyboard.

Precautions

- Replace batteries in pairs.
- Do not mix battery types (zinc carbon with alkaline).
- Do not recharge, heat, short-circuit, disassemble, or burn batteries.

Wireless Keyboard
Battery Cover



Feature Chart

MODEL CT-27D42	
Features	
2 TUNER PIP	<input type="checkbox"/>
75 OHM INPUT	<input type="checkbox"/>
VIDEO PICTURE MEMORY	<input type="checkbox"/>
CHANNEL INFO BANNER	<input type="checkbox"/>
VIDEO INPUT SKIP	<input type="checkbox"/>
INTERNET/EMAIL	<input type="checkbox"/>
V-CHIP CAPABILITY	<input type="checkbox"/>
CLOSED CAPTIONING	<input type="checkbox"/>
VIDEO NORM	<input type="checkbox"/>
AUDIO NORM	<input type="checkbox"/>
STEREO	<input type="checkbox"/>
BASS/TREBLE/BALANCE	<input type="checkbox"/>
AI SOUND	<input type="checkbox"/>
A/V IN (REAR/FRONT)	3 (2/1)
S-VIDEO INPUT (REAR/FRONT)	(1/0)
COMPONENT VIDEO INPUT	<input type="checkbox"/>
PHONE JACK (RJ11)	<input type="checkbox"/>
ETHERNET JACK (RJ45)	<input type="checkbox"/>
HEADPHONE JACK	<input type="checkbox"/>
ACCESSORY	
WIRELESS KEYBOARD	<input type="checkbox"/>
PHONE CABLE	<input type="checkbox"/>
PHONEX TRANSMITTER	<input type="checkbox"/>
PHONEX RECEIVER	<input type="checkbox"/>

SPECIAL FEATURES
AUDIO
A/V JACKS

IMPORTANT INFORMATION REGARDING THE USE OF VIDEO GAMES, COMPUTERS, OR OTHER FIXED IMAGE DISPLAYS.

WARNING: The marking or retained image on the picture tube resulting from viewing fixed image is not an operating defect and as such is not covered by Warranty.

This television is designed to display constantly moving images on the screen. Continuous viewing of stationary images such as letterbox pictures on standard screen TVs (with top/bottom bars), non-expanded standard (4:3) pictures on wide screen TVs (with side bars shown on each side of an image), stock market report bars (ticker running at the bottom of the screen), video game patterns, fixed scoreboards, bright station logos, on-line (internet) or repetitive computer style patterns should be limited.

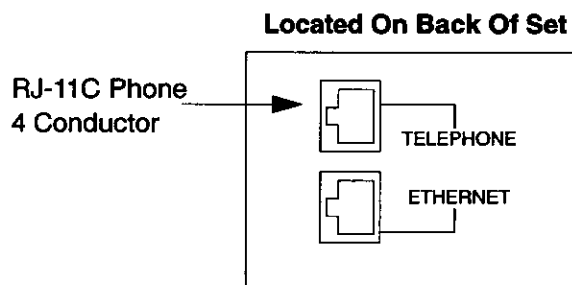
The extended use of fixed image program material can cause a permanent picture tube damage, shown as a "shadow image" viewable on normal programs. This type of irreversible picture tube deterioration can be limited by performing the following steps:

- Do not display the fixed image for extended periods of time.

Getting Started

Connecting to Analog Phone Line

Plug in an analog phone line into the RJ-11C phone 4 conductor located in the rear panel of the receiver. This is the upper rectangular jack located in the jack pack area on the back panel of the receiver.

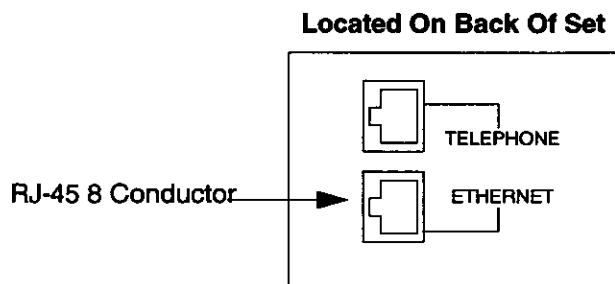


Connecting Wireless Jack for Modems

If the phone jack is located to far from the receiver to make connections, use the pair of wireless modules that is packed in the carton with the receiver. To install, refer to the manual part # TQB2AA0410 located in the carton.

Connecting to an Ethernet Broadband Source

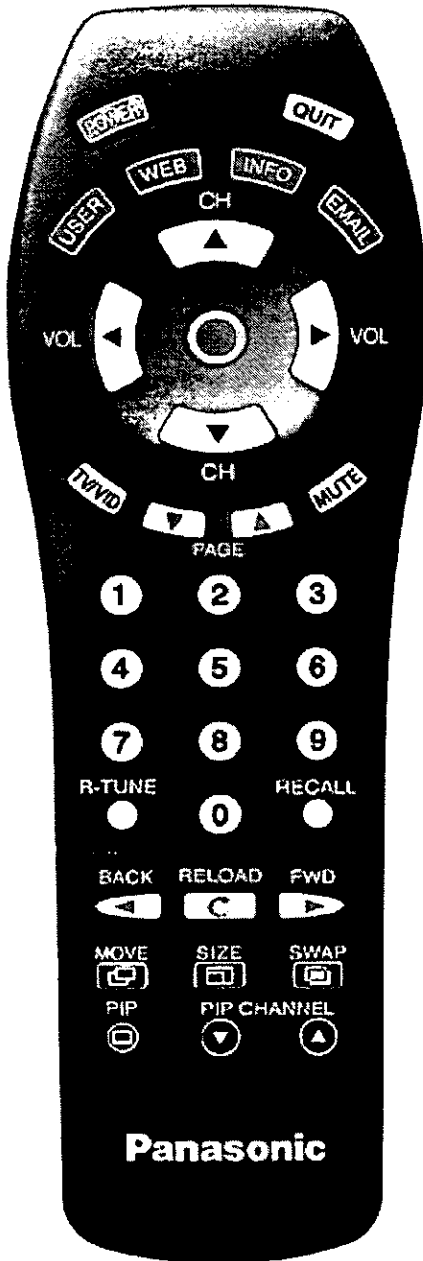
Plug in cable connected to an Ethernet source to the RJ-45 8 conductor on the receiver on the back panel. This is the rectangular connector just below the RJ-11 phone jack. Make sure the cable for the phone connection is not plugged into the RJ-45 connector on the back panel for the Ethernet connection.



Remote Control Operation

The remote control is designed to allow you to control not only the normal TV functions but also navigate links provided from the interactive content displays.

Remote Keys Operation

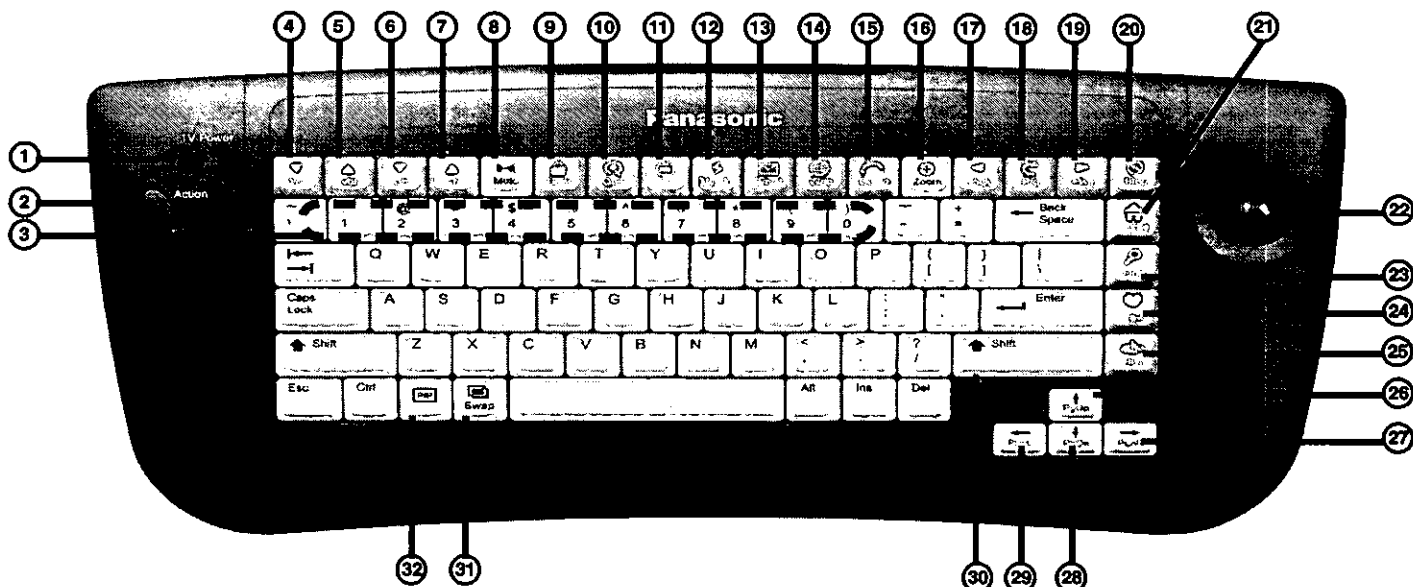


Keys	Non-Menu Operations	Menu Operations
POWER	On/off	On/off
QUIT	Press to exit onscreen displays.	Press to exit menus
MUTE	TV Mute	-
USER	-	Identifies the User that is signed on to the Earthlink Personal Start Page.
TV/VIDEO	Press to select desire video input.	-
INFO	-	Displays Info Menu allowing for access to the cached information.
EMAIL	-	Displays the Email menu, allowing for read, write of email on-line or off-line.
ACTION	Upon direct channel entry, tunes to channel.	Accepts entry (Enter)
CH UP	Tunes to next higher number channel	Navigation Up
CH DOWN	Tunes to next lower number channel	Navigation Down
VOL LEFT	Decreases the volume	Navigation Left
VOL RIGHT	Increase the volume	Navigation Right
PAGE UP/DOWN	Press to page up or down while on-line.	-
WEB	-	Displays Web Menu, allowing for quit access to the Internet.
0-9	Channel tuning	Alphanumeric input
R-TUNE	Tune to previously viewed TV channel.	-
RECALL	Displays current TV settings (ex: SAP, Channel Number, ratings).	-
BACK	While surfing the WEB, allows for "paging" back to a previously viewed web site.	-
RELOAD	While Surfing the WEB, allows for "refresh" of a loading web page.	-
FWD	While surfing the WEB, allows the consumer to forward to a previously viewed web page.	-
MOVE	While in PIP mode, allows for the quadrant movement of 1/16 or 1/4 PIP window.	-
SIZE	While in PIP mode, allows for the resizing of the PIP FROM 1/16 to 1/9 window.	-
SWAP	While in PIP mode, allows to SWAP between TV as the main window, and Internet as PIP or vice versa.	-
PIP	Activates the PIP mode.	-
PIP CHANNEL	If TV video is in the PIP window, allows for channel changing of the programs.	-

WIRELESS KEYBOARD OPERATION

Wireless Keyboard Operation

The wireless keyboard also provides the ability to not only control most TV functions but also to enter text into interactive content pages and to navigate the on-screen with the trackball mounted on the wireless keyboard.



Wireless Keyboard Operation

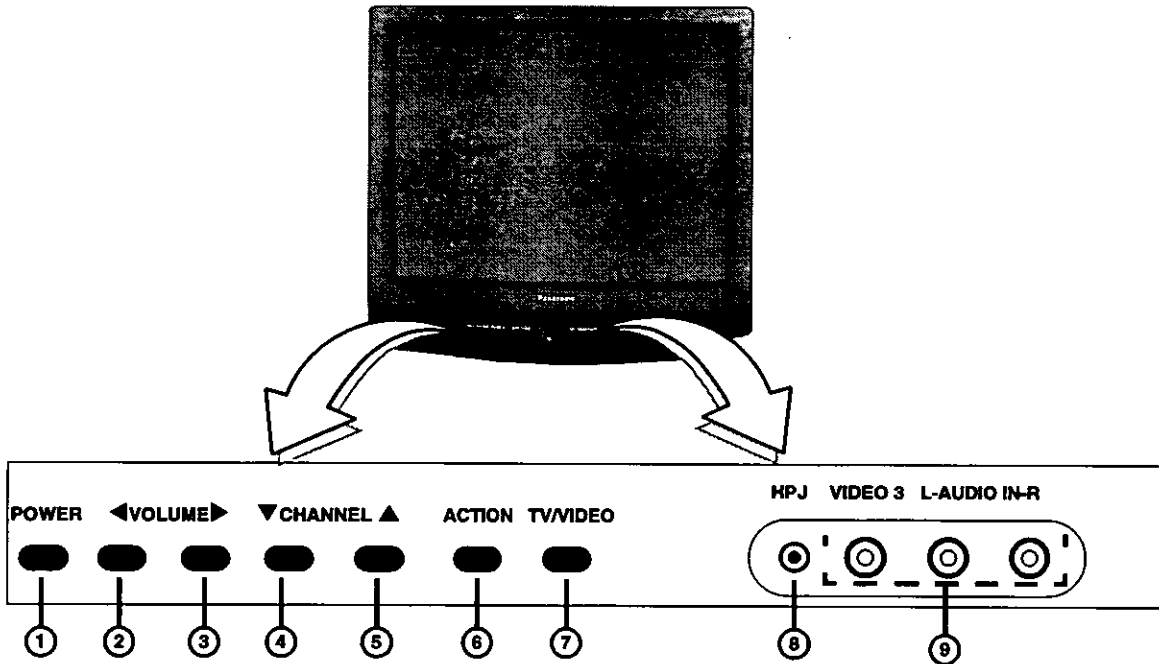
Keys	Non-Menu Operation	Menu Operation
① TV POWER	On/off	On/off
② ACTION	-	Activate Menu While menus are displayed
③ 0 ~ 9	select channels <i>Note: Press and hold ALT key, then press number keys.</i>	Alphanumeric Input
④ VOL DOWN	Increases the volume	-
⑤ VOL UP	Decreases the volume	-
⑥ CH DOWN	Tunes to next lower number channel.	-
⑦ CH UP	Tunes to next higher number channel.	-
⑧ MUTE	Mutes Audio from the TV	-
⑨ USER	-	Identifies the User that is signed on to the System/Personal Start Page.
⑩ QUIT	-	Exit from the Web mode or onscreen menus.
⑪ TV	-	TV Menu selection allowing for access to the sub menus for TV control.

continued on next page

continued from previous page
Wireless Keyboard Operation

Keys	Non-Menu Operation	Menu Operation
⑫ MY INFO	-	Displays Info Menu allowing for access to the cached information.
⑬ E - MAIL	-	Displays the Email menu, allowing for read, write of email on-line or off-line.
⑭ WEB	-	Displays Web Menu, allowing for quick access to the Internet and Earthlink Personal Start Page.
⑮ GO TO	Enables the Go to screen allowing for entry of a web address. The go to screen should always have the http://www prefix.	-
⑯ ZOOM	While web surfing, enables the user to Zoom In and out of a web page area of interest.	-
⑰ BACK	While surfing the WEB, allows for "paging" back to a previously viewed web site.	-
⑱ RLD	While Surfing the WEB, allows for "refresh" of a loading web page.	-
⑲ FWD	While surfing the WEB, allows the consumer to forward to a previously viewed web page.	-
⑳ STOP	While surfing the Internet, can STOP the loading of a web page.	-
㉑ HOME	While connected to the Internet, the Earthlink Personal Start Page is accessed.	-
㉒ TRACKBALL	On-Screen Navigation	On-Screen Navigation
㉓ FIND	Quick pop-up menu enabling the user to search for specified text while connected to the Internet.	-
㉔ FAV	Displays list of Internet Favorite web sites.	-
㉕ HIST	Activates the listings of previously viewed pages up to 5 days.	-
㉖ PG UP	Pages up an Internet page.	-
㉗ PANR	Navigates Right	-
㉘ PG DN	Pages Down an Internet page.	-
㉙ PANL	Navigates left	-
㉚ ENTER	-	-
㉛ SWAP	While in PIP mode, allows to SWAP between TV as the main window, and Internet as PIP or vice versa.	Displays On-Line symbol when connected to the Internet and full screen video is displayed.
㉜ PIP	Activates the PIP mode.	-

TV Front Control Panel Operation



Front Control Panel Operation

Keys	Non-Menu Operation	Menu Operation
① POWER	On/off	On/off
② VOLUME DOWN	Increases the volume	Adjust or Activate features
③ VOLUME UP	Decreases the volume	Adjust or Activate features
④ CHANNEL DOWN	Tunes to next lower number channel	Highlight menu features
⑤ CHANNEL UP	Tunes to next higher number channel	Highlight menu features
⑥ ACTION	-	Activates the Menu system as well as confirms a selection (Enter).
⑦ TV/VIDEO	To select the desired input (RF, Video 1, 2, 3, S-Video 2 or Component)	-
⑧ HPJ	Use for connection of external headphones	-
⑨ VIDEO INPUT 3	Use for connection of an external device (ex: game machine, VCR, Camcorder).	-

Optional Equipment Connections

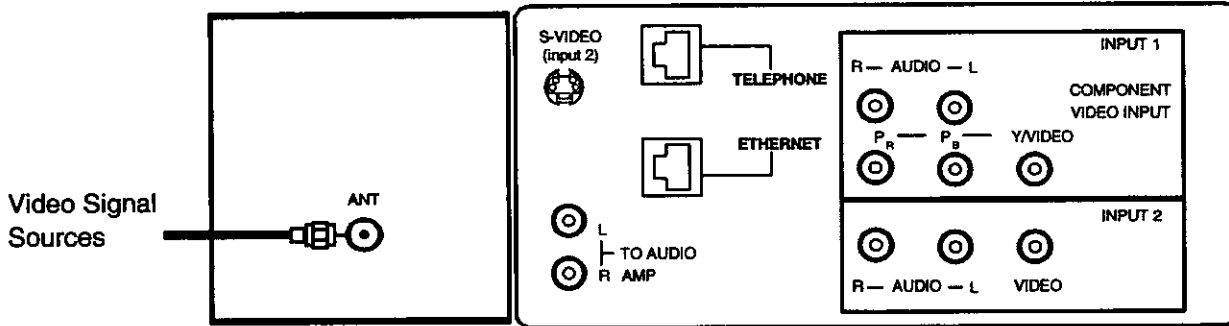
Connecting Video Signals Sources

RF/Channel 3/4 (from antenna, cable or satellite box, or VCR)

Plug in cable from your antenna, cable or satellite box or VCR Channel 3 or 4 output to the ANT input connector. This connector has threads to allow a screw on cable connector to be used.

CABLES NOT SUPPLIED

TERMINALS ON BACK OF TV



VCR Connection

VCRs, video disc players, video game equipment, and DSS equipment can also be connected to the video inputs jack. See the optional equipment manual for more information.

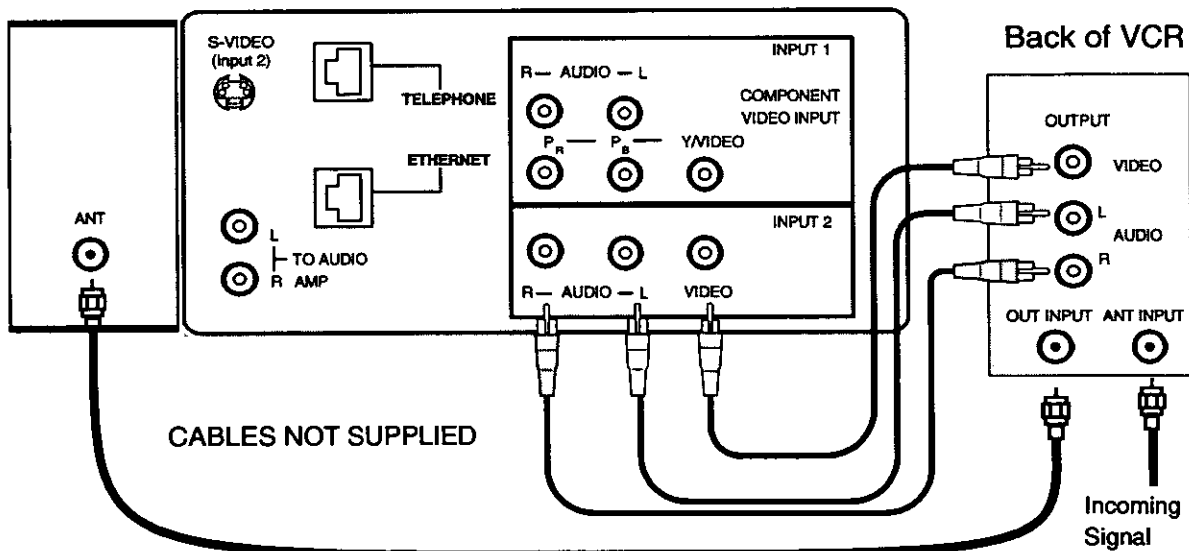
Procedure

1. Connect equipment as shown to rear Audio/Video input jacks.
2. Select the Video mode by pressing **TV/VIDEO** button.

Notes:

- VIDEO 1 input is a dual-purpose input. It is primarily intended for connection with 480i devices such as a DVD player using the Y P_B P_R component video jacks and Audio L & R jacks. However, it can also be connected to conventional composite video sources such as a VCR, using only the Y/Video jack and Audio L & R jacks. The on-screen label will display Component or Video 1 depending on which source is connected.
- S-Video (input 2) provides a higher quality video input signal to the TV. The audio from the source can be connected to INPUT 2 L and R audio.

TERMINALS ON BACK OF TV



OPTIONAL EQUIPMENT CONNECTIONS

Amplifier Connection (To Audio Amp)

Connect to an external audio amplifier input for listening to a stereo system.

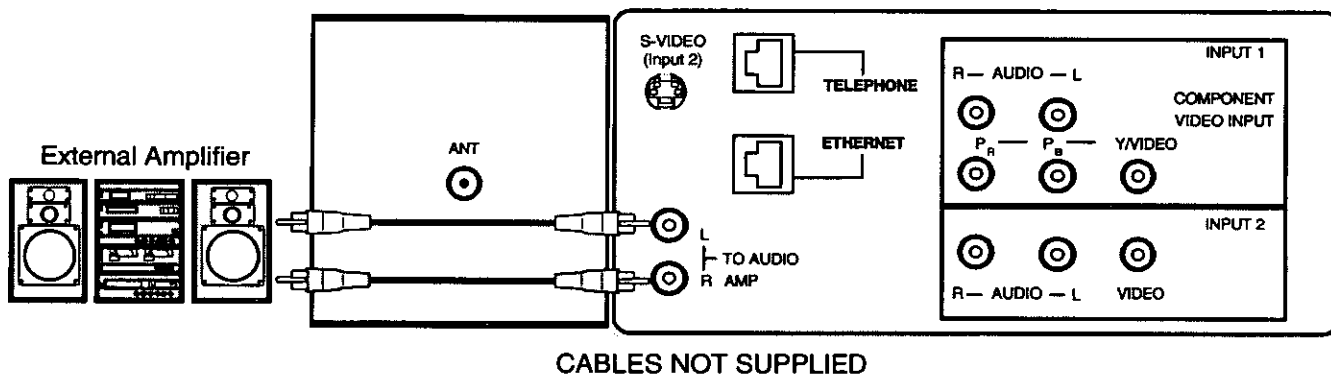
Note: TO AUDIO AMP terminals cannot be connected directly to external speakers.

Audio Adjustments

1. Select TV SPEAKERS ON from AUDIO menu.
2. Set amplifier volume to minimum.
3. Adjust TV volume to desired level.
4. Adjust amplifier volume to match the TV.
5. Select TV SPEAKERS OFF&VAO from AUDIO menu.
6. Volume, mute, bass, treble and balance are now controlled from the TV.

Note: In OFF&FAO the volume is controlled by the external amplifier.

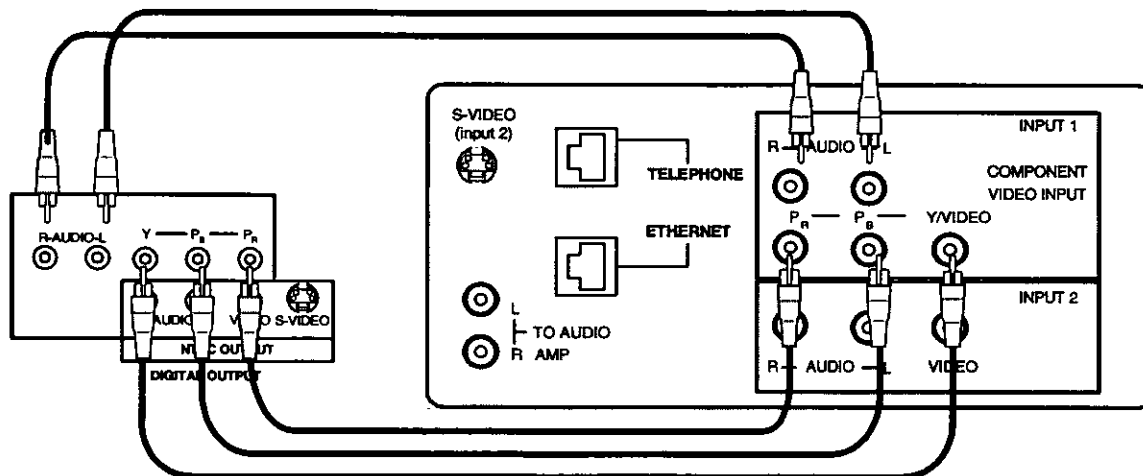
TERMINALS ON BACK OF TV



Digital TV - Set-Top Box (DTV-STB) or DVD Player Connection

Use this diagram to connect the Panasonic DTV-STB (Digital TV-Set-Top Box) to the back of your TV.

TERMINALS ON BACK OF DTV-STB OR DVD PLAYER



CABLES NOT SUPPLIED

COMPONENT VIDEO INPUT TERMINALS ON BACK OF TV

Notes:

- There are three video inputs, Y, P_B, and P_R. Separate component color inputs provide luminance and color separation. Use the L (left) and R (right) audio from Inputs 1.
- Select DTV-STB to 480i output mode. TV set can receive 480i signal only.

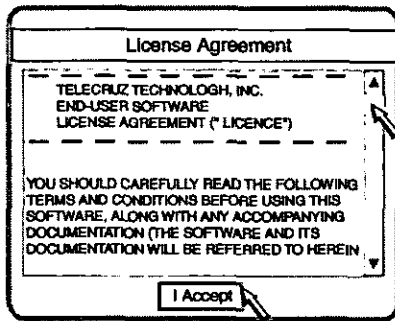
Turning On The TV for the First Time

AC Plug In

After making all the appropriate connections described on previous pages, plug in the AC line cord. There is an initialization period of **10-15 seconds** after the AC line cord is plugged in before the TV will respond to a POWER ON command from the front panel, remote control, or wireless keyboard POWER keys.

License Agreement

Please carefully read the terms and conditions of this software agreement before continuing.



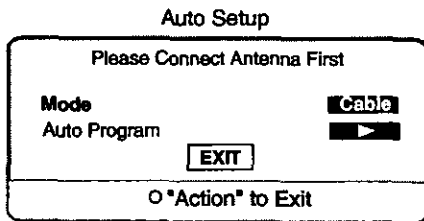
- Press and hold Action button on Keyboard, then use trackball arrow to view more license agreement text.
- After reading Licence Agreement, click on **I Accept** at the bottom of the screen.

Note: This Licence Agreement is located under the Web Icon in the About menu.

Auto Set Up

For your convenience, Auto Set up menu will be displayed on screen when the set is turned on for the first time. If needed, follow the menus and procedures for setting up the features.

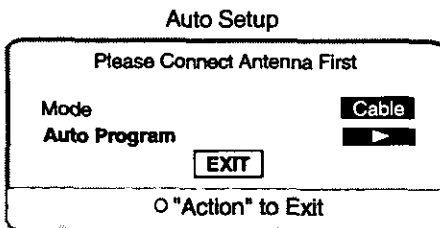
- MODE** - To select TV (antenna) or CABLE mode depending on the signal source.



- Press **VOL ▶** to select TV or CABLE.

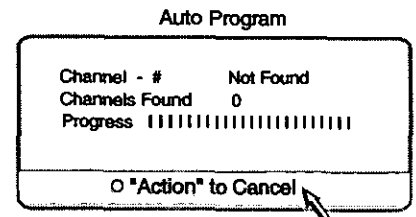
Note: To exit highlight **EXIT** with the trackball, then press the **ACTION** on the keyboard or press the **ACTION** on the remote.

- AUTO PROGRAM** - To automatically program all channels with a signal.



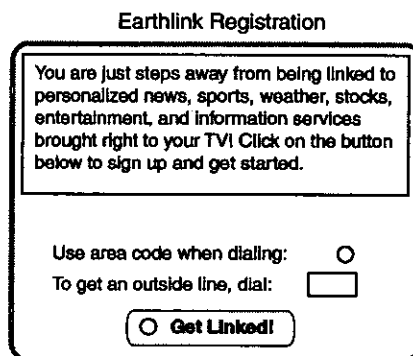
- Press **VOL ▶** to start Auto Programming.

Note: To cancel select ("Action" to cancel) with trackball, then press Action on the keyboard or press Action on the remote.



Earthlink Registration

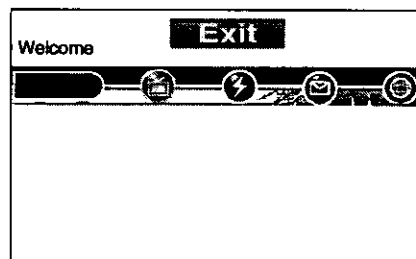
After turning on TV and setting up Auto set up, an Earthlink Registration page will appear on-screen over the video selected. The Earthlink Registration Page will continue to appear each time the TV is turned on until a registration process is completed. If you decide to register later, just exit the screen by pressing QUIT. If you decide to register during TV viewing, press Wed button on keyboard or remote and select Set-Up menu. The registration is done through the modem connection, even for an existing Earthlink DSL customer. This allows Earthlink to identify the Panasonic TV when Internet access is requested. Earthlink can then download content pages that have been created specifically for a TV display, using personalization information from the Earthlink databases selected for each user, based on the user's profile of favorites which will be filled out at the time of registration.



Displaying Main Menu Icons

The Main Menu Icons provides access to the features of the TV. The Main Menu may be displayed by the following methods:

- Pressing the **ACTION, INFO, MAIL** or **WEB** button on the remote control.
- Pressing the **TV, INFO, MAIL** or **WEB** button on the wireless keyboard.
- Pressing the **ACTION** button on the TV.



Main Menu Navigation

With the Wireless Keyboard

Using the trackball on the wireless keyboard, and moving the cursor over the icons with the trackball, causes drop downs to appear below each of the Icons. These drop downs contain options related to the selected Icons. As the cursor moves over the drop downs, each function is highlighted as the cursor moves over it. Pressing the ACTION button while each feature is highlighted, will then cause that function to be initiated.

With the Remote Control Hand Unit

Using the Volume UP and Volume DN keys will move the highlight from one of the icons to the next adjacent one, triggering the drop down items associated with that icon.

With the TV Front Panel Keys

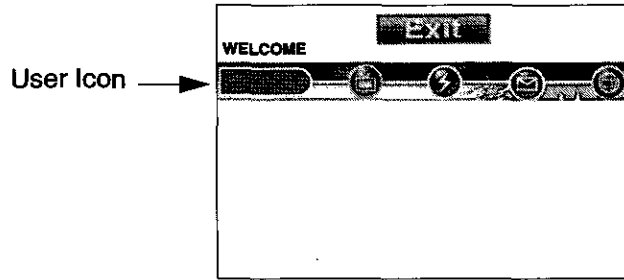
Using the Volume UP and Volume DN buttons will move the highlight from one of the icons to the next adjacent one, triggering the drop down items associated with that icon.

To Exit Main Menu

Highlight EXIT with the trackball on the keyboard or the remote navigation buttons, then press the Action button.

Setup For Administrator And Different Users

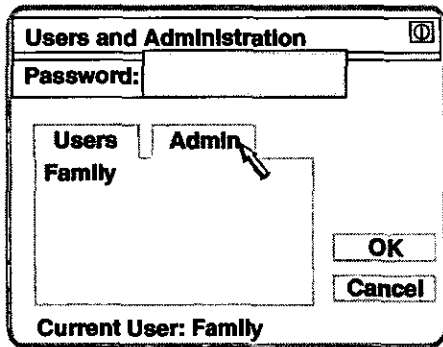
With the Main Menu display active, highlight the USER icon under the word "Welcome" at the left of the Main Menu. Initially this icon will have the word "Family" displayed. Then press the Action to display the Users and Administration menu.



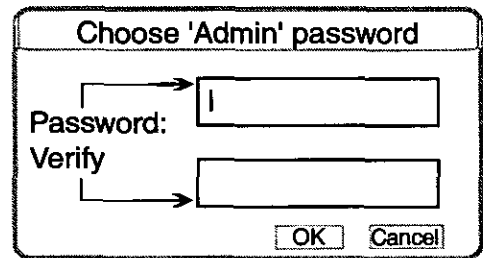
Users And Administration Screen

First an Administrator function needs to be set up by having the user assigned to be the administrator.

1. From the Users and Administration screen, click on Admin. This will display a sub menu for entering the Administrator password.



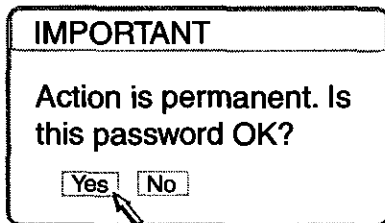
Click on Admin to display sub menu.



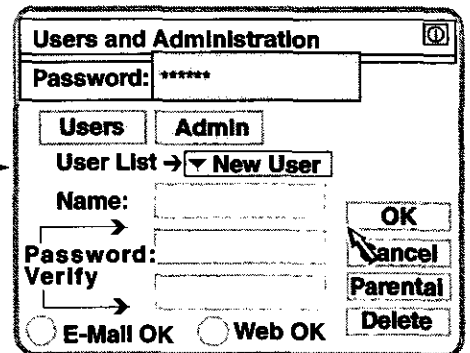
2. Use the keyboard to enter password, then verify password by entering the password word again (*Use a password that is easy to remember and record it in a safe place*).

Note: After turning set off the user will default to family. The family setting will be the same as the user with the most prohibited setting.

3. Click on "OK" when password is completed, another sub menu will be displayed to remind you that this password is permanent.
4. Click on "Yes" to display the Administrator Set up screen.



Click on Yes to display the New Users set up screen.



SETUP FOR ADMINISTRATOR AND DIFFERENT USERS

Adding New Users

A new user is setup by entering the name of the new user in the Name Box, entering a password in the Password and Password Verify boxes below the name. Clicking on the WEB OK and EMAIL OK buttons in this display will enable the new user to access the web and their web email account using the TV. Clicking on the TV Rating in this display will bring up an additional screen that allows the Administrator to set the acceptable V-Chip TV ratings for this user to view various programs that support the V-Chip rating system.

Note: Refer to Parental Control Rating Charts section on page (17) for description of rating.

Users and Administration

Password: []

Users Admin

User List → New User

Name: children 1

Password: []

Verify: []

E-Mail OK Web OK

OK Cancel Parental Delete

Click on Parental to display the Parental Control screen.

Parental Controls

User: Children 1 Done

TV Ratings Other

All FV V S D

None [] Green → Permit

TV-Y [] Off → Prohibit

TV-Y7 [] []

TV-G [] [] [] []

TV-PG [] [] [] []

TV-14 [] [] [] []

TV-MA [] [] [] []

1. After setting TV Rating click on "Other".

Parental Controls

User: Children 1 Done

TV Ratings Other

All FV V S D

None [] Green → Permit

TV-Y [] Off → Prohibit

TV-Y7 [] []

TV-G [] [] [] []

TV-PG [] [] [] []

TV-14 [] [] [] []

TV-MA [] [] [] []

Click on "Other" to display the Other menu.

Parental Controls

User: Children 1 Done

TV Ratings Other

MPAA Eng. Canada Fr.

None [] None [] None [] Fr. []

G [] C [] [] [] Game []

PG [] CB+ [] [] [] Unrated []

PG-13 [] G [] [] []

R [] PG [] [] []

NC-17 [] 14+ [] Green → Permit

X [] 18+ [] Off → Prohibit

2. After setting Other click on "Done".
3. The Users and Administration will be displayed, then click on "OK".
4. The "Confirm add user" menu will be displayed, then click on "Yes".

Note: The Administrator must also have a user name and password.

Users and Administration

Password: []

Users Admin

User List → New User

Name: children 1

Password: []

Verify: []

E-Mail OK Web OK

OK Cancel Parental Delete

Click on "OK" to display the Confirm Add User menu.

Confirm Add User

Are you sure you want to add 'Children 1'?

Yes No Cancel

5. To set up additional users name and separate passwords, repeat the process for "Adding New Users".

Note: Each time a additional user is added, click on "Admin".

Parental Control Rating Description Charts

TV RATINGS CHART

TV-Y	All children. The themes and elements in this program are specifically designed for a very young audience, including children from ages 2-6.
TV-Y7	Directed to older children. Themes and elements in this program may include mild physical or comedic violence, or may frighten children under the age of 7.
TV-G	General audience. It contains little or no violence, no strong language, and little or no sexual dialogue or situations.
TV-PG	Parental guidance suggested. The program may contain infrequent coarse language, limited violence, some suggestive sexual dialogue and situations.
TV-14	Parents strongly cautioned. This program may contain sophisticated themes, sexual content, strong language and more intense violence.
TV-MA	Mature audiences only. This program may contain mature themes, profane language, graphic violence, and explicit sexual content.
FV	FANTASY/CARTOON VIOLENCE
V	VIOLENCE
S	SEX
L	OFFENSIVE LANGUAGE
D	DIALOGUE WITH SEXUAL CONTENT

OTHER RATINGS MPAA CHART

G	GENERAL AUDIENCES. All ages admitted.
PG	PARENTAL GUIDANCE SUGGESTED. Some material may not be suitable for children.
PG-13	PARENTS STRONGLY CAUTIONED. Some material may be inappropriate for children under 13.
R	RESTRICTED. Under 17 requires accompanying parent or adult guardian.
NC-17	NO ONE 17 AND UNDER ADMITTED.
X	ADULTS ONLY.

CANADA ENGLISH RATINGS CHART

C	Programming intended for children under age 8. No offensive language, nudity or sexual content.
C8+	Programming generally considered acceptable for children 8 years and over. No profanity, nudity or sexual content.
G	General programming, suitable for all audiences.
PG	Parental Guidance suggested. Some material may not be suitable for children.
14+	Programming contains themes or content which may not be suitable for viewers under the age of 14. Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens.
18	ADULTS ONLY

PARENTAL CONTROL RATING DESCRIPTION CHARTS

Parental Control Rating Description Charts (contd.)

CANADA FRENCH RATINGS CHART

G	General - Programming intended for audience of all ages. Contains no violence, or the violence content is minimal or is depicted appropriately.
8 ans +	8+ General - Not recommended for young children. Programming intended for a broad audience but contains light or occasional violence. Adult supervision recommended.
16 ans +	Programming may not be suitable for children under the age of 16 - Contains frequent scenes of violence or intense violence.
18 ans +	Programming restricted to adults. Contains constant violence or scenes of extreme violence.

GAME AND UNRATED CHART

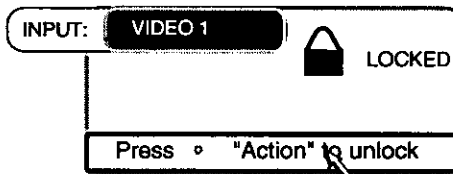
Game	Locks out channel 3, 4 and all Video Input modes.
Unrated	CONTAINS NO RATING (NOT RATED) AND NA (NOT APPLICABLE) PROGRAMS. Movie has not been rated or rating does not apply.

Unlock Parental Control Menu

1. Select "Press Action to unlock" with trackball, then press Action button.

Note: Only the administrator password can unlock this menu.

2. Click on Admin, then enter administrator password.
3. The administrator can now change setting to unlock.



Main Menu Icon Features

TV Icon



- Programs** - The Programs submenu will enable the user to connect to the Internet and View a TV Guide via the Internet.
- Listings** - The Listings submenu will enable the user to connect to the Internet and to view listing from the cable company in the area.
- Setting** - The Settings drop down will enable the TV settings series of menus beginning with the Timer menu.
- Infoactive** - This menu will enable the user to be notified about on-line content.

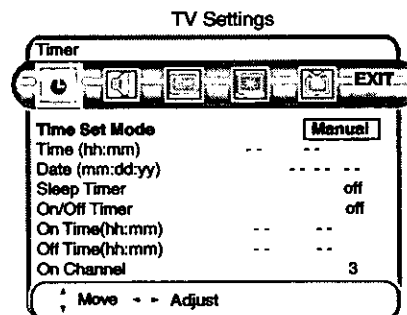
Settings

Timer

When the Timer Icon is highlight, pressing the Channel Down key will move the highlight to "Time Set Mode." Pressing the Channel down key again will move the highlight down to the next item on the menu, "Time (hh,mm)" Subsequent presses of the Channel Down key will continue to move the highlight to the next successive items on the menu (Date, Sleep Timer, etc.). Pressing the Channel Up key will move the highlight up to the menu item directly above the current highlighted function.

- Time set Mode** - Press VOL buttons to select MANUAL or AUTO.
- Sleep Timer** - Select to turn television off in 30, 60 or 90 minutes. Select NO to turn off timer.
- On/off Timer** -To turn the television on and off at selected times, on selected channels. TIME of day must be entered to operate the Timer Program feature.

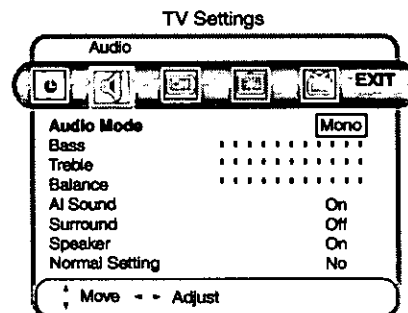
Note: Highlight Exit, then press Action button to exit menu.



Audio

- Audio Mode** - Select STEREO, SAP (Second Audio Program) or MONO. (Use MONO when stereo signal is weak.)
- Bass** - Increase or decrease the low frequency response.
- Treble** - Increase or decrease the high frequency response.
- Balance** - Emphasize the left/right speaker volume.
- Surround** - Enhances audio response when listening to stereo.
- AI Sound** - Equalize overall volume levels across all channels. (AI sound is not available in VIDEO mode.)
- Speaker** - Select to control audio from the TV speakers:
 - ON - TV speakers operate normally.
 - OFF & Variable Audio Out - TV speakers off - audio adjustable by television.
 - OFF & Fixed Audio Out - TV speakers off - audio adjustable by the external amplifier only.
- Normal Settings** - Reset BASS, TREBLE and BALANCE adjustments to factory default settings.

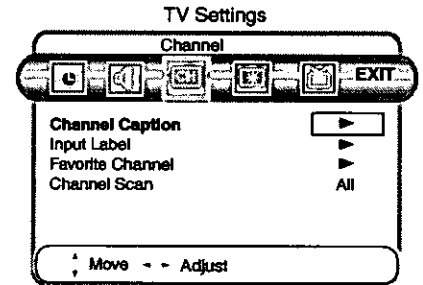
Note: Highlight Exit, then press Action button to exit menu.





Channel

- ❑ **Channel Caption** - Provide labels for stations using up to four characters for each station (see below for procedures).
- ❑ **Input Label** - Lets you label the video input connections for onscreen display (see next page for procedures).
- ❑ **Favorite Channel** - After entering favorite channels and selecting Channel Scan FAV, only favorite channels will be scan when pressing channel Up/Down buttons (see page 22 for procedures).
- ❑ **Channel Scan** - To scan ALL channels or Favorite channels when using CH Up/Down buttons.

Note: Highlight Exit, then press Action button to exit menu.

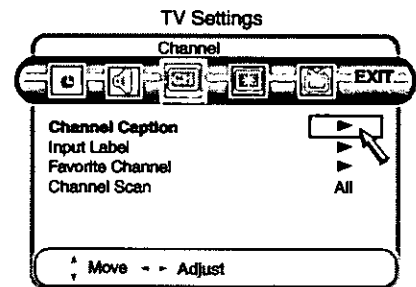


Channel Caption Procedure

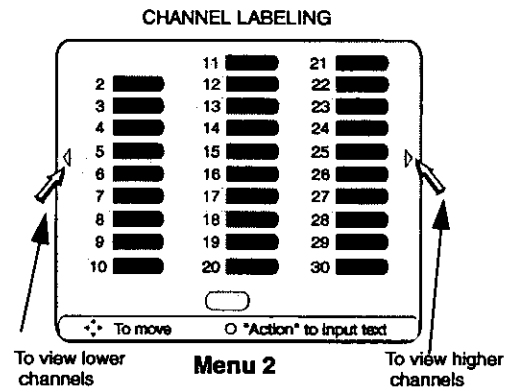
1. Press TV button on Keyboard.
2. Highlight SETTING on the drop down menu.
3. Press ACTION button to display TV Setting menu.
4. Highlight the Channel  icon.
5. Highlight Channel Caption  (see menu 1), then press the ACTION button to display the Channel Labeling menu (see menu 2).
6. Select desire channel number to apply Channel Labeling. Use trackball or navigation buttons to select, then press ACTION button to display Channel Labeling sub-menu (see menu 3).
7. Highlight first dash, then press CH Up/Down or use letter keys on keyboard to enter character. Repeat until all characters are enter up to four.

Note: To delete a channel Labeling, highlight Clear, then press ACTION button. To return to a previous setting, highlight Cancel, then press the ACTION button.

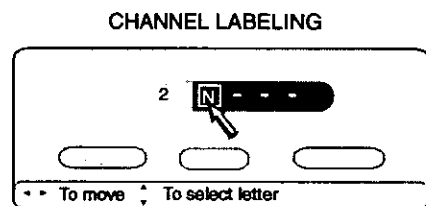
8. To continue adding Channel Labeling, highlight EXIT, then press ACTION button and repeat steps 6 through 8.



Menu 1





Menu 2



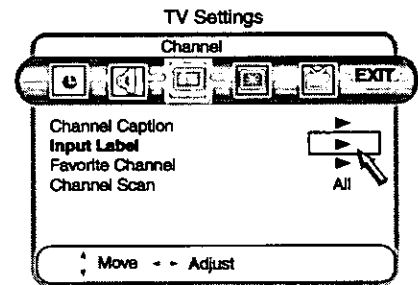
Menu 3

Input Label Procedure

1. Press TV button on Keyboard.
2. Highlight SETTING on the drop down menu.
3. Press ACTION button to display TV Setting menu.
4. Highlight the Channel  icon.
5. Highlight Input Label  (see menu 1), then press the ACTION button to display the Input Labeling menu (see menu 2).
6. Select desire Video Input 1, 2 or 3. Use trackball or navigation buttons to select, then press ACTION button to display Input Labeling sub-menu (see menu 3).
7. Highlight first dash, then press CH Up/Down or use letter keys on keyboard to enter character. Repeat until all characters are enter up to eight.

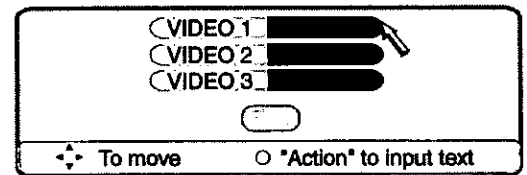
Note: To delete a Input Labeling, highlight Clear, then press ACTION button. To return to a previous setting, highlight Cancel, then press the ACTION button.

8. To continue adding Input Labeling, highlight EXIT, then press ACTION button and repeat steps 6 through 9.
9. To skip desire video mode when pressing TV/VIDEO button, highlight first dash, then press CH Down button to display SKIP or use the keyboard to type the word SKIP. (see menus 3 and 4).



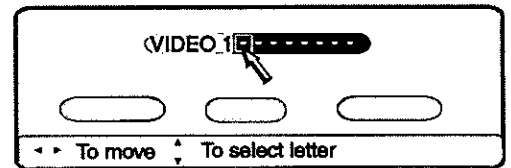
Menu 1

INPUT LABELING



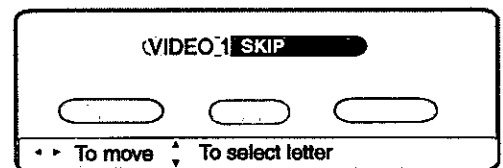
Menu 2

INPUT LABELING



Menu 3

INPUT LABELING





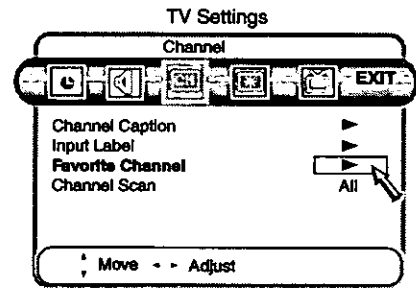
Menu 4

Note: Press CH Down button while first dash is highlighted to display SKIP.

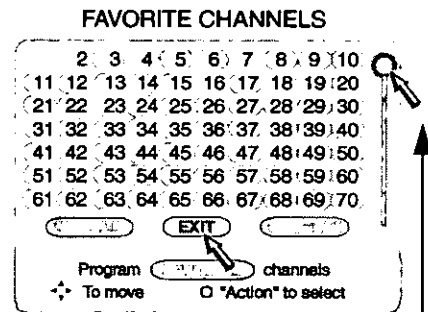
MAIN MENU ICON FEATURES

Favorite Channel Procedure

1. Press TV button on Keyboard.
 2. Highlight SETTING on the drop down menu.
 3. Press ACTION button to display TV Setting menu.
 4. Highlight the Channel  icon.
 5. Highlight Favorite Channel  (see menu 1), then press the ACTION button to display the Favorite Channels menu (see menu 2).
 6. Highlight desire channel number to add to favorite channel list (see menu 2), then press the Action button (*Channel number background will change to purple*).
- Note:** To view more channels highlight the ball on the right side of the menu, then use CH Up/Down or select with the trackball and press and hold Action button while rotating trackball Up or Down.
7. Repeat step 6 to continue adding favorite channels.
 8. To delete all Favorite Channels, highlight Clear All, then press the ACTION button. To select all channels, highlight "Select All", then press the ACTION button. To delete an unwanted channel, highlight the channel number, then press the Action button.
 9. Highlight EXIT, then press Action button to exit (see menu 2).



Menu 1



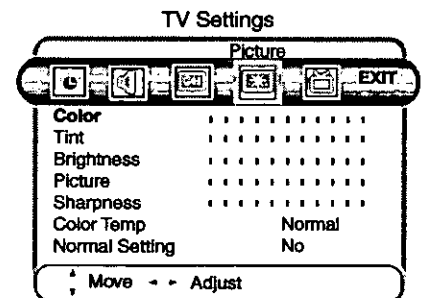
Menu 2 Slide down or up to view more channels while in cable mode.

Picture

- Color** - Adjusts desired color intensity.
- Tint** - Adjusts natural flesh tones.
- Brightness** - Adjusts dark areas of picture.
- Picture** - Adjusts white areas of picture.
- Sharpness** - Adjusts clarity of outline detail.
- Color Temp** - To increase and decrease WARM (red) and COOL (blue) colors to suit personal preferences or select NORMAL.
- Normal Setting** - Reset picture adjustments (Color, Tint, Brightness, Picture, Color Temp and Sharpness) to factory default settings or select No.

Notes:

- Highlight Exit, then press Action button to exit menus.
- Video adjustments can be individually set for TV RF and each video input mode.



Set Up

- ❑ **Mode** - To select TV (antenna) or CABLE mode depending on the signal source.
- ❑ **Auto Program** - To automatically program all channels with a signal.
- ❑ **Manual Program** - To manually add or delete channels.
- ❑ **CC on Mute** - Activates the Closed Caption feature when the MUTE button on the remote control is pressed.

Recommended setting for CC on Mute:

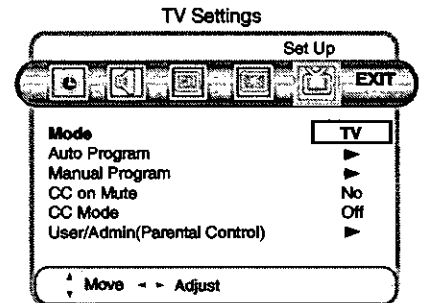
- CC on Mute: C1
- CC Mode: Off

- ❑ **CC Mode** - This television contains a built-in decoder that displays **CC** (Closed Captioned) text across the screen (white or colored letters on black background). It allows the viewer to read the dialogue of a television program or other information. The program viewed must include Closed Captioning for the feature to work.

Activate the onscreen Closed Caption feature by selecting one of the following modes:

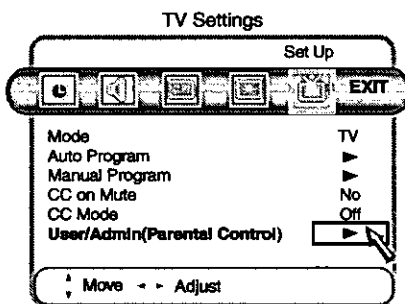
- OFF - When Closed Caption is not desired.
- C1 - For video related information to be displayed, up to 4 lines onscreen at a time. (It does not block relevant parts of the picture). Text may be in any language.
- C2 - C4 - For other modes of video related information.

Note: Highlight Exit, then press Action button to exit menu.

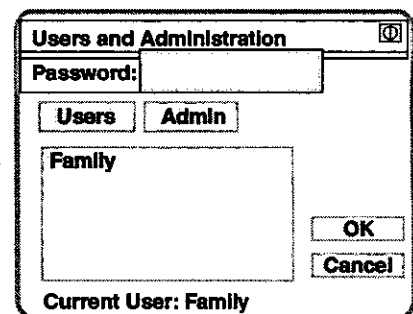


- ❑ **User/Admin (Parental Control)**

1. Highlight **User/Admin(Parental Control)**, then press Action.
2. User and Administration screen will be displayed.



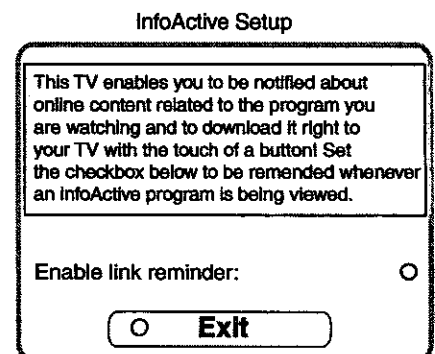
Press Action to display Users And Administration menu.



Note: Refer to "Set Up for Administrator and Different Users" on page (15) for setting Users and Administration menu.

InfoActive

- ❑ The InfoActive submenu will enable the user to be notified about on-line content related to the program you are watching and download it right to your TV.



MAIN MENU ICON FEATURES

My Info Icon



Home

- When the user selects the Home option, the Interactive TV will first begin a dialing sequence to the Earthlink service.

News

- This series of submenus is created by having the user define the preferred cached content when registering with the Earthlink service. This content will be downloaded to the TV on a daily basis not less than 5 times a day.

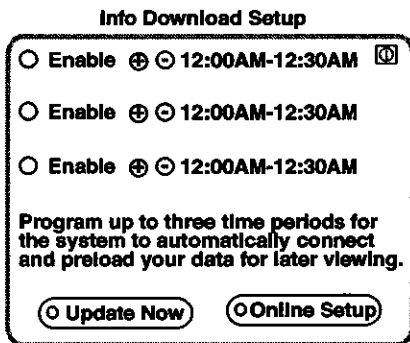
Sports

Weather

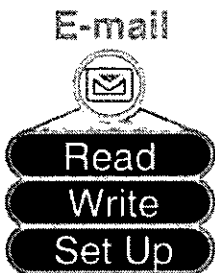
Stocks

Set Up

Select to display the Info Download Setup screen. This screen is used to program up to three time periods for the system to automatically connect and preload your data for later viewing. Click (+) for time forward and (-) for time backwards.



E-mail Icon



- These submenus will enable the user to create (write) emails as well as check incoming emails. This system will utilize IMAP protocol, which enables the user to retain the email that is read on the TV for viewing on their PC account. This is an important consideration, since the Interactive TV does not have a printer port, and consumer may select to print their emails at a later date. Only when the user specifically deletes the email will the email be deleted. Select setup to organize e-mail.

Web Icon

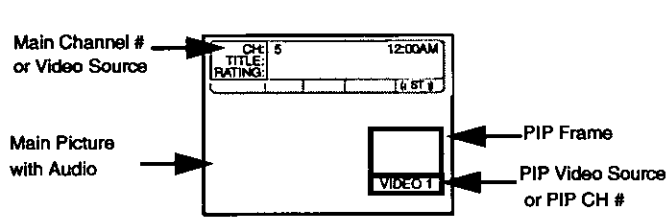





- Go To and Search** - The various submenu's will enable the user to access their home page, which in this case is defaulted to the Earthlink Personal Start page (www.earthlink.net).
- About** - This feature lets you download the latest software or read the Telecruz Agreement.
- Setup** - This feature is used to set up your account and get connected.

PIP Remote Function Buttons (when main picture is TV)

This Interactive television includes a two tuner Picture In Picture (PIP) feature. This allows watching two (2) live broadcasts at the same time without or with an external video source (VCR).

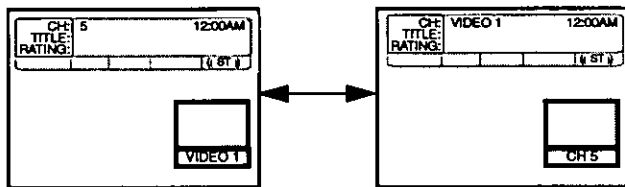
PIP (Picture-In-Picture) Button



- Press  to display PIP frame.
- Press  while PIP frame is displayed to select desired input mode.
- Press  again to cancel the PIP feature.

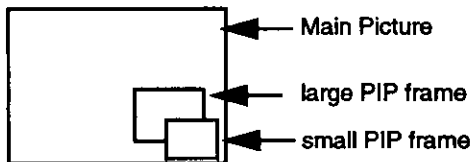
Note: Audio is from Main Picture only.

Swap Button



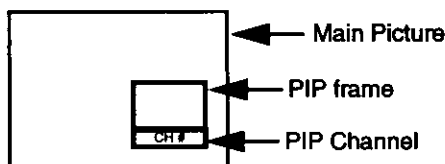
- Press  (when PIP frame is displayed) to interchange the main picture with the picture in the PIP frame.

Size Button



- Press  (when PIP frame is displayed) to choose either the large or small PIP frame.

PIP Channel Buttons

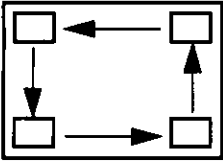


- Press the  while PIP frame is displayed to scan through channels.

PIP REMOTE FUNCTION BUTTONS (WHEN MAIN PICTURE IS TV)

PIP Remote Function Buttons (contd.)

Move Button

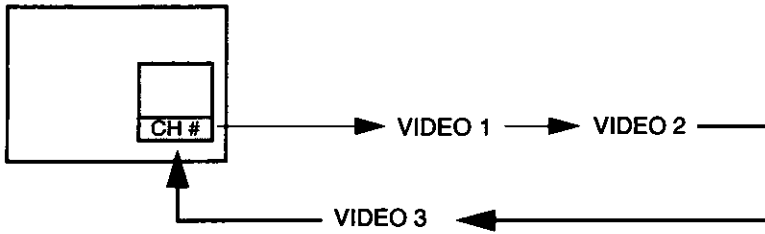



- The PIP frame may be placed at any corner of the Main Picture by pressing the



button. Each time the MOVE button is pressed, the PIP frame will move counterclockwise as illustrated.

TV/VIDEO Button



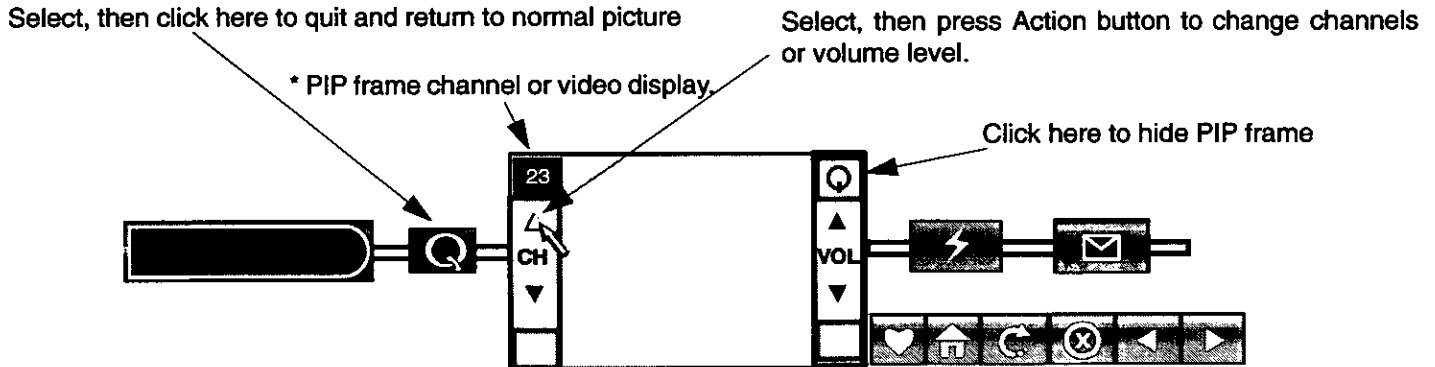
- Press  while PIP frame is displayed to select desired input mode (RF, Video1, Video2 or Video 3).

PIP Operation (when main picture is Earthlink home page or Web)

Once connected to the web, the browser will launch and the consumer can also select to watch TV, by activating the PIP mode. The PIP mode can be activated by pressing the PIP button on the remote or on the keyboard. If the PIP button is pressed while connected to the Internet, the following type of screen shall appear:

The PIP window will have a specified area when in this Web-PIP mode. The PIP size and move functions will not be available in this mode.

Top of screen with PIP being displayed



This screen shall also enable the user to access the main menu item such as TV, My Info, and Email. In addition, various TV controls (Channel Up/down and Volume up/down) shall be made available on the screen as shown. The icons listed next to the PIP window are specific web navigation icons. These icons also exist on the wireless keyboard.

Note: * To select a direct channel number for the PIP frame from the keyboard, press and hold the ALT key, then press 0-9 keys to select desire channel.

Top of screen without PIP being displayed

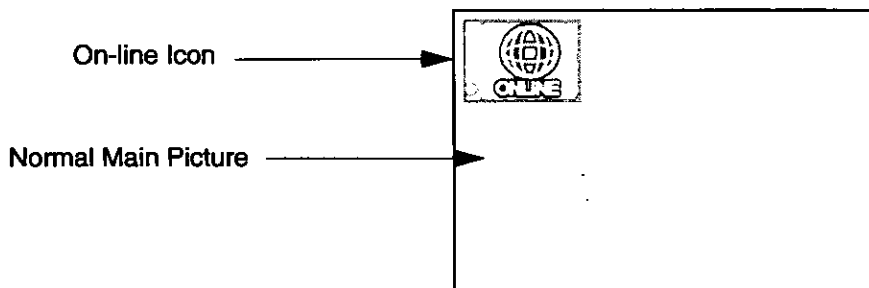


Keyboard PIP Buttons Operation

PIP Button - To display or delete PIP frame.

Swap - Press SWAP while on-line to interchange web page with normal Main Picture, a small On-line icon will be displayed in the top left corner of the picture to remind you that web is active. Press SWAP again to return to web page.






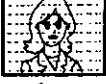



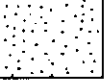








Note: To exit on-line connection, press the Quit key.



TROUBLESHOOTING CHART FOR NORMAL TV OPERATION

Troubleshooting Chart For Normal TV Operation

Before calling for service, determine the symptoms and follow suggested solutions.

AUDIO	VIDEO	Solutions
 Noisy Audio	 Snowy Video	Adjust Antenna Location and Connection
 Noisy Audio	 Multiple Image	Adjust Antenna Location and Connection Check Antenna Lead-in Wire
 Noisy Audio	 Interference	Move television from Electrical Appliances, Lights, Vehicles and Medical Equipment
 No Audio	 Normal Video	Increase Volume Check Mute Check television SPEAKERS on/off Change Channel
 Noisy Audio	 No Video with Snow	Set TV or Cable Mode Properly Check Antenna Cables
 No Audio	 No Video/No PIP	Check Power Cord is Plugged into Active Outlet Adjust Brightness and Audio Controls Change Channel Check Cable Connections Check Second Video Source Operation
 Normal Audio	 No Color	Adjust Color Settings Change Channel
 Wrong Audio	 Normal Video	Check Audio Is Set To Stereo or Mono, Not SAP
 Normal Audio	 Normal Video	Replace Remote Control Batteries
Intermittent Remote Control Operation		

Troubleshooting Chart When Using TV For Interactive Operation

<i>PROBLEMS</i>	<i>Solutions</i>
Snowy Video	Adjust Antenna Location and Connection Change Channel
Can't connect to Internet	Check Telephone or Ethernet Connection Check Modem Connection Try To connect Again
TV will not come ON after pressing POWER button	Wait 10 to 15 seconds in try again Check Power Cord is Plugged into Active Outlet
Can't select desire channel	Set TV or Cable Mode Properly Check Antenna Cables
No Video	Check Power Cord is Plugged into Active Outlet Adjust Brightness and Audio Controls Change Channel Check Cable Connections Deselect Video Mode
No PIP	Press PIP button Again. Check Second Video Source Operation
Weak Color	Adjust Color Settings Change Channel
Can't load Web page	Try loading Web page Again Try typing Web page address again.
Intermittent Keyboard Operation	Replace Wireless Keyboard Batteries Make sure you point the Keyboard at the TV remote sensor Move closer to the TV, you may be outer range

LIMITED WARRANTY

PANASONIC CONSUMER ELECTRONICS COMPANY,
DIVISION OF:
MATSUSHITA ELECTRIC CORPORATION OF AMERICA
One Panasonic Way
Secaucus, New Jersey 07094

PANASONIC SALES COMPANY,
DIVISION OF:
MATSUSHITA ELECTRIC OF PUERTO RICO,
INC., Ave. 65 de Infantería, Km. 9.5
San Gabriel Industrial Park
Carolina, Puerto Rico 00985

Panasonic Color Television Limited Warranty

Limited Warranty Coverage

If your product does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

TV CATEGORIES	ALL PARTS EXCEPT CRT	CRT	LABOR	SERVICE
22"-27" diagonal	1 (ONE) YEAR	2 (TWO) YEARS	90 DAYS	IN-HOME OR CARRY-IN

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must carry-in your product or arrange for in-home service (in-home service available only for 22" [diagonal] and larger screen), as applicable, during the warranty period. If non-rechargeable batteries are included, they are not warranted. This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

Carry-in or In-Home Service

For Carry-In or In-Home Service (as applicable) in the United States call 1-800-211-PANA(7262) or visit Panasonic Web Site: <http://www.panasonic.com>.

For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

In-Home service, if applicable, requires clear, complete and easy access to the product by the authorized servicer and does not include removal or re-installation of an installed product. It is possible that certain in-home repairs will not be completed in-home, but will require that the product, or parts of the product, be removed for shop diagnosis and/or repair and then returned.

Limited Warranty continued on next page

Limited Warranty continued from previous page**Limited Warranty Limits And Exclusions**

This warranty **ONLY COVERS** failures due to defects in materials or workmanship, and **DOES NOT COVER** normal wear and tear or cosmetic damage, nor does it cover markings or retained images on the picture tube resulting from viewing fixed images (including, among other things, letterbox pictures on standard 4:3 screen TV's, or non-expanded standard 4:3 pictures on wide screen TV's, or onscreen data in a stationary and fixed location). The warranty **ALSO DOES NOT COVER** damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or commercial use (such as in a hotel, office, restaurant, or other business), rental use of the product, service by anyone other than a Factory Servicenter or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, or travel to and from the servicer. The items listed are not exclusive, but are for illustration only.) **ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have others rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE (INCLUDING COST OF AN IN-HOME SERVICE CALL, WHERE APPLICABLE) WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY ARE YOUR RESPONSIBILITY.

THIS WARRANTY DOES NOT COVER DAMAGES OR MISOPERATION TO THIS INTERACTIVE TV DUE TO VIRUS THROUGH THE INTERNET.

Limited Warranty continued on next page

For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact:

1-800-211-PANA (7262), Monday-Friday 9am - 9pm; Saturday-Sunday 9am - 7pm, EST.

Web Site: <http://www.panasonic.com>

You can purchase parts, accessories or locate your nearest servicer by visiting our Web Site.

Accessory Purchases:

1-800-332-5368 (Customer Orders Only)

Panasonic Services Company 20421 84th Avenue South, Kent, WA 98032

(6 am to 5 pm Monday - Friday; 6 am to 10:30 am Saturday; PST)

(Visa, MasterCard, Discover Card, American Express, Check)

Service in Puerto Rico

Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/Factory Servicer:

Ave. 65 de Infanteria, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Phone (787) 750-4300 Fax (787) 768-2910

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