

Panasonic®

Color Television Operating Instructions

CT-32SL32

CT-32SX32

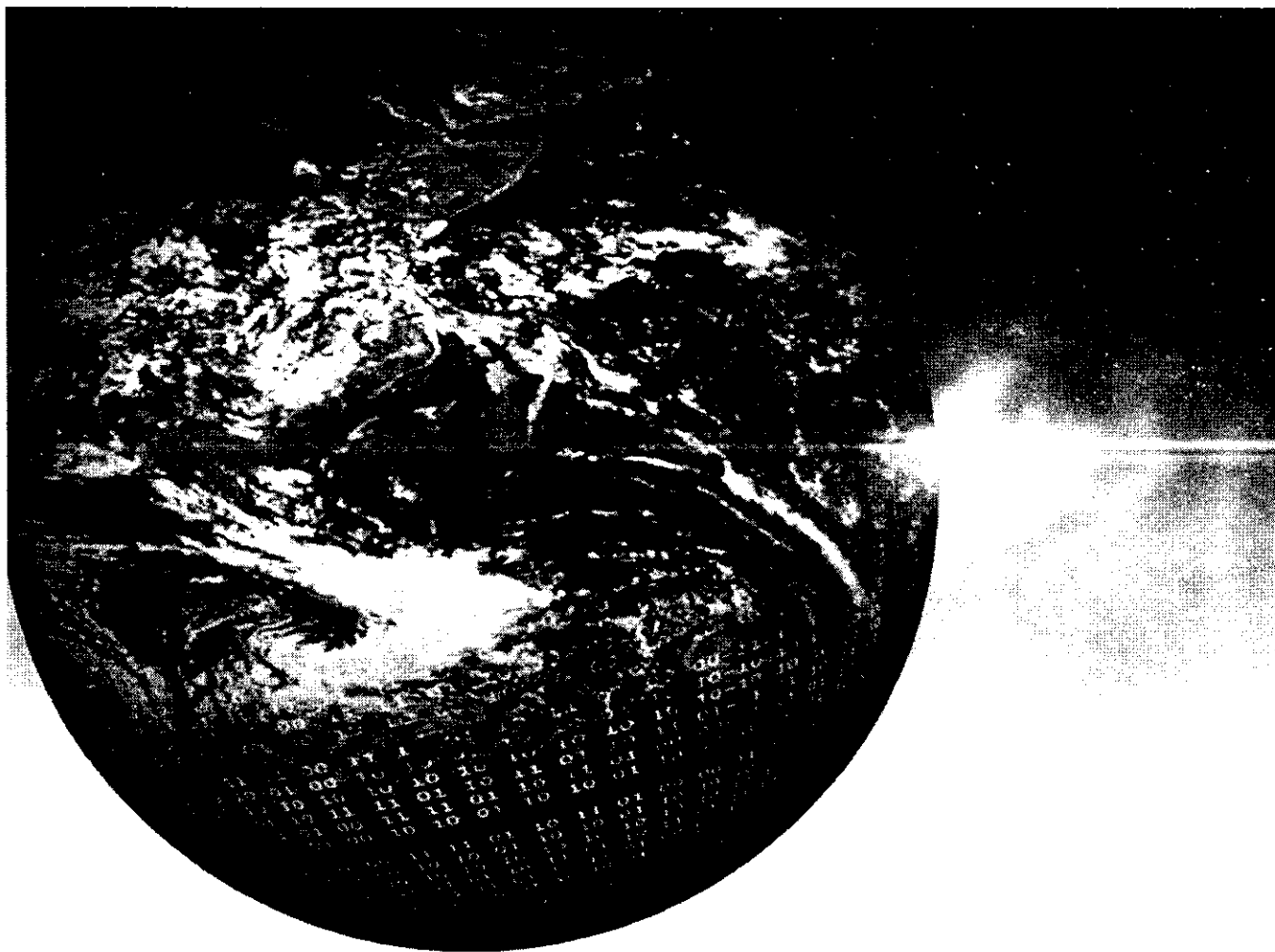
CT-36SL32

CT-36SX32

CT-F3442

CT-F3442L

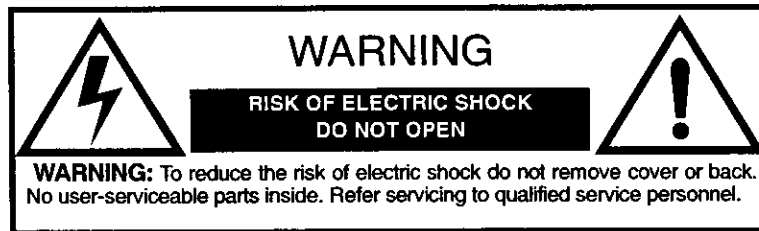
CT-F3442X



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

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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.



The double insulation symbol (a square within a square) is intended to alert qualified service personnel to use only identical replacement parts in this apparatus.

FCC CAUTION: ANY CHANGES OR MODIFICATIONS TO THIS TV RECEIVER NOT EXPRESSLY APPROVED BY MATSUSHITA ELECTRIC CORPORATION OF AMERICA COULD CAUSE HARMFUL INTERFERENCE, WHICH WOULD VOID THE USER'S AUTHORITY TO OPERATE THIS EQUIPMENT.

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)>

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Read these instructions completely before operating television.

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CONGRATULATIONS

Congratulations

Your new TV Monitor/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.

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 and Remote Control

- ☐ For cabinets 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 CT-32SX32 (2.8A) CT-32SX32U (2.8A) CT-32SL32 (2.8A) CT-32SL32U (2.8A) CT-36SX32 (2.8A) CT-36SX32U (2.8A) CT-36SL32 (2.8A) CT-36SL32U (2.8A)	120V AC, 60Hz
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
Video Output Jacks	1Vp-p, 75 Ohm, Phono Jack Type
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

Specifications are subject to change without notice or obligation.

Installation

Television Location

Follow these recommendations before deciding the location of your 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.



CT-32SX32, CT-32SX32U:

CAUTION: These television receivers for use only with PANASONIC TY-32SX31P stand. Use with other carts (or stands) is capable of resulting in instability causing possible injury.

CT-32SL32, CT-32SL32U:

CAUTION: These television receivers for use only with PANASONIC TY-32HL42P stand. Use with other carts (or stands) is capable of resulting in instability causing possible injury.

CT-36SX32, CT-36SX32U:

CAUTION: These television receivers for use only with PANASONIC TY-36SX31P stand. Use with other carts (or stands) is capable of resulting in instability causing possible injury.

CT-36SL32, CT-36SL32U:

CAUTION: This television receiver for use only with PANASONIC TY-36HL42P stand. Use with other carts (or stands) is capable of resulting in instability causing possible injury.

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.

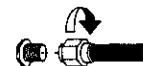
Note: A cable converter box may be required for proper reception. Check with your local cable company for compatibility requirements.

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.

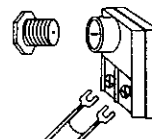
Note: Cable Mode is preset at the factory. Antenna users must change to TV mode in the Set Up Menu under Prog Chan.

Incoming Cable from
Cable Company



75 Ohm VHF/UHF
on back of TV

Incoming Cable from
Home Antenna



Feature Chart

MODELS		CT-32SX32	CT-32SL32	CT-36SX32	CT-36SL32
SPECIAL FEATURES	Features				
	MENU LANGUAGE ENG/SPAN/FR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2 TUNER PIP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	VIDEO PICTURE MEMORY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	CHANNEL INFO BANNER	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	VIDEO INPUT SKIP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2RF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	V-CHIP CAPABILITY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	CLOSED CAPTIONING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	VIDEO NORM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	AUDIO NORM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	STEREO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	BASS/TREBLE/BALANCE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	SURROUND	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	AI SOUND	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	BBE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	SUBWOOFER		<input type="checkbox"/>		<input type="checkbox"/>
AUDIO	A/V IN (REAR/FRONT)	3 (2/1)	3 (2/1)	3 (2/1)	3 (2/1)
	A/V PROGRAM OUT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	S-VIDEO INPUT (REAR/FRONT)	2 (1/1)	2 (1/1)	2 (1/1)	2 (1/1)
	COMPONENT VIDEO INPUT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	HEADPHONE JACK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.

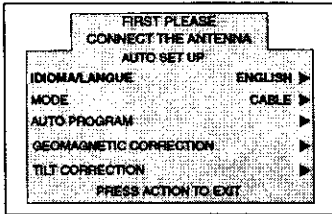
The extended use of fixed image program material can cause a permanent picture tube damage, shown as a "shadow image" viewable on normal programs. This type of irreversible picture tube deterioration can be limited by performing the following steps:

- Do not display the fixed image for extended periods of time.
- Turn the power off when not in use.

Auto Set Up Menu

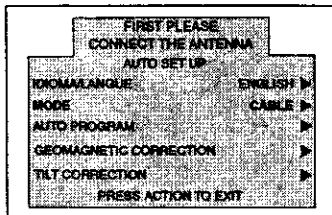
For your convenience, Auto Set up menu will be displayed on screen when the set is turned on for the first time. If needed, follow the menus and procedures for setting up the features.

- ☐ IDIOMA/LANGUE - To change menu language to ENGLISH, SPANISH or FRENCH.



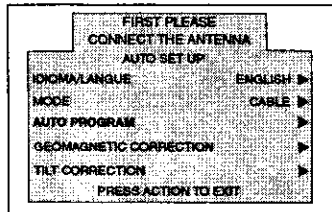
- ☐ Press **VOL ▶** to select English, Spanish or French.

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



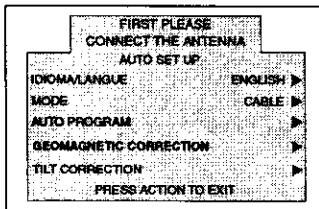
- ☐ Press **VOL ▶** to select TV or CABLE.

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

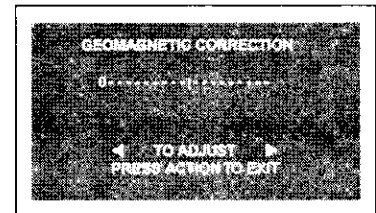


- ☐ Press **VOL ▶** to start Auto Programming.

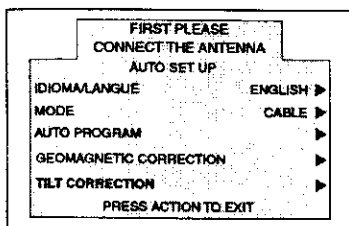
- ☐ GEOMAGNETIC CORRECTION - This feature is used to adjust discoloration of the picture due to earth's magnetic field in the area.



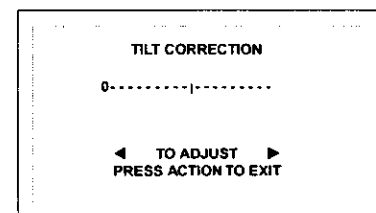
- ☐ Press **VOL ▶** to display adjustment menu.
- ☐ Press **◀ VOL or VOL ▶** to adjust discoloration in picture.



- ☐ TILT CORRECTION - This feature is used to adjust the tilt of the picture due to earth's magnetic field in the area.



- ☐ Press **VOL ▶** to display adjustment menu.
- ☐ Press **◀ VOL or VOL ▶** to adjust picture tilt.

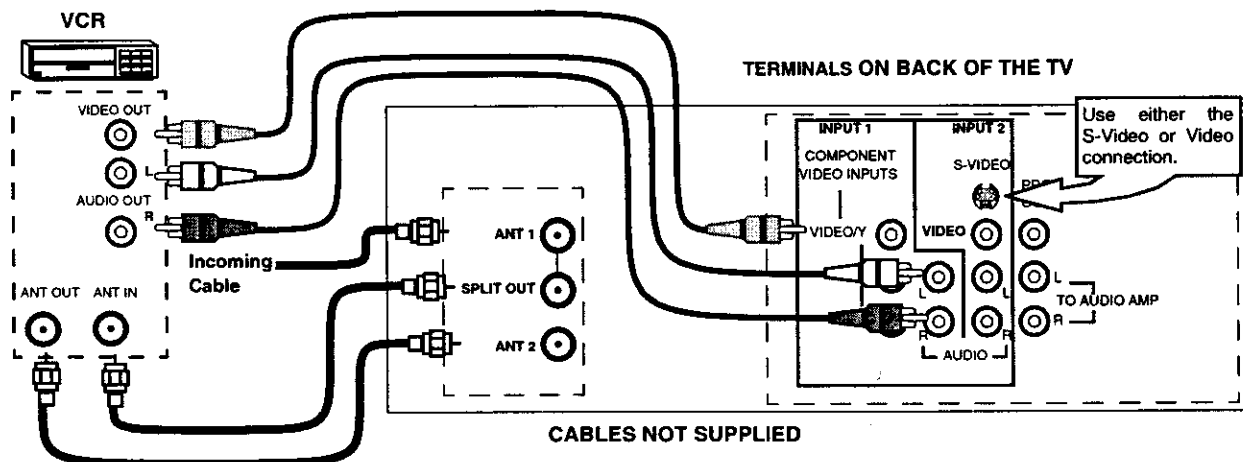


Optional Equipment Connections

VCR Connection

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

Note: Input 1 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.



If INPUT 1 is used as component video input, connect the A/V Out from the VCR to INPUT 2 A/V jacks. Connect Video Out and Audio out from VCR to INPUT 2 Video jack and Audio L & R jacks. INPUT 3 can also be used to connect a VCR and other optional video equipments.

Note: The remote control must be programmed with supplied codes to operate the VCR.

Viewing a television program

Procedure

1. Select ANT1 in the SET UP menu under Prog Chan (Program Channels).
2. Tune the television to the television program you want to view.

Viewing a video

Procedure

- ☐ Option A
 1. Select ANT1 in the SET UP menu under Prog Chan.
 2. Press the **TV/VIDEO** button on the remote control to select the video input (VIDEO 1, VIDEO 2, etc.) connected to your VCR.
 3. Begin the video.
- ☐ Option B
 1. Select ANT2 in the SET UP menu under Prog Chan.
 2. Tune the television to Channel 3 or 4, depending on your VCR.
 3. Begin the video.

Recording a television program

Procedure

- ☐ Option A (Recording and viewing the same program)
 1. Select ANT2 in the SET UP menu under Prog Chan.
 2. Tune the television to Channel 3 or 4, depending on your VCR.
 3. Using the VCR, tune to the television program you want to record.
 4. Begin recording.
- ☐ Option B (Recording one program while viewing another program)
 1. Select ANT1 in the SET UP menu under Prog Chan.
 2. Press the **TV/VIDEO** button on the remote control to select the video input (VIDEO 1, VIDEO 2, etc.) connected to your VCR.
 3. Using the VCR, tune to the television program you want to record.
 4. Begin recording.
 5. Press the **TV/VIDEO** button on the remote control to switch back to TV mode.
 6. Tune the television to the television program you want to view.

Front Control Panel (models CT-32SX32 and CT-36SX32)

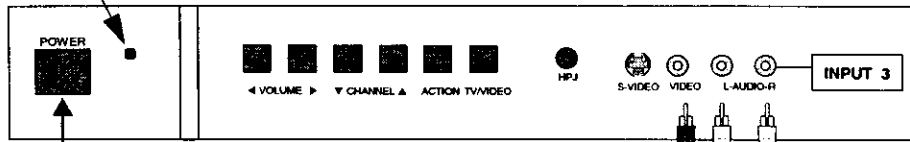
TV/VIDEO

Press  to select VIDEO 3 input mode.

Note: The front control panel located behind the customer control door can be used to access menus and switch video mode when the remote control is not available.

ON/OFF INDICATOR

Note: The ON/OFF indicator LED (red) will be lit when set is on.



POWER ON/OFF

Note: The S-VIDEO connection provides higher quality picture. It overrides VIDEO 3 connections. Use INPUT 3, AUDIO L and R with S-VIDEO connection.



A second VCR, Camcorder, a video disc player, video game equipment or DSS equipment can also be connected to the video inputs. See the optional equipment manual for details.

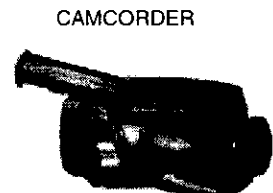
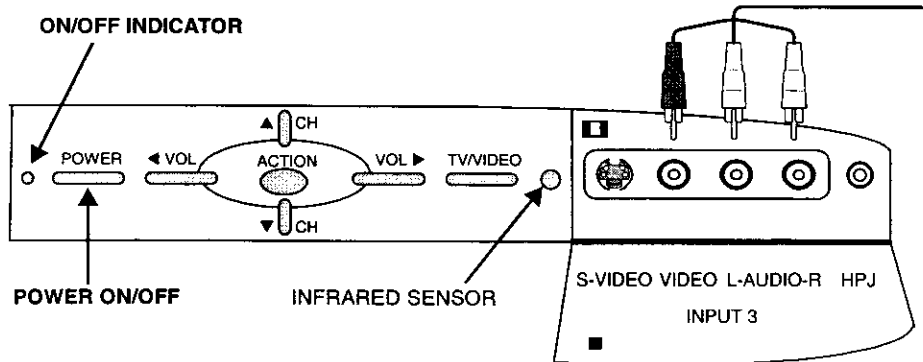
Procedure

1. Connect equipment to front Audio/Video input jacks.
2. Press TV/VIDEO button to select VIDEO 3 input mode.
3. Operate optional equipment as instructed in equipment manual.

Front control Panel (models CT-32SL32 and CT-36SL32)

Follow the procedure above to connect the optional equipment to front Audio/Video input jacks.

Note: The ON/OFF indicator LED (red) will be lit when set is on.

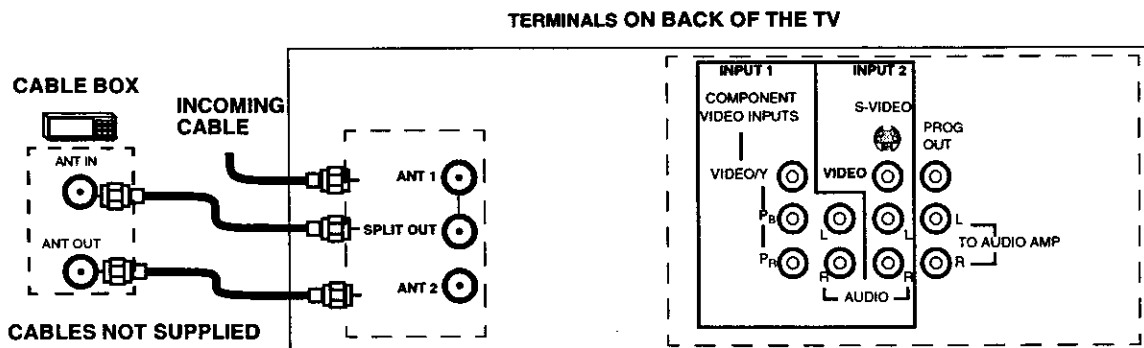


Note: The S-VIDEO connection provides higher quality picture. It overrides VIDEO 3 connections. Use INPUT 3, AUDIO L and R with S-VIDEO connection.

OPTIONAL EQUIPMENT CONNECTIONS

Cable Box Connection

Follow this diagram when connecting your television to a cable box only.



Note: The remote control must be programmed with supplied codes to operate the cable box.

Viewing a premium (scrambled) cable channel

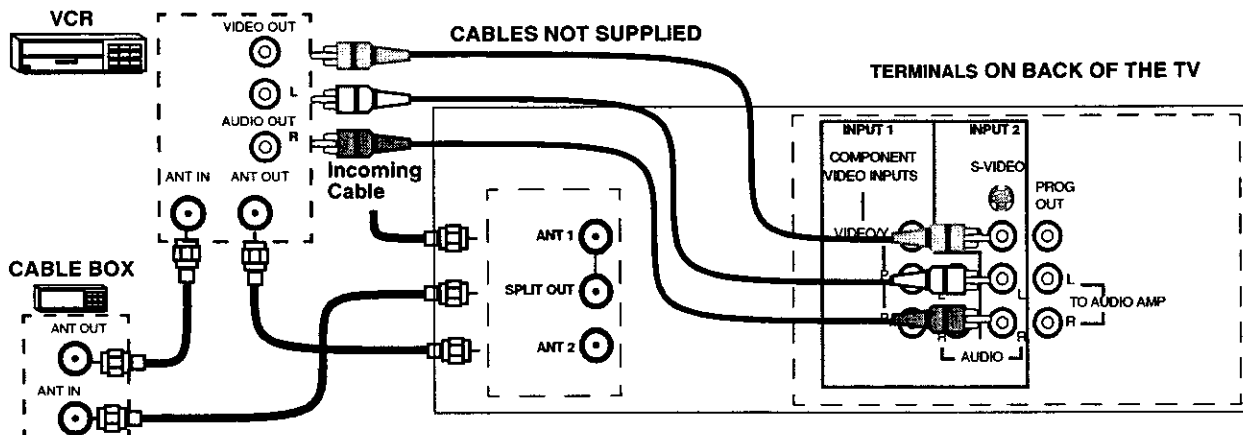
Procedure

1. Select ANT2 in the SET UP menu under Prog Chan (Program Channels).
2. Tune the television to Channel 3.
3. Using the cable box, tune to the premium cable channel you want to view.

Note: To use special features such as Channel Caption, ANT1 must be selected in the SET UP menu under Prog Chan.

VCR and Cable Box Connection

Follow this diagram when connecting your television to both a VCR and a cable box.



Note: The remote control must be programmed with supplied codes to operate the VCR and cable box.

Viewing a premium (scrambled) cable channel

Procedure

1. Select ANT2 in the SET UP menu under Prog Chan (Program Channels).
2. Tune the television to Channel 3.
3. Using the cable box, tune to the premium cable channel you want to view.

Recording a premium (scrambled) cable channel

Procedure

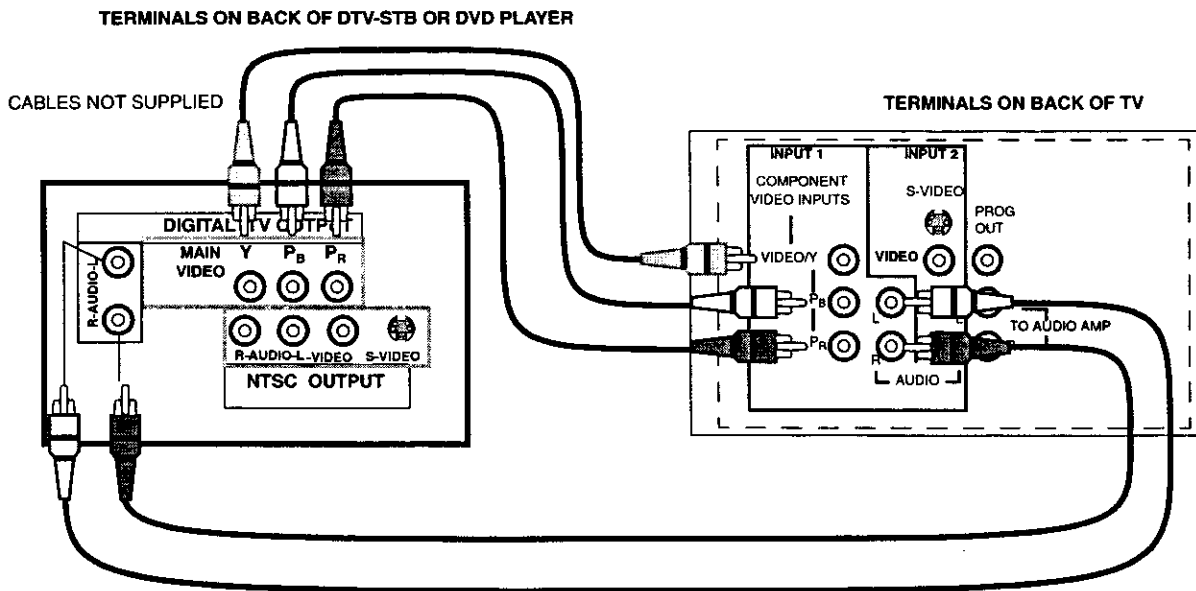
1. Select ANT2 in the SET UP menu under Prog Chan.
2. Press the **TV/VIDEO** button on the remote control to select the video input (VIDEO 1, VIDEO 2, etc.) connected to your VCR.
3. Turn the VCR ON.
4. Tune the VCR to Channel 3 or 4, depending on the switch setting on the back of VCR.
5. Using your cable box, tune to the premium cable channel you want to record.
6. Begin recording.

Note: To view a different channel while recording:

- Select ANT1 in the SET UP menu under Prog Chan.
- Press the **TV/VIDEO** button on the remote control to TV mode.
- Tune the television to a different program (except another premium cable channel).

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.



Notes:

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

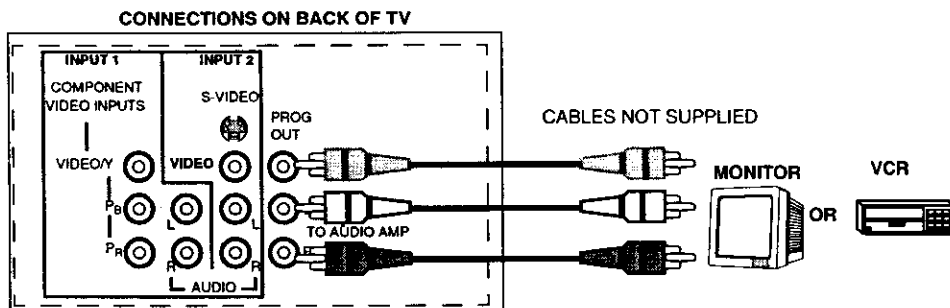
OPTIONAL EQUIPMENT CONNECTIONS

Program Out Connection (PROG OUT)

To use the television audio and video with optional equipment, connect the PROG OUT and TO AUDIO AMP connections on the back of the television.

Notes:

- When a component input video signal is connected to Video 1 (Y, P_B, P_R) terminals, and the TV main picture is Component, the Program output video will be luminance signal (no color).
- When S-Video input signal is used for TV main picture, the Program output video will be luminance signal (no color).



Procedure

1. Connect optional equipment to PROG OUT and TO AUDIO AMP terminals.
2. PROG OUT terminal display is the same as onscreen display.
3. See optional equipment manual for further instructions for recording and monitoring.

Amplifier Connection (To Audio Amp)

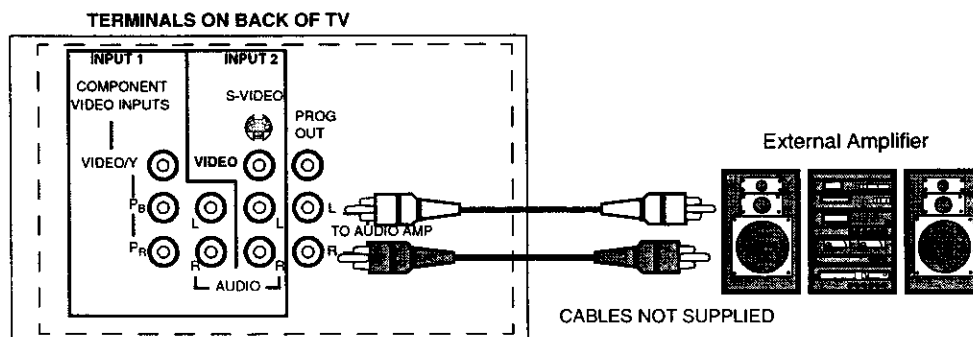
Connect to an external audio amplifier input for listening to a stereo system.

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

Audio Adjustments

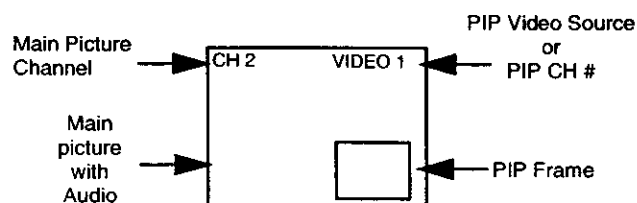
1. Select TV SPEAKERS ON from AUDIO menu.
2. Set amplifier volume to minimum.
3. Adjust TV volume to desired level.
4. Adjust amplifier volume to match the TV.
5. Select TV SPEAKERS OFF&VAO from AUDIO menu.
6. Volume, mute, bass, treble and balance are now controlled from the TV.




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



PIP Function Buttons

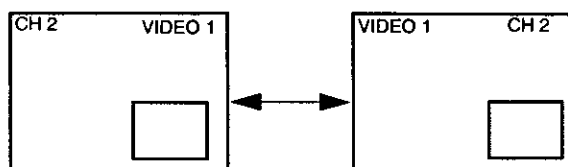
PIP (Picture-in-Picture) Button




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

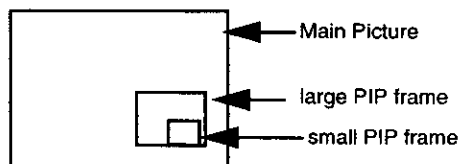
Note: Audio is from Main Picture only


Swap Button



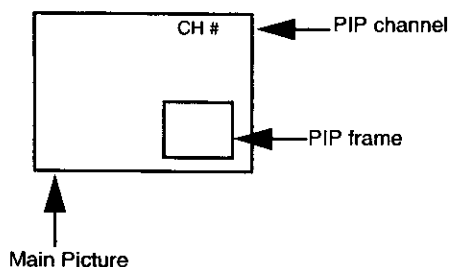
- ☐ Press  (when PIP frame is displayed) to interchange the main picture with the picture in the PIP frame.


Size Button



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

PIP Channel Buttons

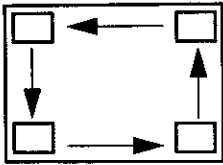


- ☐ Press the  while PIP frame is displayed to scan through channels.

PIP FUNCTION BUTTONS

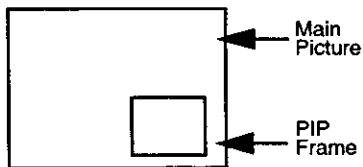
PIP Function Buttons (contd.)

Move Button



- ☐ The PIP frame may be placed at any corner of the Main Picture by pressing the **MOVE** **REW** button. Each time the MOVE button is pressed, the PIP frame will move counterclockwise as illustrated.

Freeze Button

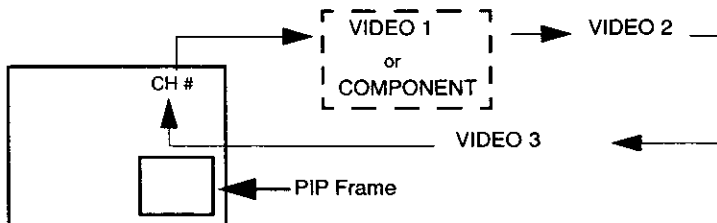


- ☐ Press **FREEZE** **TV/VCR** to stop action in the Main or PIP frame.

Note:

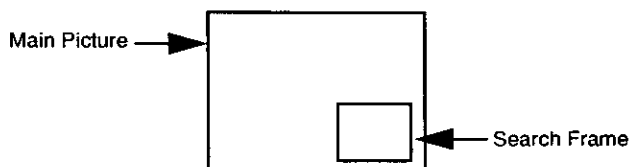
- Pressing FREEZE button when PIP frame is not displayed, will display a snapshot image of the main picture in the PIP frame.
- Pressing FREEZE button when PIP frame is displayed, will freeze the action in the PIP frame. Press the FREEZE button again to continue action.

TV/VIDEO Button



- ☐ Press **TV/VIDEO** while PIP frame is displayed to select desired input mode.

Search Button





- ☐ This feature lets you scan through all available channels.

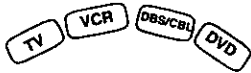
- ☐ Press **SEARCH** **STOP** to display search frames.

- ☐ Press **PIP** **FF** to stop search frame or press **SEARCH** **STOP** to delete search frame.

Remote Control Operation


POWER

 Press to turn ON and OFF.


MUTE

 Press to mute sound. Press to display and cancel CC (Closed Caption)..

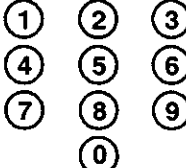

 Press to select remote operation.


ACTION

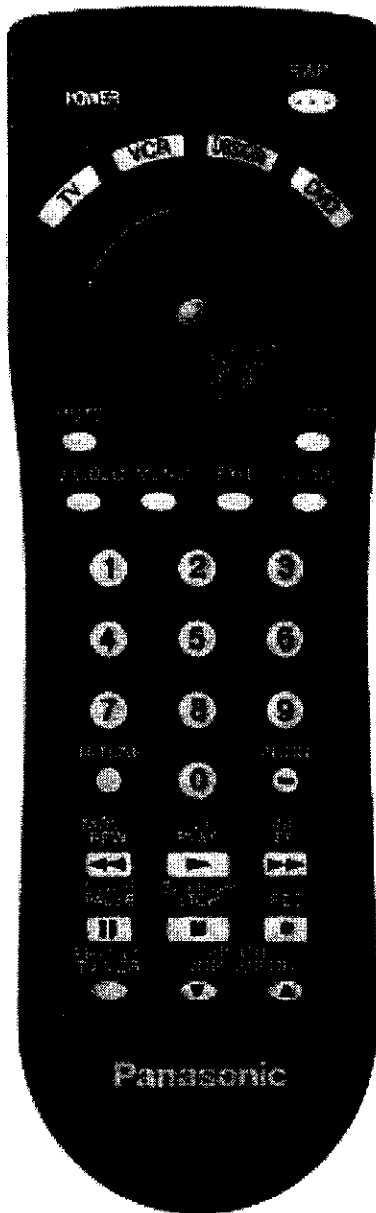
 Press to access menus.

TV/VIDEO

 Press to select TV, Video or Component mode for Main Picture or PIP frame.

MENU

 Press to access DBS or DVD menus.


 Press numeric keypad to select any channel.


R-TUNE

 Press to switch to previously viewed channel or video mode.

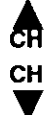



EUR7613Z30


SAP


 Press to access second audio program.



 Press to adjust TV sound and navigate in menus.











 Press to select next or previous channel and navigate in menus.

RECALL

 Press to display time, channel, sleep timer, and other options.

EXIT

 DBS functions button.

GUIDE

 DBS functions button.

PROG

 Press to enter minor number in a compound number.

MOVE REW 	SIZE PLAY 	PIP FF 
SWAP PAUSE 	SEARCH STOP 	REC 
FREEZE TV/VCR 	PIP CH VCR /DBS CH  	

Component function buttons

Battery Installation

Use two AA batteries:

Remove battery cover by pushing in and up near arrow.
 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

Precautions

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

REMOTE CONTROL OPERATION

Mode Operational Key Chart

This chart defines the keys that are operational in the selected component modes (TV, VCR, DBS, CABLE or DVD) after programming (if needed).

KEY NAME	TV MODE	CABLE MODE	DBS MODE
POWER	POWER	POWER	POWER
SAP	SAP ON/OFF	-	-
MUTE	MUTE	TV MUTE	TV MUTE
TV/VIDEO	INPUT SWITCH	TV INPUT SWITCH	TV INPUT SWITCH
MENU	-	-	DBS MENU
CHAN UP	CHANNEL UP	CABLE CHANNEL UP	DBS NAVIGATION UP
CHAN DOWN	CHANNEL DOWN	CABLE CHANNEL DOWN	DBS NAVIGATION DOWN
VOL RIGHT	VOL +	TV VOL +	DBS NAVIGATION RIGHT
VOL LEFT	VOL -	TV VOL -	DBS NAVIGATION LEFT
ACTION	ACTION	-	DBS MENU
RECALL	DISPLAY	TV DISPLAY	DBS PROG. INFO
EXIT	-	-	DBS EXIT
GUIDE	-	-	DBS GUIDE
PROG	-	-	DBS
1	DIGIT 1	DIGIT 1	DIGIT 1
2	DIGIT 2	DIGIT 2	DIGIT 2
3	DIGIT 3	DIGIT 3	DIGIT 3
4	DIGIT 4	DIGIT 4	DIGIT 4
5	DIGIT 5	DIGIT 5	DIGIT 5
6	DIGIT 6	DIGIT 6	DIGIT 6
7	DIGIT 7	DIGIT 7	DIGIT 7
8	DIGIT 8	DIGIT 8	DIGIT 8
9	DIGIT 9	DIGIT 9	DIGIT 9
0	DIGIT 0	DIGIT 0	DIGIT 0
R-TUNE	PREVIOUS CHAN OR VIDEO MODE	CABLE PREVIOUS CHANNEL	PREVIOUS DBS CHANNEL
PROG	-	-	DBS PROGRAM
MOVE <<REW	TV PIP MOVE	-	-
SIZE PLAY	TV PIP SIZE	-	-
PIP FF >>	TV PIP ON / OFF	-	-
SWAP PAUSE	TV PIP SWAP	-	-
SEARCH STOP	TV PIP SEARCH	-	-
RECORD	VCR RECORD	-	-
FREEZE/TV/VCR	TV PIP FREEZE	-	-
PIP CH VCR/DBS CH ▼	TV PIP CHANNEL DOWN	-	DBS CHANNEL DOWN
PIP CH VCR/DBS CH ▲	TV PIP CHANNEL UP	-	DBS CHANNEL UP

Mode Operational Key Chart (contd.)

KEY NAME	VCR MODE	DVD MODE
POWER	POWER	POWER
SAP	-	-
MUTE	TV MUTE	TV MUTE
MENU	-	-
TV/VIDEO	TV INPUT SWITCH	TV INPUT SWITCH
CHAN UP	-	NEXT CHAPTER
CHAN DOWN	-	PREVIOUS CHAPTER
VOL RIGHT	TV VOLUME +	NAVIGATION RIGHT
VOL LEFT	TV VOLUME -	NAVIGATION LEFT
ACTION	-	-
RECALL	ONSCREEN VCR DISPLAY	DVD DISPLAY
EXIT	-	-
GUIDE	-	-
PROG	-	-
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
0	-	-
R-TUNE	-	-
MOVE <<REW	VCR REWIND	SKIP SEARCH REW <<
SIZE PLAY	VCR PLAY	DVD PLAY
PIP FF>>	VCR FF	SKIP SEARCH FF>>
SWAP PAUSE	VCR PAUSE	DVD STILL
SEARCH STOP	VCR STOP	DVD STOP
RECORD	VCR RECORD	-
FREEZE/TV/VCR	TV/VCR SWITCH	OPEN/CLOSE
PIP CH VCR/DBS CH ▼	VCR CHANNEL DOWN	SLOW -
PIP CH VCR/DBS CH ▲	VCR CHANNEL UP	SLOW +

REMOTE CONTROL OPERATION

Programming The Remote

The Universal Remote Control can be programmed to operate many manufacturers' components, using the component function buttons for VCR, DVD, CABLE or DBS. Follow the procedures for programming your Remote Control with or without a code for the component.




Default Modes For Remote Control

Device	Operates	Default
TV	TV (Panasonic Only)	Panasonic TV Codes
VCR	VCR (Preset)	Panasonic VCR Codes
DBS	DBS (Preset)	Panasonic DBS Codes
CABLE	CABLE (Preset)	Panasonic DBS Codes
DVD	DVD, CD (Preset)	Panasonic DVD Codes

Determine the manufacturer of the component and look in the table for the code.

Programming With a Code

Procedure

- Confirm that the external component is plugged in and operating.
- Turn the component off.
- **ACTION**
Press  and  together, **for at least 5 seconds**.
- Press appropriate component button on the Remote Control VCR, DVD, CABLE or DBS.
- Enter the 3-digit component code using the Remote Control numeric keypad (0 ~ 9 buttons).
- Press the Remote Control  to test the component. If the procedure was successful, the component will turn on.




Helpful Hints: Unsuccessful Code

If the component does not operate with the Remote Control, repeat the procedure using another code. (Some brands have multiple codes).

If an incorrect code is entered, or if the procedure takes longer than 30 seconds, the programming will fail.

Programming Without A Code

This procedure searches all codes and is called the "sequence method."

- Confirm that the external component is plugged in and on.
- Turn the component off.
- **ACTION**
Press  and  together, **for at least 5 seconds**.
- Press appropriate component button on the Remote Control.
- Press **VOL ►** to move forward to the next code. Press **◄ VOL** to move backward.
- Press the Remote Control  to test the component. If the procedure was successful, the component will turn on.

Note: Repeat the above steps until the component code is found. It may take many attempts before the correct code is found.

- **ACTION**
After the code is found, press  to store the code.

Component Codes

The Universal Remote Control is capable of operating many component brands after entering a code. Some components may not operate because the codes are not available due to limited memory. The Universal Remote Control does not control all features found in each model.

Write the code numbers from tables in this space. This will serve as a reference if you need to program your Remote Control.

VCR	DVD	DBS	CABLE	
<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	

Codes For VCR

Brand	Code
Admiral	335
Aiwa	332
Akai	314, 315, 316, 329
Audio Dynamic	311, 339
Bell & Howell	305, 313
Broksonic	320, 326
Canon	323, 325
CCE	343
Citizen	306
Craig	305, 306, 329
Curtis Mathes	324, 345
Daewoo	301, 324, 343
DBX	310, 311, 339
Dimensia	345
Emerson	303, 319, 320, 325, 326, 343
Fisher	305, 307, 308, 309, 313
Funai	320, 326, 334
GE	324, 333, 345
Goldstar	306
Gradiente	334
Hitachi	300, 323, 345
Instant Replay	323, 324
Jensen	339
JVC	310, 311, 334, 339
Kenwood	306, 310, 311, 339
LXI	300, 305, 306, 307, 308, 309
Magnavox	323, 324, 331
Marantz	310, 311, 339
Marta	306
Memorex	309, 324
MGA	338, 340, 341, 347, 348
Minolta	300, 345
Mitsubishi	338, 340, 341, 347, 348
Multitech	304, 347
NEC	310, 311, 334, 339
Olympic	323, 324
Optimus	306, 321, 328, 335

Brand	Code
Orion	320, 326
Panasonic	321, 322, 323, 324
J.C. Penney	300, 305, 310, 311, 324, 339, 345
Pentax	300, 311, 345
Philco	320, 323, 324, 326, 331, 343
Philips	323, 324, 331
Pioneer	323
Proscan	300, 301, 302, 323, 324, 331, 333, 345, 346
Quasar	321, 322, 323, 324
Radio Shack	305, 309, 324, 333, 336, 340
RCA	300, 301, 302, 323, 324, 331, 333, 345, 346
Realistic	305, 309, 324, 336, 340
Samsung	302, 304, 333
Sansui	320, 326, 339, 352
Sanyo	305, 309, 313
Scott	301, 302, 304, 309, 320, 326, 338, 340, 347, 348
Sears	300, 305, 306, 307, 308
Sharp	335, 336
Shintom	317
Signature 2000	335
Singer	337
Sony	328, 329, 330
Sylvania	331, 324, 331
Tashiro	306
Tatung	310, 311, 339
Teac	310, 311, 339
Technics	321, 322, 323, 324
Teknika	324
Toshiba	301, 346
Vector Research	311
Wards	306, 309, 335, 336, 344
Yamaha	305, 310, 311, 339
Zenith	306, 344

Component Codes (contd.)

Codes for Cable Box

Brand	Code
ABC	224
Archer	225, 232
Cableview	205, 232
Citizen	205, 222
Curtis	212, 213
Diamond	224, 225, 232
Eagle	229
Eastern	234
GC Brand	205, 232
Gemini	222
General Instrument/ Jerrold	211, 219, 220, 221, 222, 223, 224, 225, 226, 227
Hamlin	212, 218, 240, 241, 242, 245
Hitachi	203, 224
Macom	203, 204, 205
Magnavox	233
Memorex	230
Movietime	205, 232
Oak	202, 237, 239
Panasonic	209, 210, 214
Philips	206, 207, 228, 229, 230
Pioneer	201, 216
Pulsar	205, 232

Brand	Code
Puser	232
RCA	215
Realistic	232
Regal	212, 218, 240, 241, 242, 245
Regency	234
Rembrandt	205, 232, 237
Samsung	205
Scientific Atlanta	211, 212, 213
Slmark	201, 205
Sprucer	205, 210
Stargate	205, 232
Teleview	201, 205
Texscan	244
Tocom	235
Toshiba	204
Unika	225, 232
Universal	222, 232
Videoway	206
Viewstar	229, 230
Zenith	200, 217
Zenith / Drake Satellite	200

Codes for DVD

Brand	Code
Denon	100
Ferguson	101
JVC	109
Mitsubishi	105
Nordmende	101
Panasonic	100
Philips	103
Pioneer	102
RCA	101

Brand	Code
Saba	101
Samsung	110
Sharp	108
Sony	104
Technics	100
Thomson	101
Toshiba	103
Yamaha	100
Zenith	107

Codes for DBS

Brand	Code
Dish Network (EchoStar)	105, 115, 116
Echo Star	105
Express VU	105, 115
G.E.	106
G.I. (General Instrument)	108
Gradiente	114
Hitachi	103, 111, 112
HNS (Hughes)	103
Magnavox	101, 102

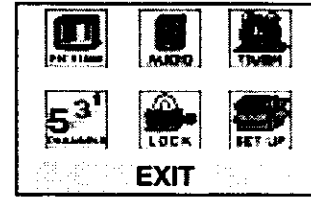
Brand	Code
Panasonic	104
Philips	101, 102
Primestar	108
Proscan	106, 109, 110, 113
RCA	106, 109, 110, 113
Sony	107
Star Choice	103, 108
Toshiba	100
Uniden	101, 102

Icon Menu Navigation

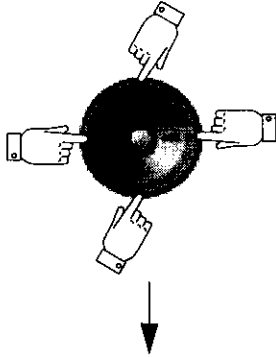
Press



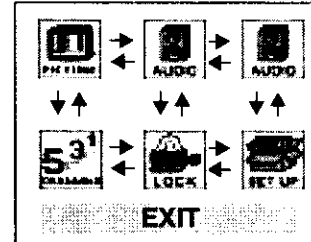
to display the Icons.



Press



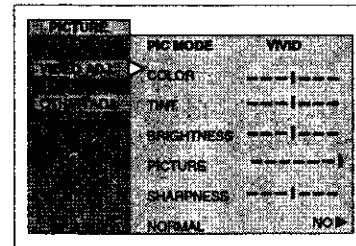
to select desired icon.



Press



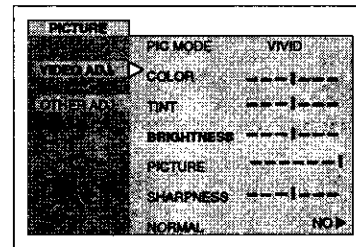
to display selected icon features.



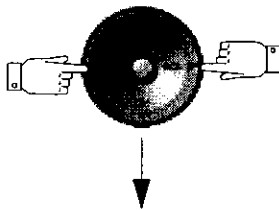
Press



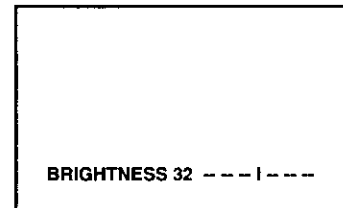
to select feature.



Press



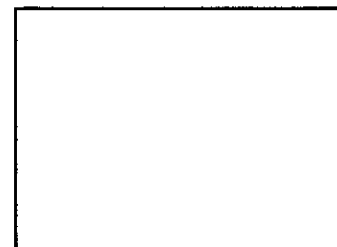
to adjust or activate feature.



Press

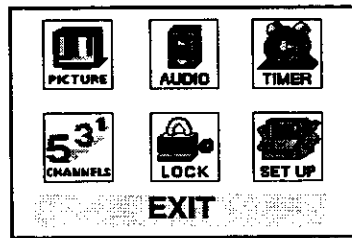


repeatedly to exit menus.




NORMAL PICTURE


Main Menu Icons





Icon Menus

These charts list all menus under each icon and which pages to refer to for menus description.


	REFER TO PAGE
IDIOMA/LANGUE <input type="checkbox"/> MODE - (ENGLISH, FRANÇAIS, ESPAÑOL)	21
PROG CHAN <input type="checkbox"/> MODE - (TV or CABLE) <input type="checkbox"/> ANTENNA - (ANT1 or ANT2) <input type="checkbox"/> AUTO PROGRAM <input type="checkbox"/> MANUAL PROGRAM	21
CC (CLOSED CAPTIONED) <input type="checkbox"/> CC ON MUTE <input type="checkbox"/> CC MODE	22
OTHER ADJ. <input type="checkbox"/> AUTO POWER ON <input type="checkbox"/> CHANNEL BANNER <input type="checkbox"/> GEOMAGNETIC CORR <input type="checkbox"/> TILT CORRECTION	22 23

	REFER TO PAGE
AUDIO ADJ. <input type="checkbox"/> MODE (STEREO, SAP or MONO) <input type="checkbox"/> BASS, TREBLE, BALANCE OR NORMAL	25
OTHER ADJ. <input type="checkbox"/> AI SOUND <input type="checkbox"/> BBE	25
SURROUND <input type="checkbox"/> MODE	25
SPEAKERS <input type="checkbox"/> ON <input type="checkbox"/> OFF & VARIABLE AUDIO OUT <input type="checkbox"/> OFF & FIXED AUDIO OUT	25

	REFER TO PAGE
CLOCK SET <input type="checkbox"/> TIME <input type="checkbox"/> DAY	24
SLEEP <input type="checkbox"/> HOW LONG?	24
TIMER <input type="checkbox"/> DAY <input type="checkbox"/> ON TIME <input type="checkbox"/> OFF TIME <input type="checkbox"/> ENTER CHANNEL <input type="checkbox"/> SET	24

	REFER TO PAGE
VIDEO ADJ <input type="checkbox"/> PIC MODE <input type="checkbox"/> COLOR, TINT, BRIGHTNESS, PICTURE, SHARPNESS or NORMAL	23
OTHER ADJ. <input type="checkbox"/> COLOR TEMP <input type="checkbox"/> VM	23

	REFER TO PAGE
CAPTION <input type="checkbox"/> MANUAL CAPTION <input type="checkbox"/> INPUT LABEL	26

	REFER TO PAGE
MODE <input type="checkbox"/> LOCK SET - GAME, CHANNEL or ALL) <input type="checkbox"/> BLOCK PROGRAM <input type="checkbox"/> HOW LONG?	27
V-CHIP OPERATION	28

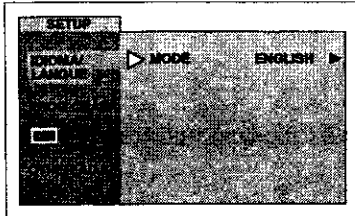
Icon Menu Operation

SET UP

Note: Refer to page 19 for Icon Menu Navigation procedures.

IDIOMA/LANGUE (Menu Languages)

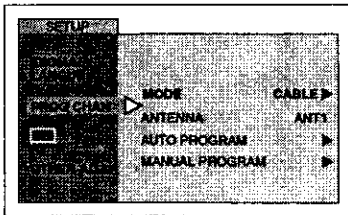
- ☐ **MODE** - In SET UP Menu, select IDIOMA/LANGUE to change menu language to ENGLISH, ESPAÑOL (Spanish) or FRANÇAIS (French).



- ☐ Press **VOL** ► to select English, Spanish or French.

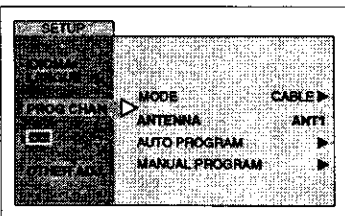
Prog Chan (Program Channels)

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



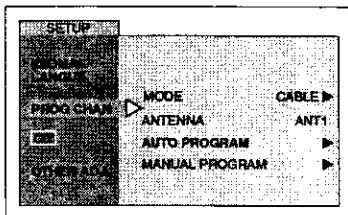
- ☐ Press **VOL** ► to select TV or CABLE.

- ☐ **ANTENNA** - To select ANT1 or ANT2.



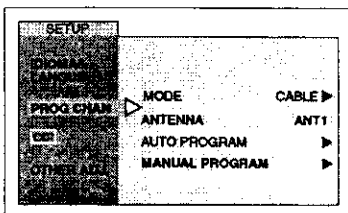
- ☐ Press **VOL** ► to select ANT1 or ANT2.

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

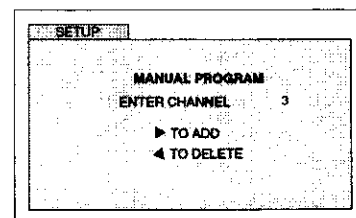


- ☐ Press **VOL** ► to start AUTO PROGRAM.

- ☐ **MANUAL PROGRAM** - To manually add or delete channels.



- ☐ Press **VOL** ► to display next menu.



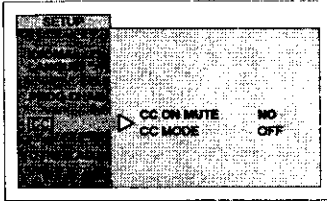
Note: Use Remote numeric keypad to enter channel numbers.

ICON MENU OPERATION

CC (Closed Captioning)

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.

- ☐ **CC ON MUTE** - Activates the Closed Caption feature when the MUTE button on the remote control is pressed.

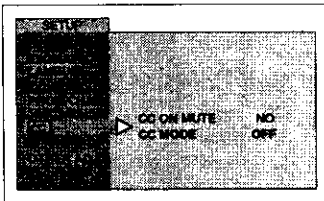


- ☐ Press **VOL** ► to select C1, C2, or NO.

Note: This feature only functions when the Closed Caption Mode is OFF. The recommended set up for Closed Caption on Mute is:

- CC ON MUTE: C1
- CC MODE: OFF

- ☐ **CC MODE** - Activates the onscreen Closed Caption feature by selecting one of the following modes:



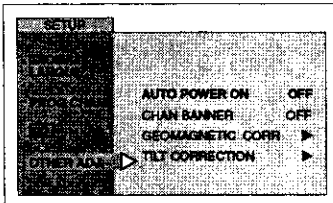
- ☐ Press **VOL** ► to select:

- 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 - Another Closed Captioning mode for video related information to be displayed.

Note: C1 mode is recommended for viewing Closed Captioning.

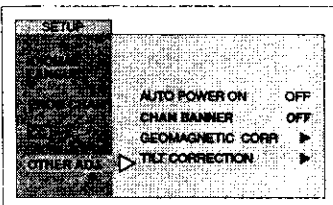
Other Adjustments

- ☐ **AUTO POWER ON** - Select SET to power up the TV at the same time as the Cable box or other components or select OFF.



- ☐ Press **VOL** ► to select OFF or SET.

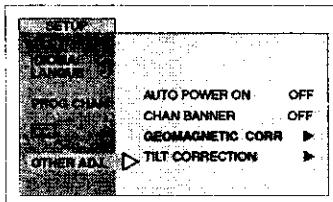
- ☐ **CHANNEL BANNER** - Select ON to display onscreen banner when changing channels.



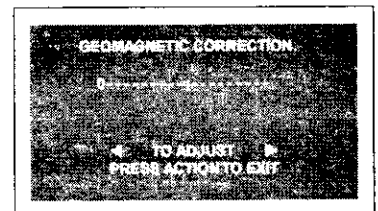
- ☐ Press **VOL** ► to select OFF or ON.

Note: Press **RECALL** to display onscreen Channel Banner at any time.

- ☐ **GEOMAGNETIC CORR** - This feature is used to adjust discoloration of the picture due to earth's magnetic field in the area.

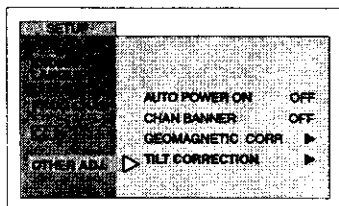


- ☐ Press **VOL** ► to display adjustment menu.
- ☐ Press ◀ **VOL** or **VOL** ► to adjust discoloration in picture.

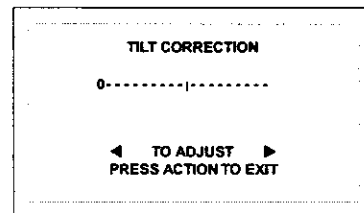


Other Adjustments (contd.)

- ☐ TILT CORRECTION - This feature is used to adjust the tilt of the picture due to earth's magnetic field in the area.



- ☐ Press **VOL ▶** to display adjustment menu.
- ☐ Press **◀ VOL** or **VOL ▶** to adjust picture tilt.



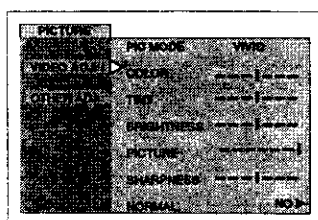
PICTURE



Note: Refer to page 19 for Icon Menu Navigation procedures.

Video Adj.

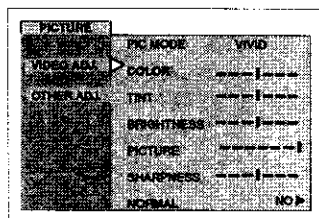
- ☐ PIC MODE - Lets you choose one of three pre-set Picture Modes that best suit the program you are viewing.



- ☐ Press **VOL ▶** to select:
 - **VIVID** - This is the default mode. It provides enhanced picture contrast and sharpness for viewing in a well-lit room.
 - **STANDARD** - Recommended for normal viewing conditions with subdued room lighting.
 - **CINEMA** - Select mode for watching movies in a darkened room. It provides a soft, film-like picture.

Note: Each mode keeps its own picture settings (Color, Tint, Brightness, Picture and Sharpness).

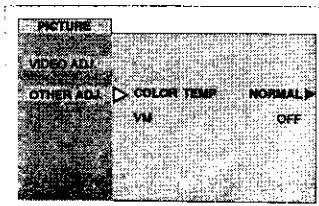
- ☐ **COLOR** - Adjusts desired color intensity.
- ☐ **TINT** - Adjusts natural flesh tones.
- ☐ **BRIGHTNESS** - Adjusts dark areas of picture.
- ☐ **PICTURE** - Adjusts white areas of picture.
- ☐ **SHARPNESS** - Adjusts clarity of outline detail.
- ☐ **NORMAL** - Reset all picture adjustments to factory default settings.



- ☐ Press **CH ▼** to select desired picture adjustment.
- ☐ Press **◀ VOL** or **VOL ▶** to adjust.

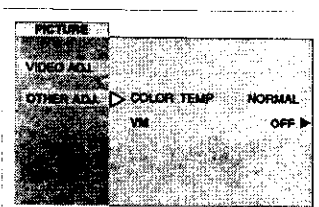
Other Adj.

- ☐ **COLOR TEMP** - To increase and decrease WARM (red) and COOL (blue) colors to suit personal preferences.



- ☐ Press **VOL ▶** to select WARM, COOL or NORMAL.

- ☐ **VM (VELOCITY MODULATION)** - Increase picture sharpness and provides crisp white to black transitions.



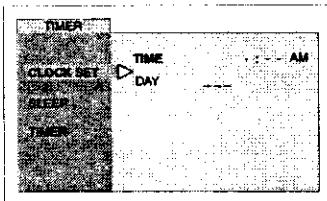
- ☐ Press **VOL ▶** to select ON or OFF.

TIMER

Note: Refer to page 19 for Icon Menu Navigation procedures.

Clock Set

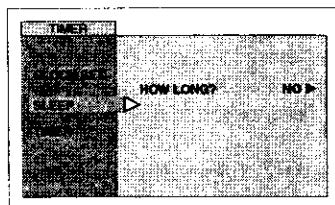
- ☐ TIME and DAY - Set the time and the day of the week.



- ☐ Press **◀ VOL** or **VOL ▶** to select hours AM or PM.
- ☐ Press **CH ▼** to select minutes position.
- ☐ Press **◀ VOL** or **VOL ▶** to select minutes.
- ☐ Press **CH ▼** to highlight DAY, then press **VOL ▶** to select day.

Sleep

- ☐ HOW LONG? - Turn television off in 30, 60 or 90 minutes. Select NO to turn off timer.

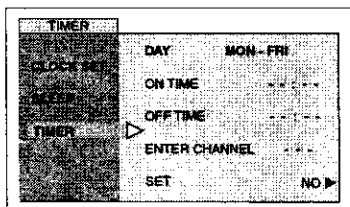


- ☐ Press **VOL ▶** to select 30, 60, 90 or NO.

Timer

- ☐ DAY, ON TIME, OFF TIME, ENTER CHANNEL and SET - To turn the television on and off at selected times, on selected channels, and on selected days.

Note: TIME must be entered in CLOCK SET to operate the TIMER features.



- ☐ Press **VOL ▶** to select day or days.
- ☐ Press **CH ▼** to select ON TIME, then press **VOL ▶**.
- ☐ Repeat for setting OFF TIME.
- ☐ Press **CH ▼** to select ENTER CHANNEL, then press **VOL ▶** to select channel.
- ☐ Press **CH ▼** to select SET, then press **VOL ▶** to select NO or SET.

Turn Off After 90 Minutes

The television automatically turns OFF after 90 minutes when turned ON by the TIMER. If the OFF time is selected or if a key is pressed, the automatic OFF after 90 minutes will be cancelled.

TIMER Activation

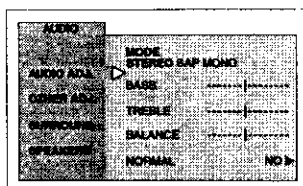
The TIMER is active when the television is OFF or ON. The television will switch to the selected channel at the selected time set in the TIMER.

AUDIO

Note: Refer to page 19 for Icon Menu Navigation procedures.

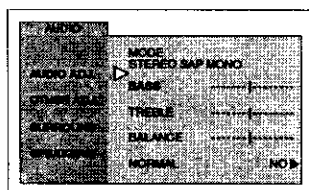
Audio ADJ.

- ☐ **MODE** - Select STEREO, SAP (Second Audio Program) or MONO. (Use MONO when stereo signal is weak).



- ☐ Press **VOL** ► to select STEREO, SAP or MONO.

- ☐ **BASS, TREBLE, BALANCE and NORMAL** -

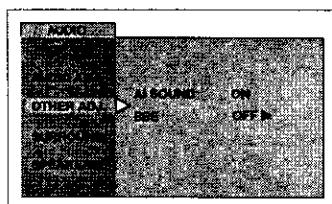


Press ◀ **VOL** or **VOL** ► to adjust.

- ☐ **BASS** - Increase or decrease the low frequency response.
- ☐ **TREBLE** - Increase or decrease the high frequency response.
- ☐ **BALANCE** - Emphasize the left/right speaker volume.
- ☐ **NORMAL** - Reset BASS, TREBLE and BALANCE adjustments to factory default settings.

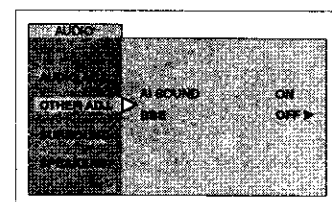
Other ADJ.

- ☐ **AI SOUND** - Equalize overall volume levels across all channels. (AI sound is not available in VIDEO mode).



- ☐ Press **VOL** ► to select ON or OFF.

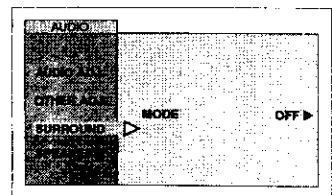
- ☐ **BBE®** - Sound technology enhances speech intelligibility and restores the dynamic range of musical passages to provide outstanding natural sound.



- ☐ Press **VOL** ► to select ON or OFF.

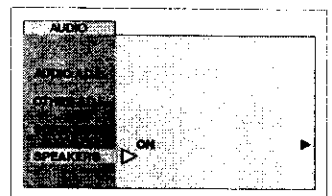
Surround

- ☐ **MODE** - Enhances audio response when listening to stereo.



- ☐ Press **VOL** ► to select ON or OFF.

Speakers



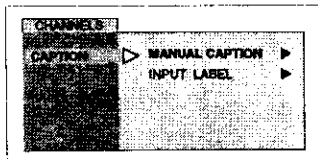
- ☐ Press **VOL** ► to select:
 - ON - TV speakers operate normally.
 - OFF & Variable Audio Out - TV speakers off - audio adjustable by television.
 - OFF & Fixed Audio Out - TV speakers off - audio adjustable by the external amplifier only.

CHANNELS

Note: Refer to page 19 for Icon Menu Navigation procedures.

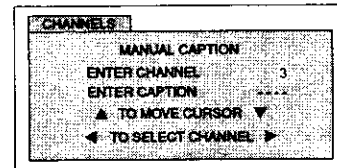
Caption

- ☐ MANUAL CAPTION - Enter channel numbers and captions manually.

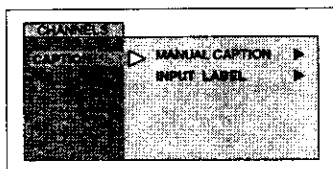


- ☐ Press **VOL ▶** to display next menu.
- ☐ Use remote numeric keypad to select desired channel (refer to your local TV guide).
- ☐ Press **CH ▼** to select ENTER CAPTION.
- ☐ Press **◀ VOL** or **VOL ▶** to select characters.

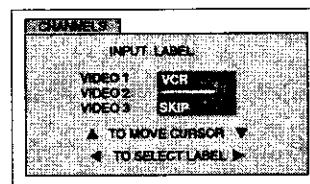
Note: Delete channel captions by entering spaces in all four character slots.



- ☐ INPUT LABEL - Lets you label the video input connections for onscreen display.



- ☐ Press **VOL ▶** to display next menu.
- ☐ Press **CH ▼** or **CH ▲** to move cursor.
- ☐ Press **◀ VOL** or **VOL ▶** to select desired preset input label (see chart below).



INPUT LABEL CHART

PRESET LABELS	REASON FOR SELECTING
VCR	Select when VCR is connected to video input.
DVD	Select when DVD is connected to video input.
SKIP	Select to skip unused video input when pressing TV/VIDEO button.
CABLE	Select when CABLE box is connected to video input.
DBS	Select when DBS is connected to video input.
DTV STB	Select when digital TV set-top-box is connected to video input.
PVR (Personal Video Recorder)	Select when a personal video recorder is connected to video input.
GAME	Select when Video GAME is connected to video input.
AUX	Select when other components are connected.
	Select to delete input label.

LOCK

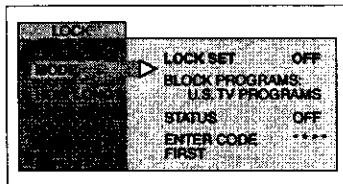
Note: Refer to page 19 for Icon Menu Navigation procedures.

Mode

- ☐ **LOCK SET** - To prevent video games, VCR tapes or all channels from being viewed. Use the remote numeric keypad to enter a four-digit secret code (*Use a code that is easy to remember and record it in a safe place*).

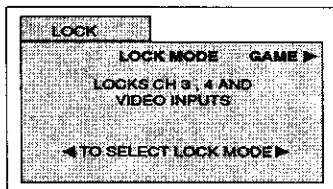
Notes:

- If you do not remember your code, LOCK will unlock in 12, 24, or 48 hours, depending on the current setup. Be cautious when selecting ALWAYS. If ALWAYS is selected, and you forget your secret code, the TV must be serviced by a qualified technician to clear the LOCK setup.
 - If you select CHANGE CODE, and you change your code from the one used in the LOCK menu, your new code becomes the controlling code.
- ☐ **OFF** - Turns Lock function off.

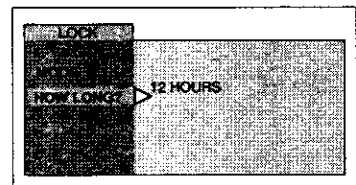


- ☐ Press **VOL** ► to display LOCK MODE GAME menu.

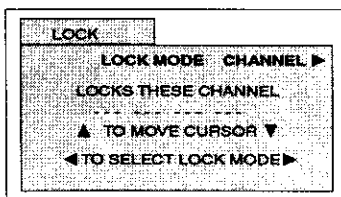
- ☐ **GAME** - Lock CH 3, 4 and Video inputs.



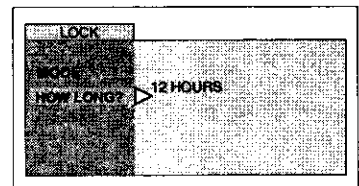
- ACTION**
- ☐ Press **●** twice.
 - ☐ Press **CH** ▼ to highlight HOW LONG?.
 - ☐ Press **VOL** ► to select 12 Hours, 24 Hours, 48 Hours or ALWAYS.



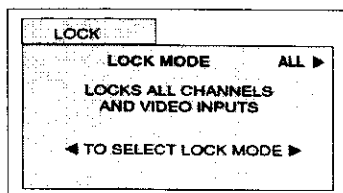
- ☐ **CHANNELS** - To lock up to four channels of your choice.



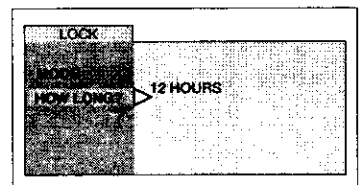
- ☐ Press **CH** ▼ or **CH** ▲ to move the cursor between channel clusters
 - ☐ Press **◀ VOL** or **VOL ►** or the numeric keypad to select the channels to be blocked.
- ACTION**
- ☐ Press **●** twice.
 - ☐ Press **CH** ▼ to highlight HOW LONG?.
 - ☐ Press **VOL** ► to select 12 Hours, 24 Hours, 48 Hours or ALWAYS.



- ☐ **ALL** - Locks all channels and Video inputs.



- ACTION**
- ☐ Press **●** twice.
 - ☐ Press **CH** ▼ to highlight HOW LONG?.
 - ☐ Press **VOL** ► to select 12 Hours, 24 Hours, 48 Hours or ALWAYS.



Note: If **GAME**, **CHANNEL** or **ALL** is selected, and if a blocked channel or video input is selected, the message **LOCKED** displays in the upper left corner of the TV screen.

V-CHIP Menu Operation



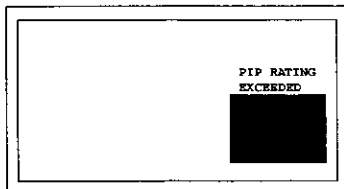
Note: Refer to page 19 for Icon Menu Navigation procedures.

Blocking Message

If V-Chip is enabled and the program exceeds the rating limit set by you, the blocking message will appear and the audio will be muted. Enter your four-digit secret code if you wish to continue viewing the program. After entering your code, all locks and rating blocks are disabled until the TV is turned off or until all settings are off.

PIP Blocking Message

PIP function is available when V-chip feature is activated. If the program being viewed in PIP exceeds the set rating limit, PIP will disappear and a blocking message will appear on screen.

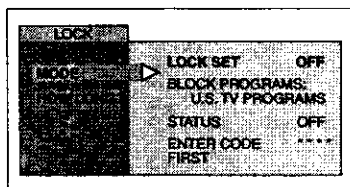


Notes:

- ☐ If the V-chip feature is activated while PIP is on, PIP will immediately disappear.
- ☐ Enable PIP functions by setting LOCK SET and V-CHIP ratings to OFF.

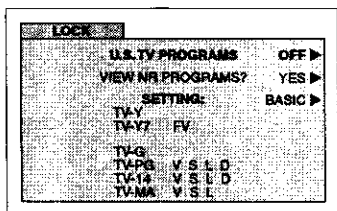
U.S. TV PROGRAMS

This TV model features the "V-Chip technology" which allows you to use U.S. TV PROGRAMS Guide ratings to block various types of TV programs. PIP will also be blocked automatically.

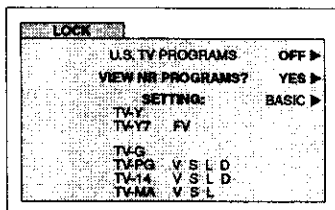


- ☐ Use the numeric keypad to enter your four digit code.
(Use a code that is easy to remember and record it in a safe place.)
- ☐ Press CH ▼ to enter the BLOCK PROGRAMS field.
- ☐ Press ◀ VOL or VOL ▶ to select U.S. TV PROGRAMS.
- ☐ Press CH ▼ to highlight STATUS.
- ☐ Press ◀ VOL or VOL ▶ to display U.S TV PROGRAMS RATING CHART.

U.S. TV Programs Rating



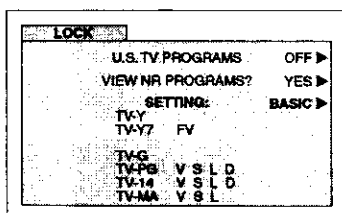
- ☐ Press VOL ▶ to select U.S. TV PROGRAMS ON or OFF.
- ☐ Press CH ▼ to select VIEW NR PROGRAMS?



- ☐ Press VOL ▶ to select VIEW NR PROGRAMS? YES or NO.

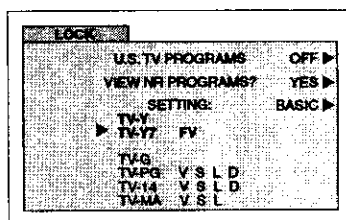
Note: Selecting "Yes", NR programs will be received. Selecting "NO", NR programs will be blocked. See Customer Caution below.

- ☐ Press CH ▼ to select SETTING.



- ☐ Press VOL ▶ to select BASIC or DETAILED.
BASIC - Allows you to select only general ratings such as TV-Y, TV-PG, etc.
DETAILED - Allows you to select both general ratings and content such as V, L, etc.

U.S. TV Programs Menu Chart (contd.)



- ☐ Press **CH▲** or **CH▼** to move between different ratings.
- ☐ Use **◀ VOL** or **VOL ▶** to select ratings you want to block (RED) and unblock (GREEN).

Note: See the U.S. TV PROGRAMS RATINGS CHART.

- ACTION**
- ☐ Press **●** twice to return to MODE in Lock menu.
 - ☐ Press **CH▼** to select HOW LONG?
 - ☐ Press **◀ VOL** or **VOL ▶** to select 12, 24, 48 hours or ALWAYS.

Customer Caution

The V-Chip system that is used in this set is capable of blocking "NR" programs (non rated, not applicable and none) per FCC Rules Section 15.120(e)(2). If the option of blocking "NR" programs is chosen "unexpected and possibly confusing results may occur, and you may not receive emergency bulletins or any of the following types of programming:"

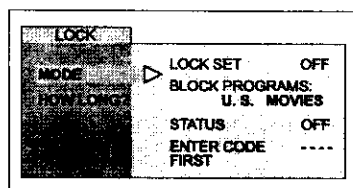
- Emergency Bulletins (Such as EAS messages, weather warnings and others)
- Locally originated programming
- News
- Political
- Public Service Announcements
- Religious
- Sports
- Weather

U.S. TV PROGRAMS RATINGS CHART

NR	Not Rated. SEE CUSTOMER CAUTION above.
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

U.S. MOVIES

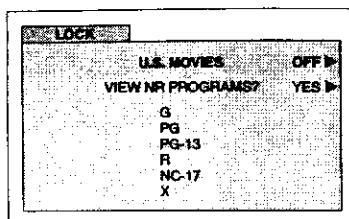
This TV model features the "V-Chip technology" which allows you to use Motion Picture Ratings when viewing movies or video tapes. This innovation allows parents to block various types of movies and video tapes at their discretion. PIP will also be blocked automatically.



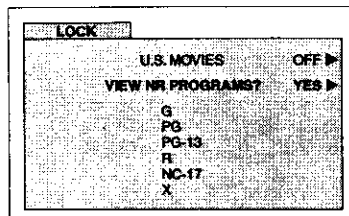
- ☐ Use the numeric keypad to enter your four digit code. (Use a code that is easy to remember and record it in a safe place.)
- ☐ Press **CH▼** to enter the BLOCK PROGRAMS field.
- ☐ Press **◀ VOL** or **VOL ▶** to select U.S. MOVIES.
- ☐ Press **CH▼** to highlight STATUS.
- ☐ Press **◀ VOL** or **VOL ▶** to display U.S MOVIES RATING CHART.

V-CHIP MENU OPERATION

U.S. Movies Menu (contd.)

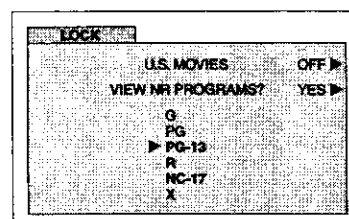


- ☐ Press **VOL ▶** to select U.S. MOVIES ON or OFF.
- ☐ Press **CH ▼** to select VIEW NR PROGRAMS?



- ☐ Press **VOL ▶** to select VIEW NR PROGRAMS? YES or NO.

Note: Some movies are not rated for a variety of reasons. Old movies and foreign films are usually not rated.



- ☐ Press **CH▲** or **CH ▼** to move between different ratings.
- ☐ Use **◀ VOL** or **VOL ▶** to select ratings you want to block (**RED**) and unblock (**GREEN**).

Note: See the U.S. MOVIES CHART.

- ☐ Press **ACTION** twice to return to MODE in Lock menu.
- ☐ Press **CH ▼** to select HOW LONG?
- ☐ Press **◀ VOL** or **VOL ▶** to select 12, 24, 48 hours or ALWAYS.

PG-13, R, NC-17 and X will be blocked.

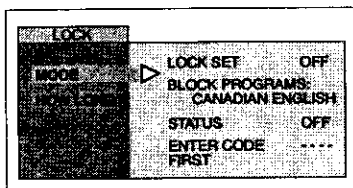
U.S. MOVIES RATINGS CHART

NR	CONTAINS NO RATING (NOT RATED) AND NA (NOT APPLICABLE) PROGRAMS. Movie has not been rated or rating does not apply.
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.

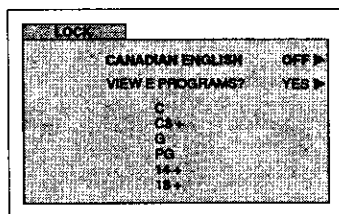
Rating Systems for Canada

Canadian English

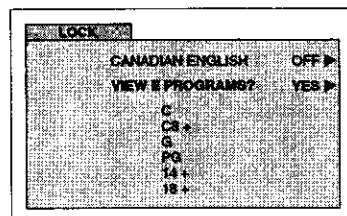
The V-CHIP used in this TV model allows you to block various types of movies and television programs based on the two rating systems used in Canada. PIP will also be blocked automatically.



- ☐ Use the numeric keypad to enter your four digit code. (Use a code that is easy to remember and record it in a safe place.)
- ☐ Press **CH ▼** to enter the BLOCK PROGRAMS field.
- ☐ Press **◀ VOL** or **VOL ▶** to select CANADIAN ENGLISH.
- ☐ Press **CH ▼** to highlight STATUS.
- ☐ Press **◀ VOL** or **VOL ▶** to display CANADIAN ENGLISH RATING CHART.

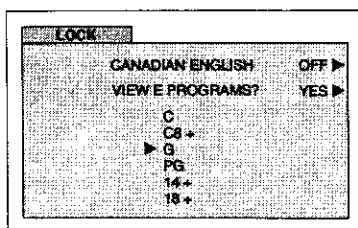


- ☐ Press **VOL ▶** to select CANADIAN ENGLISH ON or OFF.
- ☐ Press **CH ▼** to select VIEW E PROGRAMS?



Press **VOL ▶** to select VIEW E PROGRAMS? YES or NO.

Note: Not rated programs include: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.



- ☐ Press **CH ▲** or **CH ▼** to move between different ratings.
- ☐ Use **◀ VOL** or **VOL ▶** to select ratings you want to block (**RED**) and unblock (**GREEN**).

Note: See the U.S. MOVIES CHART.

ACTION

- ☐ Press **●** twice to return to MODE in Lock menu.
- ☐ Press **CH ▼** to select HOW LONG?
- ☐ Press **◀ VOL** or **VOL ▶** to select 12, 24, 48 hours or ALWAYS.

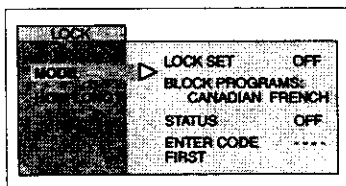
CANADIAN ENGLISH RATINGS CHART

E	Exempt - Exempt programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.
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

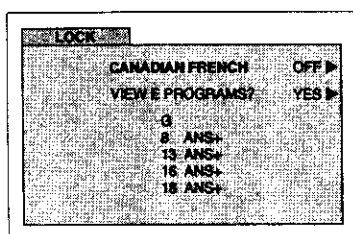
V-CHIP MENU OPERATION

Canadian French

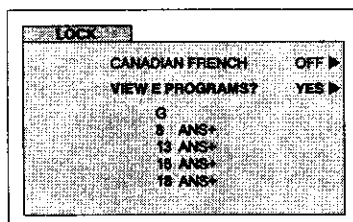
The V-CHIP used in this TV model also lets you block or unblock Canadian French programs according to various ratings categories. PIP will also be blocked automatically.



- ☐ Use the numeric keypad to enter your four digit code. (Use a code that is easy to remember and record it in a safe place.)
- ☐ Press **CH ▼** to enter the BLOCK PROGRAMS field.
- ☐ Press **◀ VOL** or **VOL ▶** to select CANADIAN FRENCH.
- ☐ Press **CH ▼** to highlight STATUS.
- ☐ Press **◀ VOL** or **VOL ▶** to display CANADIAN FRENCH menu rating chart.

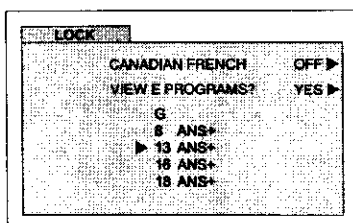


- ☐ Press **VOL ▶** to select CANADIAN FRENCH ON or OFF.
- ☐ Press **CH ▼** to select VIEW E PROGRAMS?



Press **VOL ▶** to select VIEW E PROGRAMS? YES or NO.

Note: Not Rated programs include: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.



- ☐ Press **CH▲** or **CH ▼** to move between different ratings.
- ☐ Use **◀ VOL** or **VOL ▶** to select ratings you want to block (**RED**) and unblock (**GREEN**).

Note: See the CANADIAN FRENCH RATING CHART.

ACTION

- ☐ Press **●** twice to return to MODE in Lock menu.
- ☐ Press **CH ▼** to select HOW LONG?
- ☐ Press **◀ VOL** or **VOL ▶** to select 12, 24, 48 hours or ALWAYS.










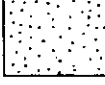








13ANS+, 16ANS+ and 18ANS+ will be blocked

CANADIAN FRENCH RATINGS CHART

E	Exempt - Exempt programming.
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.
13 ans +	Programming may not be suitable for children under the age of 13 - Contains either a few violent scenes or one or more sufficiently violent scenes to affect them. Adult supervision strongly suggested.
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.

Troubleshooting Chart

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 Program the Remote Control Again 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		

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 Infanteria, 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
31"-36" diagonal	1 (ONE) YEAR	2 (TWO) YEARS	1 (ONE) YEAR	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.

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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