

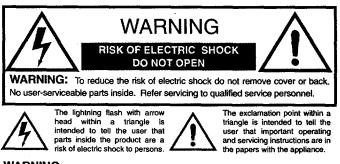
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# **Table of Contents**

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# Safety Instructions



WARNING: To prevent tire or shock hazard, do not expose this appliance to rain or moisture.

#### **CONGRATULATIONS**

# **Congratulations**

Your new TV 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.

#### Cust/omer Record

The model and serial number of this product are located on the back of the TV. 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 is available at **www.prodreg.com/panasonic**.

| Model<br>Number  |                                 |
|------------------|---------------------------------|
| Serial<br>Number | againt constraint a statistical |

#### **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.

#### **Cabinet and Remote Control**

- Use a soft cloth dampened with water or a mild detergent solution. Do not use benzene, thinner, or other petroleum based cleaners.
- Avoid excessive moisture and wipe dry.

### **specifications**

| Power Source  |   |
|---|---|
| CT-27G23 CT-32G23<br>CT-35G23 CT-36G23<br>CT-2769S CT-3269S | 120V AC, 60Hz                               |
| Channel Capability - 181                                    | VHF-12; UHF-56; Cable-113                   |
| Video Input Jacks   | 1V <sub>p-p</sub> , 75 Ohm, Phono Jack Type |
| Audio Input J <del>a</del> cks                              | 500mV RMS 47K Ohm                           |
| To Audio AMP Jack   | 0-2.0V RMS 4.7K Ohm                         |
| S-VHS Input Jack<br>(some models)                           | S-Video (Y-C) Connector                     |

Specifications are subject to change without notice or obligation.

# INSTALLATION

#### **Television Location**

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This unit is intended to be used with an optional stand or entertainment center. Consult your dealer for available options.

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

#### **Optional Cable Connections**

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

- Use 75-ohm coaxial shielded cables.
- Check type of output and input connectors on your components.
- Determine required cable lengths.

#### **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. FOR SOME MODELS THAT ARE NON-POLARIZED, THE USE OF AN AC ADAPTOR CONNECTOR MAY BE NECESSARY.

#### **Remote Control**

The **Remote Control Quick Reference Guide** is located within the package provided with this TV.

#### Cable / Antenna

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.



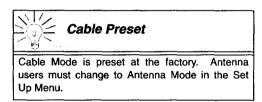
**Incoming Cable from** 

75 Ohm VHF/UHF on back of TV

#### INSTALLATION

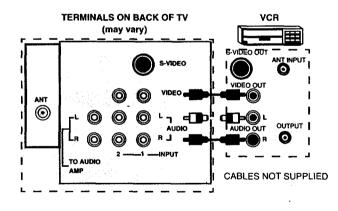
#### **Antenna Connection**

For proper reception of VHF/UHF Incoming Cable from channels, an external antenna is Home Antenna required. For best reception an outdoor antenna is recommended. Antenna Mode must be set to TV.



# **Optional Equipment Connections**

VCR's, video disc players, TV game consoles, and DSS equipment can also be connected to the video inputs. See the optional equipment manual for details. (Some models have only <u>one</u> video input and some models have an S-Video input.)



#### Procedure

- 1. Connect equipment as shown to rear Audio/Video input jacks.
- 2. Select the Video mode by pressing TV/VIDEO button.
- 3. Operate optional equipment as instructed in equipment manual.
- Note: The S-VIDEO connection is optional and overrides other VIDEO connections.

# MAIN MENU

#### **TO AUDIO AMPlifier**

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

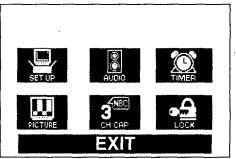
Note: Do not connet TO AUDIO AMP terminals, directly to external speakers.

#### Audio Adjustments

- 1. Press TV SPEAKERS ON button located in the back of the TV or select TV SPEAKERS ON located in the AUDIO menu on screen.
- 2. Set amplifier volume to minimum.
- 3. Adjust TV volume to desired level.
- 4. Adjust amplifier volume to match the TV.
- 5. Press TV Speakers OFF button on the back of the TV or OFF&VAO from AUDIO menu.
- 6. Volume and mute are now controlled from the TV.
  - **Note:** In OFF&FAO the volume is controlled by the external amplifier.

# Main Menu

#### Main Menu



#### **ACTION Button**

Press the **ACTION** button to display the Main Menu and Sub Menus. Press the **ACTION** button repeatedly to exit.

## **CH / VOL Buttons**

Press the CH (channel) or VOL (volume) buttons to select an icon. Use the CH buttons to highlight the desired features. Use VOL buttons to select and adjust features.

#### **Remote Navigation Buttons**



#### PICTURE IN PICTURE (PIP) OPERATION

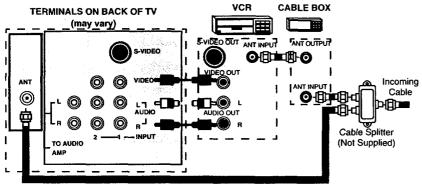
# Picture In Picture (PIP) Operation

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#### **PIP Operation with a VCR and Cable Box**

This television includes a Picture In Picture (PIP) feature. A second video source (VCR, Camcorder, etc.) is required to provide a second picture.

Connect your television to a VCR and Cable Box, as shown. (Some models have only one video input.)



CABLES NOT SUPPLIED

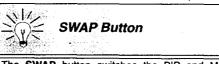
Note: The Remote Control must be programmed with supplied codes to operate the VCR and Cable Box. See Programming the Remote Control in the Remote Control Quick Reference Guide.

#### Procedure

Press the PIP button on the Remote Control to display the PIP frame.

Note: The PIP picture is the same as the main picture, initially.

- To view a different picture in the PIP frame:
  - Press the TV/VIDEO button on the Remote Control to select the video PIP source.
  - Note: Verify the CABLE BOX and VCR are ON and the VCR tuned to channel 3.
  - Choose channels for the *PIP* frame by pressing the CABLE button on the Remote Control and using the numeric keypad or CH up/down buttons.
  - Choose channels for the Main Picture by pressing the TV button on the Remote Control and using the numeric keypad or CH up/down buttons.

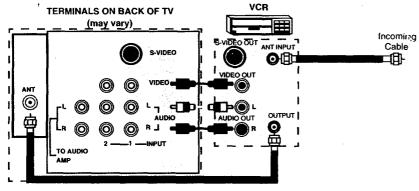


The SWAP button switches the PIP and Main Picture source. Press the **RECALL** button for PIP and Main Picture source status, on screen.

# PICTURE IN PICTURE (PIP) OPERATION

#### **PIP Operation with a VCR - No Cable Box**

- This television includes a Picture In Picture (PIP) feature. A second video source (VCR) is required to provide a second picture.
- Connect your television to a VCR, as shown. (Some models have only one video input and some models have an S-VIDEO input.).



CABLES NOT SUPPLIED

Note: The Remote Control must be programmed with the supplied codes to operate the VCR. See Programming the Remote Control in the Remote Control Quick Reference Guide.

#### Procedure

Turn the VCR OFF and tune the TV to channel 3.

Press the **PIP** button on the Remote Control to display the PIP frame on screen.

Note: The PIP picture is the same as the Main picture, initially.

- Press the TV/VIDEO button on the Remote Control to select the VIDEO PIP source.
- Press the VCR button on the Remote Control and turn ON the VCR.
- Press the **TV/VCR** button on the Remote Control.
- Choose channels for *PIP* frame by pressing VCR
   CHANNEL up/down buttons on the Remote Control.
- Choose channels for the *Main Picture* by pressing the **TV** button on the Remote Control and using the numeric keypad or **CH** up/down buttons.



Picture source. Press the **RECALL** button for PIP and Main Picture source status, on screen.

# MAIN MENU FEATURE CHART

# Main Menu Feature Chart

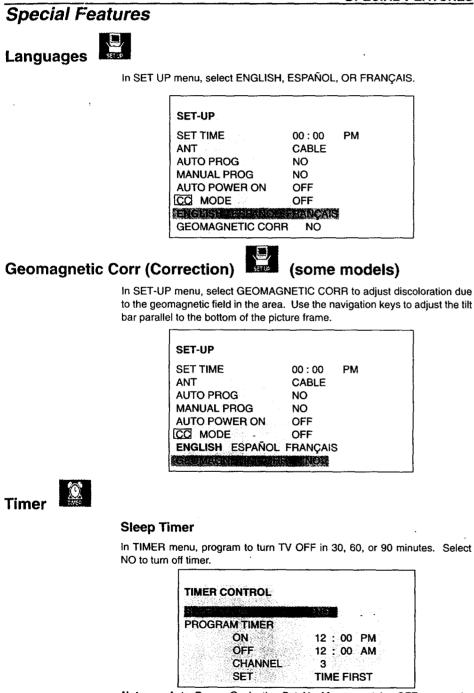
| / Menu                            | DESCRIPTION  |  |
|-----------------------------------|--|--|
| SETUP                             | SET UP   |  |
| SET TIME                          | When entered, TIME will display on screen after pressing POWER button, RECALL button, or changing channels.  |  |
| ANT                               | Choose CABLE or TV to match the signal at your antenna input.  |  |
| AUTO PROG                         | Automatically program channels with a signal into memory.  |  |
| MANUAL PROG                       | Manually add or delete channels from memory.   |  |
| AUTO POWER ON                     | Automatically turn TV POWER on when AC power is applied.   |  |
| CC MODE                           | Select CC for Closed Captioning display. Select OFF to display closed captioning when MUTE button is pressed.  |  |
| LANGUAGES                         | Select English, Spanish, or French menu.   |  |
| GEOMAGNETIC CORR<br>(some models) | Adjustment may be required for geomagnetic fields in the area.   |  |
| AUDIO                             | AUDIO  |  |
| MODE                              | <ul> <li>Select the audio mode:</li> <li>STEREO - Two channel audio reception.</li> <li>SAP - (Second Audio Program) Tune to the alternate audio channel if available in your area (bilingual or descriptive audio).</li> <li>MONO - One channel audio. Use when stereo signal is weak.</li> </ul> |  |
| AI SOUND                          | Automatically maintain constant volume between programs and commercials.   |  |
| TV SPEAKERS                       | <ul> <li>Select TV SPEAKERS:</li> <li>ON - TV SPEAKERS operate normally.</li> <li>OFF&amp;VAO (Variable Audio Output) - TV Speakers off — audio adjustable by TV.</li> <li>OFF&amp;FAO (Fixed Audio Output) - TV SPEAKERS off — audio adjustable only by the amplifier (some models).</li> </ul>   |  |

# Main Menu Feature Chart Main Menu Feature Chart (Cont.)

| Menu               | DESCRIPTION  |
|--------------------|--|
|                    | СН САР   |
| CHANNEL CAPTION    | Provide labels for up to 30 stations using up to four characters for each station.                         |
| TIMER              | TIMER  |
| SLEEP TIMER        | Program TV to automatically turn off in 30, 60, or<br>90 minutes. Select NO to turn timer off.             |
| PROGRAM TIMER      | Program TV to automatically turn on and off at selected time on a selected channel, daily or only one day. |
| PICTURE            | PICTURE  |
| PICTURE NORM       | Reset all picture adjustments to factory default settings.   |
| COLOR              | Adjust desired color intensity.  |
| TINT               | Adjust natural flesh tones.  |
| BRIGHTNESS         | Adjust dark areas for crisp detail.  |
| PICTURE            | Adjust white areas of picture.   |
| SHARPNESS          | Adjust clarity of outline detail.  |
| ● <u>A</u><br>LOCK | LOCK   |
| GAME GUARD         | Program to prevent video games, cable box, and VCR's from being viewed.                                    |

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Note: Auto Power On in the Set Up Menu must be OFF to use the Sleep Timer.

# Program Timer

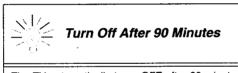
In Timer menu, program TV to automatically turn on and off at selected time on a selected channel, daily or one day.

| TIMER CONTROL |            |
|---------------|------------|
|               | NO         |
| ON            | 12:00 PM   |
| OFF           | 12:00 AM   |
| CHANNEL       | 3          |
| SET           | TIME FIRST |

Note:

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e: TIME must be entered in the SET UP menu to operate PROGRAM TIMER.



The TV automatically turns <u>OFF</u> after 90 minutes when turned on by the PROGRAM TIMER. If the OFF time is programmed or if a key is pressed, the automatic OFF after 90 minutes will be cancelled.



The PROGRAM TIMER is active when the TV is OFF or ON. The TV will switch to the selected channel at the selected time set by the PROGRAM TIMER.

#### 3 CH CHP **CH CAP (Channel Caption)**

Program channel captions (station labels) for 30 stations using up to four characters.

| CHANNEL CAPTION  |                       |
|--|-----------------------|
| STREET, STREET | MARIER                |
| 123  |                       |
| ENTER CAPTION  |                       |
|  |                       |
|  | and the second second |
| A TO MOVE  | TO SELECT             |
| V CURSOR   | CHANNEL               |

Note:

Delete channel captions by entering dashes (-) in all four character slots.



#### **Game Guard Lock**

In LOCK menu, use to prevent video games and VCR's from being viewed for 12, 24, or 48 hours using a secret code.

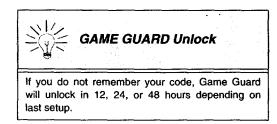
Lock Channel 3, Channel 4, and video inputs for 12, 24, or 48 hours by entering a three-digit secret code.

Unlock GAME GUARD by entering the same three-digit secret code.

| GAME LOCK          |              |
|--------------------|--------------|
| LOCKS CH 3, 4, AND | VIDEO INPUTS |
| HOW LONG?          | 12 HRS       |
| ENTER CODE         | <b></b>      |

Note:

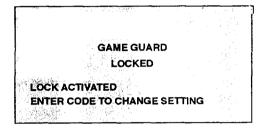
Understand how to unlock GAME GUARD before using it. Use a code that is easy to remember or record it in a safe place.



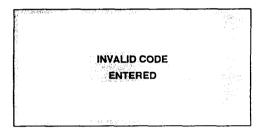
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# **Unlocking Game Guard**



Enter the same three-digit code.



If the three-digit code is not the same as entered previously.



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If the same three-digit code is used.

# TROUBLESHOOTING CHART

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

| Αυσιό                               | VIDEO              | Solutions  |
|-------------------------------------|--------------------|--|
| Noisy Audio                         | Snowy Video        | Adjust Antenna Location and Connection   |
| Noisy Audio                         | Multiple Image     | Adjust Antenna Location and Connection<br>Check Antenna Lead-in Wire   |
| Noisy Audio                         | Interference       | Move TV from Electrical Appliances, Lights, Vehicles,<br>and Medical Equipment   |
| No Audio                            | Normal Video       | Increase Volume<br>Change Channel  |
| Noisy Audio                         | No Video           | Set TV or Cable Mode Property<br>Check Antenna Cables  |
| No Audio                            | No Video<br>No PIP | Check Power Cord is Plugged into Active Outlet<br>Adjust Brightness and Audio Controls<br>Change Channel<br>Check Cable Connections<br>Program the Remote Control Again<br>Check Second Video Source Operation |
| Normal Audio                        | No Color           | Adjust Color Settings<br>Change Channel  |
| Wrong Audio                         | Normal Video       | Check Audio Is Set To Stereo Or Mono, Not SAP  |
| ود د                                |                    | Adjust Geomagnetic Corr (Correction) in the SET-UP menu  |
| Normal Audio                        | Discoloration      |  |
|                                     |                    | Replace Remote Control Batteries   |
| Normal Audio<br>Intermittent Remote | Normal Video       |  |

NOTES

Read these instructions completely before operating TV.

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Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America One Panasonic Way Secaucus, New Jersey 07094 www.panasonic.com (800) 222-4213 Panasonic de Mexico, S.A, de C.V. Amores No. 1120 Col. Del Valle C.P. 03100 México, D.F. Tel. (915 ó 015) 488-1000 Fax (915 ó 015) 575-6763, 575-6765 Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico Inc. ("PSC") Ave. 65 de infanteria, Km 9.5 San Gabriel Industrial Park Carolina, Puerto Rico 00985 Tel. (787) 750-4300 Fax (787) 768-2910

