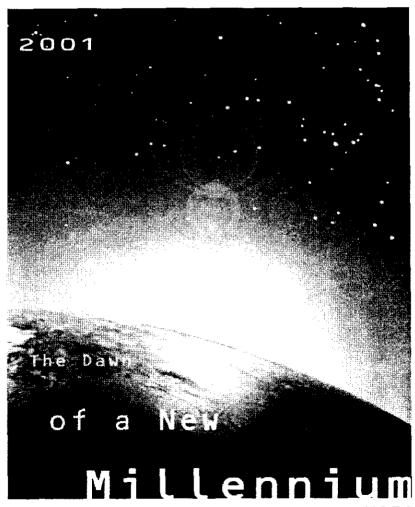
Panasonic®

Color Television Operating Instructions

CT-20SX11 CT-F2111X CT-F2111 CT-F2121L



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

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WARNING

RISK OF ELECTRIC SHOCK DO NOT OPEN



WARNING: To reduce the risk of electric shock do not remove cover or back. No user-serviceable parts inside. Refer servicing to qualified service personnel.



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 prevent fire or shock hazard, do not expose this appliance to rain or moisture.

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Read these instructions completely before operating TV. Contents are subject to change without notice or obligation.

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Feature Chart

Г.					
	MODELS	CT-20SX11	CT-F2111	CT-F2111X	CT-F2121L
:	FEATURES				
SPECIAL FEATURES	MENU LANGUAGE ENG/SPAN/FR			0	۵
	V-CHIP CAPABILITY	0	0	0	0
	75 OHM INPUT				
SF	VIDEO NORM	0	0		
0	AUDIO NORM	0			
	STEREO		0		
AUDIO	AI SOUND	0	0		
A	BASS/BALANCE/TREBLE		0		
	SURROUND		0		
A/V JACKS	A/V IN (REAR/FRONT)	2 (2/1)	2 (2/1)	2 (2/1)	2 (2/1)
	AUDIO OUT		0	0	
	S-VHS INPUT		0	0	0
Ą	HEADPHONE JACK				

Congratulations

Your new Panasonic Tau television is designed to provide state-of-the-art picture quality and features an innovative PureFlatTM picture tube. The new gray or silver cabinet with compact, elegant styling 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 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 registraton 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-20SX11 (1.4A) CT-F2111 (1.4A)	120V AC, 60Hz	
CT-F2111X (1.4A)	127V AC, 60Hz	
CT-F2121L (1.4A)	Auto (110Vca-220Vca), 50/60Hz	
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	
Audio Output Jacks	0-2 0V RMS 4 7K Ohm	
S-Video Input Jacks	S-Video (Y-C) Connector	

Specifications are subject to change without notice or obligation.

Installation

Television Location

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.
 Fluorescent lighting may reduce remote control transmitting range.
 Keep away from magnetic equipment, including motors, fans and external speakers.

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



Optional Cable Connections

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

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

AC Power Supply Cord

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



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

Cable / Antenna Connection

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

Cable Connection

Connect the cable supplied by your local cable company.

Note:

A cable converter box may be required for proper reception. Check with your local cable company for compatibility requirements. Incoming Cable from Cable Company



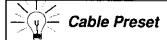
75 Ohm VHF/UHF on back of TV

Antenna Connections

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

Incoming Cable from Home Antenna





Cable Mode is preset at the factory. Antenna users must change to Antenna Mode in the Setup Menu.

Optional Equipment Connections

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

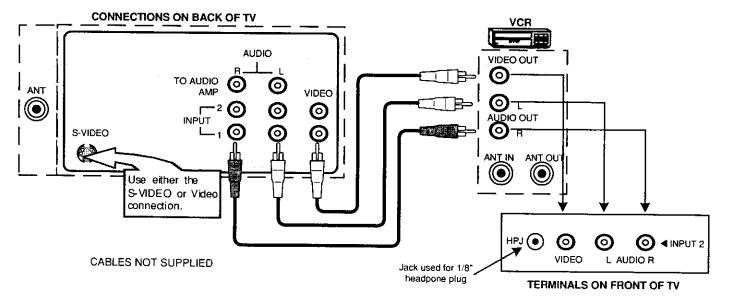
The extended use of fixed image program material can cause a permanent "shadow image" on the picture tube. This background image is viewable on normal programs in the form of a stationary fixed image. This type of irreversible picture tube deterioration can be limited by observing the following steps:

- A. Reduce the brightness/contrast setting to a minimum viewing level.
- B. Do not display the fixed image for extended periods of time.
- C. Turn the power off when not in actual use.

Note: The marking or retained image on the picture tube resulting from fixed image use is not an operating defect and as such is not covered by Warranty. This product is not designed to display fixed image patterns for extended periods of time.

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.



Procedure

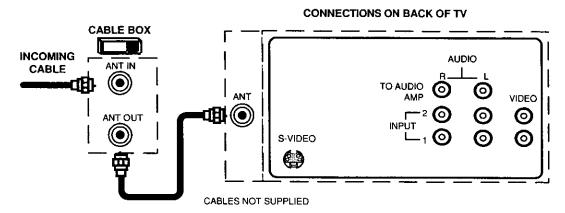
1. Connect equipment as shown to front or rear Audio/Video input jacks.

Note: Front and rear Audio/Video connections (INPUT 2) cannot be operated at the same time.

- Select the Video mode by pressing TV/VIDEO button.
- 3. Operate optional equipment as instructed in equipment manual.

Cable Box Connection

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



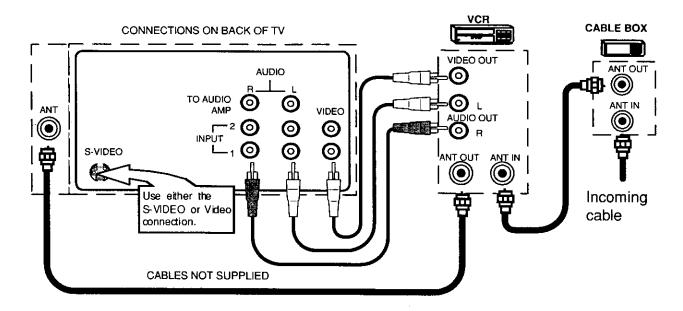
Note: The remote control must be programmed with supplied codes to operate the cable box. See Programming the Remote Control in the **Remote Control Quick Reference Guide**

Viewing a premium (scrambled) cable channel Procedure

- 1. Tune the television to Channel 3 or 4 depending on the RF out setting of the cable box.
- 2. Using the cable box, tune to the premium cable channel you want to view.

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. See Programming the Remote Control in the **Remote Control Quick Reference Guide**.

Viewing a premium (scrambled) cable channel

Procedure

- 1. Tune the television to CH 3 or CH 4 depending on the Cable box RF out.
- 2. Using the cable box, tune to the premium cable channel you want to view.

Recording a premium (scrambled) cable channel

Procedure

- 1. Press the **TV/VIDEO** button on the remote control to select the video input (VIDEO 1, VIDEO 2, etc.) connected to your VCR.
- 2. Turn the VCR ON.
- 3. Tune the VCR to Channel 3 or 4, depending on your VCR.
- 4. Using your cable box, tune to the premium cable channel you want to record.
- 5. Begin recording.

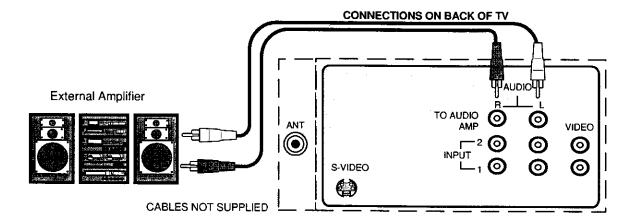
Amplifier Connection (To Audio Amp)

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.

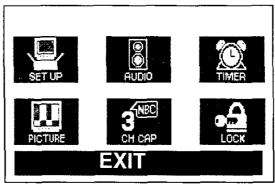
Audio Adjustments

- Select TV SPEAKERS ON from AUDIO menu.
- 2. Set amplifier volume to minimum.
- Adjust TV volume to desired level.
- 4. Adjust amplifier volume to match the TV.
- 5. Select TV SPEAKERS OFF&VAO from AUDIO menu.
- Volume, mute, bass, treble and balance are now controlled from the TV.
 Note: In OFF&FAO the volume is controlled by the external amplifier.



Main Menu





ACTION Button

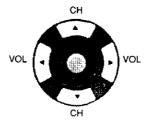
Press the **ACTION** button to display the Main Menu and submenus. Press the **ACTION** button repeatedly to exit.

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 Control Buttons

Remote ACTION / Navigation Button



Remote Control Guide

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

Main Menu Feature Chart

Menu	DESCRIPTION	
SET UP	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	Select SET to power up the TV at the same time as the Cable Box or other components or select OFF.	
CC MODE	Select C1 or C2 for Closed Captioning display. Select OFF to display closed captioning when MUTE button is pressed.	
LANGUAGES	Select English, Spanish, or French menu.	
AUDIO	AUDIO	
AUDIO NORM	Reset BASS, TREBLE and BALANCE to factory default.	
BASS	Increase or decrease the bass response.	
TREBLE	Increase or decrease the treble response.	
BALANCE	Emphasize the left/right speaker volume.	
MODE	 Select the audio mode: STEREO - Two channel audio reception. SAP - (Second Audio Program) Tune to the alternate audio channel if available in your area (bilingual or descriptive audio). MONO - One channel audio. Use when stereo signal is weak 	
AI SOUND	Automatically maintain constant volume between programs and commercials.	
SURROUND	Enhances audio response when listening to stereo.	
TV SPEAKERS	Select TV SPEAKERS: ON - TV SPEAKERS operate normally. OFF&VAO (Variable Audio Output) - TV Speakers off — audio adjustable by TV. OFF&FAO (Fixed Audio Output) - TV SPEAKERS off — audio adjustable only by the external amplifier.	

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

MENU	DESCRIPTION
TIMER	TIMER
SLEEP TIMER	Program TV to automatically turn off in 30, 60, or 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.
3 CH CAP	СН САР
CHANNEL CAPTION	Provide labels for up to 30 stations using up to four characters for each station.
o <u>.</u> Lock	LOCK
GAME GUARD	Program to prevent video games, cable box, and VCRs from being viewed.

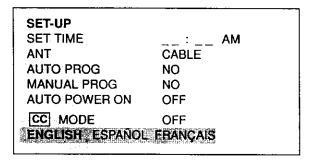
Special Features

SET UP



Menu Languages

In SETUP menu, select ENGLISH, ESPAÑOL (Spanish), or FRANÇAIS (French) to change the menu language.



Timer



Sleep Timer

In TIMER menu, program to turn TV OFF in 30, 60, or 90 minutes. Select NO to turn off timer.

TIMER CONTROL	
SLEEP TIMER STORES	ON
PROGRAM TIMER	
ON	<u></u> :
OFF OFF	:
CHANNEL	3
SET	TIME FIRST

Program Timer

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

NO
: : 3 NO

Note: TIME must be entered in the SETUP menu to operate PROGRAM TIMER.



Turn Off After 90 Minutes

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.



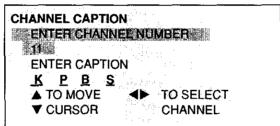
PROGRAM TIMER Activation

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.

CH CAP (Channel Caption)



Program channel captions (station labels) for 30 stations using up to four characters. Use the numeric keypad for entering numbers unavailable with the select arrows.



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



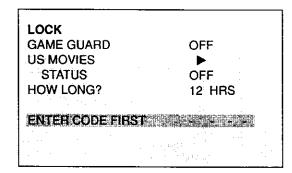
Game Guard Lock and Unlock

Select GAME GUARD to prevent video games and videotapes from being viewed.

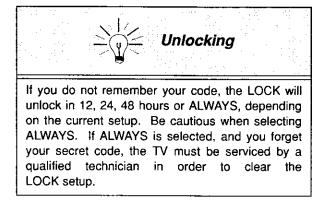
Lock Channel 3, Channel 4, and video inputs for 12, 24, 48 hours or ALWAYS by entering a four-digit secret code, then selecting GAME GUARD ON.

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.

Unlock GAME GUARD by reentering your four-digit secret code, then selecting GAME GUARD OFF.



Note: If GAME GUARD is ON, and if a blocked channel or video input is selected, the message GAME GUARD ON displays in the upper right corner of the TV screen.



Note: For more information about LOCK menu, see the V-CHIP Parental Lock manual provided with the TV package.

Troubleshooting Chart

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

AUDIO -	VIDEO	Solutions
		Control of the water is a second and the control of the second and
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 TV from Electrical Appliances, Lights, Vehicles, and Medical Equipment
×		Increase Volume Check Mute Check TV SPEAKERS on/off
No Audio	Normal Video	Change Channel
(),		Set TV or Cable Mode Properly Check Antenna Cables
Noisy Audio	No Video with Snow	
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	VIDEO 1 Missing Video Input mode	De-Select Skip Feature Located In The Channel Menu
Normal Audio Intermittent Remote	Normal Video	Replace Remote Control Batteries

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