

# Panasonic<sup>®</sup>

just slightly ahead of our time<sup>®</sup>

## Operating Instructions Manuel d'utilisation

CT-13R31C

CT-13R41C

CT-13R51D

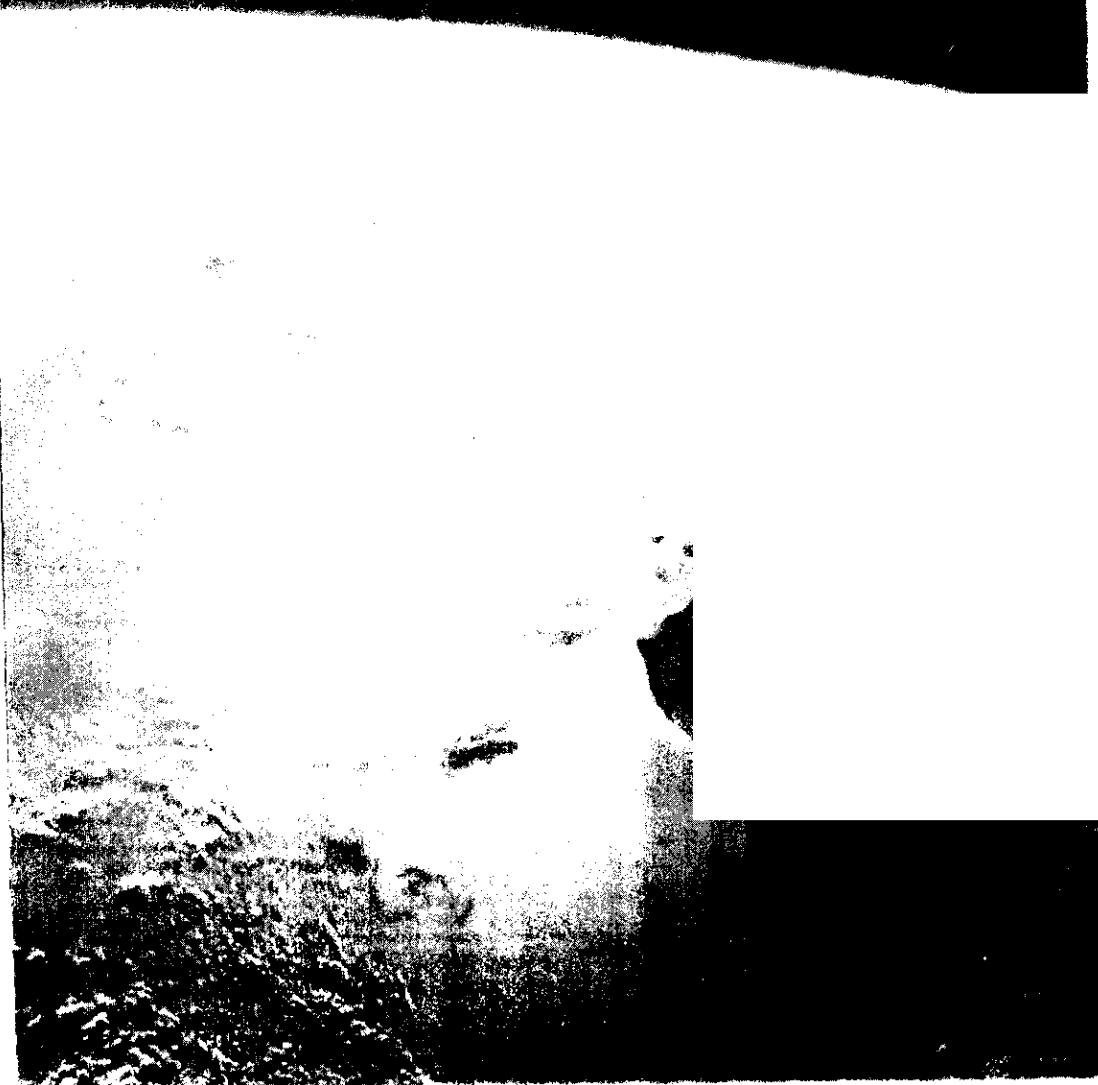
CT-20D10D

CT-20G5C

CT-20R5C

CT-27G5C

CT-32G5C



## 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 may be found on the back of the unit. 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.

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

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

### Specifications

<b>Power Source</b> CT-13R31C (0.9A) CT-13R41C (0.9A) CT-13R51D (0.9A) CT-20D10D (1.4A) CT-20G5C (1.4A) CT-20R5C (1.3A) CT-27G5C (1.8A) CT-32G5C (1.8A)	120V AC, 60Hz
<b>Channel Capability - 181</b>	VHF-12; UHF-56; Cable-113
<b>Video Input Jacks</b> (some models)	1V <sub>p-p</sub> ; 75 Ohm, Phono Jack Type
<b>Audio Input Jacks</b> (some models)	500mV RMS 47K Ohm
<b>To Audio AMP Jack</b> (some models)	0-2.0V RMS 4.7K Ohm

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.
- ☐ Avoid magnetic equipment, including motors, fans, or external speakers.

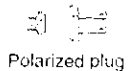
### Optional Cable Connections

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

- Use 75-ohm coaxial shielded cables.
- 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.

### Cable / Antenna

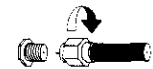
For proper reception, either a cable or antenna connection is required.

#### 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 Cable Company



75 Ohms VHF/UHF  
On Back of TV

**Read these instructions completely before operating TV.**

**Contents are subject to change without notice or obligation.**

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.

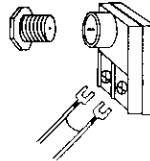
## Antenna Connection

- 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.

## VHF/UHF Antenna

A VHF/UHF indoor antenna and transformer are supplied with some models. Attach to the TV and adjust the antenna until the picture is clear. (See Antenna Connection).

### Incoming Cable from Home Antenna



### Helpful Hints: Cable Preset

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

## Optional Equipment Connections

### Procedure

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

**Note:** Front and rear Audio/Video connections cannot be operated at the same time.

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

**Note:** VCRs, video disc players, video game equipment, and DSS equipment can also be connected to the antenna input connection. (See your equipment manual).

## To Audio Amplifier (AMP, some models)

To listen to sound through your stereo system, connect it to the input (To Audio AMP) on your TV.

**Note:** TO AUDIO AMP terminals cannot be used directly for external speakers.

### Audio Adjustments

1. Press TV SPEAKERS ON button located on back of set.

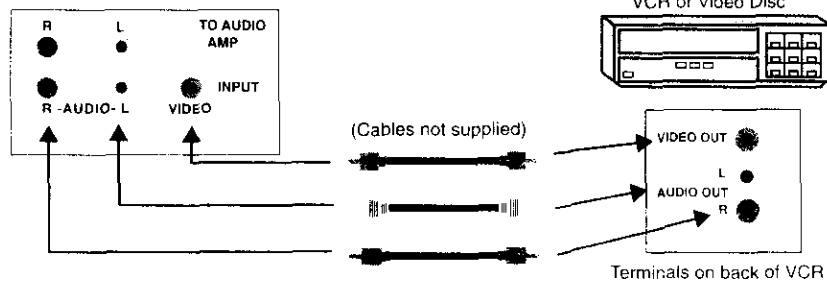
**Note:** If your TV does not have a TV SPEAKERS ON/OFF button, select TV SPEAKERS ON from AUDIO menu.

2. Set amplifier volume to minimum.
3. Adjust TV volume to desired level.
4. Adjust amplifier volume to match the TV.
5. Press TV SPEAKERS OFF button, located on the back of the set.

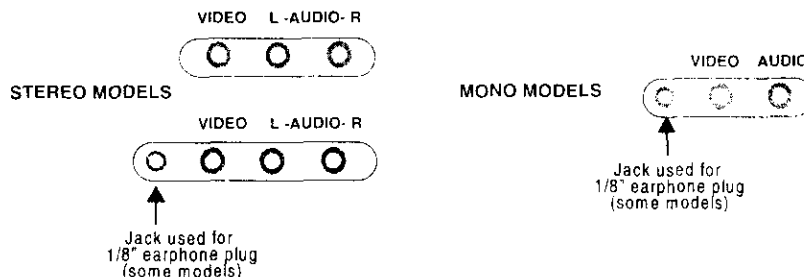
**Note:** If your TV does not have a TV SPEAKERS ON/OFF button, select OFF&VAO from AUDIO menu.

6. Volume and mute are now selected using the TV controls.

Terminals on back of TV (some models)



Terminals on front of TV (some models)

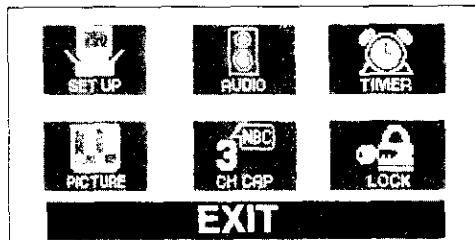


# MAIN MENU

## ACTION Button

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

### Main Menu / Menu Principal

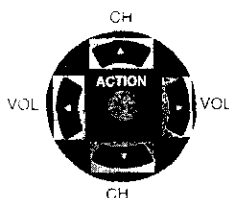


AUDIO MENU NOT AVAILABLE ON SOME MODELS

## 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



## Remote Control

The Remote Control Quick Reference Guide is located in the package provided with the TV.

# SPECIAL FEATURES

## Languages



In **SETUP** menu, select **ENGLISH**, **ESPAÑOL**, OR **FRANÇAIS**.

<b>SET-UP</b>	
SET TIME	___ : ___ AM
ANT	CABLE
AUTO PROG	NO
MANUAL PROG	NO
CC MODE	OFF
<b>ENGLISH</b>	<b>ESPAÑOL</b> <b>FRANÇAIS</b>

## Timer



### Sleep Timer

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

<b>TIMER CONTROL</b>	
SLEEP TIMER	NO
PROGRAM TIMER	
ON	___ : ___
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.

<b>TIMER CONTROL</b>	
SLEEP TIMER	NO
PROGRAM TIMER	
ON	___ : ___
OFF	___ : ___
CHANNEL	3
SET	TIME FIRST

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

### Helpful Hints: Turn Off After 90 Minutes

The TV automatically turns **OFF** 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.

### Helpful Hints: 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.

<b>CHANNEL CAPTION</b>
ENTER CHANNEL NUMBER
123
ENTER CAPTION
_____
p TO MOVE      lu TO SELECT
q CURSOR      CHANNEL

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

# LOCK

## Game Guard Lock and Unlock

Select GAME GUARD to prevent video games and VCRs 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.

<b>LOCK</b>	
GAME GUARD	OFF
US MOVIES	u
STATUS	OFF
HOW LONG?	12 HRS
ENTER CODE FIRST    _ _ _ _	

**Note:** If GAME GUARD is selected, 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.

### Helpful Hints: GAME GUARD Unlock

If you do not remember your code, the LOCK will unlock in 12, 24, 48 hours or ALWAYS, depending on 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 in order to clear the LOCK setup.

## AC/DC POWER SOURCES

### DC Models ONLY

This TV model operates on both standard household current (120 volt, 60 Hz AC) and car battery (12 volt negative ground DC) through the cigarette lighter. An AC power cord and a car cigarette lighter adapter cord are supplied.

### Household Installation

Insert the AC power cord into the connection on the rear of the TV. Connect the two pronged plug to an AC outlet (120 volt, 60Hz). If you are unable to insert the plug fully into the wall outlet, try reversing it. If the plug does not fit, contact an electrician. Do not force the plug or defeat the safety purpose of the polarized plug.

### Car Installation

Insert the power cord into the connection on the rear of the TV. Remove the cigarette lighter from your car and insert the car cigarette lighter adapter plug.

**Note:** The supplied car cord is designed for use with a negative ground battery only.

### AC/DC Power Cord Connections



### Helpful Hints: Do Not Overload the Engine

Keep the engine idling while operating the TV, especially when the temperature is low and when viewing the TV for over an hour. Do not operate the TV while starting the engine. Disconnect the power cord from cigarette lighter when not in use.

### Fuse Replacement

If the TV does not turn on, the cigarette lighter adapter fuse may have blown.

#### Procedure

- Turn TV OFF and unplug power cord from the cigarette lighter.
- Remove cap and replace the fuse, as shown in illustration.
- Insert the supplied spare fuse and replace cap.

#### Car Cord Plug with Fuse and Cap





**Note:** Use only a 7A-125V fuse for replacement.

### Helpful Hints: Keeping Lighter Socket Clean

Always keep the cigarette lighter socket clean for better contact. A bad contact can overheat the car cord plug.

**Main Menu Feature Chart**  
**TABLE DES RUBRIQUES DU MENU PRINCIPAL**

<b>DESCRIPTION</b>	<b>MENU</b>	<b>DESCRIPTION</b>
<b>SETUP</b>		<b>RÉGLAGE</b>
When entered, TIME will display on screen after pressing POWER button, RECALL button, or changing channels.	<b>SET TIME RÉGLER HEURE</b>	Une fois le réglage fait, l'heure s'affiche à l'écran après pression de l'interrupteur ou de la touche RECALL, ou après un changement de canal.
Choose CABLE or TV to match the signal at your antenna input.	<b>ANT</b>	Sélectionner CABLE ou TV en fonction du signal acheminé à la prise d'antenne.
Automatically program channels with a video signal into memory.	<b>AUTO PROG PROG AUTO</b>	Programmation automatique des canaux par mémorisation d'un signal vidéo.
Manually add or delete channels from memory.	<b>MANUAL PROG PROG MANU.</b>	Permet d'ajouter des canaux à la mémoire ou d'en supprimer.
Select CC for Closed Captioning display. Select NO to use mute button for closed captioning.	<b>CC MODE MODE CC</b>	Sélectionner EF (En fonction) pour afficher des sous-titres. Sélectionner HF (Hors fonction) pour afficher des sous-titres sur pression de la touche MUTE.
Select English, Spanish, or French menu.	<b>LANGUAGES LANGUES</b>	Permet la sélection du menu en anglais, en français ou en espagnol.
<b>AUDIO</b> (some models)		<b>AUDIO</b> (sur certains modèles)
Select the audio mode: <input type="checkbox"/> STEREO - Two channel audio reception. <input type="checkbox"/> SAP - (Second Audio Program) Tune to the alternate audio channel if available in your area (bilingual or descriptive audio). <input type="checkbox"/> MONO - One channel audio. Use when stereo signal is weak.	<b>MODE</b>	Sélectionner le mode audio: <input type="checkbox"/> STÉRÉO - Réception audio sur deux canaux. <input type="checkbox"/> SAP (Seconde voie audio) - Pour capter la piste sonore alternative (autre langue ou commentaires), si elle est disponible. <input type="checkbox"/> MONO - Réception sur un seul canal audio. Utiliser ce mode lorsque la réception stéréo laisse à désirer.
Automatically maintain constant volume between programs and commercials.	<b>AI SOUND SON IA</b>	Assure le maintien du volume à un niveau constant entre les émissions et pendant les réclames publicitaires.
Select TV SPEAKERS: <input type="checkbox"/> ON - TV SPEAKERS operate normally. <input type="checkbox"/> OFF&VAO (Variable Audio Output) - TV SPEAKERS OFF, sound is adjustable from TV	<b>TV SPEAKERS HAUT-PARLEUR</b>	Sélection des différents modes: <input type="checkbox"/> EF - Par la mise en fonction des haut-parleurs du téléviseur. <input type="checkbox"/> HF&VAO (Sortie audio variable) - Les haut-parleurs du téléviseur sont mis hors fonction et le volume se règle sur le téléviseur.

**Main Menu Feature Chart (Cont.)**  
**TABLE DES RUBRIQUES DU MENU PRINCIPAL (Suite)**























<b>DESCRIPTION</b>	<b>MENU</b>	<b>DESCRIPTION</b>
<b>CH CAP</b>		<b>SIGLE CANAL</b>
Provide labels for up to 30 stations using up to four characters for each station.	<b>CHANNEL CAPTION SIGLE CANAL</b>	Permet d'assigner un sigle de quatre caractères à un total de 30 canaux.
<b>TIMER</b>		<b>MINUTERIE</b>
Program TV to automatically turn off in 30, 60, or 90 minutes. Select NO to turn timer off.	<b>SLEEP TIMER SOMMEIL</b>	Permet de programmer la mise hors contact automatique dans 30, 60 ou 90 minutes. Sélectionner NON pour mettre la minuterie hors fonction.
Program TV to automatically turn on and off at selected time on a selected channel, daily or only one day.	<b>PROGRAM TIMER MINUTERIE PROG.</b>	Permet de programmer la mise en/ hors marche du téléviseur à une heure préréglée, au canal de son choix, tous les jours ou seulement une fois.
<b>PICTURE</b>		<b>IMAGE</b>
Reset all picture adjustments to factory default settings.	<b>PICTURE NORM NORM IMAGE</b>	Rétablit tous les réglages par défaut.
Adjust desired color intensity.	<b>COLOR COULEUR</b>	Réglage de la densité chromatique.
Adjust natural flesh tones.	<b>TINT NUANCES</b>	Réglage des nuances.
Adjust dark areas for crisp detail.	<b>BRIGHTNESS BRILLANCE</b>	Réglage des zones sombres.
Adjust white areas of picture.	<b>PICTURE IMAGE</b>	Réglage des zones claires.
Adjust clarity of outline detail.	<b>SHARPNESS NETTETÉ</b>	Réglage de la netteté.
<b>LOCK</b>		<b>VERROUILLAGE</b>
Program to prevent video games and VCRs from being viewed.	<b>GAME GUARD VERROUILLAGE JEU</b>	Permet de programmer le blocage de l'utilisation de jeux vidéo et du visionnement d'enregistrements vidéo.

CHART • TABLE DES RUBRIQUES DE MENU PRINCIPAL •

## Troubleshooting Chart /Guide de dépannage

Before calling for service, determine the symptoms and make a few simple checks shown below.

Avant de faire appel à un technicien, vérifier les symptômes et faire les vérifications simples décrites ci-dessous.

<b>Sound Son</b>	<b>PICTURE IMAGE</b>	<b>CHECK VÉRIFICATION</b>
 Noisy Sound Présence de bruit	 Snowy Picture Présence de neige	Antenna Location and/or Connection Orientation et (ou) branchement de l'antenne
 Noisy Sound Présence de bruit	 Multiple Image Image dédoublée	Antenna Direction and/or Location Antenna Lead-in Wire Orientation et (ou) branchement de l'antenne Fil d'amenée de l'antenne
 Noisy Sound Présence de bruit	 Interference Interférence	Electrical Appliances, Lights, Cars, and Trucks Diathermy and Other Medical Equipment Appareils électroménagers, éclairage et véhicules Appareil diathermique ou autre dispositif médical
 No Sound Absence de son	 Normal Picture Image normale	Volume Control Setting Mute Control (If Applicable) Try Another Channel Réglage du volume Commande de sourdine (s'il y a lieu) Syntoniser un autre canal
 Noisy Sound Présence de bruit	 No Video Absence d'image	TV or Cable Tuning Mode Set to Proper Setting Antenna Input Correct (If Applicable) Sélection du mode TV ou câble Entrée d'antenne (s'il y a lieu)
 No Sound Absence de son	 No Picture Absence d'image	Check that AC Power Cord is Plugged into AC Outlet Brightness and Audio Controls Set Properly Try Another Channel Branchement du cordon d'alimentation Réglages de la brillance et du son Syntoniser un autre canal
 Normal Sound Son normal	 No Color Absence de couleur	Color Control Settings Try Another Channel Réglages de la couleur Syntoniser un autre canal
 Audio Does Not Match Video Son erroné	 Normal Picture Image normale	Change Audio in Main Menu to STEREO or MONO, not SAP Le réglage AUDIO au menu principal devrait être STÉRÉO ou MONO et non SAP
 Normal Sound Son normal	 Normal Picture Image normale	Replace Remote Control Batteries Remplacer les piles dans la télécommande
Intermittent Remote Control Operation Fonctionnement intermittent de la télécommande		