20" Color Television TTM-2004





Important Safeguards

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



This symbol indicates that this product incorporates double insulation between hazardous mains voltage and user accessible parts. When servicing use only identical replacement parts.

ment parts.
Caution: To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.



This symbol indicates important instructions accompanying the product.



This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.

WARNING

To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.

The apparatus must not be exposed to dripping or splashing. Objects filled with liquids, such vases or drinking glasses, must never be placed on the apparatus.

IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grouding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.

Important safeguards

- 12. Use 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 carts/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, do not operate normally, or has been dropped.
- 15. If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984 (Section 54 of Canadian Electrical Code, Part 1) provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrode. See following example.

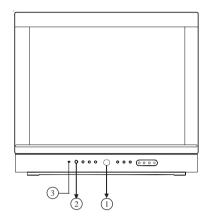


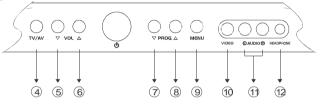
Contents

Overview	4
Remote control	5
Basic operation	6
Menu overview	7
External connection	8
Using the PICTURE menu	10
Using the P.LOCK menu	11
Using the TIMER menu	13
Using the PRESET menu	14
Using the EXTRA menu	15
Picture defects and countermeasures (VHF/UHF reception)	16
Troubleshooting	17
Specifications	18

Overview

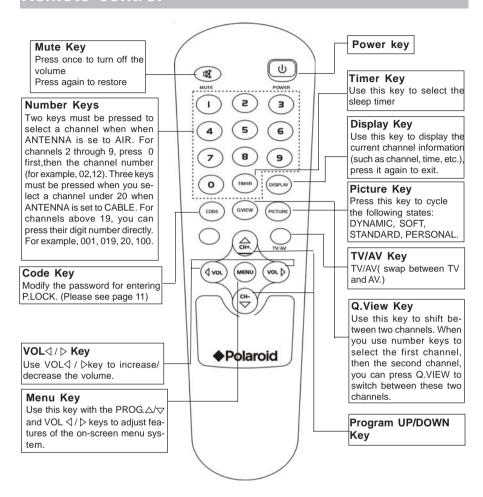
- 1. Power Button
- 2. Remote Sensor
- 3. Power Indicator
- 4. TV/AV Selection Button
- 5. Volume Down Button
- 6. Volume Up Button
- 7. Program Down Button
- 8. Program Up Button
- 9. Menu Button
- 10. Video Input Jack
- 11. Audio Input Jack
- 12. Headphone
- 13. Antenna Jack







Remote control



Loading batteries: Remove the lid of the battery compartment, insert 2 size AAA batteries with the polarities as indicated inside the compartment and replace the lid.

Note:

- 1. Batteries will last typically last about 1 year under normal use.
- If you do not intend to use the remote control for a long period of time, remove the batteries to avoid damage due to leakage.

Basic operation

Connect to AC outlet

Insert the mains wire plug of the unit into 120V AC outlet, unplug the AC cord when the unit will not be used for a long period time.

How to power on/off

You can turn on the power by using the POWER button at TV front panel (or the POWER button on the remote control).

Non-signal power-off in 10 minutes

If the unit doesn't receive a signal state, the TV will enter standby mode automatically in 10 minutes. To turn it on, press the POWER button on the remote control. Note: Under AV mode, this function only activates when you set BLUE BACKGROUND.

Change channels

You can change channels by using the PROG.△/▽ button on the front of the TV (or the PROG.△/▽ button on the remote control). When ANTENNA is set as AIR, you can also access the channel by using a 2-digit number button combination on the remote control. When ANTENNA is set as CABLE, use a three-digit number button combination on the remote control to select the channel. For channels between 20 and 99, input a two-digit number button to select the channel you want to watch.

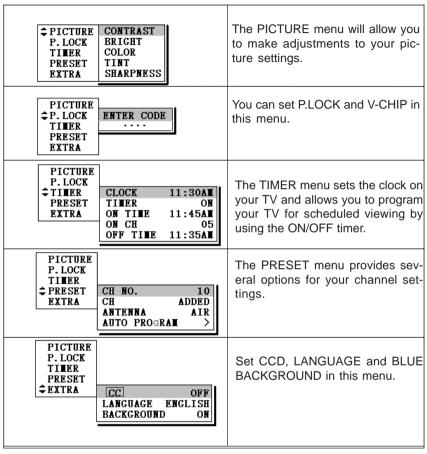
Volume UP/DOWN

You can adjust the sound by using VOL $\triangleleft/\triangleright$ button on the front of the TV (or the VOL $\triangleleft/\triangleright$ button on the remote control).

Sleep function

- Press TIMER button on the remote control to display the set 120,90,60,30,0
 minutes to play until shut off. The unit will be automatically turn off when the sleep
 time has elapsed.
- 2. To cancel the TIMER function, press the TIMER button repeatedly until display changes to 0.

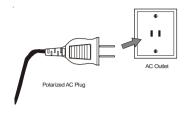
Menu overview



Menu basic operation

- To enter a menu, press the menu button on the TV (or on the remote control), then use the PROG.△/▽ buttons on the TV (or on the remote control) to select the desired mode.
- 2. Press VOL $\triangleleft\,/\,\triangleright$ button to select the mode you want to change.
- 3. Use the PROG.△/▽ button on the TV (or on the remote control) to select within the sub-menu.
- 5. Press MENU button to return the last menu.

External connection



CONNECTING TO AC POWER SUPPLY

Use the AC polarized line cord provided for operation on AC. Insert the AC cord plug into a polarized AC outlet.

NOTE:

If the polarized AC plug does not fit into a nonpolarized AC outlet, do not attempt to fix or cut the blade of the plug. It is the user's responsibility to have an electrician replace the obsolete outlet.

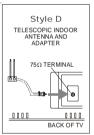
Connecting Antenna to TV

Choose the type of antenna hook-up style (A,B,C or D) that resembles your antenna. Connect directly to the TV's 75Ω Input terminal as shown in the style you selected.



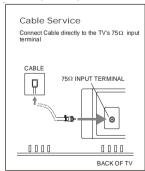


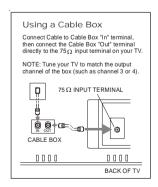




NOTE: TV will enter standby mode automatically after 10 minutes if a signal is not being received.

Connecting Cable (CATV) to TV

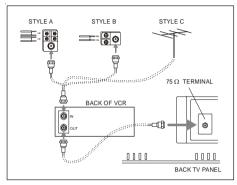




External connection

Connecting an Antenna or Cable System to VCR and TV Antenna

- Choose your antenna hook-up style A, B or C and connect to "IN FROM ANT." on the VCR.

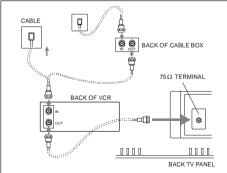


Cable Service

Connect cable directly to "IN FROM ANT" on VCR •. (If using a cable box, connect cable to input on box. Connect cable from output on box to "IN FROM ANT" on VCR

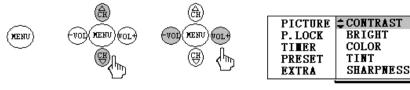
•.) Connect cable from "OUT TO TV" on VCR directly to the 75 Ω input terminal on your TV. •

NOTE: Tune your TV to match the output channel on the cable box and VCR (such as Channel 3 or 4).



Using the PICTURE menu

To select the PICTURE menu

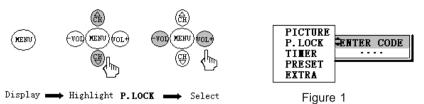


Display 📥	Highlight	PICTURE	\rightarrow	Select
-----------	-----------------------------	---------	---------------	--------

CONTRAST	Adjust left to decrease picture contrast. Adjust right to increase picture contrast.
BRIGHT	Adjust left to darken the picture. Adjust right to brighten the picture.
COLOR	Adjust left to decrease color intensity or saturation. Adjust right to increase color intensity or saturation.
TINT	Adjust left to decrease the red tone. Adjust right to increase the red tone.
SHARPNESS	Adjust left to soften the picture detail. Adjust right to sharpen the picture detail.

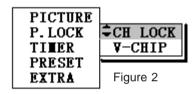
Using the P.LOCK menu

To select the P.LOCK menu



Note:

1. When you enter P.LOCK submenu first time, red "NEW CODE" will display on the menu, input four-digit numbers as your password by pressing 0-9 buttons. After you input the numbers, blue "ENTER CODE" will display on the menu, input again the password you have set to enter P.LOCK submenu, the submenu will display as the following:



- 2. If you have set your password, when you want to enter P.LOCK submenu, the menu will display blue "ENTER CODE" shown as figure 1, input your password to enter the submenu shown as figure 2.
- 3. If you need to modify your password, first enter the submenu shown as figure 1, then press CODE button on the remote control, the "OLD CODE" will display in red on the menu; Input your old password, then "NEW CODE" will display in red on the menu, input four-digit numbers as your new password. "ENTER CODE" will display in blue on the menu, input your new password to enter the submenu shown as figure 2. If you forget your password, input 4769 to enter the submenu and renew your password.

CHLOCK	Select this item to enter CH LOCK submenu (as shown). You can set to lock one channel in				
CHLOCK	this submenu	this submenu.			I
	LOCK ON:	Turn on CH LOCK.	P. LOCK	\$LOCK	ON
	OFF:	Turn off CH LOCK.	TIMER	CH AIR	69
	CH AIR:	Select the channel you want	PRESET	CH LOCK	ON
		to lock, you can use △VOL▽ button	EXTRA		
	or number buttons to input channel number.				
	Note: "CH CABLE ***" will be displayed under CABLE mode.				
	CH LOCK ON: The selected channel in the CH LOCK menu cannot be viewed.				
	OFF: LOCK is deactivated and any selected channel for CH LOCK, can be viewed.				

Using the P.LOCK menu

V-CHIP Select this item to enter V-CHIP submenu.

PICTURE **±V**-CHIP P. LOCK MPAA RATING TIMER TV RATING PRESET EXTRA

V-CHIP ON: Turn on V-CHIP function.

OFF: Turn off V-CHIP function.

MPAA RATING: Set MPAA rating. "BLOCK" prohibits watching the BLOCK channels, VIEW permits watching all channels. If ab high rating is set as "VIEW", lower ratings will be set to VIEW mode. If a low_rating is set to "BLOCK", higher

ratings will be set to BLOCK mode.

G: For all children.

PG: Directed to old children. PG-13: General Audience.

R: Parental Guidance suggested. NC-17: No one under 17 admitted.

X: For Adults.

TV RATING: Set MPAA rating. "BLOCK" prohibits watching the BLOCK channels, VIEW permits watching all channels.

If ab high rating is set as "VIEW", lower ratings will be set to VIEW mode. If a low rating is set to "BLOCK",

higher ratings will be set to BLOCK mode.

Y: All children.

Y7: Directed to old children, following items can be set in this rate.

FV: Fantasy violence **G:** General Audience.

PG: Parental Guidance suggested, following items can be set in this rating.

D: Suggestive Dialogue.
L: Strong language.
S: Sexual situation.

V: Violence.

14: Parents strongly cautioned, following items can be set in this rating.

D: Suggestive Dialogue.

L: Strong language.

S: Sexual situation.

V: Violence.

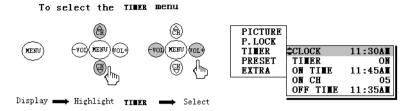
MA: Mature Audience only, following items can be set in this rating.

Strong language. L:

Sextual situation.

Violence.

Using the TIMER menu



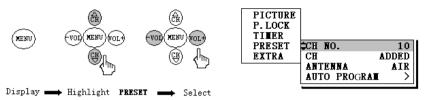
CLOCK	Press number buttons to set HOUR and MINUTE. Press VOL ▷ button to circles between AM and PM.
TIMER	ON: Set the timer to be active. OFF: Turn off the timer. Note: Clock must be programmed before you can use the timer.
ONTIME	Press number buttons to set HOUR and MINUTE. Press VOL button to set AM or PM. Note: ON-TIME will turn on the TV automatically at preset time, and this function activates only when you set TIMER ON.
ON CH.	You can press 0-9 number buttons or PROG.△/▽ button to select your desired channel. Note: Set ON CH. to go into your desired channel directly when TV turns on automatically.
OFF TIME	Press number buttons to set HOUR and MINUTE. Press VOL button to set AM or PM. Note: OFF-TIME will turn off the TV automatically at preset time, and this function activates only when you set TIMER OFF.

Note:

When you unplug the power cord, the clock is reset to zero. You will need to set the clock again if you need the timer functions.

Using the PRESET menu

To select the PRESET menu

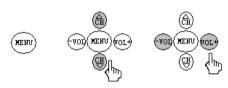


CH NO.	Press number buttons or VOL ⊲/♭ button to select your desired channel.	
СН	ADDED: Select to add the channel that you selected in CH NO. DELETED: Select to delete the channel that you selected in CH NO.	
ANTENNA	AIR: Select to receive television broadcast signal. CABLE: Select to receive cable signal.	
AUTO PROGRAM	Select to start automatic channel search and store.	

Note: TIMER, ON TIME, ON CH, OFF TIME items in TIMER submenu will be reset when changing between AIR and CABLE modes. These functions must be reset before using them again.

Using the EXTRA menu

To select the EXTRA menu



TIMER
PRESET

EXTRA

CC OFF

LANGUAGE ENGLISH
BACKGROUND ON

PICTURE P. LOCK

Display 🗪	Highlight	EXTRA	\rightarrow	Select

СС	C1: Select to display Caption 1. C2: Select to display Caption 2. C MUTE: Only after pressing MUTE button, CAPTION will be displayed on the screen. TEXT1: Select it to display TEXT 1. TEXT2: Select it to display TEXT 2. OFF: Turn off the Caption.
	Tips: CAPTION prepared for TV programs can be pre-recorded (movies, daytime dramas etc.) This type of CAPTION is normally 1 or 2 lines of text. TEXT can include: Captioned program listing, farm news, sports report and news reports for hearing inpaired persons or general wire-service news. This type of caption does not generally relate to the program. The displays may be several lines of text information at a time.
LANGUAGE	Select from available language to display the menu. (You can select ENGLISH , SPANISH , FRENCH)
BACKGROUND	If this item is selected, the screen will turn blue when there is no signal input

Troubleshooting VHF/UHF reception

The most common types of television interference are as follows:

SNOWY PICTURE

Snowy picture is usually due to weak signal. Adjust antenna or install an antenna amplifier.



DOUBLE IMAGE OR "GHOSTS"

Double images are usually caused by reflections from tall buildings. Adjust the direction of the antenna or raise it.



RADIO WAVE INTERFERENCE

Wavy patterns are moving on the screen, which are usually caused by nearby radio transmitters or shortwave receiving equipment.



HIGH TEMPERATURE ELECTROTHERMAL INTERFERENCE

Diagonal or herringbone patterns appear on the screen or part of picture is missing. This is probably caused by high temperature electrothermal equipment in a nearby hospital.



NOTE:If one of these symptoms appears on the screen when input from a local cable TV company is connected, this may be due to the local cable company broadcast.

Troubleshooting

If you have any problem, check the countermeasures for each symptom listed below. The following symptoms may have been caused by inappropriate adjustments rather than actual malfunction of the unit.

If the trouble persists, contact the service center.

SYMPTOMS	POSSIBLE SOLUTIONS
TV does not operate	 Make sure the power cord is plugged in. Try another AC outlet. Power is off; check fuse or circuit breaker.
Poor sound or no sound	 Station or CATV experiencing problems; tune to another station. Check sound adjustments (Volume and Mute). Check for source of possible interference.
Poor picture or no picture	 Station or CATV experiencing problems; tune to another station. Check antenna or CATV connections; reorient antenna. Check for source of possible interference. Check picture adjustments.
Poor reception on some channels	 Station or CATV experiencing problems; tune to another station. Station signal is weak; reorient antenna to receive weaker station. Check for sources of possible interference.
Poor color or no color	 Station or CATV experiencing problems; tune to another station. Check picture adjustments. Make sure Antenna Mode is correct. Check antenna or CATV connections; reorient antenna. Check for sources of possible interference.
Picture wobbles or drifts	 Station or CATV experiencing problems; tune to another station. CATV company is scrambling signal. Check antenna orientation.
No CATV reception	 Check CATVconnections. Make sure Antenna Mode is correct. Station or CATV system problems; try another station.
Horizontal or diagonal bars on screen	 Check antenna connections and reorient antenna. Make sure Antenna Mode is correct. Check for source of possible interference.
No remote operation	 Batteries are weak, dead or inserted improperly. Remote is out of range; move closer to TV. Make sure remote is aimed at sensor. Confirm no obstructions between remote and TV. Make sure power cord is plugged in.
TV shuts off	Sleep Timer is set.Power interrupted.
No reception above channel 13	 Make sure Antenna Mode is correct. If using UHF antenna, check connections.

Specifications

TUBE/POWER SUPPLY

SIZE 20" ASPECT RATIO 4:3

POWER SUPPLY 120V~60Hz

TUNER

OF CHANNELS 181

PICTURE

CONTROLS TINT, COLOR, BRIGHTNESS, CONTRAST,

SHARPNESS

PICTURE SETTINGS PERSONAL, DYNAMIC, STANDARD, SOFT

OSD LANGUAGES ENGLISH, FRENCH, SPANISH

SOUND

SPEAKER QUANTITY 2

AUDIO OUTPUT POWER 2W*2

CONNECTORS

CABLE/ANTENNA INPUT 1 REAR
AV INPUT 1FRONT
HEADPHONE OUTPUT 1FRONT

DIMENSIONS (INCH, WxDxH) 19.7 X 18.4 X 17.4

WEIGHT (LBS) 48.4

For service, support and warranty information, visit www.polaroidelectronics.com or in the US call 1-866-289-5168 and in Canada call 1-866-301-7922.

"Polaroid" and "Polaroid Pixel" are registered trademarks of Polaroid Corporation of Waltham, MA USA.