



Changing Entertainment. Again.

User's Guide

Find Inside:

- Connecting page 2
- Remote Control..... page 5
- Using TV Menus page 7
- Playing Discs..... page 10
- Troubleshooting page 18
- Additional Information page 21
- Warranty page 23



Model 20F510TD is pictured here.



www.rca.com/television

Important Information

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.

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.

Notes:

This DVD player is designed and manufactured to respond to the Region Management Information. If the Region number of a DVD disc does not correspond to the Region number of this DVD player, this DVD player cannot play the disc. The Region number for this DVD player is Region No 1.

This device is protected by U.S. patent numbers 4,631,603 and 4,577,216 and 4,819,098 and other intellectual property rights. The use of Macrovision's copy protection technology in the device must be authorized by Macrovision and is intended for home and other limited pay-per-view uses only, unless otherwise authorized in writing by Macrovision. Reverse engineering or disassembly is prohibited.

WARNING

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

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

Refer to the identification/rating label located on the back panel of your product for its proper operating voltage.

FCC Regulations state that unauthorized changes or modifications to this equipment may void the user's authority to operate it.

Caution: Using video games or any external accessory with fixed images for extended periods of time can cause them to be permanently imprinted on the picture tube (or projection TV picture tubes). ALSO, some network/program logos, phone numbers, etc. may cause similar damage. This damage is not covered by your warranty.

CAUTION

THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

Cable TV Installer: This reminder is provided to call your attention to Article 820-40 of the National Electrical Code (Section 54 of the Canadian Electrical Code, Part 1) which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

Product Registration

Please fill out the product registration card (packed separately) and return it immediately. For U.S. customers: Your RCA Consumer Electronics product may also be registered at www.rca.com/productregistration. Registering this product allows us to contact you if needed.

**CLASS 1
LASER
PRODUCT**

Product Information

Keep your sales receipt to obtain warranty parts and service and for proof of purchase. Attach it here and record the serial and model numbers. These numbers are located on the product.

Model No. _____ Serial No. _____ Purchase Date: _____

Dealer/Address/Phone: _____

Connections and Setup

Things to Consider Before

Connecting	2
Explanation of Jacks and Cables.....	3
Front Panel Controls.....	4
Putting Batteries in the Remote.....	4

The Remote Control

The Buttons on the Remote Control... 5

DVD Function Buttons.....	6
---------------------------	---

Using TV Menus

TV Menus..... 7

TV Menu Navigation	7
The PICTURE Menu	7
The SOUND Menu	7
The TUNING Menu	8
The FUNCTION Menu	8

Playing Discs

DVD Basics..... 10

Regional Coding	10
Using Different Menus	10
Types of Discs Your DVD Will Play.....	10
To Load and Play a Disc.....	10

Search Options..... 11

Picture Scan.....	11
Chapter Advance.....	11

Playback Options 11

Repeat	11
Zoom.....	11

DVD Info Menu 12

Title/Chapter.....	12
Audio	12
Subtitles.....	12
Angle.....	12
TT Time/CH Time.....	12

Repeat	13
Display Info.....	13
DVD Menu System.....	13

DVD Menu Navigation 13

Setup Menus 14

General Setup Page	14
TV Display.....	14
Angle Mark	14
OSD Lang.....	14
Screen saver	14
Last Memory.....	14

Speaker Setup Page..... 15

Downmix	15
Dual Mono	15
Dynamic.....	15

Preference Page 15

PBC (Playback Control).....	15
Audio	16
Subtitle	16
Disc Menu	16
Parental Control	16
Password.....	16
Default	16

Playing Audio CDs..... 16

Disc Scan	17
Track Advance or Reverse	17
Pause.....	17

Playing mp3 Discs..... 17

Playing Picture CDs 17

Playing CD files (JPEG or mp3) 17

Other Information

Troubleshooting 18

Recommendations and information Concerning Discs..... 21

Additional Information 22

Limited Warranty 23

Things to Consider Before Connecting

Important Stand and Base Safety Information

Choose the location for your TV carefully. Place the TV on a stand or base that is of adequate size and strength to prevent the TV from being accidentally tipped over, pushed off, or pulled off. This could cause personal injury and or damage the TV. Refer to the Important Safeguards sheet packed with your TV.

Protect Components From Power Surges

- Connect all devices before you plug any of their power cords into the wall outlet.
- Turn off the TV and/or device before you connect or disconnect any cables.
- Using a surge protector can help prevent damage to your TV from electrical power surges. In case of lightning, unplug your TV.

Protect Devices from Overheating

- Don't block ventilation holes on any of the devices. Arrange the devices so that air can circulate freely.
- Don't stack devices.
- If you place devices in a stand, make sure you allow adequate ventilation.
- If you connect an amplifier, place it on the top shelf so the heated air from it won't flow around other devices.

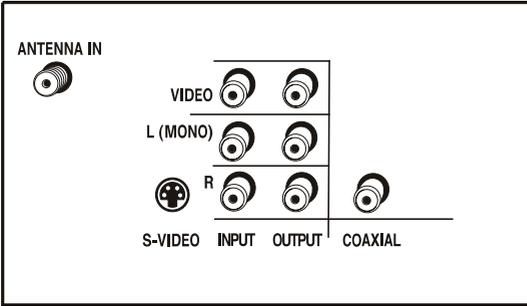
Position Cables to Avoid Audio Hum or Interference

- Insert each cable firmly into the jack.
- Place any Audio/Video (A/V) cables to the side(s) of the TV's back panel instead of straight down the back after connecting devices.
- Try not to coil any twin-lead antenna cables and keep them away from all A/V cables as much as possible.
- Make sure all antennas and cables are properly grounded. Refer to the Safety Tips sheet packed with your TV for detailed information.

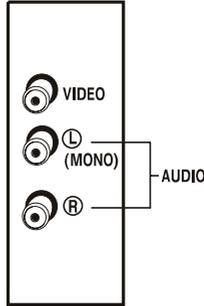
Use Indirect Light

Don't place the TV where sunlight or room lighting will be directed toward the screen. Use soft or indirect lighting.

(back panel)



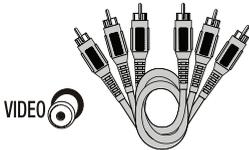
side panel



Explanation of Jacks and Cables

You can connect other components to your TV/DVD player such as a VCR, video camera, or audio receiver. There are several ways to connect other components to your TV/DVD player depending upon the cables you have and the jacks that are on the back of the components. Different jacks and cables provide a different level of performance. The jacks on the back of your TV/DVD Player and the cables used to connect them are explained below.

Note: If you do not connect a cable, antenna, or another component to your TV, the TV will automatically shut off after 15 minutes to save power.



VIDEO Jack and Cable

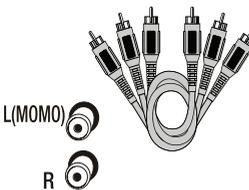
The basic Video jack (usually color-coded yellow) is also referred to as composite video. Composite video is better than the video quality you get from an RF coaxial cable (the type used to plug the cable feed into a TV). Usually the video cable is bundled with the audio cables (color-coded white and red).



S-VIDEO Jack and Cable

The S-VIDEO (separate video) jack provides better picture quality than composite video (the VIDEO jack) because the color is kept separate from the black and white part of the video signal.

Note: Remember to connect the audio cables because the S-Video cable carries only the picture signal, not the sound.



AUDIO L (left) and R (right) Jacks and Cables

These jacks are used for audio connections of other components to the TV. The audio jacks and cables are often color-coded (red for right audio, and white for left audio). You must connect audio cables to the AUDIO L and R jacks on the TV/DVD player and the corresponding jacks on the component no matter which Video jack [AV1 (SVID), DVD, AV3 (side front)] you connect.

Note: If your component has only one audio output for audio (mono), connect it to the left (white L/Mono) audio jack on the TV and don't connect the right audio part of the cable.

Digital Audio Out/Coaxial Jack

Use this jack to connect your TV/DVD Player to a Dolby* Digital or DTS receiver or decoder.

*Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

DTS is a registered trademark of Digital Home Theater Systems, Inc.

Front Panel Controls (from left to right)

If you cannot locate your remote, you can use the front panel buttons of your TV to operate many of the TV/DVD's features.

POWER Turns the TV/DVD on and off.

PLAY/PAUSE Starts and pauses disc playback.

STOP Stops disc playback.

REV. (Reverse) Searches backward through a disc while it is in play mode. Press and hold remote control to go to the previous chapter.

FWD. (Forward) Searches forward through a disc while it is in play mode. Press and hold to advance to the next chapter.

OPEN/CLOSE Opens and closes the disc tray.

INPUT Toggles through the Video Input Channels [TV (AIR/CABLE), AV1 (SVID), DVD, AV3 (side front)].

MENU Brings up the PICTURE menu.

VOL ▼ Decreases the volume. In the menu system, acts like the left arrow button on the remote control and adjusts menu controls.

VOL ▲ Increases the volume. In the menu system, acts like the right arrow button on the remote control and adjusts menu controls.

CH ▼ Scans down through the current channel list. In the menu system, acts like the down arrow button on the remote control and adjusts menu controls.

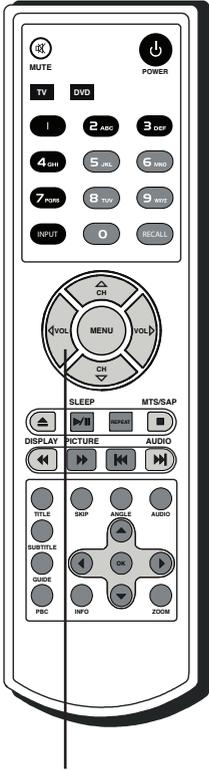
CH ▲ Scans up through the channel list. In the menu system, acts like the up arrow button on the remote control and adjusts menu controls.

Putting Batteries in the Remote

Remove the cover of the battery compartment. Insert batteries, with the polarities as indicated, inside the compartment. Replace the cover.

Note: If you are not going to use the remote for a long period of time, remove the batteries to avoid damage due to leakage.

The Buttons on the Remote Control



Arrow buttons
for the TV Menu
System

INPUT Press it to switch between AV/DVD input and RF (antenna) input.

TV Press to place the remote control in TV mode.

MUTE Press to reduce the volume level. Press again to restore the volume.

DISPLAY Press to display channel information

PICTURE Press to display the picture preset.

SLEEP Press to set the sleep timer.

RECALL Press to return to the previous channel. If the unit is in menu mode, press the RECALL button to the return previous menu screen.

POWER Press to turn the TV on or off.

VOL (left and right) buttons Press to increase or decrease the TV volume.

CH (up and down) buttons Scans up or down through the current channel list. Press once to change the channel up or down, press and hold to continuously channels. If your TV is in standby mode, press these buttons to turn the TV on. In AV mode, press these buttons to switch to TV mode.

MENU Displays the TV's Main menu (see page 7 for details).

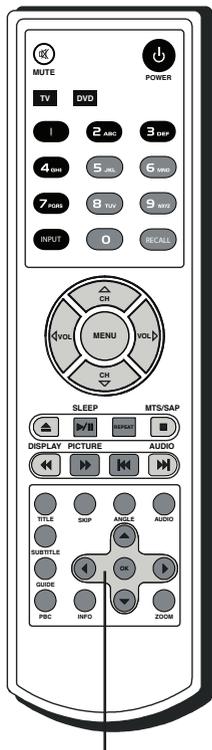
0-9 (Number buttons) Press these buttons to select channels and to set the time directly. Press 0-9 to select a channel. For example, to select channel 10, press 1 and 0, the channel changes. If you press 0 first, when you press the second number, the channel changes at once. For example, to select channel 8, press 0 and then 8, the channel changes immediately.

AUDIO Choose from four preset audio settings (MEMORY, STANDARD, NEWS or MUSIC).

MTS/SAP This button is not available for this model.

Other buttons: Buttons other than the ones listed above, are not available for TV functions.

The Remote Control



Arrow buttons for DVD Menu System

DVD Function Buttons

DVD Puts the remote in DVD mode.

POWER Turns the TV on or off.

VOL (left and right) buttons Press the buttons to increase or decrease the TV volume.

MUTE Reduces the TV's volume to its minimum level. Press again to restore the volume.

OPEN/CLOSE ▲ Press to open or close the DVD disc tray.

PLAY/PAUSE ►/|| Press to start or pause the disc playback. Press again to resume playback.

STOP ■ Press to stop disc playback.

INFO Press to display the title, chapter and elapsed time information during disc playback. Press again to hide this information.

ZOOM Press to zoom in or out of the view during DVD playback.

TITLE Press to display the TITLE menu during DVD playback.

REPEAT Press to repeat a chapter or title on DVD, or track on Audio CDs.

SKIP Press to skip to the specified chapter/track or time. See page 12 for details.

►► Advances to the next chapter or track.

◄◄ Reverses to the last chapter or track.

MENU Displays the TV's Main menu (see page 7 for details).

SUBTITLE Press to select a subtitle language (only if the disc is encoded with multiple Subtitle languages).

AUDIO Press to select audio soundtrack language (only if the disc is encoded with multiple languages).

ANGLE Press to select the camera angle (multiple screen shot angles might be available if the disc is encoded with this information).

PBC Press to turn the navigation OFF and the disc playback starts immediately without entering the menu. Press again to turn the navigation ON.

GUIDE Press to display the DVD setup menu when the DVD player is in stop mode.

REV Press to search backward through the disc during disc playback. Press repeatedly to increase the search speed.

FWD Press to search forward through the disc during disc playback. Press and hold to increase the search speed.

Arrow buttons (up, down, left, right) Press to move through the on-screen menu system.

OK button Press to select and highlight the desired item on the screen display.

Other buttons: Buttons other than the ones listed above are not available for DVD functions.

TV Menus

TV Menus let you control picture quality and features available for TV viewing. There is a different menu system for DVD features (described on page 12).

Note: Remember to use the TV arrow buttons when accessing the TV's menu system.

TV Menu Navigation

1. To bring up the TV's menu system, press the MENU button.
2. Press MENU button repeatedly to select PICTURE, SOUND, TUNING or FUNCTION submenu.
3. Press the ▲/▼ buttons on the remote (or CH ▲/▼ on the front of the TV) to select the option.
4. Use the arrow buttons ◀/▶ on the remote (or the VOL ▲/▼ buttons on the front of the TV) to change the setting of the option.
5. Press the MENU button on the remote to exit the menu system.

PICTURE	
BRIGHTNESS	14
CONTRAST	48
COLOR	52
SHARPNESS	29
TINT	00
COLOR TEMP	NORMAL

The PICTURE Menu

The PICTURE menu allows you make adjustments to your picture settings.

BRIGHTNESS	Adjusts the brightness of the picture.
CONTRAST	Adjusts the contrast between the light and dark areas of the picture.
COLOR	Adjusts the color intensity or saturation.
SHARPNESS	Adjusts the sharpness of the picture.
TINT	Adjusts the balance between the red and green levels.
COLOR TEMP	Provides three color adjustments: NORMAL, COLD (for more blue in the picture), and WARM (for more red in the picture).

SOUND	
VOLUME	63
TREBLE	32
BASS	32
BALANCE	00
SURROUND	ON
STEREO	PASS

The SOUND Menu

The SOUND menu offers different audio options.

VOLUME	Decreases/increases sound volume.
TREBLE	Decreases/increases high-pitched sound.
BASS	Decreases/increases low-pitched sound.
BALANCE	Adjusts left/right speaker balance.
SURROUND	Turns the surround sound on or off.
STEREO	Adjust different kinds of stereo sound effects.

TUNING	
CHANNEL	8
DELETE CH	NO
SOURCE	AIR
LABEL	AAAAA
AUTO SEARCH	>>>

The TUNING Menu

The TUNING menu is used to adjust the signal source, channel setup and reception of the TV.

CHANNEL Use the VOL ◀▶ buttons on the remote control (or the VOL ▲/▼ buttons on the front of the TV) to scroll through the available channels or enter the channel number directly using the number buttons.

DELETE CH Select YES to remove the channel. Select NO to enter to the channel.

SOURCE Choose AIR or CABLE. Select AIR to receive a broadcast signal. Select CABLE to receive a CATV signal.

LABEL To add a channel description:

1. Go to the TUNING menu.
2. Enter the channel you want to add a description for in the CHANNEL option.
3. Select the LABEL option.
4. Press the VOL ▶ button, then enter the first character of your label. You can press the number button repeatedly to select the character you want. For example, if you want to input 'L', you can press '5' four times rapidly. When you stop pressing, the cursor will move to the next character.
5. Enter the rest of characters. After you enter the fifth character, your description is saved. You must enter the five characters, to save the label.
6. If you want to erase a description, press VOL ◀ button to delete the characters.

AUTO SEARCH Starts channel search and stores the channels automatically. Use the VOL ◀▶ buttons on the remote control to begin the auto search. If you wish to stop the search before completed, press MENU.

FUNCTION	
LANGUAGE	ENGLISH
SCREEN SAVER	SAVER
CHILD LOCK	----
CCD	OFF
V-CHIP	>>>

The FUNCTION Menu

The FUNCTION menu is used to setup specific features of the TV including language and closed captioning.

LANGUAGE Selects the language (ENGLISH, FRANÇAIS, ESPAÑOL) you want the TV menus to be displayed in.

SCREEN Turns the screen function on (BLUE BACK, SAVER) or off.

CHILD LOCK Select OFF to turn CHILD LOCK off. Select ON to activate it. The CHILD LOCK feature takes effect after the TV is turned off and back on again. The initial password is MUTE+999. The initial password is used to clear the current password and set a new password. Keep the password a secret.

CCD Choose from eight closed captioned modes, including four text modes.

FUNCTION	
LANGUAGE	ENGLISH
SCREEN SAVER	SAVER
CHILD LOCK	----
CCD	OFF
V-CHIP	>>>

V-CHIP The choices in this menu involve software inside your TV which allows you to block content that may be unsuitable. Press the MENU button on the remote control until the *Function* menu appears. Press ► button to choose *ON* to use the V-Chip settings.

V-CHIP	
V-CHIP	[ON]
MPAA:	[N/R]
TVPG SETTING	
RETURN	

V-CHIP	
CONFIRM PASSWORD	
RETURN	

CONFIRM PASSWORD From the FUNCTION menu press the ▼ button to choose V-CHIP. Press ► on the remote control to bring up the screen to confirm your password. Press four digital buttons on the remote control. The V-CHIP menu can not be displayed without inputting the right password. The initial number is 0358.

Note: For rating limits to take effect, you must lock V-Chip settings to activate them.

V-CHIP	
V-CHIP	[ON]
MPAA:	[TV-PG]
TVPG SETTING	
RETURN	

MPAA From the FUNCTION menu press the ▼ button to choose V-CHIP. Press the ► button to enter the password screen. Enter your password. Press the ▼ button to choose MPAA. Select a movie rating. The system will automatically block all other movies with higher ratings.

TVPG SETTING	
RATING	[ON]
RATING	[TV-PG]
CONTENT	[ON]
D:	[ON]
L:	[OFF]
S:	[ON]
V:	[ON]
RETURN	

TVPG SETTING Use the VOL ◀/▶ buttons to go to TVPG SETTING. You can block all program ratings above a specific age-based level. To use these ratings choose *ON*. Press the ▼ button to choose the age-based rating. Determine the content themes (D, L, S, V or FV) you want to block.

↶ RETURN Return to the previous menu.

Notes: Broadcasters are not required to provide content themes or age-based ratings.

For rating limits to take effect, you must lock V-Chip settings to activate them.

Hierarchy of MPAA Ratings	
N/R	Not Rated
G	General Audiences
PG	Parental Guidance Suggested
PG-13	Parents Strongly Cautioned
R	Restricted
NC-17	No one under 17 admitted
X	Adults Only

Hierarchy of Age-Based Ratings	
TV-MA	Mature Audience Only
TV-14	Parents Strongly Cautioned
TV-PG	Parental Guidance Suggested
TV-G	General Audience
TV-Y7	Directed to Children 7 years and older
TV-Y	All Children

Content Themes	
D	Sexually explicit dialogue
L	Adult language
S	Sexual situations
V	Violence
FV	Fantasy Violence

DVD Basics

Regional Coding

The DVD player and the discs are coded by region. These regional codes must match in order for the disc to play. This unit's code is Region 1. Discs with other regional codes can't be played in this unit.

Using Different Menus

Each disc is programmed with different features. There are two separate menu systems that you can use to access DVD features: the disc's menu and the DVD player's menu (separate from the TV's menu system). Remember that a feature only works if the disc was programmed with that feature. For example, if you choose subtitles, the subtitles only appear if the disc was created with subtitles. The DVD menu system is explained on page 13.

- The Disc menu – The disc menu is part of each disc and is separate from the DVD player's menu system. The contents of each disc's menu vary according to how the disc was created and what features are included. Sometimes a disc's menu appears automatically when you insert the disc, or you can access it by pressing the MENU button.

Types of Discs Your DVD Will Play

- DVD discs – Contain video.
- Audio discs – Contain musical or sound content only (such as CD, CD-R, CD-RW).
- mp3 discs – Contain audio files (for example, a CD-R with downloaded mp3 files).
- VCDs, JPEG files.

Before you load a disc, make sure that it is compatible with the player. Note that the following discs CANNOT be used with this player:

Laserdisc

- CD-I, CD-ROM, DVD-ROM
- MiniDisc
- CD-G discs play audio only, not graphics

To Load and Play a Disc

1. Press the DVD button on the remote to make sure the unit is in the DVD mode.
2. Press the ▲ (OPEN/CLOSE) button on the remote to open the disc tray. Place a disc gently into the tray with the disc's label facing up (double-sided discs have content on both sides, so you can place either side up).
3. Press the ▲ (OPEN/CLOSE) button again to close the disc tray.

The player reads the disc's table of contents, and then one of following happens depending on how the disc was created:

- No disc menu appears, a screen saver is displayed. (Press the DVD button to put the player in DVD mode).
- The disc menu appears. (Highlight the PLAY option and press OK).

- The disc menu appears on the screen when you press ►/II. (Highlight PLAY and press OK).
- The disc starts playing automatically.

If no picture or screen saver is displayed, press the DVD button to put the player in the DVD mode.

Search Options

You can use the following search features with some discs:

Picture Scan

When you're playing a disc, each time you press ►► (Forward) or ◀◀ (Reverse), your DVD player scans the disc faster until you reach the fastest scan speed. To resume normal playback, press ►/II.

Chapter Advance

While a DVD is playing, press ►►I to advance to the next title or chapter. Press the I◀◀ button to go to the previous title or chapter.

Playback Options

With some discs, you can access playback features directly from the remote control.

Repeat

For DVD discs, press the REPEAT button on the remote to repeat a chapter. Press once more to repeat a title. Press three times to repeat the entire disc, and press four times to cancel repeat.

For audio CDs, press REPEAT to repeat a track. Press REPEAT twice to repeat the entire disc, and three times to cancel repeat.

Zoom

1. While you're playing a disc, press ZOOM (the player zooms in on the image). Each time you press ZOOM, the picture is magnified up to 4X.
2. To see other parts of the picture when you've zoomed in on the image, try pressing the ◀/►/▲/▼ buttons to go in corresponding directions.

DVD Info Menu

Title / Chapter

To directly access a title or a chapter:

1. Press TITLE on the remote control. Select Title or Chapter using the ▲/▼ buttons and press OK.
2. Enter a title or chapter number using the number buttons.

Note: Many discs only have one title.

Audio

Some discs have several audio tracks used for different languages.

To change the track and language during playback:

1. Press AUDIO on the remote repeatedly.
2. Choose your desired language.

This option is only available if the disc offers a number of dialogue languages.

When you change the dialogue language your choice of language is only applicable to the disc being played.

When you eject the disc or switch off the player, the dialogue language will revert to the one you selected in the Preferences menu (see page 16).

Subtitles

Subtitles are disabled by default. To enable the subtitle function while the disc is playing:

1. Press SUBTITLE on the remote repeatedly.
2. Choose your desired language.

When you change the language of the subtitles your choice of language only applies for the disc currently being played. When you eject the disc and switch off the player, the subtitles will be displayed again in the subtitle language you selected in the Preferences menu (see page 16).

Angle

Some discs offer different camera angles for specific scenes. To change the camera angle during playback:

1. Press ANGLE on the remote.
2. Press ANGLE repeatedly to select the angle or enter an angle number using the number buttons.

If the disc was recorded using a single camera angle, this function is not available. There are very few discs offering more than one angle.

TT Time/CH Time

To directly access a location on the disc which does not correspond to the start of a title or a chapter:

1. Press SKIP button on the remote control twice.
2. Enter a time with the numeric buttons (format h:mm:ss).

Repeat

To select a playback mode while the disc is playing:

Press REPEAT on the remote repeatedly.

Display Info

Press the INFO button repeatedly during playback to show:

DVD: Title elapsed time, Title remaining time, Chapter elapsed time, Chapter remaining time, and Display Off.

VCD, SVCD and audio CD: Single elapsed time, Single remaining time, Total elapsed time, Total remaining time, and Display Off.

Note: A title or chapter can also be accessed by entering the number in the on-screen display.

DVD Menu System

The DVD player menu system lets you set up features for your DVD player. There is a different menu system that controls TV features (see page 7). The DVD setup menu is accessed with the GUIDE button.

Note: Remember to use the DVD arrow buttons when accessing the DVD player's menu system.

DVD Menu Navigation

1. Make sure the remote is in the DVD mode by pressing the DVD button.
2. Press GUIDE. The General Setup Page menu is displayed.
3. Use the ◀ and ▶ buttons to display the different setup menus.
4. Use the ▲ and ▼ buttons to highlight a menu or option item. Use the ▶ button to access the submenu and the ▲ and ▼ buttons to highlight your selection. (Use the ◀ button to go back through the menu).
5. Press the OK button to confirm your selection.
6. Press GUIDE to exit the DVD menu system.

Continues on next page...

Setup Menus

These menus are used to set up TV screen formats for DVD viewing and other DVD functions.

General Setup Page

General	Audio	Preference
-- General Setup Page --		
TV Display	PS	
Angle Mark	On	
OSD Lang	ENG	
Screen Saver	On	
Last Memory	On	
Go To Speaker Setup Page		

TV Display

TV Display is used only when the TV/DVD is connected to another TV. Choose one of the following options:

- **Normal/PS (Pan Scan):** Select this option when the TV/DVD is connected to a standard 4:3 aspect ratio TV. A 16:9 wide screen picture is shown with some of picture partly cut off.
- **Normal/LB (Letter Box):** Select this option when the TV/DVD is connected to a standard 4:3 aspect ratio TV. A full 16:9 wide screen picture is shown with black bars on the top and bottom.
- **Wide:** Select this option when the TV/DVD is connected to a wide screen TV.

Angle Mark

The *ANGLE MARK* option is used when DVD discs contain scenes which have been shot simultaneously from a number of different camera angles. Use the *ANGLE* button on the remote to access the Angle Mark.

Note: Currently, very few discs have this feature.

ON: Select if the DVD disc contains camera angles. An angle symbol appears on the screen.

OFF: Select if the DVD disc does not contain content shot from different angles.

OSD Lang

The *OSD Lang* controls the text language in the DVD on-screen menus. The default setting is English. Language options available are English, French, Italian, Portuguese, Spanish and Russian.

Screen Saver

The *Screen Saver* is a graphic that randomly moves around the screen to guard against screen burn-in.

ON: Screen saver turned on.

OFF: Screen saver turned off.

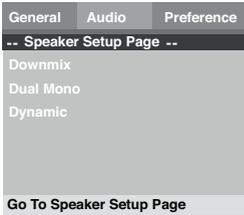
Last Memory

The *Last Memory* feature enables you to resume play at the same point at which you stopped playback, even if the disc is removed and re-inserted.

ON: Resumes play from where the disk was last stopped.

OFF: Starts playback from the beginning of the disc.

The Speaker Setup Page



Downmix

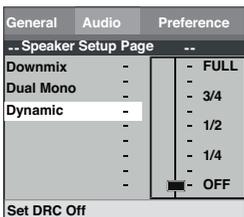
This feature allows you to download audio to a receiver and generate a multi-channel or stereo sound.

- **LT/RT:** Select this option when connecting the TV/DVD to an audio system with Dolby Pro-Logic.
- **Stereo:** Select this option when connecting the TV/DVD to an audio system that does not have Dolby Pro-Logic.

Dual Mono

Dual Mono gives you a fuller, better balance of audio based on the disc that you are playing.

- **Stereo:** Delivers audio from the left and right channels to the left and right speakers.
- **L-Mono:** Delivers audio from the left channel to the two front speakers.
- **R-Mono:** Delivers audio from the right channel to the two front speakers.
- **Mix-Mono:** Delivers a mixture of the left and right channels to both speakers.

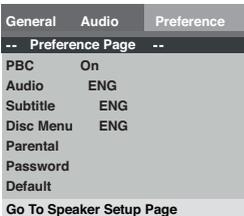


Dynamic

This feature allows you to reduce the range between loud and low sounds to your personal preference. It increases the lowest sounds and quiets the loudest sounds. The default setting is OFF.

Use the arrow buttons to access and change the dynamic setting and press OK to confirm.

Preference Page



PBC (Playback Control)

Playback Control turns the Navigate feature ON or OFF.

OFF: The disc begins playback without entering the disc's menu.

ON: You must select Play in the disc's menu.

Continues on next page...

Audio

Some discs are recorded with different languages. You can select a default language so discs will play in the language of your choice, if the disc was recorded with multiple tracks. Language choices are: English, French, German, Spanish, Chinese, Japanese, Korean.

Notes: Discs are created differently and not all discs are recorded with multiple languages.

The DVD player cannot override some language preferences. If a disc's software was created to play the movie (title) in a preferred language, the preference you set might be ignored.

Also, if the language isn't available on the movie you're playing, the disc's default language is chosen.

Subtitle

This option allows you to select a language used to display subtitles (if subtitles are turned on and are available on the disc). Language choices are: English, French, German, Spanish, Chinese, Japanese, Korean and Russian.

Note: Not all discs offer subtitles with multiple languages.

Disc Menu

This option allows you to select a default language for the disc's menu. Language choices are: English, French, German, Spanish, Chinese, Japanese, Korean Russian.

General	Audio	Preference
-- Preference Page --		
PBC	On	1 KID SAF
Audio	ENG	2 G
Subtitle	ENG	3 PG
Disc Menu	ENG	4 PG 13
Parental		5R
Password		6 NC17
Default		
Set Parental Control		

Parental Control

You can control access to the player and the type of content your family watches with the Parental Control feature. DVD viewing is blocked if its rating exceeds the level that you selected. A four-digit password is required to change the level, disable the feature, or view the DVD.

Password

You must enter a valid password to gain access to Parental Controls and can change the password at any time. The default password is "8888."

To change the password, enter the current four-digit password in the Old Password box. Then enter the new password in the New Password box and again in the Confirm Password and press OK.

Default

The DEFAULT option restores the setup options to the factory settings, with the exception of Password. This option is available only in the stop mode or when the disc tray is open.

Playing Audio CDs

Your DVD player has many of the same features as an audio CD player. This section explains how to play audio CDs in your TV/DVD player.

Scan Disc

You can scan through the disc while you're playing it by doing the following:

1. Press the ►► (Fast Forward) or ◀◀ (Reverse) button on the remote.
2. Press the button again to scan at a faster speed.
3. Press the ►/|| PLAY/PAUSE button at any time to resume normal playback.

Track Advance or Reverse

1. Press the ►►| or |◀◀ button on the remote when you're playing a disc.
2. Each time you press the button, the CD advances (or reverses) one track.

Pause

1. Press the ►/|| PLAY/PAUSE button when a disc is playing to pause the disc.
2. Press it again to resume normal playback.

Playing mp3 Discs

Insert an mp3 disc in the player and the Disc Navigation screen appears automatically. You can change folders and songs through the Disc Nav screen. Songs are played in the order they were burned onto the disc.

1. Insert an mp3 disc, and the folder selection screen appears.
2. Use the ▲/▼ buttons to select the folder you want to play and press the OK button.
3. Use the ◀/▶/▲/▼ buttons to select the files (or tracks) you want to play and press the OK button. The selected files (or tracks) play.
4. Press the STOP ■ button to stop playback.

Note: When you play an audio CD or mp3 disc, you can also use number buttons to select tracks, files, and folders.

Playing Picture CDs

Insert a picture CD into the disc tray. The pictures on the CD are played in a slide show.

1. To stop on a certain picture, press ►/|| PLAY/PAUSE.
2. Press the arrow keys to rotate the picture.

Playing CD files (JPEG or mp3)

When CD with JPEG or mp3 files are inserted, a File Manager window is displayed. The DVD player automatically begins playback of the files on the disc. Use the arrow buttons to navigate through the folders and select files for playback.

- When displaying JPEG files, press ►► (Fast Forward) repeatedly to change the speed of the slide show.

Other Information

Troubleshooting

Most problems you encounter with your TV/DVD can be corrected by consulting the following troubleshooting list.

TV Problems

TV won't turn on

- Press the POWER button.
- Make sure the TV is plugged in.
- Check the wall receptacle (or extension cord) to make sure it is "live" by plugging in something else.
- Something might be wrong with your remote control. Press the POWER button on the front of the TV. If the TV turns on, check the remote control solutions on page 19.

Buttons don't work

- If you're using the remote control, press the TV button first to make sure the remote is in TV mode.
- Unplug the TV for two minutes and then plug it back in. Turn the TV on and try again.

TV turns off unexpectedly

- Sleep timer might have been activated.
- Electronic protection circuit may have been activated because of a power surge. Wait 30 seconds and then turn on again. If this happens frequently, the voltage in your house may be abnormally high or low.
- Unplug TV. Wait five minutes. Plug it in again.

Blank screen

- Try another channel.

No sound, picture okay

- Maybe the sound is muted. Try pressing the volume up button to restore sound.

Can't select certain channel

- Channel may be blocked or not approved through the V-Chip (Parental Control).

Noisy stereo reception

- May be a weak station. Access the SOUND menu (see page 7), highlight STEREO and then choose MONO.

No picture, no sound but TV is on

- Maybe the signal type (SOURCE) is set wrong. Go to page 8 for detailed instructions.

- The channel might be blank – change channels.
- If in DVD mode, press TV, then the INPUT button twice for the CABLE or AIR channels.

Sound okay, picture poor

- Check antenna connections. Make sure all of the cables are firmly connected to the jacks.
- Try adjusting sharpness function to improve weak signals.

Black box appears on the screen

- Closed caption might be on.

The Remote Control Doesn't Work

- Something might be between the remote and the remote sensor on the component. Make sure there is a clear path.
- Maybe batteries in remote are weak, dead, or installed incorrectly. Put new batteries in the remote.
- You might need to reset the remote: remove batteries and press the number 1 button for at least 60 seconds. Release the 1 button, and replace the batteries.
- Make sure remote is in the correct mode (TV or DVD).

Problems with V-Chip/Parental Controls

The rating limits don't work

- For rating limits to take effect, you must lock V-Chip settings to activate them.

I don't remember my password and I want to unlock the TV

- If you forget your password you can reset it. Enter 5898 as the password and then change it to a new one.

DVD Problems

Can't advance through a movie

- You can't advance through the opening credits and warning information that appear at the beginning of movies because the disc is programmed to prohibit that action.

The invalid icon appears on screen

- The feature or action cannot be completed at this time for one of the following reasons:
- The disc's software restricts it.
- The disc's software doesn't support that feature (e.g., angles).
- The feature is not available at the moment.
- You've requested a title or chapter number that is out of range (doesn't exist).

Continues on next page...

Other Information

The picture is distorted

- The disc might be damaged. Try another disc.
- If you're using forward or reverse buttons, it is normal for some distortion to appear while scanning.

A screen saver appears on the TV/DVD screen

- Your player is equipped with a screen saver that appears on the TV after your player has been idle for several minutes. To make it disappear, go to the General Setup Page menu and turn the Screen Saver feature to off.

Subtitle and/or audio language is not the one selected from the initial setting

- If the subtitle and/or audio language does not exist on the disc, the initial settings will not be seen/heard. The disc's priority language is selected instead. Set the subtitle and/or audio language manually through the DVD player's menu.

The menu is displayed in a foreign language

- Go to the General Setup Page menu and select OSD Lang. Select the language you prefer.

Play doesn't begin

- The rating of the title on the disc exceeds the rating limit set in the PARENTAL feature. Go to the Preference Page menu and select *Parental*. Change the rating limit in the menu.

No forward or reverse scan

- Some discs have sections that prohibit rapid scanning, or title and chapter skip.
- If you're trying to skip through the warning information and credits at the beginning of a movie, you won't be able to. This part of the movie is often programmed to prohibit skipping through it.

Disc won't eject

- When you put a disc into the player, the player might take up to 15 seconds to read the disc. You won't be able to eject the disc during this time. Wait 15 seconds and try again.

Switching back to TV mode when in DVD mode

- Press the TV button on the remote and then the INPUT button until the Cable/Air channels are displayed.

Recommendations and Information Concerning Discs

CD-R and CD-RW Discs

This player can play most CD-R and CD-RW discs. However, depending on the type of disc and recording method used, some discs might not play, or the performance might not meet the expected quality. When playing a CD-R disc, it is completely normal for the unit to take up to 20 seconds to recognize the disc before it plays. If the disc is not recognized after a period of 20 seconds, remove the disc, and then insert it again. If after several trials, the disc cannot be recognized, make sure you have followed the recommendations below or try another type of disc.

- Do not fill the disc to its maximum recording capacity.
- Use CD-R discs rather than CD-RW (re-recordable CDs), as replay of CD-RWs may sometimes not work properly.
- Use a reliable and good quality recording software.
- Before recording on a disc, close all applications on your personal computer in order to optimize the quality and reliability of recordings on the disc.

CD-R and CD-RW Discs with mp3 Format "Music" Files

For discs that include mp3 files, follow the general recommendations for CD-R and CD-RW discs, and also the following specific recommendations:

- The format of your mp3 files should be ISO 9660 or JOLIET. These files are compatible with DOS and Windows applications as well as with Mac applications.
- Your mp3 files must have a name no longer than 12 characters as well as the suffix ".mp3". They must be recorded in the form: title.mp3. Ensure that you do not leave spaces or use special characters such as (, / , \ , = , +) in the name.
- Do not attempt to record protected mp3 files. Such files are coded and protected.
- Use a decompression transfer rate of at least 128 kb/sec (kilobytes/second) when recording mp3 files. Sound quality with mp3 files basically depends on the rate of compression/ decompression you choose. Getting audio CD quality sound requires an analog/digital sampling rate, that is conversion to mp3 format, of at least 128 kb/sec and up to 160 kb/sec.

Choosing higher rates, like 192 kb/sec. or more, only rarely gives better sound quality.

Conversely, files with sampling rates below 128 kb/sec will not be played properly.

Important: The above recommendations cannot be taken as a guarantee that the DVD player will play mp3 recordings, or as an assurance of sound quality. You should note that certain technologies and methods for mp3 file recording on CD-Rs prevent optimal playback of these files on your DVD player (that is degraded sound quality and even, in some cases, inability of the player to read the file or files).

Information updated in December 2002

Additional Information

Maintenance of Cabinet

For safety reasons, when cleaning the cabinet be sure to disconnect the AC power cord from the AC outlet.

- Do not use benzene, thinner, or other solvents for cleaning.
- Wipe the cabinet with a soft cloth.

Formation of Condensation

- Due to sharp changes in temperature and humidity, condensation may form if warm air comes in contact with any cold parts inside the player.
- When condensation forms inside the player, the player may not operate correctly. If this occurs, leave the player at room temperature until the inside of the player becomes dry and operational.
- If condensation forms on a disc, wipe the disc with a soft, dry cloth by moving the cloth from the center hole toward the outer edge.

Handling Discs

- Don't touch the disc's data surfaces. Hold by the edges or by one edge and the hole in the center.
- Don't affix labels or adhesive tape to label surfaces. Don't scratch or damage the label.
- Do not use damaged (cracked or warped) discs.

Cleaning Discs

- Dirty discs can cause reduced video and audio performance. Always keep discs clean by wiping them gently with a soft cloth from the inner edge toward the outer perimeter.
- If a disc becomes dirty, wet a soft cloth in water, wring it out well. Wipe the dirt away gently, and remove any water drops with a dry cloth.
- Do not use record-cleaning sprays or anti-static agents on discs. Also, never clean the discs with benzene, thinner, or other volatile solvents which may cause damage to the disc surface.

Handling Cautions

- Before connecting other components to this player, be sure to turn all components off.
- Don't move the player while a disc is being played. The disc may get scratched or broken, and the player's internal parts may be damaged.
- Don't put any container filled with liquid or any small metal objects on the player.
- Be careful not to put your hand into the disc tray.
- Don't place anything other than a disc in the disc tray.
- Exterior influences such as lightning and static electricity can affect normal operation of this player. If this occurs, turn the player off and on again with the POWER button, or disconnect and then reconnect the AC power cord to the AC power outlet. The player will operate normally.
- Be sure to remove the disc and turn off the player after use.

Limited Warranty

What your warranty covers:

- Defects in materials or workmanship.

For how long after your purchase:

- 90 days from date of purchase for labor charges.
- One year from date of purchase for parts.
- One year from date of purchase for the picture tube.

What we will do:

- Pay any Authorized RCA Television Service Center the labor charges to repair your television.
- Pay any Authorized RCA Television Service Center for the new or, at our option, refurbished replacement parts and picture tubes required to repair your television.

What your warranty does not cover:

- CUSTOMER INSTRUCTION (Your Owner's Manual describes how to install, adjust, and operate your television. Any additional information should be obtained from your dealer).
- Installation and related adjustments.
- Signal reception problems not caused by your television.
- Damage from misuse or neglect.
- Batteries.
- Customer replacement fuses.
- Damage from images burnt onto the screen.
- Special, incidental or consequential damages.
- A television that has been modified or incorporated into other products or is used for institutional or other commercial purposes.
- A television purchased or serviced outside the U.S.A.
- Acts of nature, such as but not limited to lightning damage.

How you get service:

- For screen sizes of 26" and smaller: Take your RCA television to any Authorized RCA Television Service Center and pick up when repairs are complete.
- For screen sizes larger than 26": Contact the Service Center and arrange service. If your unit is located within the geographic territory covered by an Authorized Service Center, the Authorized Service Center will either arrange for service to be performed in your home or for pick-up and return service to enable the Authorized Service Center to perform service at the Authorized Service Center. If your unit is not located within the geographic territory covered by an Authorized Service Center, you must take your unit to the Service Center location at your own expense, or pay for the cost the Service Center may charge to transport your unit to and from your home.

Other Information

To identify your nearest Authorized RCA Television Service Center, ask your dealer, visit www.rca.com, look in the Yellow Pages, or call 1-800-336-1900.

- Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the product is within the warranty period must be presented to obtain warranty service. For rental firms, proof of first rental is also required.

Product registration:

- Please complete the online Product Registration on www.rca.com/productregistration or complete and mail the Product Registration Card packed with your TV. It will make it easier to contact you should it ever be necessary. The return of the card is not required for warranty coverage.

Limitation of Warranty:

- THE WARRANTY STATED ABOVE IS THE ONLY WARRANTY APPLICABLE TO THIS PRODUCT. NO VERBAL OR WRITTEN INFORMATION GIVEN BY TTE TECHNOLOGY, INC., ITS AGENTS OR EMPLOYEES SHALL CREATE A GUARANTY OR IN ANY WAY INCREASE OR MODIFY THE SCOPE OF THIS WARRANTY.
- REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. TTE TECHNOLOGY, INC. SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT OR ARISING OUT OF ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. THIS DISCLAIMER OF WARRANTIES AND LIMITED WARRANTY ARE GOVERNED BY THE LAWS OF THE STATE OF INDIANA. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED TO THE APPLICABLE WARRANTY AND WARRANTY PERIOD SET FORTH ABOVE.

How state law relates to this warranty:

- Some states do not allow the exclusion nor limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.
- This warranty gives you specific legal rights, and you also may have other rights that vary from state to state.

If you purchased your unit outside the United States or seek warranty coverage outside the United States:

- This warranty does not apply. Contact your dealer for warranty information.

Service calls which do not involve defective materials or workmanship are not covered by this warranty. Costs of such service calls are the sole responsibility of the purchaser.

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Visit the RCA website at www.rca.com/television

Please do not send any products to the Indianapolis address listed in this manual or on the carton. This will only add delays in service for your product.

TTE

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