

 MITSUBISHI

M-V7057

Laserdisc Player

Owner's Guide

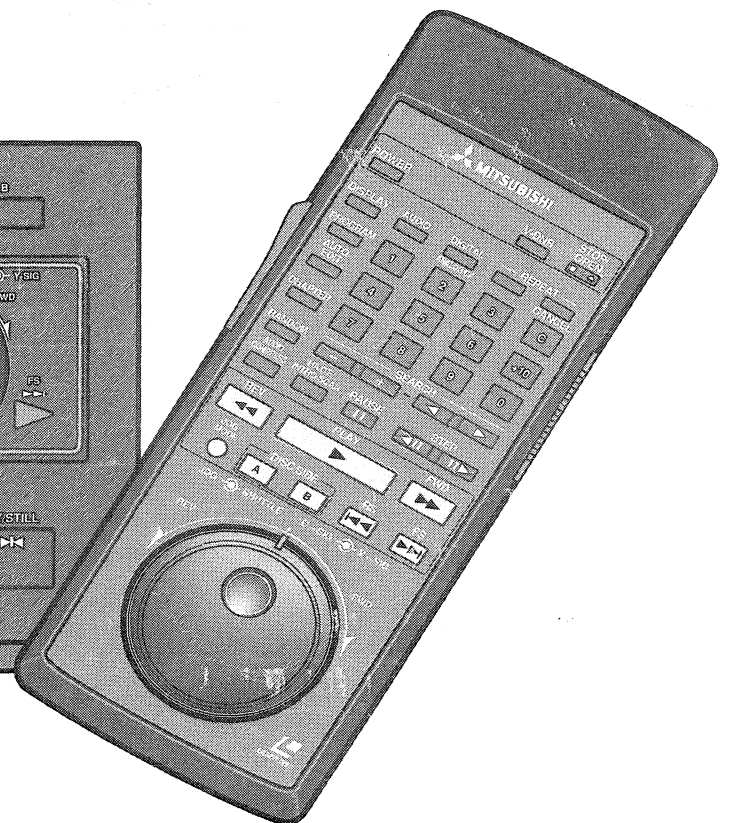
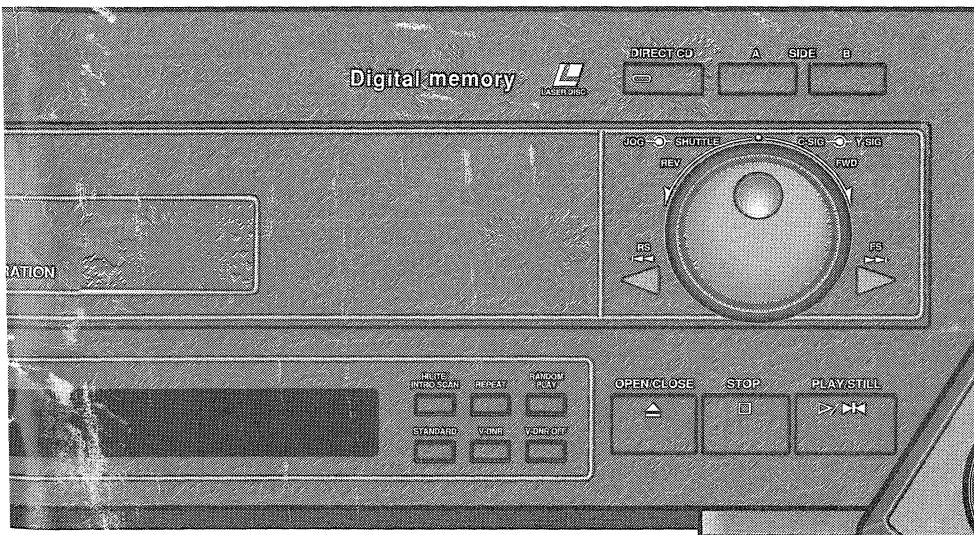




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Welcome to Mitsubishi

Congratulations on your purchase of the Mitsubishi M-V7057 Laserdisc/CD Player. Your M-V7057 is designed to produce superb sound and the highest resolution image currently available to consumers.

To familiarize you with your Laserdisc/CD Player and owner's guide, we suggest that you read through the preface, which provides the following information:

- ◆ **Summary of Special Features**
- ◆ **Unpacking Your Laserdisc/CD Player**
- ◆ **Handling and Caring for Discs**
- ◆ **What's in Each Chapter**
- ◆ **Some Conventions Used in this Guide**
- ◆ **Additional Precautions**

Mitsubishi has created your Laserdisc/CD Player so that it brings you years of listening and viewing enjoyment. Similarly, your owner's guide has been designed to help you take full advantage of all of your player's features with easy-to-follow explanations and directions.

Once again, thank you for selecting our product and welcome to Mitsubishi!



Summary of Special Features

Your top-rated Laserdisc/CD Player delivers the following special features:

- **Automatic Two-side Playback** -- the player automatically plays both sides of a two-sided laserdisc, without requiring you to turn the disc over by hand.
- **Repeat Playback** -- you can program the player to repeat sections of the CD or laserdisc in many different ways.
- **Auto-Program Editing/Compu-Program Editing** -- the player will automatically select and play back tracks to fit into an amount of time that you specify.
- **Programmed Playback** -- you can program playback of up to twenty-four tracks or chapters in any order you want -- even tracks on both sides of a two-sided disc.
- **Advanced technology** -- the player uses a digital noise-reduction system, a digital TBC system, and 1-bit digital/analog converters to produce extremely clear sound and pictures.
- **Compatibility with many disc types and sizes** -- the player can use conventional laserdiscs (12" and 8"), CDs (5"), and also the thin-type 20cm laserdiscs (8") and 8cm CDs (3") without an adapter.

You can play discs bearing the following labels:



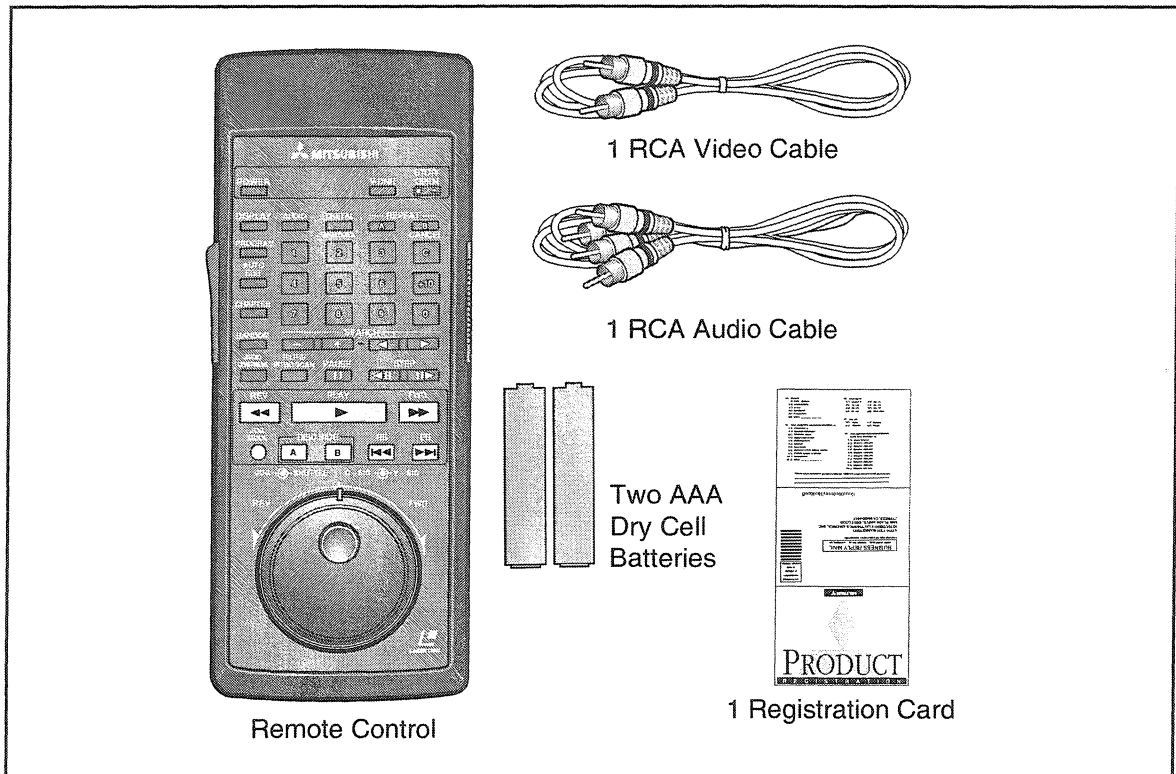
This is the unified symbol mark of LASERDISC (LaserVision videodisc).





Unpacking your Laserdisc/CD Player

As you unpack your new Laserdisc/CD Player, please check to be sure that the following items are included along with your player and this owner's guide:



A few suggestions

- ① Be sure to save the box your player came in. In the unlikely event your new player should ever have to be returned to your dealer, it should be transported in this box.
- ② Before you hook up your new Laserdisc/CD Player, please take a few minutes to:
 - Complete the registration card asking for the player's serial number, which you'll find on the back of the unit, and
 - File your sales receipt. For your convenience, we've printed the warranty information in the back of this owner's guide.

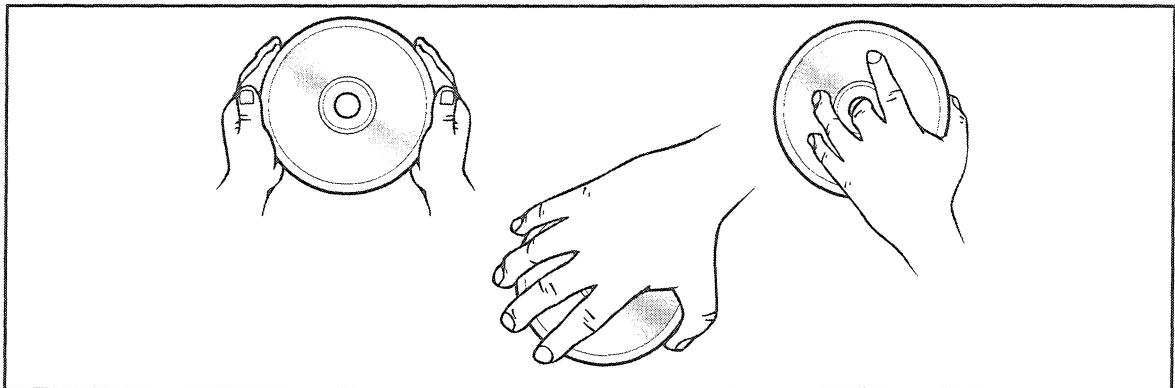
You may want to write down your serial number and file it away for your own use.



Handling and Caring for Discs

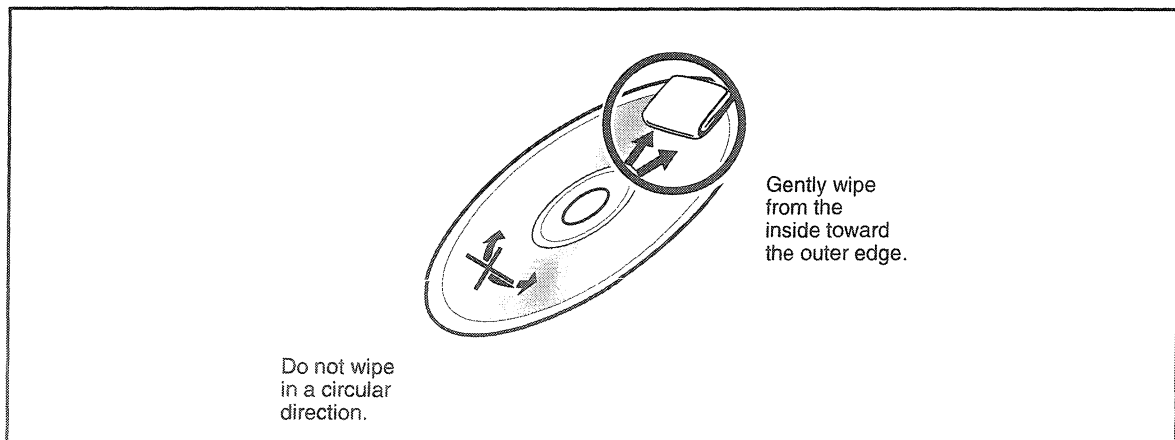
holding discs

When loading or unloading discs, try not to touch their playing surfaces



cleaning discs

To clean your discs, moisten a soft clean cloth and wipe the discs with the cloth. Always wipe from the center outward. To remove heavy fingerprints, moisten the cloth with a diluted detergent.



► **Warning:**

Never clean discs with record cleaning sprays or static prevention sprays. Never use liquids such as benzine or thinner.

Storing discs

Always remove a disc for your player after playing it and return it to its cover. Store discs upright away from heat or humidity.

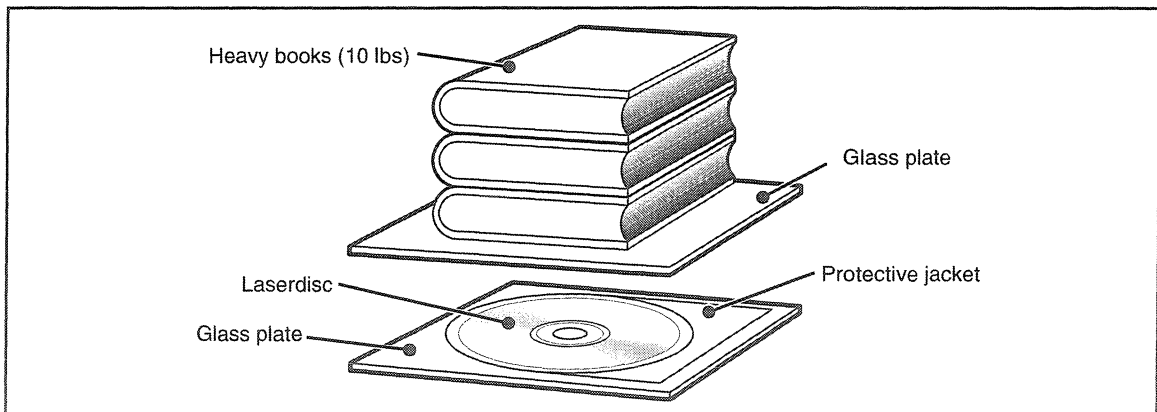
► **Warning:**

Store discs carefully. If you stack discs on top of each other, they can warp, even inside their jackets. Always store discs vertically, standing on their edges.

Restoring a warped laserdisc

To restore a warped laserdisc:

- ① Put the disc into its jacket and place it between two flat pieces of glass.
- ② Place heavy books (about 10 lbs.) on top of the glass.
- ③ Leave the disc for a day or two. This may correct the warp.





What's in Each Chapter

Your owner's guide consists of five chapters, an appendix, and an index:

Chapter 1, "Getting to Know Your Laserdisc/CD Player," introduces you to the locations and functions of the buttons, controls, and terminals of your Laserdisc/CD player.

Chapter 2, "Connecting your Laserdisc/CD Player," explains how to connect the TV and other equipment to your player.

Chapter 3, "Operating your Laserdisc/CD Player," explains the step-by-step operation of your Laserdisc/CD player.

Chapter 4, "Using the Advanced Features," explains the step-by-step procedures for the more advanced features of your Laserdisc/CD Player, such as searching and programming.

Chapter 5, "Troubleshooting," is a chart that summarizes the problems you may have, along with the suggestions for remedying these problems.

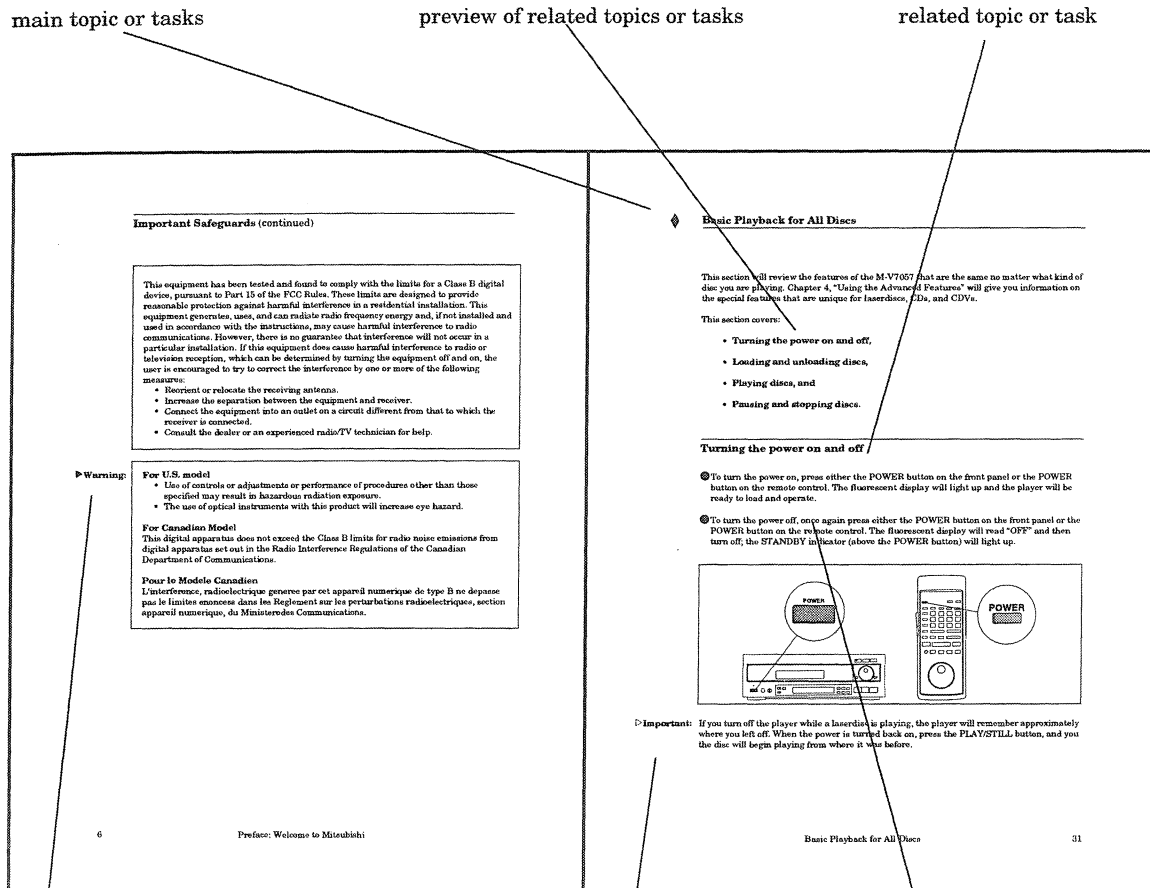
The appendix, "Specifications," gives you the technical specifications of the Laserdisc/CD Player.

At the end of this guide, you'll find an index.

Some Conventions Used in This Guide

We have gone to great effort to provide users with an easy-to-follow, useful owner's guide. Different types of information are treated in different ways.

Users should read information labeled **Important** and information that is boxed and labeled **Warning**. The owner's guide uses these terms sparingly, and all information highlighted in this manner should be read carefully.



Warning:

This cue alerts you to information describing dangerous situations which could harm your equipment or cause electrical shock

Important:

This cue indicates information critical to the operation of your new VCR.

1, 2, etc.

Procedures, the step-by-step instructions on how to accomplish a particular task, are signaled by white numbers set in a black background.



Additional Precautions

Following are some additional precautions you should follow when using your Laserdisc/CD Player.

moving your player

Before moving your player, remove any discs from the player, make sure the tray is completely closed, turn the player off, then unplug the power cord.

heat and ventilation

Do not install your player in an area subject to direct sunlight, or near appliances or components that generate heat. If you place your player in a cabinet, be sure that there is adequate ventilation for the player and other components. Do not place the player on carpets, beds, sofas, or other places that might interfere with ventilation.

cleaning care

Use a soft, dry cloth for cleaning. For more stubborn dirt, soak the cloth in a solution of detergent and water, with one part detergent to six parts water. Wring the cloth well, then wipe the player. Use a dry cloth to wipe it dry. Do not use harsh chemicals such as benzine or paint thinner, as they may damage the surface of the player.

loading and unloading discs

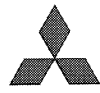
When loading and unloading discs, use only the OPEN/CLOSE buttons. Do not press or pull on the disc tray.

interference

If the player seems to be causing interference with AM/FM radio signals or TV reception, turn the player off. If interference continues, you may need to move the player, the radio antenna, or the TV antenna.

copyrights

The information on discs is copyrighted. You may violate copyright laws if you broadcast or display this information publicly.



Getting to Know Your Laserdisc/CD Player

Now that you have unpacked your player, read through the safety information, and glanced at the overview explaining how this owner's guide is organized, it's time to become familiar with the buttons and controls. On the following pages, you'll find information on:

- ◆ **Terms You Should Know**
- ◆ **Overview of the Remote Control**
- ◆ **Front Panel Buttons and Functions**
- ◆ **Fluorescent Display**

◆ Terms You Should Know

If laserdiscs are new to you, there are a lot of terms that may be unfamiliar to you. If you read through this page, it will be easier for you to understand the rest of this guide.

Types of discs

Since your M-V7057 can play many types of discs, it is important that you understand the differences between them. The main types of discs mentioned in this guide are listed below.

- Compact discs are 5" in diameter and only play back sound; they are called **CDs**.
- Some compact discs are specially encoded with video signals; they are called **CDVs** (for **Compact Disc Video**).
- There are also smaller 3" compact discs that contain fewer songs; they are called **CD Singles**
- Laserdiscs are usually 8" or 12" in diameter, and they are sometimes called **LDs**. They contain sound and pictures, and are often used for full-length movies.

Chapters and Tracks

The information on a disc is usually divided into a number of parts; this way, your disc player can find certain sections quickly. On audio discs, such as CDs, we call these parts **tracks**; on laserdiscs, we call the parts **chapters**. Both words mean essentially the same thing, so in this guide, when we're talking about both CDs and laserdiscs, we'll sometimes refer to these parts as chapters/tracks.

CLV and CAV

Laserdiscs (the big ones that have movies on them) can be recorded in one of two different ways. The most common way is **CLV**. This method allows the disc to contain more information, so discs encoded with CLV are often called **extended play** discs. The drawback to CLV is that most players cannot perform special effects with CLV discs.

The other method, **CAV**, allows less information on a disc, so we call these discs **standard play** discs.

The other difference between CLV and CAV is this: CAV discs use **frame numbers** to keep track of the information on the disc, while CLV discs use **time numbers** (minutes and seconds). That's why you'll see different displays when you play different kinds of discs.

Digital audio, analog audio, and multi-audio

The audio, or sound, portion of a disc can be recorded in one of two ways: with **digital audio** or **analog audio**. Digital audio is usually considered to be of higher quality. Your player can play back discs recorded in either digital or analog audio.

If a disc is marked "**multi-audio**," it means that the disc contains information in both digital audio and analog audio, *and* that the information on the two soundtracks is *different*. For example, the digital audio track on a laserdisc may contain the normal soundtrack of a movie, while the analog track contains a commentary by the director about the movie.

Table of Contents

One last thing you need to know about are the table of contents. Almost all discs have a table of contents, which tells the player how many chapter/tracks there are, the playing time, and other information. Occasionally you will run across a disc that doesn't have a table of contents. If that happens, the displays you see on the player's fluorescent panel will be different, and some features may not work as well.

Overview of the Remote Control

This section includes the following information:

- Getting ready to use the remote control, and
- Remote control buttons and functions.

Getting ready to use the remote control

installing the batteries

- ① Take the box containing two size AAA batteries from the packing box.
- ② Remove the back cover of the remote control by pushing in the direction of the arrow.
- ③ Load the batteries as indicated in the illustration, making sure they are positioned correctly (+ with +, - with -).

some do's and don'ts

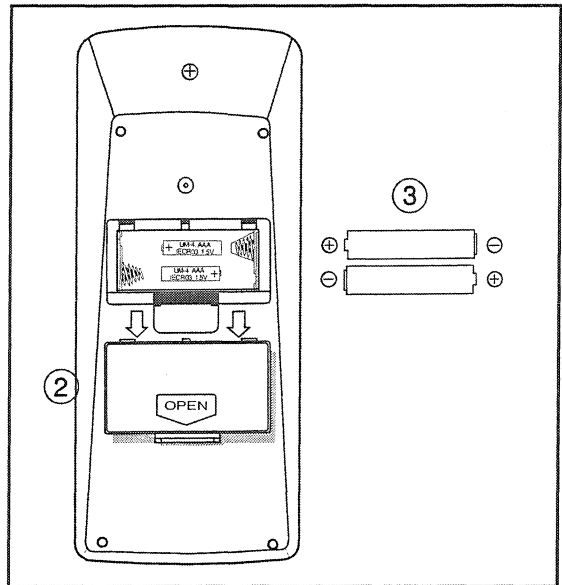
To ensure that your remote control will continue to operate properly, follow these guidelines:

- Don't press two or more buttons at the same time.
- Don't allow the remote control to get wet or become heated.
- Avoid dropping the remote control on a hard surface.
- Don't mix old and new batteries, and don't mix batteries of different brands.
- Don't place any objects on top of the remote control, as the objects may press the control's buttons and wear out the batteries.
- When cleaning the remote control, don't use any harsh chemicals. Use only a soft, slightly moistened cloth.

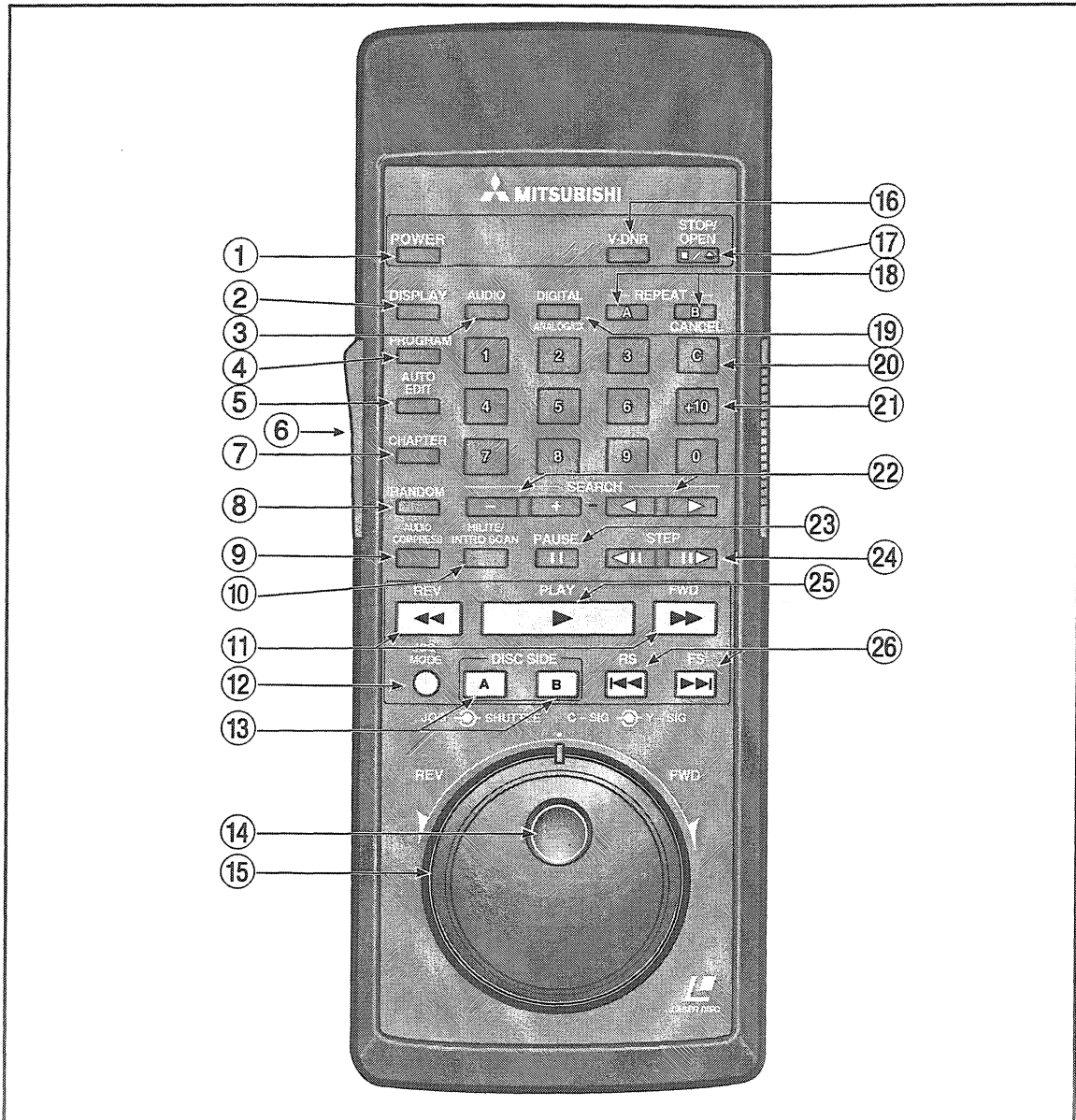
general instructions

When using the remote control to operate the Laserdisc/CD player, follow these procedures:

- ① Make sure you are within 23 feet of the disc player.
- ② Point the top of the remote control towards the player.
- ③ Press the appropriate button or series of buttons.



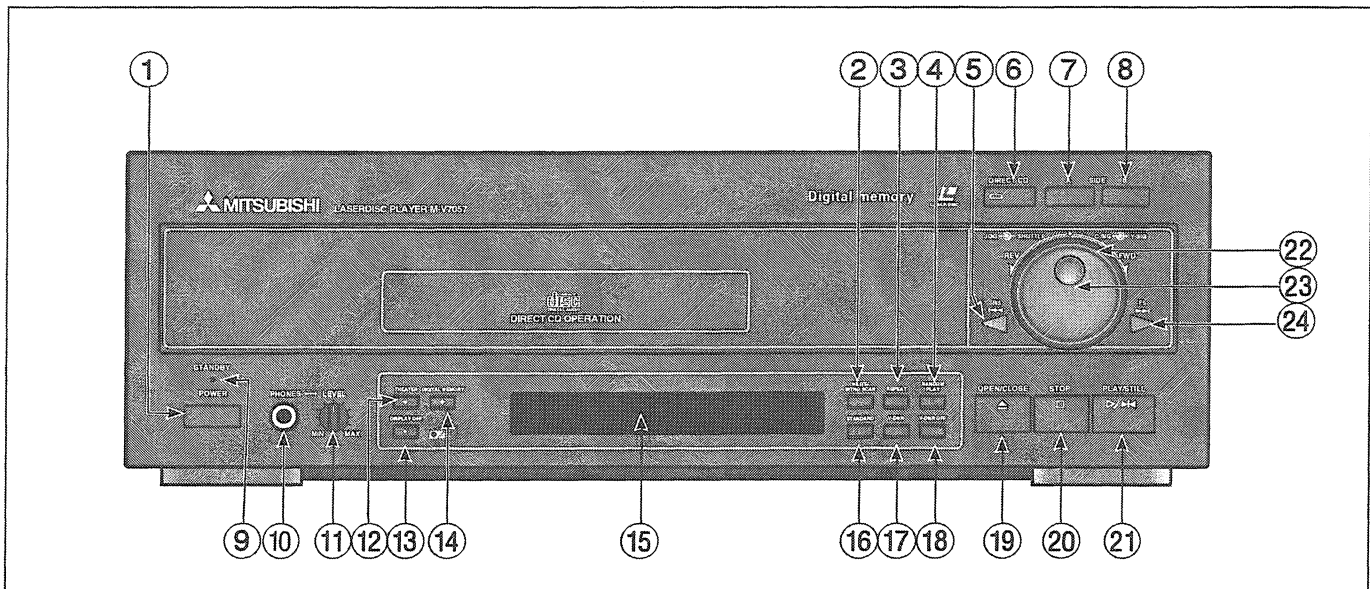
Remote control buttons and functions



- | | |
|---|---|
| <p>① power button (POWER)
Press this button to turn the player on and off (see page 33).</p> | <p>④ program button (PROGRAM)
Press this button to program the player to play selected chapters or tracks (page 55).</p> |
| <p>② display button (DISPLAY)
Press this button to see the on-screen displays (see page 38).</p> | <p>⑤ auto edit button (AUTO EDIT)
Press this button to use the compu-edit or auto-edit features (see page 65).</p> |
| <p>③ audio monitor button (AUDIO)
Press this button to select either the left or right channel of a stereo disc (see page 60).</p> | <p>⑥ lighting button (LIGHTING)
Pressing this button will light up the eight buttons immediately above the jog dial.</p> |

-
- ⑦ **chapter button (CHAPTER)**
Press this button to choose a method of searching for a point on a disc (see page 49).
- ⑧ **random button (RANDOM)**
Press this button to begin random play (see page 66).
- ⑨ **audio compression button (AUDIO COMPRESS)**
Pressing this button allows you to use the jog dial to adjust the volume of a disc's digital sound (see page 61).
- ⑩ **hilite/intro scan button (HILITE/INTRO SCAN)**
Press this button to begin hilite-scan or intro-scan (see page 50).
- ⑪ **reverse and forward scan buttons (REV/FWD)**
Use these buttons to quickly scan in the reverse or forward direction.
- ⑫ **jog mode button and indicator (JOG MODE)**
Pressing this button allows you to use the jog dial to scan the disc frame-by-frame (see page 46).
- ⑬ **side A and B buttons (DISC SIDE A/B)**
Press this button to play either side A or side B or a two sided laserdisc (see page 36).
- ⑭ **jog dial**
Use this "inside" part to scan through a disc frame-by-frame or to adjust the digital level (see page 46).
- ⑮ **shuttle ring**
Turn this "outside" part to search quickly through a disc (see page 45).
- ⑯ **video digital noise reduction button (V-DNR)**
Press this button to change the settings of the video noise reduction feature (page 62).
- ⑰ **stop and open button (STOP/OPEN)**
Press this button when a disc is playing to stop it. Press this button when no disc is playing to open the disc tray (see page 34).
- ⑱ **repeat A and B buttons (REPEAT A/B)**
Use these buttons when repeating sections of a disc (see page 51).
- ⑲ **audio track button (DIGITAL/ANALOG/CX)**
Use these buttons to choose between the audio tracks on a disc (see page 60).
- ⑳ **cancel button (CANCEL)**
Press this button to cancel repeats, programs, or scan features, or to cancel track/chapter numbers you have entered.
- ㉑ **number buttons (0-9, +10)**
Use these buttons to enter chapter/track numbers, or to set the time when editing.
- ㉒ **search buttons (SEARCH)**
Press to increase or decrease search speed, and to change disc direction (see page 70).
- ㉓ **pause button (PAUSE)**
Use this button to pause a disc (see page 37).
- ㉔ **step buttons (STEP)**
Press these buttons freeze the picture and move forward or backward frame-by-frame (see page 69).
- ㉕ **play button (PLAY)**
Use this button to play a disc (see page 36).
- ㉖ **reverse and forward skip buttons (RS/FS)**
Use these buttons to skip to a particular chapter/track. Also use them when programming (see page 47).

Front Panel Buttons and Functions



- ① power button (POWER)**
Press this button to turn the player on and off (see page 33).
- ② hilite/intro scan button (HILITE/INTRO SCAN)**
Press this button to begin hilite-scan or intro-scan (see page 50).
- ③ repeat button (REPEAT)**
Use this button to repeat sections of a disc (see page 51).
- ④ random play button (RANDOM PLAY)**
Press this button to play a disc's tracks in random order (see page 66).
- ⑤ reverse skip button (RS)**
Press to skip to a previous chapter or track (see page 47).
- ⑥ direct CD button (DIRECT CD)**
Press this button to turn off video circuits that may interfere with the audio quality of a CD (see page 66).
- ⑦ side A button (SIDE A)**
Press this button to play the first side of a laserdisc (see page 36).
- ⑧ side B button (SIDE B)**
Press this button to play the second side of a laserdisc (see page 36).
- ⑨ standby indicator (STANDBY)**
Lights up when the player is turned off.
- ⑩ earphone jack (PHONES)**
Plug headphones in here.
- ⑪ earphone level control (LEVEL)**
Turn this dial clockwise to increase the volume of the headphones; turn it counterclockwise to lower the volume (see page 61).
- ⑫ theater button (THEATER)**
Press this button to use theater mode. This will decrease the time it takes to switch between side A and side B of a laserdisc. This button also turns off the fluorescent display (see page 72).
- ⑬ display off button (DISPLAY OFF)**
Press this button to turn the fluorescent display on or off.

⑭ **digital memory button (DIGITAL MEMORY)**
Digital memory allows you to memorize a frame of video and display it later (page 73).

⑮ **display window**
This fluorescent display is explained on page 24.

⑯ **standard noise reduction button (STANDARD)**
This button sets the video noise reduction to its standard setting (page 62).

⑰ **video digital noise reduction button (V-DNR)**
Press this button to change the settings of the video noise reduction feature (page 62).

⑱ **video noise reduction off button (V-DNR OFF)**
Press this button to turn off the video noise reduction feature (page 62).

⑲ **open and close button (OPEN/CLOSE)**
Press this button to open or close the disc tray, in order to put in or remove a disc (see page 34).

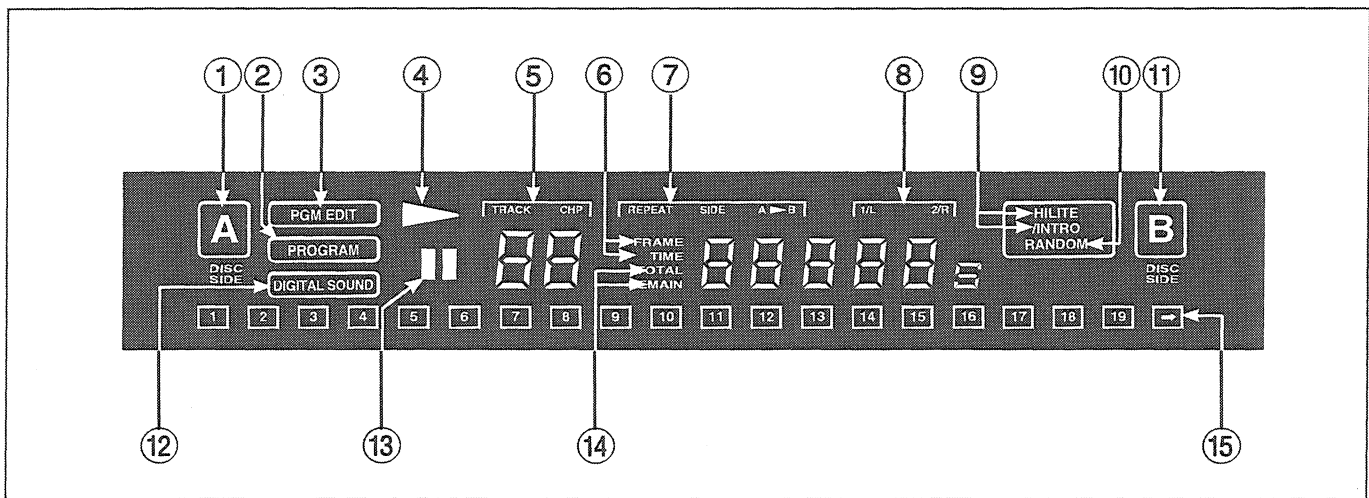
⑳ **stop button (STOP)**
Press to stop a disc (see page 37).

㉑ **play and still button (PLAY/STILL)**
Press to play a disc or to pause a disc while it is playing, (see page 36).

㉒ **shuttle ring**
This “outside” part of the knob allows you to advance a disc at high speed, forward or backwards, by turning the ring (see page 45).

㉓ **jog dial**
This “inside” part of the knob allows you to advance through a disc frame by frame, forwards or backwards, by turning the dial (see page 46).

㉔ **forward skip button (FS)**
Press to skip to an upcoming chapter or track (see page 47).



- ① side A indicator**
This will light up when you are playing the first side of a disc.
- ② program play indicator**
This lights up when you play a programmed sequence of tracks (see page 55).
- ③ edit indicator**
This lights up when you are editing a program.
- ④ play indicator**
This will light up when you play a disc and blink when you use a searching feature.
- ⑤ track/chapter indicator**
If a CD is being played, "Track" will light up, and the number below will show the track being played. If a laserdisc is being played, "Chapter" will light up, and the number below will show the chapter being played.
- ⑥ frame/time display**
When the word "Frame" is lit, then the number to the right is the frame number of the laserdisc.

When the word "Time" is lit, then the number to the right is either the time elapsed on the track or the time elapsed on the disc.
- ⑦ repeat play indicator**
This lights up when you have set the player to repeat a section of the disc.
- ⑧ 1/L channel, 2/R channel indicators**
These will light up to show which audio channel is being played (see page 60).
- ⑨ intro-scan/hilite scan indicator**
This lights up when you use the intro-scan or hilite scan feature (see page 50).
- ⑩ random play indicator**
This lights up when you use the random play feature (see page 66).
- ⑪ side B indicator**
This lights up when you are playing the second side of a laserdisc.
- ⑫ digital sound indicator**
This lights up when a compact disc being played has a digital sound signal. For laserdiscs, it lights up when the digital sound signal is selected (instead of the analog sound signal) (see page 60).
- ⑬ pause indicator**
This lights up when you pause a disc (see page 37).

⑭ **total/remain indicator**

When “Total” is lit, the number to the right indicates the total playing time on the disc.

When “Remain” is lit, the number to the right indicates either the total time remaining on the disc or the time remaining on the track being played.

⑮ **chapter/track display**

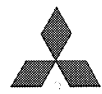
When you load a disc, these numbers light up to show all of the chapter/track numbers recorded on the disc (if the number of tracks is less than nineteen).

If there are more than nineteen chapters/tracks on the disc, the arrow will light up.

After a chapter or track is played, its number will turn off.

If the disc does not have a table of contents, only the chapter/track being played will light up.

When you play a CDV disc, the video track numbers will light up first, followed by the audio track numbers.



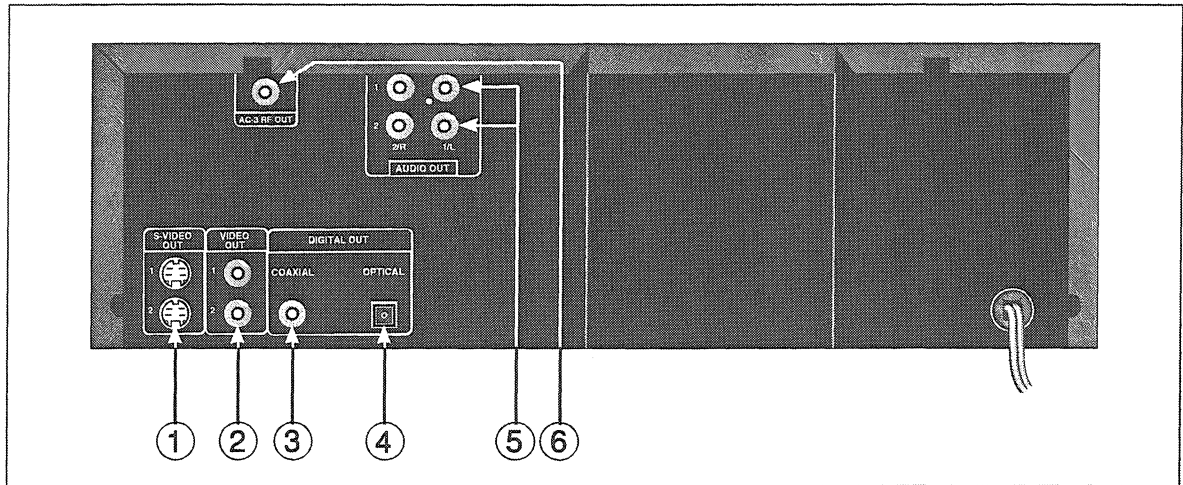
Connecting Your Laserdisc/CD Player

Before you can take advantage of the full range of special features that the M-V7057 offers, first you'll need to connect your new Laserdisc/CD Player to a television or an amplifier/receiver.

This chapter offers step-by-step instructions for completing the most common hook-ups. It contains the following sections:

- ◆ **Overview of the Back Panel**
- ◆ **Connecting Your Equipment**

Overview of the Back Panel



On the back panel of the player, you'll see the following:

**① Super-VHS output terminals
(S-VIDEO OUT)**

These black terminals supply a "Super-VHS" signal to a television with S-VHS input jacks. The Super-VHS signal provides better picture quality than the standard video signal.

**② video output terminals
(VIDEO OUT 1, 2)**

The yellow terminals are called video outputs. They allow the player to send a picture to a television or A/V receiver. There are two outputs provided. You'll find it easy to connect equipment because the video cables are color coded. All you have to do is match the colors on the cables to the colors on the terminals.

**③ coaxial digital output terminal
(COAXIAL DIGITAL OUT)**

Use this output to attach the player to an amplifier equipped to receive coaxial digital signals.

**④ optical digital output terminal
(OPTICAL DIGITAL OUT)**

Use this output to attach the player to an amplifier equipped to receive optical digital signals.

**⑤ audio output terminals
(AUDIO OUT 1, 2)**

The red and white terminals are called audio outputs. They enable the sound to flow from your player to the television, A/V receiver, or amplifier. There are two sets of outputs provided.

You'll find it easy to connect equipment because the audio cables are also color-coded (red for the right stereo channel and white for the left stereo channel). All you have to do is match the colors on the cables to the colors on the terminals when you make the audio connections.

⑥ AC-3 RF OUT terminal

This terminal is intended for use with Dolby AC-3 components planned for future release. Do not connect this terminal to currently available amplifiers and TVs. Additionally, currently available discs will not work with this terminal.



Connecting Your Equipment

This section explains how to connect a television, A/V receiver, or stereo amplifier to your Laserdisc/CD Player. You'll learn how to make the following connections:

- Laserdisc/CD player + television,
- Laserdisc/CD player + Home Theater receiver, and
- Laserdisc/CD player + amplifier.

preparing to connect your Laserdisc Player

To prepare to connect your Laserdisc Player, you should:

- ① Place the player on a sturdy surface next to the television and amplifier.
- ② Make sure that any external speakers are away from your television.

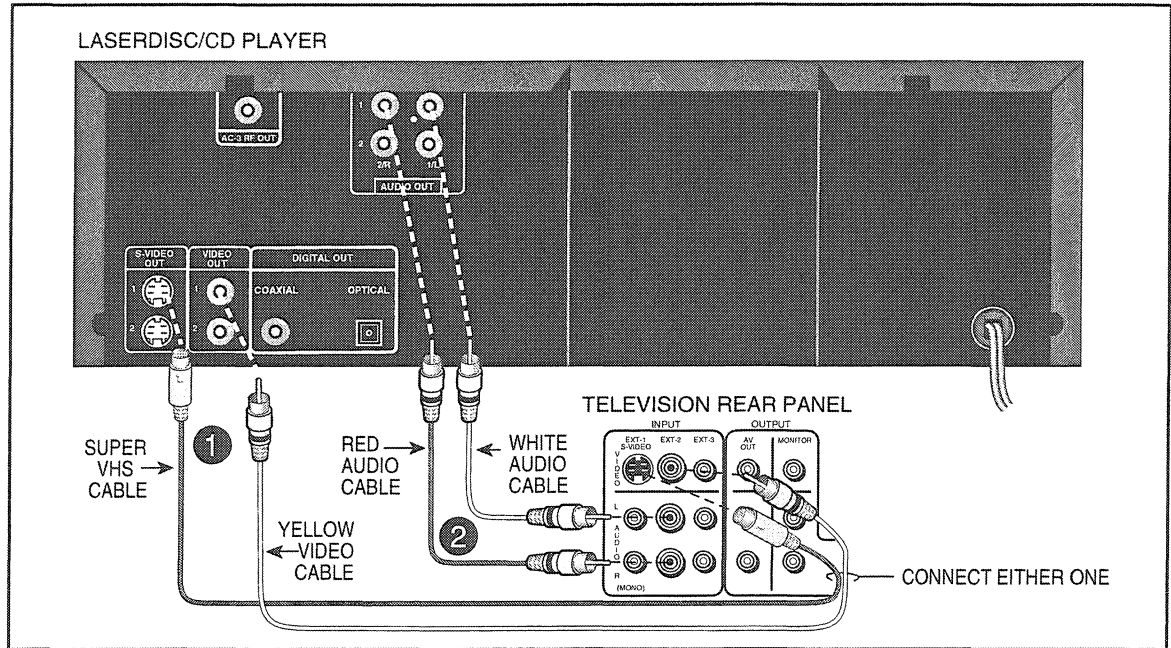
► **Warning:**

Never place any heavy objects on top of the M-V7057. Do not place the player on top of the television. Keep the player away from equipment such as cassette decks that may be sensitive to magnetic fields.

► **Warning:**

Before connecting any cables, make sure that the Laserdisc/CD Player and any equipment you are connecting are all turned OFF.

Laserdisc/CD player + television



To connect a television:

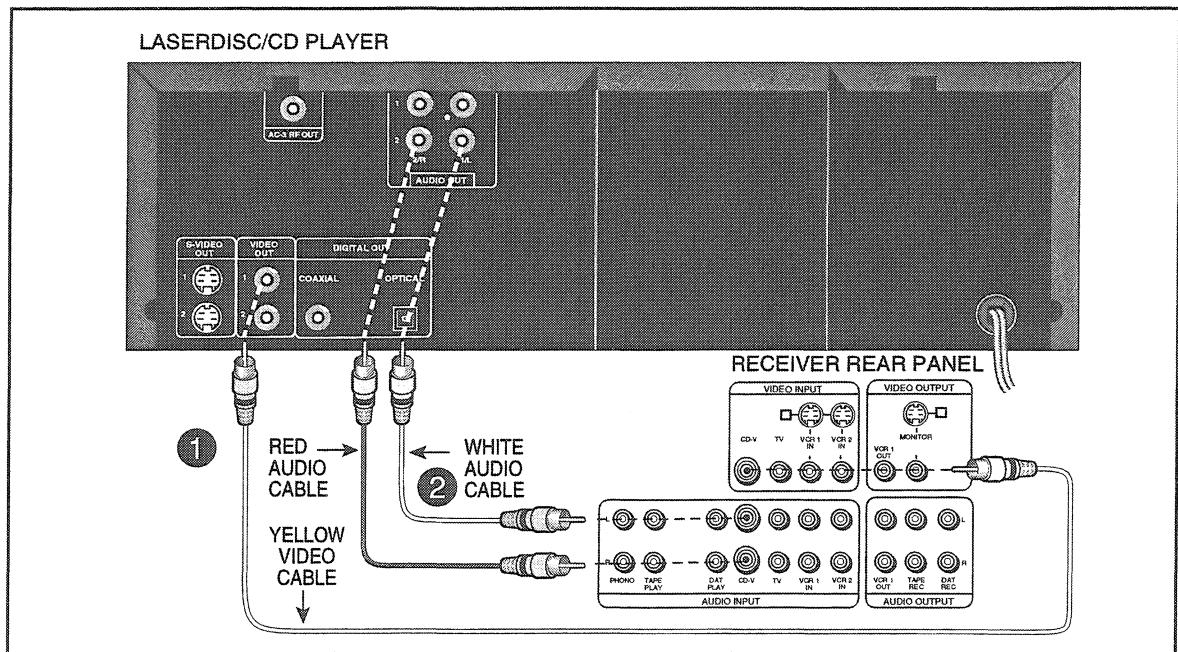
- 1 Connect one end of the supplied yellow video cable to the video output terminal on the Laserdisc/CD player labeled VIDEO OUT. Connect the other end of this cable to the video input terminal on the television labeled VIDEO IN.

If you have a television with a Super VHS input, you can connect a black S-Video cable instead. This will give you a sharper picture. Simply connect one end of the black S-Video cable to the video output terminal labeled S-VIDEO OUT. Connect the other end of this cable to the video input terminal on the television labeled S-VIDEO IN.

- 2 Connect the supplied red and white audio cables to the audio output terminals on the Laserdisc/CD Player labeled AUDIO OUT. The red cable should be connected to the right channel terminal; the white cable should be connected to the left channel terminal. Connect the other ends of these cables to the audio input terminals on your television labeled AUDIO IN.

Attaching the audio cables to your television allows you to play back the audio through the television's speakers. However, your stereo amplifier or your Home Theater receiver may be better equipped to reproduce the excellent sound quality of your Laserdisc/CD Player.

Laserdisc/CD player + Home Theater receiver



To connect a Home Theater receiver:

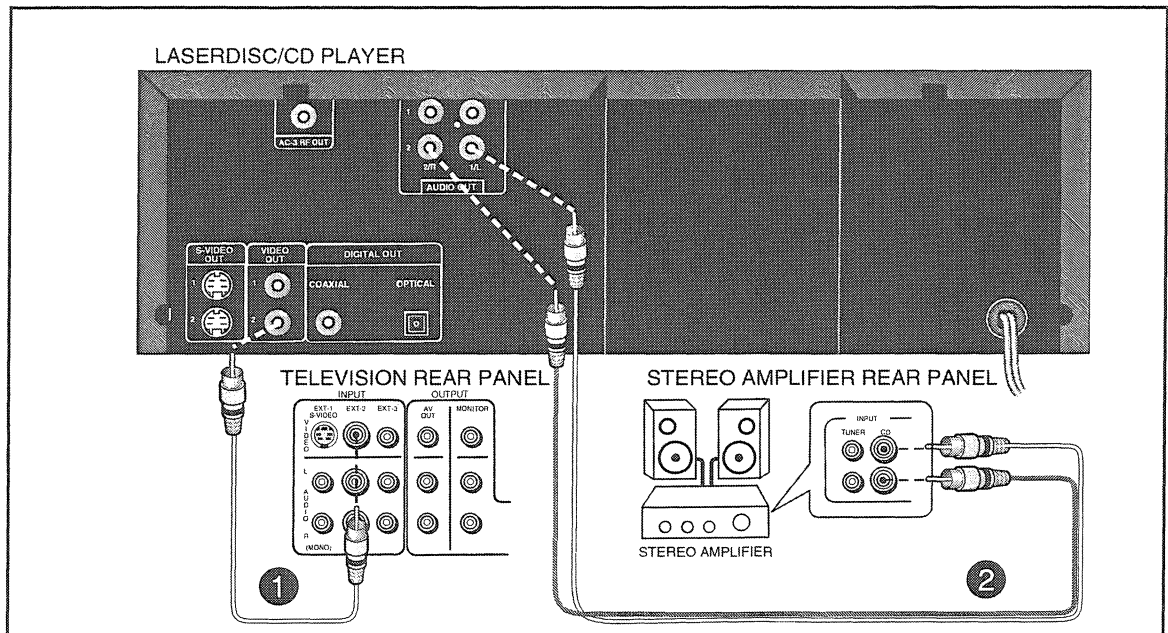
- 1 Connect one end of a yellow video cable to the video output terminal on the Laserdisc/CD player labeled VIDEO OUT. Connect the other end of this cable to the video input terminal on the Home Theater receiver labeled CD-V, LASERDISC, or AUX. Do not connect to a terminal labeled “phono.”

Depending on the type of Home Theater receiver you have, you may want to attach a black S-VIDEO cable instead.

- 2 Connect the supplied red and white audio cables to the audio output terminals on the Laserdisc/CD Player labeled AUDIO OUT. The red cable should be connected to the right channel terminal; the white cable should be connected to the left channel terminal. Connect the other ends of these cables to the audio input terminals on your Home Theater receiver labeled CD-V, LASERDISC, or AUX (the same label as you used for the video cable).

If your receiver does not have terminals that are labeled as mentioned above (CD-V, LASERDISC, or AUX), don't worry. You can connect your Laserdisc/CD player to any of the available terminals, except terminals labeled “phono.” Just be sure that both the audio terminals and the video terminals have the same label. For example, if you attach your video cable to the VCR-2 video terminal, be sure to attach your audio cable to the VCR-2 audio terminals.

Laserdisc/CD player + stereo amplifier



To connect a stereo amplifier:


- 1 Connect a regular video cable or an S-Video cable between the Laserdisc/CD Player and your television. (See page 29.)
- 2 Connect the supplied red and white audio cables to the audio output terminals on the Laserdisc/CD Player labeled AUDIO OUT. The red cable should be connected to the right channel terminal; the white cable should be connected to the left channel terminal. Connect the other ends of these cables to the audio input terminals on your stereo amplifier receiver labeled CD, LASERDISC, or AUX.

▷ **Important:** If you have a stereo amplifier equipped with an optical digital terminal that matches the one on the Laserdisc/CD layer, you can use it to connect to the player. To make this connection, connect an optical fiber cable between the OPTICAL DIGITAL OUT terminal on your player and the optical digital input terminals on your stereo amplifier. Align each plug of the optical fiber cable carefully and make a secure connection.

Be careful not to fold or crimp the optical cable. Always use an optical cable less than 3 meters (about 10 feet) long. If you coil the cable, make sure the diameter of the coil is at least 6 inches across. If you are not using an optical cable, keep the protective dust cap plugged into the digital optical terminal at all times.

▷ **Important:** If you have a stereo amplifier equipped with a coaxial digital terminal, you can connect it to the Laserdisc/CD Player. To make this connection, connect a coaxial digital cable between the COAXIAL DIGITAL OUT terminal on your player and the coaxial digital input terminal of the amplifier

▷ **Important:** Your player does not come supplied with an optical fiber cable or a coaxial digital cable.



CHAPTER 3

Operating Your Laserdisc/CD Player

Now that your player is connected to a television, stereo amplifier, or Home Theater receiver, you should read this chapter to learn how to operate the basic functions of your player.

This chapter covers:

- ◆ **Basic Playback for All Discs**
- ◆ **Understanding the On-screen Displays**



Basic Playback for All Discs

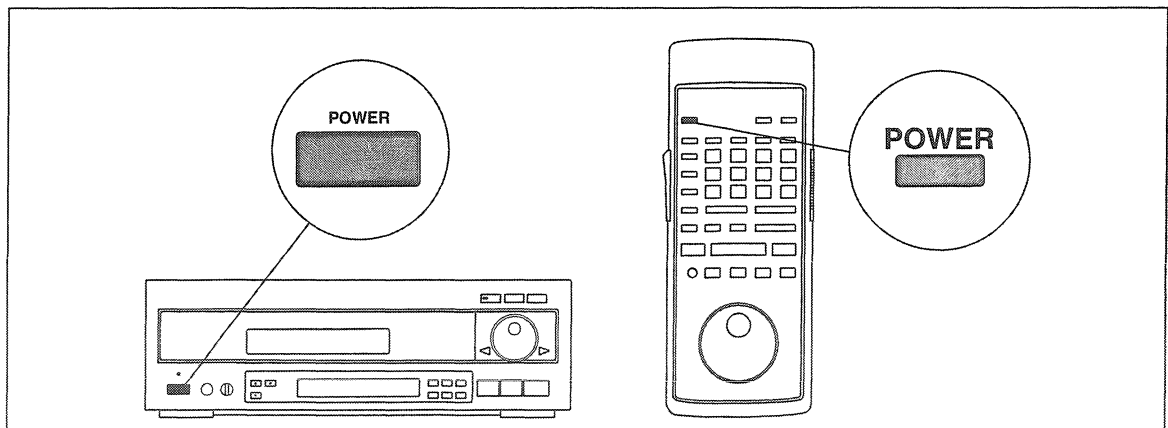
This section will review the features of the M-V7057 that are the same no matter what kind of disc you are playing. Chapter 4, "Using the Advanced Features" will give you information on the special features that are unique for laserdiscs, CDs, and CDVs.

This section covers:

- Turning the power on and off,
- Loading and unloading discs,
- Playing discs, and
- Pausing and stopping discs.

Turning the power on and off

- ① To turn the power on, press either the POWER button on the front panel or the POWER button on the remote control. The fluorescent display will light up and the player will be ready to load and operate.
- ② To turn the power off, once again press either the POWER button on the front panel or the POWER button on the remote control. The fluorescent display will read "OFF" and then turn off; the STANDBY indicator (above the POWER button) will light up.

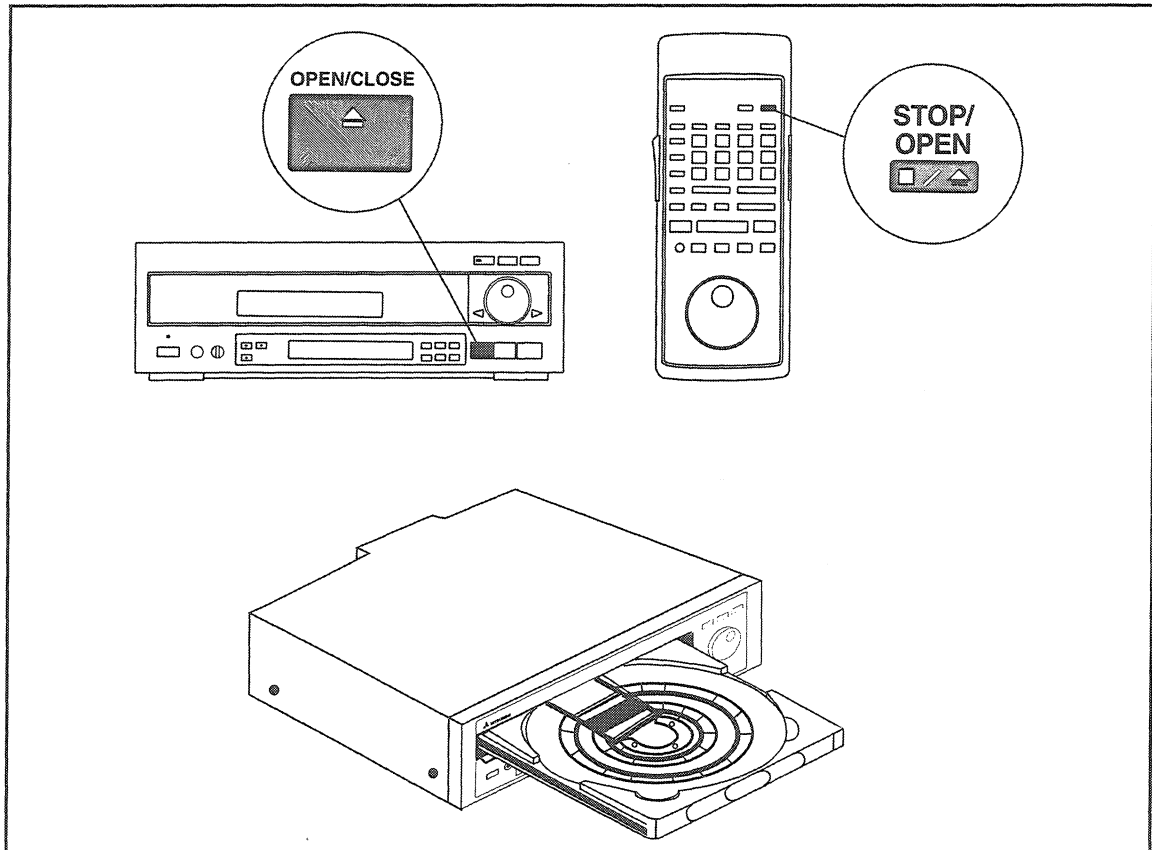


▷ **Important:** If you turn off the player while a laserdisc is playing, the player will remember approximately where you left off. When the power is turned back on, press the PLAY/STILL button, and you the disc will begin playing from where it was before.

Loading and unloading discs

To open the disc tray and load a disc:

- 1 Press the OPEN/CLOSE button on the front panel or the STOP/OPEN button on the remote control. The disc tray will automatically slide out.



► **Warning:**

Do not place any object other than a disc on the disc tray.

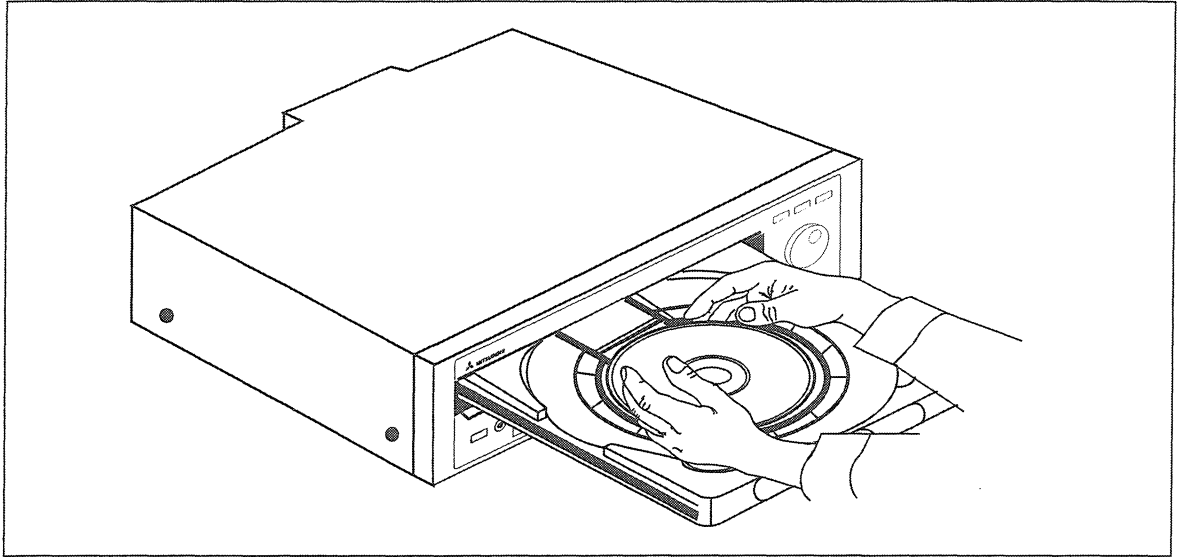
Never play cracked or warped discs. This may damage the player.

Be sure that the disc you are about to play is flat and properly centered or you will damage the Laserdisc/CD Player.

Always load the discs with the label facing up.

Never place more than one disc on the disc tray.

-
- ② Place a disc on the tray; fit the disc into the groove that corresponds to its size.



- ③ Press the OPEN/CLOSE button on the front panel. The disc tray will retract back into the player. You are now ready to begin playing the disc.

► **Warning:**

In step ③, be careful not to catch your finger in the disc tray when it closes.

Never use any kind of adaptor with this player. It can play any kind of disc without an adaptor.

Be careful that children never put their hands inside the player when the disc tray is open.

Unloading discs

- ① Press the OPEN/CLOSE button on the front panel or the STOP/OPEN button on the remote control. The disc tray will slide out.
- ② Unload the disc and place it back into its protective envelope. Always store discs vertically, standing on their edges
- ③ Press the OPEN/CLOSE button on the front panel. The disc tray will retract back into the player.

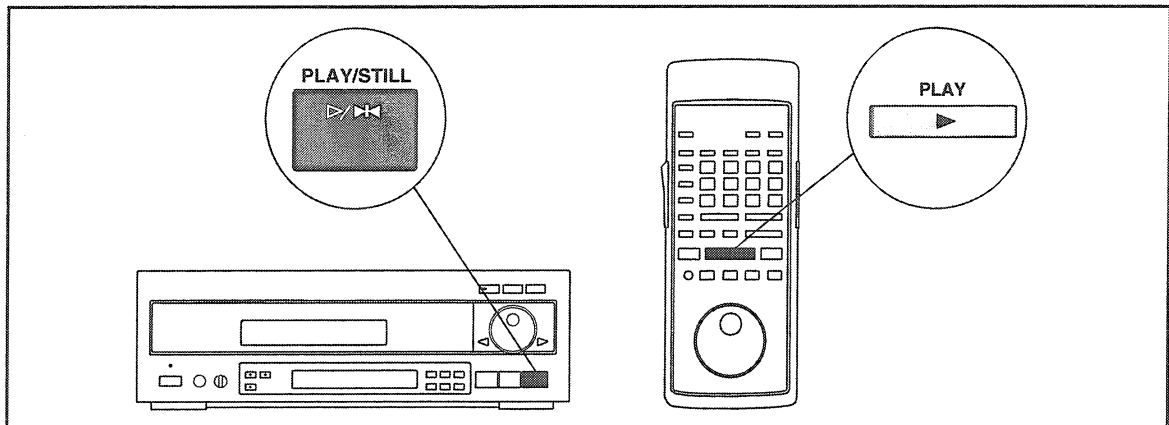
► **Warning:**

Do not press or pull on the disc tray. Use the buttons to open and close the tray

Playing discs

To play a disc:

- 1 Turn on the power to the television, amplifier, or Home Theater receiver. (When using an amplifier or Home Theater receiver, make sure that its input is set to CD, LASERDISC, or AUX; the TV's input should be set to EXT-1 or EXT-2.)
- 2 Press the PLAY/STILL button on the front panel or the PLAY button on the remote control.

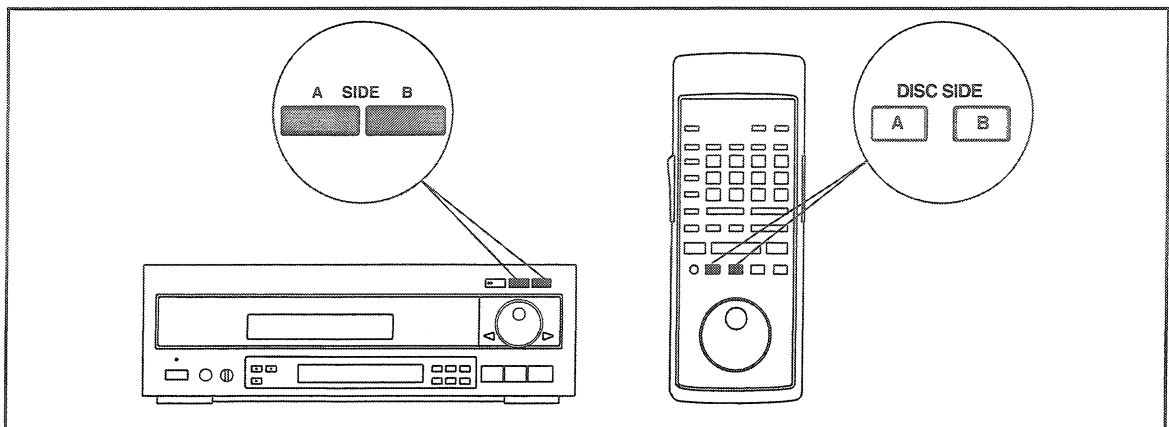


The player will begin playing the disc at the beginning and will stop when it reaches the end.

The player will automatically play both sides (A and B) of a double sided laserdisc.

playing only one side of a double-sided laser disc

- 1 Press the SIDE A button or SIDE B button on the remote control or on the front panel. The player will play only the side you have chosen and then stop.



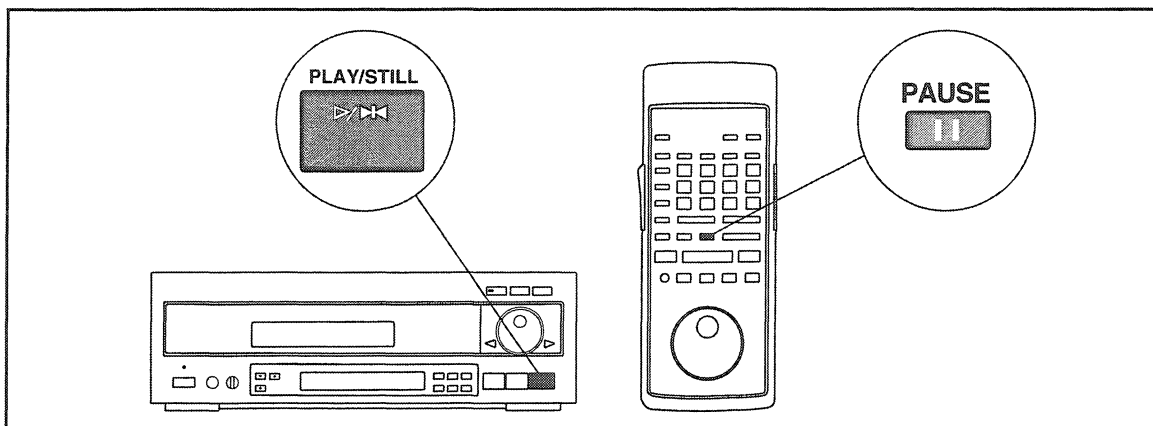
Pausing and stopping discs

With discs, there is a much more important distinction between “stopping” and “pausing” than with audio tapes or video cassettes. If you play a tape after stopping it or after pausing it, you will continue from where you left off.

For discs, that is only true when you pause the disc. When you stop a disc, the player stops keeping track of where you were. When you begin playing again, you will be at the beginning of the disc, making it important to understand the difference between stopping and pausing.

To pause a disc:

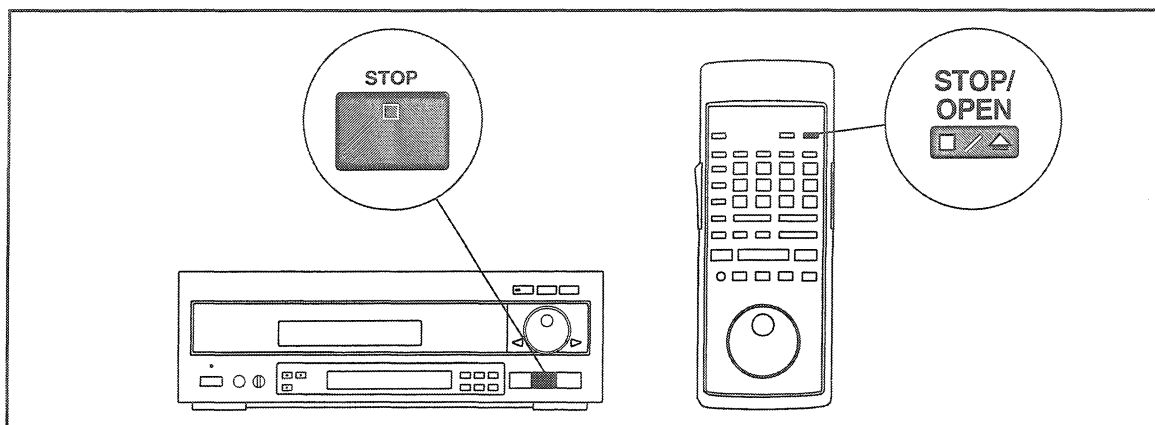
- 1 While a disc is playing, press the PAUSE button on the remote control or the PLAY/STILL button on the front panel.
- 2 Press the PAUSE or PLAY/STILL button again to resume playing the disc.



▷ **Important** Do not pause a disc for more than a few minutes, or you could damage your player.

To stop playing a disc:

- 1 Press the STOP button on the front panel or the STOP/OPEN button on the remote control.



◆ Understanding the On-Screen Displays

Your Laserdisc/CD Player gives you complete on-screen displays tailored for the type of disc you are playing.

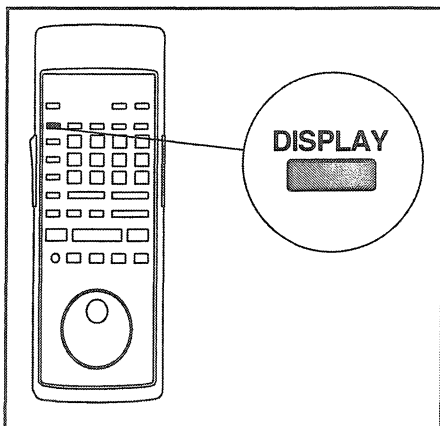
In this section, you'll learn about

- Viewing the on-screen displays,
- Displays for each disc type, and
- Additional displays.

Viewing the on-screen displays

To view the on-screen displays:

- ① Load a disc into the player and press the PLAY button.
- ② Press the DISPLAY button on the remote control.



- ③ When you wish to turn off the displays, press the DISPLAY button until the display disappears.

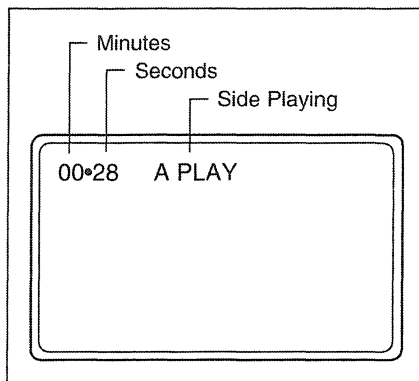
Displays for each type of disc

The displays you see will differ depending on what type of disc you are playing. This section explains displays for:

- laserdiscs without a table of contents,
- standard play (CAV) laserdiscs with a table of contents,
- extended play (CLV) laserdiscs with a table of contents, and
- compact discs and CD-Vs.

displays for laserdiscs without a table of contents

When you press the DISPLAY button on the remote control during playback, you will see the following display:

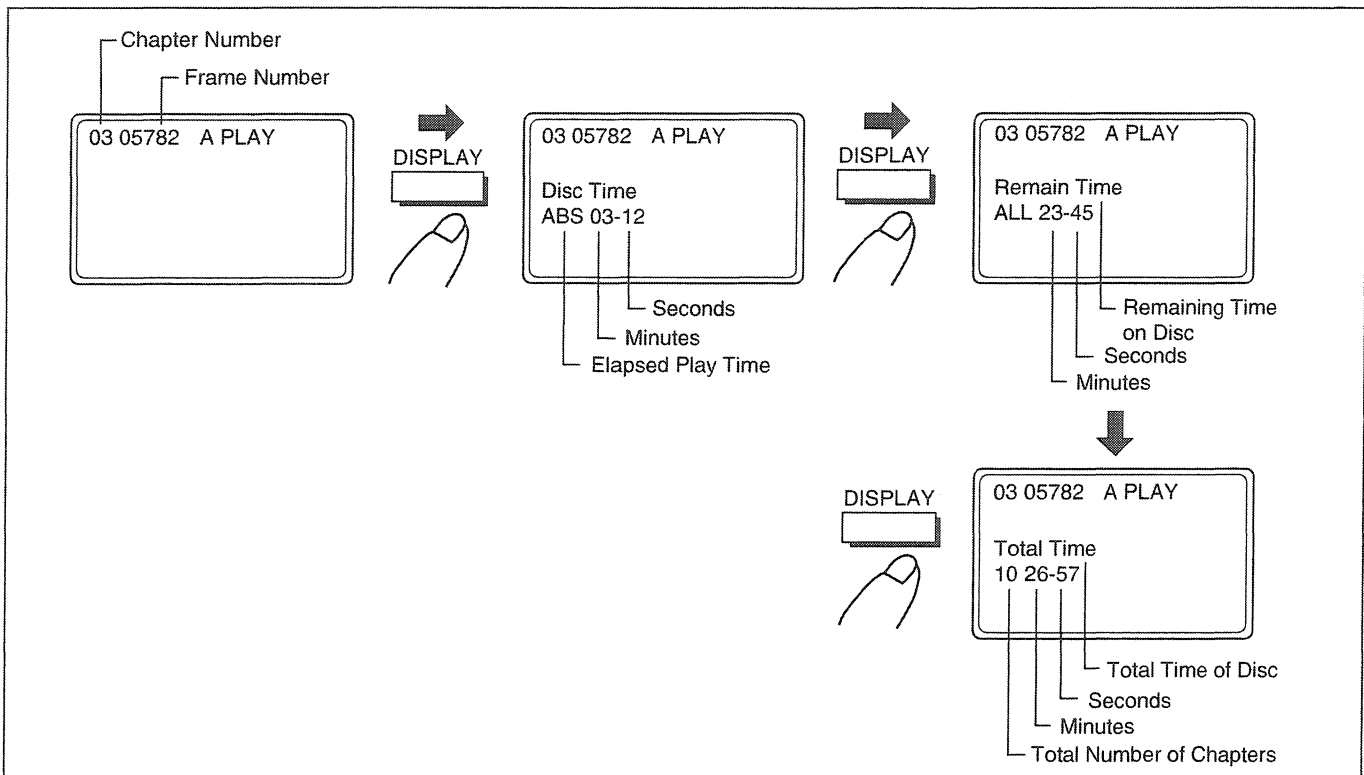


If your laserdisc is a CAV (standard play) disc, the frame number will be displayed instead of the time.

Displays for each type of disc (continued)

displays for standard play (CAV) laserdiscs with a table of contents

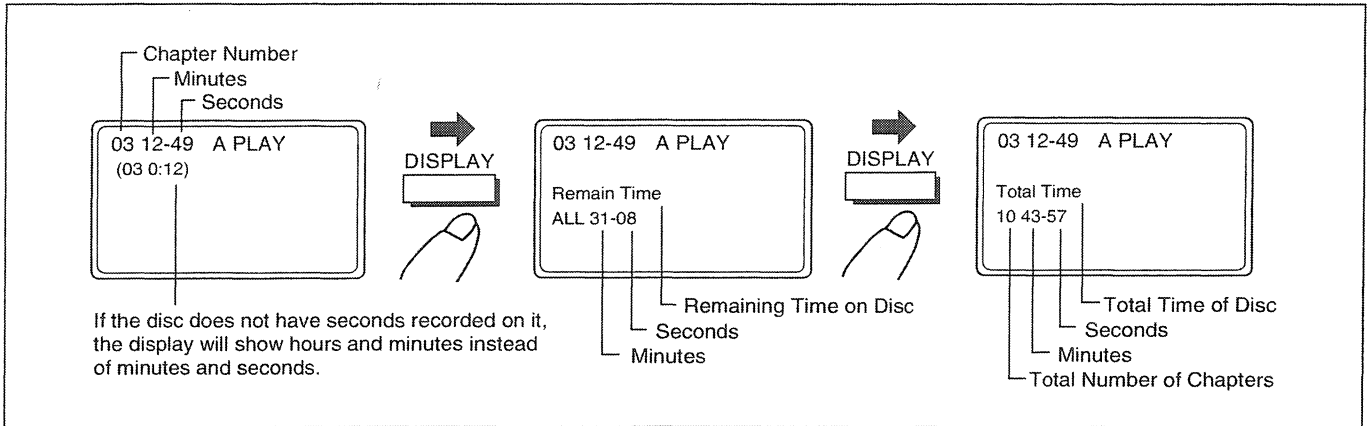
Each time you press the DISPLAY button on the remote control, you will see the following displays:



The displays will turn off when you press the DISPLAY button again.

displays for extended play (CLV) laserdiscs with a table of contents

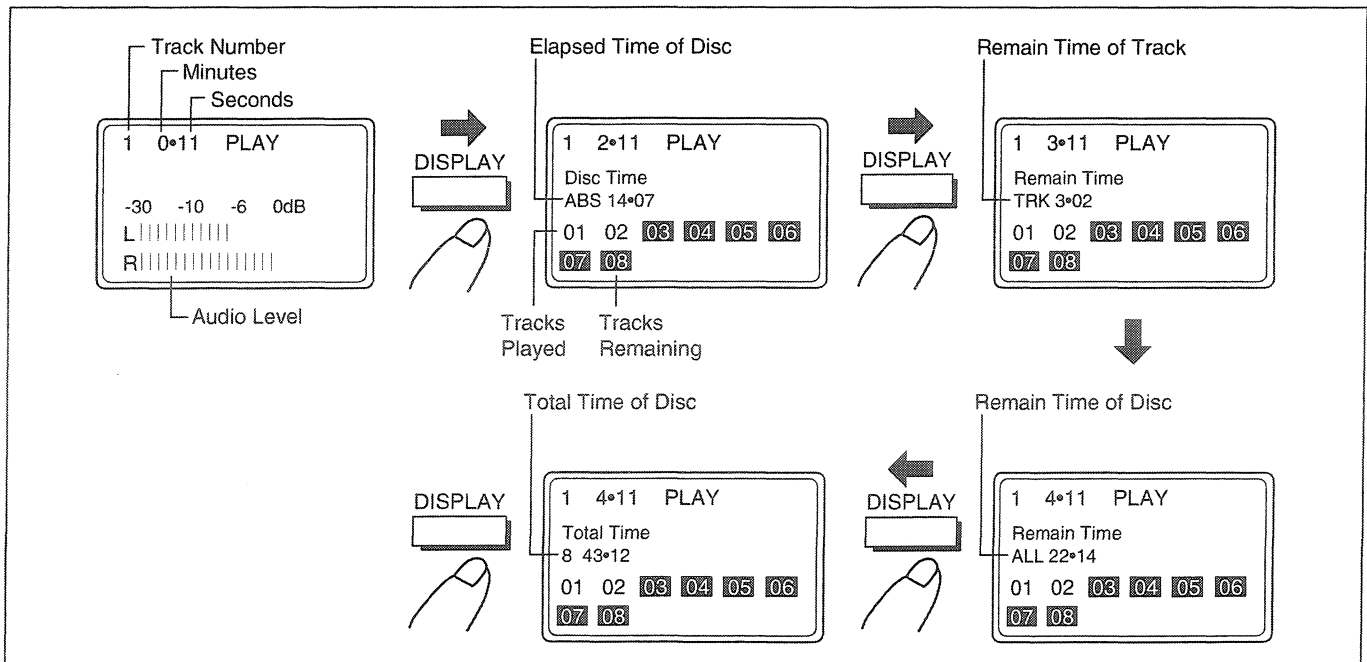
Each time you press the DISPLAY button on the remote control, you will see the following displays:



The displays will turn off when you press the DISPLAY button again.

displays for compact discs and CDVs

Each time you press the DISPLAY button on the remote control, you will see the following displays:



Additional displays

As you make use of your player's many features, you will see a number of on-screen displays. Below is a list of displays you may come across, the features they refer to, and where you can look for more information.

If you see this:	It refers to:	Look for information on page:
OPEN	The disc tray opens	Page 34.
CLOSE	The disc tray closing	Page 34.
STOP	Stopping the disc	Page 37.
PLAY	Playing the disc	Page 36.
PAUSE	Pausing the disc	Page 37.
STILL	Freezing the frame on a laser disc	Page 69.
1/2, 1/4 . . . x2, x3	Multi-speed play	Page 70.
CLV	The type of disc you are playing	Page 18.
Video	Searching for the video portion of a CDV	Page 18.
Audio	Searching for the audio portion of a CDV	Page 18.
A, B	The side of a laser disc you are playing	Page 36.
Repeat Memory	You have programmed a point to which you can return	Page 53.
Repeat A-B	You have designated a section to be continuously repeated	Page 54.
Repeat Side A Repeat Side B	The player is continuously repeating a side of a disc	Page 52.
Repeat All	The player is continuously repeating the disc	Page 52.
Repeat Chapter/Track	The player is continuously repeating a chapter/track	Page 51.
Repeat Program	The player is continuously repeating a programmed sequence of chapters/tracks	Page 54.
Program	You are playing a programmed sequence of chapters/tracks	Page 55.
Step	You are in the process of programming a sequence of chapters/tracks	Page 55.
Pgm.Rnd	You are playing a sequence of chapters/tracks that were randomly assigned	Page 66.
Editing	You are using one of the editing features.	Page 65.

If you see this:	It refers to:	Look for information on page:
Compute	You are using the Compu-edit feature	Page 63.
Intro	You are using the Intro-scan feature	Page 50.
Hilite	You are using the Hilite-scan feature	Page 50.
Digital	The player is playing the digital signal	Page 61.
Analog	The player is playing the analog signal	Page 61.
Stereo	The player is playing the stereo signal	Page 60.
1/Lch	The left (Main) audio channel	Page 60.
2/Rch	The right (secondary) audio channel	Page 60.
Random	The player is playing chapters/tracks in a random order	Page 66.
One-shot	You are assigning a frame to one-shot digital memory	Page 73.
Output level	You can adjust the digital volume level	Page 61.
A ► B	You are switching from side A to side B	
B ► A	You are switching from side B to side A	
CX On/Off	You are turning the CX audio on or off	Page 61.



Using the Advanced Features

Now that you've familiarized yourself with the basic features of the your new Laserdisc/CD player, it's time to enjoy the advanced features that Mitsubishi has provided.

Most advanced features can be used for all kinds of discs. However, some advanced features apply to only one specific type of disc.

In this chapter you'll learn:

- ◆ **Advanced Features for All Discs**
- ◆ **Advanced Features for CDs and CDVs only**
- ◆ **Advanced Features for Laserdiscs only**



Advanced Features for All Discs

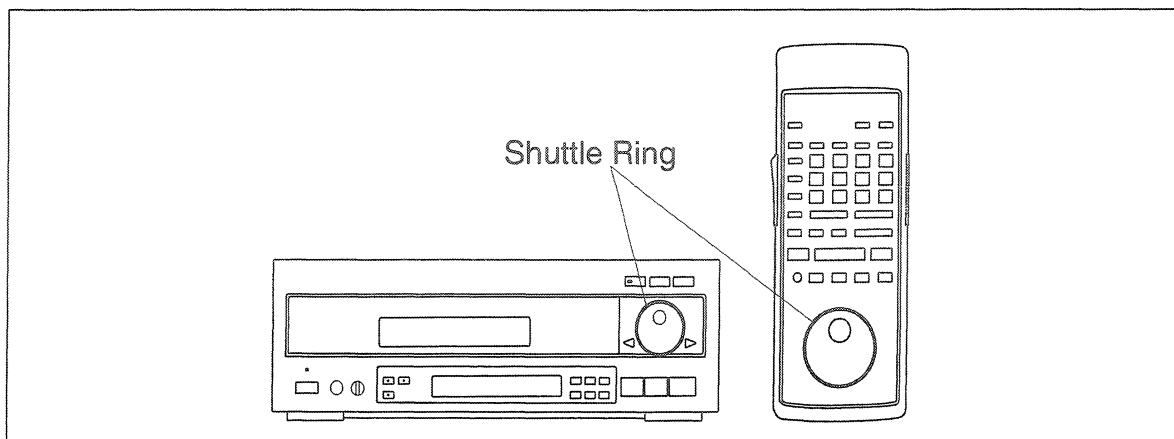
Your Laserdisc/CD player has many advanced features that make playing discs easier and more enjoyable. This section reviews advanced features common to all types of discs.

In this section, you'll learn about:

- Using the shuttle ring,
- Using the jog dial,
- Searching for a chapter or track
- Using intro-scan,
- Repeating sections of a disc,
- Programming a disc,
- Adjusting the audio,
- Using single play, and
- Using soft picture.

Using the shuttle ring

Your player comes with a state-of-the-art control called a “shuttle ring.” This ring is the “outside” part of the round knob that is on both the remote control and the front of the player. The shuttle ring enables you to search for a particular spot on a disc while continuing to view the disc's video contents (if any).



Using the shuttle ring (continued)

To use the shuttle ring:

- ① While a disc is playing, turn the shuttle ring. If you turn the ring clockwise, the disc will scan forward; if you turn the ring counterclockwise, the disc will scan in reverse.

If you turn the shuttle ring slightly, the disc will scan at about twice normal speed, and the picture (if any) will not have any “noise.”

If you turn the shuttle ring more, the disc will scan at about 5 times normal speed.

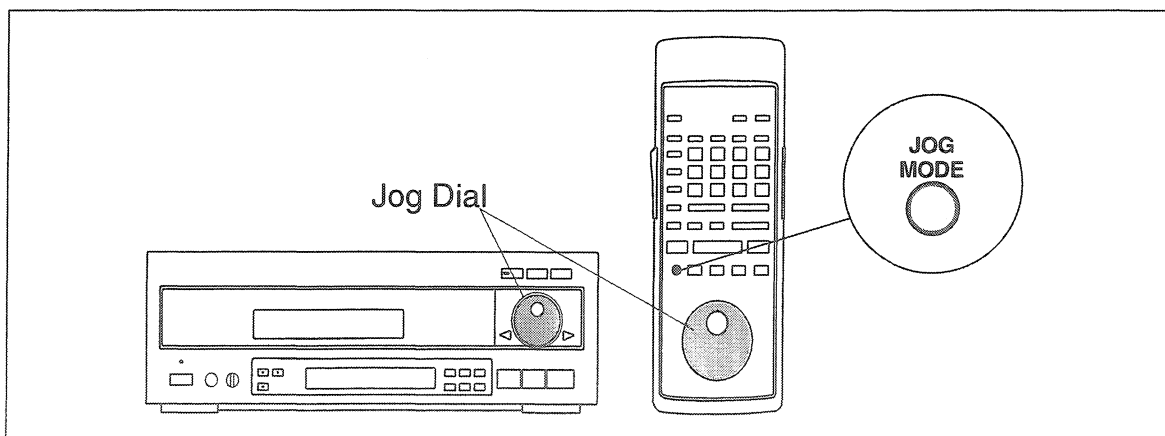
Turn the shuttle ring even further, and the disc will scan at about 10 times normal speed.

If you turn the shuttle ring all the way, the disc will scan at about 20 times normal speed.

- ② When you release the shuttle ring, the disc will resume normal playback.

Using the jog dial

Your player also comes with a control called a “jog dial.” This dial is the “inside” part of the round knob that is on both the remote control and the front of the player. The shuttle ring enables you to advance through a disc frame by frame.



To use the jog dial:

- ① If you are using the remote control, press the JOG MODE button. The button will light up, indicating that the jog dial is turned on. If you are using the dial on the front panel, you do not have to press any button.
- ② While a disc is playing, turn the jog dial. If you turn the dial clockwise, the disc will scan forward; if you turn the dial counterclockwise, the disc will scan in reverse.

-
- ③ The faster you turn the jog dial, the faster the disc will scan.
 - ④ If you are playing a CD, the disc will resume normal playback when you stop turning the jog dial. If you are playing a laserdisc, you need to press PLAY to resume normal playback.

▷ **Important:** If you do not use the jog dial on the remote for more than five minutes, the jog indicator will turn off. However, to save the batteries, we recommend that you turn off the jog indicator (by pressing the JOG MODE button) as soon as you are finished using the jog dial.

Searching for a chapter or track

Your CDs and CDVs are divided into “tracks” that indicate the beginning of songs or sections on the discs. This makes it easy to search for those points on the disc.

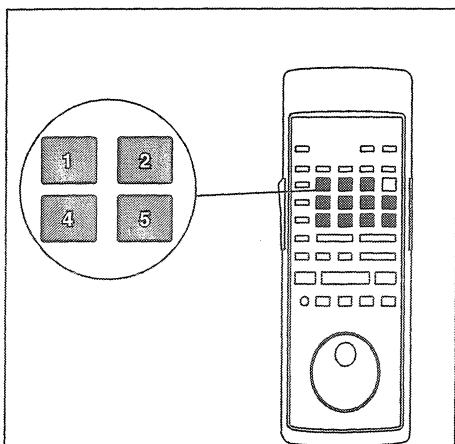
Likewise, your laserdiscs may be divided into “chapters” that serve the same purpose. (If your laserdisc is not divided into chapters, this kind of search is not possible.)

There are three ways to search for a chapter or a track: directly, sequentially, or through the menus.

searching for a chapter/track directly

- ① On the remote control, press the number of the chapter or track you wish to find.

To search for a chapter or track numbered 10 or higher. Use the “+10” button on the remote control. For example, to enter “17”, press “+10” followed by “7.” To enter “27,” press “+10” twice, followed by “7.”

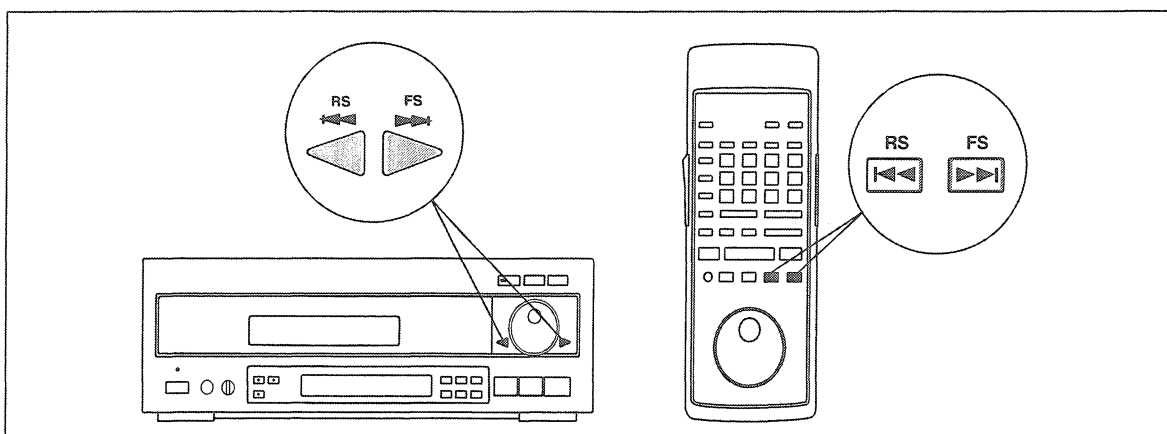


Searching for a chapter or track (continued)

searching for a chapter/track sequentially

While a disc is playing, you can skip through the chapter/tracks to search for the beginning of a particular chapter/track.

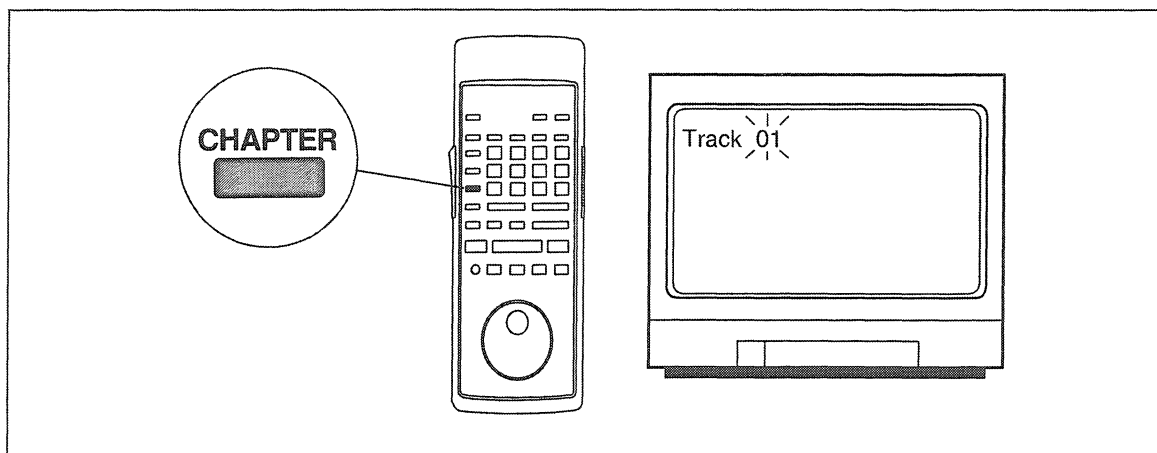
- 1 Press the RS button on either the front panel or on the remote control to go to the beginning of the chapter/track that is currently playing. The player will then “skip back” one chapter/track each time you press the RS button.
- 2 Press the FS button on either the front panel or on the remote control to go to the beginning of the next chapter/track. The player will “skip forward” one chapter or track each time you press the FS button.



searching for a chapter/track through the menus

- 1 If you are playing a laserdisc, press the MENU button on the remote control twice. You will see the word "Chapter" appear on the screen.

If you are playing a CD, press the MENU button on the remote control three times. You will see the word "Track" appear on the screen.

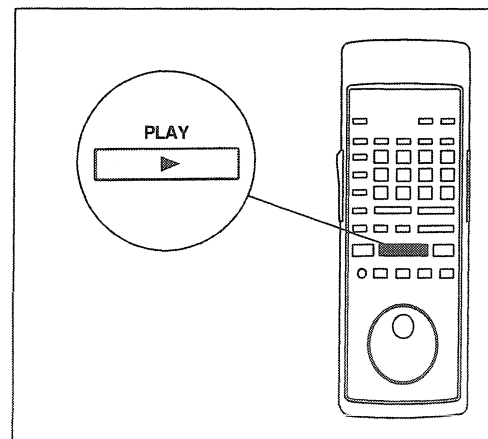


- 2 Use the number keys on the remote control to enter the number of the chapter/track you are searching for

- 3 Press the PLAY button on the remote control. The player will go to the beginning of the chapter/track and begin playing. If you are searching on a standard play (CAV) laserdisc, the player will go to the beginning of the chapter and display a still frame. Press PAUSE or PLAY to begin playing.

canceling a search

To cancel a search, press the CANCEL button on the remote control.

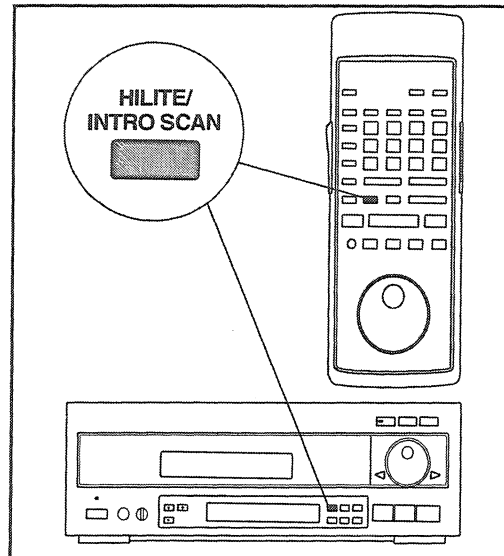


Using intro-scan

When viewing a laserdisc that has chapter number or the video part of a CDV that has track numbers, you can easily scan the beginning of each chapter/track. To do this:

- 1 Press the HILITE/INTRO SCAN button on the remote control or front panel. The beginning of each chapter/track is played for about 8 seconds.
- 2 To play a chapter/track as it is being introduced, simply press PLAY. The disc will begin playing back from that point.
- 3 To cancel intro-scan, press the CANCEL button on the remote control.

When the player has scanned all of the chapters/tracks on the disc, it will begin normal playback from the first one.



Using hilite scan

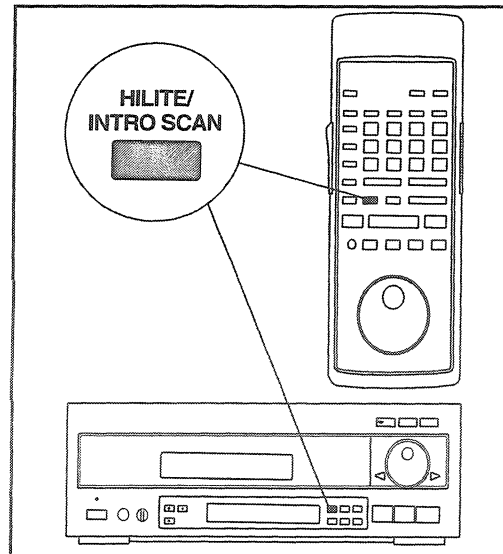
When you are listening to a CD or to the audio portion of a CDV, you can easily scan a section of each track. To do this:

- 1 Press the HILITE/INTRO SCAN button on the remote control or front panel. The beginning of each chapter/track is played for about 8 seconds.

If the disc was stopped when you began hilite scan, you will hear approximately eight seconds of each track, beginning from a point one minute into the track.

If the disc was playing when you began hilite scan, you will hear approximately eight seconds of each track, beginning from the same point at which you began hilite scan.

(For example, if you were 2:15 into a track when you began hilite scan, each eight-second selection will begin play at a point 2:15 into the track.)



-
- ② To play a track that is being highlighted, press the PLAY button. Playback will begin from that point.
 - ③ To cancel hilite scan, press the CANCEL button on the remote control.

When the player has scanned all of the tracks on the disc, it will begin normal playback from the first one.

▷**Important:** When playing a CDV, all scans begin with intro-scan on the video portion, followed by hilite scan on the audio portion.

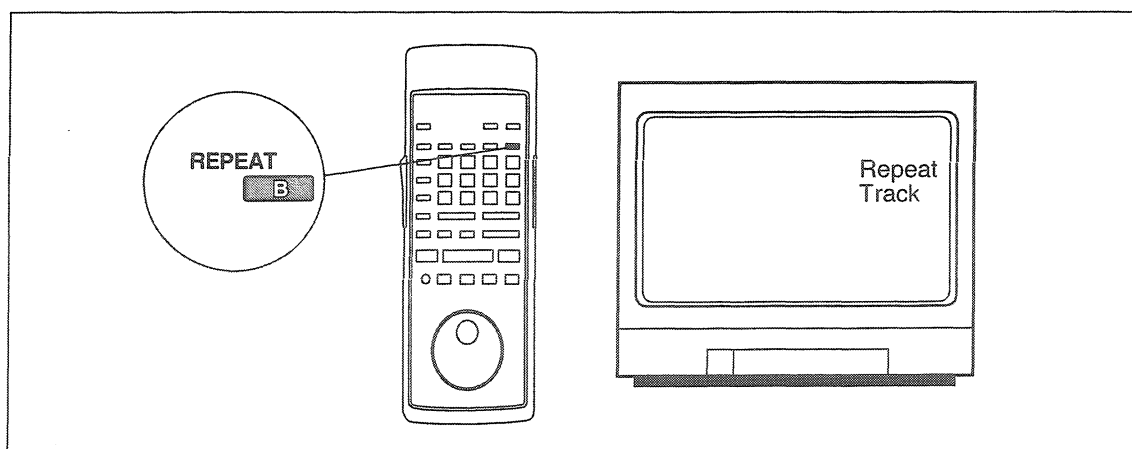
Repeating playback

There are many different ways to repeat parts of a disc. This section explains:

- repeating the current chapter/track,
- repeating one side of a disc,
- repeating both sides of a double-sided laserdisc,
- marking a point to return to later, and
- marking and repeating a section of a disc.

repeating the current chapter/track

- ① While the chapter/track that you want to repeat is playing, press the REPEAT B button on the remote control once. The words "Repeat Track" or "Repeat chapter" will flash on the on-screen display.



- ② The chapter/track will play over and over until you press the CANCEL button, the RS button, or the FS button on the remote control.

Repeating playback (continued)

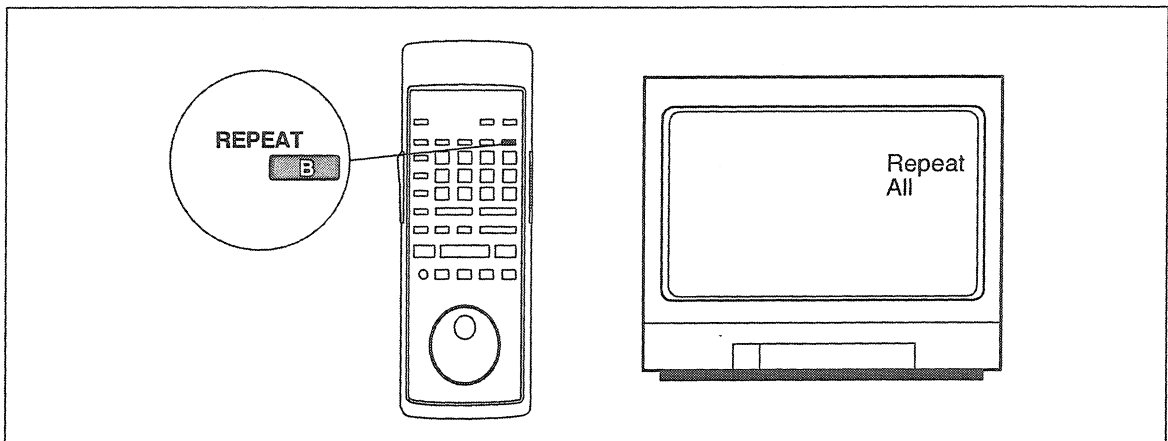
repeating one side of a disc

To repeat one side of a disc:

- ① While a disc is playing, press the REPEAT B button on the remote control twice. The words "Repeat Side" will appear on the on-screen display.
- ② The side you marked will play over and over until you press the CANCEL button on the remote control.

repeating both sides of a double-sided laserdisc

- ① While a disc is playing, press the REPEAT B button on the remote control three times. The words "Repeat All" will flash on the on-screen display.

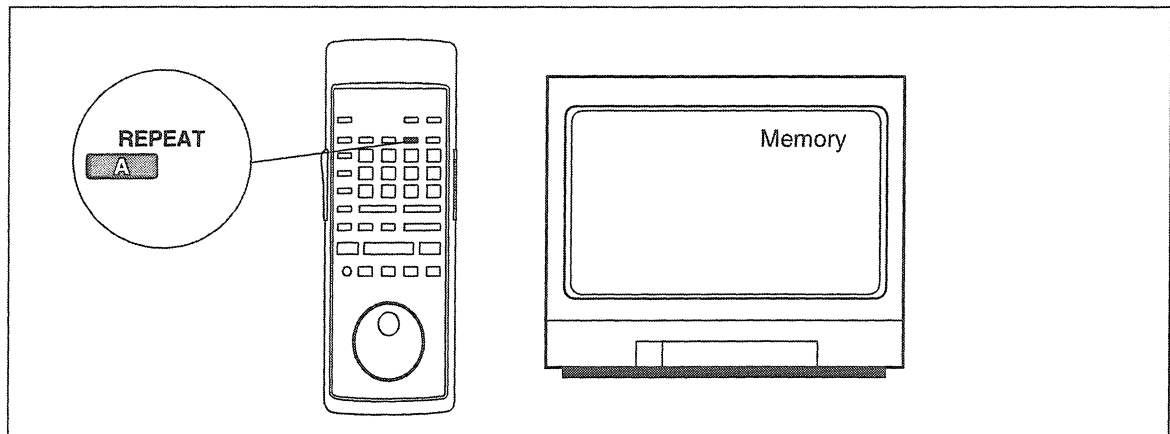


- ② Both sides of the laserdisc will play over and over until you press the CANCEL button on the remote control.

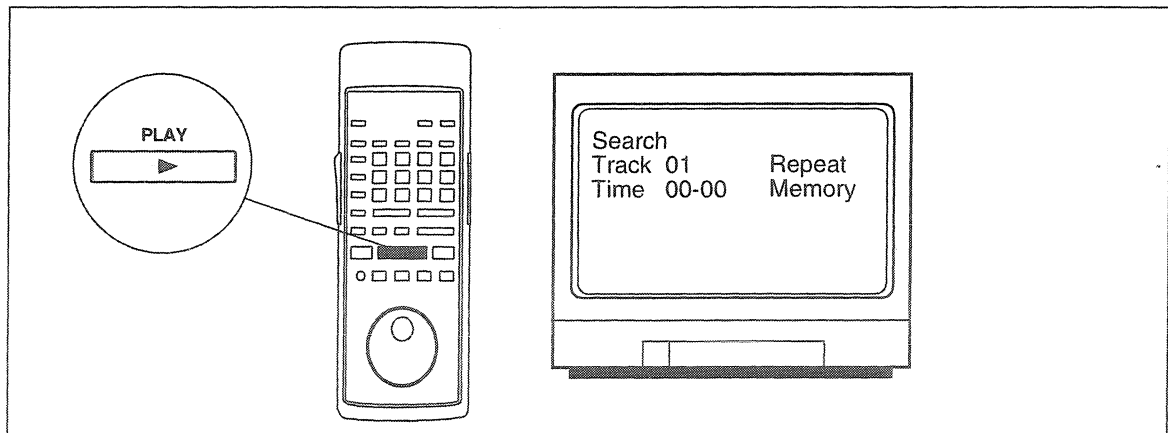
marking a point to return to later

Sometimes it can be very useful to mark a point on a disc that you may want to return to. To do this:

- 1 While a disc is playing, press the REPEAT A button on the remote control at the point you want to mark. The word "Memory" will appear on the on-screen display.



- 2 When you are ready to return to that point, press the PLAY button on the remote control, or the PLAY/STILL button on the front panel. The words "Repeat Memory" will appear on the screen, and the player will begin playing back at the point you marked.



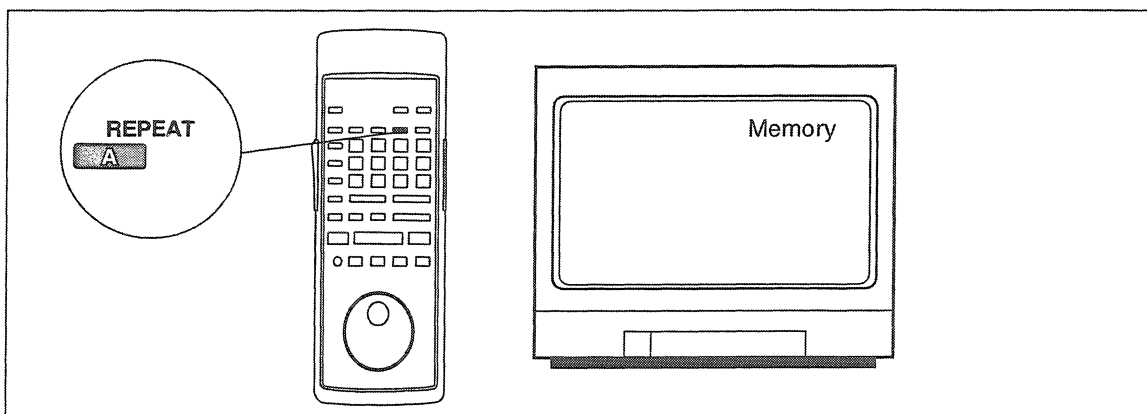
The player will only remember the point you marked as long as the disc continues playing. If you stop playing the disc, the point you marked is forgotten.

Repeating playback (continued)

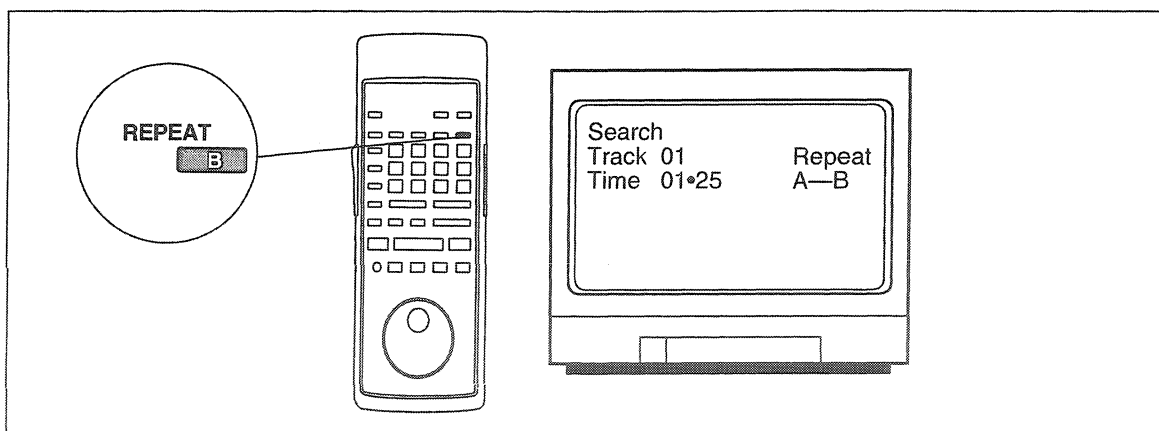
marking and repeating a section

While a disc is playing, you can mark the beginning and end of a section and set that section to continuously repeat. To do this:

- 1 While a disc is playing, press the REPEAT A button on the remote control at the beginning of the section you would like to be repeated. The word “Memory” will appear on the screen.



- 2 When you reach the end of the section you would like to repeat, press the REPEAT B button on the remote control. The words “Repeat A-B” will appear on the screen, and the section you have marked will play over and over.



- 3 To cancel, press the CANCEL button, the RS button, or the FS button.

If you want to select a new beginning point for the section, simply press the REPEAT A button at that point. It will replace the old beginning point.

On CDV discs, you can only set up a repeating section within the video part or within the audio part. You cannot repeat across the parts.

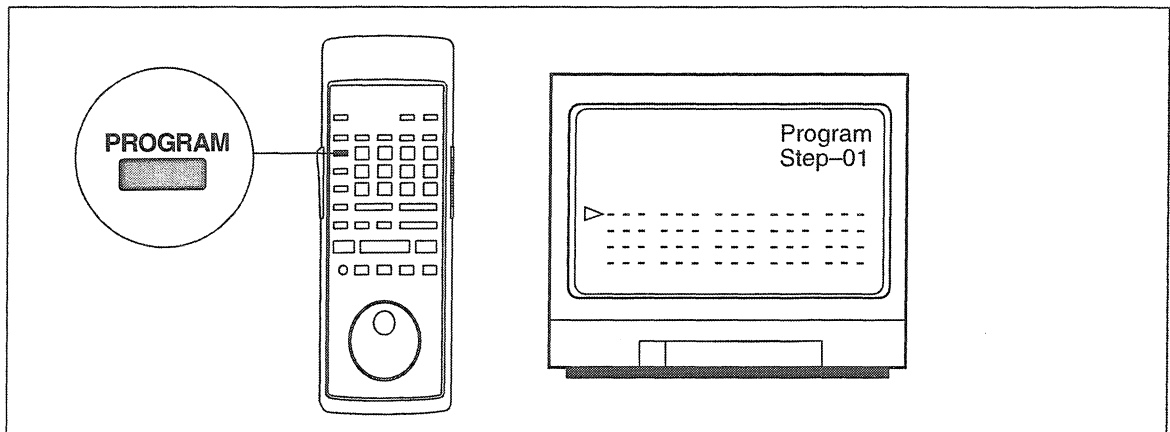
Programming a disc

Your player allows you to program and play back the chapters/tracks of your laserdisc in any order you choose. The process is slightly different for laserdiscs than for CDs and CDVs, so be sure to read the instructions for each type of disc

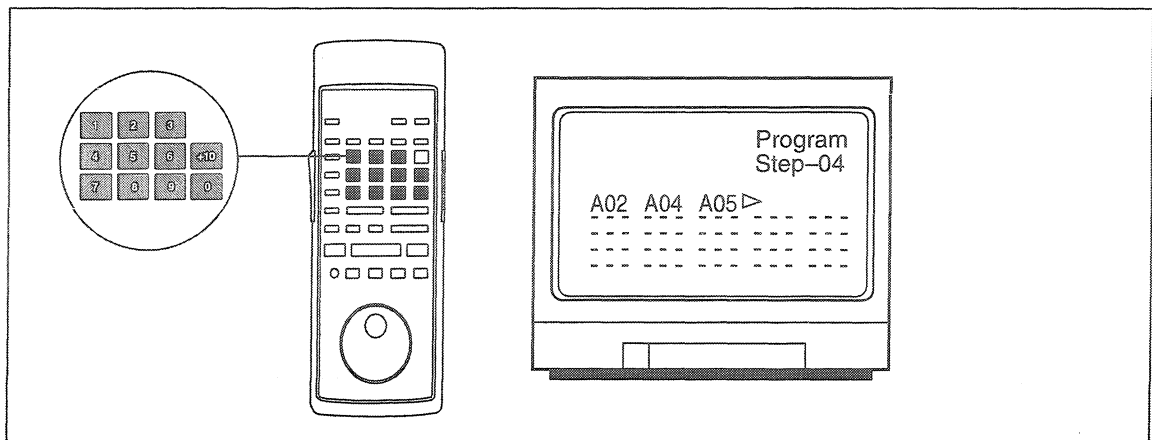
programming chapters on a laserdisc

▷ **Important:** You cannot program a laserdisc that does not have chapters encoded on it.

- ① Press the PROGRAM button on the remote control. The programming menu will appear on the screen.

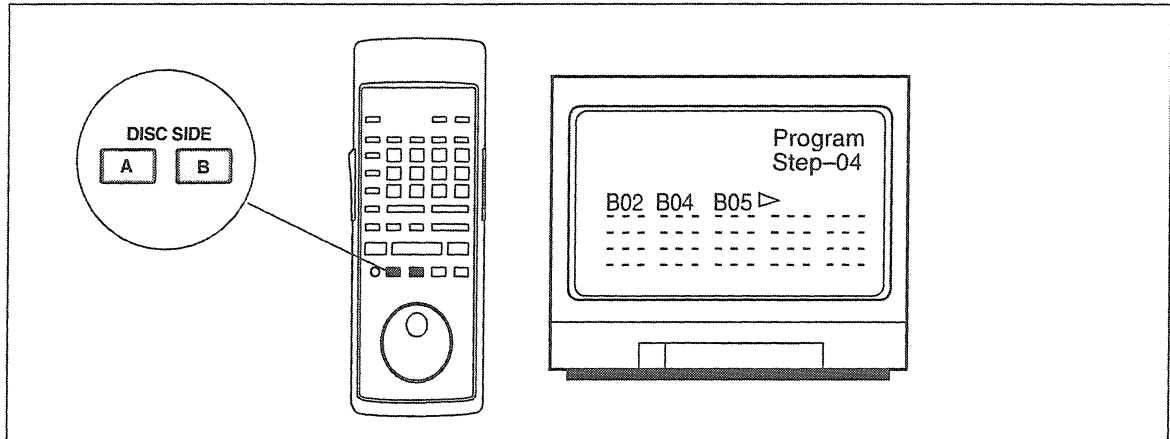


- ② If you are playing a single-sided laserdisc, simply enter the numbers of the chapters you wish to program by pressing the number buttons. You will see the letter A followed by the chapter number you chose. If you make a mistake, push the CANCEL button on the remote control until the error is corrected, then continue programming.

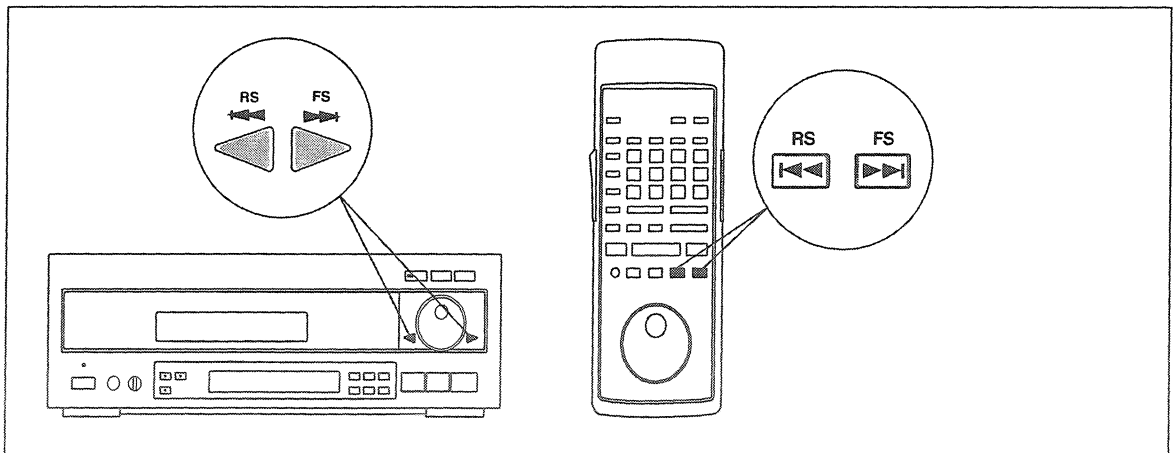


Programming a disc (continued)

- ③ If you are playing a double-sided laserdisc, first choose the side you want to program by pressing the SIDE A/SIDE B buttons on the remote control or the front panel. Then enter the number of the chapter you wish to program by pressing the number buttons. If you make a mistake, press the CANCEL button until the error is corrected, then continue programming.



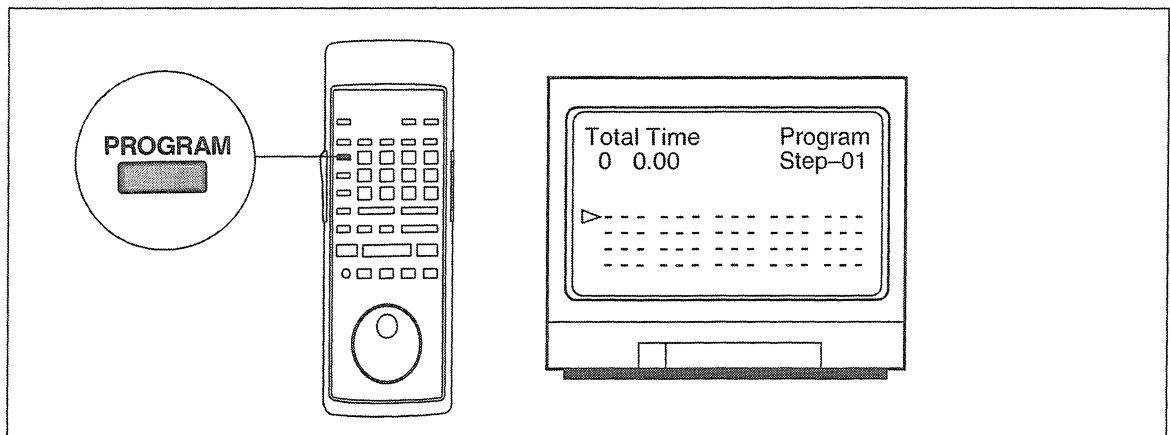
- ④ When you have finished, press the PLAY button; the player will play back the chapters in the order you have chosen. You can go to preceding or upcoming chapters in the program by pressing the FS/RS buttons on the remote control or on the front panel.



- ⑤ When all of the programmed chapters have been played, the Laserdisc/CD Player will stop.

programming tracks on CDs and CDVs

- ① Press the PROGRAM button on the remote control. The programming menu will appear on the screen.



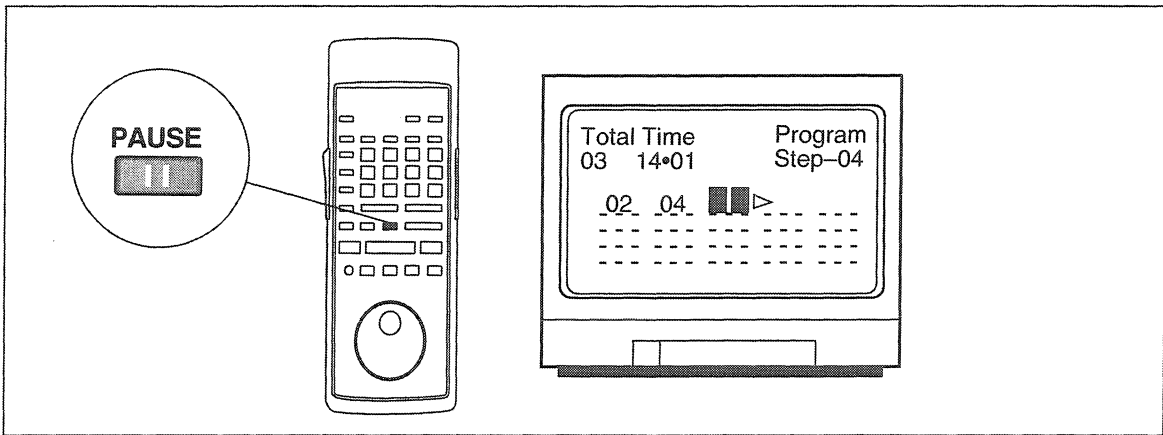
- ② Simply enter the numbers of the tracks you wish to program by pressing the number buttons on the remote control. The tracks you have entered will appear on the screen, and the total time of your program will be displayed. If you make a mistake, press the CANCEL button until the error is corrected, then continue programming.
- ③ When you have finished, press the PLAY button; the player will play back the tracks in the order you have chosen. You can go to preceding or upcoming tracks in the program by pressing the FS/RS buttons on the remote control or on the front panel.
- ④ When all of the programmed tracks have been played, the Laserdisc/CD Player will stop.

Programming a disc (continued)

inserting a pause

You may find it useful to insert a pause into a program, especially when you are recording tracks onto a cassette. A pause could give you time to switch the sides of a cassette tape or to add narration between songs. To insert a pause:

- ① During programming, instead of pressing a number button for a chapter/track, press the PAUSE button instead. You will see a PAUSE symbol on the screen.



- ② Continue to add chapter or track numbers until programming is complete.

▷ **Important:** You cannot insert a pause at the beginning of a program (the first position on the screen). You cannot program one pause after another.

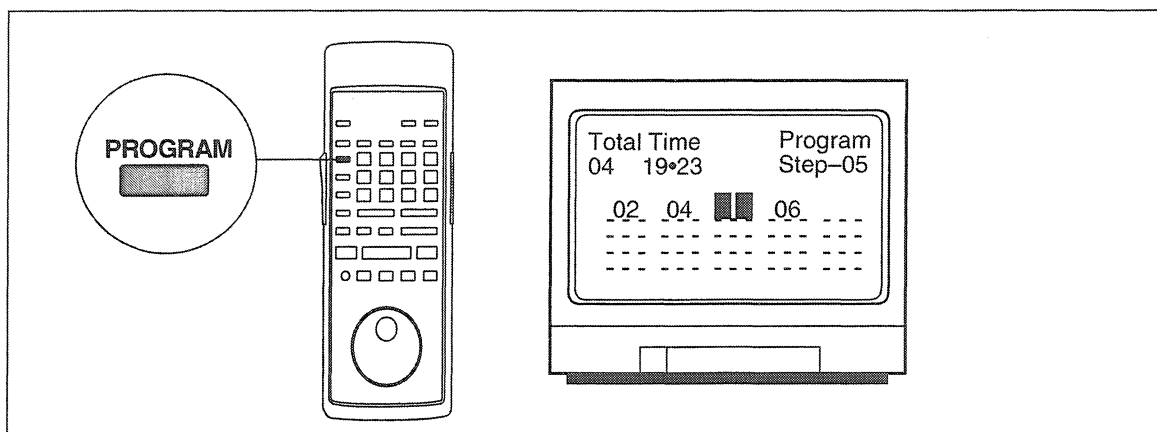
changing program contents

To change the contents you have programmed:

- ① Press the PROGRAM button on the remote control.
- ② Use the FS/RS buttons on the remote control to move the arrow to the left of the item you wish to change.
- ③ Press CANCEL to clear the item, or enter a new chapter number, track, or “pause” mark.
- ④ Press PROGRAM or PLAY to complete your changes.

displaying program contents

To display the contents of a program, press the PROGRAM button on the remote control. Press the PROGRAM button a second time to clear the screen.



erasing the contents of a program

You can erase the contents of a program in one of two ways. When the player is stopped:

- ① Press the CANCEL button, or
- ② Open the disc tray.

repeating a program

While a program is playing, press the REPEAT B button on the remote control. The programmed series of chapters/tracks will repeat until you cancel it.

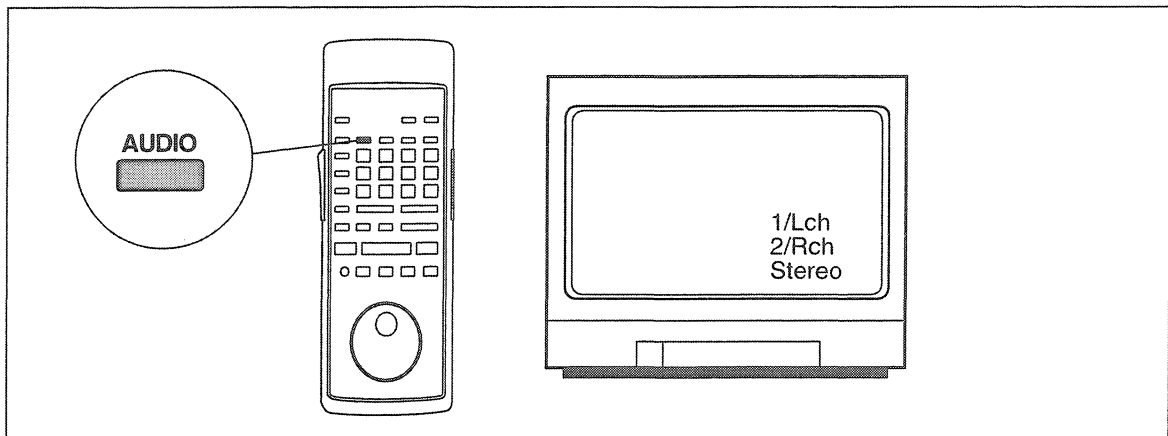
Adjusting the audio

Your player allows you to listen to just the left or right stereo channels, or just the analog or digital tracks. This is useful if you have a “Multi Audio” laserdisc that has separate audio recorded on the analog and digital tracks. For example, some laserdiscs have separate music soundtracks or languages recorded on the digital and analog tracks.

listening to one channel of a stereo disc

To separately listen to the right and left audio tracks of a stereo recording:

- ① While a disc is playing, press the AUDIO button on the remote control. The first time you press the button you will hear the left (1/ch) channel. The second time you press the button you will hear the right (2/ch) channel. Pressing the button a third time returns the player to stereo.



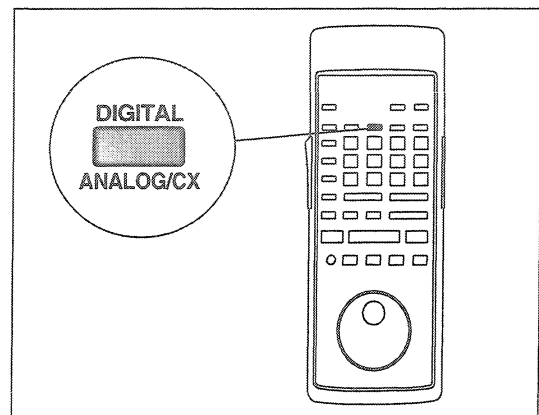
You can sometimes use this feature to turn off the vocals of a disc, to use it for karaoke.

listening to the analog audio of a digital laserdisc

A digital audio laserdisc will automatically play in digital sound. If you wish to listen to the analog audio:

- ① While the laserdisc is playing, press the DIGITAL/ANALOG/CX button on the remote control. The DIGITAL SOUND indicator on the fluorescent display will turn off, indicating that you are listening to the analog audio. Press the DIGITAL/ANALOG/CX button again to return to hearing the digital audio.

If you are listening to a Dolby AC-3 disc, and you select “mono” and “analog,” you will only hear the left channel.



using CX noise reduction*

Disc marked "CX" are recorded with the CX noise reduction system. However, there are some discs that have the system, but which do not automatically turn CX noise reduction on. If you play a disc that has excessive background noise, press the DIGITAL/ANALOG/CX button on the remote control to turn CX noise reduction on.

* "CX noise reduction" is a trademark of CBS Inc. This player meets the CX Expanding Specification.

listening to multi-audio discs

Multi-audio discs contain more than one soundtrack. Often these extra sound tracks contain information in different languages, karaoke (no lyric) versions, or commentary. To listen to these alternate soundtracks, use the DIGITAL/ANALOG/CX button to switch between the digital and analog tracks, and the AUDIO button to switch between the left and right channels. The sleeve of the disc should explain what information is on each track/channel.

adjusting the volume of the headphones

To adjust the volume of the headphones, use the LEVEL control on the front panel of the player. Turn the control clockwise to increase the volume; turn the control counterclockwise to decrease the volume.

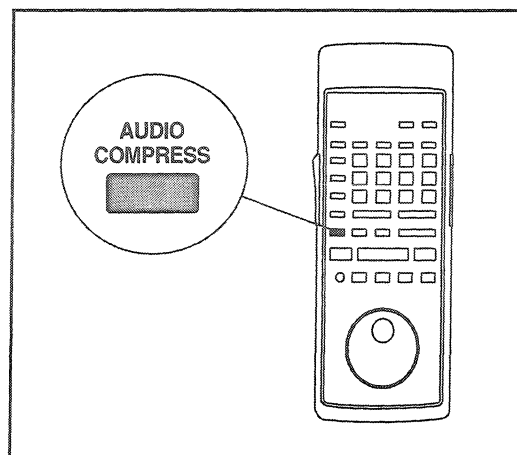
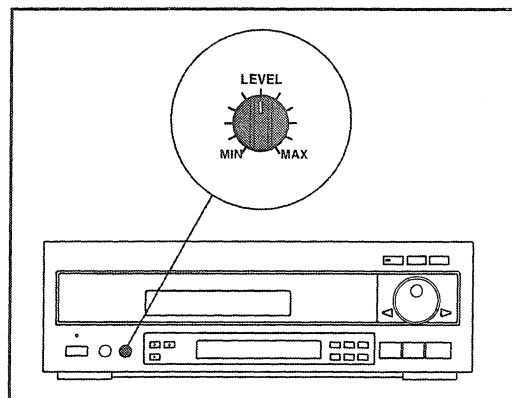
adjusting the digital level

When you are listening to the digital signal of a disc, you can adjust the sound with the remote control.

To do this:

- 1 Make sure the DIGITAL SOUND indicator on the fluorescent display is lit; then, press the AUDIO COMPRESS button on the remote control.
- 2 Use the shuttle ring on the remote control or on the front panel to adjust the sound.
- 3 To turn off the digital level display, press the AUDIO COMPRESS button again.

▷ **Important:** Be careful if you adjust the digital level and then switch to the analog signal. The analog signal may be much louder.



Adjusting the video digital noise reduction

When you play a laserdisc, there can be noise or color distortion on the screen. Your player's video digital noise reduction (V-DNR) feature can be used to reduce this color distortion. You can use V-DNR in its STANDARD setting, adjust V-DNR yourself with its VARIABLE setting, or you can turn it OFF.

To set V-DNR to its standard setting:

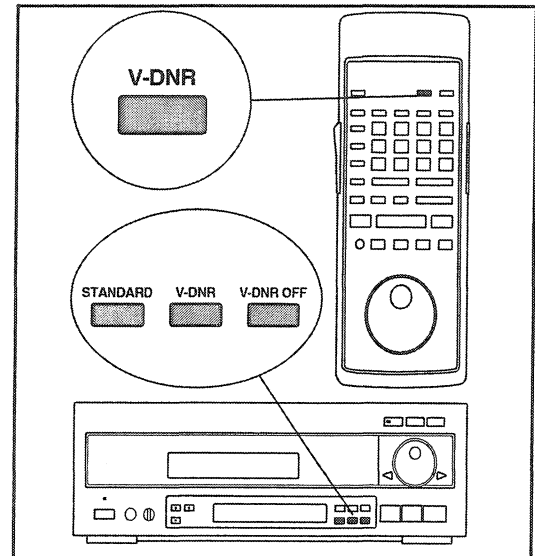
- 1 Press the V-DNR button on the remote control or the STANDARD button on the front panel until you see "V-DNR Standard" displayed on your screen.

To use V-DNR in its variable setting

- 1 While playing a laserdisc, press the V-DNR button on the remote control or on the front panel until you see "V-DNR Variable" on the screen.
- 2 Turn the shuttle ring on the remote or front panel to adjust the level of brightness (indicated on-screen by the "Y").
- 3 Turn the jog dial on the remote or front panel to adjust the level of color (indicated on-screen by the "C").
- 4 When you've finished making your adjustments, the display will turn off after five seconds.

To turn off V-DNR

- 1 Press the V-DNR button on the remote control or the V-DNR OFF button on the front panel until you see "V-DNR off" on the screen.



◆ Advanced Features for CDs and CDVs only

This section describes advanced features that are most useful for CDs and CDVs only. (In fact, some of them can only be used with CDs and CDVs.)

This section describes:

- **Compu-editing,**
- **Auto editing,**
- **Listening to tracks at random,**
- **Using direct CD,**
- **Searching by track time, and**
- **Searching by elapsed time.**

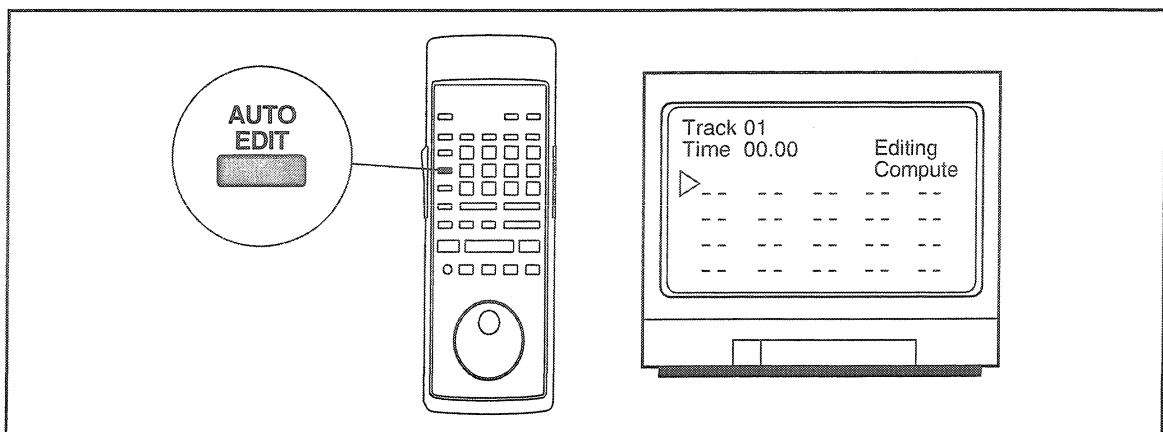
Compu-editing

The compu-editing feature makes it easy to create a program that will fit into a certain period of time. This feature is particularly useful if you are recording CD tracks onto a cassette tape.

▷ **Important:** Compu-editing might not work with discs that contain 33 tracks or more.

To use compu-editing:

- ① Press the AUTO EDIT button on the remote control. The compu-edit menu will appear on the screen.



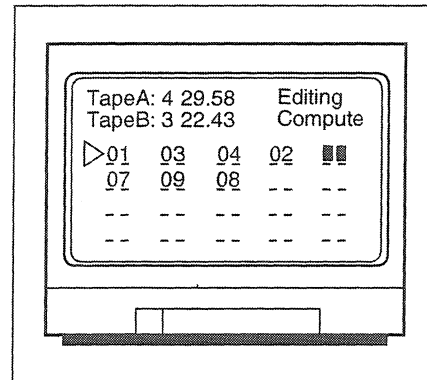
Compu-editing (continued)

- ② If you wish to begin the program with a particular track, use the FS/RS buttons until the track number appears. You can only choose the first track.

▷ **Important:** The player will not include in the program any tracks that come before the one you have chosen to start the program.

- ③ Use the number buttons to enter the total time, in minutes, that you wish the program to play. For example, if you want to record onto a 60 minute tape, you would enter "60."

The player will divide the time you entered into two equal parts, and will then choose tracks that fit most closely into those two time. In the example shown, the player chose tracks to fit into two 30-minute sections. The player displays the number of tracks and the total time of each section.



The player automatically places a pause between the two sections.

▷ **Important:** If you enter a time that is less than the time of a single track, programming will not work.

- ④ Press the PLAY button to begin programmed play. The player will stop after all tracks have been played.
- ⑤ Repeat steps 1-3 to enter a second program. When the first program is complete, your player will pause before beginning the second program. Press the PLAY button to listen to the second program.

Listening to tracks at random

You can play your CD and CDV tracks in a random order. To do this:

- 1 Press the RANDOM PLAY button on the front panel. The RANDOM indicator on the fluorescent display will light up, and the tracks will play in a random order.

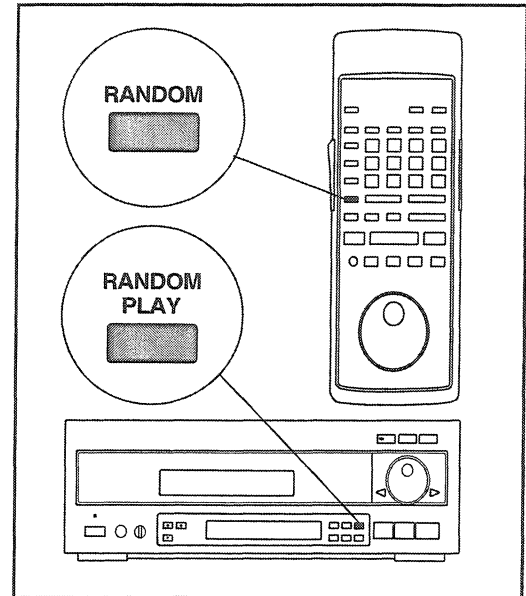
▷ **Important:** You can also press RANDOM PLAY when playing a program. The tracks in the program will be played back in a random order.

stopping random play

- 1 Press the CANCEL button on the remote control, or
- 2 Search for a track using the number buttons.

In both cases, random play is canceled.

▷ **Important:** You can also use random play for laserdiscs encoded with chapters.



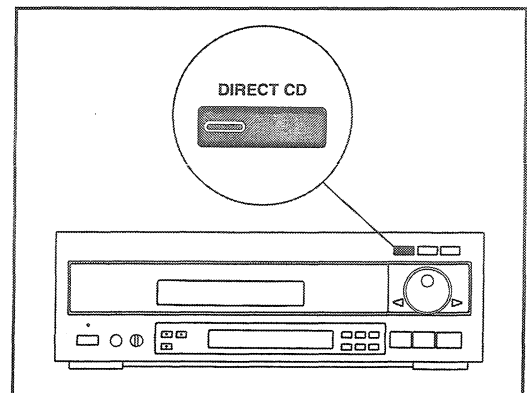
Using direct CD

The direct CD feature turns off all video circuitry so that audio can be reproduced with no interference. This feature also shortens the amount of time it takes the play to begin playing a CD. You'll also notice that the disc tray only opens enough for you to place CDs on the tray.

▷ **Important:** When the direct CD feature is on, the player does not show any on-screen displays.

To use direct CD:

- 1 Press the DIRECT CD button on the front panel.
- 2 Open the disc tray by pressing the OPEN/CLOSE button on the front panel or the STOP/OPEN button on the remote control. Notice that the disc tray opens so as to only allow you to load a CD.
- 3 Load a CD, close the tray, and press PLAY

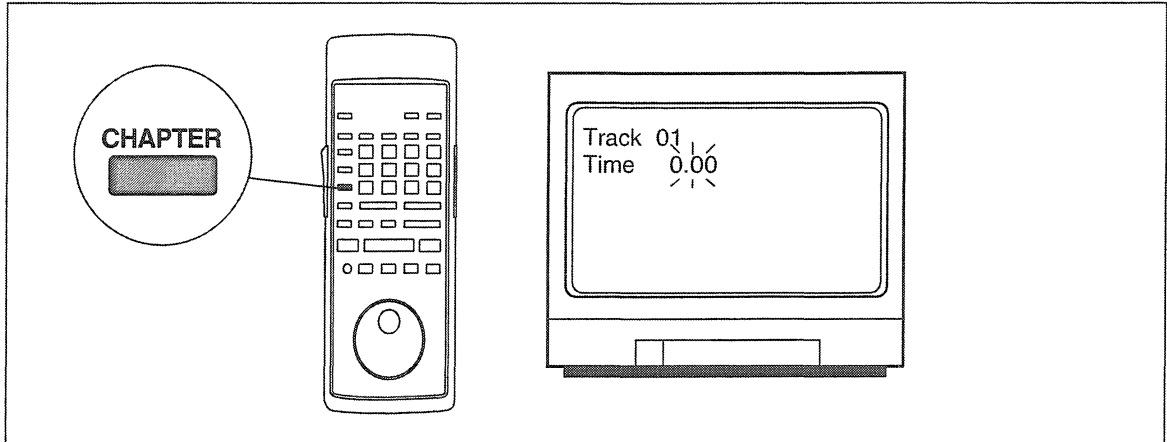


To turn off the direct CD feature, press the DIRECT CD button again.

Searching by track time

You can search to a particular time on any track (for example, 1 minute into track 3). To do this:

- ① Press the CHAPTER button on the remote control. You will see the display asking you to enter a track and time.



- ② Select a track by pressing the RS/FS buttons on the remote control or on the front panel.
- ③ Select the amount of time into the track you wish to search by pressing the number buttons.

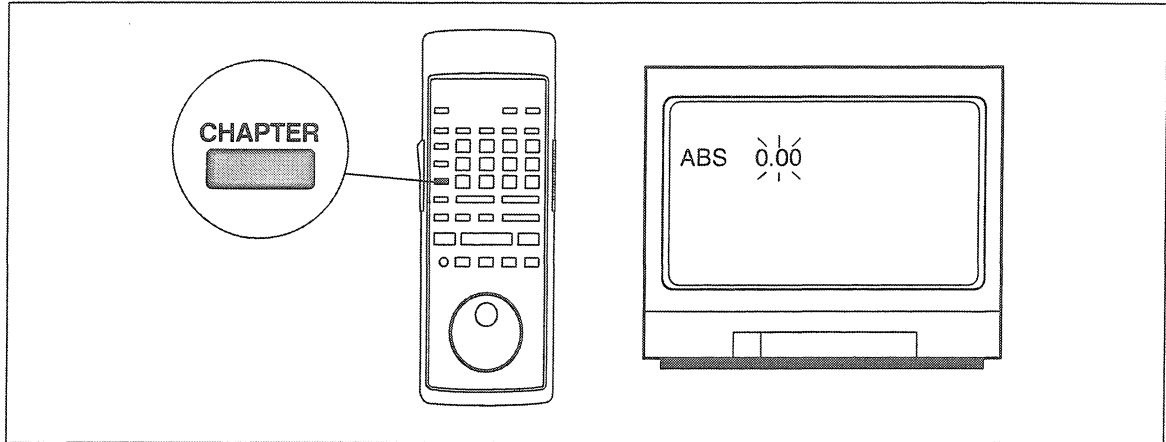
▷ **Important:** If you make a mistake, press CANCEL on the remote control.

- ④ Press PLAY or ENTER to begin playback.

Searching by elapsed time

You can also search the disc by entering the elapsed time you wish to find (for example, 10 minutes into the disc). To do this:

- 1 Press the CHAPTER button twice on the remote control. You will see the following on-screen display:



- 2 Select the time into the disc you wish to search by pressing the number buttons.

▷ **Important:** If you make a mistake, press CANCEL on the remote control.

- 3 Press PLAY or ENTER to begin playback from that point.

▷ **Important:** You can only search to an elapsed time on CDs.

◆ Advanced Features for Laserdiscs Only

This section describes advanced features that work for laserdiscs only, such as multi-speed playback. Some of these features work for only one type of laserdisc (CAV or CLV), while some work for both.

This section explains:

- **Varying the playing speed (CAV only),**
- **Searching by time (CLV only),**
- **Searching by frame number (CAV only),**
- **Using the theater feature, and**
- **Using digital memory.**

Varying the playing speed (CAV only)

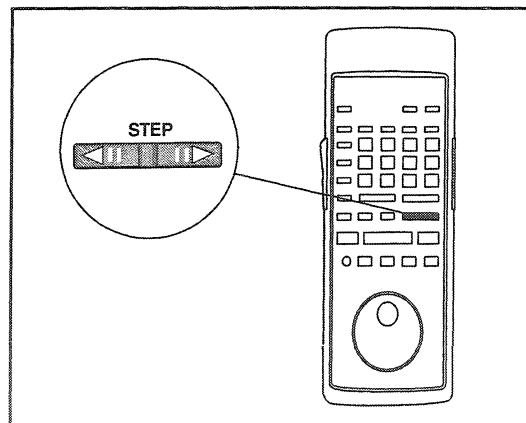
pausing a disc and moving it one frame at a time

To pause a laserdisc and move it one frame at a time:

- ① Press the **STEP** button on the remote control. The sound will turn off and the picture will be frozen.
- ② Press the right side of the **STEP** button to move forward one frame. Press the left side of the **STEP** button to move one frame in reverse.
- ③ To return to normal play, press the **PLAY** button.

You can also pause a disc by pressing the **PAUSE/STILL** button on the front panel.

No sound plays when you display a still image.



Varying the playing speed (continued)

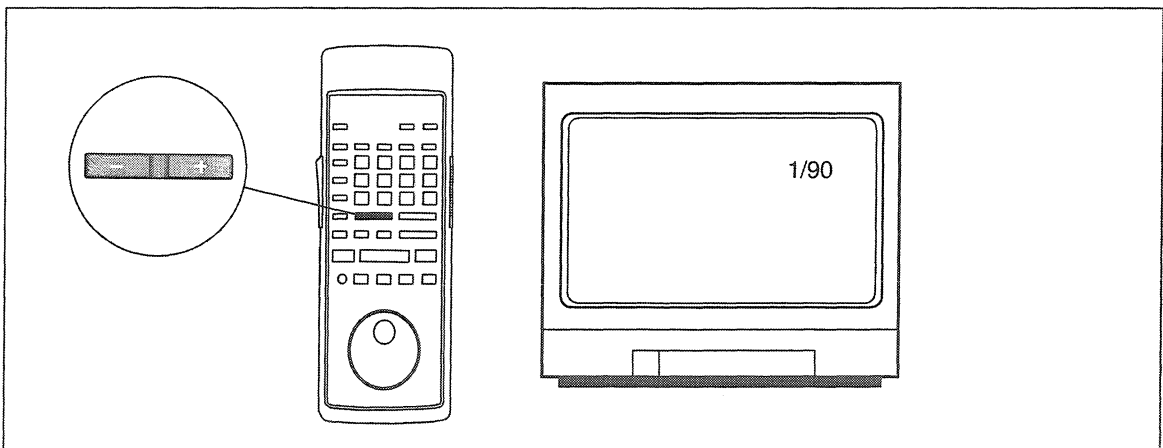
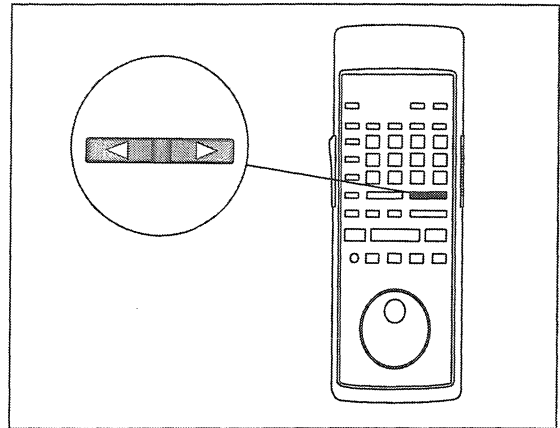
varying the playing speed and direction of a laserdisc

You can play your laserdisc at various speeds of slow motion and fast motion, forward and backward. To do this:

- ① While a disc is playing, press the SEARCH button on the remote control. The sound will turn off. Press the right arrow button to play the disc forward. Press the left arrow button to play the disc in reverse.

You can change the direction at any time by pressing these buttons.

- ② Press the "+" and "-" buttons on the remote control to increase or decrease the playing speed. You can play the disc at speeds of 1/90, 1/30, 1/16, 1/8, 1/4, 1/2, X1, X2, and X3. The speed you have selected will appear momentarily on the screen.

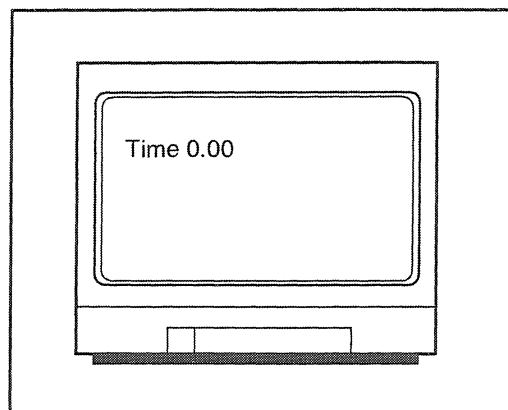


- ③ To return to normal play, press the PLAY button.

Searching by time (CLV only)

There is an additional searching method available when you play an extended play (CLV) laserdisc.

- ① While a tape is playing, press the CHAPTER button on the remote control. The word "Time" will appear.
- ② Use the number buttons to enter an amount of time. For example, to find a scene located 12 minutes, 34 seconds into the disc, press 1, 2, 3, 4.
- ③ Press the ENTER button on the remote control. The player will start playing at the time you chose.

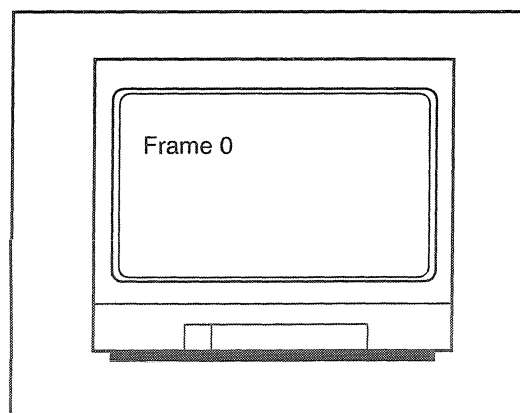


▷ **Important:** If a disc does not contain seconds, specify the time in minutes only. If you enter a time number longer than the disc itself, the end of the disc is played with a still frame image. The +10 button does not work for entering time numbers.

Searching by frame (CAV only)

There is an additional searching method available when you play a standard play (CAV) laserdisc.

- ① While a tape is playing, press the MENU button on the remote control. The word "Frame" will appear.
- ② Use the number buttons to enter a frame number.
- ③ Press the ENTER button on the remote control. The player will start playing at the frame you chose.



▷ **Important:** If you enter a frame number longer than the disc itself, the end of the disc is played with a still frame image. The +10 button does not work for entering frame numbers.

Using the theater feature

The theater feature allows your player to more closely simulate a theater experience by decreasing the amount of time it takes to flip a laserdisc from side A to side B.

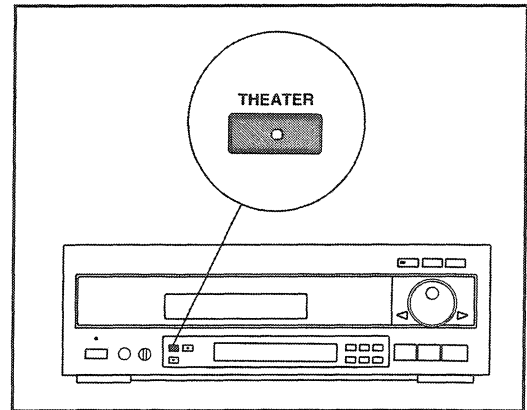
Activating the theater feature also has the following effects:

- The screen will be black, instead of blue, when the disc is stopped or changing sides.
- The fluorescent display window will turn off.
- No screen displays will appear.
- Editing, programming, or random playback cannot be performed on the "B" side.

To use the theater feature:

- ① Press the THEATER button on the front panel.
- ② To turn off the theater feature, press the THEATER button again.

▷ **Important:** The theater function remains in effect when a disc is removed and/or the power is turned off.



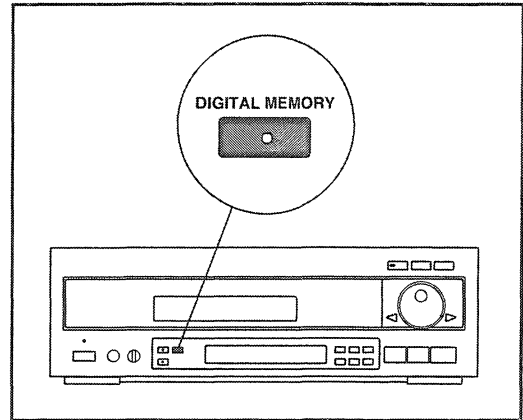
Using digital memory

Digital memory allows you to memorize a frame of video and display it later. To do this:

- ① While a disc is playing, press the DIGITAL MEMORY when you see an image you would like to save. The words "One-shot" will appear on the screen.

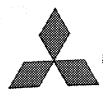
When you stop the disc, the image you memorized will appear on the screen. It will stay on the screen continuously, even if you take out the disc and begin to play a new one.

- ② To remove the image, press DIGITAL MEMORY again.



▷ **Important:** One-shot memory may memorize a slightly different image than the one you expected, especially if your disc is not encoded with seconds. On-screen displays will not appear while a memorized image is on the screen. Your image is lost if a two-sided disc changes sides.

If you memorize an image on the video part of a CDV and perform a direct search to the audio part, then the memorized image will be displayed while the audio part is played.



Troubleshooting

Even though you're now familiar with the basic and advanced features of the Laserdisc/CD Player, you may run into some trouble from time to time. This chapter offers solutions to some of the most common problems you may encounter. We suggest that you consult this chart before contacting a Mitsubishi service representative.

In this section, you will find trouble shooting information:

- ◆ **For All Discs**
- ◆ **For Laserdiscs and CDVs**
- ◆ **For CDs**

For All Discs

Problems	Possible Solutions	For More Information
The disc table does not eject when you push the STOP/OPEN button.	Make sure the power cord is properly connected and the POWER button is turned on.	
The disc table ejects when you try to load a disc.	Clean the disc	See page 12.
	The disc may be incorrectly placed on the tray. Reload the disc properly	See page 34.
	Moisture may be condensed on parts of the player. Allow player to dry.	
	The disc may be warped. Try to flatten the disc.	See page 13.

For Laserdiscs and CDVs

Problems	Possible Solutions	For More Information
The disc turns but there is no picture.	Turn the TV set on. Check the connections from the player to the TV.	See page 29.
The picture moves vertically.	Adjust the vertical hold on the television.	
The disc does not play properly or stops in the middle of a program.	Clean the disc. The disc may be warped. Try to flatten the disc.	See page 12. See page 13.
The sound is distorted.	Make sure the CX system is ON if the disc has no CX mark.	See page 61.
There is no sound.	Make sure you are not using any special video effects (such as Search). Press PLAY.	
The picture shakes when you freeze an image.	There may be cases where the image shakes when it is frozen. This is not a malfunction.	
You cannot use some of the searching or programming features.	Make sure the disc has chapter numbers encoded on it. If it does not, you cannot use some of the player's features.	
Some discs take longer to play or do not start.	Press the STOP button and stop disc play. Press the PLAY button to resume playing.	

For Laserdiscs and CDVs (continued)

Problems	Possible Solutions	For More Information
When you search by time number you get a different picture than you searched for.	Make sure you are entering the numbers correctly. Sometime numbers are in minutes while others are in minutes and seconds.	
During repeat play, the player takes too long to find point A.	This is not a malfunction. Sometimes it takes a little longer for the player to read the code.	See page 71.

For CDs

Problems	Possible Solutions	For More Information
The player stops immediately after you press PLAY.	The disc is loaded upside down. Reload the disc properly.	See page 34.
There is no sound.	The stereo amplifier is not connected properly. Check the connections.	See page 31.
	Clean the terminals or connections.	
	The connectors may be disconnected. Connect them securely.	See page 26.
	The player may be in PAUSE. Press PLAY to continue.	See page 37.
The sound is distorted.	Make sure the player is properly connected to the stereo amplifier.	See page 31.
	Clean the terminals or connectors.	
	The connectors may be disconnected. Connect them securely.	See page 26.



APPENDIX

Specifications

1. General

Systems	LaserVision Disc system and Compact Disc digital audio system
Laser	Semiconductor laser wavelength 780 nm
Power Requirements	AC 120 V 60Hz
Power Consumption	46W
Weight	8.4 kg (18 lbs 8oz)
Dimensions	420 (W) x 436 (D) x 140 (H) mm 16-9/16 (W) x 17-3/16 (D) x 5-1/2 (H) in
Operating Temperature	+5°C ~ +35°C (41° F ~ 95° F)
Operating humidity	5% ~ 85%
(There should be no condensation moisture)	

2. Disc

LaserVision Discs	
Maximum playing times*	
12-inch standard play disc	1 hour/both sides
12-inch extended play disc	2 hour/both sides
8-inch standard play disc	28 min./both sides 14 min./one sides
8-inch extended play disc	40 min./both sides 20 min/one side
Spindle motor speed	
Standard play disc	1,800 rpm
Extended play disc	1,800 rpm (inner circumference) to 600 rpm (outer circumference) (For a 12-inch disc)

*Actual playback time differs for each disc.

Compact Disc

DISC	Diameter: 5-inch, 3-inch, Thickness: 1.2 mm
Rotation direction (pickup side)	Counterclockwise
Linear speed	audio portion: 1.2 ~ 1.4 m/sec
*Maximum playing time	74 min. 5-inch discs 20 min. 3-inch discs (For stereo playback)

Compact Discs with Video

DISC	Diameter: 5-inch, Thickness: 1.2 mm
Rotation direction (pickup side)	Counterclockwise
Linear speed	Audio portion: 1.2 ~ 1.4 m/sec Video portion: 11 ~ 12 m/sec
Maximum playing time*	Video portion: 5 min. (CLV) Audio portion: 20 min. (Digital)

*Actual playback time differs for each disc.

3. Video characteristics

Format	NTSC specifications
Video output	
Level	1 Vp-p nominal, sync. negative, terminated
Impedance	75 Ω unbalanced
Jacks	Both RCA jacks
Number of channels	2

4. S-Video output

Y (luminance) - Output level	1 Vp-p (75 Ω)
C (Color) - Output level	286 m Vp-p (75 Ω)
Jack	S-Video jack
Number of channels	2

Specifications continued)

5. Audio characteristics

Output level	
During analog audio output	200 mVrms (1kHz, 40%)
During digital audio output	200 mVrms (kHz, -20db)
Jacks	Both RCA jacks
Number of channels	2

Digital Audio Characteristics

Frequency response	4 Hz - 20 kHz (EIAJ)
SN ratio	115 dB (EIAJ)
Dynamic range	96 dB (EIAJ)
Total harmonic distortion	0.0035% (EIAJ)
Wow and flutter	Limit of measurement (EIAJ)

6. Other Terminals

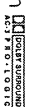
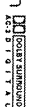

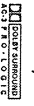


Control input/output	Both miniature jacks
Optical digital output	Optical digital jack
Coaxial digital output	RCA jack
AC-3 RF out	RCA jack

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CORRECTION

INCORRECT	CORRECT
<p>AC-3 RF OUT terminal</p> <p>This terminal is intended for use with Dolby AC-3 components (*1) planned for future release. With this terminal, you will be able to connect an AC-3 RF input of amplifiers and surround processors, and playback laser discs formatted with Dolby AC-3 (*2).</p> <p>(*1) Indicated with  (For hardware)</p> <p>(*2) Indicated with  (For software)</p> <ul style="list-style-type: none"> ● You cannot playback currently available laser discs, laser disc players, AV amplifiers, etc., with this terminal. ● Do not connect this terminals to the audio input terminal of a normal stereo or AV amplifiers. <div style="text-align: center; margin-top: 10px;">  <p>AC-3 RF OUT Terminal</p> </div>	<p>AC-3 RF OUT terminal</p> <p>This terminal is intended for use with Dolby AC-3 components (*1) planned for future release. With this terminal, you will be able to connect an AC-3 RF input of amplifiers and surround processors, and playback laser discs formatted with Dolby AC-3 (*2).</p> <p>(*1) Indicated with  (For hardware)</p> <p>(*2) Indicated with  (For software)</p> <ul style="list-style-type: none"> ● You cannot playback currently available laser discs, laser disc players, AV amplifiers, etc., with this terminal. ● Do not connect this terminals to the audio input terminal of a normal stereo or AV amplifiers. <div style="text-align: center; margin-top: 10px;">  <p>AC-3 RF OUT Terminal</p> </div> <ul style="list-style-type: none"> ● "Dolby", "AC-3" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.