SONY

3-759-918-21(1)

CD CDV LD Player

Operating Instructions EN

MDP-650

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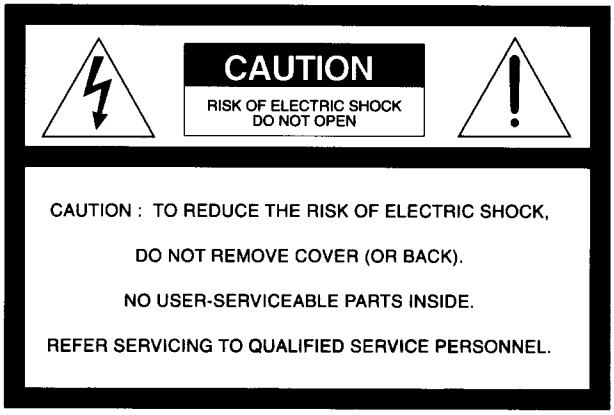
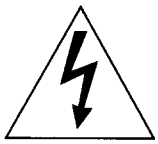
WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.





This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

To prevent electric shock, do not use this polarized AC plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

CAUTION

The use of optical instruments with this product will increase eye hazard.

As the laser beam used in this player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

Precautions

Safety

- Operate the unit only on 120V AC, 60 Hz.
- If anything falls into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- One blade of the plug is wider than the other for safety reasons and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your Sony dealer.
- Unplug the unit from the wall outlet if you do not intend to use it for an extended period of time. To disconnect the cord, pull it out by the plug, never by the cord.

Installing

- Allow adequate air circulation to prevent internal heat buildup.
- Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the space under the unit.
- Do not install the unit near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Do not install the unit in an inclined position. It is designed to be operated in a horizontal position only.
- Do not place heavy objects on the unit.
- If the unit is brought directly from a cold to a warm location, moisture may condense inside it. When you first install the unit, or when you move it from a cold to a warm location, wait for about one hour before operating the unit.

Information

For customers in the USA

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Owner's record

The model number is located at the rear and front of the unit and the serial number on the top. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. MDP-650 Serial No. _____

If you have any questions or problems concerning your unit, please contact your nearest Sony dealer.

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EN

Welcome!

Thank you for purchasing the Sony Laser Disc (LD) player.

The MDP-650, an easy-to-operate laser disc player, allows you to:

- Play many types of optical discs, LDs, CDs and CDVs
- Play a double sided LD without turning it over
- Freeze picture or play at variable speeds even with CLV LDs—Digital Memory
- Scan scenes at variable speeds—Jog/Shuttle
- Shorten the viewing time for an LD—LD Digest
- Recall and display a picture you like even while playing a CD—Picture Call
- Get a theater-like picture—Theater mode
- Continue an LD from the exact point at which you stopped—Auto Resume
- Play karaoke (sing along with a disc) using a microphone and digital echo

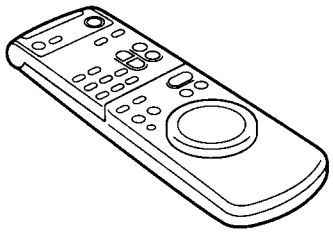
Compatible color systems

This LD player plays video discs recorded in the NTSC color system.

Step 1 Unpacking

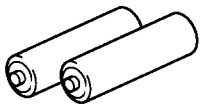
Check that you have the following items:

- **Remote commander RMT-M37A**

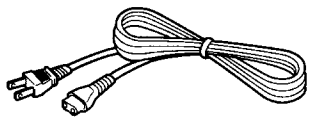


- **Audio/Video cable**

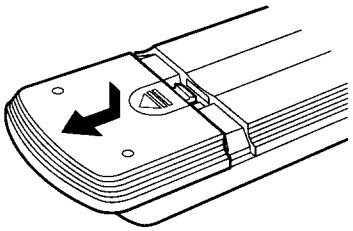
- **Two size AA (R6) batteries**



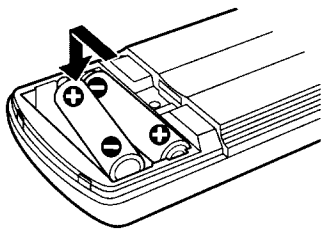
- **AC power cord**



Step 2 Inserting batteries into the remote commander



1 Turn the commander over, and remove the cover.



2 Check the polarities and position two size AA (R6) batteries correctly.

3 Close the cover.

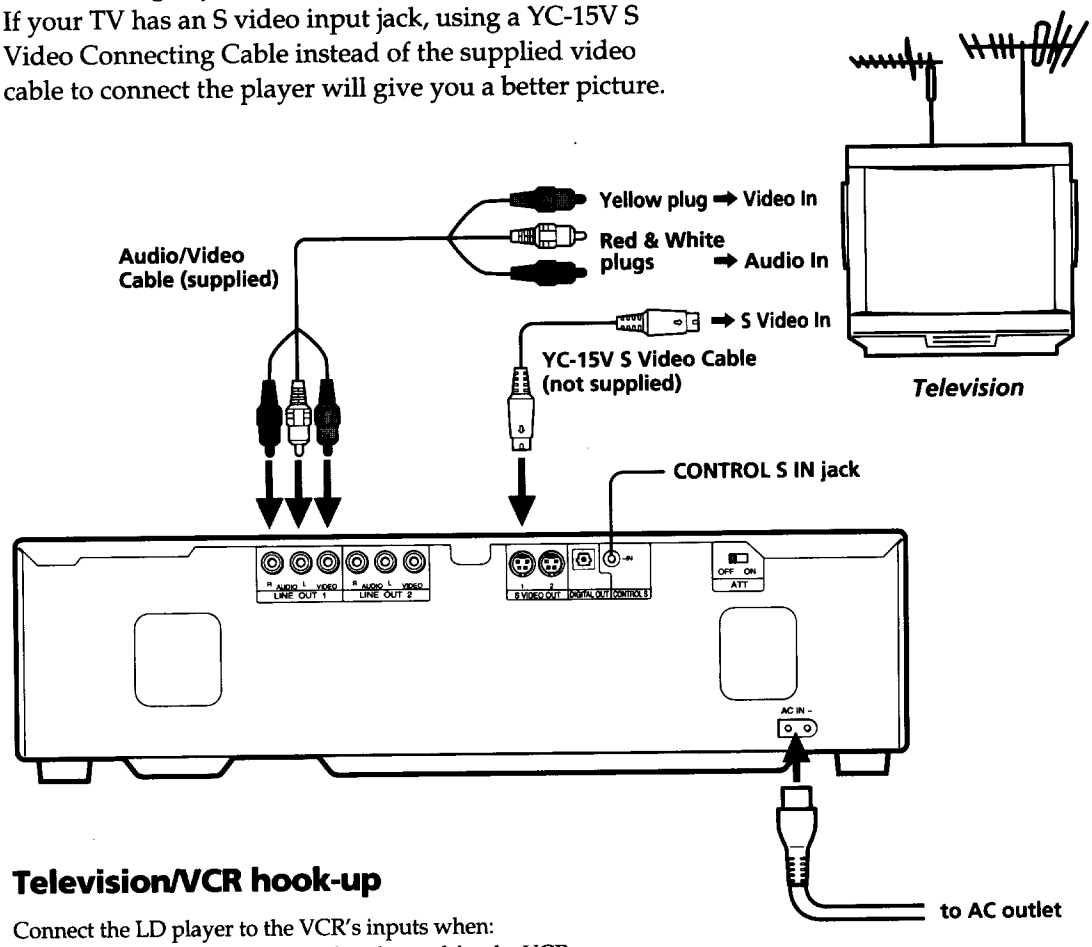
Notes

- With normal use, the batteries should last for approximately six months.
- Use two size AA (R6) batteries.
- If you use the batteries incorrectly, they may leak or explode. See notes below for correct usage.
  - Insert the batteries with correct polarity as shown above.
  - Do not use a new battery together with an old one.
  - Do not use different types of batteries together.
  - Do not recharge the batteries.
  - If you are not going to use the remote commander for an extended period of time, remove the batteries to avoid possible damage from battery leakage.
  - If battery leakage should occur, wipe off the leakage from the battery compartment, then insert new batteries.
- Do not let direct sunlight or powerful artificial light such as spot light fall directly on the remote sensor on the front panel of the player. Such light interferes with the signals from the remote commander, causing the remote commander to fail to operate correctly.

Step 3 Connecting the player

Television hook-up

To play LDs or CDVs, hook up a television to the LD Player. Take out the supplied audio/video cable (yellow, red and white plugs). Use this to connect the player to the television. Once you have hooked-up the television, set the input selector on the TV to "Video." Before connecting or disconnecting any of the cables, turn off all equipment. If your TV has an S video input jack, using a YC-15V S Video Connecting Cable instead of the supplied video cable to connect the player will give you a better picture.

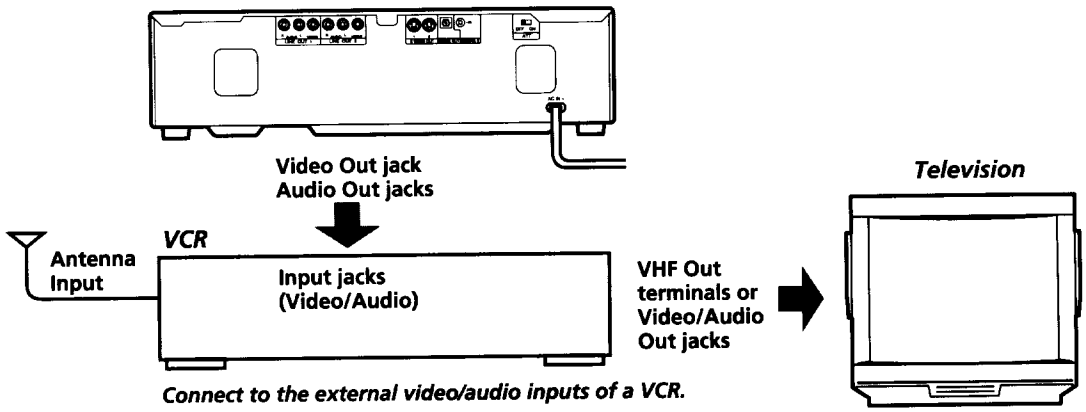


Notes

- Make sure all equipment is turned off before connecting or disconnecting any cables.
- Connection methods may differ; when in doubt about a connection, consult the TV or VCR manufacturer's manual.
- If the sound or picture is disturbed by noise, try moving the equipment farther apart.
- Firmly insert plugs into the jacks. A loose connection may cause noise.
- To prevent interference with TV broadcast reception, turn off all equipment connected but not currently in use.
- If your TV only has a monaural phono jack for audio input, use a VMC-910/915 Connecting Cable (not supplied).
- If you connect the CONTROL S IN jack to the CONTROL S output jack on your TV, etc. using an RK-G69 Connecting Cable (not supplied), you can control this player with the remote commander pointed at the TV, etc.
- If you plug one end of the cable into the CONTROL S IN jack on the player and leave the other end unplugged, the remote commander cannot control the player.

Television/VCR hook-up

Connect the LD player to the VCR's inputs when:
- the video inputs of the TV are already used for the VCR or a similar machine.
- the TV has only an antenna input.



Connect to the external video/audio inputs of a VCR.

Audio equipment hook-up

To achieve full stereo sound from your LD Player, hook up a stereo system following the diagram below. Use an RK-C310 (or RK-C315) Audio Connecting Cable (not supplied) to connect the LD Player to your amplifier or receiver. Before connecting or disconnecting any cables, turn off all equipment.

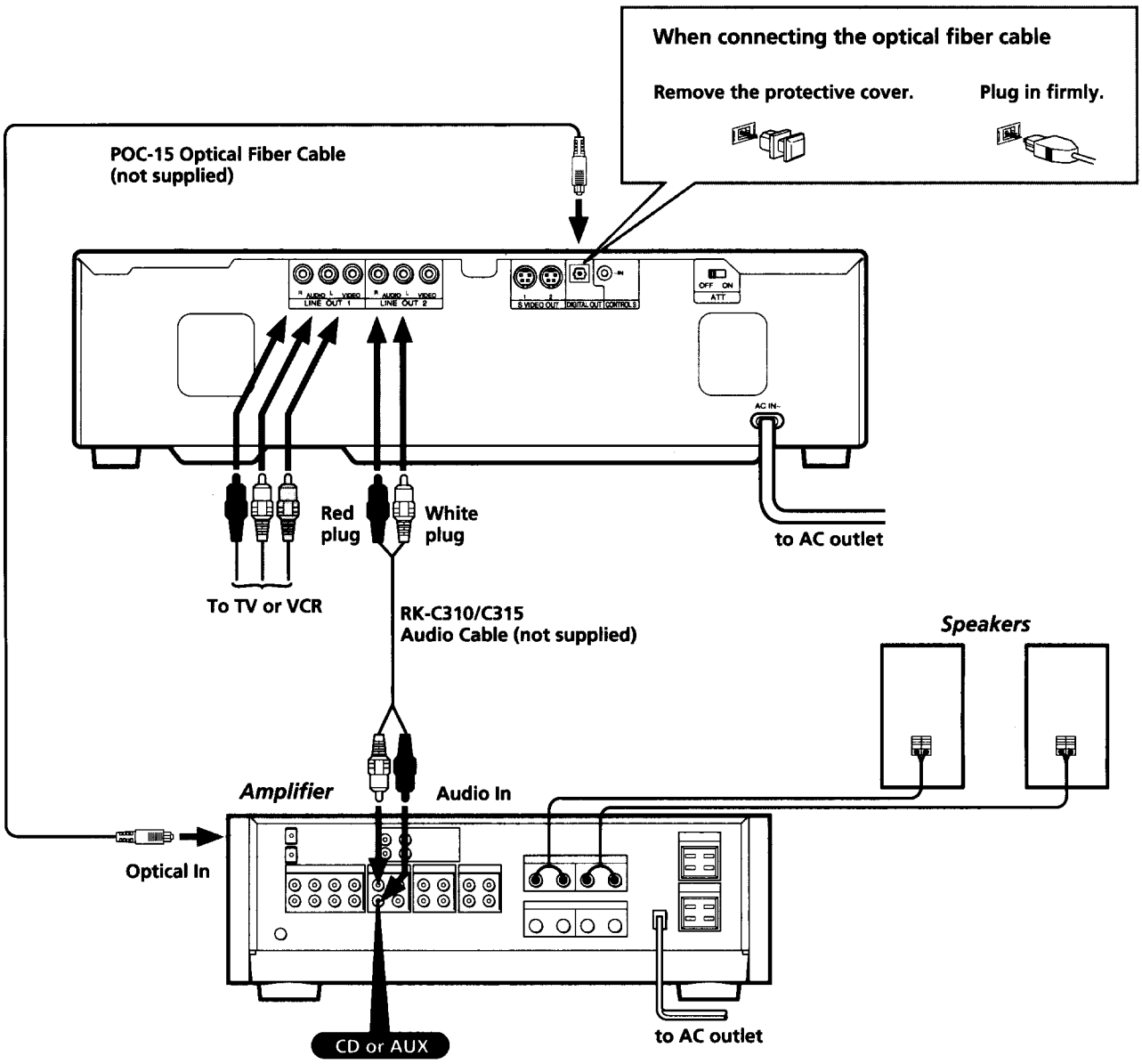
Notes

- Make sure all equipment is turned off before making any of the above connections.
- Firmly insert plugs into the jacks. A loose connection may cause noise.
- When listening to a radio broadcast, turn off the LD Player to get better reception.

To achieve digital sound

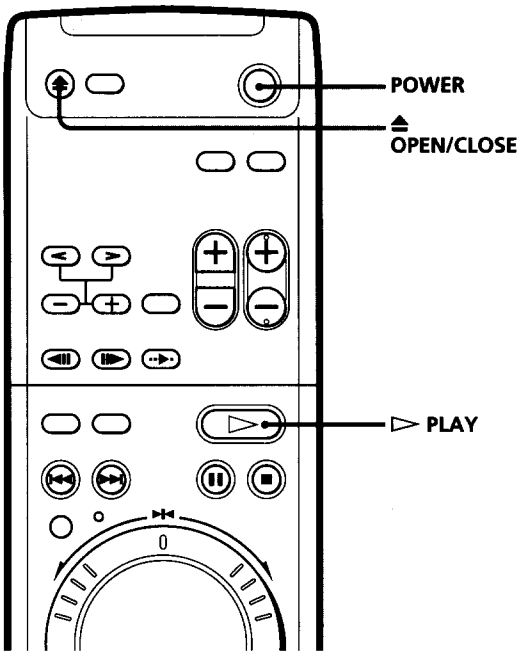
Optical fiber digital audio output enables a high quality sound reproduction. If your amplifier has an optical input connector, or if you have a D/A converter unit with optical input, connect the player to the amplifier or D/A converter using an Optical Fiber Audio Cable POC-15 (not supplied).

- You can get digital audio output from CDs, CDVs, and most LDs. When you play an LD which does not have digital sound tracks, you cannot get any sound from the DIGITAL OUT (OPTICAL) connector.
- Sound from a microphone is not output from the DIGITAL OUT (OPTICAL) connector. When you play karaoke with a microphone, connect the player using an Audio Cable (red & white plugs).



Basic Operations

Playing a disc



Tip

- You can also turn on the player by pressing ⏏ OPEN/CLOSE on the player.

Notes

- If you place more than one disc on the disc tray, or if the disc is not seated properly, the disc may not start playing, and may damage the disc or player.
- Do not lift up or transport the player while a disc is loaded as doing so may damage your disc or player.
- Do not use a CD stabilizer when playing a CD as doing so may damage your disc or player.
- When you press ❚❚ PAUSE, the picture freezes, even while playing a CLV LD or CDV.
- When you press ■ STOP to stop playing an LD, the picture freezes and remains on the TV screen. If you want to clear it, press the FL DISPLAY button on the player. The screen turns to a blank, blue screen. Each time you press the FL DISPLAY button, the stored picture and the blue screen alternate.

This section shows you how to play an LD, CD or CDV.

Before you start...

- Connect the player to your TV and set the input selector on the TV to "Video" (see "Connecting the player" on page **6**).
- If you use a stereo system, turn on the amplifier and set its input selector to an external input such as "CD" or "AUX" to listen to the sound of the player.

Loading and playing a disc

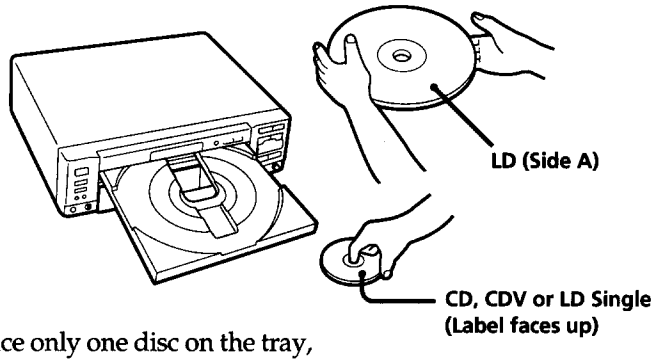
1 **Press POWER to turn on the player.**

You can also directly turn on the player by pressing ▷ PLAY on the player or remote commander.

2 **Press ⏏ OPEN/CLOSE to open the disc tray.**

The front cover of the player automatically slides down and the disc tray comes out.

3 **Place a disc on the disc tray.**



Place only one disc on the tray, carefully fitting it in the circle on the tray.

4 **Press ▷ PLAY (or DISC SIDE A).**

The disc tray closes and the upper side of the disc starts playing. You can also start playing by pressing the disc tray to close it.
When playback of the upper side of an LD (side A) ends, the other side (side B) starts playing automatically.

To	Press
Stop play	■ STOP
Pause play	❚❚ PAUSE
Resume play after pause	❚❚ PAUSE or ▷ PLAY
Scan forward or backward	◀◀/▶▶ SCAN on the player or rotate the SHUTTLE ring
Skip chapters or tracks	⏮/⏭ ACS/AMS
Remove the disc	⏏ OPEN/CLOSE

Tips

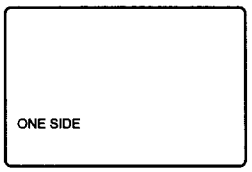
- When playing a double-sided LD, the player determines that the upper side of the disc is side "A" and the other side is "B," regardless of the label "A" or "B" printed on the disc.
- When playback of LD side B ends, the player stops.
- When playing a CD or CDV, the DISC SIDE B button does not function.

To start playing from the beginning of either LD side

Press DISC SIDE A to play the upper side of the LD from the beginning.
Press DISC SIDE B to play the other side of the LD from the beginning.

To play only one side of an LD

Press 1/SIDE/ALL twice. "ONE SIDE" appears briefly.
Press ▷ (Play) or DISC SIDE A/B.
The selected side of the LD is played once.



To pause playing just before starting

Press ❚❚ PAUSE instead of pressing ▷ PLAY, after you place the disc on the tray.
The disc tray closes and the player waits at the start of the disc until you press ▷ PLAY or ❚❚ PAUSE. If you want to start from side B of an LD, press ❚❚ PAUSE, then DISC SIDE B.

To stop playing and turn off the player

Press POWER.
You can resume playback from the point at which you stopped by simply pressing ▷ PLAY (see "Resuming LD playback" on page **10**).

To stop playing and remove the disc

Press ⏏ OPEN/CLOSE.
Remove the disc and press ⏏ again to close the empty tray.

To listen with headphones

Plug headphones into the PHONES jack on the front panel and adjust the volume with the LEVEL control beside the jack.

Tips

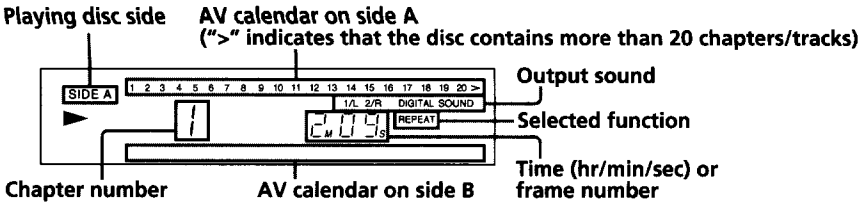
- The AV calendar shows the chapters/tracks remaining on the disc. As chapters/tracks are played, the corresponding numbers on the calendar disappear.
- When there is no disc in the player, "NO dISC" appears on the front panel display.

Note

- The AV calendar is available when you play LDs containing TOC (Table of Contents) data, CDs or CDVs. When you use the AV calendar with those LDs, press the QUICK START button to turn off the button indicator before you start playing (see "Quick-starting LD playback" on page **11** for details). When you play CDs or CDVs, the QUICK START indicator goes off automatically and the AV calendar always appears.

Reading the front panel display

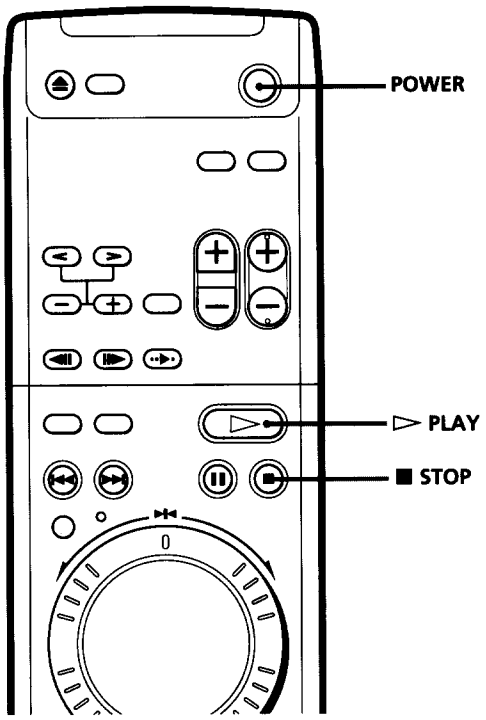
The illustration below is an example of what is displayed on the front panel of the player. For more information about the AV calendar, see the tips and note on the left hand of this page and "Quick-starting LD playback" on page **11**.



Turning off and on the front panel display

You can turn off the front panel display if you feel the display glaring while you view a movie in a dark room. Each time you press the FL DISPLAY button on the player, the display turns off/on.

Resuming LD playback (Auto Resume)



This function operates automatically only for LDs. Once you stop playing an LD by pressing ■ STOP or POWER, the player stores the point you stopped at so that you can continue viewing from the same point.

1 **Press ■ STOP (or POWER) to stop playback.**
The AUTO RESUME indicator on the player lights up and the point you stopped at is stored (if you press POWER, the indicator lights up briefly, then goes off with the power).

2 **Press ▷ PLAY.**
The player searches for the scene at which you stopped playing, then playback starts.

To pause playing just before starting
If the player is turned on, press ❚❚ PAUSE instead of ▷ PLAY.
If the player is turned off, press POWER or ▷ PLAY to turn on the player, then press ❚❚ PAUSE.

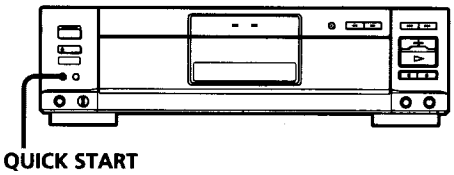
To view from the beginning of the LD
Press DISC SIDE A to start playing from the beginning of side A.
Press DISC SIDE B to start playing from the beginning of side B.
The point at which you stopped is cleared.

Tips
- Each time you stop playing, the point at which you stopped is stored.
- The point at which you stopped playing is cleared when:
  - you completely open the disc tray, press DISC SIDE A/B or ⏮/⏭ ACS/AMS.
  - you do a Chapter Search or Frame/Time Search.
  - you press PROGRAM.
  - you unplug the player.

  If you press ⏏ OPEN/CLOSE to close the disc tray when it is open halfway, the point at which you stopped is retained.

Notes
- Playback may resume at a point slightly different from the point at which you stopped playback.
- The point at which you stopped is not stored if you stop playback during a Chapter Search or Frame/Time Search, or while in program mode.
- If you press ▷ PLAY when the power is off, the player turns on automatically. If a disc is loaded, playback resumes where you last stopped.

Quick-starting LD playback (Quick Start)



Notes

- Once the player has read TOC data of an LD after you turned off the Quick Start function, you cannot turn on the Quick Start function until you open the disc tray or turn off the player.
- When you play a CD or CDV, the Quick Start function is automatically turned off.

Tip

- TOC data contains some information on the disc including amount of chapters, total playing time, and information about each chapter.

The Quick Start function remarkably shortens the starting time of an LD by skipping the TOC data read procedure. When the QUICK START button indicator on the player is lit, the Quick Start function is active and you can start playing the LD very quickly.

Selecting Quick Start on/off

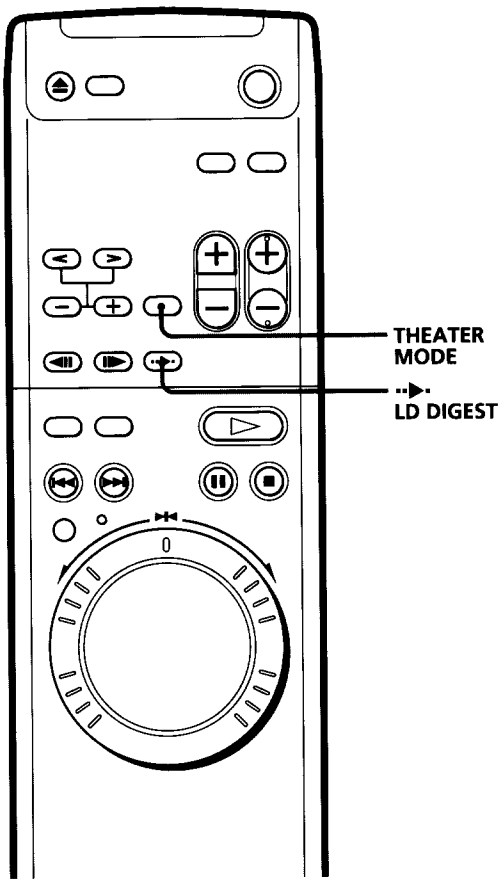
When you turn on the player, the QUICK START button indicator always lights up and the Quick Start function is turned on.
If you turn off the Quick Start function, the player reads TOC data on the current side of the LD when the disc starts playing, allowing you to use several functions (see table below).

To turn off (or, then on) the Quick Start function

Press QUICK START on the player while the player is stopped.
Each time you press the button, the QUICK START button indicator is turned off/on.

Indicator	The player starts playing an LD
On	Without reading TOC data, to save time
Off	Reading TOC data, so that you can use the functions shown below: • AV calendar • Remaining time of the current chapter • Total remaining time on the current disc side • Total elapsed time for CAV discs • Total playing time of chapters you programed

Using enjoyable functions for viewing movies



Notes

- The sound is also skipped as the scene skips.
- You can use LD Digest only when you play an LD in normal play mode.
- You cannot use LD Digest or Theater mode when playing CDVs.
- The effect of Theater mode depends on the quantity of the blackness in the picture. If there is little blackness, Theater mode may not be effective.

Tip

- You can turn on/off the front panel display by pressing the FL DISPLAY button on the player while in theater mode. However, when you exit theater mode, the front panel display always lights up.

Shortening the viewing time for an LD (LD Digest)

You can quickly view an LD, in about two thirds or a half of its original playing time. In LD Digest mode, the player skips scenes at regular intervals to save one third or half of the playing time. You hear the normal speed sound as the scenes progress so that you can understand the plot of a movie, etc.

To start quick viewing

Press ▪▪▶▪ LD DIGEST while playing an LD.
The LD DIGEST indicator on the player lights up and the player starts skipping scenes.
Each time you press ▪▪▶▪ LD DIGEST, the on-screen indication changes as follows:

LD DIGEST 1 → LD DIGEST 2

If you select "LD DIGEST 1," about one third of the playing time is saved.
If you select "LD DIGEST 2," about a half of the playing time is saved.

To resume normal playback

Press ▷ PLAY.
The LD DIGEST indicator goes off and normal playback resumes.

Getting a theater-like picture (Theater mode)

In theater mode (LDs only), the player emphasizes the black color on the recording to give the picture you see some of the depth and clarity of a movie in a movie theater. This is especially effective if you view movies in a dark room.

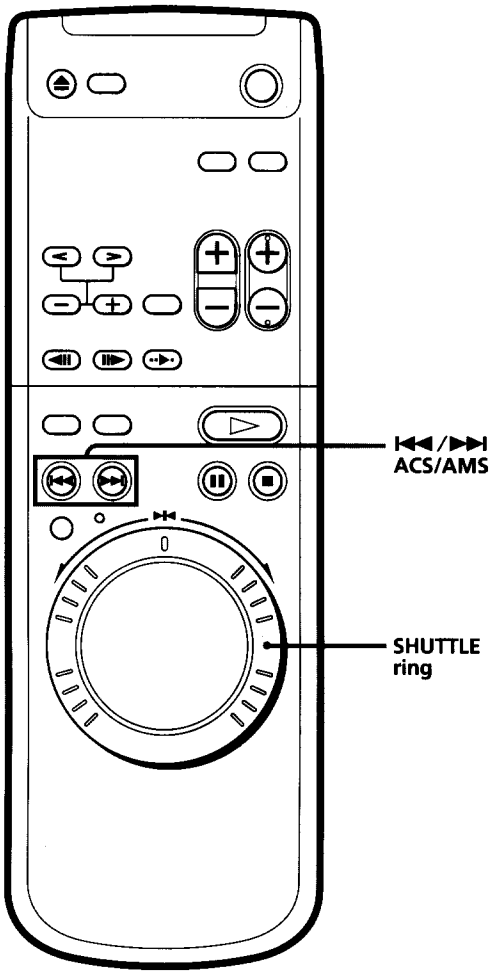
To enter theater mode

Press THEATER MODE while playing an LD.
"THEATER" appears on the screen briefly, the THEATER MODE indicator lights up and the front panel display turns off. The picture's black color becomes more black.

To exit theater mode

Press THEATER MODE again.
The THEATER MODE indicator goes off, the front panel display lights up and the player exits the theater mode.

Searching for a particular point on the disc



Notes

- A certain amount of visual noise and instability is inevitable when scanning an LD.
- When scanning a CLV LD or CDV, speed varies between the beginning and end of a side.

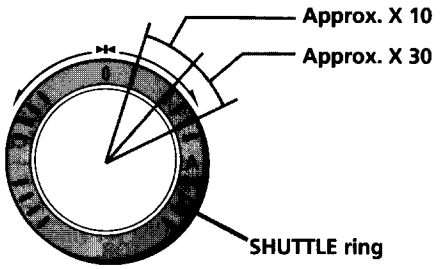
Tips

- ACS/AMS stands for Automatic Chapter Sensor/ Automatic Music Sensor.
- In addition to normal play mode, you can do Variable Speed Scan and Skip Search while in Freeze Frame, Repeat or Pause mode. After the scan or search, playback continues in the same mode.
- You can also do a Skip Search while using Multi Speed.

You can locate a particular point on a disc by scanning scenes at variable speed or skipping chapters/tracks.

Scanning a disc quickly (Variable Speed Scan)

Rotate the SHUTTLE ring on the remote commander while playing a disc.
The scanning speed changes from about ×10 to ×30 times the normal speed corresponding to the degree you rotate the SHUTTLE ring.
To resume normal playback, release the SHUTTLE ring.



You can also scan a disc by holding down the ◀◀ or ▶▶ SCAN button on the player while playing the disc. The scanning speed is constant at 10 times the normal speed.

To	Hold down
Scan forward	▶▶ SCAN
Scan backward	◀◀ SCAN

To resume normal playback, release ◀◀/▶▶ SCAN.

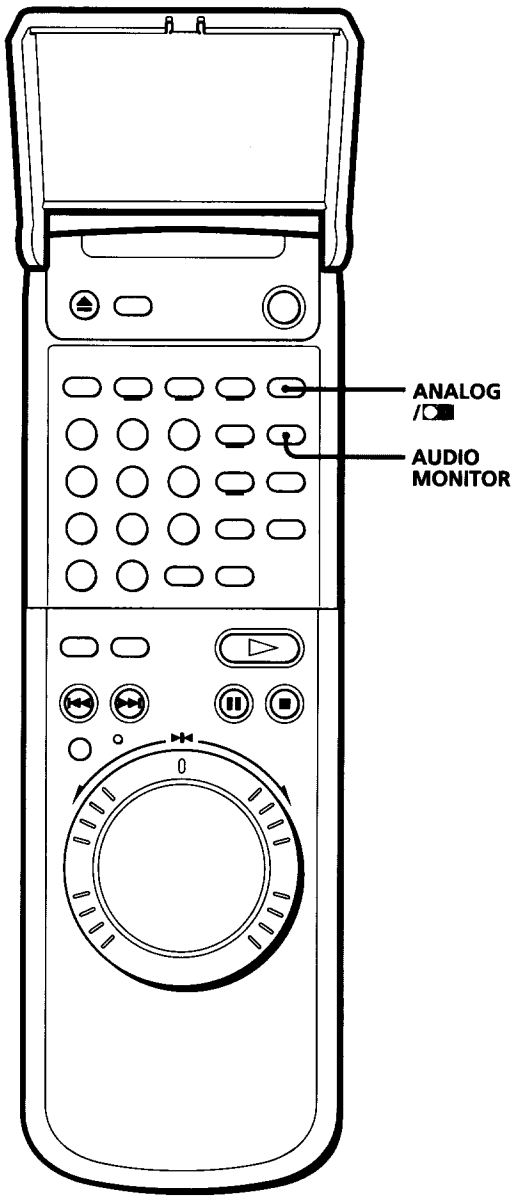
Skipping chapters or tracks (Skip Search)

Press or hold down I◀◀ /▶▶I ACS/AMS on the player or remote commander.

To go to the beginning of	Press
Next chapter/track	▶▶I ACS/AMS once
Current chapter/track	I◀◀ ACS/AMS once
Previous chapter/track	I◀◀ ACS/AMS twice before the picture or sound resumes

Hold down ▶▶I or I◀◀ to skip chapters/tracks continuously.

Using the sound control functions



Notes

- The output level may differ between digital and analog sound.
- When using the DIGITAL OUT (OPTICAL) connector, you cannot alternate sound output (always 1/L 2/R).

Playing a stereo disc or Second Audio Program (SAP) disc

When playing SAP discs such as bilingual discs, you can alternate the sound output using the AUDIO MONITOR button.

To alternate the sound output

Press AUDIO MONITOR while playing the disc.
Each time you press AUDIO MONITOR, the on-screen indication changes as follows:

1/L → 2/R → 1/L 2/R

The indication appears on the screen briefly, then disappears.

Indication	From stereo disc	From SAP disc
1/L	Left channel	Sound track 1 (Left channel)
2/R	Right channel	Sound track 2 (Right channel)
1/L 2/R	Stereo (Both channels)	Sound track 1 (Left channel) Sound track 2 (Right channel)

When you select 1/L (or 2/R), the sound of the left (or right) channel is output from both speakers.

Listening to analog sound on an LD

If your LD contains digital soundtracks, the player automatically outputs digital sound. To listen to sound recorded on analog soundtracks, use the ANALOG/ button.

Press ANALOG/ while playing the disc.
"♪ ANALOG" appears on the screen briefly and analog sound is output.

To return to digital sound

Press ANALOG/ repeatedly until "♪ DIGITAL" appears on the screen.

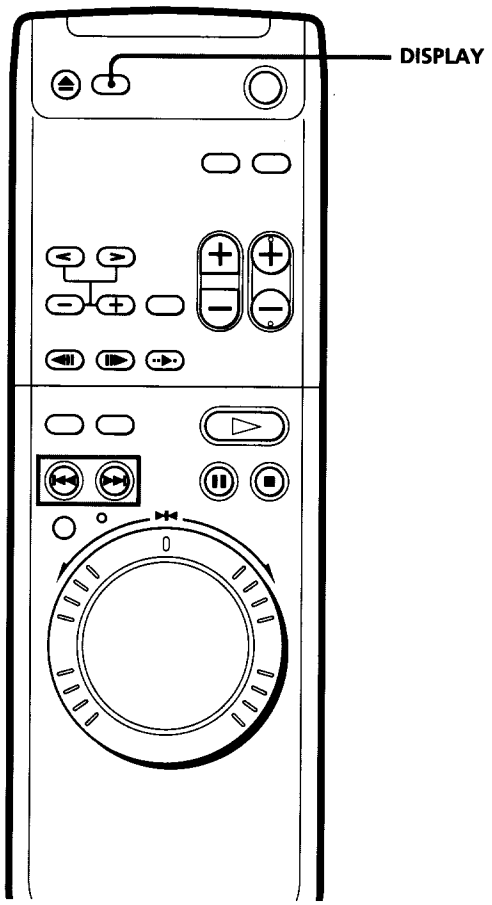
Playing discs with a (CX) logo

LDs bearing the logo are recorded with the CX noise reduction system, which gives lower noise level and higher dynamic range on analog sound. The player detects most discs and activates the CX noise reduction system automatically when outputting analog sound. If your LD does not contain a code to activate the CX noise reduction system, you can activate the CX noise reduction system manually while playing analog sound.

To activate the CX noise reduction system manually

Press the ANALOG/ button repeatedly until "CX ON" appears.
The CX noise reduction system is activated.

Understanding on-screen indications



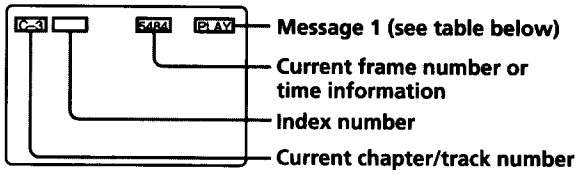
Notes

- The AV calendar (display of remaining chapter numbers) for LDs is only available when:
  - the LD contains TOC data.
  - you have turned off the QUICK START button indicator on the player.
- When playing an LD which does not contain chapters, the chapter number does not appear.
- When playing a CLV LD which does not contain time data to the second, a two-digit number such as "22:", meaning 22 minutes, appears.
- Messages concerning sound control functions such as "1/L, 2/R" or "♪ DIGITAL, ♪ ANALOG" appear only briefly when you press the AUDIO MONITOR or ANALOG/◻■ button.

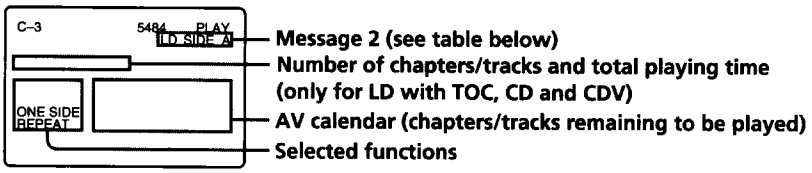
You can view the operating status of the player or disc information on the TV screen.

Displaying on-screen indications

Press DISPLAY.
The operating status of the player is displayed on the screen.



Press DISPLAY again.
Operating status and disc information are displayed on the screen.



Press DISPLAY once again to turn off the indications.

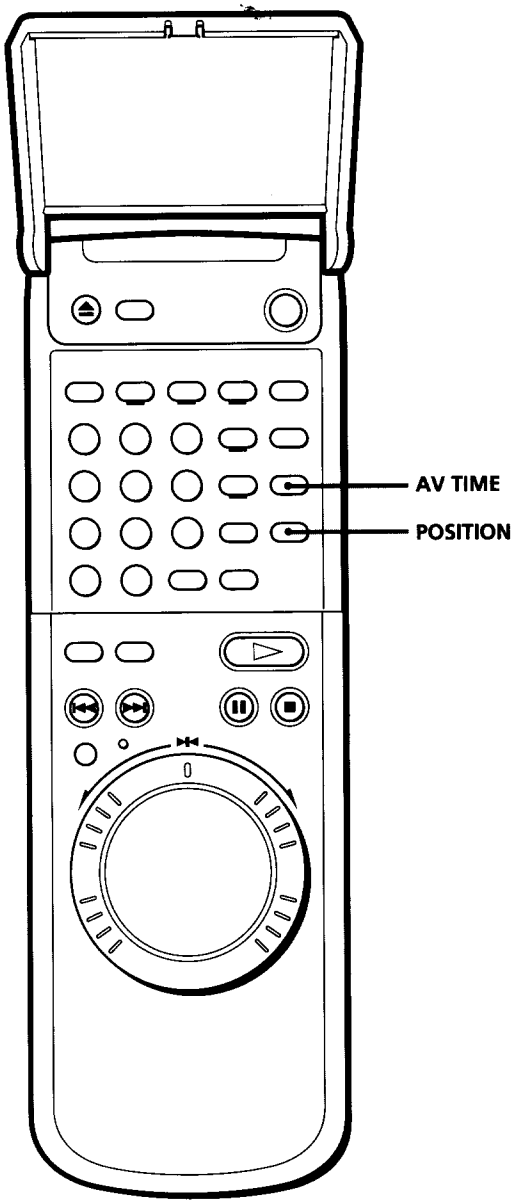
Message 1

Display	Current status of the player
OPEN	Disc tray open
CLOSE	Disc tray closed
PLAY	Playing a disc
STOP	Playback stopped
PAUSE	Playback temporarily stopped
◀◀/▶▶	Speed scanning (slow)
◀◀◀/▶▶▶	Speed scanning (fast)
SEARCH	Searching

Message 2

Display	Currently playing
LD SIDE A	Side A of LD
LD SIDE B	Side B of LD
CD	CD
CDV	CDV
1/L	First soundtrack/left channel
2/R	Second soundtrack/right channel
♪ DIGITAL	Digital sound
♪ ANALOG	Analog sound
THEATER	With real black color

Understanding on-screen indications (continued)



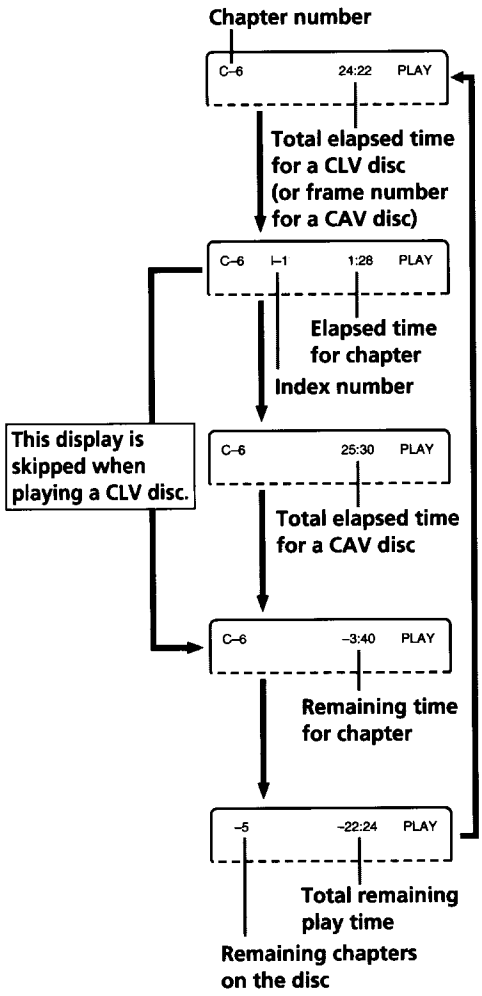
Notes

- When playing an LD which does not contain TOC data, or playing with the QUICK START button indicator on the player lit, you can only view the total elapsed time (for CLV disc) or current frame number (for CAV disc).
- The display does not show remaining time for chapters or tracks numbered 51 or greater.
- When playing a CDV, these figures refer only to the current section (audio or video) being played.

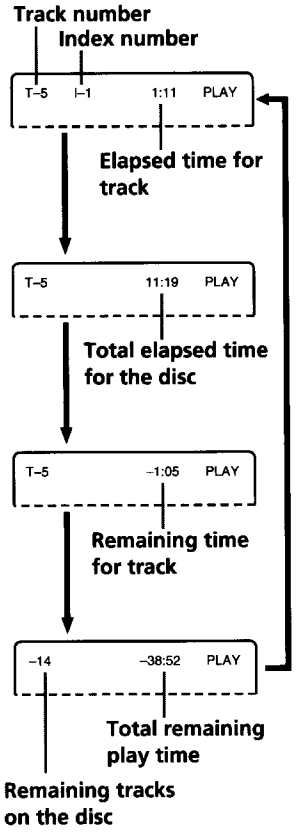
Checking the elapsed or remaining time of the disc

You can check the elapsed or remaining time on the TV screen.
Press DISPLAY, then press AV TIME repeatedly.
Each time you press AV TIME, the on-screen display changes as follows. To use AV TIME while playing an LD containing TOC data, press QUICK START on the player to turn off the Quick Start function (see "Quick-starting LD playback" on page **11**).

LDs with TOC



CDs/CDVs



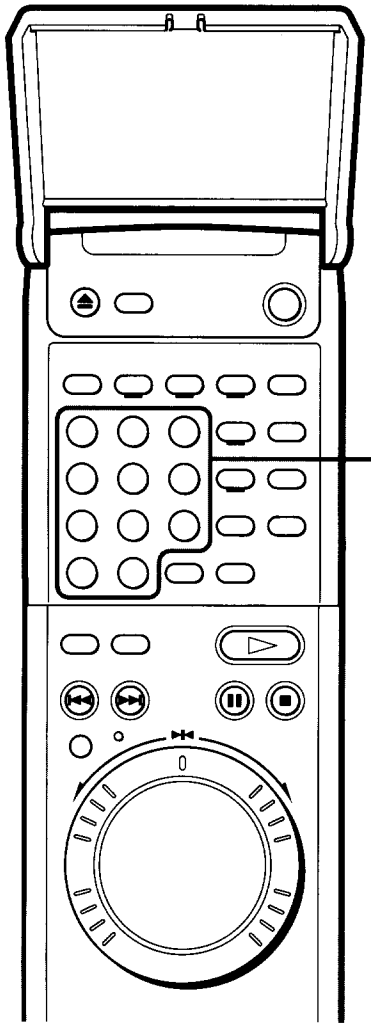
Changing the position of the on-screen indications

You can select the position of the on-screen indications.
If you use a wide-screen TV and some indications on the top or bottom of the screen are invisible, change the position of the on-screen indications using the POSITION button so that you can view the indications.

Each time you press the POSITION button on the remote commander, the position of the on-screen indications changes. There are three other positions.

Additional Operations

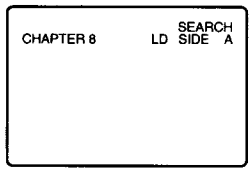
Specifying a chapter or track directly (Chapter/Track Search)



LDs are divided into sections called "chapters." CDs and CDVs are divided into sections called "tracks." Simply enter the desired chapter/track number to go to a chapter or track and start playing it immediately.

Locating a particular chapter/track

Press one of the number buttons to enter the chapter/track number. The picture freezes and the player goes to the chapter/track you entered, then playback starts.



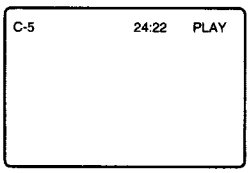
To play a chapter on the opposite side of the LD, press DISC SIDE B (or A), then enter the chapter number.

To enter a number greater than 10, press +10, then one of the 0 – 9 buttons. If you press +10 by mistake, press CLEAR, then enter the correct number.

To	Press
Enter 14	+10, then 4
Enter 25	+10, +10, then 5
Enter 30	+10, +10, +10, then 0

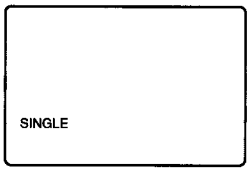
To check the current chapter/track number on the screen

Press DISPLAY to display the chapter/track number.
The number appears in the upper left-hand corner of the screen. If the LD does not contain chapter numbers, no number is displayed.



To play only one chapter/track

Press 1/SIDE/ALL once. "SINGLE" appears briefly.
Enter the chapter/track number using the number buttons.
The chapter or track is played once.



Tip

- In addition to normal play mode, you can do Chapter/Track Search while in Multi Speed, Freeze Frame, Repeat or Pause mode. When the specified chapter or track is located after the search, playback continues in the same mode.

Note

- Chapter Search does not function correctly if the LD does not contain chapter numbers, or if the chapter number entered does not exist.