SONY

CD/DVD Player

Operating Instructions



DVP-CX860

© 2000 Sony Corporation

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture. To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

Mains cord must only be changed at a qualified service shop.



This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CAUTION

The use of optical instruments with this product will increase eye hazard. As the laser beam used in this CD/DVD player is harmful to eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.



This label is located on the Laser protective housing inside the enclosure.

Notice for customers in the United Kingdom and Republic of Ireland

A moulded plug complying with BS1363 is fitted to this equipment for your safety and convenience.

Should the fuse in the plug supplied need to be replaced, a 5 AMP fuse approved by ASTA or BSI to BS1362, (i.e., marked with $\textcircled{}{}$ or $\textcircled{}{}$ mark) must be used.

If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service station.

Precautions

Safety

- This unit operates on 220 240 V AC, 50/ 60 Hz. Check that the unit's operating voltage is identical with your local power supply.
- To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.

Installing

- Do not install the unit in an inclined position. It is designed to be operated in a horizontal position only.
- Keep the unit and discs away from equipment with strong magnets, such as microwave ovens, or large loudspeakers.
- Do not place heavy objects on the unit.

Welcome!

Thank you for purchasing this Sony CD/ DVD Player. Before operating this player, please read this manual thoroughly and retain it for future reference.

TABLE OF CONTENTS

About This Manual 4 This Player Can Play the Following Discs 4 Precautions 6 Notes About the Discs 6

Getting Started 7

Unpacking 7 TV Hookups 8 Receiver (Amplifier) Hookups 12 2+1 Channel Surround Hookups 14 5.1 Channel Surround Hookups 15 Selecting the Language for the On-Screen Display 17 Operation Sound Effects (Sound Feedback) 18 Inserting Discs 19

Playing Discs 22

Playing Discs 22 Playing Side B (FLIP) 25 Playing at Various Speeds/Frame by Frame 25 Resuming Playback from the Point Where You Stopped the Disc (Resume Play) 27 Using the DVD's Menu 28 Playing VIDEO CDs with PBC Functions (PBC Playback) 29 Using the Front Panel Display 30 **Displaying the Disc Information (Disc Browser)** 32 Filing Discs in the Folder (Disc Browser - File Mode) 34 Labeling Discs and Folders (Disc Browser - Edit Mode) 36 Sorting Discs (Disc Browser - Sort Mode) 39

Using Various Functions with the Control Menu 41

Using the Control Menu Display 41 Control Menu Item List 43 Searching for a Disc/Title/Chapter/Track/Index/ Scene 44 Checking the Playing Time and Remaining Time 45 Selecting a Starting Point Using the Time Code 46 Viewing the Disc Information 47 Changing the Sound 47 **Displaying the Subtitles** 49 Changing the Angles 50 **Digital Cinema Sound Settings** 51 **Checking the Play Information** 52 Locking Discs (Custom Parental Control) 53 Selecting the Disc Mode (1 Disc or All Discs) 55 Creating Your Own Program (Program Play) 56 Playing in Random Order (Shuffle Play) 58 Playing Repeatedly (Repeat Play) 59 Repeating a Specific Portion (A–B Repeat) 60 Using the Quick Reference Screen (VIEWER) 61

Settings and Adjustments 64

Using the Setup Display 64 Setup Display Item List 66 Setting the Display Language or Sound Track (LANGUAGE SETUP) 67 Settings for the Display (SCREEN SETUP) 68 Custom Settings (CUSTOM SETUP) 70 Settings for the Sound (AUDIO SETUP) 74 Subwoofer Set Up (SPEAKER SETUP) 76 Controlling Your TV or AV Receiver (Amplifier) with the Supplied Remote 77 Controlling the CD Changer (Mega Control) 79

Additional Information 81

Troubleshooting 81 Self-diagnosis function 84 Specifications 84 Glossary 85 Language Code List 87 Index to Parts and Controls 88 Index 92

About This Manual

Conventions

- Instructions in this manual describe the controls on the player. You can also use the controls on the remote if they have the same or similar names as those on the player.
- The icons on the right are used in this manual:

lcon	Meaning
	Indicates that you can use only the remote to do the task.
Ý	Indicates tips and hints for making the task easier.
DVD	Indicates that the function is for DVD VIDEOs.
VIDEO CD	Indicates that the function is for VIDEO CDs.
CD	Indicates that the function is for Audio CDs.

This Player Can Play the Following Discs

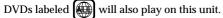
	DVD VIDEOs		VIDEO CDs		Audio CDs	
Disc logo	VIDEO WIDEO					
Contents	Audio +	Video	Audio	+ Video	Au	ldio
Disc size	12 cm	8 cm	12 cm	8 cm	12 cm	8 cm (CD single)
Play time	About 4 h (for single-sided DVD)/ about 8 h (for double-sided DVD)	About 80 min. (for single-sided DVD)/ about 160 min. (for double-sided DVD)	74 min.	20 min.	74 min.	20 min.

The "DVD VIDEO" logo is a trademark.

When you play an NTSC disc, this player outputs the video signal in the NTSC system only. In this case, if your TV uses the PAL system, the picture becomes noisy.

Region code of DVDs you can play on this unit

Your DVD player has a region code printed on the back of the unit and will only play DVDs that are labeled with identical region codes.



If you try to play any other DVD, the message "Playback prohibited by area limitations." will appear on the TV screen.

Depending on the DVD, no region code indication may be labeled even though playing the DVD is prohibited by area restrictions.

Note on playback operations of DVDs and VIDEO CDs

Some playback operations of DVDs and VIDEO CDs may be intentionally fixed by software producers. Since this player plays DVDs and VIDEO CDs according to the disc contents the software producers designed, some playback features may not be available. Also refer to the instructions supplied with the DVDs or VIDEO CDs.



Terms for discs

Title

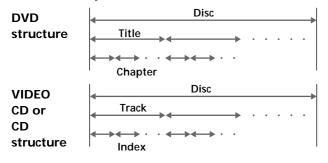
The longest section of a picture or music feature on a DVD, the movie, etc. in video software, or the name of an album in audio software.

Chapter

Sections of a picture or a music feature that are smaller than titles. A title is composed of several chapters. Each chapter is assigned a chapter number enabling you to locate the chapter you want. Depending on the disc, no chapters may be recorded.

Track

Sections of a picture or a music feature on a VIDEO CD or a CD. Each track is assigned a track number enabling you to locate the track you want.



• Index (CD) / Video Index (VIDEO CD)

A number that divides a track into sections to easily locate the point you want on a VIDEO CD or a CD. Depending on the disc, no indexes may be recorded.

• Scene

On a VIDEO CD with PBC (playback control) functions, the menu screens, moving pictures and still pictures are divided into sections called "scenes." Each scene is assigned a scene number enabling you to locate the scene you want.

Note on PBC (Playback Control) (VIDEO CDs)

This player conforms to Ver. 1.1 and Ver. 2.0 of VIDEO CD standards. You can enjoy two kinds of playback according to the disc type.

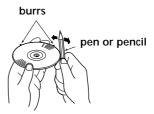
Disc type	You can
VIDEO CDs without PBC functions (Ver. 1.1 discs)	Enjoy video playback (moving pictures) as well as music.
VIDEO CDs with PBC functions (Ver. 2.0 discs)	Play interactive software using menu screens displayed on the TV screen (PBC Playback), in addition to the video playback functions of Ver. 1.1 discs. Moreover, you can play high-resolution still pictures if they are included on the disc.

Discs that the player cannot play

The player cannot play discs other than the ones listed in the table on page 4. CD-Rs, CD-ROMs including PHOTO CDs, data sections in CD-EXTRAs, DVD-ROMs, DVD-audio, HD (high density) layer of Super Audio CD etc., cannot be played.

Notes on using discs

- With some new discs, glue from the manufacturing process may be present on the outer edge. Placing such discs into the slots may cause the disc to get stuck when loaded. Wipe the edge of the disc with the side of a pen or pencil so that the glue is spread evenly along the edge and does not ball up. Be sure not to touch the playback side of the disc when wiping the edge. Then insert the disc into the player.
- With some new discs, burrs from manufacturing may remain on the outer edge or inside the center hole. If such burrs are present, be sure to remove them by rubbing with the side of a pen or pencil. If burrs are not removed, discs may not load properly into the player, or fragments of plastic adhering to the playback side of the disc may cause skipping in the sound. Burrs may also cause the disc to be unsettled when placed in the slots.



When playing DTS*-encoded CDs, excessive noise will be heard from the analog stereo outputs. To avoid possible damage to the audio system, the consumer should take proper precautions when the analog stereo outputs of the DVD player are connected to an amplification system. To enjoy DTS Digital SurroundTM playback, an external 5.1-channel DTS Digital SurroundTM decoder system must be connected to the digital output of the DVD player.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

* "DTS," "DTS Digital Surround" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.

Precautions

On safety

- Caution The use of optical instruments with this product will increase eye hazard.
- Should any solid object or liquid fall into the cabinet, unplug the player and have it checked by qualified personnel before operating it any further.

On power sources

- The player is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the player itself has been turned off.
- If you are not going to use the player for a long time, be sure to disconnect the player from the wall outlet. To disconnect the AC power cord (mains lead), grasp the plug itself; never pull the cord.

On placement

- Place the player in a location with adequate ventilation to prevent heat build-up in the player.
- Do not place the player on a soft surface such as a rug that might block the ventilation holes on the bottom.
- Do not place the player in a location near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.

On operation

- If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the player. Should this occur, the player may not operate properly. In this case, remove the disc and leave the player turned on for about half an hour until the moisture evaporates.
- When you move the player, take out any discs. If you don't, the disc may be damaged.

On adjusting volume

Do not turn up the volume while listening to a section with very low level inputs or no audio signals. If you do, the speakers may be damaged when a peak level section is played.

On cleaning

Clean the cabinet, panel, and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

On cleaning discs

Do not use a commercially available cleaning disc. It may cause a malfunction.

If you have any questions or problems concerning your player, please consult your nearest Sony dealer.

IMPORTANT NOTICE

Caution: This player is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Projection televisions are especially susceptible to this.

Notes About the Discs

On handling discs

- To keep the disc clean, handle the disc by its edge. Do not touch the surface.
- Do not stick paper or tape on the disc. If there is glue (or a similar substance) on the disc, remove the glue completely before using the disc.



- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature may rise considerably inside the car.
- After playing, store the disc in its case.

On cleaning

• Before playing, clean the disc with a cleaning cloth. Wipe the disc from the center out.



• Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.

On novelty discs

Do not use irregularly shaped CDs such as heart- or starshaped CDs as they may cause the player to malfunction.

Getting Started

This section describes how to hook up the CD/DVD player to a TV (with audio/video input jacks) and/or an AV receiver (amplifier). You cannot connect this player to a TV which does not have a video input connector. Be sure to turn off the power of each component before making the connections.

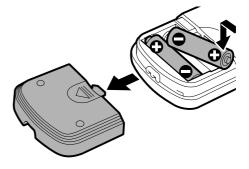
Unpacking

Check that you have the following items:

- Audio/video connecting cord (1)
- S video cord (1)
- Remote commander (remote) RMT-D123P (1)
- R6 (size AA) batteries (2)

Inserting batteries into the remote

You can control the player using the supplied remote. Insert two R6 (size AA) batteries by matching the + and - ends on the batteries to the markings inside the compartment. When using the remote, point it at the remote sensor \square on the player.



 $\dot{\mathbf{V}}$ You can control TVs and AV receivers (amplifiers) using the supplied remote

See page 77.

Notes

- Do not leave the remote in an extremely hot or humid place.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction.
- If you do not use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Transporting the player

Before transporting the player, follow the procedure below to return the internal mechanisms to their original positions.

- **1** Remove all the discs form the disc slots. Failure to remove the discs may cause damage to the player.
- **2** Press OPEN/CLOSE to close the front cover Make sure that "NO DISC" appears on the front panel display.
- 3 Wait for 10 seconds, then pss I/ ⁽¹⁾ on the emote, followed by⁽¹⁾ on the player This will safely turn off the player.

TV Hookups

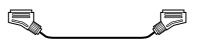
This connection is for listening to the sound through TV speakers (L: left, R: right). Refer to the instructions supplied with the component to be connected. You cannot connect this player to a TV without a SCART (EURO AV) connector or a video input connector.

$\dot{\mathbf{Q}}$ You can enjoy surround sound using your TV's built-in speakers

You can use 3D sound imaging to create virtual rear speakers from the sound of built-in TV speakers without using actual rear speakers (VES TV: Virtual Enhanced Surround TV). For details, see page 51.

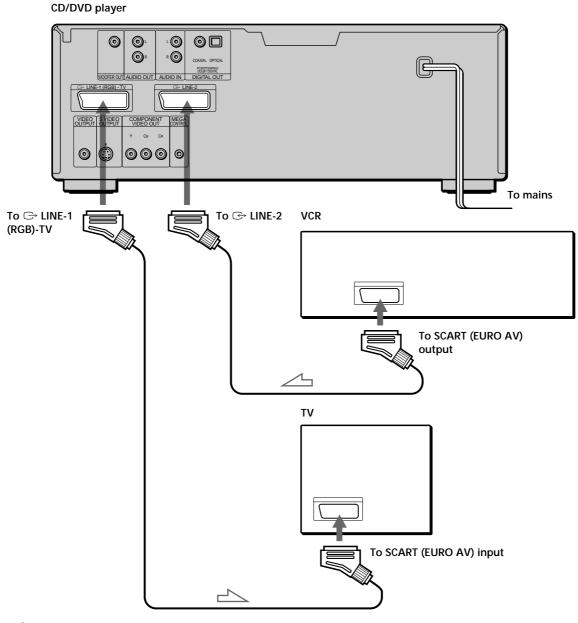
Required cords

SCART (EURO AV) connecting cord (not supplied) (2) Be sure to make connections firmly to avoid hum and noise. Refer to the instructions supplied with the TV to be connected.



Notes

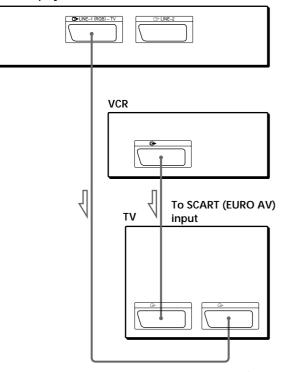
- When you set "LINE" to "S VIDEO" or "RGB" under "CUSTOM SETUP" in the setup display, use a SCART (EURO AV) connecting cord that conforms to each signal.
- When you connect using the SCART (EURO AV) connecting cord, confirm that the TV corresponds to S VIDEO or RGB. Refer to the instructions supplied with the TV to be connected.



Signal flow

If your TV has two SCART (EURO AV) connectors



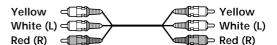


To SCART (EURO AV) input

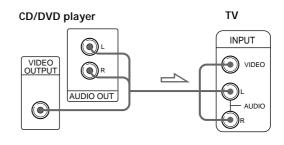
If your TV has no SCART (EURO AV) connectors

You can connect the player to a TV (with audio/video input jacks) using the supplied audio/video connecting cord. If your TV has an S video input connector, connect the component via the S VIDEO OUTPUT connector using the supplied S video cord instead of the video connecting cord. You will get a better picture. When connecting the cords, be sure to match the color-coded cord to the appropriate jacks on the components: Yellow (video) to Yellow, Red (right) to Red and White (left) to White.

Audio/Video connecting cord (supplied) (1)

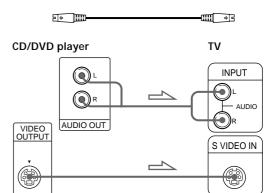


■ To listen to the sound through TV speakers



■ If your TV has an S video input connector

S video cord (supplied) (1)



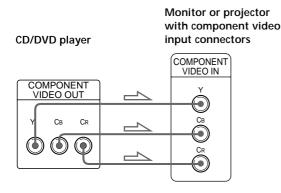
TV Hookups

If you connect the player to a monitor or projector having component video input connectors that conform to the output signals from the COMPONENT VIDEO OUT (Y, CB, CR) connectors on the player

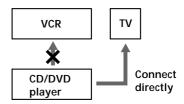
Connect the component via the COMPONENT VIDEO OUT connectors using three video connecting cords (not supplied) of the same kind. You will get a better picture.

Set "LINE" in "CUSTOM SETUP" to "VIDEO" or "S VIDEO" in the setup display and set "COMPONENT OUT" to "ON" (page 70).

In order to set COMPONENT OUT to ON, you must first connect the player to a projector or monitor using the LINE-1 connector so that the setup display appears on your screen.



- Refer to the instructions supplied with the component to be connected.
- Do not connect this player to a video deck. If you do, noise may appear in the picture.



- Depending on the TV or receiver (amplifier), sound distortion may occur because the audio output level is high. In this case, set "AUDIO ATT" in "AUDIO SETUP" to "ON" in the setup display. For details, see page 74.
- If you cannot view the pictures from a VCR through this player which is connected to a TV with RGB component connectors, set →…1 to -② (Audio/Video) on your TV. When you select →… (RGB), the TV cannot receive the signal from the VCR.
- If you want to use your VCR's SmartLink function, connect the VCR to your TV's SmartLink connector and connect the CD/DVD player to the TV with another connector.
- When you connect the player to your TV via the SCART (EURO AV) connectors, the TV's input source is set to the player automatically when you start playback or press any button except for ① on the player or I/\bigcirc on the remote. In this case, press TV/DVD on the remote to return the input to the TV.
- When you set "LINE" in "CUSTOM SETUP" to "RGB," you cannot select the item "COMPONENT OUT" in "CUSTOM SETUP." For details, see page 70.
- If you want to enjoy the picture's RGB signals via the LINE-1 (RGB) connector, set "COMPONENT OUT" in the "CUSTOM SETUP" to "OFF," then set "LINE" to "RGB" in the setup display. For details, see page 70.
- When you connect the player to a monitor or projector via only the COMPONENT VIDEO OUT connectors, do not select "OFF" in "COMPONENT OUT" under "CUSTOM SETUP." If you select "OFF" in this case, the picture may not appear.

Setups for the player

Some setup adjustments are necessary for the player depending on the TV or other components to be connected.

Use the setup display to change the various settings. For details on using the setup display, see page 64.

- To connect the player to a wide-seen TV In the setup display, set "TV TYPE" in "SCREEN SETUP" to "16:9" (default setting). For details, see page 68.
- To connect the player to a normal TV In the setup display, set "TV TYPE" in "SCREEN SETUP" to "4:3 LETTER BOX" or "4:3 PAN SCAN." For details, see page 68.
- To connect the player to a TV or VCR via a SCAR (EURO AV) connector that conforms to the S video signals or RGB signals In the setup display, set "LINE" in "CUSTOM SETUP" to "S VIDEO" or "RGB." For details, see page 70.
- To connect the player to a monitor or gjector with component video input connectors that conform to the output signals form the COMPONENT VIDEO OUT (Y, CB, CR) connectors on the player In the setup display, set "COMPONENT OUT" in "CUSTOM SETUP" to "ON". For details, see page 70.

When you play a disc recorded in the NTSC color system, the player outputs the video signal or the setup display etc. in the NTSC color system and the picture may not appear on PAL color system televisions. In this case, open the disc tray and remove the disc.

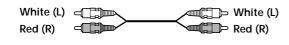
Receiver (Amplifier) Hookups

This connection is for listening to the sound through speakers connected to a receiver lacking a built-in DTS, Dolby* Digital or MPEG decoder. Refer as well to the instructions supplied with the component to be connected.

 * Manufactured under license from Dolby Laboratories.
 "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.
 Confidential unpublished works. ©1992-1997 Dolby Laboratories. All rights reserved.

Required cords

Audio connecting cord (not supplied) (1)



(;;;; + =

S video cord (supplied) (1)

2 ¢

CD/DVD player

When connecting the cords, be sure to match the color-coded cord to the appropriate jacks on the components: Red (right) to Red and White (left) to White. Be sure to make connections firmly to avoid hum and noise.

If you have a digital component such as a receiver (amplifier) with a digital connector, DAT or MD, connect the component via the DIGITAL OUT OPTICAL or COAXIAL connector using an optical or coaxial digital connecting cord (not supplied).

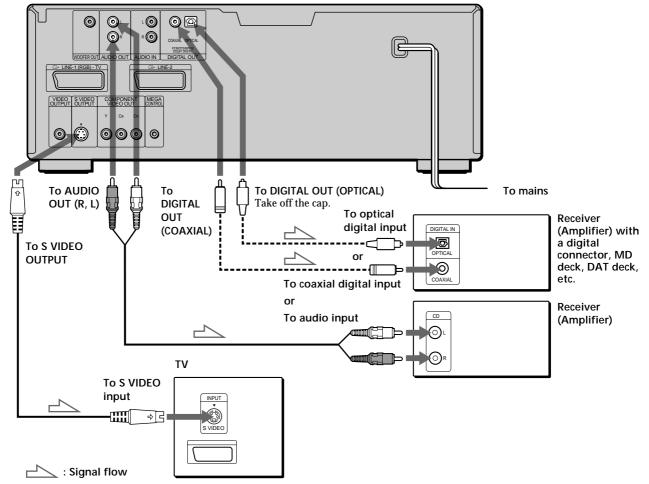
Optical digital connecting cord (not supplied) (1)



Coaxial digital connecting cord (not supplied) (1)



Do not connect the power cord to a switched mains such as the AC outlet (mains) on a receiver (amplifier). Doing so may cause the Playback Memory, Bookmark, Disc Browser and menu settings to be cancelled when you turn off the receiver.



 $\overleftrightarrow{\mathbf{V}}$ You can enjoy surround sounds even if you connect front speakers only

You can use 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers (VES: Virtual Enhanced Surround). For details, see page 51.

 $\hat{\mathbf{V}}$ If you have a digital component with a built-in DTS, Dolby Digital or MPEG decoder

You can enjoy multichannel surround sound by connecting the component via the DIGITAL OUT OPTICAL or COAXIAL connector using an optical or coaxial digital connecting cord (not supplied). For details on hookups and settings, see page 15.

Notes

· You cannot enjoy a picture with an S video signal if your TV does not conform to the S video signal. When your TV does not have an S VIDEO input, connect the component via the VIDEO INPUT connector using the audio/video connecting cord (supplied) instead of the S video cord. For details, see page 9.

Refer to the instructions supplied with your TV.

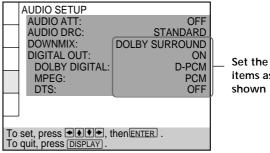
- · You cannot make digital audio recordings of discs recorded in multichannel surround format directly using an MD deck or DAT deck.
- · When you connect the component via the DIGITAL OUT OPTICAL or COAXIAL connector, set Virtual Enhanced Surround (VES) to "OFF." Otherwise, the player will not output the following signals from the DIGITAL OUT OPTICAL or COAXIAL connector.
- Dolby Digital signals (when you set "DOLBY DIGITAL" in "AUDIO SETUP" to "D-PCM")
- MPEG audio

When you have made the connections using an optical or coaxial digital connecting cord, do not set "DOLBY DIGITAL" to "DOLBY DIGITAL," "MPEG" to "MPEG" and "DTS" to "ON." If you do, a loud noise will suddenly come out from the speakers, affecting your ears or causing the speakers to be damaged.

Setups for the player

Some setup adjustments are necessary for the player depending on the components to be connected. Use the setup display to change the various settings. For details on using the setup display, see page 64.

• To listen to the sound though speakers connected to a receiver (amplifier) which has a digital connector and lacks a built-in DTS, Dolby Digital or MPEG decoder, or to output the sound to a digital component such as a DA or MD deck Set the "AUDIO SETUP" items in the setup display (page 74) as shown in the illustration below. These are the default settings.



items as shown

Set "VES" to "OFF" in the Control Menu display (page 51). When you select any VES mode other than "OFF," no sound will come from the speakers.

Note

When you output the signals which do not reproduce the Dolby Surround (Pro Logic) effect from the DIGITAL OUT OPTICAL or COAXIAL connector, set "DOWNMIX" to "NORMAL" in "AUDIO SETUP" in the setup display (page 74).

2+1 Channel Surround Hookups

This connection is for listening to the sound through the left and right speakers of the TV, or speakers connected to a receiver and the subwoofer. You can enjoy rich bass frequencies by connecting a subwoofer. Refer to the instructions supplied with the component to be connected.

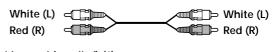
Set "SUBWOOFER" in "SPEAKER SETUP" to "YES" in the setup display (page 76). Then set "FRONT SPEAKER SIZE" to "TV" when you use the TV's speakers, or to "LARGE," "MIDDLE" or "SMALL" when you use the speakers connected to the receiver.

You can enjoy surround sounds even if you connect front speakers only

You can use 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers (VES: Virtual Enhanced Surround). For details, see page 51.

Required cords

Audio connecting cord (not supplied) (1)

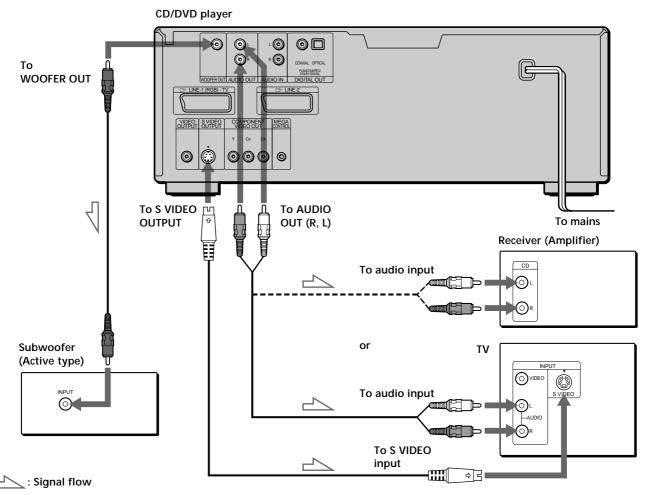


S video cord (supplied) (1)



When connecting the cords, be sure to match the color-coded cord to the appropriate jacks on the components: Red (right) to Red and White (left) to White. Be sure to make connections firmly to avoid hum and noise.

Monaural audio cord (not supplied) (1) One for a subwoofer



Note

You cannot enjoy the picture with S video signal if your TV does not conform to the S video signal. When your TV does not have an S VIDEO input, connect the component via the VIDEO INPUT connector using the video connecting cord (not supplied) instead of the S video cord. For details, see page 9. Refer to the instructions supplied with your TV.

5.1 Channel Surround Hookups

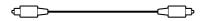
With DVDs which contain DTS, Dolby Digital or MPEG audio sound, you can enjoy the surround sound while producing the effect of being in a movie theater or a concert hall using a digital component with a built-in DTS, Dolby Digital or MPEG decoder (not supplied). The player outputs the surround sound signals from the DIGITAL OUT OPTICAL and COAXIAL connectors. Using a receiver (amplifier) having the OPTICAL or COAXIAL connector and 6 speakers, you can enjoy even greater real audio presence in the comfort of your own home.

Note

When a DVD has a sound track with 7.1 channels recorded in MPEG audio format, the output audio signals are mixed down to 5.1 channels.

Required cords

Optical digital connecting cord* (not supplied) (1)



Coaxial digital connecting cord* (not supplied) (1)



S video cord (supplied) (1)



* Connect the component via the DIGITAL OUT OPTICAL or COAXIAL connector using an optical or coaxial digital connecting cord (not supplied). You do not need to connect both of these cords. See the figure on the next page.

Notes

- Do not connect the power cord to a mains or press the POWER switch before completing all connections.
- Refer to the instructions supplied with the component to be connected.
- The cord connectors should be fully inserted into the jacks. A loose connection may cause hum and noise.

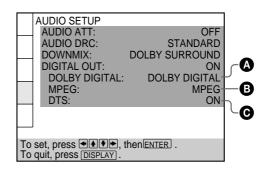
Do not connect the power cord to a switched mains such as the AC outlet (mains) on a receiver (amplifier). Doing so may cause the Playback Memory, Bookmark, Disc Browser and menu settings to be cancelled when you turn off the receiver.

Setups for the player

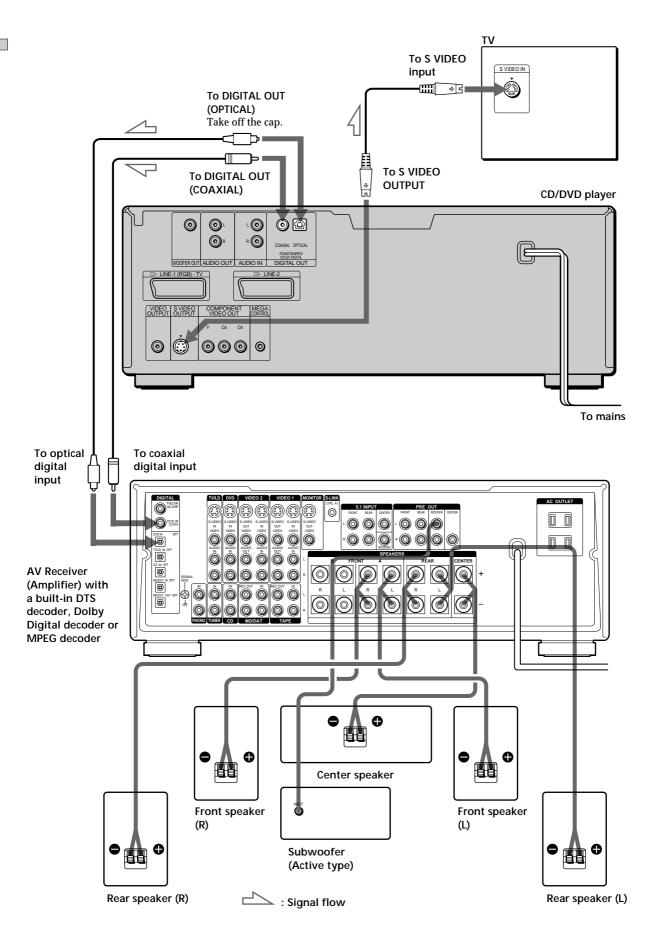
Some setup adjustments are necessary for the player depending on the components to be connected. Use the setup display to change the various settings. For details on using the setup display, see page 64.

- When you connect an audio component with a builtin Dolby Digital decoder Set "DIGITAL OUT" in "AUDIO SETUP" to "ON" and then set "DOLBY DIGITAL" to "DOLBY DIGITAL" in the setup display (page 75).
- When you connect an audio component with a builtin MPEG decoder ⁽²⁾ Set "DIGITAL OUT" in "AUDIO SETUP" to "ON" and then set "MPEG" to "MPEG" in the setup display (page 75).
- When you connect an audio component with a builtin DTS decoder G

Set "DIGITAL OUT" in "AUDIO SETUP" to "ON" and then set "DTS" to "ON" in the setup display (page 75).

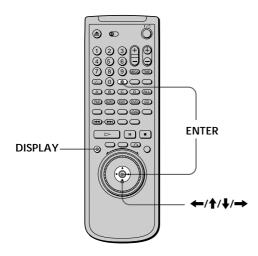


- When you do not connect an audio component with a built-in Dolby Digital decoder, do not set "DOLBY DIGITAL" to "DOLBY DIGITAL."
- When you do not connect an audio component with a built-in MPEG decoder, do not set "MPEG" to "MPEG."
- When you do not connect an audio component with a built-in DTS decoder, do not set "DTS" to "ON."



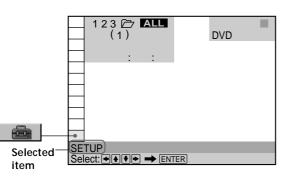
Selecting the Language for the On-Screen Display

You can select the language for the setup display, the Control Menu display or the messages displayed on the screen. The default setting is "ENGLISH."



1 When the player is in stop mode, **ps**s DISPLAY and select "SETUP" using ↑/ ↓.

The on-screen menu items are different depending on whether there is a disc in the player or not.

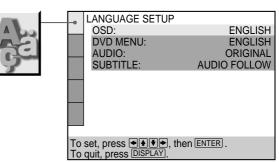


2 Press ENTER.

The setup display appears on the TV screen.

	LANGUAGE SETUP	
	OSD:	ENGLISH
	DVD MENU:	ENGLISH
	AUDIO:	ORIGINAL
	SUBTITLE:	AUDIO FOLLOW
-		
To set, press ●●●, thenENTER . To quit, press DISPLAY.		

3 Select "LANGUAGE SETUP" using ↑/↓, and then press ENTER.



4 Select "OSD" using ↑/ ↓, then pess → or ENTER. The languages you can select are displayed.

	LANGUAGE SETUP	
	OSD:	ENGLISH
	DVD MENU:	ENGLISH
	AUDIO:	FRANÇAIS
	SUBTITLE:	DEUTSCH
		ITALIANO
		ESPAÑOL
		NEDERLANDS
		DANSK
		SVENSKA
		▼
To set, press ●●●, then ENTER. To quit, press DISPLAY.		

5 Select the desized language using ↑/↓, then press ENTER.

	CHOIX DE LA LANGUE	
	ECRANS:	FRANÇAIS
	MENU DVD :	ENGLISH
	AUDIO:	ORIGINAL
	SOUS-TITRE:	IDEM AUDIO
PO	ur le réglage, appuyez sur ENTER . Pour quitter, app	
Sui	ENTERJ. Pour quiller, appl	uyez sur DISPLAT

6 Press DISPLAY.

The setup display disappears.

7 Press DISPLAY repeatedly to turn offthe on-screen menu.

To return to the previous screen Press SRETURN.

To quit while making a selection Press DISPLAY.

Note

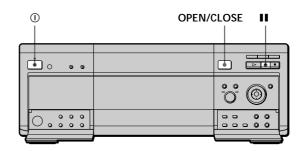
The languages you can select are the ones displayed in Step 4. For details, see page 67.

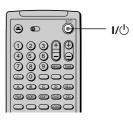
Operation Sound Effects (Sound Feedback)

The player beeps when the following operations are performed.

The default setting of the Sound Feedback function is set to off.

Operation	Operation sound
Power is turned on	One beep
Power is turned off	Two beeps
⊳ is pressed	One beep
■ is pressed	Two beeps
Playback is stopped	One long beep
Operation is not possible	Three beeps





1 Press ① on the player then pess I/ ⁽¹⁾ on the remote.

The power indicator lights up in green.

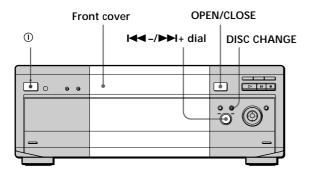
- **2** Press OPEN/CLOSE to open the front cover
- 3 Press and hold II on the player for mor than thee seconds.You will hear one beep and the Sound Feedback function is turned on.

To turn off the Sound Feedback Function

When the front cover is open, press and hold **II** on the player for more than three seconds. You will hear two beeps and the Sound Feedback function is turned off.

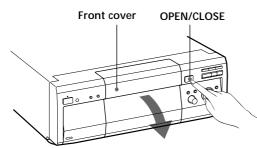
Inserting Discs

You can insert up to 301 discs into the disc slots (including the EASY PLAY slot) in this player.

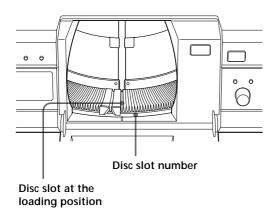


- 1 Press 1 to turn on the player
- 2 Press OPEN/CLOSE.

The front cover opens.



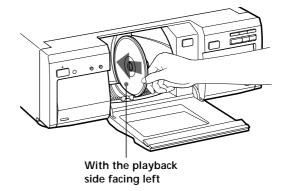
- **3** Press DISC CHANGE to turn the indicator on.
- 4 Turn the I ← / ►►I+ dial until you find the disc slot where you want to insert a disc, while checking the disc slot number indicated on theofint panel display or by the slot.



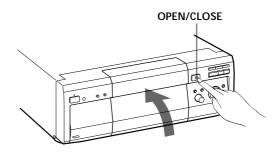
5 Insert a disc with the playback side facing left.

Notes

- Make sure you have inserted the disc into each slot at a right angle to the rotary table. If the disc is not put in straight, it may damage the player or the disc.
- Gently place the disc all the way into the slot and do not release the disc until it is completely seated.



- 6 Repeat Steps 4 and 5 to insert mondiscs.
- 7 Close the font cover by pessing OPEN/CLOSE.



The rotary table turns and the disc slot at the loading position is set to the playing position.

 $\overleftrightarrow{\mathbf{V}}$ You can select a disc slot number by skipping by 10 slots When you select the disc slot number in Step 4, press DISC SKIP +/- on the remote. Ten disc slots each before and after from the current disc slot number will be skipped.

Notes

• When you insert an 8 cm (3-inch) CD, be sure to attach a Sony CD-single adaptor (not supplied) to the disc <u>and only use the EASY PLAY slot.</u>

Do not insert an empty $8\ {\rm cm}$ (3-inch) CD adaptor. It may damage the player.

- Do not attach anything such as stickers or sleeves to discs. It may damage the player or the disc.
- Do not turn the turntable by hand.
- Do not reach inside of the turntable compartment. Always follow the correct steps for inserting and removing disc.
- When transporting the player, remove all discs from the player. Failure to remove the discs may cause damage to the player.

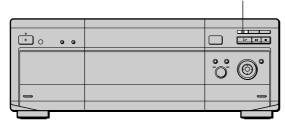
- When closing the front cover, be careful not to let anything get caught between the door and the player.
- Do not insert anything other than a DVD, Audio CD or Video CD into the player.

Using the EASY PLAY slot

The EASY PLAY slot can be used separately from other slots for the purpose of inserting a disc you want to play immediately.

The EASY PLAY disc is numbered 301. When you use the Program Play or Disc Browser function, or search for a disc by slot number, enter the disc in the EASY PLAY slot as disc number 301.



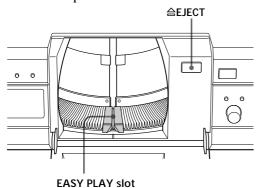




To insert a disc to the EASY PLAY slot

1 Press EASY PLAY.

The EASY PLAY indicator lights up on the player and the EASY PLAY slot comes to the loading position, the front cover opens.



- 2 Insert the disc.
- **3** Press EASY PLAY again.

The front cover closes and playback of the EASY PLAY disc starts.

If you press EASY PLAY when there is a disc in the EASY PLAY slot

The player loads the disc information and starts playback of the disc.

ţ

"EZ" appears in the front panel display when the EASY PLAY slot is being used.

To remove the disc from the EASY PLAY slot

- **1** Press OPEN/CLOSE to open the front cover The front cover opens.
- **2** Press EASY PLAY.

The EASY PLAY indicator lights up on the player and the EASY PLAY slot comes to the loading position.

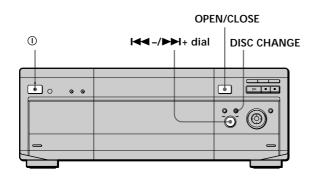
3 Press ≙EJECT on the player

The loading guide rises so that you can remove the disc easily.

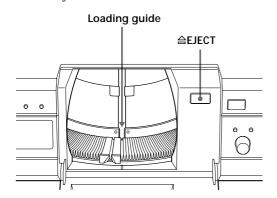
4 Remove the disc.

Getting Started

Removing discs



- **1** Press ① to turn on the player
- 2 Press OPEN/CLOSE.
- **3** Press DISC CHANGE to turn the indicator on.
- 4 Turn the I ← / → I + dial until you find the disc you want to emove, while checking the disc slot number indicated on the fint panel display or by the slot.
- 5 Press ≙EJECT on the player The loading guide rises so that you can remove the disc easily.



- 6 Remove the disc.
- 7 Repeat Steps 4 to 6 toemove other discs.
- 8 Close the font cover by pessing OPEN/CLOSE.

If you replace a disc in Step 6

The loading guide automatically goes down after few seconds. If you want to place another disc in the same slot, wait until the loading guide goes down before inserting the disc.

Note

The loading guide automatically goes down when you make another operation.

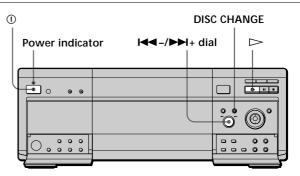
Playing Discs

This chapter describes how to play a DVD/CD/VIDEO CD.

When you play a disc recorded in the NTSC color system, the player outputs the video signal or the setup display etc. in the NTSC color system and the picture may not appear on PAL color system televisions. In this case, open the disc tray and remove the disc.

Playing Discs **OVD CD**

Depending on the DVD or VIDEO CD, some operations may be different or restricted. Refer to the instructions supplied with your disc.





1 Turn on your TV

Turn on the TV and select the video input so that you can view the pictures from this player.

When using a eceiver (amplifier) Turn on the receiver (amplifier) and select the appropriate position so that you can listen to the sound from this player.

- **2** Press ① to place the player in standby mode. The player enters standby mode and the power indicator lights up in red.
- **3** Press I/ ⁽¹⁾ on the emote to turn on the player The power indicator lights up in green.
- **4** Press ⊳.

The player starts playback. Adjust the volume on the TV or the receiver (amplifier).

To change the disc

Press DISC CHANGE to turn the indicator on. Then turn the $| \blacktriangleleft | - / \triangleright | +$ dial until the desired disc number appears on the front panel display. Press the $| \blacktriangleleft | - / \triangleright | +$ dial to start playback.

After following Step 4

■When playing a DVD

A DVD menu or title menu may appear on the TV screen (see page 28).

■When playing a VIDEO CD

Depending on the VIDEO CD, a menu may appear on the TV screen. You can play the disc interactively by following the instructions on the menu. (PBC Playback, see page 29.)

To turn on the player

 $\ensuremath{\mathsf{Press}}\ensuremath{\mathbbm 0}$ on the player. The player enters standby mode and the power indicator lights up in red.

Then press I/(!) on the remote. The player turns on and the power indicator lights up in green. In standby mode, the player also turns on by pressing \triangleright .

To turn off the player

Press I/\odot on the remote. The player enters standby mode and the power indicator lights up in red.

To disconnect the power of the player, press ① on the player.

Notes on playing DTS sound tracks on a CD

- Do not play DTS sound tracks without first connecting the player to an audio component having a built-in DTS decoder . The player outputs the DTS signal via the DIGIT AL OUT OPTICAL and COAXIAL connectors even if "DTS" in "AUDIO SETUP" is set to "OFF" in the setup display , and may af fect your ears or cause your speakers to be damaged.
- Set the sound to "STEREO" when you play DTS sound tracks on a CD. (See "Changing the Sound" on page 47.) If you set the sound to "1/L" or "2/R," no sound will come fr om the DIGITAL OUT OPTICAL and COAXIAL connectors.
- If you play a CD with a DTS sound track, a loud noise may come out fr om the AUDIO OUT connectors, af fecting your ears or causing the speakers to be damaged.

Notes on playing DTS sound tracks on a DVD

- The signals of the DTS sound tracks ar e output from the DIGITAL OUT OPTICAL and COAXIAL connectors only No sound will be output from the AUDIO OUT connectors.
- If the player is connected to an audio component lacking a built-in DTS decoder, do not set "DTS" in "DIGITAL OUT" to "ON" in the setup display. Other wise, when you play the DTS sound track, a loud noise will come out from the speakers, affecting your ears or causing the speakers to be damaged.
- When you set "DTS" in "AUDIO SETUP" to "OFF," no sound will come out fr om the DIGITAL OUT OPTICAL and COAXIAL connectors even if you play DTS sound tracks on DVDs.

- If you leave the player or the r emote in pause or stop mode for 15 minutes, the scr een saver image appears automatically . It will also appear if you play back a CD for mor e than 15 minutes. To make the scr een saver image go away , press ▷. (If you want to set the scr een saver function to of f, see page 69.)
- If you don't operate the player or the r emote for mor e than 30 minutes when a disc is not being played, the player automatically enters the standby mode. (Auto Power Of f function)
- While playing a disc, do not tur n off the player by pr essing ①. Doing so may cancel the settings of the menu. When you turn off the player, press first to stop playback and then pr ess 1/⁽¹⁾ on the r emote. After the power indicator lights up in r ed and the player enters standby mode, pr ess ① on the player.

Playing Discs

Additional operations DIRECT SEARCH **|⊲ −**/**▶▶|**+ \triangleright н • o 0 0 -0. 0 \bigcirc 000 0 ▲ ۲ Ð O 123 456 789 \oplus DISC SKIP FLE SOM EET OVD CD 00000 -----11 \triangleright

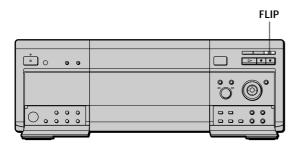
То	Operation
Select a disc	On the player: Press DISC CHANGE to turn the indicator on. Then turn the I◀◀ -/ ►►I+ dial until the desired disc number appears on the front panel display Press the I◀◀ -/►►I+ dial to start playback
Skip empty disc slots while selecting a disc	Press DISC SKIP +/- on the remote
Stop	Press
Pause	Press II
Resume play after pause	Press II or 🗁
Go to the next chapter, track or scene in continuous play mode	On the player: Press DIRECT SEARCH to turn it on and turn the I◀◀ -/▶▶I+ dial clockwise On the remote: Press ▶►I
Go back to the preceding chapter, track or scene in continuous play mode	On the player: Press DIRECT SEARCH to turn it on and turn the I◀◀ -/▶►I+ dial counterclockwise On the remote: Press I◀◀
Stop play and remove the disc	On the player: Press OPEN/CLOSE, followed by

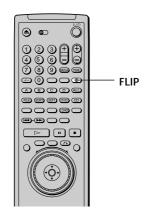
You can play discs in various modes such as Program Play using the on-screen menu (Control Menu). For Control Menu operations, see page 41.

Playing Side B (FLIP)

You can play side B without ejecting the disc to turn it over.

"Side B" is the side facing right when you insert the disc into the slot.





While playing a disc, pess FLIP. While side B is being played, $\widehat{\mathcal{C}_{FLIP}}$ appears on the TV.



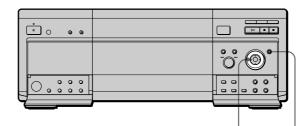
Y To return to side A Press FLIP again.

Notes

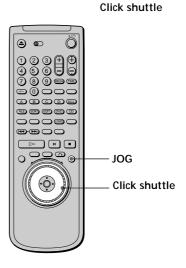
- Playback does not continue fr om side A to side B.
- Side B contents ar e not played even if you select the ALL DISCS mode.
 - Program Play, Repeat Play, Bookmark, Disc Browser, Custom Parental Control or Shuf fle Play cannot be set with side B contents.
 - Playback Memor y settings ar e not ef fective for side B.
 - When you flip the disc, Pr ogram Play, Repeat Play, and Shuf fle Play settings for side A ar e cancelled.

Playing at Various Speeds/ Frame by Frame

Using the click shuttle and the JOG button/indicator, you can play back a DVD/CD/VIDEO CD at various speeds or frame by frame. Each time you press JOG, it changes between shuttle mode and jog mode.



JOG



To change the playback speed (Shuttle mode)

Turn the click shuttle. The playback speed changes depending on the turning direction and angle as follows:

When you play back a DVD

goes to $2 \rightarrow 0$ or $2 \rightarrow 0$ at once.

During playback

25

During pause

- 1 ► Slow (playback dir ection)
- ↓
 2 ► Slow (playback dir ection slower than "1 ► ")

```
‡
∎ Pause
```

\$
\$
2 ◄ \$ Slow (opposite dir ection - slower than "1 ◄ \$")
\$
\$
1

1 - Slow (opposite dir ection)

When you play back a CD/VIDEO CD

During playback

* CD Only

If you tur n the click shuttle quickly , the playback speed goes to 2 \Longrightarrow or 2 $\blacktriangleleft \triangleleft$ at once.

During pause (VIDEO CD only)

```
1 ► Slow (playback dir ection)
2 ► Slow (playback dir ection - slower than "1 ►")
1 Pause
```

To return to continuous play

Press \triangleright .

Note

Depending on the DVD/VIDEO CD, you may not be able to do some of the operations described.

To play the disc frame by frame (Jog mode) DVD (VDE)

1 Press JOG.

JOG lights up during jog mode. When you press JOG on the player, it pauses.

2 Turn the click shuttle.

Depending on the turning speed, playback goes to frame-by-frame playback in the direction that the click shuttle is turned. If you turn the click shuttle at a constant speed for a while, the playback speed goes to slow or normal.

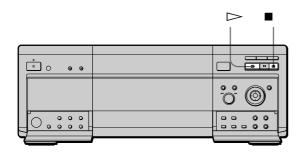
To return to Continuous Play

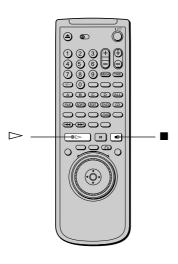
Press ⊳.

- The JOG indicator shows the mode of the cor responding click shuttle. For example, when the JOG indicator on the r emote is not lit, the r emote click shuttle will r emain in the shuttle mode even if the indicator on the player is lit.
- If you don't operate the click shuttle for about 20 seconds after pressing JOG, it r eturns to shuttle mode. On the player $\,$, it stays in jog mode.

Resuming Playback from the Point Where You Stopped the Disc (Resume Play) OVD (Resume Play)

The player remembers the point where you stopped the disc, and when "RESUME" appears on the front panel display, you can resume playback from that point. Resume Play will work even if the player enters standby mode by pressing $1/(\frac{1}{2})$ on the remote.





 While playing a disc, pess ■ to stop playback. "RESUME" appears on the front panel display and "Disc will restart from current point. To start from beginning, press STOP again." appears on the TV screen.

If "RESUME" does not appear, Resume Play is not available.

2 Press \triangleright .

The player starts playback from the point where you stopped the disc in Step 1.

Y To play from the beginning of the disc

When the playing time appears on the fr ont panel display befor e you start playing, pr ess \blacksquare to r eset the playing time, then pr ess \triangleright .

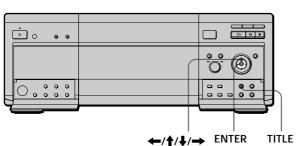
- Resume Play may not be available on some DVDs.
- $\bullet \ {\rm Resume} \ {\rm Play} \ {\rm is} \ {\rm not} \ {\rm available} \ {\rm in} \ {\rm Shuf} \quad {\rm fle} \ {\rm or} \ {\rm Pr} \ {\rm ogram} \ {\rm Play} \ {\rm mode}.$
- Depending on wher e you stopped the disc, the player may resume playback fr om a dif ferent point.
- The point wher e you stopped playing is clear $% \left({{{\mathbf{F}}_{\mathbf{r}}}^{\mathbf{r}}} \right)$ ed when:
- you open the front cover
- you turn the power of f by pressing ${\rm \textcircled{0}}$ on the player
- you change the play mode
 you start playback after selecting a disc, title, chapter or
- track
 you change the settings in the setup display
- you load disc information by pressing LOAD
- you press MEGA CONTROL (MEGA on the remote)
- you use the DISC BROWSER function

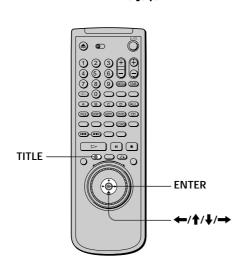
Using the DVD's Menu 🖤

Some DVDs have a title menu or a DVD menu that is provided with DVDs only.

Using the title menu

A DVD is divided into long sections of a picture or a music feature called "titles." When you play a DVD which contains several titles, you can select the title you want using the title menu.





1 Press TITLE.

The title menu appears on the TV screen. The contents of the menu vary from disc to disc.

2 Press ←/↑/↓/→ to select the title you want to play.

Depending on the disc, you can use the number buttons to select the title.

3 Press ENTER.

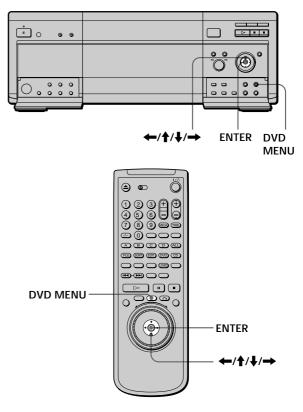
The player starts playing the selected title.

Notes

- On some DVDs, you may not be able to select the title.
- On some DVDs, a "title menu" may simply be called a "menu" or "title" in the instructions supplied with the disc. "Press ENTER." may also be expressed as "Press SELECT"

Using the DVD menu

Some DVDs allow you to select the disc contents using a menu. When you play these DVDs, you can select the language for the subtitles, the language for the sound, etc., using the DVD menu.



1 Press DVD MENU.

The DVD menu appears on the TV screen. The contents of the menu vary from disc to disc.

2 Press ←/ ↑/ ↓/ → to select the item you want to change.

Depending on the disc, you can use the number buttons to select the item.

- **3** To change other items, expeat Step 2.
- 4 Press ENTER.

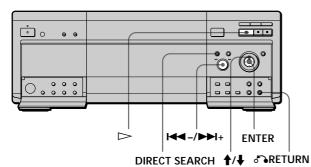
Q If you want to select the language for the DVD menu Change the setting using "DVD MENU" in "LANGUAGE SETUP" in the setup display. For details, see page 67.

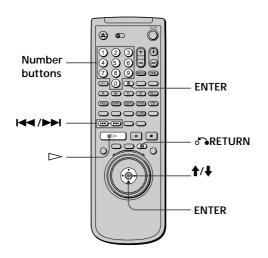
Note

Depending on the DVD, a "DVD menu" may simply be called a "menu" in the instructions supplied with the disc.

Playing VIDEO CDs with PBC Functions (PBC Playback)

When playing VIDEO CDs with PBC (Play Back Control) functions (Ver. 2.0 discs), you can enjoy simple interactive operations, search functions, and other such operations. PBC Playback allows you to play VIDEO CDs interactively by following the menu on the TV screen. On this player, you can use the number buttons, ENTER, $| \blacktriangleleft |$, $| \uparrow |$ and $d \cap RETURN$ during PBC Playback. When you use the $| \blacktriangleleft | - / \rightarrow | +$ dial on the player, press DIRECT SEARCH to turn it on.





- 1 Start playing a VIDEO CD with PBC functions by following Steps 1 to 4 in "Playing Discs" on page 22.
- 2 Select the item number you want.
 Press ↑/↓ to select the item number.
 You can also select the item number with the number buttons on the remote.
- 3 Press ENTER.

4 Follow the instructions in the menu for interactive operations.

Refer to the instructions supplied with the disc, as the operating procedure may differ according to the VIDEO CD.

To go back to the menu

Press ♂ RETURN, I , or ►► .

Y To cancel PBC playback of a VIDEO CD with PBC functions and play the disc in continuous play mode There are two ways.

- here are two ways. References to be a solution of the solution
- Befor e you star t playing, select the track you want using or ►►I, then pr ess ENTER or ►►.
- Befor e you star t playing, select the track number using the number buttons on the r emote, then pr ess ENTER or ▷. "Play without PBC" appears on the TV scr een and the player starts continuous play. You cannot play still pictur es such as a menu.

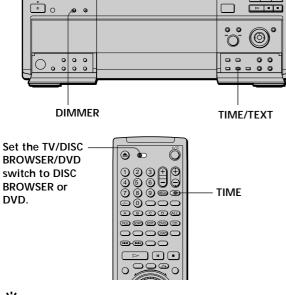
To return to PBC playback, pr ess \blacksquare twice then pr ess \triangleright .

Note

Depending on the VIDEO CD, "Pr ess ENTER" in Step 3 may be expressed as "Pr ess SELECT" in the instructions supplied with the disc. In this case, pr ess ▷.

Using the Front Panel Display OVD III CD

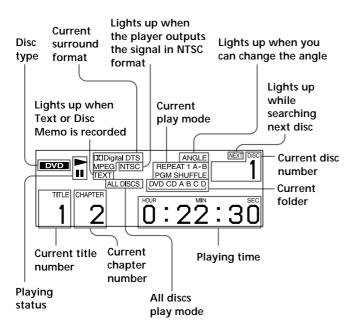
You can check information about the disc, such as the total number of titles or tracks or remaining time, using the front panel display.



Y To change the brightness of the front panel display Press DIMMER on the player . Each time you pr ess the button, the front panel display and indicators on the player become dark, of f, or bright in sequence. The power indicator is not tur ned of f by pressing DIMMER however . You can change the brightness also using the setup display (page 70).

When playing back a DVD **DVD**

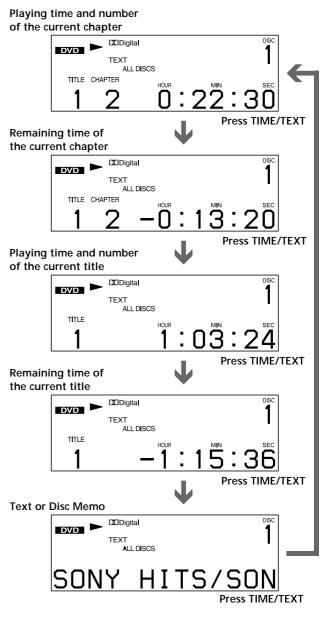
Displaying information while playing the disc



Checking the remaining time

Press TIME/TEXT on the player (or set the TV/DISC BROWSER/DVD switch to DVD or DISC BROWSER and press TIME on the remote).

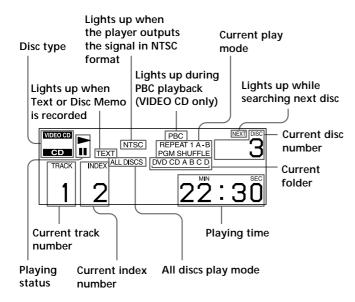
Each time you pr ess TIME/TEXT (or TIME) while playing the disc, the display changes as shown in the following chart.



- On some DVDs, the chapter number or time may not appear or you may not be able to change the fr ont panel display .
- While you ar e doing Shuf fle Play or Pr ogram Play, the playing time of the title and the r emaining time of the title ar e not displayed.

When playing back a CD/VIDEO CD

Displaying information while playing a disc

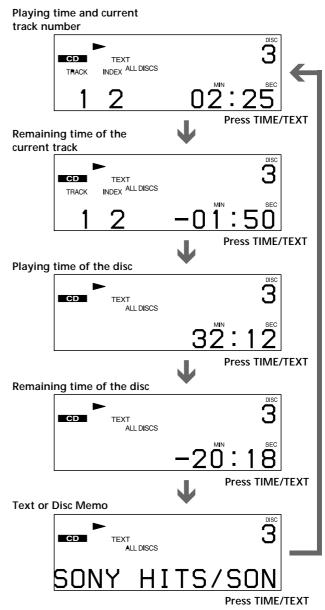


When playing VIDEO CDs with PBC functions The current scene number is displayed instead of the current track number and the current index number . In this case, the front panel display does not change when you press TIME/ TEXT If TEXT is recorded on the disc, the front panel display changes to the Text display when you press TIME/TEXT (see page 47).

Checking the remaining time

Press TIME/TEXT on the player (or set the TV/DISC BROWSER/DVD switch to DVD or DISC BROWSER and press TIME on the remote).

Each time you pr ess TIME/TEXT (or TIME) while playing the disc, the display changes as shown in the following chart.



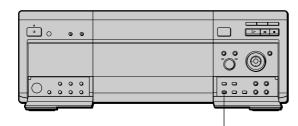
Note

While you are doing Shuf fle Play, or Program Play, the playing time of the disc and the r $\,$ emaining time of the disc ar $\,$ e not displayed.

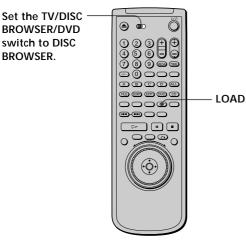
Displaying the Disc Information (Disc Browser)

You can check the contents of each disc loaded into the player.

Loading the disc information



LOAD



On the player:

Press LOAD when the player is in stop or standby mode.

On the remote:

- 1 Set the TV/DISC BROWSER/DVD switch to DISC BROWSER.
- **2** Press LOAD when the player is in stop or standby mode.

The player reads the disc information of all the discs and loads it into memory so that the disc type, titles and other text information can be displayed.

To cancel loading

Press .

 $\ddot{\mathbf{Q}}$ The player can load the disc information even when the power is in standby mode

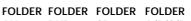
 $Press\,LOAD\,befor\,e\,tur\,ning\,on\,the\,player\,\,.\,\,The\,player\,r\,\,eads\,and\,\,loads\,all\,the\,disc\,infor\,\,mation.\,\,After\,loading\,is\,complete,\,the\,\,player\,r\,etur\,ns\,to\,the\,standby\,mode.$

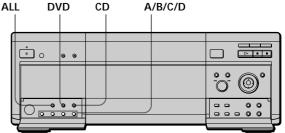
Displaying the information of the loaded discs 👔

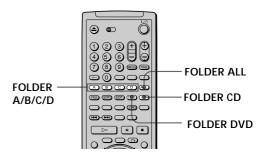
You can look at the loaded disc information on the Disc Browser, and also select the disc to be played on the Disc Browser.

The player has 7 folders (ALL, DVD, CD, A to D) and can display the Disc Browser of each folder.

All the discs in the player are filed in the "ALL" folder. At the same time, DVDs are automatically filed in the "DVD" folder, and CDs and VIDEO CDs are in the "CD" folder. You can file your discs as you like in the A to D folders. See "Filing Discs in the Folder" (page 34).

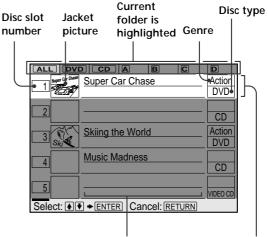






Press the folder button (FOLDERALL/DVD/CD/A/B/C/ D) of the desired folder in stop mode.

The Disc Browser of the selected folder appears.



Text information (DVD TEXT, CD TEXT, Disc Memo)

Current disc

Jacket picture

 $The jacket pictur\ erecorded on the disc appears automatically \quad . If the jacket pictur\ e is not r\ ecorded, the genr\ e pictur\ erecorded in the memory of the player is displayed when you select the genr e.$

Text information (DVD TEXT, CD TEXT or Disc Memo)

The text information (DVD TEXT or CD TEXT) recorded on the disc appears automatically. If no text information is recorded, you can store the text information (Disc Memo) yourself (page 36).

Genre

You can select the genr e of the disc yourself (page 38).

Disc type

The disc type appears automatically \cdot "?" appears when the player has not loaded the disc information in the memory. If the selected slot does not contain a disc, the text information row is blank.

Selecting the disc on the Disc Browser

- **1** Select the folder using the FOLDER buttons. The Disc Browser of the selected folder appears.
- 2 Select the disc by one of the following operations.
 pressing ↑/↓
 - pressing the number buttons and ENTER
 - pressing DISC CHANGE to turn the indicator on, followed by turning the I◄◀ -/▶►I+ dial and then pressing it
 - pressing DISC SKIP +/- on the remote

3 Press ENTER.

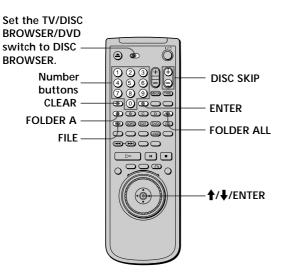
The Disc Browser disappears and playback starts.

To cancel using the Disc Browser Press SRETURN.

- If you press a FOLDER button during playback, the playback stops and the Disc Br owser appears. In this case, the Resume Play is not available.
- Even if you have r emoved the disc fr om the player, the disc information of the disc r emains on the Disc Br owser until you load the disc information again by pr essing LOAD or place a new disc in the same slot and play it.
- If you have inserted a disc whose disc information has not been loaded yet, you cannot select and play the disc on the Disc Browser. The player skips the disc whose disc infor mation differs fr om the loaded disc infor mation, and plays the next loaded disc.
- If you load or try to play an empty slot, it appears as a blank in the Disc Br owser. You cannot select this.
- $\bullet\,$ Even if the disc has a jacket pictur $e\,$ recorded on it, the jacket picture may not appear on the Disc Br $\,$ owser .
- Do not tur n off the player by pr essing ①. Doing so may cancel the settings. When you tur n off the player, press first to stop playback and then pr ess 1⁄℃ on the r emote. After the power indicator lights up in r ed and the player enters standby mode, press ① on the player.

Filing Discs in the Folder (Disc Browser - File Mode)

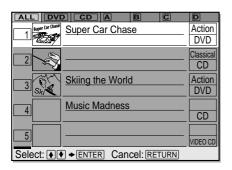
You can file your discs as you like in four individual folders, A to D. Even if you file discs from Folder ALL, DVD or CD to Folder A to D, those discs are not deleted from Folder ALL, DVD or CD. You can file up to 301 discs in one folder, and the same disc in different folders. If you file your favorite discs in a folder (A to D), you can play only those discs, or set Program Play, Shuffle Play and Repeat Play for the discs within the folder.



For example, to file DVDs in the no. 1 and no. 3 slots to Folder A

1 Press FOLDER ALL.

The Disc Browser of Folder ALL appears. You can also press FOLDER DVD to select a DVD.



2 Press FILE to enter the file mode. "FILE" appears at the right bottom corner.

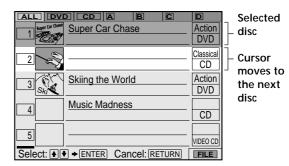
ALL	D CD A B C	D
1 Super Car Chase	Super Car Chase	Action DVD
2		Classical CD
3 Sk/	Skiing the World	Action DVD
4	Music Madness	CD
5		VIDEO CD
Select:	► ENTER Cancel: RETURN	FILE

3 Select the disc using the number buttons, then press ENTER.

You can also use \uparrow/\downarrow , DISC SKIP +/- on the remote. Or, you can press the DISC CHANGE button followed by turning and pressing the $|\triangleleft \neg/ \rightarrow \rightarrow|$ + dial.

4 Press ENTER.

To file more than one disc, repeat Steps 3 and 4.



5 Press FOLDER A.

"FILE" disappears from the Disc Browser. Then the Disc Browser for Folder A containing the selected discs appears.

ALL DVD CD A B C	D
1 Super Car Chase	Action DVD
3 Skiing the World	Action DVD
Select: • • ENTER Cancel: RETURN	

To cancel the file mode

Press *** RETURN**. "FILE" disappears from the Disc Browser.

ϔ You can sort the discs by genre or text information

The discs are listed first by slot number in the Disc Br $\,$ owser. You can then sort the discs by desired genre or text and store them (page 39).

Note

Do not tur n of f the player by pr essing ①. Doing so may cancel the settings. When you tur n of f the player, press \blacksquare first to stop playback and then pr ess I/\bigcirc on the r emote. After the power indicator lights up in r ed and the player enters standby mode, press ① on the player.

Deleting discs from a folder

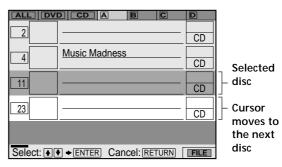
You can delete unnecessary discs from Folder A to D. You cannot delete discs from Folder ALL, DVD or CD unless you remove the disc from the player.

- Press the FOLDER (A/B/C/D) button of the disc you want to delete. The Disc Browser of the selected folder appears.
- **2** Press FILE to enter the file mode. "FILE" appears at the right bottom corner.
- **3** Select the disc using the number buttons, then press ENTER.

You can also use \uparrow/\downarrow , DISC SKIP +/- on the remote. Or, you can press the DISC CHANGE button followed by turning and pressing the $|\triangleleft \neg/ \rightarrow \downarrow|$ dial.

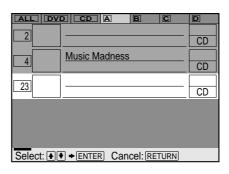
4 Press ENTER.

To delete other discs, repeat Steps 3 and 4.



5 Press CLEAR.

The disc disappears from the folder. "FILE" disappears from the Disc Browser.



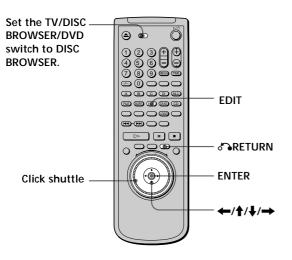
To cancel the file mode

Press ***RETURN**. "FILE" disappears from the Disc Browser.

Labeling Discs and Folders (Disc Browser - Edit Mode)

You can label the disc with a personal title of 16 characters (Disc Memo) when DVD TEXT or CD TEXT is not recorded on the disc, and the folders A through D with a title of 3 characters.

The Disc Memo can be anything you like, such as a title, musician's name, category or date of purchase. You can also assign a genre label to the disc. This will help you keep your discs organized.

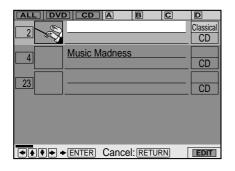


Labeling a disc or folder

1 Select the disc or folder you want to label. *To label a disc:*

Select the disc on the Disc Browser, then press EDIT to enter the edit mode.

The selected disc's text only is highlighted and "EDIT" appears at the right bottom corner.



To label a folder:

- 1 Press EDIT to enter the edit mode.
- 2 Press 1.
 - The folder A is highlighted.

ALL DVD CD A B C	D
	Classical
	CD
Music Madness	
	CD
	CD

3 Select the folder you want to label byepsing
 ←/→.

ALL DVD CD A B C	D
	Classical
	CD
Music Madness	
	CD
	CD

2 Press ENTER.

The DISC MEMO INPUT display appears when you have selected a disc.

The FOLDER NAME INPUT display appears when you have selected a folder.

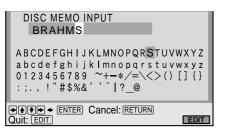
DISC MEMO INPUT
ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789 ~+-*/=\<>()[]{} :;.,!"#\$%&'`^!?_@

3 Select a character by pessing ←/ ↑/ ↓/ → or by turning the click shuttle. The selected character changes color.

DISC MEMO INPUT B ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijkImnopqrstuvwxyz 0123456789 ~+-*/=\<>()[]{} :;.,!"#\$%&'`^|?_@ Center Cancel: [RETURN] Quit: [EDIT]

4 Press ENTER.

5 Repeat Steps 3 and 4 to input other characters.



6 When you have entered all the characters for the Disc Memo or folder name, perss EDIT. The DISC MEMO INPUT display or the FOLDER NAME INPUT display disappears and the Disc Memo or folder name is stored.

	BRAHM	S SYMI	B PHONY	C 4	Classical CD
	Music M	adness			CD
23					CD
₹ ₽₽	ENTER	Cance	RETUR	RN]	EDIT

To cancel the edit mode

Press ***RETURN**. "EDIT" disappears from the Disc Browser.

To correct the characters

You can correct the characters using the |--|+| dial on the player or |-|+| on the remote. To use the |-|+| dial, press DIRECT SEARCH to turn it on.

- To erase the characters:
 - Move the cursor to the character you want to erase by pressing I or ▶►I or by turning the I -/ ▶►I + dial.
 - 2 Press CLEAR.
- To insert or overwrite the characters:
 - Move the cursor to the character you want to correct by pressing I ← or ►►I.
 - 2 Select the correct character by pressing (-////) or by turning the click shuttle.
 - 3 To insert the character, press ENTER.
 To overwrite, don't press ENTER but move the cursor by pressing ▶▶ or by turning the I◄◄ -/
 ▶► dial clockwise.

- Do not tur n off the player by pr essing ①. Doing so may cancel the settings. When you tur n off the player, press first to stop playback and then pr ess 1/⁽¹⁾ on the r emote. After the power indicator lights up in r ed and the player enters standby mode, press ① on the player.
- You can label up to 301 discs. When you have the player stor e a new disc in memory, the data for the old disc is erased.
- Even if you have r emoved the disc fr om the player, the disc information of the disc r emains on the Disc Br owser until you load the disc information again by pr essing LOAD or place a new disc in the same slot and play it.

Labeling the disc or folder using a keyboard

To label the disc or folder, you can use an IBM compatible PC keyboard of the USA model* (not supplied) on the DISC MEMO INPUT or FOLDER NAME INPUT display.

 $^*\,$ Power consumption must be 120 mA or less.

	°°° ©°
0	

KEYBOARD jack

- 1 Connect a keyboad to the KEYBOARD jack on the front panel when the power of the player is not on.
- 2 Turn on the player
- **3** Do Steps 1 and 2 of "Labeling a disc or folder" to display the DISC MEMO INPUT or FOLDER NAME INPUT display.
- 4 Input the characters on the keyboair
- 5 Press ENTER on the keyboad to stoe the Disc Memo or folder name. The DISC MEMO INPUT display or the FOLDER NAME INPUT display disappears and the Disc Memo or folder name is stored.

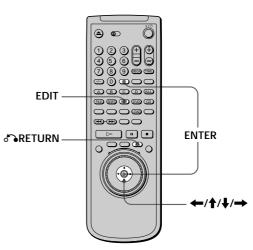
Notes

- If the cursor keys do not work cor rectly and you cannot complete the task using the keyboar d, disconnect the keyboar d then r econnect it to the player and tr y again.
- If the keyboar d is not the USA model, the characters may be input differently from those on the keys. The USA keyboar d layout is shown below .



Selecting a genre 👔

You can assign a genre to your disc.



- 1 Select the disc on the Disc Borwser using ↑/↓.
- **2** Press EDIT to enter the edit mode. The selected disc's text only is highlighted and "EDIT" appears at the right bottom corner.

ALL	_ DVI		D
1			
			CD
	13	Skiing the World	Action
2	Ski		DVD
		Music Madness	
3			CD
4			VIDEO CD
5			VIDEO CD
<		ENTER Cancel: RETURN	EDIT

3 Press \rightarrow , then ENTER.

The GENRE SELECTION display appears.

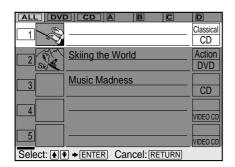
GENRE SE	LECTION	
Action Drama Non Feature Western	Classics Family Sci-fi	Comedy Horror Thriller
Classical Pop	Country Rock	Jazz/R&B Others
	R Cancel: R	ETURN EDIT

4 Select the generusing ←/ ↑/ ↓/ →, then press ENTER.

The genre for the selected disc is stored in memory. If no jacket picture is recorded in the disc, the genre picture in the memory of the player is displayed.

ALL DVD	CD A	В	C	D
-1 -				Classical CD
2 Ski 2	Skiing the World	d		Action DVD
3	Music Madness			CD
				VIDEO CD
				VIDEO CD
◆♦♦ ♦	ENTER Cance	I: (RETUR	RN	EDIT

5 Press SRETURN to return to the original Disc Browser display



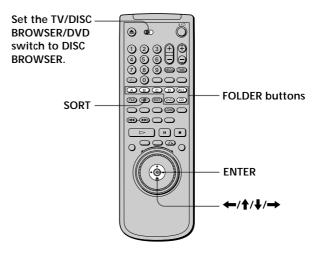
To cancel the edit mode

Press **ARETURN**. "EDIT" disappears from the Disc Browser.

Sorting Discs (Disc Browser - Sort Mode)

You can sort the discs in the folder by disc slot number, text information (DVD TEXT/CD TEXT/Disc Memo) or genre.

The text information is sorted alphabetically. In case of the genre, the selected genre comes first.



1 Select the folder you want to sort using the FOLDER buttons.

ALL DVD CD A B C	D
1 Super Car Chase	Action DVD
2 BRAHMS SYMPHONY4	Classical CD
3 Skiing the World	Action DVD
4 Music Madness	CD
5	VIDEO CD
Select: ▲ ▼ → ENTER Cancel: RETURN	

2 If you want to sort by text information or genr select the disc which has the desid text information or the gener by pressing ↑/↓.

		D
1 Super Car Chase	Super Car Chase	Action DVD
2	BRAHMS SYMPHONY4	Classical CD
3	Skiing the World	Action DVD
4	Music Madness	CD
5		VIDEO CD
Select:	► ENTER Cancel: RETURN	

3 Press SORT to enter the sort mode. The selected disc only is highlighted and "SORT" appears at the right bottom corner.

		7	В	С	D
1 Super Car Chase	Super Car	Chas	e		Action DVD
2	BRAHMS	SYMF	PHONY	′4	Classical CD
3	Skiing the	World	1		Action DVD
4	Music Mad	dness			CD
5					VIDEO CD
Spiect: 🗲	► ENTER	Can	cel: RE	TURN	SORT

Sorting item indicator (green)

4 Select the item you want to sort by qssing
 ←/→.

You can select the disc number, text information or genre. The sorting item indicator moves to the selected item.

	D
1 Super Car Chase	Action DVD
2 BRAHMS SYMPHONY4	Classical CD
3 Skiing the World	Action DVD
4 Music Madness	CD
5	VIDEO CD
Select: • • ENTER Cancel: RETURN	SORT

Sorting item indicator position when you sort by genre

5 Press ENTER.

The discs are sorted and re-displayed. The sorted order remains even if the power of the player is turned off.

		D
1 Super (ar Chase	Super Car Chase	Action DVD
3	Skiing the World	Action DVD
198	Highway Touring	Action DVD
2	BRAHMS SYMPHONY4	Classical CD
4	Music Madness	CD
Select:	► ENTER Cancel: RETURN	

$\mathbf{\dot{V}}$ The disc order in the same genre

The discs in the same genr $\,$ e are sorted by numerical or der of the disc slot number .

Note

Do not tur n off the player by pr essing ①. Doing so may cancel the settings. When you tur n off the player, press \blacksquare first to stop playback and then pr ess I/\bigcirc on the r emote. After the power indicator lights up in r ed and the player enters standby mode, press ① on the player.

To cancel the sort mode

Press SRETURN. "SORT" disappears from the Disc Browser.

Using Various Functions with the Control Menu

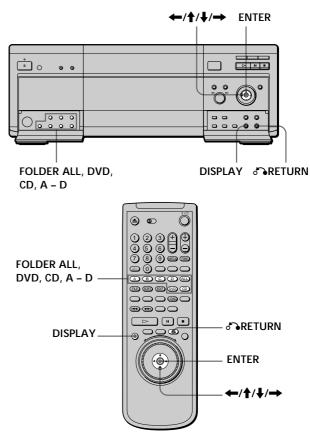
This chapter describes how to play discs in various modes and how to use the convenient features of the onscreen menu (Control Menu).

Using the Control Menu Display ID III CD

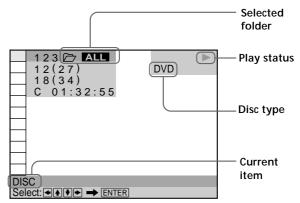
Using the Control Menu display, you can select the starting point, play scenes in any order you like, change the viewing angles, make Digital Cinema Sound settings, and other such operations.

The possible operations are different depending on the kind of disc.

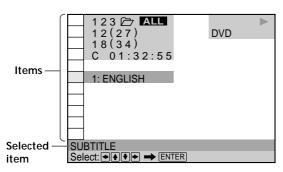
For details on each Control Menu display item, see pages 43 to 63.



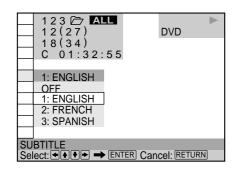
- **1** Select the desired folder.
- **2** Press DISPLAY to show the Control Menu display on the TV screen.



3 Select the item you want using \uparrow/\downarrow .



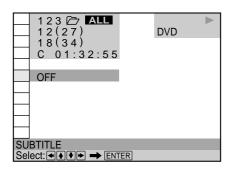
4 Press ENTER.



5 Select the item you want using \uparrow/\downarrow .

123 C ALL 12(27) 18(34) C 01:32:55	DVD	
1: ENGLISH OFF 1: ENGLISH 2: FRENCH 3: SPANISH		Selected item Items
SUBTITLE Select: ●●● ● ENTER	Cancel: RETURN	

6 Press ENTER.



To cancel while making a selection Press SRETURN.

To display other items

Each time you press DISPLAY, the Control Menu display changes as follows:

Control Menu display 1
+
Control Menu display 2
(The items except the first three items from the top
are changed to other items.)
+
ADVANCED display (see page 52)
+
Control Menu display off

The Control Menu display items are different depending on the disc.

You can select some items directly

Some items can be selected by pressing the corresponding button on the remote or on the player. In this case, only the item you selected is displayed. For instructions on using the buttons, see the pages of each relevant item. For a list of available buttons on the player and remote, see pages 88 to 91.

Note

Some Control Menu display items require operations other than selecting the setting. For details on these items, see the relevant pages.

Control Menu Item List



()__ DISC (page 44)

TITLE (DVD only) (page 44)/ SCENE (VIDEO CD during PBC playback only) (page 44)/ TRACK (VIDEO CD only) (page 44)

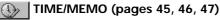
CHAPTER (DVD only) (page 44)/

INDEX (VIDEO CD only) (page 44)

TRACK (CD only) (page 44)

INDEX (CD only) (page 44)

You can select a disc or search for a point on the disc by selecting the title, chapter, track, index or scene.



(he) TIME/TEXT (pages 45, 46, 47)

You can check the playing time and remaining time of the current title, chapter, track and the total playing time or remaining time of the disc.

You can also search for a scene by inputting the time code. You can check the DVD TEXT or CD TEXT of the disc on the TV screen and the front panel display.

()) AUDIO (page 47)

If the DVD is recorded with multilingual tracks, you can select the language you want while playing the DVD. If the DVD is recorded in multiple audio formats (PCM, Dolby Digital, MPEG or DTS), you can select the audio format you want while playing the DVD.

With CDs or VIDEO CDs, you can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers.

SUBTITLE (DVD only) (page 49)

With DVDs on which multilingual subtitles are recorded, you can change the subtitle language whenever you want while playing the DVD, and turn it on or off whenever you want.

I 🥵 ANGLE (DVD only) (page 50)

With DVDs on which various angles (multi-angles) are recorded, you can change the angle of the scene.

VES (DVD only) (page 51)

Select a mode to enjoy multichannel surround sound such as Dolby Digital or MPEG.

Even if you connect only TV or front speakers, Virtual Enhanced Surround (VES) lets you enjoy 3D sound by using 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers.

ADVANCED (DVD only) (page 52)

You can check play information about the bit rate or the position where the disc is being played (layer).

(CUSTOM PARENTAL CONTROL (page 53)

Using a registered password, you can set playback restrictions for a desired disc.

The same password is used for both Parental Control (page 71) and Custom Parental Control.

💼 SETUP (page 64)

Using the setup display, you can do the initial setup, adjust the picture and sound and set the various outputs. You can also set a language for the subtitles and the setup display, limit playback by children, and so on. For details about the setup display, see page 64.

())) 1/ALL DISCS (page 55)

You can have the player play one or all of the discs in the selected folder. You can switch between one disc mode or all disc mode in the Program Play, Shuffle Play and Repeat Play modes.

PROGRAM (page 56)

You can play the contents of the disc(s) in the order you want by arranging the order of the titles, chapters or tracks on the disc(s) to create your own program.

SHUFFLE (page 58)

You can have the player "shuffle" titles, chapters or tracks and play them in a random order. Subsequent "shuffling" may produce a different playing order.



🔳 🥽 REPEAT (page 59)

You can play all of the titles/tracks on a disc or all of the discs, or a single title/chapter/track repeatedly.

Control Menu Item List

I 💷 A-B REPEAT (page 60)

You can play a specific portion of a title, chapter, or track repeatedly.

I III VIEWER (DVD, VIDEO CD only) (page 61)

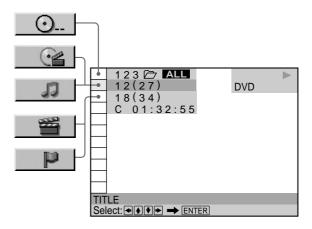
You can divide the screen into 9 sections (quick reference screen) and quickly search for a scene or a bookmark.

Searching for a Disc/Title/ Chapter/Track/Index/Scene

You can select a disc, or search the disc by title, chapter, track, index or scene.

Select "DISC," "TITLE," "CHAPTER," "TRACK," "INDEX" or "SCENE" after pressing DISPLAY. When you play back a DVD, "TITLE" and "CHAPTER" are displayed.

When you play back a VIDEO CD/CD, "TRACK" and "INDEX" are displayed. When you play back a VIDEO CD with PBC functions, "SCENE" is displayed.



1 Select "DISC," "TITLE," "CHAPTER," "TRACK," "INDEX" or "SCENE" using ↑/↓.

"* * (* *)" is highlighted (** refers to a number). The number in parentheses indicates the total number of titles, chapters, tracks, indexes or scenes.

123 (⊅ ALL 12(27) 18(34) C 01:32:55	DVD	
CHAPTER Select: €€€ → ENTER		

Checking the Playing Time and Remaining Time

2 Press \rightarrow or ENTER.

```
"* * (* *)" changes to "- - (* *)".
```

123 🗁 ALL 12(27)	DVD	
(34)		
C 01:32:55		
-		
CHAPTER		

3 Select the number of the disc, title, chapter, track, index or scene you want to search for using the number buttons, then press ENTER.

The player starts playback at the selected number. To cancel the number, press CLEAR before pressing ENTER.

To cancel while making a selection

Press & RETURN.

Notes

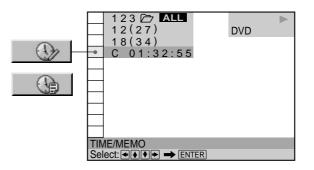
- The title, chapter or track number displayed is the same number recorded on the disc.
- The index numbers are not displayed during PBC playback of VIDEO CDs.
- If you cannot search the desired disc in Step 3, the disc is not included in the current folder. To search the desired disc from all the discs in the player, press FOLDER ALL to select the ALL folder.

You can search for a title, chapter, or track using the VIEWER See "Scanning the title, chapter, or track" on page 62 for more information about using the VIEWER.

You can check the playing time and remaining time of the current title, chapter or track and the total playing time or remaining time of the disc.

Press DISPLAY. Then press TIME/TEXT on the player, or set the TV/DISC BROWSER/DVD switch to DVD or DISC BROWSER and press TIME on the remote to change the time information.

You can also check the DVD TEXT, CD TEXT or Disc Memo (page 47).



When playing a DVD

- TIME/MEMO or TIME/TEXT
- C **:**: Playing time of the current chapter
- C -* * :* * : Remaining time of the current chapter
- T **:**: Playing time of the current title
- T -* * : * * : Remaining time of the current title

When playing a VIDEO CD (during PBC playback) ■ TIME/MEMO

• * * : * * : Playing time of the current scene

When playing a VIDEO CD (in continuous play) or CD

■ TIME/MEMO or TIME/TEXT

- T **:**: Playing time of the current track
- T -* * : * * : Remaining time of the current track
- D ******:******: Playing time of the current disc
- D -* * : * * : Remaining time of the current disc

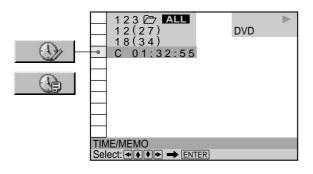
You can select "TIME/MEMO" or "TIME/TEXT" directly Press TIME/TEXT on the player or set the TV/DISC BROWSER/ DVD switch to DVD or DISC BROWSER and press TIME on the remote. Each time you press the button, the time information changes.

Selecting a Starting Point Using the Time Code 👔 🖤

You can search for a starting point by inputting the time code.

Select "TIME/MEMO" or "TIME/TEXT" after pressing DISPLAY.

The time code corresponds to the approximate actual playing time. For example, to search for a scene 2 hours 10 minutes 20 seconds past the beginning, input 2:10:20.

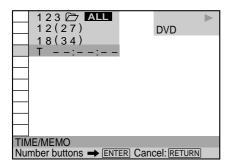


1 Select "C **:**: ** " (playing time of the current chapter) when playing a DVD.

1 2 3 2 ALL 1 2 (2 7) 1 8 (3 4) C 0 1 : 3 2 : 5 5	DVD	▲
$\frac{TIME/MEMO}{Select} \rightarrow \mathbb{E}$	_	

2 Press \rightarrow or ENTER.

Time code changes to "T – – : – – : – –."



3 Input the time code using the number buttons, then press ENTER.

The player starts playback at the selected time code. To cancel the number, press CLEAR before pressing ENTER.

To cancel while making a selection Press SRETURN.

Note

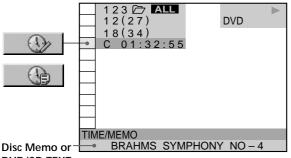
When you input the time code, input the playing time of the title, not the chapter or track time.

Viewing the Disc Information

You can check the DVD TEXT, CD TEXT or Disc Memo on the TV screen and the front panel display.

Press DISPLAY. Then press TIME/TEXT on the player, or set the TV/DISC BROWSER/DVD switch to DVD or DISC BROWSER and press TIME on the remote until DVD/CD TEXT is displayed. DVD TEXT and CD TEXT are information recorded on the disc which you cannot change.

The information is displayed at the bottom of the display. If you entered a Disc Memo in Edit mode of the Disc Browser function, the Disc Memo will appear at the bottom of the display instead. If the disc does not contain a label, "NO TEXT" is displayed.



DVD/CD TEXT

You can select "TIME/MEMO" or "TIME/TEXT" directly Press TIME/TEXT on the player, or set the TV/DISC BROWSER/DVD switch to DVD or DISC BROWSER and press TIME on the remote. To display DVD/CD TEXT or Disc Memo, press TIME/TEXT until DVD/CD TEXT or Disc Memo is displayed.

 $\overleftrightarrow{\mathbf{V}}$ You can view the entire DVD/CD TEXT or Disc Memo recorded on the disc

DVD/CD TEXT or Disc Memo is scrolled on the front panel display.

 $\dot{\mathbf{Q}}$ You can input the text information (Disc Memo)

You can input the Disc Memo on the Disc Browser (see page 36).

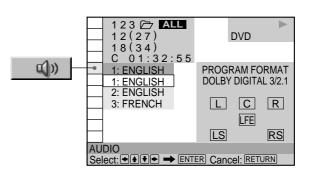
Notes

- "NO TEXT" appears when the DVD/CD TEXT is not recorded on the disc.
- This player can only display the first level of DVD/CD TEXT information.

Changing the Sound

If the DVD is recorded with multilingual tracks, you can select the language you want while playing the DVD. If the DVD is recorded in multiple audio formats (PCM, Dolby Digital, MPEG or DTS), you can select the audio format you want while playing the DVD. With multiplex CDs or VIDEO CDs, you can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers. In this case, the sound loses its stereo effect. For example, with a disc containing a song, the right channel may output the vocals and the left channel may output the instrumental. If you only want to hear the instrumental, you can select the left channel and hear it from both speakers.

Select "AUDIO" after pressing DISPLAY.



AUDIO When playing a DVD

Select the language. The languages you can select are different depending on the DVD. When 4 digits are displayed, they indicate a language code. Refer to "Language Code List" on page 87 to see which language the code represents.

When the same language is displayed two or more times, the DVD is recorded in multiple audio formats. The current audio format is shown on the "PROGRAM FORMAT" display.

When playing a VIDEO CD or a CD

The default setting is underlined.

- STEREO : The standard stereo sound
- 1/L : The sound of the left channel (monaural)
- 2/R : The sound of the right channel (monaural)

Changing the Sound

You can select "AUDIO" directly

Press AUDIO on the remote. Each time you press the button, the item changes.

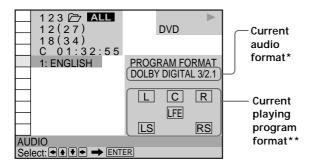
Notes

- Depending on the DVD, you may not be able to change the languages even if multilingual tracks are recorded on the DVD.
- While playing the CD/VIDEO CD, standard stereo playback will be resumed when:
- you open the front cover
- the player enters standby mode by pressing $I/ {\overset{}{\cup}}$ on the remote
- you turn the power off by pressing ① on the player
- While playing the DVD, the sound may be changed when:
 - you open the front cover
 - you change the title
- If "DTS" is set to "OFF" in "AUDIO SETUP," the DTS track selection option will not appear on the screen even if the disc contains DTS tracks.

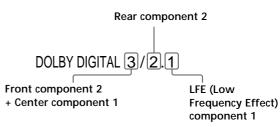
Displaying the audio information of the disc OVD

When you select "AUDIO," the channels being played are displayed on the screen.

For example, in Dolby Digital format, multiple signals ranging from monaural to 5.1 channel signals can be recorded on a DVD. Depending on the DVD, the number of the recorded channels may be different.



* "PCM," "DTS," "MPEG" or "DOLBY DIGITAL" is displayed. In case of "DOLBY DIGITAL," the channels in the playing track are displayed by numbers as follows: For Dolby Digital 5.1 ch:



- ** The letters in the program format display mean the following:
 - L: Front (left)
 - R: Front (right)
 - C: Center (monaural)
 - LS: Rear (left)
 - RS: Rear (right)
 - S: Rear (monaural) the rear component of the Dolby Surround processed stereo signal and the Dolby Digital signal.
 - LFE: LFE (Low Frequency Effect)

The display examples are as follows: • PCM (stereo)

F		

• Dolby Surround

C 0 1 : 3 2 : 5 5 1: ENGLISH	PROGRAM FORMAT DOLBY DIGITAL 2/0 DOLBY SURROUND LCR	
	S	
AUDIO Select:●●● ► ENTER		

• Dolby Digital 5.1ch

"LFE" appears only when a disc contains an LFE signal component. "LFE" remains on the "PROGRAM FORMAT" display even if the LFE signal component is not being output.

C 01:32:55 1: ENGLISH	PROGRAM FO DOLBY DIGITA	
	L C	R
	LS	RS
AUDIO Select: ●▲●● ENTER		

• MPEG

C 0 1 : 3 2 : 5 1: ENGLISH	5 5 PROGRAM MPEG 2/2	I FORMAT
	L	R
	LS	RS
AUDIO Select: ●●● ● ENTER		

•DTS

"LFE" is always enclosed in a solid line regardless of the LFE signal component being output.

C 01:32:55 1: ENGLISH	PROGRAM FORMAT DTS 3/2.1	
	L C R LFE	
	LS RS	
AUDIO Select: ●●●● → ENTER		

Note

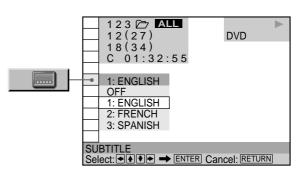
When the signal does not contain rear signal components such as LS, RS or S, the Virtual Enhanced Surround (VES) effect cannot be heard (page 51).

Displaying the Subtitles

With DVDs on which subtitles are recorded, you can turn the subtitles on and off whenever you want while playing the DVD.

With DVDs on which multilingual subtitles are recorded, you can change the subtitle language whenever you want while playing the DVD, and turn it on or off whenever you want. For example, you can select the language you want to practice and turn the subtitles on for better understanding.

Select "SUBTITLE" after pressing DISPLAY.



■ SUBTITLE

Select the language. The languages you can select are different depending on the DVD. When 4 digits are displayed, they indicate a language code. Refer to "Language Code List" on page 87 to see which language the code represents.

You can select "SUBTITLE" directly

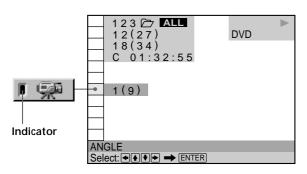
Press SUBTITLE on the remote. Each time you press the button, the item changes.

- When playing a DVD on which no subtitles are recorded, no subtitles appear.
- Depending on the DVD, you may not be able to turn the subtitles on even if they are recorded on the DVD.
- Depending on the DVD, you may not be able to turn the subtitles off.
- The type and number of languages for subtitles vary from disc to disc.
- Depending on the DVD, you may not be able to change the subtitles even if multilingual subtitles are recorded on it.
- While playing the DVD, the subtitle may change when: you open the front cover
 - you change the title

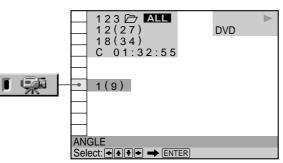
Changing the Angles 👔 🖤

With DVDs on which various angles (multi-angles) for a scene are recorded, you can change the angles. For example, while playing a scene of a train in motion, you can display the view from either the front of the train, the left window of the train or from the right window without having the train's movement interrupted.

Select "ANGLE" after pressing DISPLAY. When the angles can be changed, the "ANGLE" indicator lights up in green.



1 Select "ANGLE."



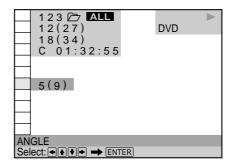
2 Press →.

The number of the angle changes to "–." The number in parentheses indicates the total number of angles.

123 ₯ ALL 12(27) 18(34) C 01:32:55 - (9)	DVD
ANGLE Number buttons ➡ ENTER	Cancel: RETURN

3 Select the angle number using the number buttons or ↑/↓, then press ENTER.

The angle is changed to the selected angle.



You can select the angle directly

Press ANGLE on the remote. Each time you press the button, the angle changes.

You can display different angles simultaneously (ANGLE VIEWER)

You can display all the angles recorded on the disc on the same screen, and start playback in continuous mode from the chosen angle directly. The angles are displayed on a screen divided in 9 sections. For details, see page 61.

- The number of angles varies from disc to disc or from scene to scene. The number of angles that can be changed on a scene is equal to the number of angles recorded for that scene.
- Depending on the DVD, you may not be able to change the angles even if multi-angles are recorded on the DVD.

Digital Cinema Sound Settings

Select a mode to enjoy multichannel surround sound such as Dolby Digital and MPEG.

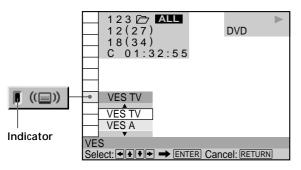
Even if you connect only a stereo TV, front speakers or use a 2+1 channel connection, Virtual Enhanced Surround (VES) lets you enjoy 3D sound by using 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L: left, R: right) without using actual

rear speakers. The surround sound signals are output from the AUDIO OUT connectors.

When you select a surround mode, the player does not output the following signals from the DIGITAL OUT OPTICAL or COAXIAL connector.

- Dolby Digital signals (when you set "DOLBY DIGITAL" in "AUDIO SETUP" to "D-PCM")
- MPEG audio signals

Select "VES" after pressing DISPLAY. When you select any item except "OFF," the "VES" indicator lights up in green.



VES

Select the desired item. For details on each item, see "Effects of each item."

The default setting is underlined.

- <u>OFF</u>
- VES TV
- VES A
- VES B
- VIRTUAL SEMI MULTI DIMENSION

Effects of each item

OFF

Outputs 2-channel signals for stereo sound. 5-channel signals for Dolby Digital sound of a DVD are mixed down to 2-channels.

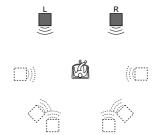
VES (Virtual Enhanced Surround) TV

Uses 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers. This mode is effective when the distance between the front L and R speakers is short, such as built-in speakers on a stereo TV.



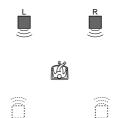
VES (Virtual Enhanced Surround) A

Uses 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers. The virtual speakers are reproduced as shown in the illustration below.



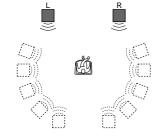
VES (Virtual Enhanced Surround) B

Uses 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers. The virtual speakers are reproduced as shown in the illustration below.



VIRTUAL SEMI MULTI DIMENSION

Uses 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers. This mode creates 5 sets of virtual speakers surrounding the listener at a 30° angle of elevation.



🍟 You can select "VES" directly

Press VES on the player. Each time you press the button, the item changes.

Notes

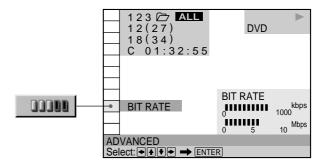
- When you select an item, the sound cuts off for a moment.
- When the playing signal does not contain the surround component, the effects may be difficult to hear even if you select "VES TV," "VES A," "VES B" or "VIRTUAL SEMI MULTI DIMENSION."
- Set the front speakers to form an equilateral triangle with the listening position at the top, or the effects may be difficult to hear even if you select "VES A," "VES B" or "VIRTUAL SEMI MULTI DIMENSION."
- When you select "VES TV," "VES A," "VES B" or "VIRTUAL SEMI MULTI DIMENSION," set the surround settings of the connected units, such as the amplifier, to OFF.

Checking the Play Information

You can check information such as the bit rate or the disc layer that is being played.

While playing a disc, the approximate bit rate of the playback picture is always displayed as Mbps (Mega bit per second) and the audio as kbps (kilo bit per second).

Select "ADVANCED" after pressing DISPLAY.



ADVANCED

The default setting is underlined.

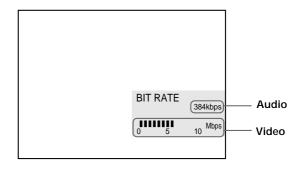
When playing a DVD

- BIT RATE: displays the bit rate.
- LAYER: displays the layer and the pick-up point.
- OFF: turns off the ADVANCED display.

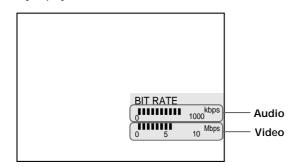
Displays of each item

By pressing DISPLAY repeatedly, you can display either "BIT RATE" or "LAYER," whichever was selected in "ADVANCED."

BIT RATE

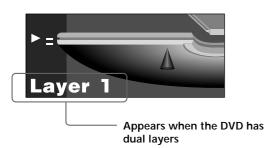


When you play MPEG audio sound tracks



Bit rate refers to the amount of video/audio data per second in a disc. The higher the bit rate, the larger the amount of data. When the bit rate level is high, there is a large amount of data. However, this does not always mean that you can get higher quality pictures or sounds.

LAYER



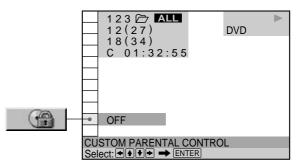
Indicates the approximate point where the disc is playing. If it is a dual-layer DVD, the player indicates which layer is being read ("Layer 0" or "Layer 1"). For details on the layers, see page 86 (DVD).

Locking Discs (Custom Parental Control)

Using a registered password, you can set playback restrictions for the desired disc(s).

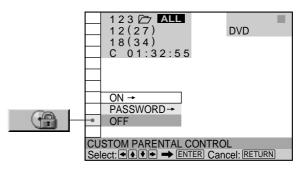
You can set the same Custom Parental Control password for up to 301 slots. When you have the player store a new disc in memory, the data for the old disc is erased. The same password is used for both Parental Control (page 71) and Custom Parental Control.

Select "CUSTOM PARENTAL CONTROL" after pressing DISPLAY.

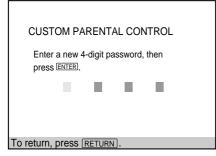


Setting the Custom Parental Control for a disc

- Select the disc you want to lock. If a disc is playing, press ■ to stop playback.
- 2 Select "CUSTOM PARENTAL CONTROL" using ↑/↓, then press ENTER.



- **3** Select "ON \rightarrow " using \uparrow/\downarrow , then press ENTER.
 - If you have not entered a password The display for entering a password appears.

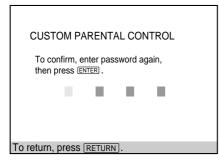


■ When you have already registered a password The display for confirming the password appears. Skip Step 4.

CUSTOM PARENTAL CONTROL
Enter password, then press ENTER.
To return, press [RETURN].

4 Enter a 4-digit password using the number buttons, then press ENTER.

The digits change to asterisks (\mathbf{X}), and the display for confirming the password appears.



5 Enter the same 4-digit password using the number buttons, then press ENTER.

"Custom parental control is set." appears and then the screen returns to the Control Menu display.

To return to the normal screen Press SRETURN.

To turn off the Custom Parental Control function

- 1 Select the disc for which you want to turn off the Custom Parental Control function.
- 2 Select "CUSTOM PARENTAL CONTROL" using ↑/↓, then press ENTER.
- 3 Select "OFF \rightarrow " using \uparrow/\downarrow , then press ENTER.
- 4 Enter your 4-digit password using the number buttons, then press ENTER.

To change the password

- 1 Select "CUSTOM PARENTAL CONTROL" using ↑/↓, then press ENTER.
- **2** Select "PASSWORD \rightarrow " using \uparrow/\downarrow , then press ENTER.
- **3** Enter your 4-digit password using the number buttons, then press ENTER.

The display for changing the password appears.

- 4 Enter a new 4-digit password using the number buttons, then press ENTER.
- **5** To confirm your password, re-enter it using the number buttons, then press ENTER.

Playing the disc for which the Custom Parental Control is set

1 Select the disc.

The CUSTOM PARENTAL CONTROL display appears.



2 Enter your 4-digit password using the number buttons, then press ENTER. The player starts playback.

لاً 🛱 If you forget your password

Enter the 6-digit number "199703" whenever the CUSTOM PARENTAL CONTROL display asks you for your password, then press ENTER. The display will ask you to enter a new 4-digit password.

Note

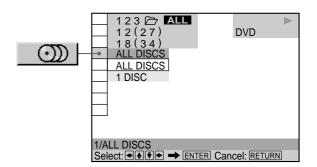
Unless you enter the password, the player cannot play the disc for which the Custom Parental Control is set. When you do not know the password, press OPEN/CLOSE and remove the disc.

Selecting the Disc Mode (1 Disc or All Discs)

You can have the player play one disc or all of the discs in the player.

Before setting Program Play, Shuffle Play, or Repeat Play, you must select whether to set those play modes on one disc or all of the discs.

Select "1/ALL DISCS" after pressing DISPLAY.



■ 1/ALL DISCS

- <u>ALL DISCS</u>: will play all of the discs in the player in consecutive order. Also allows you to set Program Play, Shuffle Play or Repeat Play for all of the loaded discs.
- 1 DISC: will play the selected disc to the end. Also allows you to set Program Play, Shuffle Play or Repeat Play for 1 disc only.

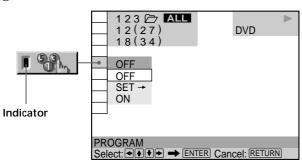
You can select the mode directly

Press 1/ALL DISCS on the remote or the player. Each time you press the button, 1 DISC or ALL DISCS mode is selected.

Creating Your Own Program (Program Play)

You can play the contents of the disc(s) in the order you want by arranging the order of the titles, chapters or tracks on the disc(s) and create your own program. One program can be stored in the player and contain up to 99 titles, chapters and tracks. By selecting "1/ALL DISCS," you can create a program for one or all of the discs in the player.

Select "PROGRAM" after pressing DISPLAY. When you select "ON," the "PROGRAM" indicator lights up in green.



PROGRAM

The default setting is underlined.

- OFF: plays normally.
- SET →: allows you to create your own program.
- ON: plays Program Play.

Note

If the program contains a disc which is not included in the current folder, the disc will not be played during Program Play. To play all the discs in the program select the ALL folder before you start Program Play.

Creating the program

1 Select "SET→" in "PROGRAM." The programming display appears and "1" is highlighted. S

Selected	folder

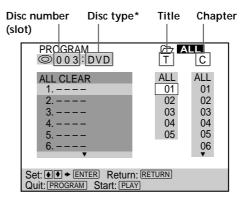
PROGRAM	
<u> </u>	I
ALL CLEAR	ALL
1	
2	
3	
4	
5 6	
0 ▼	
Set: • • ENTER	
Quit: PROGRAM Start: PLAY	

2 Press ENTER.

It is ready to set the first disc of a title or track for Program Play.

PROGRAM	T ALL
ALL CLEAR	ALL
2 3	
4 5 6	
▼	
Number buttons + ENTER Quit: PROGRAM Start: PL	

3 Select the disc you want to program using the number buttons or \uparrow/\downarrow , then press ENTER. To select the EASY PLAY disc, press 301. "EZ" appears at the disc number.

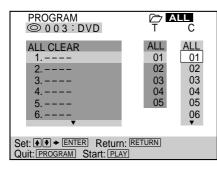


* "?" appears when the player has not loaded the disc information in the memory. If an empty slot is loaded, the disc type does not appear.

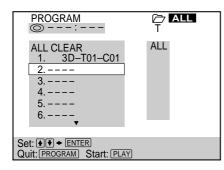
4 Select the title, chapter or track you want to program using \uparrow/\downarrow , then press ENTER. You can also use the number buttons and ENTER button to make a selection. In this case, the selected number is displayed on the screen.

When playing a DVD

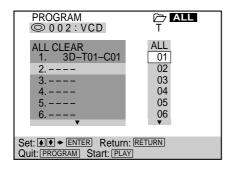
For example, select title 1, chapter 1 in disc 3. When both titles and chapters are recorded on the disc, select the title, then the chapter.







When playing a VIDEO CD or CD For example, select track 1 in disc 2.



5 To program other discs, titles, chapters or tracks, repeat Steps 3 and 4. The programmed discs, titles, chapters or tracks are

displayed in the selected order.

6 Press \triangleright to start Program Play.

To stop Program Play

Press CLEAR on the remote.

To cancel programming

Press PROGRAM on the remote.

To change the program

- 1 In Step 3, select the disc for which you want to change the program using \uparrow/\downarrow .
- 2 Follow Step 4 for new title, chapter or track programming.

To cancel the programmed order

To cancel all the titles, chapters or tracks in the programmed order, select "ALL CLEAR." To cancel the selected program, select the program using \uparrow/\downarrow then press CLEAR.

 $\overleftrightarrow{\mathbf{V}}$ The program remains even after Program Play ends When you press \triangleright , you can play the same program again.

Ŷ You can do Repeat Play or Shuffle Play of the programmed titles, chapters or tracks

During Program Play, press REPEAT or SHUFFLE. Or set "REPEAT" or "SHUFFLE" to "ON" in the Control Menu display.

You can select "PROGRAM" directly Press PROGRAM on the remote.

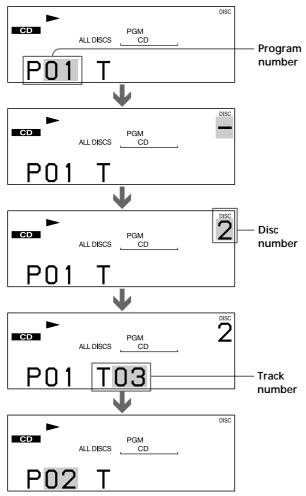
Ŷ For easier programming, load the disc information Press LOAD when the player is in standby or stop mode so that the player reads and loads the disc information.

Ö Disc types are abbreviated on-screen as follows. DVD : D VCD:V CD : C

Creating Your Own Program (Program Play)

You can select discs, titles, chapters and tracks for the program by looking at the front panel display You can program by looking at the front panel display instead of using the programming display on the TV screen. When you select Track 3 in a CD in disc slot 2 in the CD folder for

Program 1, the front panel display will appear as follows:



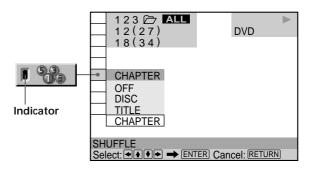
Notes

- The number of titles, chapters or tracks displayed are the same number of titles, chapters or tracks recorded on a disc.
- Program play is canceled when:
 - you open the front cover
 - the player enters standby mode by pressing I/ \circlearrowright on the remote
 - you turn the power off by pressing ${\rm \textcircled{0}}$ on the player
- You cannot select side B contents for Program Play.
- Depending on the DVD, you may not be able to perform Program Play.
- If you are using the PBC playback function, you must first stop the disc before you can set a program.

Playing in Random Order (Shuffle Play)

You can have the player "shuffle" discs, titles, chapters or tracks and play them in a random order. Subsequent "shuffling" may produce a different playing order. By selecting "1/ALL DISCS," you can have the player shuffle one disc or all of the discs in the selected folder.

Select "SHUFFLE" after pressing DISPLAY. When you select a shuffle mode other than "OFF," the "SHUFFLE" indicator lights up in green.



SHUFFLE

Selects the Shuffle Play setting. The default settings are underlined.

When playing a DVD and when Program Play is set to OFF

- OFF: does not play the disc(s) in random order.
- DISC*: has the player "shuffle" discs in the folder and play them in a random order.
- TITLE: has the player "shuffle" titles in the folder and play them in a random order.
- CHAPTER: has the player "shuffle" chapters in the folder and play them in a random order.

When playing a VIDEO CD or CD (when Program Play is set to OFF)

- OFF: does not play the disc(s) in random order.
- DISC*: has the player "shuffle" discs in the folder and play them in a random order.
- TRACK: has the player "shuffle" tracks in the folder and play them in a random order.

When playing a VIDEO CD, CD or DVD (when Program Play is set to ON)

- OFF: does not play the disc(s) in random order.
- ON: has the player "shuffle" titles or tracks selected in Program Play and play them in a random order.
- * Appears only when you select "ALL DISCS" in "1/ALL DISCS."

To stop Shuffle Play

Press CLEAR on the remote.

Ŷ You can set Shuffle Play while the disc is stopped After selecting the "SHUFFLE" option, press ▷. The player starts Shuffle Play.

You can select "SHUFFLE" directly

Press SHUFFLE on the player or the remote. Each time you press the button, the item changes.

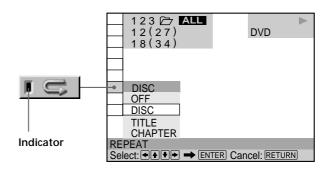
Notes

- Shuffle Play is canceled when:
- you open the front cover
- the player enters standby mode by pressing $I/ {\textcircled{}}$ on the remote
- you turn the power off by pressing ${\rm \textcircled{O}}$ on the player
- Depending on the DVD, you may not be able to perform Shuffle Play.
- Up to 96 chapters in a disc can be played in random order when "CHAPTER" is selected.
- You cannot perform Shuffle Play during PBC playback of VIDEO CDs (page 29).
- You cannot set Shuffle Play on side B contents.

Playing Repeatedly (Repeat Play) **WD CD**

You can play all discs, or all of the titles or tracks on a disc, or a single title, chapter or track repeatedly. In Shuffle or Program Play mode, the player repeats the titles or tracks in the shuffled or programmed order. By selecting "1/ALL DISCS," you can have the player repeat one disc or all of the discs in the selected folder. You cannot perform Repeat Play during PBC playback of VIDEO CDs (page 29).

Select "REPEAT" after pressing DISPLAY. When you select a repeat mode other than "OFF," the "REPEAT" indicator lights up in green.



REPEAT

Selects the Repeat Play setting. The default settings are underlined.

When playing a DVD and when Program Play and Shuffle Play are set to OFF

- OFF: does not play repeatedly.
- DISC: repeats all titles on the selected disc when you select "1 DISC" in "1/ALL DISCS," and repeats all titles in all discs in the folder when you select "ALL DISCS."
- TITLE: repeats the current title on a disc.
- CHAPTER: repeats the current chapter.

When playing a VIDEO CD/CD and when Program Play and Shuffle Play are set to OFF

- OFF: does not play repeatedly.
- DISC: repeats all tracks on the selected disc when you select "1 DISC" in "1/ALL DISCS," and repeats all tracks in all discs in the folder when you select "ALL DISCS."
- TRACK: repeats the current track.

When Program Play or Shuffle Play is on

- OFF: does not play repeatedly.
- ON: repeats Program Play or Shuffle Play.

To stop Repeat Play

Press CLEAR on the remote.

You can set Repeat Play while the disc is stopped After selecting the "REPEAT" option, press ▷. The player starts Repeat Play.

You can select "REPEAT" directly

Press REPEAT on the player or the remote. Each time you press the button, the item changes.

Notes

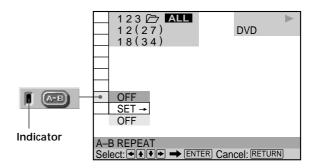
- Repeat play is canceled when:
 - you open the front cover
 - the player enters standby mode by pressing I/ on the remote
 - you turn the power off by pressing ① on the player
- Depending on the DVD, you may not be able to perform Repeat Play.
- You cannot set Repeat Play on side B contents.

Repeating a Specific Portion (A–B Repeat)

You can play a specific portion of a title, chapter or track repeatedly. This function is useful when you want to do such things as memorize lyrics.

During PBC Playback of VIDEO CDs (page 29), this function is available only while playing moving pictures.

Select "A-B REPEAT" after pressing DISPLAY. During A-B Repeat Play, the "A-B REPEAT" indicator lights up in green.



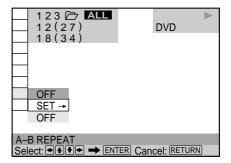
A-B REPEAT

The default setting is underlined.

- SET : sets the A and B points.
- <u>OFF</u>: does not play a specific portion of a title/chapter/ track repeatedly.

Setting a portion for A-B repeat

1 Select "A-B REPEAT" and press ENTER.

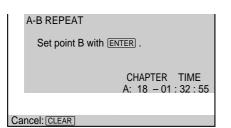


2 Select "SET→" and press ENTER. The A-B REPEAT setting display appears.

A-B REPEAT	
Set point A with ENTER .	
Return: RETURN	

3 During playback, when you find the starting point (point A) of the portion to be played repeatedly, press ENTER.

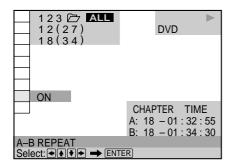
The starting point (point A) is set.



4 When you reach the ending point (point B), press ENTER again.

The set points are displayed and the player starts repeating this specific portion.

"A-B" appears on the front panel display during A-B repeat play.



To stop A-B Repeat Play

Press CLEAR on the remote.

Notes

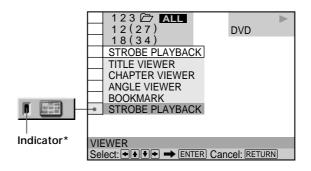
- You can set A-B Repeat for only one specific portion.
- A-B Repeat is canceled when:
- you open the front cover
- the player enters standby mode by pressing I/ on the remote
- you turn the power off by pressing ① on the player
- When you set A-B Repeat, the settings for Shuffle Play, Repeat Play, and Program Play are canceled.
- You may not be able to set A-B Repeat for some DVD or VIDEO CD scenes.
- You cannot set the start point (point A) on one disc and ending point (point B) on other disc.

Using the Quick Reference Screen (VIEWER) OVD

You can divide the screen into 9 sections (quick reference screen) and enjoy the following functions.

- STROBE PLAYBACK
- TITLE VIEWER (DVD only)
- CHAPTER VIEWER (DVD only)
- TRACK VIEWER (VIDEO CD only)
- ANGLE VIEWER (DVD only)
- BOOKMARK

Select "VIEWER" after pressing DISPLAY.



* The indicator lights up when a bookmark is in memory.

Dividing a track into 9 sections (STROBE PLAYBACK) **DVD V**

You can display 9 consecutive sections of the disc on the screen. If you are playing a disc, you can change the speed of the images on the screen by turning the click shuttle. When you press **II**, 9 still images around the pause position are displayed.

Select "STROBE PLAYBACK" in "VIEWER" and press ENTER. Nine consecutive scenes appear on the screen.

To cancel watching the strobe play Press SRETURN.

- Depending on the disc, there are some scenes you may not be able to watch with the strobe play function.
- The sound is muted when using this function.

Scanning the title, chapter, or track

You can check the first picture of titles, chapters or tracks of the disc, and start playback from the chosen title, chapter or track.

When playing a DVD, select "TITLE VIEWER" or "CHAPTER VIEWER" in "VIEWER" and press ENTER.

When playing a VIDEO CD, select "TRACK VIEWER" in "VIEWER" and press ENTER.

The screen will divide into 9 sections and show the first picture of each title, chapter or track.

To start playback from the selected picture

Select the picture using $\leftarrow/\uparrow/\downarrow/\rightarrow$, then press ENTER. Playback starts from the selected picture.

² When there are over 9 titles, chapters or tracks ▼ appears at the right bottom of the screen. Select the right bottom scene (the position 9) and use ↓ to display the next titles, tracks or chapters. To return to the previous scene, select the left top scene (the position 1) and press ↑.

1	2	3		
4	5	6		
7	8	9	▼	

You can check the number on the front panel display The number of the title, chapter or track you selected is displayed on the front panel display.

To cancel scanning the title, chapter or track Press SRETURN.

Notes

- Depending on the disc, you may not be able to scan the title, chapter or track.
- The sound is muted when using this function.

Displaying different angles simultaneously

With DVDs on which various angles (multi-angles) for a scene are recorded, you can display all of the angles recorded on the disc on the same screen, and start playback in continuous mode at the chosen angle. The angles are displayed on a screen divided in 9 sections.

Select "ANGLE VIEWER" in "VIEWER." The available angles appear on the screen.

To select one angle

Select the angle using $\leftarrow/\uparrow/\downarrow/\rightarrow$, then press ENTER. The selected angle is displayed.

To cancel displaying multi-angles Press & RETURN.

 $\mathbf{\hat{V}}$ You can check the angle number on the front panel display The number of the angle you selected is displayed on the front panel display.

- If only one angle is recorded on the disc, then you will not be able to use this function.
- Depending on the DVD, you may not be able to change the angles even if multi-angles are recorded on the DVD.
- When a scene for which various angles (multi-angles) are not recorded appears when using this function, the player returns to normal playback.
- The sound is muted when using this function.

Setting and selecting favorite scene (Bookmark) 👔 DVD VIEO

You can have the player store specific portions of the disc in memory and play them immediately whenever you want (Bookmark). Up to 9 bookmarks per disc for up to 301 slots can be stored in memory.

Select "BOOKMARK" in "VIEWER." The bookmarks appear on the screen.

To start playback from the selected picture

Select the picture using $\leftarrow/\uparrow/\downarrow/\rightarrow$, then press ENTER. Playback starts from the selected picture.

To cancel scanning the bookmark pictures Press S RETURN.

To reset the bookmark

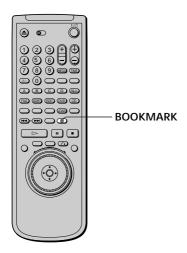
Select the bookmark you want to reset using $\leftarrow/\uparrow/\downarrow/$ \rightarrow , then press CLEAR.

To reset all of the bookmarks for the player

Select "BOOKMARK RESET→" under "CUSTOM SETUP" in the setup display. For details on resetting all of the bookmarks for the player, see page 70.

Setting a bookmark

During playback, when you find a scene to be bookmarked, press BOOKMARK on the remote.



You can check the bookmark number on the front panel display

The number of the bookmark you selected is displayed on the front panel display.

- The player can store in memory the bookmarks of up to 301 slots. When you have the player store a new disc in memory, the data for the old disc is erased.
- Depending on the DVD, you may not be able to set the bookmark.
- Do not turn off the player by pressing ①. Doing so may cancel the settings. When you turn off the player, press first to stop playback and then press I/① on the remote. After the power indicator lights up in red and the player enters standby mode, press ① on the player.
- The sound is muted when using this function.

Settings and Adjustments

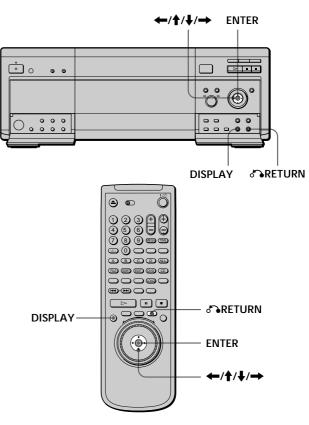
This chapter describes how to set and adjust the player using the on-screen setup menu. Most settings and adjustments are required to be set when you first use the player. This chapter also describes how to set the remote for controlling the TV or the AV receiver (amplifier) or the CD changer.

Using the Setup Display

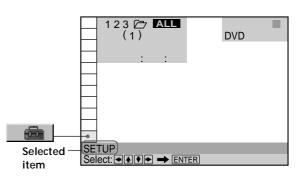
Using the setup display, you can do the initial setup, adjust the picture and sound and set the various outputs. You can also set a language for the subtitles and the setup display, limit playback by children, and so on. For details on each setup display item, see pages 67 to 76.

Note

You can display the setup display only when the player is in stop mode.



1 Press DISPLAY and select "SETUP" using ↑/↓.

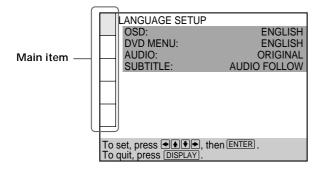


2 Press ENTER.

The setup display appears.

	LANGUAGE SETUP	
	OSD:	ENGLISH
	DVD MENU:	ENGLISH
	AUDIO:	ORIGINAL
	SUBTITLE:	AUDIO FOLLOW
To :	set, press 🗨 🕈 🗭, t	hen ENTER .
To set, press ●●●, thenENTER . To quit, press DISPLAY.		

3 Select the main item you want using \uparrow/\downarrow .



4 Press ENTER.

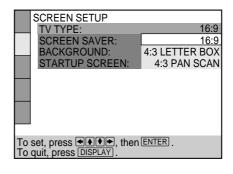
The selected main item is highlighted.

	SCREEN SETUP			
	TV TYPE:	16:9		
	SCREEN SAVER:	ON		
	BACKGROUND:	JACKET PICTURE		
	STARTUP SCREEN:	STANDARD		
_				
To set, press 🝽 🍽, then ENTER. To quit, press DISPLAY.				
10	quit, press [DISPLAY].			

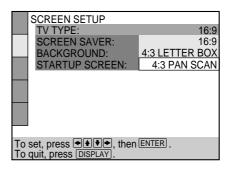
5 Select the item you want using \uparrow/\downarrow .

	SCREEN SETUP				
	TV TYPE:	16:9			
	SCREEN SAVER:	ON			
	BACKGROUND:	JACKET PICTURE			
	STARTUP SCREEN:	STANDARD			
_					
To	To set, press 🝽 🗭, then ENTER . To quit, press DISPLAY .				
10	quit, press [DISPLAY].				

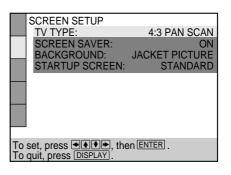
6 Press ENTER.



7 Select the setting you want using $\leftarrow/////$.



8 Press ENTER.



9 Press DISPLAY.

The setup display disappears.

10 Press DISPLAY repeatedly to turn off the on-screen menu.

To return to the previous screen Press SRETURN.

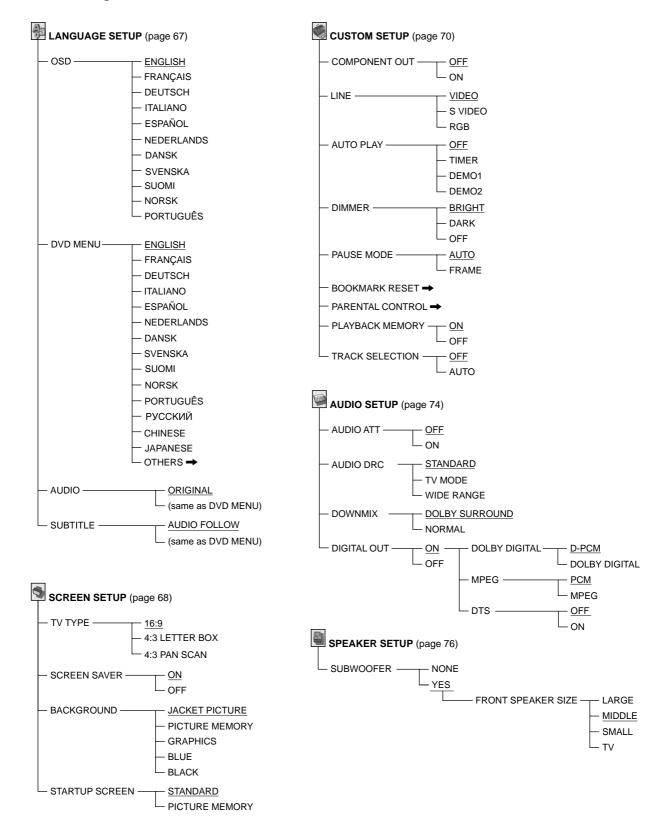
To quit while making a selection Press DISPLAY.

Note

Some setup display items require operations other than selecting the setting. For details on these items, see the relevant pages.

Setup Display Item List

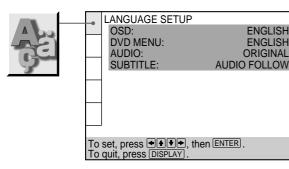
The default settings are underlined.



Setting the Display Language or Sound Track (LANGUAGE SETUP) IN CO

"LANGUAGE SETUP" allows you to set various languages for the on-screen display or sound track. The default settings are underlined.

Select "LANGUAGE SETUP" in the setup display.



Notes

- When you select a language that is not recorded on the DVD, one of the recorded languages is automatically selected for the "DVD MENU," "AUDIO" and "SUBTITLE" settings.
- Depending on the DVD, the player may not start playing with the selected language even when you select a language in "DVD MENU," "AUDIO" or "SUBTITLE."

OSD (On-Screen Display)

- Selects the language for the on-screen display.
- ENGLISH (English)
- FRANÇAIS (French)
- DEUTSCH (German)
- ITALIANO (Italian)
- ESPAÑOL (Spanish)
- NEDERLANDS (Dutch)
- DANSK (Danish)
- SVENSKA (Swedish)
- SUOMI (Finnish)
- NORSK (Norwegian)
- PORTUGUÊS (Portuguese)

DVD MENU

Selects the language for the DVD menu.

- ENGLISH (English)
- FRANÇAIS (French)
- DEUTSCH (German)
- ITALIANO (Italian)
- ESPAÑOL (Spanish)
- NEDERLANDS (Dutch)
- DANSK (Danish)
- SVENSKA (Swedish)
- SUOMI (Finnish)
- NORSK (Norwegian)
- PORTUGUÊS (Portuguese)
- РУССКИЙ (Russian)
- CHINESE (Chinese)
- JAPANESE (Japanese)
- OTHERS→

When you select "OTHERS \rightarrow ," select and enter the language code from the list using the number buttons (page 87). After you have made a selection, the language code (4 digits) is displayed.

AUDIO

Selects the language for the sound track.

- **<u>ORIGINAL</u>**: the language given priority in the disc
- ENGLISH (English)
- FRANÇAIS (French)
- DEUTSCH (German)
- ITALIANO (Italian)
- ESPAÑOL (Spanish)
- NEDERLANDS (Dutch)
- DANSK (Danish)
- SVENSKA (Swedish)
- SUOMI (Finnish)
- NORSK (Norwegian)
- PORTUGUÊS (Portuguese)
- РУССКИЙ (Russian)
- CHINESE (Chinese)
- JAPANESE (Japanese)
- OTHERS**→**

When you select "OTHERS \rightarrow ," select and enter the language code from the list using the number buttons (page 87). After you have made a selection, the language code (4 digits) is displayed.

Setting the Display Language or Sound Track (LANGUAGE SETUP)

SUBTITLE

Selects the language for the subtitles.

- <u>AUDIO FOLLOW*</u>
- ENGLISH (English)
- FRANÇAIS (French)
- DEUTSCH (German)
- ITALIANO (Italian)
- ESPAÑOL (Spanish)
- NEDERLANDS (Dutch)
- DANSK (Danish)
- SVENSKA (Swedish)
- SUOMI (Finnish)
- NORSK (Norwegian)
- PORTUGUÊS (Portuguese)
- РУССКИЙ (Russian)
- CHINESE (Chinese)
- JAPANESE (Japanese)
- OTHERS→

When you select "OTHERS \rightarrow ," select and enter the language code from the list using the number buttons (page 87). After you have made a selection, the language code (4 digits) is displayed.

* When you select "AUDIO FOLLOW," the language for the subtitles changes according to the language you selected for the sound track.

Settings for the Display (SCREEN SETUP)

"SCREEN SETUP" allows you to set the display according to the playback conditions. The default settings are underlined.

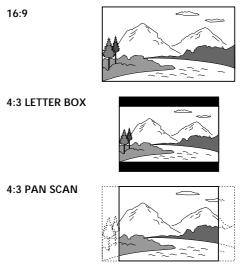
Select "SCREEN SETUP" in the setup display.

SCREEN SETUP TV TYPE: SCREEN SAVER: BACKGROUND: STARTUP SCREEN:	16:9 ON JACKET PICTURE STANDARD
To set, press ●●●, the To quit, press DISPLAY.	en (ENTER).

TV TYPE

Selects the aspect ratio of the TV to be connected.

- <u>16:9</u>: select this when you connect a wide-screen TV to the player.
- 4:3 LETTER BOX: select this when you connect a normal TV to the player. Displays a wide picture with bands on the upper and lower portions of the screen.
- 4:3 PAN SCAN: select this when you connect a normal TV to the player. Displays the wide picture on the whole screen automatically and cuts off the portions that do not fit.



Note

Depending on the DVD, "4:3 LETTER BOX" may be selected automatically instead of "4:3 PAN SCAN" and vice versa.

SCREEN SAVER

Turns on and off the screen saver. If you turn on the screen saver, the screen saver image appears when you leave the player or the remote in pause or stop mode for 15 minutes, or when you play back a CD for more than 15 minutes. The screen saver will help prevent your display device from becoming damaged.

- ON: turns on the screen saver.
- OFF: turns off the screen saver.

BACKGROUND

Selects the background color or picture on the TV screen in stop mode or while playing a CD.

- <u>JACKET PICTURE</u>: The jacket picture appears in the background, but only when the jacket picture is already recorded on the disc.
- PICTURE MEMORY: Your favorite picture appears in the background. For an explanation of how to store your favorite scene recorded on the disc for the background picture, see the following section "Storing a picture in memory."
- GRAPHICS: A preset picture stored in the player appears in the background.
- BLUE: The background color is blue.
- BLACK: The background color is black.

Note

If a disc which does not contain the jacket picture is played while "BACKGROUND" is set to "JACKET PICTURE," the picture stored in the player will automatically appear in the background.

STARTUP SCREEN

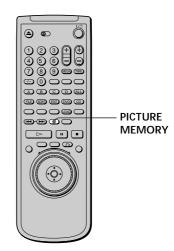
Selects the startup screen. The startup screen image you selected appears when you turn on the player.

- <u>STANDARD</u>: The standard startup screen in the player's memory appears.
- PICTURE MEMORY: Your favorite picture appears in the startup screen. For an explanation of how to store your favorite scene recorded on the disc for the startup screen, see the following section "Storing a picture in memory."

If you select PICTURE MEMORY before setting a picture in memory, the standard startup screen will appear.

Storing a picture in memory

During playback, when you find the scene to be stored in memory, press PICTURE MEMORY on the remote. The picture is stored in memory.



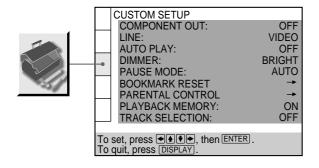
- The player can store only one scene in memory. The stored picture appears in both the background and the startup screen.
- Depending on the DVD, some scenes cannot be stored in memory when using the remote.
- When the picture is stored in memory by pressing PICTURE MEMORY, the picture stored before is erased.
- If you operate this player while the picture is being stored in memory, the player will fail to store the picture.

Custom Settings (CUSTOM SETUP) OVD (CD

"CUSTOM SETUP" allows you to set the playback conditions.

The default settings are underlined.

Select "CUSTOM SETUP" in the setup display.



■ COMPONENT OUT

Selects the methods of outputting video signals from the COMPONENT VIDEO OUT (Y, CB, CR) connectors on the rear panel of the player.

In order to set COMPONENT OUT to ON, you must first connect the player to a projector or monitor using the LINE-1 connector so that the setup display appears on your screen.

- OFF: outputs no signals.
- · ON: outputs the component video signals.

Notes

- When you set "LINE" to "RGB", you cannot set "COMPONENT OUT" to "ON."
- When you connect the player to a monitor or projector via only the COMPONENT VIDEO OUT connectors, do not select "OFF." If you select "OFF" in this case, the picture may not appear.

LINE

Selects the methods of outputting video signals from the LINE-1(RGB)–TV connector on the rear panel of the player.

- <u>VIDEO</u>: outputs the video signals.
- S VIDEO: outputs the S video signals.
- RGB: outputs the RGB signals.

Notes

- If your TV does not conform to the S video or the RGB signals, no picture appears on the TV screen even if you select "S VIDEO" or "RGB." Refer to the instructions supplied with your TV.
- If your TV has only one SCART (EURO AV) connector, do not select "S VIDEO."

AUTO PLAY

Selects the Auto Play setting when you connect the AC power cord to the AC outlet (mains).

- <u>OFF</u>: does not use "TIMER," "DEMO1" or "DEMO2" to start playback.
- TIMER: starts playing when the player is turned on, or at any time you want when connected to a timer (not supplied). Set the timer when the player is in standby mode (the power indicator lights up in red).
- DEMO1: starts playing the first demonstration automatically.
- DEMO2: starts playing the second demonstration automatically.

DIMMER

Adjusts the lighting of the front panel display.

- <u>BRIGHT</u>: makes the front panel display bright.
- DARK: makes the front panel display dark.
- OFF: turns off the lighting of the front panel display.

Ϋ́

You also can adjust the lighting with the DIMMER button on the player.

■ PAUSE MODE (DVD only)

Selects the picture in pause mode.

- <u>AUTO</u>: A picture, including subjects that move dynamically, is output with no jitter. Normally select this position.
- FRAME: A picture including subjects that do not move dynamically is output with high resolution.

■ BOOKMARK RESET→

Select "BOOKMARK RESET→." The BOOKMARK RESET display appears. And then press ENTER to reset <u>all</u> bookmarks.

■ PARENTAL CONTROL→

Sets a password and playback limitation level for DVDs with playback limitation for children.

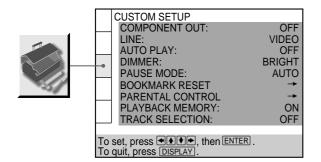
The same password is used for both Parental Control and Custom Parental Control (page 53).

For details, see "Limiting Playback by Children (Parental Control) ."

Limiting Playback by Children (Parental Control)

Playback of some DVDs can be limited depending on the age of the users. The "Parental Control" function allows you to set a playback limitation level.

Select "CUSTOM SETUP" in the setup display.

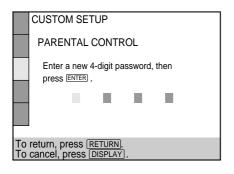


 Select "PARENTAL CONTROL" using ↑/↓, then press ENTER.

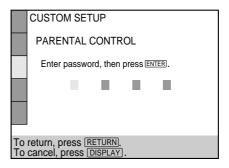
	CUSTOM SETUP		
	COMPONENT OUT:	OFF	
	LINE:	VIDEO	
	AUTO PLAY:	OFF	
	DIMMER:	BRIGHT	
	PAUSE MODE:	AUTO	
	BOOKMARK RESET	->	
	PARENTAL CONTROL	→	
	PLAYBACK MEMORY:	ON	
	TRACK SELECTION:	OFF	
To set, press ●●●, then ENTER. To quit, press DISPLAY.			
To quit, press [DISPLAY].			

When you have not entered a password

The display for entering a password appears.

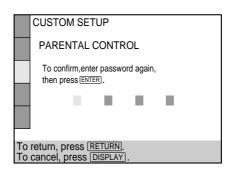


■ When you have already registered a password The display for confirming the password appears. Skip Step 2.

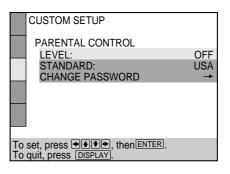


2 Enter a password in 4 digits using the number buttons, then press ENTER.

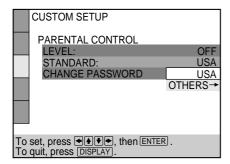
The digits change to asterisks (\mathbf{X}) , and the display for confirming the password appears.



3 To confirm your password, enter it again using the number buttons, then press ENTER. The display for setting the playback limitation level and changing the password appears.



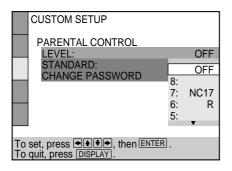
4 Select "STANDARD" using ↑/↓, then press →.



5 Select a geographic area as the playback limitation level standard using ↑/↓, then press ENTER. When you select "OTHERS→," select and enter the standard code in the table on the next page using the number buttons.

	CUSTOM SETUP	
	PARENTAL CONTROL	
	LEVEL:	OFF
	STANDARD:	USA
	CHANGE PASSWORD	->
To To	set, press 🗲 🍽 , then ENTER.	

6 Select "LEVEL" using \uparrow/\downarrow , then press \rightarrow .



7 Select the level you want using ↑/↓, then press ENTER.

	CUSTOM SETUP			
	PARENTAL CONTROL			
	LEVEL:	4:	PG13	
	STANDARD:		USA	
	CHANGE PASSWORD		-	
To To	To set, press ●●●, then ENTER. To quit, press DISPLAY.			

The lower the value, the more strict the limitation.

To return to the normal screen Press DISPLAY.

To turn off the Parental Control function and play the DVD after entering your password

Set "LEVEL" to "OFF" in Step 7, then press \triangleright .

To change the password

- 1 After Step 3, select "CHANGE PASSWORD \rightarrow " using \uparrow/\downarrow , then press \rightarrow or ENTER.
 - The display for changing the password appears.
- 2 Follow Steps 2 and 3 to enter a new password.

Playing a disc which is blocked by the playback limitation level

- 1 Insert the disc and press ▷. The PARENTAL CONTROL display appears.
- 2 Enter your 4-digit password using the number buttons, then press ENTER.The player starts playback.When you stop playing the DVD, the level network to play a stop player to be player to

When you stop playing the DVD, the level returns to the original level.

Ç İf you forget your password

Enter the 6-digit number "199703" whenever the PARENTAL CONTROL display asks you for your password, then press ENTER. The display will ask you to enter a new 4-digit password.

- When you play DVDs which do not have the Parental Control function, playback cannot be limited on this player.
- If you do not set a password, you cannot change the settings for playback limitation.
- Depending on the DVD, you may be asked to change the Parental Control level while playing the disc. In this case, enter your password, then change the level.
 When you stop playing the DVD, the level returns to the original level.
- The same password is used for both Parental Control and Custom Parental Control (page 53).

Standard	Code number
Argentina	2044
Australia	2047
Austria	2046
Belgium	2057
Brazil	2070
Canada	2079
Chile	2090
China	2092
Denmark	2115
Finland	2165
France	2174
Germany	2109
Hong Kong	2219
India	2248
Indonesia	2238
Italy	2254
Japan	2276
Korea	2304
Malaysia	2363
Mexico	2362
Netherlands	2376
New Zealand	2390
Norway	2379
Pakistan	2427
Philippines	2424
Portugal	2436
Russia	2489
Singapore	2501
Spain	2149
Sweden	2499
Switzerland	2086
Taiwan	2543
Thailand	2528
United Kingdom	2184

■ PLAYBACK MEMORY (DVD only)

The player can store the AUDIO, SUBTITLE and other settings of each disc for up to 301 slots (Playback Memory).

Set the Playback Memory function on or off.

- <u>ON</u>: stores the settings in memory when you eject the disc.
- OFF : does not store the settings in memory.

The following settings are stored in memory by the Playback Memory function.

- AUDIO (page 47)
- SUBTITLE (page 49)
- ANGLE (page 50)
- VES (page 51)

Notes

- The player can store the settings of up to 301 slots. When you have the player store a new disc in memory, the data for the old disc is erased.
- The Playback Memory settings are not effective for side B.
- Depending on the DVD, the information stored in the disc takes priority over the Playback Memory settings and the function does not work.
- Do not turn off the player by pressing ①. Doing so may cancel the settings. When you turn off the player, press first to stop playback and then press I/⁽¹⁾ on the remote. After the power indicator lights up in red and the player enters standby mode, press ① on the player.

TRACK SELECTION

Gives the sound track which contains the highest number of channels priority when you play a DVD on which multiple audio formats (PCM, DTS, MPEG audio or Dolby Digital format) are recorded.

- OFF : No priority given.
- AUTO : Priority given.

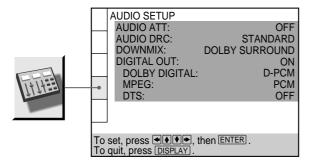
Notes

- When you set this item to "AUTO", the language may change depending on the "AUDIO" settings in "LANGUAGE SETUP." The "TRACK SELECTION" setting has higher priority than the "AUDIO" settings in "LANGUAGE SETUP" (page 67).
- If you set "DTS" in "AUDIO SETUP" to "OFF", the DTS sound track is not played even if you set this item to "AUTO" and the highest-numbered audio channel is recorded in DTS format.
- If PCM, DTS, MPEG audio and Dolby Digital sound tracks have the same number of channels, the player selects PCM, DTS, Dolby Digital and MPEG audio sound tracks in this order.
- Depending on the DVD, the audio channel with priority may be predetermined. In this case, you cannot give priority to the DTS, MPEG audio or Dolby Digital format by selecting "AUTO."

Settings for the Sound (AUDIO SETUP)

"AUDIO SETUP" allows you to set the sound according to the playback conditions. The default settings are underlined.

Select "AUDIO SETUP" in the setup display.



■ AUDIO ATT (attenuation)

If the playback sound is distorted, set this item to "ON." The player reduces the audio output level. Selects the setting of the output from the AUDIO OUT and LINE-1, 2 connectors according to the audio equipment to be connected.

- <u>OFF</u>: turns off the audio attenuation. Normally select this position.
- ON: reduces the audio output level so that no sound distortion occurs. Select this when the playback sound from the built-in TV speakers is distorted.

Note

The setting does not affect the output from the DIGITAL OUT OPTICAL and COAXIAL connectors.

■ AUDIO DRC (Dynamic Range Control) (DVD only)

Makes the sound clear when the volume is turned down when playing a DVD. This function works only when you play a DVD which has the AUDIO DRC function. This affects the output from the DIGITAL OUT connectors only when "DOLBY DIGITAL" is set to "D-PCM" and "MPEG" is set to "PCM" in "DIGITAL OUT."

- <u>STANDARD</u>: Normally select this position.
- TV MODE: makes the low sounds clear even if you turn the volume down. It is especially recommended when you listen to the sound using the speakers of the TV.
- WIDE RANGE: It gives you the feeling of being at a live performance. This function works only when you are playing a Dolby Digital disc. When you use high quality speakers, it is more effective.

Note

When you play DVDs without the AUDIO DRC function, there may be no effect on the sound.

DOWNMIX

Switches the mixing down methods when you play a DVD on which rear signal components such as LS, RS or S are recorded in Dolby Digital format. For details on the rear signal components, see "Displaying the audio information of the disc" (page 48).

The "DOWNMIX" setting affects the following connectors:

- AUDIO OUT connectors
- DIGITAL OUT OPTICAL and COAXIAL connectors (when you set "DOLBY DIGITAL" to "D-PCM" in "AUDIO SETUP" in the setup display)
- <u>DOLBY SURROUND</u>: when the player is connected to an audio component that conforms to Dolby Surround (Pro Logic). The output signals which reproduce the Dolby Surround (Pro Logic) effect are mixed down to 2 channels.
- NORMAL: when the player is connected to an audio component that does not conform to Dolby Surround (Pro Logic). The signals without the Dolby Surround (Pro Logic) effect are output.

DIGITAL OUT

Selects output signals via the DIGITAL OUT OPTICAL and COAXIAL connectors.

- <u>ON</u>: Normally select this position. When you select "ON," set "DOLBY DIGITAL," "MPEG," and "DTS." For details on setting these items, see "Setting the Digital Output Signal."
- OFF: when the player does not output the sound signals via the DIGITAL OUT OPTICAL and COAXIAL connectors, the influence of the digital circuit upon the analog circuit is at a minimum.

Notes

- When you play sound tracks with a 96 kHz sampling frequency, the output signals from the DIGITAL OUT (OPTICAL, COAXIAL) connectors are converted to 48 kHz (sampling frequency). The analog audio signals from the AUDIO OUT connectors are not affected by this setting and keep their original sampling frequency level.
- When you select "OFF," you cannot set "DOLBY DIGITAL," "MPEG" and "DTS."

Setting the Digital Output Signal

Switches the methods of outputting audio signals when you, connect 1. a digital component such as a receiver (amplifier) having a digital connector, 2. an audio component having a built-in decoder (Dolby Digital, MPEG or DTS), 3. a DAT or MD via the DIGITAL OUT OPTICAL or COAXIAL connector using an optical or coaxial digital connecting cord. For connection details, see pages 12 and 16.

When you select "ON," set "DOLBY DIGITAL," "MPEG" and "DTS."

	AUDIO SETUP						
	AUDIO ATT:	OFF					
	AUDIO DRC:	STANDARD					
	DOWNMIX:	DOLBY SURROUND					
	DIGITAL OUT:	ON					
	DOLBY DIGITAL:	D-PCM					
	MPEG:	PCM					
	DTS:	OFF					
To set, press ●●●●, thenENTER .							
10	To quit, press DISPLAY.						

DOLBY DIGITAL

Selects the Dolby Digital signals to be output via the DIGITAL OUT OPTICAL and COAXIAL connectors. You cannot select this item when you set "DIGITAL OUT" to "OFF."

- <u>D-PCM</u> (Downmix PCM): when you play Dolby Digital sound tracks, the output audio signals are mixed down to 2 channels. You can select whether the signals conform to Dolby Surround (Pro Logic) or not by making adjustments to the "DOWNMIX" item in "AUDIO SETUP."
- DOLBY DIGITAL: when the player is connected to an audio component with a built-in Dolby Digital decoder. If the player is connected to an audio component lacking a built-in Dolby Digital decoder, do not set this. Otherwise, when you play the Dolby Digital sound track, a loud noise or no sound will come out from the speakers, affecting your ears or causing the speakers to be damaged.

Note

When you select "D-PCM," set Virtual Enhanced Surround (VES) to "OFF." Otherwise, the player will not output signals from the DIGITAL OUT OPTICAL or COAXIAL connector.

MPEG

Selects the MPEG audio signals to be output via the DIGITAL OUT OPTICAL and COAXIAL connectors. You cannot select this item when you set "DIGITAL OUT" to "OFF."

- <u>PCM</u>: when the player is connected to an audio component lacking a built-in MPEG decoder. If you play MPEG audio sound tracks, the player outputs stereo signals via the DIGITAL OUT OPTICAL and COAXIAL connectors.
- MPEG: when the player is connected to an audio component having a built-in MPEG decoder. If the player is connected to an audio component lacking a built-in MPEG decoder, do not set this. Otherwise, when you play the MPEG audio sound track, a loud noise or no sound will come out from the speakers, affecting your ears or causing the speakers to be damaged.

DTS

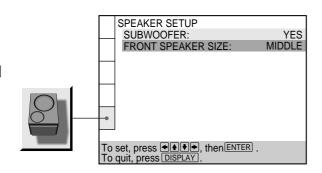
Selects the DTS signals to be output via the DIGITAL OUT OPTICAL and COAXIAL connectors. You cannot select this item when you set "DIGITAL OUT" to "OFF."

- <u>OFF</u>: when the player is connected to an audio component lacking a built-in DTS decoder.
- ON: when the player is connected to an audio component having a built-in DTS decoder.
 If the player is connected to an audio component lacking a built-in DTS decoder, do not set this.
 Otherwise, when you play the DTS sound track, a loud noise or no sound will come out from the speakers, affecting your ears or causing the speakers to be damaged.

Subwoofer Set Up (SPEAKER SETUP)

When you have connected a subwoofer, specify the size of the front speakers you have connected to change the frequency range output from the subwoofer so that you can obtain the best possible surround sound. Even if you change the "SUBWOOFER" setting, the sound output from the front speakers do not change. For the speaker hookups, see pages 14 and 15. The default settings are underlined.

Select "SPEAKER SETUP" in the setup display.



SUBWOOFER

Selects whether a subwoofer is connected to the player or not.

- NONE: When a subwoofer is not connected to the player.
- <u>YES</u>: When a subwoofer is connected to the player. When you select "YES," set "FRONT SPEAKER SIZE." For details, see "Setting the output level from the subwoofer."

Setting the output level from the subwoofer

When you select "YES" in "SUBWOOFER," set "FRONT SPEAKER SIZE." This selects the size of the connected front speakers. The frequency range output from the subwoofer varies according to the size of the front speakers.

FRONT SPEAKER SIZE

• LARGE: If you connect large speakers that will effectively reproduce bass frequencies and play a DVD recorded in 5.1 channels including an LFE signal, select this.

If you feel a lack of bass frequencies from the front speakers when you select this, select "MIDDLE."

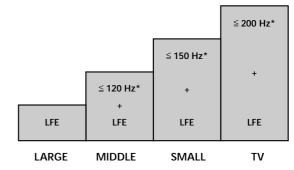
Notes

- If an LFE signal is not recorded on the disc, no sound will be output from the subwoofer even if you select "LARGE."
- When you play MPEG audio sound track, an LFE signal is not output from the WOOFER OUT connector.
- <u>MIDDLE</u>: If you connect large speakers that will effectively reproduce bass frequencies and play a source on which an LFE signal is not recorded, such as CD or DVD with 2 channels, select this to output the bass frequencies from the subwoofer as well as from the front channel.

If you feel a lack of bass frequencies from the front speakers when you select this, select "SMALL."

- SMALL: If you feel a lack of bass, select this to output even more bass frequencies from the subwoofer. If you still feel a lack of bass frequencies from the front speakers when you select this, select "TV."
- TV: If you use the speakers of the TV or small speakers, select this to output the bass frequencies from the subwoofer.

 $\dot{\mathbf{Q}}$ The subwoofer outputs the LFE signal and the frequency range according to the FRONT SPEAKER SIZE setting. The LFE signal is output only when the disc contains an LFE signal.



* Audio signal besides LFE

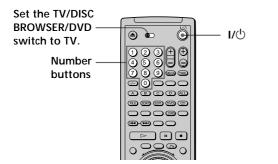
Note

The signals of the PCM sound tracks with a 96 kHz sampling frequency are not output from the WOOFER OUT connector.

Controlling Your TV or AV Receiver (Amplifier) with the Supplied Remote

By adjusting the remote signal, you can control your TV or AV receiver (amplifier) with the supplied remote.

Controlling TVs with the remote



- 1 Slide the TV/DISC BROWSER/DVD switch to TV.
- 2 Hold down I/⁽⁾, and enter your TV's manufacturer's code (see the table) using the number buttons.
- 3 Release I/⁽¹⁾.

Code numbers of controllable TVs

If more than one code number is listed, try entering them one at a time until you find the one that works with your TV.

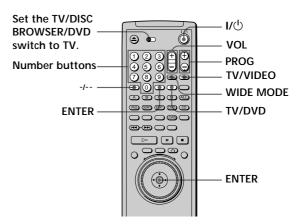
Manufacturer	Code number
Sony (default)	01
Grundig	11
Hitachi	24
Loewe	45
Nokia	15, 16, 69
Panasonic	17, 49
Philips	06, 07, 08
Saba	12, 13
Samsung	22, 23
Sanyo	25
Sharp	29
Telefunken	36
Thomson	43
Toshiba	38

Notes

- If you enter a new code number, the code number previously entered will be erased.
- When you replace the batteries of the remote, the code number may be reset to the default setting. Reset the appropriate code number.

Controlling the TV

When you set the TV/DISC BROWSER/DVD switch to TV, you can control your TV using the buttons below.



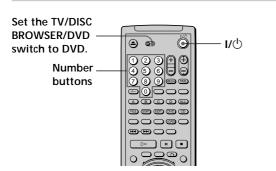
By pressing	You can
I/心	Turn the TV on or off
TV/VIDEO	Switch the TV's input source between the TV and other input sources
TV/DVD*	Switch the TV's input source between the TV and CD/DVD player
VOL	Adjust the volume of the TV
PROG	Select the program position of the TV
WIDE MODE	Switch to or from the wide mode of a Sony Wide TV
Number buttons and ENTER	Select the program position of the TV

* If you connect the player to the TV via the SCART (EURO AV) connectors, the input source for the TV is set to the player automatically when you start playback or press any button except for I/(!). In this case, press TV/DVD to return the input to the TV.

Notes

- Depending on the TV, you may not be able to control your TV or to use some of the buttons above.
- If you use number buttons to select the TV's program position, press -/-- followed by the number buttons for two-digit numbers.

Controlling AV receivers (amplifiers) with the remote



- **1** Slide the TV/DISC BROWSER/DVD switch to DVD.
- 2 Hold down I/(), and enter your AV receiver's manufacturer's code (see the table) using the number buttons.
- 3 Release I/⁽⁾.

Code numbers of controllable AV receivers (amplifier)

If more than one code number is listed, try entering them one at a time until you find the one that works with your AV receiver (amplifier).

Manufacturer	Code number
Sony	91 (default), 89
Denon	84, 85, 86
Kenwood	92, 93
Onkyo	81, 82, 83
Pioneer	99
Sansui	87
Technics	97, 98
Yamaha	94, 95, 96

Notes

- If you enter a new code number, the code number previously entered will be erased.
- When you replace the batteries of the remote, the code number may be reset to the default setting. Reset the appropriate code number.

Controlling the AV receiver (amplifier)

When you set the TV/DISC BROWSER/DVD switch to DVD, you can change the volume of the AV receiver (amplifier) using VOL.



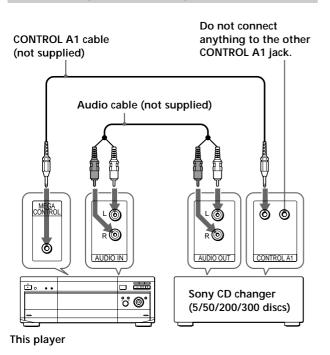
Note

Depending on the AV receiver (amplifier), you may not be able to control your AV receiver (amplifier).

Controlling the CD Changer (Mega Control)

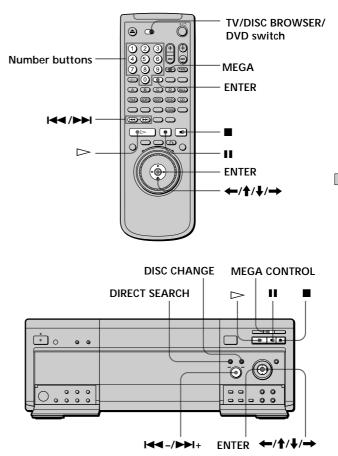
You can control a Sony CD changer of 5/50/200/300 discs connected to the MEGA CONTROL jack of the player.

Connecting the CD changer



Controlling the CD changer

The controls indicated below are effective while the MEGA CONTROL button is lit.



- 1 Set the command mode selector of the CD changer to "CD 3."
- 2 Set the TV/DISC BROWSER/DVD switch to DISC BROWSER or DVD.
- **3** Turn on the player and the CD changer.
- Press MEGA CONTROL on the player or MEGA on the remote.
 The MEGA CONTROL button on the front panel lights up and the display shows the current disc number in the CD changer.
- 5 Select the play mode you want on the CD changer.

6 Press ▷ on the player to start playing. Playback starts and the display shows the current disc and track numbers and the playing time of the track. While the MEGA CONTROL button on the front panel is lit, you can control the CD changer with the controls on the player as follows:

То	Operation				
Select a disc during playback	Press the number button on the remote and ENTER, or ↑/↓ and ENTER, or turn the click shuttle slowly and press ENTER. Or, press DISC CHANGE to turn the indicator on followed by turning the I◄◀-/▶▶I+ dial and then pressing it.				
Skip by 10 discs in continuous play mode	Press \leftarrow / \rightarrow and then press ENTER.				
Stop	Press .				
Pause	Press II.				
Resume play after pause	Press II or ⊳.				
Go to the next track during playback	On the player: Press DIRECT SEARCH to turn it on and turn the I◀◀ -/▶▶I+ dial clockwise. On the remote: Press ▶▶I.				
Go back to the preceding track during playback	On the player: Press DIRECT SEARCH to turn it on and turn the I≪ -/>>I+ dial. counterclockwise On the remote: Press I≪ .				

To control the player again

Press MEGA CONTROL on the player or MEGA on the remote.

The MEGA CONTROL button on the player turns off and you can control the player.

Notes

- Connect only a Sony 5/50/200/300 CD changer to the MEGA CONTROL jack.
- You cannot locate a particular point on a CD's track using the controls on the player.
- Depending on the CD changer, some controls on the player may not operate the CD changer as they do the player.
- You cannot control the player when the MEGA CONTROL button on the front panel is lit.
- The player will not enter Resume Play after the MEGA CONTROL button on the front panel has been turned on and off.
- You cannot control the CD changer right after turning on the player or connecting the CD changer. Wait a few seconds until the player recognizes the CDs.
- When the MEGA CONTROL button is lit, you cannot use the Control Menu and Disc Browser.

Additional Information

Troubleshooting

If you experience any of the following difficulties while using the player, use this troubleshooting guide to help remedy the problem. Should any problem persist, consult your nearest Sony dealer.

Power

The power is not turned on.

→ Check that the mains lead is connected securely.

Picture

There is no picture.

- → Check that the player is connected securely.
- ➡ The video connecting cord is damaged. Replace it with a new one.
- → Make sure you connect the player to the video input connector on the TV. (page 8)
- → Make sure you turn on the TV.
- ➡ Make sure you select the video input on the TV so that you can view the pictures from the player.
- ➡ In the setup display, set "LINE" and "COMPONENT OUT" in "CUSTOM SETUP" to the appropriate item conforms to your system. (page 70)
- → "OFF" in "COMPONENT OUT" under "CUSTOM SETUP" is selected, when you have connected the player to a monitor or projector via only the COMPONENT VIDEO OUT connectors. To view the picture, connect the monitor via LINE-1, VIDEO OUTPUT or S VIDEO OUTPUT.

Picture noise appears.

➡ Clean the disc.

→ If the video signal from your DVD player has to go through your VCR to get to your TV, the copyprotection applied to some DVD programs could affect picture quality. If you still experience problems after checking your connections, please try connecting your DVD player directly to your TV's S-input, if your TV is equipped with this input. (page 9)

Even though you set the aspect ratio in "TV TYPE" in "SCREEN SETUP" of the setup display, the picture does not fill the screen.

 \rightarrow The aspect ratio is fixed on your DVD.

The picture is black and white.

- ➡ In the setup display, set "LINE" in "CUSTOM SETUP" to the appropriate item that conforms to your TV. (page 70)
- ➡ Depending on the TV, the picture on the screen becomes black and white when you play a disc recorded in the NTSC color system.

Sound

There is no sound.

- ightarrow Check that the player is connected securely.
- ➡ The audio connecting cord is damaged. Replace it with a new one.
- → Make sure you connect the player to the audio input connectors on the receiver (amplifier). (page 12)
- ➡ Make sure you turn on the TV and the receiver (amplifier).
- → Make sure you select the appropriate input on the receiver (amplifier) so that you can listen to the sound from the player.
- ➡ The player is in pause mode or in Slow-motion Play mode. Press ▷ to return to normal play mode.
- ➡ The player is in fast forward or fast reverse mode. Press ▷ to return to normal play mode.
- ➡ If you use the DIGITAL OUT connectors, set "DIGITAL OUT" to "ON" in the setup display. Otherwise no sound will come from the DIGITAL OUT connectors. (page 74)
- → You selected a VES mode other than "OFF" in the Control Menu display when you connected the component via the DIGITAL OUT OPTICAL or COAXIAL connector. Set "VES" to "OFF" in the Control Menu display. (page 51)
- ➡ When you play DTS sound tracks, sound will only come out from the DIGITAL OUT OPTICAL or COAXIAL connector. (page 23)

Sound is noisy.

- ightarrow Clean the disc.
- → When you play a CD with DTS sound tracks, noise will come from any connector other than the DIGITAL OUT OPTICAL or COAXIAL connector. (page 23)

Sound distortion occurs.

➡ In the setup display, set "AUDIO ATT" in "AUDIO SETUP" to "ON." (page 74)

The sound loses its stereo effect when you play a VIDEO CD or a CD.

- → Set "AUDIO" to "STEREO" in the Control Menu display. (page 47)
- ➡ Make sure you connect the player correctly. (pages 8, 12, 14, 15)

The surround effect is difficult to hear when you are playing a Dolby Digital, MPEG or DTS sound track.

→ Depending on the DVD, the output signal may not be the entire 5.1 channels. It may be monaural or stereo even if the sound track is recorded in Dolby Digital, MPEG or DTS format.

Operation

The remote does not function.

- → Remove any obstacles between the remote and the player.
- ightarrow Use the remote near the player.
- ➡ Point the remote at the remote sensor on the player.
- ➡ Replace all of the batteries in the remote with new ones if they are weak.
- → The TV/DISC BROWSER/DVD switch is not in the correct position.

The disc does not play.

- ➡ There is no disc inside ("Insert disc." appears on the TV screen). Insert a disc.
- ➡ Insert the disc correctly with the playback side facing left into the disc slot.
- ightarrow Clean the disc.
- → The player cannot play CD-ROMs, etc. (page 5) Insert a DVD, a VIDEO CD, or a CD.
- → Check the region code of the DVD. (page 4)
- ➡ Moisture has condensed inside the player. Remove the disc and leave the player turned on for about half an hour. (page 6)
- ➡ The selected disc is not included in the current folder.

The player does not play from the beginning when playing a disc.

- ➡ Program Play, Shuffle Play, Repeat Play or A-B Repeat Play has been selected. Press CLEAR. (pages 56 through 61)
- → Resume Play has been selected. Press ■ on the front panel or on the remote before you start playing. (page 27)
- → A title menu or a DVD menu automatically appears on the TV screen when you play your DVD, or a setup display automatically appears on the TV screen when you play your VIDEO CD with PBC functions.

The player starts playing the disc automatically.

- \rightarrow The DVD features the auto playback function.
- → "AUTO PLAY" in "CUSTOM SETUP" is set to "TIMER." (page 70)

Playback stops automatically.

➡ The disc may contain an auto pause signal. While playing such a disc, the player stops playback at the signal.

You cannot perform some functions such as Stop, Search, Slow-motion Play, Repeat Play, Shuffle Play or Program Play.

➡ Depending on the disc, you may not be able to do some of the operations above.

Messages do not appear on the TV screen in the language you want.

➡ In the setup display, select the desired language for the on-screen display in "OSD" under "LANGUAGE SETUP." (page 67)

The language for the sound track cannot be changed when you play a DVD.

- → Multilingual tracks are not recorded on the DVD.
- → Changing the language for the track is prohibited on the DVD.

The subtitle language cannot be changed when you play a DVD.

- → Multilingual subtitles are not recorded on the DVD.
- ➡ Changing the language for the subtitles is prohibited on the DVD.

The subtitles cannot be turned off when you play a DVD.

→ Depending on the DVD, you may not be able to turn the subtitles off.

The angles cannot be changed when you play a DVD.

- → Multi-angles are not recorded on the DVD.
- ➡ Change the angles when "ANGLE" appears on the front panel display. (page 30)
- → Changing the angles is prohibited on the DVD.

The player does not operate properly.

→ Static electricity, etc., may affect the player's operation.

Press ① on the player to turn the player off and then on again.

Nothing is displayed on the front panel display.

- → Press DIMMER on the player. (page 30)
- → In the set up display, "DIMMER" in "CUSTOM SETUP" is set to "OFF." Set "DIMMER" to "BRIGHT" or "DARK." (page 70)

The sound does not come from the CD changer connected using the CONTROL A1 cable

- \rightarrow Turn on the player.
- ➡ Press the MEGA CONTROL button on the front panel. (page 79)

5 numbers or letters are displayed on the screen and on the front panel display.

➡ The self-diagnosis function was activated. See the table on page 84.

The front cover does not open and "LOCKED" is displayed on the front panel display.

➡ Contact your Sony dealer or local authorized Sony service facility.

The FLIP button does not operate.

➡ The disc you are trying to flip does not have a side B.

Self-diagnosis function

When the self-diagnosis function activates to prevent the player from malfunctioning, a five-character service number (combination of a letter and digits) flashes on the screen and on the front panel display. In this case, check the following table.



First three characters	Cause and/or Corrective Action			
C13	 The disc is dirty. → Clean the disc with a cleaning cloth. (page 6) The disc is not facing the correct direction. → Place the disc in the slot so that the playing side is facing left. 			
C31	 The front cover will not open or close all the way. ➡ Remove any objects that may be blocking the movement of the front cover. 			
C32	 The front cover automatically opens and the player enters standby mode. → Check that there is nothing wrong inside the rotary table, such as a fallen disc. After you have checked the inside of the rotary table and resolved any possible problems, press ▷. 			
Exx (xx is any number)	 To prevent a malfunction, the player has performed the self-diagnosis function. The front cover automatically opens and the player enters standby mode. → When you contact your Sony dealer or local authorized Sony service facility, remove all of the discs in the player and give the 5-character service number. (example: E:61:10) 			

Specifications

CD/DVD player

Laser Semiconductor laser Signal format system PAL/(NTSC)

Audio characteristics

Outputs/Inputs

Frequency response				
DVD (PCM 96 kHz): 2 Hz to 44 kHz				
(±1.0 dB)*				
DVD (PCM 48 kHz): 2 Hz to 22 kHz				
(±0.5 dB)				
CD: 2 Hz to 20 kHz (±0.5 dB)				
Signal-to-noise ratio				
More than 110 dB				
(AUDIO OUT connectors only)				
Harmonic distortion				
Less than 0.003 %				
Dynamic range				
More than 100 dB (DVD)				
More than 97 dB (CD)				
Wow and flutter				
Less than detected value				
(±0.001% W PEAK)				

	Jack type	Output/input level	Load impedance	
AUDIO OUT (R, L)	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms	
DIGITAL OUT (OPTICAL)	Optical output connector	–18 dBm	Wave length: 660 nm	
DIGITAL OUT (COAXIAL)	Phono jack	0.5 Vp-p	75 ohms terminated	
VIDEO OUTPUT	Phono jacks	1.0 Vр-р	75 ohms, sync negative	
S VIDEO OUTPUT	4-pin mini DIN	Y: 1.0 Vp-p C: 0.3 Vp-p (PAL) C: 0.286 Vp-p (NTSC)	75 ohms, sync negative 75 ohms terminated	
COMPONENT VIDEO OUT (Y, Cb, Cr)	Phono jacks	Y: 1.0 Vp-р Св, Сг: 0.7 Vp-р	75 ohms, sync negative 75 ohms	
WOOFER OUT	Phono jack	2 Vrms (at 50 kilohms)	Over 10 kilohms	

	Jack type	Output/input level	Load impedance
MEGA CONTROL	Mini jack	-	-
AUDIO IN (R, L)	Phono jacks	2 Vrms	47 kilohms

General

Power requirements 220 - 240 V AC, 50/60 HzPower consumption 19 WDimensions (approx.) $430 \times 158 \times 415 \text{ mm} (17 \times 6^{-1/4} \times 16^{-3/8} \text{ in.})$ (w/h/d) incl. projecting partsMass (approx.) 7.0 kg (15 lb 7 oz)Operating temperature 5 °C to 35 °C (41 °F to 95 °F)Operating humidity 25 % to 80 %

Supplied accessories

See page 7.

* The signals from AUDIO OUT connectors are measured. When you play PCM sound tracks with a 96 kHz sampling frequency, the output signals from the DIGITAL OUT (OPTICAL, COAXIAL) are converted to 48 kHz (sampling frequency).

Design and specifications are subject to change without notice.

Glossary

Bit rate (page 52)

Value indicating the amount of video data compressed in a DVD per second. The unit is Mbps (Mega bit per second). 1 Mbps indicates that the data per second is 1,000,000 bits. The higher the bit rate, the larger the amount of data. However, this does not always mean that you can get higher quality pictures.

Chapter (page 5)

Sections of a picture or a music piece on a DVD that are smaller than titles. A title is composed of several chapters. Each chapter is assigned a chapter number enabling you to locate the chapter you want.

Digital Cinema Sound (DCS) (page 51)

The general name of technology that Sony developed to enjoy surround sound in a home. It simulates the sound of a movie editing studio instead of the usual concert hall so that you can enjoy the surround sound of a movie theater in the comfort of your own home. The VES (Virtual Enhanced Surround) system contained in DCS programs can create the sound image of virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers.

Dolby Digital (pages 12, 75)

Digital audio compression technology developed by Dolby Laboratories. This technology conforms to 5.1channel surround sound. The rear channel is stereo and there is a discrete subwoofer channel in this format. Dolby Digital provides the same 5.1 discrete channels of high quality digital audio found in Dolby Digital cinema audio systems. Good channel separation is realized because all of the channel data is recorded discretely and processed in digital.

Dolby Pro Logic (page 74)

Audio signal processing technology that Dolby Laboratories developed for surround sound. When the input signal contains a surround component, the Pro Logic process outputs the front, center and rear signals. The rear channel is monaural.

DTS (pages 15, 75)

Digital audio compression technology that Digital Theater Systems, Inc. developed. This technology conforms to 5.1channel surround. The rear channel is stereo and there is a discrete subwoofer channel in this format. DTS provides the same 5.1 discrete channels of high quality digital audio. Good channel separation is realized because all of the channel data is recorded discretely and processed in digital.

Glossary

DVD (page 4)

A disc that contains up to 8 hours of moving pictures even though its diameter is the same as a CD.

The data capacity of a single-layer and single-sided DVD is 4.7 GB (Giga Byte) which is 7 times that of a CD. The data capacity of a dual-layer and single-sided DVD is 8.5 GB, a single-layer and double-sided DVD is 9.4 GB, and a dual-layer and double-sided DVD is 17 GB.

The picture data uses the MPEG 2 format, one of the worldwide standards of digital compression technology. The picture data is compressed to about 1/40 of its original size. The DVD also uses a variable rate coding technology that changes the data to be allocated according to the status of the picture.

Audio data is recorded in Dolby Digital as well as in PCM, allowing you to enjoy a more real audio presence. Furthermore, various advanced functions such as the multi-angle, multilingual, and Parental Control functions are provided with the DVD.

MPEG audio (page 75)

International standard coding system used to compress audio digital signals authorized by ISO/IEC. MPEG 1 conforms to up to 2-channel stereo. MPEG 2 used on DVDs conforms to up to 7.1-channel surround.

Multi-angle function (page 50)

Various angles for the scene (viewpoints of the video camera) are recorded on some DVDs.

Multilingual function (pages 17, 49, 67)

Several languages for the audio track or subtitles in a picture are recorded on some DVDs.

Parental Control (page 71)

A function of the DVD used to limit playback of the disc according to the age of the user and the limitation level in each country. The limitation varies from disc to disc; when it is activated, playback is completely prohibited, violent scenes are skipped or replaced with other scenes, and so on.

Playback Control (PBC) (page 29)

Signals encoded on VIDEO CDs (Version 2.0) to control playback.

By using menus recorded on VIDEO CDs with PBC functions, you can enjoy playing simple interactive programs, programs with search functions, and so on.

Title (page 5)

The longest section of a picture or a music piece on a DVD; a movie, etc., for a picture piece on video software; or an album, etc., for a music piece on audio software. Each title is assigned a title number enabling you to locate the title you want.

Track (page 5)

Sections of a picture or a music piece on a CD or VIDEO CD. Each track is assigned a track number enabling you to locate the track you want.

VIDEO CD (page 4)

A compact disc that contains moving pictures. The picture data uses the MPEG 1 format, one of the worldwide standards of digital compression technology. The picture data is compressed to about 1/140 of its original size. Consequently, a 12 cm VIDEO CD can contain up to 74 minutes of moving pictures. VIDEO CDs also contain compact audio data. Sounds outside the range of human hearing are compressed while the sounds we can hear are not compressed. VIDEO CDs can hold 6 times the audio information of conventional audio CDs.

There are 2 versions of VIDEO CDs.

- Version 1.1: You can play only moving pictures and sounds.
- Version 2.0: You can play high-resolution still pictures and enjoy PBC functions.

This player conforms to both versions.

Language Code List

For details, see pages 49, 67.

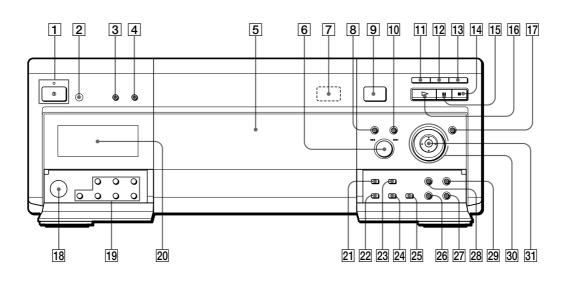
Code	Language	Code	Language	Code	Language	Code	Language
1027	Afar	1186	Scots Gaelic	1350	Malayalam	1513	Siswati
1028	Abkhazian	1194	Galician	1352	Mongolian	1514	Sesotho
1032	Afrikaans	1196	Guarani	1353	Moldavian	1515	Sundanese
1039	Amharic	1203	Gujarati	1356	Marathi	1516	Swedish
1044	Arabic	1209	Hausa	1357	Malay	1517	Swahili
1045	Assamese	1217	Hindi	1358	Maltese	1521	Tamil
1051	Aymara	1226	Croatian	1363	Burmese	1525	Telugu
1052	Azerbaijani	1229	Hungarian	1365	Nauru	1527	Tajik
1053	Bashkir	1233	Armenian	1369	Nepali	1528	Thai
1057	Byelorussian	1235	Interlingua	1376	Dutch	1529	Tigrinya
1059	Bulgarian	1239	Interlingue	1379	Norwegian	1531	Turkmen
1060	Bihari	1245	Inupiak	1393	Occitan	1532	Tagalog
1061	Bislama	1248	Indonesian	1403	(Afan) Oromo	1534	Setswana
1066	Bengali; Bangla	1253	Icelandic	1408	Oriya	1535	Tonga
1067	Tibetan	1254	Italian	1417	Punjabi	1538	Turkish
1070	Breton	1257	Hebrew	1428	Polish	1539	Tsonga
1079	Catalan	1261	Japanese	1435	Pashto; Pushto	1540	Tatar
1093	Corsican	1269	Yiddish	1436	Portuguese	1543	Twi
1097	Czech	1283	Javanese	1463	Quechua	1557	Ukrainian
1103	Welsh	1287	Georgian	1481	Rhaeto-Romance	1564	Urdu
1105	Danish	1297	Kazakh	1482	Kirundi	1572	Uzbek
1109	German	1298	Greenlandic	1483	Romanian	1581	Vietnamese
1130	Bhutani	1299	Cambodian	1489	Russian	1587	Volapük
1142	Greek	1300	Kannada	1491	Kinyarwanda	1613	Wolof
1144	English	1301	Korean	1495	Sanskrit	1632	Xhosa
1145	Esperanto	1305	Kashmiri	1498	Sindhi	1665	Yoruba
1149	Spanish	1307	Kurdish	1501	Sangho	1684	Chinese
1150	Estonian	1311	Kirghiz	1502	Serbo-Croatian	1697	Zulu
1151	Basque	1313	Latin	1503	Singhalese	1703	Not specified
1157	Persian	1326	Lingala	1505	Slovak		
1165	Finnish	1327	Laothian	1506	Slovenian		
1166	Fiji	1332	Lithuanian	1507	Samoan		
1171	Faroese	1334	Latvian; Lettish	1508	Shona		
1174	French	1345	Malagasy	1509	Somali		
1181	Frisian	1347	Maori	1511	Albanian		
1183	Irish	1349	Macedonian	1512	Serbian		

The language spellings conform to the ISO 639: 1988 (E/F) standard.

Index to Parts and Controls

Refer to the pages indicated in parentheses for details.

Front Panel



- 1 ① (power) button and indicator (18) Disconnects the power of the player or places the player in standby mode.
- [2] I (remote sensor) (7)Accepts the remote control signals.
- 3 DIMMER button and indicator (30) Press to change the brightness of the front panel display and the indicators on the front panel. The
 - DIMMER indicator lights up when the front panel is off.
- VES button and indicator (52)
 Press to select the desired "VES" item.
 The indicator lights up for every selected item except "OFF."
- 5 Disc compartment (19) Insert discs in the disc slots.
- [6] I◄◄-/▶▶I+ dial (19, 22, 24)
 When the DIRECT SEARCH indicator is lit, turn to go to the next chapter or track or to go back to the previous chapter or track.
 When the DISC CHANGE indicator is lit, turn to rotate the disc slots or select disc.
- **∂**EJECT button (21)

 Press to remove the disc from the disc slot.
- B DIRECT SEARCH button and indicator (24) Press to use the I◄◄ -/ ►►I+ dial to locate the chapter or track.
- 9 OPEN/CLOSE button (19) Opens or closes the front cover.
- DISC CHANGE button and indicator (19, 22)
 Press to use the I◄◄ -/ ►►I+ dial to rotate the disc slots or select disc.

- 1 EASY PLAY button and indicator (20) Press to play the EASY PLAY disc or bring the EASY PLAY slot to the loading position.
- 12 MEGA CONTROL button and indicator (79) Press to control the connected CD changer.
- **13** FLIP button and indicator (25) Press to turn over the disc.
- 14 (stop) button (24, 27) Stops playing a disc.
- 15 II (pause) button (24) Pauses playing a disc.
- 16 ▷ (play) button (22) Plays a disc.
- **17** JOG button and indicator (25) Press to play a disc frame by frame.
- **18** KEYBOARD jack (38) Connect a keyboard to label the discs.
- 19FOLDER buttons (32)_______Selects a disc folder.
- 20 Front Panel Display (30) Indicates the playing time, etc.
- 21 REPEAT button (60) Each time you press this button, the "REPEAT" setting changes.
- 22 LOAD button (32)
- Reads the information of the discs loaded in sequence.
 23 SHUFFLE button (59)

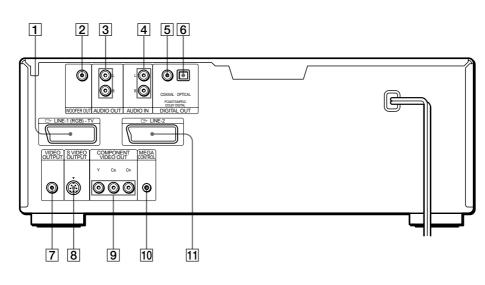
Each time you press this button, the "SHUFFLE" setting changes.

- **24** TIME/TEXT button (30, 45, 47) Displays the playing time of the disc, etc., on the front panel display.
- 25 1/ALL DISCS button (55)Selects 1 DISC or ALL DISCS play mode.
- 26 DISPLAY button (41)Displays the Control Menu display on the TV screen to set or adjust the Control Menu items.
- 27 SRETURN button (29, 33, 42)Press to return to the previously selected screen, etc.

Rear Panel

28 TITLE button (28)

- Displays the title menu on the TV screen. 29 DVD MENU button (28)
- Displays the DVD menu on the TV screen. 30 Click shuttle (25)
- Changes the playback speed.
- ∃1 ←/↑/↓/→/ENTER button
 Selects and executes the items or settings.

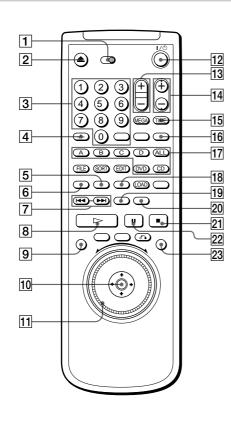


- 1 LINE-1 (RGB)-TV connector (8, 70) Connect to your TV using a LINE-1 connector to output the signal from the player. You can select the video signals, the S VIDEO signals or the RGB signals as the output signal format.
- **2** WOOFER OUT connector (14) Connect to a subwoofer (not supplied).
- 3 AUDIO OUT R (right)/L (left) connectors (12, 14) Connect to the audio input connector on your TV or receiver (amplifier).
- 4 AUDIO IN (L, R) connectors (79) Connect to the audio output on a Sony CD changer of 5/50/200/300 discs.
- **5** DIGITAL OUT COAXIAL connector (12, 16) Connect to an audio component using a coaxial digital connecting cord.
- DIGITAL OUT OPTICAL connector (12, 16)
 Connect to an audio component using an optical digital connecting cord. Take off the cap.

- VIDEO OUTPUT connectors (9)
 Connect to the video input connector on your TV or monitor.
- 8 SVIDEO OUTPUT connectors (12, 14, 16) Connect to the S video input connector on your TV or monitor.
- COMPONENT VIDEO OUT connectors (10)
 Connects to a monitor or projector having component video input connectors (Y, CB, CR) that conform to output signals from the player.
- 10 MEGA CONTROL connector (79) Connect to the control connector on a Sony CD changer of 5/50/200/300 discs.
- 1 LINE-2 connector (8) Connect your video equipment using a LINE-2 connector to input the signal from the equipment.

Index to Parts and Controls

Remote

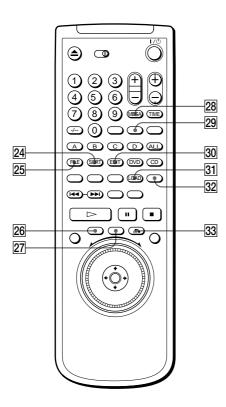


- **1** TV/DISC BROWSER/DVD switch (32, 77, 78) Selects to control the player, the Disc Browser or the TV with the remote.
- ② ▲OPEN/CLOSE button (24) Opens or closes the front cover.
- 3 Number/ENTER buttons Selects and executes the items or settings.
- 4 CLEAR/-/-- (ten's digit) button (57 through 61) Press to return to continuous play, etc.
- **5 PROGRAM button (57)** Displays the "PROGRAM" display on the TV screen.
- 6 SHUFFLE button (59) Each time you press this button, the "SHUFFLE" setting changes.
- [7] I◀◀/▶►IPREV/NEXT (previous/next) buttons (24) Press to go to the next chapter or track, or to go back to the previous chapter or track.
- 8 PLAY button (22) Plays a disc.
- DISPLAY button (41)
 Displays the Control Menu display on the TV screen to set or adjust the Control Menu items.
- 10 ←/↑/↓/→/ENTER buttons Selects and executes the items or settings.

11 Click shuttle (25, 36)

Changes the playback speed, or selects characters. **12** I/\bigcirc (on/standby) button (22)

- Press to turn on the player or place it in standby mode after power is connected by pressing ① on the player.
- VOL +/- buttons (77, 78)
 When 1 is set to DISC BROWSER or DVD, controls the AV receiver (amplifier) volume.
 When 1 is set to TV, controls the TV volume.
- PROG/DISC SKIP +/- buttons (24, 77)
 When 1 is set to DISC BROWSER or DVD, searches the discs in the folder (DISC SKIP).
 When 1 is set to TV, selects the program position of the TV (PROG).
- TV/VIDEO/TIME button (30, 45, 47, 77)
 When 1 is set to DISC BROWSER or DVD, displays the playing time of the disc, etc., on the front panel display (TIME).
 When 1 is set to TV, switches the TV's input (TV/VIDEO).
- **16** FLIP button (25) Press to turn over the disc.
- 17 FOLDER buttons (32)
- Selects a disc folder.
 REPEAT button (60)
 Each time you press this button, the "REPEAT" setting changes.
- 19 PICTURE MEMORY button (69) Press to store a picture in memory.
- 20 BOOKMARK button (63) Press to set a bookmark.
- 21 ■STOP button (24, 27) Stops playing a disc.
- 22 **IIPAUSE** button (24) Pauses playing a disc.
- 23 JOG button and indicator (25) Press to play a disc frame by frame.



24 ANGLE/SORT button (39, 50)

When 1 is set to DVD or TV, changes the angles when playing a DVD (ANGLE). When 1 is set to DISC BROWSER, enters the SORT mode (SORT).

- AUDIO/FILE button (34, 48)
 When 1 is set to DVD or TV, changes the sound while playing a DVD or VIDEO CD (AUDIO).
 When 1 is set to DISC BROWSER, enters the FILE mode (FILE).
- **26 TITLE button (28)** Displays the title menu on the TV screen.
- DVD MENU button (28)
 Displays the DVD menu on the TV screen.
- WIDE MODE/MEGA button (77, 79)
 When 1 is set to TV, switches the wide picture on or off (WIDE MODE).
 When 1 is set to DVD or DISC BROWSER, press to control the connected CD changer (MEGA).
- 29 TV/DVD button (77)
 Switches the TV's input source between the TV and CD/DVD player.
- 30 SUBTITLE/EDIT button (36, 49)
 When 1 is set to DVD or TV, displays the SUBTITLE display on the TV screen (SUBTITLE).
 When 1 is set to DISC BROWSER, enters the EDIT mode to label the disc (EDIT).
 31 1/ALL DISCS/LOAD button (32, 55)
- 31 1/ALL DISCS/LOAD button (32, 55)
 When 1 is set to DVD or TV, selects 1 DISC or ALL DISCS play mode (1/ALL DISCS).
 When 1 is set to DISC BROWSER, reads the information of the discs loaded in sequence (LOAD).
- EASY PLAY button (20)
 Press to play the EASY PLAY disc or bring the EASY PLAY slot to the loading position.
 DESTUDE buttom (20, 22, 42)
- 33 ***•RETURN button (29, 33, 42)** Press to return to the previously selected screen, etc.

Index

Numerics

1/ALL DISCS 55 2+1 Channel Surround 14 4:3 LETTER BOX 68 4:3 PAN SCAN 68 5.1 Channel Surround 15 16:9 68

Α

A-B REPEAT 60 ADVANCED 52 ANGLE 50 ANGLE VIEWER 61 AUDIO 47, 67 AUDIO ATT 74 AUDIO DRC 74 AUDIO SETUP 74 AUTO PLAY 70

В

BACKGROUND 69 Batteries 7 BOOKMARK 63 BOOKMARK RESET 70

С

CD 4, 22 Chapter 5, 44, 85 CHAPTER 44 CHAPTER VIEWER 61 COMPONENT OUT 70 Connecting 8, 12, 14, 15 Continuous play CD/VIDEO CD 22 DVD 22 Control Menu display 41 CUSTOM PARENTAL CONTROL 53 CUSTOM SETUP 70

D

DIGITAL OUT 74 Digital output 12.74 DIMMER 30, 70 DISC 44 Disc Browser 32 Disc Memo 36 Display Control Menu display 41 Front panel display 30 Setup display 64 DOLBY DIGITAL 12, 75 DOWNMIX 74 DTS 15, 75 DVD 4, 22 DVD menu 28 DVD MENU 67

Ε

EASY PLAY 20 EDIT 36

F

Fast Forward 25 Fast Rewind 25 FILE 34 Folder 32, 34 Front panel display 30

G

GENRE 38

Η

Handling discs 6 Hooking up 8, 12, 14, 15

I

Index 5, 44 INDEX 44

J

Jacket Picture 33, 69

Κ

Keyboard 38

L

LANGUAGE SETUP 67 LETTER BOX 68 LINE 70 Locating a specific point 25 by watching the TV screen 25

M, N

MEGA CONTROL 79 MPEG 75

0

On-screen display Control Menu display 41 Setup display 64 OSD 67

P, Q

PAN SCAN 68 PARENTAL CONTROL 71 PAUSE MODE 70 PBC functions 29 PBC Playback 29, 86 PICTURE MEMORY 69 PLAYBACK MEMORY 73 PRO LOGIC 74 PROGRAM 56 Program Play 56

R

Remote 7, 77 REPEAT 59 Resume Play 27 S

S video output 12, 14, 16 Scene 5 SCENE 44 SCREEN SAVER 69 SCREEN SETUP 68 Searching. See Locating. Setup display 64 SHUFFLE 58 Shuffle Play 58 Side B 25 Slow-motion Play 26 SORT 39 SPEAKER SETUP 76 STARTUP SCREEN 69 STROBE PLAYBACK 61 SUBTITLE 49,68

Т

TIME/MEMO 45, 46, 47 TIME/TEXT 45, 46, 47 Title 5, 44, 86 TITLE 44 Title menu 28 TITLE VIEWER 61 TRACK 5, 44, 86 TRACK 44 TRACK SELECTION 73 TRACK VIEWER 61 Troubleshooting 81 TV TYPE 68

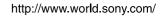
U

Usable discs 4

V, W, X, Y, Z

VES 51 VIDEO CD 4, 22 VIEWER 61





_

Printed on recycled paper