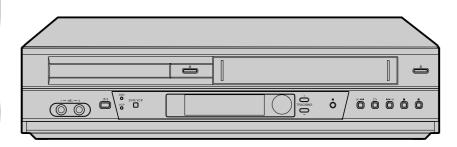
JVC



DVD PLAYER/Hi-Fi STEREO KARAOKE VIDEO CASSETTE PLAYER

HR-XV10AG









Safety Precautions

The rating plate and the safety caution are on the rear of the unit.

WARNING: DANGEROUS VOLTAGE INSIDE WARNING: TO PREVENT FIRE OR SHOCK

HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

The STANDBY/ON 0/1 button does not completely shut off mains power from the unit, but switches operating current on and off.

This unit is produced to comply with Standard IEC 60065.

When the equipment is installed in a cabinet or a shelf, make sure that it has sufficient space on all sides to allow for ventilation (10 cm or more on both sides, on top and at the rear).

When discarding batteries, environmental problems must be considered and the local rules or laws governing the disposal of these batteries must be followed strictly.

Failure to heed the following precautions may result in damage to the player, remote control or video cassette.

- 1. DO NOT place the player ...
 - ...in an environment prone to extreme temperatures or humidity.
 - ...in direct sunlight.
 - ...in a dusty environment.
 - ...in an environment where strong magnetic fields are generated.
 - ...on a surface that is unstable or subject to vibra-
- DO NOT block the player's ventilation openings or holes.
 - (If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)
- DO NOT place heavy objects on the player or remote control.
- DO NOT place anything which might spill on top of the player or remote control.
 - (If water or liquid is allowed to enter this equipment, fire or electric shock may be caused.)
- 5. <u>DO NOT</u> expose the apparatus to dripping or splashing.
- DO NOT use this equipment in a bathroom or places with water. Also DO NOT place any containers filled with water or liquids (such as cosmetics or medicines, flower vases, potted plants, cups, etc.) on top of this unit.
- 7. <u>DO NOT</u> place any naked flame sources, such as lighted candles, on the apparatus.
- 8. AVOID violent shocks to the player during transport.

Beware of moisture condensation

Moisture in the air will condense on the player when you move it from a cold place to a warm place, or under extremely humid conditions—just as water droplets form on the surface of a glass filled with cold liquid. Moisture condensation on the head drum will cause damage to the tape. In conditions where condensation may occur, keep the player's power turned on for a few hours to let the moisture dry.

When transporting

- Be sure to remove cassette from player before packing.
- Avoid violent shocks to the player during packing and transport.

Video heads cleaning

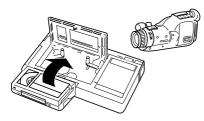
Accumulation of dirt and other particles on the video heads may cause the playback picture to become blurred or interrupted. Clean the video heads using a dry cleaning cassette or be sure to contact your nearest JVC dealer if such troubles occur.

You can check the video head status by using the Video Doctor function. See page 24.

Usable cassettes

- Compact VHS camcorder recordings can be played on this player. Simply place the recorded cassette into a VHS Cassette Adapter and it can be used just like any full-sized VHS cassette.
- This player can record on regular VHS and Super

VHS cassettes. However, it will record and play back regular VHS signals only. It is not possible to play back a recorded Super VHS cassette.



ATTENTION:

To mobile phone users:

Using a mobile phone in the vicinity of the player may cause picture vibration on the screen or change the screen to a blue back display.

On placing the player:

Some TVs or other appliances generates strong magnetic fields. Do not place such appliance on top of the player as it may cause picture disturbance.

Safety Precautions (Cont'd)

CAUTION:

A DVD/VCP IS A CLASS 1 LASER PRODUCT. HOWEVER THIS DVD/VCP USES A VISIBLE LASER BEAM WHICH COULD CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE THE PLAYER CORRECTLY AS INSTRUCTED.

THE FOLLOWING CAUTION LABEL IS LOCATED ON THE REAR PANEL OF THE DVD/VCP.

CLASS 1 LASER PRODUCT KLASSE 1 LASER PRODUKT LUOKAN 1 LASER LAITE KLASS 1 LASER APPARAT CLASSE 1 PRODUIT LASER

WHEN THIS DVD/VCP IS PLUGGED INTO THE WALL OUTLET, DO NOT PLACE YOUR EYES CLOSE TO THE OPENING OF THE DISC TRAY AND OTHER OPENINGS TO LOOK INTO THE INSIDE OF THIS DVD/VCP.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

Contents

Introduction Safety Precautions Table of Contents Before Use Playable Discs Precautions Notes on Discs About Symbols Front Panel and Display Window Remote Control Rear Panel	4 5-6 6 6 6
Preparation Connections	11_12
Connecting to a TV	11-12
Connecting to a TV	10
Before Operation - VCP part	12
How to using the main menu	13
Before Operation - DVD part	14-17
General Explanation	14
On-Screen Display	14
Initial Settings	15-17
Initial Settings General Operation	15 17
Language	15
• Picture	15
• Sound	
Others (DRC/Vocal/PBC)	16
Parental Control	17
Operation Operation with tape. Playing a tape OPR (Commercial Message) Skip OPR (Optimum Picture Response). Operation with DVD and Video CD Playing a DVD and Video CD General Features. Moving to another TITLE Moving to another CHAPTER/TRACK Slow Motion. Still Picture and Frame-by-frame playback Search. Random Repeat Repeat A-B Time Search 3D Surround Zoom. Marker Search. Special DVD Features Title Menu Disc Menu Camera Angle.	181818191919191920202020212121
 Changing the Audio Language 	21
• Subtitles	21

Operation with Audio CD and MP3 Discs	. 22
Playing an Audio CD and MP3 Discs	. 22
 Pause	. 22
Moving to another Track	. 22
Repeat Track/All/Off	
• Search	
• Random	22
• Repeat A-B	22
• 3D Surround	
Changing the Audio Channel	
Programmed Playback	
Programmed Playback with Audio CD	20
and MP3 Discs	23
Programmed Playback with Video CD	23
Repeat Programmed Tracks	
Erasing a Track from Program List	23
Erasing the Complete Program List	23
Additional Operation - VCP part	24
On Screen Display	24
On Screen Display	24
Video Doctor (Self-Diagnosis)	24
Hi-Fi Stereo Sound System	24
Additional Operation - DVD part	25
Last Condition Memory	25
Screen Saver	
Video Mode Setting	
Notes on MP3 Discs	
Special Operation - Karaoke function	26
Before you start karaoke	26
Karaoke sing-along	
Grading your singing	26
Special Recording	. 27
Copying from DVD to VCP	. 27
Recording from another video player	27
Reference	
Troubleshooting	28
Language Code List	29
Country Code List	30

About the symbols for instructions



Indicates hazards likely to cause harm to the unit itself or other material damage.



M Indicates special operating features of this unit.



Indicates tips and hints for making the task easier.

Before Use

Playable Discs



In addition, this unit can play a CD-R or CD-RW that contains audio titles or MP3 files.

Notes

- Depending on the conditions of the recording equipment or the CD-R/RW disc itself, some CD-R/RW discs cannot be played on the unit.
- The unit cannot play the CD-R/RW discs that contain no data, or contain different kinds of formatted data other than MP3 and CD-DA data.
- Do not attach any seal or label to either side (the labeled side or the recorded side) of a disc.
- Do not use irregular shaped CDs (e.g., heart-shaped or octagonal). It may result in malfunctions.

№ Notes on DVDs and Video CDs

Some playback operations of DVDs and Video CDs may be intentionally fixed by software manufacturers. As this unit plays DVDs and Video CDs according to disc content designed by the software manufacturer, some playback features of the unit may not be available, or other functions may be added.

Refer also to the instructions applied with the DVDs and Video CDs. Some DVDs made for business purposes may not be played on the unit.

Regional code of the DVD player and DVDs

This DVD player is designed and manufactured for playback of region "2" encoded DVD software. The region code on the labels of some DVD discs indicates which type of player can play those discs. This unit can play only DVD discs labeled "2" or "ALL". If you try to play any other discs, the message "Check Regional Code" will appear on the TV screen. Some DVD discs may not have a region code label even though their playback is prohibited by area limits.

Disc-related terms

Title (DVD only)

The main film content or accompanying feature content or additional feature content, or music album. Each title is assigned a title reference number enabling you to locate it easily.

Chapter (DVD only)

Sections of a picture or a musical piece that are smaller than titles.

A title is composed of one or several chapters. Each chapter is assigned a chapter number, enable you to locate the chapter you want. Depending on the disc, no chapters may be recorded.

Track (Video CD and audio CD only)

Sections of a picture or a musical piece on a video CD or an audio CD. Each track is assigned a track number, enabling you to locate the track you want.

Scene

On a video CD with PBC (Playback control) functions, moving pictures and still pictures are divided into sections called "Scenes". Each scene is displayed in the menu screen and assigned a scene number, enabling you to locate the scene you want.

A scene is composed of one or several tracks.

Types of video CDs

There are two types of video CDs:

Video CDs equipped with PBC (Version 2.0)

PBC (Playback control) functions allow you to interact with the system via menus, search functions, or other typical computer-like operations. Moreover, still pictures of high resolution can be played if they are included in the disc.

Video CDs not equipped with PBC (Version 1.1)

Operated in the same way as audio CDs, these discs allow playback of video pictures as well as sound, but they are not equipped with PBC.

Before Use (Cont'd)

Precautions

Handling the unit

When shipping the unit

The original shipping carton and packing materials come in handy. For maximum protection, re-pack the unit as it was originally packed at the factory.

When setting the unit

The picture and sound of a nearby TV or radio may be distorted during playback. In this case, position the unit away from the TV or radio, or turn off the unit after removing the disc.

To keep the surface clean

Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber of plastic products in contact with the unit for a long period of time. They will leave marks on the surface.

Cleaning the unit

To clean the cabinet

Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents, such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

To obtain a clear picture

The DVD player is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn down, the picture quality will be poor.

Regular inspection and maintenance are recommended after every 1,000 hours of use. (This depends on the operating environment.)

For details, please contact your nearest dealer.

Notes on Discs

Handling discs

Do not touch the playback side of the disc. Hold the disc by the edges so that fingerprints will not get on the surface.

Do not stick paper or tape on the disc.





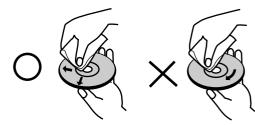
Storing discs

After playing, store the disc in its case.

Do not expose the disc to direct sunlight or sources of heat, or leave it in a parked car exposed to direct sunlight, as there may be a considerable temperature increase inside the car.

Cleaning discs

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center out.



Do not use strong solvents such as alcohol, benzine, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

About Symbols

About the ○ symbol display

" O " may appear on the TV screen during operation. This icon means the function explained in this owner's manual is not available on that specific DVD video disc.

About the disc symbols for instructions

A section whose title has one of the following symbol is applicable only to the disc represented by the symbol.

DVD DVD

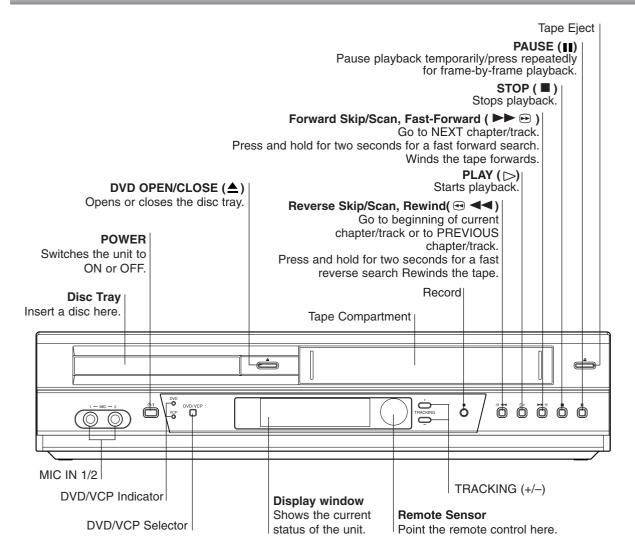
VCD2.0 Video CDs with the PBC (playback control)

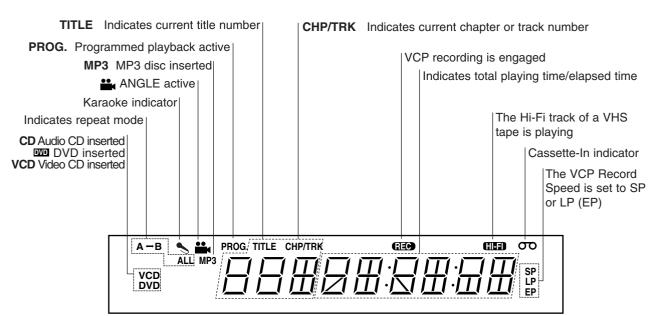
VCD1.1 Video CDs without the PBC (playback control) function.

CD Audio CDs.

MP3 MP3 disc.

Front Panel and Display Window





Remote Control

DVD/VCP select button

Selects operational mode of remote control.

POWER

Switch this unit ON or OFF.

DISPLAY COUNT

ტ/I

ISPI AV

DVD

8)

^

Access the On-Screen Display. Shows you the counter.

► ▲ ▼ (left/right/up/down)

- Select an item in the menu
- Perform the Karaoke Search.

SETUP/ MENU

Access or remove setup menu.

TITLE • available.

Display the title menu of the disc if

PAUSE/STEP (▮▮) •

Pause playback temporarily / press repeatedly for frame-by-frame playback.

STOP (■)•

Stops playback.

0-9 numerical buttons

Select numbered items in a menu.

A. MONITOR •

Select an audio language (DVD) or an audio channel (CD).

SUBTITLE •

Select a subtitle language.

MARKER •

Mark any point during playback.

SEARCH •

Display MEMORY SEARCH menu.

MIC/ECHO •

To select the MIC/ECHO mode **RETURN •**

- Remove the setup menu.
- Displays the menu of a video CD with PBC.

KARAOKE

Switch Karaoke on and off.

OPEN/CLOSE EJECT

- Open or close the disc tray.
- Tape Eject.

TOP MENU

Access menu of a DVD disc.

SELECT/ENTER/OK

Acknowledge menu selection.

REC

Record your input sources into tape.

• Forward SKIP/SCAN (►►I)/ Fast - Forward

- Search forward*/ go to next chapter or track.
- Winds the tape forwards.
- Press and hold button for about two seconds.

• PLAY (▶)

Starts playback.

Reverse SKIP/SCAN (I◄◄)/ Rewind

- Search backward* / go to beginning of current chapter or track or go to previous chapter or track.
- Rewinds the tape.
- Press and hold button for about two seconds.

PROGRAM

Access or remove program menu.

CLEAR

- Clear a track number on the program menu or a mark on the MARKER SEARCH menu.
- Reset tape counter to zero.

• REPEAT

- Repeat chapter, track, title, all.

• RANDOM

- Play tracks in random order.
- CM Skip

ANGLE

Select DVD camera angle if available

• REPEAT A-B/LP

- Repeat sequence.
- Select the recording speed of the tape.

ZOOM

Enlarge video image.

^{*} Feature is not available.

Remote Control (Cont'd)

Remote Control Operation Range

Point the remote control at the remote sensor and press

- Distance: About 7 m from the front of the remote
- Angle: About 30° in each direction of the front of the remote sensor

Remote control battery installation



Detach the battery cover on the rear of the remote control, and insert two R03 (size AAA) batteries with ⊕ and ● aligned correctly.

Do not mix old and new batteries. Never mix different types of batteries (standard, alkaline, etc.).

Remote A/B Code Switching

The remote control is capable of controlling two JVC units independently; one set to response to control's A code control signals and another set to The remote control is respond to B code control signals. The remote control is preset to send A code signals because your unit is initially set to respond to A code signals. You can easily change your unit to respond to B code signals.

- Press and hold VCP on the remote control for over 2 seconds, press the **number key "2"** and then press **OK**. The remote control now can transmit B code signals.
- Press and hold **PLAY** ► on the unit for more than 5 seconds while the unit is turned off. The code currently set appears on the display window.
- Press any key on the remote control. The unit will now only respond to B code signals.

Notes

- To set the unit back to respond to A code signals, repeat the same procedure as shown above, but in step 1, press the number key "1" instead of "2".
- The code for the unit will be back to respond A code signals once you disconnect the AC power cord.

AUDIO OUT (Left/Right) Connect to an amplifier, receiver or stereo system. COAXIAL (Digital audio out jack) Connect to digital (coaxial) audio equipment. AUDIO OUT L/R (Both DVD and VHS out) Connect to an amplifier, receiver or stereo system. AUDIO IN L/R (VHS IN) Receive the audio signals from an external source to VCP. COAMA **AC Power Cord** Connect to a power source. VIDEO IN (VHS IN) Receive the video signals from an external source to VCP. VIDEO OUT (Both DVD and VHS out) Connect to a TV with video inputs. COMPONENT VIDEO OUT (Y Pb Pr) (DVD OUT) Connect to a TV with Y Pb Pr inputs. **VIDEO OUT** Connect to a TV with video inputs.



Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

Connections

Tips

- Depending on your TV and other equipment you wish to connect, there are various ways you could connect the unit.
- Please refer to the manuals of your TV, Stereo System or other devices as necessary to make the best connections.
- For better sound reproduction, connect this unit's AUDIO OUT jacks to the audio in jacks of your amplifier, receiver, stereo or audio/video equipment.
 See "Connecting to optional equipment" on page 12.

ACaution

- Make sure this unit is connected directly to the TV.
 Set the TV to the correct video input channel.
- Do not connect this unit's AUDIO OUT jack to the phono in jack (record deck) of your audio system.

Connecting to a TV

- Make one of the following connections, depending on the capabilities of your existing equipment.
- When using the COMPONENT VIDEO OUT jacks, set TV's INPUT to COMPONENT VIDEO.

Basic connection (AV)

- Connect the VIDEO OUT jack on this unit's DVD/VHS OUT to the video in jack on the TV using the video cable supplied.
- 2 Connect the Left and Right AUDIO OUT jacks of this unit's DVD/VHS OUT to the audio left/right in jacks on the TV using the supplied audio cables.

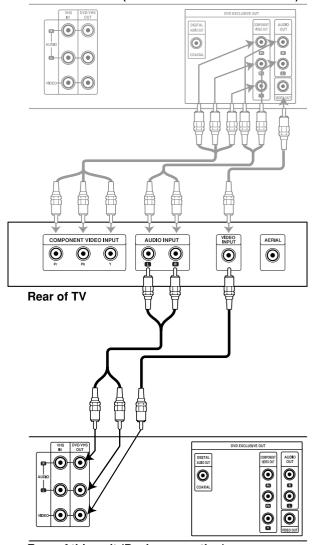
Component Video (Color Stream®) connection (for DVD)

- Connect the COMPONENT VIDEO OUT jacks on the unit to the corresponding in jacks on the TV using an optional Y Pb Pr cable.
- Connect the Left and Right AUDIO OUT jacks of the unit to the audio left/right in jacks on the TV using the audio cables.

DVD exclusive out connection

- You can only watch the DVD playback.
- Connect the VIDEO OUT jack on this unit's DVD EXCLUSIVE OUT to the video in jack on the TV using the video cable.
- 2 Connect the Left and Right AUDIO OUT jacks of this unit's DVD EXCLUSIVE OUT to the audio left/right in jacks on the TV using the audio cables.

Rear of this unit (DVD exclusive out connection)



Rear of this unit (Basic connection)

Connections (Cont'd)

Connecting to Optional Equipment

Connecting to an amplifier equipped with two channel analog stereo or Dolby Surround

Connect the Left and Right AUDIO OUT jacks on this unit to the audio left and right in jacks on your amplifier, receiver or stereo system, using the audio cables.

Connecting to an amplifier equipped with two channel digital stereo (PCM) or to an Audio/ Video receiver equipped with a multi-channel decoder (Dolby Digital™, MPEG 2 or DTS)

Connect this unit's DIGITAL AUDIO OUT jack (COAXIAL) to the corresponding in jack on your amplifier. Use an optional coaxial audio cable.

You will need to activate this unit's digital output. (See "Digital Audio Output" on page 16).

Digital Multi-channel sound

A digital multi-channel connection provides the best sound quality. For this you need a multi-channel Audio/Video receiver that supports one or more of the audio formats supported by your unit (MPEG 2, Dolby Digital and DTS). Check the receiver manual and the logos on the front of the receiver.

Warning:

Due to the DTS Licensing agreement, the digital output will be in DTS digital out when DTS audio stream is selected.

Amplifier (Receiver)

Notes

- If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound or no sound at all.
- To see the audio format of the current DVD in the On-Screen Display, press A. MONITOR.



Before Operation - VCP part

How to using the main menu

This VCP can easily be programmed by using the menus displayed on screen.

The menus are controlled from the Remote Control Handset.

1 Switch on your TV set and video player by pressing Ե/I.

Press VCP.

Press **MENU**.

The main menu will appear on the TV screen.



- F.OSD ON/OFF To switch the display of operational mode of your VCP ON or OFF (see p 24).
- **OPR** To improve the playback picture (see p 18).
- DR To check a problem with your VCP (see p 24).
- ABC OSD To change the language setting for OSD.
 You can select the language

between English and Russian.

- To switch on or off Karaoke &

- KARAOKE To switch on or off Karaoke & Karaoke Search (see p 26).
- **SCORE** To display the score your song when you Karaoke (see p 26).
- SYSTEM Select the colour system used for playback and recording.
 The system is changed as shown below. (Refer to the right for more information.)

*If you want to record NTSC signals, press **OK** and select between NTSC 3.58 and NTSC 4.43.

Source	Mode	System Change
PAL/	Recording	AUTO → PAL→ MESECAM
MESECAM	Playback	AUTO → PAL→ MESECAM
NTSC	Recording	NTSC3.58 → NTSC4.43*
NISC	Playback	NTSC-PB → NTSC3.58 → NTSC4.43

Press ◀ and ▶ to select the option to change, then Press **OK** to change the setting and press ◀ and ▶ to select the sub menu.

Press **MENU** to remove the menu screen.

To set the colour system

If streaks appear during playback, set colour system manually to conform to the system that the tape was recorded in. (Normally set the switch to AUTO.)

If your tape was recorded in		Set colour system to	If your TV is		
PAL		PAL			
NTSC3.58		NTSC3.58	MULTI-SYSTEM TV		
111503.56		NTSC-PB	PAL TV		
NTSC4.43		NTSC4.43	MULTI-SYSTEM TV		
101304.43		NTSC-PB	PAL TV		
MESECAM		MESECAM	MULTI-SYSTEM TV		

Before Operation - DVD part

General Explanation

This manual gives the basic instructions for operating this unit. Some DVDs require specific operation or allow only limited operation during playback. When this occurs, the symbol ⊘ appears on the TV screen, indicating that the operation is not permitted by this unit or is not available on the disc.

On-Screen Display

The general playback status can be displayed on the TV screen. Some items can be changed on the menu.

On-screen display operation

Press DISPLAY during playback.

Press ▲ or ▼ to select an item.
The selected item will be highlighted.

Press ◀ or ▶ to change the setting of an item.

The number buttons can be also be used for setting numbers (e.g., title number). For some functions, press OK to execute the setting.

Temporary Feedback Field Icons

P TITLE Repeat Title

P CHAPT Repeat Chapter

Repeat Track (non-PBC Video CDs only)

Repeat All Tracks (non-PBC Video CDs only)

- Repeat A-B

Resume play from this point

Notes

- Some discs may not provide all of the below On-Screen Display.
- If no button is pressed for 10 seconds, the On-Screen Display disappears.

DVD

Items		Function (Press ▲/▼ to select desired item)	Selection Method
Title Number	1/3	Shows the current title number and total number of titles, and skips to the desired title number.	√ / ▶, or Numbers, OK
Chapter Number	© 1/12	Shows the current chapter number and total number of chapters, and skips to the desired chapter number.	
Time search	0:16:57	Shows the elapsed playing time, and searches the point by the elapsed time directly.	Numbers, OK
Audio language and Digital Audio Output mode	1 ENG DIDD 5.1 CH	Shows the current audio soundtrack language, encoding method, and channel number, and changes the setting.	∢ / ▶
Subtitle language	OFF	Shows the current subtitles language, and changes the setting.	◄ /▶
Angle	1/1	Shows the current angle number and total number of angles, and changes the angle number.	◀ /▶
Sound	NORM.	Shows the current sound mode, and changes the setting.	⋖ /▶

VCD2.0 VCD1.1

Items		Function (Press ▲/▼ to select desired item)	Selection Method
Track Number	1/4	Shows the current track number, total number of tracks and PBC On mode, and skip to the desired track number.	✓ /►, or Numeric, OK
Time	0:16:57	Shows the elapsed playing time (Display only)	-
Audio Channel	STER.	Shows the audio channel, and changes the audio channel.	◄ /▶
Sound	NORM.	Shows the current sound mode, and changes the setting.	◄ /▶

Before Operation - DVD part (Cont'd)

Initial Settings

You can set your own Personal Preferences on this unit.

Initial Settings General Operation

■ Press SETUP.

The setup menu appears.



- Press ▲/▼ to select the desired item.

 The screen will show the current setting for the selected item, as well as alternate setting(s).
- While the desired item is selected, press ▶, then ▲/▼ to select the desired setting.
- Press OK to confirm your selection.
 Some items require additional steps.
- Fress SETUP, RETURN or PLAY ► to exit the setup menu.

Language

Disc Language DVD

Select a language for the disc's Menu, Audio and Subtitle.

Original: The original language set for the disc is selected.

Other: To select another language, press number buttons to enter the corresponding 4-digit number according to the language code list on page 29. If you enter the wrong language code, press **CLEAR**.



Menu Language

Select a language for the setup menu. This is the menu you see when you press **SETUP**.



Picture

TV Aspect DVD

4:3 Letterbox: Select when a standard 4:3 TV is connected. Displays theatrical images with masking bars above and below the picture.

4:3 Panscan: Select when a standard 4:3 TV is connected. Displays pictures cropped to fill your TV screen. Either sides of the picture are cut off.

16:9 Wide: Select when a 16:9 wide TV is connected.



Before Operation - DVD part (Cont'd)

Sound

Digital Audio Output

Each DVD disc has a variety of audio output options. Set this unit's Digital Audio Output according to the type of audio system you use.

DOLBY DIGITAL/PCM: Select "DOLBY DIGITAL/PCM" if you connected this unit's DIGITAL OUT jack to a Dolby Digital decoder (or an amplifier or other equipment with a Dolby Digital decoder).

Stream/PCM: Select "Stream/PCM" if you connected this unit's DIGITAL OUT jack to an amplifier or other equipment with a DTS decoder, Dolby Digital decoder or MPEG decoder.

PCM: Select when connected to a 2 channel digital stereo amplifier. This unit outputs sounds in the PCM 2ch format when you play a DVD video disc recorded on the Dolby Digital, MPEG1 or MPEG2 recording system.



Sample Frequency

To change the Sample Frequency setting, first select the desired Digital Audio Output as indicated as above. If your receiver or amplifier is NOT capable of handling 96KHz signals, select 48KHz. When this choice is made, this unit will automatically convert any 96KHz signals to 48KHz so your system can decode them. If your receiver or amplifier is capable of handling 96KHz signals, select 96KHz. When this choice is made, this unit will pass each type of signal through without any further processing.

Others

The DRC, Vocal, and PBC settings can be changed.

Press ▲/▼ to select the desired item and press OK.
 The setting of the selected item is changed between On and Off.



Dynamic Range Control (DRC)

With the DVD format, you can hear a program's sound-track in the most accurate and realistic presentation possible, thanks to digital audio technology. However, you may wish to compress the dynamic range of the audio output (the difference between the loudest sounds and the quietest ones). Then, you may listen to a movie at a lower volume without losing clarity of sound. Set DRC to On for this effect.

Vocal

Set Vocal to On only when a multi-channel karaoke DVD is playing. The karaoke channels on the disc will mix into a normal stereo sound.

PBC

Set Playback Control (PBC) to On or Off.

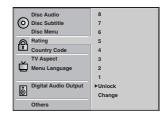
On: Video CDs with PBC are played according to the PBC.Off: Video CDs with PBC are played the same way as Audio CDs.

Before Operation - DVD part (Cont'd)

Parental Control

Rating DVD

Movies on DVDs may contain scenes not suitable for children. Therefore, discs may contain Parental Control information that applies to the complete disc or to certain scenes on the disc. These scenes are rated from 1 to 8, and alternatively, more suitable scenes are available for selection on some discs. Ratings are country-dependent. The Parental Control feature allows you to prevent discs from being played by your children or to have certain discs played with alternative scenes.



- Select "Rating" on the Setup menu using the ▲ and ▼ buttons.
- While "Rating" is selected, press ►.
- When you have not entered a password yet.
 Enter a 4-digit password using the numbered buttons to create a personal 4-digit security password, then press **OK**. Enter the 4-digit password again and press **OK** to verify.

When you have already entered a password; Enter a 4-digit password using the numbered buttons to confirm the personal 4-digit security password, then press **OK**.

If you make a mistake before pressing **OK**, press **CLEAR** and enter 4-digit security password again.

Select a rating from 1 to 8 using the ▲/▼ buttons. One (1) has the least playback restrictions. Eight (8) has the most playback restrictions.

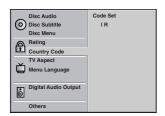
Unlock: If you select Unlock, Parental Control is not active. The disc will play in full.

Ratings 1 to 8: Some discs contain scenes not suitable for children. If you set a rating for the player, all disc scenes with the same rating or lower will be played. Higher rated scenes will not be played unless an alternative scene is available on the disc. The alternative must have the same rating or a lower one. If no suitable alternative is found, playback will stop. You must enter the 4-digit password or change the rating level in order to play the disc.

5 Press OK to confirm your rating selection, then press SETUP to exit the menu.

Country Code DVD

Enter the code of a country/area whose standards were used to rate the DVD video disc, referring to the list (See "Country Code List", page 30).



- Select Country Code using the ▲/▼ buttons on the setup menu.
- While Country Code is selected, press ▶.
- Prollow step 3 of "Rating" on left.
- Select the first character using the ▲/▼ buttons.
- Shift the cursor using ◆ buttons and select the second character using ▲ buttons.
- Press OK to confirm your country code selection, then press SETUP to exit the menu.

Note

Confirmation of the 4-digit password is necessary when the code is changed (See "Changing the 4-digit code" below).

Changing the 4-digit code

- 1 Follow Steps 1-2 as shown above to the left (Rating).
- 2 Enter the old code, then press **OK**.
- 3 Select Change using the ▲/▼ buttons then press OK.
- 4 Enter the new 4-digit code, then press **OK**.
- 5 Enter exactly the same code a second time and verify by pressing OK.
- 6 Press **SETUP** to exit the menu.

If you forget your 4-digit code

If you forget your password, to clear the current password, follow the procedure below.

- 1 Press **SETUP** to display the setup menu.
- 2 Use the Number buttons to enter the 6-digit number "210499".
 - The 4-digit password is cleared.
- **3** Enter a new code as shown above to the left (Rating).

Operation with tape

Playing a tape

You will only be able to load and eject video cassettes when your VCP is plugged into the mains.
Your VCP may also playback recordings from NTSC

tapes (on PAL TV).

Getting a better picture

When a cassette is inserted and playback started, the automatic tracking function works to get the best possible picture automatically. If the quality of the recording is poor, repeatedly press ▲ or ▼ on the remote control to manually adjust the tracking until any distortions have been removed. Press numbered 0 on the remote control to switch automatic tracking back on again.

Make sure that you have correctly connected your VCP as described earlier in this book.

Turn on your TV.

Press U/I to turn on your VCP.

Insert the video cassette into your VCP.

The video cassette should have the window side facing up and the arrow facing away from you.

Press PLAY ► to start playing your tape.

If you load a video cassette which has had its record protection tab removed, playback of the cassette will start automatically.

AUTO TRACKING

Your VCP will automatically adjust the tracking to give the best picture quality.

Press II to still a picture.

Press II repeatedly to advance the tape frame by frame.

If you hold down ▶►I, the picture will be slowed down at about 1/19 times the normal playback. Tapes can be paused for up to 5 minutes. After 5 minutes your VCP will stop the tape to prevent damaging the tape or your VCP.

Still picture quality can be improved slightly by pressing \blacktriangle or \blacktriangledown .

Press PLAY ► to continue playing your tape.

Picture search:

During playing back press either ►►I or I◄ to this will enable you to rapidly wind the tape (7 times normal playback) see where you are on the tape.

Logic search:

During fast forwarding or rewinding press and hold ▶►I or I◄◄ the picture will be played back at 7 times normal playback speed.



Press to end playback.

Press 📤.

If the end of the tape is reached, your VCP will stop playback automatically, rewind, stop, eject the tape.

CM (Commercial Message) Skip

This feature enables you during playback of a tape to skip a commercial break in a few seconds, then resume normal playback.

While tape is playing press O on the remote control to skip commercial (or another programme material).

Repeatedly press O to skip:

1 press : 30 seconds 2 press : 60 seconds

3 press : 90 seconds 4 press : 120 seconds 5 press : 150 seconds 6 press : 180 seconds

OPR (Optimum Picture Response)

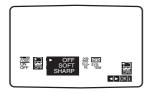
This feature automatically improves playback picture quality by adjusting your VCP to the condition of the tape.

Please note you may only set OPR when playing a tape.

Press MENU.

Press ◀ or ▶ to select OPR.

Press OK.



Press ◀ or ▶ repeatedly to select: **OFF**, **SOFT** or **SHARP**.

Press OK.

Press **MENU** to remove the menus.

Operation with DVD and Video CD

Playing a DVD and Video CD

T Playback Setup (DVD) (VCD2.0) (VCD1.1)

- Turn on the TV and select the video input source connected to the DVD player.
- Audio system: Turn on the audio system and select the input source connected to the DVD player.

2 Load your chosen disc in the tray, with the label facing up.

When a double-sided DVD is inserted, make sure the side you want to play is facing up.

READING appears on the TV screen, and playback starts automatically. If playback does not start, press **PLAY** ▶.

In some cases, the disc menu might appear instead.

If a menu screen is displayed

The menu screen may be displayed first after loading a DVD or Video CD which contains a menu.

DVD

Use the ◀ ► ▲ ▼ buttons to select the title/chapter you want to view, then press **OK** to start playback. Press **TITLE** or **TOP MENU** to return to the menu screen.

VCD2.0

- Use the number buttons to select the track you want to view
 - Press **RETURN** to return to the menu screen.
- Menu setting and the exact operating procedures for using the menu may differ depending on the disc.
 Follow the instructions on the each menu screen.
 You also may set PBC to Off under setup. See page 16.

Notes

- If Parental Control is set and the disc is not within the Rating settings (not authorized), the 4-digit code must be entered and/or the disc must be authorized (see "Parental Control", on page 17).
- DVDs may have a region code.
- Your player will not play discs that have a region code different from your player. The region code for this player is 2 (two).
- If you load a video cassette which has had its record protection tab removed during playing the DVD, the mode will be switched to VCP automatically.

General Features

√ Note

Unless stated otherwise, all operations described use the remote control. Some features may also be available on the Setup menu.

Moving to another TITLE DVD



When a disc has more than one title, you can move to another title as follows:

 Press DISPLAY when playback is stopped, then press the appropriate numbered button (0-9) to select a title number.

Moving to another CHAPTER/TRACK



When a title on a disc has more than one chapter or a disc has more than one track, you can move to another chapter/track as follows:

- Press I◄◄ or ►►I briefly during playback to select the next chapter/track or to return to the beginning of the current chapter/track.
- Press I◄◄ twice briefly to step back to the previous chapter/track.
- To go directly to any chapter during DVD playback, press DISPLAY. Then, press ▲/▼ to select C (chapter) (or for a Video CD, select T for track). Then, enter the chapter/track number using the numbered buttons (0-9).

Note Note

For two-digit numbers, press the buttons in rapid succession.

Slow Motion DVD VCD2.0 VCD1.1

- 1 Press I or I during pause. The player will enter SLOW mode.
- 2 Use the I◄◀ or ►►I to select the required speed: ◀▮1/16, ◀▮ 1/8, ◀▮ 1/4 or ◀▮ 1/2 (backward), or ▮► 1/16, ▮► 1/8, ▮► 1/4 or ▮► 1/2 (forward).
- 3 To exit slow motion mode, press PLAY ▶.

Note

Slow motion playback in reverse is not applicable for Video CD.

Operation with DVD and Video CD (Cont'd)

General Features (continued)

Still Picture and Frame-by-frame playback DVD VCD2.0 VCD1.1

- 1 Press II during playback. The player will now go into PAUSE mode.
- 2 You can advance the picture frame-by-frame by pressing II repeatedly on the remote control.

Search DVD VCD2.0 VCD1.1

- 1 Press and hold I or ▶►I for about two seconds during playback.
 - The player will now go into SEARCH mode.
- 2 Press and hold I◀◀ or ▶▶I repeatedly to select the required speed: ◀◀X2, ◀◀X4, ◀◀X16, ◀◀X100 (backward) or $\triangleright X2$, $\triangleright X4$, $\triangleright X16$, $\triangleright X100$ (forward).
 - With a Video CD, the Search speed changes: ◀◀X2, $\blacktriangleleft X4$, $\blacktriangleleft X8$ (backward) or $\blacktriangleright X2$, $\blacktriangleright X4$, ►►X8 (forward).
- 3 To exit SEARCH mode, press PLAY ▶.

Random Karaoke DVD VCD1.1

- 1 Press RANDOM during playback or in stop mode. The unit automatically begins Random Playback and "RANDOM" appears on the TV screen.
- 2 To return to normal playback, press RANDOM again until "NORMAL" appears on the TV screen.

By pressing I or I during Random playback, the unit selects another title (track) and resumes Random playback.

Note

This function only works with DVD Karaoke discs and video CD without PBC.

Repeat DVD VCD2.0 VCD1.1



DVD Video Discs - Repeat Chapter/Title/Off

- 1 To repeat the currently playing chapter, press REPEAT.
 - The Repeat Chapter icon appears on the TV screen.
- 2 To repeat the title currently playing, press REPEAT a second time.
 - The Repeat Title icon appears on the TV screen.
- **3** To exit Repeat mode, press **REPEAT** a third time. The Repeat Off icon appears on the TV screen.

Video CDs - Repeat Track/All/Off

- 1 To repeat the track currently playing, press REPEAT. The Repeat Track icon appears on the TV screen.
- 2 To repeat the disc currently playing, press **REPEAT** a second time.
 - The Repeat All icon appears on the TV screen.
- **3** To exit Repeat mode, press **REPEAT** a third time. The Repeat Off icon appears on the TV screen.

Note

On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Repeat function. See page 16.

Repeat A-B DVD VCD2.0 VCD1.1



To repeat a sequence in a title:

- 1 Press REPEAT A-B at your chosen starting point. A- appears briefly on the TV screen.
- 2 Press REPEAT A-B again at your chosen end point. A-B appears briefly on the TV screen, and the repeat sequence begins (a-b repeat appears on the player's display).
- **3** To cancel the sequence, press **REPEAT A-B**.

Time Search DVD © 0:16:57 © ------





The Time Search function allows you to start playing at any chosen time on the disc.

- 1 Press DISPLAY during playback. The on-screen display appears on the screen.
 - The Time Search box shows the elapsed playing time of the current disc.
- 2 Within 10 seconds, press ▲/▼ to select the Time Search icon in the on-screen display. The "-:--" appears in the Time Search box.
- 3 Within 10 seconds, use the number buttons to enter the required start time. Enter hours, minutes, and seconds from left to right in the box.
 - If you enter the wrong numbers, press **CLEAR** to remove the numbers you entered. Then enter the correct numbers.
- 4 Within 10 seconds, press **OK** to confirm the start

Playback starts from the selected time on the disc. If you enter an invalid time, playback will continue from the current point.

3D Surround DVD VCD2.0 VCD1.1





This unit can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-

- 1 Press **DISPLAY** during playback.
- 2 Press ▲/▼ to select "NORM." or "3D SUR".

channel audio from a home theater system.

3 Press **◄** repeatedly until the desired sound is selected.

Operation with DVD and Video CD (Cont'd)

General Features (continued)

Zoom DVD VCD2.0 VCD1.1

The Zoom function allows you to enlarge the video image and to move through the enlarged image.

- 1 Press ZOOM during playback or still playback to activate the Zoom function.
 - If you press **ZOOM** repeatedly, the magnification level increases up to six times.
- 2 Use the ◀▶▲ ▼ buttons to move through the zoomed picture.
- **3** Press **CLEAR** to resume normal playback or return to the paused image.

Notes

- The zoom function may not work for some DVDs.
- The zoom function may not work on multi-angle scenes.

Marker Search DVD VCD2.0 VCD1.1



You can start playback from a memorized point. Up to nine points can be memorized.

To enter a mark, follow these steps.

- 1 During disc playback, press MARKER when playback reaches the spot that you want to memorize. The Marker icon will appear on the TV screen briefly.
- 2 Repeat step 1 to enter up to nine Marker points on a disc.

To Recall a Marked Scene

- 1 During disc playback, press **SEARCH**. The MARKER SEARCH menu will appear on the
- 2 Within 10 seconds, press **√** to select a Marker number that you want to recall.
- **3** Press **OK**. Playback will start from the Marked scene.
- 4 To remove the MARKER SEARCH menu, press SEARCH.

To clear a Marked Scene

- During disc playback, press SEARCH.
 The MARKER SEARCH menu will appear on the screen.
- 2 Press ◄/► to select the Marker number that you want to erase.
- 3 Press CLEAR.
 - The Marker number will be erased from the list.
- 4 Repeat steps 2 and 3 to erase additional Marker numbers.
- 5 To remove the MARKER SEARCH menu, press **SEARCH**.

Special DVD Features DVD

Checking the contents of DVD Video discs: Menus

DVDs may contain menus that allow you to access special features. To use the disc menu, press **TOP MENU**. Then, press the appropriate number button to select an option. Or, use the $\blacktriangleleft \nearrow / \triangle / \blacktriangledown$ buttons to highlight your selection, then press **OK**.

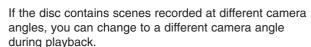
Title Menu DVD

- 1 Press TITLE.
 - If the current title has a menu, the menu will appear on the screen. Otherwise, the disc menu may appear.
- 2 The menu can list camera angles, spoken language and subtitle options, and chapters for the title.
- 3 To remove the title menu, press TITLE again.

Disc Menu DVD

- 1 Press TOP MENU.
 - The disc menu is displayed.
- 2 To remove the disc menu, press TOP MENU again.

Camera Angle DVD



 Press ANGLE repeatedly during playback to select a desired angle.

The number of the current angle appears on the display.

Changing the Audio Language DVD



Press **A. MONITOR** repeatedly during playback to hear a different audio language or audio track.

Subtitles DVD - 1 ENG

Press **SUBTITLE** repeatedly during playback to see the different subtitle languages.



If \bigcirc appears, the feature is not available on the disc.

Operation with Audio CD and MP3 Discs

Playing an Audio CD and MP3 discs

The DVD Player can play MP3 formatted recordings on CD-ROM, CD-R, or CD-RW discs.

Before playing MP3 recordings, read the notes on MP3 Recordings on page 25.

Insert a disc and close the tray. The menu appears on the TV screen.





Audio CD menu

MP3 menu

Press A/▼ to select a track then press PLAY ▶. Playback starts.

During playback, the current track's elapsed playing time will appear on the display.

Playback will stop at the end of the disc.

To stop playback at any other time, press ■.

Pause CD MP3

- 1 Press II during playback.
- 2 To return to playback, press PLAY ▶ or press II again.

Moving to another Track CD MP3

- Press I◄◄ or ►►I briefly during playback to go to the next track or to return to the beginning of the current track.
- Press I◄◄ twice briefly to step back to the previous track.
- In case of audio CD, to go directly to any track, enter the track number using the numbered buttons (0-9) during playback.

Repeat Track/All/Off CD MP3

- 1 To repeat the track currently playing, press **REPEAT**. The Repeat Track icon appears on the menu screen.
- 2 To repeat all tracks on a disc, press REPEAT a second time.
 - The Repeat ALL icon appears on the menu screen.
- **3** To cancel Repeat mode, press **REPEAT** a third time. The Repeat OFF icon appears on the menu screen.

Search CD

- 1 Press and hold I◄◄ or ►►I for about two seconds during playback.
 - The player will now go into SEARCH mode.
- 2 Press and hold I or ►►I repeatedly to select the required speed: ✓X2, ✓X4, ✓X8 (backward) or ►►X2, ►►X4, ►►X8 (forward).
- 3 Search speed and direction are indicated on the menu screen.
- 4 To exit SEARCH mode, press PLAY ▶.

Random CD

- Press RANDOM during playback or when playback is stopped.
 - The unit automatically begins Random Playback and "RAND." appears on the menu screen.
- **2** To return to normal playback, press **RANDOM** repeatedly until "RAND." disappears on the menu screen.

Repeat A-B CD

To repeat a sequence.

- 1 During disc playback, press REPEAT A-B at your chosen starting point.
 - The Repeat icon and "A -" appears on the menu screen.
- 2 Press REPEAT A-B again at your chosen end point. The Repeat icon and "A B" appears on the menu screen, and the sequence begins to play repeatedly.
- **3** To exit the sequence and return to normal play, press **REPEAT A-B** again.

The Repeat icon and "OFF" appear on the menu screen.

3D Surround CD

This unit can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.

- 1 Press **DISPLAY** or **A. MONITOR** during playback.
- 2 Press **♦** to select "NORM." or "3D SUR".
- 3 Press ▲▼ repeatedly until the desired sound is selected.

Changing the Audio Channel CD

Press **A. MONITOR** repeatedly during playback to hear a different audio channel (STEREO, LEFT, or RIGHT).

Programmed Playback CD MP3 VCD2.0 VCD1.1





Programmed Playback with Audio CD and MP3 Discs

Program allows you to store your favorite tracks for a particular disc in the player memory.

Program can contain 32 tracks (Audio CD) or 60 tracks (MP3 disc).

Insert the disc and close the tray. The menu is displayed on the TV screen.

Press PROG. during playback or in the stop mode to enter the Program Edit mode.

The E mark will appear to the right of the word Program on the right side of the menu screen.

N Note

Press PROG. to exit the Program Edit mode; the 🗉 mark will disappear.

Press ▲/▼ to select a track, then press OK to place the selected track on the Program list.

Repeat step 3 to place additional tracks on the Program list.





Audio CD menu

MP3 menu

Press ▶.

The programmed track you selected last is highlighted on the program list.

Press ▲/▼ to select the track you want to start

Press TITLE to move to the next page. Press TOP MENU to move to the previous page.

Press PLAY ▶ to start.

Playback begins in the order in which you programmed the tracks and "PROG." appears on the display window. Playback stops after all of the tracks on the Program list have played once.

Programmed Playback with Video CD

N Note

On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Program function. See page 16.

Insert Video CD and close the tray.

Press PROG. while playback is stopped. The VCD Program menu will appear.



Press **RETURN** or **PROG.** to exit the Program menu.

Follow steps 3-7 of "Programmed Playback with Audio CD and MP3 Disc" on left.

Repeat Programmed Tracks

- To repeat the track currently playing, press **REPEAT**. The Repeat Track icon appears on the menu screen.
- To repeat all tracks on the program list, press **REPEAT** a second time.

The Repeat All icon appears on the menu screen.

To cancel Repeat mode, press **REPEAT** a third time. The Repeat Off icon appears on the menu screen.

Erasing a Track from Program List

1 Press **PROG.** during playback or in the stop mode to enter the Program Edit mode.

The E mark will appear.

- 2 Press ▶ to move to the Program list.
- 3 Use ▲/▼ to select the track that you wish to erase from the Program list.
- 4 Press CLEAR.

The track will be erased from the Program list.

Erasing the Complete Program List

- 1 Follow steps 1-2 of "Erasing a Track from Program" List" as above.
- 2 Use ▲/▼ to select "Clear All", then press OK. The complete Program for the disc will be erased. The programs are also cleared when the disc is removed.

To resume normal playback from programmed playback

Press and hold PROG. for 3 seconds until "PROG." indicator disappears in the display window.

Additional Operation - VCP part

On Screen Display

You may easily display the operating mode, tape speed. colour system, audio output channel and tape counter of your VCP on the TV screen. If a recording is taking place these On Screen Displays will not be recorded onto the tape.

Be sure to set OSD to ON.

Press DISPLAY to display.
The tape counter does not appear if there is no tape loaded.

After 3 seconds the majority of the On Screen Displays will clear leaving only the tape counter on the screen.

Press **DISPLAY** again to remove all displays from the TV screen.

Tape Counter Memory Stop

The **Digital Tape Counter** is displayed on the display window if there is a tape loaded. The Digital Tape Counter indicates the relative positions of recordings on the tape.

Be sure to set OSD to ON.

The counter is automatically reset to 0:00:00 and "M" appears on the TV screen.

Press **DISPLAY**.

Press **CLEAR** to set the counter to 0:00:00.

Press PLAY ▶ or start recording.

The tape counter will display the actual play time in hours, minutes and seconds.

Press ■ when playback or recording is complete. Press I◄.

The tape will rewind and automatically stop when the counter returns to 0:00:00.

Video Doctor (Self-Diagnosis)

This feature informs you that there is a problem with your VCP. These error messages will appear on the TV screen.

Press MENU.
Press ◀ or ▶ to select DR.
Press OK.



Press ◀ or ▶ to check a problem. HEAD STATUS

- OK
- PLEASE CLEAN:
 Clean your video heads.

TAPE STATUS

- RECORDABLE
- NOT RECORDABLE:
 Insert a tape with its protection tab in place.

Press OK.

Press **MENU** to remove menus from the TV screen.

Hi-Fi Stereo Sound System

Press **A. MONITOR** repeatedly until the desired audio mode appears.

The choice is **HI-FI (STEREO)**, **LEFT**, **RIGHT** and **MONO**.

Additional Operation-DVD part

Last Condition Memory





DVD CD VCD1.1

This player memorizes the last condition for the last disc you have watched. Settings remain in memory even if you remove the disc from the player or switch off the player. If you load a disc that has its settings memorized, the latest stop position is automatically recalled.

Notes 1

- Settings are stored in memory for use any time.
- This player does not memorize settings of a disc if you switch off the player before commencing to play it.

Screen Saver

The screen saver picture appears when you leave the DVD Player in stop mode for about five minutes.

Video Mode Setting DVD VCD2.0 VCD1.1

- With certain discs, the playback picture may be flickering or Dot Crawl is shown on straight lines. That means Vertical interpolation or De-interlace is not perfectly matched with the disc. In this case, the picture quality may be improved by changing the video mode.
- To change the video mode, press and hold DISPLAY about 3 seconds during disc playback. The new video mode number selected is displayed on the TV screen. Check whether the video quality has improved. If not, repeat the above procedure until picture quality is improved.
- Video mode change sequence: MODE1 → MODE2 → MODE3 → MODE4 → MODE5 → MODE1
- If you turn off the the power, the video mode will be back to initial state (MODE1).

Notes on MP3 Discs

About MP3

- An MP3 file is audio data compressed by using MPEG1, the audio layer-3 file-coding scheme. We call files that have the ".mp3" file extension "MP3 files".
- The player can not read an MP3 file that has a file extension other than ".mp3".
- The player can not read a fake MP3 file that has a file extension ".mp3".

MP3 Disc compatibility with this player is limited as follows:

- 1. Sampling Frequency / only at 44.1kHz
- 2. Bit rate/ within 32 320kbps
- 3. CD-R physical format should be "ISO 9660"
- 4. If you record MP3 files using the software which cannot create a FILE SYSTEM, for example "Direct-CD" etc., it is impossible to playback MP3 files. We therefore recommend that you use "Easy-CD Creator", which creates an ISO9660 file system.
- 5. A single session disc requires MP3 files in the first track. If there is no MP3 file in the 1st track, it cannot playback MP3 files. If you wish to playback MP3 files, format all the data in the disc or use a new one
- 6. We do not recommend using CD-RW discs. Please use finished CD-R discs only.
- 7. File names should be named using 8 letters or less and must incorporate the ".mp3" extension e.g. "*******.MP3".
- 8. Do not use special characters such as '_?!><+*}{`[@]:;V.," etc.
- 9. Total number of files on the disc should be less than
- 10. Use 74 minute CD-R discs (650M), do not use 80 minute CD-R (700M) software.

This DVD player requires discs/recordings to meet certain technical standards in order to achieve optimal playback quality. Pre-recorded DVDs are automatically set to these standards. There are many different types of recordable disc formats (including CD-R containing MP3 files).

Customers should also note that permission is required in order to download MP3 files and music from the Internet. Our company has no right to grant such permission. Permission should always be sought from the copyright owner.

Special Operation - Karaoke function

Before you start karaoke

Note

You cannot enjoy Karaoke from DVD exclusive out.

You can sing along with a karaoke source (video tape, VCD, audio CD, Karaoke DVD). You can sing duets if you use an extra microphone.

Turn on your TV and set it to the AV. When using an amplifier, turn on the amplifier and select this player position.

2 Connect a microphone to the MIC 1 jack. To sing duets, connect another microphone to MIC 2 jack.

To adjust the microphone volume

Press **MIC/ECHO** to select the MIC control mode.

Press ▲/▼ for the microphone connected to MIC 1/2. Setting the microphone volume to the centre position provides the best microphone volume.

"MIC: _ _ " appears on the TV screen.

To control the echo effect

Press **MIC/ECHO** to select the ECHO control mode. Press **△**/▼. This controls both microphones' echo effect in the same way.

To get the best effect, adjust the microphone volume to a level slightly higher than the music volume.

"ECHO: _ _ _" appears on the TV screen.

Karaoke sing-along

Singing along with karaoke video tapes

Insert a karaoke video tape.
The player turns on and starts playing automatically if you insert a tape with its safety tab removed.

Press PLAY ►.

If you want to play back a specific song, perform the Karaoke search.

 Karaoke search will be operated only when a microphone has been plugged in.

Karaoke search

Press ◀ or ▶ on the remote control.

Press ◀ or ▶ again to play a desired song.

Now you can enjoy playing karaoke.

Singing along with karaoke VIDEO CD or DVD

 \P Press riangle , and place the disc on the disc tray.

Press PLAY ►.
The disc tray closes and starts.

Now you can enjoy playing karaoke.

Note

The microphone volume and the echo effect will be reset to the default setting once you disconnect the AC power cord.

Grading your singing

As an extra challenge, this player can grade your singing.

When you have finished singing, your score appears on the TV screen.

Notes

- The unit cannot grade your singing if there is no blank portion between the tracks.
- If the sound is reproduced through a stereo amplifier, turn down the volume of amplifier before operation.
- If streaks appear during playback, select the colour system that the tape was recorded in (see "To set the colour system" on page 13).
- If feedback occurs, turn down the microphone or TV volume, or move the microphone away from the speakers.

Special Recording

Copying from DVD to VCP

This unit allows you to copy the contents of a DVD to a VHS tape with a press of the ● button.

Note

If the DVD you are attempting to copy is copy protected, you may not be able to copy the disc.

- Insert Disc
 - Insert the disc you wish to copy in the DVD deck and close the disc tray.
- Insert VHS Tape
 Insert a blank VHS video tape into the VCP deck.
- Press DVD so that the DVD indicator lights up.
- Copy the DVD to VHS tape
 Press ●.
 - The DVD will go into Play mode and the VCP will go into Record mode.
 - If the DVD disc menu appears, you may need to press PLAY ► manually to begin copying.
 - If you try to record the copy protected programme, "COPY PROTECTED DISC" appears on the TV screen and "LOCK" appears on the display window.
 - Press II to still a picture.
- Stop the Copy Process Press .

Recording from another video player

With this video player you can make recordings from an external source, such as copying from another video player or a camcorder.

Note

In the following description, this video player will be one used for recording and will be referred to as VCP B. The other appliance will be used for playback and will be referred to as VCP A.

- VCP A should be connected to the AUDIO L/R (VHS IN)/VIDEO (VHS IN) jack on the rear panel of your VCP.
- Insert the recorded tape into VCP A and a blank tape into VCP B.
- To start recording, press on VCP B and PLAY ► on VCP A.
- When you want to finish copying, press **STOP** on both video players.

Troubleshooting

Check the following guide for the possible cause of a problem before contacting service.

Symptom	Cause	Correction		
DVD or VCP do not work properly.	DVD or VCP button is not switched properly.	Press DVD or VCP on the remote control, or DVD/VCP on the front panel to switch the control.		
No power.	The power cord is disconnected.	Plug the power cord into the wall outlet securely.		
The power is on, but the DVD player does not work.	No disc is inserted.	Insert a disc. (Check that the DVD or, audio CD indicator in the display window is lit.)		
No picture.	The TV is not set to receive DVD signal output.	Select the appropriate video input mod- on the TV so the picture from the DVD player appears on the TV screen.		
No sound.	The equipment connected with the audio cable is not set to receive DVD signal output.	Select the correct input mode of the audio receiver so you can listen to the sound from the DVD player.		
	The audio cables are not connected securely.	Connect the audio cable into the jacks securely.		
	The power of the equipment connected with the audio cable is turned off.	Turn on the equipment connected with the audio cable.		
	The Digital Audio Output is set to the wrong position.	Set the Digital Audio Output to the correct position, then turn on the DVD player again by pressing POWER.		
The picture is poor.	The disc is dirty.	Clean the disc.		
The DVD player does not start playback.	An unplayable disc is inserted.	Insert a playable disc. (Check the disc type, color system and Regional code.)		
	The disc is placed upside down.	Place the disc with the playback side down.		
	The disc is not placed within the guide.	Place the disc on the disc tray correctly inside the guide.		
	The disc is dirty.	Clean the disc.		
	The Rating level is set.	Cancel the Rating function or change the rating level.		
The remote control does not work properly.	There is an obstacle in the path of the remote control and this unit.	Remove the obstacle.		
,	The batteries in the remote control are exhausted.	Replace the batteries with new ones.		
Video tape cannot be inserted.	Is the cassette compartment empty?	Eject the tape in.		
No Hi-Fi sound	Audio mode is not set properly.	Select "HI-FI" by repeatedly pressing A. MONITOR on the remote control.		

Video Head Cleaning

Whenever a video cassette is inserted into or ejected from your VCP, the video head is automatically cleaned. This should mean that additional head cleaning should not be necessary. However dirt accumulating on the head after a long period of time can cause the playback picture to become blurred or broken up.

High quality video cassette tapes will not normally deposit dirt onto the video head, but old or damaged tapes might.

Language Code List

Enter the appropriate code number for the initial settings "Disc Audio", "Disc Subtitle" and/or "Disc Menu" (See page 15).

Code	Language	Code	Language	Code	Language	Code	Language
6565	Afar	7079	Faroese	7678	Lingala	8375	Slovak
6566	Abkhazian	7082	French	7679	Laothian	8376	Slovenian
6570	Afrikaans	7089	Frisian	7684	Lithuanian	8377	Samoan
6577	Ameharic	7165	Irish	7686	Latvian, Lettish	8378	Shona
6582	Arabic	7168	Scots Gaelic	7771	Malagasy	8379	Somali
6583	Assamese	7176	Galician	7773	Maori	8381	Albanian
6588	Aymara	7178	Guarani	7775	Macedonian	8382	Serbian
6590	Azerbaijani	7185	Gujarati	7776	Malayalam	8385	Sudanese
6665	Bashkir	7265	Hausa	7778	Mongolian	8386	Swedish
6669	Byelorussian	7273	Hindi	7779	Moldavian	8387	Swahili
6671	Bulgarian	7282	Croatian	7782	Marathi	8465	Tamil
6672	Bihari	7285	Hungarian	7783	Malay	8469	Telugu
6678	Bengali; Bangla	7289	Armenian	7784	Maltese	8471	Tajik
6679	Tibetan	7365	Interlingua	7789	Burmese	8472	Thai
6682	Breton	7378	Indonesian	7865	Nauru	8473	Tigrinya
6765	Catalan	7383	Icelandic	7869	Nepali	8475	Turkmen
6779	Corsican	7384	Italian	7876	Dutch	8476	Tagalog
6783	Czech	7387	Hebrew	7879	Norwegian	8479	Tonga
6789	Welsh	7465	Japanese	7982	Oriya	8482	Turkish
6865	Danish	7473	Yiddish	8065	Panjabi	8484	Tatar
6869	German	7487	Javanese	8076	Polish	8487	Twi
6890	Bhutani	7565	Georgian	8083	Pashto, Pushto	8575	Ukrainian
6976	Greek	7575	Kazakh	8084	Portuguese	8582	Urdu
6978	English	7576	Greenlandic	8185	Quechua	8590	Uzbek
6979	Esperanto	7577	Cambodian	8277	Rhaeto-Romance	8673	Vietnamese
6983	Spanish	7578	Kannada	8279	Rumanian	8679	Volapük
6984	Estonian	7579	Korean	8285	Russian	8779	Wolof
6985	Basque	7583	Kashmiri	8365	Sanskrit	8872	Xhosa
7065	Persian	7585	Kurdish	8368	Sindhi	8979	Yoruba
7073	Finnish	7589	Kirghiz	8372	Serbo-Croatian	9072	Chinese
7074	Fiji	7665	Latin	8373	Singhalese	9085	Zulu

Country Code List

Enter the appropriate code number for the initial setting "Country Code" (See page 17).

	Country		Country		Country		Country
AD	Andorra	ER	Eritrea	LC	Saint Lucia	SC	Seychelles
AE	United Arab Emirates	ES	Spain	LI	Liechtenstein	SD	Sudan
AF	Afghanistan	ET	Ethiopia	LK	Sri Lanka	SE	Sweden
AG	Antigua and Barbuda	FI	Finland	LR	Liberia	SG	Singapore
Al	Anguilla	FJ	Fiji	LS	Lesotho	SH	Saint Helena
AL	Albania	FK	Falkland Islands	LT	Lithuania	SI	Slovenia
AM	Armenia	FM	Micronesia	LU	Luxembourg	SJ	Svalbard and Jan Mayen
AN	Netherlands Antilles	FO	Faroe Islands	LV	Latvia		Islands
AO	Angola	FR	France	LY	Libya	SK	Slovak Republic
AQ	Antarctica	FX	France (European	MA	Morocco	SL	Sierra Leone
AR	Argentina		Territory)	MC	Monaco	SM	San Marino
AS	American Samoa	GA	Gabon	MD	Moldavia	SN	Senegal
AT	Austria	GB	Great Britain	MG	Madagascar	SO	Somalia
AU	Australia	GD	Grenada	МН	Marshall Islands	SR	Suriname
AW	Aruba	GE	Georgia	MK	Macedonia	ST	Saint Tome and Principe
AZ	Azerbaidjan	GF	French Guyana	ML	Mali	SU	Former USSR
BA	Bosnia-Herzegovina	GH	Ghana	MM	Myanmar	SV	El Salvador
BB	Barbados	GI	Gibraltar	MN	Mongolia	SY	Syria
BD	Bangladesh	GL	Greenland	MO	Macau	SZ	Swaziland
BE	Belgium	GM	Gambia	MP	Northern Mariana Islands	TC	Turks and Caicos Islands
BF	Burkina Faso	GN	Guinea	MQ	Martinique (French)	TD	Chad
BG	Bulgaria	GP	Guadeloupe (French)	MR	Mauritania	TF	French Southern
BH	Bahrain	GQ	Equatorial Guinea	MS	Montserrat		Territories
BI	Burundi	GR	Greece	MT	Malta	TG	Togo
BJ	Benin	GS	S. Georgia & S. Sandwich	MU	Mauritius	TH	Thailand
BM	Bermuda	as	Isls.	MV	Maldives	TJ	Tadjikistan
BN	Brunei Darussalam	GT	Guatemala	MW	Malawi	TK	Tokelau
BO	Bolivia	GU	Guam (USA)	MX	Mexico	TM	Turkmenistan
BR	Brazil	GW	Guinea Bissau	MY	Malaysia	TN	Tunisia
BS		GY		MZ		TO	
BT	Bahamas		Guyana		Mozambique	TP	Tonga
	Bhutan	HK	Hong Kong	NA	Namibia		East Timor
BV	Bouvet Island	HM	Heard and McDonald	NC	New Caledonia (French)	TR	Turkey
BW	Botswana		Islands	NE	Niger	TT	Trinidad and Tobago
BY	Belarus	HN	Honduras	NF	Norfolk Island	TV	Tuvalu
BZ	Belize	HR	Croatia	NG	Nigeria	TW	Taiwan
CA	Canada	HT	Haiti	NI	Nicaragua	TZ	Tanzania
CC	Cocos (Keeling) Islands	HU	Hungary	NL	Netherlands	UA	Ukraine
CF	Central African Republic	ID	Indonesia	NO	Norway	UG	Uganda
CG	Congo	IE	Ireland	NP	Nepal	UK	United Kingdom
CH	Switzerland	IL	Israel	NR	Nauru	UM	USA Minor Outlying
CI	Ivory Coast	IN	India	NU	Niue		Islands
CK	Cook Islands	Ю	British Indian Ocean	NZ	New Zealand	US	United States
CL	Chile		Territory	ОМ	Oman	UY	Uruguay
CM	Cameroon	IQ	Iraq	PA	Panama	UZ	Uzbekistan
CN	China	IR	Iran	PE	Peru	VA	Vatican City State
CO	Colombia	IS	Iceland	PF	Polynesia (French)	VC	Saint Vincent &
CR	Costa Rica	ΙΤ	Italy	PG	Papua New Guinea		Grenadines
CS	Former Czechoslovakia	JM	Jamaica	PH	Philippines	VE	Venezuela
CU	Cuba	JO	Jordan	PK	Pakistan	VG	Virgin Islands (British)
CV	Cape Verde	JP	Japan	PL	Poland	VI	Virgin Islands (USA)
CX	Christmas Island	KE	Kenya	PM	Saint Pierre and Miquelon	VN	Vietnam
CY	Cyprus	KG	Kyrgyzstan	PN	Pitcairn Island	VU	Vanuatu
CZ	Czech Republic	KH	Cambodia6	PR	Puerto Rico	WF	Wallis and Futuna Islands
DE	Germany	KI	Kiribati	PT	Portugal	WS	Samoa
DJ	Djibouti	KM	Comoros	PW	Palau	YE	Yemen
DK	Denmark	KN	Saint Kitts & Nevis Anguilla	PY	Paraguay	YT	Mayotte
DM	Dominica	KP	North Korea	QA	Qatar	YU	Yugoslavia
DO	Dominican Republic	KR	South Korea	RE	Reunion (French)	ZA	South Africa
DZ	Algeria	KW	Kuwait	RO	Romania	ZM	Zambia
EC	Ecuador	KY	Cayman Islands	RU	Russian Federation	ZR	Zaire
EE	Estonia	KZ	Kazakhstan	RW	Rwanda	ZW	Zimbabwe
EG		LA		SA		∠VV	ZIIIDabwe
EH	Egypt Cahara		Labanan		Saudi Arabia		
	Western Sahara	LB	Lebanon	SB	Solomon Islands		

Specification

General

Power requirements AC 110-240V, 50/60 Hz

Power consumption 20W

Dimensions (approx.) 430 X 97.5 X 360 mm (w/h/d)

Mass (approx.) 5.3 kg
Operating temperature 5°C to 35°C
Operating humidity 5 % to 90 %

System

Laser Semiconductor laser, wavelength 650 nm Video Head system Double azimuth 4 heads, helical scanning.

Signal system PAL/NTSC

Frequency response DVD (PCM 96 kHz): 2 Hz to 44 kHz

DVD (PCM 48 kHz): 2 Hz to 22 kHz

CD: 2 Hz to 20 kHz

Signal-to-noise ratio More than 100dB (ANALOG OUT connectors only)

Harmonic distortion Less than 0.008%

Dynamic range More than 95 dB (DVD)

More than 95 dB (CD)

Wow and flutter Less than detected value (±0.001% W PEAK)

Inputs (VCP)

Audio -6.0dBm, more than 47 kohms Video 1.0 Vp-p, 75 ohms, unbalanced

Outputs (DVD)

VIDEO OUT 1 Vp-p 75 ohms, sync negative

COMPONENT VIDEO OUT (Y) 1.0 V (p-p), 75 Ω, negative sync., RCA jack x 1

(Pb)/(Pr) 0.7 V (p-p), 75 Ω , RCA jack x 2

Audio output (digital audio) 0.5 V (p-p), 75 Ω , RCA jack x 1

Audio output (analog audio) 2.0 Vrms (1 KHz, 0 dB), 330 Ω, RCA jack (L, R)

Outputs (VCP/DVD)

Audio -6.0dBm, less than 1 kohms
Video 1.0 Vp-p, 75 ohms, unbalanced

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

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

• Design and specifications are subject to change without notice.



