LG

DVD Mini Home Cinema System

OWNER'S MANUAL

MODEL : FFH-DV55AD
FE-DV55VE/CVE/SE

Before connecting, operating, or adjusting this unit,
please read this instruction booklet carefully and completely.

P/N:3828R-A022F

Precautions

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION:TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER(OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Explanation Graphical Symbols:



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.

WARNING:

TO REDUCE THE RISK OF FIRE OF ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

To avoid electrical shock, do not open the cabinet, Refer servicing to qualified personnel only.

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

(FOR THE CUSTOMERS IN EUROPE)

CE If this product is marked with the CE-symbol, that means it conforms to EMC regulation 89/336/EEC.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

CAUTION:INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.

VARNING:OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD STRÅLEN ÄR FARLIG.

Attention: Quand l'appareil est ouvert, ne pas s'exposer aux radiations invisibles du faisceau laser.

This label is located on the interior.

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

This Compact Disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the exterior.

(FOR CUSTOMERS IN CANADA)

CAUTION:TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

This class B digital apparatus meets all requirements of the canadian Interference-Causing Equipment Regulations.

WARNING:

SHOCK HAZARD - DO NOT OPEN

MISE EN GARDE:

Pour éviter les chocs électriques, n'utilisez pas cette fiche (polariesée) avec une rallonge, un réceptacle ou une autre prise si vous ne pouvez pas y insérer les brouches à fond.

MISE EN GARDE

Cet appareil numérique de la classe B respecte toutes les exigences de Règlement sur le matériel brouilleur de Canada.

AVERTISSEMENT

RISQUE DE CHOC ELECTRIQUENE-PAS OUVRIR

(FOR CUSTOMERS IN THE UNITED STATES OF AMERICA)

Note to CATV system Installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

NOTE:

The interference potential to the device.

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

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

(FOR CUSTOMERS IN THE UNITED KINGDOM)

WIRING INSTRUCTIONS

This appliance is supplied with a BS1363 approved 3 amp fused mains plug. When replacing the fuse always use a 3 amp BS1362 approved type. Never use this plug with the fuse cover omitted. To obtain a replacement fuse cover contact your supplying dealer or "LG ELECTRONICS U.K.LTD"

If the mains sockets in your home differ, or are not suitable for the type of plug supplied, then the plug should be removed and a suitable type fitted. Please refer to the wiring instructions below:

Warning: The mains plug severed from the mains lead of this appliance must be destroyed. A mains plug with bared wires is hazardous if engaged in a mains output line socket.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following codes:

Blue	:	Neutral
Brown	:	Live

As the colour of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

If a 13 amp BS1363 plug or any other type of plug is used, 3 amp BS1362 approved fuse must be fitted either in the plug or at the distribution board.

Warning:

Do not connect either wire to the earth pin, marked with the letter E or with the earth symbol ⏚ or coloured green or green and yellow.

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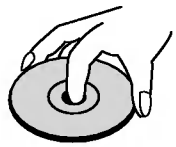
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This section shows you how to handle, clean, and store discs.

On Handling Discs

- Do not touch the playback side of the disc.



- Do not attach paper or tape to discs.

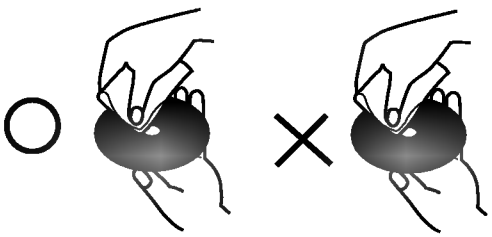


On Storing Discs

- Do not store discs in a place subject to direct sunlight or near heat sources.
- Do not store discs in places subject to moisture and dust such as a bathroom or near a humidifier.
- Store discs vertically in a case. Stacking or placing objects on discs outside of their case may cause may damage to the discs.

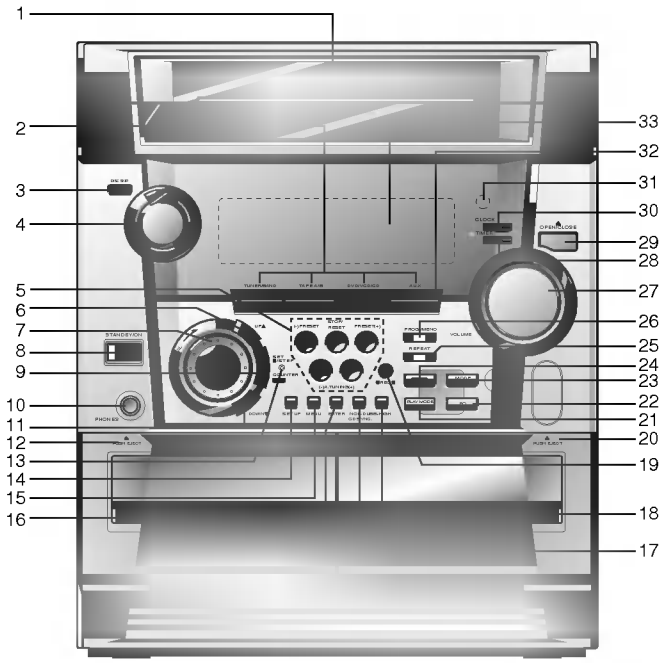
On Cleaning Discs

- Fingerprints and dust on the disc cause picture and sound deterioration. Wipe the disc from the center outward with a soft cloth. Always keep the disc clean.
- If you cannot wipe off the dust with a soft cloth, wipe the disc lightly with a slightly moistened soft cloth and finish with a dry cloth.
- Do not use any type of solvents such as thinner, benzine, commercially available cleaners or anti-static spray for vinyl LPs. They may damage the disc.



About This Owner's Manual

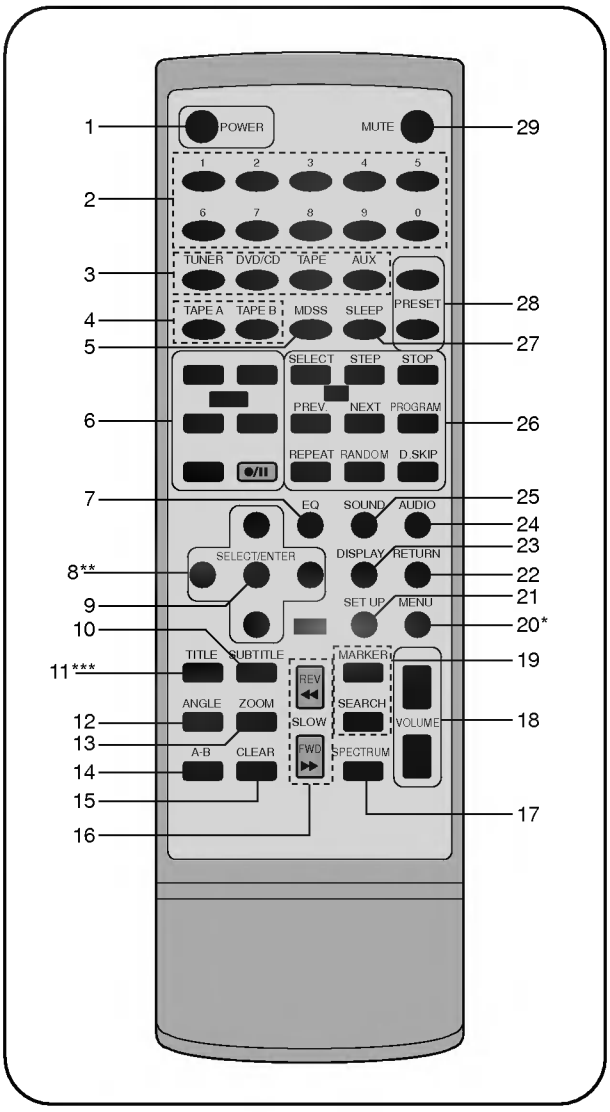
- This owner's manual explains the basic instructions of this unit.
- Some DVD video discs have functions that may not be explained in this owner's manual. Therefore, some instructions may differ from this owner's manual, and there may be extra instructions. In this case, follow the instructions displayed on the TV screen or package.
- " ⃠ " 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.



1. CD DOOR
2. FUNCTION SELECT BUTTON (TUNER/BAND, DVD/CD, TAPE, AUX)
3. DISC SKIP BUTTON
4. DISC DIRECT PLAY (1 - 3) BUTTON
5. • PRESET (-)/(+) BUTTONS (RADIO)
   • AUTO TUNING (-)/(+) BUTTONS (RADIO)
   • SKIP/SEARCH (▶▶ ▶▶I / I◀◀ ◀◀) BUTTONS(DVD/CD)
   • REWIND/FAST FORWARD BUTTONS (TAPE)
   • ◀/▶=TAPE PLAY DIRECTION BUTTONS (◀ :OPTIONAL)
   • CD PLAY BUTTON (▶)
   • STOP/RESET BUTTON (■)
6. UP (▲) BUTTON
7. MULTI JOG DIAL
8. STANDBY/ON BUTTON
9. SET/PAUSE/STEP/TAPE COUNTER/RDS BUTTON (OPTIONAL)
10. HEADPHONE SOCKET (6.3mm)
11. DOWN (▼)BUTTON
12. ⏏ PUSH EJECT POSITION (TAPE A)
13. PAUSE INDICATOR
14. SET UP BUTTON
15. MENU BUTTON
16. ENTER BUTTON (DVD)
17. NORMAL DUBBING/CD SYNCHRO BUTTON
18. HI-SPEED DUBBING BUTTON
19. RECORD/RECORD PAUSE BUTTON (TAPE)
20. ⏏ PUSH EJECT POSITION (TAPE B)
21. PLAY MODE/DEMO BUTTON (OPTIONAL)
22. EQ PATTERN BUTTON (OPTIONAL)
23. MODE/RIF BUTTON
24. MDSS BUTTON
25. REPEAT BUTTON
26. PROGRAM/MEMORY BUTTON
27. VOLUME
28. TIMER BUTTON
29. CD DOOR OPEN/CLOSE (⏏) BUTTON
30. CLOCK BUTTON
31. REMOTE SENSOR
32. POWER INDICATOR
33. DISPLAY

REMOTE CONTROL

You will find instructions for each of the remote control functions in the appropriate sections of this instruction manual.



1. POWER button
2. NUMERIC button
3. FUNCTION SELECT buttons
4. TAPE A/B SELECT button
5. MDSS button
6. TAPE FUNCTION button
   - REWIND/FAST FORWARD PLAY
   - FORWARD PLAY
   - BACKWARD PLAY(OPTIONAL)
   - STOP
   - RECORD/RECORD PAUSE
7. EQ PATTERN button
8. ARROW buttons
9. SELECT/ENTER button
10. SUBTITLE button
11. TITLE button
12. ANGLE button
13. ZOOM button
14. REPEAT A-B button
15. CLEAR button
16. SLOW buttons
17. SPECTRUM button
18. VOLUME +/- buttons
19. MARKER/SEARCH buttons
20. MENU button
21. SET UP button
22. RETURN button
23. DISPLAY button
24. AUDIO button
25. SOUND button
26. DVD/CD CONTROL buttons
    - PLAY/SELECT
    - PAUSE/STEP
    - STOP
    - SKIP/PREV.
    - SKIP/NEXT
    - PROGRAM
    - REPEAT
    - RANDOM
    - DISC SKIP

    SKIP ⏮/⏭ : Press and hold button for about two seconds for search function.
27. SLEEP button
28. PRESET (▲/▼) buttons
29. MUTE button

*** MENU button**

Use the MENU button to display the menu screen included on DVD video discs. To operate a menu screen, follow the instructions in “Using a DVD Menu” (page 29).

**** Directional arrow buttons**

(up, down, left, right) for use in highlighting a selection on a GUI menu screen, TITLE and MENU screen.

***** TITLE button**

Use the TITLE button to display the title screen included on DVD video discs. To operate a menu screen, follow the instructions in “Using a Title Menu” (page 29).

Preparing the Remote Control

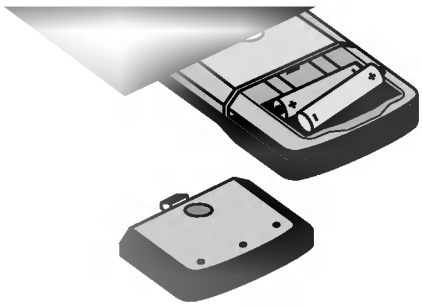
Insert the batteries into the remote control so you can use it to operate the unit.

Open the battery cover.

Insert batteries (AAA size).

- Make sure to match the + and - on the batteries to the marks inside the battery compartment.

Close the cover.

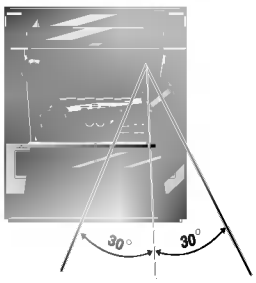


- Improper use of batteries may cause battery leakage and corrosion.
- To operate the remote control correctly, follow the instructions.
- Do not insert the batteries into the remote control in the wrong direction.
- Do not charge, heat, open, or short-circuit the batteries. Do not throw the batteries into fire.
- Do not leave dead or exhausted batteries in the remote control.
- Do not use different types of batteries together, or mix old and new batteries.
- If you do not use the remote control for a long period of time, remove the batteries to avoid possible damage from battery corrosion.
- If the remote control does not function correctly or if the operating range becomes reduced, replace all batteries with new ones.
- If battery leakage occurs, wipe the battery liquid from the battery compartment, then insert new batteries.
- The batteries should last about one year with normal use.

Operating with the Remote Control

This section shows you how to use the remote control.

Point the remote control at the remote sensor and press the buttons.



23 ft (about 7m)

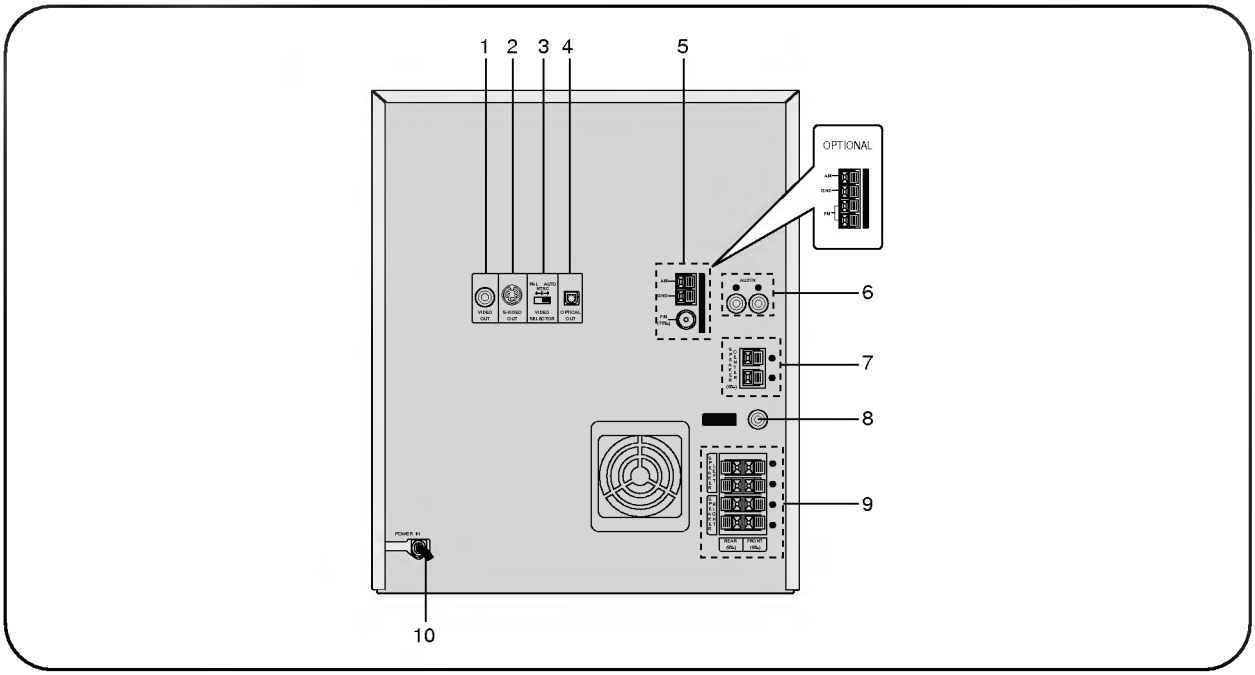


Distance: About 23 ft (7 m) from the front of the remote sensor

Angle: About 30° in each direction of the front of the remote sensor

* Do not expose the remote sensor of the receiver to a strong light source such as direct sunlight or illumination. If you do so, you may not be able to operate the receiver with the remote control.

- Direct the remote control at the remote sensor of the unit.
- Do not drop the remote control.
- Do not leave the remote control near an extremely hot or humid place.
- Do not spill water or put anything wet on the remote control.
- Do not open the remote control.



1. VIDEO OUT JACK
2. S-VIDEO OUT JACK
3. VIDEO SELECTOR SWITCH *
4. OPTICAL OUT JACK
5. ANTENNA TERMINAL
6. AUXILIARY INPUT SOCKETS
7. CENTER SPEAKER CONNECTOR
8. SUB WOOFER OUT CONNECTOR
9. SPEAKER CONNECTORS
10. POWER CORD

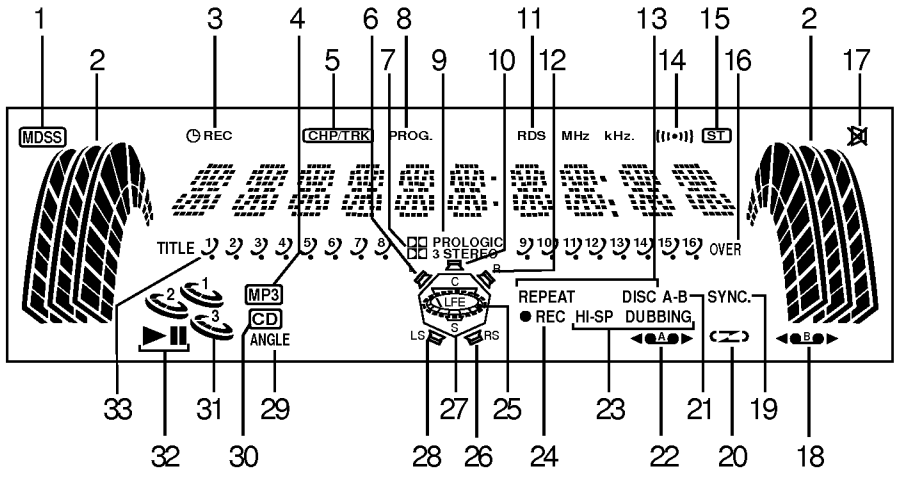
* VIDEO SELECTOR SWITCH

You can enjoy NTSC or PAL discs by using your VIDEO SELECTOR switch to choose the appropriate system.

- If you try to play back PAL disc with NTSC-TV, the DVD receiver will not playback the disc.
- When the selected VIDEO SELECTOR switch does not coincide with the system of your TV, normal color picture may not be displayed.
- Adjust the VIDEO SELECTOR switch when the power is turned off.
- When you playback NTSC disc with PAL-TV, some discs may produce black bands at the top and bottom of the screen.

Position of VIDEO SELECTOR switch	Connected TV	Available disc
PAL	PAL	PAL DVD disc
NTSC	NTSC	NTSC DVD disc
AUTO	MULTI system TV	NTSC/PAL DVD disc

Display Window

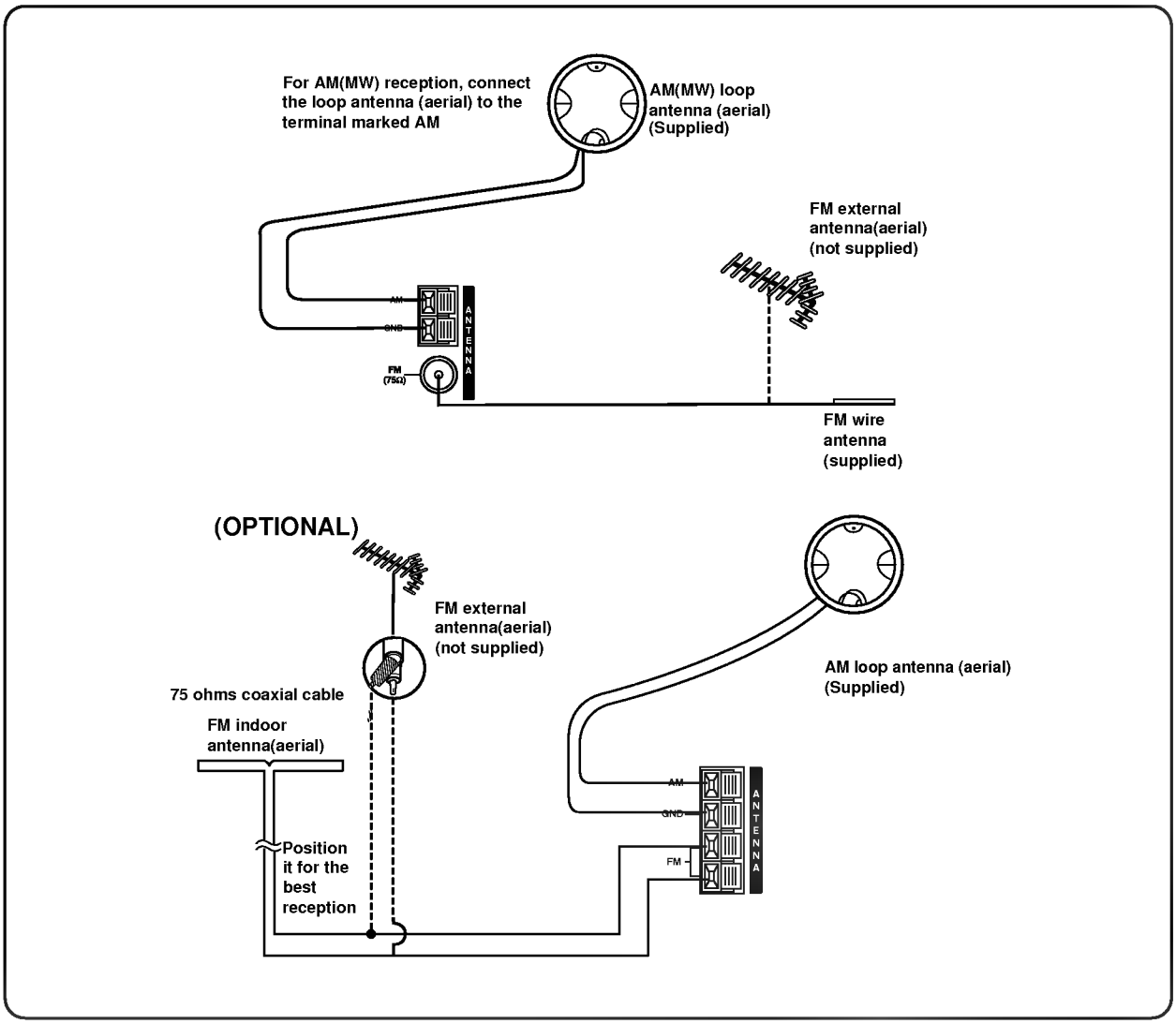


1. MDSS indicator
2. LEVEL indicator
3. TIMER indicator
4. MP3 indicator
5. CHAPTER/TRACK indicator
6. LEFT FRONT SPEAKER indicator
7. DOLBY 3 STEREO indicator
8. PROGRAM indicator
9. DOLBY PROLOGIC indicator
10. CENTER SPEAKER indicator
11. RDS indicator (OPTIONAL)
12. RIGHT FRONT SPEAKER indicator
13. DISC REPEAT PLAY indicator
14. FM STEREO RECEIVING indicator
15. FM STEREO indicator
16. CD MUSIC CALENDAR OVER indicator
17. MUTE indicator
18. TAPE B ENTERED/DIRECTION indicator
19. SYNCHRO RECORDING indicator
20. PLAY MODE indicator (OPTIONAL)
21. A-B REPEAT indicator
22. TAPE A ENTERED/DIRECTION indicator (OPTIONAL)
23. TAPE DUBBING indicator
24. RECORD indicator
25. LFE(Low Frequency Effect) indicator
26. RIGHT SURROUND SPEAKER indicator
27. SURROUND indicator
28. LEFT SURROUND SPEAKER indicator
29. ANGLE indicator
30. CD indicator
31. DISC NO. indicator
32. PLAY/PAUSE indicator
33. CD MUSIC CALENDAR indicator

Antenna(Aerial) Connections

Connect the supplied FM/AM antennas for listening to the radio.

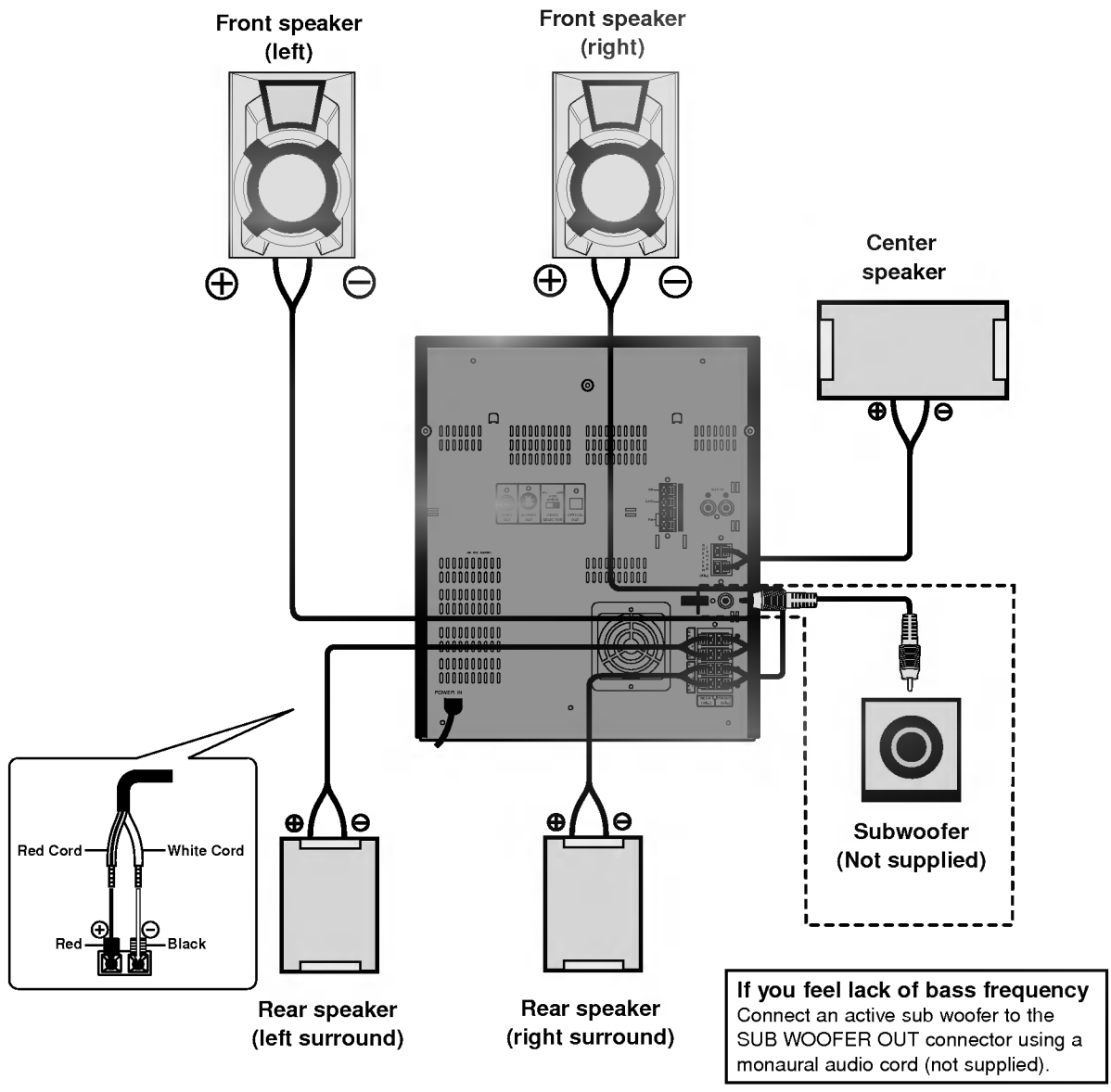
- Connect the AM loop antenna to the AM antenna connector.
- Connect the FM wire antenna (or FM "T" antenna) to the FM 75Ω coaxial connector.



Notes

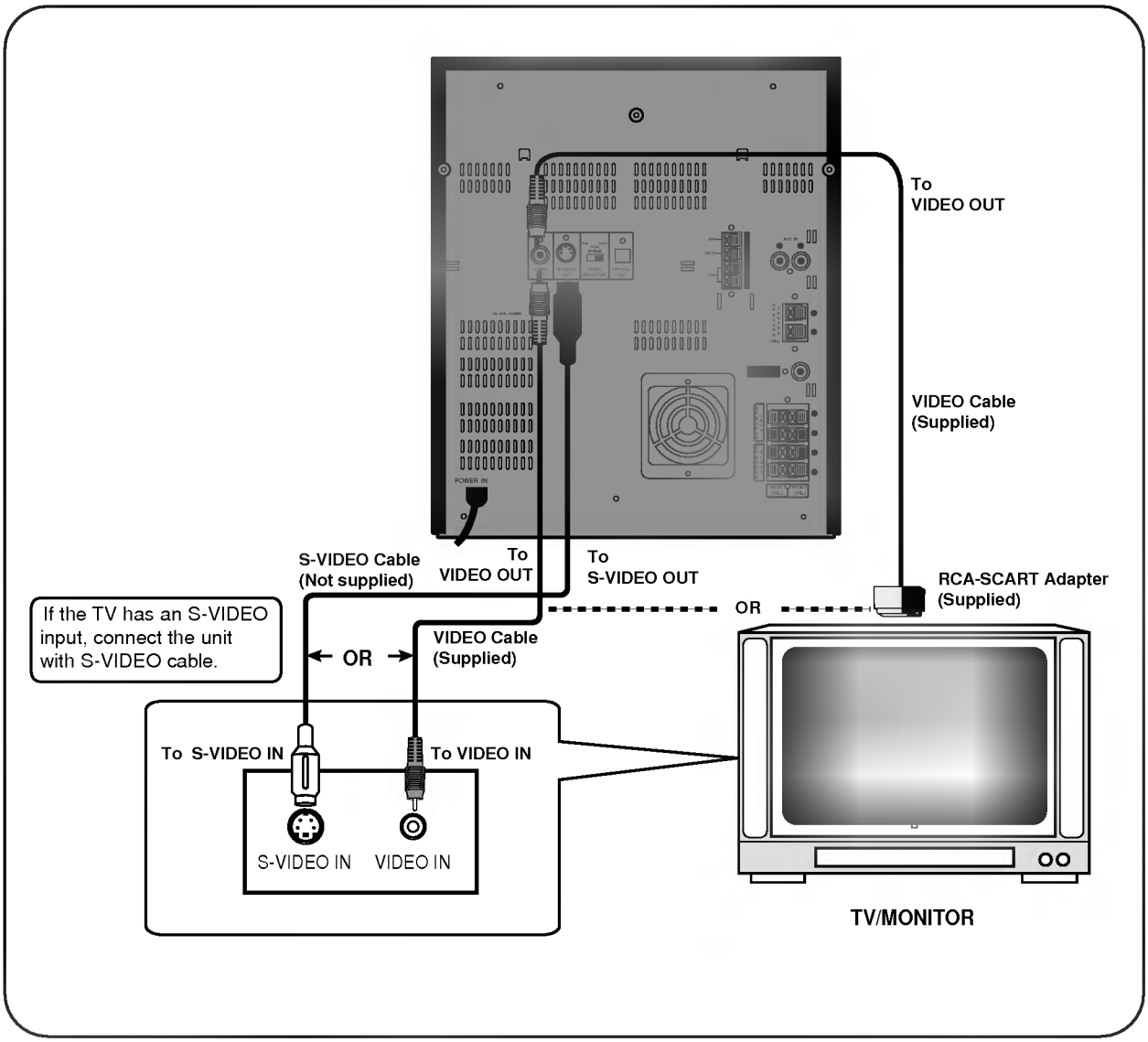
- ❍ To prevent noise pickup, keep the AM loop antenna away from the unit and other components.
- ❍ Be sure to fully extend the FM wire antenna.
- ❍ After connecting the FM wire antenna, keep it as horizontal as possible.

Connect the speakers using the supplied speaker cords by matching the colors of the terminals and those of the cords. To obtain the best possible surround sound, adjust the speaker parameters (distance, level, etc.).



- Be sure to match the speaker cord to the appropriate terminal on the components: + to + and – to –. If the cords are reversed, the sound will be distorted and will lack base.
- If you use front speakers with low maximum input rating, adjust the volume carefully to avoid excessive output on the speakers.
- Do not disassemble the front cover of supplied speaker.

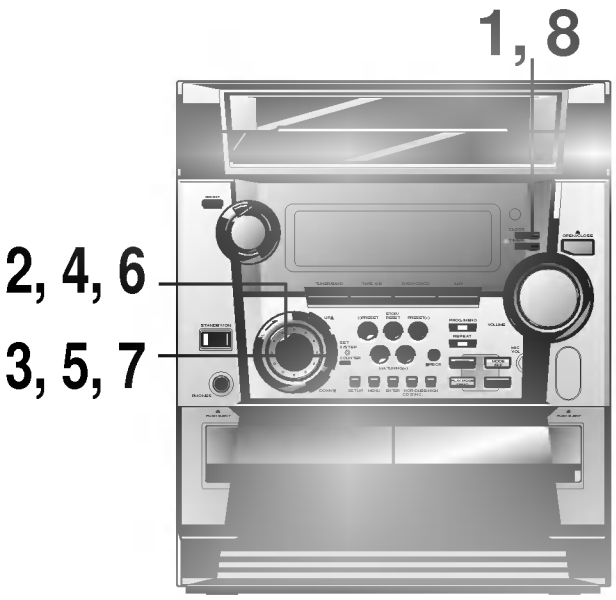
Connect the unit to your TV.



- Refer to the owner's manual of your TV as well.
- When you connect the unit to your TV, be sure to turn off the power and unplug both units from the wall outlet before making any connections.
- Connect the unit to your TV directly. If you connect the unit to a VCR, the playback picture will be distorted because DVD video discs are copy protected.
- The signal of S-VIDEO OUT jack will output only when the function mode is selected to DVD/CD.

Setting the clock

You must set the time for the Sleep and Timer function.

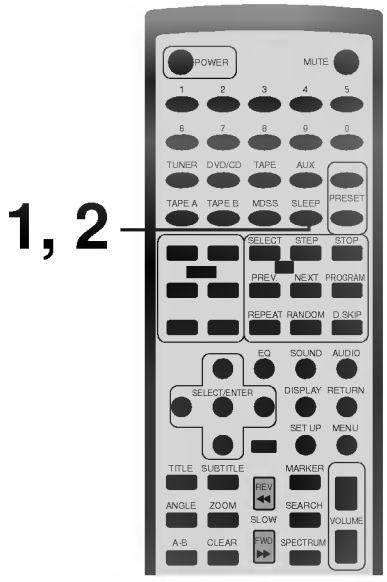


Information on the time
AM 12:00 = midnight
PM 12:00 = noon

1. Press the **CLOCK** button. (If the clock is already set, press and hold the **CLOCK** button for more than 2 seconds.) - The hours begin to flash.
2. Select a 24 hour cycle or 12 hour cycle by turning the **JOG DIAL**.
   AM 12:00 (12HR) or 0:00 (24HR)
3. Press the **SET** button to confirm the selected hour cycle.
4. Use the **JOG DIAL** to set the correct hours.
5. Press the **SET** button.
6. Use the **JOG DIAL** buttons to set the correct minutes.
7. Press the **SET** and the correct time is shown on the display.
8. Press the **CLOCK** button at any time to display the time for about 3 seconds.

Sleep timer

When the sleep timer is used, the power is automatically turned off after the specified time has elapsed.

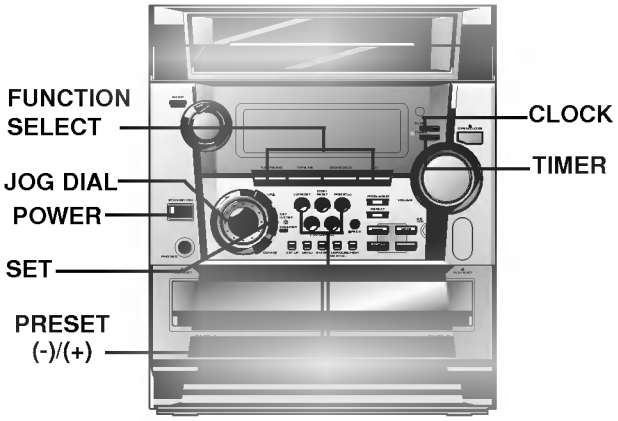


1. **To specify the time until the power is turned off, press the SLEEP button.**
   In the display you can see SLEEP 90 for about 5 seconds. This means that the system turns off automatically after 90 minutes.
   Each time the button is pressed the time interval before it turns off is reduced by 10 minutes. i.e. 80...70... etc.
   Select the desired time to turn off.
2. **To check the remaining time until the power is turned off.**
   While the sleep function is active press the **SLEEP** button briefly. The time remaining until it turns off is displayed for about 5 seconds.

If you press the **SLEEP** button while the sleep time is displayed, the SLEEP time is reset.

3. **To cancel the sleep timer mode:**
   If you wish to stop the function press the **SLEEP** button repeatedly until 10 appears, and then press the **SLEEP** button once again while 10 is displayed.

With the TIMER function you can have the radio reception and recording, CD or tape playing turned on and off at the time desired.



Press the **CLOCK** button to check the current time.

Press the "◷ **TIMER**" button to enter the timer setting mode. (If you want to correct the previous memorized TIMER, press and hold the "◷ TIMER" button more than 2 seconds.)
The previous memorized timer on time and the "◷" appears in the display. Each function : TUNER-DVD/CD-TAPE flashes in the display in turn.

Press the "**SET**" button when the desired function is flashing.

If you select the TUNER :
REC and PLAY flash in the display alternately for about 3 seconds. Press the **SET** button to confirm the desired operating mode.
REC: TUNER recording and play
PLAY: TUNER play only

- If you have selected the DVD/CD or TAPE, ignore step 4.

When you have selected the TUNER;
Select the previous memorized preset number with the **PRESET (-)/(+)** buttons and press the **SET** button. The hour with ON display flashes.

- If you have selected the DVD/CD ,TAPE ignore step 5.

Set the hour to switch on by turning the JOG DIAL.

Press the **SET** button to confirm the hour to switch on. The minute with ON display flashes.

Set the minute to switch on by turning the JOG DIAL.

Press the **SET** button to confirm the minute to switch on. The hour with OFF now flashes in the display.

Program the time to switch off in the same way as the time to turn on.

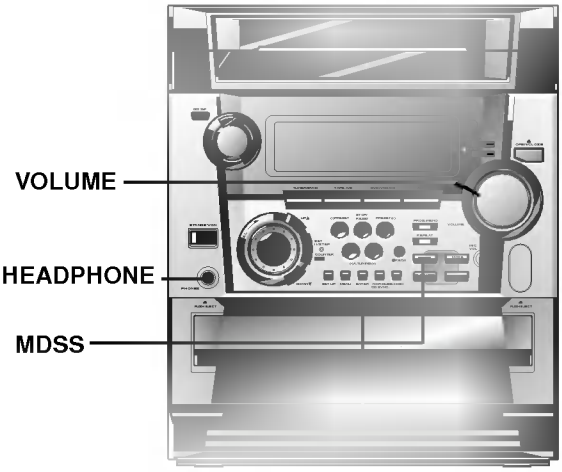
Press the **SET** button.

Adjust the volume level by turning the JOG DIAL.

Press the **SET** button. ◷ appears and the timer setting has been completed.

Switch the system off.
The selected function is automatically switched on and off at the time set.

To cancel or check the timer.
Each time the **TIMER** button is pressed you can select the timer set or cancel. You can also check the timer setting status.
To activate or check the timer, press the **TIMER** button so that ◷ lights up in the display.
To cancel the TIMER, press the **TIMER** button so that ◷ in the display window disappears.



Volume Adjustment

- Turn the **VOLUME** clockwise to increase the sound level, or counterclockwise to decrease it.
- Press the **VOLUME +** button to increase the sound level, or press the **VOLUME -** button to decrease it on the remote control.

Sound Quality Adjustment

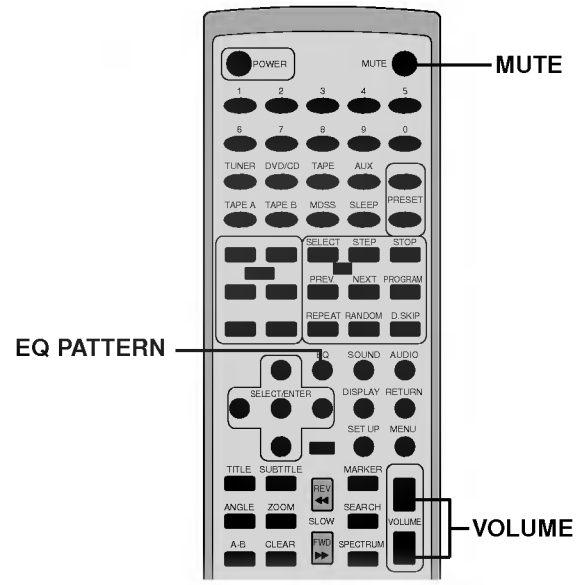
▶ **To activate stereo sound**

You can choose between 4 fixed sound impressions: select a desired sound mode by using the **EQ PATTERN** button.

FLAT : linear frequency response
ROCK : more bass, more treble
POP : less bass, less treble
CLASSIC : for orchestral music

▶ **Headphone Socket**

Connect a stereo headphone plug (6.3mm) into the headphone socket.
The speakers are automatically disconnected when you plug in the headphones (not supplied).



MUTE button (on remote control)

Press this button to mute your unit.
You can mute your unit in order, for example, to answer the telephone, the **MUTE** indicator flashes on the display window.

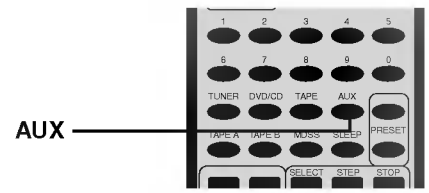
MDSS (Multi Dynamic Sound System)

Press the **MDSS** button to reinforce treble(Hi-Tone), bass(UBB: Ultra Bass Booster) and surround effect.
The "MDSS ON" or "MDSS OFF" indicator lights up.
To cancel it press the **MDSS** button again.

SPECTRUM effect

Whenever you press the **SPECTRUM** button on the remote control, you can enjoy the spectrum change with 4 types in the display.

With the unit plugged in but turned off, press the PLAY **MODE/DEMO** button for a continuous visual display of unit's features. Press it again to return to a display of the current time.



Connect an auxiliary device i.e. TV or VCR, via the rear mounted AUX phono sockets.

Press the "**AUX**" function button.

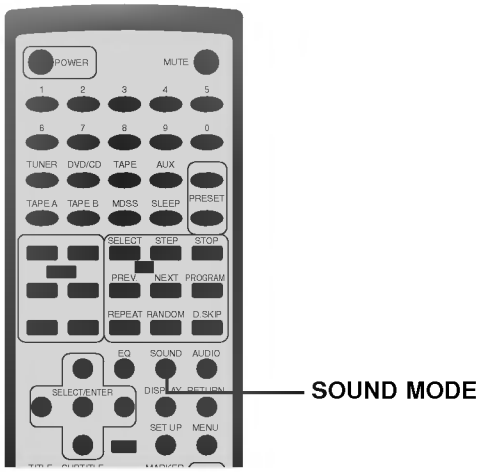
You can also record from the auxiliary input source, see Cassette Deck Operation Section.

You can enjoy surround sound simply by selecting one of the pre-programmed sound fields according to the program you want to listen to.

This operation works only with CD/DVD discs.

Press the SOUND MODE repeatedly until the sound mode you want appears in the display window.

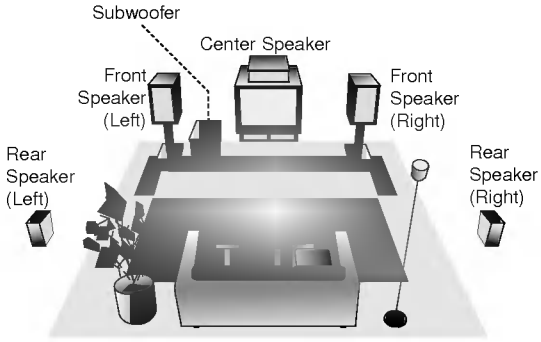
See the table below for information on each sound mode.



Sound Mode	Effect
DOLBY DIGITAL	The Dolby Digital surround format lets you enjoy up to 5.1 channels of digital surround sound from a Dolby Digital program source. If you play DVD of laser discs with " DOLBY DIGITAL " mark, you can enjoy even better sound quality, greater spatial accuracy, and improved dynamic range. This is because Dolby Digital delivers up to 5 totally discrete, audio channels (front left and right, center, and rear left and right), plus 0.1 channel called LFE*(bass-only effects channel) *LFE=Low Frequency Effects. This channel delivers separate non-directional bass signals to the subwoofer for more dynamic deep bass sound effects.
DOLBY PRO LOGIC	Use this mode when playing movie or Dolby Digital 2 channel which carries the " DOLBY SURROUND " mark. This mode provides the effect of being in a movie theater or live concert house-an effect with an intensity which can only be obtained through DOLBY PRO LOGIC SURROUND. The effect of the front/back/left/right movement of the sound image, as well as the sense of fixed position in the sound image, is much clearer and more dynamic than before.
3D SURROUND	This unit can produce a 3D Surround effect, using 3D Surround Sound technology, 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 theatre. This feature works with DVD discs encoded with Dolby Pro Logic and Dolby Digital audio tracks.
3 STEREO	Dolby 3 Stereo surround sound uses analog or digital audio signals to playback three speakers. You do not require rear speakers. This allows you to enjoy a home theater surround sound experience without connecting rear channel speakers. 3 Stereo can be used with Dolby Digital or Dolby Pro Logic audio sources.



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Speaker Positioning Example

Constituent Elements

Dolby Digital and Dolby Pro Logic are used to enjoy the 3-dimensional sound effect with video image, you need to use the devices as follows.

- Use the program sources (e.g. DVD) marked with Dolby Surround (DOLBY DIGITAL or DOLBY SURROUND).

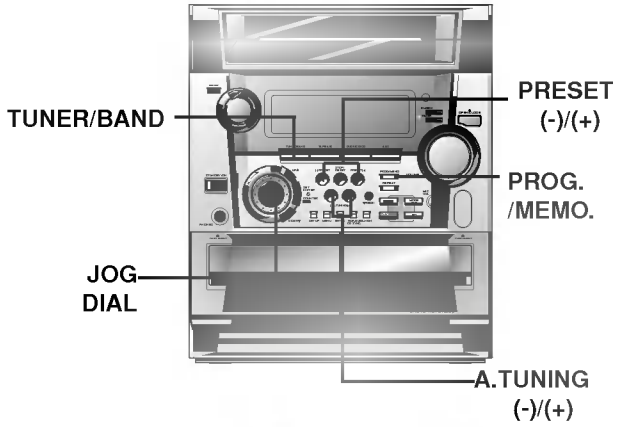
Speaker Positioning

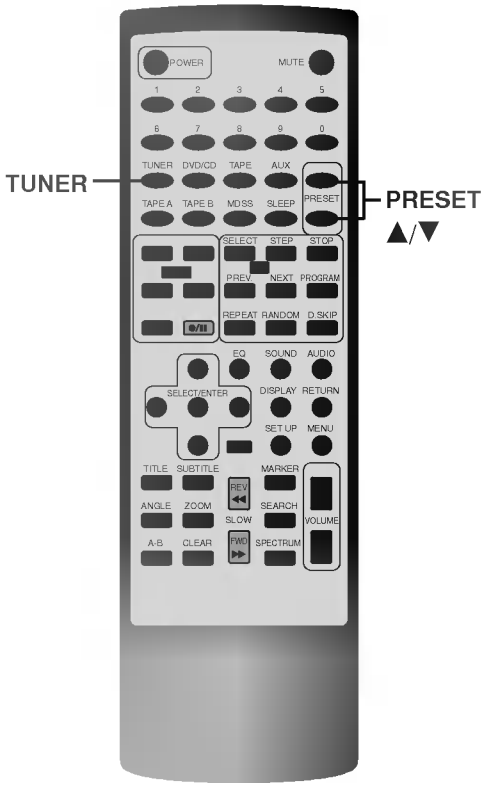
In the case of normal position use the 6 speakers (2 front speakers, center speaker, 2 rear speakers and subwoofer). If you want to play the excellent bass sound or Dolby Digital surround, you should connect a subwoofer.

- **Front speakers**
  We recommend that the height of the tweeter of the front speakers and listener's ears are same height and positioned at an angle of 45 degrees.
- **Center speaker**
  It is ideal that the center speakers and front speakers are the same height. But normally place it above or below the television.
- **Rear speakers**
  Place left and right behind the listening area. These speakers recreate sound motion and atmosphere required for surround playback. For best results, do not install the rear speakers too far behind the listening position and install them at or above the level of the listener's ears. It is also effective to direct the rear speakers towards a wall or ceiling to further disperse the sound.
  In case of the small sizes from the front to rear of the room, if the listener is near the rear wall set the rear speakers opposite each other, and set the rear speakers above 60 - 90 cm above the listener's ears in a downward direction.
- **Subwoofer**
  Without notice for the setting position place it is an appropriate position.

- We recommend that you use the magnetic shielded speakers for the front left/right speakers and center speakers to protect from the video noise of the nearby television.
- Use the speakers that have a similarity in the sound character of all speakers.

You can preset 30 stations for FM and AM. Before tuning, make sure that you have turned down the volume to the minimum.





Press the TUNER/BAND on the front panel repeatedly or TUNER on the Remote control until the FM or AM appears in the display window.

Every time you press the TUNER/BAND (TUNER : on the remote control), FM and AM changes alternately.

Press the AUTO TUNING button (A.TUNING) on the front panel until the frequency indication starts to change, then release.
Scanning stops when the unit tunes in a station.

Press the PROG./MEMO.
A preset number will flash in the display window.

Press the PRESET (-)/(+) on the front panel to select the preset number you want.

Press the PROG./MEMO. again.
The station is stored.

Repeat steps 3 to 6 to store other stations.

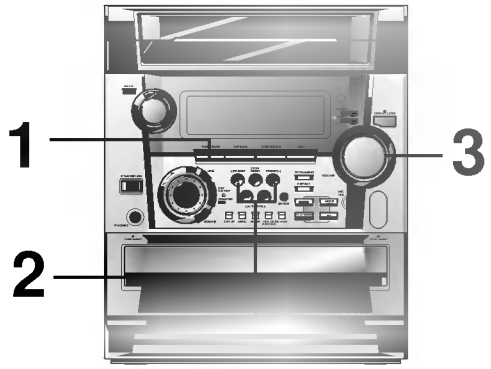
To tune in a station with a weak signal
Turn the **JOG DIAL** in step 3 to tune in the station manually.

To clear all the memorized stations
Press and hold the **PROG./MEMO.** for about two seconds, "RESET" appears in the display window and then press **PROG./MEMO.** again, the stations are cleared.

For your reference
If all stations have already been entered, FULL message will appear in the display window for a moment and then a preset number will flash. To change the preset number, follow the steps 5-6 as above.

To recall presets.
Press and hold the **PRESET (-)/(+)** or **PRESET ▲/▼** (on the remote control) until the desired preset number appears.

Preset radio stations in the unit's memory first (see "Presetting radio stations" on the previous page).



For your reference

- **If an FM program is noisy**
  Press the **MODE/RIF** on the front panel so that "STEREO" disappears in the display window. There will be no stereo effect, but the reception will improve. Press the **MODE/RIF** again to restore the stereo effect.
- **To improve reception**
  Reposition the supplied antennas.

❍ Use MODE/RIF (Radio Interference Filter) to switch the mono reception if stereo reception is distorted by noise.
❍ When recording the MW(AM) or LW broadcast, beat noises occur. If it does, press the **MODE/RIF** once.

Press the TUNER/BAND until AM or FM appears in the display window.
The last received station is tuned in.

Press the PRESET (-)/(+) repeatedly to select the preset station you want.
Each time you press the button, the unit tunes in one preset station at a time.

Adjust the volume by rotating VOLUME on the front panel or pressing VOLUME (+/-) repeatedly on the Remote control.

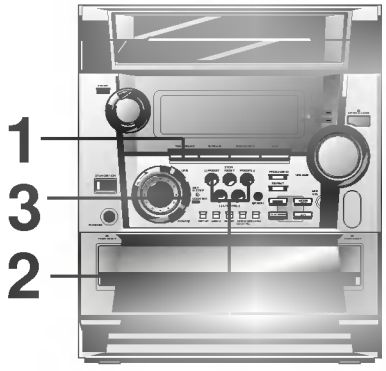
To turn off the radio

Press POWER to turn the unit off or select another function mode (DVD/CD, TAPE or AUX).

To listen to non-preset radio stations

- Use manual or automatic tuning in step 2.
- For manual tuning, turn the **JOG DIAL**.
- For automatic tuning, press **A.TUNING (-)/(+)** on the front panel.

What is RDS?
RDS (Radio Data System) is a system gradually being introduced on FM in many countries, where by an inaudible stream of data is transmitted in addition to the normal radio signal. This data contains various information including station/ transmitter identification, traffic information and a list of alternative frequencies for the radio station being received.



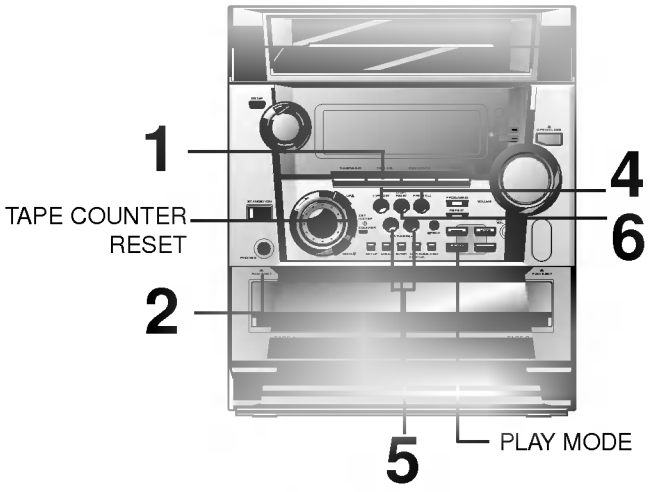
Press the TUNER/BAND to select FM.

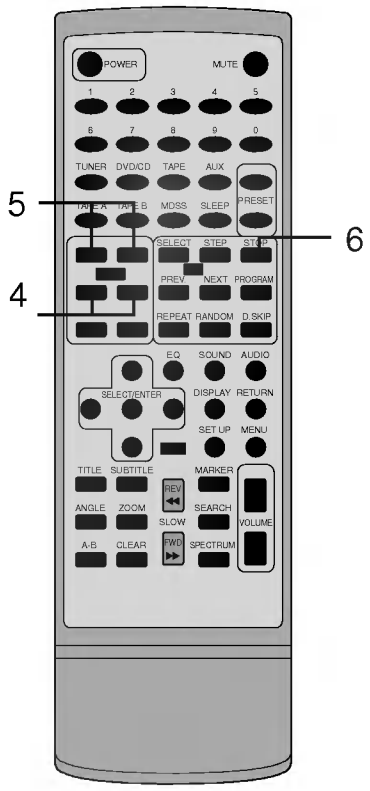
Select a desired station by pressing the PRESET (-)/(+) or Preset ▲/▼ (on the remote control).
When the RDS transmission is received, the display shows the program service name (PS) after RDS indicator appears.

Press the RDS to recall the frequency.

❍ RDS is only available for FM reception.
❍ The PS (PROGRAM SERVICE) NAME is displayed automatically when a RDS station is received.

You can use only normal tapes.





To set the cassette function:
Switch th unit on and press the TAPE A/B button. (If necessary press the button again to select the other deck.)

To insert cassettes :
Open cassette deck A (or B) or both by pushing the deck PUSH EJECT position. Insert one or two cassettes with the tape side to the bottom and the cassette side that you wish to hear facing the front in cassette deck A or B.
NOTE:
DECK A - Auto stop only (Non-autoreverse)
DECK B - Auto reverse

Auto reverse :
Select which side of the cassette is to be played and how often with the PLAY MODE button.

1) **1st Option**
In case of non-autoreverse (auto stop) deck A and auto reverse deck B.
In this case, the continuous play between deck A and B cannot be performed.
(a) DECK A
Front side play only.
(b) DECK B (Auto Reverse)
One side : Unit plays the front or reverse side in deck B and stops automatically at the end of the tape.
All side : Unit plays the front and reverse side in deck B and stops automatically at the end of the tape.
Endless loop : Like but six times in succession in deck B.

2) **2nd Option**
In case of non-autoreverse (auto stop) deck A and B. (Front side play only)

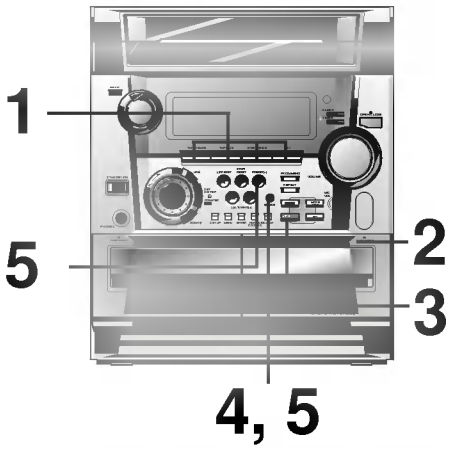
Playback:
Start playback with PLAY button (front side) or (reverse side). The (reverse side) PLAY button is not operated in the non-autoreverse deck.

Fast forward or rewind :
Press button on the unit or on the remote control for fast forward and to rewind.

To end playback :
Press the STOP/RESET button.
The unit stops automatically at the end of the tape.

TAPE COUNTER RESET

Press the COUNTER RESET button while tape is playing or stopped.
During play or fast forward, the tape counter increases and during rewind, the tape counter decreases.



Recording from Radio, CD or auxiliary source.

PREPARATION :
Wind up the tape to the point recording starts.
Use only normal tapes.
You can record from cassette deck B only.

To select the function :
Select the CD function.

To insert the cassette :
Open the cassette deck B.
Insert a blank cassette into the cassette compartment.

PLAY MODE (OPTIONAL)
Select the play mode with PLAY MODE button,
⇄ if you wish to record one cassette side only and ⇄) or (⇄) for both cassette sides.

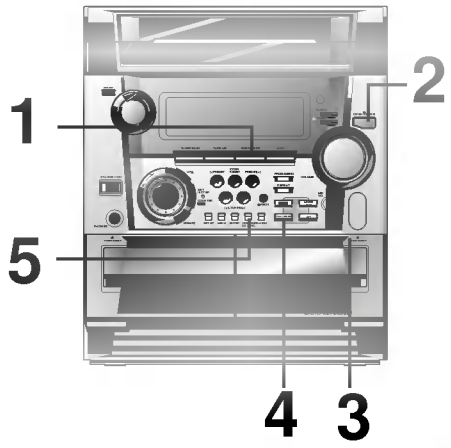
Recording mode :
Press the ●REC/II button.
The REC indicator flashes and holds the cassette in pause mode.

To start recording :
Press the ●REC/II button or PLAY button ▶ again if you want to record the front side or ◀ for the reverse side (OPTIONAL). The recording begins.

NOTE :
If both cassette sides are to be recorded (PLAY MODE ⇄ , ⇄) always start with the front side PLAY (⇄). (Use only auto reverse deck)

To interrupt recording :
To interrupt the recording for a short period, press the ●REC/II button again.

To end the recording :
Press the STOP button. The unit stops automatically at the end of the tape.



CD to tape synchronized recording.

The CD synchro recording function dubs a complete CD and programmed titles automatically into a cassette.

Select the CD function.

Open the CD compartment with the CD OPEN / CLOSE button, insert discs and close the CD compartment again.

To insert cassette :
Open the cassette deck B
Insert a blank cassette into the cassette compartment.
Rewind the cassette to the beginning of the tape.

Auto reverse (OPTIONAL)
Select the PLAY MODE, ⇄ if you only wish to record the front side and ⇄) or (⇄) for both cassette sides.

NOTE:
If the last track has stopped because the tape is full, the track will be recorded again completely on the reverse side of the cassette tape.

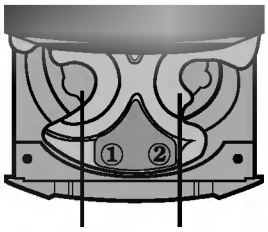
To start recording :
Press the CD SYNC. button.
The recording begins and stops automatically at the end of the CD.

NOTE:
In case of Auto Stop deck (OPTIONAL)
If you want to record onto another tape after one has ended. Change the tape, then push the PLAY button. The tape enters into the recording mute mode for 7 seconds then CD player starts playing and recording.

- If you only want to record certain titles, program these before the CD synchro recording.
- If you wish to record from the desired track, select the desired track with the (⏮ ◀◀ / ▶▶ ⏭) button before commencing CD synchro recording.
- The function change is not possible during recording.

Preparations

- When you want to play back DVD video discs, turn on the TV and select the video input source connected to the unit.
- When you want to enjoy the sound of DVD video discs or audio CDs from the audio system, turn on the audio system and select the input source connected to the unit.
- For connection details, see pages 10 through 12.
- Set the playback picture size according to the aspect ratio of the connected TV at the SETUP menu (TV Aspect).
- If you do not have the necessary equipment to enjoy Dolby Digital sound, set the Digital Audio Output at the SETUP menu to "PCM".



Number 1 disc **Number 2 disc**

Basic Operation

Select the CD FUNCTION by pressing the FUNCTION SELECTOR.

Press the CD OPEN/CLOSE button to open the disc compartment.

Load disc (s) with the label side up.

- **Playing one or two discs**
  Place discs on trays 1 and 2.
- **Playing three discs**
  After placing two discs, press the DISC SKIP button to rotate the trays. Place the next disc on tray 3.

NOTICE

To load an 8cm(3 in.) disc, put it onto the inner circle of the tray.

Press the CD OPEN/CLOSE button to close the disc compartment.

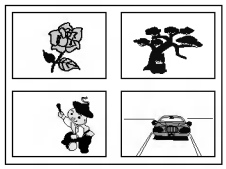
Press the PLAY (▶) to start play.

Play begins with the disc on the left hand side tray before closing the disc compartment. All the discs are played once only.

- If the disc is placed in upside down (and it is a single sided disc), "NO DISC" or "DISC ERROR" appears on the TV screen.
- If you insert an audio CD, the CHP/TRK indicator lights up in the display window. The title number does not appear.
- After playing back all of the chapters in the title, the unit automatically stops and returns to the menu screen.
- **During playback**
  A tray which has no disc is skipped and play proceeds to the next tray. The indicator of the skipped tray number goes out in the display.
- **To skip discs**
  During play or in the stop mode, press the DISC SKIP button.
- **During play**
  Play begins automatically after skipping.
- **In the stop mode**
  The changer skips to the next disc, but the player remains stopped. Press the PLAY (▶) (or on remote control) button to play the next disc. Play begins and all the discs are played once.
- **To play one disc only**
  Press one of the DISC DIRECT PLAY(DISC 1,2,3) buttons to start play.
- **To remove discs**
  Press the CD OPEN/CLOSE button to open the disc compartment. You can remove two discs. To remove the disc on the back tray, press the DISC SKIP button to rotate the disc tray.

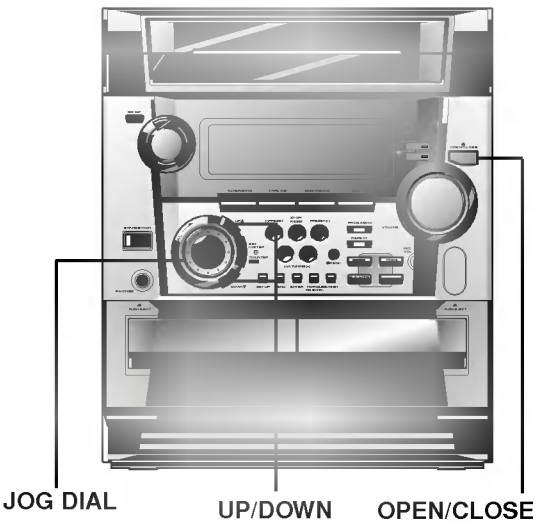
When a menu screen appears on the TV screen.

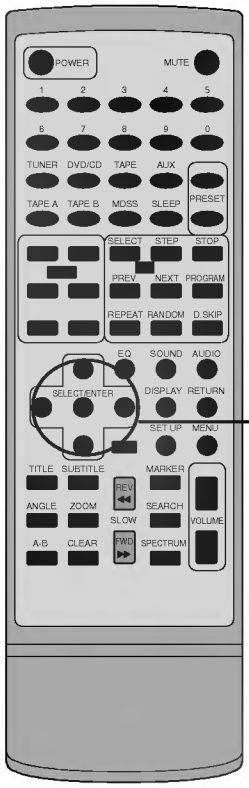
In case of interactive DVDs with control, a menu screen appears on the TV screen. Perform step 6 on page 22 to start play.



Example of interactive DVD On-Screen Menu

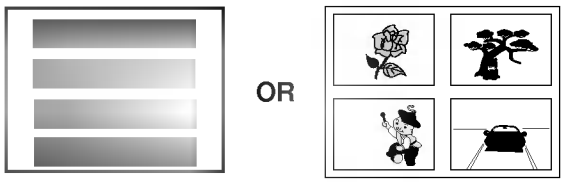
- Do not tilt the unit with discs loaded. This may dislodge the discs. Usage under these conditions may damage the discs.
- Do not place more than one compact disc on one disc tray at the same time.
- If, during CD play, the video image of a nearby television is distorted, or if static is heard from a nearby radio, move this unit further away from the affected television or radio.
- Do not move the unit during playback. Doing so may damage the disc and the unit.
- Use the **OPEN/CLOSE** button on the unit to open and close the disc tray. Do not push the disc tray while it is moving. Doing so may cause the unit to malfunction.
- Do not push up the disc tray or put any objects other than discs on the disc tray. Doing so may cause the unit to malfunction.
- Keep your fingers well clear of the disc tray as it is closing. Be especially careful with children's fingers around the closing disc tray as there is a risk of personal injury.





6

Press ▲/▼/◀/▶ and press SELECT /ENTER (Or, turning the JOG DIAL and press UP/DOWN button on the unit), or press the numeric button(s), to select the desired item.



Play of the selected item now begins.

- For further information, also refer to the jacket or case of the disc you are playing.

After operation
When the unit is not in use, remove the disc and press the **POWER** to turn off the power.

Changing Discs During Play

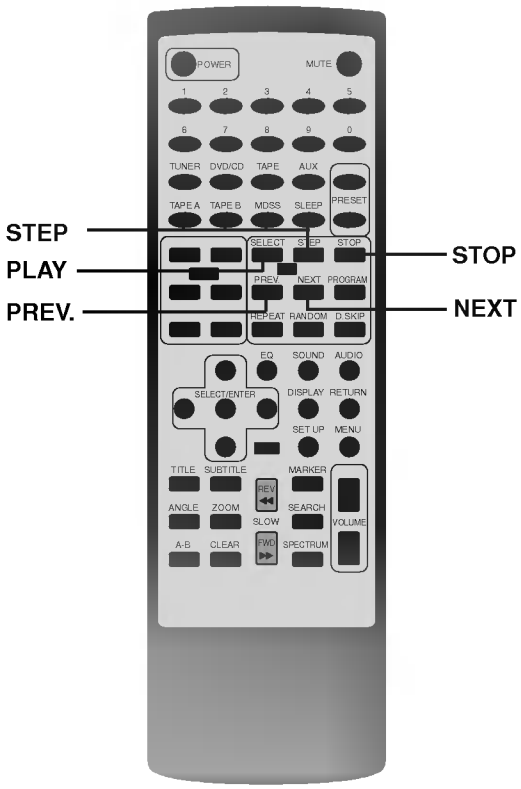
Press the CD OPEN/CLOSE button to open the disc compartment.

Remove the discs and replace with other discs. The disc placed on the left side tray will be played next.

Press the CD OPEN/CLOSE button to close the disc compartment.

pressed, it means that this function is not available on the disc you are playing.

- Depending on the DVD disc, some operations may be different or restricted. Refer to the jacket or case of the disc you are playing.
- The sound is muted during playback on an audio CD recorded in dts.
- The sound is muted during playback on a DVD disc recorded in dts. To enjoy sound, select the Dolby Digital audio track by pressing the **DISPLAY** and ▲/▼/◀/▶ in GUI Menu Icons (see page 28).



Press the STOP during playback.

- When play is stopped, the unit records the point where STOP was pressed (RESUME function).
  Press the **PLAY** and play will resume from this point.

- Resume function will be cleared when the STOP is pressed on the STOP mode.
- Resume function will be cleared when the power is turned off and then on.
- Opening the disc tray cancels Resume function.
- The Resume function may not be available on some DVD discs.

Still Picture (Pause)

Press the STEP during playback.

- DVD
  The unit will be placed in the still picture mode.
- CD
  The unit will be placed in the pause mode.

Frame advance (DVD only)

Press the STEP during still playback.
(Each time you press the **STEP**, the picture advances one frame)

To resume normal playback, press the PLAY.

Skipping chapters and tracks forward or back

Skipping forward

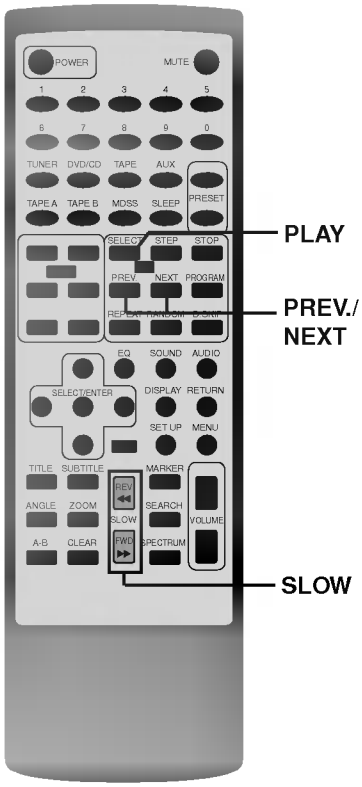
Press the NEXT ⏭ (unit : ▶▶ ▶▶❙) during playback.
A chapter (DVD) or a track (CD) is skipped each time the button is pressed.

Skipping back

Press the PREV. ⏮ (unit : ❙◀◀ ◀◀) during playback.

- When the button is pressed once midway through a chapter/track, the player returns to the start of that chapter/track. When it is pressed again, a chapter/track is skipped each time the button is pressed.

You can play back discs at various speeds.



To Scan at fast forward or fast reverse playback.

Press and hold the PREV. ⏮ or NEXT ⏭ button during playback.

[TV screen]

◀◀ X2 ▶▶ X2

- The speed of advance (reverse) is relatively slow at first. When the button is pressed again, the speed becomes faster. (Each time the button is pressed, the speed increases up to 4 steps.)
- The speed will be retained even after the button is released.

To return to normal playback, press PLAY.

❍ The unit does not play back sound during the high speed reverse and forward playback of DVD video discs. However, the unit plays back sound during fast forward or fast reverse playback of audio CDs.

Playing in slow-motion (DVD)

Press the SLOW ◀◀ or ▶▶ during playback.
The playback speed becomes 1/16 (DVD) of the normal speed.

[TV screen]

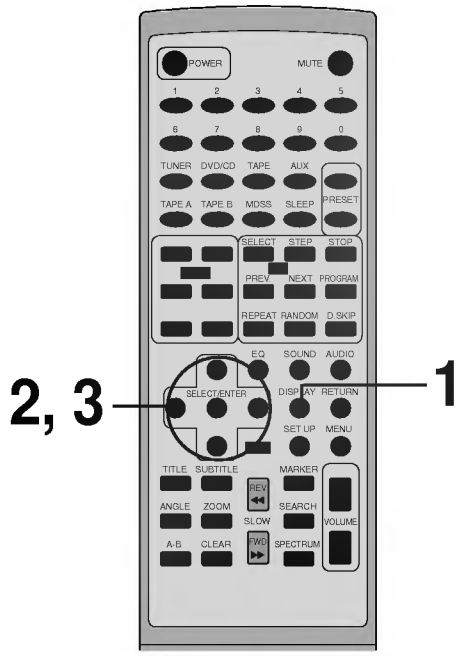
◀❙ 1/16 ❙▶ 1/16

- The speed of slow-motion is slow at first. When the button is pressed again, the speed becomes faster. (Each time the button is pressed, the speed increase up to 4 steps.)
- The speed will be retained even after the button is released.

To return to normal playback, press the PLAY.

❍ The sound is muted during slow-motion playback.
❍ Subtitles do not appear on the screen during slow motion playback.
❍ This function does not work in case of Audio CDs.

This unit features GUI Menu Icons showing disc information (title/chapter/track number, elapsed playing time, audio/subtitle language, angle, and sound) and player information (repeat play, play mode, marker, etc.). Some icons only show the indicated information. Other icons allow the settings to be changed.



Common procedures

Press the DISPLAY during playback.

- Title function can be accessed from the stop mode.

Press the ▲/▼ to select the desired item.

- The current selected item is indicated by a yellow frame on its GUI menu icons.

Press the ◀/▶ to select the desired setting.

- When numbers are displayed (e.g. title No.), the numeric buttons can also be used for setting instead of ◀/▶.
- For some functions, the setting will be registered immediately; for others, **SELECT/ENTER** must be pressed.

To clear the GUI Menu Icons, press the DISPLAY.

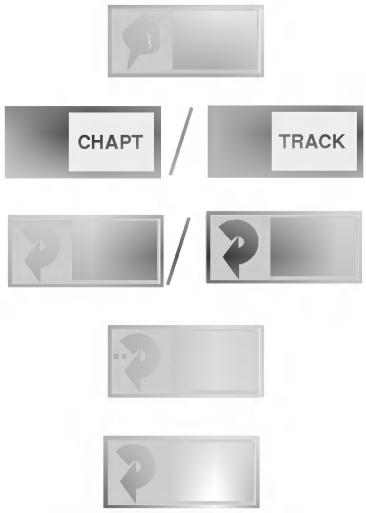
Examples of GUI Menu Icons.
(The screens may differ depending on the disc contents.)



(DVD GUI)



(CD GUI)



(DVD and CD Function GUI)

You can view information about a disc and its operational status on the TV screen.

Press the DISPLAY during playback.
[TV screen] DVD GUI



FUNCTION (Press ▲/▼ to select desired item)	SELECTION METHOD
To show the current title No. **and to jump to the desired title No.**	◀/▶, or Numeric SELECT/ENTER
To show the current chapter No. **and to jump to the desired chapter No.**	◀/▶, or Numeric SELECT/ENTER SKIP
To show the elapsed time **and directly select scenes by the desired time.**	Numeric SELECT/ENTER
To show the current audio soundtrack language, encoding method, channel No. **and to change the settings.**	◀/▶, AUDIO
To show the current subtitles language **and to change the setting.**	◀/▶, SUBTITLE
To show the current angle No. **and to change the angle.**	◀/▶, ANGLE
To show the current sound (NORMAL, 3D SURROUND, Dolby Pro Logic or Dolby 3 Stereo) **and to change the setting.**	◀/▶

Press DISPLAY during playback.
[TV screen] CD GUI



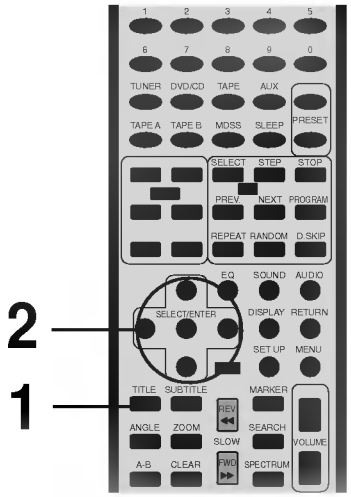
FUNCTION (Press ▲/▼ to select desired item)	SELECTION METHOD
To show the current track No. **and to jump to the desired track No.**	◀/▶, or Numeric SELECT/ENTER SKIP
To show the elapsed time. **(Display only)**	———
To show the current audio (STEREO, LEFT, RIGHT) **and to select to the desired audio channel.**	◀/▶, AUDIO
To show the current sound (NORMAL, 3D SURROUND, Dolby Pro Logic or Dolby 3 Stereo) **and to change the setting.**	◀/▶

○ Some DVD discs may not provide all of the above GUI menu icons.

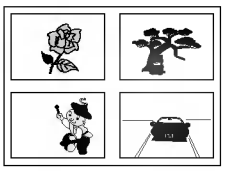
Title menu

Some movie discs may contain two or more titles. If the disc has a title menu recorded on it, the TITLE button can be used to select the movie title. (The details of operation differ depending on the disc used.)

- Selecting a title may not be possible on certain DVD discs.



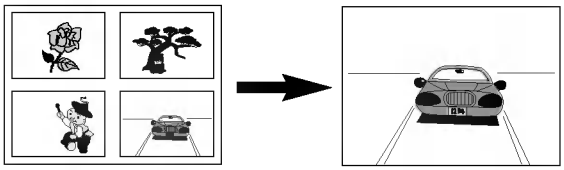
Press the TITLE.
A list of the titles on the disc is displayed.



Press the TITLE again to resume play from the scene when TITLE was first pressed.

- Resume play may not be possible on certain discs.

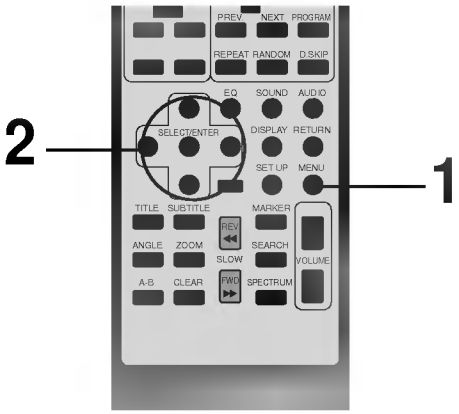
Press the ▲/▼/◀/▶ and press the SELECT/ ENTER or PLAY, or press the numeric button(s), to select desired title.



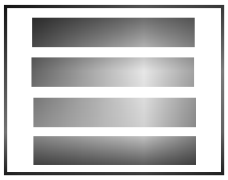
The selected title now starts playing.

DVD menu

Some DVDs have unique menu structures called DVD menus. For example, DVDs programmed with complex contents provide guide menus, and those recorded with various languages provide menus for audio and subtitle language. Although the DVD menu's contents and operation differ from disc to disc, the following explains the basic operation when this feature is used.



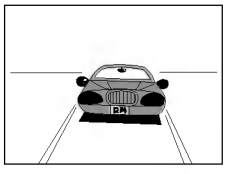
Press the MENU during play.
The DVD menu available on the disc is now displayed.



Press the MENU again resumes play from the scene when MENU was first pressed.

- Resume play may not be possible on certain discs.

Press the ▲/▼/◀/▶ and press the SELECT/ENTER, or press the numeric button(s), to select desired item.

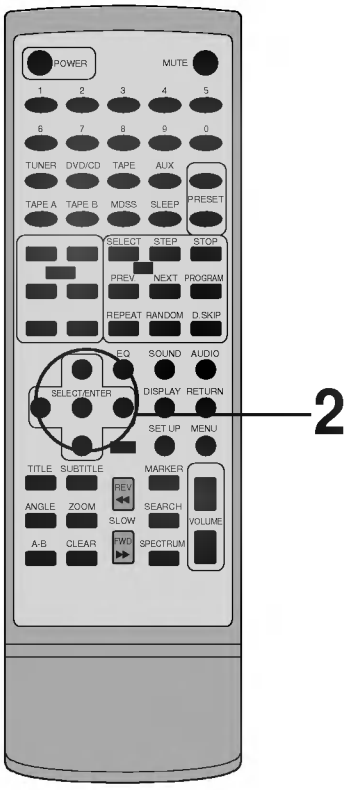


The selected item is now executed.

This unit stores, in memory, settings for DVDs you have watched. Settings remain in memory even if you remove the disc from the unit, or switch power to OFF. If you load a disc that has its settings memorized, the "Resume disc from last position?" message will appear on the TV screen. When you start playing the disc, the memorized settings are automatically recalled.

You can memorize details for the following six settings.

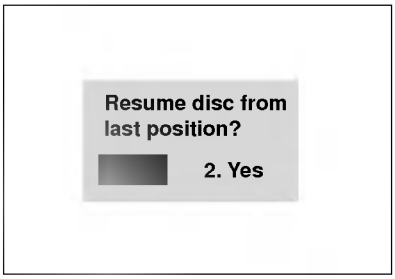
- **Latest Stop Position (Page 25)**
- **TV Aspect (Page 43)**
- **Disc Subtitle Language (Page 31)**
- **Disc Audio Language (Page 31)**
- **Disc Menu Language (Page 44)**
- **Angle (Page 32)**



Load the DVD that was memorized.

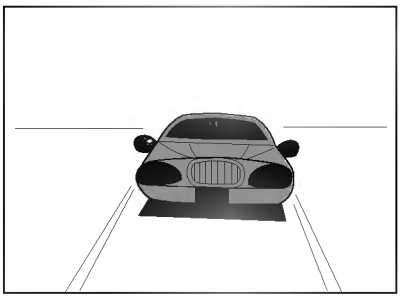
It will appear on the TV screen as below

- If the screen is left for more than 10 seconds, playback will start from the beginning of the title automatically.



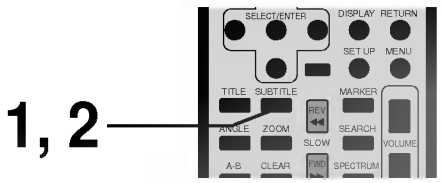
Press the ◀/▶ to select "Yes" and press the SELECT/ENTER.

The memorized settings are automatically recalled.



- Settings are stored in memory for use any time.
- You can store settings for up to 1 DVD in memory. If you memorize settings for more than 1 DVD previously memorized settings are erased in order from the least recently memorized settings. Subsequently, if you try to call up these previously memorized settings, you will get the latest settings that have taken their place.
- Switching of the audio mode etc., is automatic on some discs.
- This unit does not store settings in memory, if you remove the disc from the unit or switch power to the unit OFF when DVD or title menu is displayed on the TV screen.

It is possible to change the subtitle language to a different language from the one selected at the initial settings. (See page 40 for further info.)
This operation works only with discs on which multiple subtitle languages are recorded.



- In some cases, the subtitle language is not changed to the selected one immediately.
- When a disc supporting the closed caption is played, the subtitle and the closed caption may overlap each other on the TV screen. In this case, turn the subtitle off.
- When the desired language is not selected even after pressing the button several times, it means that the language is not available on the disc.
- When the power is turned on or the disc is removed, subtitles appears in the language selected at the initial settings. If this language is not recorded on the disc, the disc's priority language appears.

Press the SUBTITLE during playback.

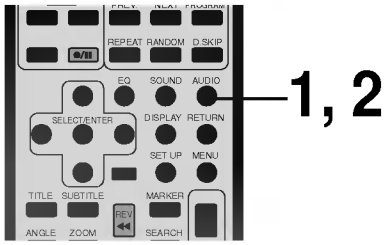


Press the SUBTITLE repeatedly until the desired language is selected.
Number of the subtitle language being played back.



To eliminate the On Screen Subtitles.
Press the **SUBTITLE** repeatedly to select OFF at step 2.

It is possible to change the audio soundtrack language to a different language from the one selected at the initial settings in case of DVD disc. (See page 40 for further info.) This operation works only with discs on which multiple audio soundtrack languages are recorded.
It is not possible to change the audio channel in case of audio CD.



- When the desired language is not selected even after pressing the button several times, it means that the language is not available on the disc.
- When the power is turned on or the disc is removed, the language heard is the one selected at the initial settings. If this language is not recorded on the disc, only the available language on the disc will be heard.
- Some discs may not respond to Audio feature.

• DVD

Press the AUDIO during play.
Number of the audio soundtrack language being played back.



Press the AUDIO repeatedly until the desired language is selected.



• CD

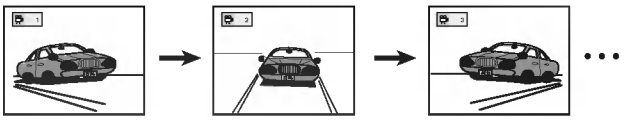
Press the AUDIO during play.

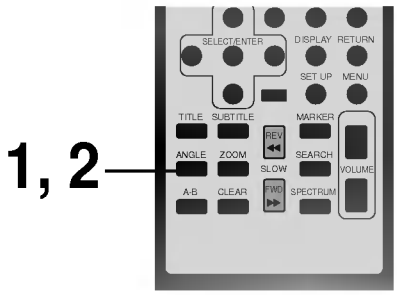


Press the AUDIO repeatedly until the desired sound is selected.



Some DVDs may contain scenes which have been shot simultaneously from a number of different angles. For these discs, the same scene can be viewed from each of these different angles using the **ANGLE** button. (The recorded angles differ depending on the disc used.)





Press the ANGLE during playback.

Number of angle being played back.



Press the ANGLE repeatedly until the desired angle is selected.

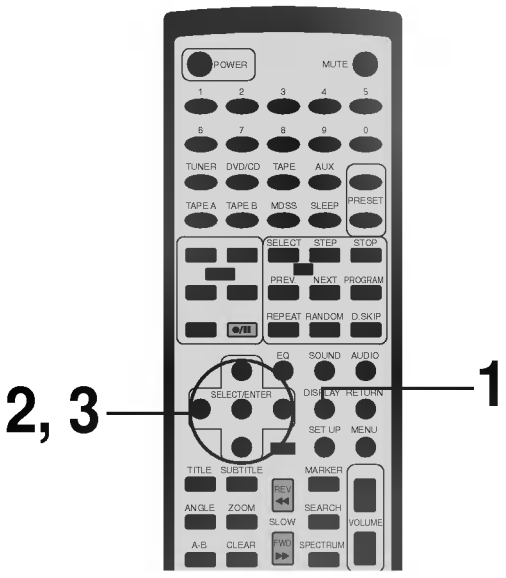


For your reference

- The ANGLE indicator will blink in the display window at scenes recorded at different angles to indicate that angle switching is possible.
- The angle number can be programmed beforehand; the angle will be switched to the selected number when the ANGLE indicator blinks.

❍ This function only works for discs having scenes recorded at different angles.

This unit can produce a 3D Surround effect, using 3D Surround Sound technology, 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 theatre. This feature works with DVD discs encoded with Dolby Surrround and Dolby Digital audio tracks.



Press the DISPLAY during playback.

Press the ▲/▼ to select NORM.



Press the ◀/▶ repeatedly until the desired sound is selected.

Each time this button is pressed, the TV screen display changes:



❍ This 3D Surround effect may not be available on some DVD discs, such as those recorded with a mono audio soundtrack.

❍ Turn off the TV surround sound and other surround effects when using this 3D surround effect.

❍ For best 3D Surround effect using only two speakers it is recommended that the two speakers be positioned approximately 2m to 2.5m apart, and the listening position should be 2m to 2.5m away from the speakers.

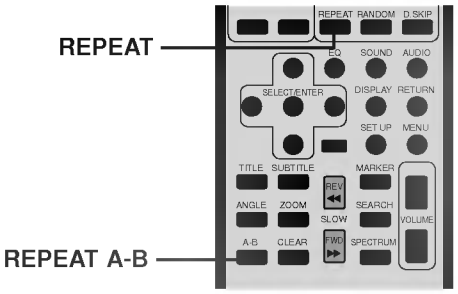
❍ Dolby Pro Logic will only display during playback a disc with 2 channel audio format.

❍ Dolby 3 Stereo will display when you select the rear speaker to None mode in the 5.1 Speaker Setup menu.

Repeating viewing (listening)

Press REPEAT during playback.

Each time this button is pressed, the TV screen changes as shown below and the disc will repeat a chapter or title (DVD) or a track (CD).

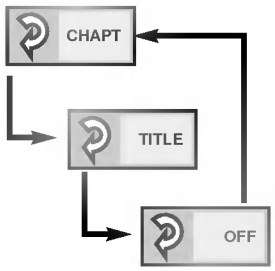


• DVD

Repeat of chapter being played

Repeat of title being played

Cancel repeat mode (normal play)

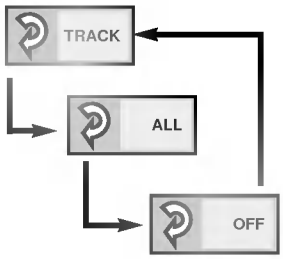


• CD

Repeat of track being played

Repeat of entire disc contents

Cancel repeat mode (normal play)



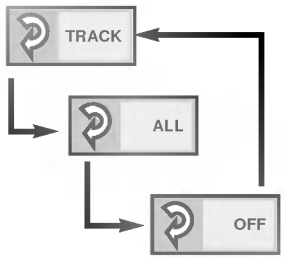
To enjoy program repeat play (CD)

If REPEAT is pressed during program play, repeat play is operated as below.

Repeat of the current programmed track

Repeat of all programs

Cancel repeat mode (Program play)



To return to normal play

Press the REPEAT several times until "OFF" is displayed.

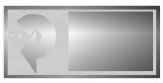
Repeating sections between two specific points (A-B repeat)

Press the A-B during play at the point where repeat play is to start (A).



- You can select "OFF" at this step by pressing the CLEAR.

Press the A-B during play at the point where repeat play is to be concluded (B).



- Repeat play of the selection between points A and B starts.

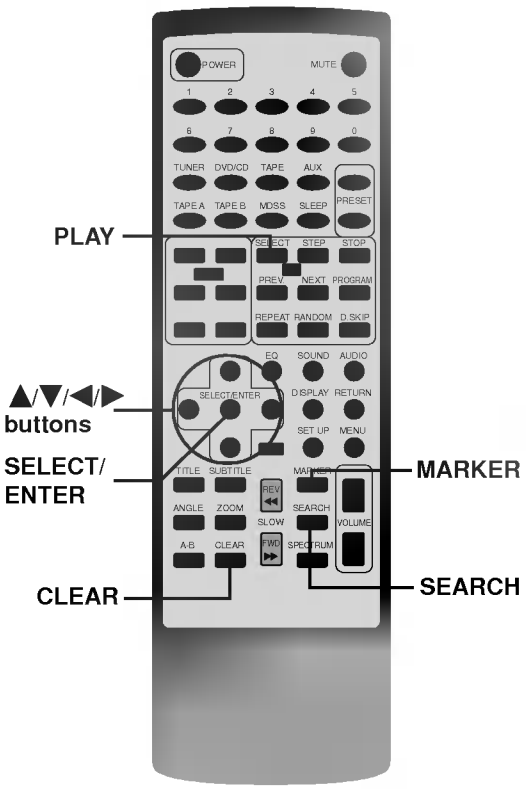
To return to normal play

Press the A-B once "OFF" is displayed.



- Repeat play works only with discs for which the elapsed playing time appears in the DVD display window during playback.
- Repeat play may not work correctly with some DVDs.
- A-B repeat play works only within a title DVD or a track CD.
- Some subtitles recorded around point A or B may fail to appear (DVD).

Storing a MARKER in the DVD memory is similar to marking your page in a book. It allows you to quickly return to any point on the disc.



Storing a marker in the memory

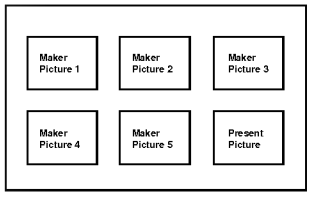
Press the MARKER during play at the starting point to be viewed (listened to) again.



Indicates “1/5” is stored in the memory.
Up to 5 markers can be stored in the memory.

Recalling/Clearing a marker

Press the SEARCH during playback.



Press the ▲/▼/◀/▶ to select the marker to be recalled/cleared.

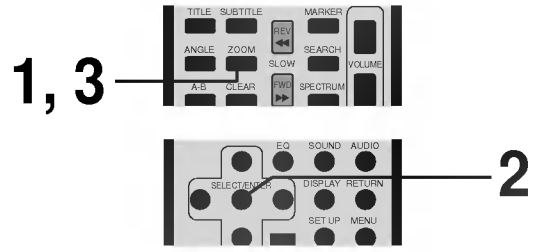
Press the PLAY or SELECT/ENTER to recall a marker. or Press the CLEAR to clear a marker.

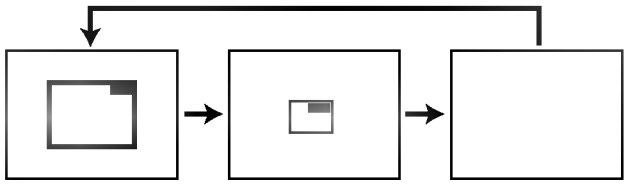
Play resumes from the point corresponding to the selected marker, or the selected marker is cleared.

- The “Present Picture” is not cleared.

- These operations work only with discs for which the elapsed playing time appears in the display window during playback or stop.
- Some subtitles recorded around the marker may fail to appear (DVD).
- All the markers are cleared when the power is turned off or the disc is removed and when TV Aspect mode is changed at the SETUP menu.
- The marker is not stored when the DVD or title menu is displayed on the TV screen.

The Zoom feature allows you to "ZOOM-IN" and enlarge the picture on the screen to either 4 times (X4) or 16 times (X16) its normal size.





Press the ZOOM during normal playback or still playback.

- The square frame will be displayed in the center of the picture. If no button is pressed for more than 10 seconds, the square frame will disappear.
- Each press of the **ZOOM** button changes the TV screen in the left sequence.
- The magnification level will be displayed in the upper right corner of the zoom area.

If you press the ▲/▼/◀/▶ buttons the zoom point shifts.

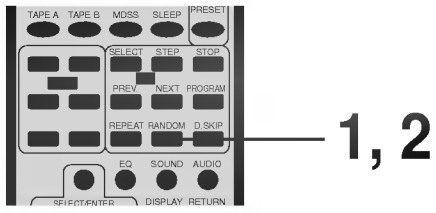
Press the SELECT/ENTER.
The selected frame is displayed in full size on the TV screen.

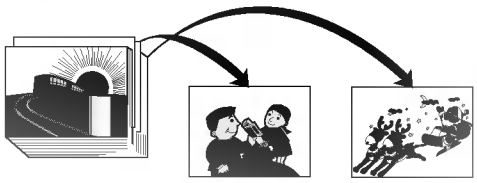
To resume normal playback
Press the **ZOOM** again to cancel Zoom feature and resume normal playback or still playback.

- ❍ Some discs may not respond to the Zoom feature.
- ❍ Zoom does not work on subtitles or menus included on DVD video discs.

Note: This function only works with karaoke DVD and with audio CD discs. Random does not work with DVD movies.

You can playback titles, or tracks in random order. (Random playback)
This unit automatically selects the titles in a DVD video karaoke disc only and plays them back randomly.





- ❍ Random playback may not be possible on certain discs.
- ❍ If you press the SKIP ▶▶| button during random playback, the unit goes to another track randomly and starts playback.

Random play (Karaoke DVD/CD)

Press the RANDOM during stop.
This unit starts random playback.

- ● If you press the **RANDOM** during normal playback, the unit will randomly select another title and begin random playback immediately.

To resume normal playback, press the RANDOM.
The RANDOM indicator in the display window disappears.

Random play (CD)

This unit plays the tracks on the disc in random order.

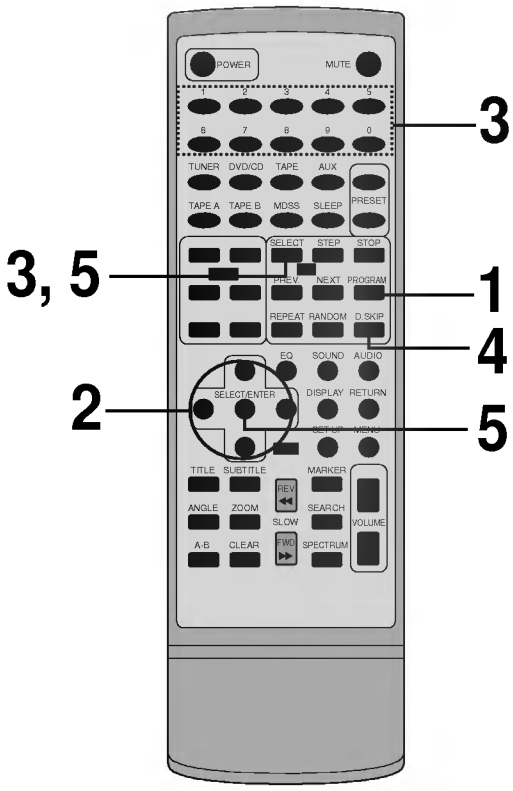
Press the RANDOM during stop.
The random playback screen appears on the TV screen.

- ● If you press the **RANDOM** button during normal playback, the unit immediately selects another track and begins random playback.

To resume normal playback, press the RANDOM during random playback.
The RANDOM indicator in the display window disappears.

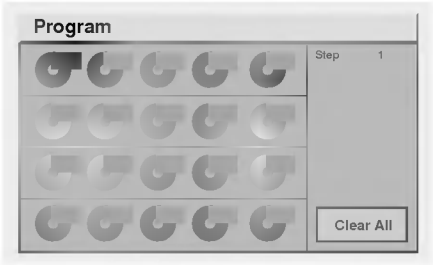
The player plays the tracks in the disc in an order you specify.

Note: Program play function is possible only with audio CDs. It does not work with DVD movie discs.



Press PROGRAM during playback or stop mode.

The program playback screen appears on the TV screen.



• To exit the screen, press PLAY, PROGRAM.

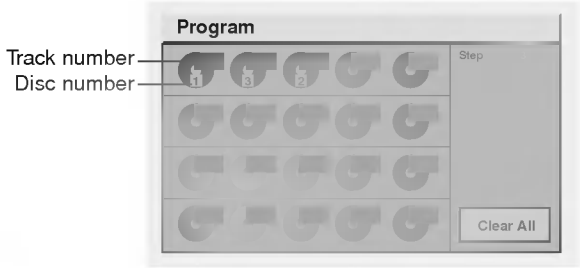
Press ▲/▼/◄/► to select the desired position.

Press the numeric button(s), to select the desired track number.

● The disc number which in the play position will be appeared automatically.

Press the DISC SKIP to select another disc number.

• Repeat steps 2 to 4 to select another track.
• Up to 20 tracks can be programmed.



Press PLAY or SELECT/ENTER to exit the screen.

The selected track is stored in the memory and play now begins in the programmed sequence.

● If you press PROGRAM to exit the screen, the selected tracks are not memorized.

After playback of all tracks programmed

Play is stopped.

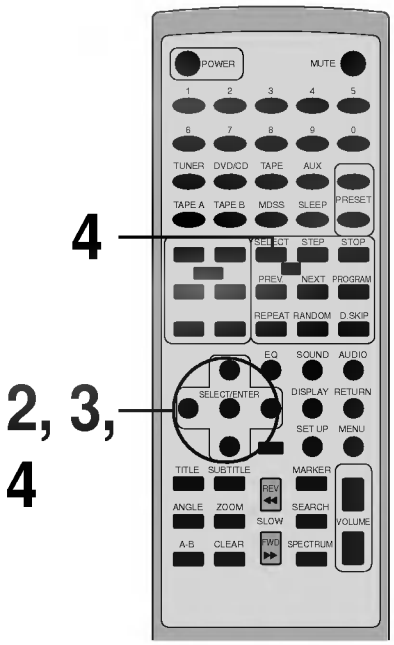
Clearing the program

● To clear the program one by one

Press ▲/▼/◄/► to select the unwanted No. and then press CLEAR.

● To clear all the programs

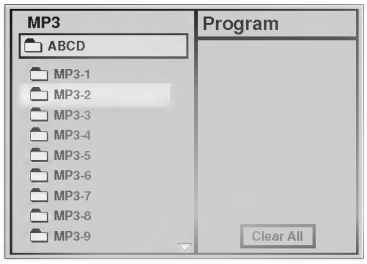
Press ▲/▼/◄/► to select the "Clear All" and press SELECT/ENTER. Press PLAY or SELECT/ENTER to exit the screen. If you press PROGRAM to exit the screen, the programs are not cleared. (The programs are also cleared when the power is turned off or the disc is removed.)



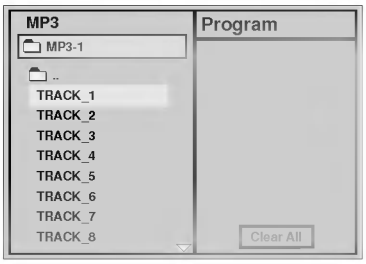
To play an MP3 file

Load an MP3 disc.

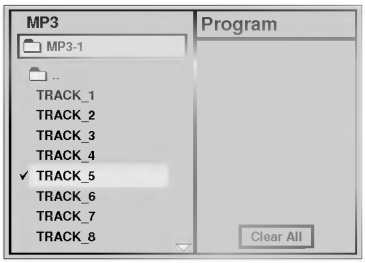
The MP3 menu is displayed.



Press the ▲/▼ buttons to select the directory where MP3 files that you want to play are located and then press the SELECT/ENTER.



Press the ▲/▼ button to select the desired MP3 file of the selected directory on your disc.



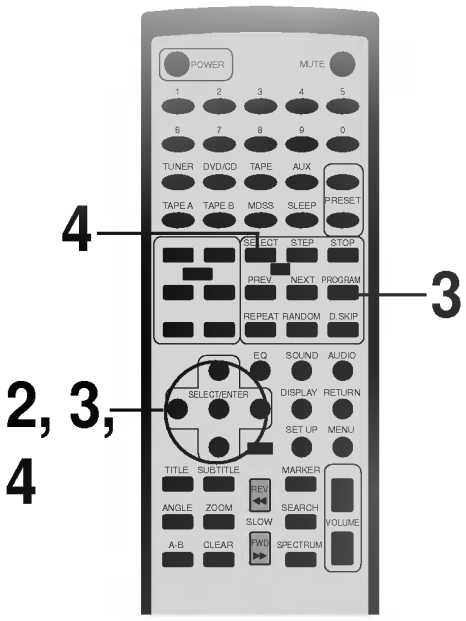
If you want to return to the previous menu, press the RETURN button.

Press the SELECT/ENTER or PLAY to start playback of a file.

For your reference

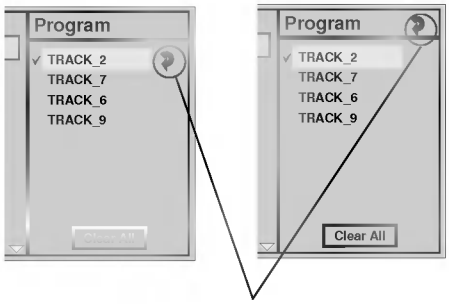
- Press the **SKIP** ⏭ or **SKIP** ⏮ to play the next file or previous file during playback.
- Press the **TITLE** to move to 1st page of current directory during playback and press the **TITLE** again to move to the next page within 5 seconds.
- Press the **MENU** to move to the Root Directory during playback.

- The directory and file name is only displayed in English.
- If there is an impossible code to display, it will be displayed underlined (_) instead of English.
- If a directory has no MP3 file, the " ⃠ " is displayed with the directory name.
- This unit can play up to 256 files per disc. A disc recorded with more than 256 files cannot be played.
- The maximum allowable depth of nested folder is 50.
- Disc format is compatible with ISO9660 only.
- 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.
- 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.
- If there are already data files which are not MP3 files on the CD-R disc, please, do not use that disc; use a new one instead. However, if the disc is a CD-RW disc, this does not apply.
- If you select another file by pressing ▲/▼ during playback, the file is played after 5 seconds automatically.
- If you select a directory by pressing ▲/▼ during playback, the playback is stopped after 5 seconds.



To play an MP3 file repeatedly

- If you press the **REPEAT** button once during play, the current MP3 file will play repeatedly.
- If you press the **REPEAT** button twice during play, the all MP3 files on the programme list will play repeatedly.
- If you press the **REPEAT** button three times, the repeat play will be cancelled.



REPEAT symbol

Clearing the programme

● To clear the programme one by one

Press the ▲/▼/◄/► to select the unwanted MP3 file on the programme list and then press the **CLEAR**.

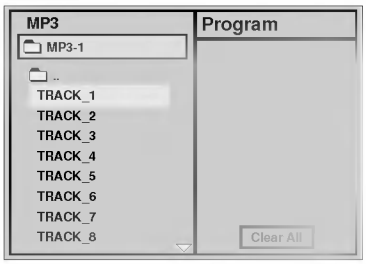
● To clear all the programmes

Press the ▲/▼/◄/► to select the "Clear All" and press the **SELECT/ENTER**.

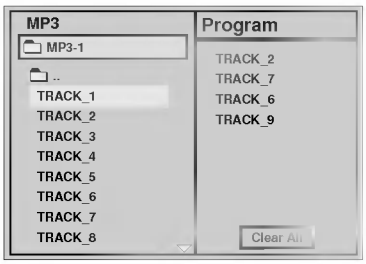
To programme play an MP3 file

Follow steps 1 to 2 on previous page.

Select an MP3 file to programme with ▲/▼.

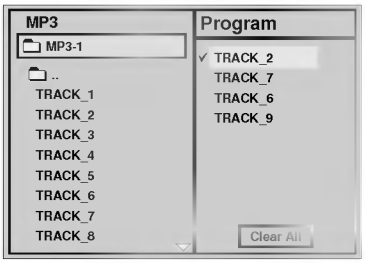


Press the PROGRAM button to add an MP3 file on the programme list.



- Repeat steps 2 - 3 to select another track.
- Up to 60 files can be programmed.

Press the ► button and select the desired MP3 file and press the SELECT/ENTER or PLAY button to play.

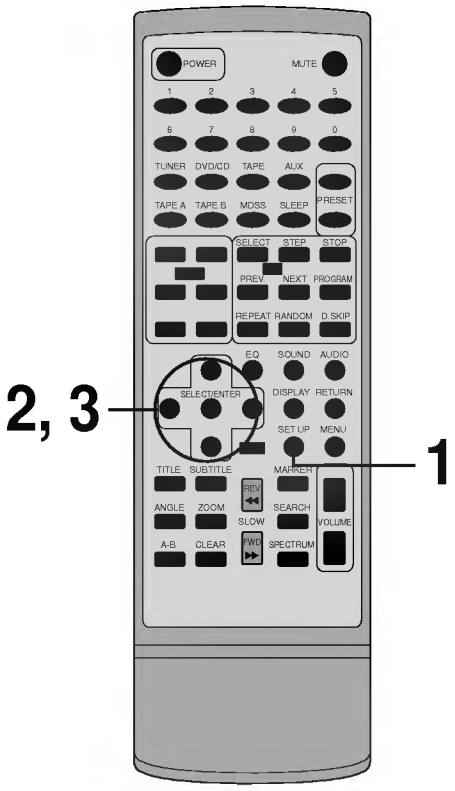


If you want to enter the main menu, press the ◄ button.

After playback all tracks programmed

Play is stopped.

Once the initial settings have been completed, the unit can always be operated under the same conditions (especially with DVD discs).
The settings will be retained in the memory until they are changed, even if the power is switched off.



Selection of initial settings

Press the SETUP in the stop or playback mode. The SETUP menu is displayed.



Press the ▲/▼ to select the desired item.
The screen will show the current setting for the selected item, and the alternate setting(s).

- Disc Audio
- Disc Subtitle | (see page 40)
- Disc Menu
- Rating (see page 41)
- Password (see page 42)
- TV Aspect (see page 43)
- Menu Language (see page 44)
- Digital Audio Output (see page 45)
- 5.1 Speaker Setup (see page 46)
- Others (DRC/Pseudo PAL/Vocal) (see page 47)

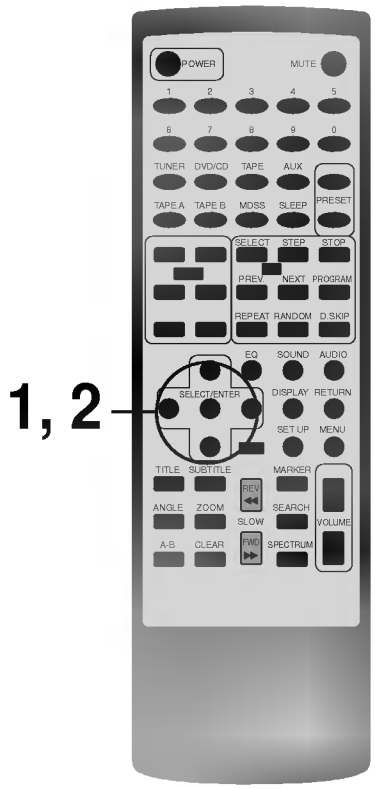
Press the ► and then ▲/▼ to select the desired setting and press the SELECT/ENTER.
- Some items require additional steps. (See the respective page.)

When the alternate setting is selected the screen returns to the Initial Settings display.

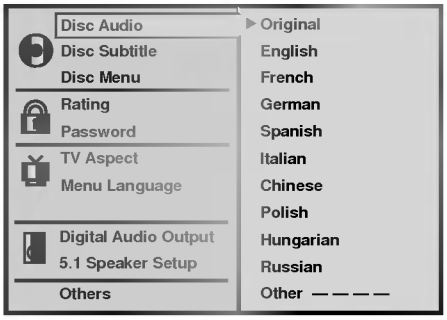
To exit SETUP menu
Press the **SETUP**, **RETURN** or **PLAY**.

This is to select the audio soundtrack language, subtitle language and the language used in title menus or DVD menus which will always be used for every disc to be played back.

When you play back a DVD video disc, the unit automatically displays the pre-selected subtitle language if it is included on the disc.



At the setup screen, press the ▲/▼ to select "Disc Audio" and press ▶.



Press the ▲/▼ to select the desired language and then press the SELECT/ENTER.



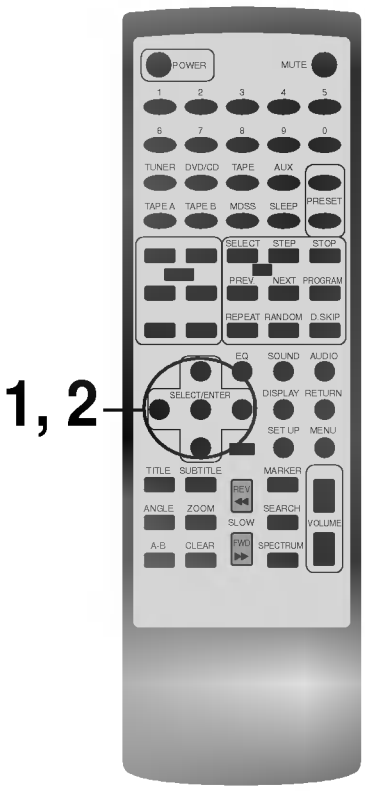
Original : The original language of each disc will be selected.
English : The English will be Selected.
Other : Another language can be selected. You can input 4-digit language code. (Refer to the language codes on page 48. Press the **CLEAR** if an incorrect language code is entered.)

The "Disc Subtitle" and "Disc Menu" are selected by the same method.

❍ If the language selected is not available on the disc, the original language designated by each disc will be selected.

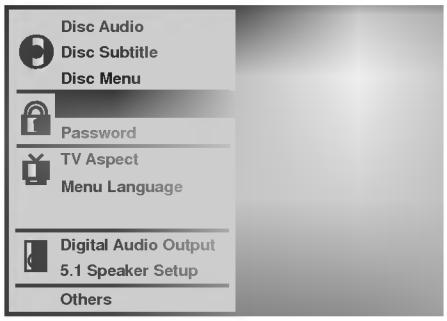
This is to prohibit the playing of specified DVDs which are unsuitable for children.

- Some DVD discs contain a restriction level which enables parents to remove scenes or prevent playback of discs by children. This unit is equipped with a password designed to prevent children changing the level.

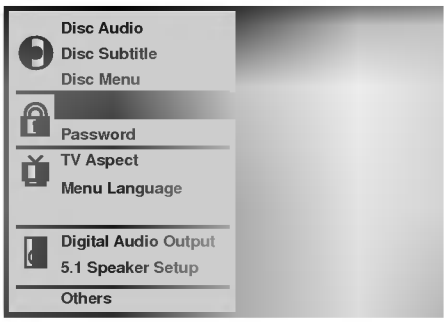


Selecting rating level (DVD only)

At the SETUP screen, press the ▲/▼ to select "Rating" and press the ▶.

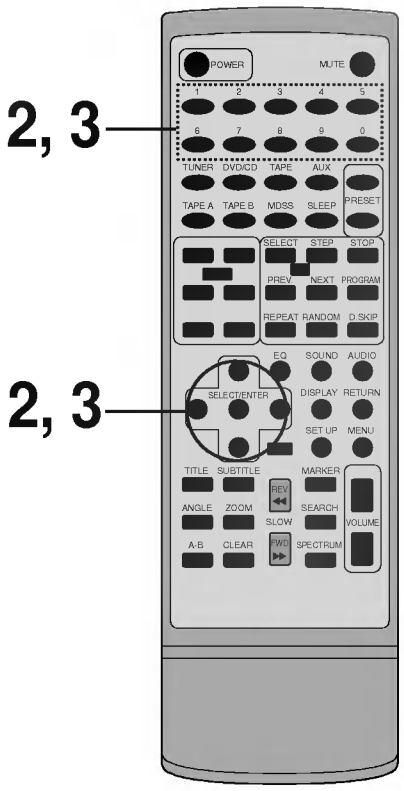


Press the ▲/▼ to select the desired level and press the SELECT/ENTER.



You cannot play DVD video discs rated higher than the level you selected unless you cancel the parental lock function. For example, when you select level 7, discs rated higher than level 7 are blocked and cannot be played.

If you change the level and enter a password, playback of all DVDs with ratings higher than your selection will be blocked, unless the correct password is entered again. For example: if you change the level to "5", the unit will not play discs with ratings of "6", "7" or "8" unless the correct password is entered on the remote control.



Setting your password (DVD only)

If you change the rating level to "7" or lower, you must enter a 4-digit "password" to prevent playback of discs with higher ratings.

At the SETUP screen, press the ▼ to select "Password" and press the ►.



Input a 4-digit password and press the SELECT/ENTER.
Example : 1234
Do not forget your password.

Input the 4-digit password again and press the SELECT/ENTER to verify.
Setting is finished.

- The rating is locked. Any discs whose rating is higher than the setting cannot be played back unless the correct password is entered.

To change/clear memorized password

At the SETUP screen, press the ▼ to select "Password" and press the ►.

Input your password and press the SELECT/ENTER.



To change or clear your password, press the ▲/▼ to select the "Change" or "Clear" and press the SELECT/ENTER.

To change the rating level/password, follow the steps on page 41-42 again.

To clear your 4-digit password

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

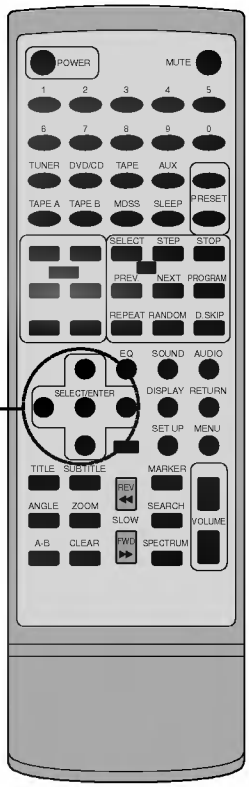
At the SETUP screen

1 **Press the ▼ to select "Password" item.**

2 **Enter 6-digit number "210499" and then press the SELECT/ENTER.**
The 4-digit password is cleared.

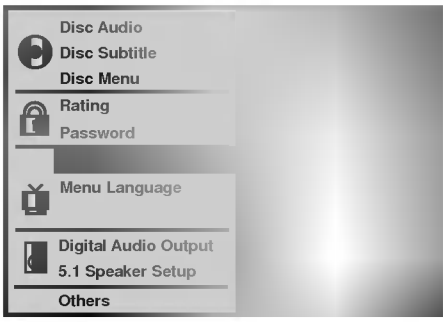
3 **Enter a new password**
Refer to "Setting your password" section on the right.

Select the appropriate screen type according to your TV set; conventional size screen (4:3) or wide-screen (16:9).

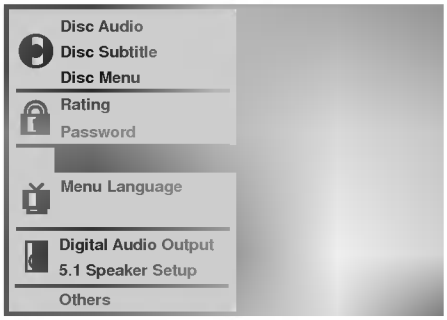


1, 2

At the SETUP screen, press the ▲/▼ to select "TV Aspect" and press the ▶.



Press the ▲/▼ to select the desired Aspect and press the SELECT/ENTER.

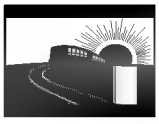


4:3 Letterbox : The video material not formatted in the Pan & Scan style is played back in the letterbox style (black bands appear at top and bottom of screen).

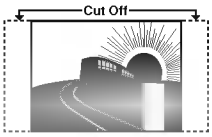
4:3 Panscan : Select when a conventional TV set is connected. The video material formatted in the Pan & Scan style is played back in that style (the left and right edges are cut off).

16:9 Wide : Select when a wide-screen TV set is connected. Played in "FULL" size. (Setting the wide-screen TV to "FULL" mode is also necessary.)

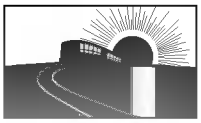
* Each screen shows an example when the video material for a wide-screen is played.
(This setting does not affect the video material for conventional size.)



4:3 Letterbox



4:3 Panscan



16:9 Wide

Selects language for DVD menus and displays on the TV.

At the SETUP screen, press the ▲/▼ to select "Menu Language" and press the ▶.



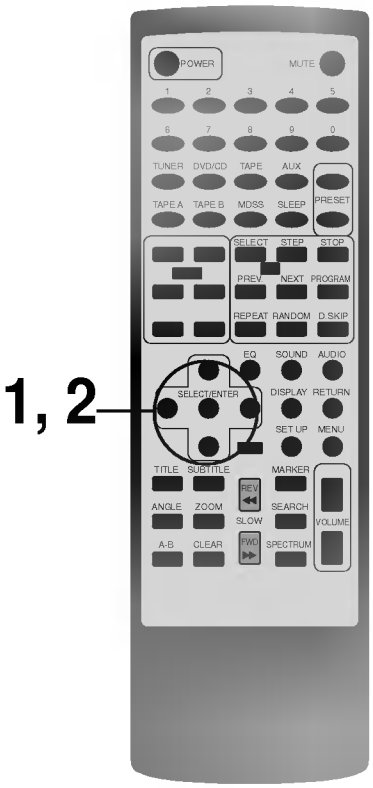
1, 2



Press the ▲/▼ to select the desired Language and press the SELECT/ENTER.



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



At the SETUP screen, press the ▲/▼ to select Digital Audio Output and press the ►.



Press the ▲/▼ to select the desired output and press the SELECT/ENTER.



DOLBY DIGITAL/PCM: Select "DOLBY DIGITAL/PCM" if an active digital output is supplied to a Dolby Digital decoder, (or an amplifier or other equipment with Dolby Digital decoder).

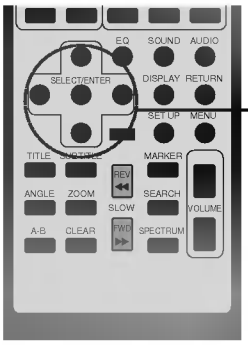
Stream/PCM: Select "Stream/PCM" if an active digital output is supplied to an amplifier or other equipment with Dolby Digital decoder and MPEG decoder.

PCM: Select "PCM" if an active digital output is supplied to an amplifier or other equipment with linear PCM only (or MD recorder or DAT deck).

Playback Disc	OUTPUT		
	Stream/PCM	Dolby Digital/ PCM	PCM only
96 kHz Linear PCM DVD	PCM	PCM	PCM
Dolby Digital DVD	Dolby Digital bit Stream	Dolby Digital bit Stream	PCM
MPEG DVD	MPEG bit Stream	PCM	PCM
Audio CD	PCM	PCM	PCM

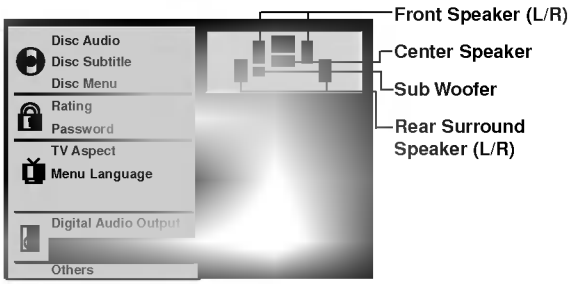
- When you are not using the unit's digital audio output, don't select any of the options.
- If an active digital audio output signal is supplied to a unit or other equipment without a corresponding digital decoding capability, a very loud noise may be produced which could permanently damage the speakers.

Select the speaker to adjust the audio output mode of the speaker.

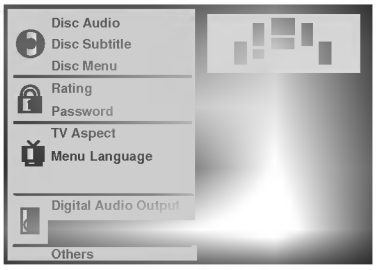


- Do not place the center or rear speakers further away from the listening position than the front speakers.
- The test tone does not output from the subwoofer.

At the SETUP screen, press the ▲/▼ to select "5.1 Speaker Setup" and press the ▶.



Press the ◀/▶ to select the desired speaker and press the ▲/▼/◀/▶ to adjust options.



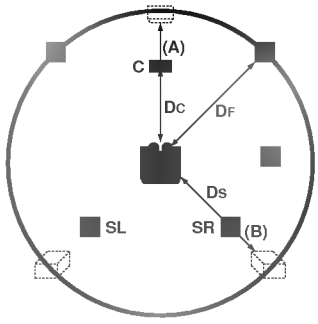
Volume: Press the ◀/▶ to adjust the output level of selected speaker. (-6dB ~ 0dB)

Size: Press the ◀/▶ to set a mode. (Large, Small, None)

- If you have connected the system to a speaker with low frequency of 100Hz or below, select "Large"
- If you have connected the system to a speaker without low frequency of 100Hz or below, select "Small" But if you haven't connected to sub woofer, always select "Large" of Front Speaker (L/R).
- When you don't connect to speaker, select "None".
- Front L/R speaker's size can be selected to Large" or "Small".
- If Front L/R speaker's size is selected to "Small", Rear and Center speaker's size can be selected to "Small" or "None", and Sub woofer speaker's size can be selected only to "Large".

Delay: Press the ◀/▶ to customize the sound to conform to the acoustics of your room by adding a delay effect to the sound of the Center Speaker and Surround Speaker.

- When 5.1CH Surround is played, you can enjoy the best sound if the distance between you and each speaker is same. You can set Delay time in the Center/Surround Speaker to customize the sound to to the acoustic of your room. (Center: 0 ~ 5ms, Rear: 0 ~ 15ms).



- **Setting Center Speaker**
  If the distance of Dc is equal to or longer than the DF in the left figure, set the mode as 0ms. Otherwise, change the setting according to the table below.
  (A) = DF - Dc

Distance of (A)(cm)	Setting(ms)
34	1
68	2
102	3
136	4
170	5

- **Setting Rear Surround Speaker**
  If the distance of DF is equal to the distance of Ds in the above, set the mode as 0ms. Otherwise, change the setting according to the table below.
  (B) = DF - Ds

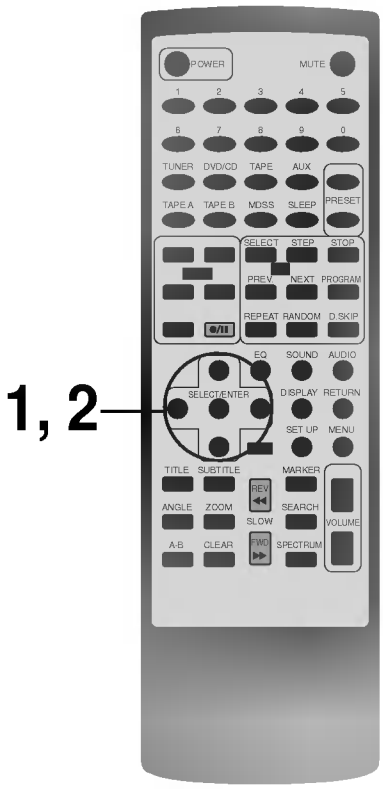
Distance of (B)(cm)	Setting(ms)
170	5
340	10
510	15

Test : Press the **SELECT/ENTER** to test signals of each speaker. Adjust Volume to match to the volume of test signals memorized in the system.

- Front (L) → Front (R) → Center → Rear (L) → Rear (R)

Return: Press the **SELECT/ENTER** to return to the previous menu screen.

The DRC, Pseudo PAL and Vocal settings can be changed.



At the SETUP screen, press the ▲/▼ to select "Others" and press the ▶.



Press the ▲/▼ to select the desired items and press the SELECT/ENTER.

DRC (Dynamic Range Compression) On/Off

On: Select this option to turn on the Dynamic Range Compression circuitry so that the dialogue remains clear even at low volume levels.

Off: Select this option to turn off the Dynamic Range Compression and have the soundtrack presented exactly as it was created.

Pseudo PAL On/Off

On: A NTSC DVD disc can be played back with the PAL colour system TV set, depending on the disc.

Off: A NTSC DVD disc cannot be played back with the PAL colour system TV set.

Vocal On/Off

Set to On only when a multi-channel karaoke DVD is being played. The karaoke channels on the disc will then be mixed into a normal stereo sound.

About DRC (Dynamic Range Compression)

With the DVD format you have the opportunity to hear a programme's soundtrack in the most accurate and realistic presentation possible, thanks to the use of digital audio technology. However, in certain instances you may wish to slightly compress the dynamic range of the audio output (the difference between the loudest sounds and the quietest ones) so that you may listen to a movie at a lower volume without losing dialogue intelligibility.

- The DRC function works only during playback of Dolby Digital recorded discs.
- The level of Dynamic Range Compression may differ depending on the DVD disc.
- When playing karaoke, connect appropriate audio equipment such (such as an amplifier) to the unit.
- The Pseudo PAL can be displayed when the SYSTEM selector on the rear panel is switched to PAL mode.
- If there are any problems during playback of a NTSC disc, select the "Pseudo PAL" to "On" mode.
- The picture can be streamed according to TV type when the "Pseudo PAL" is in "On" mode.

Enter the appropriate code number for the initial settings “Audio”, “Subtitle” and/or “Menu” (See page 40).

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	Sundanese
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

Playable Discs

This unit can play back the following discs.

	Disc mark	Contents	Disc size	Maximum playback time
DVD video discs	DVD VIDEO™	Audio+Video (moving pictures)	12 cm	Approx. 4 hours (single sided disc)
				Approx. 8 hours (double sided disc)
			8 cm	Approx. 80 minutes (single sided disc)
				Approx. 160 minutes (double sided disc)
Audio CDs	COMPACT disc DIGITAL AUDIO	Audio	12 cm	74 minutes
			8 cm	20 minutes

In addition, this unit can play back a CD-R or CD-RW that contains audio titles or MP3 files.
You cannot playback discs other than those listed above. (Video CD, CD-ROM, CD-Extra, CD-G, photo CD, and CD-i discs can not be played on this unit.)

Region Management Information: This unit is designed and manufactured to respond to the Region Management Information that is recorded on a DVD disc. If the Region number described on the DVD disc does not correspond to the Region number of this unit, this unit cannot play that disc.

The Region number of this unit is 2.



You may not be able to play back some DVD video discs on this unit if they were purchased from outside your geographic area or made for business purposes.
When you try to play back an unauthorized disc, "**Check Regional Code**" appears on the TV screen.

It is forbidden by law to copy, broadcast, show, broadcast on cable, play in public, and rent copyrighted material without permission.
DVD video discs are copy protected, and any recordings made from these discs will be distorted.
This unit 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.

Before Calling Service Personnel

Symptoms and Correction

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

Symptom	Cause	Correction
No power.	• The power cord is disconnected.	• Plug the power cord into the wall outlet securely.
The power is on, but the receiver does not work.	• No disc is inserted.	• Insert a disc. (Check that the DVD or, CHP/TRK indicator in the display window is lit.)
No picture.	• The TV is not set to receive DVD signal output.	• Select the appropriate video input mode on the TV so the picture from the unit appears on the TV screen.
	• The video cable is not connected securely.	• Connect the video cable into the jacks securely.
	• The connected TV power is turned off.	• Turn on the TV.
There is no sound or only a very low-level sound is heard.	• 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 receiver.
	• 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 audio connecting cord is damaged.	• Replace it with new one.
The playback picture is poor.	• The disc is dirty.	• Clean the disc.
The unit does not start playback.	• No disc is inserted.	• Insert a disc.(Check that the DVD, or CHP/TRK indicator in the display window is lit.)
	• 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.
	• A menu is on the TV screen.	• Press the **SET UP** button to turn off the menu screen.
	• The Rating level is set.	• Cancel the Rating function or change the rating level.
Severe hum or noise is heard.	• The plugs and jacks are dirty.	• Wipe them with a cloth slightly moistened with alcohol.
	• The disc is dirty.	• Clean the disc.
	• The speakers and components are connected poorly.	• Connect the speakers and components securely.
	• The unit is located with TV nearly.	• Move your TV away from the audio components.

Before Calling Service Personnel (Cont'd)

Symptoms and Correction

Symptom	Cause	Correction
Recording cannot be done.	• The components are connected incorrectly.	• Connect the components correctly.
	• The source is selected in correctly.	• Select the source with the **FUNCTION SELECT** button (DVD/CD, TAPE, AUX or Tuner).
Radio stations cannot be tuned in.	• The antennas are connected poorly.	• Connect the antenna securely.
		• Adjust the antennas and connect an external antenna if necessary.
	• The signal strength of the stations is too weak (when tuning in with automatic tuning).	• Tune in the station manually.
	• No stations have been preset or preset stations have been cleared (when tuning by scanning preset stations).	• Preset the stations (see page 18).
The remote control does not work properly.	• The remote control is not pointed at the remote sensor of the unit.	• Point the remote control at the remote sensor of the unit.
	• The remote control is too far from the unit.	• Operate the remote control within about 23 ft (7 m).
	• There is an obstacle in the path of the remote control and the unit.	• Remove the obstacle.
	• The batteries in the remote control are exhausted.	• Replace the batteries with new ones.

Specifications

[General]	Power supply	Refer to the back panel		
	Power consumption	150W		
	Mass	11kg		
	External dimensions (W x H x D)	273 x 327 x 356 mm		
[CD/DVD]	Laser	Semiconductor laser, wavelength 650 nm		
	Frequency response (audio)	40 - 18,000 Hz		
	Signal-to-noise ratio (audio)	More than 70 dB (1 kHz)		
	Signal-to-noise ratio (video)	More than 60 dB (1 kHz)		
	Dynamic range (audio)	More than 70 dB		
	Harmonic distortion (audio)	0.2 % (1 kHz)		
[Video]	Video output	1.0 V (p-p), 75 Ω, negative sync., RCA jack		
	S-video output	(Y) 1.0 V (p-p), 75 Ω, negative sync., Mini DIN 4-pin x 1 (C) 0.3 V (p-p), 75 Ω		
[Tuner] FM	Tuning Range	87.5 - 108.0 MHz OR 65 -74 MHz, 87.5 -108.0 MHz		
	Intermediate Frequency	10.7 MHz		
	Signal to Noise Ratio (Mono/Stereo)	61/58 dB		
	Frequency Response	60 - 10,000 Hz		
[Tuner] AM (MW)	Tuning Range	522 - 1611 kHz OR 530 - 1610 kHz		
	Intermediate Frequency	450 kHz		
	Signal to Noise Ratio	35 dB		
	Frequency Response	100 - 2,000 Hz		
[Amplifier]	output Power	Front: 75W + 75W (6 Ω 2ch THD 10 %) Center: 30W (6 Ω 1ch THD10%) Rear: 30W + 30W (6 Ω 2ch THD 10 %)		
	T.H.D	0.2%		
	Frequency Response	42 - 25,000 Hz		
	Signal-to-noise ratio	80 dB		
[Speakers]	Speker Model	Front Speaker (FE-DV55VE)	Center Speaker(FE-DV55CVE)	Rear Speaker (FE-DV55SE)
	Type	3 Way 3 Speaker	1 Way 1 Speaker	1 Way 1 Speaker
	Impedance	6 Ω	6 Ω	6 Ω
	Frequency Response	60 - 20,000 Hz	100 - 20,000 Hz	120 - 20,000 Hz
	Sound Pressure Level	86 dB/W (1m)	84 dB/W (1m)	84 dB/W (1m)
	Rated Input Power	75 W	30 W	30 W
	Max. Input Power	150 W	60 W	60 W
	Net Dimensions (W x H x D)	230 x 326 x 277 mm	200X90X106mm	90 x 125 x 106 mm
	Net Weight	5.07 kg	0.8kg	0.59 kg
TAPE	Tape Speed	3 kHz ± 50Hz		
	Wow Flutter	0.25% (MTT -111, JIS-WTD)		
	F.F/REW Time	120sec (C-60)		
	Frequency Response	125 - 8,000Hz		
	Signal to Noise Ratio	43dB		
	Channel Separation	45dB(P/B)/42dB(R/P)		
	Erase Ratio	52dB (MTT-5511)		

[Supplied Accessories]

- Audio cable 1
- Speakers 5
- Remote control 1
- AM loop antenna 1
- RCA-SCART Adapter 1
- Video cable 1
- Speaker cables 3
- Batteries (AAA) 2
- FM antenna 1

✻ Designs and specifications are subject to change without notice.