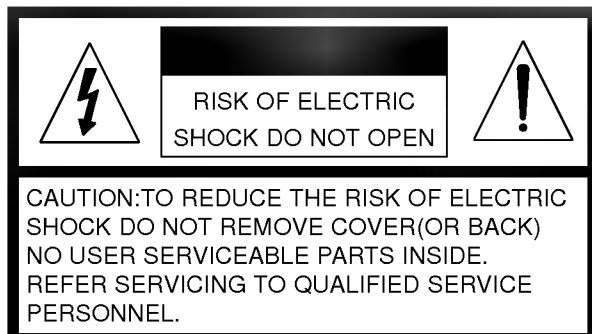




Mini Hi-Fi Audio System
OWNER'S MANUAL
MODEL : FFH-876MVA
FE-876VE



Please read this manual carefully before operating your set.
Retain it for future reference.



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.

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.

WARNING: 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.

Introduction

- ❑ Precautions 2
- ❑ Table of Contents 3
- ❑ Notes on Discs 4
- ❑ Identification of Controls 5-8
 - Front Panel 5
 - Remote Control 6
 - Preparing the Remote Control 7
 - Operating with the Remote Control 7
 - Rear Panel/Display Window 8

Connections

- ❑ Antenna(Aerial) Connections 9
- ❑ Speaker System Connection 10
- ❑ Connecting to a TV/Monitor 10

Before Operation

- ❑ Setting the Clock 11
- ❑ Sleep Function 11
- ❑ Timer Function 12
- ❑ Audio Adjustment 13
 - Volume Adjustment 13
 - Sound Quality Adjustment 13
 - MUTE 13
 - MDSS (Multi Dynamic Sound System) 13
 - SPECTRUM MODE 13
 - DEMO 13
- ❑ Auxiliary Function 13

Radio Operation

- ❑ Presetting the radio stations 14
- ❑ Listening to the radio 15

Cassette Deck Operation

- ❑ Tape Play 16
 - To Stop Play 16
 - To Play Fast Rewind or Fast Forward 16
 - Tape Counter Reset 16
 - Dubbing 16
- ❑ Recording 17
 - Recording from Radio, CD or Auxiliary Source 17
 - CD to Tape Synchronized Recording 17

CD/VCD Operations

- ❑ Basic Playback 18-19
 - To Stop Play 18
 - To Pause Play 18
 - To Go to the next discs 18
 - To Select a disc directly 18
 - To Skipping the track 18
 - To Play Fast Rewind or Fast Forward 18
 - To Replace discs during Playback 19

Advanced Operation

- ❑ RESUME 19
- ❑ Time Search 19
- ❑ Display Function 19
- ❑ Multiplex Function 20
- ❑ Digest Play 20-21
 - Intro Scan Play 20
 - Disc Digest Play 20
 - Disc Track Play 21
- ❑ PBC Play(Playback Control Play) 21
- ❑ Repeat Play 22
- ❑ Program Play 22
- ❑ Playback with MP3 23
- ❑ Karaoke 24
 - To Adjust ECHO Volume 24
 - To Change the Key (KEY CONTROL) 24
 - Recording with Karaoke 24

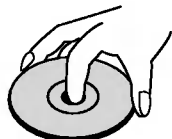
Reference

- ❑ System Select Function (NTSC/PAL) 25
- ❑ Discs Requirements 25
 - Playable Discs 25
- ❑ Before Calling Service Personnel 26
- ❑ Specifications 27

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 the discs.

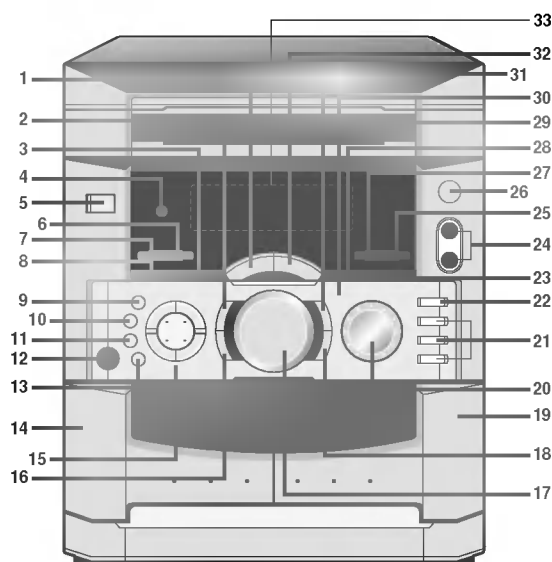
On Cleaning Discs

- 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.



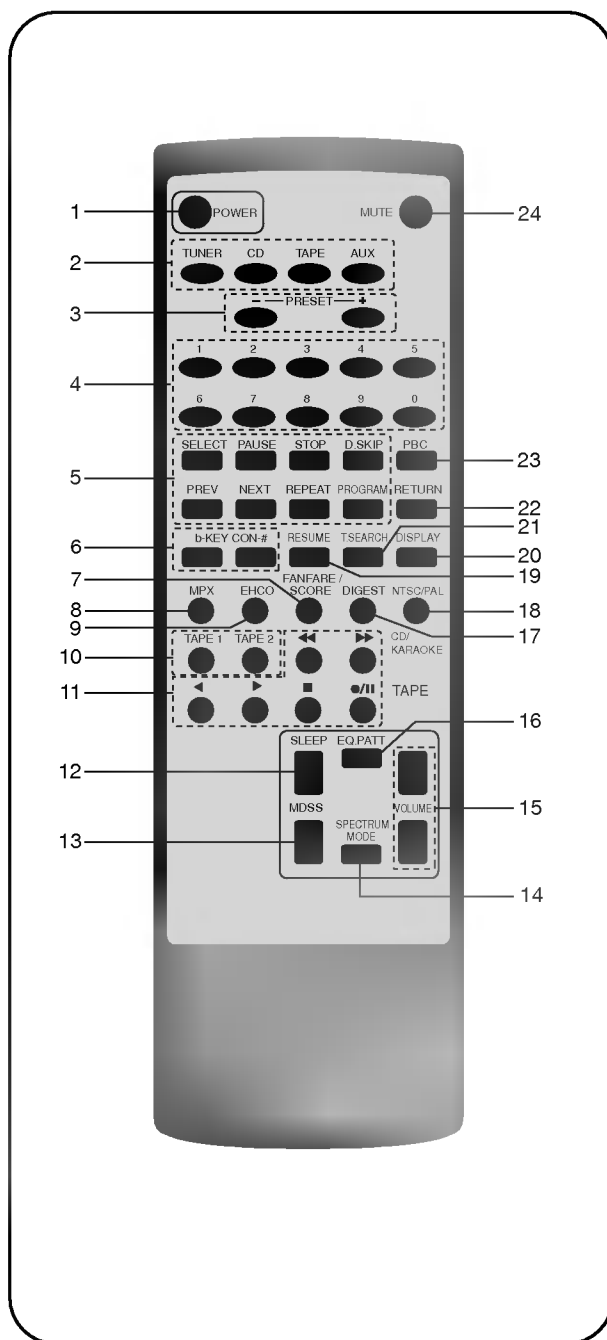
About This Owner's Manual

- This owner's manual explains the basic instructions of this unit.
- Some VIDEO CD 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 VIDEO CD discs.



1. PRESET DOWN button
BACKWARD PLAY button (◀)
2. **MDSS** button
3. MENU (+) button (▶▶)
4. REMOTE SENSOR
5. POWER button
6. TIMER ⌚ button
7. CLOCK button
8. MENU (-) button (◀◀)
9. MODE/RIF button
10. • **PBC** button
• DEMO button
• PLAY MODE button
11. • CD SYNC. button
• **SELECT** button
• NORMAL DUBBING button
12. HEADPHONE jack (PHONES): ∅ 6.3mm
13. • HIGH DUBBING button
• **RETURN** button
14. ▲ PUSH EJECT POSITION -DECK1 (TAPE 1)
15. FUNCTION SELECT buttons
(TUNER/BAND, TAPE1/2, AUX, CD)
16. RECORD/ RECORD PAUSE button (●REC/||)
17. VOLUME KNOB
18. STOP (TAPE/CD) button (■)
CLEAR button
19. ▲ PUSH EJECT POSITION-DECK2 (TAPE 2)
20. JOG DIAL
• MANUAL TUNING DOWN/UP (TUNER)
• ADJUST DOWN/UP (CLOCK/ TIMER)
• SKIP DOWN/UP (CD TRACK)
21. DISC DIRECT PLAY buttons (DISC1, DISC2, DISC3)
22. DISC SKIP button (D.SKIP)
23. NEXT button (▶▶)
24. MIC jacks (MIC1, MIC2): ∅ 6.3mm
25. CD OPEN/ CLOSE button (CD ▲)
26. MIC VOLUME control
27. PROG./MEMO. button
28. PREV. button (◀◀)
29. CD DOOR
30. CD PAUSE/ SET indicator
31. • COUNTER RESET(TAPE) button (COUNTER)
• CD PAUSE (CD) button (CD ||)
• SET (CLOCK/ TIMER) button
32. PRESET UP button
FORWARD PLAY button (▶)
33. DISPLAY

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



1. POWER button
2. Function select buttons
(TUNER, CD, TAPE, AUX)
3. PRESET (-/+) buttons
4. NUMERIC buttons
5. VCD/CD CONTROL buttons
 - PLAY(▶)/SELECT
 - PAUSE(⏸)
 - STOP(■)
 - DISC SKIP(D.SKIP)
 - PREV/NEXT(◀◀/▶▶)
 - REPEAT
 - PROGRAM
6. KEY CONTROL buttons (b - KEY CON - #)
7. FANFARE/ SCORE button
8. MPX button
9. ECHO button
10. TAPE 1/2 SELECT buttons
11. TAPE FUNCTION buttons
 - FAST REWIND/FAST FORWARD PLAY(◀◀/▶▶)
 - BACKWARD PLAY(◀): OPTIONAL
 - FORWARD PLAY(▶)
 - STOP(■)
 - RECORD/RECORD PAUSE(■)
12. SLEEP button
13. MDSS button
14. SPECTRUM MODE button
15. VOLUME +/- buttons
16. EQ PATTERN button
17. DIGEST button
18. NTSC/PAL button
19. RESUME button
20. DISPLAY button
21. T.(Time) SEARCH button
22. RETURN(↺) button
23. PBC button
24. MUTE button

Preparing the Remote Control

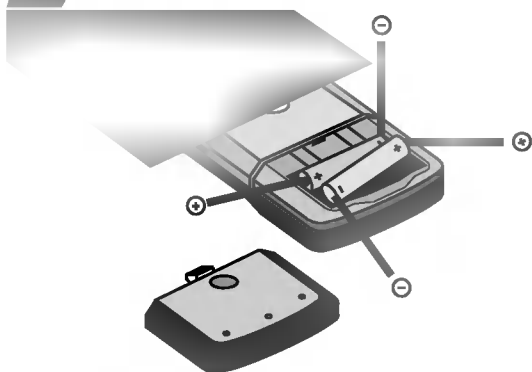
Insert the batteries into the remote control so you can use it to operate the unit.

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.

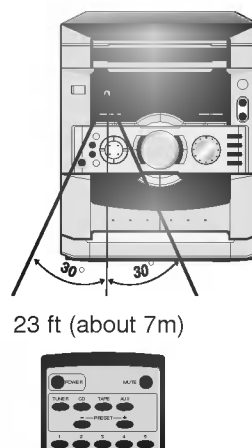


- Improper use of batteries may cause battery leakage and corrosion.
- To operate the remote control correctly, follow the instructions.
- Do not insert the batteries into the remote control in the wrong direction.
- Do not charge, heat, open, or short-circuit the batteries. Do not throw the batteries 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.

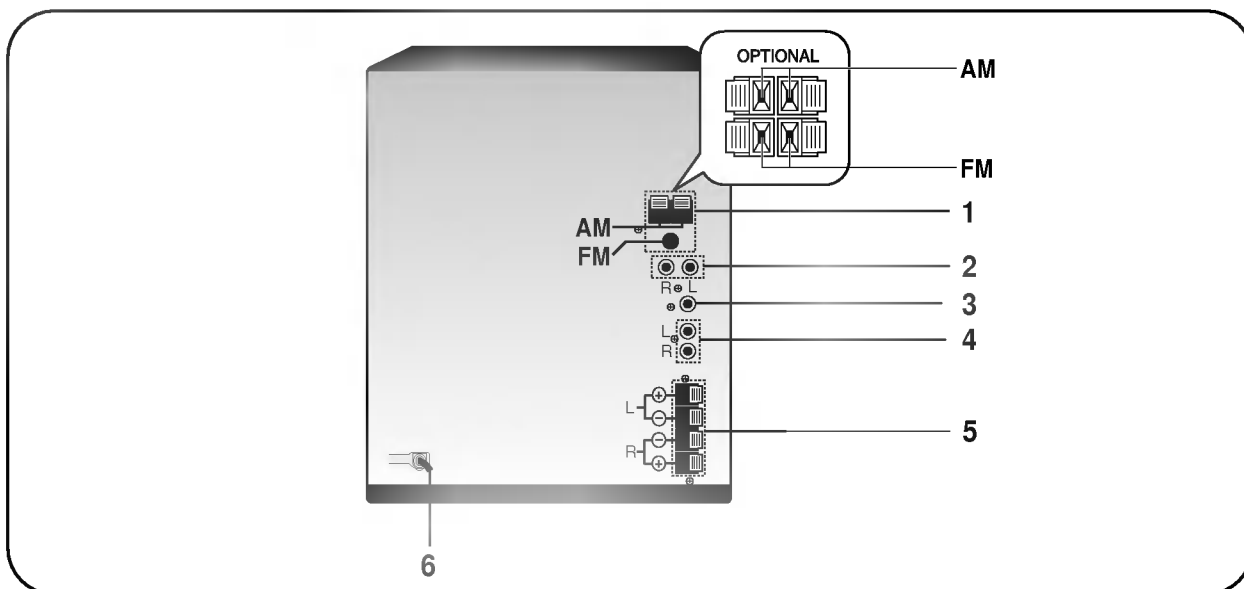


Distance: About 23 ft (7 m) from the front of the remote sensor

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

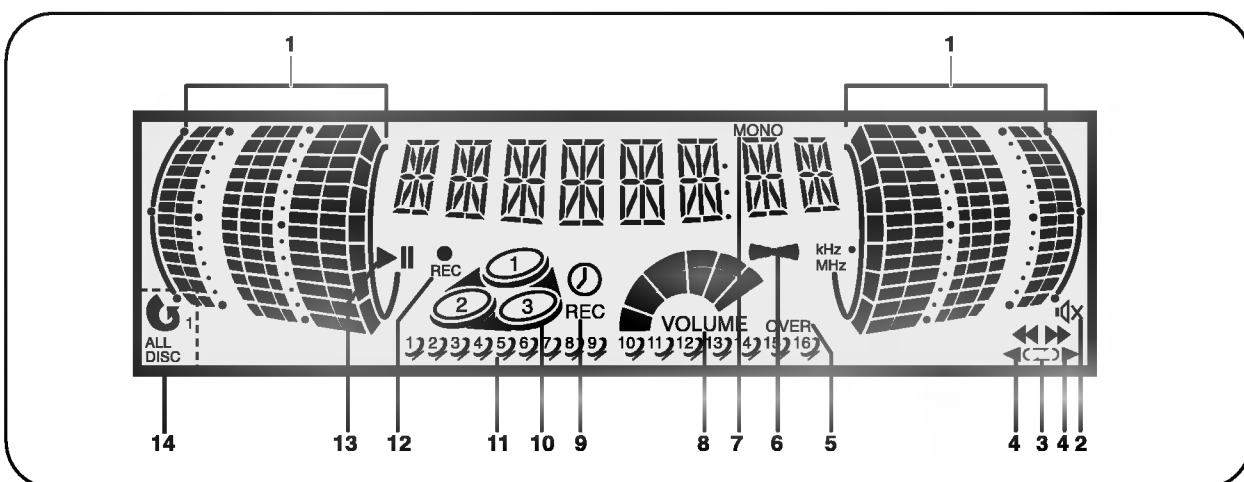
- * Do not expose the remote sensor of the receiver to a strong light source such as direct sunlight or illumination. If you do so, you may not be able to operate the unit with the remote control.

- 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. ANTENNA Terminal | 4. AUDIO(CD) LINE OUT Jacks |
| 2. AUXILIARY INPUT Jack | 5. SPEAKER Terminal |
| 3. VIDEO OUT Jack | 6. POWER Cord |

Display Window

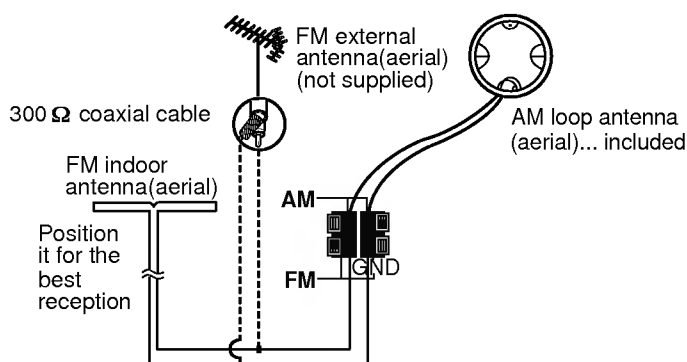


- | | |
|-------------------------------------|----------------------------|
| 1. LEVEL indicator | 8. VOLUME indicator |
| 2. MUTE indicator | 9. TIMER indicator |
| 3. PLAY MODE indicator | 10. DISC NO. indicator |
| 4. TAPE DIRECTION indicator | 11. CD MUSIC CALENDAR |
| 5. CD MUSIC CALENDAR OVER indicator | 12. RECORD indicator |
| 6. FM STEREO RECEIVING indicator | 13. PLAY / PAUSE indicator |
| 7. FM MONO RECEIVING indicator | 14. CD REPEAT indicator |

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

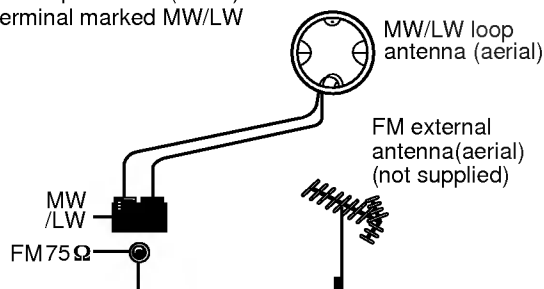
- Connect the AM loop antenna to the AM antenna connector.
- Connect the FM wire antenna (or FM "T" antenna) to the FM 75 Ω / 300 Ω coaxial connector.

(1) 2 BAND(FM/AM) AREA

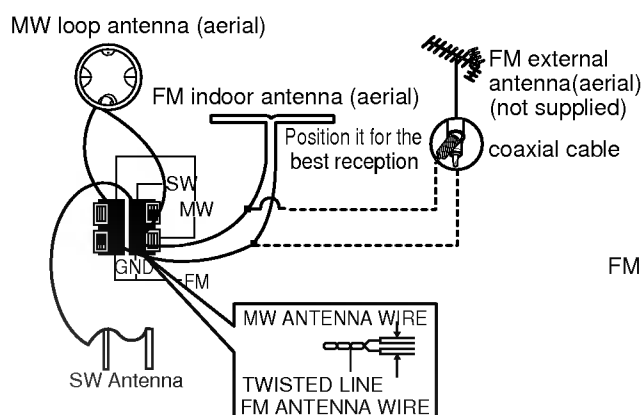


(2) 3 BAND(FM/MW/LW) AREA

For MW/LW reception, connect the loop antenna (aerial) to the terminal marked MW/LW

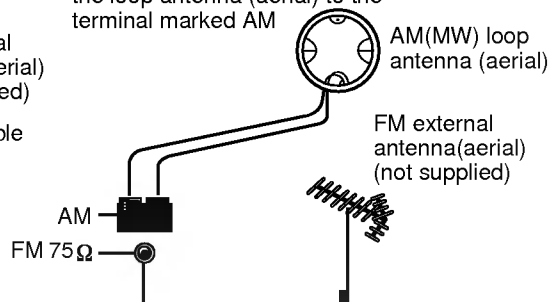


3) 3 BAND(FM/MW/SW) AREA



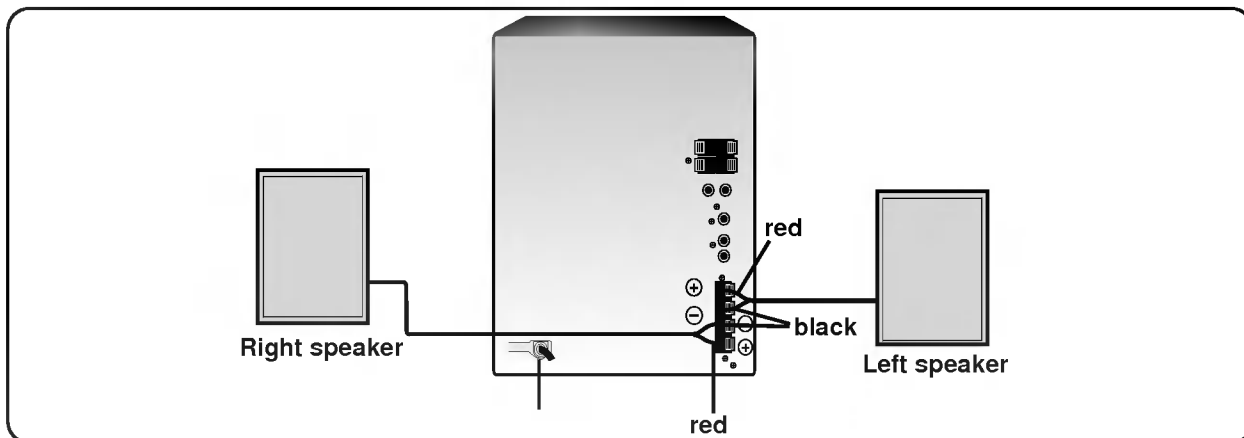
4) 2 BAND[FM/AM(MW)] AREA

For AM(MW) reception, connect the loop antenna (aerial) to the terminal marked AM

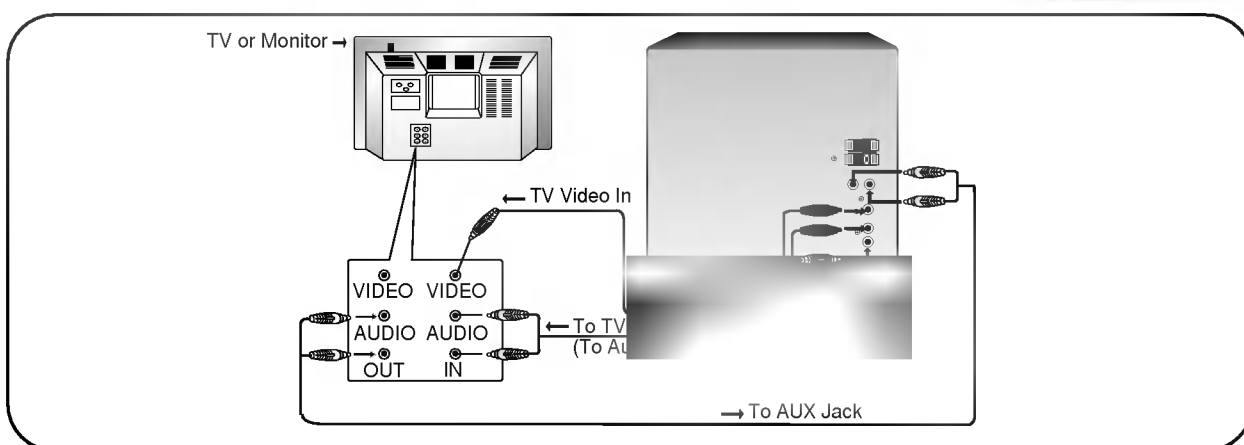


- To prevent noise pickup, keep the AM loop antenna away from the unit and other components.
- Be sure to fully extend the FM wire antenna.
- After connecting the FM wire antenna, keep it as horizontal as possible.

Connect to speaker connector 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.



VIDEO OUT jack connection

Connect the VIDEO OUT jack on the back of the unit to a VIDEO IN jack of a TV or monitor.

AUDIO OUT jacks connection

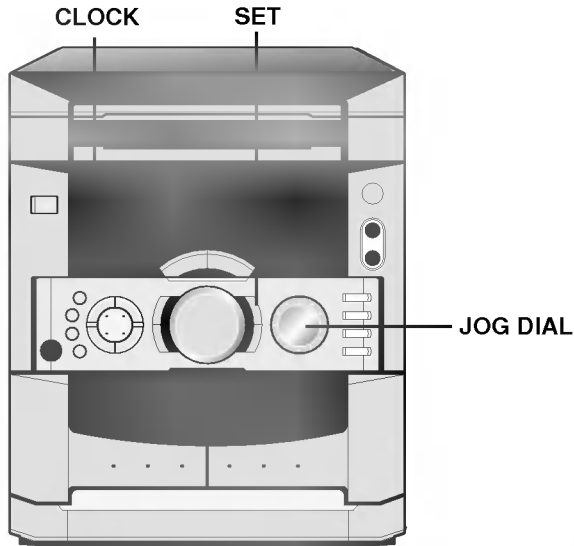
Connect the AUDIO OUT jack on the back of the unit to a AUDIO IN jack of a TV or monitor.

AUX jacks connection

Two phones jacks marked AUX are provided on the back of the unit for connecting other units. (For example, a record player with a pre amplifier, video recorders or tape recorders.)

- 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.

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



Press **CLOCK**. (If the clock is already set, press and hold **CLOCK** for more than 2 seconds.)
- The hours begin to flash.

Select a 24 hour cycle or 12 hour cycle by turning **JOG DIAL**.

AM 12:00 (12HR) or 0:00 (24HR)

Press **SET** to confirm the selected hour cycle.

Use **JOG DIAL** to set the correct hours.

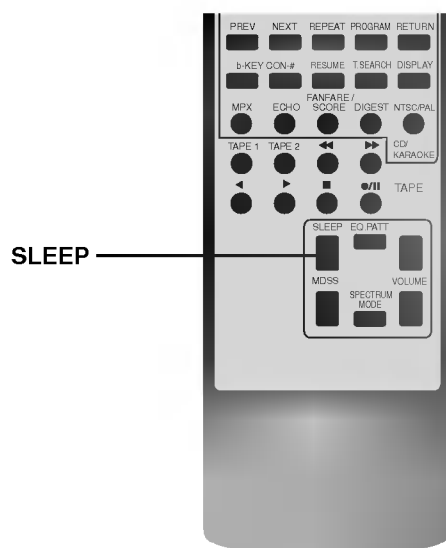
Press **SET**.

Use **JOG DIAL** to set the correct minutes.

Press **SET** and the correct time is shown on the display.

Press **CLOCK** at any time to display the time for about 5 seconds.

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



To specify the time until the power is turned off, press **SLEEP**.

In the display window 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.

To check the remaining time until the power is turned off.

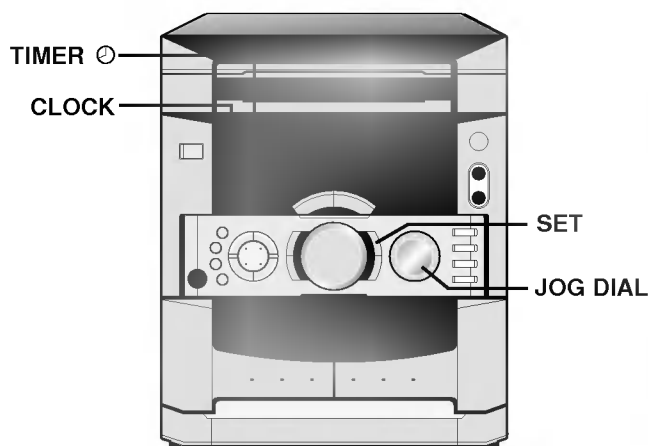
While the sleep function is active press **SLEEP** briefly. The time remaining until it turns off is displayed for about 5 seconds.

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

To cancel the sleep timer mode

If you wish to stop the function press the **SLEEP** button repeatedly until 10 appears, and then press **SLEEP** once again while 10 is displayed.

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



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

Press **"TIMER ⌚"** 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-CD-TAPE-AUX flashes in the display window in turn.

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

If you select the TUNER or AUX: PLAY and REC flash in the display window alternately for about 3 seconds. Press **SET** to confirm the desired operating mode.

REC: TUNER or AUX recording and play

PLAY: TUNER or AUX play only

- If you have selected the CD or TAPE, ignore step 4.
- If you want to set "AUX" Timer, turn POWER on the auxiliary unit.

When you have selected the TUNER; Select the previous memorized preset number with **JOG DIAL** and press **SET**. The hour with ON display flashes.

- If you have selected the CD, TAPE or AUX ignore step 5.

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

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

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

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

Set the hour to switch off by turning **JOG DIAL**.

Press **SET**.

Set the minute to switch off by turning **JOG DIAL**.

Press **SET**.

Adjust the volume level by turning **JOG DIAL**.

Press **SET**.

⌚ appears in the display window and the timer setting has been completed.

Switch the system off.

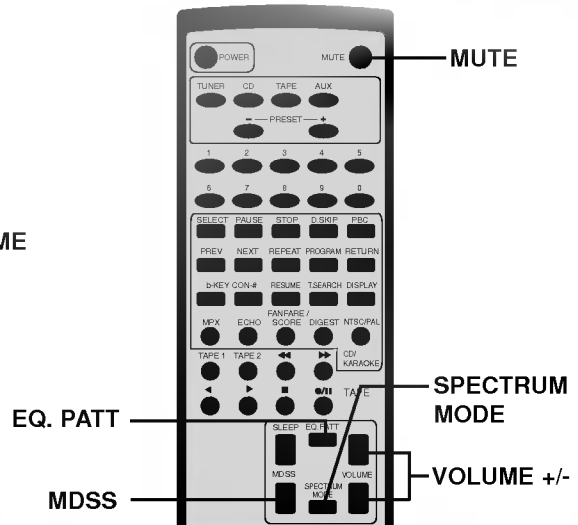
The selected function is automatically switched on and off at the time set.

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 window.

To cancel the TIMER, press the **"TIMER ⌚"** button so that "⌚" disappears in the display window.



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

You can choose between 4 fixed sound impressions. Select a desired sound mode by using the **EQ.PATT** button.

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

• Headphone Jack

Connect a stereo headphone plug (Ø6.3mm) into the headphone jack.

The speakers are automatically disconnected when you plug in the headphones (not supplied).

Press **MUTE** to mute your unit.

You can mute your unit in order, for example, to answer the telephone, "Mx" indicator flashes in the display window.

MDSS (Multi Dynamic Sound System)

Press **MDSS** (or **MDSS** on the remote control) to reinforce treble(Hi-Tone), bass(UBB: Ultra Bass Booster) and surround effect.

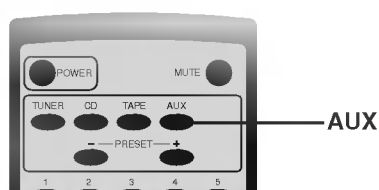
The "MDSS ON" or "MDSS OFF" indicator lights up.

To cancel it press **MDSS** (or **MDSS** on the remote control) again.

Whenever you press **SPECTRUM MODE**, you can enjoy the spectrum change with 11 types in the display.

Press **DEMO** in power off state to demonstrate the function in the display.

To cancel it, press **POWER** or **DEMO** again. During demonstration in power-on status you can cancel it by using the other buttons.

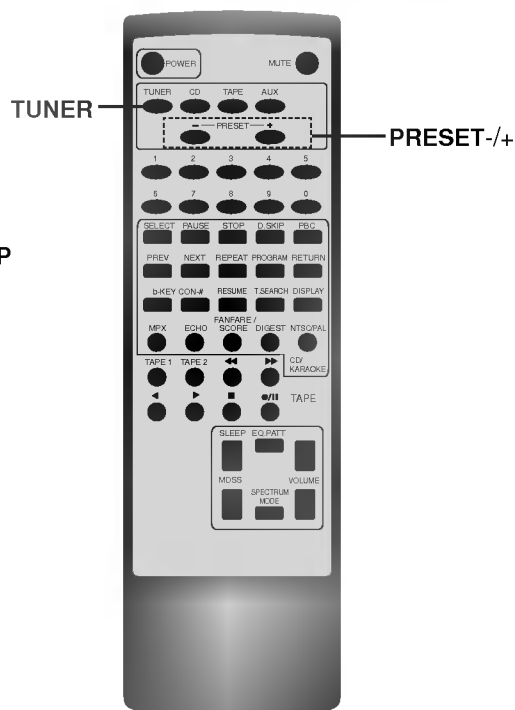
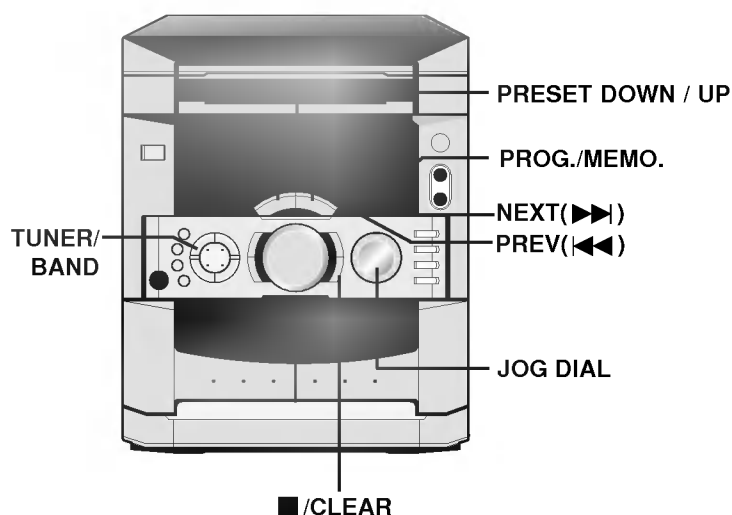


Connect an auxiliary device i.e. TV or VCR, via the rear mounted AUX phone jacks.

Press **AUX**.

You can also record from the auxiliary input source, see Recording Section.

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



- **Press TUNER/BAND (or TUNER on the remote control) until the FM or AM appears in the display window.**
- **And then every time you press TUNER/BAND (or TUNER on the remote control), FM and AM changes alternately.**
- **Press PREV/NEXT(◀◀/▶▶) on the front panel until the frequency indication starts to change, then release.**
Scanning stops when the unit tunes in a station.
- **Press PROG./MEMO.**
A preset number will flash in the display window.
- **Press PRESET DOWN/UP (or PRESET -/+ on the remote control) to select the preset number you want.**
- **Press 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 **JOG DIAL** in step 3 to tune in the station manually.

To clear all the memorized stations

Press and hold **PROG./MEMO.** for about two seconds, "CLEAR" appears in the display window and then press **■/CLEAR** again, the stations are cleared.

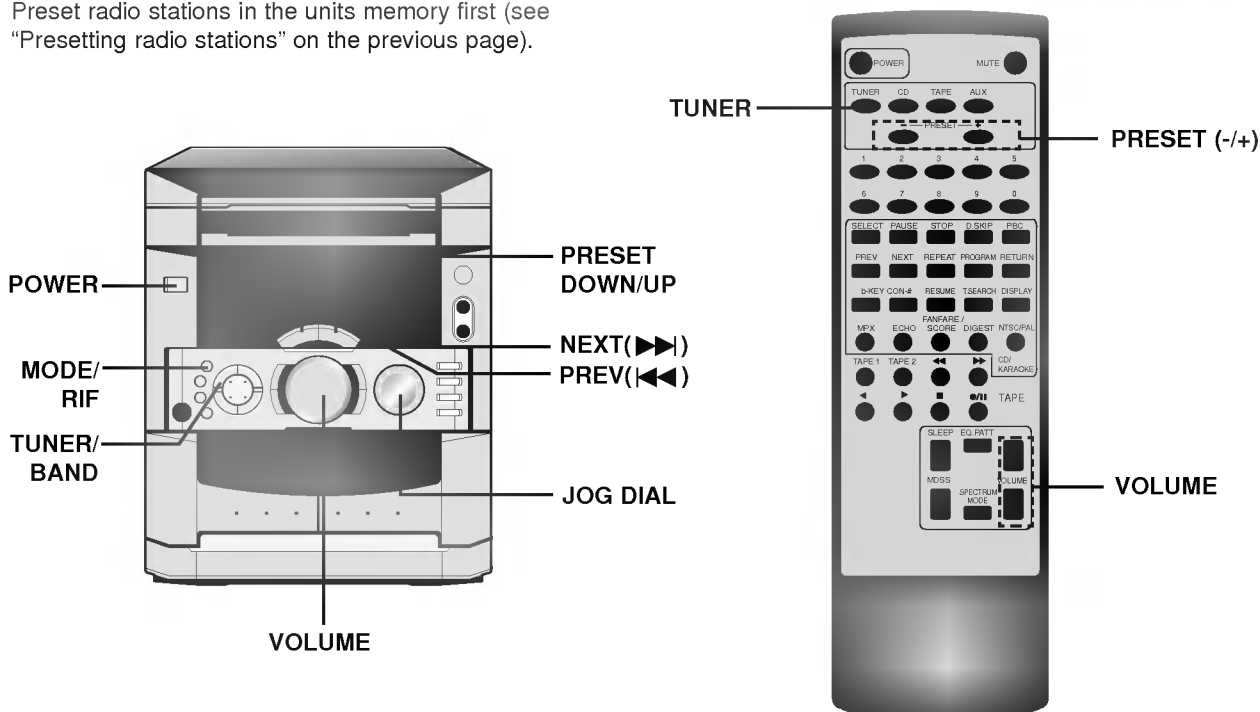
For your reference

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 on the left side.

To recall presets.

Press and hold **PRESET DOWN/UP** (or **PRESET -/+** on the remote control) until the desired preset number appears or press it repeatedly.

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



Press TUNER/BAND (or TUNER on the remote control) until AM or FM appears in the display window.

The last received station is tuned in.

Press PRESET DOWN/UP (or PRESET -/+ on the remote control) 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 KNOB (or pressing VOLUME (+/-) on the remote control) repeatedly.

To turn off the radio

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

To listen to non-preset radio stations

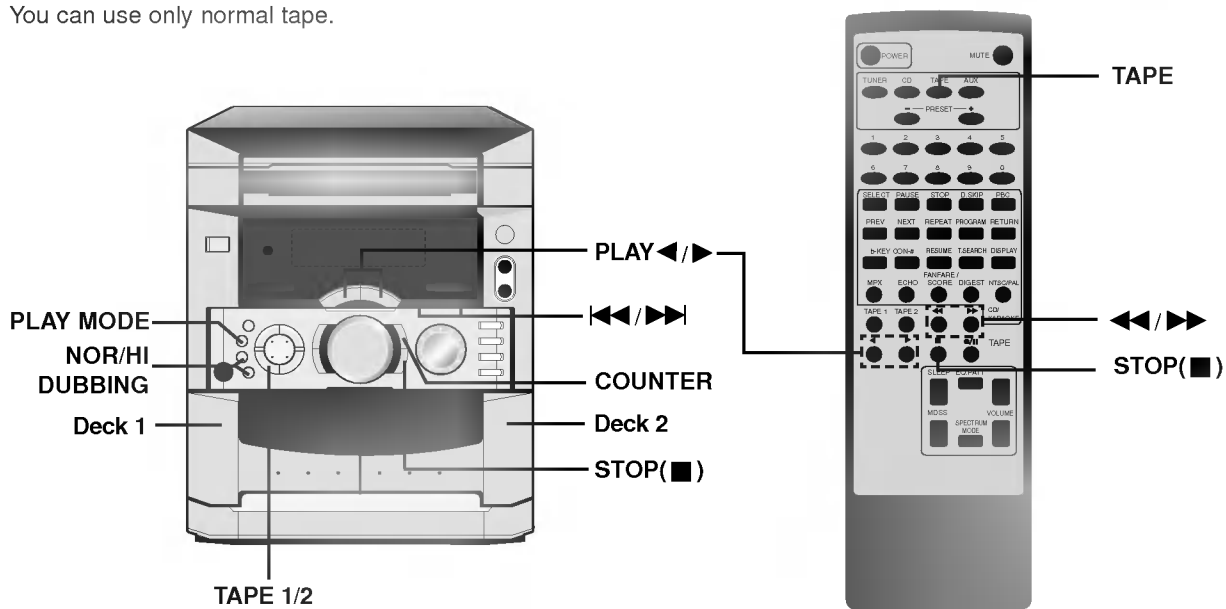
- Use manual or automatic tuning in step 2.
- For manual tuning, turn **JOG DIAL**.
- For automatic tuning, press **PREV/NEXT (◀◀/▶▶)** on the front panel.

For your reference

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

- Use **MODE/RIF** (Radio Interference Filter) function 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 **MODE/RIF** once.

You can use only normal tape.



Press **TAPE 1/2** (or **TAPE** on the remote control).
("NO TAPE" appears in the display window.)

Open cassette deck 1 (or 2) by pushing **▲ PUSH EJECT** position.

Insert one or two cassette with the tape side to the bottom and then close the deck1 (or 2) .

Press **PLAY** (▶ or ◀: **TAPE2** only).

AUTO STOP DECK(TAPE1)

After auto stop deck plays only front side, the unit stops automatically.

AUTO REVERSE DECK(TAPE2)

You can select direction of the cassette you want by pressing **PLAY MODE**.

Pressing	Display	Function
Once		After the cassette plays front or reverse(backward play) side, stops automatically.
Twice		After the cassette plays front and reverse side, stops automatically.
Three times		After the cassette plays six times repeatedly front and reverse side, stops automatically.

Press **STOP (■)** during playback.

After press **<</>>** on the front panel or **<</>>** on the remote control during playback, press **PLAY** (▶) in the point you want.

Press **COUNTER** during playback.

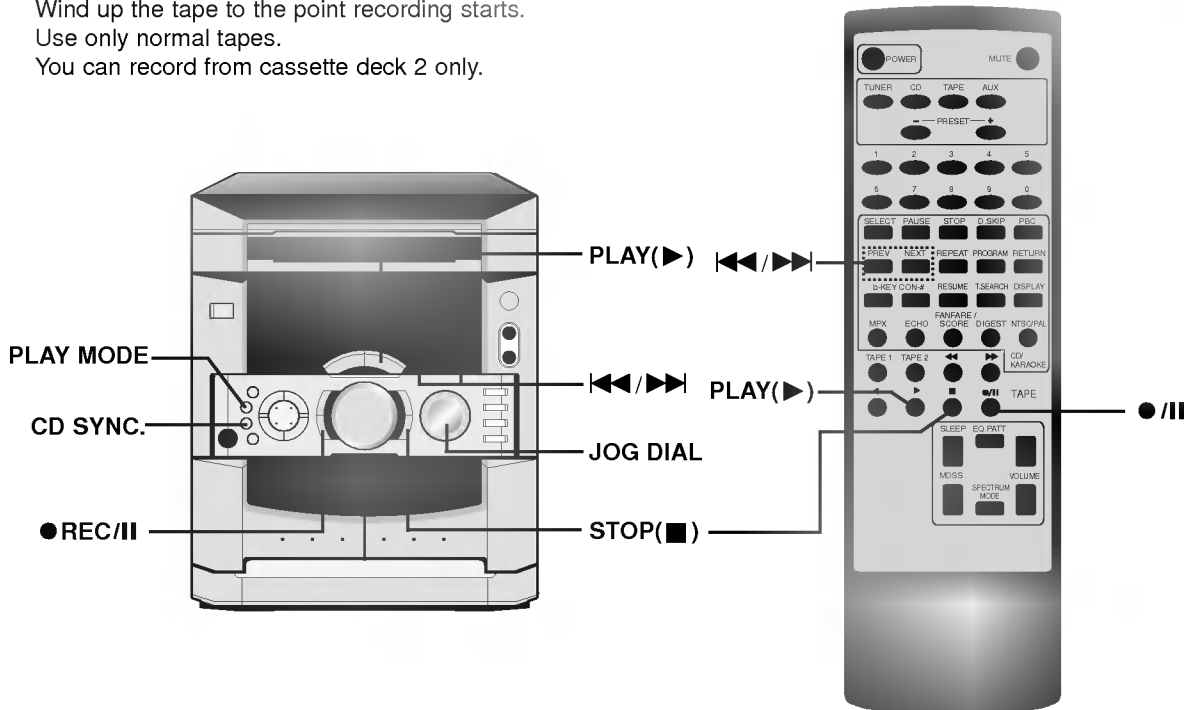
Playing time appears "0000" in display window.
This function shows how to record from tape to tape.

Press **TAPE 1/2** (or **TAPE** on the remote control).
•Cassette deck 1- Insert a playback tape to dub.
•Cassette deck 2- Insert a blank tape.

Press **NOR/Hi DUBBING** as follow.

Pressing	Display	Function
NOR DUBBING	<i>NOR DUBB</i>	Normal speed dubbing
HI DUBBING	<i>HI DUBB</i>	Double speed dubbing

Wind up the tape to the point recording starts.
Use only normal tapes.
You can record from cassette deck 2 only.



Preparation

Press CD or TUNER.

Open the cassette deck 2 and insert a blank cassette into the cassette compartment.

To set the recording direction
Press PLAY MODE as follows.

Pressing	Display	Function
Once	↔	Recording front side.
Twice	↔)	Recording front and reverse side.
Third	(↔	

Recording from Radio, CD or Auxiliary source.

Press ●REC/II (or ●/II on the remote control), and then play the CD or TUNER function. "●REC" flashes and holds the cassette in pause mode.

Press ●REC/II or PLAY(▶) (or ●/II or PLAY(▶) on the remote control). The recording begins.

To pause recording

To pause the recording, press ●REC/II or ●/II again. "●REC" flashes in display window.

To stop recording

Press STOP(■).

CD to Tape Synchronized Recording

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

Press CD SYNC. in stop mode.

"●REC" flashes and "CD SYNC" displays in the display window.

The synchronized recording is started automatically after about 8 seconds.

- If you wish to record from the desired track, select the desired track with PREV/NEXT(◀/▶) or JOG DIAL before commencing CD synchro recording.
- The function change is not possible during recording.
- This function is not available to MP3 discs.

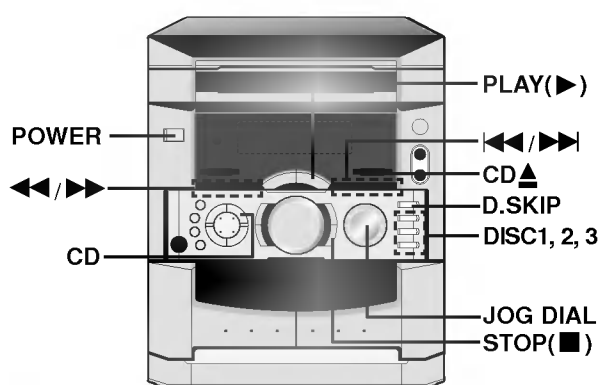
Preparation

In case of using a TV

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

In case of using an amplifier

Turn on the amplifier and select the CD player position so that you can listen to the sound from this unit.



Press **POWER** to turn on the unit.

Press the **CD** button to enter the CD mode.

Press **CD OPEN/CLOSE (CD ▲)** and place the disc into the disc tray.

The disc on the left (DISC 1) is played first.



With the label side up

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

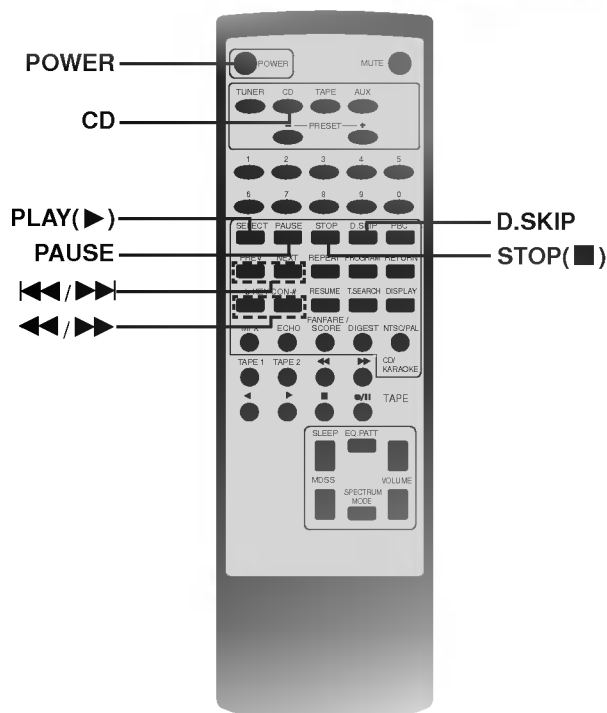
Press **CD OPEN/CLOSE (CD ▲)** to close the disc compartment.

Press **PLAY (▶)**.

The unit plays all discs consecutively in the order of disc number.

Press **STOP (■)** during playback.

Press **PAUSE (⏸)** during playback. Press **PLAY (▶)** or **PAUSE (⏸)** again it to resume play.



Press **D.SKIP** during playing or stopping.

Press **DISC1, DISC2 or DISC3** during playing or stopping.

When you press DISC 1-3 before playing a disc, the unit will automatically start playing the selected disc.

- Turn **JOG DIAL** to select the track.
- Press **NEXT (▶▶)** to go to the next scene or track.
- Press **PREV (◀◀)** to go to the back preceding scene or track.

To Play Fast Rewind or Fast Forward

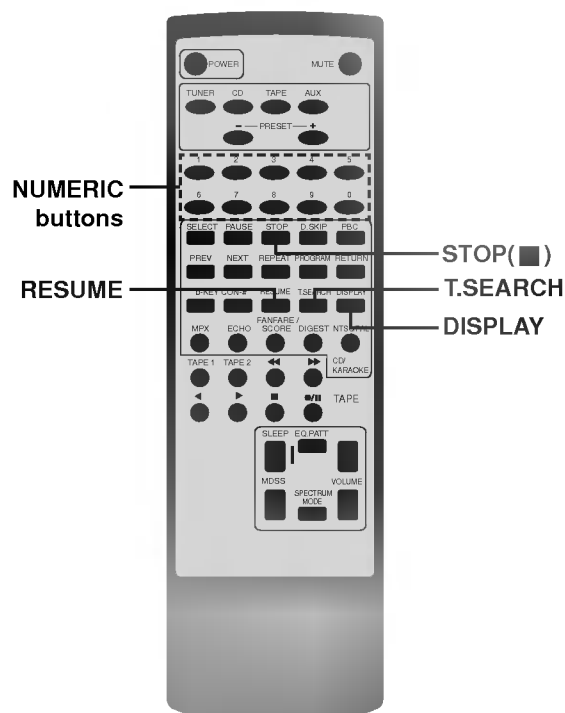
Press **◀◀/▶▶** repeatedly during playback.

(When a desired scene is displayed, press **PLAY (▶)**.)

FR X 1

FF X 1

- 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 Replace discs during Playback

You can open the disc tray during playing a disc to check what discs are to be played next and replace discs without interrupting playback of the current disc.

Press the CD OPEN/CLOSE (CD ▲).

The disc tray is opened. Two disc compartments appear. Even if the unit is playing a disc, it doesn't stop playing.

Replace discs in the compartments with new ones.

The unit plays the disc in the left compartment after the current disc, and then the one in the right compartment.

Press CD OPEN/CLOSE (CD ▲).

The CD door is opened.

- Do not place more than one compact disc on one disc tray at the same time.
- Do not push the disc tray to close CD door, as you may damage the unit.

The unit memorizes the point you stopped a VIDEO CD and you can resume playback from that point. It is not available during playing an audio CD.

Press STOP(■) during playback.

Press RESUME on the remote control.

- The unit starts playback from the point you stopped the VIDEO CD in step 1.
- "RESUME" appears on the TV screen.

This function lets you use elapses time as a guide to find a certain point on a VIDEO CD. Time Search function is especially useful when playing discs that have only a few track divisions.

Press T.SEARCH during playing or stopping.

TIME SEARCH __:__ on the TV screen

Press the NUMERIC buttons to enter the time of the point that you want to locate.

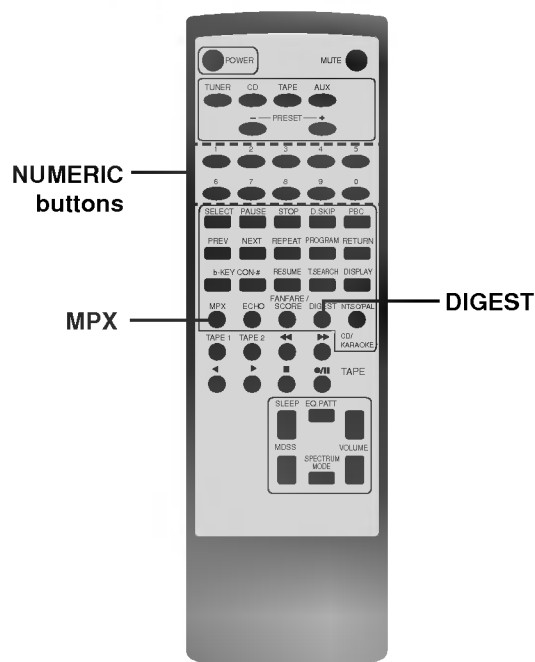
Playback is started automatically from the entered time.

TIME SEARCH 22:15

For your reference

- This function can not be used during Digest Play , AUDIO CD and VIDEO CD with PBC function (Version 2.0 discs).

- Press DISPLAY during playing. - You can view the elapsed time per a track.
- Press DISPLAY again during playing. - You can view the remained time per a track.
- Press DISPLAY once more during playing. - You can view the total remained time on the disc.



You can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers. In this case, the sound loses the stereo effect.

Press MPX during playing a disc.

Each time you press the button, the indication and the sound from the speakers change as follows.

Pressing	Screen	Function
Once	MONO L	You can hear the sound of the left channel.
Twice	MONO R	You can hear the sound of the right channel.
Three times	STEREO	You can hear the standard stereo sound.

- This screen doesn't appear on the display window.
- The MULTIPLEX function works not for TUNER, TAPE and AUX functions.

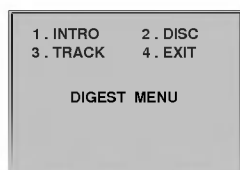
You can locate the disc or scene you want by observing several still pictures at one time on the TV screen.

NOTES

- This function is not used in MP3 file CD.
- If you start Digest play before you start playing a VIDEO CD with PBC functions, the unit automatically starts playing without PBC functions.

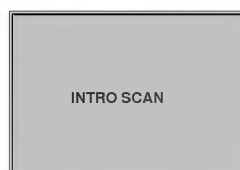
Press DIGEST during stopping.

The following menu appears on the TV screen.



Press NUMERIC button 1.

- This function only plays 10 seconds the beginnings of each track or scene on the disc.

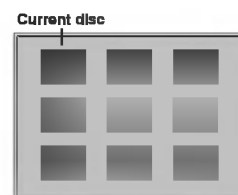


- In case of audio CD, you can only hear a sound.
- In case of VIDEO CD, you will also show a scene.

You can locate the track you want by observing the first picture of 9 tracks on the disc at one time on the TV screen.

Press NUMERIC button 2.

- During playing a VIDEO CD, the TV screen shows still picture of the first scenes of tracks 1 to 9.



To view still pictures of the tracks of the tracks numbered over 9

Press NEXT(▶▶).

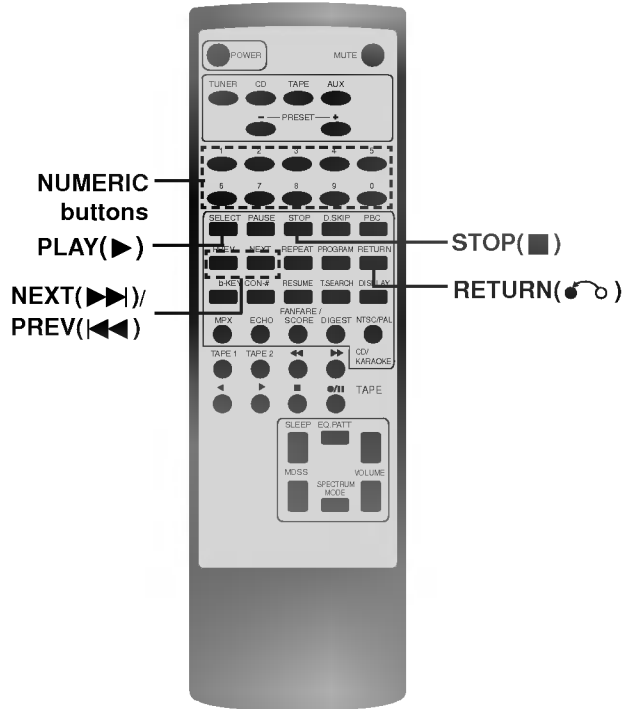
- The TV screen shows still pictures of tracks 10 to 18.
- To go back to the previous screen, press PREV(◀◀).

Press NUMERIC buttons to select the track you want.

The unit starts playing from the selected track.

To cancel Disc digest play

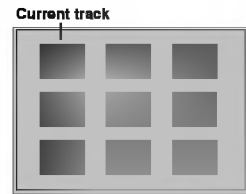
Press STOP(■).



You can locate the point you want by observing first picture of 9EA of each section at one time on the TV screen. This might be useful when you play a disc which is divided into a few tracks, such as a movie.

Press NUMERIC button 3.

- During playing a VIDEO CD, the unit divides the track into 9 sections and TV screen shows still pictures of each section in order.



For your reference

To view sections of another track, press **NEXT(▶▶)** such as Disc digest play.

Press NUMERIC buttons to select the point you want.

The unit starts playing from the selected point.

To cancel Disc track play

Press **STOP(■)**.

When playing VIDEO CD with PBC functions (Version 2.0 discs), you can enjoy playing simple interactive software, software with search functions, etc.

PBC play allows you to play VIDEO CD interactively, following the menu screen on the TV screen.

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

Preparation

Insert VIDEO CD with PBC function (Version 2.0 discs) into the disc tray.

"PBC" appears in the display window.

After press PLAY(▶) to playing in stop mode.

The menu screen appears on the TV screen.

Select the menu number you want by pressing NUMERIC buttons on the remote control.

The selected item is now executed.

(Or Select the menu number you want by pressing the MENU (-)/(+) on the front panel, and then press the PLAY(▶) or SELECT button.)

Example



To Stop play

Press **STOP(■)** during playback.

To go the next of a menu

Press **NEXT(▶▶)**.

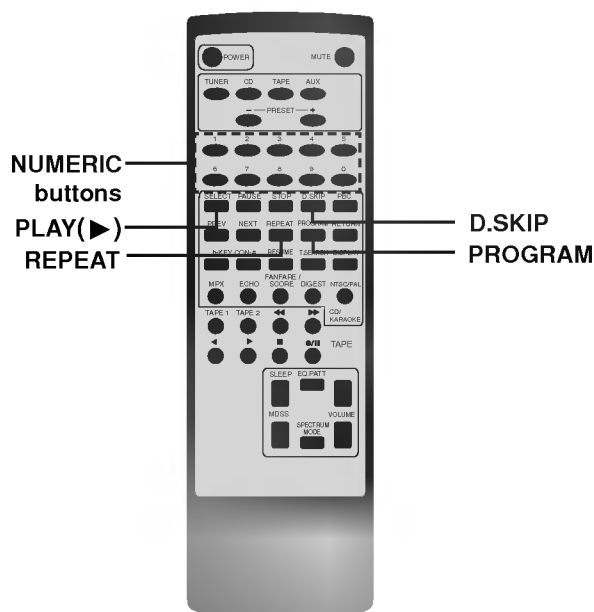
To go back to a previous menu

Press **PREV(◀◀)**.

To go back to the top of a menu

Press **RETURN(↻)**.

NOTE: The repeat play does not work in PBC ON status of the VIDEO CD with PBC function (Version 2.0).



To play one track repeatedly.

Press **REPEAT** once during playback.
- "1" appears in the display window.

To play one disc repeatedly.

Press **REPEAT** again during playback.
- "1 DISC" appears in the display window.

To play all tracks on all discs repeatedly

Press **REPEAT** once more during playback.
- "ALL DISC" appears in the display window.

To cancel repeat play

- Press **REPEAT** several times until "repeat indicator" disappears.

Program repeat play

- Press **REPEAT** once during program play.
 - "1" appears in the display window. (One track repeat)
- Press **REPEAT** again during program play.
 - "ALL DISC" appears in the display window. (All program repeat)

You can arrange the order of the tracks on the discs and create your own program. The program can contain up to 20 tracks.

NOTE: The program play does not work in PBC ON status of the VIDEO CD with PBC function (Version 2.0).

Press PROG./MEMO. (or PROGRAM on the remote control) on the stop mode.

Program Order Track Number
 PD 1 0-00
 Disc Number

Press D.SKIP or DISC DIRECT PLAY (DISC1/2/3) to select the disc.

PD 1 2-00

Press PREV/NEXT(◀/▶) or turn JOG DIAL to select the track.

In case of using NUMERIC(0~9) button, press "0" and "3".

PD 1 2-03

Press PROG./MEMO. (or PROGRAM on the remote control).

Repeat 1~5.

Press PLAY(▶).

To check program contents

Press **PROG./MEMO.** (or **PROGRAM** on the remote control) on the stop mode.
- A disc, track and program number will be displayed.

To clear program contents

Press **PROG./MEMO.** (or **PROGRAM** on the remote control) on the stop mode. And then press **CLEAR** on the front panel or **STOP(■)** on the remote control.

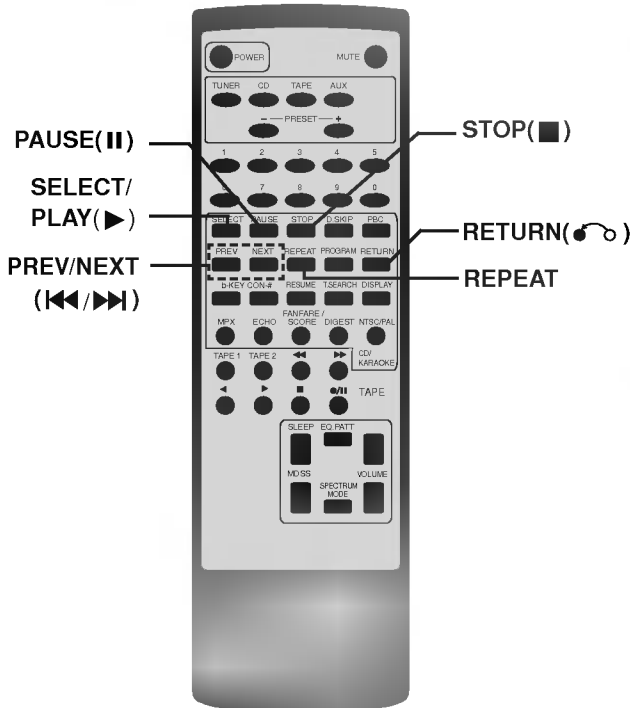
To add program contents

1. Press **PROG./MEMO.** (or **PROGRAM** on the remote control) repeatedly on the program stop mode until "Disc Number" blinks.
2. Repeat 2~5 on the left side.

To modify program contents

1. Press the **PROG./MEMO.** (or **PROGRAM** on the remote control) to display program number you want to modify.
2. Repeat 2~5 on the left side.

○ This function is not available to MP3 discs.



Press **PREV/NEXT**(⏮/⏭) to select the desired MP3 file of the selected directory on the disc.

MP3 FILE : TRACK_1	
PAGE 01/02	
MUSIC_1	MUSIC_2
MUSIC_3	→MUSIC_4
MUSIC_5	MUSIC_6
MUSIC_4	MUSIC_4
MUSIC_5	MUSIC_5

Press **PLAY**(▶) to start playback of a file.

For your reference

- Press **PREV/NEXT**(⏮/⏭) to play the next file or previous file during playback.
- Press **RETURN**(↶) to move to the ROOT directory during playback.

FOLDER : ROOT	
PAGE 01/01	
→TRACK_1	TRACK_2
TRACK_3	TRACK_4
TRACK_5	TRACK_6
TRACK_7	TRACK_8
TRACK_9	

Load an MP3 disc.

The ROOT directory menu is displayed on the TV screen.

FOLDER : ROOT	
PAGE 01/01	
→TRACK_1	TRACK_2
TRACK_3	TRACK_4
TRACK_5	TRACK_6
TRACK_7	TRACK_8
TRACK_9	

Press **PREV/NEXT**(⏮/⏭) to select the directory where MP3 files that you want to play are located and then press **SELECT**.

MP3 FILE : TRACK_1	
PAGE 01/02	
→MUSIC_1	MUSIC_2
MUSIC_3	MUSIC_4
MUSIC_5	MUSIC_6
MUSIC_4	MUSIC_4
MUSIC_5	MUSIC_5

- The directory and file name is only displayed in English.
- If you select another file by pressing **PREV/NEXT**(⏮/⏭) during playback, the file is played after 5 seconds automatically.

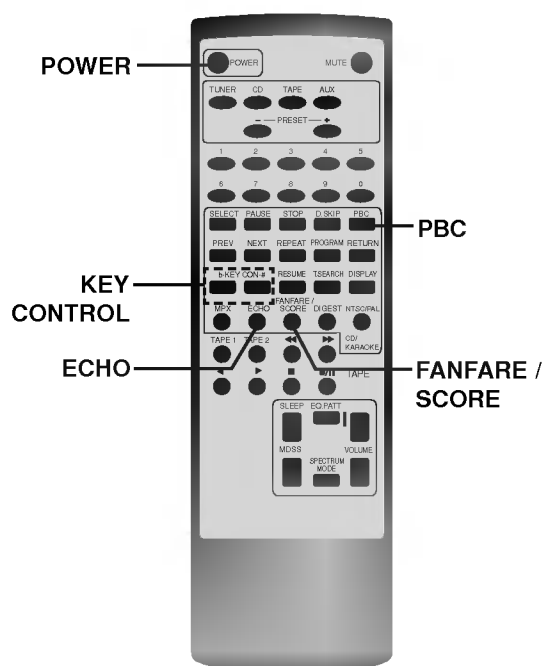
To Play an MP3 file repeatedly

- If you press **REPEAT** once during playback, the current MP3 file will play repeatedly.
"1" appears in the display window.
- If you press **REPEAT** twice during playback, the all MP3 files on the disc will play repeatedly.
"1 DISC" appears in the display window.
- If you press **REPEAT** three times, the repeat play will be cancelled.

For your reference

- Press **PREV/NEXT**(⏮/⏭) to play the next file or previous file during playback.
- Press **PAUSE**(II) to enter the pause mode, press **PLAY** or **PAUSE**(II) again to return to normal playback.
- Press **STOP**(■) to stop the playback.

You can play KARAOKE(singing along) with CD by connecting a microphone to the unit.
You can enjoy KARAOKE with a stereo-recorded disc, even if it is a non-karaoke disc, by reducing the singer's voice.



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

Select the **CD** function.

Press **CD OPEN/CLOSE**(CD ▲) to open the disc compartment, load disc(s) with the label side up.
In case of a VIDEO CD with PBC functions, "PBC" appears in the display window. Press **PBC** to cancel it.

Connect your microphone to the **MIC 1** or **MIC 2** jack.
Turn the **MIC VOLUME** control to adjust the microphone volume.

Press **FANFARE/SCORE** to enter the karaoke mode.
"KARAOKE" appears in the display window.

Select the desired track number on the disc by pressing **PREV/NEXT** (◀◀/▶▶) or turning the **JOG DIAL**.
If you press the **NUMERIC** buttons, starts playing automatically.

Press **PLAY**(▶) to start play.
Sing along with the accompaniment.

For your reference

To play next, press **PREV/NEXT**(◀◀/▶▶) or turn **JOG DIAL** again.

Comes out the Fanfare & Score

If the track playback is finished, the score will appear on the screen, and if you take the score 70 points and over the fanfare sound comes out. And the unit will automatically pause after playing back of each track.

You can give an echo effect to the sound from the microphones.

• Press **ECHO** repeatedly to adjust the strength of echo.

ECHO-1, ECHO-2 or ECHO-3 is displayed in the display window.

• To cancel it, set the echo indication disappear in the display window.

To Change the Key (KEY CONTROL)

You can change the key to suit your vocal range.

Press **KEY CONTROL** repeatedly to find the key that suits your vocal range.

You can adjust the key to 15 steps (7step higher, 7steps lower and the original key).
The setting appears on the screen.

You can record during playing KARAOKE.
Refer to the "RECORDING" explanation section.

○ If howling occurs

- Move the microphone(s) away from the TV or the speakers.
- Lower the volume of the TV or the mic volume.
- Cancel ECHO function.

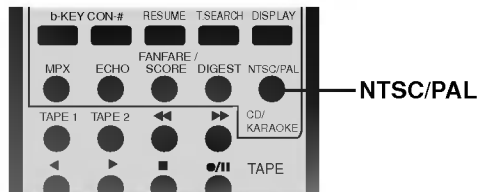
○ If the sound is distorted when the unit is connected a TV

- Cancel ECHO function.

○ If sound through the microphone is extremely loud it may be distorted. In this case turn the MIC volume toward minimum and set to "ECHO OFF" by pressing ECHO.

You can enjoy NTSC or PAL discs by using the **NTSC/PAL** button to choose the appropriate system.

- If you try to play back PAL disc with NTSC-TV. The unit will not play back the disc.
- When the system of your unit does not coincide with the system of your TV, normal color picture may not be displayed.
- When you play back NTSC disc with PAL-TV, some discs may produce black bands at the top and bottom of the screen.





Position of System Select	Connected TV	Available disc
PAL	PAL	PAL VCD disc
NTSC	NTSC	NTSC VCD disc
NTSC or PAL	MULTI system TV	NTSC/PAL disc

This unit can play back the following discs.

This equipment has been designed to play discs bearing the identification logo shown as below.

CD: compact disc recorded only with digital audio signals.

VIDEO CD : compact disc recorded with compressed digital audio and video signals.

	Disc mark	Contents	Disc Size	Maximum Playback Time
Video CD		Audio + Video	12 cm	74 minutes
			8 cm	20 minutes
Audio CD		Audio	12 cm	74 minutes
			8 cm	20 minutes

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

Notes on VIDEO CD		CAUTION
This player conforms to Version 1.1 and Version 2.0 of VIDEO CD standards. You can enjoy two kinds of playback according to the discs type.		<ul style="list-style-type: none"> • Small impact while video disc is playing can cause abnormality on pictures. • Because video disc reproduces data compressed in 1/100 of regular disc, even a minor scratch on its surface can cause enormous influence on video and audio and even make the disc unuseful. Therefore, much more care is required. • A mosaic with faint checker pattern can appear on the pictures with many movements and detailed motion, however this is not a defect.
Disc Type	You can	
VIDEO CD without PBC functions (Version. 1.1 disc)	Enjoy video playback(moving pictures) as well as music.	
VIDEO CD with PBC functions (Version 2.0 discs)	Play interactive software using menu screens displayed on the TV screen, in addition to the video playback function of Version 1.1 discs.	

- Discs should be kept clean at all times. -Stains, scratches and dust on disc's surface cause bad quality video and audio.
- Never touch disc's surface.
- Depending on the conditions of the recording equipment or the CD-R/RW disc itself, some CD-R/RW discs cannot be played on the unit.

Symptoms and Correction

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

Symptom	Cause	Correction
No power.	<ul style="list-style-type: none"> The power cord is disconnected. 	<ul style="list-style-type: none"> Plug the power cord into the wall outlet securely.
No picture.	<ul style="list-style-type: none"> The TV is not set to receive VCD signal output. The video cable is not connected securely. The connected TV power is turned off. 	<ul style="list-style-type: none"> Select the appropriate video input mode on the TV so the picture from the unit appears on the TV screen. Connect the video cable into the jacks securely. Turn on the TV.
There is no sound or only a very low-level sound is heard.	<ul style="list-style-type: none"> The audio cables are not connected securely. 	<ul style="list-style-type: none"> Connect the audio cable into the jacks securely.
	<ul style="list-style-type: none"> The power of the equipment connected with the audio cable is turned off. 	<ul style="list-style-type: none"> Turn on the equipment connected with the audio cable.
	<ul style="list-style-type: none"> The audio connecting cord is damaged. 	<ul style="list-style-type: none"> Replace it with new one.
The playback picture is poor.	<ul style="list-style-type: none"> The disc is dirty. 	<ul style="list-style-type: none"> Clean the disc.
The unit does not start playback.	<ul style="list-style-type: none"> The disc is placed upside down. 	<ul style="list-style-type: none"> Place the disc with the playback side down.
	<ul style="list-style-type: none"> The disc is not placed within the guide. 	<ul style="list-style-type: none"> Place the disc on the disc tray correctly inside the guide.
	<ul style="list-style-type: none"> The disc is dirty. 	<ul style="list-style-type: none"> Clean the disc.
Severe hum or noise is heard.	<ul style="list-style-type: none"> The plugs and jacks are dirty. 	<ul style="list-style-type: none"> Wipe them with a cloth slightly moistened with alcohol.
	<ul style="list-style-type: none"> The disc is dirty. 	<ul style="list-style-type: none"> Clean the disc.
	<ul style="list-style-type: none"> The speakers and components are connected poorly. 	<ul style="list-style-type: none"> Connect the speakers and components securely.
	<ul style="list-style-type: none"> The unit is located with TV nearby. 	<ul style="list-style-type: none"> Move your TV away from the audio components.
Recording cannot be done.	<ul style="list-style-type: none"> The components are connected incorrectly. 	<ul style="list-style-type: none"> Connect the components correctly.
	<ul style="list-style-type: none"> The source is selected incorrectly. 	<ul style="list-style-type: none"> Select the source with the FUNCTION SELECT button (CD, TAPE, AUX or TUNER).
Radio stations cannot be tuned in.	<ul style="list-style-type: none"> The antennas are connected poorly. 	<ul style="list-style-type: none"> Connect the antenna securely.
		<ul style="list-style-type: none"> Adjust the antennas and connect an external antenna if necessary.
The remote control does not work properly.	<ul style="list-style-type: none"> The signal strength of the stations is too weak (when tuning in with automatic tuning). 	<ul style="list-style-type: none"> Tune in the station manually.
	<ul style="list-style-type: none"> The remote control is not pointed at the remote sensor of the unit. 	<ul style="list-style-type: none"> Point the remote control at the remote sensor of the unit.
	<ul style="list-style-type: none"> The remote control is too far from the unit. 	<ul style="list-style-type: none"> Operate the remote control within about 23 ft (7 m).
	<ul style="list-style-type: none"> There is an obstacle in the path of the remote control and the unit. 	<ul style="list-style-type: none"> Remove the obstacle.
	<ul style="list-style-type: none"> The batteries in the remote control are exhausted. 	<ul style="list-style-type: none"> Replace the batteries with new ones

[General]		Power supply	Refer to the back panel of the unit.
		Power consumption	120W
		Mass	8.3kg
		External dimensions (W x H x D)	273 x 330 x 360 mm
[VCD/CD]		Frequency response	40 - 18,000 Hz
		Signal-to-noise ratio	More than 70 dB (1 kHz)
		Dynamic range	More than 70 dB
		Video output	1.0 V, 75 Ω, RCA jack
[Tuner]	FM	Tuning Range	87.5 - 108.0 MHz
		Intermediate Frequency	10.7 MHz
		Signal to Noise Ratio	61/58 dB
		Frequency Response	60 - 10,000 Hz
	AM (MW)	Tuning Range	522 - 1611 kHz OR 530 - 1610 kHz
		Intermediate Frequency	450 kHz
		Signal to Noise Ratio	35 dB
		Frequency Response	100 - 1,900 Hz
[Amp]		Output Power	100W
		T.H.D	0.15% (6Ω, 2ch, T.H.D 10%)
		Frequency Response	42 - 25,000 Hz
		Signal-to-noise ratio	80 dB
[TAPE]		Tape Speed	4.75cm/sec
		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	50dB(P/B)/45dB(R/P)
		Erase Ratio	55dB (MTT-5511)
[Speakers]		Type	3 Way 3 Speaker
		Impedance	6 Ω
		Frequency Response	50 - 20,000 Hz
		Sound Pressure Level	87 dB/W (1m)
		Rated Input Power	100 W
		Max. Input Power	200 W
		Net Dimensions (W x H x D)	230X401X289mm
		Net Weight	5.70kg

* Designs and specifications are subject to change without notice.

