NEW KARAOKE SYSTEM

OWNER'S MANUAL

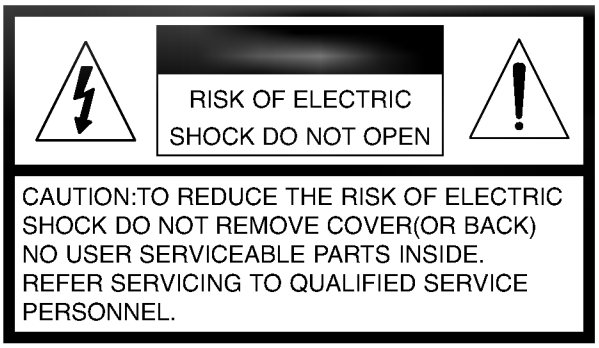
MODELS : FFH-2103AX
FE-2103VE
FFH-2108AX
FE-2108VE

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

COMPACT disc DIGITAL AUDIO

COMPACT disc DIGITAL VIDEO

BZ03



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.

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.

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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.

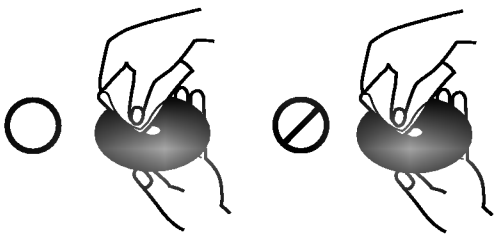
- Do not attach paper or tape to discs.

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 the discs.

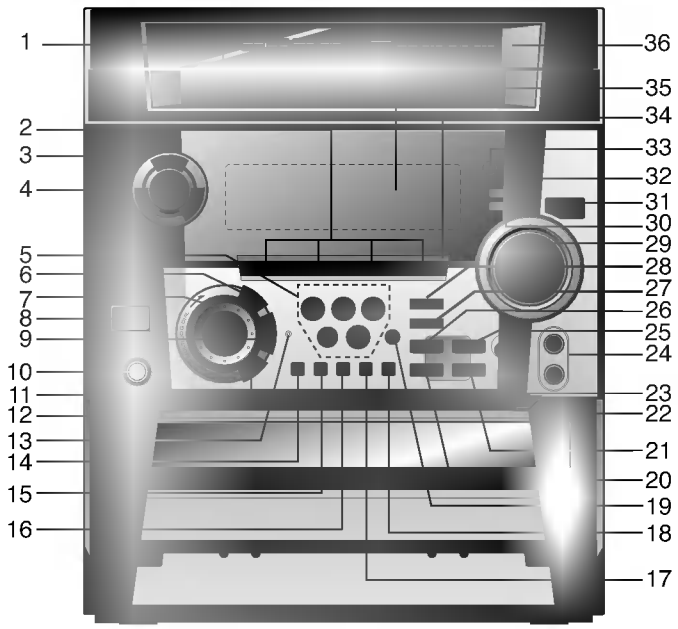
On Cleaning Discs

- 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.



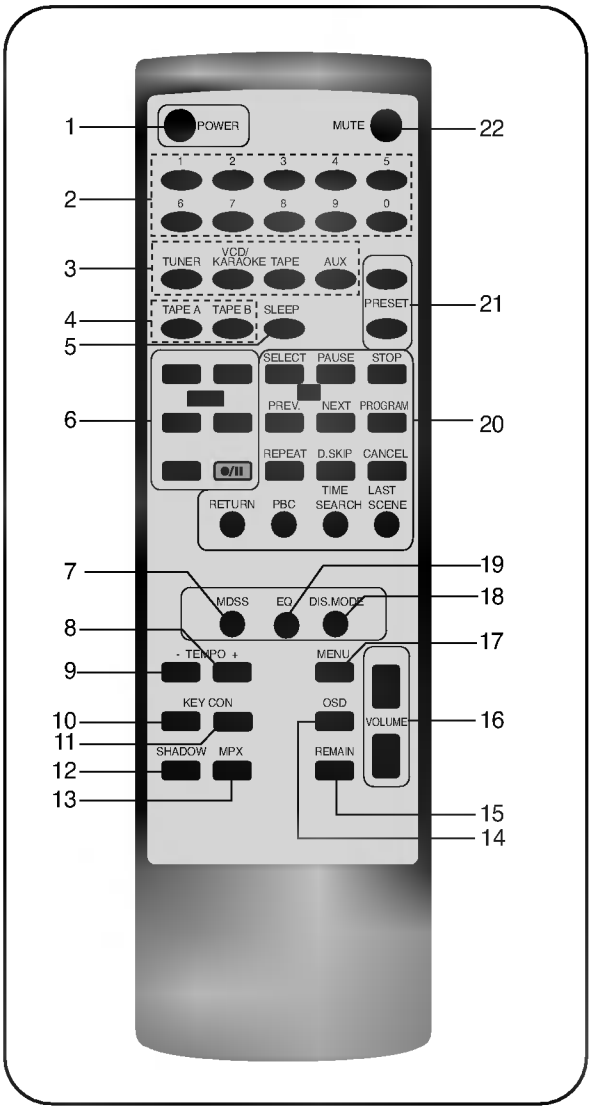
About This Owner's Manual

- This owner's manual explains the basic instructions of this unit.
- Some video 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 disc.



1. CD DOOR
2. FUNCTION SELECT BUTTONS (TUNER/BAND, TAPE A/B, KARAOKE/VCD, AUX)
3. DISC SKIP BUTTON
4. DISC DIRECT PLAY BUTTONS (1, 2, 3)
5. • PRESET (-)/(+) BUTTONS (RADIO)
   • MANUAL/ AUTO TUNING (-)/(+) BUTTONS (RADIO)
   • SEARCH(◀◀ / ▶▶)/ TEMPO(-/+) BUTTONS (CD/VCD/KARAOKE)
   • FAST REWIND/ FAST FORWARD BUTTONS (TAPE)
   • CD PLAY BUTTON (▶)
   • STOP/CLEAR BUTTON (■)
6. MENU BUTTON
7. MULTI JOG DIAL [PRESETTING STATIONS(TUNER), TRACK SKIP, CLOCK, TIMER, KEY CONTROL]
8. POWER BUTTON (STANDBY/ON)
9. SET/PAUSE/TAPE COUNTER BUTTON
10. HEADPHONE SOCKET (6.3mm)
11. PBC ON/OFF BUTTON
12. ⏏ PUSH EJECT POSITION (TAPE A)
13. SET/PAUSE INDICATOR
14. RETURN/CANCEL BUTTON
15. PLAY MODE (OPTIONAL)/DEMO BUTTON
16. MODE/RIF BUTTON
17. NORMAL DUBBING/CD SYNCHRO BUTTON
18. HI-SPEED DUBBING BUTTON
19. RECORD/RECORD PAUSE BUTTON
20. UBB/HI-TONE BUTTON
21. EQ PATTERN BUTTON
22. ⏏ PUSH EJECT POSITION (TAPE B)
23. MIC VOLUME
24. MIC SOCKETS
25. ECHO BUTTON
26. MDSS BUTTON
27. REPEAT BUTTON
28. PROGRAM/MEMORY BUTTON
29. VOLUME
30. ◷ TIMER BUTTON
31. CD OPEN/CLOSE (⏏) BUTTON
32. CLOCK BUTTON
33. REMOTE SENSOR
34. POWER INDICATOR
35. DISPLAY
36. NUMERIC BUTTONS

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



1. POWER button
2. NUMERIC buttons
3. FUNCTION SELECT buttons
   (TUNER, VCD/KARAOKE, TAPE , AUX)
4. TAPE A/B SELECT buttons
5. SLEEP button
6. TAPE FUNCTION buttons
   - REWIND/FAST FORWARD PLAY (◀◀/▶▶)
   - FORWARD PLAY (▶)
   - BACKWARD PLAY (◀) : OPTIONAL
   - STOP (■)
   - RECORD/RECORD PAUSE (●/❚❚)
7. MDSS button
8. TEMPO+ /SEARCH(▶▶) button
9. TEMPO- /SEARCH (◀◀) button
10. KEY CONTROL(b) button
11 KEY CONTROL(#) button
12. SHADOW button
13. MPX button
14. OSD button
15. REMAIN button
16. VOLUME +/- buttons
17. MENU button
18. DISPAY MODE button (DIS.MODE)
19. EQ PATTERN button (EQ)
20. CD/VCD/KARAOKE CONTROL buttons
    - PLAY/SELECT (▶)
    - PAUSE (❚❚)
    - STOP (■)
    - SKIP/PREV. (|◀◀)
    - SKIP/NEXT (▶▶|)
    - PROGRAM
    - REPEAT
    - DISC SKIP(D.SKIP)
    -.CANCEL
    -.RETURN
    -.PBC ON/OFF
    -.TIME SEARCH
    -.LAST SCENE
21. PRESET (▲ / ▼) buttons
22. MUTE button

Preparing the Remote Control

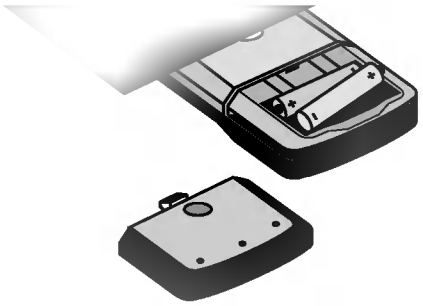
Insert the batteries into the remote control so you can use it to operate the unit.

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.

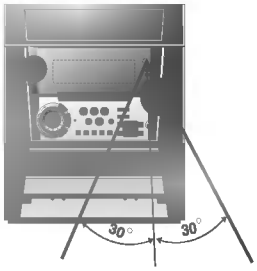


- Improper use of batteries may cause battery leakage and corrosion.
- To operate the remote control correctly, follow the instructions.
- Do not insert the batteries into the remote control in the wrong direction.
- Do not charge, heat, open, or short-circuit the batteries. Do not throw the batteries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



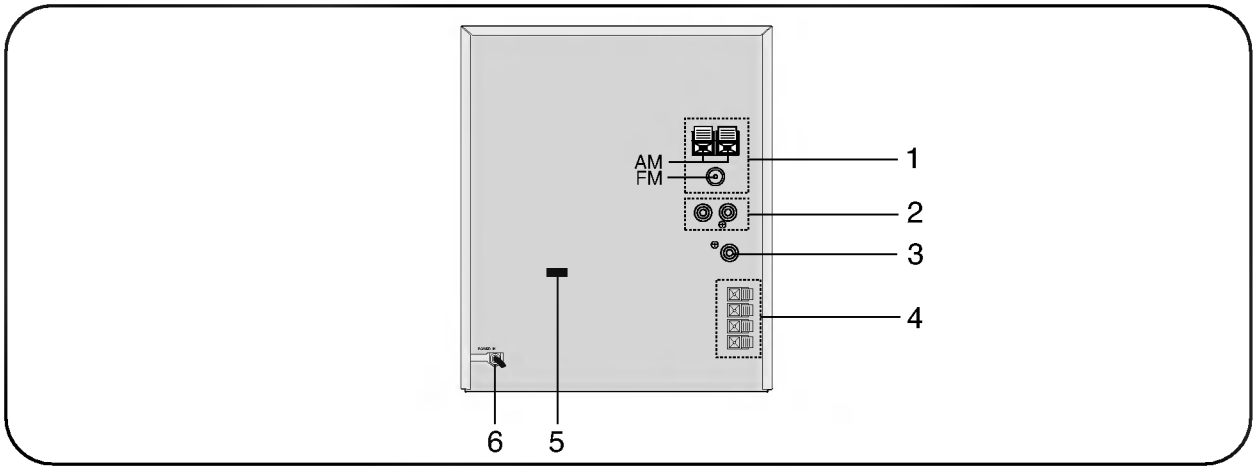
23 ft (about 7m)

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

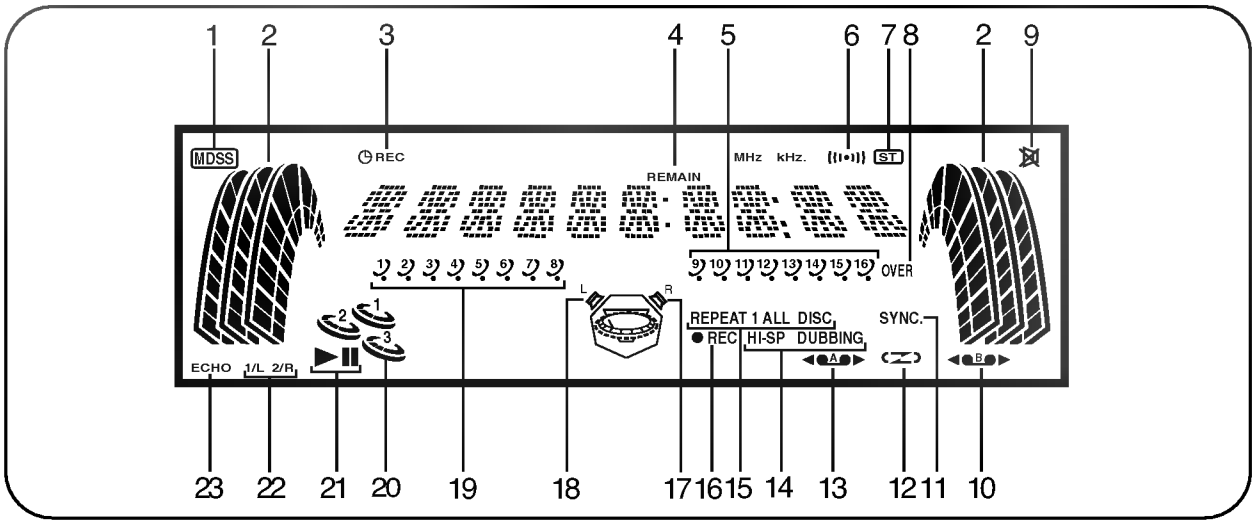
* Do not expose the remote sensor of the receiver to a strong light source such as direct sunlight or illumination. If you do so, you may not be able to operate the receiver with the remote control.

- 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.

Rear Panel



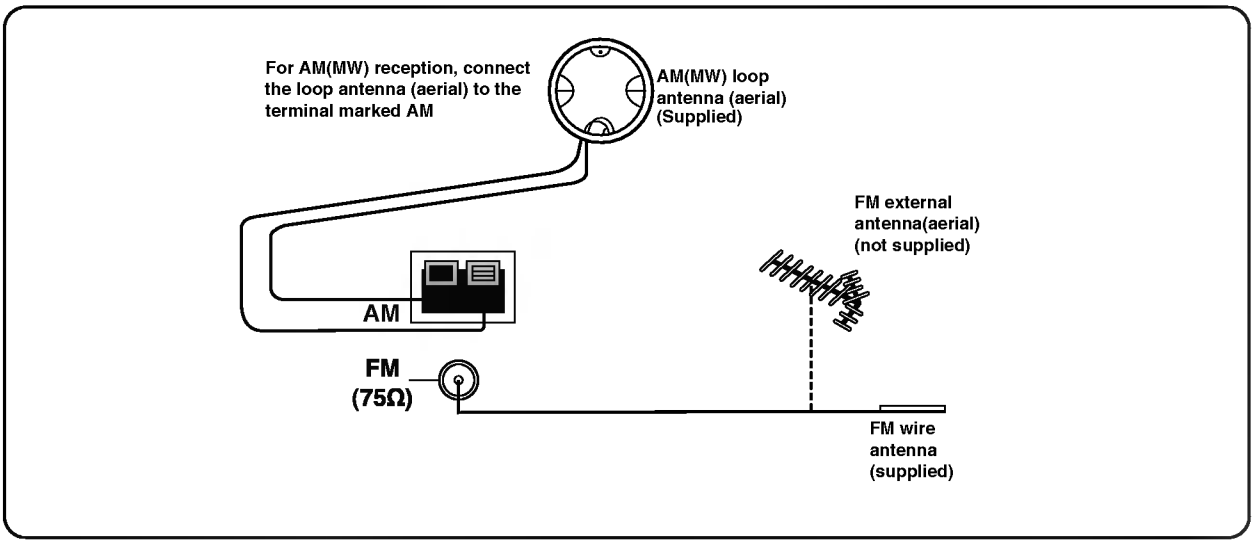
1.ANTENNA TERMINAL
2.AUXILIARY INPUT SOCKETS
3.VIDEO OUT JACK
4.SPEAKER CONNECTOR
5.VOLTAGE SELECTOR (OPTIONAL)
6.POWER CORD



1. MDSS indicator
2. LEVEL indicator
3. TIMER indicator
4. REMAIN TIME indicator
5. CD MUSIC CALENDAR indicator
6. FM STEREO RECEIVING indicator
7. FM STEREO indicator
8. CD MUSIC CALENDAR OVER indicator
9. MUTE indicator
10. TAPE B ENTERED/DIRECTION indicator
11. CD SYNC. indicator
12. PLAY MODE indicator
13. TAPE A ENTERED/DIRECTION indicator (OPTIONAL)
14. TAPE DUBBING indicator
15. REPEAT indicator
16. RECORD. indicator
17. RIGHT SPEAKER indicator
18. LEFT SPEAKER indicator
19. CD MUSIC CALENDAR indicator
20. DISC NO. indicator
21. PLAY/PAUSE indicator
22. MPX FUNCTION indicator
23. ECHO indicator

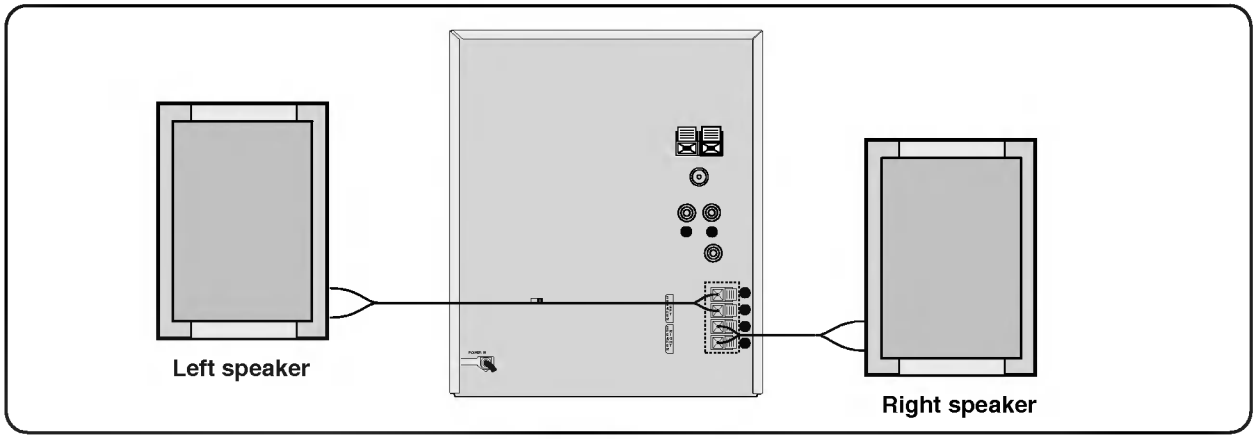
Connect the supplied FM/AM antennas for listening to the radio.

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

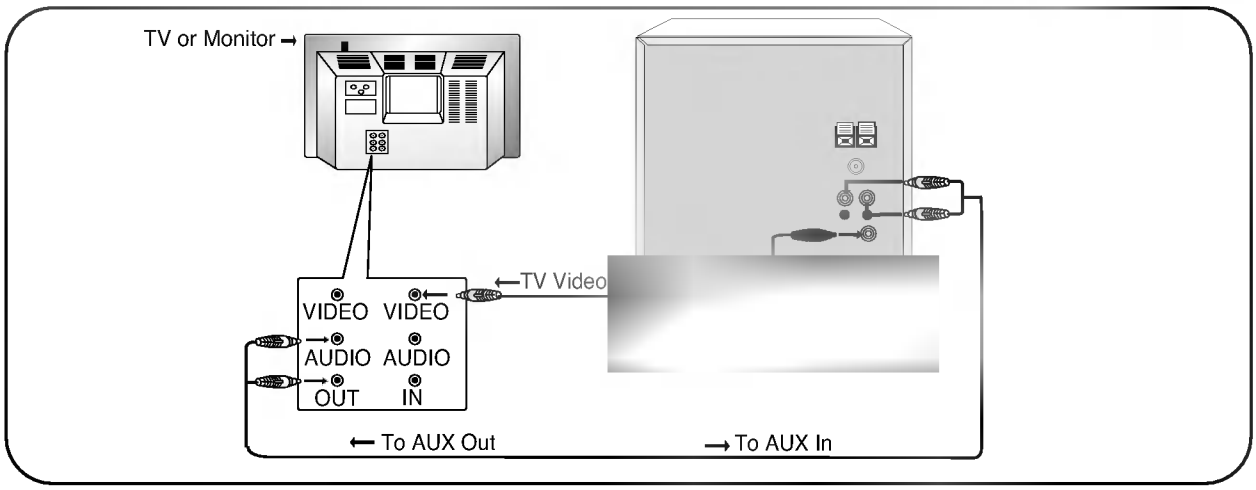


❍ To prevent noise pickup, keep the AM loop antenna away from the unit and other components.
❍ Be sure to fully extend the FM wire antenna.
❍ After connecting the FM wire antenna, keep it as horizontal as possible.

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.

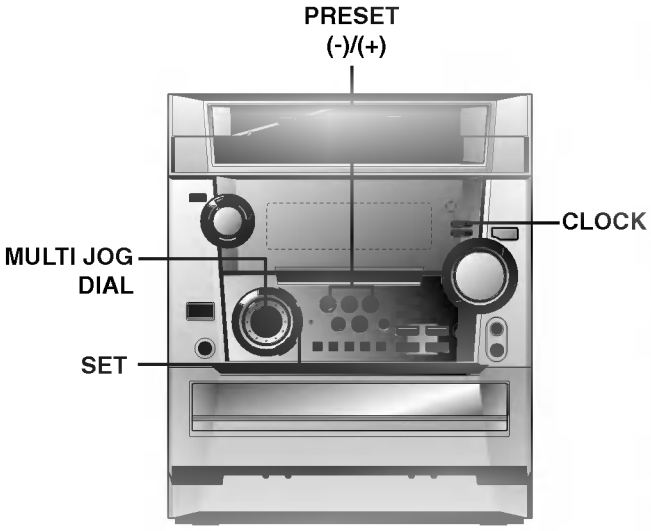
AUX jacks connection

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.

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

Sleep timer

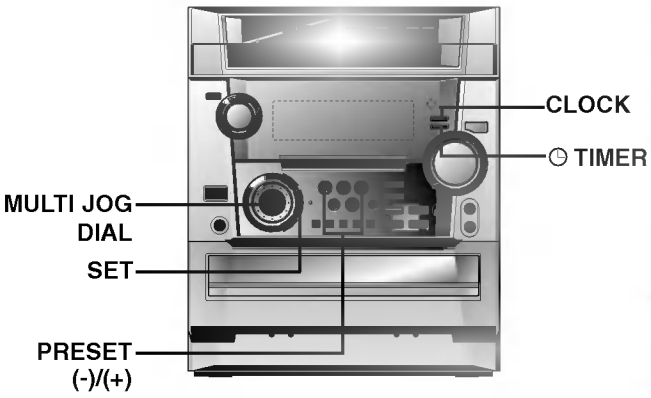
When the sleep timer is used, the power is automatically turned off after the specified time has elapsed.

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

3. **To cancel the sleep timer mode:**
   If you wish to stop the function press **SLEEP** 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 or tape playing turned on and off at the time desired.



Press **CLOCK** 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-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 CD or TAPE, ignore step 4.

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

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

Set the hour to switch on by turning **MULTI JOG DIAL** or pressing **PRESET (-)/(+)** buttons.

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 **MULTI JOG DIAL** or pressing **PRESET (-)/(+)** buttons.

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.

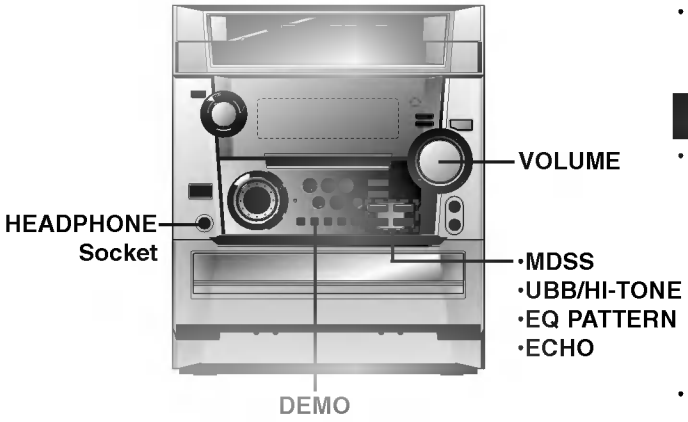
Press the **SET** button.

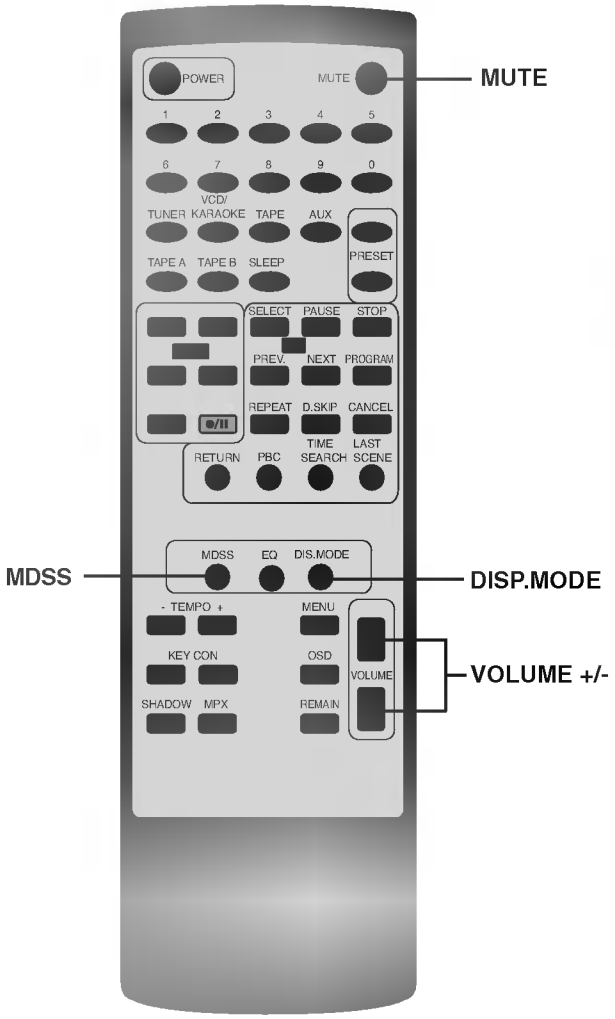
Adjust the volume level by turning **MULTI JOG DIAL** or pressing **PRESET (-)/(+)** buttons.

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.





- 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 on the remote control.

- **To activate stereo sound**
  You can choose between 6 fixed sound impressions: Select a desired sound mode by using the **EQ PATTERN** button.

JAZZ → **CLASSIC** → **VOCAL**
↑ ↓
FLAT ← **POP** ← **ROCK**

- **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).

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.

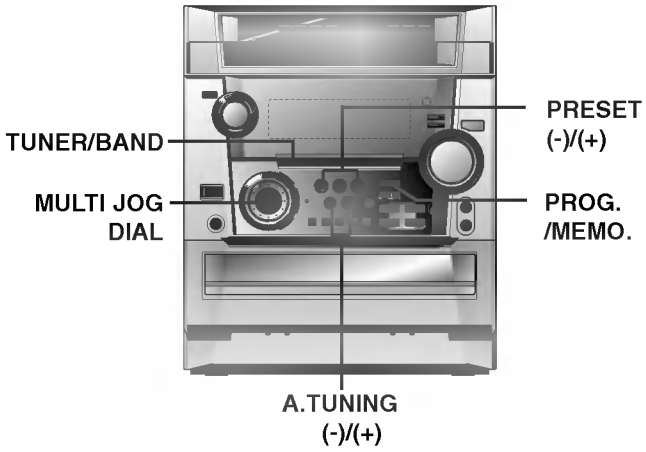
With the unit plugged in but turned off, press the PLAY **DEMO** button for a continuous visual display of units features. Press it again to return to a display of the current time.

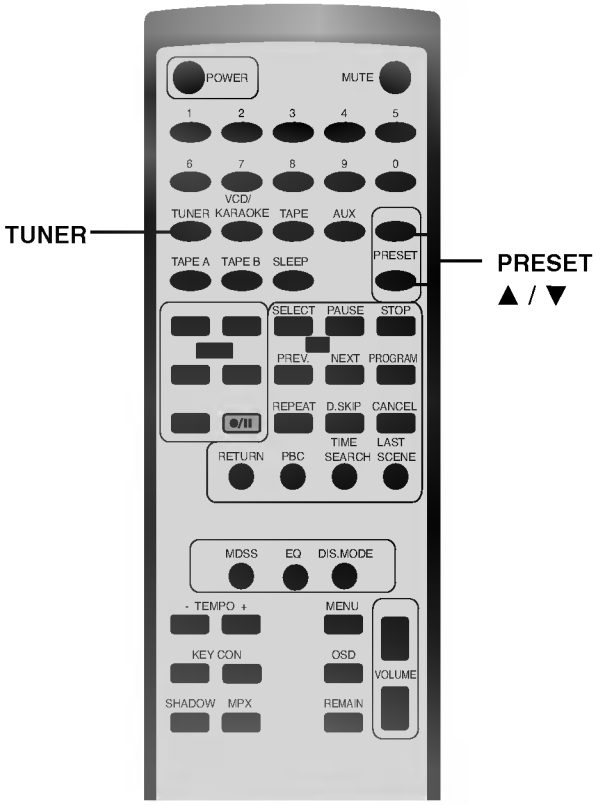
Whenever you press **DIS.MODE** on the remote control, you can enjoy the spectrum change with 4 types in the display.

Press the **UBB/HI-TONE** button to set the UBB/HI-TONE mode.
Each time **UBB/HI-TONE** button is pressed, it change as follows.

UBB ON → UBB OFF → HI-TONE ON → HI-TONE OFF

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 (-)/(+) or turn MULTI JOG DIAL on the front panel to select the preset number you want.

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

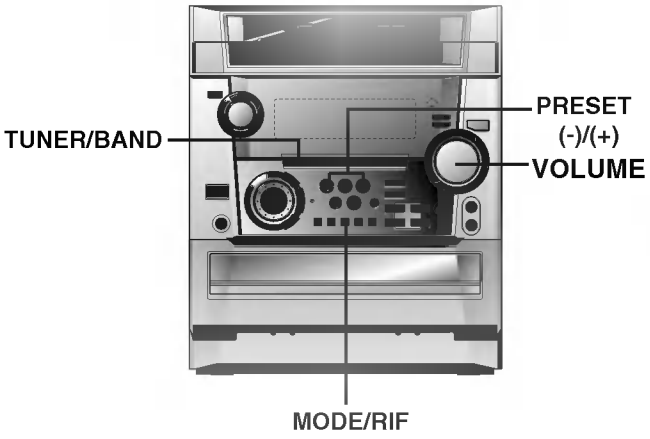
Repeat steps 3 to 6 to store other stations.

To 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 units 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 **ST** 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 (-)/(+) or 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.

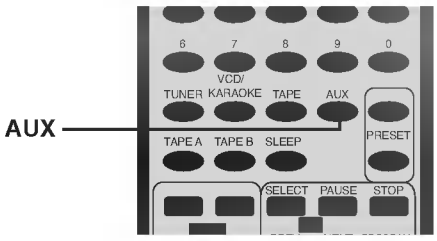
Adjust the volume by rotating VOLUME on the front panel or pressing VOLUME (+/-) repeatedly on the Remote control.

To turn off the radio

Press **POWER (STANDBY/ON)** to turn the unit off or select another function mode (KARAOKE/VCD, TAPE or AUX).

To listen to non-preset radio stations

For manual automatic tuning, press **A.TUNING (-)/(+)** on the front panel.

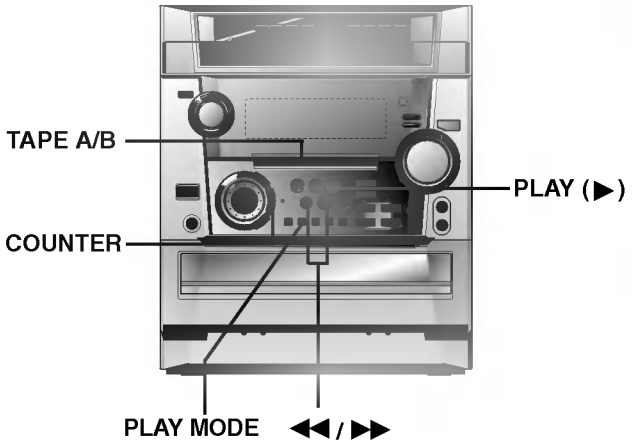


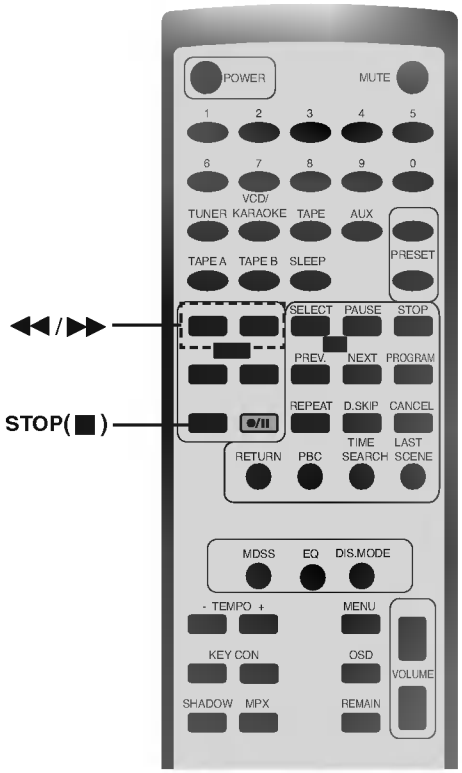
Connect an auxiliary device i.e. TV or VCR, via the rear mounted AUX phono sockets.

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

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

You can 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-auto reverse)
DECK B - Auto reverse

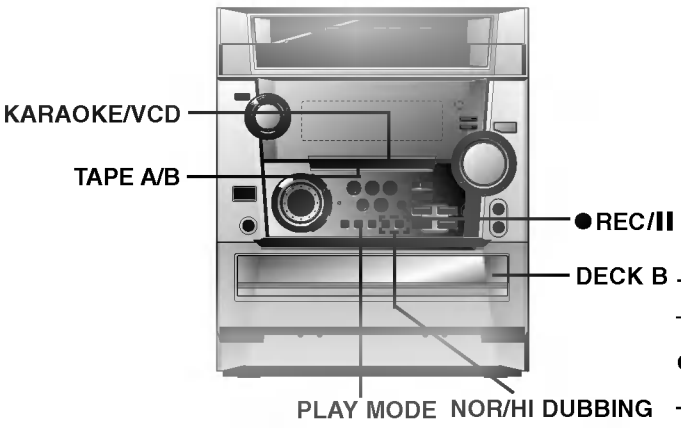
Auto reverse :
Select which side of the cassette is to be played and how often with the **PLAY MODE** button.
1) **1st Option**
In case of non-autoreverse (auto stop) deck A and auto reverse deck B.
In this case, the continuous play between deck A and B cannot be performed.
(a) DECK A
Front side play 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-auto reverse deck.

Fast forward or rewind :
Press ◀◀ / ▶▶ for fast rewind or fast forward.

To end playback :
Press the STOP/CLEAR (■) button.
The unit stops automatically at the end of the tape.

Press the **COUNTER** 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 KARAOKE/VCD function.

To insert the cassette :

Open the cassette deck B.

Insert a blank cassette into the cassette compartment.

PLAY MODE

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.

Before recording, select a function you want and then press the **PLAY (▶)**.

To start recording :

Press the ●**REC/II** button or PLAY (▶) button again if you want to record the front side or PLAY (◀) 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.

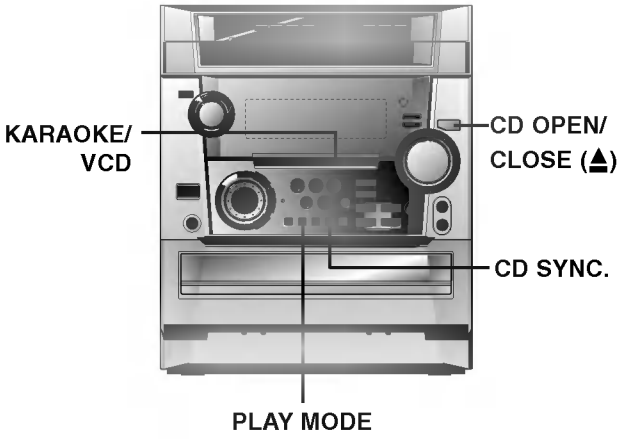
Press TAPE A/B (or TAPE on the remote control).

•DECK A- Insert a playback tape to dub.

•DECK B- Insert a blank tape.

Press NOR/HI DUBBING as follow.

Pressing	Display	Function
NOR DUBBING	NOR DUBB	Normal speed dubbing
HI DUBBING	HI DUBB	Double speed dubbing



CD to tape synchronized recording.

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

Select CD or VCD function by pressing KARAOKE/VCD repeatedly.

Open the CD compartment with the **CD OPEN / CLOSE(▲)** , insert CD 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.

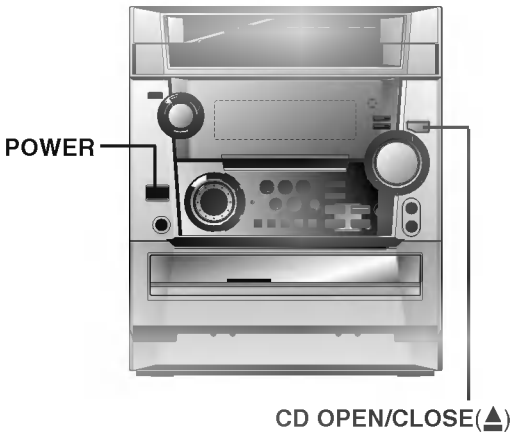
Auto reverse
Select the **PLAY MODE**, ⇄ if you only wish to record the front side and ⇄) or (⇄) for both cassette sides.

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.** .
The recording begins and stops automatically at the end of the CD.

NOTE:
In case of Auto Stop deck
If you want to record onto another tape after one has ended. Change the tape, then push the PLAY .
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 (◀◀ / ▶▶) before commencing CD synchro recording.
- The function change is not possible during recording.



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

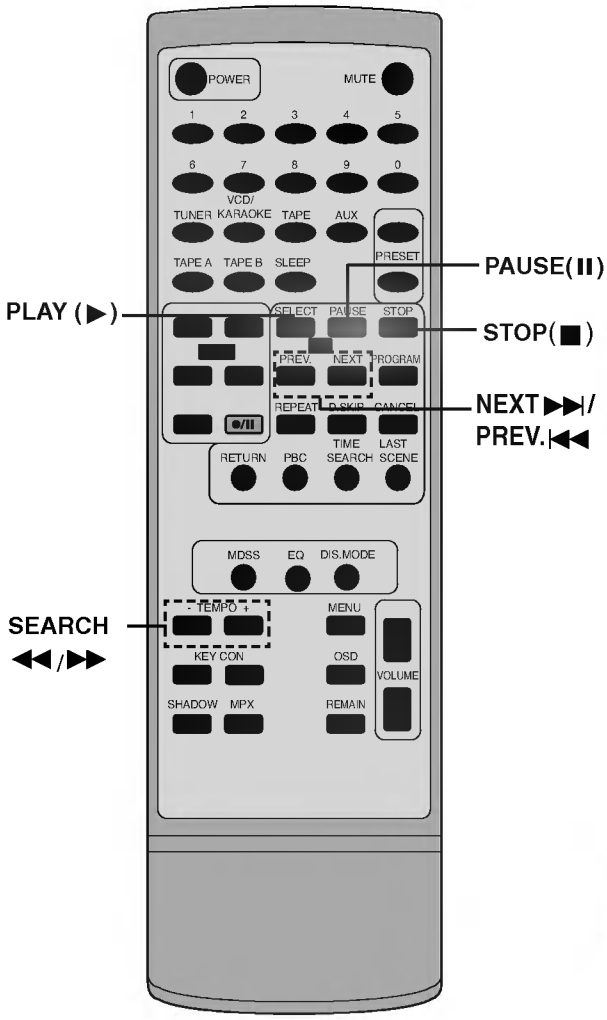
After operation
When the unit is not in use, remove the disc and press the **POWER** to turn off the power.

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

❍ When " " appears on the TV screen while a button is pressed, it means that this function is not available on the disc you are playing.



To stop playback

Press the STOP(■) during playback.

To pause playback

Press PAUSE(II) during playback.

[TV screen]

Press PLAY (▶) or PAUSE(II) again it to resume play.

To Skip chapters and tracks forward or back

Skipping forward

Press NEXT ▶▶| during playback.

A chapter (VCD) or a track (CD) is skipped each time the button is pressed.

Skipping back

Press the PREW. |◀◀ during playback.

When the 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.

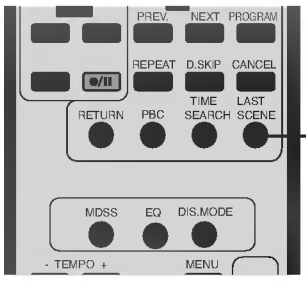
To Scan at fast forward or fast reverse playback.

Press SEARCH ◀◀/▶▶ (unit : ◀◀ / ▶▶) during playback.

[TV screen]

To return to normal playback, press PLAY(▶).

- The unit does not play back sound during the high speed reverse and forward playback.



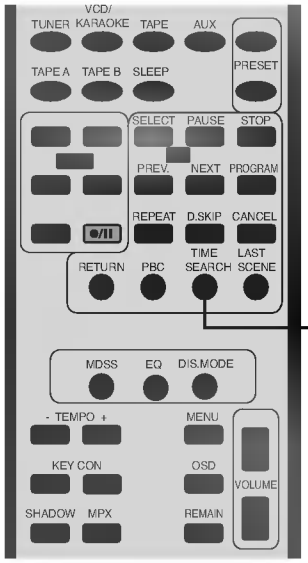
The unit memorizes the point you stopped a VIDEO CD and you can resume playback from that point.
It is not available during playing an audio CD.

Press STOP(■) during playback.

Press LAST SCENE on the remote control.
- The unit starts playback from the point you stopped the VIDEO CD in step 1.

[TV screen]

SEARCH
LAST SCENE



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 TIME SEARCH during playing or stopping.

[TV screen]

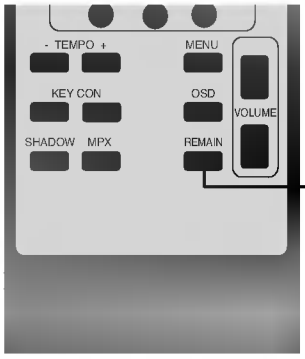
TIME --:--

Press the NUMERIC buttons to enter the time of the point that you want to locate.
Playback is started automatically from the entered time.

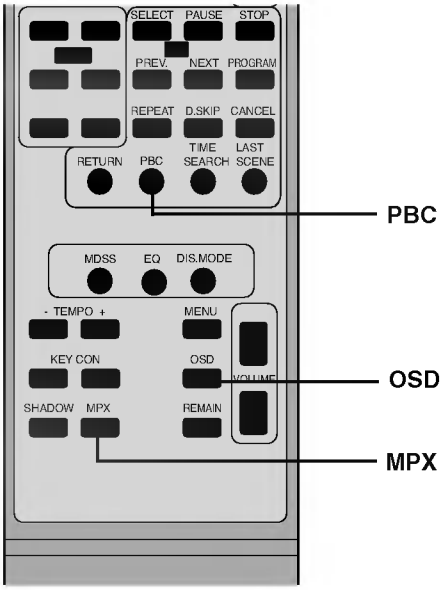
[TV screen]

SEARCH
TIME 22: 15

For your reference
- ❍ This function can not be used in AUDIO CD and VIDEO CD with PBC function (Version 2.0 discs).



- **Press REMAIN during playing.**
  - You can view the elapsed time per a track.
- **Press REMAIN again during playing.**
  - You can view the total remained time on the disc.
- **To cancel it, press REMAIN once more during playing.**



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 , 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.

- "1/L or 2/R" appears in the display window.
- The MULTIPLEX function works not for TUNER, TAPE and AUX functions.

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 ON" appears in the display window.

After press PLAY(▶) to playing in stop mode.
The menu screen appears on the TV screen after a few seconds.

Select the menu number you want by pressing NUMERIC buttons on the remote control.
The selected item is now executed.

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(↶)**.

To cancel PBC PLAY

Press **PBC**.
Press **PBC** again to resume play.

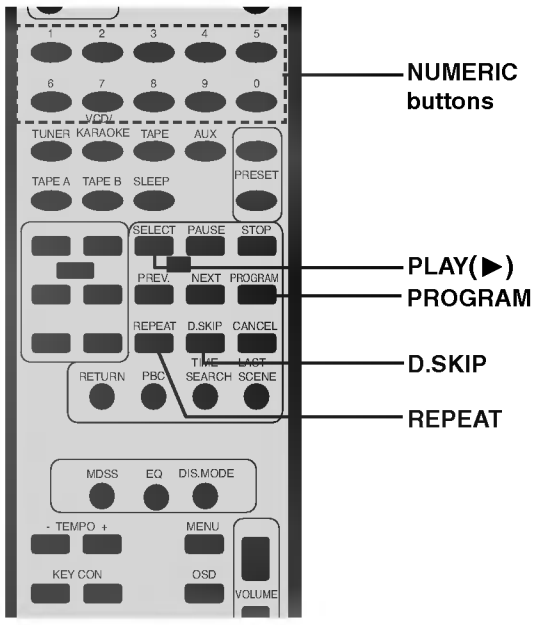
It can conveniently check the current play status and the remain time of the disc.

Press OSD during playing a disc.
- The current operation status appears on the TV screen.

To cancel it, press OSD again.

- The current operation status indicator disappears on the TV screen.

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.
- "REPEAT 1" appears in the display window.
- "REPEAT 1 TRACK" appears on TV screen.

To play one disc repeatedly.

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

To play all tracks on all discs repeatedly

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

To cancel repeat play

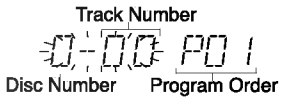
- Press **REPEAT** several times until "repeat indicator" disappears.

Program repeat play

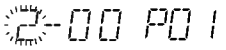
- Press **REPEAT** once during program play.
  - "REPEAT 1" appears in the display window.(One track repeat)
- Press **REPEAT** again during program play.
  - "REPEAT ALL DISC"appears in the display window.(All program repeat)

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).

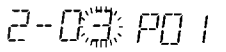
Press PROG./MEMO. (or PROGRAM on the remote control) on the stop mode.



Press D.SKIP or DISC DIRECT PLAY (1/2/3) to select the disc.



Press PREV/NEXT(|◀◀/▶▶|) (or turn MULTI JOG DIAL) to select the track.
In case of using NUMERIC(0~9) , press "0" and "3".



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.

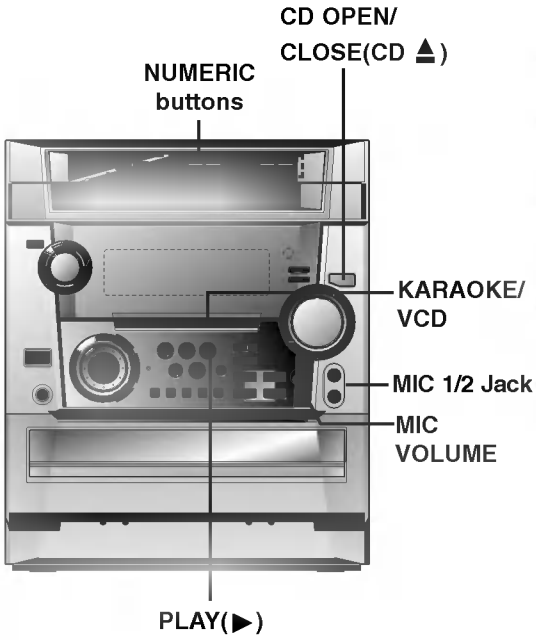
To add program contents

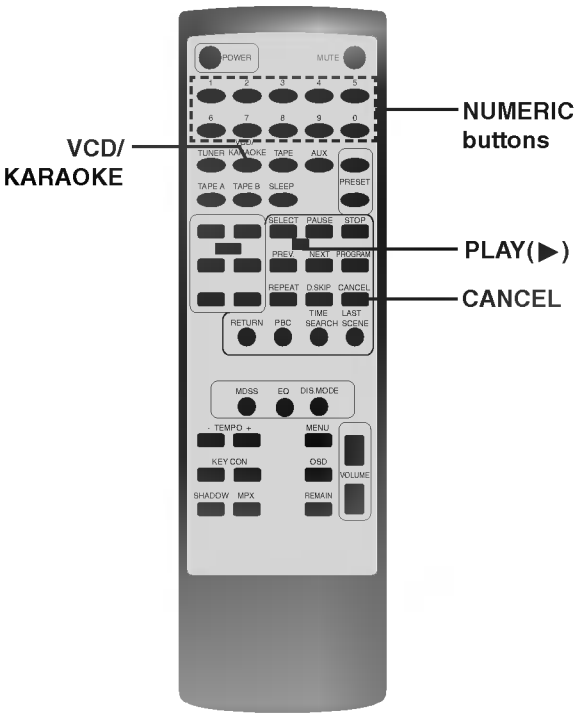
1. Press **PROG./MEMO.** (or **PROGRAM** on the remote control) repeatedly on the program stop mode until "Disc Number" blinks.
2. Repeat 2~5 on the left side.

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.

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.





Preparation

Check if the system is connected.

Turn on the powers of TV, Amplifier, and this equipment.

Press "TV/VIDEO" to enter video mode on TV.

Press CD OPEN/CLOSE(CD ⏏) to open the disc compartment, load KARAOKE disc(s) with the label side up.

Connect your microphone to the MIC 1 or MIC 2 jack.
Turn the MIC VOLUME control to adjust the microphone volume.
***MIC 1 Jack**
Insert when only one microphone is used.
***MIC 2 Jack**
Insert when two microphones are used.

Playback

Press KARAOKE/VCD repeatedly to enter KARAOKE mode.
After "KARAOKE" blinks in the display window, displays as follows.

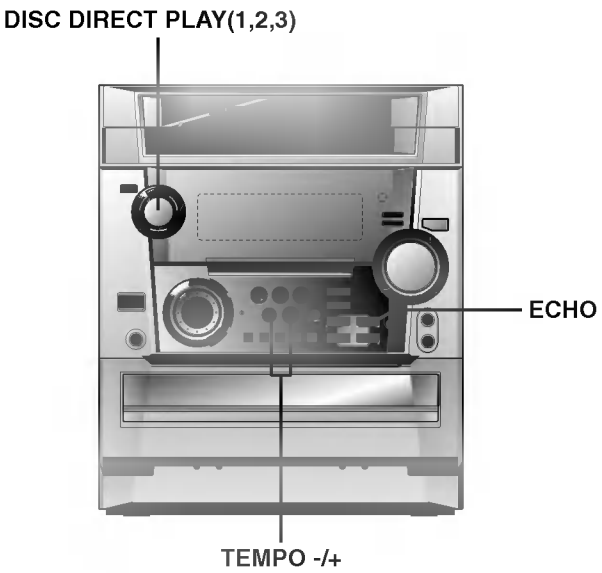
Select the melody number you want by pressing NUMERIC buttons.

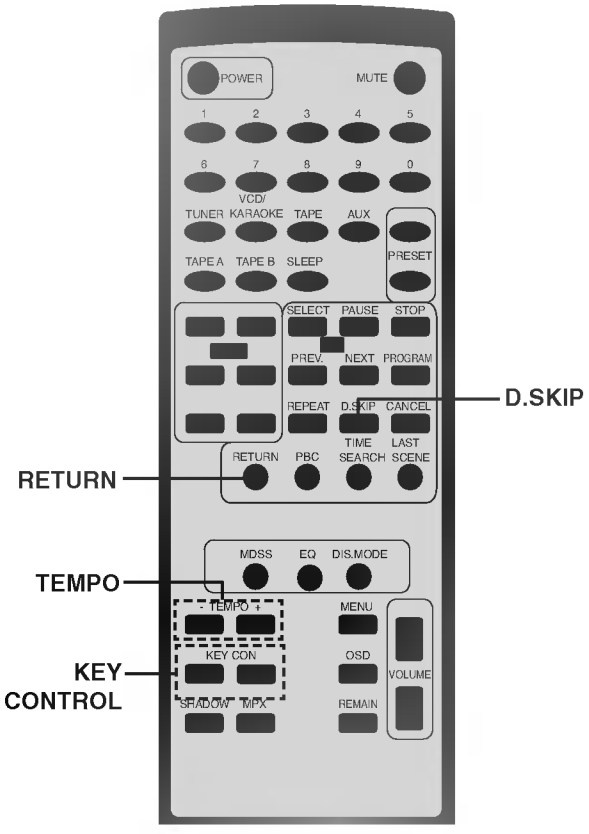
For your reference
If you cancel the selected melody number, press the **CANCEL**.

Press PLAY(▶) .
The selected melody number is played.

For your reference
After melody ends, it is stopped automatically.

- On the karaoke mode, in case of not putting the KARAOKE disc in, the unit is not played.
- Whenever you press **KARAOKE/VCD** (unit) or **VCD/ KARAOKE** (remote control), "KARAOKE"(karaoke mode) or track number (VCD mode) appears in the display window in turn.





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.**

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 13 steps (6step higher, 6steps lower and the original key).
The setting appears on the screen.

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

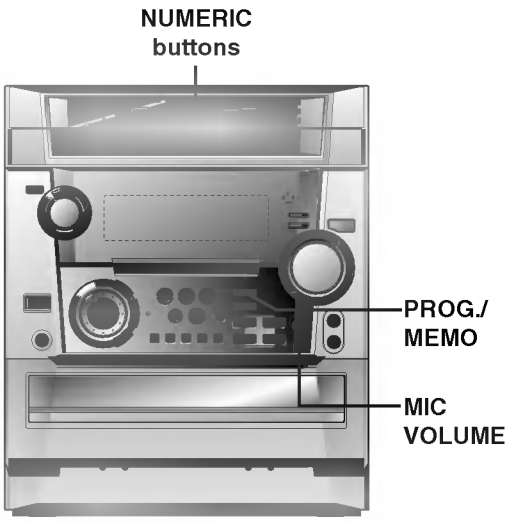
You can use Tempo Change function when you want to play fast or slow.

- **Press TEMPO + repeatedly during singing.**
  When you want to tempo fast in the middle of singing, and then you can sing to tempo your want as the tempo is 1/2 faster.
- **Press TEMPO - repeatedly during singing.**
  For slow tempo, and then you can sing to tempo your want as the tempo is 1/2 slower.

This function is used when you want to change the playback background screen to that of another disc.
Press the DISC DIRECT PLAY (1,2,3) or D.SKIP button during the play mode.

This is a function that returns to the preceding MENU.
Press the RETURN .

If there is no preceding menu (in case of the first menu), this function may not be executed.



When you want to make a reservation of next melody, you can enjoy the most 8 melodies reservation Without waiting.

Press the NUMERIC buttons to select melody number you want in the play mode.
Melody number appears on the TV screen.

Press PROGRAM or PROG./MEMO.
The melody number is made a reservation.

For your reference

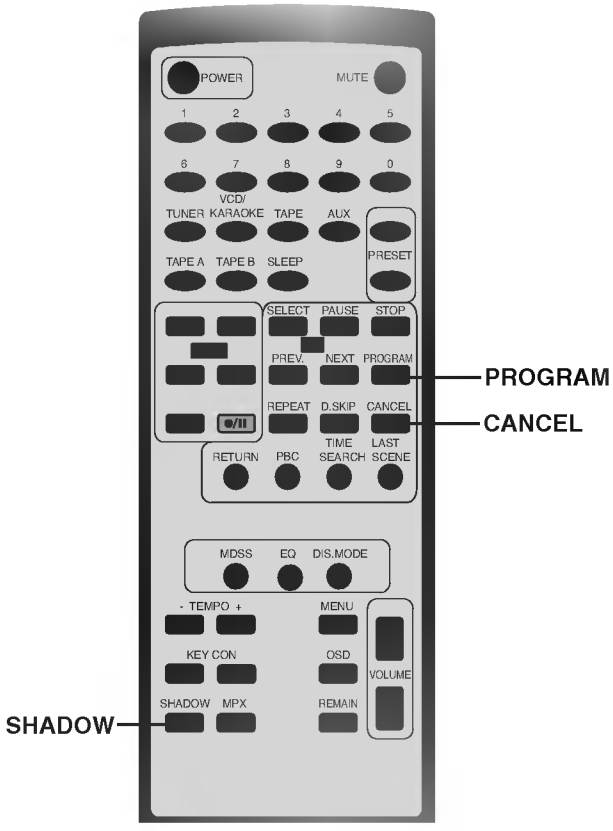
- It is possible to reserve the 8 songs at its maximum on repeating the and operations.
- After the one song finishes its playback, the next song will be playback automatically.

To cancel the reserved song

Each time you press **CANCEL** , the reserved song will be cancelled one by one.

To cancel or change the wrong reserved song

Press the **PROGRAM** to move to the desired position, then press the **CANCEL** to cancel the reserved song.

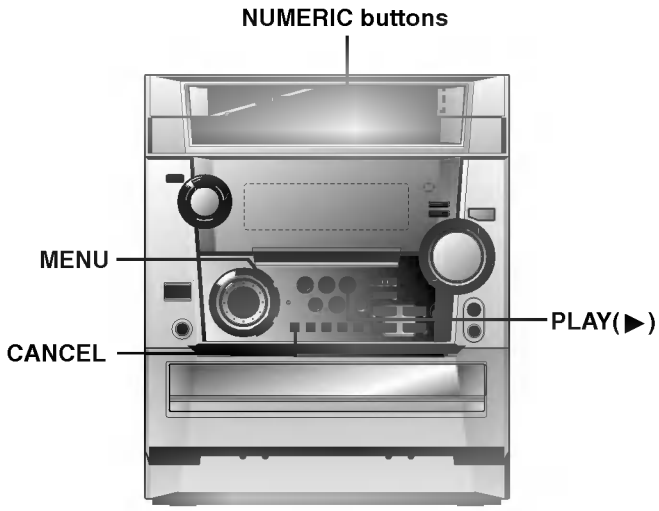


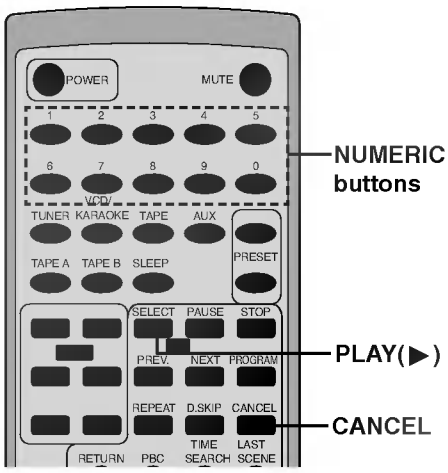
If it is connected to MIC 1 and MIC 2 Jack, adjust volume from **MIC VOLUME**.

Turn clockwise to raise the volume and turn counter-clockwise to lower the volume.

VCD caption and song melody caption are mixed up.

Press the SHADOW .
Title is expressed for shadow body in melody section when the time of function movement.





Main MENU (On the TV screen)

For your reference
On pressing the **RETURN**, one time it is returned to the condition before.

Preparation

Press the MENU to play MENU playback.
Main MENU appears on the TV screen.

Select melody mode by pressing the NUMERIC button 1.

Select the melody number you want by pressing NUMERIC buttons.

For your reference
If you cancel the selected melody number, press the **CANCEL**.

Press PLAY(▶) .
The selected melody number is played.

For your reference
After melody ends, it is stopped automatically.

When singing by selection of melody, song score comes out after one piece of song is ended.
The Score indication appears in the condition of POWER ON at first.

To cancel the Score position.

Press the NUMERIC button 2 on the main menu.
"⊘"mark is expressed on the TV screen with no score.

To reproduce the Score position.

Press the NUMERIC button 2 again.
"⊘"mark is disappeared on the TV screen.

In condition of POWER ON, scoring fanfare operates.
The fanfare sound comes out after singing finished.

To cancel the Fanfare.

Press the NUMERIC button 3 on the main menu.
"⊘"mark is expressed on the TV screen with no fanfare.

To reproduce the Fanfare.

Press the NUMERIC button 3 again.
"⊘"mark is disappeared on the TV screen.

For your reference
On pressing the **RETURN**, one time it is returned to the condition before.

Challenge will be going on up to three times.

First Challenge (70 Points) → Second Challenge (75 Points) → Third Challenge (80 Points)

Over corresponding score, next challenge is possible.
Under corresponding score, no next challenge is possible.

Press MENU on karaoke mode.

Press NUMERIC button 4 on the main menu.

1. Melody performance randomly
Press the **NUMERIC button 1**.
Melody played is randomly among melodies in karaoke CD (K-CD 3.0).

2. Melody performance according to melody
1.Press the **NUMERIC button 2**.
2.Press **NUMERIC buttons** you want.
3. Press **PLAY(▶)** .

3. Challenge per title
1.Press the **NUMERIC button 3**.
2.Press **NUMERIC buttons** you want.
3. Press PLAY(▶) .

4. Challenge per title Melody performance according to year
1.Press the **NUMERIC button 4**.
2.Press **NUMERIC buttons** you want.
3. Press **PLAY(▶)** .

5. The words of a song
(Pressing NUMERIC button 5.)
Indicates for Existence/nothing of words on every pushing, Existence/nothing of the words is changed (no indication of melody when there НЕТ is mark on).

- After selection of correspond MENU in a challenging singing room, pressing the the numbers of challenging and scores of passing are indicated.
- Success or fail for challenging, guiding passage comes out.
  When success for challenging is made, next challenging no & passing scores come out at random challenge.
  For genre/topics/chronology MENU expressed per each challenge.
- Success or failure for whirl chronology, indication to failure for third challenge, with fanfare is marked on.
- Selection of melody is selected randomly in a challenge singing room.

For your reference
On pressing the **RETURN**, one time it is returned to the condition before.

Press **MENU** on karaoke mode.

Press **NUMERIC button 5**.

1. Melody performance randomly
Press the **NUMERIC button 1**.
Melody played is randomly among melodies in karaoke CD (K-CD 3.0).

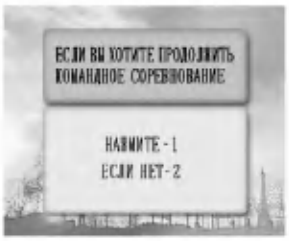
2. Dancing performance
1.Press the **NUMERIC button 2**.
2.Press **NUMERIC buttons** you want.
3. Press **PLAY(▶)** .

3. Challenge per title
1.Press the **NUMERIC button 3**.
2.Press **NUMERIC buttons** you want.
3. Press PLAY(▶) .

4. Challenge per title Melody performance according to year
1.Press the **NUMERIC button 4**.
2.Press **NUMERIC buttons** you want.
3. Press **PLAY(▶)**.

5. The words of a song
Indicates for Existence/nothing of words on every pushing, Existence/nothing of the words is changed (no indication of melody when there НЕТ is mark on).

- After one piece of melody is over, it is played automatically among corresponding range of melodies in a random order. (The display returns to previous MENU after 30 tracks continuous play.)
- When performing a melody, it is skipped to next one once pushing **STOP** .
- For movement to former screen, it is moved to the former screen on pushing **RETURN** one time.
- To make it clear of melody karaoke screen, press **MENU** and it is changed into menu screen.



For your reference
On pressing the **RETURN**, one time it is returned to the condition before.

It has a function which enjoy a game dividing by two teams of blue & red.

Press MENU on karaoke mode.
The main MENU displays on the TV screen.

Press NUMERIC button 6 on the main menu.

Press one of NUMERIC buttons 1~9 to select winner's number.

Select number you want by pressing NUMERIC buttons.

Press PLAY(▶) .
Randomly selected melody is played or no good or the chance is made.

When randomly selected melody is played
The winning point of one is increased only if the score is over the already selected score by singing.

If "The chance in going to over next team" (П О И Ы) comes out
To next team.

If "THE CHANCE"(П О П Ы Т К А) comes out
The winning two points are increased in case of over success score by singing.

Repeat step 4~5.
Changing the team of blue or red alternately for 4 to 5 courses.

For your reference
"X" Signal to be on selected No. once, it's not selected.

When reaching the targeted winning NO.
For going on the sing room game, press **NUMERIC button 1**.
To cancel, press **NUMERIC button 2**.

For your reference
On pressing the **RETURN**, one time it is returned to the condition before.

Masterpiece Impression Function

This can select when you want to impress the masterpiece as kinds you like.

Press NUMERIC button 7 on the main MENU.

Select MENU you want.

1. Selection per melody

(Pressing NUMERIC button 1.)

1. Select the melody number you want by pressing the **NUMERIC buttons**.
2. Press **PLAY(▶)** .
   - Melody is played randomly-selected which collected in karaoke disc (K-CD3.0).

2. Performance per melody

(Pressing NUMERIC button 2.)

1. **Total performance**
   (Pressing NUMERIC button 1.)
   - Melody is played randomly-selected which collected in karaoke disc (K-CD3.0).
2. **Performance per composer**
   (Pressing NUMERIC button 2.)
   Select the performance you want by using the **NUMERIC buttons** and **PREV./NEXT(|◀◀/▶▶|)** and then press **PLAY(▶)** .
3. **Performance per atmosphere**
   (Pressing NUMERIC button 3.)
4. **Cinema music (Pressing NUMERIC button 4.)**
   - Cinema music is played randomly-selected which collected in-itself.

Note: If press the **STOP(■)** , next melody is played rightly and randomly.

3. Selection of musical instrument

Press the NUMERIC button 3 repeatedly.
-The sound of melody is changed.

Note: If can be different, for it is the sound of electronic musical instrument.

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	Maxmum Playback Time
Video CD	COMPACT disc DIGITAL VIDEO	Audio + Video	12 cm	74 minutes
			8 cm	20 minutes
Audio CD	COMPACT disc DIGITAL AUDIO	Audio	12 cm	74 minutes
			8 cm	20 minutes
Karaoke Disc	**Karaoke CD 3.0**	Karaoke	12 cm	74 minutes

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.		• 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.

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 track indicator in the display window is lit.)
No picture.	• The TV is not set to receive VCD 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 VCD 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 VCD, or track 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.
	• The Rating level is set.	• Cancel the Rating function or change the rating level.
	• The plugs and jacks are dirty.	• Wipe them with a cloth slightly moistened with alcohol.
Severe hum or noise is heard.	• 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 unit.

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** (TUNRE, TAPE, KARAOKE/ VCD or AUX).
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.
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.

SECTION / MODEL		FFH-2103AX	FFH-2108AX
[General]	Power supply	Refer to the back panel of the unit.	
	Power consumption	80W	90W
	Mass	7.7kg	9.7kg
	External dimensions (W x H x D)	273 x 330 x 356 mm	
[VCD/CD] [KARAOKE] CD	Frequency response	40 - 18,000 Hz	
	Signal-to-noise ratio	70 dB	
	Dynamic range	70 dB	
	Video output	1.0 V, 75 Ω, RCA jack	
[Tuner] FM	Tuning Range	65 -74 MHz, 87.5 -108.0 MHz	
	Intermediate Frequency	10.7 MHz	
	Signal to Noise Ratio	61/58 dB (MONO/ STEREO)	
	Frequency Response	60 - 12,500 Hz	
[Tuner] AM (MW)	Tuning Range	522 - 1611 kHz	
	Intermediate Frequency	450 kHz	
	Signal to Noise Ratio	35 dB	
	Frequency Response	100 - 2,000 Hz	
[Amp]	Output Power	30W (6Ω, 2ch, T.H.D 10%)	75W (6Ω, 2ch, T.H.D 10%)
	T.H.D	0.2%	
	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	
[Speakers]		**FE-2103VE**	**FE-2108VE**
	Type	2 Way 2 Speaker	3 Way 3 Speaker
	Impedance	6 Ω	6 Ω
	Frequency Response	70 - 20,000 Hz	60 - 20,000 Hz
	Sound Pressure Level	86 dB/W (1m)	86 dB/W (1m)
	Rated Input Power	30 W	75 W
	Max. Input Power	60 W	150 W
	Net Dimensions (W x H x D)	200X326X227mm	230X326X277mm
	Net Weight	2.69kg	5.07kg

※ Designs and specifications are subject to change without notice.
※ The working life of this product is 7 years since the date of purchase.

LG Electronics Inc.

P/NO :3828R-A026A