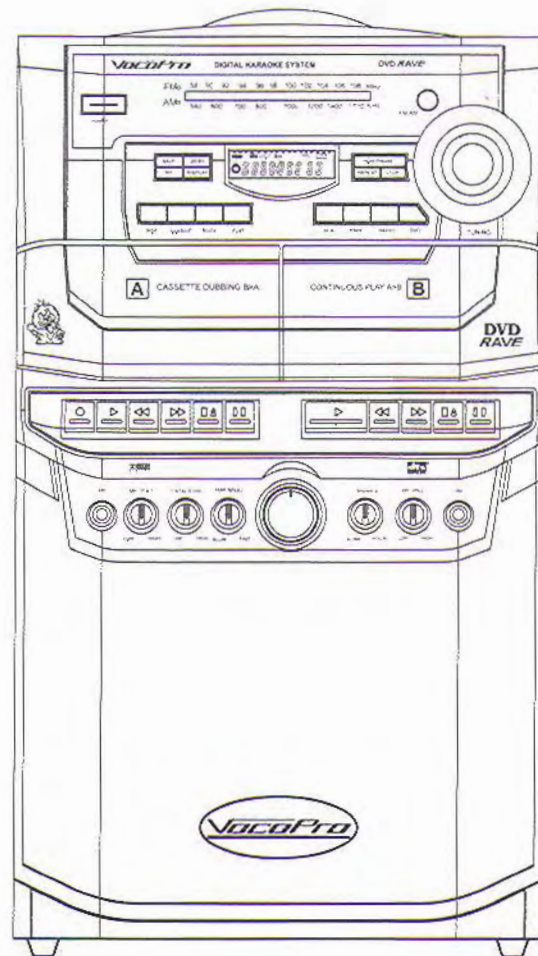


# VACO PRO

## DVD-RAVE



MULTI-FORMAT DIGITAL KARAOKE SYSTEM  
W/ DUAL CASSETTE DECKS AND AM/FM TUNER

ULTIMATE CHOICE OF KARAOKE ENTERTAINMENT

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## IMPORTANT SAFEGUARDS

### WARNING

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE, FIRE OR SHOCK HAZARD. DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.



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 products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

### WARNING

**RISK OF ELECTRIC SHOCK  
DO NOT OPEN**

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



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

## IMPORTANT SAFETY INSTRUCTIONS

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with a dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturers instructions.
- 8) Do not install near heat sources such as radiators, heat registers, stoves, or other apparatus' ( including amplifiers) that produce heat.
- 9) Do not defeat safety purposes of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Unplug this apparatus during lightening storms or when not in use for long periods of time.
- 13) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug damage, exposure to liquid, rain or moisture.
- 14) This appliance should not be exposed to dripping or splashing water and away from object with liquid such as vases.

**CAUTION: THIS PRODUCT COMPLIES WITH DHHS RULE 21 CFR SUBCHAPTER J APPLICABLE AT DATE OF MANUFACTURE.**



## CAUTION

### READ THIS BEFORE OPERATING YOUR UNIT

#### Installation:

- \* Operate only from a power source as indicated on the unit in the operating instructions.
- \* Overloaded AC outlets and extension cords are dangerous and so are frayed cords and broken plugs. Call your service technician for replacement of such cords and plugs.
- Do not allow anything to rest on, roll over, or pinch the power cord, and do not place the power cord where it is subject to traffic or abuse, This may result in a shock or fire hazard.
- \* Audio products are provided with ventilation openings to allow heat generated during operation to be released. If these openings are blocked, heat build-up within the set can cause failure which may result in a fire hazard.

#### Therefore:

1. Never block the ventilation openings of a unit by placing it on a bed, soft rug, etc.
2. Never place unit in a built-in enclosure unless proper ventilation is provided.
3. Never cover the opening with a cloth or other material.
4. The unit should not be installed near or over radiators, heat registers, or other sources of heat

#### To avoid personal injury:

1. The manufacturer recommends that this unit not be mounted on a wall or ceiling.
2. Carefully follow the operation instructions when making connections.

#### Getting your system ready for use:

- \* Choose an area away from heat. Allow about three inches between the cabinet back and the wall for proper ventilation. Place your DVD-RAVE system near an AC outlet supplying common household current(120V AC60Hz or 240V AC 50Hz).

**Do not plug in at this time.**

#### Grounding or Polarization:

- \* Your DVD-RAVE system is equipped with a polarized alternating current line plug(a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

#### Damage Requiring Service:

The appliance should be serviced by qualified service personnel when:

1. The power supply cord or the plug has been damaged; or
2. Objects have fallen, or liquid has been spilled into the appliance; or
3. The appliance has been exposed to rain; or
4. The appliance does not appear to operate normally or exhibits a marked change in performance; or
5. The appliance has been dropped; or the enclosure damaged.

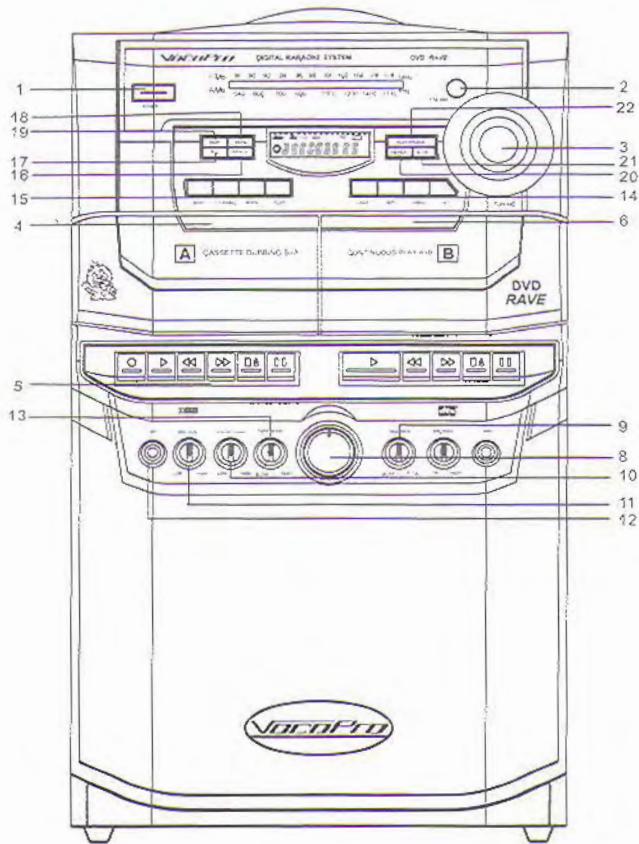
#### WARNING:

1. Do not turn on your stereo system with the volume at maximum. This will damage your speakers and void your warranty.
2. Do not insert tools, hands or figures in openings (such as a tape slot), especially if the unit is connected to a power source.

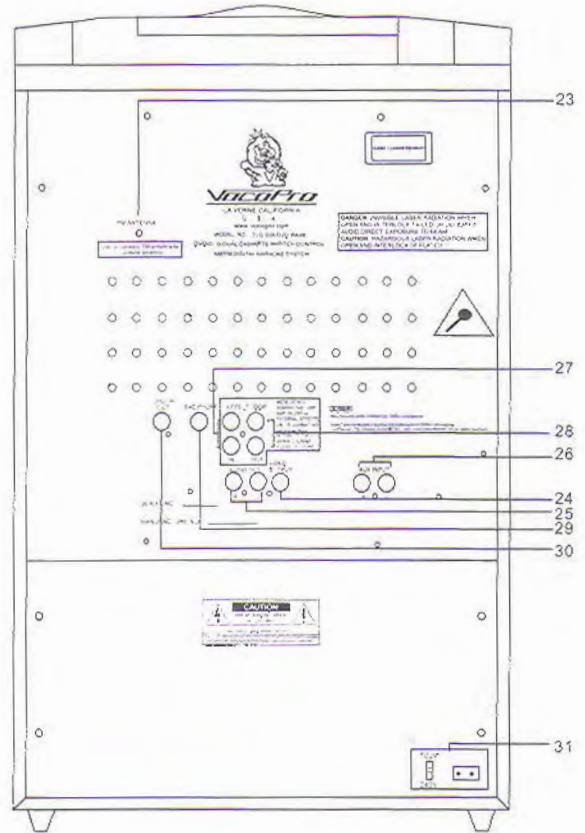


# CONTROLS AND FUNCTIONS

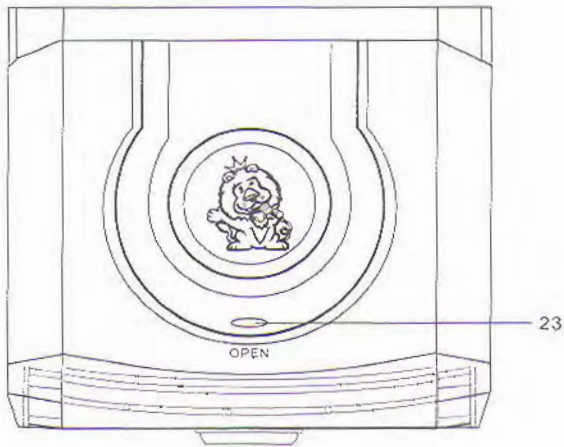
## FRONT VIEW



## REAR VIEW



## TOP VIEW



Manufactured under license from Dolby Laboratories.

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Confidential Unpublished Works. ©1992-1997 Dolby Laboratories, Inc. All rights reserved.





## CONTROLS AND FUNCTIONS

1. POWER--Press to turn the system ON. Press again and release to turn the system OFF.
2. FM/AM--Press to select the BAND MODE for radio operation.
3. TUNING--Press to select the CHANNEL frequency for radio operation.
4. CASSETTE DECK A-B CONTROLS
5. KEYS OF DECK A
  - \* RECORD-Press to start a CASSETTE RECORDING.
  - \* PLAY-Press to start CASSETTE PLAYBACK.
  - \* REWIND-Press to REWIND tape.
  - \* FAST FORWARD- Press to ADVANCE tape.
  - \* STOP/EJECT-Press once to STOP tape. Press again to EJECT the cassette.
  - \* PAUSE-Press to temporarily STOP in PLAY or RECORD mode.
6. CASSETTE DECK B
7. KEYS OF DECK B
  - \* PLAY-Press to start a CASSETTE RECORDING.
  - \* REWIND-Press to REWIND tape.
  - \* FAST FORWARD-Press to ADVANCE tape.
  - \* STOP/EJECT-Press once to STOP tape. Press again to EJECT the cassette.
  - \* PAUSE-Press to temporarily STOP in PLAY or RECORD mode.
8. VOLUME--This control RAISES and LOWERS the MASTER VOLUME.
9. BALANCE--Adjusts the OUTPUT level between the LEFT and RIGHT speakers.
10. DIGITAL ECHO--A VOCAL EFFECT to add depth to vocals. It is recommended to speak into the microphone to achieve a desired echo level when adjusting.
11. MIC VOL(1&2)--These RAISE and LOWER the MIC CHANNELS 1-2 VOLUMES.
12. MIC JACKS(MIC1/MIC2)--These 1/4" jacks are for connecting MICROPHONES.
13. TAPE SPEED--This INCREASES or DECREASES the TAPE PLAYBACK SPEED. Turn clockwise or counter clockwise to adjust tape to desired speed.
14. AUX/TAPE/RADIO/DVD INPUT SELECTOR--These switch the DVD-RAVE's active INPUT FUNCTION. Press the corresponding button of the function, i.e., tape, cd, radio, to use that function.
15. POP/CLASSIC/ROCK/FLAT--These switch the EQ pre-sets for a particular music style. Press the corresponding button to set the pre-set for the desired style of song.
16. DISPLAY--Press DISPLAY to display the CURRENT TRACK and ELAPSED/REMAINING TRACK TIMES.
17. R/L-- Press this button to select multiplex LEFT/ RIGHT (LL/RR) channel audio modes.
  
18. F.F▶▶--Press to SKIP to the beginning of the next track.
19. REW◀◀--Press to SKIP BACK to the beginning of the current or last track.
  
20. REPEAT--Press REPEAT once, the symbol "∞" will appear on the LED display. The DVD player will REPEAT the chapter currently playing. Press REPEAT again, and "∞" will light on the display. The DVD player will then repeat the disc continuously until the REPEAT key is pressed again.
21. STOP--To stop playing the DVD, press STOP once, the VFD will display chapter number of title and last playing time of the DVD. Press STOP twice the word "stop" lights on the display.
22. PLAY/PAUSE--Press and release to start a DVD playing from track number 1. The VFD chapter indicator will display "1" and the elapsed time indicating that track number 1 is playing. Press this key to temporarily stop during play.
23. OPEN--Press OPEN to open DVD compartment tray. Close DVD compartment tray by pressing down the CD compartment lid.
24. FM ANTENNA--Connect the FM ANTENNA wire for best possible TUNER reception.
25. VIDEO OUTPUT--To connect unit to a TV monitor for viewing preformatted lyrics on your TV screen when playing a CD+G KARAOKE, VCD, SVCD and DVD disc etc.



## CONTROLS AND FUNCTIONS

**NOTE:** Some TV's may not have a VIDEO input jack. In this case, use an RF modulator(sold separately) to connect to your TV.

26. AUDIO OUT JACK--Use this jack to expand your system by connecting it to another recording device, receiver or amplifier.

27. AUX--This can be used to connect to an audio output of an external audio device.

28. EFFECTS LOOP IN--Use this loop jack to connect the output of an external effects unit, such as a key controller or EQ. Remove bar by pulling straight out.

**IMPORTANT:** Do not discard loop bar. It is necessary for the loop bar to be in place when there is no external effects unit being used.

29. EFFECTS LOOP OUT--Use this loop jack to connect to the input jack of an external effects unit, such as a key controller or EQ. Remove bar by pulling straight out.

**IMPORTANT:** Do not discard loop bar. It is necessary for the loop bar to be in place when there are no external effects units being used.

30. DIGITAL OUT--This is used to connect to amplifiers with a built-in encoder for PCM or RAW output.

31. AC CORD--Plug AC power cord into 120V AC or 240V AC socket outlet and select the local power setting.

**IMPORTANT:** Be sure to select a correct local power setting before plugging into an AC outlet, or possible system damage and even failure can occur.

## RADIO OPERATION

1. Unravel the FM aerial wire located on the rear of the unit.
2. Press the POWER switch on.
3. Set the FUNCTION switch to radio.
4. Set the Band switch to the FM or AM position.
5. Rotate the Tuning control to the desired station.
6. Adjust the VOLUME control and TONE control to the desired sound level.

**NOTE:** \* When using the FM band, ensure that the aerial wire is unraveled and fully extended  
\* If the FM station is poor or noisy, try moving the aerial wire to a different position, or press the BAND key until FM MONO shows in the display.

## CONNECTING DVD SYSTEM TO A TELEVISION AND AUDIO DEVICE

CONNECTING THE VIDEO:(see figure below)

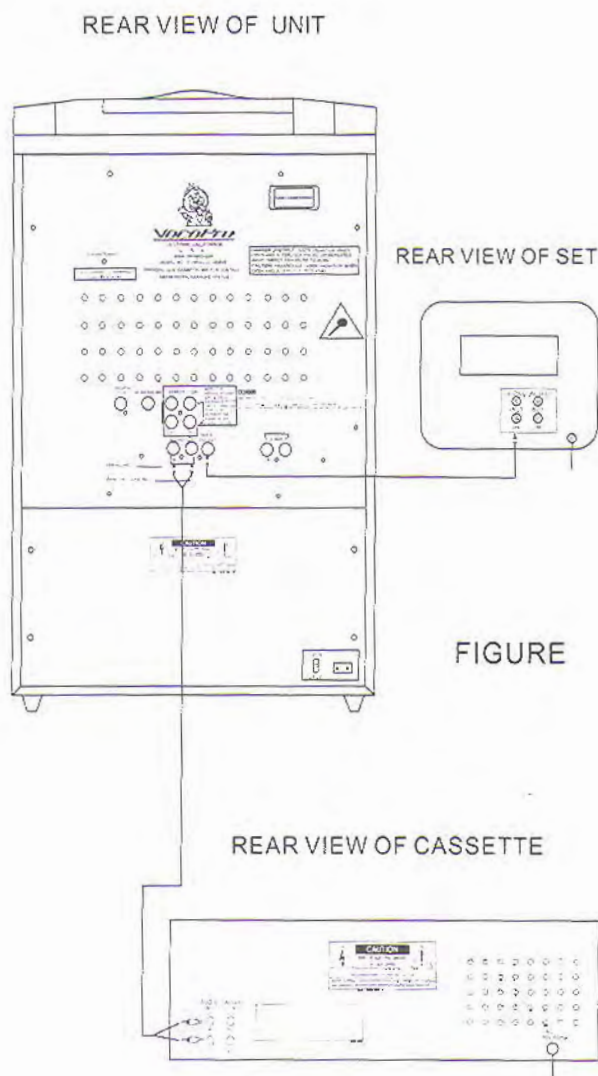
1. Connect the (included) video cable to the video output jack on the back of the DVD-RAVE Karaoke system.
2. Connect the other end of the video cable to the video input jack on the back of your television.
3. On your television's remote control (or on the front panel of TV), press the TV/Video button.
4. Turn on the power of the system.
5. Select "DVD" for the input function.
6. Insert a DVD disc into the player and press play, the video will appear on your television screen.

### NOTES:

- A) For song lyrics to appear on screen. You must be playing a CD+Graphics VCD, SVCD, DVD etc. disc. When playing an ordinary audio CD, lyrics will not appear on screen.
- B) While playing a CD + G, use of the "Search" function will cause the graphics to drop out.
- C) If your TV does not have a video line input, either:
  1. Connect the video cable to the video input of a VCR, turn your TV to the channel normally set for VCR, select AUX/LINE on your VCR, and you should be able to view the song lyrics.
  2. Connect the video cable to an external RF modulator. An RF modulator is not included.

### CONNECTING THE DVD SYSTEM TO AN AMP OR OTHER RECORDING DEVICE.

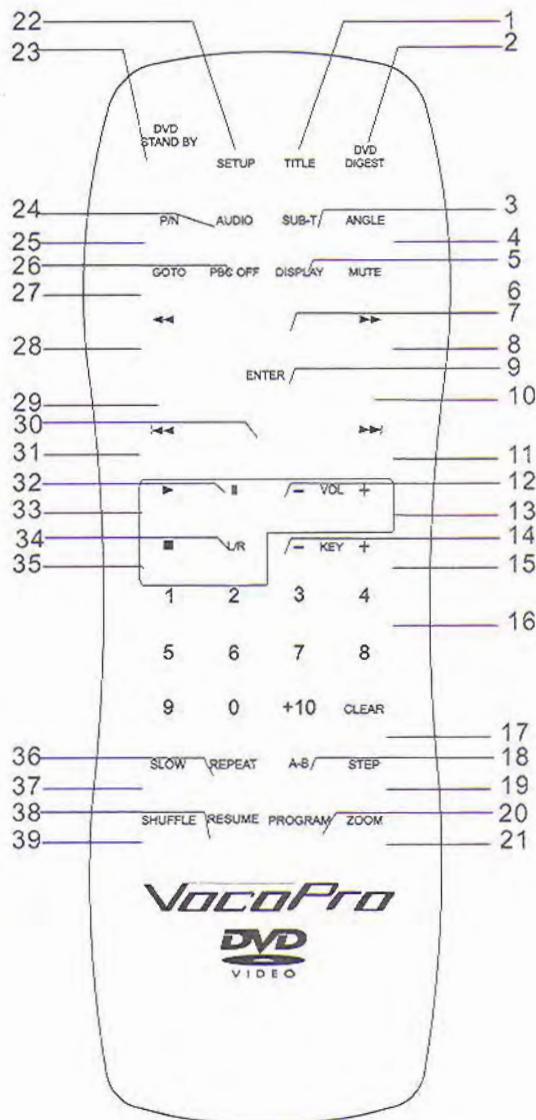
REC(INPUT) jacks of an amp. Connect the audio output jacks of RAVE to the audio input jacks (CD, AUX) of the amp to expand your system. You can also connect your audio output to the audio input jacks of a recording device (CDR, MD recorder).





# REMOTE CONTROL FUNCTIONS

## FUNCTION OF THE REMOTE CONTROL UNIT



1. Title Manual Select(DVD only)
2. Returns to Menu List
3. Selects Subtitles (DVD only)
4. Selects Viewing Angle(DVD only)
5. Selects the OSD
6. Mutes all Audio
7. Navigates Up in Menu Screens
8. Fast forwards a Track/Scene
9. Confirms a Menu Selection
10. Navigates Right in Menu Screens
11. Skip to the Next Chapter
12. Lowers the Volume
13. Raises the Volume
14. Lowers Key of Source Music
15. Raises the Key of Source Music
16. Enters Numeric Data in Menu Screens
17. Clear Data in Menu Screens
18. Creates, Repeats & Cancels A-B Loop
19. Advances Playback 1 Frame Per Press
20. Enters the Program Selection Menu
21. Zooms the Video Image Each Press
22. Enters the Main Setup Menu
23. Power ON/OFF
24. Selects Soundtrack Mode (DVD only )
25. Toggles between PAL or NTSC formats
26. Enables and Disables PBC mode
27. Enters the Goto Time Menu Screen
28. Fast-Reverses a Track/Scene
29. Navigates Left in Menu Screens
30. Navigates Down in Menu Screens
31. Skip to the Next chapter
32. Pauses Playback
33. Initiates Playback
34. Selects LL/RR Audio Modes
35. Enters Auto-stop Mode & Stops Playback
36. Selects Chapter or Title Repeat
37. Initiates Slow Playback Modes
38. Return to Menu List(DVD only)
39. Initiates Random Playback Mode

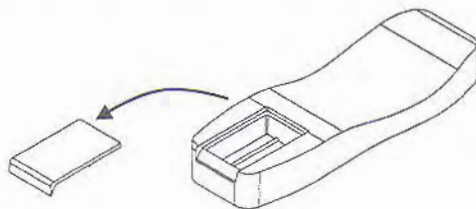


## REMOTE CONTROL OPERATION

Preparation of the remote control.

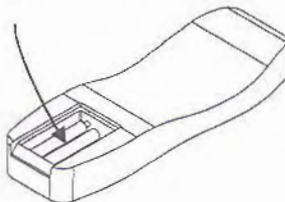
First, place the batteries into the remote control. Then you can use remote control for operation.

1. Open the cover

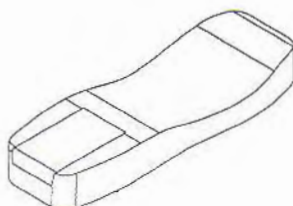


2. Insert the batteries(AAA)

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



3. Close the cover.



### NOTE ON THE BATTERIES

Improper use of batteries may cause battery leakage and corrosion. To operate the remote control correctly, follow the instructions below.

1. Do not insert batteries into the remote control in the wrong direction
2. Do not charge, heat, open, or short-circuit the batteries, or throw batteries into fire.
3. Do not leave dead or exhausted batteries in the remote control.
4. Do not use different types of batteries together, or mix old and new batteries.
5. If you do not use the remote control for a long period of time, remove the batteries to avoid possible damage from battery corrosion
6. If the remote control does not function correctly or the operating range becomes reduced, replace all batteries with new ones.
7. If battery leakage occurs, wipe the battery liquid from the battery compartment, then insert new batteries.

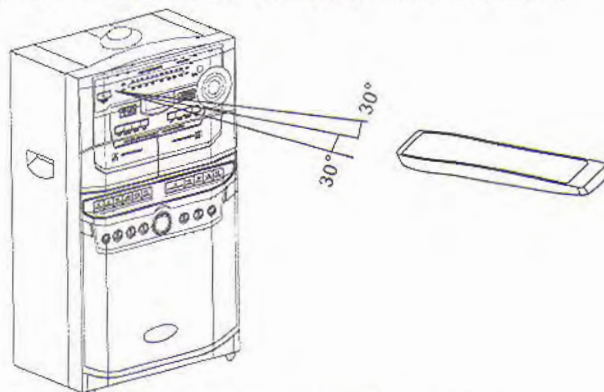
The batteries can be used for one year in normal condition.



## REMOTE CONTROL OPERATION

### OPERATION OF THE REMOTE CONTROL

The following is for instructions on how to use the remote control.



Distance: Within 15 feet from the front of the remote sensor.

Angle: Within 30° in each direction of the front of the remote control.

Do not expose the DVD-RAVE's remote sensor to strong light source such as direct sunlight or other illumination. If you do so, you may not be able to operate the remote control.

### NOTES ON THE REMOTE CONTROL

1. Direct the remote control at the remote sensor of the DVD video player.
2. Do not drop or give the remote control excessive shock.
3. Do not let the remote control sit in extremely hot areas.
4. Do not spill water or any liquid on the remote control.
5. Do not open the remote control cover.

### REMOTE CONTROL KEY FUNCTION REVIEW

This chapter lists the functions of keys on the remote control. It is intended for more detail. You can refer to the previous pages for the quick description of functions.

#### 1. TITLE

Press this button, to have the title menu of the DVD disc appear. Use the navigation  $\blacktriangle$  $\blacktriangledown$  $\blacktriangleleft$  $\blacktriangleright$  buttons to move the selection mark to the desired menu. Then press ENTER button to confirm the selected contents. (It may be the next sub-menu. Use  $\blacktriangle$   $\blacktriangledown$  buttons and ENTER button to operate).

#### 2. DVD DIGEST

As for DVD discs, when PBC is ON, this button return to the title menu during playback. If set to "PBC OFF", when pressed "DVD DIGEST" will show all chapter and title info. You can select number to play. As for VCD discs, this function works when PBC is ON.

#### 3. SUBTITLE

Press this button to select the language of the subtitle such as Chinese, English etc. Each time when pressing it, the subtitle language will switch to another one.

#### 4. ANGLE

As for a DVD disc with multi-angles, press this button to view the picture from the different angles, each time it is pressed, the picture will switch to another angle.

#### 5. DISPLAY

Press this button to display the time of CHAPTER, TITLE and now disc playing.

#### 6. MUTE

Press this button to have the audio playback muted.

#### 7. $\blacktriangle$ -UP

When the DVD menu or system menu is displayed on the TV screen, press this button to move selection mark up.



## DVD OPERATION

### 8. ►►

Press this button to play in fast forward without sound, each time it is pressed, the fast forward speed will change up a speed. Finally it will return to the normal playback speed.

### 9. ENTER

Press this button to select menu commands and commence playback.

### 10. ◀ - right

Press this button to move selection mark up in menu screens.

### 11. ►►|

As for DVD discs, press to skip the next chapter. As for a SVCD disc or other disc, press this button to skip to the next track.

### 12. VOL--

Each time pressed, the volume will lower a volume unit.

### 13. VOL+

Each time pressed, the volume will raise a volume unit.

### 14. KEY --

Press this button to lower the musical key (Karaoke mode must be set to on).

### 15. KEY +

Press this button to raise the musical key (Karaoke mode must be set to on).

### 16. NUMBER BUTTONS

(0), (1), (2)....(9) etc are used for entering numbers, For example, to enter the number of a/karaoke track, the number of DVD chapters and the number of the time etc.

When the number of the track is more than 10, use the 10+ button first, then enter the second number, each time when press 10+button, the number will increase 10.

### 17. CLEAR

When in a menu screen, press this button to cancel the entered number.

### 18. A-B

During playback, press this button once to set point (A) where the loop will start. Press this button again to set point(B) where the loop will end. The playback will then loop between the A and B points. Press this button the third time to cancel the loop.

### 19. STEP

Press this button to play frame by frame. Each time pressed, the picture will advance one frame.

### 20. PROGRAM

Press this button to create a custom playback order.

### 21. ZOOM

During playback, press this button to zoom the picture. Press it once and the picture zooms 2x. Press it twice and the picture will zoom 3x, press it a the third time and the picture will zoom 4x.

### 22. SET UP

Press this button, for the SETUP screen to appear. You can set up the system settings according to your needs.

### 23. DVD STANDBY

Press this button to turn on or turn off.

### 24. AUDIO

Press this button to change "voice" and "music" for karaoke DVD discs, or change the audio language, AC-3 and DTS modes.

### 25. P/N

Press this button to switch the system of video output. PAL, NTSC or AUTO) can be selected.

### 26. PBC OFF

As for a DVD disc, this displays all chapter and title info. You can use the left and right buttons to select for playback. As for VCD2.0 discs, it will skip this menu and start playing.

### 27. GOTO

You can select chapter, title or time, then press the "ENTER" key to goto that point.



## DVD OPERATION

### 28. ⏪

Press this button to playback in fast reverse. Each time pressed, the reverse speed will increase in speed. Finally it will return to normal playback speed.

### 29. ⏴ --Left

When the DVD menu or system menu is displayed, this navigates up.

### 30. ⏵ --Down

When the DVD menu or system menu is displayed, this navigates down.

### 31. ⏮

As for a DVD disc, press this button to skip to the previous chapter to play, as for a SVCD disc or other disc, press this button to skip to previous track.

### 32. ⏸

While the player is in the playback mode (includes slow, fast forward, fast reverse), press this button and the playback will pause. Press again to return to normal playback.

### 33. PLAY

Press to initiate playback.

### 34. L/R

As for a VCDs or SVCDs, press this button to select left, right, stereo etc. Multi output modes can also be chosen with DVDs. Options differ depending on the disc format.

### 35. STOP

As for a DVD disc, press this button once and the playback will pause, press this button again to stop the playback. As for a non-DVD disc, press it once to stop the playback.

### 36. REPEAT

As for a DVD disc, press this button to repeat the current chapter, press it again to repeat all programs of the current title. Press it a third time to cancel repetition. As for a SVCD, CD disc etc. with PBC off), press this button to repeat the current track. Press it a second time to repeat all, and a third time to cancel the repetition.

### 37. SLOW

Press this button to play in slow speed. This can also play slow-forward and reverse. Each time pressed, the slow speed will change once. Finally it will return to the normal playback speed.

### 38. RESUME

As for VCD2.0 version discs, this launches the main disc onscreen.

### 39. SHUFFLE

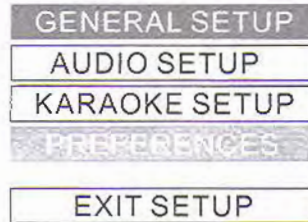
Initiates random playback of tracks in any order. Press it twice to resume normal playback.

## SETUP OPERATIONS

### System setup by remote control

Press SETUP button, then the following SETUP screen will appear:

\*\*\*--- SET MENU---MAIN PAGE --- \*\*\*



Press the nav. ▲ ▼ buttons to highlight the desired item, then press ENTER for selection.

**NOTE:** In each menu, you can use▲ or▼ buttons to highlight the desired item, then press ENTER to confirm the selection.

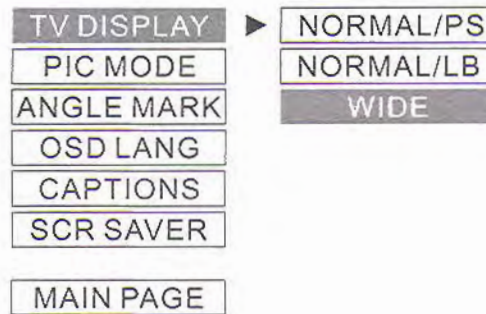
In any time, you can press SETUP to exit the system setup.

There are some common settings in the following, that users can use to grasp the method for setting up other items.

**For example:** The setting of the TV display:

1. Press ENTER, go to GENERAL SETUP PAGE, the setup screen will appear

\*\*\* ---GENERAL PAGE--- \*\*\*



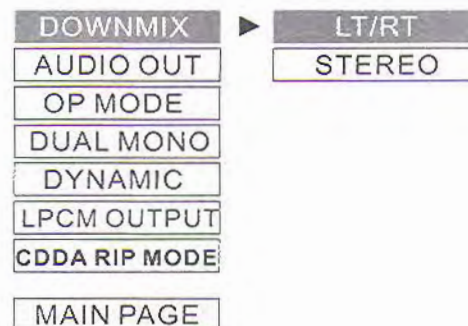
2. Press ▶ button to enter the top menu on the right of the screen, if the desired TV display mode is wide-screen, press◀ button twice to highlight "WIDE", then press ENTER and press setup button to exit system setup

**NOTE:** There are three types of TV shape. They are WIDE (wide-screen), NORMAL PS (pan-scan) and NORMAL LB (letterbox).

**For example:** The setting of DOWNMIX stereo analog output mode:

1. Press SETUP, the SETUP screen will appear, press ▼ button highlight "AUDIO" SETUP, Press ENTER button, the following on-screen display will appear.

\*\*\* ---AUDIO SETUP --- \*\*\*



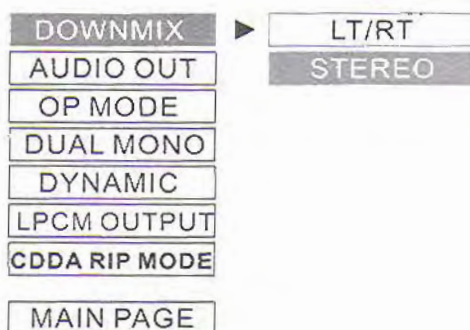


## SETUP OPERATIONS

2. Press ► button to enter the top menu on the right of the screen, select the highlight "ANALOG", then press ENTER and press ◀ and ▼ to MAIN PAGE. Press ENTER to finish AUDIO OUT SETUP.

3. Select DOWN MIX, the following will appear

\*\*\*---AUDIO SETUP PAGE---\*\*\*



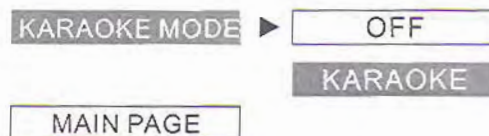
4. Press ► button to goto menu on the right, if the desired audio mode is "STEREO", press ▼ button to highlight "STEREO", then press ENTER and press SETUP button to exit system setup.

**For example:** The setting of KARAOKE mode: There are two steps for setting KARAOKE,

1. Press SETUP and SETUP screen will appear. Press ▼ button to highlight KARAOKE

SETUP, press the ENTER button for the following on-screen display to appear:

\*\*\*---KARAOKE PAGE---\*\*\*



2. Press ► button to enter the top menu on the right of the screen, press ▼ button to highlight "KARAOKE", then press ENTER and press SETUP button to exit system setup

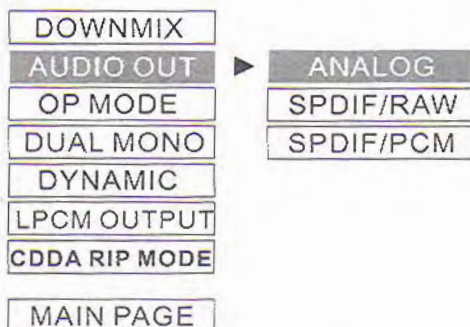
**NOTE:** If you want to use the keys of +/- for vocal range, you must setup KARAOKE to be on.

**For example:** The setting of digital output. If you use the coaxial output, the audio output must be set to RAW or PCM.

The detailed operation is as follows:

1. Press SETUP and SETUP screen will appear. First, Enter SETUP MENU top menu, then select "AUDIO SETUP", press ENTER button, the following on-screen display will appear

\*\*\* ---AUDIO SETUP---\*\*\*



2. Press ► button to enter top menu on the right, Press ▼ button to highlight "SPDIF/RAW." then press ENTER and press SETUP to exit the system.

**NOTE:** The coaxial output is connective setup to amplifier (with RAW, PCM, encoder). The state is that you can not hear sound from music center.



# CASSETTE OPERATION

## TAPE PRECAUTIONS

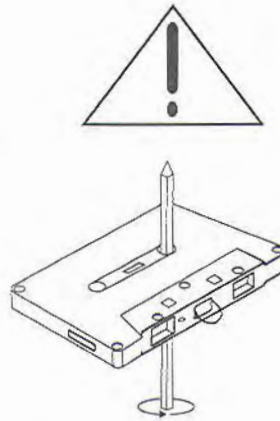
### 1. Recommended Cassette Tapes

In order to obtain optimum performance with the built-in cassette tape deck, it is essential to use only high quality cassette tapes. We recommended to use C-30 C-60 or C-90 cassettes.

**NOTE:** We do not recommended the cassettes with a time of 120 minutes(C-120), which are more likely to jam or tangle in the Player/recorder.

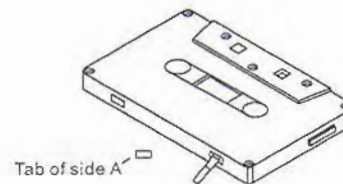
### 2. Checking the cassette(Tape Slack)

Make sure that the cassette tape has no slack prior to it into the cassette compartment. Unless the tape is taut, it may wind around the head mechanism. Use a pencil as shown to take up slack on one of the reels.

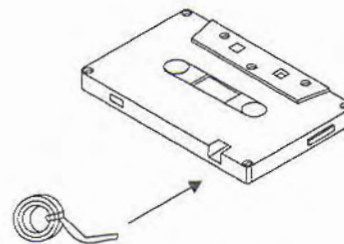


### 3. Accidental Erasure Protection

remove the tab as illustrated so that record mode does not function when the record button is pressed.



To record on a cassette once tabs have been removed, simply cover the slot with plastic tape.



## TAPE OPERATIONS

**Deck B is for playback only, Deck A is for both playback and recording**

### PLAYBACK

1. Set the function control switch to TAPE position
2. Push the POWER switch to turn on the unit
3. Press STOP/EJECT to open the cassette door
4. Insert a pre-recorded cassette with the exposed tape facing downward and the full spool on the lefthand side.
5. Gently push the cassette door closed
6. Press PLAY/PAUSE to start the play
7. Adjust VOLUME as desired and make sure that MIC Volume is in the central position
8. Press STOP/EJECT to stop playback at any time. The tape will automatically stop at the end of the tape
9. Press STOP/EJECT again to open, the cassette door and remove tape

### PAUSE

Press PAUSE to temporarily stop playback or recording .Press it again to resume operation

### FAST FORWARD AND REWIND

Press F.FWD or REW, when the desired location has been reached, press STOP/EJECT or PLAYBACK

**NOTE:** When playing or recording, do not press F.FWD or REW or the recording will terminate





## CASSETTE OPERATION

### SEQUENTIAL PLAY OF TWO CASSETTES

1. Insert a pre-recorded cassette into each of the DECK A and DECK B compartment. Make sure that the full spool is on the LEFT in each of the compartment
2. Set the FUNCTION switch to the TAPE position
3. Press PLAY on DECK B, it will start to play
4. Press PAUSE on DECK A and then press PLAY. When the tape reached the end, the tape will stop and the PLAY key will return to normal position. Immediately afterwards, DECK A will automatically start to play. The tape will continue until it has reached the end and then turn off automatically
5. Adjust TAPE SPEED to speed up or slow down tape while playing

### RECORDING

1. Recording can only be carried out on DECK A
2. Recording is possible from the RADIO, MIC, CD, DVD AND CD+G, TAPE TO TAPE and the AUXILIARY INPUT, which is located at the rear of the unit

### RECORDING FROM RADIO

1. Insert a cassette suitable for recording into DECK A
2. Press the PAUSE on DECK A and then press ONE TOUCH RECORD (PLAY key is automatically engaged when key is pressed)
3. Set FUNCTION switch for the desired source to be recorded FM, AM, TAPE or AUX. operate the function in accordance with the instructions given
4. Start recording by releasing/pressing PAUSE
5. Press STOP/EJECT to stop recording, or press PAUSE to edit recording

### RECORDING FROM CD

1. Press POWER switch to be on
2. Press FUNCTION to DVD
3. Insert the disc into the CD compartment. Press SKIP to select the desired track you wish to record from  
Recording from any position on the track: press PLAY to start playback at DVD function. Press PAUSE when reaching the desired track you wish to record
4. Press RECORD, then PLAY/PAUSE to start recording
5. Press STOP/EJECT to stop recording. The tape will automatically stop at the end of the tape

### TAPE TO TAPE DUBBING

This unit has the facility of recording/dubbing from one cassette to another

1. Set FUNCTION control switch to the TAPE position
2. Load the playback tape into DECK B and a blank tape into DECK A
3. DECK B: Locate the tape where recording will begin
4. DECK A: Locate the position of the tape to be dubbed
5. Press PAUSE on DECK A and then press ONE TOUCH RECORD
6. Press RECORD
7. Press PLAY of DECK B, the PAUSE key of DECK A will automatically be released and the tape will start to record from DECK A. Stop or edit recording by pressing STOP/EJECT or pressing PAUSE

### USING THE MICROPHONE

The DVD-RAVE may be used as a PA (public address), or you can sing along to the TAPE, RADIO, CD or AUXILIARY INPUT.

### PUBLIC ADDRESS

1. Connect the microphone to either MIC input socket



## KARAOKE OPERATION

2. Press the POWER switch to turn the unit on
3. Set the FUNCTION control switch to the AUX or TAPE position
4. Adjust MIC VOLUME control to central position
5. Adjust ON/OFF switch located on the microphone to ON position and speak or sing into the Microphone. The microphone sensitivity and loudness can be adjusted as required by using the MIC VOLUME control and VOLUME control
6. To add depth or ambiance to your voice adjust the ECHO control until the desired effect is obtained

### SINGING TO MUSIC

The microphone can operate together with the RADIO, TAPE, DVD or AUX functions.

1. Select the desired function and operate that function according to the instructions given
2. Insert the microphone into either MIC input socket
3. Move the microphone ON/OFF switch to the ON position and operate the microphone according to the instructions given in the above section

**NOTE:** To prevent feedback or whistling from occurring, make sure that the microphones are facing away from the speakers.



## CARE AND MAINTENANCE

### POWER SWITCH

After using the DVD-RAVE, turn off the power by pressing the power switch

### CLEANING THE UNIT

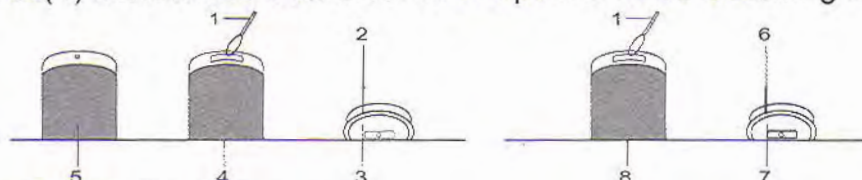
To clean the unit, simply wipe with a soft clean cloth

### CLEANING TAPE HEAD

When the tape is running, magnetic tape residue, powder and dust naturally accumulate on the tape deck heads, capstan and pinch roller, when they become too dirty, you will find:

- \* Sound quality deteriorate
- \* The output sound level drops
- \* The previous recording is not completely erased
- \* Recording is not performed satisfactorily

Therefore, for continued high performance from the cassette section, periodically clean the heads, pinch rollers and capstans whenever an accumulation of dust and red-brown oxide particles is noticed. To do this, open the cassette holder. Remove any cassettes still in the cassette compartments. Carefully rub each head(4,5,8),pinch roller(3,7) and capstan(2,6) with a cotton swab(1) moistened with alcohol or special head-cleaning fluid.



Proprietary tape head cleaners are available from most HI-FI retail outlets

### CASSETTE DECK CARE

Use a clean soft cloth. Never use benzene or other strong chemical cleaners since these could damage the finish or your unit. It is important that no liquid reaches the inside of the unit.

**NOTE:** \* Screwdrivers and other metal objects should never be allowed to come in contact with the tape heads. These will scratch the sensitive surface causing damage to your tapes.  
\* Magnets or magnetized objects should not be placed near tape heads as well.



**To prevent fire or shock hazard, disconnect your stereo system from the AC power plug when cleaning.**

### COMPACT DISC HANDLING DISC

Although the music tracks in the disc are covered with a protective layer, it is still advisable to treat the disc carefully. Ensure that you always pick up discs by the edge, and put them back in their holders immediately after use.



### CLEANING DISC

Cleaning will not normally be necessary. However should fingerprints, dust or dirty appear, you can wipe them off with a soft, lint-free cloth. Wipe the disc in a straight line from center edge



**NOTE:** Do not use detergent or abrasive cleaning agents, for they can damage the disc.



### DVD PLAYER

The player mechanism is fitted with self-lubricating bearings, and must not be oiled or greased.



## TROUBLE SHOOTING GUIDE

If you have followed the instructions and are having difficulty operating the unit, locate the PROBLEM in the left column below. Check the corresponding POSSIBLE CAUSE columns to locate the problem

PROBLEM	POSSIBLE CAUSE	SOLUTION
POWER switched on, but no sound and no light on the POWER LED	Poor AC power plug connection to wall outlet	Connect AC correctly
		Old wall-outlets sometimes cause power loss. Plug must fit snugly in outlet
The POWER LED System is on but no sound	VOLUME control is at "0" position	Adjust the VOLUME control to a proper sound level
Poor FM reception	Antenna not placed for best tape playback	Move antenna wire around to obtain best reception
System turned on and PLAY pressed, but no sound from TAPE	Function set improperly for tape playback	Slide FUNCTION to TAPE
	PAUSE button pressed in Unrecorded tape inserted	Press and release the PAUSE button Insert recorded tape
Poor playback sound	Dirty heads	Clean heads. See Tape DECK Cleaning
	Cassette tape is badly stretched Heads have become magnetized	Replace the cassette
		Degauss the play and record head with a tape head demagnetiser every 100 hours of use
RECORD button cannot be pressed in	Cassette without erase protection tabs inserted	Try another cassette, or place a piece of tape over the breakout tab holes
Poor recording	Dirty heads	Clean heads. See Tape DECK Cleaning
	Heads have become magnetized	Replace the cassette
		Degauss the play and record head with a tape head demagnetiser every 100 hours of use
Microphone cable broken or intermittent	Replace microphone or microphone cord	
Tape speed is erratic	Dirty capstan and/or pressure roller	Clean the capstan and pressure roller
Cannot copy from DECK " B " to DECK " A "	Unrecorded tape inserted into TAPE " B "	Insert recording tape
	PLAY/RECORD function selector is in wrong position	Set to the proper position
DVD PLAYER Does not work properly	Disc is inserted upside down	Insert disc correctly
	Disc is dirty	Wipe clean with soft cloth
	Disc is scratched	Use a new disc
	Disc seriously warped	Use a new disc
	A nonstandard disc is inserted	Use only brand name disc
	Moisture has formed inside the CD DECK	Wait about 20 to 30 minutes to let it dry
	DVD disc is not being used	Replace CD with a DVD disc
NO Song Appear on screen	Video cable is not connected properly to the TV	Connect the video cable to the RAVE DVD+G VIDEO OUT and to the TV Video in
	Source selector on TV is not set to VIDEO	Using your TV Remote to select VIDEO or AUX input
	TV does not have video line input	Connect from VIDEO OUT of the RAVE DVD+G to the AUX IN of your VCR of connect to an RF Modulator and then to the TV cable input



## SPECIFICATIONS

<b>RADIO SECTION:</b> FREQUENCY RANGE AM FM	520-1710 Khz 88- 108 Khz
<b>AUDIO SECTION:</b> OUTPUT POWER(THD 10%) OUTPUT IMPEDANCE	30W+30W MAX 4 ohms
<b>DVD PLAYER SECTION:</b> FREQUENCY RESPONSE SIGNAL- TO- NOISE RATIO WOW AND FLUTTER D-A CONVERSION COMPATIBLE DISCS	20Hz- 20Khz(+/- 3 dB) 65dB IMMEASURABLE 24 BIT 96 Khz LINEAR CD/CD+G/VCD/SVCD/MP3 /WMA/DVD/CD-R
NUMBER OF PROGRAMS SAMPLING SYSTEM	20 STEP RANDOM ACCESS PROGRAMMING 2X OVER SAMPLING
<b>CASSETTE DECK SECTION:</b> WOW AND FLUTTER FREQUENCY RESPONSE TAPE SPEED	0.35% (WRMS) 125Hz-8Khz (+/-3 dB) 4.75cm/Sec
<b>POWER SUPPLY:</b> AC INPUT POWER	AC 120V 60Hz/240V 50Hz