Acesonic

DGX-400
400 Disc DVD/CD+G Karaoke Changer
With USB/MMC/SD/MS Reader

USER MANUAL
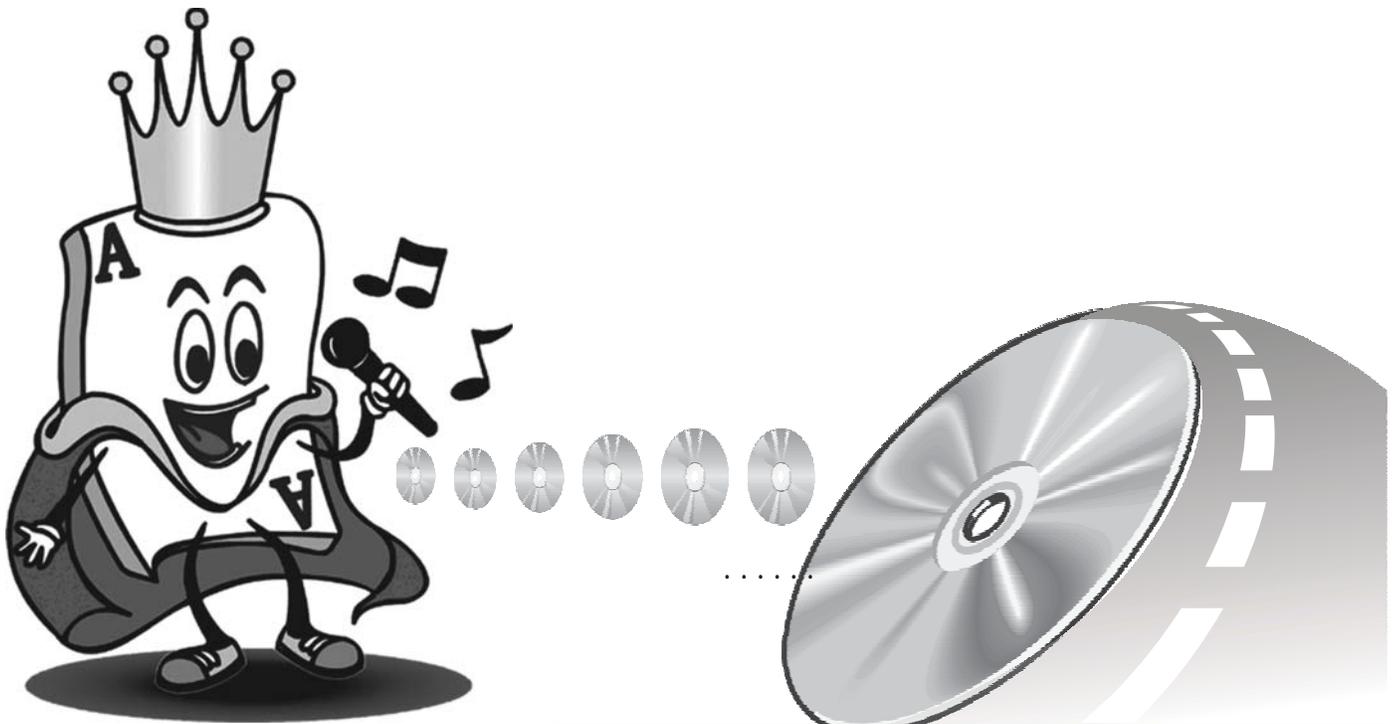
www.acesonic.com

Accessories

**DESIGN AND SPECIFICATION ARE SUBJECT TO CHANGE WITHOUT NOTICE

Confirm the following items upon opening the box:
1. User Manual
2. One AV cable
3. One remote control

Record your product information in the table provided below and refer to it whenever contacting your dealer about your purchase.

Date of Purchase:	
Model No.: DGX-400	
Machine Serial No.:	
Selling Dealer:	
Dealer Address:	
Dealer Telephone No.:	

Features and Capabilities

Main Functions
*The unit not only stores 400 discs, but it can also manage each
 individual discs' information.
*You can edit a disc name (or label) stored in the rotary table so you
 can find the disc you need quickly. The disc names will be arranged
 automatically.
*Compatible discs are CD,VCD,DVCD,CDG,MP3,WMA,SVCD,DVD,DVD-9 ,DVD-
 R, MPEG-4 and MIDI format.

System Functions
*Video Output
 Includes four modes: VIDEO, P-SCAN YPBPR, S-VIDEO, and PC-VGA
*Video Output Formats
 PAL60, NTSC, PAL, AUTO
*TV Screen Mode Output
 4:3PS, 4:3LB, 16:9
*Audio Output
 Includes six analog audio output channels.
 Supports coaxial cable mode.
 Supports composite audio output mode (L/R) in the state of AV.

Other Accessorial Functions
*Multiple music effect modes can meet your different tastes.
*The unit is equipped with karaoke functions such as echo and tempo
 control. It is also capable of scoring.
*Conveniently navigate the multi functional menu with your remote
 control.
*Contains multiple foreign language support.
*Multi angles, multi sub-pictures, multi sound streams
*Multi levels of fast forward, fast backward and slow-motion.
*Multi play modes such as dynamic enlargement, step play, memory,
 program and repeat

Power
*Wide voltage range: 90-250V~
*Low power consumption: power consumption of the system is less than
 25W.

Video Output Interface	X1
Composite Audio Output Interface	X2
S-VIDEO	X1
Mic Input Interface for Karaoke	X2
Simulate Six Sound Channels Output	X1
Score In Interface	X1
Coaxial Audio Output Interface	X1
Full function remote control	X1

Table of Contents

Table of Contents

Safety Precautions

Warning:

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. To avoid electrical shock, do not open the cabinet. Refer all servicing to qualified personnel only. To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.

Caution:

The use of optical instruments with this product will increase eye hazard. This unit is equipped with a radium-laser beam. Do not attempt to open the cabinet to prevent exposure to your eyes. If by chance the laser becomes exposed, do not look directly at the beam to prevent optical hazards.

Safety:

If your machine needs maintenance, contact your dealer and take the unit to a qualified professional for any type of repair. Inappropriate usage of the unit that is not defined as safe behavior in this manual may cause shock or fire. Safety can only be guaranteed by following the guidelines that are defined in this manual. For your safety, read through the user guide and take heed to all attentions and warnings listed,and on the unit itself as well.
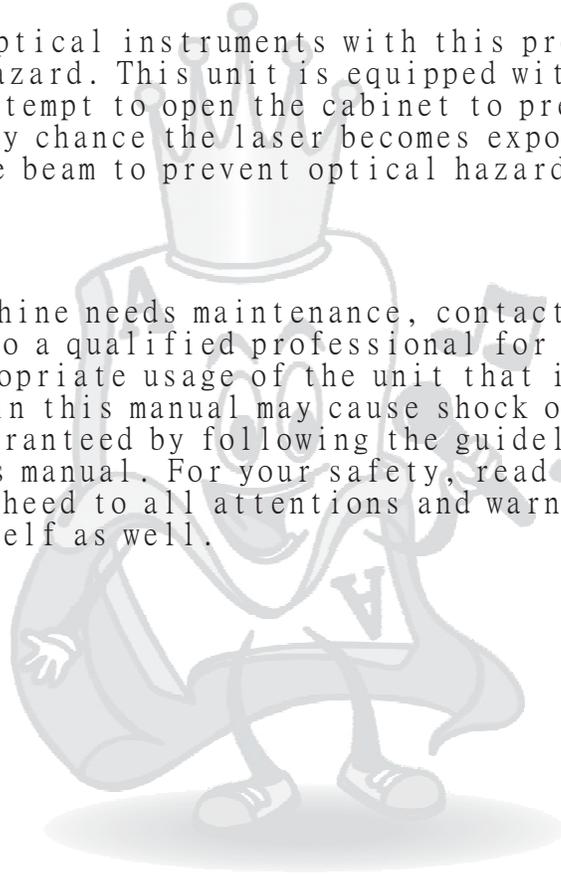
*Any disc that is not listed above will cause the player to display "NO DISC" in the DISPLAY WINDOW. Future media and disc formats maybe supported with firmware upgrade, when available.

*Encoding methods of some media formats may affect the playback (e.g. Unable to fast forward or fast backward or load time). Be sure that the encoding process conforms to the standards for that particular format.

*Dirty, scratched, warped, and defective discs may cause a considerable time delay during the loading and reading of the disc. In extreme cases, this may render the disc

Video Signal Formats
This player also accommodates NTSC and PAL color systems, with automatic detection and override settings.

Digital Audio Formats
This player accommodates, Dolby Digital 5.1 Channels, DTS, and AC-3.

NOTE

*Depending on the AUDIO SETUP> SPDIF settings digital audio signals may not be output as they are recorded on the disc.

Notes Regarding Discs
*Some DVD's, the player starts playback automatically after inserting the disc, regardless whether or not PLAY BACK CONTROL is on or off.
*The image may be poor, noisy, or grainy due to actual defects on the disc itself.
*Some functions may not be possible on all discs as described in this manual.

CAUTION

Power-Cord
Handle the power cord only by its plug, do not unplug the power cord by tugging or yanking on the cord. Touching or unplugging the cord while your hands are wet may lead to an electric shock or a short circuit. If the cord becomes damaged or its wires become exposed, please replace the cord as soon as possible in order to prevent an electric fire or shock. Check the power cord every few months to ensure it is functioning properly.

Handling and Cleaning of

Handling
*At anytime, when handling discs, always hold them from their edges and/or by the circle in the center.
*NEVER write on the any surface of the disc for it may render the disc unreadable.
*Store discs in a clean and dry environment. Storing CD's vertically will also help prevent warping.
*After use, insert CD into jacket or case to minimize wear and tear DO NOT stack CDs on top of one another.
*Do not bend or press the disc. Do not expose the disc to direct sunlight or any heat source.

Cleaning
*Wipe the discs from time to time using a soft cloth. Always wipe from the center towards the edges. NOT in circular motions.
*DO NOT clean with any other cleaning solution, unless it is specifically made for disc cleaning.

NOTE

CDs revolve at very high speeds inside of players. Never attempt to play cracked or warped CDs; doing so may cause the disc to shatter inside or the player to malfunction.

Maintenance

1. Keeping Your Unit Dustproof
You should keep the front cover closed in case dust enters the rotary table.

2. Cleaning The Unit
First, for safety, unplug the power plug from the socket. You can use a dry or damp soft cloth to clean the player. If you need to use a cleanser, Use mild detergent so it will not damage the machine's surface. Wide with a damp cloth. Afterwards, rub the player with a dry cloth. This method is the most commonly used method. In ordinary cases, it is not necessary to use any cleanser to clean the unit.

3. Diagnosing If You Need Maintenance On The Unit
You need maintenance if:
   A)Power line or plug suffers damage;
   B)Liquid or other foreign substance enters the player;
   C)The machine can't work normally when you operate it
      according to the user guide;
   D)The machine suffers damage from a fall or other reasons;
   E)There are abnormal occurrences when the player is in the
      working mode.
*If you come across these problems, pull the power plug from the socket, and bring your machine to a professional maintenance technician.
*If your machine needs replacement of some parts, the professional maintenance technician will install the new part. The new part should be recommended by the manufacturer or should have the same characteristics as the original part.

4. Safety Inspection
After finishing maintenance or repair, the professional maintenance technician should perform some safety inspections to make sure the machine is normal.
The laser head used in the machine is a precise component, if its lens surface becomes dirty, the lenses ability to read discs will worsen, affecting the quality of picture. If you discover this problem, contact the dealer.

Disc Information

This player can play the following discs:

	CD	CD-G	WMA	VIDEO CD2.0	DVCD	MP3	SVCD	MIDI DVD (KARAOK DVD)	MPEG4	DVD
Disc mark	COMPACT disc DIGITAL AUDIO	COMPACT disc DIGITAL AUDIO GRAPHICS		VIDEO CD	DVCD VIDEO	MP3 DIGITAL AUDIO	SUPER-VCD VIDEO	MIDI	MPEG4	DVD VIDEO
Content	Sound	Sound /Image	Sound	Sound /Image	Sound /Image	Sound	Sound /Image	Sound(MOVing BACKGROUND)	Sound /Image	Sound /Image
Time	74min.	74min.		74min.						135min.
Dimensions	12cm	12cm	12cm	12cm	12cm	12cm	12cm	12cm	12cm	12cm

PBC menu:
It is recorded in VCD2.0 disc,showing the content of the disc and convenient for customers to look up program
CD+G:
Audio with image information.
For example: lyric,photo,character or graphic.
VCD disc version:
1.0 version: the moving image and music.
2.0 version: higher definition still with PBC function.
MP3 disc
CD quality audio in a compressed format.
Super VCD:
Combining the strongpoint of DVD and VCD,it has high quality audio.
MIDI DVD:
MIDI is Music Instrument Digital Interface .
MIDI DVD is a disc with music files with recorded midi format which can be played in equipment with normal midi connector.
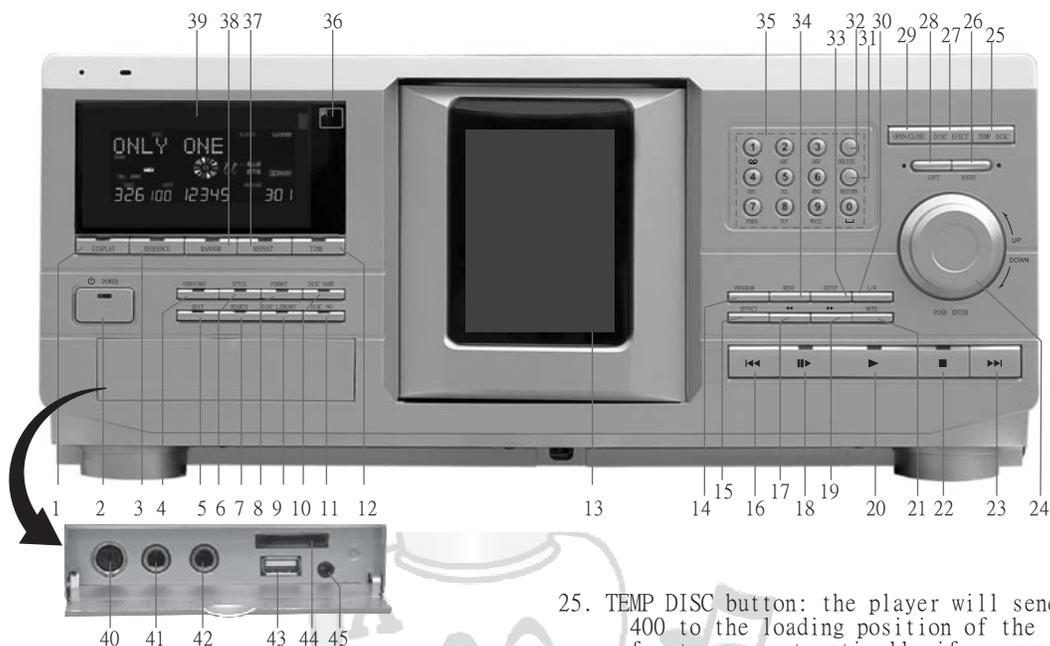MPEG4:
MPEG4 is compressed standard, image quality near dvd disc, sound quality is close to cd audio.
DVD Disc:
DVD is Digital Video Disc. It contains movie and music with eight swing and can store 32 different languages.With MPEG-II and digital stereo effect function, the user can enjoy high quality image and good acoustics at home.

1. DISPLAY button
2. POWER button
3. SEQUENCE button: select the disc format to enter the sequence play mode; select "CLOSE" to exit sequence play mode.
4. USB/CARD button
5. EDIT button
6. STYLE button: select the disc by disc type.
7. SEARCH button
8. FORMAT button: select the disc by disc format
9. Disc Library: select the disc by disc attach (including 15 disc attaches such as disc libl,disc lib2..)
10. DISC NAME button
11. DISC NO button
12. TIME button: set of timer
13. FRONT COVER
14. PROGRAM button
15. EFFECT button
16. ◄◄ :go to the previous song
17. ◄◄ :quicken the speed of fast backward
18. ❚❚▶ :PAUSE/STEP
19. ▶▶ :quicken the speed of fast forward
20. ▶ :PLAY
21. MUTE button
22. ■ :STOP
23. ▶▶❙ :The next song
24.UP/DOWN/ENTER dial: the player will turn the rotary table if you rotate this dial when the front cover is open;the function of this dial is same as the direction buttons on the remote control if you rotate this dial when the front cover is closed; the function of this dial is same as the ENTER button if you press it.

25. TEMP DISC button: the player will send disc 400 to the loading position of the front cover automatically if you press this button when the front cover is open; the player will send disc 400 to the playing position to play automatically if you press this button when the front cover is closed.
26. ➡ :the function of this button is same as the button on the remote control.
27. DISC EJECT button: the player will uplift the disc which is at the loading position of the front cover if you press this button when the front cover is open; if you press this button when the front cover is closed, the player will send the disc which is at the playing position to the related disc slot, secondly the player will send the disc to the loading position of the front cover, thirdly the player will open the front cover, lastly the player uplifts the disc.
28. ⬅ :the function of this button is same as the button on the remote control.
29. OPEN/CLOSE button
30. L/R button
31. RETURN button
32. DELETE button
33. SETUP button
34. MENU button
35. NUMBER button
36. REMOTE SENSOR
37. REPEAT button
38. RANDOM button: Enters random play mode; select "CLOSE" to exit random play mode.
39. FRONT PANEL DISPLAY
40. KEYBOARD jack
41. MICROPHONE 1 jack
42. MICROPHONE 2 jack
43. USB jack
44. MMC/MS/SD jack
45. EARPHONE jack

— 9 —
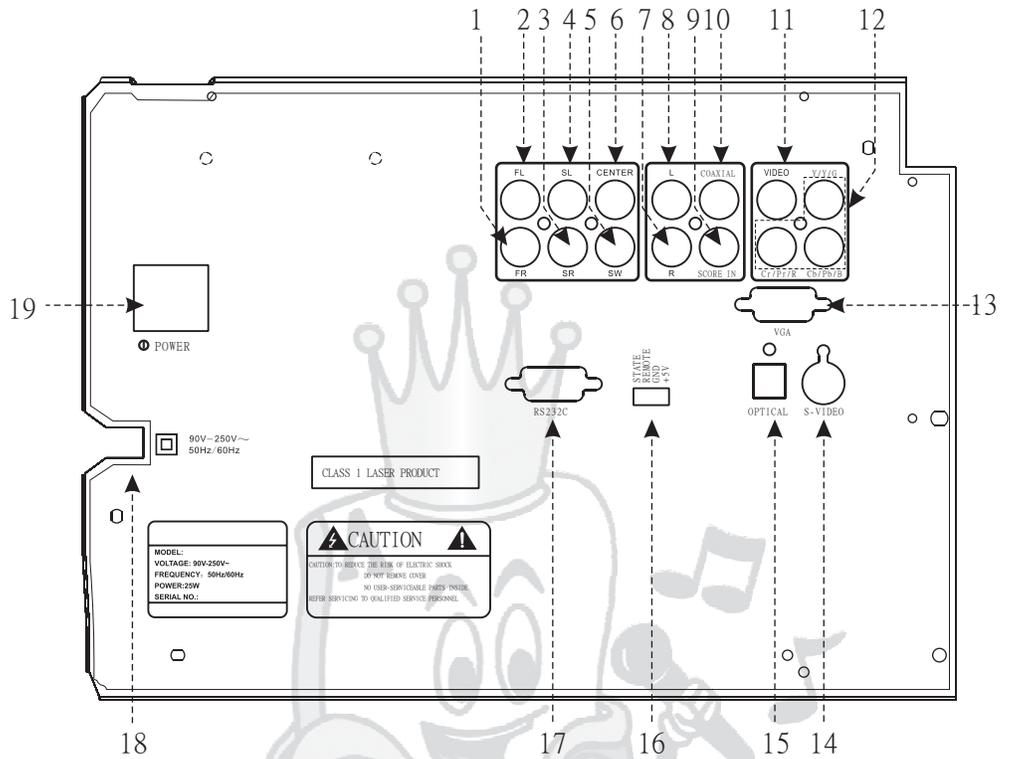
1. FRONT RIGHT SPEAKER OUTPUT
2. FRONT LEFT SPEAKER OUTPUT
3. SURROUND RIGHT SPEAKER OUTPUT
4. SURROUND LEFT SPEAKER OUTPUT
5. SUB WOOFER OUTPUT
6. CENTRE SPEAKER OUTPUT
7. RIGHT AUDIO OUTPUT
8. LEFT AUDIO OUTPUT
9. SCORE IN

10. COAXIAL OUTPUT
11. RCA VIDEO OUTPUT
12. YUV COMPONENT VIDEO OUTPUT
13. VGA OUTPUT
14. S-VIDEO OUTPUT
15. OPTICAL OUTPUT
16. STATE, REMOTE, GND, +5V INTERFACE
17. RS232C INTERFACE
18. POWER IN
19. MAIN POWER SWITCH

Display Window

Sequence mode
Random mode
PBC mode
Favorite disc
Disc
Disc format
Disc name, attach etc.
Microphone
Lock panel

DISC
LOCKED

RAND CONT
PROG
A-B PBC
(ALL)1DISC
FAVORITE JPEG
DVD S V CD-G
MIDI WMA MP3 MP4
HDCD □IVX

MUTE

L C R
LS S RS
dts DOLBY
ON OFF

DISC   SELECT NEXT   TITLE CHAP.   TRACK

Current disc No.
Disc indicator
Repeat mode
Repeat A-B mode
Program mode
Select disc NO
Select disc
Next disc
Title of DVD
Title No. of DVD
Chapter of DVD
Chapter No. of DVD
Track No.
Mute
Track
DTS L/R
Time and state
Timing
Dolby
Angle

DVD DISC

When stopped:

Example:

DVD
DISC   TITLE CHAP.
400   0 1 00   0:00:08

During play:
Example:

DVD
DISC   TITLE CHAP.
400   0 1 00   0:00:08

VCD DISC

When stopped:

Example:

VCD
DISC   TRACK
400   0 10   0:00:08

During play:
Lights up when using PBC

VCD
DISC   TRACK
400   0 10   0:00:08
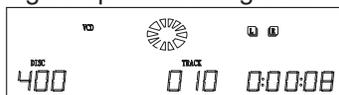
AUDIO CD

When stopped:

Example:

CD
DISC   TRACK
400   0 10   0:00:08

During play:
Example:

CD
DISC   TRACK
400   0 10   0:00:08
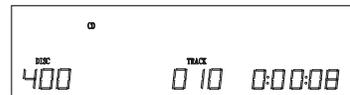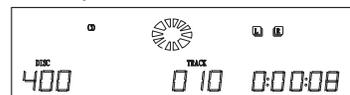
Other indicators:
 ⌣ :When set to repeat the same title, chapter or track.
 ⌣ ALL:When set to repeat to play the entire disc.
 A-B:When set to repeat a section.
 ANGLE:Angle is changed.
 PROG:During program playing.

-11-

1. POWER button
2. OPEN/CLOSE button: open/close the front cover.
3. MUTE button: open/close the audio output.
4. L/R button: switch the left and right sound channel.
5. GOTO button: select the playing start-point randomly by GOTO function.
6. SLOW button: slow the speed of playing forward.
7. PROG button: the function of ordering MIDI songs, or use for program function.
8. NUMBER buttons: used to order songs or edit the discs' information. They also are used to input the disc NO or disc name when the player explore a certain disc.
9. DELETE button:deleting the song or canceling the wrong number.
10. REV button: quicken the speed of playing backward.
11. FWD button: quicken the speed of playing forward.
12. NEXT button: goes to the next song
13. PREV button: goes to the previous song
14. PAUSE button: Pause the disc the image will move forward step by step if you press the button repeatedly.
15. PLAY button
16. USB/CARD button: switch the different data sources.(include READ DISC,READ U DISC, READ CARD)
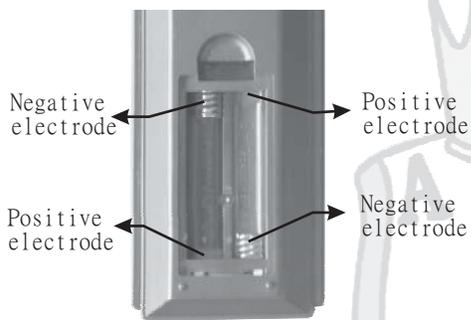17. STOP button: stop playing if you press the button in the playing mode (Play the next pre-engaging song if you press the button when the player plays the songs in program list).
18. MENU button: open/close the menu.
19. EFFECT button: set the parameter or mode of effect.
20. ▲ / ▼ / ◄ / ► buttons: adjust the cursor position.
21. ENTER button
22. SETUP button: set system functions.
23. RETURN button
24. DISC MENU button: enter thedisc manage menu.
25. DISC NO button: select the disc by disc NO.
26. EDIT button: in order to facilitate searching a certain disc by various methods quickly, you'd better edit the newly inserted disc information immediately.
27. SEARCH button: search the disc you want in the disc list.
28. FAVOR button: select the disc you want in favorite disc list.
29. DISC NAME: select the disc by disc name.
30. REPEAT button: select the repeat mode (DVD disc includes repeat chapter and repeat title; CD/VCD/SVCD disc includes repeat single song and repeat the entire disc; MP3/MP4 disc includes repeat single song, repeat dir and repeat the entire disc)
31. TITLE button: displays all information in the current title. (This function is only available to DVD disc)
32. A-B button: set the repeated section to playing.
33. VOLUME+/-: increase or decrease the volume.
34. KEY b/ ♮ /#: adjust the key.
35. DISPLAY button: open or close the status bar.
36. SUBTITLE button: change the language of subtitle.(This function is only available to the discs with multi-languages of subtitle)
37. ANGLE button: change the angle.(This function is only available to the DVD discs which support multi angles)
38. AUDIO button: select a different language (This function is only available to the discs which have been recorded with multi languages)
39. ZOOM button: enlarge the image.
40. N/P button: adjust the TV service(NTSC/PAL) pattern.
41. MELODY BUTTON:set the melody when the player plays MIDI discs. (It is only available to the songs without vocal)
42. VOCAL button: set the vocal function when the player plays MIDI discs. (This function is only available to the songs vocal)
43. M/F button: adjust the tone when the player plays MIDI discs (This function is commonly used in KARAOKE when the male/female voice plays in an out-of-character role)
44. ECHO button: to adjust the Echo volume of the Microphones
45. MIC1 buttons: to adjust the volume of the microphone 1
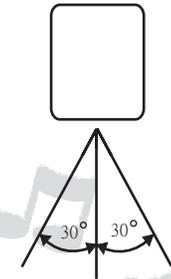46. MIC2 buttons: to adjust the volume of the microphone 2
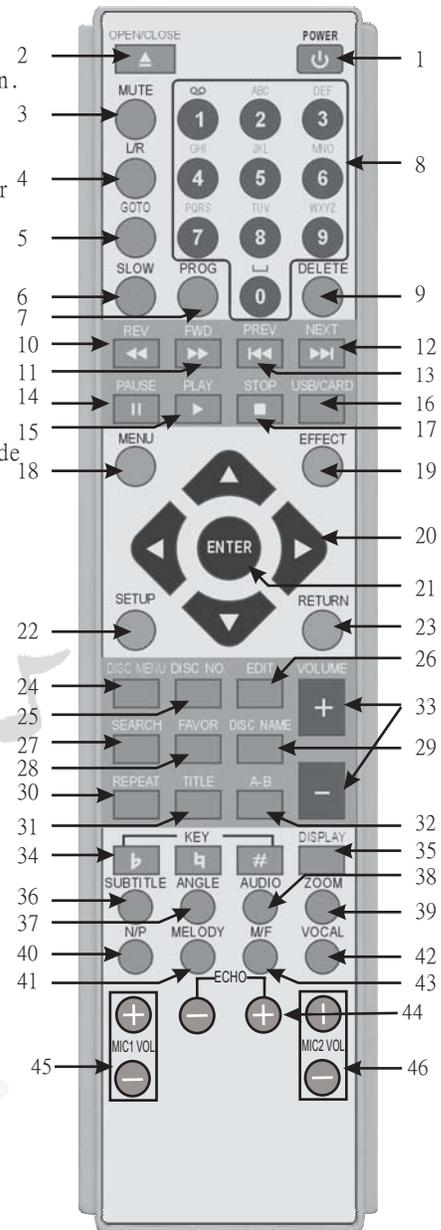
Power source for the remote controll.
The remote control is powered by two AAA batteries.

Caution for battery replacement.
Load the new batteries with their polarities (+ and -) aligned correctly.
Keep the batteries from heat sources to avoid causing short-circuit.
If you do not intend to use the remote control for a long period of time, please remove the batteries and store them in a cool and dry area
Remove the spent batteries immediately and dispose of them properly.
Do not use an old and new battery together.(Also never use an alkaline battery together with a manganese battery.)

Negative electrode

Positive electrode

Positive electrode

Negative electrode

Remote control

30° 30°

Senser ranges about 8 meters

Notes on batteries

*Improper use of batteries may cause battery leakage and corrosion. To operate the remote control correctly, follow the instructions below.
*Do not insert batteries into the remote control in the wrong direction.
*Do not charge, heat, open, or short-circuit the batteries. Do not throw batteries into a fire.
*Do not leave dead or exhausted 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 become smaller, replace all batteries with new ones.
*If battery leakage occurs, wipe up the battery liquid from the battery compartment, then insert new batteries.

Notes on the remote control

*Point the remote control at the remote sensor of the player.
*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.

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

Hooking Up The Player

Connecting to TV with AV input

Connecting to TV with AV input and
Amplifier with karaoke   scroe output

Connecting to
S-VIDEO

Yellow   Red   White

Connecting to AUDIO R

Connecting
to AUDIO L

Yellow

FL   SL   CENTER

COAXIAL   VIDEO   Y/Y/G

FR   SR   SW

R   SCORE IN   Cr/Pr/R   Cb/Pb/B

Red

VGA

STATE
REMOTE
GND
+5V

RS232C

OPTICAL   S-VIDEO

Remote Receiver of Outer

Connect to PC's
serial port(RS232)

Connecting to PC's monitor

SCORE OUT   R   L

Connecting to
SCORE OUT

Red   White

Connecting to AUDIO L

Connecting to AUDIO R   White   Yellow

FL   SL   CENTER

L   COAXIAL   VIDEO   Y/Y/G

FR   SR   SW

R   SCORE IN   Cr/Pr/R   Cb/Pb/B

Red

VGA

STATE
REMOTE
GND
+5V

RS232C

OPTICAL   S-VIDEO

Connect to the TV's COMPONENT VIDEO IN

Connecting to TV S-VIDEO

S-VIDEO   VIDEO   R   AUDIO   L   Y   U   V

Yellow   Connecting to TV VIDEO

Note:
1.Refer to the user manual to connect the player to the TV and amplifier..
2.When you connect the player to your TV, be sure to turn off
  the power and unplug both units from the wall outlet before making any connections.
3.Connect the player to your TV directly. If you connect the player to a VCR, TV/VCR combination
   or video selector, the playback picture may be distorted as DVD video disc are copy protected.
4.If you place the player near a tuner or radio, the radio broadcast sound might be distorted. In
   this case, place the player away from the tuner and radio.
5.The output sound of the player has a wide dynamic range, make sure to adjust the receiver's
  volume to a moderate listening level, otherwise,the speaker may be damaged by a sudden high
  volume sound.
6.Turn off the amplifier before you connect or disconnect the player's power cord, If you leave
  the amplifier power on, the speakers may be damaged.
7.S-VIDEO and VIDEO can be connected to a TV.
8.S-VIDEO cable is not supplied with the player, It can be purchased additionally.

—14—

Connecting to digital output

Yellow

FL   SL   CENTER

L   COAXIAL

VIDEO   Y/Y/G

FR   SR   SW

R   SCORE IN

Cr/Pr/R   Cb/Pb/B

VGA

STATE
REMOTE
GND
+5V

Connecting to
TV VIDEO

RS232C

OPTICAL   S-VIDEO

Connecting to
S-VIDEO of TV

Yellow

VIDEO   S-VIDEO

PCM

OPTICAL   COAXIAL

Amplifier

Amplifier

SUB WOOFER

Centre
speaker

Front
left speaker

Front right
speaker

Back left
speaker

Back right
speaker
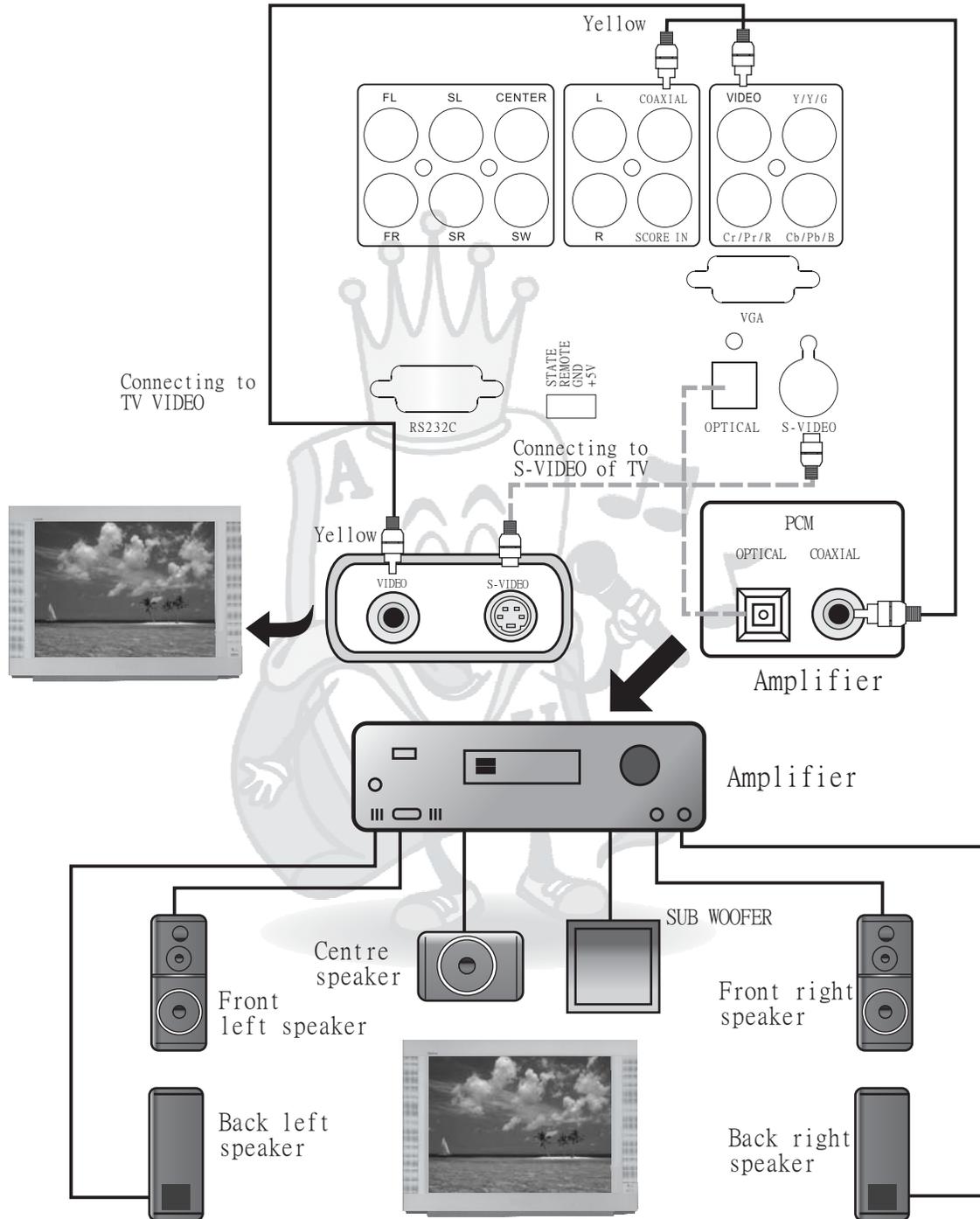
*Note-the optical or coaxial output jack can't output MIDI music.
MIDI music only can be output by mixed audio.

Connect the player to a TV with AV input, an amplifier with karaoke score out and AC-3 digital audio.

Yellow

OUTPUT FRONT L/R

OUTPUT REAR L/R

OUTPUT CENTER

FL SL CENTER
FR SR SW

L COAXIAL
R SCORE IN

VIDEO Y/Y/G
Cr/Pr/R Cb/Pb/B

INPUT CENTER

OUTPUT SUB WOOFER

VGA

AUDIO INPUT

FRONT REAR
CENTER
SUB WOOFER

INPUT SUB WOOFER

STATE
REMOTE
GND
+5V

RS232C

OPTICAL S-VIDEO SCORE OUT

Connecting
to TV VIDEO

Connecting to S-VIDEO

INPUT REAR L/R

INPUT FRONT L/R

Yellow VIDEO S-VIDEO

Amplifier

Centre
speaker

SUB WOOFER

Front
left speaker

Front right
speaker

Back left
speaker

Back right
speaker

*Note: Simulative (5+1) channels can't output MIDI music.
MIDI music only can be output by mixed audio channel.

1.Karaoke Setup

Yellow

FL SL CENTER   L COAXIAL   VIDEO Y/Y/G

FR SR SW   R SCORE IN   Cr/Pr/R Cb/Pb/B

Connecting
to TV video

White   Red

Connecting to
AUDIO L

VGA

STATE
REMOTE
GND
+5V

RS232C

OPTICAL S-VIDEO

Connecting to
AUDIO R

Yellow White Red

VIDEO   AUDIO
L   R

1 " " MIC " " 2
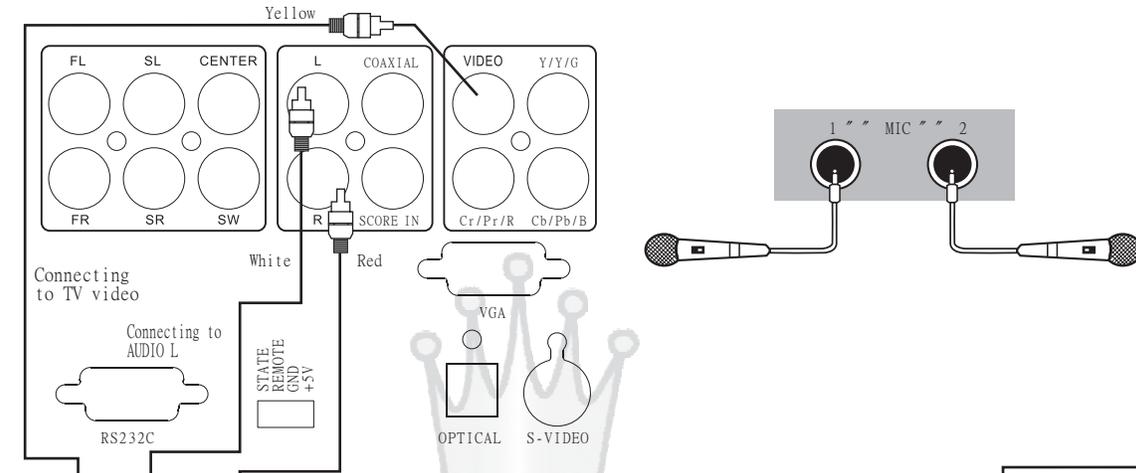
2.Setup karaoke with microphone

Yellow

FL SL CENTER   L COAXIAL   VIDEO Y/Y/G
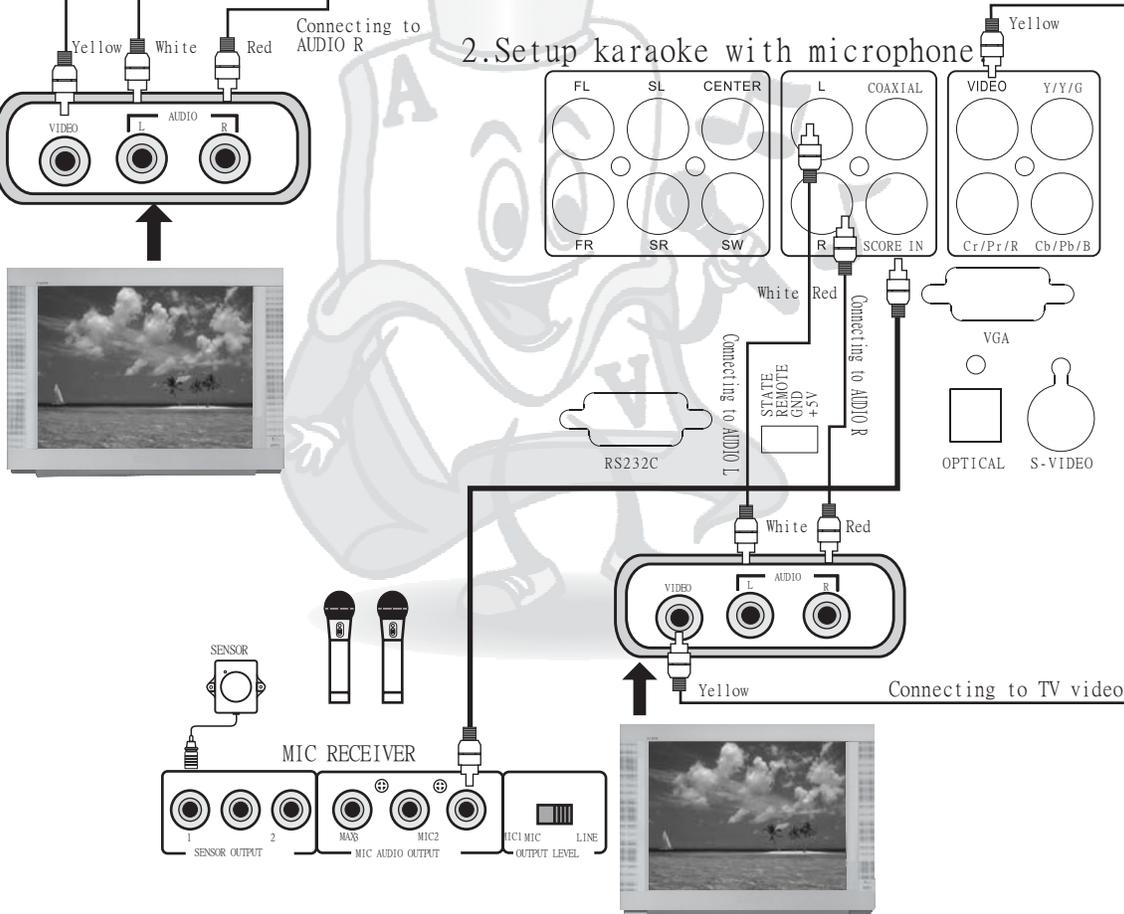
FR SR SW   R SCORE IN   Cr/Pr/R Cb/Pb/B

White Red

Connecting to AUDIO R

VGA

Connecting to AUDIO L

STATE
REMOTE
GND
+5V

RS232C

OPTICAL S-VIDEO

White   Red

VIDEO   AUDIO
L   R

Yellow   Connecting to TV video

SENSOR

MIC RECEIVER

1   2   MAX8   MIC2   MIC1 MIC   LINE

SENSOR OUTPUT   MIC AUDIO OUTPUT   OUTPUT LEVEL
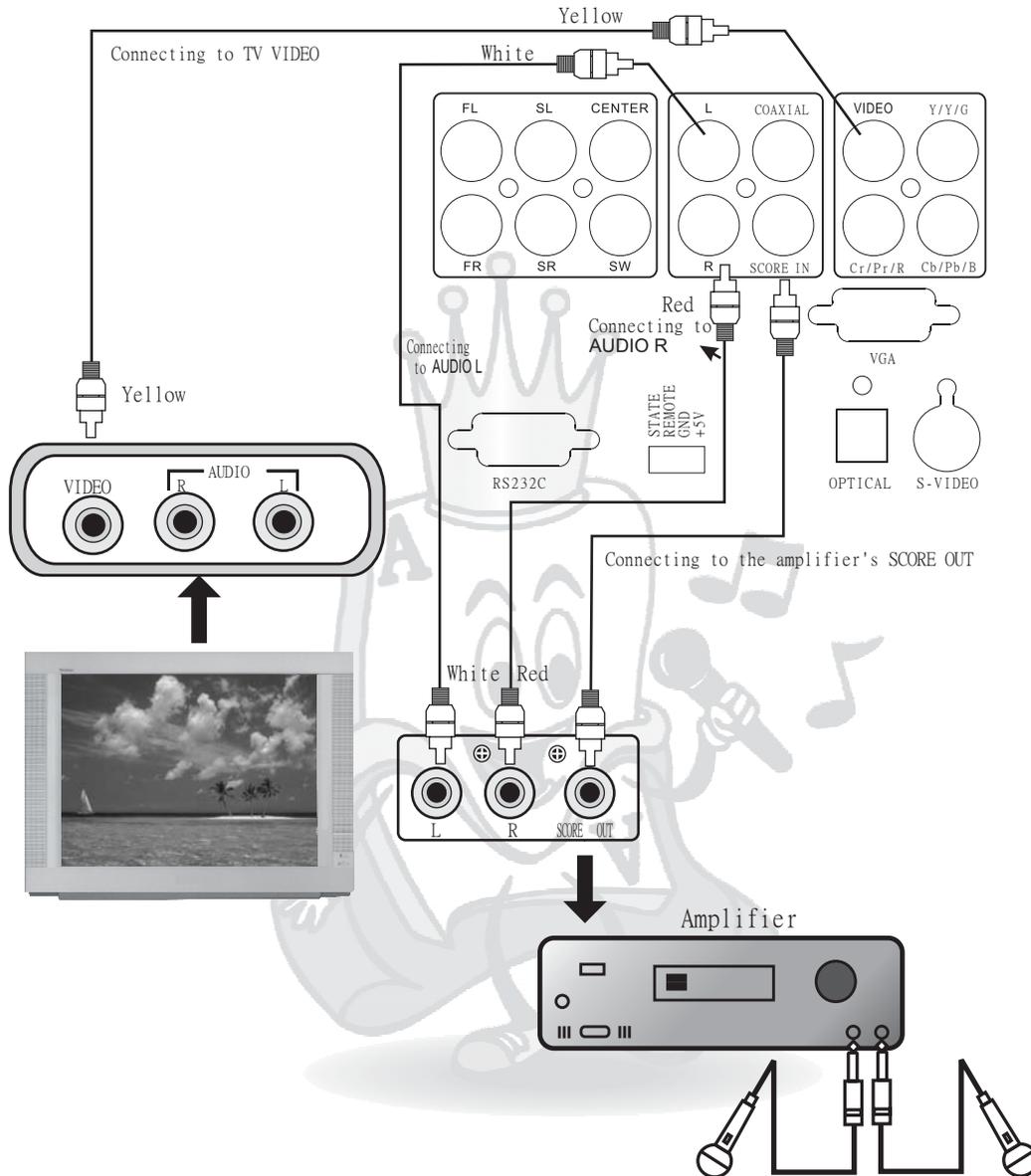
Note: If you connect a microphone to the score-in jack on the back panel of the player, the MIC jacks on the front panel will be disabled.

3.Connecting to an amplifier.

Connecting to TV VIDEO

Yellow

White

| FL | SL | CENTER | L | COAXIAL | VIDEO | Y/Y/G |

| FR | SR | SW | R | SCORE IN | Cr/Pr/R | Cb/Pb/B |

Red
Connecting to
AUDIO R

Connecting
to **AUDIO L**

VGA

STATE
REMOTE
GND
+5V

RS232C

OPTICAL   S-VIDEO

Yellow

| VIDEO | AUDIO |
| | R | L |

Connecting to the amplifier's SCORE OUT

White Red

L   R   SCORE OUT

Amplifier

Note: If you connect a microphone to the score-in jack on the back panel of the player, the MIC jacks on the front panel will be disabled.

-18-

Proper Operation

Connect the player to the TV and the stereo amplifier with the previous instructions; operate the player by using the following steps.

1. Switch the input selector on your TV so that the signal from the player appears on the TV screen.

2. If you are using a stereo amplifier, please turn the power on.

3. Press the main power switch on the back panel of the player.

4. Press the [POWER] either on the remote or on the front panel to start the player.

The rotary table of the player runs a circle automatically, detecting and recording the disc numbers of the existing discs.

Managing Discs

1.Inserting Discs

1.1 Press the [OPEN/CLOSE]button, VFD displays "OPEN", the front cover will
    open automatically. Please wait. You can press [OPEN/CLOSE] button
    again to close the front cover. When VFD displays "CLOSE", the front cover has
    been closed completely.
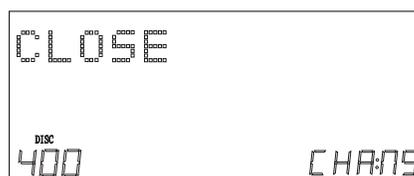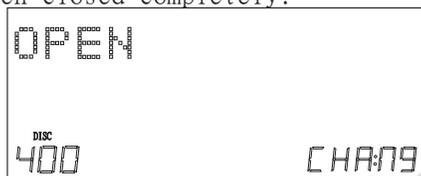
1.2 After opening the front cover, you can rotate the knob on the front panel to
    make the rotary table turn until the disc slot where you want to insert a disc
    is at the loading position of the front cover, VFD displays "NEXT".
1.3 Insert the disc into the slot which you select with the playback side facing left.
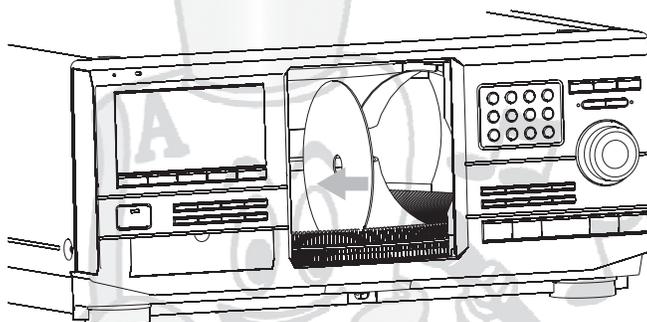
*Note: you can insert several discs into the rotary table at once.
1.4 Press [OPEN/CLOSE] to close the front cover, the rotary table will
    run a circle, detecting and recording the disc numbers of the existent discs.
    Then the player will play the disc that was just placed in the loading position.
*Note:
    We advise you to edit the disc's information immediately after you insert
the disc into the disc slot (Please refer to "Editing Disc Information"), you can
insert several discs into the rotary table at once.
  For example: insert a CD disc into disc slot 130 and insert a DVD disc into disc
   slot 300.

Method of Operation:
           Step 1. When the front cover is open, rotate the knob to make the rotary
                   table turn until the disc slot of 130 is sent to the loading
                   position of the front cover.
           Step 2. Insert your CD disc into disc slot 130 with the playback
                   side facing left.
           Step 3. Edit and save the disc information.
           Step 4. Rotate the knob to make the rotary table turn until the disc slot
                   of 300 is sent to the loading position of the front cover.
           Step 5. Insert your DVD disc into disc slot 300 with the playback
                   side facing left;
           Step 6. Edit and save the disc information.
                   Press [OPEN/CLOSE] to close the front cover when you finish
                   editing and saving all the discs' information.

2. Removing Discs

2.1 Press [DISC EJECT] when the front cover is closed; the VFD will display "OPEN" and the front cover will open automatically. After opening the front cover, the disc that is at the loading position of the front cover will be uplifted. You can press [OPEN/CLOSE] again to close the front cover. When VFD displays "CLOSE", the front cover has closed completely.

2.2 Press [DISC EJECT] when the front cover is open, the disc that is at the loading position of the front cover will be uplifted.

Note:

Press [DISC EJECT] when the front cover is closed. No matter how many times you press EJECT, the player will execute the action of DISC EJECT only once after opening the front cover.

When the front cover is open, the player will uplift or lay down the disc that is at the loading position of the front cover after you press [DISC EJECT]. You can remove several discs from the rotary table at the same time.   Example: if you want to remove CD disc from slot 130 and remove the DVD disc from slot 300.

Method of Operation:

Step 1. Press [OPEN/CLOSE] when the front cover is closed. Rotate the knob to make the rotary table turn until disc slot 130 is sent to the loading position after the player opens the front cover.

Step 2. Press [DISC EJECT], the CD disc in disc slot 130 will be uplifted and then you can remove it. Press [DISC EJECT], disc 130 will be uplifted automatically after the player opens the front cover if the disc is at the play position when the front cover is closed, and you can remove the disc.

Step 3. Rotate the knob to make the rotary table turn until disc slot 300 is sent to the loading position of the front cover.

Step 4. Press [DISC EJECT], the DVD disc in disc slot 300 will be uplifted, you can remove it.

After you finish removing all discs, close the front cover by pressing [OPEN/CLOSE].

3.Playing Temporary Discs

3.1 Press [TEMP DISC] when the front cover is closed, The rotary table
    will turn and send disc 400 to the playing position. If disc 400
    doesn't exist, the screen displays "NO DISC".
3.2 Press [TEMP DISC] when the front cover is open, the rotary table
    will turn and send the disc slot of 400 to the loading position of the front cover.

     Note: In any state, the rotary table will run a circle automatically after the
 front cover is closed, detecting and recording the disc numbers of the existing
 discs. The disc which is at the loading position of the front cover will then be
 sent to the playing position to play. If no disc is available at the loading
 position of the front cover just before closing it, the player will search a disc
 backwards until it finds a disc. If all disc slots are empty, the rotary table will
 resend the disc slot of 1 to the loading position of the front cover and the screen
 will display "NO DISC".

4.Random Play

     Press [RANDOM] on the front panel and the screen will display.the
RANDOM MENU, use the direction button up or down to switch options, then press
the [ENTER] button (you also can rotate the knob to switch options, then press
the knob), the player will play the discs randomly. The amount of songs which are
played from each disc is also random. The TV screen displays
"RANDOM", the VFD displays "RAND".

Select "CLOSE" in the menu, the mode of random play will be stopped.
* Random play is available for discs such CD, MP3, Mp4 format.
  Random play is enabled after the player has finished fore-reading all discs.

5.Sequence Play

     Press [SEQUENCE] on the front panel, the screen displays the SEQUENCE MENU.
 Use the direction button of up or down to switch options, then press
 [ENTER] (you also can rotate the knob to switch options, then press
 the knob), the player will search and play a disc.
 When the player finishes playing a disc, it will continue searching and
 playing the next disc in sequence. The TV screen displays "SEQUENCE", the
 VFD displays "CONT".

Managing Discs

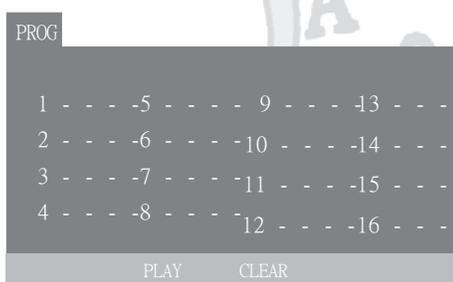Select "CLOSE" in the menu, sequence mode will be stopped.
*Sequence play is available on discs such as CD, MP3, Mp4 format.
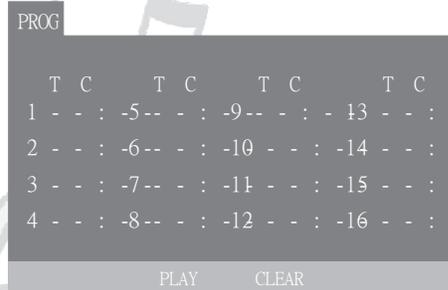   The sequence play is enable after the player has finished fore-reading all discs.

6.Program Play
        You can play the playlist in the current disc in the optional sequence by this
        function; it is only available to the disc which contains more than two playbills.
        1.Press [PROGRAM]. If the current disc is not DVD, TV screen
        displays as [6.1-1]; if the current disc is DVD, TV screen displays as [6.1-2]
.

1 - - - -5 - - - - 9 - - - -13 - - -
2 - - - -6 - - - -10 - - - -14 - - -
3 - - - -7 - - - -11 - - - -15 - - -
4 - - - -8 - - - -12 - - - -16 - - -

PLAY   CLEAR
[6.1-1]

| T C	T C	T C	T C
1 - - : -5-- - : -9-- - : - 13 - - : -
2 - - : -6-- - : -10 - - : -14 - - : -
3 - - : -7-- - : -11 - - : -15 - - : -
4 - - : -8-- - : -12 - - : -16 - - : -

PLAY   CLEAR
[6.1-2]

        2.Press [PLAY] after you input all the playlist numbers you
        want, the player will play according to the program list.
        3.You can make an appointment of 16 playbills altogether.
        4.The serial numbers show the order of the playbills in the program list.
        If you make a mistake when you input the playbill's number, please press
        the [DELETE] button to cancel the number you input; if the current
        playbill's number which the cursor points to is not the number you want
        to delete, please move the cursor to the playbill's
        number you want to delete first, then press [DELETE].
        5.You can play the playbills which are included in the program list
        selectively by pressing the direction buttons.

7.Selecting Discs
7.1   Selecting a Disc by Disc NO.
7.1.1 Press [DISC NO], the screen
        displays "select a disc by disc
        No.", the default disc number is
        the current one.
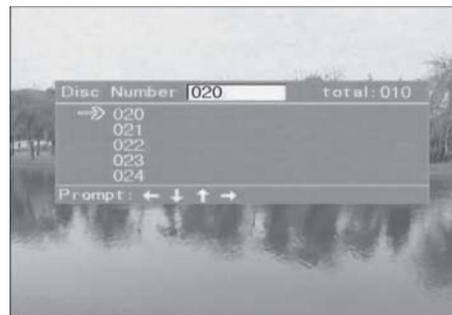
7.1.2 Press the number buttons to input the disc number which you want to select. The VFD displays the disc number you input. If the disc No. you input exceeds 400, the first digit will change to zero automatically. You can also change the disc number either by rotating the knob or pressing the left or right directional buttons.

*Note: If you change the disc number by rotating the knob or pressing the directional buttons of left or right, only the existent discs' number will be appeared.

7.1.3 Press [ENTER] button to confirm the disc number you input, the VFD displays "NEXT". The current menu will be closed.

When you input the disc number by pressing the number buttons, you will meet two statuses:

*If there is a disc corresponding to the disc number you input, the VFD displays "NEXT", the current menu will be closed.
   ∴If the front cover is closed in current state, the VFD displays "CHANG", and the player will set your aimed disc to the playing position.
   *Note:If the disc you select is the current disc, the player will not perform any action.
   ∴If the front cover is open in current state, please close the front cover, the player will set the disc you select to the playing position after it finishes detecting all existing discs.
*If there is no disc corresponding to the disc number you input, the player will select a disc to play automatically , and close the current menu.

7.2 Selecting a Disc by Disc Name

7.2.1 Press [DISC MENU] to open the main menu of disc manage, the screen displays the following picture. The VFD displays the item which the cursor points to in the current menu.

7.2.2 Press up/down button or rotate the knob to move the cursor to "DISC NAME", then press [ENTER] to enter the disc name list, the screen displays the following picture, the VFD displays disc name which the cursor points to.

*Note: you can press [DISC NAME] on the front panel "Select a Disc by Disc Name" directly.

7.2.3 Press up/down button or rotate the knob to move the cursor to the disc
      you want to select. You can search the disc with disc name by pressing the
      [SEARCH] button.(Please refer to "search by disc name")

7.2.4 Press [ENTER] or the knob, close the current menu:
      ⇕ If the front cover is closed, the player will set the disc you select to
         the playing position.

Note: If the disc you select is the current disc, the player will not perform any action.
      ⇕ If the front cover is open, please close the front cover. The player will
         set the disc you select to the playing position after it finishes
         detecting all existing discs.

7.3 Selecting a Disc by Disc Attach

7.3.1 Press [DISC MENU] button to open the main menu of disc manage, the
      screen displays as following picture, the VFD displays the item which the
      cursor points to in the current menu.
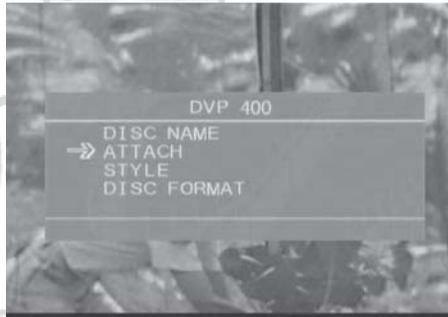
7.3.2 Press up/down or rotate the knob to move the cursor
      to "ATTACH", then press [ENTER] or the knob to enter the list
      of disc libraries. The screen displays the following picture, the VFD
      displays the disc library which the cursor points to.
Note: you can press [DISC LIBRARY] on the front panel to enter
       the menu "Select a Disc by Attach" directly.

7.3.3 Press up/down or rotate the knob to move the cursor to
      the disc library you want to select.
7.3.4 Press [ENTER] to enter the disc name list. It contains all disc
      names belonging to the current disc library, the VFD displays the disc name
      which the cursor points to.

7.3.5 Press up/down button or rotate the knob to move the cursor
       to the disc name you want to select. You can search the disc with disc name
       by pressing the [SEARCH] button .(Please refer to "search by disc name")

7.3.6 Press the button of [ENTER] or the knob, close the current menu, however,
       ⇕If the front cover is closed, the player will set the disc you select to
       the playing position.
*Note: If the disc you select is the current disc, the player will not perform
       any action.
       ⇕If the front cover is open, please close the front cover. The player will
       set the disc you select to the playing position after it finishes detecting
       all existing discs.

7.4 Selecting a Disc by Disc Style
7.4.1 Press [DISC MENU] button to open disc manage. The screen displays the following
       picture, the VFD displays the item which the cursor points to in the current menu.

7.4.2 Press up/down or rotate the knob to move the cursor
       to "STYLE", then press the [ENTER] button to enter the style list. The
       screen displays as the following picture. The VFD displays style name
       which the cursor points to.
*Note: You can press [STYLE] button
       on the panel to enter the menu of "Select
       a Disc by Style" directly.
       ⇕Includes the following style types:
       "Action","Comedy", "Romance", "Horror",
       "Sci-fi", "Cartoon","War","Classical",
       "Sitcom", "Pop Song", "Karaoke", "MTV",
       "Dance", "Disco", "Colligation".

7.4.3 Press the up/down button or rotate the knob to move the cursor to
      the style you want to select.
7.4.4 Press [ENTER] to enter the disc name list, it contains all disc
      names belonging to the current style type, the VFD displays the disc name
      which the cursor points to.

7.4.5 Press up/down button or rotate the knob to move the cursor to
      the disc name you want to select. You can search the disc with disc name by
      pressing [SEARCH]. (Please refer to "search by disc name")
7.4.6 Press [ENTER] or the knob, close the current menu:
⇧If the front cover is closed, the player will set the disc you select to the
   playing position.
*Note:If the disc you select is the current disc, the player will not do any
      action.
⇧If the front cover is open, please close the front cover. The player will set the
   disc you select to the playing position after it finishes detecting all existing discs.

7.5 Selecting a Disc by Disc Format
7.5.1 Press [DISC MENU] to open the main menu of disc manage, the screen
      displays as following picture, the VFD displays the item which the cursor
      points to in the current menu.

7.5.2 Press up/down button or rotate the knob to move the cursor to
      "DISC FORMAT", then press [ENTER] to
      enter the disc format list, the screen
      displays as the following picture.
      The VFD displays disc format which the
      cursor points to.
*Note: Press [FORMAT] on the panel to
       "Select a Disc by Disc Format".
       Disc Formats: CD, VCD, SVCD, DVD,
       MIDI, MP3, MP4

7.5.3 Press up/down button or rotate the knob to move the cursor
    to the disc format you want to select.
7.5.4 Press [ENTER] to enter disc name list.It contains all disc names
    belonging to the current disc format. The VFD displays the disc name which
    the cursor points to.

7.5.5 Press up/down button or rotate the knob to move the cursor to
    the disc name you want to select. You can search the disc with disc name by
    pressing [SEARCH]. (Please refer to "search by disc name")
7.5.6 Press [ENTER] or the knob to close the current menu:
   ⇧If the front cover is closed, the player will set the disc you select to
   the playing position.
*Note: If the disc you select is the current disc, the player will not do
    any action.
   ⇧If the front cover is open, please close the front cover. The player will
    set the disc you select to the playing position after it finishes detecting
    all existing discs.

7.6 Selecting a Disc in the Favorites List
7.6.1 When you select a disc by Disc Name, Attach, Style or Disc Format, you can
    enter the favorite list by pressing [FAVOR] except when you are in the state
    of selecting a disc name. The screen displays thefavorite list. The VFD
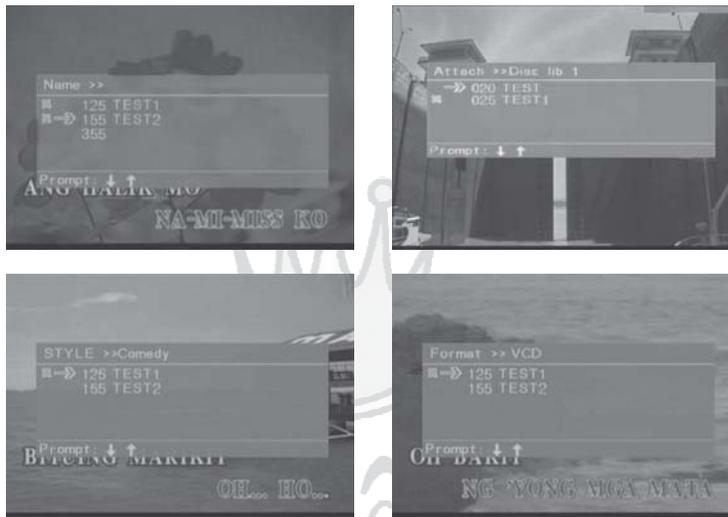   displays the disc name which the cursor points to in the favorite list.

7.6.2 Press up/down button or rotate the knob to move the cursor to
    the disc name you want to select. You can search the disc with disc name by
    pressing [SEARCH]. (Please refer to " search by disc name")
7.6.3 Press[ENTER] or the knob, close the current menu:
   ⇧If the front cover is closed, the player will set the disc you select to
   the playing position.
    *Note: If the disc you select is the current disc, the player will not perform
   any action.
   ⇧If the front cover is open, please close it, the player will
    set the disc you select to the playing position after it finishes detecting
    all existing discs.

8.Managing the Favorites List
8.1 Add Disc into the Favorite List

When you select a disc by Disc Name, Attach, Style or Disc Format, you can add the disc which the cursor points to into the favorite list when you are in the step of "selecting a disc name" by pressing [FAVOR]. The screen displays the following picture. Press [FAVOR] repeatedly to add or cancel the disc's favor property which the cursor points to.


8.2 Deleting a Favorite Disc from the Favorite List

↕ After you set a certain disc with favor property, you can delete its by pressing the button of [FAVOR] again.

↕ Delete a favorite disc from the favorite list

1. When you select a disc by Disc Name, Attach, Style or Disc Format, you can enter the favorite list by pressing [FAVOR] except when you are in the state of selecting a disc name. The screen displays the interface of favorite list as [8.2-1]. The VFD displays the disc name which the cursor points to in the favorite list.

2. Press up/down or rotate the knob to move the cursor to the disc name you want to delete.

3. Press [DELETE], the screen displays the confirming interface about deleting as [8.2-2].

[8.2-1]

4. Press [ENTER] or the knob to delete this favorite disc, when the system finishes this action, it returns to the favorite list. You can also press [RETURN] to cancel the action of deleting a favor disc.

↕ In the favorite list, press[FAVOR] button again to close the favorite list.

↕ The operation of "delete a favorite disc" deletes a favorite disc's favor property only. It doesn't delete the disc's other information.

[8.2-2]
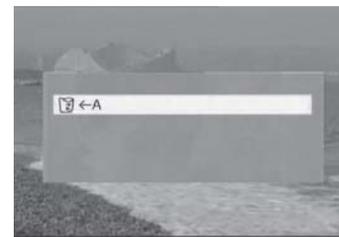
9.The Function of Searching a Disc by Disc Name

9.1 When you select a disc by Disc Name, Attach, Style or Disc Format, you can enter
the interface of "search by disc name" by pressing the [SEARCH] button in
the state of selecting a disc name.

9.2 Press the number buttons to input characters or digit. If the content of input
is wrong, you can press the [DELETE] button to delete the char/digit which
is in the front of the cursor; you can also use the left button or
right button to move the cursor and insert char/digit in the front of the cursor.

9.3 Press the [ENTER] button after you finish inputting the disc name. The system
will return to the state of selecting a disc. The screen displays the disc name
you input and other following disc names after it. You can select
the disc name you want.

10.Editing Disc Information

10.1 Edit and Modify the Disc Information

10.1.1Press the [EDIT] button to open the edit menu as the following picture:

10.1.2 When you edit or modify the discs' information, you can press
down or rotate the knob to switch to the next editing item,
you can also press up or rotate the knob up to switch
to the last edited item.

*Press the number buttons to input disc No. If the disc No. you input has
already been edited, the system will show all information of this disc
automatically. You can change the disc number by pressing the
button left/right or rotating the knob. Only the existing discs'
number will appear.Press the number buttons to input the disc name,
If the content of inputis wrong, you can press [DELETE] to
delete the char in the front of the cursor. You also can use
left or right button to move the cursor and insert char/digit
in the front of the cursor.

*Attach, Disc Style and Disc Format are choice options. The set of these
options can only be adjusted by pressing the direction button left
or right.

10.1.3 After you finish editing all information, the cursor rests on the item of disc
format as the following picture. Press [ENTER] the system
saves the information and closes the menu.

10.2 Deleting Disc Information

Delete Disc Information by Deleting Disc Name: When you select a disc by
disc name,attach, disc style or disc format, you can press the direction
button of up or down to choose the disc you want to delete in the list of
disc names, then press [DELETE]. The screen displays the
confirming menu of "deleting a disc" as the following picture. Press
[ENTER] to delete the disc name. If a disc name is deleted, all
the related information (Attach, Style, Format) attached to this
disc name is deleted too.

11. The function of USB Device/Card Reader(SD/MMC/MS):

When you plug a USB Device or a card into the player, whatever the current
state is play or stop, the system will pop-up a switching interface of
"READ DISC/ READ U DISC/ READ CARD". The default data source which the cursor
points to is the current one(the priority of "read disc"
is highest among the all data sources). If you press [USB/CARD],
the system will switch to a different data source ([UP]/ [DOWN]
is also available). There are five operation states as following:

1. Switch to a certain data source and press [ENTER], the system will switch to play the data source you select.
2. Switch to a certain data source, if you don't press [ENTER], the system will also switch to play the data source you select automatically after 10 seconds.
3. If the data source you select is the current one, the system will exit the switching interface in 10 seconds.
4. If there is no disc in the play position when you plug a USB Device or a memory card into the player, the system will switch to play the new-input data source automatically. If you want to read from a disc in this state, you should select a disc NO. that is not empty and press [ENTER].
5. If there is a disc in the play position when you play a USB Device or memory card, the system will switch to read the disc immediately after you pull out the USB Device or card.
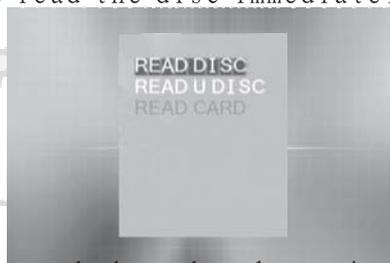
Note If you insert a USB Disc or a memory card when the player is playing MIDI discs even if you don't switch the data source, two automatic operation processes will follow:

1. If there is no MIDI song in the program list, the system will switch to play the new-input data source automatically after it finishes the current song.
2. If there are some MIDI songs in the program list, the system will switch to play the new-input data source automatically after it finishes playing the songs you programmed before inserting the USB Device or card. In addition, the system will record the song numbers that you programmed after inserting the USB Device or card. When you return to the state of "READ DISC" by pressing [USB/CARD] after the system finishes playing the files in USB Disc or card, the system will play the remaining MIDI songs in the program list.

If there is no card or USB available, when you press [USB/CARD], the screen will display "USB/CARD NOT FOUND".
If there are several different file formats such as MP3, JPEG and MP4 in the same USB disc or card, three icons will appear on the bottom right corner on the TV screen. You can play the different files by pressing the arrow keys to move the cursor to the corresponding icons.

12. Powering off Timing

Press [TIME] to start the function of "Powering off Timing", the VFD displays⚙ON. The time value will add 15 minutes each time you press [TIME], the VFD displays the time value, and it will disappear in 5 seconds. If you press the button of [TIME] when the time value is not displayed on the VFD, you can see the remaining time. If you press "Powering off Timing",the VFD displays⚙OFF

13. Keyboard Commands(with PS/2 keyboard attached)

F1: Editing information	F2: Disc information	F5: Selecting a disc by disc NO.
F8: Play	F9: Stop	ENTER: ENTER
Page up: DISC+	Page down: DISC-	ESC: RETURN
Number button: Digit function	DELETE: DELETE	Letter button: Letter function

1. Playing MIDI discs(MIDI discs not included with player)

You can select MIDI discs that are provided by Acesonic according to your tastes. It is an optional purchase; included accessories are a MIDI disc and a songbook. Find MIDI discs from the rotary table and select for playback. The TV screen will display "SELECT" when the disc is recognized by the player. Press NUMBER buttons to input the song number, then press ▶] or [ENTER] to play.

1.1 Programmed Play

In this play mode, if you input the song number that you want to play next and press [PROG], you can program it to play next. The song number will be shown at the top of TV screen. After the current song finishes, the player will play the songs in the program list consecutively.

Example:
Program the song NO "00888" with name "Hong Touying"
Step 1. Input the song number that you want to program (such as 888)---->TV screen displays
"Song Name: Hong Touying Prog: 00888".
Step 2.Press [PROG], the top of TV screen displays "00888". *In the mode of pre-engaging play, input a song number and the press ▶] or [ENTER], the current song will stop playing and play the song you input.

In the mode of pre-engaging play, if you want to play another song that is also programmed , select the song with the arrow keys and press ▶] or [ENTER].

In program play, if you stop the current song by pressing [STOP], the player will play the next programmed song in the list automatically.

1.2 Cancel Programmed Song

Choose the song that you want to delete in the program list by pressing the arrows and press [DELETE] it will delete that song. You cannot delete a song that is already playing,

Example: There are four songs in the program list as "05895 01562 00222 00556"
If you want to delete song number "00222", move the cursor to the "00222"
By using the arrow keys, TV screen displays "Qing Shu". Press [DELETE], the top of TV screen shows "05895 01562 00556"

1.3 Vocals

When the player plays a song with vocals:
If you press [VOCAL] the first time, TV screen displays:

"VOCAL ON";
If you press [VOCAL] a second time, TV screen displays:

"VOCAL OFF"
If you press [VOCAL] the third time, TV screen displays:
"AUTO".
*The function of this button is for vocals ONLY on MIDI discs.
*This button will not work if the song does not have vocals.

1.4 Melody
        Press [MELODY] to adjust the setup of melody.
        If you press [MELODY] button for the first time, the TV screen displays: "MELODY ON";
        If you press [MELODY] button for the second time, the TV screen displays: "MELODY OFF";
*The function of this button is MELODY only in MIDI disc, this button doesn't work if the song
        has vocals.

1.5 Male/Female Tone
        Press the [M/F] button for the first time, TV screen displays "MALE TONE";
        Press the [M/F] button for the second time, TV screen displays "FEMALE TONE";
        Press the [M/F] button for the third time, TV screen displays "RESUME TONE";

1.6 Mute
        When the player is playing a MIDI disc:
        Press [MUTE] for the first time, TV screen displays "MUTE";
        Press [MUTE] for the second time, the function of MUTE will be canceled.

1.7 Pause
        When the player is playing a MIDI disc:
        Press [PAUSE] , TV screen displays "PAUSE   ❚❚ "
        (In the mode of PAUSE, the picture is still and the sound disappears)
        Press [PLAY], the player returns to the normal playing mode.

1.8 Display
        (mainly displays the current song name which is playing and the program list)
        When the playing information has been displayed on the top of TV screen, you can make
        the playing information disappear by pressing [DISPLAY].
        When the playing information doesn't display on top of TV screen, you can make
        the playing information appear by pressing [DISPLAY].

1.9 FWD/SLOW:
        Play ahead quickly (four steps, adjust the playing speed, the faster the speed of play is)

        1. Press the [FWD] the first time, TV screen displays "[----❚❚---] 01"

        2. Press the [FWD] the second time, TV screen displays "[----❙-❙--] 02"

        3. Press the [FWD] the third time, TV screen displays "[----❙--❙-] 03"

        4. Press the [FWD] the fourth time, TV screen displays "[----❙---❙] 04"

        5. Return to the normal speed by pressing the button of [PLAY].

           Play ahead slowly (includes four steps)

        1. Press the [SLOW] the first time, TV screen displays "[---❚❚----] -1
        2. Press the [SLOW] the second time, TV screen displays "[--❙-❙----] -2"

        3. Press the [SLOW] the third time, TV screen displays "[-❙--❙----] -3"

        4. Press the [SLOW] the fourth time, TV screen displays "[❙---❙----] -4"

        5 .Return to the normal speed by pressing [PLAY].

1.10 Repeat: Replaying the current song
Press [REPEAT]; TV screen will display
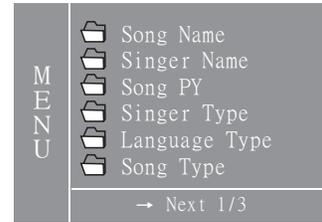"REP1", and replays the current song.

1.11 MENU
Press [MENU]; Screen displays [1.11-1].
Items in the main menu are: Song Name, Singer
Name, Song PY (Intelligent), Singer Type,
Language Type, Song Type, Vocal Sing,
Advanced Search, All Songs, Random Play,
Sequence Play, Select Play, Select SongNum,
Score Set, and Language Set.

1.11.1 Song Name: Search Songs by Word Count
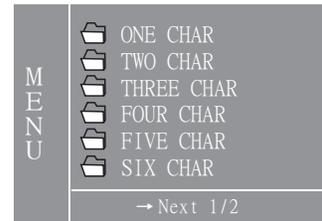(includes 10 options: 1-9 and 9+),
Display looks like figure [1.11-2]

1.11.2 Singer Name: Search songs by Word Count
(includes 6 options). Display looks like
figure[1.11-3]

11.11.3 Song PY Intelligence : Each number
button has three or four letters assigned to
it. To select different letters you may need
to press the button several times.
Example: When in sub-menu "Song PY, the
screen will look like figure [1.11-4]
Selecting a song titled "Love Me"
Step 1: The first letter of "Love" is
"L"; press "5" three times and press
"1" to confirm (you can also
confirm the input letter by pausing for
a few seconds)
Step 2: The first letter of "Me" is "M";
press "6" once then "1" to confirm your
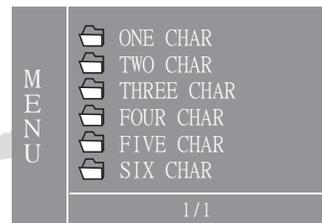selection. Screen
displays as [1.11-5]

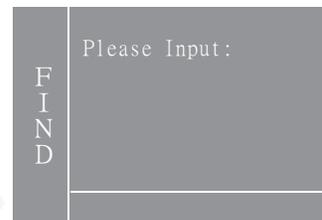Note: "1" confirms the input letter,
"0" deletes the input letter.

MENU	📁 Song Name
	📁 Singer Name
	📁 Song PY
	📁 Singer Type
	📁 Language Type
	📁 Song Type
	→ Next 1/3

[1.11-1]

MENU	📁 ONE CHAR
	📁 TWO CHAR
	📁 THREE CHAR
	📁 FOUR CHAR
	📁 FIVE CHAR
	📁 SIX CHAR
	→ Next 1/2

[1.11-2]

MENU	📁 ONE CHAR
	📁 TWO CHAR
	📁 THREE CHAR
	📁 FOUR CHAR
	📁 FIVE CHAR
	📁 SIX CHAR
	1/1

[1.11-3]

| FIND | Please Input: |

[1.11-4]

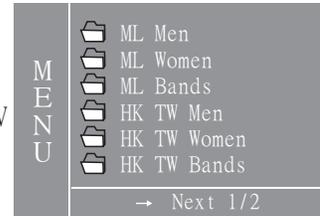| FIND | ♫ LOVE ME |
| | Input:LM |

[1.11-5]

1.11.4 Singer Type:

        includes Chinese Mainland Male Singer
/ Female Singer/Band, Hongkong and Taiwan Male Singer
/Female Singer/Band, Oversea Male Singer/Female Singer
/Band and Other. You can search songs by singer type, TV
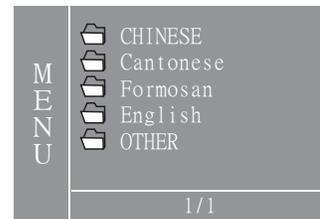screen displays as [1.11-6]

MENU	📁 ML Men
	📁 ML Women
	📁 ML Bands
	📁 HK TW Men
	📁 HK TW Women
	📁 HK TW Bands
	→ Next 1/2

[1.11-6]

1.11.5 Language Type:

        includes Chinese, Cantonese, Formosan,
English and Other. You can search songs by language type,
TV screen displays as [1.11-7].

1.11.6 Song Type:

        includes Popular Songs, Updated Songs, Movie
Songs, Drama, Army songs, Children Songs, Gospel Song,
Congratulations, Couple Songs, Ballad, Dance Drama and
Other. You can search songs by song type, TV screen
displays as [1.11-8].

| MENU | 📁 CHINESE |
	📁 Cantonese
	📁 Formosan
	📁 English
	📁 OTHER
	1/1

[1.11-7]

1.11.7 Vocal Sing:

        When you play the midi songs with vocal, you
can turn the vocal on/off by pressing
[VOCAL].

1.11.8 Advanced Search:

        You can search songs by Song Name,
Singer Name, Singer Type, Language Type and Vocal Sing.
TV screen displays as [1.11-9].

MENU	📁 Popular Songs
	📁 Updated Songs
	📁 Movie Songs
	📁 Drama
	📁 Army Songs
	📁 Children Songs
	→ Next 1/2
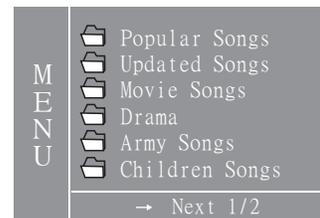
[1.11-8]

1.11.9 All Songs are displayed on the TV screen according to the
        alphabet sequence and English songs first.

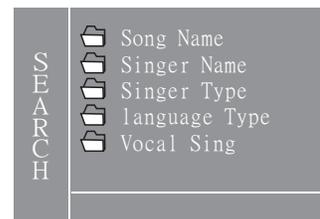1.11.10 Random Play: Open/Close

1.11.11 Sequence Play: Open/Close

1.11.12 Select Play: Open/Close

SEARCH	📁 Song Name
	📁 Singer Name
	📁 Singer Type
	📁 language Type
	📁 Vocal Sing

[1.11-9]

1.11.13 Select Song Num:

        If the current mode is random or sequence
play, you can select songs after you select "Select
Song Num".

1.11.14 Score Setup: includes Score Switch, Difficulty Level, Vocal Switch and Random Score.
    1.Score Switch: Open/Close
    2.The Difficulty Levels of Singing: includes Beginner (easier), Familiar (easy),
        Normal, Expert(hard) and Master(harder).
    3.Vocal: Open/Close
    4.Random Score: Open/Close.
1.11.15 Language Setup: you can choose the language according to your perference.

1.12 Adjust the volume of MIC, ECHO and 3D EFFECT
1.12.1 Switch to sub-menu MIC1 by pressing [EFFECT] repeatedly,
    TV screen displays as [A]

[A]   M I C 1   V O L   06

    Raise MIC1 volume by pressing [RIGHT]; lower MIC1 volume by
    pressing [LEFT].
1.12.2 Switch to the sub-menu of MIC2 by pressing the [EFFECT] button repeatedly, TV
    screen displays as [B]

[B]   M I C 2   V O L   08
    Raise MIC2 volume by pressing [RIGHT], lower MIC2 volume by
    pressing [LEFT].
1.12.3 Switch to the sub-menu of ECHO by pressing the [EFFECT] button repeatedly, TV
    screen displays as [C].

[C]   E C H O   06

    Raise the ECHO volume by pressing the [RIGHT] button, lower the ECHO volume by
    pressing [LEFT].
1.12.4 Switch to the 3D EFFECT sub-menu by pressing the [EFFECT] button repeatedly,
    TV screen displays as [D]

[D]   3 D E F F E C T :   [J A Z Z

    Adjust the set of 3D EFFECT by pressing [LEFT] or [RIGHT].
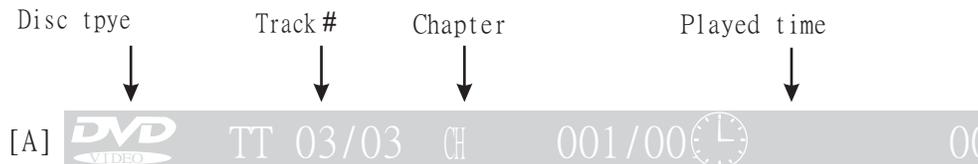   The available items are: STANDARD, JAZZ, POP, LIVE, ROCK and CLASSIC.
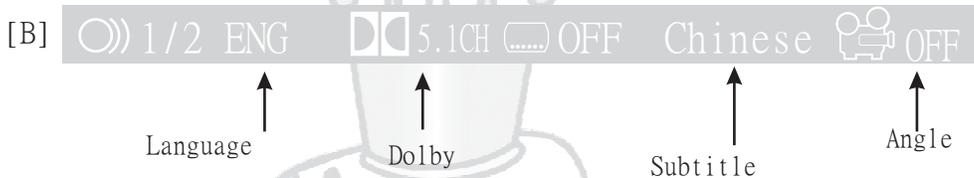
2.Confirming Playback Mode

2.1 In DVD Mode

Indicates the status of ongoing time, title and chapter.
1.Press [DISPLAY] the first time, TV screen displays as [A]

Disc tpye   Track #   Chapter   Played time

[A] **DVD** VIDEO   TT 03/03   CH   001/00🕐   0(

2.Press the [DISPLAY] button for the second time, TV screen displays as [B]

[B] ◯)) 1/2 ENG   ◼◖ 5.1CH ⬚ OFF   Chinese 📹 OFF

Language   Dolby   Subtitle   Angle

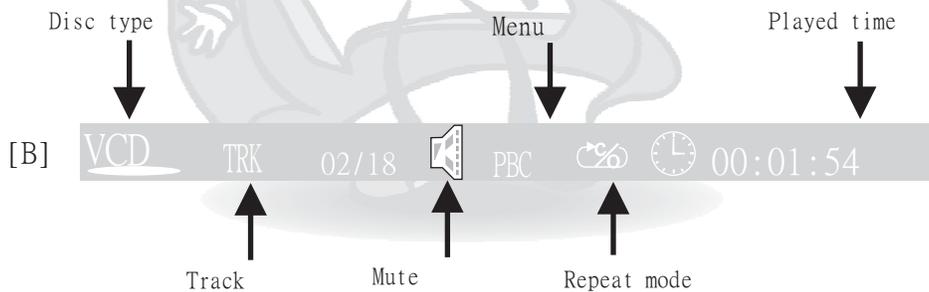3.Press [DISPLAY] for the third time, all related display will
  be canceled.
*Title refers to a film.
*Usually a film can be divided into several sections, chapter refers to a
 section among them.

2.2 In VCD Mode

Indicate the status of disc type, ongoing time, track number, mute, PBC and repeat.
  1.Press [DISPLAY] for the first time, TV screen displays as [C]

Disc type   Menu   Played time

[B] VCD   TRK   02/18 🔇 PBC   ⟳% 🕐 00:01:54

Track   Mute   Repeat mode

2.Press [DISPLAY] for the second time, all related display
  will be canceled.
* The status of repeat and play can be set only when the PBC is off.

3.Searching the Image You Want

 (This function is only available for the discs such as DVD, SVCD, VCD and MPEG4)
3.1 In the playing mode, you can search the image you want forward or backward by pressing [◄◄] or [►►].

Search Forward Fast

 1.Press [►►] for the first time, TV screen displays "FORWARD X2►► "
  Play forward at double the normal speed (sound disappear).

 2.Press [►►] for the second time, TV screen displays "FORWARD X4 ►► "
  Play forward at fourfold the normal speed (sound disappear).

 3.Press [►►] for the third time, TV screen displays "FORWARD X8 ►► "
  Play forward at eightfold the normal speed (sound disappear).

 4.Press [►►] for the fourth time, TV screen displays "FORWARD X20 ►► "
  Play forward at twenty fold the normal speed (sound disappear).

 5.Press [►►] for the fifth time, TV screen displays "PLAY ► ".
  The playing speed returns to normal (sound returns to normal).

Search Fast Backward

 1.Press [◄◄]for the first time, TV screen displays "BACKWARD X2 ◄◄ "
  Play backward at double the normal speed (sound disappear).

 2.Press [◄◄] for the second time, TV screen displays "BACKWARD X4 ◄◄ "
  Play backward at 4X the normal speed (sound disappear).

 3.Press [◄◄] for the third time, TV screen displays "BACKWARD X8 ◄◄ "
  Play backward at 8X the normal speed (sound disappear).

 4.Press [◄◄] for the fourth time, TV screen displays"BACKWARD X20◄◄"
  Play backward at 20X the normal speed (sound disappear).

 5.Press [◄◄] for the fifth time, TV screen displays "PLAY ► "
  The playing speed returns to normal (sound returns to normal).

3.2 Search for the scenes using the function of "GOTO" function.
   1.Press [GOTO], TV screen displays as [A]

[A] VCD   TRK   08/18   PBC   00:01:46

   2.Move the cursor to the position of hour/minute/second "00:00:00" by pressing
    [LEFT] or [RIGHT], then input the time you need with the number buttons.
   3.Switch to play the scenes after you press [ENTER]
    or [PLAY] or wait for a few seconds.
*When the player plays DVD discs, functions such as select title, select chapter
 and select time are available, TV screen displays as [B]

[B] DVD VIDEO   TITLE 01/04 CHAP 001/008   00:00:

*To modify the time value you input, please press [DELETE], then re-input the time value.
*In MP3/CD mode, you can switch to another song or change the playing start-point
 of a song using the "GOTO" function.

3.3 Search the image you want with [◀◀] or [▶▶|]
   (This function is available to VCD, SVCD, DVD, MPEG4)
   Switch to the previous program by pressing [◀◀] ,
   TV screen displays "PREV ◀◀ ".
   Switch to the next program by pressing [▶▶|] ,
   TV screen displays "NEXT ▶▶| ".

3.4 Search the scene you want with the "SLOW" function
   (This operation is only available to VCD, SVCD, DVD and MPEG4)
   (Six levels are included, if the level is higher, the speed of searching image
   forward is slower;sound will disappear during the process of searching image).
    1.Press [SLOW] for the first time, TV screen displays [▶ 1/2]
    2.Press [SLOW] for the second time, TV screen displays [▶ 1/3]
    3.Press [SLOW] for the third time, TV screen displays [▶ 1/4]
    4.Press [SLOW] for the fourth time, TV screen displays [▶ 1/5]
    5.Press [SLOW] for the fifth time, TV screen displays [▶ 1/6]
    6.Press [SLOW] for the sixth time, TV screen displays [▶ 1/7]
    7.Press [SLOW] for the seventh time, TV screen displays [PLAY],
     both speed and sound will return to normal.

3.5 Search for the scene you want by using "PAUSE/STEP" function
   (This operation is only available for VCD, SVCD, DVD and MPEG4)

Playing Discs

1. Press [PAUSE/STEP] for the first time, TV screen displays " ▌▌ ".
   When the player is PAUSED, the image is still and the sound will disappear.
2. Press [PAUSE/STEP] for the second time, TV screen displays "STEP ▶▌▌".
   When the player is in the status of STEP, you can press [PAUSE/STEP]
   repeatedly to search the image you want step by step. Sound will disappear during
   search. The player will return to the normal playing mode by pressing [▶].

4.Repeated Playback

4.1 The Repeat playback of DVD Discs

Play the whole title or chapter repeatedly on the base of the current image.
Press the [REPEAT] for the first time, TV screen displays "REP [CHAPTER]",
the VFD displays as [4.1-1]. The player will play the current chapter repeatedly.

Press [REPEAT] for the second time,
TV screen displays "REP [TITLE]", the VFD displays
as [4.1-2]. The player will play the current title
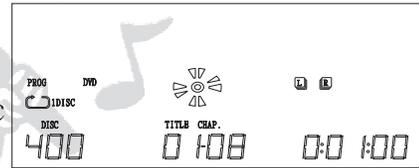repeatedly.

Press [REPEAT] for the third time,
TV screen displays "REP [OFF]", the player will cancel
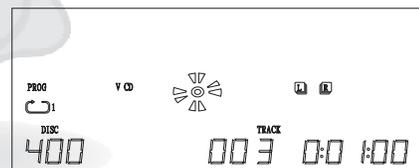the repeated playback mode and return to normal
status.
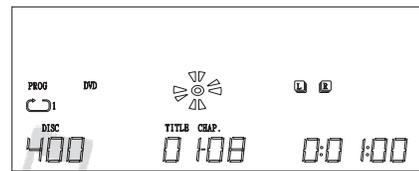
[4.1-1]

4.2 The Repeat playback of SVCD, VCD and CD Disc

Press [REPEAT] for the first time,
TV screen displays "REP 1"and the player
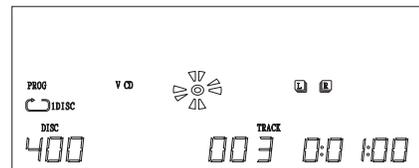plays the current playing track repeatedly. The VFD displays as [4.2-1].

[4.1-2]

Press [REPEAT] for the second time,
TV screen displays "REP ALL" and the player plays
all songs in current disc repeatedly. The VFD displays
as [4.2-2].

Press [REPEAT] for the third time, TV
screen displays "REP OFF", the player will exit
repeat mode and return to normal playing mode.

[4.2-1]

*In addition, MP3 disc can be set to play
 the whole DIR repeatedly.

[4.2-2]

4.3 Playing the Selected Section Repeatedly
   Press the [A-B] button for the first time to set the starting point of the
   repeated section you want. Press [A-B] for the second time to set
   the end point of the repeated section you want.
    1.Press [A-B] for the first time, TV screen displays "REPEAT A-"
    2.Press [A-B] for the second time, TV screen displays "REPEAT A-B"
      Then the player will play the all programs which are included in the section
      you set repeatedly.
    3.Press the button of [A-B] for the third time, TV screen displays "REPEAT OFF",
      the player will exit the repeated playing mode and return to the normal
      playing mode.

4.4 The Repeated Status of MP3 and MPEG4 Discs
    1.Press [REPEAT] for the first time, the player plays the current
      song repeatedly, TV screen displays "REP: REP1".
    2.Press [REPEAT] for the second time, the player plays all songs
      in current DIR repeatedly, TV screen displays "REP DIR".
    3.Press [REPEAT] for the third time, the player plays the current
      disc repeatedly, TV screen displays "REP ALL".
    4.Press [REPEAT] for the fourth time, the player will exit the
      repeated playing mode, TV screen displays "REP OFF".

5.Common Buttons
(Available for DVD, VCD, SVCD, CD, MP3, MPEG4)
5.1 You can raise the volume of the current playing song by pressing [+];
    You can lower the volume of the current playing song by pressing [-].
5.2 You can raise the tone of the current playing song by pressing [#]
    TV screen displays [♭-----♮--♪---#]   ;
    You can lower the tone of the current playing song by pressing [b] ,
    TV screen displays [♭--♪---♮-----#]   .

5.3 MUTE
    Press [MUTE] for the first time, TV screen displays "MUTE";Press
    [MUTE] for the second time, the player will cancel the function
    of MUTE.

5.4 PAUSE
    1.Press [❚❚] for the first time, TV screen displays " ❚❚ "
    The image is still and the sound disappears when the player is in the pausing status.
    2.The player will return to the normal playing mode when you press [▶] .

5.5 Display
    shows the current song number and ongoing time.

When you play a disc that contains several pictures of JPEG format, the operations
are similar to MP3 disc. Because JPEG format are still pictures,
volume operations volume are of no effect.

6.Zooming the Image

You can use the ZOOM function to enlarge the image you like during playback
To different discs , the related operations are different.

1.Press [ZOOM] for the first
time, TV screen displays as [6-1]. The image
will be zoomed in 2x.

[6-1]

2.Press [ZOOM] for the second
time, TV screen displays as [6-2].
The image will be zoomed threefold.

[6-2]

3.Press [ZOOM] for the third time,
TV screen displays as [6-3].
The image will be zoomed fourfold.

[6-3]

4.Press [ZOOM] for the fourth
time, TV screen displays as [6-4].
The image
will be zoomed 1/2 .

[6-4]

5.Press [ZOOM] for the fifth
time, TV screen displays as [6-5].
The image will be zoomed in 1/3.

[6-5]

6.Press [ZOOM] for the sixth
time, TV screen displays as [6-6].
The image will be zoomed in 1/4.

[6-6]

7.Press [ZOOM] for the
seventh time, TV screen displays as
[6-7]. The function of ZOOM will be
closed and the image will return to
normal.

[6-7]

8.You can also adjust the position of
the whole image by pressing
[▲] [▼] [◄] [►] when
you use ZOOM.

Playing Discs

7.Changing the Angle

Some discs can be enjoyed from different angles during playback. This function
is only available for discs that support multi-angles.
First, make sure you have opened the DISPLAY function
1.Press [ANGLE], TV screen displays as[A]

Display the current angle number current playing

[A] 1/4

Display the total amount of angles in the disc

2.The player will change an angle each time you press [ANGLE].
For different discs, the amounts of angles which can be chosen are different.
3.If the current angle is the last one, you can cancel the function of playing
from multiple angles by pressing [ANGLE] again, The image will
return to the default angle.

8.Changing the Dialogue Language

You can choose different dialog languages by using the AUDIO function during
playback. This function is available only for the DVD discs which support
multiple dialogue languages.
1.Press [AUDIO], TV screen displays as [B]
Display number of language

[B] ◯)) [1ENGLISH   5.1CH

Display the language of caption

2.The player will change languages each time you
press [AUDIO].

9.Changing Subtitle Language

(This function is only available for DVD, SVCD, MPEG4)
You can select the subtitle language optionally during playback, this function
is only available for the discs which support multiple languages.
1.Press [SUBTITLE], TV screen displays as[C]

Display number of language

[C] [1ENGLISH]

Display the caption language
2. Change subtitle language each time you press [SUBTITLE]

3.If you don't want to display subtitle language, you can turn off the
subtitle language by pressing [SUBTITLE] a few times ,
TV screen displays as[D]

[D]   [......]   [OFF]

10.Use Select Menu(VCD, SVCD)
The function of MENU (for VCD and SVCD discs, menu is also named as PBC)
All the information in the disc can be selected in the menu.
1.Press [MENU], TV screen displays all content in the disc.
2.You can select the playlist you want to play in the menu with the number
buttons directly.

PBC ON   MENU PLAY [ON]

PBC OFF   MENU PLAY [OFF]

11. Use Title(DVD)
All the title information can be selected in the title menu.
For example: karaoke music and film sections can be selected.
1.TV screen displays all content in the title if you press [TITLE].
2.You can select your aimed item in the title menu with the number buttons
or direction buttons, and then press [ENTER] to confirm.
The player will return to the title menu if you press
[RETURN] in the playing mode.In DVD mode, if there are multi menus, you can
find out the menu you need quickly by pressing the related number buttons.

12.Practice Songs
(This function is available for CD, VCD, SVCD, MP3, MPEG4)
1.Press the [L/R] button for the first time, TV screen displays "STEREO"
2.Press the [L/R] button for the second time, TV screen displays "MONO L"
3.Press the [L/R] button for the third time, TV screen displays "MONO R"
4.Press the [L/R] button for the fourth time, TV screen displays "AUTO L"
5.Press the [L/R] button for the fifth time, TV screen displays "AUTO R"
STEREO (both left sound channel and right sound channel are output at one time)
*When you enjoy karaoke, you can cancel the main vocal by pressing the button
of [L/R],then sing with the accompaniment.
*AUDIO L: When you begin singing, the player turns on the lead vocal; when you
stop singing, the player turns off the original sound.
*AUDIO R: When you begin singing, the player turns off the lead vocal; when you
stop singing, the player turns on the original sound.
*For the discs such as CD, MP3, only items such as STEREO, MONO L, MONO R can be
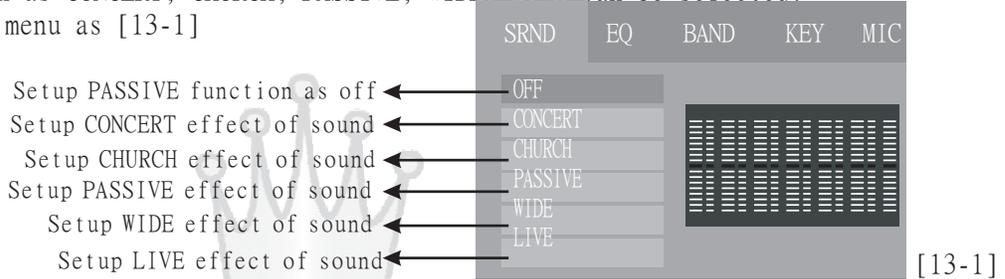selected.

13.Setting the Sound Effect

(This function is available for DVD, SVCD, VCD, CD, MP3, MPEG4)
Press [EFFECT] to enter the effect menu, use the buttons
and [ENTER] to set each item in effect menu one by one.
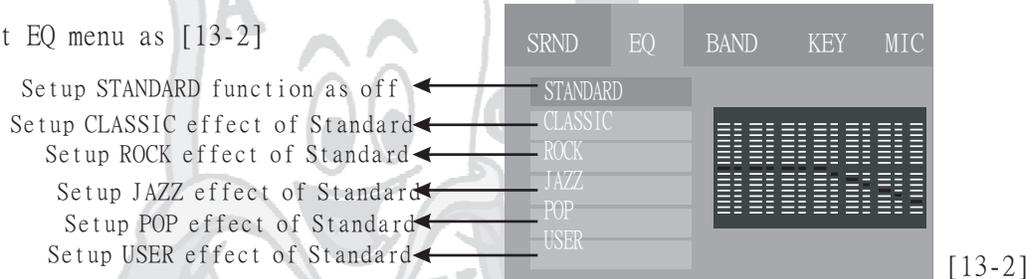
13.1 The Surround sound

Items such as CONCERT, CHURCH, PASSIVE, WIDE, LIVE can be selected.
The SRND menu as [13-1]
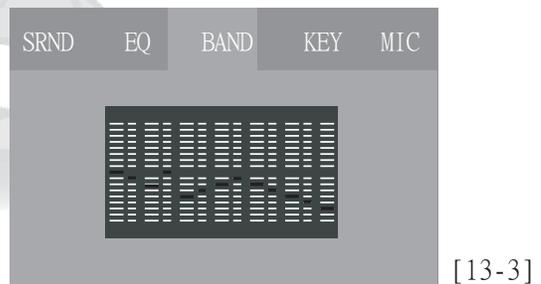
Setup PASSIVE function as off ◄
Setup CONCERT effect of sound ◄
Setup CHURCH effect of sound ◄
Setup PASSIVE effect of sound ◄
Setup WIDE effect of sound ◄
Setup LIVE effect of sound ◄

| SRND | EQ | BAND | KEY | MIC |

OFF
CONCERT
CHURCH
PASSIVE
WIDE
LIVE

[13-1]

13.2 Equilibrium Function

The optional items such as STANDARD, CLASSIC, ROCK, JAZZ, POP and USER can be selected.
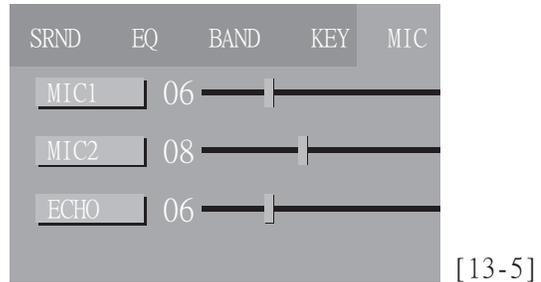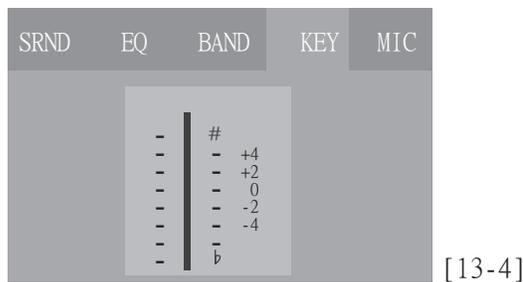The set EQ menu as [13-2]

Setup STANDARD function as off ◄
Setup CLASSIC effect of Standard ◄
Setup ROCK effect of Standard ◄
Setup JAZZ effect of Standard ◄
Setup POP effect of Standard ◄
Setup USER effect of Standard ◄

| SRND | EQ | BAND | KEY | MIC |

STANDARD
CLASSIC
ROCK
JAZZ
POP
USER

[13-2]

13.3 Frequency Spectrum

The BAND menu as [13-3]

13.4 Key Control

The KEY menu as [13-4]

| SRND | EQ | BAND | KEY | MIC |

13.5 MIC

The MIC menu as [13-5]

[13-3]

| SRND | EQ | BAND | KEY | MIC |

#
+4
+2
0
-2
-4
♭

[13-4]

| SRND | EQ | BAND | KEY | MIC |

MIC1 06
MIC2 08
ECHO 06

[13-5]

14. Function Setup
14.1 System Setup
Press the [SETUP] button, TV screen displays as [14-1]
TV SYSTEM: NTSC, PAL60, PAL, AUTO.
SCREEN SAVER: ON/OFF
VIDEO: INTERLACE-YUV, P-SCAN, YPBPR, S-VIDEO, PC-VGA
TV TYPE: 4:3PS 　,4:3LB 　 16:9 　
PASSWORD: 0000
RATING: NO ADULT, KID SAFE, VIEW ALL
DEFAULT: RESTORE
EXIT SETUP

```
SYSTEM SETUP
TV SYSTEM
SCREEN SAVER
VIDEO
TV TYPE
PASS WORD
RATING
DEFAULT
EXIT SETUP
```

[14-1]

14.2 Language Setup
Press the [SETUP] button, and then select language setup by pressing the direction buttons, TV screen displays as [14-2]

*Language setup is only on the premise that the disc is recorded with multi languages

1.OSD LANGUAGE: the language which is displayed on TV screen, it is used to point out or reply the related operations to the user. The options of ENGLISH, CHINESE, GERMAN, SPANISH, FRENCH, and PORTUGUESE can be selected in this player.

```
LANGUAGE SETUP
OSD-LANGUAGE
AUDIO LANG
SUBTITLE LANG
MENU LANG


EXIT SETUP
```

[14-2]

2.AUDIO LANG: the language which is used by dialogue. The optional languages are CHINESE, ENGLISH, JAPAN, FRENCH, SPANISH, PORTUGUESE, LATIN and GERMAN can be selected.

3.SUBTITLE LANG: the language which is used to display the dialogue. Options are CHINESE, ENGLISH, JAPAN, FRENCH, SPANISH, PORTUGUESE, GERMAN, OFF can be selected.

4.MENU LANGUAGE: the language which is used to display the select menu or title menu. Options are CHINESE, ENGLISH, JAPAN, FRENCH, SPANISH, PORTUGUESE, GERMAN, LATIN, OFF can be selected.
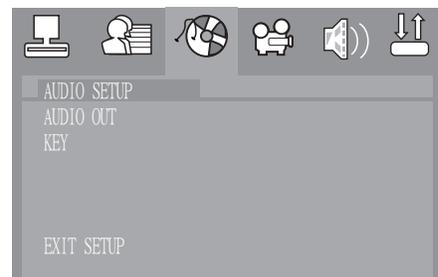
5.EXIT SETUP
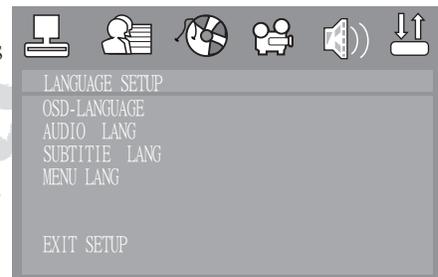
14.3 Audio Setup
Press [SETUP] and, select audio setup , TV screen displays as [14-3]
1.AUDIO OUT: SPDIF/OFF, SPDIF/RAW, SPDIF/PCM
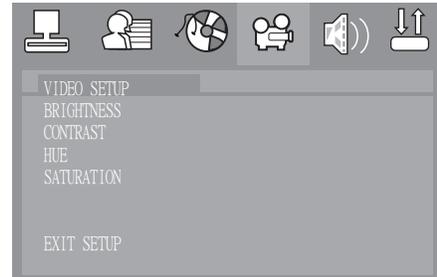2.KEY: Adjust tone by pressing UP and DOWN button
3.EXIT SETUP

```
AUDIO SETUP
AUDIO OUT
KEY




EXIT SETUP
```

[14-2]

14.4 Video Setup

Press [SETUP], select the function of video setup , TV screen displays as [14-4]
1.BRIGHTNESS: setup image brightness.
2.CONTRAST: setup image contrast degree.
3.HUE: setup image HUE.
4.SATURATION: setup image saturation.
5.EXIT SETUP

14.5 Speaker Setup

Press [SETUP], select speaker setup
, TV screen displays as [14-5]
DOWNMIX: LT/RT, STEREO, VSS, 5.1CH, OFF
SUBWOOFER: Subwoofer OFF ON
CENTER DELAY: 0 MS, 2 MS, 4 MS, +MS
REAR DELAY: 0MS, 6MS, 12MS, ΥMS
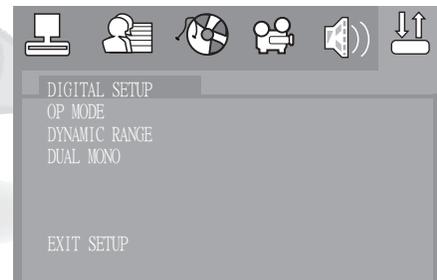FRONT: LARGE, SMALL
EXIT SETUP

14.6 Digital Setup

Press [SETUP], select digital , TV screen
displays as [14-6]
OUTPUT MODE: LINE OUT, RF REMOD
DYNAMIC RANGE: OFF, 2/8, 4/8, 6/8, FULL
DUAL MONO: STEREO, MONO L, MONO R,
MIX MONO
EXIT SETUP

VIDEO SETUP
BRIGHTNESS
CONTRAST
HUE
SATURATION

EXIT SETUP

[14-4]

SPEAKER SETUP
DOWNMIX
SUBWOOFER
CENTER DELAY
REAR DELAY
FRONT

EXIT SETUP

[14-5]

DIGITAL SETUP
OP MODE
DYNAMIC RANGE
DUAL MONO

EXIT SETUP

[14-6]

Troubleshooting

Symptoms	Action
The remote does not work.	❈ Remove the obstacles in the path of the remote and the player. ❈ Point the remote at the remote sensor on the player. ❈ Replace all the batteries in the remote with new ones if they are weak.
There is no image, no color. The image is rolling vertically	❈ Check the TV mode(NTSC/PAL) ❈ Check that the player is connected securely.
There is no sound	❈ Press the [SETUP] button change the player mode/ ❈ Check whether or not the audio output connected securely to the TV or amplifier. ❈ Check whether or not the TV is on. ❈ Turn up the TV or amplifier volume
There is no sound from the microphone	❈ Check the power of the microphone ❈ Check the audio output is connected securely. ❈ Check microphone volume
There are whistling noises when inserting the microphone	❈ The volume of the microphone. (MIC1 LEVEL,MIC2 LEVEL) ❈ Make sure you turn on the volume of TV of Amplifier
Video/Image not clear	❈ The disc may be dirty or have deep scratches.
When playing at some places, the player cannot continue	❈ Check the mode of player to see whether or not in [A-B] repeat status. ❈ The disc may be dirty or have deep scratches.
The disc does not play	❈ There is no disc inside(no disc appears). ❈ Insert the disc with the label side to the right.
Abnormal sound	❈ Send your machine to a specialized service shop
There is a disc in a certain disc slot but TV screen displays "ERROR DISC".	❈ Press [OPEN/CLOSE], first check whether the disc format of the problem disc can be compatible with the player, then check whether the problem disc has a defect.
There is a disc in a certain disc slot but TV screen displays "NO DISC" or there is a disc in the certain disc slot but the player can't detect the disc	❈ Usually the reason of this malfunction is that the related disc is not well placed. Please re-adjust the disc's position
There is not a disc a certain disc slot but the player judges there is a disc in the disc slot.	❈ Please check the related disc slot of the rotary table and clear the sundries such as dust.

Specification

Audio Characteristics	Output Voltage	2.0(+0.2 -1.0)(V)
	Frequency Response	20Hz-20kHz +-3dB
	Signal/Noise Ratio	≡80(dB)
	Dynamic Range(dB)	≡70(1kHz)
	Distortion and Noise(dB)	≒-60(1kHz)
	Channel Separation(dB)	≡70(1kHz)
Video Characteristics	Horizontal Definition(TV line)	≡250
	TV System	AUTO/NTSC/PAL
	Video Out Vp-p(V)	1.0+-0.2
	Output Impedance	75(Ohm)
General	Power Requirements	90-250V~,50/60Hz
	Power Consumption	≒25W
	Dimensions (m center meter)	430(L) X 535(W) X 188(H)
	Weight	9kg