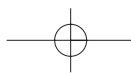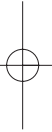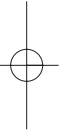HOLLYWOOD AT HOME

**OPERATING INSTRUCTIONS**

# VR-652
## *DVD Home Theater System*

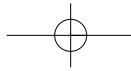# IMPORTANT SAFETY INSTRUCTIONS

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 dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose 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 the 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) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.
When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



**PORTABLE CART WARNING**

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) 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 is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

# *Introduction*

## READ THIS BEFORE OPERATING YOUR UNIT
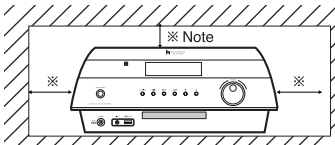
**CAUTION**
**RISK OF ELECTRIC SHOCK**
**DO NOT OPEN**

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

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.
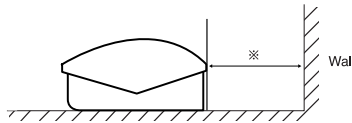
**WARNING** : **TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

**Caution regarding installation**
Note : For heat dispersal, do not install this unit in a confined space such as a bookcase or similar enclosure.

※ Note

※          ※

※          Wall

*Do not block ventilation openings or stack other equipment on the top.*

**Note to CATV System Installer :**
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.
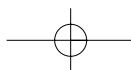
**FCC INFORMATION**
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
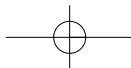• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

**CLASS 1 LASER PRODUCT**

**CAUTION**
Invisible laser radiation when the unit is open.
Do not stare into beam.

CAUTION : USE OF ANY CONTROLS, ADJUSTMENTS, OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
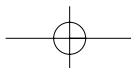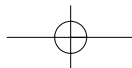
**ENGLISH**

| FOR YOUR SAFETY | | |
|---|---|---|
| **U.S.A CANADA** | **120 V** | Units shipped to the U.S.A and CANADA are designed for operation on 120 V AC only.<br>Safety precaution with use of a polarized AC plug.<br>However, some products may be supplied with a nonpolarized plug.<br>**CAUTION** : To prevent electric shock, match wide blade of plug to wide slot, fully insert.<br>**ATTENTION** : Pour éviter chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu' au fond. |

**CAUTION**

• Leave a space around the unit for sufficient ventilation.
• Avoid installation in extremely hot or cold locations, or in an area that is exposed to direct sunlight or heating equipment.
• Keep the unit free from moisture, water, and dust.
• Do not let foreign objects in the unit.
• The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.
• No naked flame sources, such as lighted candles, should be placed on the unit.
• Please be care the environmental aspects of battery disposal.
• The unit shall not be exposed to dripping or splashing for use.
• No objects filled with liquids, such as vases, shall be placed on the unit.
• Do not let insecticides, benzene, and thinner come in contact with the set.
• Never disassemble or modify the unit in any way.
  **Notes on the AC power cord and the wall outlet.**
• The unit is not disconnected from the AC power source(mains) as long as it is connected to the wall outlet, even if the unit has been turned off.
• To completely disconnect this product from the mains, disconnect the plug from the wall socket outlet.
• When setting up this product, make sure that the AC outlet you are using is easily acceptable.
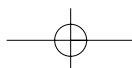• Disconnect the plug from the wall outlet when not using the unit for long periods of time.

**PRECAUTIONS**

  **Moisture condensation**
  Moisture may form on the lens in the following conditions.
• Immediately after a heater has been turned on.
• In a steamy or very humid room.
• When this unit is moved from a cold place to a warm one.
  If moisture forms inside this unit, it may not operate properly.
  In this case, turn on the power and wait about one hour for the moisture to evaporate.
  **If there is noise interference on the TV while a broadcast is being received.**
  Depending on the reception condition of the TV, interference may appear on the TV screen while you are watching a TV broadcast and this unit is left on. This is not a malfunction of this unit or the TV. To watch a TV broadcast, turn off this unit.
  **Do not transport this unit with discs left in it.**

# CONTENTS

**ENGLISH**

# System Connections

• Do not plug the AC input cord into the wall AC outlet until all connections are completed.
• Be sure to observe the color coding when connecting audio and video cords.
• Make connections firmly and correctly. If not, it can cause loss of sound, noise or damage to the unit.

## 1. CONNECTING ANTENNAS
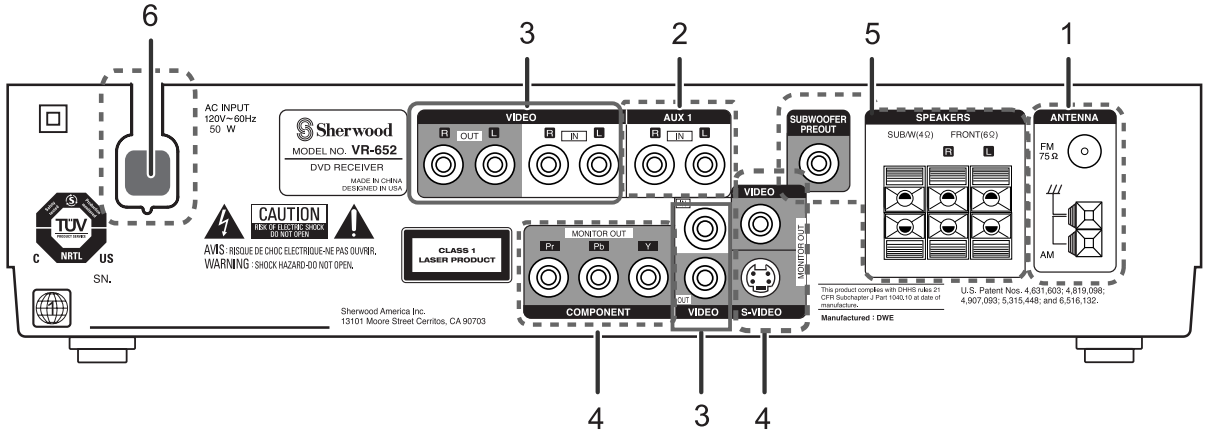


FM Indoor Antenna
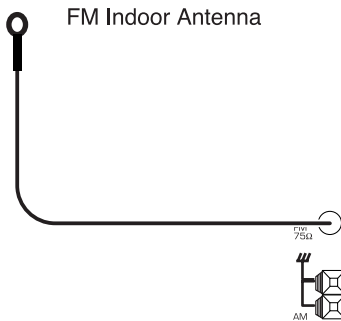
FM Outdoor Antenna

• Change the position of the FM indoor antenna until you get the best reception of your favorite FM stations.
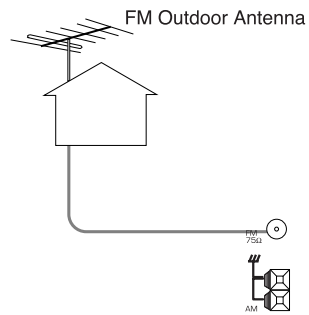
• A 75Ω outdoor FM antenna may be used to further improve the reception. Disconnect the indoor antenna before replacing it with the outdoor one.

AM Loop Antenna

AM Outdoor Antenna
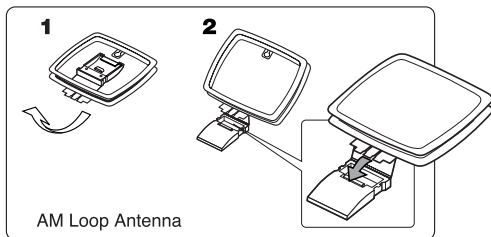
AM Loop Antenna

• Place the AM loop antenna as far as possible from the receiver, TV set, speaker cords and the AC input cord and set it to a direction for the best reception.
• If the reception is poor with the AM loop antenna, an AM outdoor antenna can be used in place of the AM loop antenna.
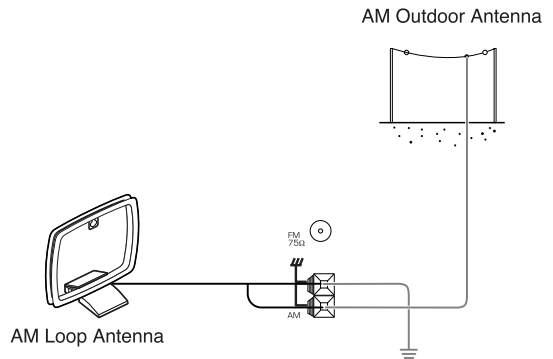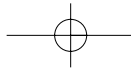
## 2. CONNECTING AUDIO COMPONENT



**AUX 1** CD player, tape deck, etc
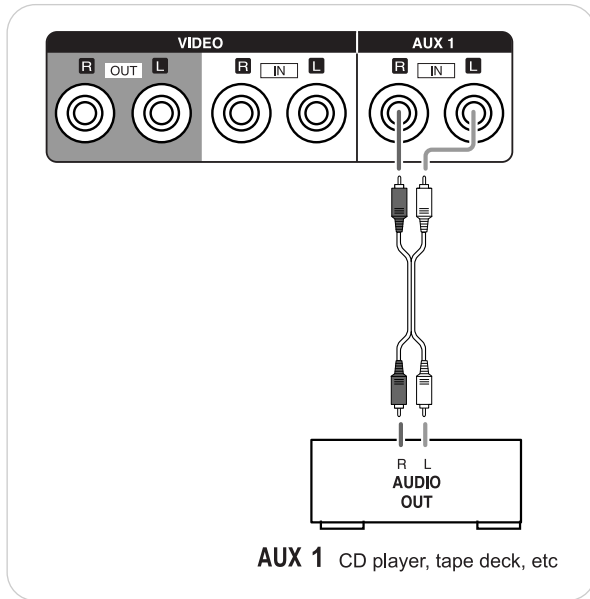
• The AUX 1 jacks can be connected to an audio component such as a CD player, tape deck, etc.

## 3. CONNECTING VIDEO COMPONENT



**VIDEO** VCR, DVD recorder, etc.
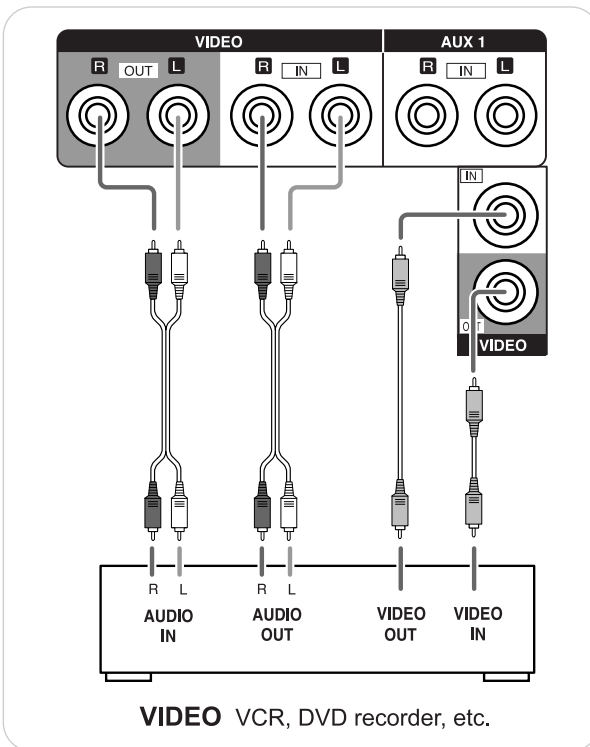
• The analog audio IN/OUT jacks may also be connected to audio recording equipment such as a tape deck, an MD recorder, etc.

  **Note :**
• Commercial DVD Video discs are copy-protected, and any recordings made from these discs will be distorted.

## 4. CONNECTING TV

MONITOR OUT
Pr    Pb    Y
COMPONENT    VIDEO    S-VIDEO
IN
OUT
VIDEO
MONITOR OUT

Pr    Pb    Y          VIDEO    S-VIDEO
COMPONENT             IN       IN
VIDEO IN

**TV, projector, etc.**
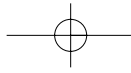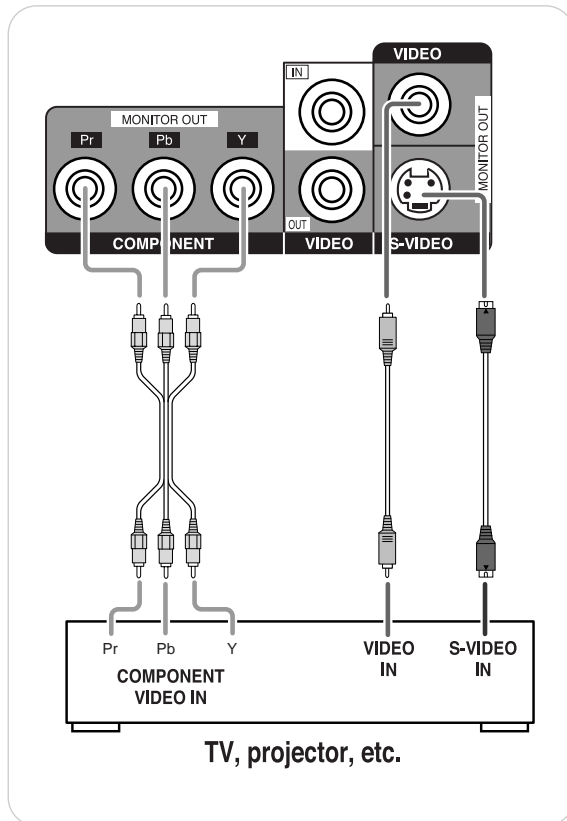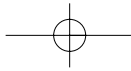
• There are three types of MONITOR OUTs (COMPONENT, S-VIDEO, ((composite) VIDEO). Connect them to the corresponding video jacks of your TV according to their capability.
• For your reference, the excellence in picture quality is as follows :
"COMPONENT" > "S-VIDEO" > (composite) "VIDEO").
• When making COMPONENT VIDEO connections, connect "Y" to "Y", "$P_b$" to "$P_b$"(or "B-Y", "$C_B$") and "$P_r$" to "$P_r$"(or "R-Y", "$C_R$").
• Depending on the type of the COMPONENT VIDEO INs of your TV, be sure to set the SCAN TYPE correctly. (Refer to "When selecting the SCAN TYPE" on page 39.)

 **Notes :**
• You don't need to make all kinds of video connections between this unit and your TV.
• When you set the resolution to the mode other than INTERLACED, the S-VIDEO and the (composite) VIDEO MONITOR OUTs of this unit cannot output the video signal, meaning the picture will not be shown. (For details, refer to "When selecting the SCAN TYPE" on page 39.)
• If the resolution of the video signals which are output from the COMPONENT MONITOR OUTs and your TV are not matched, the picture is not clear, natural or displayed. In this case, change the setting of the resolution to suit that of your TV.
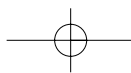• Do not connect the unit to the TV through a VCR. Otherwise the picture may be disturbed due to the copy protection function.
• CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 OR 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE "STANDARD DEFINITION" OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525p AND 625p DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER.

# 5. CONNECTING SPEAKERS

Front Speaker (ST-602)

Right          Left

Active Subwoofer
(ASW-672)

SUBWOOFER
PREOUT

AUDIO
IN

SPEAKERS

SUB/W(4Ω)          FRONT(6Ω)

R          L

or

Passive Subwoofer
(SW-652)
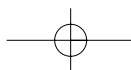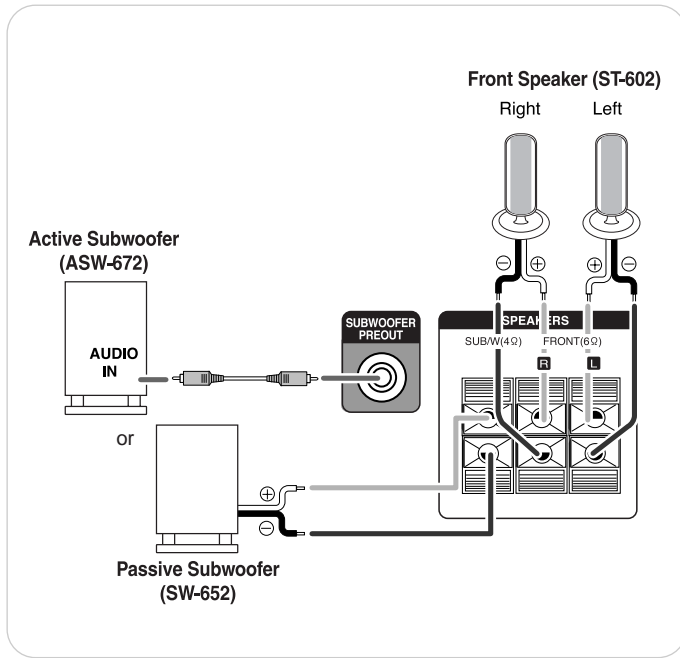
· Be sure to connect speakers firmly and correctly according to the channel (left and right) and the polarity (+ and -).
  If the connections are faulty, no sound will be heard from the speakers, and if the polarity of the speaker connection is incorrect, the sound will be unnatural and lack bass.
· Depending on the type of your subwoofer, connect it as follows.
· Connect the SUBWOOFER PREOUT jack to the active (powered) subwoofer. (For details on the operation of the subwoofer, refer to "Operating instructions of your active subwoofer" )
· Connect the SUBWOOFER terminals to the passive subwoofer.(For details on the operation of the subwoofer, refer to "Operating instructions of your passive subwoofer" )

**Caution :**
· Be sure to use the front speakers with the impedance of 6 ohms or above and the passive subwoofer with the impedance of 4 ohms or above.
· Do not let the bare speaker wires touch each other or any metal part of this unit. This could damage this unit and/or the speakers

## SPEAKER PLACEMENT

1
2     4            3

5
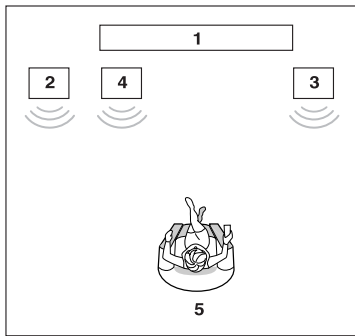
1. TV or screen
2. Front left speaker
3. Front right speaker
4. Subwoofer
5. Listening position

Place the speakers as follows :
· Front speakers: Place the front speakers with their front surfaces as flush with TV or monitor screen as possible.
· Subwoofer: Place the subwoofer any where in the front as desired because the low frequencies it reproduces are non-directional.

# 6. AC INPUT CORD

Plug this cord into a wall AC outlet.
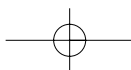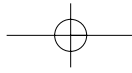
# Controls & DIsplays

## FRONT PANEL CONTROLS

ENGLISH

HOLLYWOOD
AT HOME
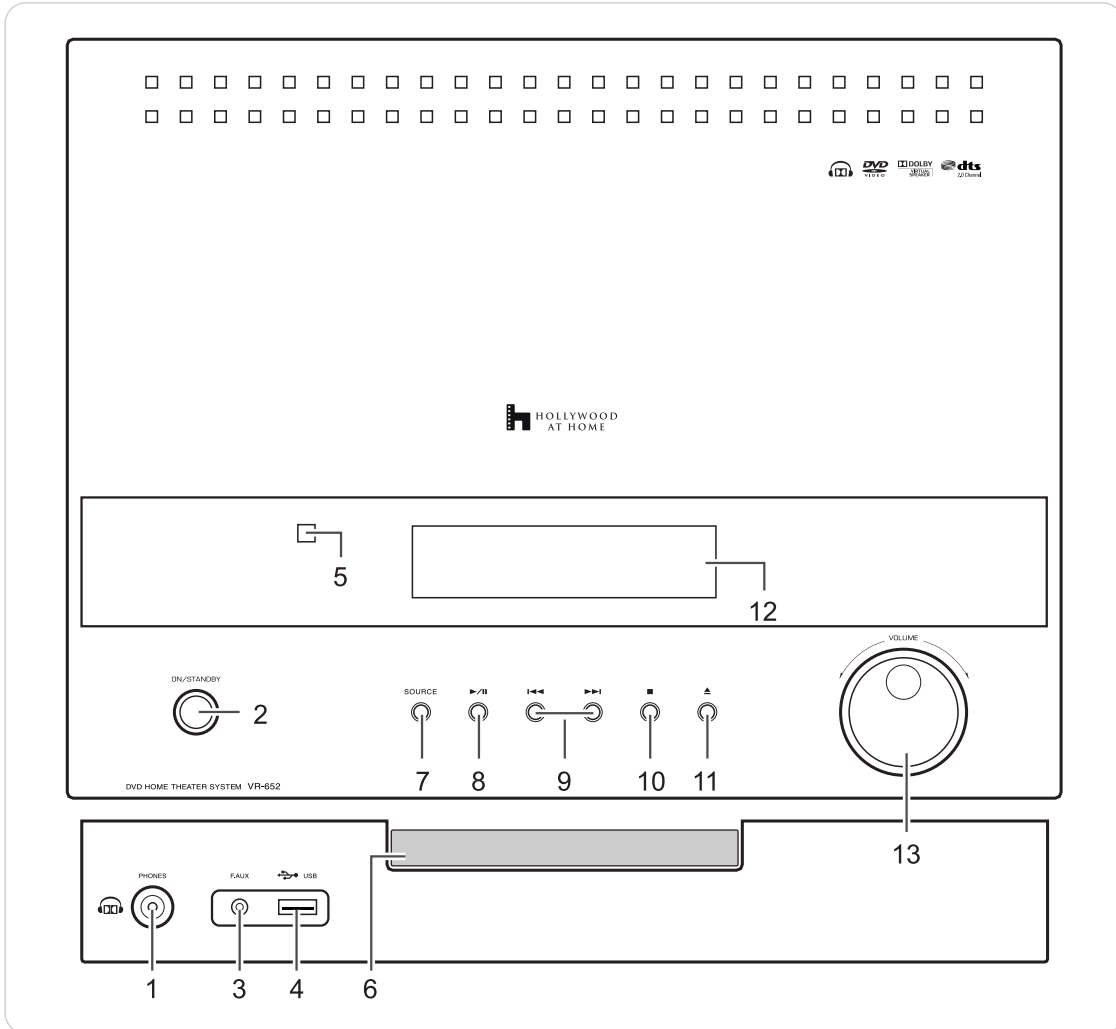
1. PHONES jack
2. POWER ON/STANDBY button/indicator
3. FRONT AUX jack
   For details, see next page.
4. USB connector
   For details, see next page.
5. REMOTE SENSOR
6. DISC TRAY
7. SOURCE SELECT button

8. PLAY/PAUSE( / ) button
9. PRESET TUNING UP/DOWN,
   FORWARD/BACKWARD SKIP( / ) buttons
10. STOP( ) button
11. OPEN/CLOSE( ) button
12. FLUORESCENT DISPLAY
   · For details, see next page.
13. VOLUME CONTROL knob
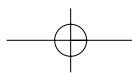
## FLUORESCENT DISPLAY
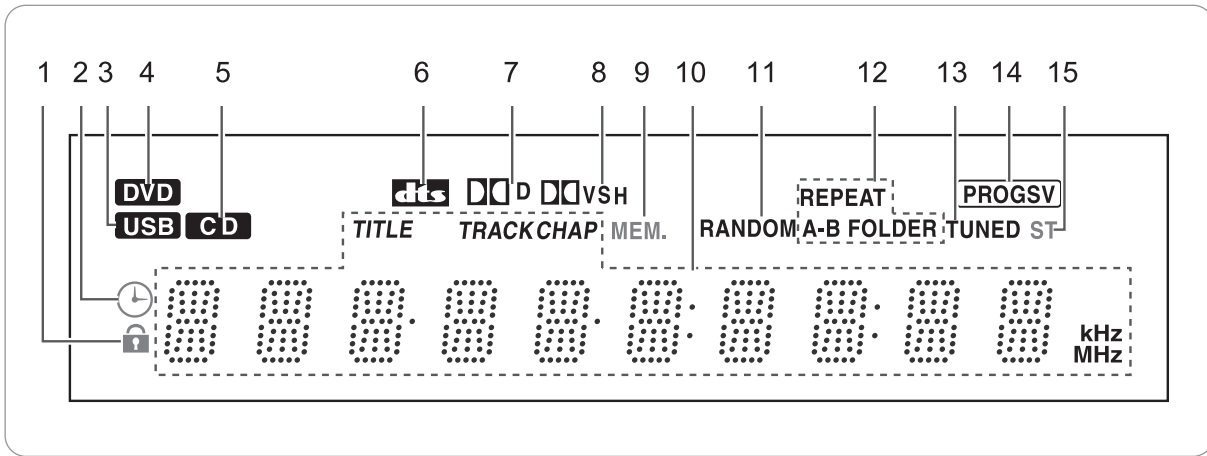


1. PARENTAL CONTROL indicator
2. TIMER indicator
3. USB indicator
4. DVD indicator
5. CD indicator
6. DTS SIGNAL indicator
7. DOLBY DIGITAL SIGNAL indicator
8. SURROUND MODE indicators

9. MEMORY indicator
10. MULTI-INFORMATION display
11. RANDOM PLAY indicator
12. REPEAT indicators
13. TUNED indicator
14. PROGRESSIVE indicator
15. STEREO indicator
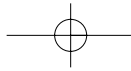
## FRONT AUX JACK

• The FRONT AUX jack can be connected to an additional audio component such as an MP3 player, etc.
   **Note :**
• When connecting this jack to an MP3 player, etc., you should use the stereo mini cord, not a mono mini cord.

F.AUX

MP3 player, etc.

AUDIO
OUT
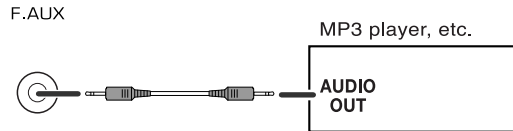
## USB CONNECTOR

• The USB connector can be connected to a USB mass storage device directly to enjoy MP3, WMA or JPEG files stored on it through this unit.
   (For details on the operation of USB device, refer to "To play files from USB mass storage device" on page 23.)
   **Note :**
• After USB playback, remove the USB device in the stop mode or the standby mode.

USB

USB mass storage device
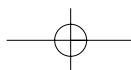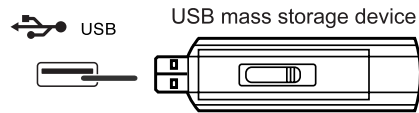
## UNIVERSAL REMOTE CONTROLS

This universal remote control can operate not only this unit but also most popular brands of video components such as TVs, VCRs, cable boxes, satellite receivers, etc.
・To operate 4 components other than this unit, you should enter the setup code for each component.
 (For details, refer to "ENTERING A SETUP CODE" on page 13.)
・The numbered buttons on the remote control have different functions in other device modes.
 For details, refer to "FUNCTION TABLE of the NUMBERED BUTTONS" on the next page.
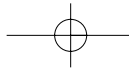
ENGLISH

STANDBY button
FUNCTION SELECT buttons

DIMMER button
CURSOR CONTROL( / / / ),
ENTER buttons

DISPLAY button
SETUP button

NUMERIC(0~9, +10) buttons

STEP( ) button
SLOW( ) button
TUNING DOWN( ), BACKWARD
SEARCH( ) button
PRESET TUNING DOWN( ),
BACKWARD SKIP( ) button
REPEAT button
REPEAT A-B button

PAL/NTSC button
CLOCK/SLEEP button
TIMER button

DEVICE buttons
To operate the desired component with
this remote control, first select the
corresponding DEVICE button.

① POWER ON button

MENU button
TOP MENU button

RETURN button

AUDIO button
SUBTITLE button
ANGLE button
CLEAR button
SURROUND MODE button
PROGRAM button
ZOOM button
④ TUNING UP( ), FORWARD
SEARCH( ) button
⑤ PLAY/PAUSE( / ) button
PRESET TUNING UP( ),
FORWARD SKIP( ) button
⑥ STOP( ) button
RANDOM PLAY button
⑦ VOLUME UP/DOWN(+/-) buttons
INTERLACED/PROGRESSIVE button
⑧ MUTING button

SET LED

REMOTE CONTOL UNIT PRC-123

HOLLYWOOD
AT HOME

**Note :**
・On the remote control, the PBC button is not available for this unit.
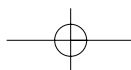
## FUNCTION TABLE of the NUMBERED BUTTONS

| Device to be controlled / Button symbol | (for TV) | (for VCR) | (for cable box) | (for satellite receiver) |
|---|---|---|---|---|
| ① POWER ON | POWER ON | POWER ON | POWER ON | POWER ON |
| ② STANDBY | STANDBY | STANDBY | STANDBY | STANDBY |
| ③ NUMERIC | NUMERIC | NUMERIC | NUMERIC | NUMERIC |
| ④ TUNING | — | REWIND(◄◄)/ FAST FORWARD(►►) | — | — |
| ⑤ | — | PLAY | — | — |
| ⑥ | — | STOP | — | — |
| ⑦ VOLUME | VOLUME UP/DOWN(+/–) | VOLUME UP/DOWN(+/–) | VOLUME UP/DOWN(+/–) | VOLUME UP/DOWN(+/–) |
| ⑧ MUTING | MUTING | MUTING | MUTING | MUTING |
| ⑨ REPEAT | CHANNEL DOWN | CHANNEL DOWN | CHANNEL DOWN | CHANNEL DOWN |
| ⑩ A-B | CHANNEL UP | CHANNEL UP | CHANNEL UP | CHANNEL UP |
| ⑪ | INPUT SELECTOR | INPUT SELECTOR | INPUT SELECTOR | INPUT SELECTOR |

**Notes :**
• Some functions for each component may not be available or may work differently.
• Depending on other kinds of components that are available for each DEVICE button, some functions may not be available or may work differently, too.
• For details about functions, refer to the operating instructions of each component.

## ENTERING A SETUP CODE

• This remote control can control up to 4 different components.
• Before operating video components other than this unit with using this remote control, the setup code for each component should be entered.

**1.** Turn on the component you want to control.

**2.** Find the setup code according to the type and the brand name of your component, referring to "Setup Code Table" on page 57.

**3.** Press and hold down both the ENTER button and the DEVICE button you want for more than 1 second.



+

TV : For TV
VCR : For VCR
CBL : For cable box
SAT : For satellite receiver
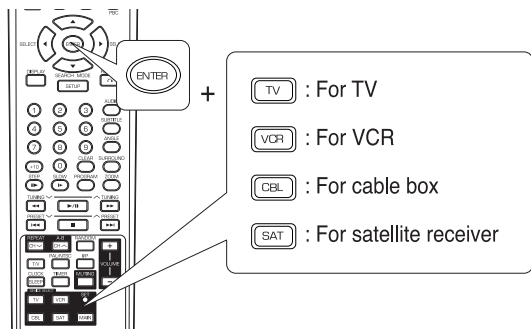
• The SET LED will flicker once.

**Note :**
• The MAIN button is unavailable for the components other than this unit.

**4.** Enter a 3 digit code.

Example) When entering "001".



0 → 0 → 1
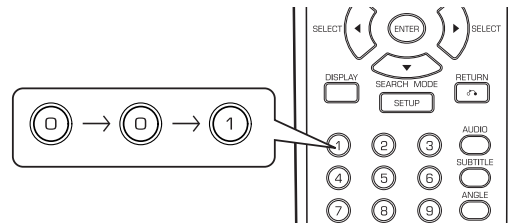
• If entering is performed successfully, the SET LED will flicker twice.
• To be sure that the setup code is correct, press the POWER ON(or STANDBY) button, aiming the remote control at the remote sensor on the component. If your component is turned off, the setup code is correct.
• When your component is not turned off, repeat the above steps 2 to 4, trying each code for your component until you find one that works.
  **Notes :**
• If the SET LED did not flicker twice, then repeat the above steps 3 to 4 and try entering the same code again.
• Manufacturers may use different setup codes for the same product category. For that reason, it is important that you check to see if the code you have entered operates as many controls as possible. If only a few functions operate, check to see if another code will work with more buttons.

**5.** Repeat the above steps 1 to 4 for each of your components.
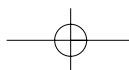
ENGLISH

**ENGLISH**

## OPERATING COMPONENTS WITH REMOTE CONTROL

**1.** Enter the setup code for each component other than this unit you wish to control. (For details, refer to "ENTERING A SETUP CODE" on page 13.)

**2.** Turn on the component you want to operate.

**3.** Press the DEVICE button on the remote control corresponding to the component you wish to operate.

Example) When selecting "MAIN" to operate this unit.
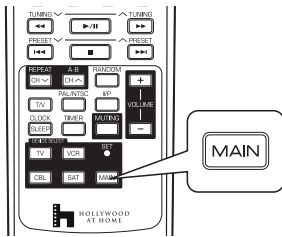


**4.** Aim the remote control at the REMOTE SENSOR of the component you wish to control and press the button corresponding to the operation you want.

## REMOTE CONTROL OPERATION RANGE

• Use the remote control unit within a range of about 5 meters (16 feet) and angles of up to 30 degrees aiming at the remote sensor.



5m

30°   30°
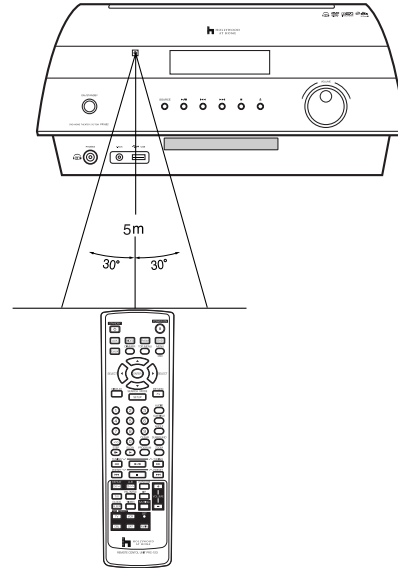
**Note :**
• Remote operation may become unreliable if the remote sensor is exposed to strong light such as direct sunlight or inverted fluorescent.

## LOADING BATTERIES

• When the remote control does not operate, the old batteries should be replaced. In this case, load new batteries within several minutes after removing old batteries.
• If the batteries are removed or have been exhausted for a longer period of time, memorized contents will be cleared. Should this happen, you should memorize them again.

**1.** Remove the cover.
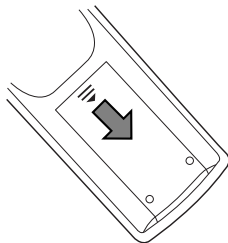


**2.** Load two batteries ("AAA" size) matching the polarity.
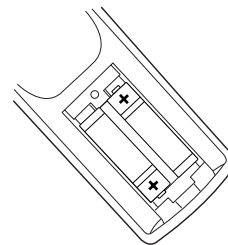


• Remove the batteries when they are not used for a long time.
• Do not use the rechargeable batteries(Ni-Cd type).
• Be sure to use alkaline batteries.
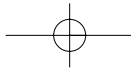
# *Basic Operation*

**Before operation**
· Before operating this unit with the supplied remote control, refer to "UNIVERSAL REMOTE CONTROLS" on page 12 for details about operation.

## LISTENING TO A PROGRAM SOURCE

**1.** Turn the power on.

Main unit
ON/STANDBY

RC
STANDBY      POWER ON

or
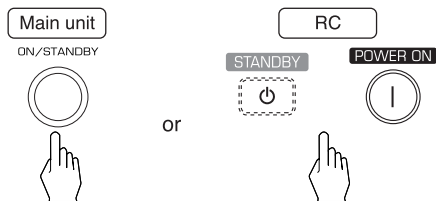
· Each time the POWER ON/STANDBY button is pressed, the unit is turned on to enter the operating mode(the POWER ON/STANDBY indicator lights up blue) or off to enter the standby mode(the POWER ON/ STANDBY indicator lights up amber).
· On the remote control, press the POWER ON button to enter the operating mode or press the STANDBY button to enter the standby mode.
· In the standby mode, if the SOURCE SELECT, PLAY/PAUSE ( / ) or OPEN/CLOSE( ) button is pressed, the unit can be also turned on.
   **Standby mode**
This means that the unit is not disconnected from the AC mains and a small amount of current is retained to support the operation readiness.
   **Setting the power off mode**
You can set the power off mode to either the standby mode or the power saving mode and can save energy more in the power saving mode than in the standby mode.
· Depending on whether the STANDBY button on the remote control for more than 2 seconds either in the standby mode or in the power saving mode, it is set to the power saving mode(time display is turned off) or the standby mode.
   **Note**
· Depending on the power off mode setting, when the power is turned off, it enters the mode you set.

**2.** Select the desired input source.

Main unit
SOURCE

RC
AUX   VIDEO   FM/AM   DVD
F.AUX

or
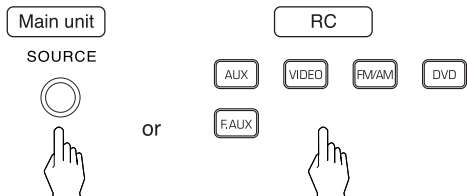
· Each time the SOURCE SELECT button on the front panel, the input source changes as follows :
   FM    AM    AUX    F. AUX    VIDEO    DVD
   (frequency display)

**3.** Turn on the source component for playback.

· In case of connecting the active subwoofer, turn on the active subwoofer.

**4.** Operate the selected component for playback.

**5.** Adjust the(overall) volume to a comfortable listening level.

Main unit
VOLUME

RC
+
VOLUME
–

or

**6.** To mute the sound.

RC
MUTING
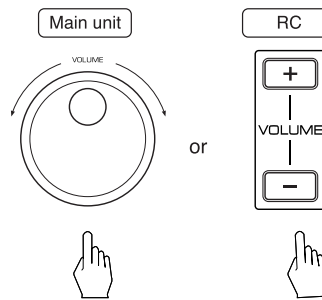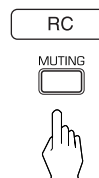
· "MUTING" flickers.
· To resume the pervious sound level, press the MUTING button again.

**7.** To listen with the headphones.

Main unit
PHONES
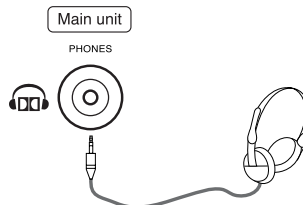
· Then the sound from the speakers is cut off.
   **Note**
Be careful not to set the volume too high when using headphones.

# Operation of DVD player

## PRELIMINARY KNOWLEDGE ABOUT DISCS

### Playable disc types

This unit supports the following discs.

| Disc | Logo | Format or file type |
|------|------|---------------------|
| DVD Video | DVD VIDEO | DVD Video |
| DVD-R | DVD R | DVD Video |
| DVD-RW | DVD RW | DVD Video |
| DVD+R | RW DVD + R | DVD Video |
| DVD+RW | RW DVD + ReWritable | DVD Video |
| Audio CD | COMPACT disc DIGITAL AUDIO | PCM |
| CD-R | COMPACT disc DIGITAL AUDIO Recordable | Audio CD, MP3, WMA, JPEG |
| CD-RW | COMPACT disc DIGITAL AUDIO ReWritable | Audio CD, MP3, WMA, JPEG |
| JPEG CD | | JPEG |
| MP3 CD | | MP3 |

• This unit supports CD-R and CD-RW discs recorded in audio CD format or MP3/WMA/JPEG in accordance with the ISO9660 format. It also supports DVD-R, DVD-RW, DVD+R and DVD+RW discs recorded in DVD Video format.

**Unplayable discs**
• Since this unit cannot support disc types, formats and file types not listed above, do not play such discs.
• Some DVD+RWs/DVD+Rs, DVD-RWs/DVD-Rs or CD-Rs/CD-RWs cannot be played due to incomplete disc finalization, recording quality or physical condition of the disc, characteristics of recording device or authoring software, etc.
See the operating instructions supplied with your recording device for more information.

**Color system format**
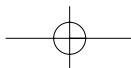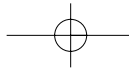• Depending on the countries, this unit conforms to either the NTSC color system for U.S.A, Canada, etc. or the PAL for Europe, Australia, China, etc.

### Region code

• DVD players and DVD Videos have their own Region Code numbers which are assigned to each country or area as shown below. DVD players are set to your Region Code number at the factory. As a result, if the region code number of this DVD player is different from that of the DVD Video, playback of the DVD Video will not be allowed by the DVD player.

| Major countries or area | All regions | North America | Europe, Japan, Middle East | Southeast Asia | Oceania, South America | Russia | China |
|------|------|------|------|------|------|------|------|
| Playable Region code | ALL | 1 | 2 | 3 | 4 | 5 | 6 |

Examples of playable DVD Videos :

• In U.S.A .        • In Europe

ALL   1      ALL   2

### Notes on copyright

• Please check the copyright laws in your country to record from DVD Video, Audio CD, MP3, WMA and JPEG discs, etc. Recording of copyrighted material may infringe copyright laws.
• Commercial DVD Video discs are copy-protected, and any recordings made from these discs will be distorted.

• This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

## SYMBOL ABOUT INVALID OPERATION
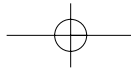
• When you press a button, if the unit does not accept its operation, ⊘ appears on the TV screen.
Operations are occasionally unacceptable even if ⊘ is not displayed.

Invalid operation may occur as expected if :
• The region code number of the unit is different from that of the DVD Video and playback will not be allowed.
• The rating level function works.
(For details, refer to "When selecting the PARENTAL CONTROL" on page 42.)
• A disc is not playable or uses features that are not supported by this unit.
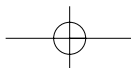
## AUDIO AND VIDEO FILES

**ENGLISH**

• Folder and file names are displayed up to 8 characters.
• A total of 512 folders and maximum of 2048 files can be supported.
• Characters except "A~Z", "0~9", " - " may be not displayed.
• The playback order of folders and files shown in the menu may differ from the order shown in a PC.
• This unit supports multi-session discs. Some multi-session discs may take a long time to load and some may not be loaded at all.

### Notes for making a private disc.
• Use "UDF format" as the disc format for DVD-R/DVD-RW, DVD+R/DVD+RW.
• Use "ISO 9660" as the disc format for CD-R/CD-RW.
• Folders can be up to eight levels deep.
• Some disc may not play due to disc characteristics, recording conditions, etc.

### MP3
• MP3 files must have a ".mp3" or ".MP3" file name extension.
• It is recommended that you record your material at a 44.1kHz sampling rate, using the 128 kbps data transfer rate.
• Fixed bit-rate files are recommended. Variable bit-rate(VBR) files are playable, but playing time may be displayed incorrectly.
• ID3 Tag is not available.
• MP3i and MP3 Pro are not available.

### JPEG
• JPEG files must have a ".jpg", ".JPG", ".jpeg" or ".JPEG" file name extension.
• It is recommended that you record your material at a 640X480 pixel resolution.
• This unit cannot play a baseline JPEG file of more than 6000X4500 pixels and a progressive JPEG file of more than 5120X3840 pixels.

### WMA
• WMA files must have a ".wma" or ".WMA" file name extension.
• It is recommended that you record your material at a bit rate of 64 kbps or higher.
• WMA Tag is not available.
• This unit cannot play copyright protected files and files recorded with a bit rate under 32 kbps.

## CARE AND HANDLING OF DISCS
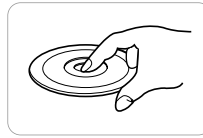

• In handling a disc, hold it carefully with edges.
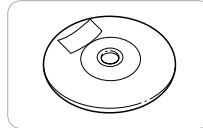

• Do not stick paper or write anything on the printed surface.
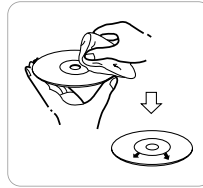

• Fingermarks and dust on the recorded surface should be carefully wiped off with a soft cloth. Wipe straight from the inside to the outside of the disc.
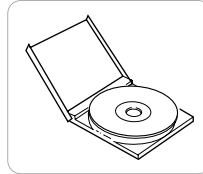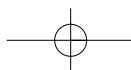

• Always keep the discs in their cases after use to protect them from dust and scratches.

• Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and apparatus malfunction.



### Notes:
• Because the temperature inside this unit is very high, in case of no further playback of disc, unload the disc to prevent the high temperature from deforming the disc.
• Do not expose discs to direct sunlight, high humidity or high temperature for a long time.
• When loading or unloading a disc in the disc tray, always place it with the printed side up.



Tray          Printed side
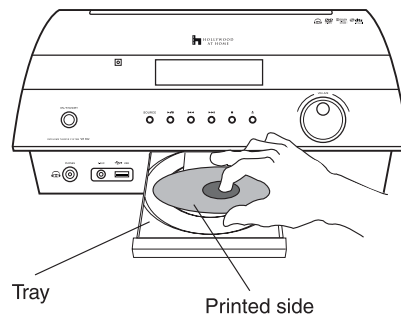
# DEFINITION OF TERMS

**DVD Video**
The format for storing MPEG-2 video on DVD, with interactive menus, multiple soundtracks, subtitles, camera angles, and so on.

**MPEG(Moving Picture Expert Group)**
It is regarded as an international standard for compressing and restoring digital video and audio signal. "MPEG" standards include MPEG-1, MPEG-2 and MPEG-4. Video CD and MP3 are based on MPEG-1, while DVD Video is based on MPEG-2.

**MP3**
MP3 is an audio data compression format, which stands for MPEG-1 Audio Layer 3. Using MP3, you can achieve a data reduction of about 1:10.
· MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.

**WMA(Windows Media Audio)**
WMA is an audio data compression format developed by Microsoft Corporation. WMA file size is smaller than that of MP3.

**JPEG(Joint Photographic Experts Group)**
JPEG is a papular file format for still image compression and storage.
There are three sub-types of the JPEG format as follows.
· baseline JPEG : used for digital cameras, the web, etc.
· progressive JPEG : used for the web.
· lossless JPEG : an old type, rarely used now.

**DVD Video structure**
DVD Video discs typically contain one or more titles, which may be subdivided into chapters.
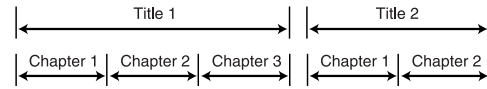


**Audio CD structure**
Audio CDs contain tracks.
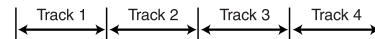


**MP3/WMA/JPEG structure**
On an MP3/WMA/JPEG disc, a folder can be a member of another folder, creating hierarchical folder layers. If you are familiar with a personal computer, you may easily understand the hierarchical file/folder construction.
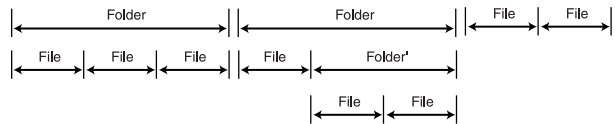


**Aspect ratio (DVD Video)**
The aspect ratio is the ratio between the vertical and horizontal size of the picture displayed on a TV screen. The aspect ratio of normal TV screen is 4:3 while that of the wide-screen TV and HDTV screen is 16:9.

**Subtitle (DVD Video)**
Some DVD Videos contain the recording of more than one subtitle languages. With these discs, this unit can select one of the subtitle languages as desired during playback.

**Angle (DVD Video)**
Some DVD Videos contain scenes which have shot simultaneously from multiple camera angles. With these discs, the same scene can be viewed from each of these different angles.

### Interlaced scan

In the conventional video system, a picture is shown on the screen in two halves. The interlaced scanning system places lines of the second half of the picture in-between lines of the first half of the picture.

### Progressive scan

Progressive scanning displays all the horizontal lines of a picture at one time, as a single frame.

### Composite video

A single video signal commonly used in most consumer video products that contains all luminance, color, and synchronization information.

### S-video

A video signal which improves picture quality over the standard composite video signal.

### Component video

Video signals with three channels of separate information that makes up the picture. There are some types of component video, such as $Y/C_B(Pb)/C_R(Pr)$ and R/G/B.

### Bitstream

The digital signal form of multichannel audio data (e.g., 5.1 channel) before it is decoded into its various channels.

### Linear PCM

PCM stands for Pulse Code Modulation. Linear PCM is the usual digital method without compression, used for audio playback of audio CDs, DVD Videos, etc.

### Dolby Digital

Dolby Digital provides multichannel surround sound in cinemas from 35 mm film and in the home from laser discs, DVD Videos, and digital broadcast television, cable, and satellite systems. It enables the transmission and storage of up to five full-range audio channels, plus a low-frequency effects channel(LFE), thus 5.1 channels, in less space than is required for just one linear PCM-coded channel on a compact disc.

Dolby and the double-D symbol are registered trademarks of Dolby Laboratories.

### DTS (Digital Theater Systems)

DTS is a newly-developed surround system which can handle more amount of data, providing better audio quality. Though the number of audio channels is 5.1 which is same as Dolby Digital, discs bearing the " dts " provides fat sound and better signal-to-noise ratio, thanks to the lower audio compression ratio format. It also provides wide dynamic range and better separation, resulting in magnificent sound.

Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS is a registered trademark and the DTS logos, Symbol and DTS 2.0 Channel are trademarks of DTS, Inc. 1996-2007 DTS, Inc. All Rights Reserved.
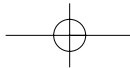
**Before starting playback**
· Make the initial settings to suit your usage conditions the very first time this unit is turned on.(For details, refer to "Initial Settings" on page 36.)
· For explanation purposes, this instructions explains the OSD(On-Screen Display) language displayed on TV in English.
· Usable discs for each operation/ function are referred to by the icons :

DVD-V    CD    MP3    WMA    JPEG

## BASIC PLAYBACK

**Preparations**
· Turn on the TV and select the video input source connected to the unit.

**1.** Select DVD as input source.

| Main unit | | RC |
|---|---|---|
| SOURCE | or | DVD |
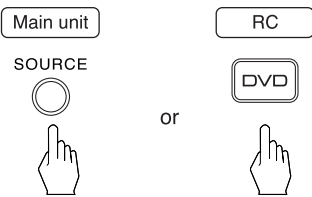
**2.** Open the disc tray to load a disc with the printed side up, then close it.

Main unit
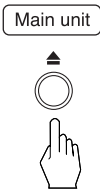
· 8 cm (3 inch) discs can be loaded on the inside circle of the tray, too.
· When DVD Video that doesn't contain any menu is loaded, playback automatically starts.

**Notes :**
· Opening or closing the disc tray by force may damage its mechanism.
· Depending on the disc types or file types, etc. it may take times to read the loaded disc.

· When you load a MP3, WMA, JPEG  disc or a DVD Video that contains a menu, the menu display may appear on the TV screen. In this case, see "To start playback from the menu of DVD Video" or "To start playback from the menu of MP3, WMA or JPEG disc" on the next page.

· Example of DVD Video

| TITLE MENU | |
|---|---|
| Dogs | Cats |
| Cows | Horses |

· Example of MP3 disc

**Multimedia Player**

Root menu —— ROOT

Folder symbol ——
MP3 file symbol ——

| | | |
|---|---|---|
| ROOT | 0 | |
| POPS | 1 | |
| BLUES | 2 | |
| HAPPY | 3 | — Folder and file menu |
| SO LONG | 4 | |
| CLASSIC | 5 | |
| LIGHT-M | 6 | |
| BIRTHDAY | 7 | |
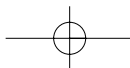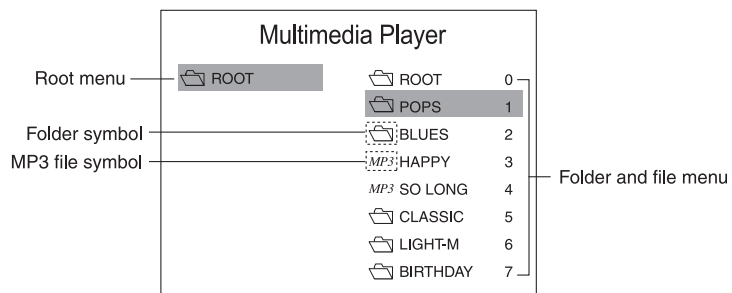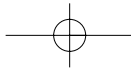
**Continued**

**3.** In case of CD, press the PLAY/PAUSE (  /  ) button to start play.

| Main unit | | RC |
| ▶/Ⅱ | or | ▶/Ⅱ |
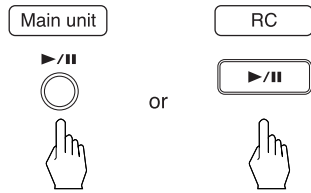
**To start playback from the menu of DVD Video**  DVD-V

Press the CURSOR  /  /  /  buttons to select the preferred item and press the ENTER button (or PLAY /PAUSE (  /  ) button).
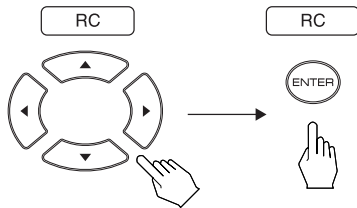
In case of use of the NUMERIC buttons on the remote control :

• When selecting "3" :   3 → ENTER

• When selecting "10" :   1 → 0 → ENTER

• Playback of the selected item starts.
• Depending on the discs, the preferred item may not be selected with pressing the NUMERIC buttons.
• When the selected item contains the subitems, repeat the above step until the preferred item is selected.

**To stop playback and return to the menu display**
• Press the TOP MENU or MENU button on the remote control.(Which button is pressed differs depending on the discs.)
• Playback is suspended and the menu display appears.

**To start playback from the menu of MP3, WMA or JPEG  disc**  MP3  WMA  JPEG

**1.** In the stop mode, press the CURSOR  /  buttons to select the folder and file menu.
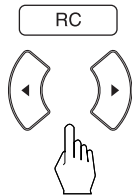
**2.** Press the CURSOR  /  buttons to select the preferred folder or file then press the ENTER button.
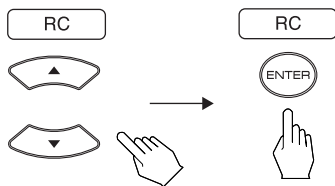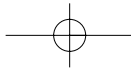
• When selecting the preferred file, playback starts from the selected file.
• When selecting the preferred folder, the file menu screen of the selected folder is displayed. In this case, repeat this step to select the preferred file in its file menu.

**Notes:**
• To play a MP3/WMA/JPEG disc with the various playback modes, select the desired playback mode.(For details, refer to "Repeating a disc, title, chapter, folder, track or file" on page 27.)
• Some discs/files recorded in DVD Video, MP3, WMA  or JPEG, etc. cannot be played due to incomplete disc finalization, recording quality or physical condition of the disc, characteristics of recording device or authoring software, etc.
• The DVD Videos continue to rotate while the menu display appears. When no further selections are to be played, be sure to press the STOP(  ) button repeatedly to enter the stop mode and to clear the menu display.
• A TV screen may be burned out if a static picture is displayed for a long time in the stop mode. To prevent this, set the SCREEN SAVER to ON (refer to "When selecting the SCREEN SAVER" on page 41). Then, the unit automatically activates the screen saver function if a static picture, etc. is displayed for over 5 minutes.
Pressing any button will cancel the screen saver function and return to the previous display.
• When you press a button, if the corresponding operation is prohibited by the unit or the disc, ⊘ appears on your TV screen.
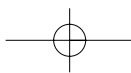
## To play files from USB mass storage device

・When connecting a USB mass storage device to this unit, you can enjoy MP3, WMA or JPEG files stored on it through this unit.

Compatible USB mass storage device :
・USB flash memory (USB 2.0 or USB 1.1)
・USB flash players (USB 2.0 or USB 1.1)
・Memory cards (requires an additional card reader to work with this unit.)

Supported formats :
・USB or memory file format FTA 16 or FTA 32.

**ENGLISH**

**Notes:**
・It is not possible to connect this unit to a PC for USB playback.
・We cannot guarantee compatibility with all USB mass storage devices and assumes no responsibility for any loss of data that may occur when connected to this unit.
・A total of 512 folders and maximum of 2048 files can be supported.
・During USB playback, do not remove the USB device. Should this happen, it may be result in malfunction or cause damage to this unit and/or the USB device.

**1.** Connect the USB device into the USB connector on the front panel.



USB mass storage device
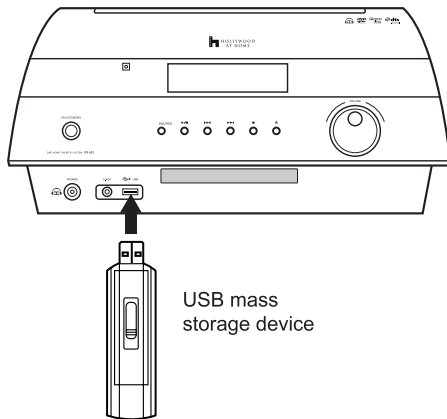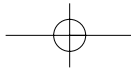
・The method of playback for files stored on a USB device is the same as for MP3, WMA or JPEG disc.

**Note:**
・When the USB device is connected into the USB connector, this unit cannot play back a disc.

**2.** After USB playback, remove the USB device in the stop mode or the standby mode.
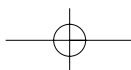
**ENGLISH**

## To stop playback    DVD-V  CD  MP3  WMA  JPEG

| Main unit | | RC |
|---|---|---|
| ■ | or | ■ |
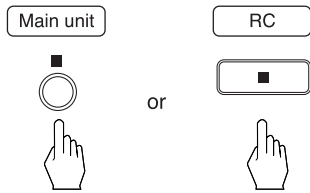
• When playback of a DVD Video is stopped, the unit memorizes the point where the STOP(  ) button was pressed (RESUME function: DVD Video only). ("Press PLAY to continue" is displayed on the TV screen for a moment when this function is activated.)
• Press the PLAY/PAUSE(   /   ) button again, and playback will resume from this point. When the STOP(  ) button is pressed again, the RESUME function will be canceled and it enters the stop mode.("Stop" is displayed for a moment.)
• During playback of a DVD Video, when the unit is turned off and on with pressing the POWER ON/STANDBY button, the resume function is activated, too.

## To pause playback   DVD-V  CD  MP3  WMA  JPEG

| Main unit | | RC |
|---|---|---|
| ►/II | or | ►/II |
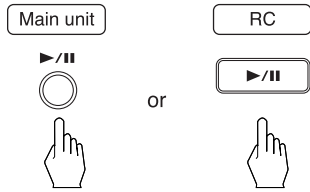
• DVD Video :
  The unit will be in the still picture mode.
• CD/MP3/WMA/JPEG disc :
  The unit will be in the pause mode.
• To return to normal playback, press the PLAY/PAUSE (   /   ) button.

## Frame advance playback    DVD-V

• During playback or in the still picture mode.

| RC |
|---|
| STEP |
| II► |

• Each time the STEP(     ) button is pressed, the disc is advanced by one frame.
• To return to normal playback, press the PLAY/PAUSE (   /   ) button.

## To skip ahead or back during playback   DVD-V  CD  MP3  WMA  JPEG

• To skip ahead                    • To skip back

| Main unit | | RC | Main unit | | RC |
|---|---|---|---|---|---|
| ►►I | or | ∧ PRESET ►►I | I◄◄ | or | PRESET ∨ I◄◄ |
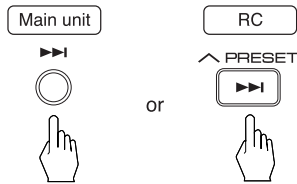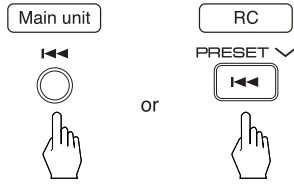
• Each time the button is pressed, a chapter/track/file is skipped.
• When the " I◄◄ " button is pressed once midway through a track, playback returns to the beginning of that track. When it is pressed again, a track is skipped.
• You can select a chapter/track/file directly with pressing the NUMERIC buttons on the remote control.

  Examples) For "3" :   ③ → ENTER
       For "10" :   ① → ⓪ → ENTER
       For "21" :   ② → ① → ENTER

• In case of selecting a file, you can select a file in the current folder only.
• Depending on the discs, the desired one may not be selected.
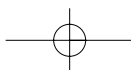
## Rapid playback during playback  DVD-V  CD  MP3  WMA

・You can play back discs at various speeds.

**RC**

TUNING ∨　∧ TUNING

To reverse ◀◀　▶▶ To advance
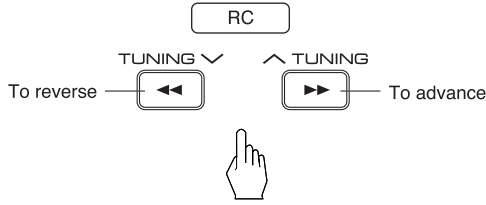
・Each time the button is pressed, the disc is advanced or reversed fast at up to 4 step speeds depending on the disc types.

CD

2X　4X　6X　8X

MP3 WMA

2X　4X　6X　8X　Off(normal playback)

DVD-V

2X　4X　8X　16X　Off(normal playback)
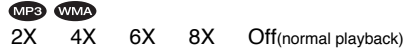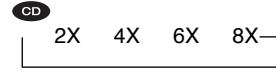
・To return to normal playback, press the PLAY/PAUSE ( / ) button.

## Slow playback during playback  DVD-V

**RC**

SLOW
▶

・Each time the button is pressed, the disc is advanced slowly at 3 step speed.

1/2　1/4　1/8
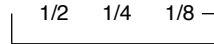
・To return to normal playback, press the PLAY/PAUSE ( / ) button.

## DISPLAYING DISC INFORMATION DURING PLAYBACK  DVD-V  CD  MP3  WMA

・The unit features the on-screen display function showing disc information.

Press the DISPLAY button.

**RC**
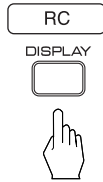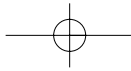
DISPLAY

・Then the disc information is displayed on the TV screen.
・Each time this button is pressed, the disc information is changed depending on the disc types as follows :

**DVD-V**

Total title number　　Current chapter number
Current title number　　Total chapter number

**Title 01/07 Chapter 001/012**
00:16:25　　：Title/chapter number and elapsed time of the title

Elapsed time of the title

**Title Remain**
01:37:32　　：Remaining time of the title

**Chapter Elapsed**
00:00:17　　：Elapsed time of the chapter

**Chapter Remain**
00:01:55　　：Remaining time of the chapter

Off
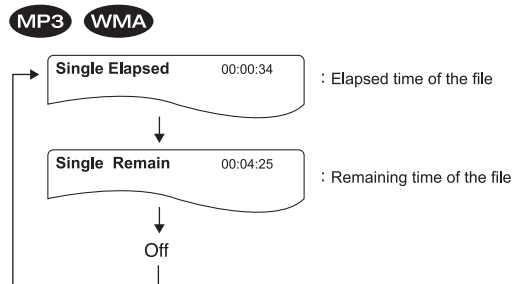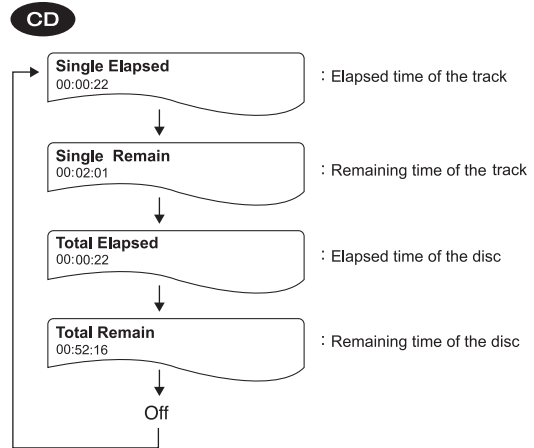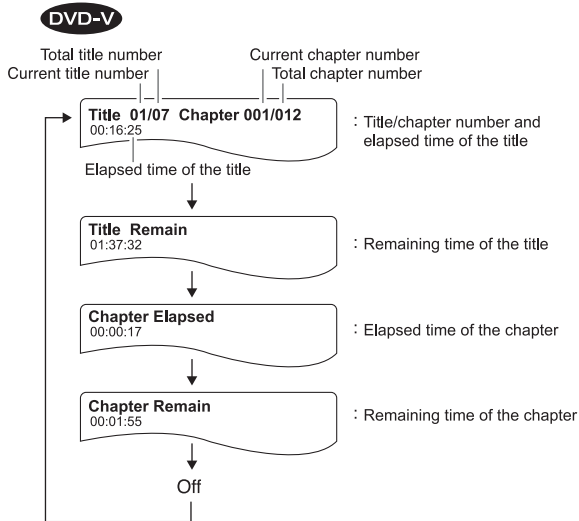
・Depending on the disc and some operation status as playback of DVD Video using a title or DVD menu, etc., the disc information may not be displayed.

**CD**

**Single Elapsed**
00:00:22　　：Elapsed time of the track

**Single Remain**
00:02:01　　：Remaining time of the track

**Total Elapsed**
00:00:22　　：Elapsed time of the disc

**Total Remain**
00:52:16　　：Remaining time of the disc

Off

**MP3 WMA**

**Single Elapsed**　00:00:34　　：Elapsed time of the file

**Single Remain**　00:04:25　　：Remaining time of the file

Off
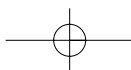
**ENGLISH**

## PLAYING A SPECIFIC ITEM  DVD-V

### When using a title menu

· If some DVD Videos which contain more than one title may have the menu like as a list of the titles, the TITLE button can be used to select the desired title. (The details of operation differ depending on the disc used.)

**1.** During playback, press the TOP MENU button.

RC

TOP MENU

Example)

**TITLE MENU**

| Dogs | Cats |
| Cows | Horses |
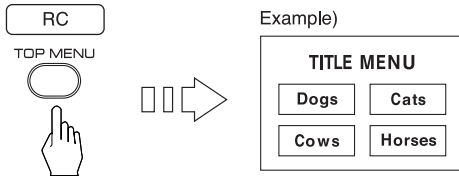
· Then a list of titles on the disc is displayed on TV screen.
· If the disc does not have the menu such as a list of titles, this function does not work.

**2.** Press the CURSOR  /  /  /  buttons to select the desired title, then press the ENTER or PLAY/ PAUSE ( / ) button.

RC          RC          Main unit          RC

ENTER      ►/II      ►/II

or          or
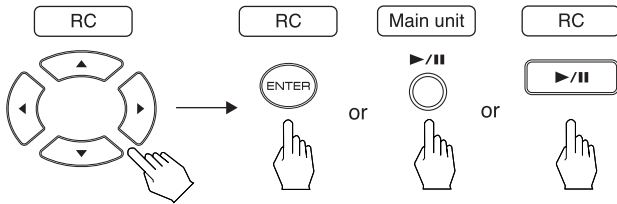
· The unit starts playback of the selected title.
· When the menu continues onto another screen, repeat this step until the desired title is selected.

### When using a DVD menu

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

**1.** During playback, press the MENU button.

RC

MENU

PBC

Example)

| 1.AUDIO |
| 2. SUBTITLE |
| 3. ANGLE |
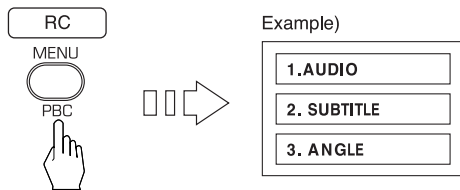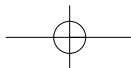
· Then the DVD menu available on the disc is displayed on TV screen.
· If the disc does not have the DVD menu, this function does not work.

**2.** Press the CURSOR  /  /  /  buttons to select the desired item, then press the ENTER or PLAY/PAUSE ( / ) button.

RC          RC          Main unit          RC

ENTER      ►/II      ►/II

or          or
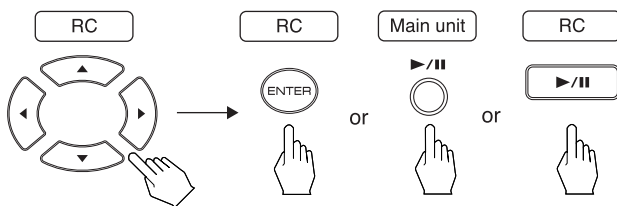
· The unit starts playback of the selected item.
· When the menu continues onto another screen, repeat this step until the desired item is selected.
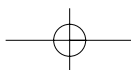
## REPEAT PLAYBACK

• You can play a current title, chapter, folder, track, file, disc or part repeatedly.

**Note:**
• Repeat playback may not work correctly with some discs.

### Repeating a disc, title, chapter, folder, track or file   DVD-V  CD  MP3  WMA  JPEG

During playback of the desired title, chapter, folder, track or file, press the REPEAT button.

RC

REPEAT
CH∨

• Then the selected repeat mode is displayed on the TV screen.

• Each time this button is pressed, the repeat mode changes depending on the disc types as follows :

**DVD-V**

| Chapter Repeat on | : Chapter repeat |
| Title Repeat on | : Title repeat |
| Repeat off | : Repeat mode off (normal playback) |

**CD**

| Repeat  one | : Track repeat |
| Repeat  all | : Entire disc repeat |
| Repeat off | : Repeat mode off (normal playback) |

**MP3  WMA  JPEG**

| Disc | : Normal playback of the disc |
| Folder Repeat | : Folder repeat |
| Disc Repeat | : Entire disc repeat |
| Repeat  one | : File repeat |
| Folder | : Normal playback of a folder |
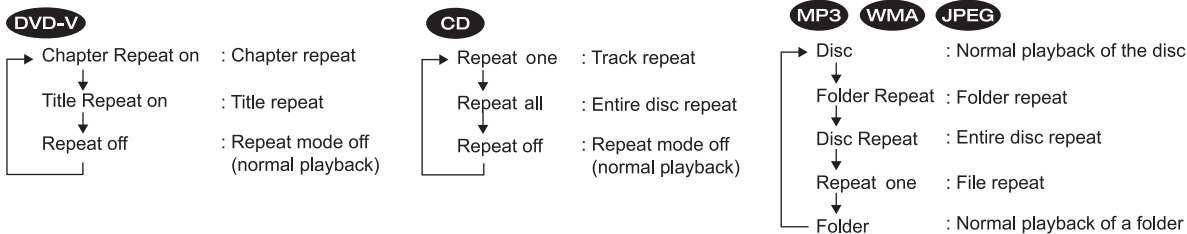
• To return to normal playback, press the REPEAT button repeatedly to select the Repeat off, Disc or Folder.

### Repeating the desired part   DVD-V  CD

**1.** During playback at the beginning of the part you want to repeat, press the REPEAT A-B button.

RC

A-B
CH∧
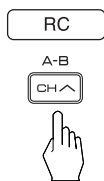
• Then "A To  B Set A " is displayed on the TV screen.
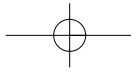
**2.** At the end of the part, press the REPEAT A-B button again.

• Then "A To B Repeat on" or "A To B Set B" is displayed on the TV screen, and the part between points A and B is played back repeatedly.
• To return to normal playback, press the REPEAT A-B button repeatedly until "A To B Cancelled" is displayed.

**Notes:**
• You may not use the repeat A-B playback of the part that includes multiple camera angles.
• Repeat A-B playback works only within a title or a track.
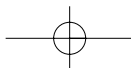
## RANDOM PLAYBACK  CD MP3 WMA JPEG

**1.** In the stop mode, press the RANDOM PLAY button.

RC

RANDOM

• Each time this button is pressed, the playback mode changes as follows :

Random on : Random playback

Tracks on the disc or files in the current folder are played back in random order.

Random off : Normal playback

**2.** Start the random playback.

Main unit ►/II     or     RC ►/II
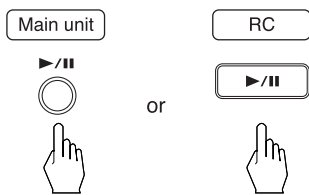
• Then tracks on the disc or files in the current folder are played back in random order.
• In case of MP3, WMA or JPEG disc, before starting the random playback, select the desired folder and file with using the CURSOR  /  /  /  buttons and press the PLAY/PAUSE ( / ) button or the ENTER button.
• After all the tracks or files have been played, it enters the stop mode and the random playback mode is not canceled.
• To return to normal playback, press the RANDOM PLAY button in the stop mode, then "Random off" is displayed.
  **Note:**
• Random playback may not work correctly with some discs.

## PROGRAMMED PLAYBACK

### Playing tracks in desired order  CD

• Up to 21 tracks can be programmed to be played in any desired order.

**1.** In the stop mode, press the PROGRAM button to enter the program mode.

RC

PROGRAM

TRACK          PROGRAM LIST
▲
01      ADD
▼
[11]    DELETE

PLAY

CLEAR

SET TRACK VALUE

Program menu          Track list
Total number of the tracks
Track menu
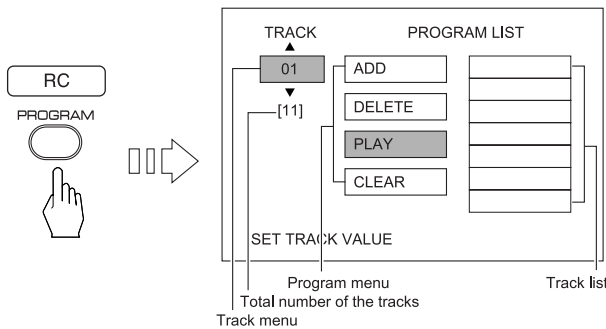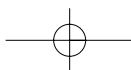
• Then the program menu is displayed on the TV screen.
• Each time the PROGRAM button is pressed, the program mode is canceled or the program menu is displayed.

**2.** Press the CURSOR  /  buttons to select the track menu, then press the CURSOR  /  buttons to select the desired track.

RC          RC
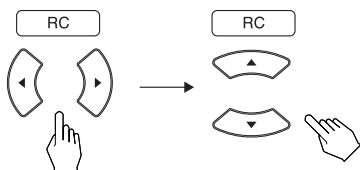
• Each time the CURSOR  or  button is pressed, the track menu or the program menu (or the track list) is selected.

**Continued**

**3.** Press the CURSOR / buttons to select the program menu and press the CURSOR / buttons to select ADD, then press the ENTER button.
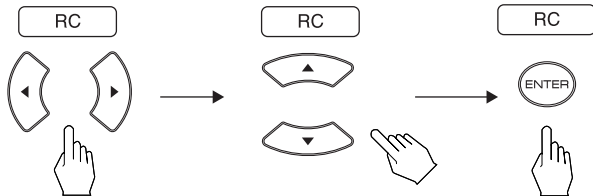


• Then the selected track is programmed.

**4.** Repeat the above steps 2 and 3 until the desired tracks are programmed.

**5.** To start programmed playback, press the CURSOR / buttons to select the program menu and press the CURSOR / buttons to select PLAY, then press the ENTER button.
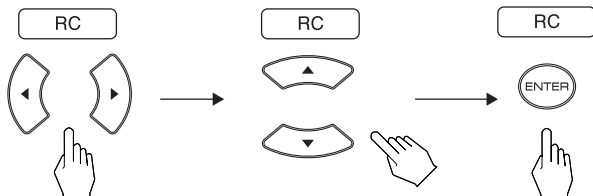


• Then the tracks are played back in the programmed order.
• After all the programmed tracks have been played back, it enters the stop mode and the program mode is canceled without clearing the programmed tracks. In this case, if the PROGRAM button is pressed, the programmed tracks are displayed on the program menu.

**To add a track to the track list**
• You can insert a track between the specific tracks.

Example) When you insert track 3 between track 1 and track 11 which are programmed first and second.

**1.** When displaying the program menu, press the CURSOR / buttons to select the track menu, then press the CURSOR / buttons to select track 3.



**2.** Press the CURSOR / buttons to select the track list, then press the CURSOR / buttons to select track 1.
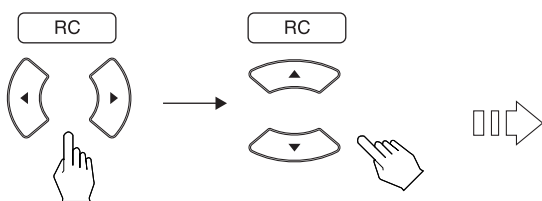
**Continued**

**3.** Press the CURSOR  /   buttons to select the program menu and press the CURSOR   /   buttons to select INSERT, then press the ENTER button.

| | | | |
|---|---|---|---|
| RC | RC | RC | TRACK    PROGRAM LIST |
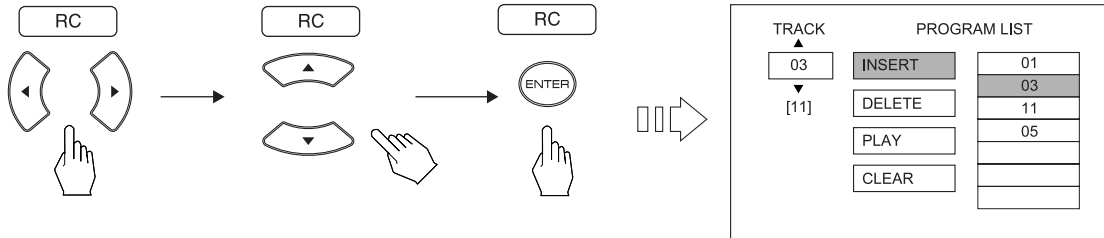
**Clearing the programmed tracks
[To clear one by one]**

**1.** When displaying the program menu, press the CURSOR   /   buttons to select the track list, then press the CURSOR   /   buttons to select the track to be cleared.

**2.** Press the CURSOR   /   buttons to select the program menu and press the CURSOR   /   buttons to select DELETE, then press the ENTER button.

・Then the selected track is cleared.

**[To clear all programmed tracks]**

When displaying the program menu, press the CURSOR   /   buttons to select the program menu and press the CURSOR   /   buttons to select CLEAR, then press the ENTER button.

・Then the programmed tracks are all cleared.
・When displaying the program menu, pressing the CLEAR button clears all programmed tracks.
・Opening the disc tray or turning the power off, etc. clears all programmed tracks.

## Playing files in desired order  MP3 WMA JPEG

・Up to 50 files can be programmed to be played in any desired order.

**1.** In the stop mode, press the CURSOR   /   buttons to select the desired folder in the folder and file menu, then press the ENTER button.

| | |
|---|---|
| RC | RC |
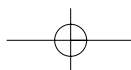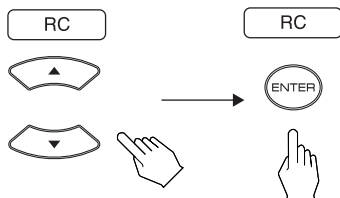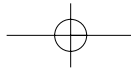
**Continued**

**2.** Press the CURSOR   /   buttons to select the desired file, then press the DISPLAY button to enter the
program mode.

RC  RC
DISPLAY

Multimedia Player
DELETE
ADD TO PLT
PROPERTIES
CANCEL

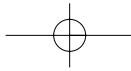| | | |
|---|---|---|
| ROOT | OT | 0 |
| POPS | PS | 1 |
| BLUES | MP3 BLUES | 2 |
| CLASSIC | MP3 HAPPY | 3 |
| LIGHT-M | MP3 SO LONG | 4 |
| BIRTHDAY | MP3 APPLE | 5 |
| PICTURE | MP3 7 DAYS | 6 |
| BABIES | MP3 BYE BYE | 7 |

Program menu

• Then the program menu is
  displayed.
• Each time the DISPLAY button is
  pressed, the program mode is
  canceled or the program menu is
  displayed.

**3.** Press the CURSOR   /   buttons to select ADD TO PLT, then press the ENTER button.

RC  RC
ENTER

Programmed order
Program  P01: 0004 —— Programmed file number

Multimedia Player

| | | |
|---|---|---|
| ROOT | ROOT | 0 |
| POPS | MP3 POPS | 1 |
| BLUES | BLUES | 2 |
| CLASSIC | MP3 HAPPY | 3 |
| LIGHT-M | MP3 SO LONG | 4 |
| BIRTHDAY | MP3 APPLE | 5 |
| PICTURE | MP3 7 DAYS | 6 |
| BABYIES | MP3 BYE BYE | 7 |

• Then the selected file is
  programmed.

**When selecting PROPERTIES in the program menu.**
• Then the information on the selected file such as file size, recording conditions, etc. is displayed.
• To turn off the information, press the ENTER button.
    **When selecting CANCEL**
• Then the program mode is canceled.

**4.** Repeat the above steps 1~ 3 until the desired files are programmed.

**5.** Press the PROGRAM button to display PROGRAM LIST, then press the ENTER button or the PLAY/PAUSE
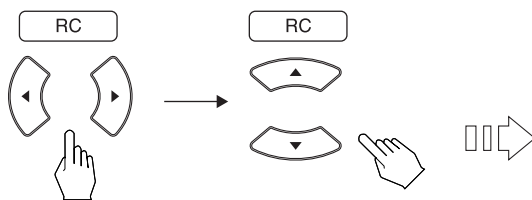(   /   ) button.

RC  RC  RC
PROGRAM  ENTER  ▶/❚❚
  or
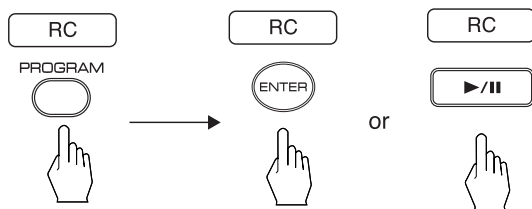
• Then the files are played back in the programmed order.
• After all the programmed files have been played back, it enters the stop mode and the PROGRAM LIST is still displayed.
• Each time the PROGRAM button is pressed, the PROGRAM LIST is displayed or not.
  In this case, even when the PROGRAM LIST disappears, the programmed files are not cleared.
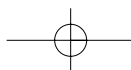
**Continued**

**Clearing the programmed files**
**[To clear one by one]**

**1.** When displaying the PROGRAM LIST, press the CURSOR    /    buttons to select the file to be cleared, then press the DISPLAY button to enter the program mode.
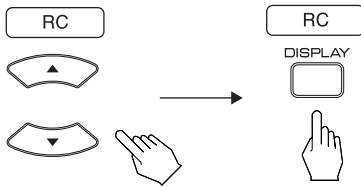
| RC | | RC |
|---|---|---|

DISPLAY

| DELETE | | |
|---|---|---|
| ADD TO PLT | | 1 |
| PROPERTIES | | 2 |
| CANCEL | | |
| MP3 BYE BYE | | 3 |
| MP3 RIVERS | | 4 |
| MP3 LADY | | 5 |
| MP3 SUNDAY | | 6 |
| MP3 AFRICA | | 7 |
| MP3 POPCORN | | 8 |

・Then the program menu is displayed.

**2.** Press the CURSOR    /    buttons to select DELETE, then press the ENTER button.

| RC | RC |
|---|---|

ENTER
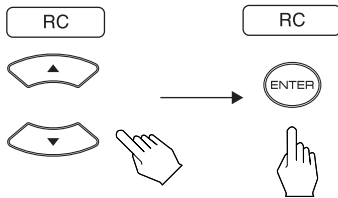
・Then the selected file is cleared.

**[To clear all programmed files]**

Open the disc tray or select an input source except DVD.

| Main unit | Main unit | RC |
|---|---|---|

SOURCE

or        or

AUX    VIDEO    FM/AM

F.AUX
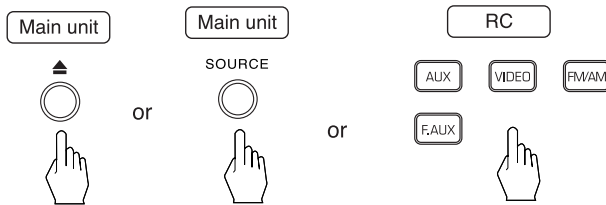
・Then the programmed files are all cleared.

ENGLISH
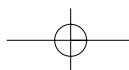
## CHANGING THE AUDIO LANGUAGE   DVD-V

• It is possible to change the audio language to a different language from the one selected at the initial settings.
  (For details, refer to "SETTING THE LANGUAGE SETUP" on page 37.)
  This operation works only with DVD Videos on which multiple audio languages are recorded.

During playback, press the AUDIO button.

RC

AUDIO

• Then the audio language menu is displayed on the TV
  screen for several seconds.

• Each time this button is pressed, the audio language changes as follows:
  Example)

Audio 1/3 : Dolby D 5.1    ENGLI → Audio 2/3 : Dolby D 2CH ENGLI → Audio 3/3 : Dolby D 2CH FRENC

Selected audio
language number          Selected audio language

Total number      Sound recording system
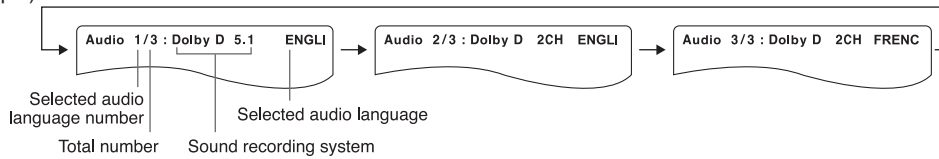
   **Notes:**
• You cannot select the preferred audio language when the disc contains only one.
• When the disc is changed, etc., the language heard is the one selected at the initial settings. If this is not recorded on the
  disc, only the available language on the disc will be heard.
• On some discs, an audio language except the selected one at the initial settings may be heard.

## CHANGING THE SUBTITLE LANGUAGE   DVD-V

• It is possible to change the subtitle language to a different language from the selected one at the initial settings.
  (For details, refer to "SETTING THE LANGUAGE SETUP" on page 37.)
  This operation works only with discs on which multiple subtitle languages are recorded.

During playback, press the SUBTITLE button.

RC
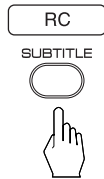
SUBTITLE

• Then the subtitle language menu is displayed on the TV
  screen for several seconds.

• Each time this button is pressed, the subtitle language changes as follows :
  Example)

Subtitle   01/02 :  ENGLISH → Subtitle   02/02 :  FRENCH → Subtitle   off

Selected subtitle
language number     Selected subtitle language          Subtitle display off mode

Total number
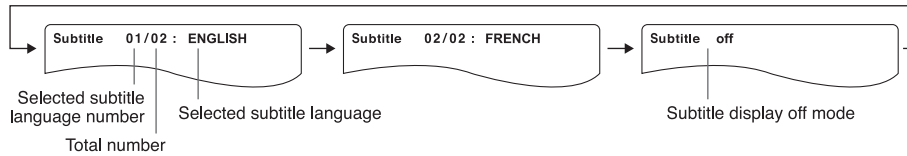
   **Notes :**
• You cannot select the preferred subtitle language when the disc does not contain the available language.
• When the disc is changed,etc., the displayed language is the selected one at the initial settings. If this is not recorded on the
  disc, the available language on the disc may be displayed.
• On some discs, a subtitle language except the selected one at the initial settings may be displayed.
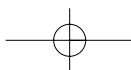
## CHANGING THE CAMERA ANGLE

• Some DVD Videos contain scenes which have been shot simultaneously from multiple camera angles.
 For these discs, the same scene can be viewed from each of these different angles.
• The recorded angles differ depending on the disc used.

During playback at the scene recorded from multiple camera angles, press the ANGLE button.

RC
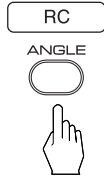
ANGLE

• During playback at the scene recorded from multiple camera angles, the angle symbol( ) is displayed on the TV screen only when the ANGLE MARK is set to ON.(Refer to "When selecting the ANGLE MARK" on page 41.)

• Each time this button is pressed, the angle changes as follows:
 Example)

Selected angle number    Total number

1/3    2/3    3/3
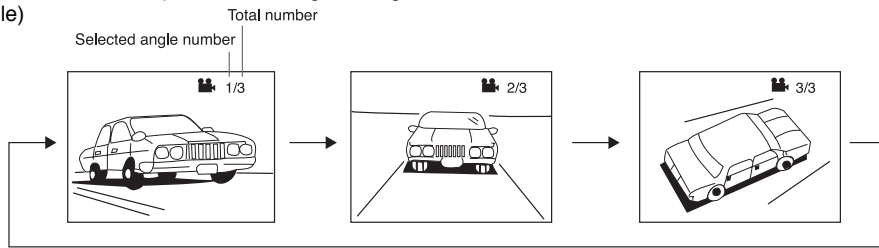
**Note :**
• This function works only at scenes recorded from multiple angles.

## ZOOMING IN/OUT A SCENE  DVD-V  JPEG

• In the zoom-in mode only, you can select and view any part of the scene close-up.

**1.** During playback or in the still picture mode or the pause mode, press the ZOOM button.

RC
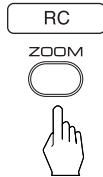
ZOOM

• Each time this button is pressed, zoom scale or zoom mode changes as follows:
• The unit zooms in to the center part of the scene.

DVD-V

Zoom x1.5    Zoom x2    Zoom x3    Zoom off
 Zoom-in mode                          Zoom playback off mode

JPEG

Zoom on    Zoom off
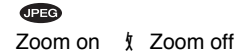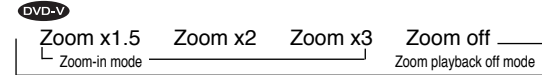
**To select a zoom scale**  JPEG
• In the zoom on mode,

RC

TUNING ∨    ∧ TUNING
◄◄    ►►
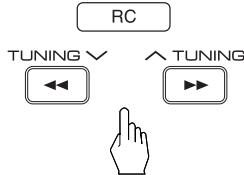
• Each time the button is pressed, zoom scale changes as follows:
 025 Pct    050 Pct    150 Pct    200 Pct    300 Pct
  └— Zoom-out mode —┘      └——— Zoom-in mode ———┘
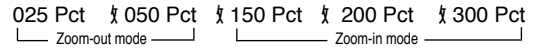
**2.** Only while zooming in a scene, press the CURSOR  /  /  /   buttons to select the desired part of the scene.

RC
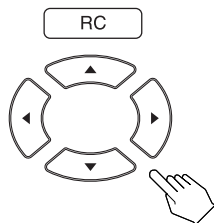
• To return to the previous operation status, press the ZOOM button repeatedly until the zoom playback is canceled.
 **Notes:**
• The zoom function may not work with some discs or files.
• The zoom function may not work properly at some scenes.
• Zooming is not possible at a title or DVD menu, etc..
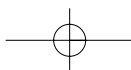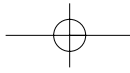
## CHANGING THE VIDEO SIGNAL FORMAT

• Depending on the countries, this unit conforms to either the NTSC color system for U.S.A, Canada, etc., or the PAL for Europe, Australia, China, etc.
 If the color system of this unit is different from that of your TV monitor and the discs to be played, the screen may be somewhat hard to see or the picture quality may be poor.
 Only in this case, change the video signal format to another.
 (For details about the video signal format of your TV monitor or the discs, refer to the operating instruction of your TV or the disc's jacket.)
• You can set the video signal format to the desired at initial settings, too.
 (For details, refer to "When selecting the TV SYSTEM" on page 38.)

When the disc tray is opened in the DVD mode, press the PAL/NTSC button.

RC

PAL/NTSC

• Each time this button is pressed, the video signal format changes as follows:
 MULTI    NTSC    PAL
• The MULTI is compatible with both NTSC and PAL formats.

## CHANGING THE RESOLUTION OF COMPONENT VIDEO OUTPUT SIGNAL

• You can select the resolution of video signals to be output from the COMPONENT MONITOR OUTs depending on the TV connected to this unit. (For details on the resolution compatible with your TV, refer to the operating instructions of that.)
• You can set the SCAN TYPE to the desired at initial settings, too.
 (For details, refer to "When selecting the SCAN TYPE" on page 39.)

 **Notes:**
• When you select the mode other than INTERLACED, the S-VIDEO and the (composite) VIDEO MONITOR OUTs of this unit cannot output the video signals, meaning the picture will not be shown.
• If the resolutions of the video signals which are output from the COMPONENT MONITOR OUTs and your TV are not matched, the picture is not clear, natural or displayed. In this case, change the setting of the resolution to suit that of your TV.
• Even though 720P or 1080I is selected, if playing a DVD Video which is copy-protected by Macrovision, INTERLACED is automatically selected and picture may be not shown correctly.
 In this case, you should connect the (composite) VIDEO IN or the S-VIDEO IN of your TV to this unit.

When the disc tray is opened in the DVD mode, press the INTERLACED/PROGRESSIVE button.

RC

I/P
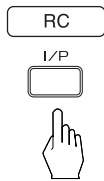
• Each time this button is pressed, the resolution of component video output signal changes as follows :

INTERLACED : When outputting 720x480i (NTSC) (or 720x576i (PAL) (interlaced)) video signals from the COMPONENT MONITOR OUTs.
480P(576P) : When outputting 720x480p (NTSC) (or 720x576p (PAL) (progressive)) video signals.
720P : When outputting 1280x720p (progressive) video signals.
1080I : When outputting 1920x1080i (interlaced) video signals
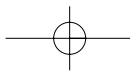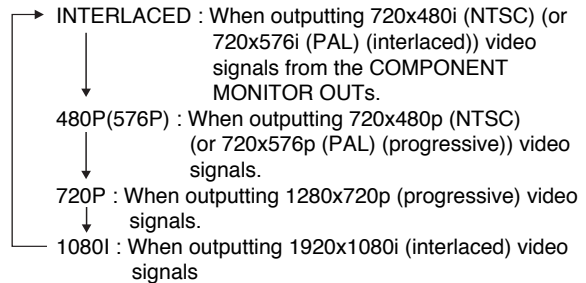
# Initial Settings

The initial settings of the unit at the factory can be modified as desired later.
Even after the power of the unit is switched to the standby mode, the initial settings are stored in memory until it is changed the next time.

**1.** In the stop mode, press the SETUP button to enter the setup mode.

RC
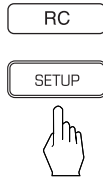
SETUP

· To exit the setup mode, press the SETUP button, or press the CURSOR   /    buttons to select "EXIT SETUP" on the main setup menu and press the ENTER button.

Main setup menu

| SETUP MENU - - MAIN PAGE |
|---|
| LANGUAGE SETUP |
| VIDEO SETUP |
| AUDIO SETUP |
| OTHER SETUP |
| |
| EXIT SETUP |
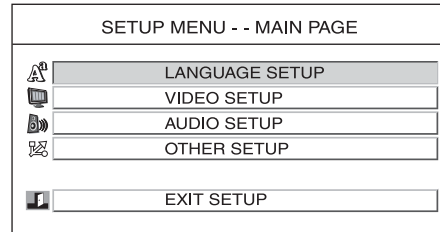
**2.** Press the CURSOR   /    buttons to select a setting category, then press the ENTER button to confirm your selection.

RC          RC

ENTER
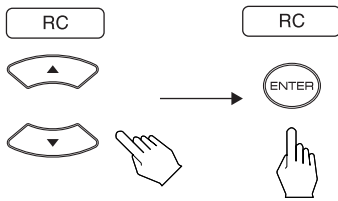
· Then the selected category will provide you the setting details using the succeeding screen.

**When selecting the LANGUAGE SETUP**

| -- LANGUAGE  SETUP PAGE -- | |
|---|---|
| AUDIO | ENGLISH |
| SUBTITLE | GERMAN |
| DISC MENU | FRENCH |
| OSD LANG | SPANISH |
| | ITALIAN |
| MAIN PAGE | |

37
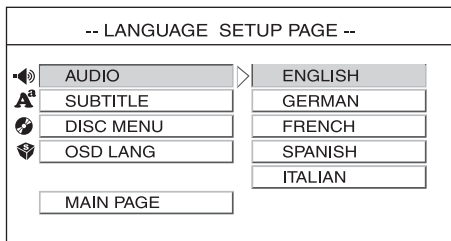
**When selecting the VIDEO SETUP**

| -- VIDEO  SETUP  PAGE -- | |
|---|---|
| TV DISPLAY | 4 : 3 PAN-SCAN |
| TV SYSTEM | 4 : 3 LETTER BOX |
| SCAN TYPE | 16 : 9 WIDE |
| MAIN PAGE | |

38
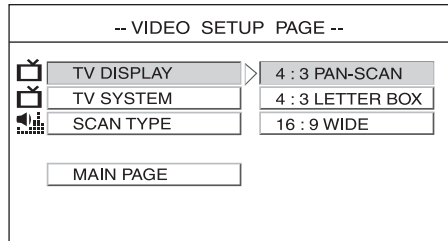
**When selecting the AUDIO SETUP**

| - - AUDIO SETUP PAGE - - | |
|---|---|
| AUDIO DRC | ON |
| | OFF |
| MAIN PAGE | |

40
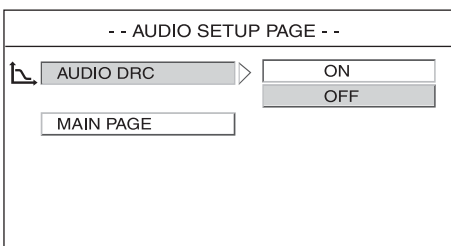
**When selecting the OTHER SETUP**

| - - OTHER SETUP PAGE - - | |
|---|---|
| CAPTIONS | ON |
| ANGLE MARK | OFF |
| SCREEN SAVER | |
| PARENTAL | |
| PASSWORD | |
| DEFAULTS | |

41
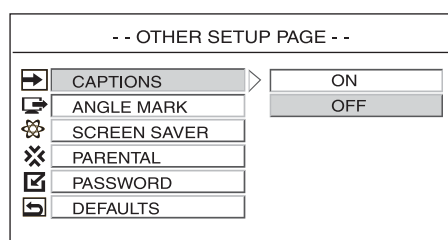
**Note :**
· During setting operation, only the buttons required for setting of DVD operation buttons will function.

ENGLISH

# SETTING THE LANGUAGE SETUP

-- LANGUAGE SETUP PAGE --

| AUDIO | ENGLISH |
| SUBTITLE | GERMAN |
| DISC MENU | FRENCH |
| OSD LANG | SPANISH |
| | ITALIAN |

MAIN PAGE

Item menu

Language menu

**ENGLISH**
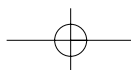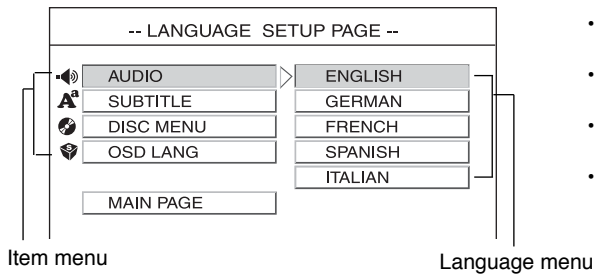
• AUDIO : When selecting a preferred audio language to be heard from those included on the DVD Video.
• SUBTITLE : When selecting a preferred subtitle language to be displayed from those included on the DVD Video.
• DISC MENU : When selecting a preferred menu language to be displayed from those included on the DVD Video.
• OSD LANGUAGE : When selecting a preferred OSD (On-Screen Display) language to be displayed.

**Note:**
• If the selected language is not recorded in the DVD Video, one of the recorded languages is automatically selected.

**1.** Press the CURSOR / buttons to select the preferred item.

RC
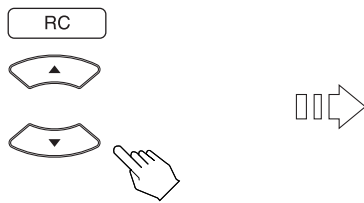
Example) When selecting the SUBTITLE

-- LANGUAGE SETUP PAGE --

| AUDIO | OFF |
| SUBTITLE | ENGLISH |
| DISC MENU | GERMAN |
| OSD LANG | FRENCH |
| MAIN PAGE | SPANISH |
| | ITALIAN |
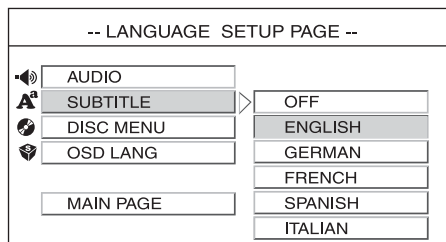
• Then the language menu of the selected item is displayed.

**2.** Press the CURSOR button to select the language menu.

RC
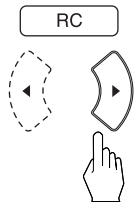
• Each time the CURSOR or button is pressed, the language menu or the item menu is selected.

**3.** Press the CURSOR / buttons to select the preferred language, then press the ENTER button.

RC        RC

ENTER
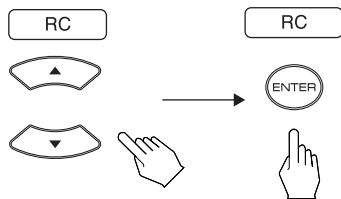
• The selected language is colored.
• You can select one of languages listed in the language menu.
• To turn off the display of subtitle language, select "OFF" on the subtitle language menu.

**4.** Press the CURSOR button to select the item menu.
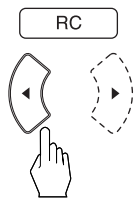
RC

**5.** Set other setups to your preference.

**To return to the main setup menu screen**
• Press the CURSOR button to select the item menu, press the CURSOR / buttons to select "MAIN PAGE" and press the ENTER button.
Then the main setup menu screen will be displayed.
• When the RETURN button is pressed, the main setup menu screen will be displayed, too.

## SETTING THE VIDEO SETUP

ENGLISH

```
-- VIDEO  SETUP  PAGE --

  TV DISPLAY          4 : 3 PAN-SCAN
  TV SYSTEM           4 : 3 LETTER BOX
  SCAN TYPE           16 : 9 WIDE

       MAIN PAGE
```

Item menu

Setting menu

• TV DISPLAY : When selecting a picture size according to the aspect ratio of your TV's screen.
• TV SYSTEM : When selecting the desired video signal format to match that of your TV monitor and DVD Video to be played.
• SCAN TYPE : When outputting the video signals in the desired resolution from the unit's COMPONENT MONITOR OUTs.

**1.** Press the CURSOR ▲ / ▼ buttons to select the preferred item.

RC
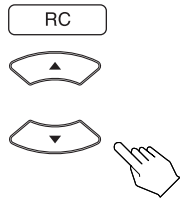
• Then the setting menu of the selected item is displayed.

### When selecting the TV DISPLAY   DVD-V

• When you connect a normal TV with 4:3 aspect ratio to this unit, select either 4:3 PAN-SCAN or 4:3 LETTER BOX and when you connect a wide TV with 16:9 aspect ratio, select 16:9 WIDE.

```
  TV DISPLAY        4:3 PAN-SCAN
  TV SYSTEM         4:3 LETTER BOX
  SCAN TYPE         16:9 WIDE
```
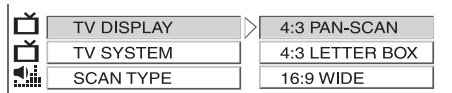
• 4:3 PAN-SCAN : DVD Videos recorded with the 16:9 aspect ratio and the pan-scan specification are reproduced in the pan-scan screen which automatically trims the left and right of picture.
• 4:3 LETTER BOX : DVD Videos recorded with the 16:9 aspect ratio are reproduced in the letter box screen which has black bands on the top and bottom.
• 16:9 WIDE : DVD Videos recorded with the 16:9 screen are reproduced by filling the TV screen.

**Notes:**
• Depending on some DVD Videos, the playback picture may not conform to the TV aspect setting you select.
• When the SCAN TYPE is set to 720P or 1080I, the TV DISPLAY cannot be selected because it is automatically set to 16:9 WIDE.(For details, refer to "When selecting the SCAN TYPE" on page 39.)

### When selecting the TV SYSTEM

• Depending on the countries, this unit conforms to either the NTSC color system for U.S.A, Canada, etc., or the PAL for Europe, Australia, China, etc.
If the color system of this unit is different from that of your TV monitor and the discs to be played, the screen may be somewhat hard to see or the picture quality may be poor.
Only in this case, change the video signal format to another. (For details about the video signal format of your TV monitor or the discs, refer to the operating instruction of your TV or disc's jacket.)
• You can select the desired video signal format with pressing the PAL/NTSC button, too.
(For details, refer to "CHANGING THE VIDEO SIGNAL FORMAT" on page 35.)

```
  TV SYSTEM        MULTI
  SCAN TYPE        NTSC
                   PAL
```
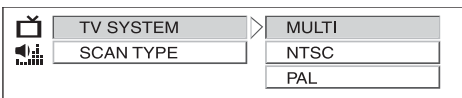
• MULTI : When selecting the MULTI that is compatible with both NTSC and PAL formats.
• NTSC : When selecting the NTSC format.
• PAL : When selecting the PAL format.
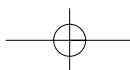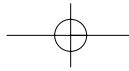
**Continued**

## When selecting the SCAN TYPE

・You can select the resolution of video signals to be output from the COMPONENT MONITOR OUTs depending on the TV connected to this unit. (For details on the resolution compatible with your TV, refer to the operating instructions of that.)
  **Notes:**
・When you set the SCAN TYPE to the mode other than INTERLACED, the S-VIDEO and the (composite) VIDEO MONITOR OUTs of this unit cannot output the video signal, meaning the picture will not be shown.
・If the resolution of the video signals which are output from the COMPONENT MONITOR OUTs and your TV are not matched, the picture is not clear, natural or displayed. In this case, change the setting of the resolution to suit that of your TV.
・Even though the SCAN TYPE is set to 720P or 1080I, if playing a DVD Video which is copy-protected by Macrovision, the SCAN TYPE is automatically set to INTERLACED and picture may be not shown correctly. In this case, you should connect the (composite) VIDEO IN or the S-VIDEO IN of your TV to this unit.

| SCAN TYPE | ▷ | INTERLACED |
|---|---|---|
|  |  | 480P(576P) |
| MAIN PAGE |  | 720P |
|  |  | 1080I |
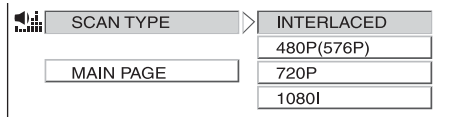
・INTERLACED : When outputting 720x480i (NTSC) (or 720x576i(PAL) (interlaced)) video signals from the COMPONENT MONITOR OUTs.
・480P(576P) : When outputting 720x480p (NTSC) (or 720x576p (PAL) (progressive)) video signals.
・720P : When outputting 1280x720p (progressive) video signals.
・1080I : When outputting 1920x1080i (interlaced) video signals.

**2.** Press the CURSOR    button to select the setting menu.
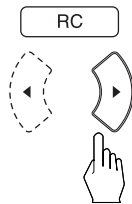
RC

・Each time the CURSOR    or    button is pressed, the setting menu or the item menu is selected.

**3.** Press the CURSOR    /    buttons to select the preferred setting, then press the ENTER button.

RC          RC

ENTER
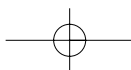
・The selected setting is colored.

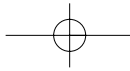**4.** Press the CURSOR    button to select the item menu.

RC
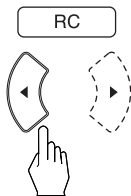
**5.** Set other setups to your preference.

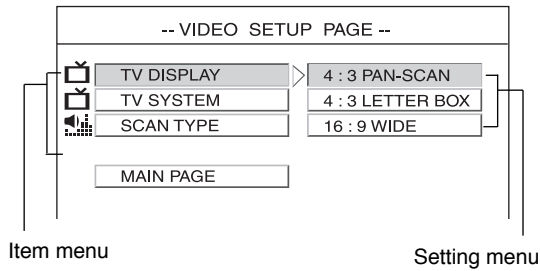**To return to the main setup menu screen**
・Press the CURSOR    button to select the item menu, press the CURSOR    /    buttons to select "MAIN PAGE" and press the ENTER button.
  Then the main setup menu screen will be displayed.
・When the RETURN button is pressed, the main setup menu screen will be displayed, too.

**ENGLISH**

## SETTING THE AUDIO SETUP  DVD-V

- - AUDIO SETUP PAGE - -

| AUDIO DRC | ▷ | ON |
| MAIN PAGE | | OFF |

Item menu                    Setting menu

・You can adjust the dynamic range compression that makes faint sound easier to hear at low volume levels.
・When playing the Dolby Digital program sources only, this setting is valid.
・ON: When adjusting the dynamic range compression.
・OFF : When turning off the dynamic range compression.

**Note:**
・In some Dolby Digital softwares, this function cannot be available.

**1.** Press the CURSOR    button to select the setting menu.

RC

・Each time the CURSOR    or    button is pressed, the setting menu or the item menu is selected.

**2.** Press the CURSOR   /   buttons to select the preferred setting, then press the ENTER button.
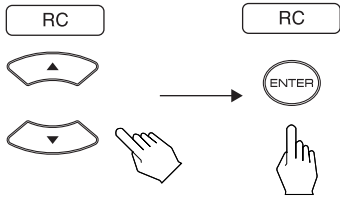
RC          RC

ENTER

**3.** Press the CURSOR    button to select the item menu.

RC

**4.** Set other setups to your preference.

**To return to the main setup menu screen**
・Press the CURSOR    button to select the item menu, press the CURSOR   /   buttons to select "MAIN PAGE" and press the ENTER button.
 Then the main setup menu screen will be displayed.
・When the RETURN button is pressed, the main setup menu screen will be displayed, too.

## SETTING THE OTHER SETUP

- - OTHER SETUP PAGE - -

CAPTIONS          ON
ANGLE MARK        OFF
SCREEN SAVER
PARENTAL
PASSWORD
DEFAULTS

Item menu                Setting menu

・CAPTIONS : When turning on or off the display of the closed captions recorded on DVD Video.
・ANGLE MARK : When displaying the angle symbol on the TV screen during playback at the scene recorded from multiple camera angles.
・SCREEN SAVER : When turning on or off the screen saver function.
・PARENTAL CONTROL :
When restricting playback of DVD Video which contains violent and other scenes according to the level set by the user.
For example, if a movie which includes violent scenes supports the parental lock feature, such scenes which you do not want to let children view can be cut or replaced with other scenes.
・PASSWORD : When changing the password for parental lock. The unit's password has been set to "3308" at the factory.
・DEFAULTS : When resetting all the settings made in the setup menu except the rating leve and the password to the default settings.

### When selecting the CAPTIONS, ANGLE MARK, SCREEN SAVER

**1.** Press the CURSOR    /    buttons to select the preferred item.
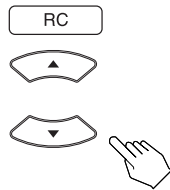
RC

・Then the setting menu of the selected item is displayed.

### When selecting the CAPTIONS    DVD-V

- - OTHER SETUP PAGE - -

CAPTIONS          ON
ANGLE MARK        OFF

・ON : When turning on the display of the closed captions recorded on DVD Videos.
・OFF : When turning it off.
  **Notes :**
・The caption decoder is required to display captions.
・DVD Videos with caption signals are indicated by the ☐, ☐, ☒ mark. The captions cannot be displayed when playing DVD Videos which do not contain caption signals.

### When selecting the ANGLE MARK    DVD-V

ANGLE MARK        ON
SCREEN SAVER      OFF
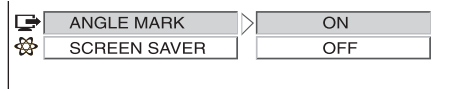
・ON : When turning on the display of the angle symbol ( 📹 ) on the TV screen.
・OFF : When turning it off.

### When selecting the SCREEN SAVER

・A TV screen may be burned out if a static picture is displayed for a long time in the stop mode.
To prevent this, set the SCREEN SAVER to ON. Then the unit automatically activates the screen saver function if a static picture is displayed for over 5 minutes.
  **Note:**
・The monitor screen of a projector or projection TV is easily burned out if a static picture is displayed for a long time.
Be careful not to allow the monitor screen to be burned out when the SCREEN SAVER is set to OFF.

SCREEN SAVER      ON
PARENTAL          OFF

・ON : When turing on the screen saver function.
・OFF : When turning it off.

**Continued**

**2.** Press the CURSOR    button to select the setting menu.

RC

• Each time the CURSOR    or    button is pressed, the
setting menu or the item menu is selected.

**3.** Press the CURSOR    /    buttons to select the preferred setting, then press the ENTER button.
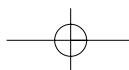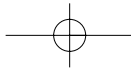
RC          RC

ENTER

• The selected setting is colored.

**4.** Press the CURSOR    button to select the item menu.

RC
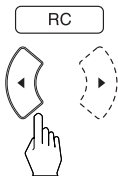
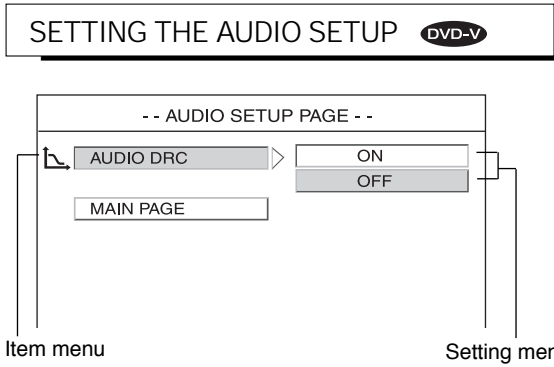**5.** Set other setups to your preference.

**To return to the main setup menu screen**
• Press the CURSOR    button to select the item menu, press the CURSOR    /    buttons to select "MAIN PAGE" and press
the ENTER button.
Then the main setup menu screen will be displayed.
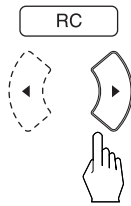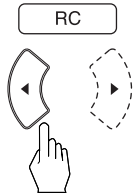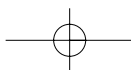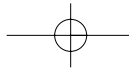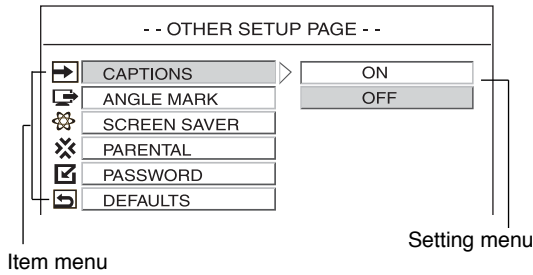• When the RETURN button is pressed, the main setup menu screen will be displayed, too.

## When selecting the PARENTAL CONTROL  DVD-V

**1.** Press the CURSOR    /    buttons to select the PARENTAL CONTROL.

RC

- - OTHER SETUP PAGE - -

| CAPTIONS | LEVEL 1(KIDS) |
| ANGLE MARK | LEVEL 2 |
| SCREEN SAVER | LEVEL 3 |
| PARENTAL | LEVEL 4 |
| PASSWORD | LEVEL 5 |
| DEFAULTS | LEVEL 6 |
| | LEVEL 7 |
| MAIN PAGE | LEVEL 8(ADULT) |

• LEVEL 1(KIDS) :
  Select this to play only DVD Videos for
  children. Adult and general audience
  DVD Videos cannot be played.
• LEVEL 2 ~ 7 :
  Select this to play DVD Videos for
  general audiences and children. Adult
  DVD Videos cannot be played.
• LEVEL 8 (ADULT) :
  Select this to play for general audiences,
  children and adults.
• NO PARENTAL :
  Select this to play all DVD Videos.

**Notes :**
• When you set the rating level low, some discs may not be played at all. In this case, set the rating level higher or to "NO
  PARENTAL".
• DVD Videos may or may not respond to the rating level setting. Make sure this function works with your DVD Videos.

42
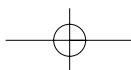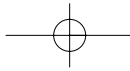
**Continued**

**2.** Press the CURSOR     button to select the level menu.

RC
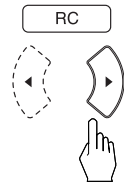
・Each time the CURSOR    or    button is pressed, the level menu or the item menu is selected.

**3.** Press the CURSOR   /   buttons to select the preferred level, then press the ENTER button.

RC      RC      ENTER

PASSWORD VERIFY PAGE
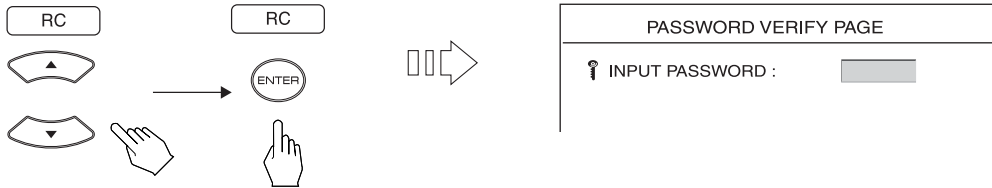
INPUT PASSWORD :

**4.** Input a 4-digit password with pressing the NUMERIC buttons, then press the ENTER button.

RC      RC      ENTER
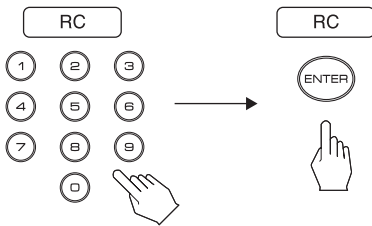
・When the password is input correctly, the rating level is set to the preferred level and the previous menu screen is displayed.
・If you input a wrong password,"PASSWORD INCORRECT" is displayed. In this case, input the password again.
・While displaying the password verify page screen, when the RETURN button is pressed, the other setup menu screen will be displayed.
   **Note :**
・If you forgot your password, input "3308" that has been set to at factory.

**5.** Press the CURSOR     button to select the item menu.

RC
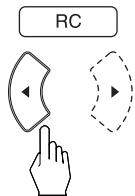
**6.** Set other setups to your preference.

   **To return to the main setup menu screen**
・Press the CURSOR    button to select the item menu, press the CURSOR   /   buttons to select "MAIN PAGE" and press the ENTER button.
  Then the main setup menu screen will be displayed.
・When the RETURN button is pressed, the main setup menu screen will be displayed, too.
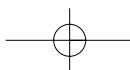
**Continued**

## When selecting the PASSWORD  DVD-V

**1.** Press the CURSOR  /  buttons to select the PASSWORD.

```
RC
```
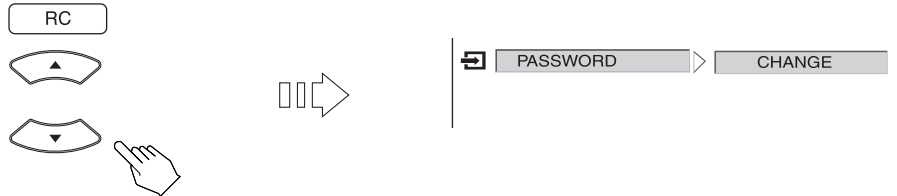
PASSWORD  →  CHANGE

**2.** Press the CURSOR  buttons to select the CHANGE, then press the ENTER button.

```
RC        RC
          ENTER
```

PASSWORD CHANGE PAGE

OLD PASSWORD :
NEW PASSWORD :
CONFIRM :
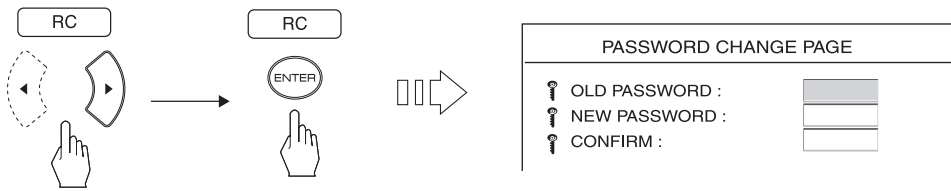
**3.** Input 4-digit passwords in sequence for old password, new password and confirmation, then press the ENTER button.

```
RC
1 2 3
4 5 6
7 8 9
  0
```

PASSWORD CHANGE PAGE

OLD PASSWORD :  XXXX
NEW PASSWORD :  XXXX
CONFIRM :  XXXX

```
RC
ENTER
```
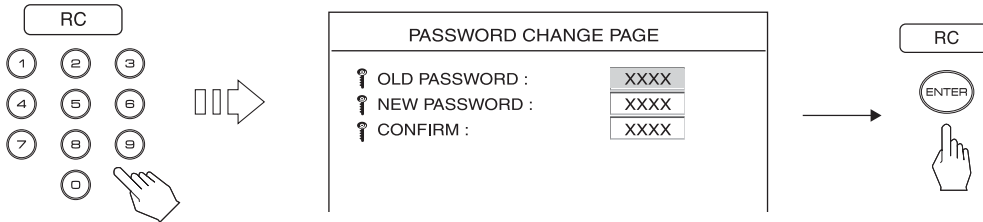
・When each password is input correctly, the previous menu screen is displayed.
・While displaying the password change page menu screen, when the RETURN button is pressed, the other setup menu screen will be displayed.
   **Note :**
・Do not forget the password. When you input the password first time or if you forgot your password, input "3308" that has been set to at factory for the old password.

**4.** Press the CURSOR  button to select the item menu.
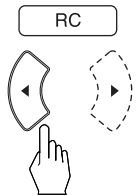
```
RC
```

**5.** Set other setups to your preference.

**To return to the main setup menu screen**
・Press the CURSOR  button to select the item menu, press the CURSOR  /  buttons to select "MAIN PAGE" and press the ENTER button.
 Then the main setup menu screen will be displayed.
・When the RETURN button is pressed, the main setup menu screen will be displayed, too.

**Continued**

## When selecting the DEFAULTS

**1.** Press the CURSOR  /  buttons to select the DEFAULTS.

RC
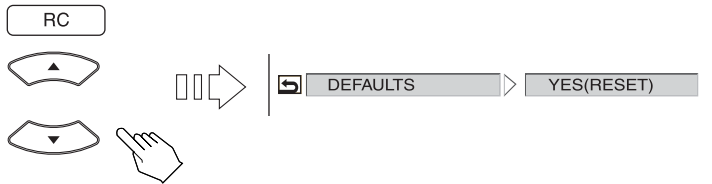
DEFAULTS ▷ YES(RESET)

· YES(RESET) :
   When resetting all the settings in the
   setup menu except the rating level and
   the password to the default settings.

**2.** Press the CURSOR  button to select the setting menu, then press the ENTER button.

RC          RC

ENTER
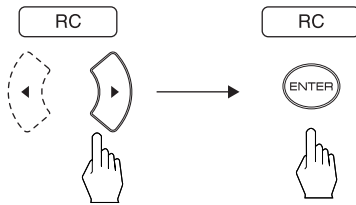
· Each time the CURSOR   or   button is pressed, the
   setting menu or the item menu is selected.
· Then the settings are reset to initial settings.

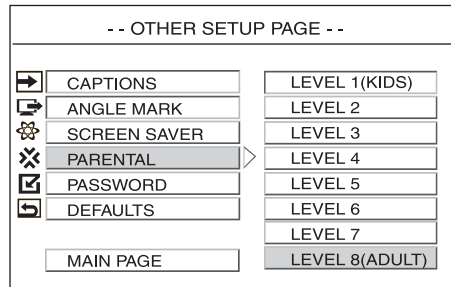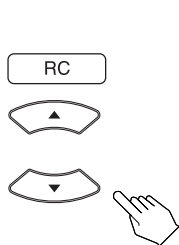**3.** Press the CURSOR  button to select the item menu.
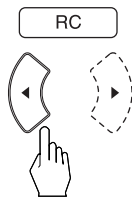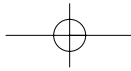
RC

**4.** Set other setups to your preference.

**To return to the main setup menu screen**
· Press the CURSOR    button to select the item menu, press the CURSOR   /   buttons to select "MAIN PAGE" and press
   the ENTER button.
   Then the main setup menu screen will be displayed.
· When the RETURN button is pressed, the main setup menu screen will be displayed, too.
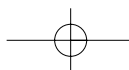
# *Operation of Tuner*

## LISTENING TO RADIO BROADCASTS

**Note :**
· When selecting the FM, if FM stereo broadcasts are poor because of weak broadcast signals, you can set the FM mode to FM MONO to reduce the noise. (For details, refer to "Adjusting the channel level(/setting the FM mode)" on page 16.)

### Auto tuning

**1.** Select the tuner.

| Main unit | RC |
|---|---|
| SOURCE | FM/AM |

or

Preset number   Band        Frequency
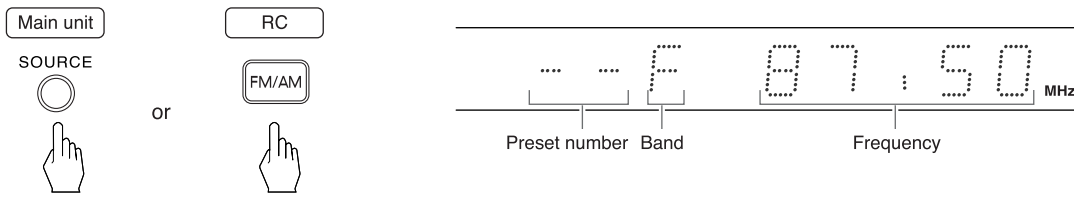
**2.** Select the desired band.

RC
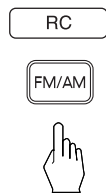
FM/AM

· Each time the FM/AM button on the remote control is pressed, the band changes as follows :
"F" (FM)        "A" (AM)

**3.** Press the TUNING UP/DOWN( / ) buttons for more than 0.5 second.

RC

TUNING ⌄        ⌃ TUNING
◄◄               ►►
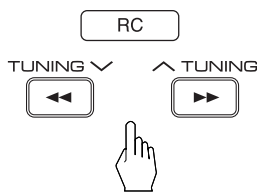
· The tuner will now search until a station of sufficient strength has been found. The display shows the tuned frequency and "TUNED" indicator lights up.
· If the station found is not the desired one, simply repeat this operation.
· Weak stations are skipped during auto tuning.

### Manual tuning

· Manual tuning is useful when you already know the frequency of the desired station.

After selecting the tuner and the desired band, press the TUNING UP/DOWN ( / ) buttons repeatedly until the right frequency has been reached.

RC
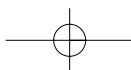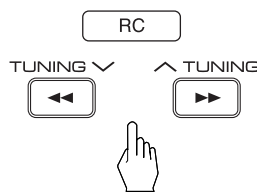
TUNING ⌄        ⌃ TUNING
◄◄               ►►

## Presetting radio stations

・You can store up to 40 preferred stations in the memory.

**1.** Tune in the desired station with auto or manual tuning.

**2.** Press the PROGRAM button.

RC

PROGRAM

・Then "MEM" indicator lights up and the preset number
("01",etc.) is flickering for several seconds.
・If flickering the preset number stops, press the
PROGRAM button again.

**3.** Select the desired preset number (01~40) and press the PROGRAM button.

| Main unit | RC | RC |
| --- | --- | --- |
| ◄◄   ►►│ | PRESET ⌄   ⌃ PRESET | PROGRAM |

or

・When using the NUMERIC buttons on the remote control.
Examples)

For "3" :    0  within 4 seconds  3

For "21" :   2  within 4 seconds  1

For "40" :   4  within 4 seconds  0
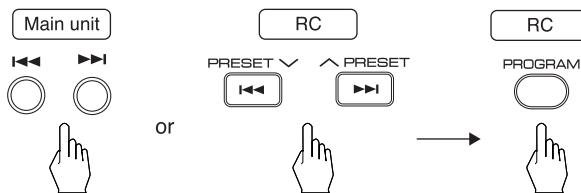
・The station has now been stored in the memory.
・When using the NUMERIC buttons, the station is stored automatically without pressing the PROGRAM button.
・A stored frequency is erased from the memory by storing another frequency in its place.

**4.** Repeat the above steps 1 to 3 to memorize other stations.

MEMORY BACKUP FUNCTION

The following items, set before the receiver is turned off, are memorized.
・INPUT SELECTOR settings
・Preset stations, etc.

## Tuning to preset stations

After selecting the tuner, select the desired preset number.

| Main unit | RC |
| --- | --- |
| ◄◄   ►►│ | PRESET ⌄   ⌃ PRESET |

or

・When using the NUMERIC buttons on the remote control.
Examples)

For "3" :    0  within 2 seconds  3

For "21" :   2  within 2 seconds  1

For "40" :   4  within 2 seconds  0
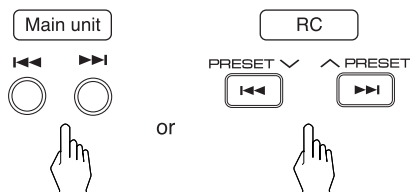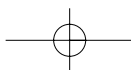
# *Operation of Other Functions*

## RECORDING WITH VIDEO

・Depending on whether the video recording equipment or the audio recording equipment is connected to the VIDEO jacks, you can record the video and audio signals or the audio signals only. (For details, refer to "CONNECTING VIDEO COMPONENT" on page 7.)

**Notes :**
・The volume settings, etc. have no effect on the recording signals.
・Commercial DVD Video discs are copy-protected, and any recordings made from these discs will be distorted.

**1.** Select the desired input as recording source except VIDEO.



| Main unit | | RC |
|---|---|---|
| SOURCE | | AUX    FM/AM    DVD |
| ○ | or | F.AUX |
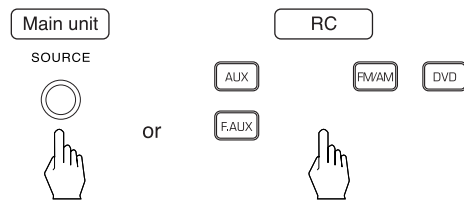
**2.** Start recording on the component connected to VIDEO.

**3.** Start play on the desired input.
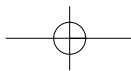
## SETTING THE CLOCK

· In case of setting the clock for the first time, perform the setting procedure from the step 2.
· In the standby mode, you can set the clock, too. In this case, perform it from the step 2.
   **Note :**
· If the electricity fails or the AC input cord is unplugged, the current time will be cleared. Should this happen, set the clock again, performing it from the step 2.

**1.** To check the time, press the CLOCK/SLEEP button for more than 2 seconds.

RC
CLOCK
SLEEP

· Then the time is displayed for several seconds and the current operation status is displayed.
· In the power saving mode, when the CLOCK/SLEEP button is pressed, the time is displayed for several seconds.
· Before the time display disappears, perform the step 2.

**2.** Press the CLOCK/SLEEP button for more than 2 seconds.

Example ) When setting to 6:30 PM.

RC
CLOCK
SLEEP

AM 12:00
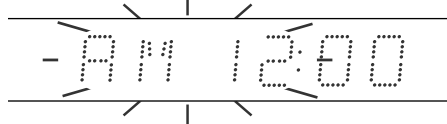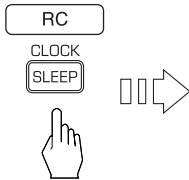
· Then the hour digit is flickering for several seconds.

**3.** Press the CURSOR UP/DOWN ( / ) buttons to set the hour and press the ENTER button.

RC

RC
ENTER

PM 6:00
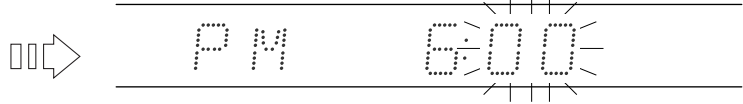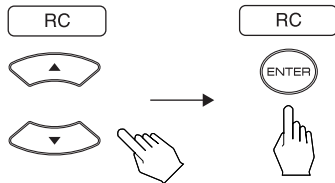
· Then the minute digit is flickering for several seconds.

**4.** Press the CURSOR UP/DOWN ( / ) buttons to set the minute and press the ENTER button.

RC

RC
ENTER

PM 6:30
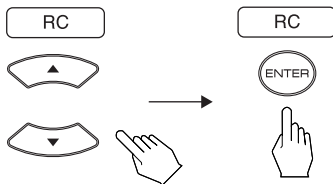
· Then the time is displayed for several seconds.

**5.** Press the ENTER button to select the desired time display mode.

RC
ENTER
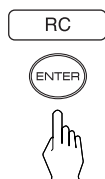
· Each time the ENTER button is pressed, the 12 hour display mode or the 24 hour display mode is selected.
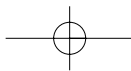
ENGLISH

## OPERATING THE TIMER

· Once the timer is set to on, it will operate at the preset time once or everyday.

**Before setting the timer**

· Make sure the clock has been set correctly. If not, when the TIMER button is pressed, "CLOCK ADJust" message is displayed and it will enter the clock setting mode.
In this case, first set the clock performing "SETTING THE CLOCK" procedure on page 49.

**Note :**

· If the electricity fails or the AC input cord is unplugged, the current time and the timer setting will be cleared. Should this happen, set the clock and the timer again.

**1.** Press the TIMER button for more than 2 seconds to enter the timer setting mode.

RC
TIMER
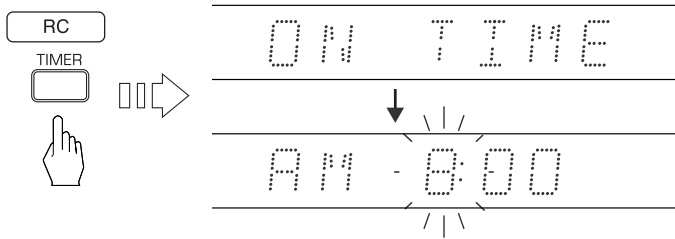
ON TIME
AM - 8:00

· Then it enters the on time setting mode and the hour digit is flickering for several seconds.
· In the standby mode, you can set the timer, too.
· In case of setting the timer for the first time, press this button briefly to enter the timer setting mode.
  **Notes:**
· If the timer setting mode display disappears, start again from the step 1.
· In the power saving mode, you cannot set the timer.

**2.** While flickering the hour digit, press the CURSOR UP/DOWN ( / ) buttons to set the hour for on time and press the ENTER button.

RC    RC
ENTER
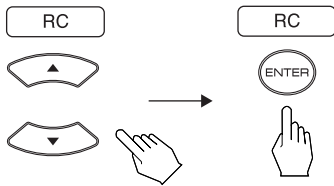
· Then the minute digit is flickering for several seconds.

**3.** While flickering the minute digit, press the CURSOR UP/DOWN ( / ) buttons to set the minute for on time and press the ENTER button.

RC    RC
ENTER
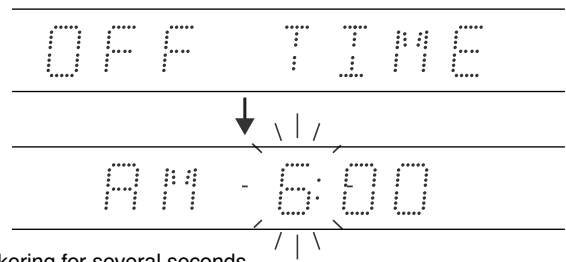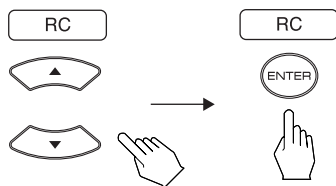
OFF TIME
AM - 6:00

· Then it enters the off time setting mode and the hour digit is flickering for several seconds.

**4.** Repeat the above steps 2 and 3 to set the off time.

T-PLAY
- DVD -
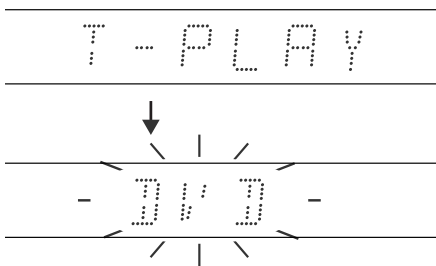
· Then it enters the input setting mode and the input source is flickering for several seconds.
  **Note :**
· If the on time and the off time are the same, when the ENTER button is pressed, the off time will not be set. In this case, set the off time different from the on time.

**ENGLISH**
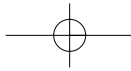
**Continued**

**5.** While flickering the input source, press the CURSOR UP/DOWN ( / ) buttons to select the desired input source and press the ENTER button.

RC          RC
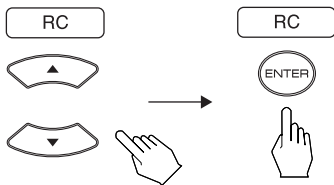
ENTER

Example ) When selecting DVD

VOL 30

or
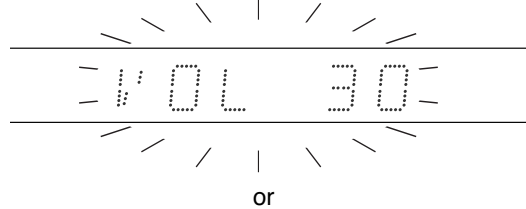
Example ) When selecting TUNER

01F 87.50 **MHz**
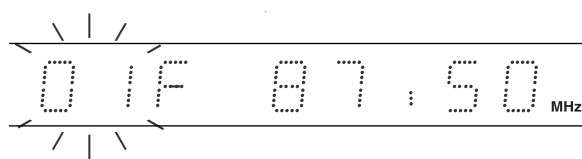
・Each time the CURSOR UP/DOWN ( / ) buttons are pressed, DVD or TUNER is selected.
・Depending on whether DVD or TUNER is selected, it enters the volume setting mode or the preset station setting mode and corresponding display is flickering for several seconds.

**When selecting TUNER**

While flickering the preset number, press the CURSOR UP/DOWN ( / ) buttons to select the desired preset station and press the ENTER button.

RC          RC
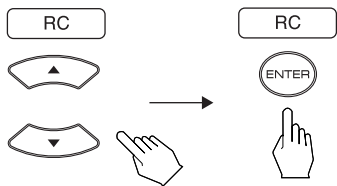
ENTER

・Then it enters the volume setting mode.

**6.** While flickering the volume level, press the CURSOR UP/DOWN ( / ) buttons to adjust the volume level as desired and press the ENTER button.

RC          RC

ENTER

OFF
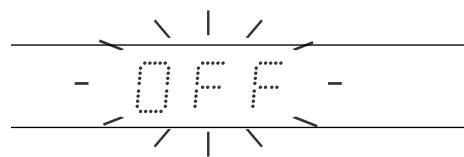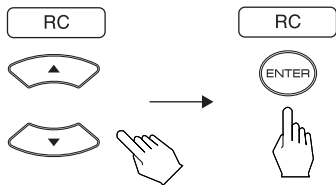
・Then it enters the timer mode and the timer mode is flickering for several seconds.

**7.** While flickering the timer mode, press the CURSOR UP/DOWN ( / ) buttons to select the desired mode and press the ENTER button.

RC          RC

ENTER
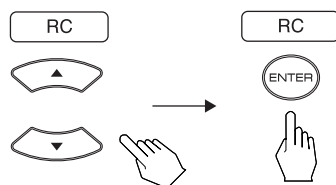
・Then the timer settings are memorized and displayed in order.
・Each time the CURSOR UP/DOWN ( / ) buttons are pressed, the timer mode change as follows :
→ OFF : Turns off the timer. (" ⊕ " goes off.)

  ONCE : Operates once according to the timer settings. (" ⊕ " lights up.)
→ EVERYDAY : Operates everyday. (" ⊕ " lights up.)
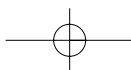
**Continued**

**When selecting DVD as an input source**

Make preparations for timer play.

Load a DVD Video or a CD.
In case of a DVD Video, start playback.
**Notes :**
・Timer function cannot play back MP3, WMA, JPEG disc or USB mass storage device.
・In case of DVD Videos, you should play back a DVD Video until the desired scene is reached to.
  If not, it will not play back a DVD Video.
・When a disc is not loaded, the timer function will automatically tune in the preset station.

**8.** (In case of DVD Video, at the scene to be played back,) turn the power off before on time.

Main unit

ON/STANDBY

RC

STANDBY

or
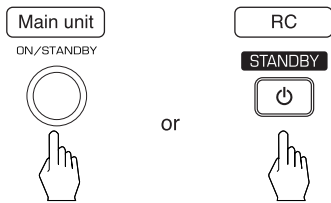
・To operate the timer, you should turn the power off before on-time.
・At on time, the power is turned on and the timer function is performed automatically.

**Checking the timer settings while displaying operation status**

Press the TIMER button.

RC
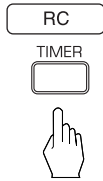
TIMER

・Then the timer settings are displayed in order and the current status is displayed.
・In the standby mode, you can check the timer settings or select the desired timer mode, too.
・You can select the desired timer mode with pressing this button repeatedly.

**ADJUSTING THE BRIGHTNESS OF THE DISPLAY**

RC

DIMMER

・Each time the DIMMER button is pressed, the brightness of the display changes as follows :
    On       dim

**OPERATING THE SLEEP TIMER**

・The sleep timer allows the system to continue to operate for a specified period of time before automatically shutting off.
・To set the receiver to automatically turn off after the specified period of time.

RC

CLOCK
SLEEP

・Each time this button is pressed, the sleep time changes as follows:
    10    20    30    60    90    OFF
              Unit : minutes

・When the sleep time is selected, the display of the unit is dimly lit.
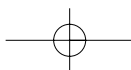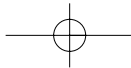
# *Troubleshooting Guide*

If a fault occurs, run through the table below before taking your system for repair.
If the fault persists, attempt to solve it by switching the unit off and on again. If this fails to resolve the situation, consult your dealer. Under no circumstances should you attempt to repair the unit yourself. This could void the warranty.

**ENGLISH**

### REMOTE CONTROL UNIT

| PROBLEM | POSSIBLE CAUSE | REMEDY |
|---------|----------------|--------|
| No operation | • Batteries are not loaded or exhausted.<br>• The remote sensor is obstructed. | • Replace the batteries.<br>• Remove the obstacle. |

### MAIN UNIT
### [AMPLIFIER SECTION]

| PROBLEM | POSSIBLE CAUSE | REMEDY |
|---------|----------------|--------|
| No power | • The AC input cord is disconnected.<br>• Poor connection at AC wall outlet or the outlet is inactive. | • Connect the cord securely.<br>• Check the outlet using a lamp or another appliance. |
| No sound | • The speaker cords are disconnected.<br>• The volume is adjusted too low.<br>• The MUTING button on the remote control is pressed to ON.<br>• Incorrect selection of the input source.<br>• Incorrect connections between the components. | • Check the speaker connections.<br>• Adjust the volume.<br>• Press the MUTING button to cancel the muting effect.<br>• Select the desired input source correctly.<br>• Make connections correctly. |
| Noise or distorted sound | • Poor connections. | • Check the connections and connect all cords securely. |

### [DVD PLAYER SECTION]

| PROBLEM | POSSIBLE CAUSE | REMEDY |
|---------|----------------|--------|
| No playback | • The disc is loaded upside down.<br>• The disc is not playable.<br>• The disc is dirty.<br>• The rating level is not set correctly.<br><br><br>• The symbol about invalid operation is displayed. | • Reload the disc with the printed side up.<br>• Use a playable disc.<br>• Clean the disc.<br>• Set the rating level setting correctly.(Refer to "When selecting the PARENTAL CONTROL" on page 42.)<br>• Adjust the setting correctly.(Refer to "SYMBOL ABOUT INVALID OPERATION" on page 17.) |
| Malfunction | • The disc is scratched or dirty badly. | • Wipe off the dirt or load another disc. |
| No picture | • The video cords are disconnected.<br>• The incorrect selection of input source on the TV.<br>• The disc is not playable. | • Connect the cords correctly.<br>• Select the input source correctly.<br>• Use a playable disc. |
| Noisy or distorted picture | • The unit is connected to a VCR directly and the copyguard function is activated.<br>• The disc is dirty.<br>• It is in rapid advance or reverse playback, or in frame advance playback. | • Connect the unit so that the picture signal is transferred directly to the TV.<br>• Clean the disc.<br>• Sometimes a small amount of picture distortion may appear. This is not malfunction. |
| Abnormal or no picture | • The resolution of component video output signal is not selected correctly. | • Select the resolution of component video output signal correctly.<br>(Refer to "When selecting the SCAN TYPE" on page 39.) |
| Slight pause of picture | • The layer transition occurs during playback of DVD Videos recorded in dual-layer format. | • Sometimes slight pause may occur.<br>This is not malfunction. |
| Noise or distorted sound | • The disc is dirty. | • Clean the disc |
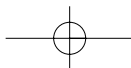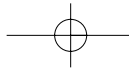
**[TUNER SECTION]**

ENGLISH

| PROBLEM | POSSIBLE CAUSE | REMEDY |
|---|---|---|
| Stations cannot be received | • No antenna is connected.<br>• The desired station frequency is not tuned in.<br>• The antenna is in wrong position. | • Connect an antenna.<br>• Tune in the desired station frequency.<br>• Move the antenna and retry tuning. |
| Preset stations cannot be received | • An incorrect station frequency has been memorized.<br>• The memorized stations are cleared. | • Memorize the correct station frequency.<br><br>• Memorize the stations again. |
| Poor FM reception | • No antenna is connected.<br>• The antenna is not positioned for the best reception. | • Connect an antenna.<br>• Change the position of the antenna. |
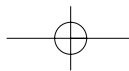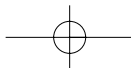
# *Specifications*

**[AMPLIFIER SECTION]**
- Front power output, stereo mode, 6 Ω, THD 0.7 %, 20 Hz~20 kHz   **| 2× 25 W**
- Subwoofer power output, 4 Ω, THD 10 %, 20 Hz~200 Hz   **| 50 W**
- Total harmonic distortion, 6 Ω, 25 W, 1 kHz   **| 0.09 %**
- Intermodulation distortion
    60 Hz : 7 kHz=4:1 SMPTE, 6 Ω, 25 W   **| 0.05 %**
- Signal to noise ratio, IHF "A" weighted, DVD   **| 85 dB**
- Frequency response
    Line(AUX, VIDEO, DVD), 20 Hz~20 kHz   **| ±3 dB**
- Output level
    VIDEO OUT, 2.2 kΩ   **| 180 mV**
    SUBWOOFER PREOUT, 30 Hz   **| 1.5 V**

**ENGLISH**

**[VIDEO SECTION]**
- Output level, 75Ω
    Video (Composite(normal))   **| 1 Vp-p**
    S-Video (Luminance signal)   **| 1 Vp-p**
             (Chrominance signal)   **| 0.286 Vp-p**
    Component video ($P_r$ signal)   **| 0.7 Vp-p**
                    ($P_b$ signal)   **| 0.7 Vp-p**
                    (Y signal)   **| 1 Vp-p**

**[DVD PLAYER SECTION]**
- Pickup   **| Semiconductor laser, wavelength 650/780 nm**
- D/A conversion
    Video   **| 10 bit, 54 MHz**
    Audio   **| 24 bit, 192 kHz**
- Oversampling
    Sampling frequency : 44.1, 48 kHz/96 kHz   **| 8 fs, 8 fs/4 fs**
- Video format   **| NTSC/PAL**
- Frequency response
    Sampling frequency : 44.1 kHz   **| 10 Hz~20 kHz**
    Sampling frequency : 48 kHz   **| 10 Hz~22 kHz**
    Sampling frequency : 96 kHz   **| 10 Hz~44 kHz**
- Signal to noise ratio, A weighted
    CD   **| 95 dB**
- Dynamic range
    16/20/24 bit   **| Move than 99/108/108 dB**
- Total harmonic distortion, 1 kHz
    CD   **| Less than 0.03 %**
- Wow and flutter   **| Unmeasurable(less than ±0.002 %)**

**[FM TUNER SECTION]**
- Tuning frequency range   **| 87.5~108 MHz**
- Usable sensitivity, THD 3 %, S/N 30 dB   **| 17.2 dBf**
- Signal to noise ratio, 65 dBf, mono/stereo   **| 68/65 dB**
- Total harmonic distortion, 65 dBf, 1 kHz, mono/stereo   **| 0.7/1.0 %**
- Frequency response, 30 Hz~15 kHz   **| +1, -3 dB**
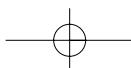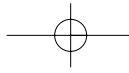
**[AM TUNER SECTION]**
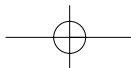
・Tuning frequency range **| 520~1710 kHz**

・Usable sensitivity **| 562 μV/m**

・Signal to noise ratio **| 40 dB**

・Selectivity **| 25 dB**

**[GENERAL]**

・Power supply **| 120 V ~ 60 Hz**

・Power consumption **| 50 W**

・Dimensions(W× H× D, including protruding parts) **| 347× 102× 270 mm(13-5/8× 4× 10-5/8 inches)**

・Weight(Net) **| 3.1 kg(6.8 lbs)**

Note: Design and specifications are subject to change without notice for improvements.
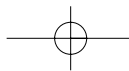
# Setup Code Table

| TV |
|---|

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AOC | 005 | 003 | | | | | Goldstar | 005 | 025 | 003 | 011 | | |
| Admiral | 041 | 031 | | | | | Gradiente | 009 | 011 | | | | |
| Aiko | 014 | | | | | | Grunpy | 027 | 026 | | | | |
| Akai | 005 | | | | | | Hallmark | 025 | | | | | |
| Alaron | 026 | | | | | | Harley Davidson | 026 | | | | | |
| Ambassador | 024 | | | | | | Harman/Kardon | 010 | | | | | |
| America Action | 027 | | | | | | Havard | 027 | | | | | |
| Ampro | 043 | | | | | | Hitachi | 016 | 011 | 018 | | | |
| Anam | 027 | 047 | 048 | 049 | | | Infinity | 010 | | | | | |
| Audiovox | 030 | 027 | 014 | 034 | | | Inteq | 002 | | | | | |
| Baysonic | 027 | | | | | | JBL | 010 | | | | | |
| Belcor | 003 | | | | | | JCB | 050 | | | | | |
| Bell & Howell | 019 | 001 | | | | | JVC | 009 | 046 | | | | |
| Bradford | 027 | | | | | | KEC | 027 | | | | | |
| Brockwood | 003 | | | | | | KTV | 027 | 005 | 006 | | | |
| Broksonic | 028 | 031 | | | | | Kenwood | 005 | 003 | | | | |
| CXC | 027 | | | | | | LG | 011 | | | | | |
| Candle | 005 | 011 | | | | | LXI | 007 | 010 | 019 | 020 | 025 | |
| Carnivale | 005 | | | | | | Logik | 001 | | | | | |
| Carver | 010 | | | | | | Luxman | 011 | | | | | |
| Celebrity | 050 | | | | | | MGA | 017 | 005 | 025 | 003 | | |
| Cineral | 030 | 014 | | | | | MTC | 012 | 005 | 003 | 011 | | |
| Citizen | 012 | 005 | 011 | 006 | 014 | | Magnavox | 010 | 005 | 026 | | | |
| Concerto | 011 | | | | | | Majestic | 001 | | | | | |
| Contec | 027 | | | | | | Marantz | 010 | 005 | | | | |
| Craig | 027 | | | | | | Matsushita | 042 | | | | | |
| Crosley | 010 | | | | | | Magatron | 025 | 016 | | | | |
| Crown | 027 | 006 | | | | | Memorex | 019 | 042 | 031 | 017 | 025 | 011 |
| Curtis Mathes | 007 | 010 | 019 | 008 | 030 | 041 | | 001 | | | | | |
| | 012 | 005 | 016 | 011 | 001 | 006 | Midland | 007 | 002 | 008 | 006 | 015 | |
| | 022 | 032 | 038 | 040 | | | Minutz | 004 | | | | | |
| Daewoo | 030 | 003 | 006 | 014 | 034 | 035 | Mitsubishi | 041 | 017 | 025 | 003 | | |
| Daytron | 003 | | | | | | Motorola | 041 | | | | | |
| Denon | 016 | | | | | | Multitech | 027 | | | | | |
| Dumont | 002 | 003 | | | | | NAD | 020 | 025 | 022 | | | |
| Dwin | 044 | 036 | | | | | NEC | 005 | 003 | 011 | | | |
| Electroband | 050 | | | | | | NTC | 014 | | | | | |
| Emerson | 019 | 028 | 031 | 027 | 029 | 025 | Nikko | 005 | 025 | 014 | | | |
| | 003 | 026 | 006 | 024 | 034 | 035 | Onwa | 027 | | | | | |
| Envision | 005 | | | | | | Optimus | 019 | 042 | 022 | | | |
| Fisher | 019 | | | | | | Optonica | 041 | 021 | | | | |
| Fujitsu | 026 | | | | | | Orion | 028 | 031 | 026 | | | |
| Funai | 027 | 026 | 023 | | | | Panasonic | 008 | 042 | | | | |
| Futuretech | 027 | | | | | | Penney | 007 | 020 | 008 | 012 | 005 | 025 |
| GE | 007 | 008 | 030 | 041 | 029 | 025 | | 004 | 003 | 011 | 006 | 015 | 040 |
| | 004 | 015 | 038 | 040 | | | Pilco | 010 | 031 | 005 | 016 | 003 | |
| Gibralter | 002 | 005 | 003 | | | | Philips | 010 | | | | | |
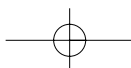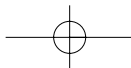
**ENGLISH**

| | | | | | | |
|---|---|---|---|---|---|---|
| Pilot | 005 | 003 | 006 | | | |
| Pioneer | 022 | | | | | |
| Portland | 003 | 006 | 014 | | | |
| Prism | 008 | | | | | |
| Proscan | 007 | | | | | |
| Proton | 025 | 032 | | | | |
| Pulsar | 002 | 003 | | | | |
| Quasar | 008 | 042 | 021 | | | |
| RCA | 007 | 008 | 041 | 003 | 013 | 015 |
| | 037 | 038 | 039 | 040 | | |
| Radio Shack | 007 | 019 | 021 | 027 | 005 | 025 |
| | 003 | 011 | 006 | | | |
| Realistic | 019 | 021 | 027 | 005 | 025 | 003 |
| | 011 | 006 | | | | |
| Runco | 002 | 005 | 033 | | | |
| SSS | 027 | 003 | | | | |
| Sampo | 005 | 006 | | | | |
| Samsung | 012 | 005 | 025 | 003 | 011 | 045 |
| Samsux | 006 | | | | | |
| Sansei | 030 | | | | | |
| Sansui | 031 | | | | | |
| Sanyo | 019 | | | | | |
| Scimitsu | 003 | | | | | |
| Scotch | 025 | | | | | |
| Scott | 028 | 027 | 025 | 003 | 026 | |
| Sears | 007 | 010 | 019 | 020 | 025 | 026 |
| | 011 | 023 | | | | |
| Semivox | 027 | | | | | |
| Semp | 020 | | | | | |
| Sharp | 041 | 021 | 006 | | | |
| Sherwood | 000 | | | | | |
| Shogun | 003 | | | | | |
| Signature | 001 | | | | | |
| Sony | 050 | | | | | |
| Soundesign | 027 | 025 | 026 | | | |
| Squareview | 023 | | | | | |
| Starlite | 027 | | | | | |
| Supreme | 050 | | | | | |
| Sylvania | 010 | 005 | | | | |
| Symphonic | 023 | | | | | |
| TMK | 025 | 011 | 024 | | | |
| Tandy | 041 | | | | | |
| Technics | 008 | 042 | | | | |
| Technoi Ace | 026 | | | | | |
| Techwood | 008 | 011 | | | | |
| Teknika | 010 | 027 | 017 | 012 | 003 | 026 |
| | 011 | 001 | 006 | 014 | | |
| Telefunken | 011 | | | | | |
| Toshiba | 019 | 020 | 012 | | | |
| Totevision | 006 | | | | | |
| Vector Research | 005 | | | | | |
| Victor | 009 | | | | | |
| Vidikron | 010 | | | | | |

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|---|---|---|---|---|---|---|
| Vidtech | 025 | 003 | | | | |
| Wards | 010 | 021 | 005 | 025 | 004 | 003 |
| | 026 | 011 | 001 | | | |
| White Westinghouse | 031 | 034 | 035 | | | |
| Yamaha | 005 | 003 | | | | |
| Zenith | 002 | 031 | 001 | 014 | | |

## VCR

| | | | | | | |
|---|---|---|---|---|---|---|
| Admiral | 027 | 021 | | | | |
| Adventura | 000 | | | | | |
| Aiko | 025 | | | | | |
| Aiwa | 005 | 000 | | | | |
| Akai | 026 | | | | | |
| America Action | 025 | | | | | |
| America High | 004 | | | | | |
| Asha | 023 | | | | | |
| Audiovox | 005 | | | | | |
| Beaumark | 023 | | | | | |
| Bell & Howell | 017 | | | | | |
| Brocksonic | 021 | | | | | |
| Broksonic | 020 | 018 | 021 | 001 | | |
| CCE | 015 | 025 | | | | |
| Calix | 005 | | | | | |
| Canon | 004 | | | | | |
| Carver | 016 | | | | | |
| Cineral | 025 | | | | | |
| Citizen | 005 | 025 | | | | |
| Colt | 015 | | | | | |
| Craig | 005 | 012 | 023 | 015 | 024 | |
| Curtis Mathes | 013 | 004 | 026 | 028 | | |
| Cybernex | 023 | | | | | |
| Daewoo | 010 | 025 | | | | |
| Denon | 008 | | | | | |
| Dynatech | 000 | | | | | |
| Electrohome | 005 | | | | | |
| Electrophonic | 005 | | | | | |
| Emerex | 002 | | | | | |
| Emerson | 005 | 020 | 000 | 018 | 009 | 021 |
| | 001 | 025 | | | | |
| Fisher | 012 | 017 | | | | |
| Fuji | 004 | 003 | | | | |
| Funai | 000 | | | | | |
| GE | 013 | 004 | 027 | 023 | | |
| Garrard | 000 | | | | | |
| GoldStar | 005 | 006 | | | | |
| Gradiente | 000 | | | | | |
| HI-Q | 012 | | | | | |
| Harley Davidson | 000 | | | | | |
| Harman/Kardon | 016 | 006 | | | | |
| Harwood | 015 | | | | | |

ENGLISH
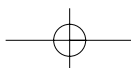
| | | | | | | |
|---|---|---|---|---|---|---|
| Headquarter | 011 | | | | | |
| Hitachi | 000 | 008 | 026 | | | |
| JVC | 014 | 026 | | | | |
| Jensen | 026 | | | | | |
| KEC | 005 | 025 | | | | |
| KLH | 015 | | | | | |
| Kenwood | 014 | 026 | 006 | | | |
| Kodak | 004 | 005 | | | | |
| LXI | 005 | | | | | |
| Lloyd's | 000 | | | | | |
| Logik | 015 | | | | | |
| MEI | 004 | | | | | |
| MGA | 023 | 009 | | | | |
| MGN Technology | 023 | | | | | |
| MTC | 023 | 000 | | | | |
| Magnasonic | 025 | | | | | |
| Magnavox | 004 | 007 | 016 | 000 | 019 | |
| Magnin | 023 | | | | | |
| Marantz | 004 | 016 | | | | |
| Marta | 005 | | | | | |
| Matsushita | 004 | 028 | 029 | | | |
| Memorex | 004 | 005 | 027 | 007 | 012 | 023 |
| | 000 | 017 | 021 | 011 | 031 | 032 |
| Minolta | 008 | | | | | |
| Mitsubishi | 027 | 014 | 009 | | | |
| Motorola | 004 | 016 | | | | |
| Multitech | 000 | 015 | | | | |
| NEC | 017 | 014 | 026 | 006 | | |
| Nikko | 005 | | | | | |
| Noblex | 023 | | | | | |
| Olympus | 004 | | | | | |
| Opimus | 005 | 027 | 017 | 028 | 029 | 030 |
| | 031 | 032 | | | | |
| Orion | 020 | 021 | 001 | | | |
| Panasonic | 004 | 028 | 022 | 029 | 031 | |
| Penny | 004 | 005 | 023 | 008 | 006 | |
| Pentax | 008 | | | | | |
| Philco | 004 | 021 | | | | |
| Philips | 004 | 016 | | | | |
| Pilot | 005 | | | | | |
| Pioneer | 014 | | | | | |
| Profitronic | 023 | | | | | |
| Proscan | 013 | | | | | |
| Protec | 015 | | | | | |
| Pulsar | 007 | | | | | |
| Quarter | 011 | | | | | |
| Quartz | 011 | | | | | |
| Quasar | 004 | 028 | 029 | 031 | | |
| RCA | 013 | 004 | 027 | 023 | 008 | 019 |
| Radio Shack | 000 | | | | | |
| Radix | 005 | | | | | |
| Randex | 005 | | | | | |

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|---|---|---|---|---|---|---|
| Realistic | 004 | 005 | 027 | 012 | 000 | 017 |
| | 011 | | | | | |
| Runco | 007 | | | | | |
| STS | 008 | | | | | |
| Samsung | 023 | 010 | 033 | | | |
| Sanky | 027 | 007 | | | | |
| Sansui | 000 | 014 | 021 | 026 | 024 | |
| Sanyo | 012 | 023 | 017 | 011 | | |
| Scott | 020 | 010 | 018 | 009 | | |
| Sears | 004 | 005 | 012 | 000 | 008 | 017 |
| | 011 | | | | | |
| Semp | 010 | | | | | |
| Sharp | 027 | | | | | |
| Shintom | 015 | | | | | |
| Shogun | 023 | | | | | |
| Singer | 015 | | | | | |
| Sony | 004 | 002 | 000 | 003 | | |
| Syvania | 004 | 016 | 000 | 009 | | |
| Symphonic | 000 | | | | | |
| TMK | 023 | | | | | |
| Tatung | 026 | | | | | |
| Teac | 000 | 026 | | | | |
| Technics | 004 | 028 | | | | |
| Teknika | 004 | 005 | 000 | | | |
| Thomas | 000 | | | | | |
| Toshiba | 010 | 009 | | | | |
| Totevision | 005 | 023 | | | | |
| Unitech | 023 | | | | | |
| Vector | 010 | | | | | |
| Vector Research | 006 | | | | | |
| Video Concepts | 010 | | | | | |
| Videosonic | 023 | | | | | |
| Wards | 013 | 004 | 027 | 012 | 016 | 023 |
| | 000 | 008 | 015 | 019 | | |
| White WestingHouse | 021 | 025 | | | | |
| XR-100 | 004 | 000 | 015 | | | |
| Yamaha | 006 | | | | | |
| Zenith | 007 | 000 | 021 | 003 | | |

## VCR - TV/VCR

| | |
|---|---|
| Ameira High | 004 (TV use 008) |
| Brocksonic | 001 |
| Colt | 015 |
| Cutis Mathes | 004 (TV use 008) |
| Daewoo | 025 |
| Emerson | 001 |
| Funai | 000 |
| GE | 004 (TV use 008)   013 (TV use 007) |
| | 027 (TV use 041)   023 |
| Hitachi | 004 (TV use 008)   000 |

| | | |
|---|---|---|
| HQ | 000 | |
| Lloyds | 000 | |
| MGA | 023 | |
| Megavox | 016 (TV use 010) | 004 (TV use 008) |
| | 000 | |
| Magnin | 023 | |
| Memorex | 005 | 028 (TV use 042) |
| Mitsubishi | 027 (TV use 041) | |
| Orion | 001 | |
| Panasonic | 004 (TV use 008) | 028 (TV use 042) |
| Penney | 004 (TV use 008) | 023 |
| | 028 (TV use 042) | |
| Quasar | 004 (TV use 008) | 028 (TV use 042) |
| RCA | 013 (TV use 007) | 004 (TV use 008) |
| | 027 (TV use 041) | |
| Sansui | 000 | |
| Sanyo | 023 | |
| Sear | 000 | 005 |
| Sharp | 027 (TV use 041) | |
| Sony | 002 (TV use 050) | |
| Symphonic | 000 | |
| Zenith | 000 | |
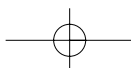
## CBL

| | | | | | | |
|---|---|---|---|---|---|---|
| ABC | 002 | 003 | 009 | 030 | 006 | 008 |
| | 037 | 107 | 036 | 059 | 062 | 066 |
| | 072 | | | | | |
| Adelphia | 063 | 085 | | | | |
| Allegro | 018 | 021 | | | | |
| Altrio | 063 | | | | | |
| Americast | 103 | | | | | |
| Archer | 018 | 026 | 038 | 040 | 047 | |
| Armstrong | 085 | | | | | |
| AT&T Broadband | 085 | | | | | |
| Atlantic Broadband | 063 | 085 | | | | |
| Bell South | 103 | | | | | |
| Bell&Howell | 009 | | | | | |
| Blue Ridge | 063 | 085 | | | | |
| Bresnan | 085 | | | | | |
| Bright House | 063 | 114 | | | | |
| Buckeye Comm | 085 | | | | | |
| Cablevision | 063 | 085 | 112 | | | |
| Centurion | 096 | | | | | |
| Century | 018 | 040 | | | | |
| Charter | 063 | 085 | | | | |
| Citizen | 018 | 021 | 040 | | | |
| Cogeco | 085 | | | | | |
| Combano | 089 | 090 | | | | |
| Comcast | 063 | 085 | 114 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Comsat | 085 | | | | | |
| Comtronics | 014 | | | | | |
| Contec | 011 | | | | | |
| Cox Digital | 063 | 085 | | | | |
| Digicable | 105 | | | | | |
| Eagle | 050 | 052 | 060 | | | |
| Eastern | 001 | 076 | 081 | | | |
| Echostar | 110 | | | | | |
| Electricord | 054 | | | | | |
| Emerson | 026 | | | | | |
| Everquest | 010 | 014 | | | | |
| Focus | 022 | | | | | |
| Garrard | 018 | | | | | |
| Gemini | 010 | 041 | 073 | | | |
| General Electric | 084 | | | | | |
| General Instrument | 033 | 032 | 006 | 034 | 085 | 107 |
| | 108 | | | | | |
| GNC | 103 | | | | | |
| Golden Channel | 052 | | | | | |
| GoldStar | 017 | 014 | | | | |
| Goodmind | 026 | | | | | |
| Hamlin | 012 | 020 | 004 | 013 | 068 | 069 |
| | 074 | | | | | |
| Hitachi | 006 | 107 | 074 | | | |
| Insight | 085 | | | | | |
| Jasco | 010 | 018 | 021 | | | |
| Jerrold | 002 | 007 | 033 | 032 | 009 | 010 |
| | 006 | 034 | 035 | 036 | 037 | 041 |
| | 042 | 043 | 082 | 085 | 107 | |
| Magnavox | 043 | 045 | 080 | 088 | 099 | 098 |
| Massillon | 085 | | | | | |
| Media One | 111 | | | | | |
| Medicom | 074 | | | | | |
| Memorex | 000 | 071 | | | | |
| Mitsubishi | 106 | | | | | |
| Motorola | 085 | 114 | 113 | 106 | | |
| Movie Time | 015 | 028 | 054 | | | |
| Moxi | 106 | | | | | |
| Nctc | 085 | | | | | |
| NSC | 015 | 048 | 051 | 058 | 083 | |
| Oak | 011 | 053 | 057 | 072 | | |
| Optimus | 031 | | | | | |
| Pace | 063 | 085 | | | | |
| Panasonic | 000 | 016 | 031 | 064 | 067 | |
| Paragon | 000 | 071 | | | | |
| Philips | 018 | 039 | 045 | 046 | 050 | 091 |
| | 099 | | | | | |
| Pioneer | 017 | 025 | 063 | 107 | 055 | 070 |
| | 079 | 086 | 109 | | | |
| Popular Mechanics | 022 | | | | | |
| Prucer | 077 | | | | | |
| Pulsar | 000 | 071 | | | | |

| Quasar | 000 | | | | |
|---|---|---|---|---|---|
| RCA | 031 | 067 | | | |
| Radio Shack | 010 | 021 | 026 | 028 | |
| Recoton | 022 | 102 | | | |
| Regal | 012 | 020 | 068 | 069 | |
| Regency | 001 | 076 | | | |
| Rembrandt | 006 | | | | |
| Rodgers | 063 | | | | |
| Runco | 000 | | | | |
| Samsung | 017 | 014 | 052 | | |
| Scientific Atlanta | 003 | 023 | 030 | 027 | 063 | 044 |
| | 036 | 061 | 062 | 065 | 066 |
| Seren | 063 | | | | |
| Service Electric | 085 | | | | |
| Shaw | 085 | | | | |
| Sherwood | 000 | | | | |
| Sigecom | 063 | | | | |
| Signal | 010 | 014 | | | |
| Signature | 006 | | | | |
| SL Marx | 014 | | | | |
| Sony | 100 | 112 | | | |
| Sprucer | 031 | 067 | 087 | | |
| Starcom | 002 | 010 | 035 | 037 | 041 | 042 |
| Stargate | 010 | 014 | 026 | 041 | 052 | 101 |
| | 108 | | | | |
| Starquest | 010 | | | | |
| Susquehanna | 063 | 085 | | | |
| Teleview | 014 | | | | |
| Time Warner | 063 | 085 | | | |
| Tocom | 007 | 008 | 059 | 060 | 075 |
| Toshiba | 000 | 071 | | | |
| Tusa | 010 | | | | |
| TV86 | 015 | | | | |
| Unika | 018 | | | | |
| United Cable | 037 | 072 | | | |
| Universal | 018 | 019 | 038 | 040 | 047 | 054 |
| | 056 | | | | |
| Videotron | 063 | | | | |
| Viewstar | 015 | 045 | 048 | 049 | 092 | 093 |
| | 094 | 095 | | | |
| Wide Open West | 063 | 103 | | | |
| Zenith | 000 | 024 | 071 | 078 | 097 | 104 |
| Zentek | 022 | | | | |

## SAT

| AlphaStar | 008 | | | | |
|---|---|---|---|---|---|
| Cablevision/voom | 031 | | | | |
| Chaparral | 001 | | | | |
| Directv | 053 | | | | |
| Echostar/dish | 009 | 024 | 049 | 050 | |
| Expreevu | 009 | | | | |
| Expressvu | 024 | | | | |
| General Electric | 033 | 021 | 032 | | |
| General Instrument | 016 | 015 | 018 | 031 | |
| Goi | 024 | | | | |
| Hitachi | 011 | 028 | 029 | | |
| HTS | 009 | 024 | | | |
| Hughes | 043 | 044 | 019 | 036 | 047 | 048 |
| | 022 | 023 | | | |
| Hughes Net.Sys | 007 | | | | |
| JVC | 009 | 024 | | | |
| Jerrold | 016 | 015 | | | |
| LG | 052 | | | | |
| Magnavox | 027 | | | | |
| Megavox | 006 | 005 | | | |
| Memorex | 006 | | | | |
| Mitsubishi | 019 | 036 | | | |
| Motorola | 031 | | | | |
| Next Level | 018 | 031 | | | |
| Panasonic | 017 | 030 | 042 | | |
| Pansat | 027 | | | | |
| Philips | 006 | 005 | 034 | 035 | 038 | 019 |
| | 036 | 027 | 022 | 023 | |
| Primestar | 016 | 015 | | | |
| Proscan | 033 | 021 | 032 | | |
| Radio Shack | 018 | 031 | | | |
| RCA | 003 | 000 | 002 | 012 | |
| Realistic | 014 | | | | |
| RSA | 033 | 021 | 032 | | |
| Samsung | 025 | 037 | 045 | 051 | 054 |
| Sherwood | 000 | | | | |
| SKY | 046 | | | | |
| Sony | 004 | 020 | | | |
| Star Choice | 018 | 031 | | | |
| Toshiba | 010 | 026 | 019 | 036 | 039 | 040 |
| Uniden | 006 | 005 | 014 | 027 | |
| Zenith | 013 | 041 | | | |

**DVD Home Theater System**

# VR-652

HOLLYWOOD
AT HOME