LG

AV RECEIVER
OWNER'S MANUAL

MODEL: LH-T6000
(AMP: LH-A6730A
DVD Player: DV7100
Speakers: LHS-A6730T, LHS-A6730C,
LHS-A6730W)

DOLBY
DIGITAL
PRO LOGIC II

DIGITAL
dts
SURROUND

Before connecting up, operating or repairing this product, please read this instruction booklet carefully and completely.

Safety Precautions

SERIAL NUMBER: The serial number is located on the back of this unit. This number is unique to this unit and not available to others. You should record requested information here and retain this guide as a permanent record of your purchase.

Model No. _____

Serial No. _____

About the symbols for instructions

⚠ Indicates hazards likely to cause harm to the unit itself or other material damage.

𝒩 Indicates special operating features of this unit.

𝒯 Indicates tips and hints for making the task easier.

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Table of Contents

Before Use

Precautions

Handling the unit

When shipping the unit
It may be convenient to keep the original shipping carton and packing materials come in handy. For maximum protection, re-pack the unit as it was originally packed at the factory.

To keep the surface clean
Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber of plastic products in contact with the unit for a long period of time. They will leave marks on the surface.

Installing
● Do not install the unit in a confined space, such as a bookcase or built-in cabinet.
● Allow adequate air circulation to prevent internal heat buildup.
● Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation slots.
● Do not install the unit near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
● Do not place heavy objects on the unit.

Cleaning the unit

To clean the cabinet
Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents, such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

Front Panel Buttons and Display Window

STANDBY-ON

FUNCTION/JOG Dial

TUNING MODE

REMOTE Sensor

DISPLAY Window

SURROUND MODE Select

MASTER VOLUME
Control(UP/DOWN)

SET/MEMORY

INPUT SELECT

HEADPHONE Jack

STANDBY indicator
Lights red when the receiver
is in Standby mode (off).

Surround mode
indicator

Audio Stream
indicator

MEMORY indicator

SLEEP indicator

STEREO indicator

TUNED indicator

MUTE indicator

DIGITAL
PL II
dts
PCM

MEMORY SLEEP   STEREO TUNED   MUTE

dB
ms
kHz
MHz

Frequency/Delay time/Input signal/Volume etc. Indicators

Remote Control Buttons

MUTE — POWER

FM/AM — VIDEO1 input Selector

VIDEO2 input Selector

CD/DVD Input Selector

AUDIO INPUT(AMP)/TV AV(TV)

TV input Selector — TITLE(DVD)

NUMBERS(DVD/TV)
TEST TONE(AMP)
BY PASS(AMP)
PRO LOGIC II(AMP)
DYNAMIC RANGE(AMP)
MONO/STEREO(AMP)

SURROUND(AMP)/
SOUND(DVD)
REPEAT(DVD)

REPEAT A-B(DVD)

CLEAR(DVD) — RETURN(DVD)
ZOOM(DVD)

SPEAKER MODE(AMP)
PROGRAM(DVD)

MARKER(DVD)

PRESET(+/-)(AMP)/
SLOW(DVD) — VOLUME(+/-)

SEARCH(DVD)

LEVEL(AMP)/
SETUP(DVD) — DELAY(AMP)/
MENU(DVD)

CURSOR (◄►▲▼)(DVD)
For use in highlighting a selection
on a GUI menu screen, TITLE and
MENU screen. — OSD(AMP)/
DISPLAY(DVD)
CHANNEL(TV)
MEMORY(AMP)/ENTER(DVD)

TONE(AMP)/
AUDIO(DVD) — STOP(DVD)/
PAUSE/STEP(DVD)/
PLAY(DVD)

SUBTITLE(DVD)

SKIP/SCAN(I◄◄/►►I)(DVD)
Press and hold button for
about two seconds for search
function.

TUNING(-/+)(AMP)

Selecting the source Remote
control operation:
● Press [AMP] to select the
"AMP" function.
● Press [DVD] to select the
"DVD" function.
● Press [TV] to select the
"TV" function.

SLEEP(AMP)/
ANGLE(DVD)

Remote Control Operation Range

Point the remote control at the remote sensor and press
the buttons.
● **Distance:** About 23 ft (7 m) from the front of the
remote sensor
● **Angle:** About 30° in each direction in front of the remote
sensor

Remote control battery installation
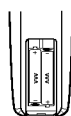
Remove the battery cover on the rear
of the remote control, and insert two
R03 (size AAA) batteries with ⊕ and
⊖ aligned correctly.

⚠ **Caution**
Do not mix old and new batteries. Never mix different
types of batteries (standard, alkaline, etc.).

Rear Panel

FM 300Ω Antenna Connector

AM Antenna Connectors

VIDEO1 Input Connectors

VIDEO2 Input Connectors

DVD Input Connectors

TV Input Connectors

VIDEO1 Output Connectors

SPEAKER Connectors

POWER Cord

SUBWOOFER PRE OUT Connector

6(5.1) CHANNEL AUDIO OUT
Connect to a 6(5.1) channel player
– center speaker connection
– subwoofer connection
– front speakers connections
– rear (surround) speakers connections

OPTICAL IN Connector

COAXIAL IN Connector

S-VIDEO IN Connector

S-VIDEO OUT Connector

MONITOR OUT Connector

⚠️

Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

Antenna Connections

Connect the supplied FM/AM antennas for listening to the radio.
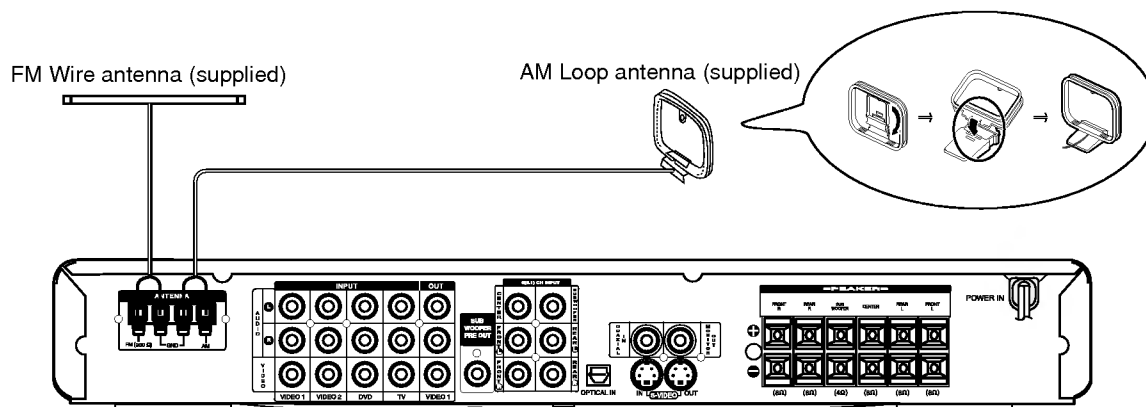● Connect the AM loop antenna to the AM antenna connector.
● Connector the FM wire antenna to the FM 300Ω connector.
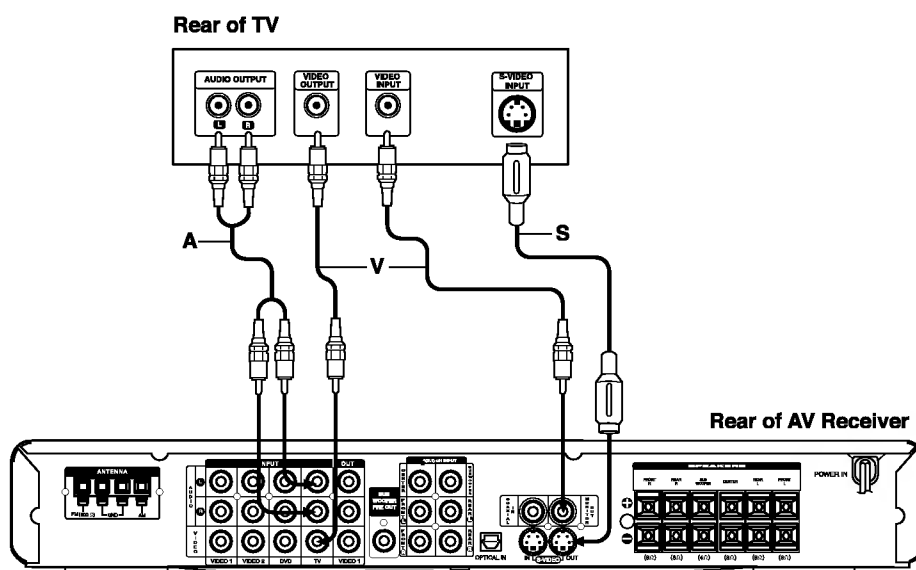
FM Wire antenna (supplied)   AM Loop antenna (supplied)

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

Connecting to a TV

Rear of TV

Rear of AV Receiver

● Make one of the following connections, depending on the capabilities of your existing equipment.

Tips
● Depending on your TV and other equipment you wish to connect, there are various ways you could connect the AV Receiver.
● Please refer to the manuals of your TV, VCR, Stereo System or other devices as necessary to make the best connections.

⚠ Caution
Make sure the AV Receiver is connected directly to the TV. Select the correct AV input on your TV.

Connection

1 Connect the MONITOR OUT jack on the AV Receiver to the video in jack on the TV using the video cable **(V)**.

2 Connect the VIDEO IN jack on the AV Receiver to the video out jack on the TV using the video cable **(V)**.

3 Connect the Left and Right AUDIO IN jacks of the AV Receiver to the audio left/right out jacks on the TV using the audio cables **(A)**.

4 Connect the S-VIDEO OUT jack on the AV Receiver to the S-Video in jack on the TV using the S-Video cable **(S)**.

Notes
● The signal of S-VIDEO OUT jack will output only when the unit is connected to S-VIDEO IN.
● When you connect the AV Receiver to your TV, be sure to turn off the power and unplug both units from the wall outlet before making any connections.

Connecting to Video Equipment

Rear of VCR1

Rear of AV receiver

Rear of VCR2 or LDP
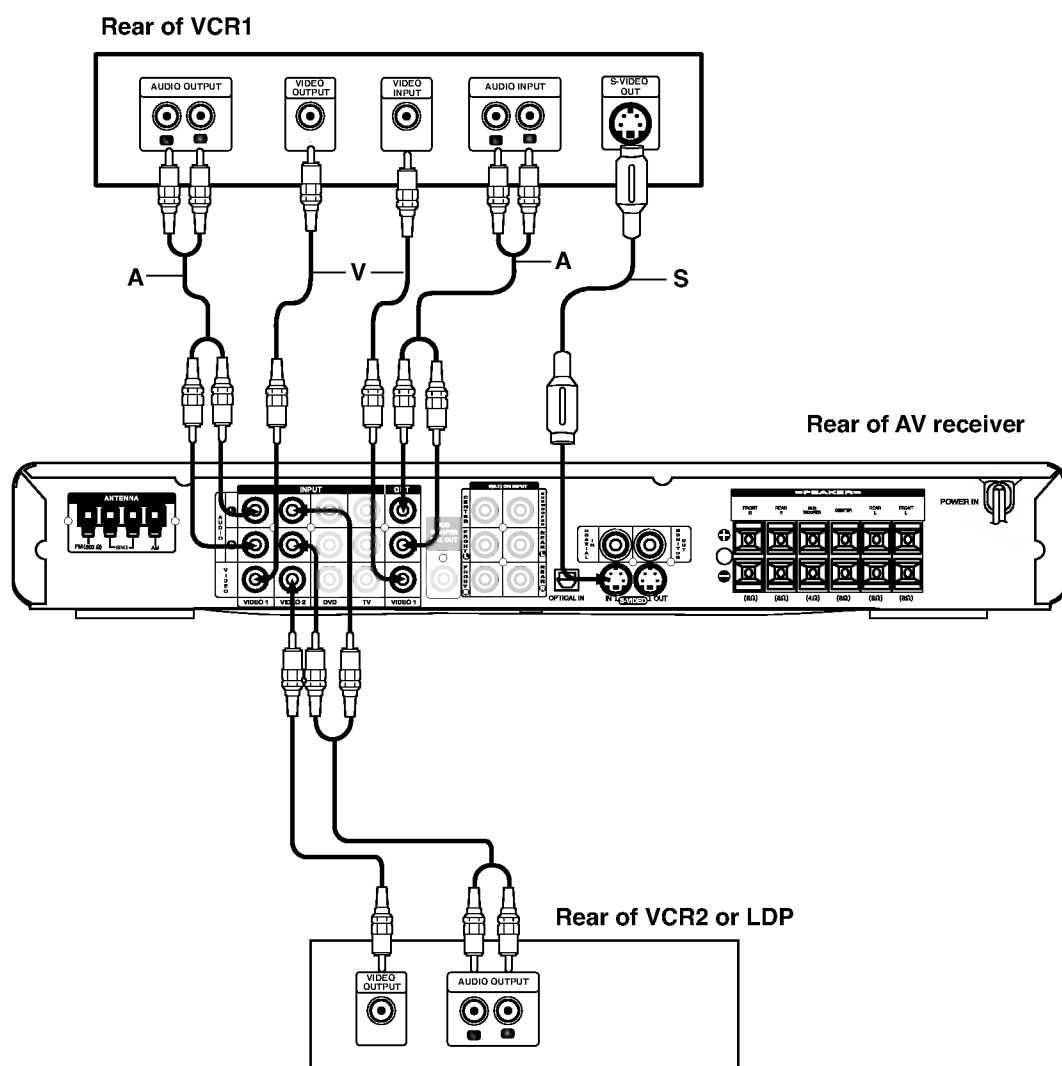
Connection

1 Connect VCR1's audio and video out jacks to the VIDEO1 IN jacks on the AV Receiver using the audio and video cable **(A, V)**. The audio and video in jacks on the VCR1 should be connected to the VIDEO1 OUT jacks on the AV Receiver.

2 Connect the analog audio and video outputs of a VCR2, LDP or any other video source to the VIDEO 2 IN jacks on the AV Receiver.

Notes
● When you select the function mode to VIDEO1, a video signal is not output at the jack.
● If the audio format of the digital output does not match the capabilities of your AV Receiver, the AV Receiver will produce a strong, distorted sound or no sound at all.

Connecting to Optional Equipment

Rear of DVD player (or Digital Device, etc)

Rear of AV receiver
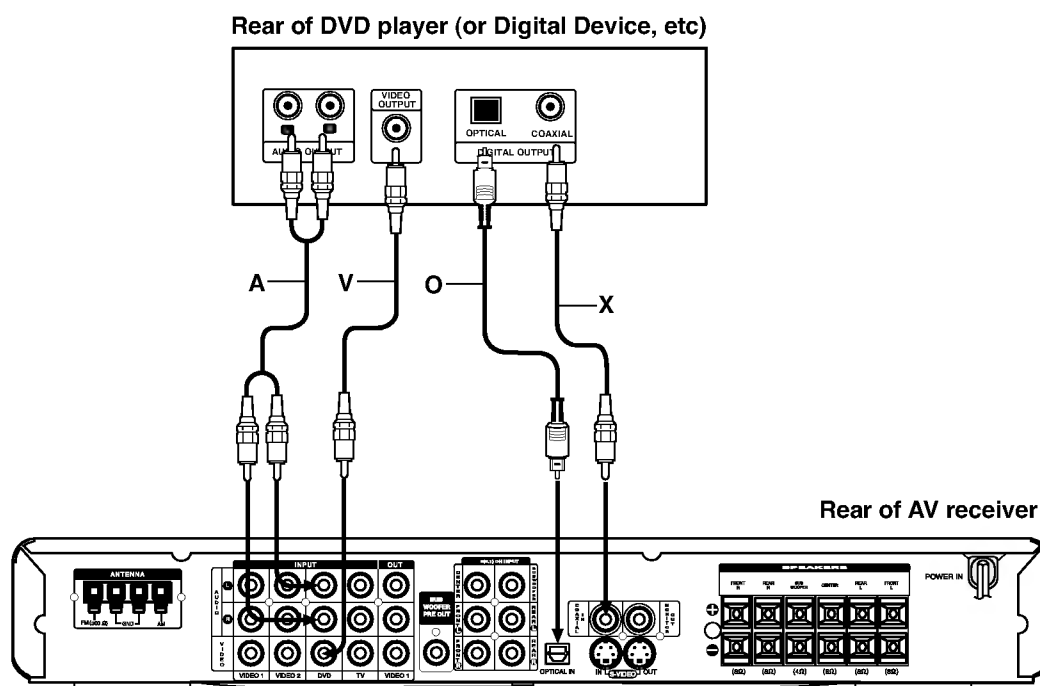
Connection

● If the auxiliary devices (e.g. DVD) are equipped with COAXIAL or OPTICAL DIGITAL OUT jacks, connect them to to the corresponding input jacks of the AV Receiver.

1 Connect the audio and video out jacks on the DVD player to the audio and video in jacks on the AV Receiver using the video cable supplied **(A, V)**.

2 Connect the OPTICAL INPUT jacks on the AV Receiver to the OPTICAL OUTPUT jacks on the DVD player or Digital Device.

3 Connect the COAXIAL INPUT jacks on the AV Receiver to the COAXIAL OUTPUT jacks on the DVD player or Digital Device.

Notes

● When connecting the COAXIAL jack, be sure to use 75 ohm coaxial cable, not normal type audio cable.
● When connecting the OPTICAL jack, be sure to use the optical fiber cable.
● When connecting the OPTICAL jack, remove the dust cover. If the OPTICAL jack is not used, insert the dust cover.

Connecting to Optional Equipment (Cont'd)

Analog connection to a multi-channel A/V receiver with 6(5.1) Channel connectors (Dolby Digital)

This AV receiver contains a multi-channel decoder. This enables playback of DVDs recorded in Multi-channel Surround without the need for an optional decoder.
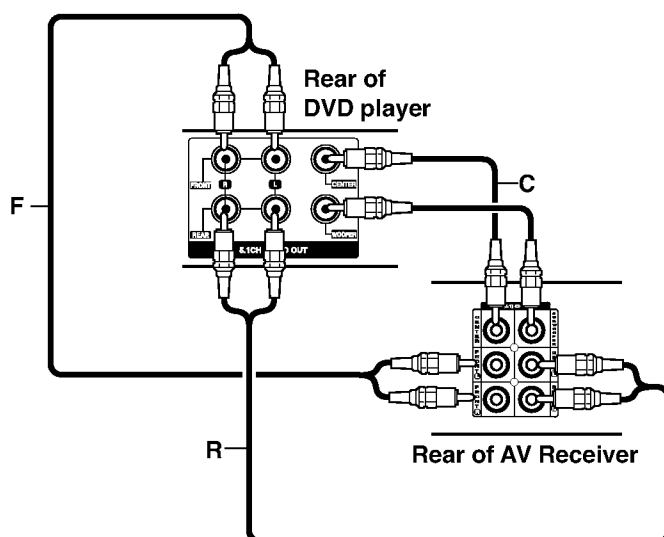

1 Connect the CENTER and WOOFER jacks for the Center speaker and the Subwoofer **(C)** to the corresponding in jacks on your receiver.

2 Connect the Left and Right FRONT speaker jacks **(F)** to the corresponding in jacks on your receiver.

3 Connect the Left and Right REAR speaker jacks **(R)** to the corresponding in jacks on your receiver.

Assembling and Connecting to the Speakers

The front and rear speakers are detached from the speaker stands. Connect the speaker cords and assemble the front and rear speakers from speaker stands as illustrated.
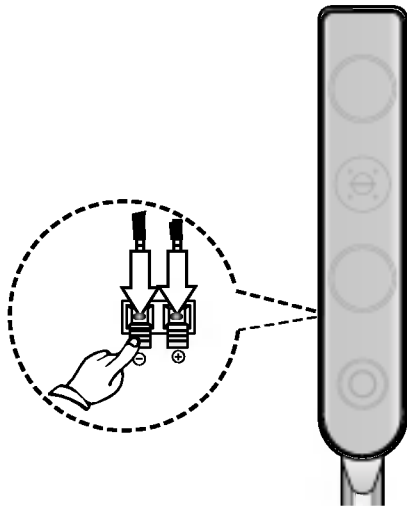
How to connect the Speakers

- **When you do not use the stand**
  Connect the speaker cords to the appropriate terminals on the back of each front and rear speaker.

- **When you use the stand**
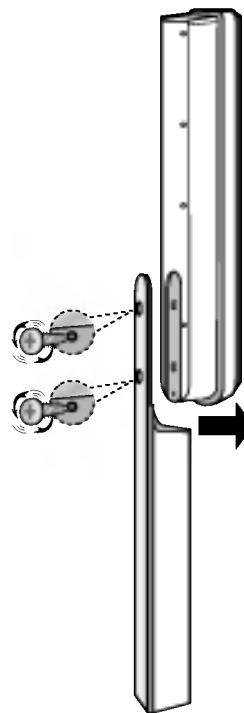 After connecting the speaker cords to the appropriate terminals on the back of each front and rear speaker and attach the front and rear speakers to the speaker stands.

To attach the speaker to the stand
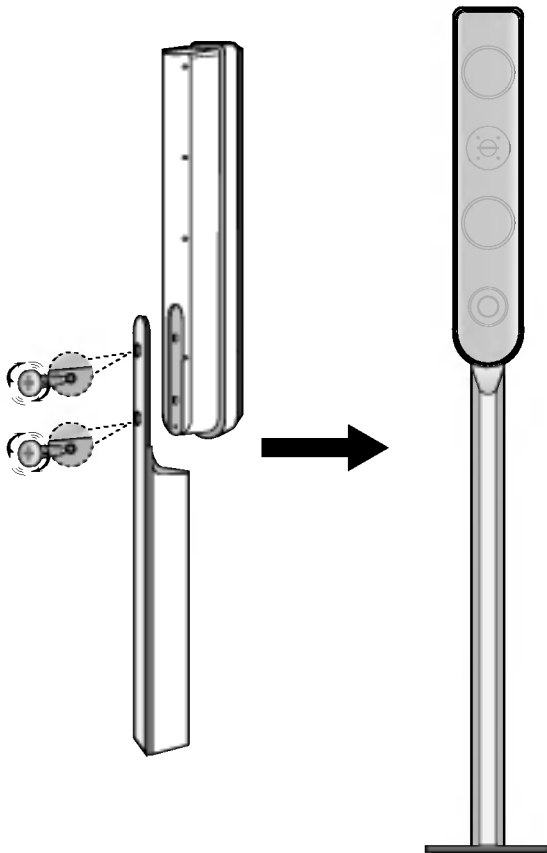
To detach the speaker from the stand

Speaker System Connection

Connect the speakers using the supplied speaker cords.
To obtain the best possible surround sound, adjust the speaker parameters (distance, level, etc.).

If you feel lack of bass frequency
Connect an active subwoofer to the WOOFER PRE-OUT connector using a monaural audio cord (not supplied). When you connect an active subwoofer, disconnect the woofer from the SUBWOOFER speaker connector.

Front Speaker
(Right)

Front Speaker
(Left)

Active Subwoofer
(Not supplied)

Center Speaker

Rear Speaker
(Right surround)

Rear Speaker
(Left surround)

Passive Subwoofer

Notes

● Be sure to match the speaker cord to the appropriate terminal on the components: + to + and − to −. If the cords are reversed, the sound will be distorted and will lack base.
● If you use front speakers with low maximum input rating, adjust the volume carefully to avoid excessive output on the speakers.
● Do not disassemble the front cover of supplied speaker.

Speaker Positioning

In the case of normal position use the 6 speakers (2 front speakers, centre speaker, 2 rear speakers and sub-woofer).
If you want to play the excellent bass sound, DTS digital surround or Dolby Digital surround, you should connect a subwoofer.

- **Front speakers**
  According to your listening position set up the speakers for equal distance. And by hearing position set up the interval between speakers to 45 degree.
- **Centre speaker**
  The centre speakers and front speakers are ideally the same height. But normally place it above or below the television.
- **Rear speakers**
  Place left and right behind the listening area. These speakers recreate sound motion and atmosphere required for surround sound playback. For best results, do not install the rear speakers too far behind the listening position and install them at or above the level of the listener's ears. It is also effective to direct the rear speakers towards a wall or ceiling to further disperse the sound.
  In the case of a smaller room size, if the audience is near to the rear wall set the rear speakers opposite each other, and set the rear speakers above 60 - 90 cm than the listener's ears.
- **Subwoofer**
  This can be placed in any front position.
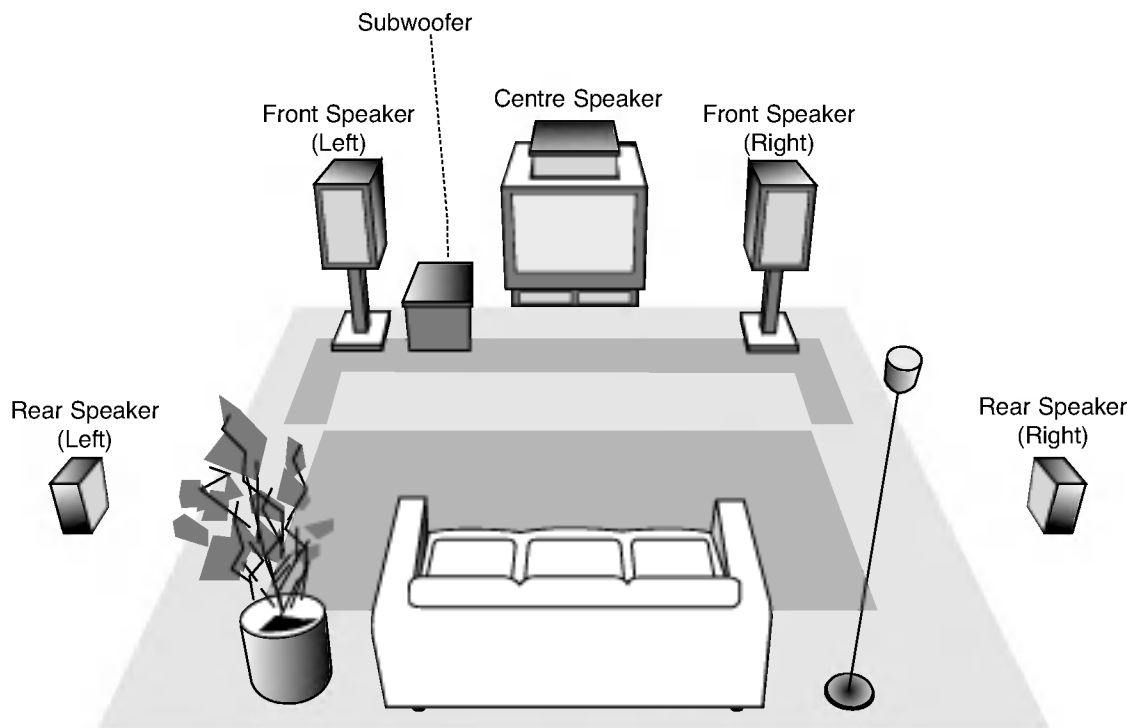
Speaker Placement Example

Speaker Settings

After you have installed this unit and connected all the components, you first perform the speaker setup settings for the optimum sound acoustics according to your environment and speaker layout.

1 Turn on the unit.

2 Press AMP and press SPK MODE on the remote control.

The current speaker mode will appear in the Display Window.

3 Press ◄ / ► on the remote control to select desired speaker.

Each time you press these buttons, the sound mode is changed in the following order;

FRNT(FRONT) → CENT(CENTER) → REAR → WOOFER...

4 Press ▲ / ▼ on the remote control to select desired mode.

Depending on your speaker type, you can select one of these following speaker types.

- **LARGE:** Select this when connecting speakers that can fully reduce sounds below 80 Hz.
- **SMALL:** Select this when connecting speakers that cannot fully reduce sounds below 80 Hz. When this is selected, sounds below 80 Hz are sent to the subwoofer.
- **NONE:** Select this when no speakers are connected. When this is selected, sounds are sent to the front speakers.
- **YES/NO:** Select the desired depending on whether a subwoofer is connected or not.

5 Repeat the above steps 3 and 4 until the speakers are all set to the desired mode.

Note
- When the 6(5.1) CH INPUT is selected as an input source, the speaker setting mode can not be selected.

Delay Time Setting

In Dolby Digital or Dolby Pro Logic mode it is assumed that the distance from the listener to each of the speakers is equal. If not then setting the delay times of the center or rear speakers the sound will be heard simultaneously by the listener.
The interval from the speakers to the listener. If the distance from the listener to each speaker is the same, in the Dolby Digital and Dolby Pro Logic mode the delay time of each speaker is as follows

In Dolby Digital mode
Centre delay time : 0 ~ 5ms
Rear delay time: 0 ~ 15ms
In Dolby Pro Logic mode
Centre delay time : cannot be set
If the rear delay time is set in Dolby Digital mode, in the Dolby Pro Logic mode the delay time will be automatically set.
The delay time is 1 msec per 30 cm.
If the centre and rear speakers are further than the front speakers from the listener, the delay time will be at minimum.
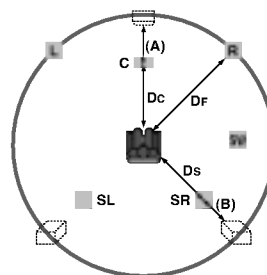
Surround delay time setting

If the distance of Ds is equal to or longer than the DF in the left figure, set the Surround Delay Time as 0ms. Otherwise, change the setting according to the below.
Ex) If the distance from front speakers to the listener is 3 m and from rear speakers from the listener is 1.5 m, in the Dolby Digital mode the rear delay time is 5 msec.
3m (DF) - 1.5m (Ds) = 1.5m (B)
1.5m (B) = 150cm / 30cm = 5msec

In Dolby Pro Logic II (Surround delay time):
- Pro Logic: 15 ~ 30msec
- Movie: 10 ~ 25msec
- Music: 0 ~ 15msec
- Matrix: 0 ~ 15msec

Centre delay time setting (Dolby Digital mode only)

If the distance of DF is equal to the distance of DC in the left figure, set the Centre Delay Time as 0ms. Otherwise, change the setting according to the table below.
Ex) If the distance from the front speakers to the listener is 3m and from the centre speaker to the listener is 2.4m, the centre delay time is 2msec.
3m (DF) - 2.4m (DC) = 60cm (A)
60cm (A) / 30cm = 2msec

Delay Time Setting (Cont'd)

Setting the delay time in the Dolby Digital and Dolby Pro Logic (II) mode

1 **Press AMP and DELAY.**
The current surround delay time appears in the Display Window.

2 **Press ▲/▼ to change the delay time.**

3 **If setting is complete, press DELAY.**

N ote
You can adjust the center delay time only in the Dolby Digital mode and its delay time appears.

Setting the Sound Effects in the Music mode of Dolby Pro Logic (II)

1 **Press AMP and press ⅨPLⅡ repeatedly to select the Music mode.**
Each time you press these buttons, the sound mode is changed in the following order;
PRO LOGIC → PLII MOVIE → PLII MUSIC → PLII MATRIX ...

2 **Press DELAY.**
The current surround delay time appears in the Display Window.

3 **Press ◄/► to select a desired Sound mode.**
Each time you press the ◄/► button, it is changed in the following order;
C WIDTH → DIMENSE → PANOR ...

4 **Press ▲/▼ to change the steps.**
- **C WITH : 0 ~ +7**
- **DIMENSE : -3 ~ +3**
- **PANOR : ON/OFF**

5 **If setting is complete, press DELAY.**

C WIDTH (Center Width)
This control allows centre-channel sounds to be positioned between the centre speaker and the left/right speakers over a range of eight steps. Step "3" uses a combination of all three front speakers to give the best vocal imaging and most seamless soundstage presentation, and is recommended for most recordings. Step "0" places all centre sound in the centre speaker. Step "7" places all centre sound equally in the left/right speakers, just as in conventional stereo.

DIMENSE (DIMENSION)
This control allows the user to gradually adjust the sound field either towards the front or the rear. This can be useful to help achieve the desired balance from all the speakers with certain recordings that may contain either too much or too little spatial effect. Step "0" is the recommended setting, which has no effect on the sound. Steps 1, 2, and 3 gradually move the sound forward, and steps –1, –2, and –3 move the sound towards the surrounds.

PANOR (PANORAMA)
This control extends the front stereo image to include the surround speakers for an exciting "wraparound" effect with side-wall imaging. It is particularly effective for recordings which have strong left- or right-channel elements in the mix, as these are detected and accentuated by the Panorama process.

Sound Level

You can set the sound level of the desired channel.

1 Press AMP and press LEVEL on the remote control.

The level indicator will appear in the Display Window.

2 Press ◄/► to select a desired speaker to set.
Each time you press the ◄/► button, it is changed in the following order;

FL (Front Left) → C (Centre) → FR (Front Right) →
SR (Surround Right) → SL (Surround Left) →
SW (Subwoofer) → FL (Front Left) ...

*N*ote
● According to the speaker setting(NONE or NO), Centre, Surround or Subwoofer channel will not be selected. (see p. 15).

3 Press ▼/▲ to adjust the sound level of the selected channel. (-6dB ~ +6dB)

4 Repeat step 2-3 and adjust the sound level of the other channels.

5 If setting is complete, press LEVEL.

Test Tone

This function allows you to can easily adjust the sound balance of the speakers from the listener's position.

1 Select the test tone mode by pressing TEST TONE.

A hiss noise comes out for 2 seconds from each speakers in the following order;

FL (Front Left) → C (Centre) → FR (Front Right) →
SR (Surround Right) → SL (Surround Left) →
SW (Subwoofer) → FL (Front Left) ...

2 You can adjust the sound level while the test tone is operating. First press LEVEL then press the ▼/▲ buttons, so that the sound level from all the speakers is same from the listener's position.

· During the test tone, if you adjust the sound level, it will be paused in the current speaker channel.

3 If setting is complete, press TEST TONE.

*N*otes
● When the 6(5.1)CH is selected as an input source, the Test Tone function does not work.
● According to the speaker setting(NONE or NO), the test tone of the corresponding channel is not available. (see p. 15).

Mini Glossary for Sound Mode

dts

Allows you to enjoy 5.1(or 6) discrete channels of high quality digital audio from DTS program sources bearing the trademark such as discs, DVD and compact discs, etc. DTS Digital Surround delivers up to 6 channels of transparent audio(which means identical to the original masters) and results in exceptional clarity throughout a true 360 degree sound field. The term DTS is a trademark of DTS Technology, LLC. Manufactured under license from DTS Technology, LLC.

⊓⊔DIGITAL

The Dolby Digital surround format lets you enjoy up to 5.1(or 6) channels of digital surround sound from a Dolby Digital program source. If you play DVDs with " DIGITAL " mark, you can enjoy even better sound quality, greater spatial accuracy, and improved dynamic range.

HALL 1

When playing recordings of live music and classic, this mode provides a feeling similar to actually being in a small concert hall.

HALL 2

When playing recordings of live music and classic, this mode provides a feeling similar to actually being in a large concert hall.

THEATER

This mode provides a three dimensional effect similar to that of a movie theater.

⊓⊔PRO LOGIC (II)

Dolby Pro Logic II creates five full-bandwidth output channels from two-channel sources. This is done using an advanced, high-purity matrix surround decoder that extracts the spatial properties of the original recording without adding any new sounds or tonal colorations.

MOVIE mode:
The Movie mode is for use with stereo television shows and all programs encoded in Dolby Surround. The result is enhanced soundfield directionality that approaches the quality of discrete 5.1-channel sound.

MUSIC mode:
The Music mode is for use with any stereo music recordings, and provides a wide and deep sound space. The Music mode includes controls that allow the sound to be tailored to individual listening tastes.

MATRIX mode:
The Matrix mode is the same as the Music mode except that the directional enhancement logic is turned off. It may be used to enhance mono signals by making them seem "larger." The Matrix mode may also find use in auto systems, where the fluctuations from poor FM stereo reception can otherwise cause disturbing surround signals from a logic decoder. The ultimate "cure" for poor FM stereo reception may be simply to force the audio to mono.

SURROUND OFF (2CH STEREO)

Outputs the sound from the front left and right speakers and subwoofer. Standard two channel (stereo) sources completely bypass the sound field processing. This allows you to play any source using only the front left and right speakers and subwoofer. **You can select SURROUND OFF by pressing BY-PASS on the remote control.**

Display Information about External Digital Input Signal

This display appears depending on the change of the external digital input signal.

UNLOCK DISPLAY	appears when the problem gets in external digital input while normally operating in optical or coaxial function. It could be displayed instantaneously according to the external system quality while operating in switching audio or in skip, open and channel up/down.
CHANNEL DISPLAY	appears when Audio coding mode is changed or when the stream information is changed or the function mode is switched.
1+1	ch1, ch2
1/0	C
2/0	L, R
3/0	L, R, C
2/1	L, R, S(Mono Surround)
2/2	L, R, Ls, Rs
3/1	L, R, C, S(Mono Surround)
3/2	L, R, C, Ls, Rs
.1	LFE signal, no LFE signal

Sound Mode

You can enjoy surround sound simply by selecting one of the pre-programmed sound fields according to the program you want to listen to.
Press **SURR.** repeatedly until the sound mode you want appears in the display window as below.

Each time you press **SURR.**, the sound mode is changed in the following order;
PRO LOGIC → HALL 1 → HALL 2 → THEATER ...

When PCM indicator is only displayed in the display window:

Each time you press $\square\square$**PL Ⅱ** button, the sound mode is changed in the following order;
PRO LOGIC → PLⅡ MOVIE → PLⅡ MUSIC → PLⅡ MATRIX ....
(This function available 2-channel mode only)

For your reference
· **You can identify the encoding format of program software by looking at its packaging.**
  - Dolby Digital discs are labeled with the ▣▣▣▣ logo.
  - Dolby Surround encoded programs are labeled with the ▣▣▣▣ logo.
  - DTS Digital Surround discs are marked with DTS.

𝒩 otes
● When you play sound tracks with 96kHz sampling frequency, the output signals will be converted to 48kHz (sampling frequency).
● Sound Mode is not applicable when headphone is used.

Tone Control

During a listening session you may wish to adjust the BASS and TREBLE to suit your listening tastes.

1 **Press AMP and press TONE on the remote control.**
  The word TONE will appear in the Display Window.

2 **Press ◀ / ▶ to select the BASS or TREBLE mode.**

3 **Press ENTER and press ▼ / ▲ to adjust the level of the audio. (-10dB ~ +10dB)**

4 **Repeat step 2-3 and adjust the level of the other mode.**

Adjusting Dynamic Range

When playing the Dolby Digital Source in Surround mode (Dolby digital, Dolby Pro LogicⅡ movie, Dolby Pro LogicⅡ music and Dolby Pro LogicⅡ matrix) you can turn down the audio volume, by adjusting the dynamic range of the playback signal for the balanced sound.

1 **Press D.RANGE on the remote control.**
  The DRANGE ON indicator appears for three seconds in the Display window.

2 **Press D.RANGE once again.**
  The DRANGE OFF indicator appears for three seconds in the Display window.

Source Selection

You can use VCRs or other units connected to the VIDEO1, VIDEO2, DVD, TV, COAXIAL connectors or OPTICAL connector. Refer to the owner's manual supplied with the unit for further information on the operation.

Press FUNCTION on the remote control or turn the FUNCTION/JOG dial on the front panel to select the desired input source.
● **DVD:** To select a source connected to the rear panel DVD INPUT jacks.
● **VIDEO 1:** To select a source connected to the rear panel VIDEO 1 INPUT jacks.
● **VIDEO 2:** To select a source connected to the rear panel VIDEO 2 INPUT jacks.
● **TV:** To select a source connected to the rear panel TV INPUT jacks.

Selecting a Digital Source

To utilize the Dolby Digital mode you must have a digital source properly connected to this unit.
Connect the digital outputs from DVD and HDTV receivers to the OPTICAL or COAXIAL inputs on the rear panel. In order to provide a backup signal and a source for analog stereo recoding, the analog outputs provided on digital source equipment should also be connected to their appropriate inputs on the rear panel of the unit.

When playing a digital source such as DVD, first select its analog input (DVD) using the remote control or front-panel controls to feed its video signal to the TV monitor and to provide its analog audio signal for recording. Next, select the digital input connected with the DVD player by pressing **INPUT** on the remote control to choose either of the OPTICAL or COAXIAL inputs, as they appear in the Display Window.
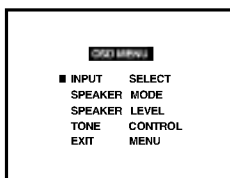
𝒩 ote
● The Optical input function is available only when the other unit's Sampling Frequency is 32 ~ 48kHz. (PCM: 92kHz)

OSD Menu Settings

The OSD(On-screen display) menu allows you to perform the setup procedures easily. In most situations, you will only need to set this once during the installation and layout of your home theater, and it rarely needs to be changed later.

1 **Press OSD on the remote control.**
The **MAIN MENU** screen is displayed

```
        OSD MENU
    ■ INPUT     SELECT
      SPEAKER   MODE
      SPEAKER   LEVEL
      TONE      CONTROL
      EXIT      MENU
```

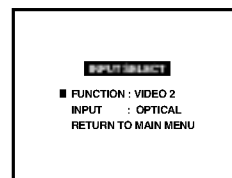**2** **Press ▼ / ▲ on the remote control to move the cursor to the setting to be changed.**

3 **Press ◄ / ► on the remote control to set the desired setting.**

𝒯ips
● To exit the Main Menu, press **OSD** on the remote control.
● To return to the Main Menu, move cursor to RETURN TO MAIN MENU and press **ENTER**.

■ When selecting the INPUT SELECT

1 **Press ▼ / ▲ on the remote control to select the INPUT SELECT, then press ENTER.**

```
        INPUT SELECT
    ■ FUNCTION : VIDEO 2
      INPUT     : OPTICAL
      RETURN TO MAIN MENU
```

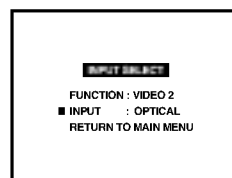**2** **Press ◄ / ► on the remote control to select the desired input function.**

Each time you press ◄ / ►, the sound mode is changed in the following order;
DVD ↔ TV ↔ VIDEO1 ↔ VIDEO2 ↔ TUNER ...

3 **Press ▼ / ▲ on the remote control to select the INPUT, then press ◄ / ► to select the desired audio input source.**

Each time you press ◄ / ►, the sound mode is changed in the following order;
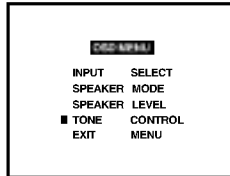COAX(COAXIAL) ↔ OPT(OPTICAL0 ↔ 6CH(5.1) ↔ ANA(ANALOG) ...

```
        INPUT SELECT
      FUNCTION : VIDEO 2
    ■ INPUT     : OPTICAL
      RETURN TO MAIN MENU
```

𝒩ote
● When a Tuner (FM, AM) Input source is selected, the input source will not be selected.
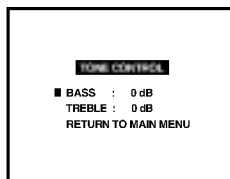
OSD Menu Settings (Cont'd)

■ When selecting the TONE CONTROL

1 Press ▼ / ▲ on the remote control to select the TONE CONTROL, then press ENTER.

```
        OSD MENU
  INPUT     SELECT
  SPEAKER   MODE
  SPEAKER   LEVEL
■ TONE      CONTROL
  EXIT      MENU
```

2 Press ▼ / ▲ on the remote control to select the desired tone mode.

```
      TONE CONTROL
■ BASS   :   0 dB
  TREBLE :   0 dB
  RETURN TO MAIN MENU
```
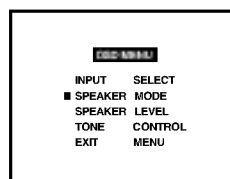
3 At the desired tone mode, press ◄ / ► on the remote control to adjust the selected tone as desired.
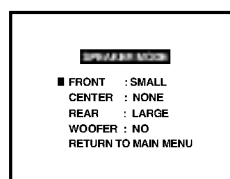
𝒩 otes

● The tone level can be adjusted within the range of -10 ~ +10 dB.
● In general, we recommend the bass and treble to be adjusted to 0 dB(flat level).
● Extreme settings at high volume may damage your speakers.

■ When selecting the SPEAKER MODE

1 Press ▼ / ▲ on the remote control to select the SPEAKER MODE, then press ENTER.

```
        OSD MENU
  INPUT     SELECT
■ SPEAKER   MODE
  SPEAKER   LEVEL
  TONE      CONTROL
  EXIT      MENU
```

2 Press ▼ / ▲ on the remote control to select the desired speaker.

```
      SPEAKER MODE
■ FRONT   : SMALL
  CENTER  : NONE
  REAR    : LARGE
  WOOFER  : NO
  RETURN TO MAIN MENU
```
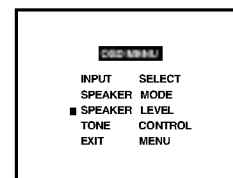
3 Press ◄ / ► on the remote control to select the desired mode.
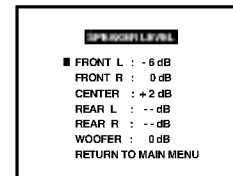Depending on your speaker type, you can select one of these following speaker types.

● **LARGE:** Select this when connecting speakers that can fully reduce sounds below 80 Hz.
● **SMALL:** Select this when connecting speakers that cannot fully reduce sounds below 80 Hz.
When this is selected, sounds below 80 Hz are sent to the subwoofer.
● **NONE:** Select this when no speakers are connected. When this is selected, sounds are sent to the front speakers.
● **YES/NO:** Select the desired depending on whether a subwoofer is connected or not.

■ When selecting the SPEAKER LEVEL

1 Press ▼ / ▲ on the remote control to select the SPEAKER LEVEL, then press ENTER.

```
        OSD MENU
  INPUT     SELECT
  SPEAKER   MODE
■ SPEAKER   LEVEL
  TONE      CONTROL
  EXIT      MENU
```

2 Press ▼ / ▲ on the remote control to select the desired speaker.

```
      SPEAKER LEVEL
■ FRONT L  : - 6 dB
  FRONT R  :   0 dB
  CENTER   : + 2 dB
  REAR L   : -- dB
  REAR R   : -- dB
  WOOFER   :   0 dB
  RETURN TO MAIN MENU
```

𝒩 ote

● According to the speaker setting(NONE or NO), Centre, Surround or Subwoofer channel will not be selected.

3 Press ◄ / ► to adjust the sound level of the selected channel. (-6dB ~ +6dB)

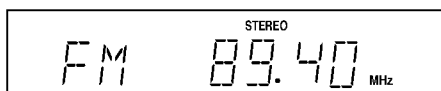**4** Repeat step 2-3 and adjust the sound level of the other channels.

Operation with Radio

Presetting the Radio Stations

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

■ By using the Remote control
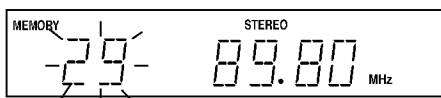
1 Press FM/AM on the remote control to select desired band.

```
            STEREO
  FM      89.40 MHz
```

2 Press and hold TUNING (◄◄ or ►►) on the remote control for about two seconds until the frequency indication starts to change, then release.
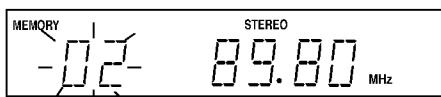Scanning stops when the AV Receiver tunes in a station. "TUNED" appear in the Display Window.

```
            STEREO
  FM      89.80 MHz
```
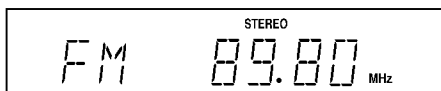
3 Press MEMORY on the remote control.
A preset number will blink in the Display Window.

```
MEMORY      STEREO
  29      89.80 MHz
```

4 Press TUNING (◄◄ or ►►) on the remote control to select the preset number you want.

```
MEMORY      STEREO
  02      89.80 MHz
```

5 Press MEMORY on the remote control.
The station is stored.

6 Repeat steps 2 to 5 to store other stations.

To clear all the stored stations
Press and hold MEMORY for about three seconds and "CLEAR ALL" is appeared in the Display Window and then press MEMORY again, the stations are cleared.

𝒩ote
If all stations have already been entered, the FULL message will appear in the Display Window for a moment and then a preset number will flash.
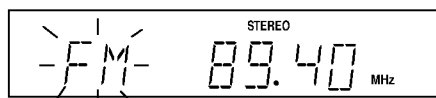To change the preset number, follow the steps 3-5 as above.

■ By using the Front Panel

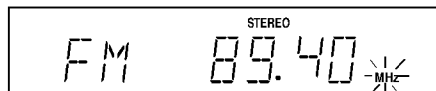**1 Press TUNING MODE twice on the front panel until the frequency band appears in the Display Window.**
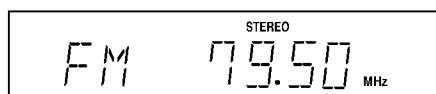The word FM or AM will blink in the Display Window.

```
  AM      1370 kHz
```
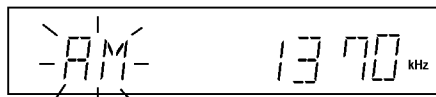
2 Turn FUNCTION/JOG dial on the front panel to select desired band.

```
            STEREO
  FM      89.40 MHz
```

3 Press TUNING MODE on the front panel.
The word kHZ or MHz will flash in the Display Window.

```
            STEREO
  FM      89.40 MHz
```

4 While the "kHZ" or "MHZ" indicator blinks, turn FUNCTION/JOG dial on the front panel to select desired frequency.

```
            STEREO
  FM      79.50 MHz
```

5 Press SET/MEMORY on the on the front panel.
A preset number will blink in the Display Window.
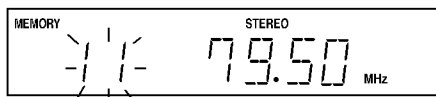
```
MEMORY      STEREO
  11      79.50 MHz
```

6 Turn FUNCTION/JOG dial on the front panel to select the preset number you want.

```
MEMORY      STEREO
  05      79.50 MHz
```
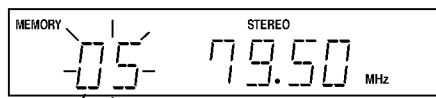
7 Press SET/MEMORY on the front panel.
The station is stored.

8 Repeat steps 2 to 7 to store other stations.

To clear all the stored stations
Press and hold SET/MEMORY for about three seconds and "CLEAR ALL" is appeared in the Display Window and then press SET/MEMORY again, the stations are cleared.

Operation with Radio (Cont'd)

Listening to the Radio

Preset radio stations in the AV receiver's memory first (see "Presetting the radio stations" on page 22.)

1 Press FM/AM on the remote control.
The last received station is tuned in.

```
           STEREO
FM    89.40 MHz
```

2 Press PRESET(∧/∨) repeatedly to select the preset station you want.
Each time you press the button, the AV receiver tunes in one preset station at a time.

```
01    79.50 MHz
```
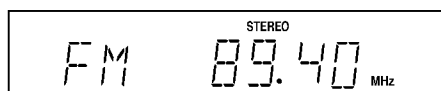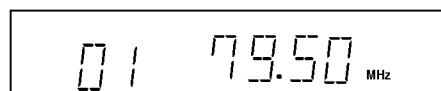
3 Adjust the volume by pressing VOLUME + or - on the remote control or by rotating MASTER VOLUME on the front panel repeatedly.

To turn off the radio
Press POWER to turn the AV receiver off or select another function mode (CD/DVD, TV, VIDEO1, VIDEO2).

To listen to non-preset radio stations
● Use manual or automatic tuning in step 2.

● For manual tuning, press TUNING (◀◀ or ▶▶) on the front panel repeatedly.

● For automatic tuning, press and hold TUNING (◀◀ or ▶▶) for about two seconds on the front panel.

For your reference
● **If an FM program is noisy**
Press MO./ST. on the remote control so that "STEREO" disappears in the Display Window. There will be no stereo effect, but the reception will improve. Press the button again to restore the stereo effect.

● **To improve reception**
Reorient the supplied antennas.

Other Operations

Sleep Timer Setting

You can set the AV receiver to turn off automatically at a specified time.

1 Press SLEEP to set the desired sleep time.
The SLEEP indicator and sleep time appears in the display window.

2 Each time you press SLEEP the setting changes in the following order.
SLEEP 90 →80 → 70 → 60→ 50 → 40 → 30 → 20 →10 → OFF

𝒩 ote
● **You can check the time remaining before the AV receiver turns off.**
Press SLEEP. The remaining time appears in the display window.

Dimmer

This function will change the brightness of the display window on the front panel during in power-on status.
Press the DIMMER repeatedly.

Mute

Press MUTE to mute your unit.
You can mute your unit in order, for example, to answer the telephone, "MUTE" indicator flashes in the Display Window.

Using Headphone Jack

Connect a stereo headphone plug (∅3.5mm) into the **PHONES connector**.
The speakers are automatically disconnected when you plug in a headphone (not supplied).

Video Recording from VIDEO1 OUT

1 Select the desired recording input mode from VIDEO2.

2 Start video recording from the VCR connected to the VIDEO1 OUT jacks on the rear panel of this unit.

3 The external unit with video input starts playback.

Troubleshooting

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

Symptom	Cause	Correction
LED indicator does not light up when STAND-BY-ON button is pressed.	• The power plug is not fully inserted. • POWER button is not ON.	• Fully insert the unit's power plug into a power socket. • Press the POWER button securely.
No sound from Front speakers.	• Connections are faulty or incomplete. • The MASTER VOLUME setting is low. • Input sources are faulty.	• Make sure the connections are functioning. • Turn the MASTER VOLUME clockwise to increase sound volume. • Fix faulty input source.
No sound from Surround speakers.	• Connections are faulty or incomplete. • The Surround mode is off. • The Surround speaker mode is set to "NONE".	• Make sure the connections are functioning. • Select appropriate Surround mode. • Set the Surround mode to "LARGE" or "SMALL".
No sound from Centre speaker.	• Connections are faulty or incomplete. • Ordinary stereo mode is selected. • The Centre speaker mode is set to "NONE" mode.	• Make sure the connections are functioning. • Select the appropriate Surround mode. • Set the Centre speaker mode to "LARGE" or "SMALL".
FM radio sound is abnormal.	• Interference of radio wave occurs.	• Change the location and direction of antenna to avoid interference.
AM radio sound is abnormal.	• TV, VCR nearby interferes with AM loop antenna. • Beat noise of electric wave occurs.	• Install antenna away from electric appliance. If possible, turn electric appliance off. • Change antenna location and direction.
Recording can't be performed.	• The connections between devices may not be appropriate. • The external devices may not perform properly.	• Check the connections between devices. • Refer to Owner's Manuals of corresponding devices.
The remote control does not work properly.	• The remote control is not pointed at the remote sensor of the AV Receiver. • The remote control is too far from the AV Receiver. • There is an obstacle in the path of the remote control and the AV Receiver. • The batteries in the remote control are exhausted.	• Point the remote control at the remote sensor of the AV Receiver. • Operate the remote control within about 23 ft (7 m). • Remove the obstacle. • Replace the batteries with new ones.

Specifications

[General]		Power supply	Refer to main label (labeled at the bottom cover)		
		Power consumption	Refer to main label (labeled at the bottom cover)		
		Mass	5.9 kg		
		External dimensions (W x H x D)	360 x 82 x 344 mm		
		Operating conditions	Temperature: 5°C to 35°C, Operation status: Horizontal		
		Operating humidity	5% to 85%		
[Video]		Video input	1.0 V (p-p), 75 Ω, negative sync., RCA jack x 2		
		Video output	1.0 V (p-p), 75 Ω, negative sync., RCA jack x 1		
		S-video input	(Y) 1.0 V (p-p), 75 Ω, negative sync., Mini DIN 4-pin x 1 (C) 0.3 V (p-p), 75 Ω		
		S-video output	(Y) 1.0 V (p-p), 75 Ω, negative sync., Mini DIN 4-pin x 1 (C) 0.3 V (p-p), 75 Ω		
[Tuner]	[FM]	Tuning Range	87.5 - 108.0 MHz or 65.0 - 74.0 MHz, 87.5 - 108.0 MHz		
		Intermediate Frequency	10.7 MHz		
		Signal-to Noise Ratio	60 dB (Mono)		
		Frequency Response	150 - 8,000 Hz		
	AM [MW]	Tuning Range	522 - 1,611 kHz or 530 - 1,610 kHz		
		Intermediate Frequency	450 kHz		
[Amplifier]		Stereo mode	70W + 70W (8Ω at 1 kHz, THD 10 %)		
		Surround mode (* Depending on the sound mode settings and the source, there may be no sound output.)	Front: 70W + 70W (THD 10 %) Centre*: 70W Surround*: 70W + 70W (8Ω at 1 kHz, THD 10 %) Subwoofer*: 120W (4Ω at 60 Hz, THD 10 %)		
		Inputs	VIDEO 1, VIDEO 2, DVD, TV, COAXIAL AUDIO, OPTICAL AUDIO		
		Outputs	VIDEO 1 (AUDIO OUT) : 2 V PHONES: (32 Ω, 0.8V) MONITOR, WOOFER FRE OUT (2 V)		

[Speakers]		Front/Rear Speaker (LHS-A6730T)	Centre speaker (LHS-A6730C)	Passive Subwoofer (LHS-A6730W)
	Type	2 Way 3 Speaker	2 Way 3 Speaker	1 Way 1 Speaker
	Impedance	8 Ω	8 Ω	4 Ω
	Sound Pressure Level	83 dB/W (1m)	83 dB/W (1m)	83 dB/W (1m)
	Rated Input Power	70W	70 W	120 W
	Max. Input Power	140 W	140 W	240 W
	Net Dimensions (W x H x D)	170 x 1300 x 97 mm	370 x 126.5 x 102 mm	260 x 320 x 372mm
	Net Weight	5.6 kg	1.7kg	8.4kg

[Supplied Accessories]

- Audio cable 1
- Coaxial cable 1
- Remote control 1
- AM loop antenna 1
- Video cable 1
- Speaker cables 6
- Batteries (AAA) 2
- FM antenna 1

✽ Designs and specifications are subject to change without notice.

DVD PLAYER

Table of Contents

About the symbols for instructions

⚠ Indicates hazards likely to cause harm to the unit itself or other material damage.

🅽 Indicates special operating features of this unit.

🆃 Indicates tips and hints for making the task easier.

Before Use

Playable Discs

DVD VIDEO™	DVD video discs (8 cm / 12 cm disc)
DVD AUDIO™	DVD audio discs (8 cm / 12 cm disc)
COMPACT disc DIGITAL VIDEO	Video CD (VCD) (8 cm / 12 cm disc)
COMPACT disc DIGITAL AUDIO	Audio CD (8 cm / 12 cm disc)

In addition, this unit can play a DVD±R, DVD±RW, Kodak PICTURE CD, SVCD, and CD-R or CD-RW that contains audio titles, MP3, WMA or JPEG files.

Notes
– Depending on the conditions of the recording equipment or the CD-R/RW (or DVD±R/±RW) disc itself, some CD-R/RW (or DVD±R/±RW) discs cannot be played on the unit.
– Do not attach any seal or label to either side (the labeled side or the recorded side) of a disc.
– Do not use irregularly shaped CDs (e.g., heart-shaped or octagonal). It may result in malfunctions.

Notes on DVDs and Video CDs
Some playback operations of DVDs and Video CDs may be intentionally fixed by software manufacturers. As this unit plays DVDs and Video CDs according to disc content designed by the software manufacturer, some playback features of the unit may not be available or other functions may be added.
Refer also to the instructions supplied with the DVDs and Video CDs. Some DVDs made for business purposes may not be played on the unit.

Regional code of the DVD player and DVDs
This DVD player is designed and manufactured for playback of region "2" encoded DVD software. The region code on the labels of some DVD discs indicates which type of player can play those discs. This unit can play only DVD discs labeled "2" or "ALL". If you try to play any other discs, the message "Check Regional Code" will appear on the TV screen. Some DVD discs may not have a region code label even though their playback is prohibited by area limits.

Disc-related terms
Title (DVD video discs only)
The main film content or accompanying feature content or additional feature content, or music album.
Each title is assigned a title reference number enabling you to locate it easily.

Chapter (DVD video discs only)
Sections of a picture or a musical piece that are smaller than titles. A title is composed of one or several chapters. Each chapter is assigned a chapter number, enabling you to locate the chapter you want. Depending on the disc, chapters may not be recorded.

Group (DVD audio discs only)
The main audio content or accompanying feature content or additional feature content, or music album. Each group is assigned a group reference number enabling you to locate it easily.

Track (DVD audio discs,Video CD and audio CD only)
Sections of a picture or a musical piece on a video CD or an audio CD. Each track is assigned a track number, enabling you to locate the track you want.

Scene
On a video CD with PBC (Playback control) functions, moving pictures and still pictures are divided into sections called "Scenes". Each scene is displayed in the menu screen and assigned a scene number, enabling you to locate the scene you want.
A scene is composed of one or several tracks.

Types of video CDs
There are two types of video CDs:

Video CDs equipped with PBC (Version 2.0)
PBC (Playback control) functions allow you to interact with the system via menus, search functions, or other typical computer-like operations. Moreover, still pictures of high resolution can be played if they are included in the disc.

Video CDs not equipped with PBC (Version 1.1)
Operated in the same way as audio CDs, these discs allow playback of video pictures as well as sound, but they are not equipped with PBC.

Before Use (Continued)

Precautions

Handling the unit

When shipping the unit
The original shipping carton and packing materials come in handy. For maximum protection, re-pack the unit as it was originally packed at the factory.

When setting up the unit
The picture and sound of a nearby TV, VCR, or radio may be distorted during playback. In this case, position the unit away from the TV, VCR, or radio, or turn off the unit after removing the disc.

To keep the exterior surfaces clean
Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber or plastic products in contact with the unit for a long period of time. They will leave marks on the surface.

Cleaning the unit

To clean the cabinet
Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

To obtain a clear picture
The DVD player is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn, the picture quality will be poor.
Regular inspection and maintenance are recommended after every 1,000 hours of use. (This depends on the operating environment.)
For details, please contact your nearest dealer.

Notes on Discs

Handling discs

Do not touch the playback side of the disc.
Hold the disc by the edges so that fingerprints will not get on the surface.
Do not stick paper or tape on the disc.
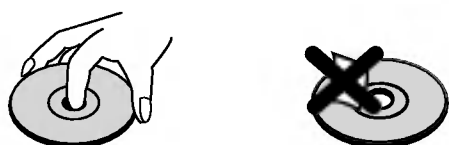
Storing discs

After playing, store the disc in its case.
Do not expose the disc to direct sunlight or sources of heat, or leave it in a parked car exposed to direct sunlight, as there may be a considerable temperature increase inside the car.

Cleaning discs

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center out.

YES   NO
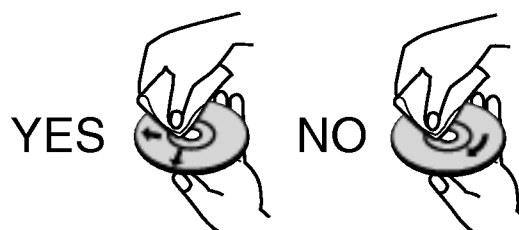
Do not use strong solvents such as alcohol, benzine, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

About Symbols

About the ⊘ symbol display

" ⊘ " may appear on the TV screen during operation. This icon means the function explained in this owner's manual is not available on that specific DVD video disc.

About the disc symbols for instructions

A section whose title has one of the following symbol is applicable only to the disc represented by the symbol.

DVD-V DVD Video discs
DVD-A DVD Audio discs
VCD2.0 Video CDs with the PBC (playback control) function.
VCD1.1 Video CDs without the PBC (playback control) function.
CD Audio CDs.
MP3 MP3 disc.
WMA WMA disc.
JPEG JPEG disc.

4

Front Panel and Display Window

PLAY (▶)
Starts playback.

PAUSE (II)
Pause playback temporarily/ press repeatedly
for frame-by-frame playback.

STOP (■)
Stops playback.

Reverse Skip/Scan (◀◀ / I◀◀)
Go to beginning of current chapter/track or to
PREVIOUS chapter/track.
Press and hold for two seconds for a fast reverse
search.

Power indicator
Lights green when the
DVD player is turned on.

Forward Skip/Scan (▶▶I / ▶▶)
Go to NEXT chapter/track.
Press and hold for two seconds for
a fast forward search.

POWER
Switches the player
ON and OFF.

OPEN/CLOSE (▲)
Opens or closes the disc tray.

Display window
Shows the current status of
the player.

Disc Tray
Insert a disc here.

Remote Sensor

ANGLE active

TITLE Indicates current title number

DVD DVD video disc inserted

DVDA DVD audio disc inserted

CD Audio CD inserted

VCD Video CD inserted

MP3 MP3 or WMA disc inserted

CHP/TRK Indicates current chapter or track number

Indicates total playing time/elapsed time

PROG. Programmed playback active

Indicates current player
function:
Playback, Pause, etc.

Indicates repeat
mode

MP3 VCD	CD DVD A		TITLE	CHP/TRK	PROG.	ALL A B

Rear Panel

COAXIAL (Digital audio out jack)
Connect to digital (coaxial) audio equipment.

AUDIO OUT (Left/Right)
Connect to an amplifier, receiver,
or stereo system.

VIDEO OUT
Connect to a TV with video inputs.

5.1 CHANNEL AUDIO OUT
Connect to a 5.1 channel receiver
– center speaker connection
– subwoofer connection
– front speakers connections
– rear (surround) speakers connections

COMPONENT/PROGRESSIVE SCAN VIDEO OUT (Y Pb Pr)
Connect to a TV with Y Pb Pr inputs.

S-VIDEO OUT
Connect to a TV with S-Video inputs.

AC Power Cord
Plug into the power source.

OPTICAL (Digital audio out jack)
Connect to digital (optical) audio equipment.

⚠

**Do not touch the inner pins of the jacks on the rear
panel. Electrostatic discharge may cause permanent
damage to the unit.**

Connections

Connecting to a TV

- Make one of the following connections, depending on the capabilities of your existing equipment.

Video connection

1 Connect the VIDEO OUT jack on the DVD Player to the video in jack on the TV using the video cable **(V)**.

2 Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A)** using the audio cables.

S-Video connection

1 Connect the S-VIDEO OUT jack on the DVD Player to the S-Video in jack on the TV using the S-Video cable **(S)**.

2 Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A)** using the audio cables.

Component Video (ColorStream®) connection (Best)

1 Connect the COMPONENT VIDEO OUT/ PROGRESSIVE SCAN jacks on the DVD Player to the corresponding in jacks on the TV using the Y Pb Pr cable **(C)**.

2 Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A)** using the audio cables.

Progressive Scan (ColorStream® pro) connection

- If your television is a high-definition or "digital ready" television, you may take advantage of the DVD Player's progressive scan output for the highest video resolution possible.
- If your TV does not accept the Progressive Scan format, the picture will appear scrambled if you try Progressive Scan on the DVD Player.

1 Connect the COMPONENT VIDEO OUT/ PROGRESSIVE SCAN jacks on the DVD Player to the corresponding in jacks on the TV using an optional Y Pb Pr cable **(C)**.

2 Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A)** using the supplied audio cables.

𝒩 Notes

- Set the Progressive to "On" on the setup menu for progressive signal, see page 11.
- Set the Progressive to "Off" by removing any disc from the unit and close the disc tray. See that "no disc" is displayed on the display window. Then press STOP and hold it for five seconds before relesasing it.
- Progressive scan does not work with the analog video connections (yellow VIDEO OUT jack) or S-VIDEO connection.

Rear of TV

Rear of DVD player
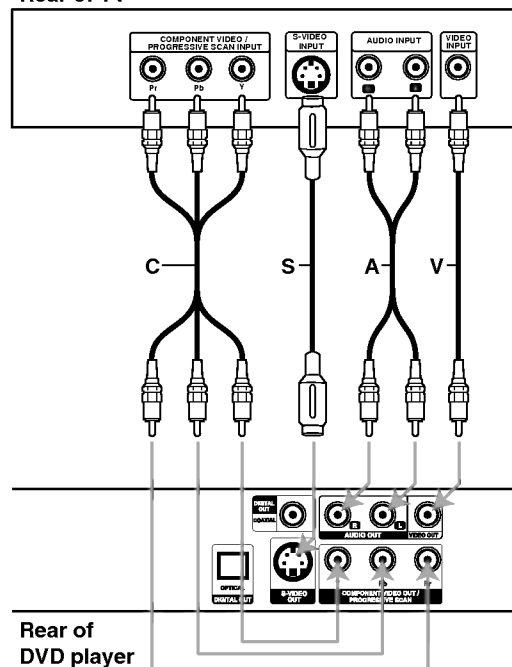
𝒩 Note

If the TV has an S-video input, connect the DVD player with the S-video cable. When using an S-video cable, do not connect the yellow video cable.

PREPARATION

Connections (Continued)

Connecting to Optional Equipment

Connecting to an amplifier equipped with two channel analog stereo or Dolby Pro Logic II/Pro Logic

Connect the Left and Right AUDIO OUT jacks on the DVD Player to the audio left and right in jacks on your amplifier, receiver, or stereo system, using the audio cables **(A)**.

Connecting to an amplifier equipped with two channel digital stereo (PCM) or to an Audio/Video receiver equipped with a multi-channel decoder (Dolby Digital™, MPEG 2, or DTS)

1 Connect one of the DVD Player's DIGITAL AUDIO OUT jacks (OPTICAL **O** or COAXIAL **X**) to the corresponding in jack on your amplifier. Use an optional digital (optical **O** or coaxial **X**) audio cable.

2 You will need to activate the player's digital output. (See "Digital Audio Output" on page 12).

🔹 Digital Multi-channel sound

A digital multi-channel connection provides the best sound quality. For this you need a multi-channel Audio/Video receiver that supports one or more of the audio formats supported by your DVD Player (MPEG 2, Dolby Digital and DTS). Check the receiver manual and the logos on the front of the receiver.

⚠ Caution:

Due to the DTS Licensing agreement, the digital output will be in DTS digital out when DTS audio stream is selected.

Rear of DVD player

Amplifier (Receiver)
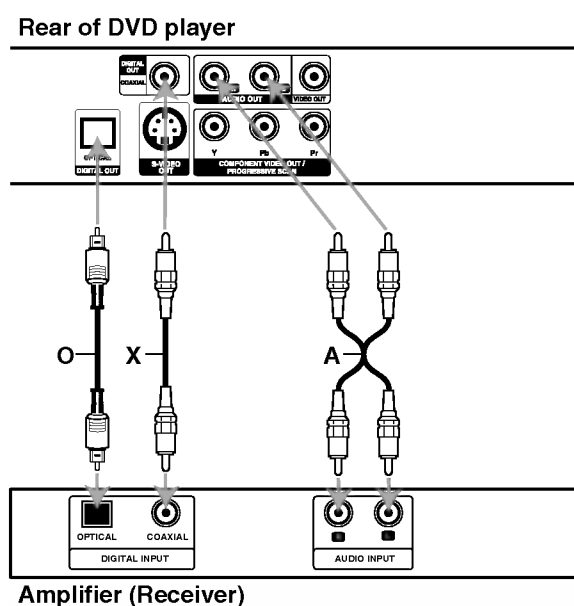
🔹 Notes

– If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound or no sound at all.
– Six Channel Digital Surround Sound via digital connection can only be obtained if your receiver is equipped with a Digital Multi-channel decoder.
– To see the audio format of the current DVD in the on-screen display, press AUDIO.

Analog connection to a multi-channel A/V receiver with 6 Channel connectors (Dolby Digital)

This DVD Player contains a multi-channel decoder. This enables playback of DVDs recorded in Multi-channel Surround without the need for an optional decoder.

1 Connect the CENTER and WOOFER jacks for the Center speaker and the Subwoofer **(C)** to the corresponding in jacks on your receiver.

2 Connect the Left and Right FRONT speaker jacks **(F)** to the corresponding in jacks on your receiver.

3 Connect the Left and Right REAR speaker jacks **(R)** to the corresponding in jacks on your receiver.

4 Make the appropriate Sound settings for Analog Output and Speaker Settings in the setup menu. See page 12.

Rear of DVD player

Amplifier (Receiver)
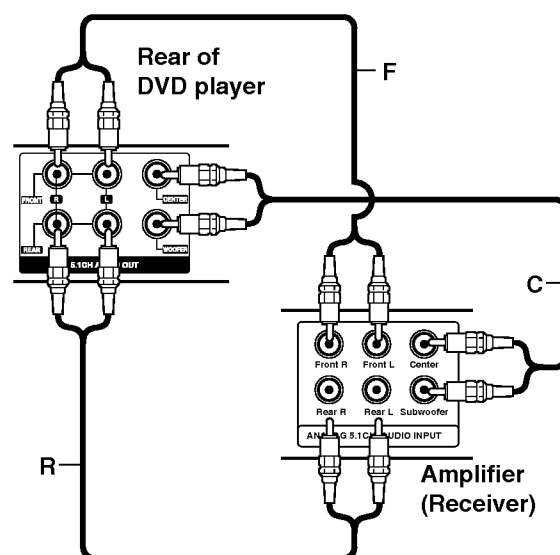
Before Operation

⚠ Caution:

Before using the remote control, press the **DVD** or **TV** button to select the device to be operated.

General Explanation

This manual gives basic instructions for operating the DVD Player. Some DVDs require specific operation or allow only limited operation during playback. When this occurs, the symbol ⊘ appears on the TV screen, indicating that the operation is not permitted by the DVD Player or is not available on the disc.

On-Screen Display

General playback status can be displayed on the TV screen. Some items can be changed on the menu.

On-screen display operation

1 **Press DISPLAY during playback.**

2 **Press ▲/▼ to select an item.**
The selected item will be highlighted.

3 **Press ◄/► to change the setting of an item.**
The number buttons can be also be used for setting numbers (e.g., title number). For some functions, press ENTER to execute the setting.

Temporary Feedback Field Icons

↻ TITLE	Repeat Title
↻ CHAPT	Repeat Chapter
↻ GROUP	Repeat Group (DVD audio discs only)
↻ TRACK	Repeat Track (non-PBC Video CDs and DVD audio discs only)
↻ ALL	Repeat All Tracks (non-PBC Video CDs only)
↻ A B	Repeat A-B
↻ OFF	Repeat Off
▮▮▮	Resume play from this point
⊘	Action prohibited or not available

✎ Notes

● Some discs may not provide all of the features on the on-screen display example shown below.
● If no button is pressed for 10 seconds, the on-screen display disappears.

DVD-V

Items		Function (Press ▲/▼ to select desired item)	Selection Method
Title Number	1 /3	**Shows the current title number and total number of titles, and** skips to the desired title number.	◄ / ►, or Numbers, ENTER
Chapter Number	1 /12	**Shows the current chapter number and total number of chapters, and** skips to the desired chapter number.	◄ / ►, or Numbers, ENTER
Time search	0:20:09	**Shows the elapsed playing time, and** searches the point by the elapsed time directly.	Numbers, ENTER
Audio language and Digital Audio Output mode	1 ENG ⫿⫿D 5.1 CH	**Shows the current audio soundtrack language, encoding method, and channel number, and** changes the setting.	◄ / ►, or AUDIO
Subtitle language	OFF	**Shows the current subtitles language, and** changes the setting.	◄ / ►, or S-TITLE
Angle	1 /1	**Shows the current angle number and total number of angles, and** changes the angle number.	◄ / ►, or ANGLE
Sound	NORM.	**Shows the current sound mode, and** changes the setting.	◄ / ►, or SOUND

Before Operation (Continued)

On-Screen Display (Continued)

DVD-A

Items		Function (Press ▲/▼ to select desired item)	Selection Method
Group Number	2 /6	**Shows the current group number and total number of groups, and** skips to the desired group number.	◀ / ▶, or Numbers, ENTER
Track Number	1 /12	**Shows the current track number and total number of tracks, and** skips to the desired track number.	◀ / ▶, or Numbers, ENTER
Time search	0:10:15	**Shows the elapsed playing time.(Display only)**	–
DVD Audio Output mode	1 PPCM 5 CH	**Shows the current encoding method, and channel number, and** changes the setting.	◀ / ▶, or AUDIO
Subtitle language	OFF	**Shows the current subtitles language, and** changes the setting.	◀ / ▶, or S-TITLE
Page (or Angle)	1 /12 or 1 /1	**Shows the current page (or angle) number and total number of pages (or angle), and** changes the page (or angle) number.	◀ / ▶, or ANGLE

VCD2.0 **VCD1.1**

Items		Function (Press ▲/▼ to select desired item)	Selection Method
Track Number	1 /4	**Shows the current track number, total number of tracks and PBC On mode, and** skip to the desired track number.	◀ / ▶, or Numbers, ENTER
Time	0:20:09	**Shows the elapsed playing time (Display only)**	–
Audio Channel	STER.	**Shows the audio channel, and** changes the audio channel.	◀ / ▶, or AUDIO
Sound	NORM.	**Shows the current sound mode, and** changes the setting.	◀ / ▶, or SOUND

Initial Settings

You can set your own Personal Preferences on the player.

Initial Settings General Operation

1 Press SET UP.
The setup menu appears.
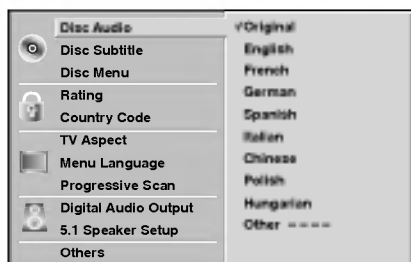
2 Press ▲/▼ to select the desired item.
The screen will show the current setting for the selected item, as well as alternate setting(s).

3 While the desired item is selected, press ▶, then ▲/▼ to select the desired setting.

4 Press ENTER to confirm your selection.
Some items require additional steps.

5 Press SET UP, RETURN, or PLAY to exit the setup menu.

Language

Disc Language **DVD-V** **DVD-A**

Select a language for the disc's Menu, Audio, and Subtitle.
Original : The original language set for the disc is selected.
Other : To select another language, press number buttons to enter the corresponding 4-digit number according to the language code list on page 25. If you enter the wrong language code, press CLEAR.

Menu Language

Select a language for the setup menu. This is the menu you see when you press SET UP.
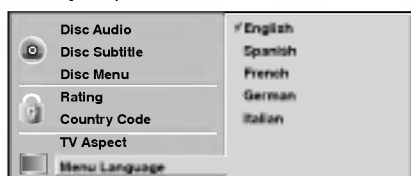
Picture

TV Aspect **DVD-V** **DVD-A**

4:3 Letterbox: Select when a standard 4:3 TV is connected. Displays theatrical images with masking bars above and below the picture.
4:3 Panscan: Select when a conventional TV set is connected. The video material formatted in the Pan & Scan style is played back in that style (Both sides of the picture are cut off).
16:9 Wide: Select when a 16:9 wide TV is connected.
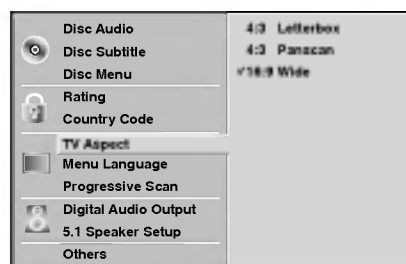
Progressive Scan **DVD-V** **DVD-A**

Progressive Scan Video provides the highest quality pictures with less flickering.
If you are using the COMPONENT VIDEO OUT/ PROGRESSIVE SCAN jacks, but are connecting the DVD Player to a standard (analog) television, set Progressive Scan to Off.
If you are using the Component Video jacks for connection to a TV or monitor that is compatible with a progressive scan signal, set Progressive Scan to On.

⚠**Caution**
Once the setting for progressive scan output is entered, an image will only be visible on a progressive scan compatible TV or monitor. If you set Progressive Scan to On in error, you must reset the unit.
1) Remove any disc from the unit and close the disc tray. See that "no disc" is displayed on the display window.
2) Press STOP and hold it for five seconds before releasing it. The video output will be restored to the standard setting and a picture will once again be visible on a conventional analog TV or monitor.

Before Operation (Continued)

Sound

Digital Audio Output

Each DVD disc has a variety of audio output options.
Set the player's Digital Audio Output according to the
type of audio system you use.

DOLBY DIGITAL/PCM: Select "DOLBY DIGITAL/PCM"
if you connected the DVD Player's DIGITAL OUT jack to
a Dolby Digital decoder (or an amplifier or other equip-
ment with a Dolby Digital decoder).

Stream/PCM: Select "Stream/PCM" if you connected
the DVD Player's DIGITAL OUT jack to an amplifier or
other equipment with a DTS decoder, Dolby Digital
decoder or MPEG decoder.

PCM: Select when connected to a 2-channel digital
stereo amplifier. The DVD player outputs sounds in the
PCM 2ch format when you play a DVD video disc
recorded on the Dolby Digital, MPEG1, or MPEG2
recording system.
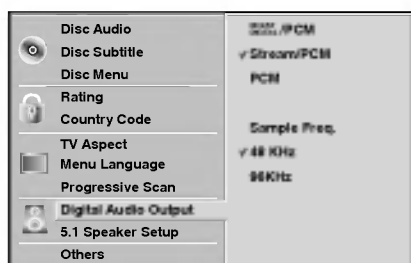
Sample Frequency

To change the Sample Frequency setting, first select
the desired Digital Audio Output as indicated as above.
If your receiver or amplifier is NOT capable of handling
96KHz signals, select 48KHz. When this choice is
made, this unit will automatically convert any 96KHz
signals to 48KHz so your system can decode them.
If your receiver or amplifier is capable of handling
96KHz signals, select 96KHz. When this choice is
made, this unit will pass each type of signal through
without any further processing.

5.1 Speaker settings [DVD-V] [DVD-A]

Select speaker settings, including volume balance and
delay time, or test the speaker settings.
Speaker settings are only active on the Analog Multi-
Channel Output. (See "Speaker Settings", page 24.)

Others

The DRC, Vocal, PBC and Auto Play settings can
be changed.

● Press ▲/▼ to select the desired item and press
ENTER. The setting of the selected item is changed
between On and Off.

Dynamic Range Control (DRC)

With the DVD format, you can hear a program's sound-
track in the most accurate and realistic presentation
possible, thanks to digital audio technology. However,
you may wish to compress the dynamic range of the
audio output (the difference between the loudest sounds
and the quietest ones). Then, you may listen to a movie
at a lower volume without losing clarity of sound. Set
DRC to On for this effect.

Vocal

Set Vocal to On only when a multi-channel karaoke
DVD is playing. The karaoke channels on the disc will
mix into normal stereo sound.

PBC

Set Playback Control (PBC) to On or Off.
On: Video CDs with PBC are played according to the PBC.
Off: Video CDs with PBC are played the same way as Audio
CDs.

Auto Play [DVD-V]

You can set up the DVD Player so a DVD disc automat-
ically starts playing whenever the DVD is inserted.
If Auto Play mode is set to On, this DVD player will
search a title that playback time is long most and then
play back the title automatically.
On: Auto Play function is activated.
Off: Auto Play function is not activated.

ℕ **Note**
The Auto Play function may not work for some DVDs.

Before Operation (Continued)

Parental Control

Rating [DVD-V]

Movies on DVDs may contain scenes not suitable for children. Therefore, discs may contain Parental Control information that applies to the complete disc or to certain scenes on the disc. These scenes are rated from 1 to 8, and alternatively, more suitable scenes are available for selection on some discs. Ratings are country-dependent. The Parental Control feature allows you to prevent discs from being played by your children or to have certain discs played with alternative scenes.
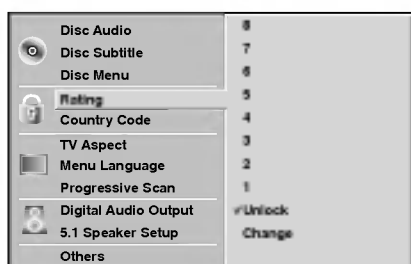
1 Select "Rating" on the Setup menu using the ▲/▼ buttons.

2 While "Rating" is selected, press ▶.

3 **When you have not entered a password yet.**
Enter a 4-digit password using the numbered buttons to create a personal 4-digit security password. then press ENTER. Enter the 4-digit password again and press ENTER to verify.
When you have already entered a password;
Enter a 4-digit password using the numbered buttons to confirm the personal 4-digit security password, then press ENTER.

If you make a mistake before pressing ENTER, press CLEAR and enter 4-digit security password again.

4 Select a rating from 1 to 8 using the ▲/▼ buttons. One (1) has the least playback restrictions. Eight (8) has the most playback restrictions.
Unlock: If you select Unlock, Parental Control is not active. The disc will play in full.
Ratings 1 to 8: Some discs contain scenes not suitable for children. If you set a rating for the player, all disc scenes with the same rating or lower will be played. Higher rated scenes will not be played unless an alternative scene is available on the disc. The alternative must have the same rating or a lower one. If no suitable alternative is found, playback will stop. You must enter the 4-digit password or change the rating level in order to play the disc.

5 Press ENTER to confirm your rating selection, then press SET UP to exit the menu.

Country Code [DVD-V]

Enter the code of a country/area whose standards were used to rate the DVD video disc, referring to the list (See "Country Code List", page 26.).
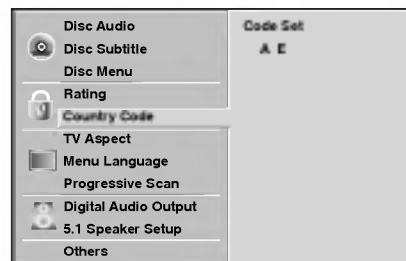
1 Select Country Code using the ▲/▼ buttons on the setup menu.

2 While Country Code is selected, press ▶.

3 Follow step 3 of "Rating" on left.

4 Select the first character using the ▲/▼ buttons.

5 Shift the cursor using ▶ button and select the second character using ▲/▼ buttons.

6 Press ENTER to confirm your country code selection, then press SET UP to exit the menu.

N Note
Confirmation of the 4-digit password is necessary when the code is changed (see "Changing the 4-digit code" below.).

Changing the 4-digit code

1 Follow Steps 1-2 as shown above to the left (Rating).
2 Enter the old code, then press ENTER.
3 Select Change using ▲/▼ buttons then press ENTER.
4 Enter the new 4-digit code, then press ENTER.
5 Enter exactly the same code a second time and verify by pressing ENTER.
6 Press SET UP to exit the menu.

If you forget your 4-digit code

If you forget your password, to clear the current password, follow the procedure below.
1 Press SET UP to display the setup menu.
2 Use the Number buttons to enter the 6-digit number "210499".
The 4-digit password is cleared. "P CLr" appears on the display for a moment.
3 Enter a new code as shown above to the left (Rating).

PREPARATION

Operation with DVD and Video CD

Playing a DVD and Video CD

🇹 Playback Setup (DVD-V) (DVD-A) (VCD2.0) (VCD1.1)

● Turn on the TV and select the video input source connected to the DVD player.
● Audio system: Turn on the audio system and select the input source connected to the DVD player.

1 Press OPEN/CLOSE of the main unit to open the disc tray.

2 Load your chosen disc in the tray, with the playback side down.

3 Press OPEN/CLOSE of the main unit to close the tray.
READING appears on the TV screen, and playback starts automatically. If playback does not start, press PLAY.
In some cases, the disc menu might appear instead.

🇹 If a menu screen is displayed

The menu screen may be displayed first after loading a DVD or Video CD which offer a menu.

(DVD-V)

Use the ◄ ►▲▼ buttons to select the title/chapter you want to view, then press ENTER to start playback.
Press TITLE or MENU to return to the menu screen.

(DVD-A)

Use the ◄ ► ▲ ▼ buttons to select an option you want, then press ENTER to view the option.

(VCD2.0)

● Use the number buttons to select the track you want to view.
Press RETURN to return to the menu screen.
● Menu setting and the exact operating procedures for using the menu may differ depending on the disc. Follow the instructions on the each menu screen. You also may set PBC to Off under setup. See page 12.

🇳 Notes

– If Parental Control is set and the disc is not within the Rating settings (not authorized), the 4-digit code must be entered and/or the disc must be authorized (see "Parental Control", on page 13).
– DVDs may have a region code.
Your player will not play discs that have a region code different from your player. The region code for this player is 2 (two).

General Features

🇳 Note

Unless stated otherwise, all operations described use the remote control. Some features may also be available on the Setup menu.

Moving to another TITLE /GROUP

(DVD-V) (DVD-A)   ⊕ 1/3   📁 1/6

When a disc has more than one title/group, you can move to another title/group as follows:
● Press DISPLAY, then press the appropriate numbered button (0-9) to select a title/group number.

Moving to another CHAPTER/TRACK

(DVD-V) (DVD-A) (VCD1.1)

▦ 1/12   ⊕ 1/3   🎵 1/12

When a title on a disc has more than one chapter or a disc has more than one track, you can move to another chapter/track as follows:
● Press SKIP/SCAN I◄◄ or ►►I briefly during playback to select the next chapter/track or to return to the beginning of the current chapter/track.
● Press I◄◄ twice briefly to step back to the previous chapter/track.
● To go directly to any chapter/track during DVD playback, press DISPLAY. Then, press ▲/▼ to select the chapter/track icon. Then, enter the chapter/track number using the numbered buttons (0-9).

🇳 Note

For two-digit numbers, press the numbered buttons (0-9)in rapid succession.

Search (DVD-V) (DVD-A) (VCD2.0) (VCD1.1)

1 Press and hold SKIP/SCAN I◄◄ or ►►I for about two seconds during playback.
The player will now go into SEARCH mode.
2 Press and hold SKIP/SCAN I◄◄ or ►►I repeatedly to select the required speed: ◄◄X2, ◄◄X4, ◄◄X16, ◄◄X100 (backward) or ►►X2, ►►X4, ►►X16, ►►X100 (forward).
With a Video CD, the Search speed changes: ◄◄X2, ◄◄X4, ◄◄X8, (backward) or ►►X2, ►►X4, ►►X8, (forward).
3 To exit SEARCH mode, press PLAY.

🇳 Note

When using a DVD audio disc that includes pictures, this operation may be permitted in some picture segments.

Pause (DVD-V) (DVD-A) (VCD2.0) (VCD1.1)

1 Press PAUSE/STEP during playback.
2 To return to playback, press PLAY.

Operation with DVD and Video CD

General Features (continued)

Still Picture and Frame-by-Frame playback

DVD-V **DVD-A** **VCD2.0** **VCD1.1**

1 Press PAUSE/STEP during playback.
The player will now go into PAUSE mode.
2 You can advance the picture frame-by-frame by
pressing PAUSE/STEP repeatedly on the remote con-
trol.

ℕ Note

When using a DVD audio disc that includes pictures,
this operation may be permitted in some picture
segments.

Slow Motion **DVD-V** **DVD-A** **VCD2.0** **VCD1.1**

1 Press SLOW ∧ or ∨ during playback.
The player will enter SLOW mode.
2 Use the SLOW ∧ or ∨ to select the required speed:
◀I 1/16, ◀I 1/8, ◀I 1/4 or ◀I 1/2 (backward), or
I▶ 1/16, I▶ 1/8, I▶ 1/4 or I▶ 1/2 (forward).
3 To exit slow motion mode, press PLAY.

ℕ Notes

● Slow motion playback in reverse is not applicable for
Video CD.
● When using a DVD audio disc that includes pictures,
this operation may be permitted in some picture
segments.

Repeat A-B **DVD-V** **DVD-A** **VCD2.0** **VCD1.1**

To repeat a sequence in a title or group:
1 Press REPEAT A-B at your chosen starting point.
" A * " appears briefly on the TV screen.
2 Press REPEAT A-B again at your chosen end point.
"A B" appears briefly on the TV screen, and the repeat
sequence begins ("A⟷B" appears the display window).
3 To cancel the sequence, press REPEAT A-B.

Repeat **DVD-V** **DVD-A** **VCD2.0** **VCD1.1**

DVD Video Discs - Repeat Chapter/Title/Off

1 To repeat the currently playing chapter, press
REPEAT.
The Repeat Chapter icon appears on the TV screen.
2 To repeat the title currently playing, press REPEAT a
second time.
The Repeat Title icon appears on the TV screen.
3 To exit Repeat mode, press REPEAT a third time.
The Repeat Off icon appears on the TV screen.

DVD Audio Discs - Repeat Track/Group/Off

1 To repeat the currently playing track, press REPEAT.
The Repeat Track icon appears on the TV screen.
2 To repeat the group currently playing, press REPEAT
a second time.
The Repeat Group icon appears on the TV screen.
3 To exit Repeat mode, press REPEAT a third time.
The Repeat Off icon appears on the TV screen.

Video CDs - Repeat Track/All/Off

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the TV screen.
2 To repeat the disc currently playing, press REPEAT a
second time.
The Repeat All icon appears on the TV screen.
3 To exit Repeat mode, press REPEAT a third time.
The Repeat Off icon appears on the TV screen.

ℕ Note

On a Video CD with PBC, you must set PBC to Off on the
setup menu to use the Repeat function. See page 12.

Time Search **DVD-V**

The Time Search function allows you to start playing at
any chosen time on the disc.
1 Press DISPLAY during playback. The on-screen dis-
play appears on the screen.
The Time Search box shows the elapsed playing time of the
current disc.
2 Within 10 seconds, press ▲/▼ to select the Time
Search icon in the on-screen display.
The "-:--:--" appears in the Time Search box.
3 Within 10 seconds, use the number buttons to enter
the required start time. Enter hours, minutes, and sec-
onds from left to right in the box.
If you enter the wrong numbers, press CLEAR to remove the
numbers you entered. Then enter the correct numbers.
4 Within 10 seconds, press ENTER to confirm the start
time.
Playback starts from the selected time on the disc. If you enter
an invalid time, playback will continue from the current point.

Operation with DVD and Video CD

General Features (continued)

3D Surround DVD-V VCD2.0 VCD1.1 [NORM.] [3D SUR]

This unit can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.

1 Press SOUND to select "3D SUR" during playback.

2 To turn off the 3D Surround effect, press SOUND again to select "NORM".

Zoom DVD-V DVD-A VCD2.0 VCD1.1

The Zoom function allows you to enlarge the video image and to move through the enlarged image.

1 Press ZOOM during playback or still playback to activate the Zoom function.
   If you press ZOOM repeatedly, the magnification level increases up to six steps.

2 Use the ◀▶▲▼ buttons to move through the zoomed picture.

3 Press CLEAR to resume normal playback or return to the paused image.

Note
● The zoom function may not work for some DVDs.

Marker Search DVD-V VCD2.0 VCD1.1

[1/9] [MARKER SEARCH ◀ - - - - - - - - - ▶]

You can start playback from a memorized point. Up to nine points can be memorized.
To enter a mark, follow these steps.

1 During disc playback, press MARKER when playback reaches the spot that you want to memorize.
   The Marker icon will appear on the TV screen briefly.

2 Repeat step 1 to enter up to nine Marker points on a disc.

To Recall a Marked Scene

1 During disc playback, press SEARCH.
   The MARKER SEARCH menu will appear on the screen.

2 Within 10 seconds, press ◀/▶ to select a Marker number that you want to recall.

3 Press ENTER.
   Playback will start from the Marked scene.

4 To remove the MARKER SEARCH menu, press SEARCH.

To clear a Marked Scene
1 During disc playback, press SEARCH.
   The MARKER SEARCH menu will appear on the screen.

2 Press ◀/▶ to select the Marker number that you want to erase.

3 Press CLEAR.
   The Marker number will be erased from the list.

4 Repeat steps 2 and 3 to erase additional Marker numbers.

5 To remove the MARKER SEARCH menu, press SEARCH.

Special DVD Features DVD-V DVD-A

Checking the contents of DVD discs: Menus

DVDs may offer menus that allow you to access special features. To use the disc menu, press MENU. Then, press the appropriate number button to select an option. Or, use the ◀▶▲▼ buttons to highlight your selection, then press ENTER.

Title Menu DVD-A DVD-V

1 Press TITLE.
   If the current title has a menu, the menu will appear on the screen. Otherwise, the disc menu may appear.

2 The menu can list camera angles, spoken language and subtitle options, and chapters for the title.

3 To remove the title menu, press TITLE again.

Disc Menu DVD-A DVD-V

1 Press MENU.
   The disc menu is displayed.

2 To remove the disc menu, press MENU again.

Camera Angle DVD-A DVD-V [1/1]

If the disc contains scenes recorded at different camera angles, you can change to a different camera angle during playback.

● Press ANGLE repeatedly during playback to select a desired angle.
   The number of the current angle appears on the display.

Changing the Audio Language
DVD-V DVD-A [1 ENG DD 5.1 CH] [1 PPCM 5 CH]

Press AUDIO repeatedly during playback to hear a different audio language or audio track.

Changing the Audio Channel VCD2.0 VCD1.1

Press AUDIO repeatedly during playback to hear a different audio channel (STER., LEFT or RIGHT).

Subtitles DVD-V DVD-A [1 ENG]

Press S-TITLE repeatedly during playback to see the different subtitle languages.

Note
If ⊘ appears, the feature is not available on the disc.

Operation with DVD and Video CD

DVD Audio Discs DVD-A

DVD Audio is a new disc format building on the success of DVD to provide high quality, uncompressed, multi-channel audio for a new experience in audio quality. A DVD Audio disc can be identified by the DVD audio logo on the disc jacket or on the disc itself.

DVD Audio can provide higher quality stereo than Audio CDs with a sampling rate of up to 192kHz (compared to 44.1kHz for CDs). DVD Audio digital sound can be delivered with up to 24 bits of data (compared to 16 bits for a standard CD).

A typical DVD Audio disc contains up to seven times the data capacity of a CD. This additional space is used for music, either Advanced Resolution multi-channel sound quality that is closer to the artist's master recording or for longer recordings. Many DVD Audio discs contain on-screen text, such as artist biographies, playlists, or lyrics. Some DVD Audio discs contain photo galleries or video clips.

N Note
To enjoy maximum sound quality and surround effect of DVD Audio, you must use 5.1 channel analog audio output (5.1CH AUDIO OUT jacks on the DVD Player). If you use the DIGITAL OUT (OPTICAL or COAXIAL) for your audio connection, the sound will only be similar to CD-quality sound even though you're playing a DVD Audio disc.

Moving to another GROUP DVD-A 1/6

Some DVD Audio discs divide content into different groups. Your player enables you to quickly access different groups during playback via the on-screen display.
1 Press DISPLAY during playback on in stop mode.
2 Press ▲/▼ to select Group icon.
3 Press ◄/► or the numbered buttons (0-9) to select a group number.

N Note
Sometimes the author of the disc creates hidden content that can only be accessed by entering a password. If the lock icon appears on the TV screen, enter the password (sometimes you'll find it on the disc's jacket cover or on a web site). This password control isn't dictated by your DVD Player — it is a function of the disc. Since the authoring of DVD Audio Discs varies, some of the on-screen display choices might not be available for the disc you're playing.

Viewing another PAGE DVD-A 1/12

Since DVD Audio discs can hold a lot of content, there are various ways to see what's available on the disc.
1 Press DISPLAY during playback.
2 Press ▲/▼ to select Page icon.
3 Press ◄/► to select a page number.
   What appears on the screen will vary from disc to disc because the information available depends upon the way the disc was created.

N Note
Since the authoring of DVD Audio Discs varies, some of the on-screen display choices might not be available for the disc you're playing.

Operation with Audio CD and MP3/WMA Disc

Playing an Audio CD and MP3/WMA Disc

CD **MP3** **WMA**

The DVD Player can play MP3/WMA formatted record-
ings on CD-ROM, CD-R or CD-RW discs.
Before playing MP3/WMA recordings, read the notes on
MP3/WMA Recordings on right.

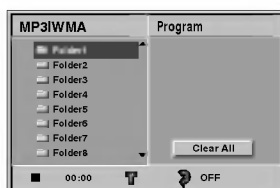**1** **Insert a disc and close the tray.**
Audio CD; Audio CD menu appears on the TV
screen go to step 4.
MP3/WMA disc; The MP3/WMA-JPEG choice
menu appears on the TV screen. Go to step 2

2 **Press ▲/▼ to select the MP3/WMA then press
ENTER.**
The MP3/WMA menu appears on the TV screen.
Press RETURN to move to the MP3/WMA-JPEG
choice menu.

3 **Press ▲/▼ to select a folder, and ENTER.**
A list of files in the folder appears.

4 **Press ▲/▼ to select a track then press PLAY or
ENTER.**
Playback starts.
During playback, the current track's elapsed playing
time will appear on the display window and menu.
Playback will stop at the end of the disc.
Press TITLE to move to the next page.
Press MENU to move to the previous page.
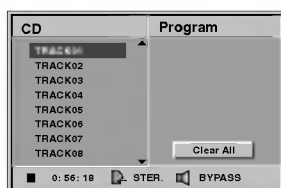
| Audio CD menu | MP3/WMA menu |
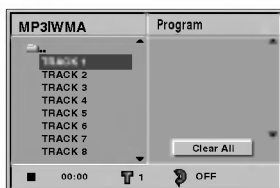
🕮 Tip
If you are in a file list and want to return to the Folder
list, use the ▲/▼ to highlight ▬▪▪ and press ENTER to
return to the previous menu screen.

5 **To stop playback at any other time, press STOP.**

Notes on MP3/WMA Recordings

About MP3

● An MP3 file is audio data compressed by using the
MPEG1 audio layer-3 file-coding scheme. We call
files that have the ".mp3" file extension "MP3 files".
● The player can not read an MP3 file that has a file
extension other than ".mp3".

About WMA(Window Media Audio)

● An WMA file is a Microsoft audio compression
technology.
● WMA(Windows Media Audio) offers double the audio
compression of the MP3 format.

MP3/WMA Disc compatibility with this player is limited as follows:

1. Sampling Frequency / only at 44.1kHz (MP3),
22.05 - 44.1kHz (WMA)
2. Bit rate / within 32 - 320kbps (MP3),
32 - 128kbps (WMA)
3. CD-R physical format should be "ISO 9660"
4. If you record MP3/WMA files using the software
which cannot create a FILE SYSTEM, for example
"Direct-CD" etc., it is impossible to playback
MP3/WMA files. We recommend that you use "Easy-
CD Creator", which creates an ISO9660 file system.
5. A single session disc requires MP3/WMA files in the
first track. If there is no MP3/WMA file in the 1st
track, it cannot playback MP3/WMA files. If you wish
to playback MP3/WMA files, format all the data in
the disc or use a new one.
6. File names should be named using 8 letters or less
and must incorporate ".mp3" or ".wma" extension
e.g. "********.MP3" or "********.WMA".
7. Do not use special letters such as "/ : * ? " < >" etc.
8. Total number of files on the disc should be less than
650.

This DVD player requires discs/recordings to meet
certain technical standards in order to achieve optimal
playback quality. Pre-recorded DVDs are automatically
set to these standards. There are many different types
of recordable disc formats (including CD-R containing
MP3 or WMA files). That require certain pre-existing
conditions (see above) to insure compatible playback.

**Customers should also note that permission is
required in order to download MP3/WMA files and
music from the Internet. Our company has no right
to grant such permission. Permission should
always be sought from the copyright owner.**

Operation with Audio and MP3/WMA Disc (Continued)

Pause CD MP3 WMA

1 Press PAUSE/STEP during playback.

2 To return to playback, press PLAY or press PAUSE/STEP again.

Moving to another Track CD MP3 WMA

● Press SKIP/SCAN I◀◀ or ▶▶I briefly during playback to go to the next track or to return to the beginning of the current track.

● Press SKIP/SCAN I◀◀ twice briefly to step back to the previous track.

● In case of audio CD, to go directly to any track, enter the track number using the numbered buttons (0-9) during playback.

Repeat Track/All/Off CD MP3 WMA

1 To repeat the track currently playing, press REPEAT.
The Repeat icon and "TRACK" appears on the menu screen.

2 To repeat all tracks on a disc, press REPEAT a second time.
The Repeat icon and "ALL" appears on the menu screen.

3 To cancel Repeat mode, press REPEAT a third time.
The Repeat icon and "OFF" appears on the menu screen.

Search CD MP3 WMA

1 Press and hold SKIP/SCAN I◀◀ or ▶▶I for about two seconds during playback.
The player will now go into SEARCH mode.

2 Press and hold SKIP/SCAN I◀◀ or ▶▶I repeatedly to select the required speed: ◀◀X2, ◀◀X4, ◀◀X8 (backward) or ▶▶X2, ▶▶X4, ▶▶X8 (forward).
Search speed and direction are indicated on the menu screen.

3 To exit SEARCH mode, press PLAY.

Repeat A-B CD

To repeat a sequence.

1 During disc playback, press REPEAT A-B at your chosen starting point.
The Repeat icon and "A * " appears on the menu screen.

2 Press REPEAT A-B again at your chosen end point.
The Repeat icon and "A B" appears on the menu screen, and the sequence begins to play repeatedly.

3 To exit the sequence and return to normal play, press REPEAT A-B again.
The Repeat icon and "OFF" appears on the menu screen.

3D Surround CD

This unit can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.

1 Press SOUND to select "3D SUR" during playback.

2 To turn off the 3D Surround effect, press SOUND again to select "NORM.".

Changing the Audio Channel CD

Press AUDIO repeatedly during playback to hear a different audio channel (STER., LEFT, or RIGHT).

Operation with JPEG Disc

Viewing a JPEG disc `JPEG`

This DVD Player can play discs with JPEG files and Kodak picture CD. Before playing JPEG recordings, read the notes on JPEG Recordings on right.

1 **Insert a disc and close the tray.**
The MP3/WMA-JPEG choice menu appears on the TV screen.

MP3\WMA

JPEG

2 **Press ▲/▼ to select the JPEG then press ENTER.**
The JPEG menu appears on the TV screen.

```
JPEG
  Folder1
  Folder2
  Folder3
  Folder4
  Folder5
  Folder6
  Folder7
  Folder8
                    Slide Speed   Off
```

3 **Press ▲/▼ to select a folder, and ENTER.**
A list of files in the folder appears.
Press RETURN to move to the MP3/WMA-JPEG choice menu.

Tip
If you are in a file list and want to return to the Folder list, use the ▲▼ buttons on the remote to highlight " ▣-- " and press ENTER to return to the previous menu screen.

4 **If you want to view a particular file, press ▲/▼ to highlight a file and press ENTER or PLAY.**
Viewing the file proceeding starts.
During viewing a file, press RETURN to move to the previous menu (JPEG menu).
Press TITLE to move to the next page.
Press MENU to move to the previous page.

```
JPEG    Folder1
  --..
  Picture1.jpg
  Picture2.jpg
  Picture3.jpg
  Picture4.jpg
  Picture5.jpg
  Picture6.jpg
  Picture7.jpg
  5/32    1024X768   Slide Speed  Off

  5/32    1024X768   Picture5.jpg
```
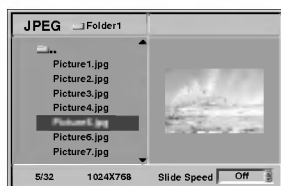
Tip
There are three viewing Slide Speed options: Fast, Normal, Slow, and Off. Press ◄/► to highlight the Slide Speed then press ▲/▼ to select the option you want to use, and press ENTER.

5 **To stop viewing at any other time, press STOP.**
The JPEG menu appears.

Moving to another File
Press SKIP/SCAN I◄◄ or ►►I once during viewing a picture to advance to the next file or to the previous file.

Still Picture
1 Press PAUSE/STEP during slide show.
The player will now go into PAUSE mode.
2 To return to the slide show, press PLAY or press PAUSE/STEP again.

To flip the picture
Press ▲/▼ during showing a picture to flip the picture horizontally or a vertically.

To rotate picture
Press ◄/► during showing a picture to rotate the picture clockwise or counter clockwise.

Notes on JPEG Recordings

- Depending upon the size and number of the JPEG files, it could take a long time for the DVD player to read the disc's contents. If you don't see an on-screen display after several minutes, some of the files are too big — reduce the resolution of the JPEG files to less than 2 mega pixels and burn another disc.

- Total number of files and folders on the disc should be less than 650.

- Some disc may be incompatible due to different recording format or condition of disc.

- When you are using software such as "Easy CD Creator" to burn the jpeg files into the CD-R, ensure that all the selected files have the ".jpg" extensions when copying into the CD layout.

- If the files have ".jpe" or ".jpeg" extensions, please rename them as ".jpg" files.

- File names without ".jpg" extension will not be able to be read by this DVD player. Even though the files are shown as JPEG image files in windows explorer.

Programmed Playback CD VCD2.0 VCD1.1 MP3 WMA

Programmed Playback with Audio CD and MP3/WMA Disc

The Program function enables you to store your favorite tracks from any disc in the player memory.

Program can contain 30 tracks.

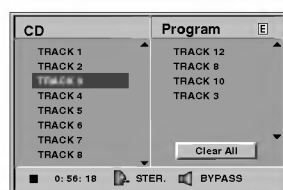**1** **Press PROGRAM during playback or in the stop mode to enter the Program Edit mode.**
The E mark will appear to the right of the word Program on the right side of the menu screen.
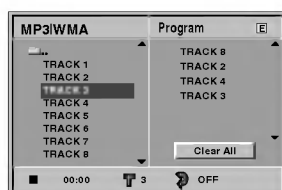
Note
Press PROGRAM to exit the Program Edit mode; the E mark will disappear.

2 **Select a track, then press ENTER to place the selected track on the Program list.**

3 **Repeat step 2 to place additional tracks on the Program list.**

CD	Program ☐ E
TRACK 1	TRACK 12
TRACK 2	TRACK 8
TRACK 3	TRACK 10
TRACK 4	TRACK 3
TRACK 5	
TRACK 6	
TRACK 7	
TRACK 8	Clear All
■ 0:56:18 STER. BYPASS	

MP3|WMA	Program E
...	TRACK 8
TRACK 1	TRACK 2
TRACK 2	TRACK 4
TRACK 3	TRACK 3
TRACK 4	
TRACK 5	
TRACK 6	
TRACK 7	
TRACK 8	Clear All
■ 00:00 3 OFF	

Audio CD menu   **MP3/WMA menu**

4 **Press ▶.**
The programmed track you selected last is highlighted on the program list.

5 **Press ▲/▼ to select the track you want to start playing.**
Press TITLE to move to the next page.
Press MENU to move to the previous page.

6 **Press PLAY to start.**
Playback begins in the order in which you programmed the tracks and "PROG." appears on the menu screen. Playback stops after all of the tracks on the Program list have played once.

7 **To resume normal playback from programmed playback, select a track of CD (or MP3/WMA) list and then press ENTER.**
"PROG." indicator disappears on the menu screen.

Programmed Playback with Video CD

Note
On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Program function. See page 12.

1 **Insert Video CD and close the tray.**

2 **Press PROGRAM while playback is stopped.**
The VCD Program menu will appear.

VCD	Program ☐ E
TRACK 1	
TRACK 2	
TRACK 3	
TRACK 4	
TRACK 5	
TRACK 6	
TRACK 7	
TRACK 8	Clear All
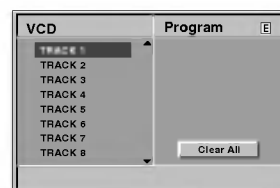
Note
Press RETURN or PROGRAM to exit the Program menu.

3 **Follow steps 2-6 of "Programmed Playback with Audio CD and MP3/WMA disc" on left.**

4 **To resume normal playback from programmed playback, press PROGRAM.**
"PROG." indicator disappears in the display window.

Repeat Programmed Tracks

● To repeat the track currently playing, press REPEAT.
The Repeat icon and "TRACK" appears on the menu screen.
● To repeat all tracks on the program list, press REPEAT a second time.
The Repeat icon and "ALL" appears on the menu screen.
● To cancel Repeat mode, press REPEAT a third time.
The Repeat icon and "OFF" appears on the menu screen.

Erasing a Track from Program List

1 Press PROGRAM during playback (Audio CD and MP3/WMA disc only) or in the stop mode to enter the Program Edit mode.
The E mark will appear.
2 Press ▶ to move to the Program list.
3 Use ▲/▼ to select the track that you wish to erase from the Program list.
4 Press CLEAR.
The track will be erased from the Program list.

Erasing the Complete Program List

1 Follow steps 1-2 of "Erasing a Track from Program List" as above.
2 Use ▲/▼ to select "Clear All", then press ENTER.
The complete Program for the disc will be erased.
The programs are also cleared when the disc is removed.

Additional Information

Last Condition Memory

DVD-V **DVD-A** **CD** **VCD1.1**

This player memorizes the user settings for the last disc that you have viewed. Settings remain in memory even if you remove the disc from the player or switch off the player. If you load a disc that has its settings memorized, the latest stop position is automatically recalled.

Notes
– Settings are stored in memory for use any time.
– This player does not memorize settings of a disc if you switch off the player before commencing to play it.

Screen Saver

The screen saver picture appears when you leave the DVD Player in stop mode for about five minutes.
After the Screen Saver has been engaged for about five minutes, the DVD Player will automatically turn itself off.

Controlling the TV

Your remote control is capable of operating your DVD player as well as limited functions of LG TV.
Follow the instructions below to operate for your LG TV.

1 Before using the remote control, press the **DVD** or **TV** button to select the device to be operated.
To switch the remote control mode (to operate a different device), be sure to press the **DVD** or **TV** button first.

2 The **POWER, CHANNEL(▼/▲), VOLUME (+/-), MUTE** and **TV AV** buttons on remote control are used to operate the LG TV.

Setting Remote Control Codes for LG TV
● This remote control supports two remote control codes for LG TV: Code 1 and Code 2.
● When the unit is shipped from the factory, the remote control is set to Code 1.
● To set the remote control to Code 2, hold down both the TV button and the number "2" button on the remote control. (If the batteries in the remote control are replaced while the remote control is set to Code 2, the setting will revert to Code 1.)
● To set the remote control back to Code 1, hold down both the TV button and the number "1" button on the remote control.

Note
If the remote control does not operate your particular TV, try the other code or use the remote control originally supplied with the LG TV.
Due to the variety of codes used by manufacturers, OUR COMPANY cannot guarantee that the remote control will operate every model of LG TV.

Video Mode Setting

DVD-V **DVD-A** **VCD2.0** **VCD1.1**

● With certain discs, the playback picture may be flickering or Dot Crawl is shown on straight lines. That means Vertical interpolation or De-interlace is not perfectly matched with the disc. In this case, the picture quality may be improved by changing the video mode.
● To change the video mode, press and hold DISPLAY about 3 seconds during disc playback. The new video mode number selected is displayed on the TV screen. Check whether the video quality has improved. If not, repeat the above procedure until picture quality is improved.
● Video mode change sequence:
MODE1 → MODE2 → MODE3 → MODE1
● If you turn off the power, the video mode will be back to initial state (MODE1).

Detailed Descriptions for Video Modes
MODE1: The source material of the DVD video (film material or video material) is determined from disc information.
MODE2: Suitable for playing film based content or video based material recorded by the progressive scan method.
MODE3: Suitable for playing video based content with comparatively little motion.

Note
The video mode setting only works when the Progressive Scan mode is set to "On" in the Setup menu.

System Select
You must select the appropriate system mode for your TV system. If NO DISC appears in the display window, press and hold PAUSE on the front panel for more than 5 seconds to be able to select a system (PAL, NTSC, or AUTO).
· When the selected system does not coincide with the system of your TV, normal color picture may not be displayed.

AUTO: Select when DVD player is connected with Multi system TV.

NTSC: Select when DVD player is connected with NTSC-TV.
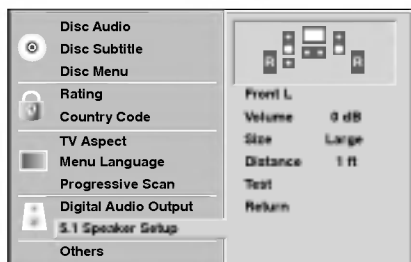
PAL: Select when DVD player is connected with PAL-TV.

Troubleshooting

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

Symptom	Cause	Correction
No power.	● The power cord is disconnected.	● Plug the power cord into the wall outlet securely.
The power is on, but the DVD player does not work.	● No disc is inserted.	● Insert a disc. (Check that the DVD or, audio CD indicator in the display window is lit.)
No picture.	● The TV is not set to receive DVD signal output.	● Select the appropriate video input mode on the TV so the picture from the DVD player appears on the TV screen.
	● The video cable is not connected securely.	● Connect the video cable securely.
	● The connected TV power is turned off.	● Turn on the TV.
	● The Progressive Scan is set to "On" on the setup menu but is connected to a standard(analog) television.	● Set Progressive Scan to "Off" (see page 11).
No sound.	● The equipment connected with the audio cable is not set to receive DVD signal output.	● Select the correct input mode of the audio receiver so you can listen to the sound from the DVD player.
	● The audio cables are not connected securely.	● Connect the audio cable securely.
	● The power of the equipment connected with the audio cable is turned off.	● Turn on the equipment connected with the audio cable.
	● The Digital Audio Output is set to the wrong position.	● Set the Digital Audio Output to the correct position, then turn on the DVD player again by pressing POWER.
The playback picture is poor.	● The disc is dirty.	● Clean the disc.
The DVD player does not start playback.	● No disc is inserted.	● Insert a disc. (Check that the DVD, or audio CD indicator in the DVD display is lit.)
	● An unplayable disc is inserted.	● Insert a playable disc. (Check the disc type, color system, and Regional code.)
	● The disc is placed upside down.	● Place the disc with the playback side down.
	● The disc is not placed within the guide.	● Place the disc on the disc tray correctly inside the guide.
	● The disc is dirty.	● Clean the disc.
	● The Rating level is set.	● Cancel the Rating function or change the rating level.
The remote control does not work properly.	● The remote control is not pointed at the remote sensor of the DVD player.	● Point the remote control at the remote sensor of the DVD player.
	● The remote control is too far from the DVD player.	● Operate the remote control within 23 ft (7 m).
	● There is an obstacle in the path of the remote control and the DVD player.	● Remove the obstacle.
	● The batteries in the remote control are exhausted.	● Replace the batteries with new ones.

Speaker Settings

Make the following settings for the built-in 5.1 channel surround decoder.

Disc Audio	
⊙ **Disc Subtitle**	
Disc Menu	
🔒 **Rating**	Front L
Country Code	Volume 0 dB
TV Aspect	Size Large
📺 **Menu Language**	Distance 1 ft
Progressive Scan	Test
🎵 **Digital Audio Output**	Return
5.1 Speaker Setup	
Others	

1 Select "5.1 Speaker Setup" using the ▲/▼ buttons on the setup menu.

2 While "5.1 Speaker Setup" is selected, press ▶ button.

3 Press ◀/▶ buttons to select the desired speaker.

4 Adjust options by using ▲ ▼◀ ▶ buttons.

Speaker selection

Select a speaker that you want to adjust. (Front speakers (Left), Front speakers (Right), Center Speaker, Rear speakers (Left), Rear speakers (Right), or Subwoofer)

Volume

Press ◀ / ▶ to adjust the output level of the selected speaker. (-10dB - 0dB)

Size

- Press ◀ / ▶ to set a mode. (Large, Small or None)
- If you have connected the system to a speaker with a low frequency of 100Hz or below, select "Large."
- If you have connected the system to a speaker without a low frequency of 100Hz or below, select "Small." If you have not connected a subwoofer, always select "Large" for Front speaker (L/R).
- When you do not have a certain speaker connected, select "None."
- Front L/R speaker's size can be set to "Large" or "Small."
- If Front L/R speaker's size is set to "Small," Rear and Center speaker's size can be set to "Small" or "None."
- Subwoofer's size can be set only to "Large" or "None".

Distance

If you connected speakers to your DVD Player, setting the Distance lets the speakers know how far the sound has to travel to reach your set listening point. This allows the sound from each speaker to reach the listener at the same time. (1 ft = 30.48 cm)

Test

Press ENTER to test the signals of each speaker. Adjust the volume to match the volume of test signals memorized in the system.
- Front Left (L) → Center → Front Right (R) → Rear Right (R) → Rear Left (L)

Return

Press ENTER to return to the previous menu.

Language Code List

Enter the appropriate code number for the initial settings "Disc Audio", "Disc Subtitle" and/or "Disc Menu"
(See page 11).

Code	Language	Code	Language	Code	Language	Code	Language
6566	Abkhazian	7074	Fiji	7678	Lingala	8373	Singhalese
6565	Afar	7073	Finnish	7684	Lithuanian	8375	Slovak
6570	Afrikaans	7082	French	7775	Macedonian	8376	Slovenian
8381	Albanian	7089	Frisian	7771	Malagasy	8379	Somali
6577	Ameharic	7176	Galician	7783	Malay	6983	Spanish
6582	Arabic	7565	Georgian	7776	Malayalam	8385	Sudanese
7289	Armenian	6869	German	7784	Maltese	8387	Swahili
6583	Assamese	6976	Greek	7773	Maori	8386	Swedish
6588	Aymara	7576	Greenlandic	7782	Marathi	8476	Tagalog
6590	Azerbaijani	7178	Guarani	7779	Moldavian	8471	Tajik
6665	Bashkir	7185	Gujarati	7778	Mongolian	8465	Tamil
6985	Basque	7265	Hausa	7865	Nauru	8484	Tatar
6678	Bengali; Bangla	7387	Hebrew	7869	Nepali	8469	Telugu
6890	Bhutani	7273	Hindi	7879	Norwegian	8472	Thai
6672	Bihari	7285	Hungarian	7982	Oriya	6679	Tibetan
6682	Breton	7383	Icelandic	8065	Panjabi	8473	Tigrinya
6671	Bulgarian	7378	Indonesian	8083	Pashto, Pushto	8479	Tonga
7789	Burmese	7365	Interlingua	7065	Persian	8482	Turkish
6669	Byelorussian	7165	Irish	8076	Polish	8475	Turkmen
7577	Cambodian	7384	Italian	8084	Portuguese	8487	Twi
6765	Catalan	7465	Japanese	8185	Quechua	8575	Ukrainian
9072	Chinese	7487	Javanese	8277	Rhaeto-Romance	8582	Urdu
6779	Corsican	7578	Kannada	8279	Rumanian	8590	Uzbek
7282	Croatian	7583	Kashmiri	8285	Russian	8673	Vietnamese
6783	Czech	7575	Kazakh	8377	Samoan	8679	Volapük
6865	Danish	7589	Kirghiz	8365	Sanskrit	6789	Welsh
7876	Dutch	7579	Korean	7168	Scots Gaelic	8779	Wolof
6978	English	7585	Kurdish	8382	Serbian	8872	Xhosa
6979	Esperanto	7679	Laothian	8372	Serbo-Croatian	7473	Yiddish
6984	Estonian	7665	Latin	8378	Shona	8979	Yoruba
7079	Faroese	7686	Latvian, Lettish	8368	Sindhi	9085	Zulu

Country Code List

Enter the appropriate code number for the initial setting "Country Code" (See page 13).

Code	Country	Code	Country	Code	Country	Code	Country
AD	Andorra	ER	Eritrea	LC	Saint Lucia	SC	Seychelles
AE	United Arab Emirates	ES	Spain	LI	Liechtenstein	SD	Sudan
AF	Afghanistan	ET	Ethiopia	LK	Sri Lanka	SE	Sweden
AG	Antigua and Barbuda	FI	Finland	LR	Liberia	SG	Singapore
AI	Anguilla	FJ	Fiji	LS	Lesotho	SH	Saint Helena
AL	Albania	FK	Falkland Islands	LT	Lithuania	SI	Slovenia
AM	Armenia	FM	Micronesia	LU	Luxembourg	SJ	Svalbard and Jan Mayen
AN	Netherlands Antilles	FO	Faroe Islands	LV	Latvia		Islands
AO	Angola	FR	France	LY	Libya	SK	Slovak Republic
AQ	Antarctica	FX	France (European	MA	Morocco	SL	Sierra Leone
AR	Argentina		Territory)	MC	Monaco	SM	San Marino
AS	American Samoa	GA	Gabon	MD	Moldavia	SN	Senegal
AT	Austria	GB	Great Britain	MG	Madagascar	SO	Somalia
AU	Australia	GD	Grenada	MH	Marshall Islands	SR	Suriname
AW	Aruba	GE	Georgia	MK	Macedonia	ST	Saint Tome and Principe
AZ	Azerbaidjan	GF	French Guyana	ML	Mali	SU	Former USSR
BA	Bosnia-Herzegovina	GH	Ghana	MM	Myanmar	SV	El Salvador
BB	Barbados	GI	Gibraltar	MN	Mongolia	SY	Syria
BD	Bangladesh	GL	Greenland	MO	Macau	SZ	Swaziland
BE	Belgium	GM	Gambia	MP	Northern Mariana Islands	TC	Turks and Caicos Islands
BF	Burkina Faso	GN	Guinea	MQ	Martinique (French)	TD	Chad
BG	Bulgaria	GP	Guadeloupe (French)	MR	Mauritania	TF	French Southern
BH	Bahrain	GQ	Equatorial Guinea	MS	Montserrat		Territories
BI	Burundi	GR	Greece	MT	Malta	TG	Togo
BJ	Benin	GS	S. Georgia & S. Sandwich	MU	Mauritius	TH	Thailand
BM	Bermuda		Isls.	MV	Maldives	TJ	Tadjikistan
BN	Brunei Darussalam	GT	Guatemala	MW	Malawi	TK	Tokelau
BO	Bolivia	GU	Guam (USA)	MX	Mexico	TM	Turkmenistan
BR	Brazil	GW	Guinea Bissau	MY	Malaysia	TN	Tunisia
BS	Bahamas	GY	Guyana	MZ	Mozambique	TO	Tonga
BT	Bhutan	HK	Hong Kong	NA	Namibia	TP	East Timor
BV	Bouvet Island	HM	Heard and McDonald	NC	New Caledonia (French)	TR	Turkey
BW	Botswana		Islands	NE	Niger	TT	Trinidad and Tobago
BY	Belarus	HN	Honduras	NF	Norfolk Island	TV	Tuvalu
BZ	Belize	HR	Croatia	NG	Nigeria	TW	Taiwan
CA	Canada	HT	Haiti	NI	Nicaragua	TZ	Tanzania
CC	Cocos (Keeling) Islands	HU	Hungary	NL	Netherlands	UA	Ukraine
CF	Central African Republic	ID	Indonesia	NO	Norway	UG	Uganda
CG	Congo	IE	Ireland	NP	Nepal	UK	United Kingdom
CH	Switzerland	IL	Israel	NR	Nauru	UM	USA Minor Outlying
CI	Ivory Coast	IN	India	NU	Niue		Islands
CK	Cook Islands	IO	British Indian Ocean	NZ	New Zealand	US	United States
CL	Chile		Territory	OM	Oman	UY	Uruguay
CM	Cameroon	IQ	Iraq	PA	Panama	UZ	Uzbekistan
CN	China	IR	Iran	PE	Peru	VA	Vatican City State
CO	Colombia	IS	Iceland	PF	Polynesia (French)	VC	Saint Vincent &
CR	Costa Rica	IT	Italy	PG	Papua New Guinea		Grenadines
CS	Former Czechoslovakia	JM	Jamaica	PH	Philippines	VE	Venezuela
CU	Cuba	JO	Jordan	PK	Pakistan	VG	Virgin Islands (British)
CV	Cape Verde	JP	Japan	PL	Poland	VI	Virgin Islands (USA)
CX	Christmas Island	KE	Kenya	PM	Saint Pierre and Miquelon	VN	Vietnam
CY	Cyprus	KG	Kyrgyzstan	PN	Pitcairn Island	VU	Vanuatu
CZ	Czech Republic	KH	Cambodia	PR	Puerto Rico	WF	Wallis and Futuna Islands
DE	Germany	KI	Kiribati	PT	Portugal	WS	Samoa
DJ	Djibouti	KM	Comoros	PW	Palau	YE	Yemen
DK	Denmark	KN	Saint Kitts & Nevis Anguilla	PY	Paraguay	YT	Mayotte
DM	Dominica	KP	North Korea	QA	Qatar	YU	Yugoslavia
DO	Dominican Republic	KR	South Korea	RE	Reunion (French)	ZA	South Africa
DZ	Algeria	KW	Kuwait	RO	Romania	ZM	Zambia
EC	Ecuador	KY	Cayman Islands	RU	Russian Federation	ZR	Zaire
EE	Estonia	KZ	Kazakhstan	RW	Rwanda	ZW	Zimbabwe
EG	Egypt	LA	Laos	SA	Saudi Arabia		
EH	Western Sahara	LB	Lebanon	SB	Solomon Islands		

Specifications

General

Power requirements	AC 110-240V , 50/60 Hz
Power consumption	14W
Dimensions (approx.)	430 X 48 X 242 mm (w x h x d)
Mass (approx.)	2.34 kg
Operating temperature	5°C to 35°C (41°F to 95°F)
Operating humidity	5 % to 90 %

System

Laser	Semiconductor laser, wavelength 650 nm
Signal system	PAL/NTSC
Frequency response	DVD (PCM 96 kHz): 8 Hz to 44 kHz DVD (PCM 48 kHz): 8 Hz to 22 kHz CD: 8 Hz to 20 kHz
Signal-to-noise ratio	More than 100dB (ANALOG OUT connectors only)
Harmonic distortion	Less than 0.008%
Dynamic range	More than 100 dB (DVD) More than 95 dB (CD)

Outputs

VIDEO OUT	1 Vp-p 75 Ω, sync negative, RCA jack x 1
S-VIDEO OUT	(Y) 1.0 V (p-p), 75 Ω, negative sync, Mini DIN 4-pin x 1 (C) 0.3 V (p-p) 75 Ω
COMPONENT VIDEO OUT	(Y) 1.0 V (p-p), 75 Ω, negative sync, RCA jack x 1 (Pb)/(Pr) 0.7 V (p-p), 75 Ω, RCA jack x 2
Audio output (digital audio)	0.5 V (p-p), 75 Ω, RCA jack x 1
Audio output (optical audio)	3 V (p-p), 75 Ω, Optical connector x 1
Audio output (analog audio)	2.0 Vrms (1 KHz, 0 dB), 600 Ω, RCA jack (L, R) x 1

● Design and specifications are subject to change without notice.

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SAFETY PRECAUTION

THIS EQUIPMENT MUST BE DISCONNECTED FROM THE MAINS POWER
SUPPLY WHEN IT IS NOT IN USE. DO NOT ALLOW THIS UNIT TO BE
EXPOSED TO RAIN OR MOISTURE.

CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE THE COVER. NO
USER SERVICEABLE PARTS ARE INSIDE. REFER SERVICING TO
QUALIFIED PERSONNEL.

The working life of this set is 7 years since the date of delivery to con-sumer.
Upon the expiry of the said period, it might be unsuitable for the use according to their designation.

PRECAUTIONS

Please read these precautions before you operate this unit.
• Avoid extreme heat, cold, moisture and dust.
• Avoid using near a magnetic field. (This will adversely affect the units performance.)
• Be careful when the surface of the case is wiped with a volatile agent such as benzene, alcohol,
  thinner, etc. or a chemically processed cloth,the surface finish may deteriorate or its coating may
  peel.
• Use the unit only in a horizontal position, and do not place anything heavy on it.
• Keep the unit away from flower vases, tubs, sinks, etc. If any liquids should spill into unit, serious
  damage could occur. In that case, please consult qualified service personnel.
• Do not obstruct the ventilation holes: they prevent overheating. Even soft materials such as paper
  and cloth may prevent proper ventilation of the unit.
• There are no serviceable parts inside. For service, please contact your service centre.

JEDDAH MAIN SERVICE CENTER
P.O.BOX 704, JEDDAH 21421 KINGDOM OF SAUDI ARABIA
TEL) 02-629-2929
JEDDAH QUICK SERVICE CENTER
TEL) 02-663-3888 EXT. 340,343
RIYADH BRANCH SERVICE CENTER
TEL) 01-461-5559
AL KHOBAR BRANCH SERVICE CENTER
TEL) 03-857-2629/2637

LG