AV Receiver System
user manual

imagine the possibilities

Thank you for purchasing this Samsung product.
To receive more complete service, please register your product at
www.samsung.com/register
Safety information

SAFETY WARNINGS

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

This symbol indicates “dangerous voltage” inside the product that presents a risk of electric shock or personal injury.

This symbol indicates important instructions accompanying the product.

WARNING
• To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.
• To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

CAUTION
• Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
• The Mains plug is used as a disconnect device and shall stay readily operable at any time.

This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances, such as radios and televisions, use shielded cables and connectors for connections.

FCC NOTE (for U.S.A):
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

Caution : FCC regulations state that any unauthorized changes or modifications to this equipment may void the user’s authority to operate it.
IMPORTANT SAFETY INSTRUCTIONS

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:
FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth an uncontrolled environment. This equipment should be installed and operated with minimum distance 7.9 inches between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Canadian Department of Communications Radio Interference Regulations

This digital apparatus (Wireless Internet Radio) does not exceed the Class B limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Read these operating instructions carefully before using the unit. Follow all the safety instructions listed below. Keep these operating instructions handy for future reference.

1) Read these instructions.
2) Keep these Instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachment/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
**PRECAUTIONS**

Ensure that the AC power supply in your house complies with the identification sticker located on the back of your player. Install your player horizontally, on a suitable base (furniture), with enough space around it for ventilation (3~4inches). Make sure the ventilation slots are not covered. Do not stack anything on top of the amplifier. In order to disconnect the player completely from the power supply, remove the AC plug from the wall outlet, especially when left unused for a long period of time.

During thunderstorms, disconnect the AC plug from the wall outlet. Voltage peaks due to lightning could damage the unit.

Do not expose the unit to direct sunlight or other heat sources. This could lead to overheating and malfunction of the unit.

Protect the player from moisture (i.e., vases), and excess heat (i.e., fireplace) or equipment creating strong magnetic or electric fields (i.e., speakers...). Disconnect the power cable from the AC supply if the player malfunctions. Your player is not intended for industrial use. Use of this product is for personal use only. Condensation may occur if your player or disc have been stored in cold temperatures. If transporting the player during the winter, wait approximately 2 hours until the unit has reached room temperature before using.

The batteries used with this product contain chemicals that are harmful to the environment. Do not dispose of batteries in the general household trash.
Features

Digital AV Receiver
This product is a pure digital AV receiver that performs
digital signal processing to minimize signal distortion and
loss.

Dolby Pro Logic II
DPL II processes any high quality stereo signal source
into five separate full frequency channels.

DTS 96/24
DTS 96/24 encodes standard 16 bit/44.1 kHz sound to
24 bit/96kHz and applies it to a 5.1 CH sound track.

DTS (Digital Theater Systems)
DTS provides a discrete 5.1 CH digital audio signal for
both music and movie contents and uses less
compression than Dolby Digital for richer sound.

iPod
You can enjoy music files by connecting your iPod/iPhone
to the AV Receiver with the supplied iPod dock.

SFE (Sound Field Effect) Using
32bit Audio Digital Signal
Processing
Provides more realistic surround sound with normal
stereo audio sources.

Anynet+ (HDMI-CEC) Function
Anynet+ is a function that can be used to operate this
AV Receiver with a Samsung TV remote control, by
connecting the receiver to a SAMSUNG TV using an
HDMI Cable. (This function is available only in
connection with Samsung TV and DVD player
supporting Anynet+(HDMI-CEC)).

ACCESSORIES

Remote Control
(AH59-02305A)/
Batteries (AAA size)  
(4301-000116)

FM antenna
(AH42-00017A)

User’s manual
(AH68-02301R)

iPod Dock
(AH96-00051A)

ASC microphone
(AH30-00099A)
Contents

SAFETY INFORMATION
2
2 Safety Warnings
3 Important Safety Instructions
4 Precautions

FEATURES
5
5 Accessories

DESCRIPTION
8
8 Front Panel
10 Rear Panel
12 Display
13 Insert Remote Control Batteries
13 Operation Range of the Remote Control
14 Tour of the Remote Control

CONNECTIONS
16
16 Speaker Positioning
18 Connecting the Speakers
20 Connecting External Devices/Your TV via HDMI
21 HDMI Function
22 Connecting to your TV
23 Connecting a DVD or BD(Blu-ray) Player
24 Connecting a Cable, Satellite or Set-top Box
25 Connecting a CD Player
26 Connecting 5.1 Channel Devices
27 Connecting an iPod
28 Connecting the FM Antenna

BASIC FUNCTIONS OF YOUR AV RECEIVER
29
29 Before Using the AV Receiver
29 Audio Setup
30 Selecting Digital/Analog Input
SETUP

31 Setup Menu Tree
35 Setting the Speaker Size
36 Setting the Speaker Listening Distance
37 Setting the Speaker Level
38 Setting the Test Tone
39 Setting Dolby Pro Logic II Mode
39 Setting Dolby Pro Logic II
40 Setting Tone Control
41 AV SYNC
41 MP3 Enhancer
41 Smart Volume
42 ASC (Auto Sound Calibration) Setup
43 DRC Setup
43 HDMI Setup
43 Variable Set

OPERATION

44 Using the Surround Modes
45 Using the Subwoofer Selection Button
46 Listening to the Radio
47 Using an iPod
49 Convenient Functions
50 Software Upgrade

MISCELLANEOUS

51 Operating Your TV With the Remote Control
53 Operating your DVD or BD player with the remote control

TROUBLESHOOTING

54 Troubleshooting

APPENDIX

56 Specifications
Description

FRONT PANEL

1. INPUT SELECT
   Used to select a source.
   (FM → BD/DVD → SAT → TV → CD → AUX → 5.1 MULTI CH → IPOD AUDIO → IPOD VIDEO).

2. UP(↑), DOWN(↓), LEFT(<), RIGHT(>), ENTER
   Used to move the cursor up, down, left or right and select an item in the SETUP menu.
   Also used to select detailed options in the SOUND EFFECT mode and to change the tone level.

3. SETUP
   Displays the SETUP menu.

4. TONE CONTROL
   Used to set the bass, treble level and tone to on/off.

5. SOUND EFFECT
   Toggles to select a surround sound mode.

6. DISPLAY
   Displays the speaker/audio input status, listening mode, etc.

7. VOLUME CONTROL
   Adjusts the volume level.

8. POWER
   Turns the receiver on/off.

9. ASC MIC JACK
   Used to connect the ASC MIC for setting up ASC (Auto Sound Calibration).
<table>
<thead>
<tr>
<th></th>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>ASC BUTTON</td>
<td>Used to select the ASC(Auto Sound Calibration) mode.</td>
</tr>
<tr>
<td>11</td>
<td>AUDIO ASSIGN BUTTON</td>
<td>Toggles to select an input mode for the selected source.</td>
</tr>
<tr>
<td>12</td>
<td>S.DIRECT/STEREO BUTTON</td>
<td>Used to select the S.DIRECT or STEREO mode.</td>
</tr>
<tr>
<td>13</td>
<td>MULTI CH INPUT BUTTON</td>
<td>Used to select a connected 5.1 multi channel player.</td>
</tr>
<tr>
<td>14</td>
<td>AV SYNC BUTTON</td>
<td>Used to select the Audio Delay Mode.</td>
</tr>
<tr>
<td>15</td>
<td>TUNING MODE BUTTON</td>
<td>Used to select the Manual or Preset mode for FM radio.</td>
</tr>
<tr>
<td>16</td>
<td>SELECT BUTTON</td>
<td>Used to change the radio frequency.</td>
</tr>
<tr>
<td>17</td>
<td>MEMORY BUTTON</td>
<td>Used to set a preset radio frequency.</td>
</tr>
</tbody>
</table>
Description

REAR PANEL

< HW-C500 >

< HW-C560S >

* All those pictures of the Rear panel are based on Model HW-C560S.
<table>
<thead>
<tr>
<th>No.</th>
<th>Connector Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FM ANTENNA JACK</td>
<td>Connect the FM Antenna here.</td>
</tr>
<tr>
<td>2</td>
<td>MULTI CH IN JACKS</td>
<td>Receives the analog audio signal from an external player with a multi-channel port.</td>
</tr>
<tr>
<td>3</td>
<td>VIDEO IN JACKS</td>
<td>Receives the video signal from a video player (BD/DVD, SAT, TV).</td>
</tr>
<tr>
<td>4</td>
<td>HDMI IN JACKS</td>
<td>Receives digital video and audio signals simultaneously using an HDMI cable.</td>
</tr>
<tr>
<td>5</td>
<td>HDMI OUT JACK</td>
<td>Outputs digital video and audio signals simultaneously using an HDMI cable.</td>
</tr>
<tr>
<td>6</td>
<td>USB PORT</td>
<td>Can be only used for firmware upgrades.</td>
</tr>
<tr>
<td>7</td>
<td>VIDEO OUT JACK</td>
<td>Outputs the video signal to video devices (TV, Projector etc).</td>
</tr>
<tr>
<td>8</td>
<td>COMPONENT VIDEO IN JACKS</td>
<td>Receives the component video signal.</td>
</tr>
<tr>
<td>9</td>
<td>COMPONENT VIDEO OUT JACKS</td>
<td>Outputs the component video signal.</td>
</tr>
<tr>
<td>10</td>
<td>iPod JACK</td>
<td>Receives the audio/video signal from an iPod.</td>
</tr>
<tr>
<td>11</td>
<td>OPTICAL IN JACKS (DIGITAL AUDIO IN)</td>
<td>Receives the digital optical audio signal.</td>
</tr>
<tr>
<td>12</td>
<td>COAXIAL IN JACK (DIGITAL AUDIO IN)</td>
<td>Receives the digital coaxial audio signal.</td>
</tr>
<tr>
<td>13</td>
<td>AUDIO IN JACKS</td>
<td>Receives the audio signal from a video player (BD/DVD, SAT, TV, CD).</td>
</tr>
<tr>
<td>14</td>
<td>SUBWOOFER AUDIO OUT JACK</td>
<td>Connect the subwoofer.</td>
</tr>
<tr>
<td>15</td>
<td>SPEAKER OUT TERMINALS</td>
<td>Speaker connection terminals.</td>
</tr>
</tbody>
</table>
**Description**

**DISPLAY**

1. **SPEAKER INDICATORS**
   Displays the connected speakers.

2. **LISTENING MODE INDICATORS**
   Displays the current listening mode.

3. **TUNING INDICATORS**
   Displays the status of the current radio broadcast.

4. **AUDIO INPUT INDICATORS**
   Displays the audio input signal type of the currently connected external audio source.

5. **SPEAKER LEVEL INDICATOR**
   Displays the speaker level.

6. **RADIO FREQUENCY INDICATORS**
   Displays the current radio frequency range.

7. **MESSAGE DISPLAY**
   Informs you of the status of the receiver.
INSERT REMOTE CONTROL BATTERIES

* Batteries (AAA size)

Follow these precautions to avoid leaking or cracking cells:

- Place batteries in the remote control so they match the polarity: (+) to (+) and (–) to (–).
- Assuming typical TV usage, the batteries last for about one year.
- Use the correct type of batteries. Batteries that look similar may differ in voltage.
- Always replace both batteries at the same time.
- Do not expose the batteries to heat or a flame.

OPERATION RANGE OF THE REMOTE CONTROL

The remote control can be used up to approximately 23 feet/7 meters in a straight line. It can also be operated at a horizontal angle of up to 30° from the remote control sensor.
Description

TOUR OF THE REMOTE CONTROL

1. POWER
2. AMP/TV
3. INPUT SELECT
4. BD/DVD
5. TUNING/CH
6. SUBWOOFER
7. SLEEP
8. ASC
9. PROLOGIC AUDIO ASSIGN
10. MULTI CH
11. RETURN
12. SETUP/MENU
13. RETURN
14. IPOD
15. INPUT SELECT
16. TV SOURCE
17. POWER
18. VOL
19. TUNING/CH
20. MUTE
21. VOL
22. ASC
23. TUNING/CH
24. TUNER MEMORY
25. TV/MULTI
26. INFO
27. EXIT
28. CD

SAMSUNG
<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 POWER BUTTON</td>
<td>Turns the receiver on/off.</td>
</tr>
<tr>
<td>2 AMP/TV BUTTON</td>
<td>Used to select the AMP/TV mode.</td>
</tr>
<tr>
<td></td>
<td>- If you select the AMP mode, the button will flash orange.</td>
</tr>
<tr>
<td></td>
<td>- If you select the TV mode, the button will flash green.</td>
</tr>
<tr>
<td>3 NUMBER BUTTONS</td>
<td>Used to select a TV channel.</td>
</tr>
<tr>
<td>4 PROLOGIC BUTTON</td>
<td>Select the desired Dolby Pro Logic II audio mode.</td>
</tr>
<tr>
<td>5 SKIP BUTTONS</td>
<td>Press to skip backwards or forwards on a connected DVD/BD player or iPod.</td>
</tr>
<tr>
<td>6 STOP/PLAY BUTTON</td>
<td>Press to stop/start playback on a connected DVD/BD player or iPod.</td>
</tr>
<tr>
<td>7 MUTE BUTTON</td>
<td>Mutes the sound of a connected device.</td>
</tr>
<tr>
<td>8 VOLUME CONTROL BUTTONS</td>
<td>Adjusts the volume of the selected device.</td>
</tr>
<tr>
<td>9 SUBWOOFER BUTTON</td>
<td>Used to select the Subwoofer.</td>
</tr>
<tr>
<td>10 TUNER MEMORY BUTTON</td>
<td>Used to set a preset radio frequency.</td>
</tr>
<tr>
<td>11 SETUP/MENU BUTTON</td>
<td>Displays the SETUP menu.</td>
</tr>
<tr>
<td>12 UP/DOWN/LEFT/RIGHT</td>
<td>Used to navigate the menus.</td>
</tr>
<tr>
<td>13 RETURN BUTTON</td>
<td>Used to return to the previous menu from the SETUP menu.</td>
</tr>
<tr>
<td>14 FUNCTION SELECTOR</td>
<td>Used to select an input source.</td>
</tr>
<tr>
<td>15 INPUT SELECT, TV</td>
<td>Toggles to find and select an input source.</td>
</tr>
<tr>
<td>16 DIMMER BUTTON</td>
<td>Adjusts the brightness of the display.</td>
</tr>
<tr>
<td>17 BD/DVD BUTTON</td>
<td>Used to select the BD/DVD mode.</td>
</tr>
<tr>
<td></td>
<td>- If you select the BD mode, the button will flash orange.</td>
</tr>
<tr>
<td></td>
<td>- If you select the DVD mode, the button will flash green.</td>
</tr>
<tr>
<td>18 SLEEP BUTTON</td>
<td>Used to set the Sleep Timer.</td>
</tr>
<tr>
<td>19 AUDIO ASSIGN BUTTON</td>
<td>Toggles to select an input mode for the selected source.</td>
</tr>
<tr>
<td>20 DSP BUTTON</td>
<td>Used to select the SFE mode.</td>
</tr>
<tr>
<td>21 SEARCH BUTTONS</td>
<td>Press to search backwards or forwards.</td>
</tr>
<tr>
<td>22 PAUSE BUTTON</td>
<td>Pauses playback on a connected device.</td>
</tr>
<tr>
<td>23 TUNING/CHANNEL BUTTONS</td>
<td>Used to change the radio broadcasting frequency or TV channel.</td>
</tr>
<tr>
<td>24 ASC BUTTON</td>
<td>Used to set the Auto Sound Calibration function.</td>
</tr>
<tr>
<td>25 MO/ST BUTTON</td>
<td>Select MONO or STEREO for radio broadcasts.</td>
</tr>
<tr>
<td>26 INFO BUTTON</td>
<td>Display information on the connected device currently being used.</td>
</tr>
<tr>
<td>27 ENTER BUTTON</td>
<td>Used to select an item in the SETUP menu.</td>
</tr>
<tr>
<td>28 EXIT BUTTON</td>
<td>Exits the SETUP menu.</td>
</tr>
</tbody>
</table>
Connections

This section involves various methods of connecting the AV receiver to other external components.
Before moving or installing the product, be sure to turn off the power and disconnect the power cord.

**SPEAKER POSITIONING**

* Speakers are provided with model HW-C560S only. Model HW-C500 does not come with speakers.

Position of AV Receiver

Place the AV Receiver on a dedicated stand or rack.

Subwoofer **SW**

The position of the subwoofer is not so critical. Place it anywhere you like.

Front Speakers **L R**

Place these speakers in front of your listening position, facing inwards (about 45°) toward you.
Place the speakers so that their tweeters will be at the same height as your ears.
Align the front face of the front speakers with the front face of the center speaker or place them slightly in front of the center speaker.
Center speaker

It is best to install it at the same height as the front speakers.
You can also install it directly over or under the TV.

Surround Speakers

Place these speakers behind your listening position.
If there isn’t enough room, place these speakers so they face each other.
Place them about 2 to 3 feet (60 to 90cm) above your ears, facing slightly downward.
Unlike the front and center speakers, the surround speakers are used to handle mainly sound effects
and sound will not come from them all the time.

When you attach the speakers to the wall, make sure to fasten them tightly so they do not fall off.

Speaker Configuration

For the best surround-sound experience, you should connect five speakers and a powered subwoofer.
The following table shows which channels you should use based on the number of speakers you have.

<table>
<thead>
<tr>
<th>2 speakers</th>
<th>3 speakers</th>
<th>4 speakers</th>
<th>5 speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
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<tr>
<td>R</td>
<td>R</td>
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<td>C</td>
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</tr>
<tr>
<td></td>
<td>SL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SR</td>
<td>SR</td>
</tr>
</tbody>
</table>

If you place a speaker near your TV set, screen color may be distorted because of the magnetic field generated
by the speaker. If this occurs, place the speaker away from your TV set.
Connections

CONNECTING THE SPEAKERS (HW-C500)

 Speakers are provided with model HW-C560S only. Model HW-C500 does not come with speakers. Contact a Samsung Electronics retailer for purchasing.

Connecting Speaker Wire

1. Loosen the knob by turning counterclockwise.
2. Insert the bare part of the wire into the hole in the side of each terminal.
3. Tighten the knob by turning clockwise to secure the wire.

 Keep the subwoofer speaker out of reach of children to prevent them from inserting their hands or objects into the duct (hole).
Never touch speaker terminals while the power is on. Doing so could result in electric shock.
Make sure the polarities (+ and -) are correct.

Connecting the Speakers

1. Press down the terminal tab on the back of the speaker.
2. Insert the black wire into the black terminal (-) and the red wire into the red (+) terminal, and then release the tab.
3. Connect the connecting plugs to the back of the AV Receiver.
   - Make sure the colors of the speaker terminals on the back of the AV receiver match the colors of the connecting plugs.
**CONNECTING THE SPEAKERS (HW-C560S)**

1. Press down the terminal tab on the back of the speaker.
2. Insert the black wire into the black terminal (–) and the red wire into the red (+) terminal, and then release the tab.
3. Press down the terminal tab on the back of the AV Receiver.
4. Insert the one wire into the terminal + and the other one into the terminal –.
   - Make sure the colors of the speaker terminals on the back of the AV receiver match the colors of the connecting plugs.

![Diagram showing connections]

**IMPORTANT**
- Keep the subwoofer speaker out of reach of children to prevent them from inserting their hands or objects into the duct (hole).
- Never touch speaker terminals while the power is on. Doing so could result in electric shock.
- Make sure the polarities (+ and -) are correct.

---

The Active Subwoofer is sold separately. Contact a Samsung Electronics retailer for purchasing.
Connections

CONNECTING EXTERNAL DEVICES/YOUR TV VIA HDMI

HDMI is a digital standard interface for connection to such devices as a TV, projector, DVD player, Blu-ray player, set-top box and more.

HDMI removes any loss of signal from analog conversion, enabling you to enjoy video and audio sound quality as it was originally created in the digital source.

By connecting through the HDMI (High-Definition Multimedia Interface) interface, you can play back digital video and audio.

- Connect it if you want to use Anynet+.

High-bandwidth Digital Content Protection System (HDCP) support
To play digital contents through the HDMI connection, both the connected external device and TV must support High-bandwidth Digital Content Protection System (HDCP). This product supports HDCP.

<table>
<thead>
<tr>
<th>Compatibility with a TV Supporting HDMI</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A TV with an HDMI jack.</td>
<td>Video/Audio</td>
</tr>
<tr>
<td>A TV with a DVI-D jack (TV supporting HDCP)</td>
<td>Video</td>
</tr>
<tr>
<td>A TV with a DVI-D jack (TV not supporting HDCP)</td>
<td>-</td>
</tr>
</tbody>
</table>

- Audio from SACD discs will not be heard with this connection. To play a DVD disc whose copyright is protected by CPPM, use a player supporting CPPM.
- The quality of the audio output through the HDMI jack (sampling frequency and bit rate) may be limited by the performance of the connected device.
- Since HDMI connection supports both video and audio, you don’t have to connect an additional audio cable.
HDMI FUNCTION

Using Anynet+(HDMI-CEC)

Anynet+ is a function that enables you to control other Samsung Devices with your Samsung TV’s remote control. Anynet+ can be used by connecting this AV Receiver to a SAMSUNG TV using an HDMI Cable. This is only available with SAMSUNG TVs and SAMSUNG AV Products that support Anynet+.

1. Connect the AV receiver to a Samsung TV with an HDMI cable. (See page 20)
2. Set the Anynet+ function on your TV.
   (See the TV instructions manual for more information.)
   - You can operate the volume on the AV receiver by using the Volume buttons on the TV remote control.

To turn on Anynet+

1. Press the SETUP/MENU button.
   • Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.
2. Press the ENTER button to select SETUP ENTER.
3. Press the ▲▼ buttons to select HDMI SETUP, and then press the ENTER or ► button.
4. Press the ▲▼ buttons to select HDMI ANYNET+, and then press the ENTER or ► button.
5. Press the ▲▼ buttons to set ANYNET+ to ON.

- To exit setup mode-
  • Press the SETUP/MENU button.
  SETUP OFF appears on the display and Setup Mode is exited.

- If you use an HDMI cable to connect a Samsung TV to your AV Receiver, you can operate the AV receiver using the TV’s remote control. This function is available only in connection with Samsung TV and DVD player supporting Anynet+(HDMI-CEC).
- Please check your TV for the Anynet+ logo. If your TV has an Anynet+ logo, then it supports the Anynet+ function.
- When you are making Anynet+ connection, do not connect more than two AV receivers (Anynet+ installed). Otherwise, it can cause a malfunction.
Connections

CONNECTING TO YOUR TV

Video Connection

If your television is equipped with Component Video inputs, connect a Component video cable (not supplied) from the Component Video Output (Pr, Pb and Y) jacks on the back of your AV Receiver to the Component Video Input jacks on your TV.

OR

Connect the Video cable from the VIDEO OUT (MONITOR) jack on the back of your AV Receiver to the Video Input jack on your TV.

Audio Connection

Connect the Digital Input (OPTICAL 3) on your AV Receiver to the Digital Output of the TV.

OR

Connect AUDIO IN (TV) on your AV Receiver to the Audio Out of the TV.
CONNECTING A DVD OR BD(Blu-ray) PLAYER

Video Connection
Connect a Component video cable (not supplied) from the COMPONENT IN (BD/DVD) (Pr, Pb and Y) jacks on the back of your AV Receiver to the Component Video Output jacks on your DVD/BD player.
OR
Connect a Video cable from the VIDEO IN (BD/DVD) jack on the back of your AV Receiver to the Video Output jack on your DVD/BD player.

Audio Connection
Connect the Digital Input (OPTICAL 1) on your AV Receiver to the Digital Output of the DVD/BD player.
OR
Connect AUDIO IN (BD/DVD) on your AV Receiver to the Audio Out of the DVD/BD player.
Connections

CONNECTING A CABLE, SATELLITE OR SET-TOP BOX

Video Connection

Connect a Component video cable(not supplied) from the COMPONENT IN (SAT) (Pb, Pr and Y) jacks on the back of your AV Receiver to the Component Video Output jacks on your SAT.

OR

Connect a Video cable from the VIDEO IN (SAT) jack on the back of your AV Receiver to the Video Output jack on your SAT.

Audio Connection

Connect the Digital Input (OPTICAL 2) on your AV Receiver to the Digital Output of the SAT.

OR

Connect AUDIO IN (SAT) on your AV Receiver to the Audio Out of the SAT.

Disconnect the power plug from the outlet if you will not use this unit for a long period of time.

If the cable/set-top box has only one audio output jack, connect it to either the right or left audio input jack of the main unit. Connect the audio cable’s red plug to the red jack and white cable to the white jack.
CONNECTING A CD PLAYER

Audio Connection

Connect the Digital Input (COAXIAL) on your AV Receiver to the Digital Output of the CD Player.

OR

Connect AUDIO IN (CD) on your AV Receiver to the Audio Out of the CD Player.

- If the CD player has only one audio output jack, connect it to either the right or left audio input jack of the main unit. Connect the audio cable’s red plug to the red jack and white cable to the white jack.
Connections

CONNECTING 5.1 CHANNEL DEVICES

You can connect the AV receiver to a DVD player, SUPER AUDIO CD player or other device with 5.1 channel output.

5.1 Channel device
CONNECTING AN iPod

You can listen to audio from an iPod through the main unit. For iPod operation with your receiver, see this page and 47 ~ 48.

1. Connect the iPod dock connector to the iPod jack on your receiver.
2. Place the iPod in the Dock.
   • If you want to play a movie stored in your iPod player, you should set the player’s **TV Out** option to **On** before inserting it into the dock. See page 48.
3. Press the **iPod** button on the remote control.
   • You can also use the **INPUT SELECT** button on the main unit.
   The mode switches as follows:
   - FM → BD/DVD → SAT → TV → CD → AUX → 5.1 MULTI CH → IPOD AUDIO → IPOD VIDEO

Disconnecting an iPod

Follow the steps below to prevent damage to an iPod and data when disconnecting from your AV receiver.

1. Press the **INPUT SELECT** button on the main unit to switch to a mode other than **IPOD AUDIO** or **IPOD VIDEO**.
2. Turn off the AV Receiver.
3. Disconnect the iPod player from the iPod dock, or remove the iPod dock connector from the AV receiver.

- You must have the VIDEO (Monitor) output connected to your TV to view iPod video. See page 23.
- Adjust the volume to a moderate level before you connect your iPod and AV Receiver.
- When the unit is powered on and you connect an iPod, the unit will charge your iPod’s battery.
- Make sure to connect the dock connector so that the label “SAMSUNG” faces upward.
- “Made for iPod” means that an electronic accessory has been designed to connect specifically to an iPod and has been certified by the developer to meet Apple performance standards.
- “Works with iPhone” means that an electronic accessory has been designed to connect specifically to an iPhone and has been certified by the developer to meet Apple performance standards.
CONNECTIONS AN iPod (Continued)

iPod models that are compatible with HW-C500/HW-C560S

<table>
<thead>
<tr>
<th>iPod model</th>
<th>iPod 1st+2nd generation 5GB 10GB 20GB</th>
<th>iPod 5th generation (video) 30GB 60GB 80GB</th>
<th>iPod 3rd generation 10GB 15GB 20GB 30GB 40GB</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPod nano 2nd generation (aluminum) 2GB 4GB 8GB</td>
<td>iPod mini 4GB 8GB</td>
<td>iPod 4th generation 20GB 40GB</td>
<td></td>
</tr>
<tr>
<td>iPod nano 3rd generation (video) 4GB 8GB</td>
<td>iPod 4th generation (color display) 20GB 30GB 40GB 60GB</td>
<td>iPod classic 80GB 120GB 160GB</td>
<td></td>
</tr>
<tr>
<td>iPod touch 1st generation 4GB 16GB 32GB</td>
<td>iPod nano 4th generation (video) 8GB 16GB</td>
<td>iPod nano 1st generation 1GB 2GB 4GB</td>
<td></td>
</tr>
<tr>
<td>iPod touch 2nd generation 8GB 16GB 32GB</td>
<td>iPhone 3G</td>
<td>iPhone 3GS</td>
<td></td>
</tr>
</tbody>
</table>

* “Made for iPod” means that the dock has been designed to connect specifically for the iPod and has been certified by the developer to meet Apple performance standards.
* Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

iPod is a trademark of Apple Inc., registered in the U.S. and other countries.
iPhone is a trademark of Apple Inc.

CONNECTING THE FM ANTENNA

1. Connect the FM antenna supplied to the FM ANTENNA terminal as a temporary measure.
2. Slowly move the antenna wire around until you find a location where reception is good, then fasten it to a wall or other rigid surface.

FM antenna (supplied)

* Do not place the antenna cable close to the power cord. Keep it as far away as possible.
* If you experience poor FM reception, use an external antenna.
Basic functions of your AV Receiver

BEFORE USING THE AV RECEIVER

Turning On/Off
Connect the power plug to the outlet.
Press the POWER button on the main unit for 2 seconds.
• This unit will be turned on or set to Standby mode.
• You can also turn the unit on/off by pressing the POWER button on the remote control.

Remote control functions
You can operate your AMP (this AV receiver)/ TV and BD(Samsung only)/ DVD player with this remote control. See pages 51 ~ 53 for more details.

To select a function

Method 1
Press the INPUT SELECT button.
• Each time you press this button, FM → BD/DVD → SAT → TV → CD → AUX → 5.1 MULTI CH → IPOD AUDIO → IPOD VIDEO will be selected in turn.

Method 2
Press the TUNING/CH, BD/DVD, SAT, TV, CD, MULTI CH, AUX or iPod button.
• You can directly select the desired function.

AUDIO SETUP

Selecting a source device and connection jack
Select the external devices you have connected to the receiver.

1. Press the SETUP/MENU button.
   • Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.
2. Press the ENTER button to select SETUP ENTER.
3. Press the ▲▼ buttons to select AUDIO SETUP, and then press the ENTER or ► button.
4. Press the ▲▼ buttons to select a desired jack.
   • The source device switches as follows; BD/DVD, SAT, TV, CD

- To exit setup mode -
• Press the SETUP/MENU button.
  SETUP OFF appears on the display and Setup Mode is exited.

* You can also use SETUP, ▲▼,◄►, ENTER on the front of your AV Receiver.
Basic functions of your AV Receiver

SELECTING DIGITAL/ANALOG INPUT

You can listen to sound in 2 channel analog, Dolby Digital or DTS using this unit.

1. Press the INPUT SELECT button to select a desired function (BD/DVD, SAT, TV, CD). See page 29.
2. Press the AUDIO ASSIGN button on the remote control to select the external device you have connected.
   - Each time you press this button, the input mode changes as follows:

   - For BD/DVD function
     - DVD OPTICAL
     - DVD HDMI1
     - DVD ANALOG

   - For SAT function
     - SAT OPTICAL2
     - SAT HDMI2
     - SAT ANALOG

   - For TV function
     - TV OPTICAL3
     - TV HDMI3
     - TV ANALOG

   - For CD function
     - CD COAXIAL
     - CD ANALOG

You can also change the input mode by pressing the AUDIO ASSIGN button on the front of your AV Receiver.

You can enjoy Dolby Digital or DTS if you connect the digital audio output jack of an external audio component to the optical or coaxial digital audio input jack on the main unit.
Setup

For your convenience, you can set this AV receiver’s features for the best use.

SETUP MENU TREE

Here’s a quick look at how the setup menus are organized on your AV Receiver.

```
AUDIO SETUP
  BD/DVD
    OPT 1,2,3
    COAX
  SAT
    OPT 1,2,3
    COAX
  TV
    OPT 1,2,3
    COAX
  CD
    OPT 1,2,3
    COAX

SPK SIZE
SPK DISTANCE
SPK LEVEL
TEST TONE
DPLII SETUP
TONE CONTROL
A/V SYNC
MP3 ENHANCER
SMART VOLUME
ASC SETUP
DRC SETUP
HDMI SETUP
VARIABLE SET
```
Setup

SETUP MENU TREE (Continued)

<table>
<thead>
<tr>
<th>AUDIO SETUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPK SIZE</td>
</tr>
<tr>
<td>FRONT</td>
</tr>
<tr>
<td>CENTER</td>
</tr>
<tr>
<td>SURR</td>
</tr>
<tr>
<td>SUBW</td>
</tr>
<tr>
<td>CROVR</td>
</tr>
<tr>
<td>SPK DISTANCE</td>
</tr>
<tr>
<td>SPK LEVEL</td>
</tr>
<tr>
<td>TEST TONE</td>
</tr>
</tbody>
</table>

- DPLII SETUP
- TONE CONTROL
- AV SYNC
- MP3 ENHANCER
- SMART VOLUME
- ASC SETUP
- DRC SETUP
- HDMI SETUP
- VARIABLE SET

SPK SIZE

FRONT
- LARGE
- SMALL

CENTER
- LARGE
- SMALL
- NONE

SURR
- LARGE
- SMALL
- NONE

SUBW
- LARGE
- SMALL
- NONE

CROVR
- YES
- NO

60Hz, 80Hz, 100Hz, 120Hz, 150Hz, 180Hz, 200Hz

SPK DISTANCE

F.L

F.R

CEN

S.L

S.R

S.W

1 ~ 30 FT (1 foot steps), default: 10 FT

SPK LEVEL

F.L

F.R

CEN

S.L

S.R

S.W

-10 ~ +10dB (1dB step), default: 00dB

TEST TONE

AUTO

MANUAL
SETUP MENU TREE (Continued)

- AUDIO SETUP
  - SPK SIZE
  - SPK DISTANCE
  - SPK LEVEL
  - TEST TONE

- DPLII SETUP
  - PANORAMA
    - OFF
    - ON
  - DIMENSION
    - -7 ~ 0 ~ +7
  - C- WIDTH
    - 0~7

- TONE CONTROL
  - TONE
    - OFF
    - ON
  - BASS
    - -6dB ~ +6dB (1dB Step)
  - TREBLE
    - -6dB ~ +6dB (1dB Step)

- A/V SYNC
- MP3 ENHANCER
- SMART VOLUME
- ASC SETUP
- DRC SETUP
- HDMI SETUP
- VARIABLE SET
Setup

SETUP MENU TREE (Continued)

- AUDIO SETUP
- SPK SIZE
- SPK DISTANCE
- SPK LEVEL
- TEST TONE
- DPLII SETUP
- TONE CONTROL

- A/V SYNC
  - SYNC OFF ~ SYNC 240MS (10MS Step)

- MP3 ENHANCER
  - OFF

- SMART VOLUME
  - OFF

- ASC SETUP
  - START

- DRC SETUP
  - MAX

- HDMI SETUP
  - SYNC
    - ON

- AUDIO
  - OFF
    - AVR
      - ON
    - TV
      - OFF
  
- ANYNET+
  - OFF

- VARIABLE SET
  - OFF
  - ON
**SETTING THE SPEAKER SIZE**

Signal outputs and frequency response from the speaker will be adjusted according to your speaker configuration and whether certain speakers are used or not.

1. Press the **SETUP/MENU** button.
   - Each time the button is pressed, the mode switches between **SETUP ENTER** and **SETUP OFF**.
2. Press the **ENTER** button to select **SETUP ENTER**.
3. Press the ▲▼ buttons to select **SPK SIZE**, and then press the **ENTER** or ▶ button.
4. Press the ▲▼ buttons to select the speaker you want, and then press the **ENTER** or ▶ button.
   - Each time you press the ▲▼ buttons, FRONT ➔ CENTER ➔ SURR ➔ SUBW ➔ CROVR will be selected in turn.
5. Press the ▲▼ buttons to set the mode (LARGE, SMALL etc.) for the selected speaker.
6. Repeat steps 3-5 to set the mode for each speaker.

- To exit setup mode -
  - Press the **SETUP/MENU** button.
  - **SETUP OFF** appears on the display and Setup Mode is exited.

### Setting the Speaker

<table>
<thead>
<tr>
<th>SPEAKER</th>
<th>Possible Settings</th>
<th>Default Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRONT (Front)</td>
<td>LARGE, SMALL</td>
<td>SMALL</td>
</tr>
<tr>
<td>CENTER (Center)</td>
<td>LARGE, SMALL, NONE</td>
<td>SMALL</td>
</tr>
<tr>
<td>SURR (Surround)</td>
<td>LARGE, SMALL, NONE</td>
<td>SMALL</td>
</tr>
<tr>
<td>SUBW (Subwoofer)</td>
<td>YES, NO</td>
<td>YES</td>
</tr>
<tr>
<td>CROVR (Crossover Frequency)</td>
<td>60, 80, 100, 120, 150, 180, 200(Hz)</td>
<td>100Hz</td>
</tr>
</tbody>
</table>

- **LARGE** : Select when using large speakers. You can listen to full range sound.
- **SMALL** : Select this when using small speakers
- **NONE** : Select when no speaker is used
- **YES** (subwoofer) : Select when using the subwoofer speaker.
- **NO** (subwoofer) : Select when not using the subwoofer speaker.
- **CROVR** : Select the crossover frequency for the best bass response in your room.

※ You can also use **SETUP, ▲, ▼, <, >, ENTER** on the front of your AV Receiver.
※ When the Front speaker is only set to LARGE, you can select LARGE of other speakers.
SETTING THE SPEAKER LISTENING DISTANCE

If the speakers cannot be placed at equal distances from the listening position, you can adjust the delay time of the audio signals from the center and surround speakers.

1. Press the SETUP/MENU button.
   - Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.

2. Press the ENTER button to select SETUP ENTER.

3. Press the ▲▼ buttons to select SPK DISTANCE, and then press the ENTER or ► button.

4. Press the ▲▼ buttons to select the speaker you want, and then press the ENTER or ► button.
   - Each time you press the ▲▼ buttons, F.L → F.R → CEN → S.L → S.R → S.W will be selected in turn.

5. Press the ▲▼ buttons to set the Speaker Distance.
   - For the FRONT LEFT, FRONT RIGHT, CENTER, SURR. LEFT, SURR. RIGHT and SUBWOOFER Speakers, you can set the distance from the speaker to listening position between 1ft ~ 30ft (0.3~9.0m) in intervals of 1ft (0.3m).

- To exit setup mode -
  - Press the SETUP/MENU button.
  - SETUP OFF appears on the display and Setup Mode is exited.

- Setting Speaker Distance -
  Set the distance from the speaker to listening position in intervals of 1ft (0.3m).

  • F.L (front left) : 1ft ~ 30ft
  • F.R (front right) : 1ft ~ 30ft
  • S.L (surround left) : 1ft ~ 30ft
  • CEN (center) : 1ft ~ 30ft
  • S.R (surround right) : 1ft ~ 30ft
  • SW (subwoofer) : 1ft ~ 30ft

- If the listening position is beyond the range of the speaker distance setup, set the speaker distance to the maximum.
- The distance range of the overall speaker system is determined based on the F.L (front left) speaker distance from the listening position.
SETTING THE SPEAKER LEVEL

You can set the balance and level of speakers.

1. Press the SETUP/MENU button.
   - Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.

2. Press the ENTER button to select SETUP ENTER.

3. Press the ▲▼ buttons to select SPK LEVEL, and then press the ENTER or ► button.

4. Press the ▲▼ buttons to select the speaker you want, and then press the ENTER or ► button.
   - Each time you press this button, F.L → F.R → CEN → S.L → S.R → S.W will be selected in turn.

5. Press the ▲▼ buttons to set the Speaker Level mode.
   - You can adjust it from -10 to +10dB in 1 step increments.
   - The sound gets quieter at -10dB and louder at +10dB.

- To exit setup mode -
  - Press the SETUP/MENU button.
    SETUP OFF appears on the display and Setup Mode is exited.

- Setting Speaker Level -
  - F.L (front left) : -10 ~ +10dB
  - F.R (front right) : -10 ~ +10dB
  - CEN (center) : -10 ~ +10dB
  - S.L (surround left) : -10 ~ +10dB
  - S.R (surround right) : -10 ~ +10dB
  - S.W (subwoofer) : -10 ~ +10dB
Setup

SETTING THE TEST TONE

Use the test tone to check the speaker connection status or level.

1. Press the SETUP/MENU button.
   - Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.

2. Press the ENTER button to select SETUP ENTER.

3. Press the ▲▼ buttons to select TEST TONE, and then press the ENTER or ► button.

4. Press the ▲▼ buttons to select the option you want, and then press the ENTER or ► button.
   - AUTO: Test signal will be automatically output as follows; F.L → CEN → S.W → F.R → S.R → S.L.
     - During test tone output, press the ▲▼ buttons to adjust the speaker output level from -10 to +10 dB by 1 step.
   - MANUAL: Enables you to adjust the output level of the speaker manually.
     1) Press the ENTER button to select the speaker you want.
        Each time you press the ENTER button, F.L → CEN → S.W → F.R → S.R → S.L will be selected in turn.
     2) Press the ▲▼ buttons to set the Test Tone mode you want.
        You can adjust the speaker output level from -10 to +10dB by 1 step.
        The sound gets quieter at -10dB and louder at +10dB.

- Test Tone Output -
  - F.L (front left): -10 ~ +10dB
  - CEN (center): -10 ~ +10dB
  - S.W (subwoofer): -10 ~ +10dB
  - F.R (front right): -10 ~ +10dB
  - S.R (surround right): -10 ~ +10dB
  - S.L (surround left): -10 ~ +10dB

- To stop test tone -
  - Press the SETUP/MENU button once.
    SETUP OFF appears on the display and test tone stops.
SETTING DOLBY PRO LOGIC II MODE

This mode provides 5.1 channel sound from 2 channel sources.
Press the PROLOGIC button on the remote control.

- **MOVIE**: Adds realism to the movie soundtrack.
- **MUSIC**: Provides 5.1 channel surround sound for digital, analog or existing stereo sources.
- **GAME**: Enhances the excitement of the game's sound.
- **MATRIX**: You will hear 5.1 channel surround sound.
- **PL (Pro Logic)**: You will experience a surround effect with 5.1 channel surround sound.

SETTING DOLBY PRO LOGIC II

This function works only in Dolby Pro Logic II MUSIC mode.

1. Press the SETUP/MENU button.
   - Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.
2. Press the ENTER button to select **SETUP ENTER**.
3. Press the ▲▼ buttons to select **DPLII SETUP**, and then press the ENTER or ► button.
4. Press the ▲▼ buttons to select the option you want, and then press the ENTER or ► button.
   - **PANORAMA**: You can set it ON or OFF.
     (This mode extends the front stereo image to include the surround speakers for an exciting "wraparound" effect with side wall imaging.)
   - **DIMENSION**: You can set from -7 to +7.
     (Incrementally adjusts the sound field (DSP) from the front or surround.)
   - **C- WIDTH**: You can set from 0 to 7.
     (This sets the width of the center sound image. The higher the setting, the less sound comes from the center speaker.)

- PANORAMA, DIMENSION and CENTER WIDTH settings are enabled only if the mode is set to MUSIC.
- You cannot use Dolby Pro Logic II mode for multi channel signals such as Dolby Digital and DTS.
- Pro Logic works only for PCM audio signals with sampling frequencies of 32kHz, 44KHz or 48KHz.
Setup

SETTING TONE CONTROL
This will enable you to adjust the bass and treble level.

1. Press the SETUP/MENU button.
   - Each time the button is pressed, the mode switches between SETUP
     ENTER and SETUP OFF.
2. Press the ENTER button to select SETUP ENTER.
3. Press the ▲▼ buttons to select TONE CONTROL, and then press the
   ENTER or ► button.
4. Press the ▲▼ buttons to select the option you want, and then press the
   ENTER or ► button.
   - Each time you press this button, TONE → BASS → TREBLE will be
     selected in turn.
5. Press the ▲▼ buttons to set the Tone Control mode you want.
   - If it is set to the TONE OFF, Tone Control function will be disabled.
   - You can adjust it from -6 to +6dB by 1 step.
   - The sound gets quieter at -6dB and louder at +6dB.

- To exit setup mode -
  - Press the SETUP/MENU button.
  - SETUP OFF appears on the display and Setup Mode is exited.

$\text{\textbullet\ The Tone Control function can be applied to all channels except for the subwoofer.}$
AV SYNC

Video may look slower than the audio if it is connected to a digital TV. If this occurs, adjust the audio delay time to match the video.

1. Press the SETUP/MENU button.
   - Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.
2. Press the ENTER button to select SETUP ENTER.
3. Press the ▲▼ buttons to select A/V SYNC, and then press the ENTER or ► button.
4. Press the ▲▼ buttons to set the A/V Sync mode you want.
   - You can adjust it from OFF to 240MS in 10MS steps.

MP3 ENHANCER

This also helps enhance your sound experience (ex. mp3 music). Use this if you want to hear better sound from a low quality mp3 source.

1. Press the SETUP/MENU button.
   - Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.
2. Press the ENTER button to select SETUP ENTER.
3. Press the ▲▼ buttons to select MP3 ENHANCER, and then press the ENTER or ► button.
4. Press the ▲▼ buttons to select ON or OFF.

SMART VOLUME

This will regulate and stabilize the volume level against a drastic volume change when changing channels or during a scene transition.

1. Press the SETUP/MENU button.
   - Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.
2. Press the ENTER button to select SETUP ENTER.
3. Press the ▲▼ buttons to select SMART VOLUME, and then press the ENTER or ► button.
4. Press the ▲▼ buttons to select ON or OFF.
Setup

ASC (AUTO SOUND CALIBRATION) SETUP

By setting the ASC function just once when you relocate or install the unit, you can have the unit automatically recognize the distance between speakers, levels between channels, and frequency characteristics to create a 5.1-channel sound field optimized for your environment.

- Before Setting -
1. Plug the ASC microphone into the ASC MIC jack.
2. Place the ASC microphone at the listening position.
3. Press the ASC button on the front panel, and then press the ENTER button.

1. Press the SETUP/MENU button.
   - Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.

2. Press the ENTER button to select SETUP ENTER.

3. Press the ▲▼ buttons to select ASC SETUP, and then press the ENTER or ▶ button.

4. Press the ▲▼ buttons to select ASC START, and then press the ENTER button.
   - To create the optimal 5.1 channel sound field, the selections are in the following sequence:
     L → C → R → SR → SL → SW
   - EQ ON: The ASC(Auto Sound Calibration) EQ mode is set to on.
   - EQ OFF: The ASC(Auto Sound Calibration) EQ mode is set to off.

5. If you see a ASC READY message on the screen, press the ENTER button to apply the measurement value. And then unplug the ASC microphone.

To cancel the ASC (Auto Sound Calibration) setup.
This will be automatically reverted if you press the RETURN button.

- Setting the ASC function takes about 3 minutes.
- Because the volume level of the tone is fixed during the ASC setup, you cannot adjust the volume using the volume control.
- If the ASC microphone is disconnected during the ASC setup, the setup will be canceled.
- You can also press the ASC button on the remote control to use this function.
DRC SETUP

You can use this function to enjoy Dolby Digital sound when watching movies at low volume at night. DRC compresses the audio to make the loudest sounds quieter and the quietest sounds louder.

1. Press the SETUP/MENU button.
   - Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.
2. Press the ENTER button to select SETUP ENTER.
3. Press the ▲▼ buttons to select DRC SETUP, and then press the ENTER or ► button.
4. Press the ▲▼ buttons to set the DRC Setup mode you want.
   - STD: Sets DRC effect to standard.
   - MAX: Sets DRC effect to maximum.
   - MIN: Sets DRC effect to minimum.

HDMI SETUP

Use this if you want to receive audio from HDMI connected external devices.

1. Press the SETUP/MENU button.
   - Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.
2. Press the ENTER button to select SETUP ENTER.
3. Press the ▲▼ buttons to select HDMI SETUP, and then press the ENTER or ► button.
4. Press the ▲▼ buttons to select the option you want, and then press the ENTER or ► button.
5. Press the ▲▼ buttons to set the HDMI Setup mode you want.
   - HDMI AUDIO: AVR (Audio Video Receiver), TV
     This preference determines whether audio received at the HDMI IN is output by the HDMI OUT. If you want to listen to audio from an HDMI connected external device through your HDMI connected TV’s speakers, set it to TV. Otherwise, leave it on AVR to listen to audio from the A/V receiver.
     - AVR: HDMI audio is not output
     - TV: HDMI audio is output
   - HDMI ANYNET+: ON, OFF
     Anynet+ is a function that enables you to control other Samsung Devices with your Samsung TV’s remote control.
     - ON: Anynet+ is enabled.
     - OFF: Anynet+ is disabled.
   - HDMI SYNC: ON, OFF
     The AV receiver can be set to automatically correct any delay between the video and the audio, based on the data from the connected TV.
     - ON: HDMI Sync is enabled.
     - OFF: HDMI Sync is disabled.

* HDMI Audio is enabled only if both the HDMI INPUT and HDMI OUT are connected properly and working normally.
* This function works only if your HDMI-compatible TV supports HDMI Sync.

VARIABLE SET (Low Power Consumption SETUP)

This function enhances electric power efficiency.

1. Press the SETUP/MENU button.
   - Each time the button is pressed, the mode switches between SETUP ENTER and SETUP OFF.
2. Press the ENTER button to select SETUP ENTER.
3. Press the ▲▼ buttons to select VARIABLE SET, and then press the ENTER or ► button.
4. Press the ▲▼ buttons to select ON or OFF.
   - ON: This is Samsung’s electric power efficiency function, you can save about 30% for power consumption.
   - OFF: Normal power efficiency function.

* This function is not available after the Tone Control, Speaker Level, SFE mode or ASC is changed from the factory setting.
Operation

USING THE SURROUND MODES

Using the SOUND EFFECT button on the front of the main unit

Selecting the SFE mode

1. Press the SOUND EFFECT button to select SFE.
   - Each time you press this button, SFE → DPLII will be selected in turn.
2. Press the UP/DOWN (▲,▼) button.
   - Each time you press the UP/DOWN (▲,▼) button,
     STEREO → HALL 1 → HALL 2 → J.CLUB → CHURCH → ROCK → CLASSIC → LIVE →
     GAME → MOVIE → CONCERT → STADIUM will be selected in turn.
   - You can also select the SFE mode by pressing the DSP button on the remote control.

Selecting the DPLII mode

1. Press the SOUND EFFECT button to select DPLII.
   - Each time you press this button, SFE → DPLII will be selected in turn.
2. Press the UP/DOWN (▲,▼) button.
   - Each time you press the UP/DOWN (▲,▼) button, MUSIC → GAME → MATRIX → PL → MOVIE will be selected in turn.
   - You can also select the DPLII mode by pressing the PROLOGIC button on the remote control.

* You cannot use Dolby Pro Logic II mode for multi channel signals such as Dolby Digital and DTS.
* Pro Logic works only for BITSTREAM audio signals with sampling frequencies of 32KHz, 44KHz or 48KHz.

Using the S.DIRECT/STEREO button on the front of the main unit

Press the S.DIRECT/STEREO button.
- Each time the button is pressed, the mode switches between the S. DIRECT mode and the STEREO mode.
- S.DIRECT: Outputs 2 CH PCM audio signal without any signal processing, providing higher audio quality. This is useful for obtaining the best sound from a connected CD player.
- STEREO: Outputs sound of the selected source in 2 CH stereo.
## USING THE SURROUND MODES (Continued)

### Surround Mode and Input Signal Chart

<table>
<thead>
<tr>
<th>Surround Mode</th>
<th>Input Signal</th>
<th>Decoding</th>
<th>Output Channel</th>
<th>Display Information</th>
<th>Channel Status</th>
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<tbody>
<tr>
<td>DOLBY (MUSIC, GAME, MATRIX, PL, MOVIE)</td>
<td>Dolby D (5.1ch)</td>
<td>Dolby Digital 5.1</td>
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<tr>
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<td>Pro Logic II</td>
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<tr>
<td></td>
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<td>Pro Logic II</td>
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<td>L, C, R, SL, SR, SW</td>
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<td>Pro Logic II</td>
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<td>L, C, R, SL, SR, SW</td>
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<td>SFE</td>
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<td>L, C, R, SL, SR, SW</td>
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<td>L, C, R, SL, SR, SW</td>
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<tr>
<td>SFE</td>
<td>Dolby D (2ch)</td>
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<td>L, R, SW</td>
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<tr>
<td></td>
<td>Dolby D (2ch Surr)</td>
<td>Stereo</td>
<td>0 – – 0</td>
<td>DIGITAL</td>
<td>L, R, SW</td>
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<td>L.PCM (Audio)</td>
<td>Stereo</td>
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<td>L.PCM</td>
<td>L, R, SW</td>
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<td>L.PCM 96kHz</td>
<td>Stereo</td>
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<td>Analog</td>
<td>Stereo</td>
<td>0 – – 0</td>
<td>Analog</td>
<td>L, R, SW</td>
</tr>
</tbody>
</table>

- **L/R**: Front Speaker (Left/Right)
- **C**: Center Speaker
- **SL/SR**: Surround Speaker (Left/Right)
- **SW**: Subwoofer

* Channel status displays are dependent on the speaker configuration.
* SFE mode works with 2-ch signals.

### USING THE SUBWOOFER SELECTION BUTTON

You can set the subwoofer to on/off. Press the **SUBWOOFER** button.
LISTENING TO THE RADIO

You can listen to the radio by using either automatic or manual tuning.

1. Press the INPUT SELECT button to select FM.

2. Select a frequency (radio broadcast).
   • Preset tuning:
     Press the button on the remote control to select the preset frequency.
   • Manual tuning 1 (Automatic tuning):
     Press and hold the TUNING/CH ( V, A ) buttons on the remote control to automatically tune in a frequency.
   • Manual tuning 2:
     Press the TUNING/CH ( V, A ) buttons on the remote control to increase or decrease the frequency step by step.

3. You can also use the SELECT ( V, A ) buttons on the main unit to change the radio frequency.

To Listen in mono/stereo
Press the MO/ST button on the remote control.
• Each time you press this button, STEREO or MONO will be selected in turn.
• If you select MONO in an area with weak reception, it will help to reduce noise.
• This function works only with the remote control.

Presetting radio stations

You can preset up to 30 FM stations.

E.g.: Setting station FM 89.10 in preset 2.

1. Press the INPUT SELECT button to select FM.

2. Press the TUNING/CH ( V, A ) buttons on the remote control to select 89.10.
   • Refer to step 2 above to tune in automatically and manually.

3. Press the MEMORY button on the main unit.
   • You can also use the TUNER MEMORY button on the remote control.
   • Tuner number will blink on the display.

4. Press the TUNING/CH ( V, A ) buttons on the remote control to select preset 2.
   • You can select from presets 1 to 30.

5. Press the MEMORY button on the main unit.
   • Tuner number will disappear and station 89.10 will be saved in preset 2.

6. To preset other stations, repeat steps 2 to 5.

To Listen to Preset Station
• Press the TUNING MODE button to select PRESET and press the SELECT ( V, A ) buttons.
USING AN iPod

You can enjoy playback of your iPod using the supplied remote control.

Listening to Music (iPod audio function)

You can play music files stored in the iPod player by connecting it to the AV receiver.

1. Connect the iPod dock connector to the iPod jack on the AV Receiver.
2. Place the iPod in the dock.
   • Your iPod is automatically turned on.
3. Press the INPUT SELECT button on the remote control to select IPOD AUDIO mode.
4. Press the PLAY button on the remote control to play.
   • The AV receiver starts playing from the first track of the iPod player.
5. You can use the remote control to control simple playback functions such as the PLAY, PAUSE, STOP, SKIP (♩,♫) buttons.

- See page 28 for compatible iPods.
  Compatibility depends on the software version of your iPod.
- You can also select iPod by pressing the iPod button on the remote control.
Watching a Movie (iPod Video function)

You can play video files stored in the iPod player on a TV by connecting it to the AV receiver.

1. Connect the iPod dock connector to the iPod jack on the AV receiver.
2. In the iPod screen, move to Videos > Settings and set the TV Out option to On.
3. Place the iPod in the dock.
4. Press the INPUT SELECT button on the remote control to select IPOD VIDEO mode.
5. Set the AV IN option of the TV connected to the AV receiver to COMPOSITE.

Follow the iPod onscreen guide through the following steps.

6. Press the ▲,▼ buttons on the remote control to select Videos and press the ENTER button.
7. Press the ▲,▼ buttons on the remote control to select Movies and press the ENTER button.
8. Press the ▲,▼ buttons to select the file to play and press the ENTER button.

   • The iPod's video files will be played on the TV screen.

9. You can use the remote control to control simple playback functions such as the PLAY, PAUSE, STOP, and SKIP (►►►) buttons.

   • If you press the PREV button within 3 seconds after the playback, the player will stop playing and return to the list screen.
   • If you press the PREV button 3 seconds or later after the playback, the player will move to the start screen of the current file.

   • Press the STOP button to stop playing and return to the list screen.
   • Press the RETURN button to return to the previous menu.

* You must have the VIDEO (Monitor) output connected to your TV to view iPod video.
* See page 28 for compatible iPods.
* Compatibility depends on the software version of your iPod.
* When the current file is played to the end, the next file will not be played automatically.
* To play the next file, select a file to play in the list screen of the iPod player.
* No other screen than the playback one will appear on the TV screen. Check other screens on the iPod player.
CONVENIENT FUNCTIONS

Sleep timer function
You can set the time that this unit will shut itself off.

Press the SLEEP button.
• SLEEP : OFF $\rightarrow$ 15 $\rightarrow$ 30 $\rightarrow$ 45 $\rightarrow$ 60 $\rightarrow$ 90 $\rightarrow$ 120 M (MIN) will be selected in turn.

To check sleep timer
Press the SLEEP button.
• The remaining time before this unit will shut itself off is shown on the display.
• Pressing the button again changes the sleep time from what you set previously.

To cancel sleep timer
• Press the SLEEP button until SLEEP OFF appears on the display.

Mute function
This function is useful when answering a doorbell or telephone call.

Press the MUTE button.
• MUTE appears on the display.

To output sound again
Press the MUTE button again.
• MUTE will disappear and sound will output.

Adjust the display
You can adjust the brightness of the display.

Press the DIMMER button.
• Each time you press this button, the brightness changes as follows : Dark $\rightarrow$ Bright.

• SLEEP, Mute and the Adjust Display functions can only be operated with the remote control.
Operation

Reset function

When the Power is on,
1. Press the MUTE button.
   • MUTE appears on the display.
2. Press the 9 button five times and then press the ENTER button.
   • INITIAL : NO appears on the display.
3. Press the ▲▼ buttons to select YES.
   • The unit will turn off after 5 seconds.

When the Power is Off,
1. Press and hold the MEMORY button on the front of your AV Receiver for longer than 5 seconds.
   • POWER LED will blink one time.

⚠️ Using the RESET function will erase all stored settings.
⚠️ Do not use this unless necessary.

SOFTWARE UPGRADE

Samsung may offer upgrades for AV Receiver's firmware in the future.

Please visit Samsung.com or contact the Samsung call center at 1-800-SAMSUNG (726-7864) to receive information about downloading upgrades and using a USB drive. Upgrades will be possible by connecting a USB drive to the USB port located on your AV Receiver.

⚠️ Insert a USB drive containing the firmware upgrade into the USB port on the back of the main unit.
⚠️ Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied. The main unit will turn off automatically after completing the firmware upgrade. When software is upgraded, settings you have made will return to their default (factory) settings. We recommend you write down your settings so that you can easily reset them after the upgrade.
⚠️ If you failed software upgrade, it is strongly recommended whole USB data format to FAT16 and retry software upgrade.
⚠️ The NTFS USB File System can not be supported.
⚠️ Depending on the manufacturer, the USB may not be supported.
OPERATING YOUR TV WITH THE REMOTE CONTROL

1. Press the **POWER** button to turn on the TV.
2. Press the **AMP/TV** button to set the remote to TV mode.
3. Point the remote control toward the TV.
4. While holding down **POWER** button, enter the code corresponding to your brand of TV.
   - If there is more than one code listed for your TV in the table, enter one at a time to determine which code works.
   - If the code matches the TV’s code, the TV will be turned off.
5. If TV is turned on or off when you press the **POWER** button of the remote control, the setting is completed.
   - You can use the TV **POWER, VOLUME, CHANNEL, MENU** and **Numeric buttons (0-9)**.

⚠️ The remote control may not work on some brands of TVs. Also, some operations may not be possible depending on your brand of TV.
⚠️ The remote control will work with Samsung TVs by default.
### Miscellaneous

**OPERATING YOUR TV WITH THE REMOTE CONTROL (Continued)**

<table>
<thead>
<tr>
<th>Brand</th>
<th>Code Number</th>
<th>Brand</th>
<th>Code Number</th>
<th>Brand</th>
<th>Code Number</th>
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<td>056, 057, 058</td>
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<td>SSS</td>
<td>018</td>
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</table>
OPERATING YOUR DVD OR BD PLAYER WITH THE REMOTE CONTROL

1. Press the POWER button to turn on the DVD (BD) player.
2. Press the BD/DVD button on the remote control to set the remote to DVD (BD) mode.
3. Point the remote control toward the DVD (BD).
4. While holding down POWER button, enter the code corresponding to your brand of DVD (BD).
   - If there is more than one code listed for your DVD (BD) in the table, enter one at a time to determine which code works.
   - If the code matches the DVD (BD)’s code, the DVD (BD) will be turned off.
5. If DVD is turned on or off when you press the POWER button of the remote controller, the setting is completed.
   - You can use DVD (BD) POWER, PLAY, PAUSE, STOP, SKIP, MENU and Numeric buttons (0–9).

- The remote control may not work on some brands of DVD.
  - Also, some operations may not be possible depending on your brand of DVD.
  - The remote control will work with Samsung DVD (BD) by default.

### DVD Brand Code List

<table>
<thead>
<tr>
<th>Brand</th>
<th>Code Number</th>
<th>Brand</th>
<th>Code Number</th>
<th>Brand</th>
<th>Code Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENON</td>
<td>003, 032</td>
<td>ONKYO</td>
<td>004, 014</td>
<td>TOSHIBA</td>
<td>004, 018</td>
</tr>
<tr>
<td>DOONON</td>
<td>019</td>
<td>OPTIMUS</td>
<td>011</td>
<td>YAMAHA</td>
<td>009, 033</td>
</tr>
<tr>
<td>DMTECH</td>
<td>017</td>
<td>PANASONIC</td>
<td>021</td>
<td>ZENITH</td>
<td>004, 024</td>
</tr>
<tr>
<td>FISHER</td>
<td>002</td>
<td>PROSCAN</td>
<td>006</td>
<td>TAEGWANG</td>
<td>026</td>
</tr>
<tr>
<td>GE</td>
<td>006</td>
<td>PHILIPS</td>
<td>004, 023</td>
<td>PS2</td>
<td>028</td>
</tr>
<tr>
<td>HARMANKARDON</td>
<td>012</td>
<td>PIONEER</td>
<td>007, 011, 022, 025</td>
<td>X-BOX</td>
<td>029</td>
</tr>
<tr>
<td>JVC</td>
<td>010, 013</td>
<td>RCA</td>
<td>006</td>
<td>APEX</td>
<td>030</td>
</tr>
<tr>
<td>KENWOOD</td>
<td>008</td>
<td>SAMSUNG</td>
<td>000, 027</td>
<td>Marantz</td>
<td>031</td>
</tr>
<tr>
<td>LG</td>
<td>001</td>
<td>SANYO</td>
<td>002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAGNAVOX</td>
<td>004</td>
<td>SONY</td>
<td>015, 020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MITSUBISHI</td>
<td>005, 016</td>
<td>THETA DIGITAL</td>
<td>011</td>
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### BD player Brand Code List

<table>
<thead>
<tr>
<th>Brand</th>
<th>Code Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAMSUNG</td>
<td>000, 001, 002, 003, 004</td>
</tr>
</tbody>
</table>

- The remote control will control Samsung BD players only.
# Troubleshooting

Before requesting service, please check the following:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Check</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The unit will not turn on.</td>
<td>• Is the power cord plugged into the outlet?</td>
<td>• Connect the power plug to the outlet.</td>
</tr>
<tr>
<td>A function does not work when the button is pressed.</td>
<td>• Is there static electricity in the air?</td>
<td>• Disconnect the power plug and connect it again.</td>
</tr>
<tr>
<td>Sound is not produced.</td>
<td>• Are the speakers and external components connected properly?</td>
<td>• Connect them correctly.</td>
</tr>
<tr>
<td></td>
<td>• Is the Mute function on?</td>
<td>• Press the MUTE button to cancel the function.</td>
</tr>
<tr>
<td></td>
<td>• Is the volume set to minimum?</td>
<td>• Adjust the volume.</td>
</tr>
<tr>
<td></td>
<td>• Is the Speaker Size set incorrectly to NONE?</td>
<td>• Refer to pages 35 to select LARGE, SMALL or YES.</td>
</tr>
<tr>
<td>Picture does not appear on a TV when the function is selected.</td>
<td>• Is the external component connected properly?</td>
<td>• Connect it correctly.</td>
</tr>
<tr>
<td>Remote controller does not work.</td>
<td>• Are the batteries drained?</td>
<td>• Replace with new batteries.</td>
</tr>
<tr>
<td></td>
<td>• Is the distance between remote control and main unit too great?</td>
<td>• Operate at close distance.</td>
</tr>
<tr>
<td>The sound from the left/right channels is reversed.</td>
<td>• Are the left/right speaker or left/right input/output cables connected properly?</td>
<td>• Check the left/right channel and connect it/them correctly.</td>
</tr>
<tr>
<td>Can't receive radio broadcasts.</td>
<td>• Is FM antenna connected properly?</td>
<td>• Connect the antenna correctly.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If the input strength of antenna signal is weak, install the FM antenna in a place with good reception.</td>
</tr>
<tr>
<td>There is no sound from surround speakers.</td>
<td>• Are the surround speakers connected properly?</td>
<td>• Refer to pages 16 ~19 to connect them properly.</td>
</tr>
<tr>
<td></td>
<td>• Is SURR (surround) incorrectly set to NONE in the Speaker Size?</td>
<td>• Refer to page 35 to select LARGE or SMALL.</td>
</tr>
<tr>
<td></td>
<td>• Is surround mode set to stereo?</td>
<td>• Refer to pages 44 ~ 45 to select proper Surround Mode.</td>
</tr>
</tbody>
</table>
Symptom | Check | Remedy
--- | --- | ---
Can’t select Dolby Pro Logic II mode. | • Is the input signal selected properly? | • Only 2 channel signal can select Dolby Pro Logic II mode. (ex: Dolby Digital, PCM, 2 channel analog input signal.)
There is no sound when playing a DTS encoded DVD. | • Is Digital input selected? | • Check whether the DVD player is properly connected and refer to page 30 to select the digital input.

### Product protection function

**Heat protection**

- The protection function will come on if the main unit or power transformer overheats. "PROTECTION" will appear in the display.

  This function will come on:
  - If speaker terminal is shorted
  - If speaker cable is shorted

  If there is no problem when you turn the unit on again after turning it off, PROTECTION mark will disappear on the display and the unit will work properly.

- If PROTECTION appears on the display, check whether the speaker terminal is shorted and then turn on the unit.
## SPECIFICATIONS

### GENERAL

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>120V, 60 Hz</td>
</tr>
<tr>
<td>Standby power consumption</td>
<td>0.9W</td>
</tr>
<tr>
<td>Power consumption</td>
<td>Main unit</td>
</tr>
<tr>
<td></td>
<td>75W</td>
</tr>
<tr>
<td>Weight</td>
<td>12.3 lbs</td>
</tr>
<tr>
<td>Dimensions (W x H x D)</td>
<td>17.2 x 5.6 x 14.3 inches</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>41°F~+95°F</td>
</tr>
<tr>
<td>Operating humidity range</td>
<td>10%~75%</td>
</tr>
</tbody>
</table>

### FM TUNER

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency response</td>
<td>87.5~108.0MHz</td>
</tr>
<tr>
<td>Usable sensitivity</td>
<td>12dBf</td>
</tr>
<tr>
<td>S/N ratio</td>
<td>MONO/STEREO 55/55dB</td>
</tr>
<tr>
<td>Distortion</td>
<td>MONO/STEREO 0.3/0.8%</td>
</tr>
<tr>
<td>Stereo separation</td>
<td>30dB</td>
</tr>
<tr>
<td>Tuner output level</td>
<td>1kHz, 75kHz Dev</td>
</tr>
</tbody>
</table>

### AMPLIFIER

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<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Rated output</td>
<td>20Hz~20kHz/THD = 0.9%</td>
</tr>
<tr>
<td>Front speaker</td>
<td>6 Ω 100W/CH</td>
</tr>
<tr>
<td>Center speaker</td>
<td>6 Ω 100W/CH</td>
</tr>
<tr>
<td>Surround speaker</td>
<td>6 Ω 100W/CH</td>
</tr>
<tr>
<td>Subwoofer speaker</td>
<td>6 Ω 100W/CH</td>
</tr>
<tr>
<td>Input sensitivity/impedance</td>
<td>450mV/47kΩ</td>
</tr>
<tr>
<td>S/N ratio (analog input)</td>
<td>80dB</td>
</tr>
<tr>
<td>Separation (1kHz)</td>
<td>60dB</td>
</tr>
</tbody>
</table>

### FREQUENCY RESPONSE

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Analog input</td>
<td>20Hz~20kHz (±3dB)</td>
</tr>
<tr>
<td>Digital input/96kHz PCM</td>
<td>20Hz~44kHz (±3dB)</td>
</tr>
</tbody>
</table>

### HDMI

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Input</td>
<td>Compatible 1080p</td>
</tr>
<tr>
<td>Output</td>
<td>Compatible 1080p</td>
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</tbody>
</table>

### VIDEO OUTPUT

<table>
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<tr>
<th>Feature</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>TV format</td>
<td>NTSC/PAL</td>
</tr>
<tr>
<td>Input level/impedance</td>
<td>1Vp-p/75Ω</td>
</tr>
<tr>
<td>Output level/impedance</td>
<td>1Vp-p/75Ω</td>
</tr>
<tr>
<td>Video frequency response</td>
<td>5Hz to 10kHz (±3dB)</td>
</tr>
<tr>
<td>S/N ratio</td>
<td>60dB</td>
</tr>
</tbody>
</table>

* S/N Ratio, Distortion, Separation and Usable sensitivity are based on measurement using AES (Audio Engineering Society) guidelines.
- Samsung Electronics Co., Ltd reserves the right to change the specifications without notice.
- Weight and dimensions are approximate.
- Design and specifications are subject to change without prior notice.
SAMSUNG AV receiver

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(*90 days Parts and Labor for Commercial Use)

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To obtain warranty hardware service, please contact SAMSUNG at:

Samsung Electronics America, Inc.
105 Challenger Road Ridgefield Park, NJ07660-0511
1-800-SAMSUNG(726-7864) and www.samsung.com
Contact SAMSUNG WORLD WIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

<table>
<thead>
<tr>
<th>Area</th>
<th>Contact Center</th>
<th>Web Site</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>North America</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>1-800-SAMSUNG (726-7864)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Mexico</td>
<td>01-800-SAMSUNG (726-7864)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td><strong>Latin America</strong></td>
<td></td>
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<tr>
<td>Argentine</td>
<td>0800-333-3733</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Brazil</td>
<td>0800-124-421</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td></td>
<td>4004-0000</td>
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<tr>
<td>Chile</td>
<td>800-SAMSUNG (726-7864)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
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<tr>
<td><strong>Europe</strong></td>
<td></td>
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</tr>
<tr>
<td>Austria</td>
<td>0810 - SAMSUNG (7267864, € 0.07/min)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Belgium</td>
<td>02-201-24-18</td>
<td></td>
</tr>
<tr>
<td>Czech</td>
<td>800 - SAMSUNG (800-726786)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Denmark</td>
<td>70 70 19 70</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Finland</td>
<td>030 - 6227 515</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>France</td>
<td>01 48 63 00 00</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Germany</td>
<td>01805 - SAMSUNG (726-7864 € 0.14/Mnt)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Hungary</td>
<td>06-80-SAMSUNG (726-7864)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>Italy</td>
<td>800-SAMSUNG (726-7864)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Luxembourg</td>
<td>261 03 710</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Netherlands</td>
<td>0900-SAMSUNG (0900-7267864 € 0.10/Mnt)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Norway</td>
<td>815-56 480</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Poland</td>
<td>0 801 15SAMSUNG (172678) 022-607-93-33</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>Portugal</td>
<td>80820-SAMSUNG (726-7864)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>Slovakia</td>
<td>0800-SAMSUNG (726-7864)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>Spain</td>
<td>902 - 1 - SAMSUNG (902 172 678)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>Sweden</td>
<td>0771 726 7864 (SAMSUNG)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>U.K</td>
<td>0845 SAMSUNG (7267864)</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Eire</td>
<td>0818 717100</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td><strong>CIS</strong></td>
<td></td>
<td></td>
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<tr>
<td>Russia</td>
<td>8-800-555-55-55</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>Georgia</td>
<td>8-800-555-555</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>Armenia</td>
<td>0-800-05-555</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>Azerbaijan</td>
<td>088-55-5555</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>Kazakhstan</td>
<td>8-10-800-500-55-500</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<td>8-10-800-500-55-500</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<td>Kyrgyzstan</td>
<td>00-800-500-55-500</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>Tajikistan</td>
<td>8-10-800-500-55-500</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>Ukraine</td>
<td>0-800-502-000</td>
<td><a href="http://www.samsung.ua/ua_ru">www.samsung.ua/ua_ru</a></td>
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<tr>
<td>Belarus</td>
<td>810-800-500-55-500</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Moldova</td>
<td>00-800-500-55-500</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td><strong>Asia Pacific</strong></td>
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<tr>
<td>Australia</td>
<td>1300 362 603</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>New Zealand</td>
<td>0800 SAMSUNG @800-726-786</td>
<td><a href="http://www.samsung.com">www.samsung.com</a></td>
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<tr>
<td>China</td>
<td>400-810-5858</td>
<td>010-6475 1880 <a href="http://www.samsung.com">www.samsung.com</a></td>
</tr>
<tr>
<td>Hong Kong</td>
<td>(852) 3698-4698</td>
<td><a href="http://www.samsung.com/hk">www.samsung.com/hk</a></td>
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