

SAMSUNG

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ELECTRONICS



DVD Digital AMP System

SPS-210

CE

Safety Precautions

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE REAR COVER. NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.

IMPORTANT NOTE

The mains lead on this equipment is supplied with a moulded plug incorporating a fuse. The value of the fuse is indicated on the pin face of the plug. If it requires replacing, a fuse approved to BS1362 of the same rating must be used.

Never use the plug with the fuse cover omitted if the cover is detachable. If a replacement fuse cover is required, it must be of the same colour as the pin face of the plug. Replacement covers are available from your dealer.

If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should obtain a suitable safety approved extension lead or consult your dealer for assistance.

However, if there is no alternative to cutting off the plug, remove the fuse and then safely dispose of the plug. Do not connect the plug to a mains socket, as there is a risk of shock hazard from the bared flexible cord.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code: -

BLUE = NEUTRAL BROWN = LIVE

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: -

The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK. The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

WARNING : DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E OR BY THE EARTH SYMBOL , OR COLOURED GREEN OR GREEN AND YELLOW.

DANGER

This symbol is intended to alert you to the presence of dangerous voltage within the product.

CAUTION

This symbol is intended to alert you to the presence of important instructions accompanying the product.

The lightning flash with an arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the unit's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

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

Warning
To prevent fire or shock hazard, do not expose units not specifically designed for outdoor use to rain or moisture.

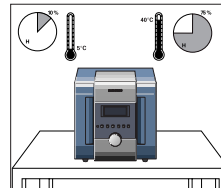
Attention : Installation should be performed by qualified service personnel only in accordance with the National Electrical Code or applicable local codes.

Power Disconnect. Units with or without ON-OFF switches have power supplied to the unit whenever the power cord is inserted into the power source; however, the unit is operational only when the ON-OFF switch is in the On position. The power cord is the main power disconnect for all units.

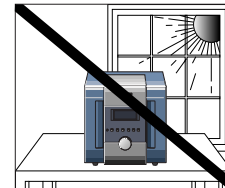
Safety Instructions

The following illustrations represent precautions.

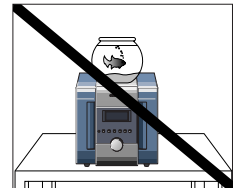
The lightning bolt is a warning sign alerting you to dangerous voltage inside the product. DO NOT OPEN THE DVD-VCR. Refer to service personnel.



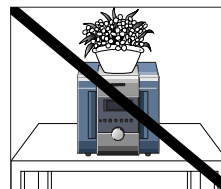
Do NOT expose the DVD-VCR to extreme temperature conditions (below 5°C and above 40°C) or to extreme humidity conditions (less than 10% and more than 75%).



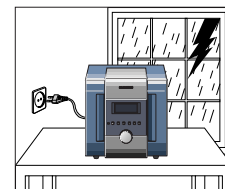
Do NOT expose the DVD-VCR to direct sunlight.



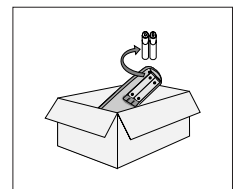
Do NOT expose the DVD-VCR to any liquids.



Do NOT place any objects on the DVD-VCR or remote control



During a storm and/or lightning, unplug the DVD-VCR from the mains socket and aerial.



If the remote control is not used for a long period of time, remove the batteries and store it in a cool, dry place.

THIS DEVICE IS NOT FOR USE IN INDUSTRIAL ENVIRONMENTS

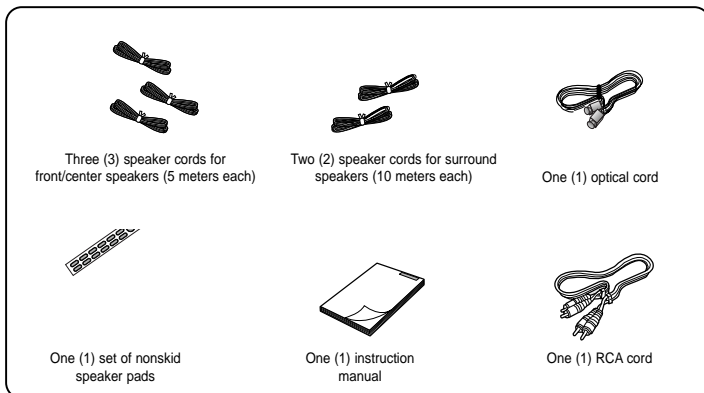
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Accessories

After unpacking, check that the following items are contained.



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Cautions on Installation

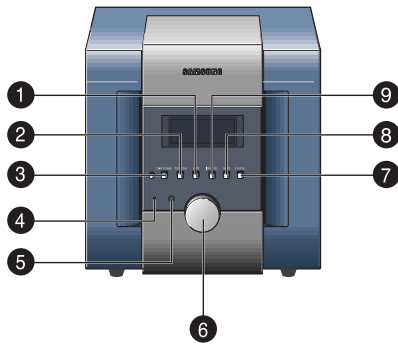
- Do not disassemble the unit. Touching the inside of the unit will expose you to a risk of electric shock.
- Be sure to disconnect the power plug from the AC outlet when installing the unit or before disassembling the unit.
- When pulling out the power cord from the wall outlet, do not hold the cord because the cord may be damaged to cause short-circuiting or cut.
- Do not touch the unit with wet hands to avoid a risk of electric shock.
- Be careful to avoid dropping foreign objects such as pins, hair or coins into the unit to avoid a risk of electric shock or fire.
- When cleaning the unit, do not use gasoline or thinner. Use clean dry clothes.
- Do not cover the air vents with a newspaper, a tablecloth, a curtain, etc. in order not to obstruct heat radiation.
- Do not place the exposed fire source such as a burning candle on the unit.
- Failure to pay due attention to installation of the speakers may cause the clothes of the net frame to be torn or broken.
- This unit is manufactured under license from Dolby Laboratories Licensing Corporation. Dolby and  symbol are trademarks of Dolby Laboratories Licensing Corporation.
- "DTS" and "DTS Digital Surround" are the registered trademarks of Digital Theater Systems, Inc.

Features

- Dolby Digital function
- DTS function
- Dolby Pro Logic function
- MPEG Multichannel function
- Various sound field modes of Theater, Hall and Stadium
- Digital signal input function (Optical/Coaxial)
- Analog signal input function (AUX 1/AUX 2)
- Built-in subwoofer
- High quality audio
- Dimmer function

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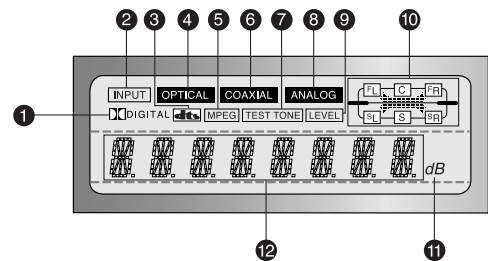
Part Names



Front Panel Controls

- 1 MUTE button**
Press this button to turn off the sound instantly.
- 2 TEST TONE button** (see page 13)
Use this button to check the connection status of each speaker.
- 3 ST-BY ON button**
Press this button to light the display lamp and to start the unit.
- 4 STANDBY display lamp**
It displays the standby status when lit. Press the POWER button to turn the lamp off.
- 5 Remote Sensor**
It receives the remote control signals for operation with the remote control unit.
- 6 Master Volume dial**
It is used to adjust the volumes of all six channels at the same time and to adjust the volume of each channel individually.
- 7 CH. LEVEL button** (see page 13)
Use this button to adjust the volume of each channel separately.
- 8 MODE button** (see page 15)
Use this button to select the sound mode.
- 9 INPUT SEL. Button** (see page 14)
Press this button to select the desired one among the external components connected to the main unit.

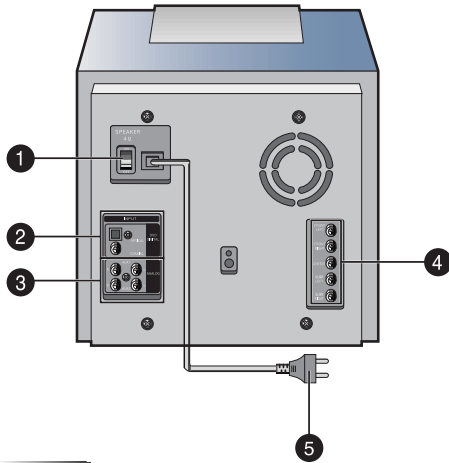
Part Names



Display panel

- 1 Dolby Digital display**
It is displayed when the DVD recorded in Dolby Digital is played.
- 2 INPUT display**
It shows the input selection of the external components connected to the main unit.
- 3 DTS display**
It is displayed when the DVD recorded in DTS is played.
- 4 OPTICAL display**
It shows that OPTICAL is selected for the digital input signal.
- 5 MPEG display**
It is displayed when the DVD recorded in MPEG Multichannel is played.
- 6 COAXIAL display**
It shows that COAXIAL is selected for the digital input signal.
- 7 TEST TONE display**
It is displayed when the speaker volumes of six channels are adjusted.
- 8 ANALOG display**
It shows that ANALOG is selected for the digital input signal.
- 9 LEVEL display**
It is displayed when the speaker volume of each channel is adjusted.
- 10 Speaker display**
It indicates the speakers in operation.
- 11 dB display**
It is displayed with numerals when the volume of each channel or the entire volume is adjusted.
- 12 Operation display**
It displays the functions in the current operational mode.

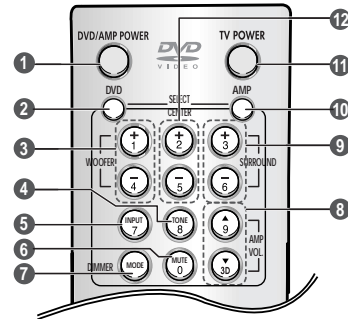
Part Names



Rear

- 1 Power switch**
It turns the main power source on and off.
- 2 Digital signal input jacks (OPTICAL/COAXIAL)**
For connection with an external component having the optical or coaxial output jack.
- 3 Analog signal input jacks (AUX1/AUX2)**
For connection with up to two external components having the analog output jack.
- 4 Speaker output jacks**
For connection with front L/R speakers, center speaker, and surround L/R speakers.
- 5 Power cord**

Remote Control Names



- 1 DVD/AMP POWER button**
Press the button to turn on the power to the unit.
- 2 DVD button**
Use this button to select the DVD function.
- 3 Subwoofer volume control buttons**
Use these buttons to adjust the volume of the subwoofer.
- 4 TONE button (TEST TONE)**
Use this button to check the connection status of each speaker.
- 5 INPUT button**
Press this button to select the desired one among the external components connected to the unit.
- 6 MUTE button**
Press this button to turn off the audio temporarily during playback of music or movie.
- 7 MODE/DIMMER button**
MODE : For selection of sound field modes
DIMMER : For adjustment of brightness of the displays
- 8 AMP volume control buttons**
Use these buttons to adjust the volume of all speakers at the same time.
- 9 Surround speakers volume control buttons**
Use these buttons to adjust the volume of both surround speakers at the same time.
- 10 AMP button**
Press this button for selection of AMP functions.
- 11 TV POWER button**
Press this button to turn on the TV.
- 12 Center speaker volume control buttons**
Use these buttons to adjust the volume of the center speaker.

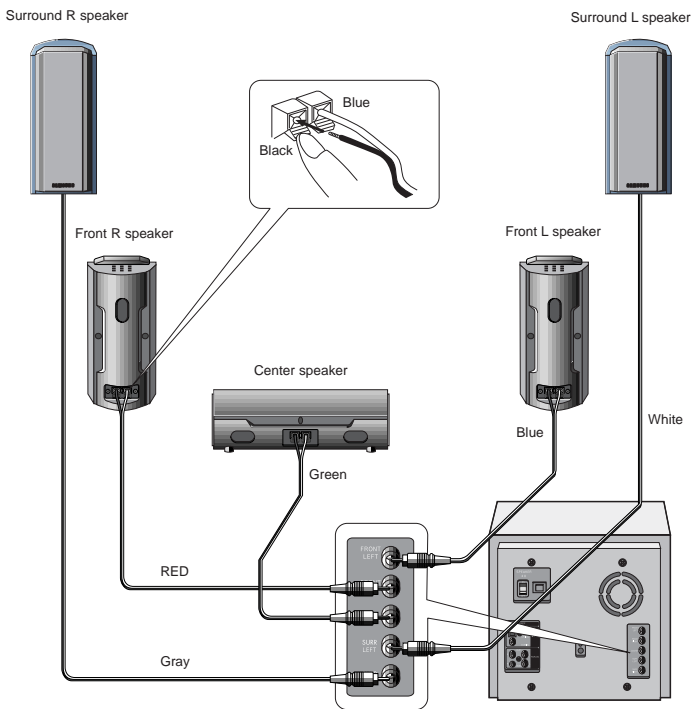
Reception Angle of Remote Control Unit

The remote control works within the range of 30 degrees to both sides and within the distance of 7-10 meters from the remote sensor of the unit.

System Connections

Connecting the Speakers

To protect the speakers, make connections while the power to the unit is turned off.

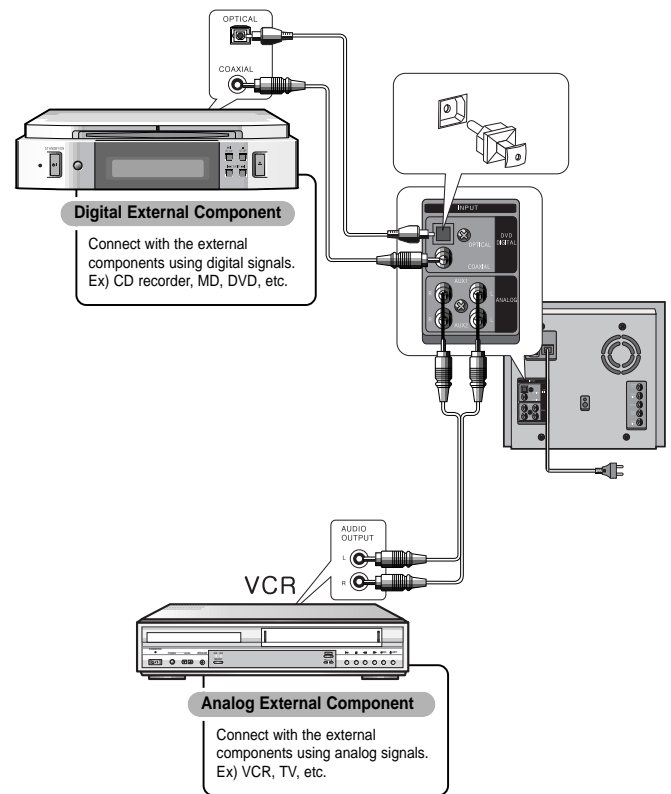


Note

- Connect the speaker cord plugs to the speaker jacks of the same color.

Connection to External Components

Be sure to turn off the power before connecting the external component to the unit.



Basic Operations

POWER



1. Press the POWER button to turn on the power.
 - When the power cord is plugged to the AC outlet, the ST-BY display is lit.
 - When the power is turned on, the ST-BY display is turned off.

Note

The ST-BY display can be on when the "POWER" switch on the rear panel of the unit is set to ON.

INPUT SEL.



2. Use the INPUT SEL. Button to select the component.
 - OPTICAL → COAXIAL → AUX 1 → AUX 2

3. Operate the selected component.
 - Refer to the instruction manual of each component for detailed information of operation.

4. Adjust the volume.
 - The volume may be adjusted between 1 (MIN) and 50 (MAX).

DIMMER function

When watching a movie in the dark, this function is useful to prevent distraction due to the display of the main unit. The brightness of the display can be selected among Bright Dim Off.

1. Automatic DIMMER function: After the ST-BY power is turned on, the display is dimmed automatically in 15 seconds.
2. Manual DIMMER function: Press and hold down the "MODE" button on the main unit or the remote control unit for 1.5 seconds repeatedly to select among the choices of brightness of the display.

Note

- Press the MUTE button to turn off the sound instantly.
 - The ST-BY display on the main unit blinks.
 - It is convenient when you have a guest or answer the phone.
 - To turn on the sound back, press the MUTE button again.

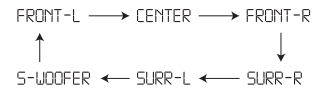
Speaker Setup

For convenience of checking the connection of each speaker and volume adjustment, this unit contains the TEST TONE function and the CH. LEVEL function.

How to adjust the volume with TEST TONE

It is used at the initial setting after the system installation for adjustment of the volume of each speaker so that the volume from each speaker can be heard at the same level from the listening position depending on the layout of the room.

1. Press the TEST TONE button.
 - The display for selection switches in the following order at the interval of two seconds.



2. Select the desired channel and use the MASTER VOLUME to adjust the volume between -10dB and +10dB.
3. The channel switches to the next channel in three seconds after adjusting the volume of the selected channel.
4. After adjusting the volume of all channels, press the TEST TONE button again.

How to adjust the volume with CH. LEVEL

It is usually used during playback. Adjust the volume to the listener's taste depending on the situation at the time of watching the movie or enjoying the music.

1. Press the CH. LEVEL button.
 - The display for selection switches in the following order each time the button is pressed.

FL → C → FR → SR → SL → SW

* If the mode is set to "STEREO": FL → FR → SW

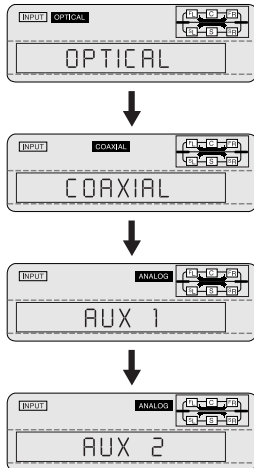
2. Select the desired channel and use the MASTER VOLUME to adjust the volume.
3. After adjusting the volume of all channels, it is switched to the sound field mode in three seconds.

Component Selection

INPUT SEL.



- Press the INPUT SEL. button.
 - The display shows the components for selection in the following order each time the button is pressed.



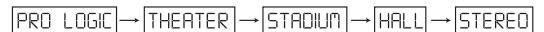
Mode Selection

MODE



Press the MODE button.

- The mode switches in the following order each time the button is pressed.



DOLBY PRO LOGIC

Dolby Pro Logic is the stereo sound effect technology developed by Dolby Laboratories. With the sound direction emphasis circuit, it provides the experience of sound movement between front and rear and between left and right as in the theater system. The sound direction emphasis circuit separates the signals of four channels (front L/R, center, rear) to enhance to three-dimensional sound depth.

THEATER

It is the surround function of providing the effect of being immersed in the 3D sound field and the feeling of expansion as in the theater by reproducing the reflected sound and the reverberation in harmony.

STADIUM

It is the surround function of reproducing the unique tone that can be experienced only in the stadium, such as the reverberation and the sound delay between the stadium and the listener's ear. Select this mode to feel the effect that the listener is in the stadium when watching the sports broadcasting or outdoor concert programs.

HALL

It is the surround function of reproducing the sound effect in the concert hall by realizing the spatial resonance and the reflected sound from different directions of the ceiling and the walls in the concert hall. Select this mode for enjoying the concert, opera or orchestra to feel the effect that the listener is in the concert hall.

Speaker Configuration According to the Surround Type

Type	Front L/R	Center	Surround L/R	Sub woofer
DTS	●	●	●	●
Dolby Digital	●	●	●	●
MPEG	●	●	●	●
Dolby Pro Logic	●	●	●	●
Stereo	●			●
Theater	●	●	●	●
Hall	●	●	●	●


Surround Effect by Audio Programs

Program	DTS	Dolby Digital	MPEG	Dolby Pro Logic	Stereo	Theater	Hall
Program marked with DTS	●				●		
Program marked with Dolby Digital		●			●		
Program marked with MPEG			●				
Program marked with Dolby Pro Logic				●			
Music							●
Concert							●
Sports							●
Old Movie						●	
Program with monaural sound						●	
Educational and news program					●		

Notes on Dolby Digital, DTS and MPEG


DOLBY DIGITAL 5.1CH

Dolby Digital is the three-dimensional sound effect technology through digital signal processing of the next generation, developed by Dolby Laboratories, and provides the sound completely split by six channels. Six channels in Dolby Digital are called as 5.1-channel, of which 5 means the front L/R, center and rear L/R channels. These five channels provide all audible frequency range of 20 – 20,000 Hz. Meanwhile, 0.1 channel means the subwoofer, providing the bass range below 120 Hz.

 Digital symbol is marked on the DVD.


DTS 5.1CH

DTS is the technology developed by Digital Theater Systems, Inc. Like Dolby Digital, it also provides the six-channel mode consisting of front L/R, center, rear L/R and subwoofer and the same frequency range. The difference between DTS and Dolby Digital lies in the data compression. Dolby Digital has a higher compression ratio than DTS, thus occupying less space in the storage media. On the other hand, DTS occupies larger space with a lower compression ratio but has gained a reputation that more emphasis is placed on the sound quality.

 symbol is marked on the DVD.

MPEG 5.1CH

MPEG is a method of compression techniques for reproducing high quality of video and audio signals for digital TV or DVD. Like Dolby Digital and DTS, it provides the six-channel mode consisting of front L/R, center, rear L/R and subwoofer and the same frequency range.

MPEG  (Multichannel symbol is marked on the DVD).

DOLBY DIGITAL 2CH/DTS 2CH/MPEG 2CH

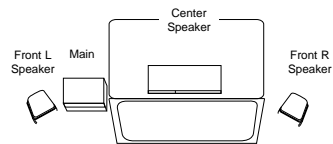
It is the function of integrating six channels into two channels for output so that the digital strips encoded in six channels can be made compatible with the conventional 2-channel stereo system. As this unit basically supports six channels, it may not be necessary to convert the input signals for 2-channel system, but if the DVD to be played is encoded in 2 channels, it is played in 2CH mode.

Installation of Speaker System

To achieve the optimum quality of the sound effect provided by this unit, it is very important to position the speakers properly. Refer to the following description for a better sound experience.

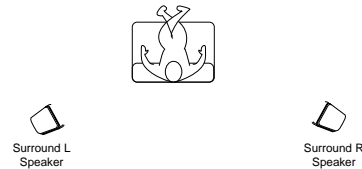
Standard Speaker Positions

- **Front L/R Speakers:** Install the speakers on the left and right side in front of the listener at the height of the listener's ears and arrange the speakers to aim at the listening position.
- **Center Speaker:** Install the speaker at the front center at the height of the listener's ears.
- **Surround L/R Speakers:** Install the speakers on the left and right side in the rear of the listener at the height of the listener's ears and arrange the speakers to aim at the listening position.
- If the speakers cannot be positioned at the height of the listener's ears because of the structure of the room, install the speaker above the listener's ears. Make sure that the speakers are placed to aim at the listening position.
- **Subwoofer:** Install the speaker on the floor in front of the listener.
 - * Install the subwoofer on hard floor keeping a distance of at least 10cm to the wall.
 - * Since there is a speaker on the left of the main unit, make sure that the left side is clear of any obstruction.



NOTE

When installing the subwoofer, keep a distance of at least 10cm to the wall and at least 30cm to the TV.



Troubleshooting

Problem	Check Point	Remedies
No power	<ol style="list-style-type: none"> 1. The power cord is not plugged in the AC outlet. 2. The "POWER" switch on the rear panel of the main unit is not set to ON. 	<ol style="list-style-type: none"> 1. Plug the power cord tightly. 2. Set the "POWER" switch to ON.
No sound from the speaker	<ol style="list-style-type: none"> 1. The speaker cords are not connected to the speaker terminals of the main unit or to the speaker itself. 2. DVD, LDP, TV, etc. is not connected to the INPUT terminal. 3. Optical cord is stained with dirty objects. 4. MASTER VOLUME is set to the minimum. 5. Muting is activated. 	<ol style="list-style-type: none"> 1. Check the connection of the speaker cords. 2. Connect to the INPUT terminal. 3. Wipe the cord with a soft cloth. 4. Adjust the MASTER VOLUME. 5. Press the MUTE button again.
Sound distortion	<ol style="list-style-type: none"> 1. MASTER VOLUME is set too high. 2. The volume of the subwoofer is set too high. 	<ol style="list-style-type: none"> 1. Lower the MASTER VOLUME. 2. Lower the volume of the subwoofer.
Remote control not working	<ol style="list-style-type: none"> 1. The distance to the main unit is too far. 2. The batteries ran out. 3. The remote sensor is exposed to direct sunlight. 	<ol style="list-style-type: none"> 1. Use the remote control unit at a closer distance. 2. Replace the batteries. 3. Block the direct sunlight.
5.1CH not displayed, and only 2CH or STEREO is played	<ol style="list-style-type: none"> 1. The DVD player is not set to 5.1CH. (Refer to the instruction manual of the DVD player.) 2. The DVD is encoded for 2-channel system. 	

Specifications 100 Hz

■ Main Amplifier	RMS	MAX.
• Output (at all channels driven)	Total 175 Watts	Total 350 Watts
Front L/R	25+25W	50+50W
Center	25W	50W
Surround L/R	25+25W	50+50W
Subwoofer	50W	100W
• Analog input sensitivity/impedance	900mV / 47K Ohm	
• Power	230V / 50Hz	
• Dimensions	W252XD423XH266(mm)	
■ Digital Specifications		
• Input sensitivity/resistance	32, 44.1, 48KHz	
• Digital input impedance	COAXIAL 0.5V / 75 Ohm	
■ Speakers		
* Front L/R and Surround L/R		
- Speaker.....	3 inch + PEI Dome Speaker	
- Impedance	4Ω	
- Frequency range	100Hz~20KHz	
- Dimensions	W100XD103XH100(mm)	
* Center Speaker		
- Speaker	Dual 3 inch	
- Impedance	4Ω	
- Frequency range	100Hz~20KHz	
- Dimensions	W247XD103XH100(mm)	
* Subwoofer		
- Speaker.....	8 inch Magnetic Shielded	
- Impedance	8Ω	
- Frequency range	50Hz~200Hz	



UNITED KINGDOM

This Samsung product is warranted for the period of twelve (12) months from the original date of purchase, against defective materials and workmanship. In the event that warranty service is required, you should return the product to the retailer from whom it was purchased. However, Samsung Authorised Dealers and Authorised Service Centres in other EC Countries will comply with the warranty on the terms issued to purchasers in the country concerned. In case of difficulty, details of our Authorised Service Centres are available from:

**Samsung Electronics (U.K.) Ltd.,
Euro Service Centre, Stafford Park 12,
TELFORD, Shropshire TF3 3BJ,
Tel: 0870) 2420303, Fax: 01952) 207117**

■ WARRANTY CONDITIONS

1. The warranty is only valid if, when warranty service is required, the warranty card is fully and properly completed and is presented with the original invoice or sales slip or confirmation, and the serial number on the product has not been defaced.
2. Samsung's obligations are limited to the repair or, at its discretion, replacement of the product or the defective part.
3. Warranty repairs must be carried out by Authorised Samsung Dealers or Authorised Service Centres. No re-imbusement will be made for repairs carried out by non Samsung Dealers and, any such repair work and damage to the products caused by such repair work will not be covered by this warranty.
4. This product is not considered to be defective in materials nor workmanship by reason that it requires adaptation in order to conform to national or local technical or safety standards in force in any Country other than the one for which the product was originally designed and manufactured. This warranty will not cover, and no re-imbusement will be made for such adaptation nor any damage which may result.



REPUBLIC OF IRELAND

5. This warranty covers none of the following:
 - a) Periodic check ups, maintenance and repair or replacement of parts due to normal wear and tear.
 - b) Cost relating to transport, removal or installation of the product.
 - c) Misuse, including the failure to use this product for its normal purposes or incorrect installation.
 - d) Damage caused by Lightning, Water, Fire, Acts of God, War, Public Disturbances, incorrect mains voltage, improper ventilation or any other cause beyond the control of Samsung.
6. This warranty is valid for any person who legally acquired possession of the product during the warranty period.
7. The consumers statutory rights in any applicable national legislation whether against the retailer arising from the purchase contract or otherwise are not affected by this warranty. Unless there is national legislation to the contrary, the rights under this warranty are the consumers sole rights and Samsung, its subsidiaries and distributors shall not be liable for indirect or consequential loss or any damage to records, compact discs, videos or audio taper or any other related equipment or material.

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