

Digital Surround AV Receiver System *HT-AS700*

Instruction Manual







CAUTION:

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

CLASS 1 LASER PRODUCT

This Compact Disc player is classified as a CLASS 1 LASER product.



This symbol indicates that dangerous voltage which can cause electric shock is present inside this unit.



This symbol alerts you to important operating and maintenance instructions accompanying the unit.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

Wiring the Main Power Supply Plug(UK Only)

IMPORTANT NOTICE

The main 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 and if it requires replacing, a fuse approved to BS1362 of the same rating must be used.

Never use the plug with the fuse cover removed. If the cover is detachable and a replacement is required, it must be of the same colour as the fuse fitted in 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 main socket as there is a risk of shock hazard from the bared flexible cord.

Never attempt to insert bare wires directly into a main socket. A plug and fuse must be used at all times.

IMPORTANT

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

BLUE = NEUTRAL BROWN = LIVE

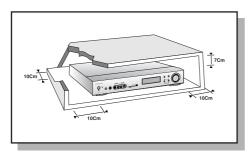
As these colours may not correspond to the coloured markings identifying the terminals in your plug, proceed as follows:—

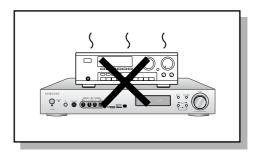
The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK. The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

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.

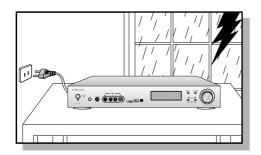


Precautions



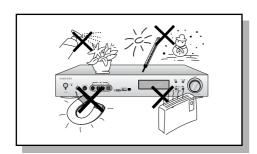


Ensure that the AC power supply in your house complies with the identification sticker located on the back of your player. Install your player horizontally, on a suitable base (furniture), with enough space around it for ventilation (3~4inches). Make sure the ventilation slots are not covered. Do not stack anything on top of the player. Do not place the player on amplifiers or other equipment which may become hot. Before moving the player, ensure the disc tray is empty. This player is designed for continuous use. Switching off the DVD player to the stand-by mode does not disconnect the electrical supply. In order to disconnect the player completely from the power supply, remove the main plug from the wall outlet, especially when left unused for a long period of time.



During thunderstorms, disconnect AC main plug from the wall outlet.

Voltage peaks due to lightning could damage the unit.

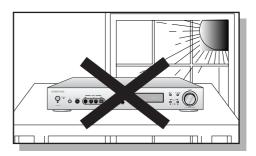


Protect the player from moisture(i.e. vases) , and excess heat(e.g.fireplace) or equipment creating strong magnetic or electric fields (i.e.speakers...). Disconnect the power cable from the AC supply if the player malfunctions. Your player is not intended for industrial use.

Use of this product is for personal use only.

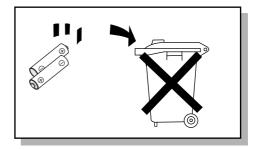
Condensation may occur if your player or disc have been stored in cold temperatures.

If transporting the player during the winter, wait approximately 2 hours until the unit has reached room temperature before using.



Do not expose the unit to direct sunlight or other heat sources.

This could lead to overheating and malfunction of the unit.



The battery used with this product contain chemicals that are harmful to the environment.

Do not dispose of batteries in the general household trash.



▶▶ What is AV receiver?

It refers to home theater exclusive amplifier by amplifying the audio signal from DVD and CD player as a core element of home theater.

▶▶ Let's find out difference between general amplifier and AV receiver!

General Amplifier	AV Receiver
2 channels (left speaker and right speaker)	Multiple Channel (5.1 channel by default)
Play back music mainly	Play back music and video sound realistically
No decoder	Has decoder
Not play back various kinds of sound formats	Play back various kinds of sound formats including Dolby Digital and DTS Many input/output connectors No noise using digital signal type

O Dolby Pro Logic II x

Dolby Pro Logic II x is a new type of multiple channel audio signal decoding method that improves upon existing Dolby Pro Logic.

O DTS 96/24

DTS is the surround format implementing 5.1 channel multi channel sounds of 96KHz/24bit without losing the image quality of DVD. In addition, it can reproduce the matrix 6.1 of DTS 96/24 decoder signal.

O DOLBY DIGITAL EX

It not only significantly enhances space expression capability of surround channel but also easily implements the sound localization at the rear according to sound field reproduction at 6.1 channel including rear center channel.

Manufactured under license from Dolby Laboratories.

"Dolby", "ProLogic" and double-D symbol are the trademark of Dolby Laboratories. Confidential unpublished works (c)1992-1997 Dolby Laboratories. All rights are Reserved.

DTS (Digital Theater Systems)

DTS play backs 5.1 channel sound of wide-range by playing sound of DVD and CD disk as surround sound system.

O DTS-ES

DTS-ES is the surround format implementing surround type of discrete 6.1 channel while preserving upper compatibility in response to existing DTS Digital Sound format.

It is the latest digital sound format maximizing the space quality and 360 surround experience by adding rear center channels.

O DTS NED:6

It reproduces the digital PCM or analog stereo sound source in 6.1 channels using the high precision digital matrix of DTS only.

This product is manufactured with technical cooperation with Digital Theater Systems, Inc., is the registered trademark of Digital Theater Systems.

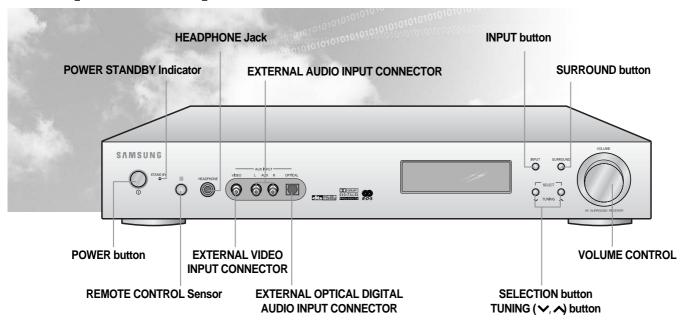
(c)1996 Digital Theater Systems, Inc. All rights Reserved.



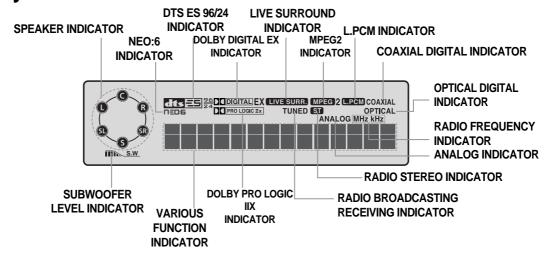
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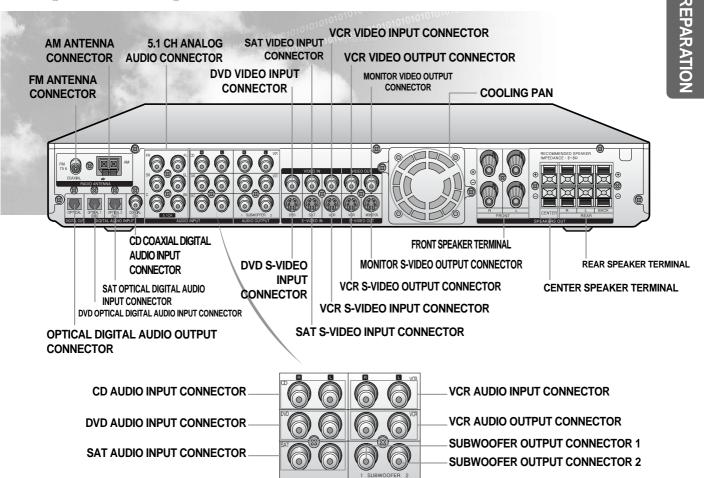
[Front Panel]



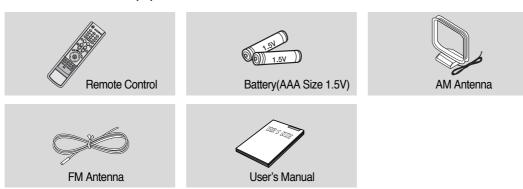
[Display]



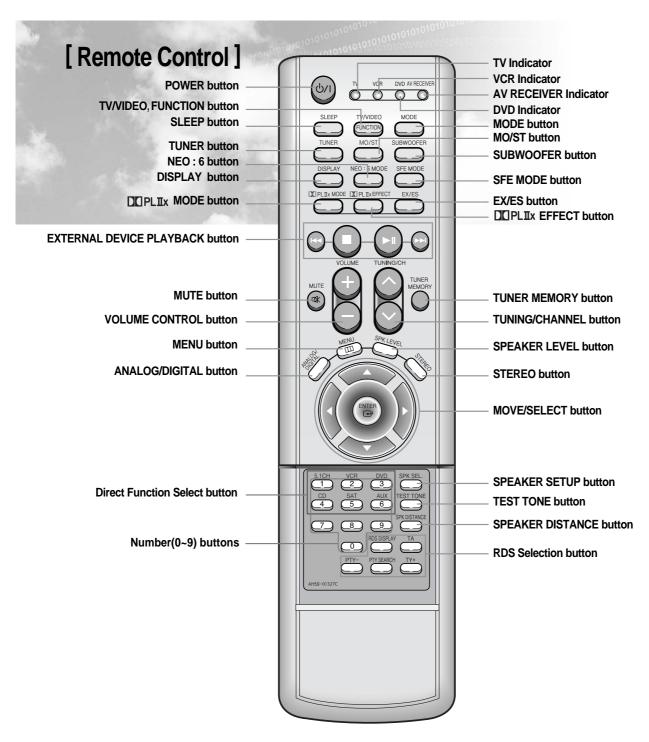
[Rear Panel]



Accessories ◀◀

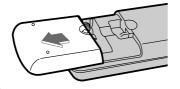




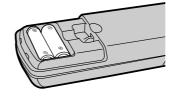


Insert Remote Batteries

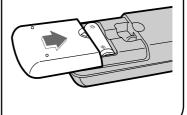
1 Remove the battery cover on the back of the remote by pressing down and sliding the cover in the direction of the arrow.



2 Insert two 1.5V AAA batteries, paying attention to the correct polarities (+ and –).



Replace the battery cover.



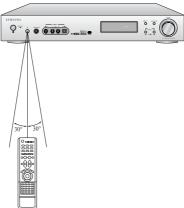
Caution !

Follow these precautions to avoid leaking or cracking batteries:

- Place batteries in the remote control so they match the polarity:(+) to (+)and (-)to (-).
- 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 batteries to heat or flame.

Range of Operation 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.



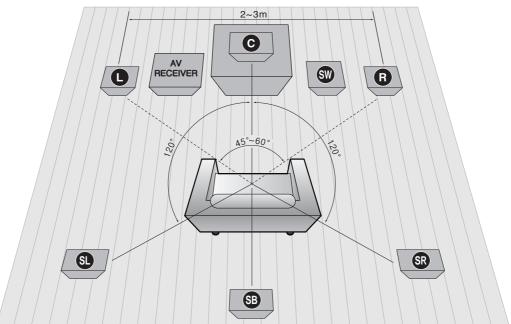
To open the remote control cover, push the top of the cover, then slide downward.





Connecting the Speakers

Before moving or installing the product, be sure to turn off the power and disconnect the power cord.



Position of AV Receiver

· Place AV Receiver on the dedicated stand or chest of living room or under the TV stand properly.

- · Adjust the angle of front left and right speakers so that it can form 30 degree to the left and right from the listening position.
- · Place the speakers so that their tweeters will be at the same height as your ear.
- · 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 C

- It is best to install center speaker at the same height as the front speakers.
- · You can also place center speaker directly over or under the TV.

Subwoofer sw

- The position of the subwoofer is not so critical. Place it anywhere you like.
- · Usually, it is placed by a corner near the front speakers.

Rear Speakers SL SR



- Place the rear left and right speaker at the interval of front left and right speaker.
- If there isn't enough now, place rear speakers to face down other.
- Place the rear speakers about 70 cm to 1 m above your ear, facing slightly downwards.
- # Unlike the front and center speakers, the rear speakers and used to mainly sound effects and sound will not come from them all the time.

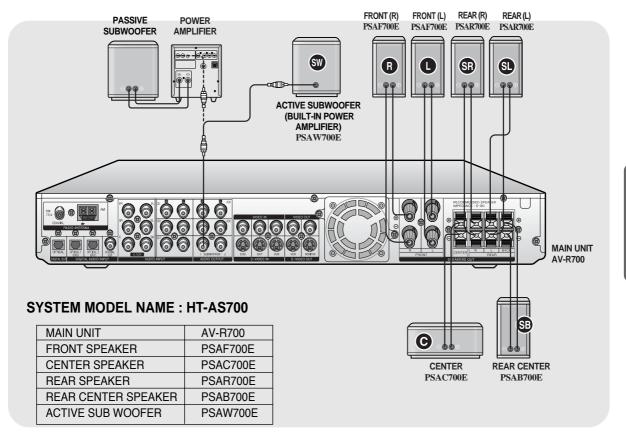
Rear Center Speaker



- If you place 1 rear center speaker, place it so that it faces forward from the back of listener.
- Place the rear center speaker about 70 cm to 1 m above rear speakers, facing slightly downwards.

Caution!

When you place the speaker on the wall, make sure to fasten it tightly so that it may not fall off.



▶ Connecting Front Speaker Wire

1 Turn and loosen the speaker connector.

Insert the black wire into the black(-) terminal and the red wire into the red(+) terminal.



3 Turn and fasten the speaker connector.



► Connecting Center/Rear Speaker Wire

1 Press the tab of the speaker connector.



Insert the black wire into the black(-) terminal and the red wire into the red(+) terminal.



Caution!

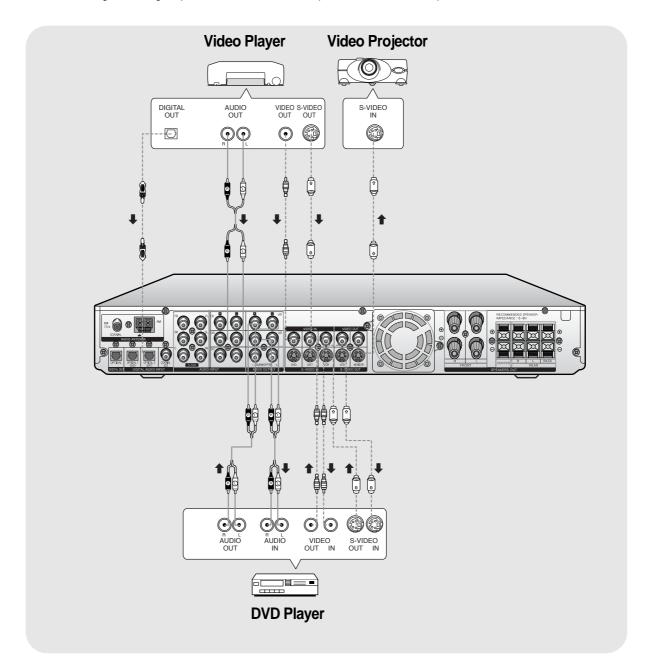
- Never touch speaker terminals while the power is on. Doing so could result in electric shock.
- Make sure the polarities (+ and -) are correctly.



Connecting External Components

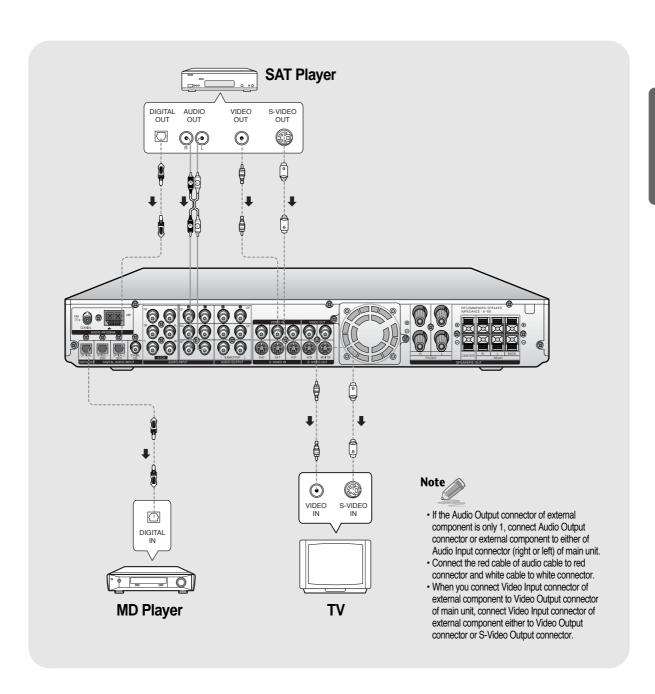
Connecting Video Component

Before moving or installing the product, be sure to turn off the power and disconnect the power cord.



Caution!

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

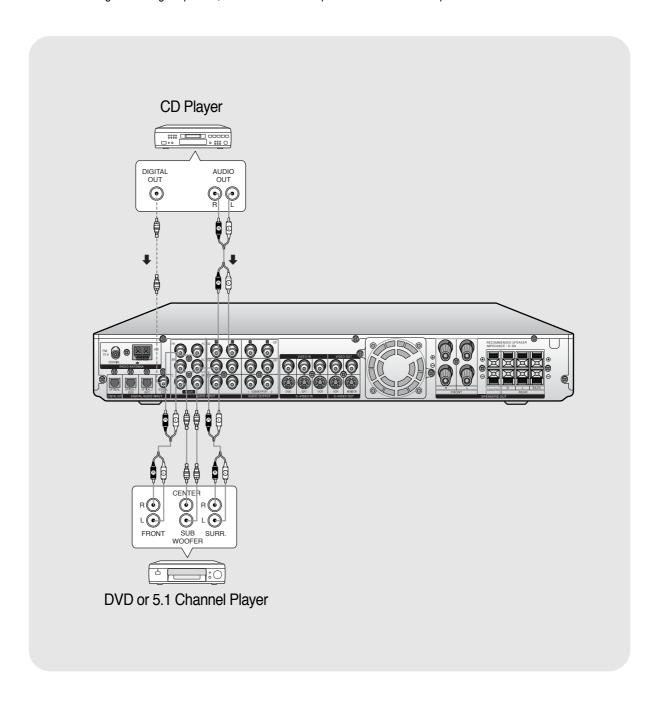




Connecting External Component

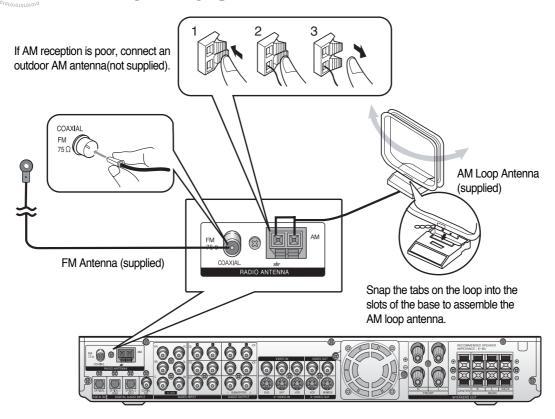
Connecting Audio Component/ 5.1 Channel

Before moving or installing the product, be sure to turn off the power and disconnect the power cord.





Connecting the FM and AM Antennas



FM antenna connection

- 1. Connect the FM antenna supplied to the FM $75\Omega COAXIAL$ terminal as a temporary mea-sure.
- 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.

AM antenna connection

- 1. Connect the AM loop antenna supplied to the AM mbr and terminals.
- If reception is poor, connect an outdoor single vinylcovered wire to the AM ter-minal. (Keep the AM loop antenna con-nected).

COOLING FAN

The cooling fan dissipates the heat generated inside the unit so that the unit can be operated normally. The cooling fan is activated automatically to supply cool air to the unit.



Please observe the following cautions for your safety.

- Make sure the unit is well-ventilated. If the unit has poor ventilation, the temperature inside the unit could rise and may damage it.
- Do not obstruct the cooling fan or ventilation holes. (If the cooling fan or ventilation holes are covered with a newspaper or cloth, heat may build up inside the unit and fire may result.)



Before Using AV Receiver

Turning On/Off

MAIN UNIT

- **1** Connect the power plug to the outlet.
- **7** Press the **POWER** (①) button of the main unit.
 - This unit will be turned on or off.

REMOTE CONTROL

Press the **POWER** (\circlearrowleft /۱) button of the remote control while main unit is turned on.

· This unit will be turned on or off.



- This unit will not turned on or off even if you press the **POWER** (む/) button of remote controller while main unit is turned off.
- When you turn off the power by pressing the **POWER** (७/۱) button of remote control, this unit will be standby mode. To completely turn off the power, press the **POWER** (①) button of the main unit. Standby indicator will be turned off.

Functions of Dedicated Remote Control

You can operate TV, VCR, DVD, AV Receiver with one remote control.

REMOTE CONTROL

Press **MODE** button.

- Each time you press this button, it will select and blink TV indicator → VCR indicator
 → DVD indicator → AV Receiver indicator in turn.
- You can operate TV after TV indicator blinking.
 You can operate VCR after VCR indicator blinking.

You can operate DVD after DVD indicator blinking.

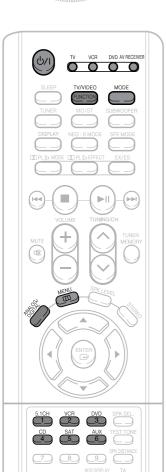
You can operate AV Receiver after AV Receiver indicator blinking.



- Basic operation of remote control is set up based on Samsung products.
 Refer to page 45~48 for more details on operation method.
- To set the menu function of external component Press the **MENU** button.
 - Menu setup screen of TV, VCR and DVD Player will appear.



Selecting External Component Input



To Select the Function

REMOTE CONTROL

Method 1 Press the **FUNCTION** button.

Press the **FUNCTION** button.

Each time you press the this button, 5.1CH MULTI CH → CD → DVD → SAT → VCR → AUX → FM → AM will be selected in turn.

Method 2 Press **DIRECT FUNCTION** Select button.

• You can directly select 5.1CH, VCR, DVD, CD, SAT, or AUX.

MAIN UNIT

Press **INPUT** button.

Each time you press the this button, 5.1CH MULTI CH → CD → DVD → SAT → VCR → AUX → FM → AM will be selected in turn.



- When you select the audio external component (external component without Video Output connector), the image of video external component (external component with Video Output connector) used last will appear in the TV screen.
- You can watch the image of video external component while listening to sound of audio external component.

To Select Analog/Digital Input

You can listen ti sound in Analog 2 Channels or Dolby Digital 5.1 Channel using this unit.

REMOTE CONTROL

Press the **ANALOG/DIGITAL** button.

· For DVD, SAT, AUX Function

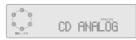
ANALOG and OPTICAL (1, 2, 3) will be selected repetitively.





For CD Function

ANALOG and COAXIAL will be selected repetitively.







 You can enjoy Dolby Digital effect only if you connect Audio Output connector of external audio component to optical/coaxial digital Audio Input connector of main unit.

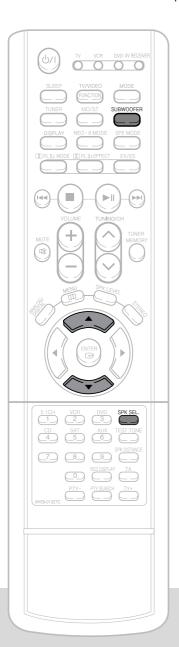
Caution!

- You can operate this function only with remote controller.
- This function will be selected in analogue only for VCR function, and will not work for 5.1CH MULTI CH function.



Setting the Speaker

Before moving or installing the product, be sure to turn off the power and disconnect the power cord. Signal outputs and frequency response from the speaker will automatically be adjusted according to your speaker configuration and whether certain speakers are used or not.





REMOTE CONTROL

- Press SPK SEL. button to select the speaker you want.

 Each time you press this button, F.SPK → C.SPK → S.SPK → SB SPK →
 - Each time you press this button, F.SPK → C.SPK → S.SPK → SB SPK →
 SW SPK → CROVR → SPK MODE OFF will be selected in turn.
- 2 Press ▲▼ button to set the speaker as you want.
- **3** Repeat the steps 1 and 2 to set the speaker.

To Exit Setup Mode

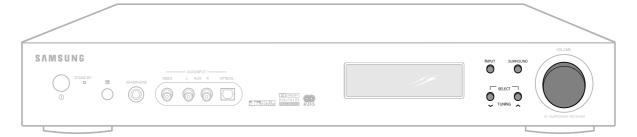
• Wait for about 5 seconds or press the **SPK SEL.** button of the remote control to select SPK MODE OFF.

To Use **SUBWOOFER** button of Remote Control Press **SUBWOOFER** button.

- Each time you press this button, SW SPK: YES, SW SPK: NO will be selected in turn.
- If you play in 2 Channel Stereo, select 'YES' to use Subwoofer and 'NO' not to use.

Caution!

- · If F.SPK is set to 'SMALL', SW SPK is fixed to 'YES'.
- If S.SPK is set to 'NONE', SB SPK is fixed to 'NONE'.
- You cannot use Speaker Setup Mode in 5.1CH MULTI CH function.



MAIN UNIT

- Press and hold **SURROUND** button for about 5 seconds.
 - "SETUP MODE" appears on the display and enters into Setup Mode.
- Press INPUT button one time.
 - "SPEAKER SETUP" appears in the display.
- 3 Press SURROUND button to select the speaker you want. Each time you press this button, F.SPK \rightarrow C.SPK \rightarrow S.SPK \rightarrow SB SPK →SW SPK → CROVR will be selected in turn.
- Press **SELECT** (\checkmark, \land) button to set the speaker as you want.
- Repeat the steps 3 and 4 to set the speaker.

To Exit Setup Mode

• Wait for about 5 seconds or turn the VOLUME CONTROL of the main unit. "SETUP MODE OFF" appears on the display and exits Setup Mode.

Setting the Speaker

- · F.SPK (Front): LARGE, SMALL
- · C.SPK (Center): LARGE, SMALL, NONE
- · S.SPK (Rear): LARGE, SMALL, NONE
- SB SPK (Rear Center) : LARGE, SMALL, NONE
- · SW SPK (Subwoofer): YES, NO
- CROVR (Crossover Frequency): 40, 60, 80, 100, 120, 150,200Hz
- LARGE: Select when you use large speaker. You can listen to full ranges of sound from bass to treble.
 SMALL: Select this when you use small speaker. Bass below 1008' will not be output from the whole speakers but only from authorize.
- *NONE: Select this when you use no speaker.

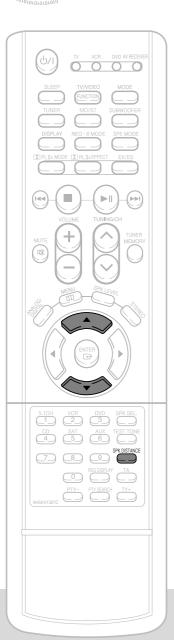
 *YES: Select this when you use Subwoofer Speaker if you play back in 2 Channel Stereo.
- pack in 2 Channel Stereo.

 NO: Select when you do not use Subwoofer Speaker if you play back in 2 Channel Stereo.

 CROVR: Select the crossover frequency depending on the size of speaker connected when you use subwoofer. Select 40Hz if cone paper speaker is 16cm, select 60Hz for 14cm, 80Hz for 12cm, 100Hz for 10cm, 12Hz for 8cm, 150Hz for 6cm and 200Hz for 4cm.



Setting the Speaker





REMOTE CONTROL

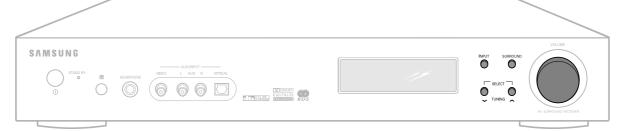
- 1 Press the **SPEAKER DISTANCE** button to select the speaker you want.
 - Each time you press this button, F.L \rightarrow CEN \rightarrow F.R \rightarrow S.R \rightarrow S.B \rightarrow S.L \rightarrow S.W \rightarrow DISTANCE OFF will be selected in turn.
- **2** Press ▲▼ button to set the speaker distance.
 - For F.L, CEN, F.R, S.W Speaker, you can set the distance from the speaker to listening position between 0.0~1.5m at the interval of 0.3m.
 - For S. R, S.B, S.L Speaker, you can set the distance from the speaker to listening position between 0.0~4.5m at the interval of 0.3m.
- 3 Repeat the steps 1 and 2 to set the speaker distance.

To Exit Setup Mode

• Wait for about 5 seconds or press the **SPEAKER DISTANCE** button of remote control to select DISTANCE OFF.



 If the listening position is beyond the range of speaker distance setup when you place the speaker, set the speaker distance to the maximum.



MAIN UNIT

- 1 Press and hold **SURROUND** button for about 5 seconds
 - ${\mbox{\ \ }}$ "SETUP MODE" appears on the display and enters into Setup Mode.
- **2** Press **INPUT** button 2 times.
 - "DISTANCE SETUP" appears on the display.
- 3 Press SURROUND button to select the speaker you want.
 - Each time you press this button, F.L \rightarrow CEN \rightarrow F.R \rightarrow S.R \rightarrow S.B \rightarrow S.L \rightarrow S.W will be selected in turn.
- **4** Press **SELECT**(**⋄**, **⋄**) button to set the speaker distance.
 - \bullet For F.L, CEN, F.R, S.W Speaker, you can set the distance from the speaker to listening position between 0.0~1.5m at the interval of 0.3m.
 - For S.R, S.B, S.L Speaker, you can set the distance from the speaker to listening position between 0.0~4.5m at the interval of 0.3m.
- **5** Repeat the steps 3 and 4 to set the speaker distance.

To Exit Setup Mode

 Wait for about 5 seconds or turn the VOLUME CONTROL of the main unit. "SETUP MODE OFF" appears on the display and exit Setup Mode.

Setting Speaker Distance

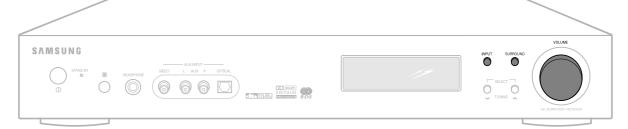
Set the distance from the speaker to listening position at the interval of 0.3m.

- F.L (Front-Left) : 0ft 0.0m ~ 5ft 1.5m
- CEN (Center) : Oft 0.0m ~ 5ft 1.5m
- F.R (Front-Right) : 0ft 0.0m ~ 5ft 1.5m
- S.R (Rear-Right) : Oft 0.0m ~ 15ft 4.5m
- S.B (Rear Center): 0ft 0.0m ~ 15ft 4.5m
- S.L (Rear-Left): Oft 0.0m ~ 15ft 4.5m



Setting DRC (Dynamic Range Compression)

You can use this function to enjoy Dolby Digital sound when watching movies at low volume at night.





MAIN UNIT

- **1** Press and hold **SURROUND** button for about 5 seconds.
 - "SETUP MODE" appears on the display and enters into Setup Mode.
- **2** Press **INPUT** button 3 times.
 - "DRC SETUP" appears on the display.
- 3 Press SURROUND button to set DRC. Each time you press this button, DRC: STD → DRC: MIN → DRC: MAX will be selected in turn.

To Exit Setup Mode

• Wait for about 5 seconds or turn the **VOLUME CONTROL** of the main unit. "SETUP MODE OFF" appears on the display and exits Setup Mode.

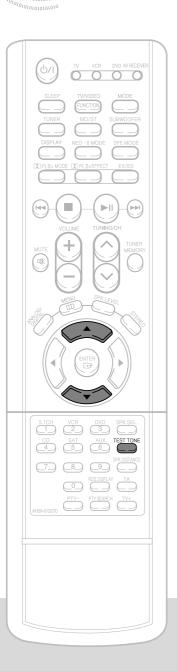
Setting DRC

- STD : Set DRC effect to standard.
- · MAX : Set DRC effect to maximum.
- · MIN: Set DRC effect to minimum.

Caution!

• This function operates only in main unit.





To Automatically Output Test Tone



REMOTE CONTROL

1 Press **TEST TONE** button.

- Test signal will be automatically output as follows; F.L \rightarrow CEN \rightarrow F.R \rightarrow S.R \rightarrow S.B \rightarrow S.L \rightarrow S.W.
- During test tone output, press ▲ \blacktriangledown button to adjust the speaker output level from -10 to +10 dB by 1 step.

To Stop Test Tone

• Press **TEST TONE** button again.

Caution!

· You cannot use test tone in 5.1CH MULTI CH function.





To Automatically Output Test Tone



MAIN UNIT

- 1 Press and hold **SURROUND** button for about 5 seconds.
 - "SETUP MODE" appears on the display and enters into Setup Mode.
- **2** Press **INPUT** button 4 times.
 - "TEST-T AUTO" appears in the display.
- **3** Press **SURROUND** button.
 - Test signal will be automatically output as follows; F.L \rightarrow CEN \rightarrow F.R \rightarrow S.B \rightarrow S.L \rightarrow S.W .
 - During test signal output, press **SELECT** (\checkmark , \spadesuit) button to adjust the speaker output level from -10 to +10 dB by 1 step.

To Stop Test Tone

Method 1) Press INPUT button 2 times.

• "TEST-T OFF" appears on the display and test tone stops.

Method 2) Turn VOLUME CONTROL.

• "SETUP MODE OFF" appears on the display and test tone stops.



To Manually Output Test Tone



MAIN UNIT

- **7** Press and hold **SURROUND** button for about 5 seconds.
 - "SETUP MODE" appears on the display and enters into Setup Mode.
- **2** Press **INPUT** button 5 times.
 - "TEST-T MANU" appears in the display.
- **3** Press **SURROUND** button.
 - Each time you press this button, F.L \rightarrow CEN \rightarrow F.R \rightarrow S.R \rightarrow S.B \rightarrow S.L \rightarrow S.W will be selected in turn.
- 4 Press SELECT(∨, ∧)button to set the test tone as you want.
 - You can adjust the speaker output level from -10 to +10dB by 1 step.

To Stop Test Tone

Method 1) Press INPUT button 1 time.

• "TEST-T OFF" appears on the display and test signal stops.

Method 2) Turn VOLUME CONTROL.

• "SETUP MODE OFF" appears on the display and test tone stops.

Test Tone Output

- F.L (Front-Left) : -10 ~ +10dB CEN (Center) : -10 ~ +10dB F.R (Front-Right) : -10 ~ +10dB S.R (Rear-Right) : -10 ~ +10dB S.B (Rear Center): -10 ~ +10dB S.L (Rear-Left): -10 ~ +10dB S.W (Subwoofer): -10 ~ +10dB

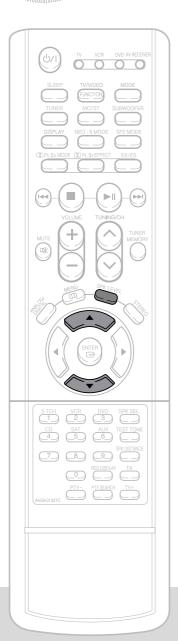
Caution!

· You cannot use test tone in 5.1CH MULTI CH function.



Setting Speaker Level

You can set the balance and level of speakers





Remote Control

- **1** Press **SPK LEVEL** button to select the speaker you want.
 - Each time you press this button, F.L \rightarrow CEN \rightarrow F.R \rightarrow S.R \rightarrow S.B \rightarrow S.L \rightarrow S.W \rightarrow SPK LEVEL OFF will be selected in turn.
- **2** Press ▲▼ button to set the speaker level you want.
 - You can adjust it from -10 to +10dB by 1 step.

 The sound gets smaller at -10dB and louder at +10dB.

 Default setting value is 00dB.
- 3 Repeat the steps 1 and 2 to set it.

To Exit Setup Mode

 Wait for about 5 seconds or press SPK LEVEL button of remote control to select SPK LEVEL OFF.



Remote Control

- $m{1}$ Press and hold $m{SURROUND}$ for about 5 seconds.
 - "SETUP MODE" appears on the display and enters into Setup Mode.
- **2** Press **INPUT** button 7 times.
 - "LEVEL SETUP" appears on the display.
- 3 Press **SURROUND** button.
 - Each time you press this button, F.L \rightarrow CEN \rightarrow F.R \rightarrow S.R \rightarrow S.B \rightarrow S.L \rightarrow S.W will be selected in turn.
- 4 Press SELECT(♥, ♠) button to set to the speaker level you
 - You can adjust it from -10 to +10dB by 1 step.
 - The sound gets smaller at -10dB and louder at +10dB.
 - Default setting value is 00dB
- $\mathbf{5}$ Repeat the steps 3 and 4 to set it.

To Exit Setup Mode

· Wait for about 5 seconds or turn VOLUME CONTROL of the main unit. "SETUP MODE OFF" appears on the display and exits Setup Menu.

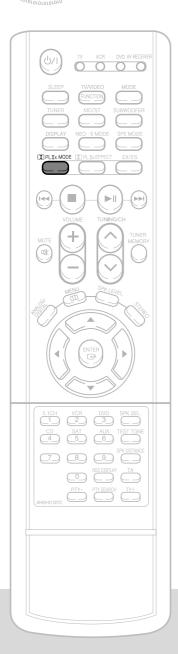
Setting Speaker Level

- F.L (Front-Left) : -10 ~ +10dB
- CEN (Center) : -10 ~ +10dB
- F.R (Front-Right) : -10 ~ +10dB S.R (Rear-Right) : -10 ~ +10dB
- S.B (Rear Center): -10 ~ +10dB
- S.L (Rear-Left): -10 ~ +10dB
- **S.W (Subwoofer)**: -10 ~ +10dB



Dolby Pro Logic IIx Mode

You can experience surround sound regardless of type of stereo mix by making existing Dolby Surround mix sound similar to discrete 5.1 Channel Surround.



REMOTE CONTROL

1 Press □□ PLIIx **MODE** button.

• Each time you press this button, MUSIC \rightarrow CINEMA \rightarrow MATRIX \rightarrow GAME \rightarrow PROLOGIC will be selected in turn.











To Exit Setup Mode

· Wait for about 5 seconds.



 Sound will be output from some speaker only if you connect the external component only to Audio Input connector (or R) of the main unit.



MAIN UNIT

1 Press **SURROUND** button briefly to select "DPL llx" Mode.

 Each time you press this button, DPL II x → NEO:6 → SFE → STEREO will be selected in turn.

2 Press **SELECT**(\checkmark , \land) button.

- Each time you press SELECT (♠) button, MUSIC → CINEMA → MATRIX →
 GAME → PROLOGIC will be selected in turn.

To Exit Setup Mode

· Wait for about 5 seconds.

Dolby Pro Logic II x Mode

- MUSIC: Provide 5.1 Channel Surround sound to digital, analog or existing stereo source such as CD, TAPE, FM, TV and Stereo VC.
- CINEMA: Provide 5.1 Channel Surround sound to sound track of stereo movie encoded as Dolby Surround.
- MATRIX: You can feel 5.1 Channel Surround sound enjoying the space of sound.
- GAME: When you play game, you can enjoy game with sound effect as if you are at actual site.
- PROLOGIC: Decode(3/1 Surround) the sound track of stereo music encoded as Dolby Surround to Dolby Pro Logic.

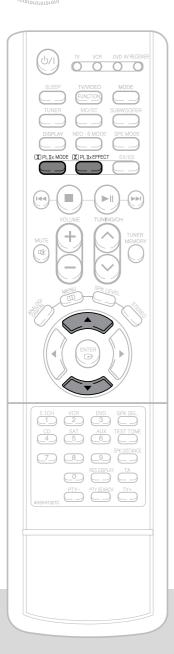
Caution!

- You cannot use Dolby Pro Logic II x Mode for multi channel signal encoded as Dolby Digital and DTS.
- You cannot use Dolby Pro Logic II x Mode in 5.1 multichannel function.
- Pro Logic works only for PCM audio signals with sampling frequency of 32KHz, 44KHz or 48KHz.
- Sound will not be output from rear center speaker if PCM audio signal is not stereo but mono.



Dolby Pro Logic IIx Effect

This function works only in Dolby PRO LOGIC IIX MUSIC Mode.



REMOTE CONTROL

- **1** Press DI PLIIX **MODE** button to select 'MUSIC' Mode.
- 2 Press DIPLIX EFFECT button.
 - Each time you press this button, C-WIDTH \rightarrow DIMENSION \rightarrow PANORAMA will be selected in turn.







- 3 Press ▲▼ button to select Dolby Pro Logic IIx effect you want.
 - C-WIDTH: You can set from 0 to 7.
 - DIMENSION: You can set from 0 to 7.
 - PANORAMA: You can Set it ON or OFF.
- ▲ Repeat the steps 2 and 3 to set the Dolby Pro Logic IIx effect.

To Exit Setup Mode

· Wait for about 5 seconds .



MAIN UNIT

- **7** Press and hold **SURROUND** button for about 5 seconds.
 - "SETUP MODE" appears on the display and enters into Setup Mode. Press
- **2 INPUT** button 8 times.

 "DPL II x MODE" appears on the display.
- **3** Press **SURROUND** button.

 Each time you press this button, DIMENSION → PANORAMA → C-WIDTH will be selected in turn.
- **4** Press **SELECT**(**⋄**, **⋄**) button to select Dolby Pro Logic IIx effect you want.
- **5** Repeat the steps 3 and 4 to set Dolby Pro Logic IIx effect.

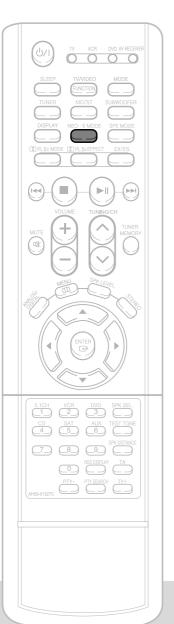
To Exit Setup Mode

• Wait for about 5 seconds or turn VOLUME CONTROL of the main unit. "SETUP MODE OFF" appears on the display and exits Setup Mode.

Dolby Pro Logic IIx Effect

- · C-WIDTH: Sound will be output from center speaker only. Front-left and front-right speaker give sound field effect only. In addition, sounds are output in different volumes from Front-Left, Front-Right Speaker and Center Speaker.
- DIMENSION: Adjust the sound balance if the sound is unbalanced to front or rear speaker.
- PANORAMA : Give the effect expanding and covering the sound from front-left and front-right Speaker to both walls.

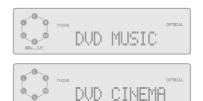




REMOTE CONTROL

1 Press **NEO:6 MODE** button.

• Each time you press this button, MUSIC → CINEMA will be selected in turn.



To Exit Setup Mode

· Wait for about 5 seconds.

Caution!

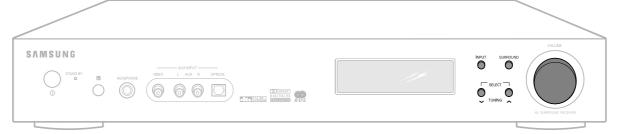
- NEO:6 Mode can be used in multi channel signal encoded to Dolby Digital or DTS.
- Pro Logic works only for PCM audio signals with sampling frequency of 32KHz, 44KHz or 48KHz..

NEO: 6 Mode

This mode decodes 2 channel signals to high precision digital matrix decoder.

DTS NEO:6 decoder discretes 2 channel sound to Discrete 6.1 channel sound.

- MUSIC : NEO:6 MUSIC Mode is used as optimized to music according to played signal.
- CINEMA: NEO:6 CINEMA Mode is used as optimized to movie according to played signal.



MAIN UNIT

- **1** Press **SURROUND** button briefly to select "NEO:6" Mode.
 - Each time you press this button, DPL II $x \to NEO:6 \to SFE \to STEREO$ will be selected in turn.
- 2 Press SELECT(✓, ∧) button.
 - Each time you press this button, MUSIC → CINEMA will be selected in turn.

To Set Sound Image of Center Speaker

If TV (or screen) is installed high, you can feel the balance of sound and image by raising the sound image of Center Speaker.

- **1** Press and hold **SURROUND** button for about 5 seconds.
 - "SETUP MODE" appears on the display and enters into Setup Mode.
- **2** Press **INPUT** button 9 times.
 - "NEO:6 MODE" appears on the display.
- **3** Press **SURROUND** button.
 - "CEN-IMG" appears on the display.
- 4 Press SELECT(♥, ♠) button to set the sound image you want.
 - You can set the sound image from 0 to 5.
- To Exit Setup Mode
 - Wait for about 5 seconds or turn **VOLUME CONTROL** of the main unit. 'SETUP MODE OFF' appears on the display and exits Setup Mode.

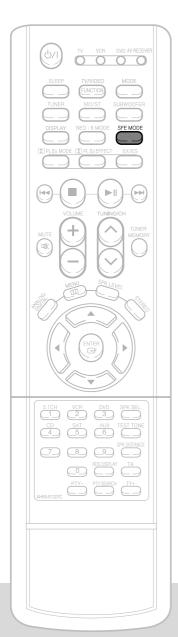
Caution!

 You can use this function to set the sound image of Center Speaker only in the main unit.



SFE Mode

Refer to the unique sound existing at specific place and you can feel live sound as if you are listening at actual site.



REMOTE CONTROL

1 Press **SEF MODE** button.

• Each time you press this button, LIVE \to ROCK \to CLASSIC \to JAZZ \to MIDNIGHT \to HALL \to CINEMA \to CHURCH will be selected in turn.



To Exit Setup Mode

· Wait for about 5 seconds.



MAIN UNIT

- **1** Press **SURROUND** button briefly to select 'SFE' Mode. Each time you press this button, DPL II x → NEO:6 → SFE → STEREO will be selected in turn.
- **2** Press **SELECT**(**▼**, **∧**) button.
 - Each time you press Select (\spadesuit) button, LIVE \to ROCK \to CLASSIC \to JAZZ \to MIDNIGHT \to HALL \to CINEMA \to CHURCH will be selected in turn
 - Each time you press Select (\checkmark) button, CHURCH \rightarrow CINEMA \rightarrow HALL \rightarrow MIDNIGHT \rightarrow JAZZ \rightarrow CLASSIC \rightarrow ROCK \rightarrow LIVE will be selected in turn.

To Exit Setup Mode

· Wait for about 5 seconds.

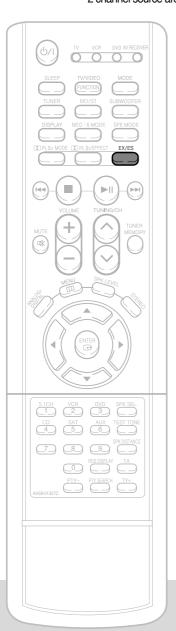
SFE Mode

- LIVE, ROCK, CLASSIC, JAZZ: Select the genre suitable for the music among Live, Rock, Classic and Jazz to listen to music.
- MIDNIGHT: Emphasize bass when you listen to music at midnight.
- HALL : Clear music as if you are listening at concert hall.
- CINEMA: Enjoy sound as if you are in cinema.
- CHURCH : Enjoy magnificent sound as if you are listening at church.



EX/ES Mode

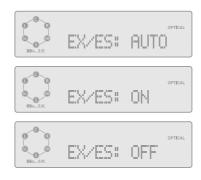
This mode enable you to listen 6.1 channel surround to the source encoded to Dolby Digital-EX, DTS-ES such as DVD. This function works when Dolby Digital 5.1 channel source is inputted, and does not work when LPCM and Dolby Digital 2 channel source are entered.



REMOTE CONTROL

Press **EX/ES** button.

• Each time you press this button, EX/ES AUTO \rightarrow EX/ES ON \rightarrow EX/ES OFF will be selected in turn.



To Exit Setup Mode

Wait for about 5 seconds or press EX/ES button of the remote control to select EX/ES
 : OFF.

EX/ES Mode

- AUTO: 7.1 channel(or 6.1 channel) sound will be played back to 7.1 channel(or 6.1 channel) and 5.1 channel sound will be automatically converted to and output as 5.1 channel.
- **ON**: 5.1 channel sound will be converted to and output as 7.1 channel (or 6.1 channel).
- **OFF**: 7.1 channel (or 6.1 channel) sound will be converted to and output as 5.1 channel.



MAIN UNIT

Method

Press and hold **SURROUND** button for about 5 seconds.

• "SETUP MODE" appears on the display and enters into Setup Mode.

Press **INPUT** button 10 times.

• "EX/ES SETUP" appears on the display.

Press **SURROUND** button.

• Each time you press this button, EX/ES : AUTO \rightarrow EX/ES : ON \rightarrow EX/ES : OFF will be selected in turn.

To Exit Setup Mode

• Wait for about 5 seconds or turn VOLUME CONTROL of the main unit. 'SETUP MODE OFF' appears on the display and exits Setup Mode.

Dolby Digital - EX

Movie sound track encoded with Dolby Digital EX can play back the rear center channel added during program mixing. Rear center channel provides fine image, in-depth and realistic

Caution!

- · You cannot use Dolby Digital-EX in the system without rear
- You need to set it to EX/ES Mode when playing back disk encoded to Dolby Digital-EX in 6.1 channel.
 Some disks encoded with Dolby Digital-EX do not contain identification signal. In this case, set EX/ES to ON.

DTS-ES (Discrete 6.1, Matrix 6.1)

Rear center channel is added to DTS 5.1 channel, improving the sense of direction and space for sound. Since DTS-ES decoder is built-in in the main unit, you can play back the disk encoded with DTS-ES Discrete and DTS-ES Matrix. DTS-ES Discrete 6.1 can record the sound of all channels including rear center channel digitally and play back the recorded sound as they are.

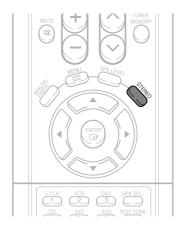
Caution!

· You cannot use DTS-ES in the system without rear center speaker.



Stereo Mode

You can select this mode when you listen to the sound at Front-Left speaker, Front-Right speaker and subwoofer.





REMOTE CONTROL

Press STEREO button. • "STEREO" appears in the display and Stereo Mode is selected.



MAIN UNIT

Press **SURROUND** button briefly to select 'STEREO'.

 Each time you press this button, DPL II x → NEO:6 → SFE → STEREO will be selected in turn.

- To Exit Setup Mode
 - · Wait for about 5 seconds.

- To Exit Setup Mode
 - · Wait for about 5 seconds.

Note

 When PCM and Analog Stereo signal are input, left/right channel is played back in Stereo Mode.

Caution!

• 96KHz PCM is not played back in Stereo Mode.

For Surround Mode and Input Signal

	land Cinnel		Output Channe		annel]	Display Information	
Surround Mode	Input Signal	Decoding	L/R	С	SL SR	SB	SubW	Display Signal Format	Channel Status
	Dolby D Surr. EX	Dolby Digital 5.1	0	0	0	-	0	DO DIGITAL	L, C, R, SL, SR, S, SW
DOLBY (MUSIC,	Dolby D (5.1ch)	Dolby Digital 5.1	0	0	0	-	0	DII DIGITAL	L, C, R, SL, SR, SW
CINEMA,	Dolby D (2ch)	Pro Logic II x	0	0	0	0	0	DII DIGITAL	L, R
Matrix, Game,	Dolby D (2ch Surr)	Pro Logic II x	0	0	0	0	0	DII DIGITAL	L, R, S
PROLOGIC)	L.PCM (Audio)	Pro Logic II x	0	0	0	0	0	L.PCM	L, R
	Analog	Pro Logic II x	0	0	0	0	0	ANALOG	-
	DTS-ES	DTS 5.1	0	0	0	0	0	dts, ES	L, C, R, SL, SR, S, SW
	DTS 96/24	DTS 96/24	0	0	0	0	0	DTS 96/24	L, C, R, SL, SR, SW
NEO:6	DTS (5.1)	DTS 5.1	0	0	0	-	0	dts	L, C, R, SL, SR, SW
(MUSIC,	L.PCM (Audio)	Neo:6	0	0	0	0	-	L.PCM	L, R
CINEMA)	Analog	Neo:6	0	0	0	0	-	ANALOG	-
	Dolby D (2ch)	Neo:6	0	0	0	0	-	DI DIGITAL	L, R
	Dolby D (2ch Surr)	Neo:6	0	0	0	0	-	DI DIGITAL	L, R, S
	Dolby Surr. EX	SFE	-	-	-	-	-	DI DIGITAL	L, C, R, SL, SR, S, SW
	Dolby D (5.1ch)	SFE	-	-	-	-	-	DI DIGITAL	L, C, R, SL, SR, SW
	Dolby D (2ch)	SFE	0	0	0	0	0	DI DIGITAL	L, R
OFF	Dolby D (2ch Surr)	SFE	0	0	0	0	0	DI DIGITAL	L, R, S
SFE	DTS-ES	SFE	-	-	-	-	-	dts, ES	L, C, R, SL, SR, S, SW
	DTS (5.1ch)	SFE	-	-	-	-	-	dts	L, C, R, SL, SR, SW
	L.PCM (Audio)	SFE	0	0	0	0	0	L.PCM	L, R
	Analog	SFE	0	0	0	0	0	ANALOG	-
	Dolby D Surr. EX	Dolby Digital EX	0	0	0	0	0	DI DIGITAL	L, C, R, SL, SR, S, SW
EX/ES	Dolby D (5.1ch)	Dolby Digital EX	0	0	0	0	0	DI DIGITAL	L, C, R, SL, SR, SW
ENES	DTS-ES	DTS-ES	0	0	0	0	0	dts, ES	L, C, R, SL, SR, S, SW
	DTS (5.1ch)	DTS-ES	0	0	0	0	0	dts	L, C, R, SL, SR, SW
	Dolby Surr. EX	Stereo	0	-	-	-	0	DI DIGITAL	L, C, R, SL, SR, S, SW
	Dolby D (5.1ch)	Stereo	0	-	-	-	0	DID DIGITAL	L, C, R, SL, SR, SW
	Dolby D (2ch)	Stereo	0	-	-	-	-	DID DIGITAL	L, R,
	Dolby D (2ch Surr)	Stereo	0	-	-	-	-	DI DIGITAL	L, R, S
STEREO	DTS-ES	Stereo	0	-	-	-	0	dts, ES	L, C, R, SL, SR, S, SW
	DTS 96/24	Stereo	0	-	-	-	0	dts 96/24	L, C, R, SL, SR, SW
	DTS (5.1ch)	Stereo	0	-	-	-	0	dts	L, C, R, SL, SR, SW
	L.PCM (Audio)	Stereo	0	-	-	-	-	L.PCM	L, R
	L.PCM 96KHz	Stereo	0	-	-	-	-	L.PCM	L, R
	Analog	Stereo	0	-	-	-	-	ANALOG	-

L/R: Front Speaker (Left/Right) C: Center Speaker SL/SR: Rear Speaker (Left/Right) S: Rear Center Speaker SW: Subwoofer

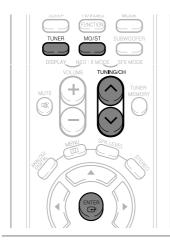
Caution!

- 2 channel Dolby Digital signal has Dolby Digital Pro Logic. Speaker Setup is set to LARGE, SMALL, or YES.
- If there is no surround signal in DVD disk, sound will not output from rear-left speaker, rear-right speaker, center speaker, and subwoofer.



Listening to Radio

You can listen to the chosen band (FM, AM broadcast stations) by using either the automatic or manual tuning operation.





REMOTE CONTROL

MAIN UNIT

1 Press **TUNER** button.

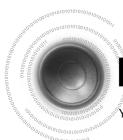
- Each time you press this button, FM → AM will be repetitively selected.
- **2** Select frequency.
 - · Automatic Tuning 1:
 - 1) Press **ENTER** button to select PRESET.
 - 2) Press **TUNING/CH()** button to select the preset frequency.
 - · Automatic Tuning 2:
 - 1) Press **ENTER** button to select MANUAL
 - 2) Press and hold **TUNING/CH(\(\sqrt{,} \(\sqrt{)}**) button to automatically tune in frequency.
 - · Manual Tuning:
 - 1) Press ENTER button to select MANUAL.
 - 2) Press **TUNING/CH(\(\lambda \), \(\lambda \)** button briefly to increase or decrease frequency by step by step.

- Press INPUT button to select FM or AM
- 2 Select the frequency.
 - Automatic Tuning :
 Press and hold TUNING/CH(, ,) button to automatically tune in frequency.
 - Manual Tuning:
 Press TUNING/CH(, ,) button briefly to increase or decrease frequency by step by step.

To Listen to Mono/Stereo

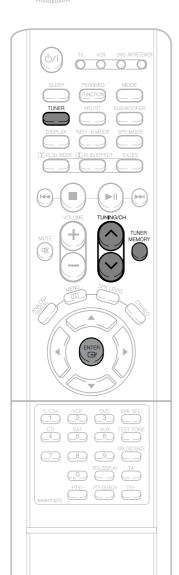
Press MO/ST button.

- Each time you press this button, STEREO, MONO will be selected in turn.
- If you select MONO in the area with weak reception and blanket area, you can listen to clear broadcasting without noise.
- This function works only in Remote Control.



Presetting Radio Stations

You can preset to 30 stations including FM and AM broadcasting.



REMOTE CONTROL

Ex) If you preset FM 89.1 station in 2ch

Press **TUNER** button.

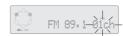
 \bullet Each time you press this button, FM \rightarrow AM will be selected in turn.



- 2 Press Select button and then TUNING/CH(❤, ♠) button to
 - Refer to step 2, page 39, to tune in automatically and manually.



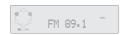
- **3** Press **TUNER MEMORY** button. Tuner number will blink on the display.



- ⚠ Press TUNING/CH(>, ∧) button to select 2ch.
 - · You can select from 1 to 30ch.



- **5** Press **TUNER MEMORY** button.
 - Tuner number will disappear and 89.1 station will be preset in 2ch.



 $\boldsymbol{6}$ To preset other stations, repeat the steps 2 to 5.

To Listen to Preset Station

• Press Select button of the remote control to select the PRESET and press TUNING/CH (V,) button.



About RDS broadcasting

Using the RDS (Radio Data System) to receive FM stations

RDS allows FM stations to send an additional signal along with their regular program signals. For example, the stations send their station names, as well as information about what type of program they broadcast, such as sports or music, etc.

When tuned to an FM station which provides the RDS service, the RDS indicator lights up on the display.

- Description on RDS function
- 1. PTY (Program Type): Displays the type of programme currently being broadcast
- 2. PS NAME (Program Service Name): Indicates the name of broadcasting station and is composed of 8 characters.
- 3. RT (Radio Text): Decodes the text broadcast by a station (if any) and is composed of maximum 64 characters.
- 4. CT (Clock Time): Decodes the real time clock from the FM frequency.
 - Some stations may not transmit PTY, RT or CT information therefore this may not be displayed in all cases.
- 5. TA (Traffic Announcement): When this symbol flashes it shows that the traffic announcement is in progress.



- RDS is not available for AM broadcasts.
- RDS may not operate correctly if the station tuned is not transmitting RDS signal properly or if the signal strength is weak.

What information can RDS signals provide?

You can see the RDS signals the station sends on the display.

TO show the RDS signals

Press RDS DISPLAY while listening to an FM station.

Each time you press the button, the display change to show you the following information:

PS (**Program Service**): While searching, "**PS**" appears and then the station names will be displayed. "**NO PS**" appears if no signal is sent.

RT(RadioText): while searching,"RT"appears and then text messages the station sends will be displayed. "NO RT"appears if no signal is sent.

Frequency: station frequency (non-RDS service)

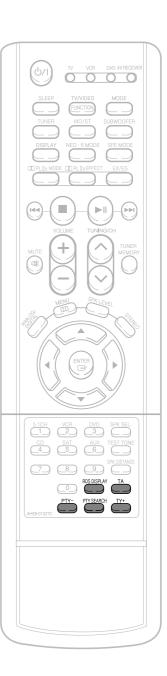
About characters shown in the display

When the display shows PS,or RT signals,the following characters are used.

- The display window cannot differentiate upper case and lower case Irtters and always uses upper case letters.
- The display window cannot show accented letters, "A," for instance, may stans for accented "A's" like "Â, Â, Ä, Ä, Å And Ã."



• If searching finishes at once, "PS", and "RT" will not appear on the display.



PTY (Program Type) indication and PTY-SEARCH function

One of the advantages of the RDS service is that you can locate a particular kind of program from the preset channels by specifying the PTY codes.

To search for a program using the PTY codes

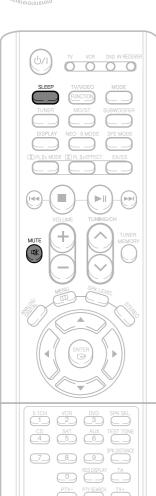
Before you start, remember...

- The PTY Search is only applicable to preset stations.
- To stop searching any time during the process, press PTY SEARCH while searching.
- There is a time limit in doing the following steps. If the setting is cancelled before you finish, start from step 1 again.
- When pressing the buttons on the primary remote control, make sure that you have selected the FM station using the primary remote control.
- Press PTY SEARCH while listenning to an FM station.
- Press the PTY-or PTY+until the PTY code you want appears on the display.
 - The display gives you the PTY codes described to the right.
- Press PTY SEARCH again, while the PTY code selected in the previous step is still on the display.
 - The center unit searches 15 preset FM stations, stops when it finds the one you have selected, and tunes in that station.

Display	Program Type			
NEWS	News including an announced opinion and report			
AFFAIRS	Several matters including a current incident, documentary, discussion and analysis.			
INFO	Information including weights and measures, returns and forecast, matters interesting the customer, medical information, etc.			
SPORT	• Sports			
EDUCATE	• Education			
DRAMA	Drama-Radio serial, etc.			
CULTURE	Culture-National or local culture including the religious problem, social science, language, theater,etc.			
SCIENCE	Natural science and technology			
VARIED	Others-Speech, amusing program (quiz, game), interview, comedy and satirical play, etc.			
POP M	Pop music			
ROCK M	Rock music			
M.O.R.M	• Current contemporary music considered to be "easylistening."			
LIGHT M	Light classical music- Classical music and instrumental and chorus music			
CLASSIC	Heavy classical music-Orchestra music, symphony, chamber music and opera			
OTHER M	Other music - Jazz, R&B country music			
WEATHER	• Weather			
FINANCE	• Finance			
CHILDREN	Children's programmes			
SOCIAL A	Social affairs			
RELIGION	• Religion			
PHONE IN	• Phone in			
TRAVEL	• Travel			
LEISURE	• Leisure			
JAZZ	Jational Music			
COUNTRY	Oldies Music			
NATION M	Folk Musicazz Music			
OLDIES	Country Music			
FOLK M	· N			
DOCUMENT	Documentary			



Convenient Functions



Sleep Timer Function

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

REMOTE CONTROL

Press the **SLEEP** button.

- SLEEP: OFF \rightarrow 15 \rightarrow 30 \rightarrow 45 \rightarrow 60 \rightarrow 90 \rightarrow 120MIN will be selected in turn.
- To Check Sleep Timer Press **SLEEP** button.
 - The remaining time before this unit will shut itself off is displayed on the display.
 - Pressing the button again changes the sleep time from what you have set earlier.
- To Cancel Sleep Timer
 - Press **SLEEP** button until SLEEP : OFF appears on the display.

Mute Function

This function is useful what answering a doorbell or telephone call.

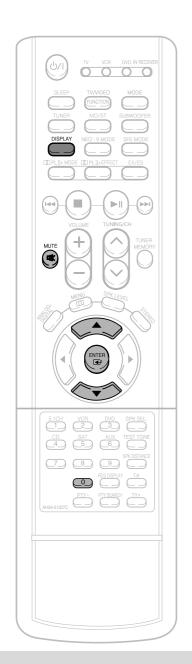
REMOTE CONTROL

Press the **MUTE** button.

- MUTE appears on the display.
- To Output Sound AgainPress MUTE button again.MUTE will disappear and sound will Output.

Caution!

 Sleep , Mute, Display Off function will work only in Remote Control.



Reset Function

REMOTE CONTROL

- **1** Press the MUTE button.
 - MUTE appears on the display.
- **2** Press "0" button five times and then press ENTER button.
- **3** Press ▲,▼ buttons to select "YES". The unit automatically back on in 5 seconds.

Caution!

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

Turning Display On/Off

You can turn the display off to prevent the dazzling light or when you go to bed.

REMOTE CONTROL

Press the **DISPLAY OFF** button.

• Each time you press this button, the display is turned on or off.

Using Headphone

Use headphones (not supplied) for private listening pleasure.

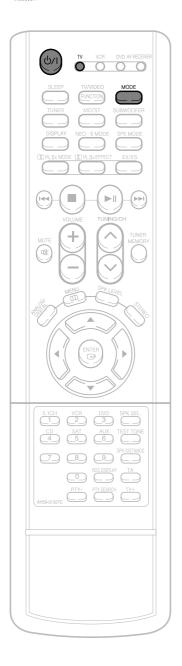
Connect the headphone to the headphone jack and listen to music.



Do not volume up when you use headphone. It may damage your hearing.



Operating TV with Remote Control



- Press **MODE** button to make the TV indicator on the remote control flash.
- **2** Press **POWER(**心/**I)** button to turn on the TV.
- 3 Point the remote control toward the TV.
- 4 While holding down **POWER(७/)** button, enter the code corresponding to your brand of TV.
 - If the code matches the TV's code, the TV will be turned off.
 - If there is more than one code listed for your TV in the table, enter one at a time to determine which code works.

Ex) For a 'Samsung' TV

While holding down POWER button, use the Numeric buttons to enter 00, 01, 02, 03, 04, and 05.

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, and Numeric buttons (0~9).



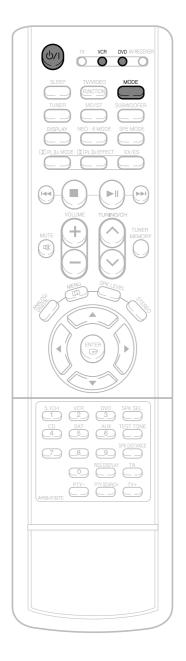
- The remote control may not work on some brands of TVs. Also, some operation may not be possible depending on your brand of TV.
- If you do not set the remote control with the code for your brand of TV, the remote control will work on a Samsung TV by default.

TV Brand Code List

056,057,058 001,015 001,002,003,004,005, 006,007,008,009,010, 011,012,013,014 001,018,040,048 057,058,081 059,060	LUXMAN LXI(SEARS) MAGNAVOX MARANTZ MATSUI	018 019, 054, 056, 059, 060, 062, 063, 065, 071 015, 017, 018, 048, 054, 059, 060, 062, 072, 089	SYLVANIA SYMPHONIC TATUNG	018,040,048,054,059, 060,062 061,095,096
001, 002, 003, 004,005, 006, 007, 008, 009, 010, 011, 012, 013, 014 001, 018, 040, 048 057, 058, 081 059, 060	MAGNAVOX MARANTZ	062,063,065,071 015,017,018,048,054,		
006, 007, 008, 009, 010, 011, 012, 013, 014 001, 018, 040, 048 057, 058, 081 059, 060	MARANTZ	015, 017, 018, 048, 054,		061,095,096
011,012,013,014 001,018,040,048 057,058,081 059,060	MARANTZ		TATUNG	
001, 018, 040, 048 057, 058, 081 059, 060		059, 060, 062, 072, 089	TATUNG	006
057,058,081 059,060			TECHWOOD	018
059,060	MATSUI	040,054	TEKNIKA	003,015,018,025
<u> </u>		054	TMK	018,040
0.10	MGA	018,040	TOSHIBA	019,057,063,071,101
018	MITSUBISHI/MGA	018,040,054,059,060,		107, 109, 110, 111, 113
003		075, 101	VIDTECH	018
003,018,025	MTC	018	VIDECH	059,060,069
097	NEC	018, 019, 020, 040, 059,	WARDS	015,017,018,040,048,
003		060		054,060,064
018	NIKEI	003	YAMAHA	018
046	ONKING	003	YORK	040
015	ONWA	003	YUPITERU	003
003, 005, 061, 082, 083,	PANASONIC	006, 007, 008, 009, 054,	ZENITH	058,079
084		066, 067, 073, 074	ZONDA	001
062	PENNEY	018	DONGYANG	003,054
003	PHILCO	003,015,017,018,048,	LOWE	054
059,061,063		054, 059, 062, 069, 090	FINLUX	054, 109, 114
003	PHILIPS	015,017,018,040,048	YOKO	054
002,003,004,015,016,		054, 062, 072, 112, 114,	LOEWE OPTA	054,114
017,018,019,020,021,		117,118	PHONOLA	054, 112, 114
022, 023, 024, 025, 026,	PIONEER	063,066,080,091	RADIOLA	054,112
027,028,029,030,032,	PORTLAND	015,018,059	SCHNEIDER	054
034, 035, 036, 040, 048,	PROTON	040	AKAI	103
059,090,099,100	QUASAR	006,066,067	GRUNDIG	108, 109, 113, 119, 120,
040	RADIOSHACK	017,048,056,060,061,		121
003		075	BLAUPUNKT	108
003, 015, 040, 046, 059,	RCA/PROSCAN	018,059,067,076,077	SIEMENS	108
061,064,082,083,084,		078,092,093,094	CGE	113
085	REALISTIC		IMPERIAL	113
019.065.103	SAMPO	040	MIVAR	113
003	SAMSUNG	000,015,016,017,040.	SABA	114
003			BANG&OLUFSEN	114
006, 040, 056, 059, 066,			BRIONVEGA	114
067,068	SANYO	019,061,065,101,102,	FORMENTI	114
040		103, 104	METZ	114
015,018,050,059,069	SCOTT	003,040,060,061	WEGA	114
045	SEARS			114
056,059,067,086	SHARP	015,057,064,101,105,	SINGER	114
070				114
059,061,087,088	SIGNATURE 2000 (M.WARDS)	057,058	TELEFUNKEN	116
<u> </u>	, ,	· ·		
015				
* - *	SOUNDESIGN			
		· ·		
	097 003 018 046 015 003,005,061,082,083, 084 062 003 059,061,063 003 002,003,004,015,016, 017,018,019,020,021, 022,023,024,025,026, 027,028,029,030,032, 034,035,036,040,048, 059,090,099,100 040 003 003,015,040,046,059, 061,064,082,083,084, 085 019,065,103 003 003 006,040,056,059,066, 067,068 040 015,018,050,059,069 045 056,059,067,086 070 059,061,087,088	097 003 018 018 018 016 046 0NKING 015 0NWA 003,005,061,082,083, 084 062 0PENNEY 003 0PHILCO 059,061,063 003 002,003,004,015,016, 017,018,019,020,021, 022,023,024,025,026, 027,028,029,030,032, 034,035,036,040,048, 059,090,099,100 040 015,016,063 003 006,040,046,059, 061,064,082,083,084, 085 085 085 086 087 087 0885 0885 0885 0885 0885 0885 0	NEC 018, 019, 020, 040, 059, 060 003 0046 0059, 0060 007, 008, 009, 054, 066 008, 007, 008, 009, 054, 066, 067, 073, 074 0062 003 003, 015, 017, 018, 048, 059, 061, 063 054, 059, 062, 069, 090 003 003, 015, 017, 018, 048, 059, 061, 063 054, 062, 072, 112, 114, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026, 026, 027, 028, 029, 030, 032, 034, 035, 036, 040, 048, 059, 090, 099, 100 0040 0059, 090, 099, 100 0040 0059, 090, 099, 100 0059, 090, 099, 100 0059, 090, 099, 100 0061, 064, 082, 083, 084, 085 0061, 064, 082, 083, 084, 085 0061, 064, 082, 083, 084, 085 0061, 064, 082, 083, 084, 085 0061, 064, 082, 083, 084, 085 0061, 064, 082, 083, 084, 085 0061, 066, 066, 067 0075 0070	NEC



Operating VCR (DVD) with Remote Control



- Press **MODE** button to make VCR indicator on the remote control flash.
 - If you operate DVD, press Device Select button to make DVD indicator on the remote control flash.
- Press POWER(७/) button to turn on the VCR (DVD).
- Point the remote control toward the VCR (DVD).
- While holding down **POWER(**(७/۱) button, enter the code corresponding to your brand of VCR (DVD).
 - If the code matches the VCR (DVD)'s code, the VCR (DVD) will be turned off.
 - If there is more than one code listed for your VCR (DVD) in the table, enter one at a time to determine which code works.

Ex)For a 'Samsung' VCR (DVD)

While holding down **POWER(** \circlearrowleft /1) button, use the Numeric button to enter 00, 32~45, 87, and 88.

5 If VCR (DVD) is turned on or off when you press the power button of the remote controller, the setting is completed.

• You can use VCR (DVD) POWER, VOLUNE, PLAY, PAUSE, STOP, SKIP and Numeric button (0~9).



- The remote control may not work on some brands of VCR (DVD)s. Also, some operations may not be possible depending on your brand of VCR (DVD).
- If you do not set the remote control with the code for your brand VCR (DVD), the remote control work on a Samsung VCR (DVD) by default.

VCR Brand Code List

Brand	Code Number	Brand	Code Number	Brand	Code Number
ADMIRAL(M.WARDS)	043, 106	MEI	001,033	TASHIRO	050
AWIA	044, 045, 046	MEMOREX	001,025,033,054,091,	TATUNG	047,052,092
AKAI	088, 089, 090		100	TEAC	044,047,052,092
ANAM	001, 002, 003, 004, 005,	MINOLTA	020,021,062	TECHNICS	001,033,049,091
	033	MITSUBISHI/MGA	068,069,070,101,102	TEKNIKA	001,025,033
AOC	091	MTC	072	TOSHIBA	006,051
AUDIO DYNAMIC	019,047,092	MULTITECH	044,057,069	TOTEVISION	025,072
BELL & HOWELL(M.WARDS)	048,093	NEC	019,047,052,057,092	TAEKWANG	087
BROKSONIC	092,094,095	OLYMPIC	049,091	UNITECH	072
CANON	001,033,049,091	OPTIMUS	101	VECTOR RESEARCH	019
CAPEHART	011	ORION	103	VIDEO CONCEPTS	019
CITIZEN	050	PANASONIC	001,004,033,049,067,	VIDEOSONIC	072
CRAIG	050,072,096		091,107	WARDS	001,020,031,032,033,
CRITERION	051	PENNEY	019,020,072	William	043,050,054,072,100,
CURTISMATHES	001,031,032,033,044,	PENTAX	001,020,021,033,062		105,106,109
CONTINUINATIFIC	091	PHILCO	001,020,021,033,062	YAMAHA	019,047,048,052,092,
DAEWOO		FILLOO	001,033,046,049,091,	ZENITH	
DAEWOO	006,007,008,009,010,	DUIL IDO	***	ZEINITH	019,047,048,052,092
	011,012,013,014,015,	PHILIPS	001,030,033,049,050,		
	016,017,018,046,051,	DILOT	066,091	DVD Bra	and Code List
DAVEDON	091	PILOT	025		
DAYTRON	011	PIONEER	049		
DBX	019,047,052,092	PORTLAND	011	Brand	Code Number
EMERSON	025,031,032,044,046,	QUASAR	001,033,049,067,091,		
	094,095,097,098,099		107,108	DENON	003,032
FISHER	009,048,053,054,055,	RICO	036	DOONOON	019
	100	RCA/PROSCAN	001,020,021,031,032,	DMTECH	017
FUNAI	044		033,049,051,062,066,	FISHER	002
GENERAL ELECTRIC(GE)	001,031,032,033,056,		070,091,104	GE	006
	091	REALISTIC	001,009,025,033,	HARMAN/KARDON	012
GO VIDEO	059,060,061	044,048,054,091,		JVC	010,013
HARMANKARDON	019		101,105	KENWOOD	008
HITACHI	020,021,049,054,062,	SAMSUNG	000,006,031,032,057,	LG	001
	100		058, 071, 072, 073, 074,	MAGNAVOX	004
HQ	051		075,076,077,078,079,	MITSUBISHI	005,016
INSTANT REPLAY	001,033,049,091		080,081	ONKYO	004,014
JCL	001,033	SANYO	008,009,046,048,050,	OPTIMUS	011
JCP	025		054,058,093,100	PANASONIC	021
JCPENNY	047,048,052,062,091,	SANSUI	092	PROSCAN	006
	092	SCOTT	006,051,054,057,069,	PHILIPS	004,023
JVC	001,033,047,052,063,		070,100,101	PIONEER	007,011,022,025
	064,065,092	SEARS	020,021,025	RCA	006
KENWOOD	047,050,052,092	SHARP	043,105,106	SAMSUNG	000,027
LG(GOLDSTAR)	019,020,021,022,023,	SINGER	096	SANYO	002
LG(GOLDOTAII)	024,025,026,027,028,	SIGNATURE 2000 (M.WARDS)	043,044,054,100,106	SONY	015, 020
	029,030,050	SHINTOM	096	THETA DIGITAL	013, 020
LXI(SEARS)	029,030,030	SONY	034,035,036,037,038,	TOSHIBA	004, 018
LAI(OLANO)	020,025,044,048,050,	JOINT	034,035,036,037,038,		· ·
MACINI				YAMAHA	009, 033
MAGNAYOY	072	CTC	083,084,085,086	ZENITH	004, 024
MAGNAVOX	001,031,032,033,049,	STS	020	TAEGWANG	026
	066,067,091	SYLVANIA	001,033,044,049,066,	PS2	028
MARANTZ	001,019,033,047,052,		091	X-BOX	029
	092,110	SYMPHONIC	044	APEX	030
MARTA	025,050	TANDY	009	MARANTZ	031



Before Calling for Service

Symptom Symptom	Check	Remedy	
Can't turn it on.	Is the power code plugged into the outlet?	Connect the power plug to the outlet.	
It does not work when the button is pressed.	Isn't the air too dry to cause electrostatics?	Disconnect the power plug and connect it again.	
Sound is not produced.	 Are the speaker and external component connected properly? Does the Mute function work? Is the volume set to minimum? Is the speaker setup selected to NONE? 	 Properly connect it. Press Mute button to cancel the function. Adjust the volume. Refer to page 17~18 to select LARGE, SMALL or YES. 	
Picture does not appear when the function is selected.	Isn't the external component connected properly?	Properly connect it.	
Remote controller does not work.	Are the batteries exhausted?Is the distance between remote control and main unit proper?	Replace with new batteries.Operate at close distance.	
The sound from each device is changed during stereo playback.	Is the left/right speaker or left/right input/output code connected properly?	Check the left/right channel and properly connect it.	
Can't receive broadcasting.	Is AM or FM antenna connected properly?	Properly connect the antenna. If the input strength of antenna connector is weak, install the FM antenna at the place with good reception.	
There is no sound from rear speaker.	 Is the rear speaker connected properly? Is S.SPK (Rear) set to NONE in Speaker Setup? Is Surround Mode selected to Stereo? 	 Refer to page 17~18 to connect it properly. Refer to page 17~18 to select LARGE or SMALL. Refer to page 27~38 to select other Surround Mode. 	
There is no sound from center speaker	 Is the center speaker connected property? Is C.SPK (Center) selected to NONE in Speaker Setup? Is the Surround Mode selected to Stereo? 	 Refer to page 9~10 to connect it properly. Refer to page 17~18 to select LARGE or SMALL. Refer to page 27~38 to select other Surround Mode. 	

Symptom	Check	Remedy
There is no sound from rear center speaker	 Is the rear center speaker connected properly? Is the SB SPK (Rear Center) selected to NONE in Speaker Setup? Is Surround Mode selected to EX/ES 	 Refer to page 9~10 to connect it properly. Refer to page 17~18 to select LARGE or SMALL. Refer to page 35~36 to select Surround Mode to EX/ES.
Can't select EX/ES Mode.	 Is SB SPK (Rear Center) selected to NONE in Speaker Setup? Is the input signal selected properly? 	 Refer to page 17~18 to select LARGE or SMALL. Use 5.1 channel external component.
Can't select Dolby Pro Logic llx Mode.	Is the input signal selected properly?	Select 2 channel Dolby Digital, PCM, and Analog input signal.
Can't select NEO:6 Mode.	Is the input signal selected properly?	Use PCM and Analog input signal.
There is no sound when playing DTS encoded DVD and CD.	• Is analog input selected?	Check whether digital external component is properly connected and refer to page 19 to select the digital input.

▶▶ Product Protection Function



DC Protection Circuit

• If DC is output from output connector, DC protection circuit works automatically to protect the speaker.

Heat Protection

- Protection function works if the main unit is overheated or power transformer is overheated.
 appears in the display when the "PROTECTION" function works.
 - If speaker terminal is shorted
 - If speaker cord is shorted

If there is no problem when you turn it 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 speaker terminal is shorted and then turn on the device.

Specifications And the design of the control of th

	Power Supply	230V, 50 Hz	
	Standby Power Consumption	0.9W	
	Power Consumption	110W	
GENERAL	Weight	4.65 kg	
	Dimensions (W x H x D)	430 x 65 x 350 mm	
	Operating Temperature Range	+5° C~+35° C	
	Operating Humidity Range	10%~75%	
	Frequency Response	87.5~108.0MHz	
	Usable Sensitivity	12dBf	
FM TUNER	S/N Ratio	MONO/STEREO 55/55dB	
TWITOINLIT	Distortion	MONO/STEREO 0.3/0.8%	
	Stereo Separation	30dB	
	Tuner Output Level	1KHz, 75KHz Dev	
	Frequency Response	522~1611KHz	
AM TUNER	S/N Ratio	40dB	
AW TONLIT	Usable Sensitivity	60dB uV/m(Loop Antenna)	
	Distortion	2% (MOD:80%)	
	Rated Output	20Hz~20KHz/THD = 1%	
	Front Speaker(Left+Right)	6 Ω 90W/CH	
	Center Speaker	6 Ω 90W/CH	
AMPLIFIER	Rear Speaker(Left+Right)	6 Ω 90W/CH	
AWII EII IEII	Rear Center Speaker	6 Ω 90W/CH	
	Input Sensitivity/Impedance	450mV/47kΩ	
	S/N Ratio(Analog Input/5.1CH Analog Input)	80dB	
	Separation(1KHz)	60dB	
FREQUENCY	Analog Input/5.1CH Analog Input	20Hz~20KHz(±3dB)	
RESPONSE	Digital Input/96KHz PCM	20Hz ~44KHz(±3dB)	
	TV Format	NTSC/PAL	
	Input Level/Impedance	1Vp-p/75 Ω	
VIDEO	Output Level/Impedance	1Vp-p/75 Ω	
OUTPUT	Video Frequency Response	5Hz to 10KHz(-3dB)	
	Component Video Frequency Response	5Hz to 40KHz(-3dB)	
	S/N Ratio	60dB	

^{\$} S/N ratio, distortion, separation and usable sensitivity are based on measurement using AES-17 filter.

c	Speaker system	Front / Rear / Rear Center	Center	Subwoofer speaker
o P	Impedance	6Ω x 5	6Ω	4Ω
E	Rated input	90W	90W	150W
Ĕ	Maximum input	180W	180W	300W
R	Dimensions (W x H x D)	91 x 135 x 98.5 mm	200 x 107 x 100 mm	205 x 418 x 455 mm
S	Weight	0.9 Kg	1.0 Kg	13 Kg



Contact SAMSUNG WORLD WIDE

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

Region	Country	Customer Care Center &	Web Site
	CANADA	1-800-SAMSUNG (7267864)	www.samsung.com/ca
North America	MEXICO	01-800-SAMSUNG (7267864)	www.samsung.com/mx
	U.S.A	1-800-SAMSUNG (7267864)	www.samsung.com
	ARGENTINE	0800-333-3733	www.samsung.com/ar
	BRAZIL	0800-124-421	www.samsung.com/br
	CHILE	800-726-7864(SAMSUNG)	www.samsung.com/cl
	COSTA RICA	0-800-507-7267	www.samsung.com/latin
	ECUADOR	1-800-10-7267	www.samsung.com/latin
	EL SALVADOR	800-6225	www.samsung.com/latin
1 1' A '	GUATEMALA	1-800-299-0013	www.samsung.com/latin
Latin America	JAMAICA	1-800-234-7267	www.samsung.com/latin
	PANAMA	800-7267	www.samsung.com/latin
	PUERTO RICO	1-800-682-3180	www.samsung.com/latin
	REP. DOMINICA	1-800-751-2676	www.samsung.com/latin
	TRINIDAD & TOBAGO	1-800-7267-864	www.samsung.com/latin
	VENEZUELA	1-800-100-5303	www.samsung.com/latin
	BELGIUM	02 201 2418	www.samsung.com/be
	CZECH REPUBLIC	844 000 844	www.samsung.com/cz
	DENMARK	38 322 887	www.samsung.com/dk
	FINLAND	09 693 79 554	www.samsung.com/fi
	FRANCE	08 25 08 65 65 (0,15€/Min)	www.samsung.com/fr
	GERMANY	01805 - 121213 (€ 0,12/Min)	www.samsung.de
	HUNGARY	06 40 985 985	www.samsung.com/hu
	ITALIA	199 153 153	www.samsung.com/it
_	LUXEMBURG	02 261 03 710	www.samsung.lu
Europe	NETHERLANDS	0900 20 200 88 (€ 0.10/Min)	www.samsung.com/nl
	NORWAY	231 627 22	www.samsung.com/no
	POLAND	0 801 801 881	•
	PORTUGAL		www.samsung.com/pl www.samsung.com/pt
	SLOVAKIA	80 8 200 128	
	SPAIN	0850 123 989	www.samsung.com/sk
		902 10 11 30	www.samsung.com/es
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