

BD-C8200M

BD-C8500M

BD-HDD Combo

user manual

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Key features

Blu-ray Disc Features

Blu-ray Discs support the highest quality HD video available in the industry - Large capacity means no compromise on video quality. Furthermore, a Blu-ray Disc has the same familiar size and look as a DVD.

The following Blu-ray Disc features are disc dependant and will vary.

Appearance and navigation of features will also vary from disc to disc.

Not all discs will have the features described below.

Video highlights

The BD-ROM format supports three highly advanced video codecs, including AVC, VC-1 and MPEG-2.

HD video resolutions are also available:

- 1920 x 1080 High Definition
- 1280 x 720 High Definition

For High-Definition Playback

To view high-definition contents on a Blu-ray Disc, an HDTV (High Definition Television) is required.

Some Blu-ray Discs may require using the product's HDMI OUT to view high-definition content.

The ability to view high-definition content on Blu-ray Discs may be limited depending on the resolution of your TV.

Interactivity

Certain Blu-ray Discs may contain Animated menus and Trivia games.

User Browsable Slideshows

With Blu-ray Discs, you can browse through various still pictures while the audio remains playing.

Subtitles

Depending on what is contained on the Blu-ray Disc, you may be able to select different font styles, sizes and colours for the subtitles. Subtitles may also be animated, scrolled or faded in and out.

BD-LIVE

You can use a Blu-ray Disc supporting BD-LIVE through network connection to enjoy various contents provided by the disc manufacturer.

BD-HDD Combo Features

Internet@TV

You can download various chargeable or free-of-charge applications through network connection. Various internet service and contents will be provided, which include news, weather forecast, stock market, games, movies and music.



Digital TV

- Functionalities related to Digital TV (DVB) are only available in countries/areas where DVB-T (MPEG2 and MPEG4 AVC) digital terrestrial signals are broadcasted or where you are able to access to a compatible DVB-C (MPEG2 and MPEG4 AAC) cable-TV service. Please check with your local dealer the possibility to receive DVB-T or DVB-C signal.
- DVB-T is the DVB European consortium standard for the broadcast transmission of digital terrestrial television and DVB-C is that for the broadcast transmission of digital TV over cable. However, some differentiated features like EPG (Electric Programme Guide), VOD (Video On Demand) and so on, are not included in this specification. So, they cannot be workable at this moment.
- Some Digital TV functions might be unavailable in some countries or regions and DVB-C might not work correctly with some cable service providers.

Safety Information

Warning

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

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	This symbol indicates important instructions accompanying the product.

Do not install this equipment in a confined space such as a bookcase or similar unit.

WARNING

To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

CAUTION

BD-HDD Combo USES AN INVISIBLE LASER BEAM WHICH CAN CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE BD-HDD Combo CORRECTLY AS INSTRUCTED.

CAUTION

THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

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

IMPORTANT NOTE

The mains lead on this equipment is supplied with a molded 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 jack, as there is a risk of shock hazard from the bared flexible cord.

To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.

The product unit accompanying this user manual is licenced under certain intellectual property rights of certain third parties. This licence is limited to private non-commercial use by end-user consumers for licenced contents.

No rights are granted for commercial use.

The licence does not cover any product unit other than this product unit and the licence does not extend to any unlicensed product unit or process conforming to ISO/IEC 11172-3 or ISO/IEC 13818-3 used or sold in combination with this product unit. The licence only covers the use of this product unit to encode and/or decode audio files conforming to the ISO/IEC 11172-3 or ISO/IEC 13818-3. No rights are granted under this licence for product features or functions that do not conform to the ISO/IEC 11172-3 or ISO/IEC 13818-3.

Safety Information

Precautions

Important Safety Instructions

Read these operating instructions carefully before using the unit. Follow all the safety instructions listed below.

Keep these operating instructions handy for future reference.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Disc Storage & Management

Disc Handling

Disc Shape

- Use discs with regular shapes. If an irregular disc (a disc with a special shape) is used, this product may be damaged.



Holding discs

- Avoid touching the surface of a disc where recording is performed.



Blu-ray Discs

- If the product is not used for a long period of time, remove the Blu-ray Disc from the product and store it in its case.
- Be careful not to leave fingerprints or scratches on the surface of the Blu-ray Disc.

DVD-VIDEO, Audio CD (CD-DA)

- Wipe off dirt or contamination on the disc with a soft cloth.

Disc Storage

Be careful not to damage the disc because the data on these discs is highly vulnerable to the environment.

- Do not keep under direct sunlight.
- Keep in a cool ventilated area.
- Store vertically.
- Keep in a clean protection jacket.

- If you move your product suddenly from a cold place to a warm place, condensation may generate on the operating parts and lens and cause abnormal disc playback. If this occurs, wait for two hours before connecting the plug to the power outlet. Then insert the disc and try to play back again.

HDD (Hard Disk Drive)

The hard disk has a high storage density, which enables long recording durations and quick access to written data. However, it can easily be damaged by shock, vibration or dust and should be kept away from magnets.

To avoid losing important data, observe the following precautions.

- Do not use the BD-HDD Combo in a place subject to extreme changes in temperature.
- Do not apply a strong shock to the BD-HDD Combo.
- Do not place the BD-HDD Combo in a location subject to mechanical vibrations or in an unstable location.
- Do not place the BD-HDD Combo on top of a heat source.
- Do not disconnect the AC power cord while the power is on.
- Do not attempt to change the hard disk. This may result in a malfunction.

Should the hard disk be damaged, you cannot recover lost data. The hard disk is only a temporary storage space.

Handling Cautions

- Do not write on the printed side with a ball-point pen or pencil.
- Do not use record cleaning sprays or antistatic. Also, do not use volatile chemicals, such as benzene or thinner.
- Do not apply labels or stickers to discs. (Do not use discs fixed with exposed tape adhesive or leftover peeled-off stickers.)
- Do not use scratch-proof protectors or covers.
- Do not use discs printed with label printers available on the market.
- Do not load warped or cracked discs.

- Before connecting other components to this product, be sure to turn them all off.
- Do not move the product while a disc is being played as the disc may be scratched or broken, or the product's internal parts may be damaged.
- Do not put a flower vase filled with water or any small metal objects on the product.
- Be careful not to put your hand into the disc tray.
- Do not place anything other than the disc in the disc tray.
- Exterior interferences such as lightning and static electricity can affect the normal operation of this product. If this occurs, turn the product off and on again with the **POWER** button, or disconnect and then reconnect the AC power cord to the AC power outlet. The product will operate normally.
- Be sure to remove the disc and turn off the product after use.
- Disconnect the AC power cord from the AC outlet when you don't intend to use the product for long periods of time.
- To clean a disc, wipe it in a straight line from the inside to the outside of the disc.
- Do not expose the product to any liquid.
- When the AC plug is connected to a wall outlet, the product will still draw power (standby mode) when it is turned off.
- Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- The main plug is used as a disconnect device and shall stay readily operable at any time.



Maintenance of Cabinet

For safety reasons, be sure to disconnect the AC power cord from the AC outlet.

- Do not use benzene, thinner, or other solvents for cleaning.
- Wipe the cabinet with a soft cloth.

Safety Information

Restrictions on Playback

- This product may not respond to all operating commands because some Blu-ray, DVD and CD discs allow specific or limited operation and features during playback.
Please note that this is not a defect in the product.
- Samsung cannot assure that this product will play every disc bearing the Blu-ray Disc, DVD or CD logo because disc formats evolve, and problems and errors may occur during the creation of Blu-ray Disc, DVD, CD software and/or the manufacture of discs.
Please contact the SAMSUNG customer care center if you have questions or encounter difficulty in playing Blu-ray, DVD, or CD discs in this product. Also, refer to rest of this user manual for additional information on playback restrictions.

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Getting Started

Before using the User Manual

Disc Types and Contents that can be played.

Term	Logo	Icon	Definition
HDD			This involves a function available on the HDD.
BD-ROM			This involves a function available on a BD-ROM.
BD-RE/-R			This involves a function available on a BD-RE/-R disc recorded in the BD-RE format.
DVD-VIDEO			This involves a function available on a DVD-VIDEO.
DVD-RW(V)			This involves a function available on recorded DVD+RW or DVD-RW(V)/DVD-R/+R discs that have been recorded and finalized.
DVD-R			
DVD+RW			
DVD+R			
Audio CD			This involves a function available on an audio CD-RW/-R (CD-DA format).
MP3 WMA	-		This involves a function available on CD-RW/-R, DVD±RW/±R discs or HDD.
JPEG	-		This involves a function available on CD-RW/-R, DVD±RW/±R discs or HDD.
DivX MKV MP4	-		This involves a function available on CD-RW/-R, DVD±RW/±R discs or HDD.

NOTE

- The product may not play certain CD-RW/-R and DVD-R due to the disc type or recording conditions.
- If a DVD-RW/-R disc has not been recorded properly in DVD video format, it will not be playable.

Disc types that cannot be played

- HD DVD
- DVD-ROM/PD/MV-Disc, etc
- DVD-RAM
- Super Audio CD (except CD layer)
- DVD-RW(VR mode)
- CVD/CD-ROM/CDV/CD-G/CD-I/LD (CD-Gs play audio only, not graphics.)
- 3.9 GB DVD-R Disc for Authoring.

Getting Started

NOTE

- Some commercial discs and DVD discs purchased outside your region may not be playable with this product. When these discs are played, either "This disc can not be played." or "Cannot read this disc. Please check the regional code of the disc." will be displayed.
- Playback may not work for some types of discs, or when specific operations, such as angle change and aspect ratio adjustment, are being performed. Information about the discs is written in detail on the disc box. Please refer to this if necessary.
- Do not allow the disc to become dirty or scratched. Fingerprints, dirt, dust, scratches or deposits of cigarette smoke on the recording surface may make it impossible to use the disc for playback.
- When a BD-J title is played, loading may take longer than a normal title, or some functions may perform slowly.
- This product may not respond to all operating commands because some Blu-ray, DVD and CD discs allow specific or limited operation and features during playback. Please note that this is not a defect in the product.
- Samsung cannot assure that this product will play every disc bearing the Blu-ray Disc, DVD or CD logo because disc formats evolve, and problems and errors may occur during the creation of Blu-ray Disc, DVD, CD software and/or the manufacture of discs. Please contact the SAMSUNG customer care centre if you have questions or encounter difficulty when playing Blu-ray, DVD, or CD discs in this product. Also, refer to rest of this user manual for additional information on playback restrictions.

HDD Recording

BD-C8200M

- You can record up to Approx. 56 hours of HD video (8 Mbps) on the internal 250GB (gigabyte) hard disk (HDD).

BD-C8500M

- You can record up to Approx. 120 hours of HD video (8 Mbps) on the internal 500GB (gigabyte) hard disk (HDD).

Blu-ray Disc Compatibility

Blu-ray Disc is a new and evolving format. Accordingly, disc compatibility issues are possible. Not all discs are compatible and not every disc will play back. For additional information, refer to the Compliance and Compatibility Notice section of this user manual.

Disc Types

BD-ROM

This Blu-ray disc can only be played back. This product can play back pre-recorded commercial BD-ROM discs.

BD-RE/-R

This Blu-ray disc can be recorded and played back. This product can play back a BD-RE/-R disc recorded by other compatible Blu-ray disc recorders.

DVD-VIDEO

- This product can play back pre-recorded commercial DVD discs (DVD-VIDEO discs) with movies.
- When switching from the first layer to the second layer of a dual-layered DVD-VIDEO disc, there may be momentary distortion in the image and sound. This is not a malfunction of the product.

DVD-RW/-R/+R

This product can play back a DVD-RW/-R/+R disc recorded and finalized with a DVD video recorder. Ability to play back may depend on recording conditions.

DVD+RW

- This product can play back a DVD+RW disc recorded with a DVD Video recorder. Ability to play back may depend on recording conditions.

Audio CD (CD-DA)

- This product can play back CD-DA format audio CD-RW/-R discs.
- The product may not be able to play some CD-RW/-R discs due to the condition of the recording.










CD-RW/-R

- Use a 700MB(80 minutes) CD-RW/-R disc. If possible, do not use a 800MB(90 minutes) or above disc, as the disc may not play back.
- If the CD-RW/-R disc was not recorded as a closed session, you may experience delays when playing back the beginning of the disc or all recorded files may not play.
- Some CD-RW/-R discs may not be playable with this product, depending on the device which was used to burn them. For contents recorded on CD-RW/-R media from CDs for your personal use, playability may vary depending on contents and discs.

Region Code

Both the product and the discs are coded by region. These regional codes must match in order to play the disc. If the codes do not match, the disc will not play.

The Region Number for this product is described on the rear panel of the product.

Disc Type	Region Code	Area
Blu-ray		North America, Central America, South America, Korea, Japan, Taiwan, Hong Kong and South East Asia.
		Europe, Greenland, French territories, Middle East, Africa, Australia and New Zealand.
		India, China, Russia, Central and South Asia.
DVD-VIDEO		The U.S., U.S. territories and Canada
		Europe, Japan, the Middle East, Egypt, South Africa, Greenland
		Taiwan, Korea, the Philippines, Indonesia, Hong Kong
		Mexico, South America, Central America, Australia, New Zealand, Pacific Islands, Caribbean
		Russia, Eastern Europe, India, most of Africa, North Korea, Mongolia
		China

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Getting Started

Supported File Formats

Video File Support

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.avi	AVI	Divx 3.11/4.x/5.1/6.0	1920x1080	6 ~ 30	8	MP3 AC3 LPCM ADPCM DTS Core
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP/MP/HP	1920x1080	6 ~ 30	25	
		MPEG4 SP/ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	800x600	6 ~ 30	8	
*.mkv	MKV	Divx 3.11/4.x/5.1/6.0	1920x1080	6 ~ 30	8	MP3 AC3 LPCM ADPCM DTS Core
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP/MP/HP	1920x1080	6 ~ 30	25	
		MPEG4 SP/ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	800x600	6 ~ 30	8	
*.asf	ASF	Divx 3.11/4.x/5.1/6.0	1920x1080	6 ~ 30	8	MP3 AC3 LPCM ADPCM WMA
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP/MP/HP	1920x1080	6 ~ 30	25	
		MPEG4 SP/ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	800x600	6 ~ 30	8	
*.wmv	ASF	Window Media Video v9	1920x1080	6 ~ 30	25	WMA
*.mp4	MP4	H.264 BP/MP/HP	1920x1080	6 ~ 30	25	MP3 ADPCM AAC
		MPEG4 SP/ASP	1920x1080	6 ~ 30	8	
		XVID	1920x1080	6 ~ 30	8	
*.3gp	3GPP	H.264 BP/MP/HP	1920x1080	6 ~ 30	25	ADPCM AAC
		MPEG4 SP/ASP	1920x1080	6 ~ 30	8	
*.vro	VRO VOB	MPEG2	1920x1080	24/25/30	30	AC3 MPEG LPCM
		MPEG1	1920x1080	24/25/30	30	
*.mpg *.mpeg	PS	MPEG1	1920x1080	24/25/30	30	AC3 MPEG LPCM AAC
		MPEG2	1920x1080	24/25/30	30	
		H.264	1920x1080	6 ~ 30	25	
*.ts *.tp *.trp	TS	MPEG2	1920x1080	24/25/30	30	AC3 AAC MP3 DD+
		H.264	1920x1080	6 ~ 30	25	
		VC1	1920x1080	6 ~ 30	25	

Limitations

- Even when the file is encoded by a supported codec mentioned above, a file might not be played if its content has a problem.
- Normal playback is not guaranteed if the file's container information is wrong or the file itself is corrupted.
- Files having higher Bitrate/frame rate than standard may stutter with sound/video playback.
- Seek (skip) function is not available if the file's index table is damaged.
- When you playback a file remotely through network connection, video playback may stutter depending on established network speed.

Video decoder

- Supports up to H.264 Level 4.1
- Does not support H.264 FMO/ASO/RS, VC1 SP/MP/AP L4 and AVCHD
- XVID, MPEG4 SP, ASP:
Below 1280x720: 60 frames max
Above 1280x720: 30 frames max
- Does not support GMC 2 or higher
- For MJPEG, supports Samsung Techwin MJPEG only

Music File Support

File Extension	Container	Audio Codec	Support Range
*.mp3	MP3	MP3	-
*.wma	WMA	WMA	Compliant with WMA version 10 * Sampling rates (in kHz) - 8, 11, 16, 22, 32, 44.1, 48 * Bit rates - All bit-rates in the range 5kbps to 384kbps

Audio decoder

- Supports WMA 7, 8, 9 and STD
- Does not support WMA 9 PRO multi-channel lossless audio decoding if number of channels is more than 2
- Does not support WMA sampling rate of 220/50Hz mono
- Supports DTS Core (5.1 ch, 16 bit, 48kHz) only
- Does not support APDCM, MULAW, ALAW

Optical Media

- CD Media
Bit Rate : Max 9.6Mbps
- DVD Media
Bit Rate : Max 22.16Mbps

AVCHD (Advanced Video Codec High Definition)








- This product can playback AVCHD format discs. These discs are normally recorded and used in camcorders.
- The AVCHD format is a high definition digital video camera format.
- The MPEG-4 AVC/H.264 format is capable of compressing images at higher efficiency than that of the conventional image compressing format.
- Some AVCHD discs use the "x.v.Color" format.
- This product can playback AVCHD discs using "x.v.Color" format.
- "x.v.Color" is a trademark of Sony Corporation.
- "AVCHD" and the AVCHD logo are trademarks of Matsushita Electronic Industrial Co., Ltd. and Sony Corporation.

NOTE

- Some AVCHD format discs may not play, depending on the recording condition. AVCHD format discs need to be finalized.
- "x.v.Color" offers a wider colour range than normal DVD camcorder discs.
- Some DivX, MKV and MP4 format discs may not play, depending on the video resolution and frame rate condition.


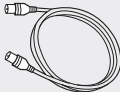

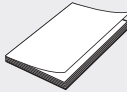
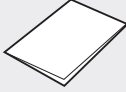

Getting Started

Logos of Discs that can be played

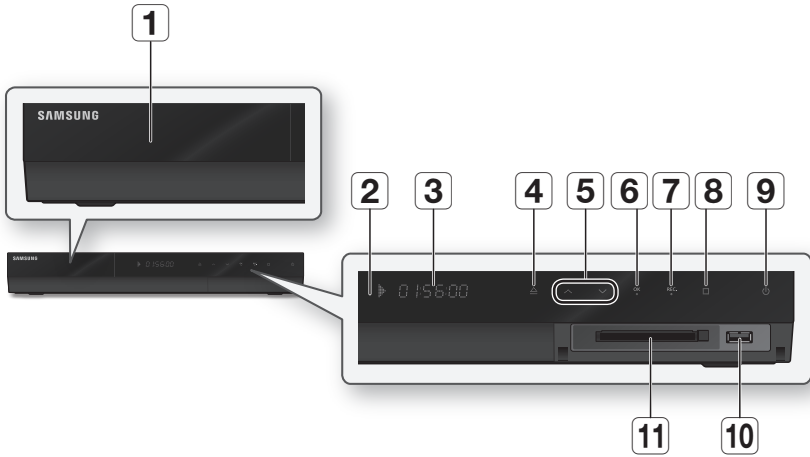
			
Blu-ray Disc	DTS-HD Master Audio	DivX	BD-LIVE
			
Dolby TrueHD	PAL broadcast System in U.K., France, Germany, etc.	Java	

Accessories

Check for the supplied accessories below.

		
Audio/Video cable	RF cable for TV	Batteries for Remote Control (AAA Size)
		
User Manual	Quick Guide	Remote Control

Front Panel



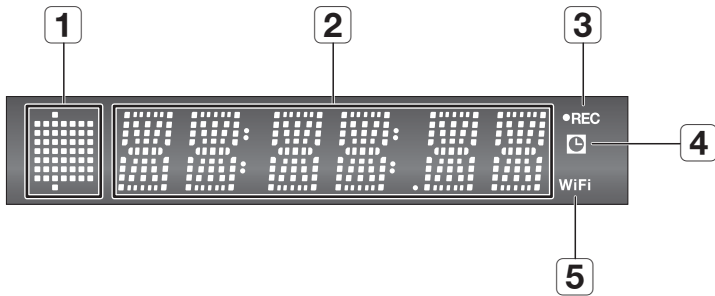
1	DISC TRAY	Opens to accept a disc.
2	REMOTE CONTROL SENSOR	Detects signals from the remote control.
3	DISPLAY	Displays the playing status, time, etc.
4	OPEN/CLOSE BUTTON	Opens and closes the disc tray.
5	CH (▲/▼) BUTTON	Selects the desired channel.
6	OK BUTTON	Selects the currently selected item or confirm the setting.
7	REC BUTTON	Starts recording.
8	STOP BUTTON	Stops playback or recording.
9	POWER BUTTON	Turns the product on and off.
10	USB HOST	It can be used for software upgrades and MP3/JPEG/DivX/MKV/MP4 playback.
11	COMMON INTERFACE SLOT	To watch paid channels, insert the CI or CI+ CARD.

Getting Started

 **NOTE**

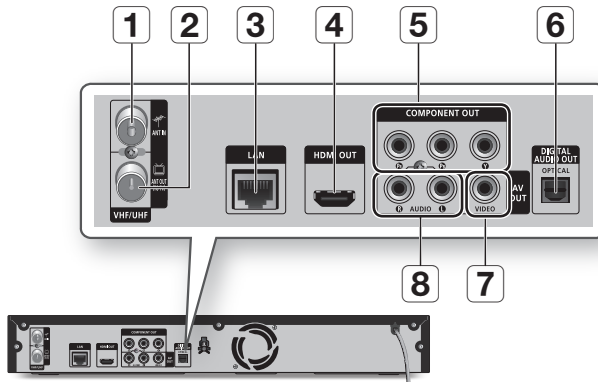
- You must obtain a “CI or CI+ CARD” from a local cable service provider.
- When removing the “CI or CI+ CARD”, carefully pull it out with your hands since dropping the “CI or CI+ CARD” may cause damage to it.
- Insert the “CI or CI+ CARD ”in the direction marked on the card.
- The location of the CI card slot may be different depending on the model.
- “CI or CI+ CARD” is not supported in some countries and regions; check with your authorized dealer.
- If you have any problems, please contact a service provider.

Front Panel Display



1	PLAYBACK-RELATED, OPEN/CLOSE INDICATOR	Lights when playback-related and open/close buttons are selected.
2	CURRENT TIME AND STATUS INDICATOR	Displays the play time and the current status.
3	REC INDICATOR	Lights in the record mode.
4	TIMER INDICATOR	Lights to indicate the timer record mode.
5	WIFI INDICATOR	Lights when the wireless network is connected.

Rear Panel

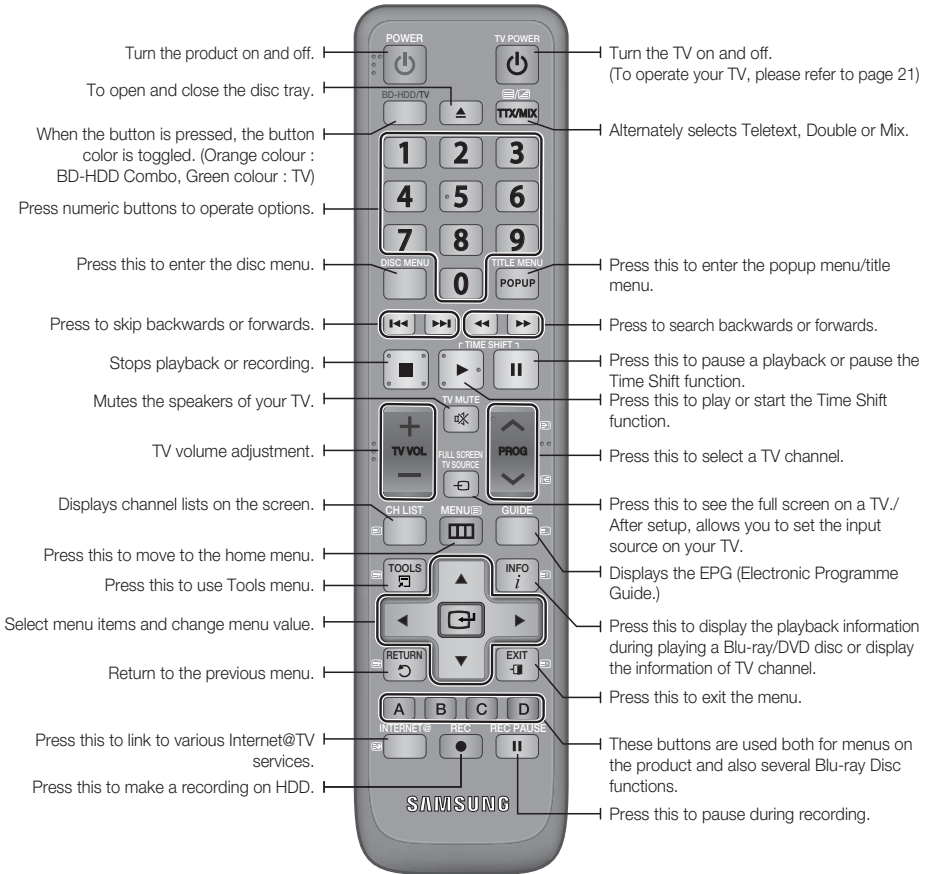


1	ANT IN	Connects RF cable from antenna.
2	ANT OUT (TO TV)	Connects RF cable to TV antenna input.
3	LAN	Can be used for network based services (See pages 67~72), BD-LIVE and software upgrades using a network connection.
4	HDMI OUT	Using an HDMI cable, connect this HDMI output terminal to the HDMI input terminal on your TV for the best quality picture or to your Receiver for the best quality sound.
5	COMPONENT OUT	Connects to equipment having component video input.
6	DIGITAL AUDIO OUT (OPTICAL)	Connects to a Receiver.
7	VIDEO OUT	Connects the input of external equipment using a video cable.
8	AUDIO OUT	Connects to the audio input of external equipment using audio cables.

Getting Started

Remote Control

Tour of the Remote Control



Setting the Remote Control

To determine whether your television is compatible, follow the instructions below.

1. Switch your television on.
2. Point the remote control towards the television.
3. Select the TV mode (Green colour) by pressing the **BD-HDD/TV** button repeatedly.
4. Press and hold the **TV POWER** button and enter the two-figure code corresponding to the brand of your television by pressing the appropriate number buttons.
If your television is compatible with the remote control, it will switch off.
It is now programmed to operate with the remote control.

NOTE

- If several codes are listed for your television brand, try each one in turn until you find one that works.
- If you replace the remote control's batteries, you must set the brand code again.

You can control certain functions of your TV with this remote control.

Button	Function
TV POWER	Used to switch the television on and off.
Number	Used to input number directly.
TV VOL +/-	Used to adjust the volume of the television.
TV MUTE	Used to toggle the sound on and off.
PROG (▲/▼)	Used to select the desired channel.
TV SOURCE	Used to select an external source connected to the TV.

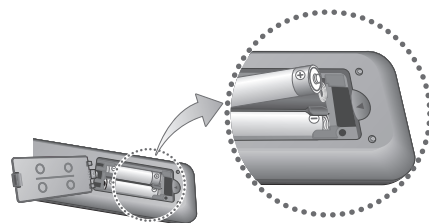
In case of Samsung TV, below buttons are also compatible with this remote control.

Button	Function
MENU	Used to move to the TV menu.
TOOLS	Used to display Tools menu.
▲▼◀▶	Used to move the cursor or select an item.
ENTER	Used to select menu items.
INFO	Used to display INFO menu.
RETURN	Return to the previous menu.
EXIT	Used to exit the menu.
COLOUR (A,B,C,D)	These buttons are used for several functions.

NOTE

- The functions listed above will not necessarily work on all televisions. If you encounter problems, operate the television directly.

Installing batteries



NOTE

- If the remote does not operate properly :
 - Check the polarity +/- of the batteries.
 - Check if the batteries are drained.
 - Check if remote sensor is blocked by obstacles.
 - Check if there is any fluorescent lighting nearby.

! CAUTION

- The rechargeable battery incorporated in this product is not user replaceable. For the information on its replacement, go to your service provider.

Getting Started

Controllable TV Codes

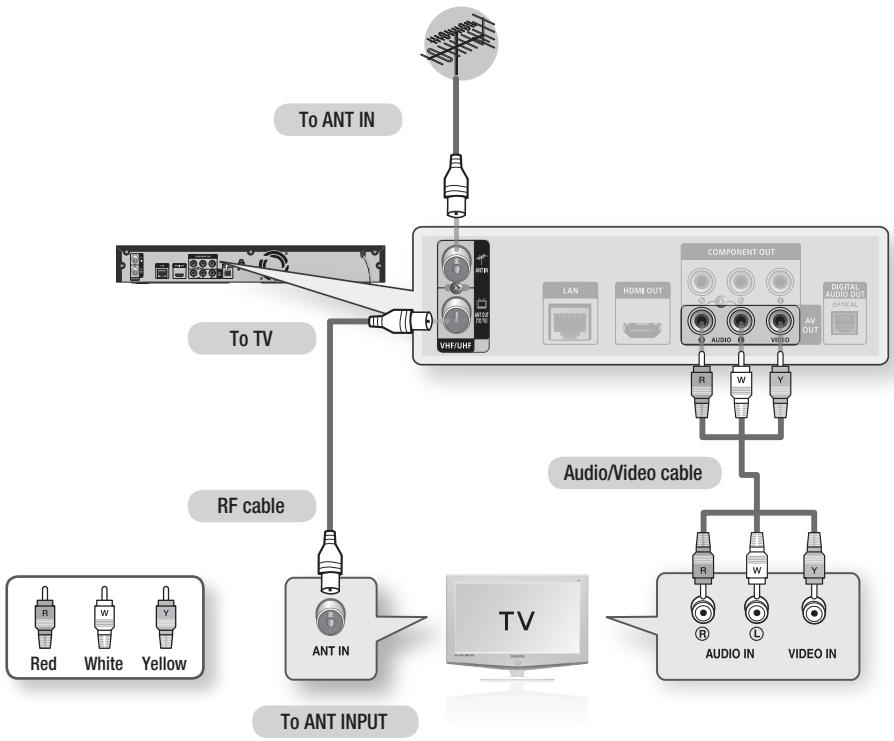
Brand	Code
SAMSUNG	TV POWER+01, +02, +03, +04, +05, +06, +07, +08, +09
AIWA	TV POWER+82
ANAM	TV POWER+10, +11, +12, +13, +14, +15, +16, +17, +18
BANG & OLUFSEN	TV POWER+57
BLAUPUNKT	TV POWER+71
BRANDT	TV POWER+73
BRIONVEGA	TV POWER+57
CGE	TV POWER+52
CONTINENTAL EDISON	TV POWER+75
DAEWOO	TV POWER+19, +20, +23, +24, +25, +26, +27, +28, +29, +30, +31, +32, +33, +34
EMERSON	TV POWER+64
FERGUSON	TV POWER+73
FINLUX	TV POWER+06, +49, +57
FORMENTI	TV POWER+57
FUJITSU	TV POWER+84
GRADIENTE	TV POWER+70
GRUNDIG	TV POWER+49, +52, +71
HITACHI	TV POWER+60, +72, +73, +75
IMPERIAL	TV POWER+52
JVC	TV POWER+61, +79
LG	TV POWER+06, +19, +20, +21, +22, +78
LOEWE	TV POWER+06, +69
LOEWE OPTA	TV POWER+06, +57
MAGNAVOX	TV POWER+40
METZ	TV POWER+57
MITSUBISHI	TV POWER+06, +48, +62, +65
MIVAR	TV POWER+52, +77
NEC	TV POWER+83

Brand	Code
NEWSAN	TV POWER+68
NOBLEX	TV POWER+66
NOKIA	TV POWER+74
NORDMENDE	TV POWER+72, +73, +75
PANASONIC	TV POWER+53, +54, +74, +75
PHILIPS	TV POWER+06, +55, +56, +57
PHONOLA	TV POWER+06, +56, +57
PIONEER	TV POWER+58, +59, +73, +74
RADIOLA	TV POWER+06, +56
RADIOMARELLI	TV POWER+57
RCA	TV POWER+45, +46
REX	TV POWER+74
SABA	TV POWER+57, +72, +73, +74, +75
SALORA	TV POWER+74
SANYO	TV POWER+41, +42, +43, +44, +48
SCHNEIDER	TV POWER+06
SELECO	TV POWER+74
SHARP	TV POWER+36, +37, +38, +39, +48
SIEMENS	TV POWER+71
SINGER	TV POWER+57
SINUDYNE	TV POWER+57
SONY	TV POWER+35, +48
TELEAVA	TV POWER+73
TELEFUNKEN	TV POWER+67, +73, +75, +76
THOMSON	TV POWER+72, +73, +75
THOMSON ASIA	TV POWER+80, +81
TOSHIBA	TV POWER+47, +48, +49, +50, +51, +52
WEGA	TV POWER+57
YOKO	TV POWER+06
ZENITH	TV POWER+63

Connections

Connecting to a TV with an Audio/Video cables and RF cable

1. Connect the RF cable as shown.
2. Using video/audio cables, connect the **VIDEO OUT (yellow) / AUDIO OUT (red and white)** terminals on the rear of the product to the **VIDEO IN (yellow) / AUDIO IN (red and white)** terminals of your TV.
3. Plug in the product and TV.
4. Turn on the product and TV.



NOTE

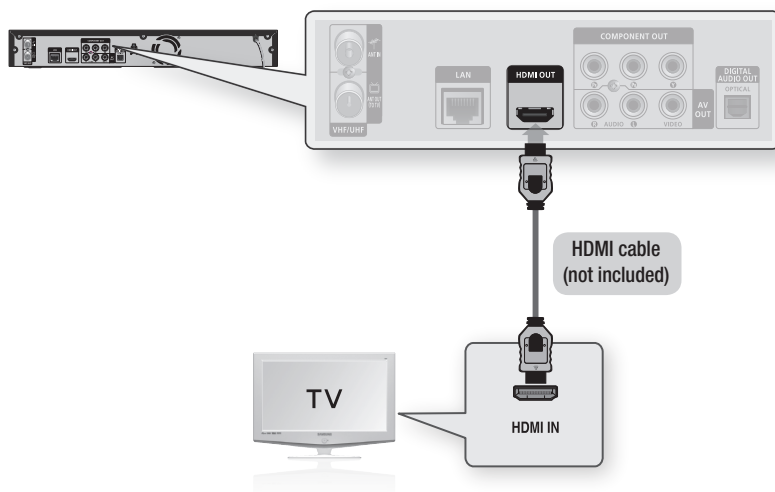
- The RF cable connection of this product sends only signals of TV. You must connect the Audio/Video cables to watch output from your product.
- Noise may be generated if the audio cable is placed too close to the power cable.
- If you want to connect to an Amplifier, please refer to the Amplifier connection pages. (See pages 27~28)
- The number and position of terminals may vary depending on your TV set. Please refer to the user manual of your TV.
- If there is only one audio input terminal on the TV, connect it to the **AUDIO OUT (right/white)** terminal of the product.

Connections

Connecting to a TV

Case 1 : Connecting to a TV with an HDMI Cable - Best Quality (Recommended)

1. Using an HDMI cable, connect the **HDMI OUT** terminal on the rear of the product to the **HDMI IN** terminal of your TV.
2. Turn on the product and TV.
3. Press the input selector on your TV remote control until the HDMI signal from the product appears on your TV screen.
 - If you have set the remote control to operate your TV (See page 21), press the **TV SOURCE** button on the remote control and select HDMI as the external source of the TV.

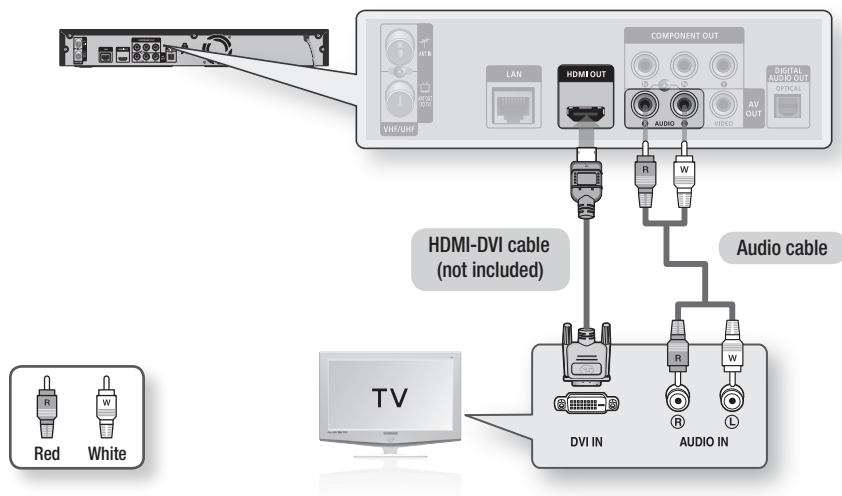


NOTE

- An HDMI cable outputs digital video/audio, so you don't need to connect an audio cable.
- If the product is connected to your TV in HDMI 720p, 1080i, 1080p output mode, you must use a High speed (category2) HDMI cable.
- HDMI outputs only a pure digital signal to the TV.
If your TV does not support HDCP (High-bandwidth Digital Content Protection), random noise appears on the screen.
- Depending on your TV, certain HDMI output resolutions may not work. Please refer to the user manual of your TV.
- When you connect the product to the TV using the HDMI cable for the first time or to a new TV, the HDMI output resolution will be automatically set to the highest supported by the TV.
- A long HDMI cable may cause a screen noise. If this is the case, set Deep Color to Off in the menu.

Case 2 : Connecting to a TV with DVI Cable - Best Quality (Recommended)

1. Using an HDMI-DVI cable, connect the **HDMI OUT** terminal on the rear of the product to the **DVI IN** terminal of your TV.
2. Using the audio cables, connect the **AUDIO OUT (red and white)** terminals on the rear of the product to the **AUDIO IN (red and white)** terminals of your TV.
3. Turn on the product and TV.
4. Press the input selector on your TV remote control until the DVI signal from the product appears on your TV screen.
 - If you have set the remote control to operate your TV (See page 21), press the **TV SOURCE** button on the remote control and select HDMI as the external source of the TV.



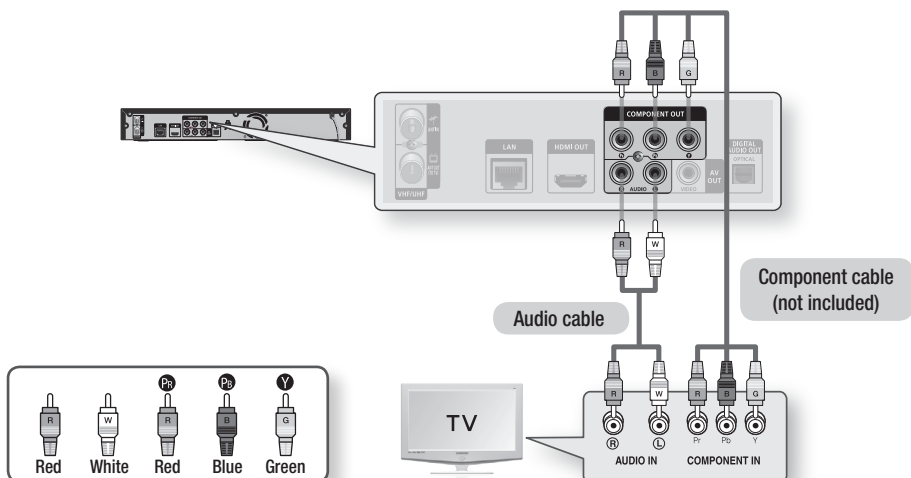
NOTE

- HDMI outputs only a pure digital signal to the TV. If your TV does not support HDCP (High-bandwidth Digital Content Protection), random noise appears on the screen.
- Depending on your TV, certain HDMI output resolutions may not work. Please refer to the user manual of your TV.
- When you connect the product to the TV using the HDMI-DVI cable for the first time or to a new TV, the HDMI output resolution will be automatically set to the highest supported by the TV.

Connections

Case 3 : Connecting to a TV (Component) - Better Quality

- Connecting to your TV using Component video cables.
 - You will enjoy high quality images with accurate colour reproduction. Component video separates the picture element into black and white(Y), blue(P_B) and red(P_R) signals to present clear and clean images. (Audio signals are delivered through the audio output.)
1. Using Component video cables, connect the **COMPONENT VIDEO OUT** terminals on the rear of the product to the **COMPONENT IN** terminals of your TV.
 2. Using the audio cables, connect the **AUDIO OUT (red and white)** terminals on the rear of the product to the **AUDIO IN (red and white)** terminals of your TV.
 3. Turn on the product and TV.
 4. Press the input selector on your TV remote control until the “COMPONENT” signal from the product appears on the TV screen.
 - If you have set the remote control to operate your TV (See page 21), press the **TV SOURCE** button on the remote control and select **COMPONENT** as the external source of the TV.



NOTE

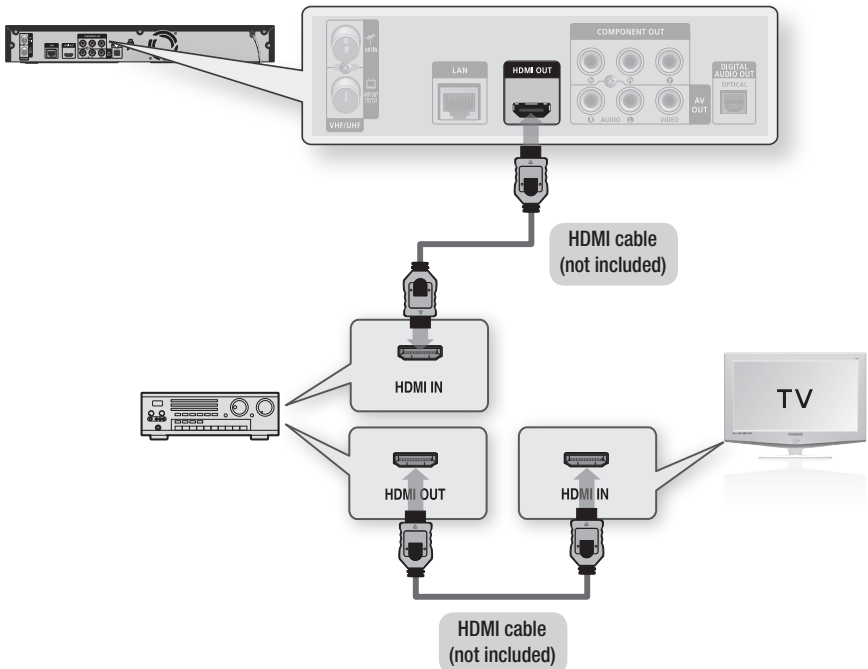
- Depending on the manufacturer, the component terminals on your TV may be marked “R-Y, B-Y, Y” or “Cr, Cb, Y” instead of “P_B, P_R, Y”. The number and position of terminals may vary depending on the TV set. Please refer to the user manual of your TV.
- You can select from a variety of resolution settings for Blu-ray Discs such as 1080i, 720p, 576p/480p, 576i/480i depending on the disc type. (See pages 35~36)
- The actual resolution may differ from the setting in the setup menu if both Component and HDMI cables are connected. The resolution may also be different depending on the disc. (See pages 35~36)
- In DVD playback, if both HDMI and Component jacks are connected and you select the Component 1080p, 1080i or 720p mode, the Display Setup menu will show the output resolution as 1080p, 1080i or 720p in the menu. The resolution is actually 576i/480i.

Connecting to an Audio System

- Please turn the volume down when you turn on the Amplifier. Sudden loud sound may cause damage to the speakers and your ears.
- Please set the audio in the menu screen according to the Amplifier. (See pages 37–39)
- The position of HDMI terminals may vary depending on the Amplifier. Please refer to the user manual of your Amplifier.

Case 1 : Connecting to an Audio System (HDMI Supported Amplifier) - Best Quality (Recommended)

1. Using an HDMI cable, connect the **HDMI OUT** terminal on the rear of the product to the **HDMI IN** terminal of your Amplifier.
2. Using an HDMI cable, connect the **HDMI OUT** terminal of the Amplifier to the **HDMI IN** terminal of your TV.
3. Turn on the product, TV and Amplifier.
4. Press the input select button of the Amplifier to select the external input in order to hear sound from the product. Refer to your Amplifier's user manual to set the Amplifier's audio input.



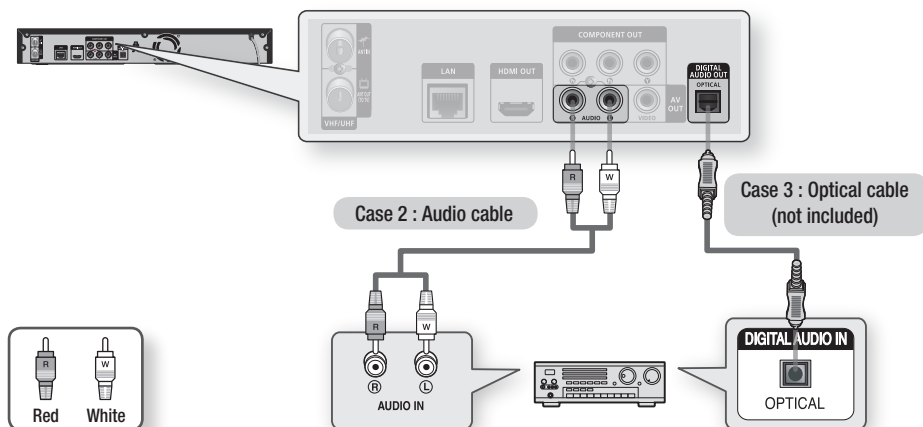
Connections

Case 2 : Connecting to an Audio System (2 Channel Amplifier) - Good Quality

1. Using the audio cables, connect the **AUDIO OUT (red and white)** terminals on the rear of the product to the **AUDIO IN (red and white)** terminals of your Amplifier.
2. Using the video signal cable(s), connect the **HDMI, COMPONENT** or **VIDEO OUT** terminals on the rear of the product to the **HDMI, COMPONENT** or **VIDEO IN** terminal of your TV. (See pages 24~26)
3. Turn on the product, TV and Amplifier.
4. Press the input select button of the Amplifier to select the external input in order to hear sound from the product. Refer to your Amplifier's user manual to set the Amplifier's audio input.

Case 3 : Connecting to an Audio System (Dolby Digital, DTS Amplifier) - Better Quality

1. Using an optical cable, connect the **DIGITAL AUDIO OUT (OPTICAL)** terminal on the rear of the product to the **DIGITAL AUDIO IN (OPTICAL)** terminal of your Amplifier.
2. Using the video signal cable(s), connect the **HDMI, COMPONENT** or **VIDEO OUT** terminals on the rear of the product to the **HDMI, COMPONENT** or **VIDEO IN** terminal of your TV. (See pages 24~26)
3. Turn on the product, TV and Amplifier.
4. Press the input select button of the Amplifier to select the external input in order to hear sound from the product. Refer to your Amplifier's user manual to set the Amplifier's audio input.



NOTE

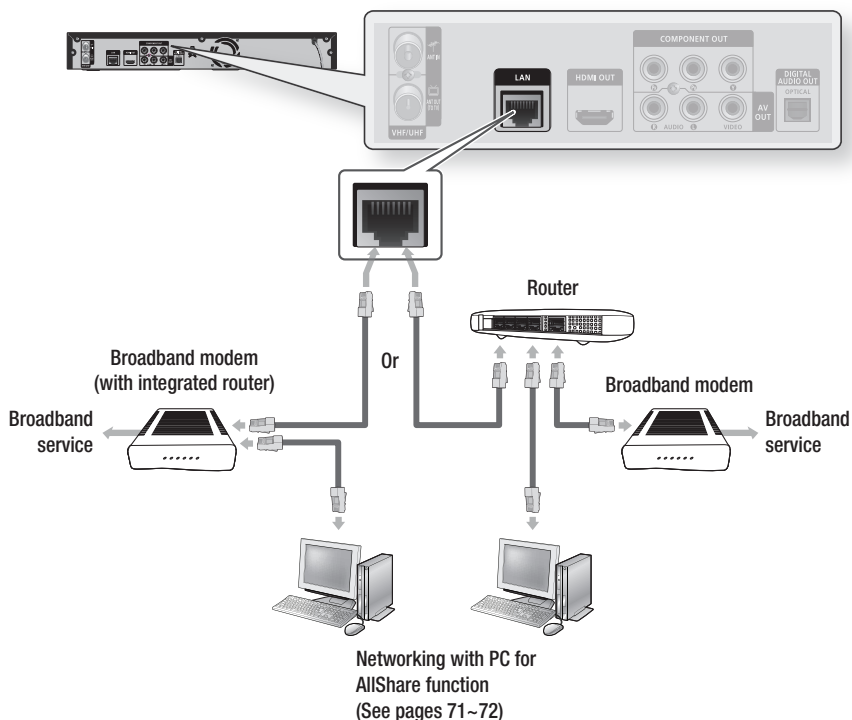
- When following the case 3 connection, discs with PCM audio soundtracks will only be heard over the front two channels.

Connecting to the Network

This product enables you to view network based services (See pages 67~72) such as Internet@TV and BD-LIVE, as well as receive software upgrades when a network connection is made. We recommend using an AP (Access Point) or IP router for the connection. For more information on router connection, refer to the user manual of the router or contact the router manufacturer for technical assistance.

Cable Network

1. Using the Direct LAN Cable (UTP cable), connect the LAN terminal of the product to the LAN terminal of your modem.
2. Set the network options. (See pages 41~45)



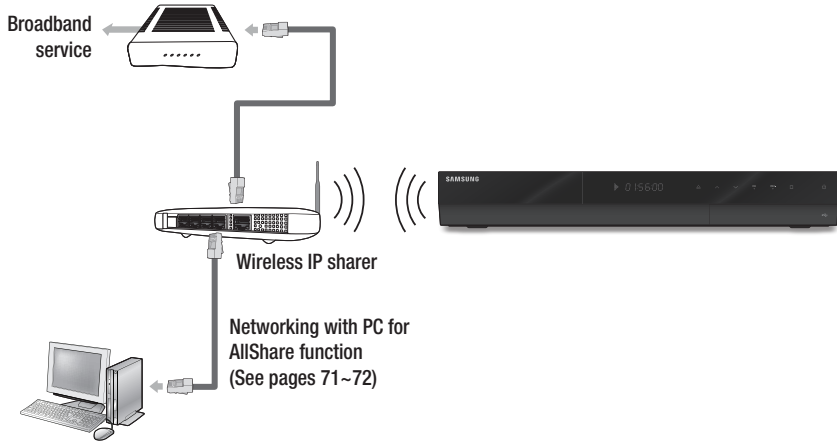
NOTE

- Internet access to Samsung's software update server may not be allowed, depending on the router you use or the ISP's policy. For more information, contact your ISP (Internet Service Provider).
- For DSL users, please use a router to make a network connection.
- For the AllShare function, a PC must be connected in the network as shown in the figure. The connection can be wired or wireless.

Connections

Wireless Network

You can connect to network with a Wireless IP sharer.
A wireless AP/IP router is required to make a wireless network connection.
To set the network options, see pages 41~45.



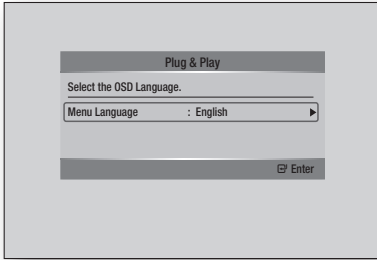
NOTE

- To use a wireless network, your product must be connected to a wireless IP sharer. If the wireless IP sharer supports DHCP, your product can use a DHCP or static IP address to connect to the wireless network.
- This product supports IEEE 802.11B, IEEE 802.11G, IEEE 802.11N. When you play the video over IEEE 802.11B/G connection, the video may not be played smoothly.
- Select a channel for the wireless IP sharer that is not currently being used. If the channel set for the wireless IP sharer is currently being used by another device nearby, this will result in interference and communication failure.
- If Pure High-throughput (Greenfield) 802.11n mode is selected and the Encryption type is set to WEP, TKIP or TKIP-AES (WPS2Mixed) for your AP, this product will not support a connection in compliance with new Wi-Fi certification specifications.
- If your AP supports WPS (Wi-Fi Protected Setup), you can connect to the network via PBC (Push Button Configuration) or PIN (Personal Identification Number). WPS will automatically configure the SSID and WPA key in either mode.
- Connection Methods : You can setup the wireless network connection 3 ways.
 - PBC (WPS)
 - Auto Setup (Using the Auto Network Search function)
 - Manual Setup
- Wireless LAN, by its nature, may cause interference, depending on the operating conditions. (AP performance, distance, obstacles, interference by other radio devices, etc).
- Set the wireless IP sharer to Infrastructure mode. Ad-hoc mode is not supported.
- When applying the security key for the AP (wireless IP sharer), only the following security protocols are supported:
 - 1) Authentication Mode : WEP, WPAPSK, WPA2PSK
 - 2) Encryption Type : WEP, AES
- To use the AllShare function, you must connect your PC to your network as shown in the figure. The connection can be wired or wireless.

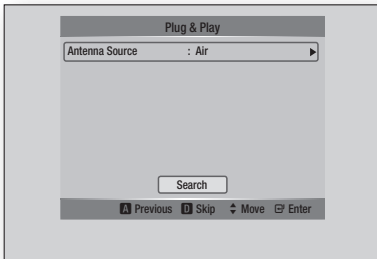
Setup

Before Starting (Plug & Play)

1. Turn on your TV after connecting the product. (When the product is connected to TV for the first time, product will turn on automatically and the Plug & Play screen will be displayed.)



2. Press the ►▲▼ buttons to select the desired language, then press the **ENTER** button.
3. Press the ►▲▼ buttons to select the desired country, then press the **ENTER** button.



4. Press the ►▲▼ buttons to select the desired Antenna Source, then press the **ENTER** button.
 - If you select **Air** : Press the ▼ button to select the **Search**, then press the **ENTER** button.
 - If you select **Cable** : Press the ▼ button to select the **Next**, then press the **ENTER** button. Set the Search Mode option, then press the ▼ button to select the **Search** button.

5. Press the ►▲▼ buttons to select the desired Clock Mode.
 - If you select **Auto** : Press the **ENTER** button.
 - If you select **Manual** : Press the ▲▼◀▶ button to set the clock, then press the **ENTER** button.
6. Press the ▲▼ button to select the desired TV Aspect ratio, then press the **ENTER** button. (See page 35)
7. Press the ◀▶ buttons to select the desired Network Settings: **Wired**, **Wireless** or **PBC (WPS)**, then press the **ENTER** button. (See pages 41~45)
8. The message "Enjoy your watching" will be displayed. Press the **OK** button. The broadcasting channel will be displayed.

NOTE

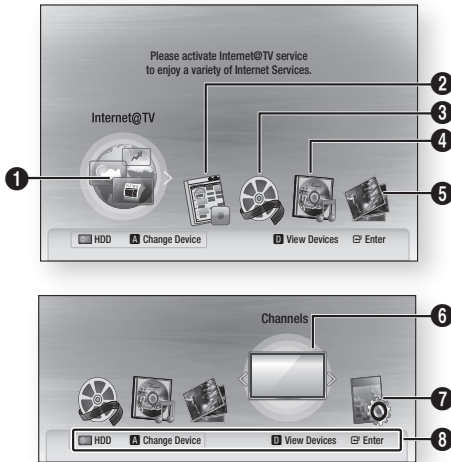
- When the product is connected to TV for the first time, product will turn on automatically. Do not confuse because this is not malfunction.
- If the product is left in the home menu more than 5 minutes without being used, a screen saver will appear on your TV.

Setup

Setting the Menu

1. Press the **MENU** button.
The home menu will be displayed.
2. Press the ◀▶ buttons to select the desired home menu, then press the **ENTER** button.
3. Press the ▲▼ buttons to select the desired submenu, then press the **ENTER** button.
4. Press the ▲▼ buttons to select the desired item, then press the **ENTER** button.
5. Press the **EXIT** button to exit the menu.

• Home Menu



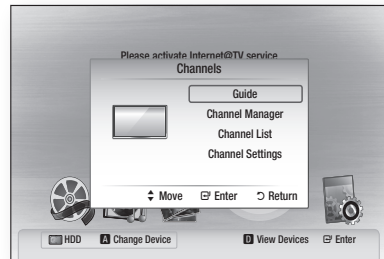
- | | |
|---|---------------------------------|
| 1 | Selects the Internet@TV. |
| 2 | Select the Recorded TV. |
| 3 | Selects the Videos. |
| 4 | Selects the Music. |
| 5 | Selects the Photos. |
| 6 | Selects the Channels. |
| 7 | Selects the Settings. |
| 8 | Displays the buttons available. |

NOTE

- When you return to home menu, the full screen mode will be cancelled automatically.
- The access step may differ depending on the selected menu.
- The OSD (On Screen Display) may change in this product after upgrading the software version.
- When the product is connected to the network, select **Internet@TV** from the home menu. Download desired content from **Samsung Apps**. (See page 70)

Channels

1. Press the **MENU** button.
The home menu will be displayed.
2. Press the ◀▶ buttons to select the **Channels**, then press the **ENTER** button.



3. Press the ▲▼ buttons to select the desired submenu, then press the **ENTER** button.
4. Press the ▲▼ buttons to select the desired item, then press the **ENTER** button.
5. Press the **EXIT** button to exit the menu.

Channel Settings

Antenna-Air

1. In Channel Settings menu, press the ▲▼ buttons to select the **Antenna**.
2. Press the ◀▶ buttons to select the **Air**, then press the ▼ button.

3. Press the **ENTER** button to select the country.
4. Enter the desired 4-digit password using the number buttons.
5. Press the **▶▲▼** buttons to select the desired Country, then press the **ENTER** button.
6. Press the **ENTER** button again, then press the **RETURN** button.
7. Press the **▼** buttons to select the **Digital Text**, then press the **◀▶** button.
8. Press the **▲▼** buttons to select the **Auto Store** or **Manual Store**, then press the **ENTER** button.

Antenna-Cable

1. In Channel Settings menu, press the **▲▼** buttons to select the **Antenna**.
2. Press the **◀▶** buttons to select the **Cable**, then press the **▼** button.
3. Press the **ENTER** button to select the country.
4. Enter the desired 4-digit password using the number buttons.
5. Press the **▶▲▼** buttons to select the desired Country, then press the **ENTER** button.
6. Press the **ENTER** button again, then press the **RETURN** button.
7. Press the **▲▼** buttons to select the **Cable Search Option**, then press the **ENTER** button.
8. Set the desired items.
9. Press the **RETURN** button.
10. Press the **▼** buttons to select the **Digital Text**, then press the **◀▶** button.
11. Press the **▲▼** buttons to select the **Auto Store** or **Manual Store**, then press the **ENTER** button.

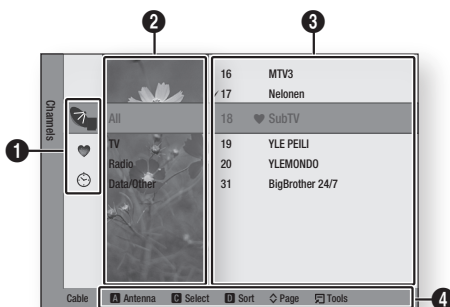
NOTE

- Default password is set to 0000.




Channel Manager

You can manage the stored channels.

Channel Manager Screen



Edited Channels : Press the **◀▲▼** buttons to check edited channels.

- **Channels** (): Shows the channel list according to channel type.
- **My Channels** (): Shows all favourite channel.
- **Scheduled** (): Shows all currently reserved channel.

Channel View : Press the **◀▲▼** buttons to select the desired channel view. (All, TV, Radio, Data/ Other)

3 Shows the stored channels.

Navigation Help : Displays remote control buttons available.

- **RED(A)** : Selects Air or Cable.
- **YELLOW(C)** : Selects the channel.
- **BLUE(D)** : Sorts the list ordered by channel name or channel number.
- **Page** : Move to next or previous page.
- **Tools** : Displays the Channel Manager option menu.

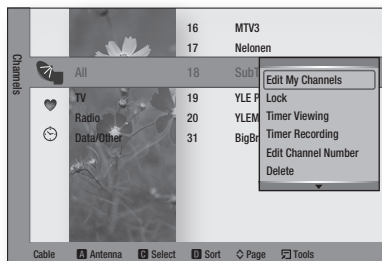
Setup

Channel Status Display Icons

Icons	Operations
✓	A channel selected.
♥	A channel set as my channels.
🔒	A locked channel.
🕒	A reserved channel.

Using the TOOLS button

1. Press the **▲▼** buttons to select the desired channel, then press the **TOOLS** button.

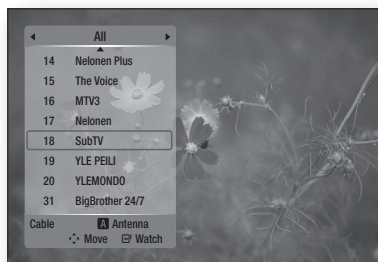


2. Press the **▲▼** buttons to select the desired option, then press the **ENTER** button.
 - **Edit My Channels** : Select this to edit the channel.
 - **Lock** : Select this to lock the channel.
 - **Timer Viewing** : Select this to set the Timer Viewing.
 - **Timer Recording** : Select this to set the Timer Recording.
 - **Edit Channel Number** : Select this to edit the Channel Number.
 - **Delete** : Select this to delete the Channel.
 - **Select All** : Select this to select all channel.

Channel List

You can see all channels searched.

1. Press the **CH LIST** button on the remote control. The channel List will be displayed.
2. Press the **▲▼** button to select desired channel, press the **ENTER** button. The selected channel will be displayed.



NOTE

- By pressing the **INFO** button, you can display or record the selected channel.

Settings





1. Press the **MENU** button. The home menu will be displayed.
2. Press the **◀▶** buttons to select the **Settings**, then press the **ENTER** button.
3. Press the **▲▼** buttons to select the desired submenu, then press the **ENTER** button.
4. Press the **▲▼** buttons to select the desired item, then press the **ENTER** button.
5. Press the **EXIT** button to exit the menu.

Display

You can configure various display options such as the TV Aspect, Resolution, etc.

TV Aspect

Depending on the type of television you have, you may want to adjust the screen setting.

<ul style="list-style-type: none"> • 16:9 Normal 	
	<p>Certain movies(4:3 source) will be displayed in 4:3 Pillarbox (black bars on sides of picture) if 16:9 normal is selected.</p>
<ul style="list-style-type: none"> • 16:9 Wide 	
	<p>You can view the full 16:9 picture on your widescreen TV.</p>
<ul style="list-style-type: none"> • 4:3 Letter Box 	
	<p>Select when you want to see the total 16:9 ratio screen a Blu-ray Disc/DVD supplies, even though you have a TV with a 4:3 ratio screen. Black bars will appear at the top and bottom of the screen.</p>
<ul style="list-style-type: none"> • 4:3 Pan-Scan 	
	<p>Select when you want to see the 16:9 video supplied by the Blu-ray Disc/DVD without the black bars on top and bottom, even though you have a TV with a 4:3 ratio screen(extreme left and right portion of the movie picture will be cut off).</p>

NOTE

- Depending on the disc type, some aspect ratios may not be available.
- If you select an aspect ratio and option which is different than the aspect ratio of your TV screen, then the picture might appear to be distorted.
- If you select the 4:3 Pan-Scan or 4:3 Letter Box, you can't see full screen by pressing the **FULL SCREEN** button on the remote control.
- If you select the 16:9 Normal, 4:3 Pillarbox may displayed.

In this case, you can't see full screen by pressing the **FULL SCREEN** button on the remote control.

BD Wise (Samsung Products only)

BD Wise is Samsung's latest inter-connectivity feature.

When you connect Samsung products with BD Wise to each other via HDMI, the optimum resolution will be set automatically.

- **On** : The original resolution of the BD/DVD disc will be output to the TV.
- **Off** : The output resolution will be fixed according to the Resolution previously set, regardless of the resolution of the disc.

NOTE

- If you want to change the resolution in BD Wise, you must set BD Wise to **Off** in advance.
- If you set off the BD Wise, the resolution of the connected TV will be adjusted to its maximum resolution automatically.
- If the product is connected to a device that does not support BD Wise, you can not use the BD Wise function.
- For proper operation of BD Wise, set the BD Wise menu of both the product and the TV to **On**.

Resolution

Sets the output resolution of the Component and HDMI video signal.

The number in 1080p, 1080i, 720p, 576p/480p, 576i/480i indicates the number of lines of video. The i and p indicate interlace and progressive scan, respectively.

- **Auto** : It automatically checks and sets the optimal resolution.
- **BD Wise** : Automatically sets the optimal resolution when connected via HDMI to a TV with the BD Wise feature. (The BD Wise menu item appears only if BD Wise is set to On.)
- **1080p** : Outputs 1080 lines of progressive video.
- **1080i** : Outputs 1080 lines of interlaced video.
- **720p** : Outputs 720 lines of progressive video.
- **576p/480p** : Outputs 576/480 lines of progressive video.
- **576i/480i** : Outputs 576/480 lines of interlaced video.

Setup

Resolution according to the output mode

■ Blu-ray Disc Playback

Setup \ Output	HDMI connected		HDMI not connected	
	HDMI Mode	Component VIDEO Mode	Component Mode	VIDEO Mode
Auto	Optimal Resolution	576i/480i	-	-
1080p, Movie Frame(24Fs) off	1080p@50F/60F	576i/480i	-	-
1080p/1080i, Movie Frame(24Fs) on	1080p@24F	576i/480i	-	-
1080i, Movie Frame(24Fs) off	1080i	576i/480i	1080i	576i/480i
720p	720p	576i/480i	720p	576i/480i
576p/480p	576p/480p	576i/480i	576p/480p	576i/480i
576i/480i	-	-	576i/480i	576i/480i

■ DVD Playback / DTV Channel View

Setup \ Output	HDMI connected		HDMI not connected	
	HDMI Mode	Component VIDEO Mode	Component Mode	VIDEO Mode
Auto	Optimal Resolution	576i/480i	-	-
1080p	1080p@50F/60F	576i/480i	-	-
1080i	1080i	576i/480i	576p/480p	576i/480i
720p	720p	576i/480i	576p/480p	576i/480i
576p/480p	576p/480p	576i/480i	576p/480p	576i/480i
576i/480i	-	-	576i/480i	576i/480i

NOTE

- If the connected TV does not support Movie Frame or the selected resolution, the message "If no pictures are shown after the selection, please wait for 15 seconds. And then, the resolution will be reverted to the previous value automatically. Would you like to make a selection?" will be displayed. If you select **Yes** and the resolution is not supported, the TV's screen will be blank. Please wait for 15 seconds and the resolution will be reverted to the previous value automatically.
- If the screen is blank, press the **MENU** button to display home menu. Press the **STOP** (■) button on the front panel of the product for more than 5 seconds with no disc inserted. All settings are restored to the factory default. Follow the steps on the previous page to access each mode and select the Display Setup that your TV will support.

- When the factory default settings are restored, all the user data stored in the BD data will be deleted.
- The Blu-ray Disc must have the 24 frame feature in order to use the Movie Frame (24Fs) mode.
- If both HDMI and Component jacks are connected and you are currently viewing component output, there is a difference between resolution table and actual resolution depending on your TV.
- When playing Blu-ray disc that made from PAL contents, Component Video output supports up to SD resolution (576p and 576i mode).

HDMI Format

You can optimize the colour setting from the HDMI output by selecting a connected device Type.

- **TV** : Select if connected to a TV via HDMI.
- **Monitor** : Select if connected to a Monitor via HDMI.

Movie Frame (24Fs)

Setting the Movie Frame (24Fs) feature to **On** allows you to adjust the product's HDMI output to 24 frames per second for improved picture quality. You can enjoy the Movie Frame (24Fs) feature only on a TV supporting this frame rate. This menu can only be selected in 1080i or 1080p HDMI output resolution modes.

- **On** : Movie Frame (24Fs) functions will work.
- **Off** : Movie Frame (24Fs) functions will not work.

NOTE

- If your TV does not support Movie Frame (24Fs) function, the pop-up message will be displayed.

Progressive Mode

Set to improve picture quality when viewing DVDs.

- **Auto** : Select this to have the product automatically set the best picture for the DVD you're watching.
- **Video** : Select for the best picture quality from concert or TV show DVDs.

Still Mode

Set the type of picture shown when you pause DVD playback.

- **Auto** : Automatically set the best still picture depending on the content.
- **Frame** : Select when pausing a scene with a little action.
- **Field** : Select when pausing a scene with a lot of action.

HDMI Deep Color

Set to output the picture from the HDMI OUT jack with Deep Color or not. Deep Color allows more accurate color reproduction with deeper color depth.

- **Auto** : The picture will be output with Deep Color to the connected TV which supports HDMI Deep Color.
- **Off** : The picture will be output without Deep Color.

Audio

Digital Output

Set Digital Output depending on the connected receiver. (For more details, please refer to the digital output selection on the next page)

- **PCM**
- **Bitstream(Re-encode)**
- **Bitstream(Audiophile)**

NOTE

- Be sure to select the correct Digital Output or you will hear no sound or a loud noise.
- If the HDMI device (Receiver, TV) is not compatible with compressed formats (Dolby digital, DTS), the audio signal outputs as PCM.
- Secondary and Effect audio will not be heard with regular DVDs.
- Some Blu-ray Discs do not have Secondary and Effect audio.
- This Digital Output setup does not effect the analogue (L/R) audio or HDMI audio output to your TV. It effects the optical and HDMI audio output when connected to a receiver.
- If you play MPEG audio soundtracks, audio signal outputs PCM regardless of Digital Output Selections (PCM or Bitstream).

Setup

Digital Output Selection

Setup		PCM		Bitstream (Re-encode)	Bitstream (Audiophile)	
Connection		HDMI Receiver	Optical	HDMI Receiver or Optical	HDMI Receiver	Optical
Audio Stream on Blu-ray Disc	PCM	Up to 7.1ch	PCM 2ch	DTS re-encoded	PCM	PCM 2ch
	Dolby Digital	Up to 5.1ch	PCM 2ch	DTS re-encoded	Dolby Digital	Dolby Digital
	Dolby Digital Plus	Up to 7.1ch	PCM 2ch	DTS re-encoded	Dolby Digital Plus	Dolby Digital
	Dolby TrueHD	Up to 7.1ch	PCM 2ch	DTS re-encoded	Dolby TrueHD	Dolby Digital
	DTS	Up to 6.1ch	PCM 2ch	DTS re-encoded	DTS	DTS
	DTS-HD HRA	Up to 7.1ch	PCM 2ch	DTS re-encoded	DTS-HD HRA	DTS
	DTS-HD MA	Up to 7.1ch	PCM 2ch	DTS re-encoded	DTS-HD MA	DTS
Audio Stream on DVD	PCM	PCM 2ch	PCM 2ch	PCM 2ch	PCM 2ch	PCM 2ch
	Dolby Digital	Up to 5.1ch	PCM 2ch	Dolby Digital	Dolby Digital	Dolby Digital
	DTS	Up to 6.1ch	PCM 2ch	DTS	DTS	DTS
Definition for Blu-ray Disc	Any	Decodes Primary, Secondary and Effect audio streams together into PCM audio.		Decodes Primary, Secondary and Effect audio streams together into PCM audio, then reencodes the PCM audio into DTS bitstream.	Outputs only the Primary audio soundtrack (main soundtrack of the movie) so that your receiver can decode the audio bitstream. You will not hear Secondary and Effect audio.	

Blu-ray Discs may include three audio streams.

- Primary Audio : The audio soundtrack of the main feature
- Secondary Audio : Additional soundtrack such as director or actor's commentary.
- Interactive Audio : Interactive sounds will be heard when selected.
Interactive Audio is different on each Blu-ray Disc.

PCM Downsampling

Set whether to downsample 96KHz signals.

- **On** : Select this when the Amplifier connected to the product is not 96KHz compatible. 96KHz signals will be down converted to 48KHz.
- **Off** : Select this when the Amplifier connected to the product is 96KHz compatible.

NOTE

- Even when PCM Downsampling is set to **Off**, some discs will only output downsampled audio through the optical digital outputs.

HDMI

- If your TV is not compatible with compressed multi-channel formats (Dolby Digital, DTS), the product may output PCM 2ch downmixed audio even though you set Bitstream(either Re-encode or Audiophile) on your setup menu.
- If your TV is not compatible with PCM sampling rates over 48kHz, the product may output 48kHz downsampled PCM audio even though you set PCM Downsampling to **Off**.

Dynamic Range Control

You can listen at low volumes but still hear dialog clearly.

This is only active when a Dolby Digital signal is detected.

- **Auto** : The Dynamic Range Control will be set automatically based on the information provided by the Dolby TrueHD Soundtrack.
- **Off** : Turn Dynamic Range Control off.
- **On** : Choose to listen to a movie at a lower volume without losing clarity of dialog.

Downmixing Mode

Set whether to downmix the multi-channel audio into fewer channels.

- **Normal Stereo** : Downmixes the multi-channel audio into two channel stereo. Choose when connected to equipment that does not support virtual surround functions such as Dolby Pro Logic.
- **Surround Compatible** : Downmixes multi-channel audio into surround compatible stereo. Choose when connected to equipment that supports virtual surround functions such as Dolby Pro Logic.

DTS Neo:6

You can enjoy multi-channel sound from a simple 2-channel audio source.

- **Off** : Outputs a 2-channel audio signal through the front speakers only.
- **Cinema** : Select this if you want to play 2-channel movie sound over multi-channels.
- **Music** : Select this if you want to play 2-channel music sound over multi-channels.

NOTE

- If you are using HDMI receiver, this option is available when you set Digital Output setup as PCM.

Audio Description

You can add a verbal description to the main audio to help the visually impaired.

- **On** : Turns the Audio Description function on.
- **Off** : Turns the Audio Description function off.

System

Plug & Play

By using Plug & Play, you can set language, country, antenna source, clock mode, TV aspect and Network Settings, etc.

For more information on the settings, refer to the corresponding section in this user manual. (See page 31)

Internet@TV Screen Size


Set the Internet@TV Screen to the optimal size.

- **Size 1** : Display smaller application icons, you may see some black on all sides of screen.
- **Size 2** : Display normal application icons.
- **Size 3** : Display larger application icons, image may be too large for your TV screen.

Anynet+(HDMI-CEC)

Anynet+ is a convenient function that offers linked operations with other Samsung products with the Anynet+ feature.

To operate this function, connect this product to a Samsung TV with an HDMI cable.

You can operate this product using a Samsung TV remote control and start disc playback simply by pressing the **PLAY** () button on the TV's remote control.

For more information, please see the TV user manual.

- **On** : Anynet+ functions will work.
- **Off** : Anynet+ function will not work.

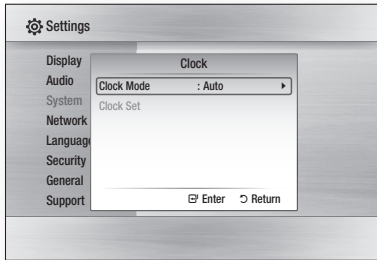
NOTE

- This function is not available if the HDMI cable does not support CEC.
- If your Samsung TV has an **Anynet+** logo, then it supports the Anynet+ function.
- Depending on your TV, certain HDMI output resolutions may not work. Please refer to the user manual of your TV.

Setup

Clock

Set time-related functions.



- **Clock Mode** : You can set it to **Auto** or **Manual**.
If you select **Manual**, the **Clock Set** menu will be activated.
- **Clock Set** : You can specify the current time and date manually.

Common Interface

Show the CI Menu Information screen.

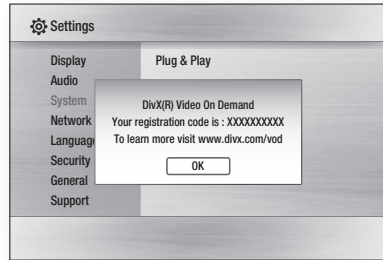
- **CI Menu** : This enables the user to select from the CAM provided menu. Select the CI Menu based on the menu PC Card.
 - **Application Info.** : View information on the CAM inserted into the CI slot and on the “CI or CI+ CARD” which is inserted into the CAM. You can install the CAM anytime whether the product is on or off.
1. Purchase a CI CAM module at your nearest dealer or by phone.
 2. Firmly insert the “CI or CI+ CARD” into the CAM in the direction of the arrow.
 3. Insert the CAM with the “CI or CI+ CARD” into the common interface slot, in the direction of the arrow so that it aligns parallel with the slot.
 4. Check if you can see a picture on a scrambled signal channel.

NOTE

- This Device is work with CI and CI+ CAM. But in case of some local DVB-T association, this device don't have perfect compatibility with all kinds of CAM.
If there is a problem, pull the CAM CARD out of the Set and insert it into the slot again.

DivX(R) Registration

View DivX(R) VOD Registration Code to purchase and play DivX(R) VOD content.

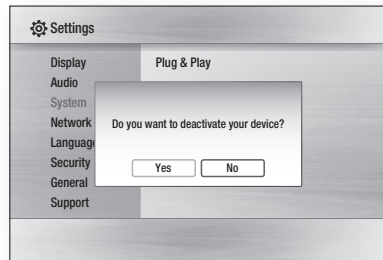


NOTE

- This option is not activated if you select **OK**. To activate this option, please activate the DivX(R) Deactivation.

DivX(R) Deactivation

Select this to get a new registration code.

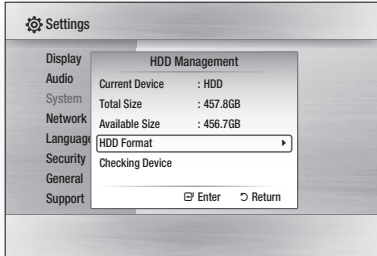


NOTE

- This function can be operated when DivX(R) Registration function is deactivated.

HDD Management

Manage the internal HDD device. You can execute management options such as the HDD format or checking Device.



- **Current Device** : Displays the current device.
- **Total Size** : Displays the total size of the device. (Storage)
- **Available Size** : Displays the available size of the device. (Storage)
- **HDD Format** : Press this to format the HDD.
- **Checking Device** : Press this to checking the Device.

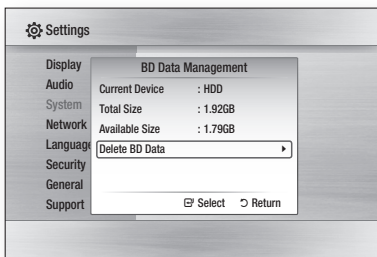
NOTE

- The available size displayed in the HDD management menu does not include the default space of 20GB. The 20GB in the HDD is reserved for the Timeshift feature by default.

BD Data Management

Enables you to manage the downloaded contents from a Blu-ray disc that supports the BD-LIVE service.

You can check the device information including the storage size, delete the BD data.



- **Current Device** : Displays the current device.
- **Total Size** : Displays the total size of the device. (Storage)
- **Available Size** : Displays the available size of the device. (Storage)
- **Delete BD Data** : Press this to delete the BD data.

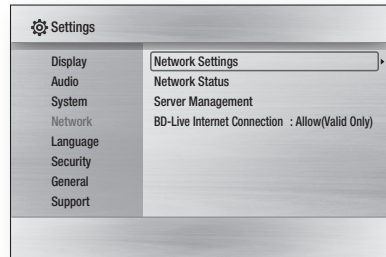
NOTE

- The total size of BD Data Management may differ, depending on the conditions.

Network

To begin setting up the network connection for your product, follow these steps:

1. In the Home menu, press the ◀▶ buttons to select the **Settings**, and then press the **ENTER** button.
2. Press the ▲▼ buttons to select **Network**, and then press the **ENTER** button.



3. Press the ▲▼ buttons to select **Network Settings**, and then press the **ENTER** button.
4. Press the ▲▼ buttons to select **Network Type**, and then press the **ENTER** button.
5. Press the ▲▼ buttons to select **Wired** or **Wireless**, and then press the **ENTER** button.
6. Go to the next section.

Network Settings

Please contact your ISP to find out if your IP address is static or dynamic. If it is dynamic, we recommend using the Auto setting. This is the easiest and will work in the majority of cases. If it is static, you must use the manual set up procedure. Directions for wired networks are below. Directions for wireless networks are after the directions for wired networks.

Setup

Wired Network

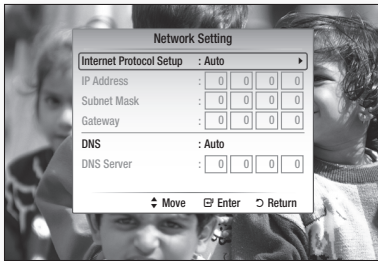
1. In the Network Settings menu, press the ▲▼ buttons to select **Network Settings**, and then press the **ENTER** button.
The Internet Protocol Setup screen appears.
2. Press the ► button, then select **Auto** or **Manual**, and then press the **ENTER** button.

■ Setting Up a Wired Connection - Auto

1. If you selected **Auto**, the Network Function acquires and fills in the values for IP Address, Subnet Mask, etc., automatically.

NOTE

- This process can take up to five minutes.



2. After the Network Function has acquired the network values, press the **RETURN** button. Then, run a Network Test to ensure the product has connected to your network (See page 45).
3. If the Network Function does not acquire the network values or you selected Manual, go to the directions for Manual Setup.

■ Setting Up a Wired Connection - Manual

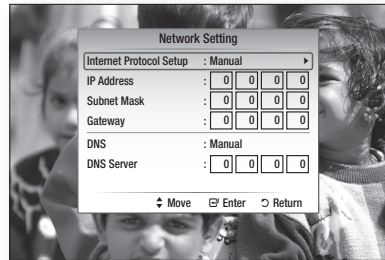
If the Auto Setting does not work, you'll need to set the Network Setting values manually.

To get the Network setting values from most Windows computers, follow these steps:

1. Right click the Network icon on the bottom right of the screen.
2. In the pop-up menu, click Status.
3. On the dialog that appears, click the Support tab.
4. On the Support tab, click the Details button.
The Network settings are displayed.

To enter the Network settings into your product, follow these steps:

1. On the Internet Protocol Setup screen, press the **ENTER** button.
2. Press the ▲▼ buttons to select **Manual**, and then press the **ENTER** button.
3. Press the ▼ button to go to the first entry field (IP Address).



4. Use the number buttons on your remote to enter numbers.
5. When done with each field, use the ► button to move successively to the next field. You can also use the other arrow buttons to move up, down, and back.
6. Enter the **IP Address**, **Subnet Mask**, and **Gateway** values.
7. Press the ▼ button to go to **DNS**.
8. Press the ▼ button to go to the first DNS entry field. Enter the numbers as above.
9. Press the **RETURN** button on your remote.
10. Run a Network Test to ensure the product has connected to your network (See page 45).

Wireless Network

You can setup the wireless connection three ways:

- Using PBC (WPS)
- Using the Auto Network Search function.
- Manually.

■ Setting Up the Wireless Network Connection - PBC (WPS)

The easiest way to set up the wireless network connection is using the PBC (WPS) function. If your wireless router has a PBC (WPS) button, follow these steps:

1. In the Network Settings menu, press the ▲▼ buttons to select **Network Settings**, and then press the **ENTER** button. The Internet Protocol Setup screen appears.
2. Press the **RED(A)** button on the remote control.
3. Press the **PBC (WPS)** button on your router within two minutes. Your product displays the Network Selection Screen, and automatically acquires all the network setting values it needs and connects to your network. When it is done, it displays an **OK** button. Press the **ENTER** button on your remote.
4. After the network connection is set up, press the **RETURN** button to exit the Network Setting screen.

■ Setting Up the Wireless Network Connection - Auto Network Search

Most wireless networks have an optional security system that requires devices that access the network to transmit an encrypted security code called an Access or Security Key. The Security Key is based on a Pass Phrase, typically a word or a series of letters and numbers of a specified length you were asked to enter when you set up security for your wireless network. If you use this method of setting up the network connection, and have a Security Key for your wireless network, you will have to enter the Pass Phrase during the setup process.

■ Setting Up the Network Connection

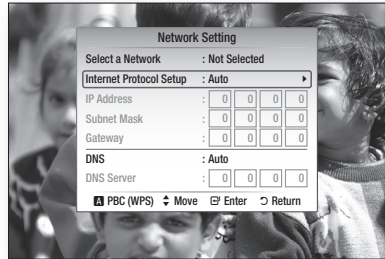
To set up the wireless connection using Auto Network Search, follow these steps:

1. In the Network Settings menu, press the ▲▼ buttons to select **Network Settings**, and then press the **ENTER** button. The Internet Protocol Setup screen appears.
2. Press the ▲▼ buttons to select the **Internet Protocol Setup**, and then press the **ENTER** button.
3. Press the ▲▼ buttons to select **Auto** or **Manual**, and then press the **ENTER** button.

4. If you selected **Auto**, press the ▲ button to go to **Select a Network**, and then press the **ENTER** button.

The Network function searches for available wireless networks.

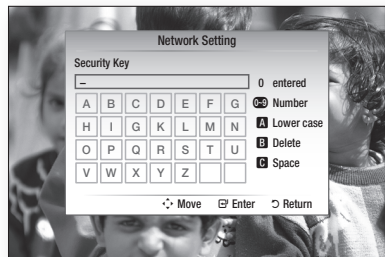
When done, it displays a list of the available networks.



5. In the list of networks, press the ▲▼ buttons to select a network, and then press the **ENTER** button.
6. If the PIN/Security pop-up appears, go to Step 7. If the Network Connecting Screen appears, go to Step 11.
7. Press the ▲▼ buttons to select PIN or Security. For most home networks, you would select Security (for Security Key).
8. On the Security screen, enter your network's Pass Phrase.

📎 NOTE

- You should be able to find the Pass Phrase on one of the set up screens you used to set up your router or modem.
- The screen may appear corrupted when you connecting the wireless network (WIFI). In this case, disable the WiFi connection.



Setup

- To enter the Pass Phrase, follow these general directions:
 - Press the number keys on your remote to enter numbers.
 - Use the arrow keys on your remote to move from button to button on the Security Key screen.
 - Pressing the **RED(A)** button on the remote lets you change the text displayed on the buttons to lower case, upper case, numbers, or icons.
To enter a letter or symbol, move the cursor to the letter or symbol, and then press the **ENTER** button.
 - To delete the last letter or number you entered, press the **GREEN(B)** button.

- When done, press the **BLUE(D)** button on your remote, and then press the **ENTER** button.
- Wait until the connection confirmation message is displayed, and then press the **ENTER** button. The Network Settings screen reappears.
- To test the connection, press the **▼** button to select **Network Test**, and then press the **ENTER** button.
 - Setting Up the Wireless Network Connection - Manual**

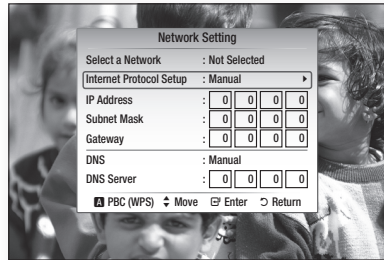
If the Auto Setting does not work, you need to enter the Network setting values manually.

To get the Network setting values from most Windows computers, follow these steps:

- Right click the Network icon on the bottom right of the screen.
- In the pop-up menu, click Status.
- On the dialog that appears, click the Support tab.
- On the Support tab, click the Details button. The Network settings are displayed.

To Enter the Network settings into your product, follow these steps:

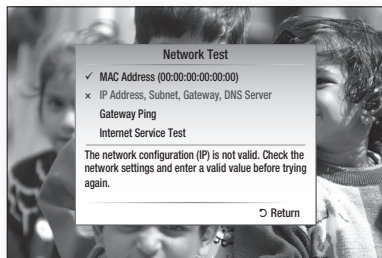
- On the Internet Protocol Setup screen, press the **ENTER** button.
- Press the **▲▼** buttons to select **Manual**, and then press the **ENTER** button.
- Press the **▼** button to go to the first entry field (IP Address).



- Use the number buttons to enter numbers.
- When done with each field, use the **▶** button to move successively to the next field. You can also use the other arrow buttons to move up, down, and back.
- Enter the **IP Address**, **Subnet Mask**, and **Gateway** values.
- Press the **▼** to go to **DNS**.
- Press the **▼** button to go to the first DNS entry field. Enter the numbers as above.
- When done, press the **▲** button to return to Access Point Selection. Select the network, and then press the **ENTER** button.
- Go to Step 6 in the Automatic Wireless procedure above, and follow the directions from that point on.

Network Test

Use this menu to connect to the wired network or check whether your network connection is working or not.



Network Status

Check whether a connection to the network and the Internet have been established.

Server Management

Manage content sharing function, You can share media contents (videos, music, photos) via the AllShare Network.

- **Server** : You can set the server on or off.
- **Change Server Name** : You can change the server name.
- **Device Access Control** : You can set the access control.

NOTE

- Formatting the HDD will switch the server status to Off.
- If the HDD has no content contained, the server management will be deactivated.

BD-LIVE Internet Connection

Set to allow internet connection when BD-LIVE service is used.

- **Allow (All)** : The Internet connection will be allowed for all BD-LIVE contents.
- **Allow (Valid Only)** : The Internet connection will be allowed only for BD-LIVE contents containing a valid certificate.
- **Prohibit** : No Internet connection will be allowed for any BD-LIVE content.

NOTE

■ What is a valid certificate?

When the product uses BD-LIVE to send the disc data and a request to the server to certify the disc, the server uses the transferred data to check if the disc is valid and sends the certificate back to the product.

- The Internet connection may be restricted while you are using BD-LIVE contents.

Language

You can select the language you prefer for home menu, disc menu, etc.

- **On-Screen Menu** : Select the language for the on-screen displays.
- **BD/DVD Disc Menu** : Select the language for the disc menu displays.
- **BD/DVD Audio** : Select the language for disc audio language.
- **BD/DVD Subtitle** : Select the language for disc subtitle language.
- **DTV Primary Audio** : Select the language for DTV primary audio language.
- **DTV Secondary Audio** : Select the language for DTV secondary audio language.
- **DTV Primary Subtitle** : Select the language for DTV primary subtitle language.
- **DTV Secondary Subtitle** : Select the language for DTV secondary subtitle language.
- **DTV Primary Teletext** : Select the language for DTV primary teletext language.
- **DTV Secondary Teletext** : Select the language for DTV secondary teletext language.

NOTE

- The selected language will only appear if it is supported on the disc or broadcast channel.

Setup

Security

When you operate this menu for the first time, password setup screen will be displayed. Enter the desired 4-digit password using the number buttons.

DTV Child Lock

You can lock some channels using the Child Lock function so that children cannot watch them.

- **On** : DTV Child Lock will work.
- **Off** : DTV Child Lock will not work.

DTV Parental Lock

This function works in conjunction with DTV that have been assigned a rating, which helps you control the types of DTV that your family watches. Select the rating level you want to set.

BD/DVD Parental Rating

This function works in conjunction with Blu-ray Disc/DVDs that have been assigned a rating, which helps you control the types of Blu-ray Disc/DVDs that your family watches. Select the rating level you want to set. A larger number indicates that the program is intended for adult use only. For example, if you select up to Level 6, discs that contain Level 7, 8 will not play.

Change PIN

Change the 4-digit password used to access security functions.

If you forgot your password

1. Press the **MENU** button to display home menu with no disc inserted.
2. Press the **STOP** () button on the front panel of the product for more than 5 seconds. All settings will revert to the factory settings.

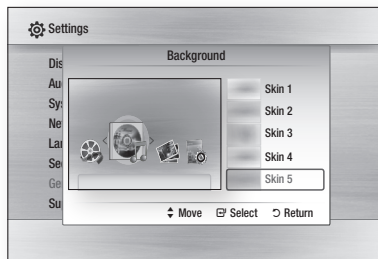
NOTE

- When the factory default settings are restored, all the user data stored in the BD data will be deleted.

General

Background

Change the background theme of the menu screen.



NOTE

- When you playing JPEG files, you can select the Home background by pressing the **TOOLS** button. (See page 56)
In this case, Skin 6 option will be displayed.

Continuous Movie Play Help

Set to display the help pop-up message for continuous movie playback.

- **On** : Turn continuous movie play help function on.
- **Off** : Turn continuous movie play help function off.

Energy Saving

You can reduce power consumption by setting the front panel to turn off automatically when the product is in standby mode.

- **On** : Turn off the front panel automatically when the product is in standby mode.
- **Off** : Set not to use the energy saving function.

Light Effect

You can activate or deactivate the light effect on the top of the product.

- **Always On** : Activate Light Effect at all times. Select this for retail display.

- **Auto** : Activate Light Effect when turning the BD-HDD Combo on and off, when recording a TV channel or when moving the tray. Select when installing the BD-HDD Combo in your home.
- **Off** : Turn Light Effect off at all times.

Advanced Music Copy

When you copy music files, information can be updated automatically. The copying time may be increased.

- **On** : Turn Advanced Music Copy On.
- **Off** : Turn Advanced Music Copy Off.

NOTE

- This feature is available only when the product is connected to the network.
- This can be used if you copy from an external device such as USB/ODD/AllShare to the HDD.
- This will not work if you copy from the HDD to an external device.

1. To select **By Internet**, press the **ENTER** button.
A popup message will appear if an update is available.
2. If you select **Yes**, the BD-HDD combo will be turned off and on automatically after completing the firmware upgrade.
“UPDATE” will appear on the front display.
3. The BD-HDD combo will be turned off and on automatically after completing the loader upgrade.
The broadcasting channel will be displayed.

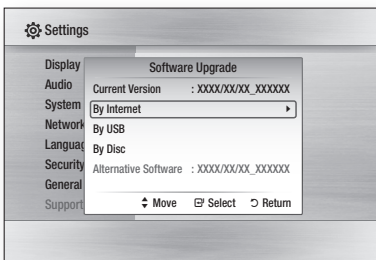
NOTE

- If the internet connection doesn't operate properly, the connection may be broken. Please retry downloading. If the problem persists, download by USB and upgrade.
- Samsung Electronics shall take no legal responsibility for product malfunction caused an unstable internet connection or consumer negligence during software upgrade.

Support

Software Upgrade

Software Upgrade can be performed by downloading the latest firmware. Current Version the software already installed in the product. Software is represented as “Year/Month/Day_Version.”



Setup

You can also update software as follows: Software update is the same as in the **By Internet** menu.

- **By USB** : Insert a USB drive containing the firmware upgrade file, downloaded from "www.samsung.com/bluraysupport".

Connect the USB flash drive to the USB port of the product to update the software, then follow the on-screen instructions.

Please be careful not to disconnect the power or remove the USB drive until upgrades are complete.

The BD-HDD combo will be turned off and on automatically after completing the firmware upgrade. "UPDATE" will appear on the front display.

The BD-HDD combo will be turned off and on automatically after completing the loader upgrade. The broadcasting channel will be displayed.

- **By Disc** : Visit www.samsung.com/bluraysupport, download and write the latest software onto a disc.

If you downloaded the firmware you'll have a B-BAHDDEUC.file Burn a data disc with your CD burning software.

After disc is finalized insert it in the BD-HDD combo.

Please be careful not to disconnect the power until upgrades are complete.

The BD-HDD combo will be turned off and on automatically after completing the firmware upgrade. "UPDATE" will appear on the front display.

The BD-HDD combo will be turned off and on automatically after completing the loader upgrade. The broadcasting channel will be displayed.

- **Alternative Software (backup)** : Displays the Software version downloaded through By Online. During the Software upgrading, When the Upgrade will discontinue from last step, this function be activated.

NOTE

- When the system upgrade is done, check the software details in the software Upgrade menu.
- Do not turn off the product during the System Upgrade, as it may cause the product to not work properly.
- Software upgrades using the USB Host jack must be performed with a USB memory flash stick only.

Contact Samsung



Provide contact information for assistance with your product.

Basic Functions

Playing a Disc




Playback




1. Press the **OPEN/CLOSE** () button to open the disc tray.
2. Place a disc gently into the tray with the disc's label facing up.
3. Press the **OPEN/CLOSE** () button to close the disc tray.
The disc will be played automatically.

Playback related buttons



PLAY ()	Starts playback.
STOP ()	Stops playback. <ul style="list-style-type: none"> • If pressing the button once : The stop position will be memorized. • If pressing the button twice : The stop position will be not memorized.
PAUSE ()	Pauses playback.

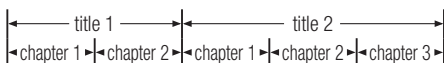
NOTE

- For some discs, pressing the **STOP** () button once may not memorize the resume position.

Disc Structure

The contents of disc are usually divided as below.

• Blu-ray Disc, DVD-VIDEO



• Audio CD (CD-DA)



• MP3, WMA, DivX, MKV and MP4




NOTE

- Playback during recording converts the media into profile 1.0, while normal playback only supports profile 2.0. In such cases, the following limitations are applied:
 - BonusView is not available.
 - Browsable slideshow audio is not available.
(Audio may not be produced in Disc Menu mode for some discs.)

Using the Disc menu/Title menu/Popup menu

Using the Disc Menu



1. During playback, press the **DISC MENU** button on the remote control. 
2. Press the **▲▼◀▶** buttons to make the desired selection, then press the **ENTER** button.

NOTE

- Depending on the disc, the menu items may differ and this menu may not be available.

Using the Title Menu



1. During playback, press the **TITLE MENU** button on the remote control. 
2. Press the **▲▼◀▶** buttons to make the desired selection, then press the **ENTER** button.

NOTE

- Depending on the disc, the menu items may differ and this menu may not be available.

Basic Functions

Playing the Title List

1. During playback, press the **DISC MENU** or **TITLE MENU** button.
2. Press the **▲▼** buttons to select an entry you want to play from Title List, then press the **ENTER** button.



NOTE

- If your disc has the playlist, press the **GREEN(B)** button to go to the Playlist.

Using the Popup Menu

1. During playback, press the **POPUP MENU** button on the remote control.
2. Press the **▲▼◀▶** buttons or **ENTER** button to select the desired menu.



NOTE

- Depending on the disc, the menu items may differ and this menu may not be available.

Using the Search and Skip Functions

During play, you can search quickly through a chapter or track, and use the skip function to jump to the next selection.

Searching for a Desired Scene



- During playback, press the **SEARCH** (**◀▶**) button.

Each time you press the **SEARCH** (**◀▶**) button, the playback speed will change as follows.

HDD, BD-ROM, BD-RE/-R, DVD-RW/-R, DVD+RW/+R, DVD-VIDEO	▶▶ 1 → ▶▶ 2 → ▶▶ 3 → ▶▶ 4 → ▶▶ 5 → ▶▶ 6 → ▶▶ 7 ◀◀ 1 → ◀◀ 2 → ◀◀ 3 → ◀◀ 4 → ◀◀ 5 → ◀◀ 6 → ◀◀ 7
DivX, MKV, MP4	▶▶ 1 → ▶▶ 2 → ▶▶ 3 ◀◀ 1 → ◀◀ 2 → ◀◀ 3

- To return to normal speed playback, press the **PLAY** (**▶**) button.

NOTE

- No sound is heard during search mode.

Skipping Chapters/Titles



- During playback, press the **SKIP** (**◀▶**) button.
- If you press the **SKIP** (**▶▶**) button, it moves to the next chapter or title.
- If you press the **SKIP** (**◀◀**) button, it moves to the beginning of the chapter or title. One more press makes it move to the beginning of the previous chapter or title.

Slow Motion Play/Step Motion Play

Slow Motion Play



- In pause mode, press the **SEARCH** (**◀▶**) button.
- Each time you press the **SEARCH** (**◀▶**) button, the playback speed is reduced.
- To return to normal speed playback, press the **PLAY** (**▶**) button.

NOTE

- No sound is heard during slow mode.
- Reverse slow motion playback supports titles recorded on the HDD only.

Step Motion Play



- In pause mode, press the **PAUSE** (**⏸**) button.
- Each time the **PAUSE** (**⏸**) button is pressed, a new frame will appear.
- To return to normal speed playback, press the **PLAY** (**▶**) button.

NOTE

- No sound is heard during step mode.
- Step motion operates only in the forward direction.
- Titles recorded on the HDD does not support step motion playback.

Using the TOOLS button

During playback, you can operate disc menu by pressing the **TOOLS** button.

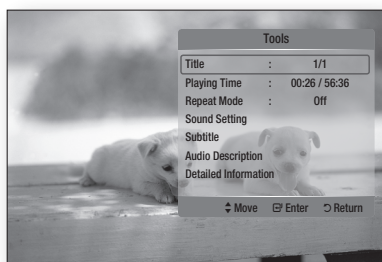


• Tools Menu Screen

<BD-ROM / DVD>



<HDD>



NOTE

- Depending on the disc, the Tools menu may differ.

Moving to a Desired Scene Directly



1. During playback, press the **TOOLS** button.
2. Press the **▲▼** buttons to select **Title**, **Chapter** or **Playing Time**.
3. Enter the desired **Title**, **Chapter** or **Playing Time** using the number buttons, then press the **ENTER** button.

Repeat the Title or Chapter



Repeat the disc title or chapter.

Depending on the disc, the Repeat function may not be available.

1. During playback, press the **TOOLS** button.
2. Press the **▲▼** buttons to select **Repeat**, then press the **ENTER** button.
3. Press the **▲▼** buttons to select **Chapter** or **Title**, then press the **ENTER** button.



4. To return to normal play, press the **TOOLS** button again.
5. Press the **▲▼** buttons to select **Repeat**, then press the **ENTER** button.
6. Press the **▲▼** buttons to select **Off**, then press the **ENTER** button.


Basic Functions

Repeat the Title or All




Repeat the disc title or all.

Depending on the disc, the Repeat function may not be available.

1. During playback, press the **TOOLS** button. 
2. Press the **▲▼** buttons to select **Repeat Mode**, then press the **◀▶** button to select **Title** or **All**.
3. To return to normal play, press the **TOOLS** button again.
4. Press the **▲▼** buttons to select **Repeat Mode**.
5. Press the **◀▶** buttons to select **Off**, then press the **ENTER** button.

Repeat the Section



1. During playback, press the **TOOLS** button. 
2. Press the **▲▼** buttons to select **Repeat**, then press the **ENTER** button.
3. Press the **▲▼** buttons to select **Repeat A-B**.



4. Press the **ENTER** button at the point where you want repeat play to start (A).
5. Press the **ENTER** button at the point where you want repeat play to stop (B).
6. To return to normal play, press the **TOOLS** button again.
7. Press the **▲▼** buttons to select **Repeat**, then press the **ENTER** button.

8. Press the **▲▼** buttons to select **Off**, then press the **ENTER** button.

NOTE

- If you set point (B) before 5 seconds has lapsed, the repeat function will not operate.

Selecting the Audio Language



1. During playback, press the **TOOLS** button.
2. Press the **▲▼** buttons to select **Audio** or **Sound Setting** then press the **ENTER** button.
3. Press the **▲▼** buttons to select the desired audio language.

NOTE

- Information about the primary / secondary mode will be also displayed if the Blu-ray Disc has a BONUSVIEW section. Use the **◀▶** button to switch between primary and secondary audio modes.
- This function depends on what audio languages are encoded on the disc and may not be available.
- A Blu-ray Disc can contain up to 32 audio languages and a DVD up to 8.
- Some Blu-ray Discs may allow you to select either the multi-channel LPCM or Dolby digital audio soundtrack in English.

Selecting the Subtitle Language



1. During playback, press the **TOOLS** button.
2. Press the **▲▼** buttons to select **Subtitle** or **Subtitle Setting**.
3. Press the **◀▶** buttons to select the desired subtitle language.

NOTE

- Depending on the Blu-ray Disc / DVD, you may be able to change the desired subtitle in the Disc Menu. Press the **DISC MENU** button.
- This function depends on what subtitles are encoded on the disc and may not be available on all Blu-ray Discs/DivX disc/DVDs.

- A Blu-ray Disc can contain up to 255 subtitle languages and a DVD up to 32.
- Information about the primary / secondary mode will also be displayed if the Blu-ray Disc has a BONUSVIEW section.
- This function changes both the primary and secondary subtitles at the same time.
- The total number of subtitles is the sum of the primary and secondary ones.

Changing the Camera Angle



When a Blu-ray Disc/DVD contains multiple angles of a particular scene, you can use the ANGLE function.

1. During playback, press the **TOOLS** button.
2. Press the **▲▼** buttons to select **Angle**.
3. Press the **◀▶** buttons to select the desired Angle.

Selecting the Picture Setting



This function enables you to adjust video quality when you are connected to a TV via HDMI.

1. During playback, press the **TOOLS** button.
2. Press the **▲▼** buttons to select **Picture Setting**, then press the **ENTER** button.
3. Press the **◀▶** buttons to select the desired **Picture Setting**, then press the **ENTER** button.
 - **Dynamic** : Choose this setting to increase Sharpness.
 - **Normal** : Choose this setting for most viewing applications.
 - **Movie** : This is the best setting for watching movies.
 - **User** : The user can adjust the sharpness and noise reduction, contrast, brightness and colour respectively.

Selecting the Information



This function enables you to check the contents information including the name and size, etc.

1. During playback, press the **TOOLS** button. 
2. Press the **▲▼** buttons to select **Detailed Information**, then press the **ENTER** button.

Setting BONUSVIEW

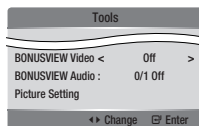


The BONUSVIEW feature allows you to view additional content (such as commentaries) in a small screen window while the movie is playing. This function is only available if the disc has the bonusview feature.

1. During playback, press the **TOOLS** button.
2. Press the **▲▼** buttons to select **BONUSVIEW Video**.
3. Press the **◀▶** buttons to select the desired bonusview video.
4. Press the **▲▼** buttons to select **BONUSVIEW Audio**, then press the **ENTER** button.
5. Press the **▲▼** buttons to select the desired bonusview audio.

NOTE

- If you switch from BONUSVIEW Video, BONUSVIEW Audio will change automatically in accordance with BONUSVIEW Video.

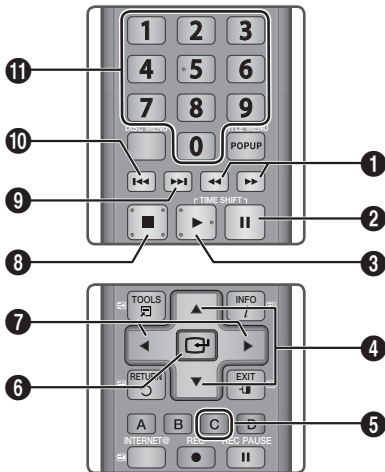


Basic Functions

Listening to Music



Buttons on the Remote Control used for Music Playback



- 1 **SEARCH** buttons : Fast Play.
(Audio CD (CD-DA) only)
- 2 **PAUSE** button : Pauses playback.
- 3 **PLAY** button : Plays the currently selected track.
- 4 **▲▼** buttons : Selects a track in the Music List or Playlist.
- 5 **YELLOW(C)** button : Select or deselect a track in the music list.
- 6 **ENTER** button : Plays and pauses the selected track.
- 7 **◀▶** buttons : Jump Play.
(except for the Audio CD (CD-DA))
- 8 **STOP** button : Stops a track.
- 9 **SKIP** button : During playback, moves to the next page in the Music List or moves to the next track in the Playlist.

- 10 **SKIP** button : During playback, moves to the previous page in the Music List or moves to the previous track in the Playlist.
If you press this button after three seconds of playback in the Playlist, the current track will be replayed from the beginning. But, if you press this button within three seconds after playback starts in the Playlist, the previous track will be played.
- 11 **NUMBER** buttons : During the Playlist playback, press the desired track number. The selected track will be played.

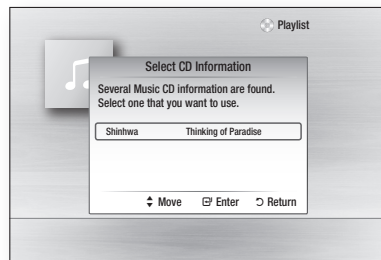
Playing an Audio CD (CD-DA)/MP3

1. Insert an Audio CD (CD-DA) or an MP3 Disc into the disc tray.
 - For an Audio CD (CD-DA), the first track will be played automatically.
 - For an MP3 disc, press the **ENTER** button to select the **Media Play**. Then press the **◀▶** buttons to select **Music**, then press the **ENTER** button.
2. Press the **▲▼** buttons to select the track you want to play, and then press the **ENTER** button.

AMG function

You can use AMG function to display the information of an Audio CD (CD-DA).

1. Insert an Audio CD (CD-DA) into the disc tray. If your disc has a CD information, the below pop-up screen will be displayed.

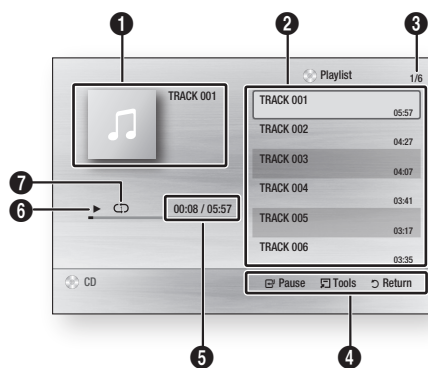


- Press the **ENTER** button.
The CD information will be displayed and the first track will be played automatically.

NOTE

- When the product is disconnected from the network, it may not retrieve the CD information from the Audio CD (CD-DA) if it's the latest version.

Audio CD (CD-DA)/MP3 Screen Elements



1	Displays the music information.
2	Displays the playlist.
3	Display the current track/total tracks.
4	Displays buttons available.
5	Shows the current play time/total play time.
6	Displays the current playback status
7	Displays the repeated playback status.

Repeat an Audio CD (CD-DA)/MP3

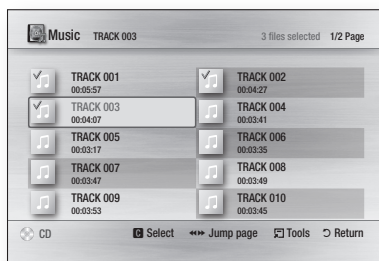
- During the Playlist playback, press the **TOOLS** button.
- Press the **◀▶** buttons to select the desired **Repeat Mode**, then press the **ENTER** button.



Off	Audio CD (CD-DA)/MP3	Tracks on a disc are played in the order in which they were recorded on the disc.
(C) Track	Audio CD (CD-DA)	Current track is repeated.
(C) One	MP3	Current track is repeated.
(C) All	Audio CD (CD-DA)/MP3	All tracks are repeated.
(C) Shuffle	Audio CD (CD-DA)/MP3	The random option plays a disc's track in random order.

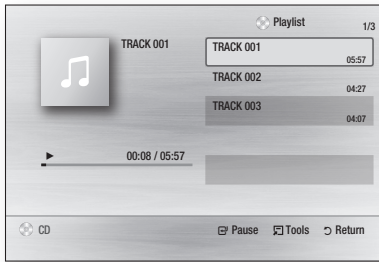
Playlist

- Insert an Audio CD (CD-DA) or an MP3 Disc into the disc tray.
 - For an Audio CD (CD-DA), the first track will be played automatically.
 - For an MP3 disc, press the **ENTER** button to select the **Media Play**. Then press the **◀▶** buttons to select **Music**, then press the **ENTER** button.
- To move to the Music List, press the **STOP** (■) or **RETURN** button.
The Music List screen is displayed.
- Press the **▲▼◀▶** buttons to move desired track, then press the **YELLOW(C)** button to check desired tracks.
Repeat this procedure to select additional tracks.



Basic Functions

- If there is an undesired track in the playlist, press the **YELLOW(C)** button again. The selected track will be deleted.
- Press the **ENTER** button to play the selected tracks. Selected track will automatically play.



- To go to the Music List, press the **STOP** (■) or **RETURN** button.
- To go to the Playlist, press the **ENTER** button.

NOTE

- You can create a playlist with up to 99 tracks on Audio CD (CD-DA).

Playing back a Picture

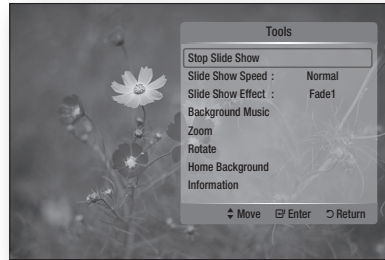


Playing a JPEG

- Insert a JPEG disc into the disc tray.
- Press the **ENTER** button to select the **Media Play**.
- Press the **◀▶** buttons to select the **Photos**, and then press the **ENTER** button.
- Press the **▲▼◀▶** buttons to select the folder you want to play, and then press the **ENTER** button.
- Press the **▲▼◀▶** buttons to select the photo you want to play, and then press the **ENTER** button. The Slide Show starts automatically.

Using the TOOLS button

During the slide show playback, you can use various function by pressing the **TOOLS** button.



- Stop Slide Show** : Select this if you want to stop the slide show.
- Slide Show Speed** : Select this if you want to adjust the Slide Show speed.
- Slide Show Effect** : Select this if you want to set the Slide Show Effect.
- Background Music** : Select this if you want to listen to music while viewing a picture.
- Zoom** : Select this if you want to enlarge the current picture. (Enlarged up to 4 times)
- Rotate** : Select this if you to rotate the picture. (This will rotate the picture either clockwise or counter clockwise.)
- Home Background** : Select this if you want to set the Home Background.
- Information** : Shows the picture information including the name and size, etc.

NOTE

- To enable the Background Music function, both music and MP3 files must be contained in the same device. However, the sound quality can be affected by the bit rate of the MP3 file, the size of the photo and the encoding method.

Playing back a DivX file



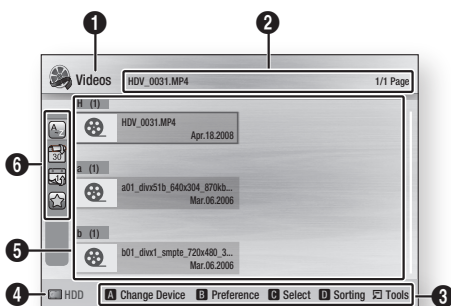
1. Insert a DivX disc into the disc tray.
2. Press the **ENTER** button to select the **Media Play**.
3. Press the **◀▶** buttons to select the **Videos**, and then press the **ENTER** button.
4. Press the **▲▼◀▶** buttons to select the file you want to play, and then press the **ENTER** button.

NOTE

- Some DivX files created on a personal computer can not be played back. That is why Codec Type, Version and Higher resolution over specification are not supported.
- The loading time taken to collect video information for playback may be delayed, depending on the device.

3. Press the **◀▶** buttons to select the desired Videos, Music or Photos, then press the **ENTER** button.
4. Press the **▲▼◀▶** buttons to select the desired file you want to play, then press the **ENTER** button.

Screen Display



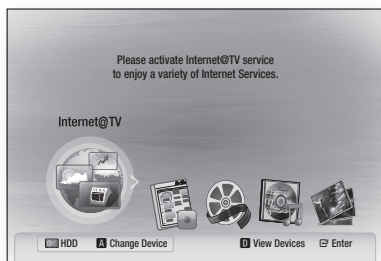
- 1 Displays the selected home menu.
- 2 Displays the selected file name and the number of files and pages.
- 3 **Navigation Help** : Displays remote control buttons available.
 - **RED(A)** : Selects this to change the device mode.
 - **GREEN(B)** : Sets the file preference.
 - **YELLOW(C)** : Selects multiple files from file list. Selected files are marked with a symbol.
 - **BLUE(D)** : Selects the sort list.
 - **TOOLS** button : Displays the option menu.
- 4 Displays the current device mode. (HDD, CD or USB, etc)
- 5 You can confirm the files and groups that is sorted by each category.
- 6 Displays sorting method. (See page 58)

Media Play

Media Play will enable you to play HDD/USB contents or the contents transferred to your PC using the AllShare function.

For more information about AllShare, refer to pages 71~72.

1. Press the **MENU** button.
The home menu will be displayed.

















2. Press the **RED(A)** button to select desired mode (HDD, USB, etc), then press the **ENTER** button.

Basic Functions

Sorting the file list

Press the **BLUE(D)** button in the file list to sort the files.

Category	Operations	Videos	Music	Photos	Recorded TV
 Basic View	It shows whole folder. You can view the file by selecting the folder. (It does not supported on HDD)	▼	▼	▼	
 Title	It sorts and displays the file title in Symbol/Number/Alphabet/Special order.	▼	▼	▼	▼
 Preference	It sorts and displays the file by preference. You can change the file preference in the file list section using the GREEN(B) button.	▼	▼	▼	▼
 Latest Date	It sorts and shows files by latest date.	▼	▼ (HDD only)	▼	▼
 Earliest Date	It sorts and shows files by earliest date.	▼		▼	▼
 Artist	It sorts the music file by artist in alphabetical.		▼		
 Album	It sorts the music file by album in alphabetical order.		▼		
 Genre	It sorts music files by the genre.		▼		
 Mood	It sorts music files by the mood. You can change the music mood information.		▼		
 Monthly	It sorts and shows photo files by month. It sorts only by month (from January to December) regardless of year.			▼	
 Weekly	It sorts and shows files by weekly.				▼
 Channel	It sorts and shows files by TV station name.				▼
 Colour	It sorts and shows photo files by colour.			▼ (HDD only)	
 Composition	It sorts and shows photo files by composition.			▼ (HDD only)	

NOTE

- DCM is not available for Disc.

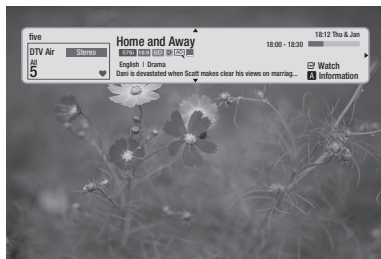
 **NOTE**

- Need-to-Know List before using Media Play
 - Media Play only supports USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives, Flash Card Readers. (Both USB HDD and HUB are not supported.)
 - MSC supports Music, Photo and Video files, while a PTP device supports Photo files only.
 - MTP (Media Transfer Protocol) is not supported.
 - Certain types of USB Digital camera and audio devices may not be compatible with this product.
 - The file system supports FAT16, FAT32 and NTFS (read only).
 - Before connecting your device to the product, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
 - Do not disconnect the USB device while it is loading.
 - If an over-power warning message is displayed while you are connecting or using a USB device, the device may not be recognized or may malfunction.
- If you are using the USB extension cable for this purpose, you may encounter a problem such as unrecognized USB devices or a failure to read internal files.
- If the problem of the unrecognized USB device persists or the internal file list is corrupt or a certain file could not be played, connect the USB device to the PC and format it in a proper file system, then check it again.
- If the file deleted from your PC still appears in Media Play, use "Empty Recycle Bin" on your desktop to delete it completely.
- Some USB devices supporting the power saving mode may switch the saving mode of the BD product to Off automatically when connected with each other.
 - You must remove the USB storage device safely (by performing the "Safe to Remove USB" function) in order to prevent a possible damage to the USB memory. Press the **MENU** button to move to the home menu, and select the **YELLOW(C)** button and press the **ENTER** button.
 - If you insert the disc when playing USB storage device, the device mode is changed to "DVD or CD" automatically.
 - When the Audio CD (CD-DA), MP3 and JPEG files are in stop mode, you can't see full screen by pressing the **FULL SCREEN** button on the remote control.
 - The External HDD device is not supported.

DTV Functions

Display Screen

1. Press the **PROG** button to select the desired channel, then press the **INFO** button. The channel information screen will be displayed.



NOTE

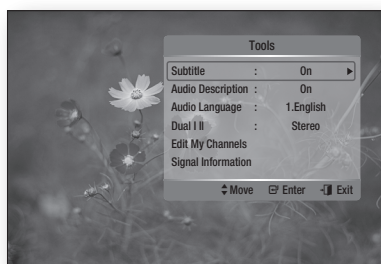
- The icon is may differ depending on the service information of signal.

Using the TOOLS button

Press the **TOOLS** button while you are viewing a channel.

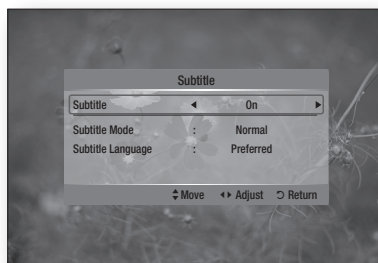


• Tools Menu Screen



Selecting the Subtitle Language

1. Press the **TOOLS** button while you are viewing a channel.
2. Press the **▲▼** buttons to select the **Subtitle**, then press the **ENTER** button.



- **Subtitle** : You can set it to **On** or **Off**. If you select **On**, the Subtitle Mode and Subtitle Language will be activated.
- **Subtitle Mode** : Select the desired subtitle mode.
- **Subtitle Language** : Select the desired subtitle language.

Selecting the Audio Description

You can add a verbal description to the main audio to help the visually impaired.

1. Press the **TOOLS** button while you are viewing a channel.
2. Press the **▲▼** buttons to select the **Audio Description**, then press the **ENTER** button.
3. If you select **On**, volume menu will be activated. Adjust the audio description volume.

Selecting the Audio Language

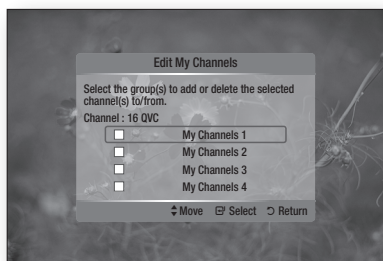
1. Press the **TOOLS** button while you are viewing a channel.
2. Press the **▲▼** buttons to select the **Audio Language**.
3. Press the **◀▶** buttons to select the desired Audio Language, then press the **ENTER** button.

Selecting the Dual I II

1. Press the **TOOLS** button while you are viewing a channel.
2. Press the **▲▼** buttons to select the **Dual I II**.
3. Press the **◀▶** buttons to select the desired Audio, then press the **ENTER** button.

Edit My Channels

1. Press the **TOOLS** button while you are viewing a channel.
2. Press the **▲▼** buttons to select the **Edit My Channels**, then press the **ENTER** button.



3. Press the **▲▼** buttons, then press the **ENTER** button to edit the channel.

Signal Information

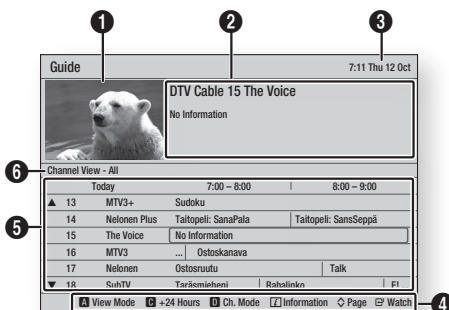
1. Press the **TOOLS** button while you are viewing a channel.
2. Press the **▲▼** buttons to select the **Signal Information**, then press the **ENTER** button. You can check the signal information.

Viewing the Guide Screen

The EPG (Electronic Programme Guide) information is provided by broadcasters. Using channel schedules provided by broadcasters, you can specify channels you want to watch in advance so that the channel automatically changes to the selected channel at the specified time. Channel entries may appear blank or out of date depending on a channel status.

1. Press the **GUIDE** button while you are viewing a channel. The guide screen will be displayed.

• Guide Screen



- 1 Displays the channel screen.
- 2 Displays the channel information.
- 3 Displays the current date and time.

Navigation Help : Displays remote control buttons available.

- **RED(A)** : To change the View Mode. (Channel View or Scheduled View)
- **YELLOW(C)** : It displays channel from now to 24 hours after. If you select **YELLOW(C)** button, **GREEN(B)** button will be displayed. Press this to display the list of channels before 24 hours.
- **BLUE(D)** : To change the Channel View (All, TV, Radio, Data/Other)
- **INFO** button : Display the channel information.
- **PROG (▲/▼)** buttons : Go to previous page or next page.
- **ENTER** button
 - When selecting the current channel, you can watch the selected channel.
 - When selecting the future channel, you can reserve to watch the selected channel.

- 5 Displays the Stored channels.
- 6 Displays view mode.

DTV Functions

Timer Recording and Timer Viewing

Make sure that clock must be set before operating this function. (See page 40)

Using the GUIDE button

1. Press the **GUIDE** button while you are viewing a channel.
The guide screen will be displayed.
2. Press the **▲▼◀▶** buttons to select the channel you want to set Timer Recording (or Timer Viewing), press the **ENTER** button.



- **Timer Viewing** : You can set a desired channel to be displayed automatically at the intended time. The green icon is displayed in the set channel.

- **Timer Recording** : You can set a desired channel to be recorded automatically at the intended time. The red icon is displayed in the set channel.

3. If you want to cancel the Timer Recording (or Timer Viewing), press the **ENTER** button in the set channel.
4. Press the **◀▶** buttons to select the **OK**, then press the **ENTER** button.

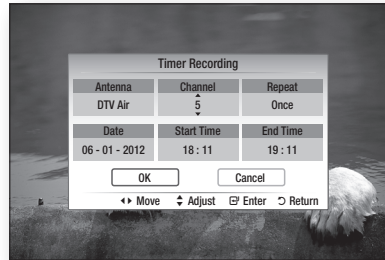
NOTE

- To cancel the scheduled Timer Recording (or Timer Viewing), press the **ENTER** button on the selected programme.

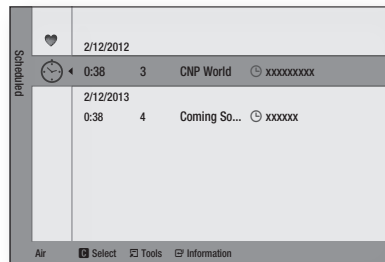
Using the Home Menu

1. Press the **MENU** button.
The home menu will be displayed.
2. Press the **◀▶** buttons to select the **Channels**, then press the **ENTER** button.

3. Press the **▲▼** buttons to select the **Channel Manager**, then press the **ENTER** button.
4. Press the **▲▼** buttons to select the channel you want to set Timer Recording (or Timer Viewing), then press the **TOOLS** button.
5. Press the **▲▼** buttons to select the Timer Recording (or Timer Viewing), then press the **ENTER** button.



6. Fill the input items using **▲▼◀▶** buttons, then press the **ENTER** button.
7. Press the **ENTER** button again.
8. If you want to cancel the Timer Recording (or Timer Viewing), press the **◀▶** buttons to select Scheduled Channels (🕒), then press the **ENTER** button.



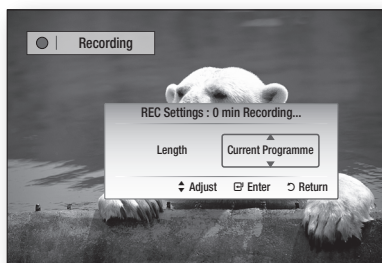
9. Press the **▲▼** buttons to select the channel you want to cancel, then press the **TOOLS** button.
10. Press the **▲▼** buttons to select the **Cancel Schedules**, then press the **ENTER** button.
11. Press the **◀▶** buttons to select the **OK**, then press the **ENTER** button.

Advanced Functions

Recording

Recording the current TV channel you are watching

1. Press the **PROG** (▲/▼) or number buttons to select the current channel you want to record.
2. Press the **REC** button.
Rec Icon is displayed on the front panel.
3. Press the **REC** button again to display the recording length.



4. Press the ▲▼ buttons to select the desired recording length, then press the **ENTER** button.

To pause recording

1. Press the **REC PAUSE** button to pause a recording in progress.
2. Press the **REC PAUSE** or **REC** button resume recording.

To stop recording

1. Press the **STOP** button to stop a recording in progress.
The message "Recording completed. This title can be played through recorded TV." will be displayed.

NOTE

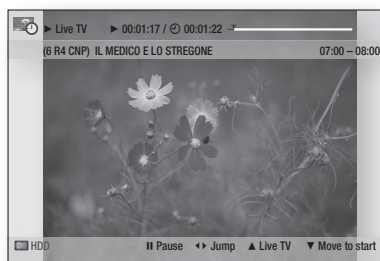
- Recorded files of less than 10 seconds are not saved.
- Other HDD space that the default 20GB reserved for the Timeshift feature will be used for recording and storing multimedia contents.
- If the free space available for recording and multimedia files in the HDD is less than 10MB, recording will be not enabled.

- The available size displayed in the HDD management menu does not include the default space of 20GB. The 20GB in the HDD is reserved for the Timeshift feature by default.

Time Shift function

This function replays recordings as a live signal.

1. When you watching a TV channel, press the **PLAY** or **PAUSE** button.
The Time Shift bar is displayed.
2. You can use the **SKIP** (◀▶) and other playback-related buttons to view the previous scene.



To pause timeshift

1. Press the **PAUSE** button to pause a time shift in progress.
2. Press the **PLAY** button resume time shift.

To stop timeshift

1. Press the **STOP** button to stop a time shift in progress.
The message "Do you want to stop Timeshift?" will be displayed.
2. Press the ◀▶ button to select the **Yes**, then press the **ENTER** button.

NOTE

- With the product in recording mode, press the **PLAY** or **PAUSE** button.
The Timeslip bar is displayed.
You can also watching the previous scene by pressing the playback-related buttons.
- Timeshift will be stopped if you play back a media file.

Advanced Functions

- Entering the menu from Timeshift and returning to the programme switches to LIVE TV.
- 20GB in the HDD will be dedicated to the Timeshift feature.

Playing the Recorded Title

1. Press the **MENU** button.
The home menu will be displayed.
2. Press the **◀▶** buttons to select the **Recorded TV**, then press the **ENTER** button.
The Recorded TV List will be displayed.



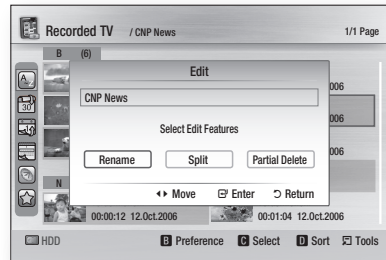
3. Press the **▲▼◀▶** buttons to select the title you want to play, then press the **ENTER** button.
The selected title will be played back.

Edit the Recorded Title

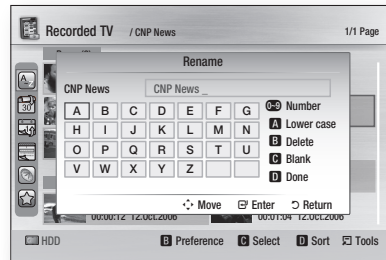
1. In the Recorded TV screen, press the **TOOLS** button.
2. Press the **▲▼** buttons to select the **Edit**, then press the **ENTER** button.



Renaming a Recorded Title



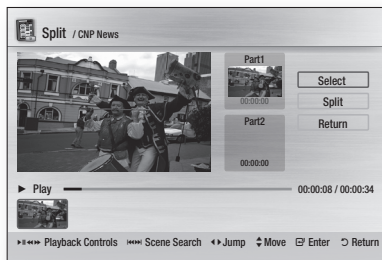
1. Press the **◀▶** buttons to select the **Rename**, then press the **ENTER** button.
2. Select the desired characters using the **▲▼◀▶** buttons, then press the **ENTER** button.



- **0-9** : Enters number.
 - **RED(A)** : Each time you press the **ENTER** button, you change the kind of characters.
 - **GREEN(B)** : Deletes and moves the cursor backwards by one position.
 - **YELLOW(C)** : Enters a blank and moves the cursor one forward (to the right).
 - **BLUE(D)** : Registers the character inputs.
3. Press the **BLUE(D)** button to save.
The message "Save the new name?" will be displayed.
 4. Press the **ENTER** button to select **OK**.

Splitting a Section of a Title (Split)

1. Press the ◀▶ buttons to select the **Split**, then press the **ENTER** button.



2. Using the playback-related buttons, move to a point for splitting and then press the **ENTER** button.
3. Press the **ENTER** button to select **Split**.
4. Press the ◀▶ buttons to select **OK**, then press the **ENTER** button.
The split title is divided into two, and the following titles will be shifted down by one.

Splitting a Section of a Title (Partial Delete)

1. Press the ◀▶ buttons to select the **Partial Delete**, then press the **ENTER** button.



2. Press the **ENTER** button at the starting point. The image and starting point time is displayed in the section deletion starting point window.
 - Select the start and end points of the section you want to delete using the playback related buttons.

3. Press the **ENTER** button at the end point. The image and end point time is displayed in the Section deletion ending point window.
4. Press the **ENTER** button to select **Delete**.
5. Press the ◀▶ buttons to select **OK**, then press the **ENTER** button.

Copy

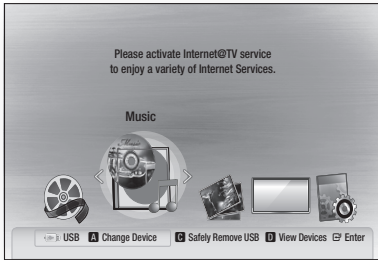
Copying Videos, Music or Photos

Contents	HDD/DISC/ AllShare → USB	DISC/USB/ AllShare → HDD	HDD/DISC/ USB → AllShare
Music	Supported	Supported	Supported
Photos	Supported	Supported	Supported
Videos	Supported	Supported	Supported

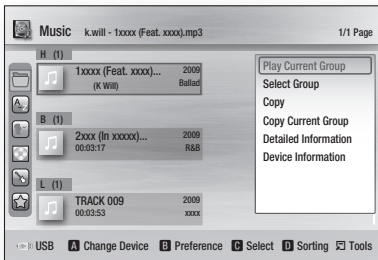
- Disc (CD-DA/CD-R/CD-RW, DVD±R(Finalise)/DVD+RW/DVD-RW(Finalise)) → HDD or USB
 - PTP USB is not available when you copy to USB.
 - The broadcast signal can be recorded on HDD but copy feature is not supported.
1. Press the **MENU** button.
The home menu will be displayed.
 2. In Stop mode, connect the USB storage device to the USB port on the front panel of the product.
The message "Do you want to access the device?" will be displayed.
 3. Press the ◀▶ buttons to select **Yes**, then press the **ENTER** button.

Advanced Functions

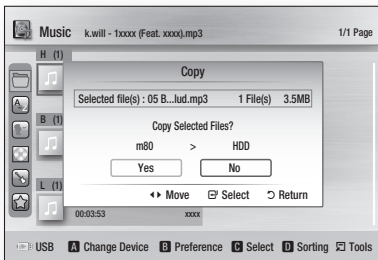
- Press the ◀▶ buttons to select **Music**, then press the **ENTER** button.



- Press the ▲▼◀▶ buttons to select the desired music file, then press the **TOOLS** button.



- Press the ▲▼ buttons to select the **Copy**, then press the **ENTER** button.
If you want to copy current group, select the Copy current group.
- Press the **ENTER** button again.



- Press the ◀▶ buttons to select **Yes**, then press the **ENTER** button.
To cancel the copying in progress, press the **STOP** (■) button.
- Press the **OK** button.

Ripping from a Audio CD (CD-DA)

- Insert an Audio CD (CD-DA), then press the **STOP** (■) or **RETURN** button to move to the Music List.
- Press the **TOOLS** button.



- Press the ▲▼ buttons to select the **Ripping**, then press the **ENTER** button.
- Press the ◀▶ buttons to select the **Yes**, then press the **ENTER** button.

Network Services

You can enjoy various network services such as Internet@TV or BD-LIVE by connecting the product to the network system.

Check the following instructions before using any network service.

1. Connect the product to the network.
(See pages 29~30)
2. Configure the network settings.
(See pages 41~45)

Using Internet@TV

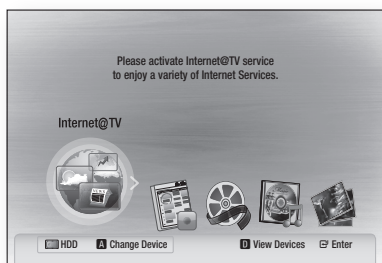
Connect this product to the network to download various for a fee or free-of-charge applications. Internet@TV brings useful and entertaining content and services directly from the web to your product such as news, weather forecasts, stock market quotes, games, movies and music.

You can also operate this function by pressing the **INTERNET@** button on the remote control.



Getting Started with Internet@TV

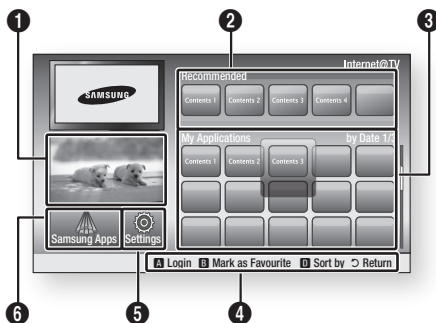
1. Press the **MENU** button.
The home menu will be displayed.



2. Press the **◀▶** buttons to select **Internet@TV** and press the **ENTER** button.
3. In the start screen of the Internet@TV service, you will see the service agreement screen. You should agree to the service terms and conditions before you can use the Internet@TV service.

4. When you have agreed on the service agreement, the Internet@TV service will start being updated. It takes several minutes. When the update is completed, you will see the Internet@TV menu screen.

Internet@TV at a Glance

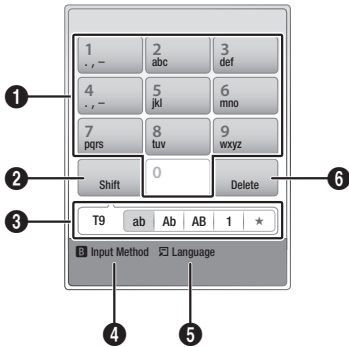


- 1 **Commercial** : Displays Internet@TV Guide, product introduction and new application introduction.
- 2 **Recommended** : Displays recommended contents managed by Samsung.
- 3 **My Applications** : Displays your personal gallery which can be added and deleted by you.
- 4 **Navigation Help** : Displays remote control buttons available.
 - **RED(A)** : To log in to Internet@TV.
 - **GREEN(B)** : To mark the application as a favourite.
 - **BLUE(D)** : To sort the applications.
 - **Return** : To return to the previous menu.
- 5 **Settings** : You can set the system setup and create accounts, etc.
- 6 **Samsung Apps** : You can download various chargeable or free-of-charge application services.

Network Services

Using the Keypad

Through your remote, you can use the On-Screen Keypad in several Internet@TV applications to enter text.



1	You can check the current keypad. Enter the desired character.
2	Press the DISC MENU button on the remote control to shift the input mode. : ab, Ab, AB, numbers or icons.
3	You can check the current input mode.
4	Press the GREEN(B) button on the remote control to change the input method. (T9 or ABC)
5	Press the TOOLS button on the remote control to change the language.
6	Press the TITLE MENU button on the remote control to delete the character.

NOTE

- Samsung Electronics shall take no legal responsibility for any interruption of the Internet@TV service caused by the service provider for any reasons.
- The Internet@TV service is to download and process data via the Internet so that you can enjoy the contents on the TV screen.
If the Internet connection is unstable, the service may be delayed or interrupted.
Furthermore, the product may be turned off automatically.
If this is the case, check the Internet connection and try again.

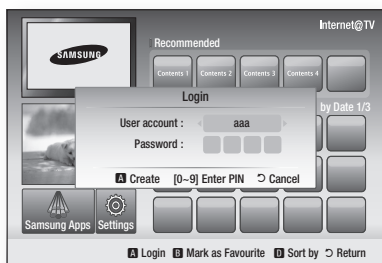
- The application service may be provided in English only and the contents available may vary, depending on the area.
- When using a application service, you can not operate **FULL SCREEN** button on the remote control.
- For more information about the Internet@TV service, visit the web site of the applicable service provider.
- The provided services are subject to change, depending on the Internet@TV service provider.
- The Internet@TV service contents may differ according to the firmware version.
- For-a-fee DivX contents with copy protection can only be played using HDMI cable.
If you have connected your product to your TV using Component or video cables, the DivX video signal can not output or the popup message "Connect with a HDMI cable to play this file." or "Cannot play current file." will be displayed.

Account Login

For a more enjoyable application experience, register and log in to your account.

To do this, you must create an account first. (For instructions on creating an account, refer to Internet@TV ID on this page)

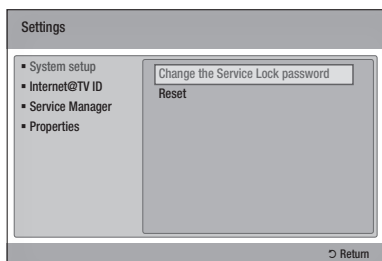
1. Press the ▲▼◀▶ buttons to select the desired application and press the **RED(A)** button.



2. Enter the user account and password.

Settings

Create IDs and configure Internet@TV settings from this screen.



System Setup

Reset

Resets Internet@TV settings to factory default settings.

NOTE

- Press the **MENU** button to display home menu. Press the **STOP** (■) button on the front panel of the product for more than 5 seconds with no disc inserted.

Internet@TV ID

Use this menu to create or delete an account and enter or delete account information.

You can control your account including contents site's account information.

This account is only for Internet@TV.

Create

Create an account and link it with desired service applications.

NOTE

- The account name must be at least 1 character in length but no more than 8.
- You can register up to 10 User Account Names.

Manager

- **Service Site** : Register login information for service sites.
- **Change Password** : Change account password.
- **Delete** : Delete the account.

Network Services

Service Manager

Delete and lock applications installed to Internet@TV.

Lock

Lock the application. Accessing a locked application requires the password.

Delete

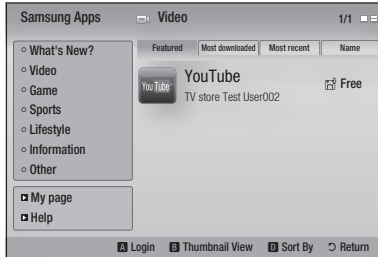
Delete the application.

Properties

Display information about Internet@TV. Use the "Check the speed of your internet connection" option to test your network connection.

Samsung Apps

Various applications are available from here, organized into different categories. Some applications have a download fee.



My page

Displays the application list.

Help

If you have questions about Internet@TV, check this section first. If none of the tips apply, please visit the help website.

Using the colour buttons with the Samsung Apps

- **RED(A) (Login)** : To log in to the internet service.
- **GREEN(B) (Thumbnail View)** : To change the view mode.
- **BLUE(D) (Sort By)** : To sort the applications by Featured, Most Downloaded, Most Recent or Name.

NOTE

- The available Internet contents services may be added or deleted.

BD-LIVE™

Once the product is connected to the network, you can enjoy various movie-related service contents using a BD-LIVE compliant disc.

1. Check the size of the remaining memory.
The total size of HDD must have at least 1GB of free space to accommodate the BD-LIVE services.
2. Insert a Blu-ray disc that supports BD-LIVE.
3. Select an item from various BD-LIVE service contents provided by the disc manufacturer.




NOTE

- The way you use BD-LIVE and the provided contents may differ, depending on the disc manufacturer.

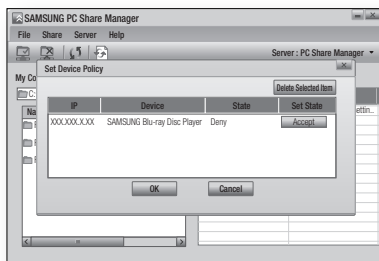
Using the AllShare Function


AllShare lets you play music, video and photo files in your PC using the product.

To use AllShare, you must connect the product to your PC via the network (See pages 29~30) and install the SAMSUNG PC Share Manager on the PC. To install and use Share Manager, follow these steps.

1. Visit the Samsung website at www.samsung.com.
2. Download the SAMSUNG PC Share Manager and install it on your PC.
3. When the installation is complete, you will see the SAMSUNG PC Share Manager icon on your desktop.
Double-click the icon to launch the application.
4. Select a folder to share from the My computer pane, and click the **Share Folder Enabled icon** ().
(To remove a shared folder : Select a folder to remove from the shared folders, and click the **Share Folder Disabled icon** ().)
5. To apply the updated sharing state to the server, click the **Set Change State icon** ().

6. To enable the product to locate a PC server, click **Share** from the menu bar. Click **Set Device Policy** and click **Accept**.



7. Click the **Set Change State icon** () and move to the home menu on product.
8. To select a device, use the **RED(A)** or **BLUE(D)** button to select a file to play.
(For playing back Video, Music or Photos files, see pages 54~59.)



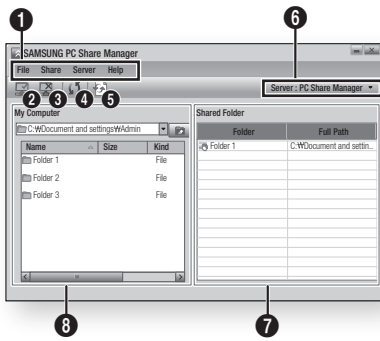
NOTE

- Depending on the performance of the external modem or router, HD video may not play properly.
- If your system uses a firewall, the product may not locate your PC on the TV screen.
- AllShare does not support the following functions.
 - The Background Music and Background Music Setting functions.
 - Sorting files by preference in the Photo, Music and Movie folders.
 - The Change Group function.
 - The Safe Remove function.

Network Services

- The Sorting method may differ depending on the server function.
- The search and skip operation may differ depending on the server function.
- During video playback, play time is not display.
- To use the AllShare function, please place both this product and PC in same subnet.

AllShare Program at a Glance





1	Menu Bar
2	Share Folder Enabled icon : Use this if you want to select a folder in your PC to share.
3	Share Folder Disabled icon : Use this if you want to set folder sharing off.
4	Refresh icon : Use this if you want to refresh list of folders and files in My Computer.
5	Set Change State icon : Select a folder to share and don't forget to press this button. The updated state will be applied to the server.
6	Server : Displays the name of the sharing server.
7	Shared Folder : Displays a list of the shared folders.
8	My Computer : Displays a list of the folders and files in the PC.


Appendix

Troubleshooting

Before requesting service, please check the following.

PROBLEM	SOLUTION
No operation can be performed with the remote control.	<ul style="list-style-type: none"> • Check the batteries in the remote control. They may need replacing. • Operate the remote control at a distance of no more than 6.1m. • Remove batteries and hold down one or more buttons for several minutes to drain the microprocessor inside the remote control to reset it. Reinstall batteries and try to operate the remote control again.
Disc does not play.	<ul style="list-style-type: none"> • Ensure that the disc is installed with the label side facing up. • Check the region number of the Blu-ray Disc/DVD.
Disc Menu does not appear.	<ul style="list-style-type: none"> • Ensure that the disc has disc menus.
The prohibition message appears on the screen.	<ul style="list-style-type: none"> • This message appears when an invalid button is pressed. • The Blu-ray Disc/DVD's software doesn't support the feature (e.g., angles) • You've requested a title or chapter number or search time that is out of range.
Play mode differs from the Setup Menu selection.	<ul style="list-style-type: none"> • Some of the functions selected in the Setup Menu may not work properly if the disc is not encoded with the corresponding function.
The screen ratio cannot be changed.	<ul style="list-style-type: none"> • The Screen Ratio is fixed on your Blu-ray Disc/DVDs. • This is not a problem with the product.
No audio.	<ul style="list-style-type: none"> • Make sure you have selected the correct Digital Output in the Audio Options Menu.
The screen is blocked	<ul style="list-style-type: none"> • Press the MENU button to display home menu. Press the STOP () button on the front panel of the product for more than 5 seconds with no disc inserted. • When the factory default settings are restored, all the user data stored in the BD data will be deleted.
If the HDMI output is set to a resolution your TV cannot support (for example, 1080p), you may not see a picture on your TV.	<ul style="list-style-type: none"> • Press the MENU button to display home menu. Press the STOP () button on the front panel of the product for more than 5 seconds with no disc inserted. • When the factory default settings are restored, all the user data stored in the BD data will be deleted.

Appendix

PROBLEM	SOLUTION
Forgot password	<ul style="list-style-type: none"> • Press the MENU button to display home menu. Press the STOP () button on the front panel of the product for more than 5 seconds with no disc inserted. Don't use this unless absolutely necessary. • When the factory default settings are restored, all the user data stored in the BD data will be deleted.
If you experience other problems.	<ul style="list-style-type: none"> • Go to the contents and find the section of the user manual that contains the explanations regarding the current problem, and follow the procedure once again. • If the problem still cannot be solved, please contact your nearest Samsung authorized service centre.
The picture is noisy or distorted	<ul style="list-style-type: none"> • Make sure that the disc is not dirty or scratched. • Clean the disc.
No HDMI output.	<ul style="list-style-type: none"> • Check the connection between the TV and the HDMI jack of the product. • Check if your TV supports 576p/480p, 720p, 1080i, 1080p HDMI input resolution.
Abnormal HDMI output screen.	<ul style="list-style-type: none"> • If random noise appears on the screen, it means that TV does not support HDCP (High-bandwidth Digital Content Protection).
PC Share Manager function	
I can see folders shared through the PC Share Manager, but I cannot see the files.	<ul style="list-style-type: none"> • Since it shows only files corresponding to the Image, Music, and Movie categories, files that do not correspond to these categories may not be displayed.
AllShare function	
Video is played intermittently.	<ul style="list-style-type: none"> • Check if the network is stable. • Check if the network cable is properly connected and if the network is not overloaded. • Wireless connection between the server and the product is unstable. Check the connection.
AllShare connection between BD-HDD Combo and PC is unstable.	<ul style="list-style-type: none"> • IP address under the same subnetwork should be unique, otherwise IP collision can results in such a phenomenon. • Check if you have a firewall enabled. If so, disable the firewall function.

PROBLEM	SOLUTION
BD-LIVE	
I cannot connect to the BD-LIVE server.	<ul style="list-style-type: none"> • Check whether the network connection is successful or not by using Network Test menu. (See page 45) • The total size of device must have at least 1GB of free space to accommodate the BD-LIVE service. You can check the available size in BD Data Management. (See page 41) • Please check whether the BD-LIVE Internet Connection menu is set to Allow(All). • If all above fails, contact the contents provider or update the latest firmware.
When using the BD-LIVE service, an error occurs.	<ul style="list-style-type: none"> • The total size of device must have at least 1GB of free space to accommodate the BD-LIVE service. You can check the available size in BD Data Management. (See page 41)

 **NOTE**

- When the factory default settings are restored, all the user data stored in the BD data will be deleted.

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Specifications

General	Weight	3.6 Kg	
	Dimensions	430 (W) X 290.2 (D) X 62 (H) mm	
	Operating Temperature Range	+5°C to +35°C	
	Operating Humidity Range	10 % to 75 %	
Disc	BD (Blu-ray Disc)	Reading Speed : 4.917m/sec	
	DVD (Digital Versatile Disc)	Reading Speed : 3.49 ~ 4.06 m/sec. Approx. Play Time (Single Sided, Single Layer Disc) : 135 min.	
	CD : 12 cm (COMPACT DISC)	Reading Speed : 4.8 ~ 5.6 m/sec. Maximum Play Time : 74 min.	
	CD : 8 cm (COMPACT DISC)	Reading Speed : 4.8 ~ 5.6 m/sec. Maximum Play Time : 20 min.	
Video Output	Composite Video	1 Channel : 1.0 Vp-p (75Ω load) Blu-ray/DVD Disc : 576i/480i	
	Component Video	Y : 1.0 Vp-p (75Ω load) P _R : 0.70 Vp-p (75Ω load) P _B : 0.70 Vp-p (75Ω load) Blu-ray Disc : 1080i, 720p, 576p/480p, 576i/480i DVD : 576p/480p, 576i/480i	
Video/Audio	HDMI	1080p, 1080i, 720p, 576p/480p PCM multichannel audio, Bitstream audio	
Audio Output	2 Channel	L(1/L), R(2/R)	
	Digital Audio Output	Optical	
	*Frequency Response	48 kHz Sampling	4 Hz to 22 kHz
		96 kHz Sampling	4 Hz to 44 kHz
	*S/N Ratio	110 dB	
	*Dynamic Range	100 dB	
*Total Harmonic Distortion	0.003%		
HDD Capacity	BD-C8200M	250 GB	
	BD-C8500M	500 GB	

*: Nominal specification

- Design and specifications are subject to change without prior notice.
- For the power supply and power consumption, refer to the label attached to the product.
- Weight and dimensions are approximate.

Appendix

Compliance and Compatibility Notice

NOT ALL discs are compatible

- Subject to the restrictions described below and those noted throughout this Manual, including the Disc Type and Characteristics section of this user manual, disc types that can be played are: pre-recorded commercial BD-ROM, DVD-VIDEO, and Audio CD (CD-DA) discs; BD-RE/-R, DVD-RW/-R discs; and CD-RW/-R discs.
- Discs other than the above cannot and/or is not intended to be played by this product. And some of the above discs may not play due to one or more reasons provided below.
- Samsung cannot assure that this product will play every disc bearing the BD-ROM, BD-RE/-R, DVD-VIDEO, DVD-RW/-R, DVD+RW/+R and CD-RW/-R logos, and this product may not respond to all operating commands or operate all features of every disc. These and other disc compatibility and product operation issues with new and existing format discs are possible because:
 - Blu-ray is a new and evolving format and this product may not operate all features of Blu-ray Discs because some features may be optional, additional features may have been added to the Blu-ray Disc format after the production of this product, and certain available features may be subject to delayed availability;
 - not all new and existing disc format versions are supported by this product;
 - new and existing disc formats may be revised, changed, updated, improved and/or supplemented;
 - some discs are produced in a manner that allows specific or limited operation and feature during playback;
 - some features may be optional, additional features may have been added after the production of this product or certain available features may be subject to delayed availability;
 - some discs bearing the BD-ROM, BD-RE/-R, DVD-VIDEO, DVD-RW/-R, DVD+RW/+R and CD-RW/-R logos may still be non-standardized discs;
 - some discs may not be played depending on their physical state or recording conditions;
 - problems and errors can occur during the creation of Blu-ray Disc, DVD software and/or the manufacture of discs;
 - this product operates differently than a standard DVD product or other AV equipment; and/or
 - for reasons noted throughout this user manual and for other reason(s) discovered and posted by SAMSUNG customer care centre.
- If you encounter disc compatibility or product operation problems, please contact SAMSUNG customer care centre.
You may also contact SAMSUNG customer care centre for possible updates on this product.
- For additional information on playback restrictions and disc compatibility, refer to the Precautions, Before Reading the user manual, Disc Types and Characteristics, and Before Playing sections of this user manual.

Copy Protection

- Because AAC (Advanced Access Content System) is approved as content protection system for Blu-ray Disc format, similar to use of CSS (Content Scramble System) for DVD format, certain restrictions are imposed on playback, analog signal output, etc., of AAC protected contents. The operation of this product and restrictions on this product may vary depending on your time of purchase as those restrictions may be adopted and/or changed by AAC after the production of this product. Furthermore, BD-ROM Mark and BD+ are additionally used as content protection system for Blu-ray Disc format, which imposes certain restrictions including playback restrictions for BD-ROM Mark and/or BD+ protected contents. To obtain additional information on AAC, BD-ROM Mark, BD+, or this product, please contact SAMSUNG customer care center.

- Many Blu-ray Disc/DVD discs are encoded with copy protection. Because of this, you should only connect your Product directly to your TV, not to a VCR. Connecting to a VCR results in a distorted picture from copy-protected Blu-ray Disc/DVD discs.
- This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.
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Appendix

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UNITED KINGDOM



EIRE

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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.
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 - 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.
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Mexico	01-800-SAMSUNG (726-7864)	www.samsung.com
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Area	Contact Center ☎	Web Site
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India	3030 8282 1800 110011 1800 3000 8282 1800 266 8282	www.samsung.com
Indonesia	0800-112-8888 021-5699-7777	www.samsung.com
Japan	0120-327-527	www.samsung.com
Malaysia	1800-88-9999	www.samsung.com
Philippines	1-800-10-SAMSUNG (726-7864) 1-800-3-SAMSUNG (726-7864) 1-800-8-SAMSUNG (726-7864) 02-5805777	www.samsung.com
Singapore	1800-SAMSUNG (726-7864)	www.samsung.com
Thailand	1800-29-3232 02-689-3232	www.samsung.com
Taiwan	0800-329-999	www.samsung.com
Vietnam	1 800 588 889	www.samsung.com
▪ Middle East & Africa		
Turkey	444 77 11	www.samsung.com
South Africa	0860-SAMSUNG (726-7864)	www.samsung.com
U.A.E	800-SAMSUNG (726-7864)	www.samsung.com
Bahrain	8000-4726	
Jordan	800-22273	



Correct disposal of batteries in this product

(Applicable in the European Union and other European countries with separate battery return systems.)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols *Hg*, *Cd* or *Pb* indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.



Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

