

2. Product Specification

2-1 Product Specification

General	Power requirements	AC 120V ~ 60Hz
	Power consumption	30 W
	Weight	4.6 lbs
	Dimensions	16.9(W) × 8.2(D) × 2.1(H) inches
	Operating Temperature Range	+41°F to 95°F
	Operating Humidity Range	10 % to 75 %
Disc	BD	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 : 5 inches (COMPACT DISC)	Reading Speed : 4.8 ~ 5.6 m/sec. Maximum Play Time : 74 min.
	CD : 3 1/2 inches (COMPACT DISC)	Reading Speed : 4.8 ~ 5.6 m/sec. Maximum Play Time : 20 min.
	Composite Video Component Video	1 channel : 1.0 Vp-p (75 Ω load) Blu-ray/DVD Disc : 480i
		Y : 1.0 Vp-p (75 Ω load) Pr : 0.70 Vp-p (75 Ω load) Pb : 0.70 Vp-p (75 Ω load) Blu-ray Disc : 1080i, 720p, 480p, 480i DVD : 480p, 480i
Video/Audio	HDMI	1080p, 1080i, 720p, 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%

2-1-1 Player Features

- Digital Photo Viewer (JPEG)
You can enjoy digital photos on your TV.
- MP3 Playback
This unit can play mp3 files from CD-R/-RW, DVD-R/-RW discs.
- HDMI (High Definition Multimedia Interface)
HDMI reduces picture noise by allowing a pure digital video/audio signal path from the player to your TV.
- Simplay HD
This unit is Simplay HD™ verified.

2-1-2 Blu-ray Disc Features

Blu-ray Discs can store 25 GB (single layer) or 50 GB (dual layer) on a single sided disc - about 5 to 10 times the capacity of a DVD. Blu-ray Discs also support the highest quality HD video available in the industry (up to 1920 x 1080 at 40 Mbit/sec) - Large capacity means no compromise on video quality. Furthermore, a Blu-ray Disc has the same familiar size and look as 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 for movie distribution supports three highly advanced video codecs, including AVC, VC-1, and MPEG-2.
HD video resolutions are also available:
 - 1920 x 1080 HD
 - 1280 x 720 HD
- For High-Definition Playback
To view high-definition contents in BD discs, an HDTV (High Definition Television) is required. Some discs may require using the player's HDMI OUT to view high-Definition content. The ability to view high-Definition content on BD discs may be limited depending on the resolution of your TV.
- Graphic planes
Two individual, full HD resolution (1920x1080) video layers are available, on top of the HD video layer. One layer is assigned to video-related graphics (like subtitles), and the other layer is assigned to interactive elements, such as buttons or menus. Various wipes, fades and scroll effects may be available on both layers.
- Menu graphics
Support 256 full color resolution graphics and animation, thereby greatly surpassing the capabilities of DVD-Video. Unlike DVD, Menus can be accessed during video playback.
- Menu sounds
When you highlight or select a menu option on a Blu-ray disc, sounds can be heard such as button clicks or a voiceover explaining the highlighted menu choice.
- Multi-page/PopUp Menus
With DVD-Video, playback is interrupted each time a new menu screen is accessed. Due to Blu-ray Disc's ability to preload data from the disc without interrupting playback, a menu may consist of several pages. You can browse through the menu pages or select different menu paths, while the audio and video remain playing in the background.
- 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 colors for the subtitles. Subtitles may also be animated, scrolled or faded in and out.

2-1-3 Disc types that can be played

<Table 2-1>

Disc Types	Recorded content	Disc Shape	Max. Playing minute
BD-ROM, BD-R, BD-RE	AUDIO + VIDEO	Single sided (25GB/50GB)	–
DVD-VIDEO	AUDIO + VIDEO	Single sided(5 inches)	240
		Double sided(5 inches)	480
		Single sided(3 1/2 inches)	80
		Double sided(3 1/2 inches)	160
AUDIO-CD	AUDIO	Single sided(5 inches)	74
		Single sided(3 1/2 inches)	20
DVD-RW(V mode and fi nalized only)	AUDIO + VIDEO	5 inches (4.7GB)	480(EX : Extended Play)
DVD-R(V mode and fi nalized only)	AUDIO + VIDEO	5 inches (4.7GB)	480(EX : Extended Play)
CD-R/-RW DVD-RW/-R	JPEG MP3	–	–

<Table 2-2>

BD-ROM	Blu-ray Disc Read Only Memory. A BD-ROM disc contains pre-recorded data. Although a BD-ROM may contain any form of data, most BD-ROM discs will contain movies in High Definition format, for playback on Blu-ray disc players. This unit can play back pre-recorded commercial BD-ROM discs.
DVD-Video	A digital versatile disc (DVD) can contain up to 135-minutes of images, 8 audio languages and 32 subtitle languages. It is equipped with MPEG-2 picture compression and Dolby Digital surround, allowing you to enjoy vivid and clear theatre quality images. When switching from the fi rst 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 unit. Once a DVD-RW/-R recorded in Video Mode is fi nalized, it becomes DVD-Video. Pre-recorded (prestamped) commercial DVDs with movies are also referred to as DVD-Videos. This unit can play back pre-recorded commercial DVD discs (DVD-Video discs) with movies.
AUDIO-CD	An audio disc on which 44.1kHz PCM Audio is recorded. This unit can play back CD-DA format audio CD-R and CD-RW discs. The unit may not be able to play some CD-R or CD-RW discs due to the condition of the recording.
DVD-RW(V mode and fi nalized only)	Use a 700MB(80 minutes) CD-R/-RW disc. If possible, do not use a 800MB(90 minutes) or above disc, as the disc may not play back. If the CD-R/-RW disc was not recorded as a closed session, you may experience a delay in the early playback time, all recorded fi les may not play. Some CD-R/-RW discs may not be playable with this unit, depending on the device which was used to burn them. For contents recorded on CD-R/-RW media from CDs for your personal use, playability may vary depending on contents and discs.
DVD-R(V mode and fi nalized only)	Once a DVD-R recorded in Video Mode is fi nalized, it becomes DVD-Video. This unit can play back DVD-R discs recorded and fi nalized with a Samsung DVD video recorder. It may not be able to play some DVD-R discs depending on the disc and the condition of the recording.
CD-R/-RW DVD-RW/-R	Playback can be performed with DVD-RW discs in the Video Mode and fi nalized only. Once a DVD-RW recorded in Video Mode is fi nalized, it becomes DVD-Video. Ability to play back may depend on recording conditions

2-1-4 Discs that cannot be played

- Blu-ray Discs with a region code other than "Region A".
- HD DVD Disc
- DVD-Video with a region number other than "1" or "ALL"
- DVD-RAM
- 3.9 GB DVD-R Disc for Authoring.
- DVD-RW(VR mode)
- DVD-ROM/PD/MV-Disc, etc
- CVD/CD-ROM/CDV/CD-G/CD-I/LD

[Note]



- Some commercial discs and DVD discs purchased outside your region may not be playable with this product. When these discs are played, either "No disc." or "Please check the regional code of the disc." will be displayed.
- If a DVD-R/-RW disc has not been recorded properly in DVD video format, it will not be playable.

2-1-5 Region code

Both the Blu-ray disc player 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 Blu-ray disc player is described on the rear panel of the Blu-ray disc player.

<Table 2-3>

Disc Type	Blu-ray	DVD-Video
Region code		




<Table 2-4>

BD Region Code	Area
A	North America, Central America, South America, Korea, Japan, Taiwan, Hong Kong and South East Asia.
B	Europe, Greenland, French territories, Middle East, Africa, Australia and New Zealand.
C	India, China, Russia, Central and South Asia.



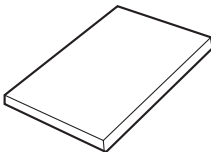
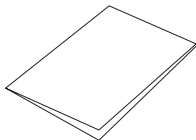
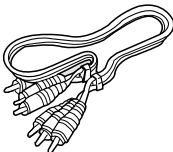

2-1-6 Blu-ray Disc Compatibility

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 Manual. If you encounter compatibility problems, please contact the SAMSUNG customer care center. This Samsung Blu-ray disc player supports only the BDROM Profile 2 (a.k.a. BD-LIVE). If you want to play later version discs, you may need to update player's firmware. Please refer to <http://www.samsung.com> or contact SAMSUNG customer care center at 1-800 SAMSUNG.

2-2 Chassis Product Specification

General	Features	BD-P1400	BD-P1500	BD-P1600
Chassis				
Input / Output	CVBS Output	1CH	1CH	1CH
	S-Video Output	1CH	1CH	-
	YPbPr Output	1CH	1CH	1CH
	HDMI	O	O	O
	Digital Audio Output(Optical/Coaxial)	O/O	O/X	O/X
	Analog Audio Output (2ch/5.1ch)	2ch/5.1ch	2ch	2ch
	HDMI CEC	O	O	O
Audio/Video Decoder	Video Decoder(Maker : DAC)	SMP8634	BCM7440	BCM7440
	Video DAC	10bit	10bit	10bit
	Audio DAC	24bit 192kHz	24bit 192kHz	24bit 192kHz
Loader	BD-ROM	O	O	O
	BD-RE / BD-R	X	O	O
	DVD-RAM	X	X	X
	DVD-RW	O	O	O
	DVD-ROM	O	O	O
	DVD-R	O	O	O
	DVD+R	X	X	X
	DVD+RW	X	X	X
	CD-ROM	O	O	O
	CD-R	O	O	O
	CD-RW	O	O	O
A/V Play-able Media	BD-ROM	O	O	O
	BD-RE / BD-R	X	O	O
	DVD-Video	O	O	O
	DVD-Audio	X	X	X
	DVD-VR	X	X	X
	Not finalized DVD-V Mode	X	X	X
	VCD 1.1/2.0	X	X	X
	SVCD/CVD	X	X	X
	CD-DA	O	O	O
	DTS CD	O	O	O
	HDCCD	X	X	X
	SACD	X	X	X
	SACD CD Layer	O	O	O
	Picture CD	O	O	O
	mp3	O	X	O
	JPG	O	X	O
	DivX	X	X	X
Miscellaneous	Front Display	VFD	VFD	VFD
	Screen capture	X	X	X
	Closed Caption pass through from disc	O	O	O
	Main Menu (including Setup Menu)	O	O	O

2-3 Option Product Specification

Description Fig	Description	Parts No	Remark
	Remote Control	AK59-00104K	Model Standard of BD-P1600/XAA
	Batteries for Remote Control	AC43-12002H	Model Standard of BD-P1600/XAA S.N.A
	Instruction Manual	AK68-01783A	Model Standard of BD-P1600/XAA
	Quick Guide	AK68-01784A	Model Standard of BD-P1600/XAA S.N.A
	Video/L/R Cable	AC39-42001R	Model Standard of BD-P1600/XAA
	Wireless LAN Adapter	- . WIS09ABGN-G AK98-01083A(gender) - . WIS09ABGN AK98-01080A(No gender)	Model Standard of BD-P3600/XAA (provided as bundle(gender type) for BD-P3600)