

# harman/kardon®

## Summary Features BDP 10

The BDP 10 isn't just an exceptional Blu-ray Disc™ player in the Harman Kardon® tradition. And it doesn't just upscale your existing DVD library to the 1080p standard. The BDP 10 is also your ticket to a world of interactive content with BD-Live™ interactivity, an exciting new feature of next-generation Blu-ray Disc media. Download games, ringtones and other special content from the Internet directly to the BDP 10 via the Blu-ray menu. Or create your own programming, with MP3, WMA and JPEG playback from the front-panel USB port. The BDP 10 is the most advanced Harman Kardon media player ever built, and the clear choice for high-definition video from any source.

New features, compared to previous models, are marked in blue.

### **Blu-ray Disc Technology**

The Blu-ray Disc (BD) format surpasses DVD technology. One of the main benefits of Blu-ray Disc technology is the high-definition digital audio and video. Depending on the capabilities of your television and the components in your audio/video home theatre system, you'll immediately notice superior sound and picture quality when playing BD discs.

BD discs are capable of holding extremely large amounts of data, which offers the producer the opportunity to include additional features on a disc, such as multiple-language and surround sound tracks; subtitling; movie trailers and "making of" featurettes; and director- or cast-commentary tracks.

### **Compatible with the Latest High-Bit-Rate Audio Formats**

The Harman Kardon BDP 10 is compatible with the latest Dolby® TrueHD and DTS-HD Master Audio™ high-bit-rate audio formats, when connected to a compatible AVR via an HDMI 1.3 connection. Dolby TrueHD is Dolby's latest lossless technology, the ultimate audio experience for high-definition disc-based media. The Dolby TrueHD decoding on the BDP 10 allows viewers using a compatible audio/video receiver to hear exactly what was captured during the recording and mastering process, bringing a palpable and involving audio presence to the home theatre experience. DTS-HD Master Audio provides lossless audio that matches, bit to bit, a movie's original studio master soundtrack; it is fully backward-compatible with all DTS® decoders.

### **HDMI™ (V.1.3a with x.v.Color™) Connectivity**

x.v.Color or extended-gamut YCC (also x.v.YCC) is a color space that is used on certain BD discs to support a gamut 1.8 times as large as that of the RGB color space. x.v.Color uses the full range of values (0 to 255 in an 8-bit space) to represent colors. The wider ranges of digital values allow representation of deeper greens, deeper reds and deeper blues and the intermediate colors previously beyond the boundary limit in the CCIR 601 color space.

The HDMI 1.3 specification defines the mechanism for carrying the gamut boundary definition for x.v.Color.

### **Backwards Compatibility with DVD**

The DVD-Video disc was a leap beyond the previous videocassette technology, and the Blu-ray Disc format surpasses DVD technology. However, the BDP 10 was designed to be backwards-compatible with your DVD library. Even older DVD-Video discs will deliver outstanding picture quality, when they are upscaled to 1080p video resolution.

### **BonusView™ Interactivity**

The additional processing power of Blu-ray Disc players allows new features such as BonusView interactivity. BonusView interactivity, available with compatible Blu-ray Disc media, allows the filmmaker to offer viewing features and options, such as added interactive games and video commentaries that were unimaginable with previous-generation discs. These can be played along with the main feature using picture-in-picture (PIP) technology.

### **BD-Live™ Interactivity**

When the BDP 10 is connected to the Internet, and a compatible BD-Live disc is loaded, you may be able to download updates to the disc content or access other interactive features, such as news of live events, and store these in the BDP 10's memory. Due to the limited size of the internal memory of the BDP 10, BD-Live functionality performs best when a USB storage device (not included) with more than 1GB of available space is connected to the front-panel USB port.

### **Front-Panel USB Port**

USB client devices, such as flash drives and most external or portable hard-disk drives that are formatted with the FAT32 file system, may be connected to the BDP 10's front-panel USB port for playback of data recorded in the MP3, Windows Media® 9 (WMA) or JPEG formats.

The BDP 10 will automatically detect the USB device, and the menu system will prompt you to decide whether to use the USB drive as a source for media playback or as virtual memory for BD-Live downloaded content.

Do not connect a personal computer directly or any iPod, USB peripheral devices (such as card readers, keyboards and pointing devices), directly to the BDP 10. Software-specific digital media players, even when placed in disc mode, are not compatible with the USB ports on the BDP 10.

### **RJ45 Ethernet Jack**

Connect the standard RJ45 jack on the rear of the BDP 10 to a broadband network (Ethernet) connection so that you may take full advantage of BD-Live updates, and features and enhancements of the BonusView system. When the network connection is "live," the lights on either side of the jack will flash to indicate network activity.

### **NTSC and PAL Progressive Scan Video Output**

Due to the immense data-storage capacity of BDs and DVDs, images are stored progressively (intact, rather than interlaced). This allows all of the lines in each frame (odd and even) to be shown at the same time. The Harman Kardon BDP 10 comes with true progressive scan video output, resulting in 40 percent greater light output than that of a conventional TV, and a stunningly detailed high-definition image with an absence of visible scan lines and motion artifacts.

### **Component Video Output**

In addition to HDMI connectivity, and composite video switching, our new BDP model includes a component video output (YUV) for use with compatible TVs and projectors, as well as with all plasma, LCD and DLP display devices with component video inputs. The component video output also bears the progressive scan video output signal.

### **Video-Output Resolution**

One of the many advantages of HDMI technology is that allows two-way handshake communication between a source and a display. The BDP 10 default video-output-resolution setting is "HDMI Auto"; in HDMI Auto the BDP 10 will communicate with the TV and select the highest video-output resolution that the TV can display.

### **Full-Color, High-Definition Graphical User Interface**

The BDP 10 is among the first in our product range to feature the Harman Kardon internally developed full-color, high definition GUI with drop-down or scroll-style menu operation. For those who use the player in a standard-definition setup, an SD version of the menu is available.

### **Multi Language Graphical User Interface**

The new GUI comes with more advantages than full color and high definition. It is now also available in six different languages - English, French, Italian, Spanish, German and Russian - allowing for customization into a local language.

### **Media Launcher**

The Media Launcher menu is the main menu from which all media playback can be started. It also gives access to the Setup menu. Automatic playback of discs is available.

### **Popup Menu**

Popup menus are among the most exciting innovations of the Blu-ray Disc system. Video playback will continue while you access the disc's setup, scene selection and special features submenus, allowing adjustments to be made on the fly.

### **MP3 and WMA Capability**

The MP3 file format used for computers and portable audio devices has become the most widespread audio innovation in recent years. The BDP 10 plays back discs containing MP3 files burnt onto recordable CDs or DVDs. This means that you can enjoy the latest music through the high-quality audio components in your home theater system using discs created on your computer. WMA v.8 or v.9 (Windows Media Audio, version 8 or 9) music files are played as described above for MP3 files. Note that the supported bit-rate for WMA files is between 32kbit/s and 192kbit/s.

### **JPEG Image Files**

In addition to all standard video and audio formats, Harman Kardon Blu-ray Disc players are also capable of playing back discs containing high-resolution JPEG images. These images can be generated in a JPEG format on almost any computer, using many public utilities. Images can be rotated in steps of 90°. Images can also be shown in a mosaic or preview by using the menu button on the remote control. This will show nine images at the same time. Pressing the SKIP button will show the next nine images. Direct selection from the preview menus is possible as well. Images can also be shown in a mosaic or preview, and can be enlarged using the Zoom function. Other functions unique to JPEG playback are image rotation, image transitions and thumbnail view.

### **Slideshow Playback of MP3 and JPEG Files**

The Harman Kardon BDP 10 allows two popular new formats to be played back at the same time. If both audio and JPEG photo files are stored on the same source media, you may create a multimedia presentation with simultaneous play of the audio behind a slide show of the images. You will be able to select from the following slideshow transitions: blend, film, shutter, fade, curtain or none.

### **Disc Readability**

The Harman Kardon BDP 10 player is a multipurpose Blu-ray Disc and DVD player, capable of playing both BDs, DVDs and conventional CD audio discs with the highest fidelity. Together with conventional DVDs, the Harman Kardon BDP 10 is also compatible with:

- DVD-R, DVD-RW, DVD+R and DVD+RW discs
- CD-R and CD-RW discs
- VCD discs, including PBC (PlayBack Control)

Playback capability for all mentioned disc types may vary due to variations in the quality of the discs and the recorder used to create the disc.

### **Playback of DivX® Compressed Video Files**

The DivX codec is a revolutionary video codec that is based on the MPEG-4 compression standard for video. The BDP 10 player will play back discs created with DivX software. The playback of DivX video discs will vary depending on the DivX software version used for creating movies. For more information about the different DivX software versions, go to [www.divx.com](http://www.divx.com).

### **Soft Keys**

Select Blu-ray Disc media offer a variety of special features, defined by the disc, which can be directly accessed using four color-coded buttons.

### **Auto Play**

The Auto Play function allows any disc that is loaded in the BDP 10 at the time the unit is turned on to automatically begin playing. The Media Launcher menu will be bypassed, allowing discs to be read faster.

### **Start-Up Time**

Due to its design features, such as random-access memory, which enable innovations such as popup menus and simultaneous playback of secondary videos (e.g., director's commentary) with the main program, Blu-ray Disc players generally take longer to start up and load a disc than conventional optical players. Thorough research has allowed Harman Kardon engineers to make the BDP 10 player among the fastest players on the market in regards of start up time.

### **Film Mode**

The Film mode allows displaying movies at their native rate of 24 frames per second for superior performance. This performance requires a BD disc recorded at 1080/24p, an HDMI connection to the audio/video receiver or TV, and a TV capable of displaying images at a resolution of 1080/24p.

### **Auto Standby**

When the Auto Standby setting is on, the BDP 10 will automatically power off after 25 minutes of inactivity to conserve energy. This setting may be turned off, and the BDP 10 will remain on indefinitely.

### **Find Function**

The Find menu presents a method of jumping directly to a desired title, chapter or time location on the disc while the disc is playing. This function is available for all disc and file types, but only during playback.

You may also use the function to begin playback from a specific time point in the track, chapter or file, or on the disc (DVDs and CDs), sometimes called Time Search. With the Time cell highlighted, use the Numeric Keys to enter up to six digits that indicate the time from which you would like playback to start. If you enter fewer than six digits, press the OK Button to complete the entry, and the disc will immediately jump to that point.

### **PCM Down-Sampling**

The PCM down-sampling configures the coaxial and optical digital audio outputs to match the bit rate capability of the AV receiver. If the BDP 10 is connected via any of the digital audio outputs to a surround receiver that is capable of processing high-bit-rate audio, change this setting to "96kHz."

### **Screen Saver**

The screen saver prevents an image from "burning" into a video display device. It's recommended that you activate the screen saver at all times.

### **Firmware Upgradeability**

The firmware controlling the functionality of the new Harman Kardon DVD players is fully upgradeable. In the event of future improvements to its operations, it will be possible to download firmware upgrades from [www.harmankardon.com](http://www.harmankardon.com). All you have to do is create a CD-R with the data and insert it in the DVD. The OSD will guide you through the upgrade process. Additional guidelines about how to format the CD-R will be shown on the Web site.

### **Backlit, Full-Function Remote Control**

For total user convenience, the Harman Kardon DVD players offer seven-speed Smooth Scan, Fast-Forward and Reverse (x2, x4, x8, x16, x32, x64, x128) functions, three-speed Super-Fine Slow Motion function in both directions (x1/2, x1/4, x1/8); and an ultra stable Still Picture Mode. The backlit remote provides easy access to functions such as Random and Repeat Play, and selection of audio track, subtitle or viewing angle.

### **Remote IR Input and Output**

The BDP 10 player is equipped with an infrared input and output to facilitate use of your system with a remote control in a variety of situations. When the BDP is placed in such a way that aiming the remote at the front-panel IR sensor is difficult, such as inside a cabinet or facing away from the listener, you may connect an external IR receiver, such as the optional Harman Kardon HE 1000, to the remote IR input jack.

### **Dimmable Dot-Matrix Front-Panel Display**

Annoyed by your audio/video equipment's display lighting up the room when watching a movie? The Harman Kardon BDP 10 player allows you to dim the display to half- or full brightness, or to turn it off completely.

### **Parental Control**

Most Blu-ray and DVD discs are specifically encoded with rating information for parental control. The Parental Control function enables you to control which discs may be viewed by children. The Parental Control function is part of the player's password system, used to change both the password itself and the rating.

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