Panasonic
ideas for life

Blu-ray Disc™ Player
DMP-BD10
DMP-BD10: Unleashing the Full Potential of BD-Video Discs

A BD-Video disc can hold huge amounts of video and audio data. To unleash its full quality potential, you need a disc player that provides 62.2 million pixel-per-second video processing plus audio processing that’s 1,000 times higher than typical CD players.

The Panasonic DMP-BD10 goes far beyond those specifications. With 15 billion pixel-per-second processing and 192kHz/24bit audio for each of eight channels, this new Blu-ray Disc™ player provides a level of image and sound quality that is truly amazing.

The DMP-BD10 reflects Panasonic’s concept for developing HD products - displays, players, AV receivers, speakers and more – that reproduce images and sounds with beauty capable of stirring deep emotion.

At Panasonic, easy operation is important too. The DMP-BD10 comes equipped with HDAVI Control, a function that links operation of an HDAVI Control compatible TV and receiver, so you can control both at the same time with a single button.

With the DMP-BD10, Panasonic invites you to discover an entirely new dimension of entertainment – one with HD-quality* images and sounds that surpass anything you’ve ever experienced.

* HD monitor required.

“Blu-ray Disc” and £ are trademarks.

Think about a marvelous ceiling painting with intricate detail. Or beautiful evening scenery with many subtle variations of the same color.

The DMP-BD10 renders images like these with enormous accuracy, faithfully conveying details, textures and color depth, using more than 2 million pixels to create each frame. The high-definition* images reproduced by the DMP-BD10 may be the most beautiful images you’ve ever seen.

* HD monitor required.

HIGH DEFINITION PICTURE QUALITY
To get the best HD images from a BD-Video disc, you need a player that renders high-quality progressive images, expresses motion smoothly, and draws sharp diagonal lines. The DMP-BD10’s P4HD processes more than 15 billion pixels per second and applies the optimum processing to every pixel in the video data on the disc. The result is images with exceptional resolution.

P4HD (Pixel Precision Progressive Processing for HD)

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**Precise Pixel Generation**

For optimum progressive conversion, the processing must suit the motion of the image. The super-high-speed P4HD categorizes the image motion of each pixel into one of 16 levels, from stationary to super fast. For areas with stationary images, it applies the progressive processing best suited to still images. In other areas it applies processing that matches the degree of motion. The result are stunningly beautiful progressive images with minimum conversion errors.

**Diagonal Processing**

The ability to create smooth, sharp diagonal lines is a key in progressive conversion. The P4HD quickly detects diagonals and applies correction to the pixels accordingly. In reproducing the kinds of geometric patterns often seen in architecture, for example, the DMP-BD10 provides exceptionally smooth, sharp diagonal lines whether the image is still or moving.

**3:2/2:2 Pull-Down Progressive Processing**

The P4HD instantly determines whether a source is film or video and optimizes the processing accordingly. Applying 3:2 or 2:2 pull-down with movie software, it makes images look natural and true to life.

**Up-Conversion to 1080p** Playbacks

When playing a BD-Video or DVD disc, the P4HD up-converts content recorded in the 480i/p, 720p or 1080i format to 1080p with high precision. You enjoy superb 1080p-level image quality.

**Digital**

- HDMI
- Component Video
- S-Video
- Video

**Analogue**

- Component Video
- S-Video
- Video

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High-Definition Audio – The Lifelike Ambience of 7.1-Channel Surround Sound

In order to fully enjoy the beauty of HD images, you need to combine them with equally impressive sound.

The DMP-BD10 lets you experience the awesome power of Dolby® Digital Plus 7.1-channel surround sound, which far exceeds the usual 5.1-channel surround sound of DVD. Processing a massive amount of information, it can recreate the ambience of a concert hall with remarkable accuracy and even convey the movement of rising clouds of mist.

The DMP-BD10 uses an EZ SyncTM compatible remote control. This makes connecting your DMP-BD10 and other Sony components easier than ever.

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**Virtual Battery Operation**

It prevents AC power supply noise from entering the audio circuitry, thereby isolating sound localization.

**HIGH QUALITY SOUND**

The DMP-BD10 uses a 192kHz/24bit D/A converter for each of the eight channels to achieve truly superb surround sound. The D/A converter uses Advanced Segment D/A processing, which applies multi-bit processing to establish the audio reference and 1-bit processing to render the delicate nuances. These combine to create a remarkably beautiful sound that has both power and purity.

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Making It Even Easier to Enjoy

The DMP-BD10 gives you a full range of features, including an EZ Sync™ compatible remote control. This makes connecting your DMP-BD10 and other Sony components easier than ever.
Making It Easy to Enjoy the Beauty

The DMP-BD10 gives you sensational images and sound, but the experience doesn’t end there. It also adds super-easy operation. In a home theater system featuring the DMP-BD10, you can control an HDAVI Control compatible TV and AV receiver at the same time by pressing a single button on the remote control. This intelligent linking function makes it easy to enjoy the beauty of HD entertainment.

HDAVI Control

With the DMP-BD10, easy operation is part of the picture. Connect it to an HDAVI Control compatible TV or AV receiver with an HDMI cable, and you can enjoy convenient linked operation. That means, for example, pressing one button on the receiver’s remote control turns on the receiver and TV, switches the input source to Video, and changes the mode selector to Blu-ray Disc™ Player. All you have to do is adjust the volume and enjoy. There is no simpler way to enjoy the beauty of BD-Video.

INTELLIGENT CONTROL

Non-HDMI-compliant cables cannot be utilized.
Blu-ray Disc™ Player
DMP-BD10

Blu-ray_P08

What's a Structure
The Blu-ray Disc is an advanced optical disc format that stores high-definition data using a set of BD standards.

The single layer structure stores single-layer high-definition content on one side. The structure combines high-quality performance with a lightweight disc for easy production costs and high-quality performance, which is essential for Blu-ray Disc production costs and high-quality performance for Blu-ray Disc production costs and high-quality performance.

Java is a trademark of Sun Microsystems, Inc.

# 1GB = 1 billion bytes. Useable capacity is less.

Blu-ray Disc™ Player
DMP-BD10

1080p Playback Capability with P4HD (Pixel Precision Progressive Processing for HD)
- Up Conversion from 1080i to 1080p* with Precise Pixel Generation, Motion Adaptive, Diagonal Processing and 3:2/2:2 Pull-Down Processing
- Up Conversion to 1080p* Playback from 60 Surrounding Pixels of Information with Precise Pixel Generation
- 297MHz/14-bit Video D/A Converter

192kHz/24bit Audio DAC
- Audio Re-Master
- Virtual Battery Operation and High-Quality Sound Parts

HDAVI Control for Panasonic BD Product Lineup

- High Definition Player
- High Quality Sound
- Intelligent Control

Gold Plated Terminal Insulator with Shock Absorb Rubber Sheet
Copper-foil Film Capacitors
Gold-plated Thin-Film Chip Resistors

Minimum pit length 0.4 µm
Track pitch 0.74 µm
Substrate 1.2m
Track pitch 4.7G
Substrate 10.08 µm

"Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
"HDMI", the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
"Java" is a trademark of Sun Microsystems, Inc.

* HDMI connection required.
What’s a Blu-ray Disc?
The Blu-ray Disc (BD) is a next-generation optical disc format for storing a large amount of data using a short wavelength blue laser to read and write. Like DVD, there are a number of BD standards, such as read-only BD-ROM, recordable BD-R and rewritable BD-RE. The single largest feature of BD is its high-density data storage capacity of 25 GB per layer on one side. This lets you store many hours of content, such as movies with HD resolution and high-quality music with loss-less audio compression. BD also features a high-performance interactive function that uses Java, called BD-J, to deliver a new video experience to users not offered by conventional video media. With many motion picture production companies and electronics, PC and gaming manufacturers expressing their support for BD, new hardware and software products are expected to hit the market soon.

Benefits of the BD-Video Disc
1. One Single-Layer Disc Equals Five DVDs in Data Capacity
The BD-Video disc boasts a data storage capacity of 25 GB in a single layer and 50 GB in dual-layer, because it uses the shorter wavelength blue-violet laser and a high-density objective lens to enable higher-density data reading. When a multi-layer system is adopted in the future, the storage capacity can increase to 100 GB and even 200 GB. One BD-Video disc can store a huge amount of data so users can enjoy many hours of high-definition content and high-quality surround sound that could not previously be provided by other media.

2. HD Image Quality Video
In addition to the MPEG-2 format used by DVD-Video, the BD-Video disc uses video codes, such as MPEG-4 AVC and VC-1, which deliver high image quality using high compression rates. The data transfer speed is 48 Mbps, which is about three times faster than DVD. A future plan also calls for a further increase in the data transfer speed. These technologies allow long-time playback of content with high-definition image quality.

3. High-Quality Surround Sound
The BD-Video disc optionally supports next-generation surround sound formats like Dolby® Digital Plus. Connecting a BD-Video player to an AV center using an HDMI* cable enables linear PCM multi-channel data transfer. This makes it possible to reproduce high-quality 7.1-channel surround sound with each channel offering DVD-Audio quality, delivering a surround sound experience that rivals the quality of the master audio source.

4. 3D for Extensive Interactive Functions
The BD-Video disc is equipped with an extended function based on Java technology, called BD-J, to provide various interactive features. For example, this can be used to program various operations, such as displaying a pop-up menu while playing a BD-Video disc, and activating a keyword search. With unlimited application possibilities, BD-J offers interactive enjoyment that is simply not possible with conventional AV software.

5. Extensive Support for Both Hardware and Software
The Blu-ray Disc specifications have been established mainly by leading electronics, PC and gaming manufacturers around the world, including Panasonic. These companies will support BD promotion by introducing a variety of hardware. A number of major motion picture production companies have expressed their support. A variety of software can be expected to hit the market before long.

Structure of the BD-Video Disc

- The Blu-ray Disc is an optical disc with the same dimensions as the DVD disc, 12 cm in diameter and 1.2 mm in thickness. By using a combination of the 405-nm-wavelength blue-violet laser, which is a shorter wavelength than the red laser used by DVD, and a high-density objective lens with a numerical aperture of 0.85, BD uses a laser beam spot that is only about 1/5 the size used by DVD. Thanks to these technologies, a single-layer BD-Video disc can store five times more data than a DVD disc.

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Picture and Sound Like You've Never Before Experienced

Panasonic offers a full lineup of high definition and Blu-ray Disc products - TVs, players, AV receivers, speakers and more - that draw out the best picture and sound quality from BD-Video discs. Our uniform design scheme assures that a Panasonic system delivers a superb performance that takes full advantage of BD-Video's remarkable capabilities, while HDAVI Control adds convenient linked operation. A Panasonic BD Theater System is designed to provide an entertainment experience that satisfies you in every way.
Panasonic High Definition Solution

Blu-ray Disc™ Player
DMP-BD10

Home Theater Receiver
SA-XR700