

Blu-ray Disc FAQs

General questions about the BDR-101A drive:

- 1) What are the maximum write speeds of the BDR-101A drive?**
 - 2X CLV for BD-R/RE
 - 8X Zone CLV for DVD-R /+R
 - 4X CLV for DVD-RW /+RW
 - 2X CLV for DVD-R Dual Layer (DL)
 - 2.4X CLV for DVD+R Double Layer (DL)

Note: CD media is not supported with this drive.

- 2) What type of media can the BDR-101A drive read?**
 - BD-ROM (single and dual layer), BD-R/RE (Single Layer),
 - DVD-ROM, DVD-Video, DVD-/+R, DVD-/+RW, DVD-/+R DL

Note: CD media is not supported with this drive.

- 3) Will the BDR-101A recognize HD-DVD media?**
 - No, HD-DVD media is not a compatible media type.

- 4) What are the Minimum PC requirements needed to use the BDR-101A?**
 - The drive requires an 80 conductor "UDMA" ribbon cable.
 - If any other software is used, then that software package determines the minimum PC requirements.
 - The bundled software requires:
 - ~ Windows XP or 2000 service pack 4 (SP4)
 - ~ CPU 150MHz (300MHz or more recommended)
 - ~ 40MB free space on the hard drive (700MB or more recommended)
 - ~ 128MB RAM (256MB or more recommended)
 - ~ Windows Media Player 9 and Internet Explorer 5 or higher are recommended

- 5) Can the drive be installed Vertically and Horizontally?**
 - Yes, but the "tilt allowance" during operation can not be more then +/- 5 degrees from the
 - Horizontal or Vertical position.

- 6) What is the interface of the drive?**
 - ATAPI (ATA-5 & SFF-8090) which requires an 80 conductor "UDMA" ribbon cable.
 - IDE DATA Transfer of PIO Mode 4, MultiWord DMA Mode 2, Ultra DMA Mode 2, Ultra DMA Mode 4 (Ultra DMA 66)

- 7) Will the BDR-101A be able to write to a 50GB dual layer disc?**
 - This drive is capable of writing to single layer Blu-Ray discs only.

- 8) **What BD-R and BD-RE media will the BDR-101A write to?**
 - The drive currently supports TDK media.
 - Other brands of media will be supported with future drive firmware updates.

- 9) **Can I use credit card-shape or odd-shape discs with the BDR-101A drive?**
 - The drive supports circular 120mm and 80mm disc types only.
 - An 80mm disc cannot be used when the drive is vertically mounted.

Note: The drive does not support 8cm (80mm) disc adapters.

- 10) **How many objective lenses and how many laser diodes does the drive use?**
 - There is 1 objective lens used by 2 separate laser diodes, one for Blu-ray discs and one for DVD discs.

- 11) **What are the dimensions of the drive?**
 - Inches: 5.83" (W) x 7.80" (D) x 1.67" (H)
 - Millimeters: 148mm (W) x 198mm (D) x 42.3mm (H)

Note: measurement includes height with front bezel

- 12) **What is the Buffer Memory Size of the drive?**
 - BD: 8MB
 - DVD: 2MB

- 13) **What is the weight of the drive?**
 - 2.42 lbs (1.1Kg)

General Blu-ray Disc questions:

- 1) **What is AACCS?**
 - **Advanced Access Content System**, a content protection technology used on content protected discs

- 2) **What is ROM Mark?**
 - ROM Mark is part of the Blu-ray Disc content protection system for BD-ROM discs.
 - It provides a way to prevent mass production piracy on replicated discs.

- 3) **What is BD+?**
 - BD+ is an additional content protection technology that provides a method of preventing playback on devices containing known security compromises or "Hacks".

- 4) **How much data can a Blu-ray Disc hold?**
 - 25GB on a single layer disc and 50GB on a dual layer disc.

- 5) **How long will it take to write a full 25GB single layer BD-R or BD-RE disc writing at 2X?**
 - Approximately 45 minutes. (1X burn is about 36Mbps or 4.5MBps)

- 6) **How much High Definition video can be recorded onto a BD-R?**
 - It depends on the codec and bit rate used. For instance, by using MPEG-4 AVC and encoding at 12Mbps, you can put 3 hours and 47 minutes of High Definition video along with 3 languages using full 1920 x 1080 resolution onto a single sided (25GB) BD-R disc.

- 7) **How many times can a BD-RE disc be rewritten/overwritten?**
 - It depends on the manufacturer. For instance, TDK states on their website that BD-RE discs (using their Durabis 2 coating) are capable of approximately 10,000 re-writes).

- 8) **Which codec's are supported by Blu-ray Disc?**
 - For Video: MPEG-2, MPEG-4 AVC, and VC-1
 - For Audio: LPCM, DTS, DTS-HD, Dolby Digital (and "Plus"), Dolby Lossless