

## **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