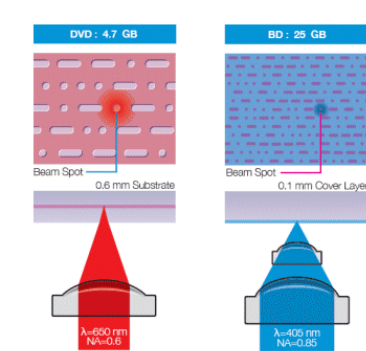


# BLU-RAY TECHNOLOGY

As the illustration below shows, the blue laser in a Blu-ray optical drive reads from and writes to small areas of information. Such precision allows you to store more data on a Blu-ray disc than conventional CD/DVD discs. The red laser found in CD/DVD optical drives locates data in wider swaths, thus making it impossible to read as much information on a single disc.



## POPULAR ACRONYMS

Acronym	Name
BD	Blu-ray Disc
BD-R	Blu-ray Disc Recordable
BD-RE	Blu-ray Disc Rewritable
BD-R LTH	Blu-ray Disc Recordable Low-to-High
BD-ROM	Blu-ray Disc Read Only Memory
BDMV	Blu-ray Disc Video
BDAV	Blu-ray Disc, Audio Visual
BD-CPS	Blu-ray Disc Content Protection System
CPS	Content Protection System
MPEG	Moving Picture Experts Group
CCI	Copy Control Information
ECC	Error Correcting Code

## Disc Layers

Layers are added to a BD to accommodate additional storage capacity. All layers are on one side of a disc.

- BD-R: Single layer (25GB) or dual layer (50GB)
- BD-RE: Single layer (25GB) or dual layer (50GB)

## Uses

The impressive capacity of Blu-ray discs can be used for:

- HD camcorder archiving
- Mass data storage
- Computer backups
- Transferring large files and entire projects from one computer to another
- General storage

## Recording Video

The total amount of video that can be recorded to a BD depends upon authoring criteria such as video bandwidth, the number of audio tracks, and the codec.

For example, when using MPEG-2 as the codec, a single layer disc can hold 135 minutes of HD video plus two hours of bonus material in standard definition. Alternatively, the same disc can store up to 10 hours of broadcast quality standard definition video.

Due to the continued development of new and existing codecs as well as BDs, the total amount of video that can be stored on a single disc will vary.

## COPYING FROM A PROTECTED BLU-RAY DISC

Pre-recorded Blu-ray discs use a strong copy protection scheme that requires playback on compatible devices. Further, copying from a protected Blu-ray device is not guaranteed since the protection runs all the way to the replicator level of the disc.

## DISC DURABILITY

Blu-ray discs are stronger than other optical media due to their hard coatings. With greater resistance to scratches and fingerprints than standard DVD and CD, BD gives you a higher level of reliability when backing up your important files.