

# Blu-ray® Technology

DISCover the infinite storage media



## Today's optical secures tomorrow's access

Blu-ray® is the state-of-the-art optical disc format for the 21st century. Up to 10 times more data, movies, music or HD-videos stored on a disc the same size as a DVD...

### Safe media

Blu-ray® Discs are safer than CD or DVD! The hard coated surface is scratch resistant, liquid repellent and can stand high temperatures, making them far easier to handle. The perfect solution to archive your valuable data!

### Data guarantee

Switch now to the most reliable and efficient long-life archiving technology to guarantee tomorrow's data availability! No longer worry about tape failures or head crashes on your existing backup systems...

### Wide application area

Blu-ray® fits perfectly into a wide range of archiving needs such as CCTV footage, medical documentation, financial records, video productions etc.

### Superior technology

- Blu-ray® by design is hard coated bare media
- Blu-ray® allows smaller drive/library design
- Blu-ray® needs less space than a cartridge library
- Blu-ray® implies significant cost reduction

### Widespread acceptance

- The Blu-ray® Disc Association (founded 2002) gained worldwide support from consumer electronic manufacturers, the IT industry and the entertainment business.
- Open industrial consortium ensures a competitive multi-vendor media and drive market
- Long-life, economically priced media

### Extremely resistant media

- Scratch resistant
- No adherence of dust or contamination
- Liquid repellent
- High temperature and humidity resistant



### Blu-ray® association\*



\* Some members of the large Blu-ray association

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DISCover the guarantee for your data

## The key facts ...

- Optical disc format for high density data storage and high definition video
- Identical physical format and handling to CD/DVD media
- Hard coating protects against damage from humidity, scratches, fingerprints and dust
- Blu-ray® drives are PC-type
- Read/write compatible with CD/DVD technology
- Fast transfer rate (read/write)
- Formats: BD-R (write once), BD-RE (record/erase multiple), BD-ROM (read only)
- Standardized, platform independent file system, UDF
- Defect management and advanced error correction
- Long term technology support through all major hardware suppliers

## Specifications

Media	BD-R		BD-RE	
	25 GB	50 GB	25 GB	50 GB
Capacity	25 GB	50 GB	25 GB	50 GB
Layers	Single	Double	Single	Double
Type	Write-once		Rewritable	
Rewrites	-		> 1000	
Disc diameter	120 mm			
Disc thickness	1.2 mm			
Laser wavelength	405 nm			
Recording speed	4x (≈ 144 Mbit/s)			
Hard coating	Durabis™ or Scratch Guard™			

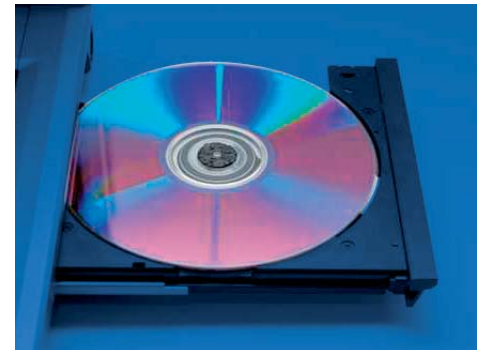
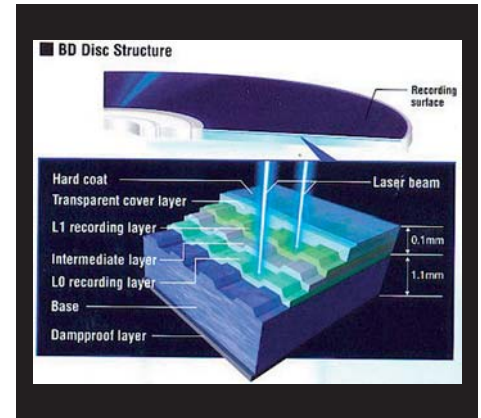
## The future of optical archiving

Blu-ray® with its fast speed and high capacity is a winning technology for the 21st century.

Future generations of Blu-ray® media will hold up to 200 GB on 8 layers. BD drives will be 4 times faster than today, with a recording speed of up to 288 Mbit/s.

The future will see increasing market share of Blu-ray® media.

The biggest film studios worldwide clearly chose Blu-ray® as the technology of the future.



**Defining the Future of Recording**  
TDK Blu-ray Disc Roadmap

Time	Capacity	Type	Layers	Sides	Recording Speed
↓	25GB	Write-Once	1	Single	2x+
	25GB	Rewritable	1	Single	2x+
	50GB	Write-Once	2	Single	2x-4x
	50GB	Rewritable	2	Single	2x-4x
	100GB	Write-Once	4	Single	2x-6x
	100GB	Rewritable	4	Single	2x-6x
	200GB	Write-Once	8	Single	TBD
	200GB	Rewritable	8	Single	TBD