

## **Maxell new optical media—HD DVD Future Archival Storage Solutions**

Maxell, a leading provider of recordable media, unveils its “Future Archival Storage Solutions” at the National Association of Broadcasters (NAB) Convention at the Las Vegas Convention Center 2003. This special display included prototypes of Maxell’s next-generation optical disc formats—Blue-ray, HD-DVD (AOD=Advanced Optical Disc), High Speed Write Once, Holographic Recording and Blue MAMMOS technologies—which are poised to make a huge impact in the recording media market upon their release.

The Blue-ray disc utilizes Blue-Violet Laser technologies to achieve storage capacities of 23, 25 or 27 GB on a single 12 cm. disc. It has a transfer rate of 36 Mbps, enabling it to record 120 min high-definition broadcasting contents as well as making it ideal for professional post-production and consumers use.

Maxell’s HD-DVD (AOD=Advanced Optical Disc) takes advantage of the blue laser technology to produce a 12 cm. recordable disc with 20GB capacity. The disc is DVD and high-definition compatible, with a 36 Mbps transfer rate, making it suitable for professional post production and consumer use as well.

Holographic recording storage is another new technology Maxell will be showcasing. Maxell is jointly developing the technology in alliance with the venture company “InPhase Technologies, Inc.” This media utilizes 3-D laser recording technology that embraces a multiple layer approach to storing data on a 5 ¼ inch optical disc. The 1<sup>st</sup> Generation Product storage capacity for this disc will be 200GB with a transfer rate of 160 Mbps, making it an excellent media choice for archiving. The capacity will be migrated up to 1TB and beyond in the future.

Employing rapid response Phase-Change Write Once recording film, High Speed Write Once discs will come in a 50GB per side or a 100GB cartridge. Utilizing blue laser technology, Write Once will possess a transfer rate of 100Mbps and is best used for archiving because the product is not rewritable.

Another future solution, Blue MAMMOS (Magnetically Amplifying MO System), which Maxell has invented, magnetically amplifies the recorded signal during readout. Blue MAMMOS employs recording film specially tuned for blue laser wavelength, and like High Speed Write Once, comes as a 50GB per side or a 100GB cartridge. This technology has a 100 Mbps transfer rate with realized 10<sup>6</sup> rewritable characteristics, which are suitable for backup media as well as archival usage.

These prototypes are a glimpse into the future of recordable media, where new forms of technology will help storage capacity and transfer rates to easily surpass anything currently available. With the ever-expanding complexity of post production and media archiving, new solutions will be needed to fully utilize the possibility of this unprecedented technological expansion. These prototypes demonstrate several different technology approaches intended to meet industry needs, illustrating why Maxell is a pioneer in recordable media.

Maxell is a leading full-line manufacturer of digital and analog media products for consumer audio, video and camcorder applications; professional audio and video media; computer data storage media and batteries. Maxell also markets a full line of care and maintenance accessories and headphones.