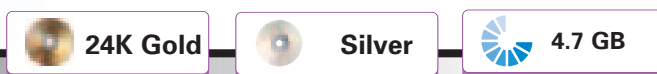


Not All DVDs Are Created Equal



- > Pure 24K Gold DVD+/-R
- > Silver DVD+/-R
- > Large Data Storage & Retrieval
- > Universal Compatibility
- > Store Video, Audio, Graphics or Data



-> Gold DVD+/-R

In order to meet consumer demands for high capacity, long life data storage, MAM-A Inc. has developed a Gold Archive Grade, recordable DVD media. The media is capable of storing any type of data or video content and is available in -R and +R formats for 4.7 GB of total storage space. This product uses 24 karat gold as the reflective layer, offering maximum resistance to chemical breakdown -- one of the major causes of disc failure. The MAM-A Gold Archive Grade DVD is offered as the long awaited companion to the MAM Archive Grade Gold CD-R which has earned a reputation for the best longevity of any storage media. See back of sheet for testing procedures and results.

-> Superior Dye Formulation

Unlike other DVD-R manufacturers, MAM-A has developed a brand new organic dye formulation used in the production of every MAM-A DVD-Recordable disc. Specific features include:

-> Superior Longevity

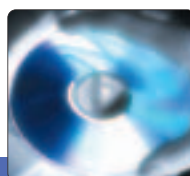
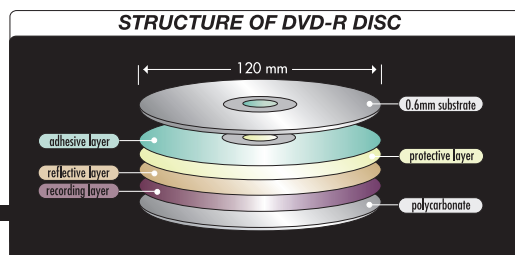
MAM-A Gold DVD-R discs have a life expectancy rating in excess of 100 years - ideal for archival use.

-> Global Compatability

Once written to, a MAM-A DVD-R disc adapts the same playback characteristics as a DVD-ROM disc, rendering it compatible with the world-wide base of both DVD video players and DVD-ROM drives which support DVD Recordable media.

-> Superior Physical Strength

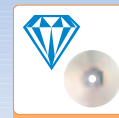
DVD-Recordable discs are manufactured by bonding two 0.6 mm "halves" together to make one 1.2mm DVD-R; each half, capable of containing its own recording, reflective and protective layers. The adhesive structure of MAM-A DVD-R is unique to our discs and has proven to have a higher bonding strength than other discs. Physical tests to this bonding layer resulted in flawless results of the MAM-A DVD-Rs, which experience no signs of peeling or damage to the bonding layer.



MAM-A DVD+/-R



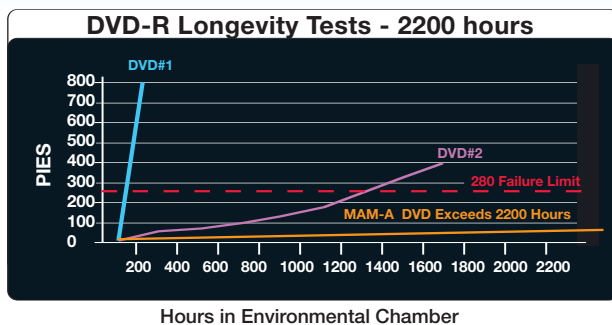
100% Accuracy, even after 200 days sun exposure



Diamond Coat™ Protection

MAM-A Archive Gold DVD Longevity Test Procedures

This chart shows a silver DVD brand that failed in less than 500 hours, and another silver DVD brand that failed at 1300 hours. In comparison, the MAM-A Gold DVD continues to last in excess of 2200 hours, while still maintaining the very low error rate.



→ Longevity Testing Guidelines

MAM longevity tests are conducted according to ISO 18927-2002 guidelines titled: "Imaging materials – Recordable compact disc systems – Method for estimating the life expectancy based on effects of temperature and relative humidity."

The test consists of placing samples in an environmental chamber at specified temperature and humidity levels for five different "stress conditions." A stress condition is defined by, for example, 2000 hours (in 500 hour segments) at 85% relative humidity and 80 degrees centigrade. Temperature and humidity "incubation" periods are reached gradually with the use of ramp times, to avoid bubbles forming in the media due to rapid transition.

5 Stress Conditions Defined

Test Cell number	Test Stress	Number of Samples	Incubation period (hours)	Min. Total Time (hours)	Min Equilibrium Duration (hours)
1	80C, 85% RH	10	500	2000	6
2	80C, 70% RH	10	500	2000	5
3	80C, 55% RH	10	500	2000	4
4	70C, 85% RH	15	750	3000	8
5	60C, 85% RH	30	1000	4000	11

(Equilibration is the time spent at ambient humidity before removal from chamber)

Before beginning the test and after each incubation period, the discs are tested for error rates (Max PIE8 for DVD-R). Failure is defined by error rates that exceed 280 PIE8, as defined by the DVD Forum.

→ Packaging



Jewel Case



Beehive

→ Other characteristics

	Thermal Printable			
		WHITE	GOLD	SILVER
	Inkjet Printable			
		WHITE	GOLD	SILVER
	Custom Silk Screening			
		WHITE	GOLD	SILVER

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