

RECORDS MANAGEMENT POLICY #11.0 - AUGUST 2005

GUIDELINES FOR STORAGE OF OPTICAL DISK MEDIA

Optical Disks such as CD's and DVD's, once touted as a virtually indestructible storage medium, have proven to be anything but that. They have many of the same storage requirements that other supposedly "less stable" mediums do. ANSI IT 9.25 (1997) is the basic standard for optical media.

HANDLING:

The original plastic container should be replaced with an air and watertight container. Clean hands before handling the disk. After the disk is used, replace disk in the box immediately.. Do not touch the playing surface of the disk. Handle by the outer shell and center hole of the disk only.

STORAGE:

All Disks should be stored in their box standing upright, not flat. There should be book shelf style separators every 4 to 6 inches. This prevents warping. Do not stuff or force disks between the separators or conversely leave them on an angle.

Keep all storage areas clean.

All Disk media should be stored in a dark room and must be kept away from sources of Ultra Violet (UV) light. This includes sunlight and unshielded florescent lamps. All disks must be kept away from potential sources of demagnetization. This includes, computers, computer monitors, televisions, telephones, speakers, cell phones, vacuum cleaners, electric motors or any potential source of magnetism (This list is far from exhaustive).

Environmental conditions greatly affect the life of the disk because the metal inside the disk has been proven to oxidize or "rot". Heat is an enemy as well. The storage areas should be climate controlled at a constant 60 to 74° F and 30 to 55% relative humidity (RH). The environmental conditions should not vary by more $\pm 5^\circ$ F or $\pm 5\%$ RH over a 24 hour period.

For extended term storage the storage area should be climate controlled at a constant 50° F and 20% RH. The environmental conditions should not vary by more $\pm 2.5^\circ$ F or $\pm 2.5\%$ RH over a 24 hour period. No disk should be stored below 46° as this could cause the disk to become brittle.

The shelving on which the disk are stored should be able to withstand about 20 pounds per shelf foot. Because of the design of the packaging, the disks will tend to concentrate their weight at the centerline of the shelf, which if not properly supported, can cause a collapse.

Again, on the shelf, disks should be stored upright and next to one another. They should not be stacked upon each other or in front of one another.

Life Of Disks:

Standard disks that are heavily used begin to experience problems after about two years (or even sooner) no matter what precautions are taken. There is little, if anything, that can be done to prevent disk “rot’ except having a more resistant metal inside the disk. The industry is now marketing disks with metals such as gold and silver inside the disks instead of standard aluminum. However, even disks properly maintained in long term storage have a finite shelf life of between ten and fifteen years according to the latest studies.