Martha Singer September 28, 2005

DIGITAL STORAGE DEVICES

Zip® 750

Zip® 250

Zip® 100

Device Name: Zip Drive

<u>Description</u>: A medium capacity removable disk storage system.

Date Introduced: (year): 1994/1995

<u>Dates in Use</u>: (years): 11 years (1994-continues today); use is declining. One review on December 4, 2001 writes: The floppy drive is dead. CDs, DVDs, hard drives (which have become affordable) can store more data faster.

Dimensions: Sizes vary depending on the drive. Sizes listed in mm, LxWxH.

Zip 100 MB Parallel Port: 182x133x35

Zip 100 MB SCSI drive: 163.6x101.4x25.4

Zip 100 MB USB drive: 182x133x35

Zip 100 MB ATAPI/IDE drive: 163.6x101.4x25.4 Zip 250 MB parallel port drive: 193x139x44 Zip 250 MB SCSI external drive:193x139x44

Zip 250 MB USB drive: 165X119X25

Zip 250 MB ATAPI drive: 163.6x101.4x25.4 Zip 750 MB ATAPI drive: 163.3x101.4x25.4

Zip 750 MB USB drive: 175x110x21

Zip 750 MB FireWire drive: 163.3x101.4x25.4

Variations and/or Identifying Features: The Zip Drive is available (see above) for IDE

internal or parallel, SCSI, USB external and they make FireWire adapters. There are three different capacities: 100 MB, 250 MB and 750 MB.

Common Manufacturers/Brands: lomega (introduced the drive in 1994)

Associated Hardware: None

Associated Software: IomegaWare™ software or drivers

Not all computers need the software or drivers (files allowing the computer to recognize the drive) since many operating systems will recognize the drive without it. If native driver not working, then software can be downloaded from lomega website. The latest version of lomegaWare supports all zip products,

lomegaWare™ software allows protection, management of files, etc.

There is a "tools" disk included with some zip drives needed for installing Tools software.

Associated Media:

Each Zip Drive has associated requirements for Mac users or PC users. A few examples will be given below. More information can be obtained directly from lomega.

Zip 100 MB USB drive:

Operating Systems Requirement: For PC: **Windows**® Windows XP, Windows Me, Windows 2000, Windows NT (with service pack 4 or higher), Windows 98, Windows 95; For **Macintosh**® Mac® OS 8.5 - 9.2, Mac OS X.

Zip 100 MB SCSI drive:

Operating System Requirements: **Windows**® Windows XP, Windows Me, Windows 2000, Windows NT (with service pack 4 or higher), Windows 98, Windows 95, Windows 3.x, DOS; **Macintosh**® Mac® OS 7.0 or higher.

Zip 250 MB

Operating System Requirements: Windows XP, Windows Me, Windows 2000, Windows NT (with service pack 4 or higher), Windows 98, Windows 95; **Macintosh®** Mac® OS 8.5.1, 9.X, 10.x.

<u>Interface</u>: Internal drives made with IDE and SCSI interface; External drive: parallel and SCSI interface; USB zip drives.

<u>Primary Usage</u>: Removable storage on personal computers and MacIntosh. Originally sold by lomega to save room on your hard drive, back up files, organize projects, carry projects with you to other computers (since the drive was so ubiquitous in the late 1990's—or carry the light/small drive as well), etc. Many reviewers found it easy to use. The data is transferred on a zip disk (see below).

Risks:

Higher MB drives can read lower MB disks, but not vice versa. So, for a 100 MB USB drive: It can read and write 100MB disk, but will not read or write to 250MB or 750MB disks. For a 250 MB zip drive, it reads and writes: 250MB and 100 MB disks, but will not read or write to 750MB disks. A 750 MB USB drive can read and write: 750MB, 250MB, 100MB disks.

A 3.5" diskette (which used to be popular before CDs), could be easily inserted into the drive and damage it. The 3.5" disk and the zip disk are similar. The zip disk is a bit thicker, but someone without knowledge could easily be confused.

More than one review commented on the sound of the zip drive as it is working, which made them uneasy at the time.

The zip disk is too easy to lose because it is small, light and can be misplaced. There may be a high risk of loss.

Decline in use may mean that data stored on zip disks will not be accessible when zip drives are discontinued. The decline of zip drives may be due to the more common CD-Rs and memory sticks which are significantly cheaper and can be faster to transfer data. In addition, hard drives which hold large amounts of data are much cheaper and faster.

Conservation Actions:

Maintain equipment in good condition. Have more than one drive if there is much use of the zip drive in the collection.

Refresh files by moving them to a different physical storage medium (like a hard drive). This will avoid physical decay or obsolescence.

Make more than one copy.

Keep different copies in different locations.

Additional Resources:

Zip Drive, Accessed on September 17, 2005 at: http://en.wikipedia.org/wiki/Zip_drive.

Zip Drives Come in New Flavors by Alan Stafford, PCWorld.com (January 25, 2001) can be accessed at: http://www1.pcworld.com/reviews/article/0,aid,39266,00.asp.

Zip 750 MB FireWire Drive by Owen Linzmayer, Accessed on September 27, 2005 at: http://machome.com/reviews/display.lasso?grr8=70.

Removable Storage Buying Guide, Accessed on September 26, 2005 at: http://www.viewz.com/shopingguide/storage.shtml

Abbreviations:

ATAPI: Advanced Technology Packet Interface IDE: Integrated Device Electronics SCSI: Small Computer System Interface USB: Universal Serial Bus

DIGITAL STORAGE MEDIA

Media Format: Zip Disk; a type of magnetic floppy disk

Media Type: (Disk, tape or solid state): Disk

<u>How it works</u>: The disk has a plastic base with magnetic particles on it. It is encased in a hard plastic case (to reduce bending and other damage). A slot in this hard case lets the read/write head of the drive contact the disk.

The read/write head of the drive polarizes the thin layer of magnetic particles on the disk's surface. The magnetic fields, or north and south poles, represent "zero" or "one".

A disk stores information in concentric circles or tracks like an LP, and the drive head moves to any part of the spinning disk to access information.

Date Introduced: (year): 1994

<u>Dates in Use</u>: (years): continues today, but is in decline.

<u>Dimensions</u>: Similar to a 3.5" (9 cm) floppy, but thicker. Approximately 3"x3"x.125".

Capacity: 100 MB disk, 250 MB disk, 750 MB disk

Media Variations and/or Identifying Features: Aside from capacity, there is no difference.

<u>Common Manufacturers/Brands</u>: Iomega, Maxell, Fuji, Verbatim; Epson made a 100 MB disk model.

Associated Hardware: See Zip Drive information above in Digital Storage Devices.

<u>Associated Software</u>: See above. There is software associated with the zip drive. An older operating system may need software that comes with the drive.

<u>Primary Usage</u>: External removable storage; allows transport, swapping and storage of files. Originally used to free up space on a hard drive.

<u>Risks</u>: One of the problems and reason for decline is that the disks are more expensive than CDs and DVDs. Also, huge files (gigabytes), especially made with graphics can be more easily stored on a hard drive than a zip disk.

Zip disks can deteriorate. They will be damaged by exposure to direct sunlight, high temperatures, moisture and magnetic fields. Also, dust particles, dirt, grease, and chemical pollutants can cause deterioration.

Particles that retain coded information can become unstable.

Zip disks were often used because drives were so ubiquitous—easy to transfer files, but this is less common now, so less likely to have this format in the future.

There was a class action law suite in 1998 because of a zip disk failure, which was called: The click of Death.

Conservation Actions:

Store in a region devoid of magnetic fields, dust, and ultraviolet light. Useful to have smoke alarms since smoke/water from fire can cause damage. Keep in environmentally stable condition. The following was recommended, but unclear where the testing/numbers come from. 18-20^oC, 30-40%RH.

Store a master copy, a duplicate copy and a reference copy, not all in the same place.

Implement refreshment cycles into system of collection. Develop of a timetable to evaluate holdings in collection. Make sure that information is refreshed to newer media.

"Maintain file archive on an external hard drive rather than removable media for which technological development is more volatile."

Choose more than one vendor of a media. For example, if using Zip disks, use disks by lomega, Maxell, and Fuji because there may be a flaw in the vendor's batch.