XYXIS CORPORATION

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NEWS RELEASE

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XYXIS CORPORATION INTRODUCES ERASABLE OPTICAL DISK DRIVE FOR IBM AT and PS/2

October 19, 1989--Eden Prairie, Minnesota--XYXIS Corporation announces the introduction of an erasable magneto optical disk drive, the XY600RW, which is compatible with IBM AT and PS/2. The high density drive is accessed via a SCSI interface board. The software interface supports DOS Versions 3.2 to 4.01.

Each 5 1/4 inch industry standard ISO format cartridge stores up to 600 megabytes of information.   The cartridge can be erased more than 1,000,000 times. It can also be removed from the drive for security or portability. The retail price of the XY600RW is $4,995 excluding the SCSI interface board. The interface kits including SCSI board, software and cables have a retail price of $695 for AT and $895 for PS/2. The rewritable cartridges retail for $275.   The optical drive is available for immediate shipment. Attractive discount schedules are available for resellers.

An interface to the Apple Macintosh family of computers is also available for the XY600RW. An interface to Sun Microsystems computers is being developed.

XYXIS Corporation develops high density optical storage devices for personal computers and workstations.

Competitive Strengths

XYXIS Erasable Optical Subsystems

DOS (AT & PS/2)

ISO/ANSI standard
DOS Operating system standard format
Not a proprietary format
Installs as a standard system disk
SCSI interface accessed through an I/O Port
Supports multiple partitions
Compatible with DOS 3.3, 3.3.1, 4.0 and above
Device driver is a small 6K
Easy menu assisted installation
Mature product
Supports removable media
Available for multiple platforms
Install tests for potential addressing contention

Novell (AT & PS/2)

Supports NetWare 2.15 & 3.1
Works with Novell NetWare 286/386 DCB drivers
Can use up to 4 controllers per server
Support for up to 8 Erasable drives per controller
SCSI adapter powered by 80188 coprocessor
Supports multiple partitions
Supports removable media
ISO/ANSI standard
Disk buffering & no wait states
Supports Micro Channel POS capability
Full SFT support and security
Full mirroring and duplexing supported
Mount/Dismount supported with eject lockout
Easy to install

Unix (AT & PS/2)

Supports SCO Xenix 2.3, 2.3GT and 3.2
Supports SCO Unix 3.2
Supports AT&T 3.0, 3.1 and 3.2
Supports Interactive 386ix 1.0.6, 2.0.1 and 2.0.2
Supports IBM AIX 1.1
Provides seamless interface of optical drive to Unix
Includes full error recovery
Includes read-ahead caching and disk mirroring
Includes overlapped seeks and data transfer

Sun Microsystems

True mount/unmount of individual partitions
Supports multiple partitions
Supports removable media with eject lockout
Unmount inhibited while files active
ISO/ANSI standard
Compatible with Sun3, Sun4 and SPARCstation
Supports SunOS 4.0, 4.0.1, 4.0.3 and 4.0.3c
Supports newfs, tar and cpio file systems
Operating system standard
Not a proprietary format
Interfaces to Sun's SCSI Port
Available for multiple platforms

Amiga

Configurable as boot device
Amiga 500, 2000, 2500 and 3000
Supports multiple partitions
Fred Fish collection with cartridge purchase
Compatible with AMax II Macintosh emulator
Operating system standard
Not a proprietary format
Interfaces to Amiga 2091 SCSI Interface Adapter
Easy to install
Supports removable media
Available for multiple platforms
Cartridge holds 20 minutes of animation

Macintosh

Partitioning utility supports multiple partitions
Mount/Unmount of partitions through control panel
Lock option for each individual partition
Supports removable media with eject lockout
Configurable as boot device
Compatible with Macintosh Plus and above
ISO/ANSI standard drive and media
Macintosh operating system standard
Configurable as boot device
Easy to install
Mature product
Available for multiple platforms

Criteria for Selecting Optical Drives

by William Fraser

Proponents of erasable optical disk technology have long suggested that it will replace the magnetic media hard disk drive. Large storage capacities, media removability, data integrity and costly head crash elimination are the major points they expound. The demise of the 100MB Winchester is far from imminent, however the erasable optical disk is poised to begin a serious assault on the drive market.

Here are some simple, yet serious questions that should be asked while qualifying optical products.

Does the product comply with the ISO/ANSI standard? In November 1989, the International Standards Organization approved Standards for the Erasable Optical Drive and for the 600/650MB Erasable Optical Media using the CAV recording method. The standards defines the unrecorded disk cartridge characteristics (ISO/IEC DP 10089-1) and the disk cartridge recording format (ISO/IEC DP 10089-2).

Is the product Operating System standard or does it have a proprietary Format? Many of the OEM manufacturers of Optical Drives comply with operating system standard and users benefit by being able to read and write cartridges across the brand names and for current and future versions of operating systems. The Optical Disk drivers and utilities should be designed to insure that the cartridges are partitioned and formatted with the standard operating system utilities, thereby insuring total compatibility. However, some optical disks come with proprietary partitioning utilities which create cartridges that can be read by only that brand name drive.

Is good technical support available? Some of the Optical Drives are bundled with software drivers and utilities that are not written by the companies that provide the optical disk subsystem. Problems can occur when the technical support channels are non-existent or not well defined.

Is the SCSI Interface accessed through an I/O Port? For PC systems, some of the small computer systems interface (SCSI) boards are memory mapped and others are accessed through an I/O port. DOS does not have memory address reserved for SCSI interfaces. Memory contention problems have been encountered with both devices and application programs. SCSI addressing through I/O ports does not have contention problems.

Does the product support removable media with mount/unmount commands? Platforms such as Macintosh, Sun and other Unix systems do not support the changing of removable media within the operating system. Accidental cartridge ejection on these systems could result in a loss of data or system errors, particularly in multi-user environments. Drivers with full implementation of mount and unmount commands will ensure that cartridges are not ejected until all files are properly closed.

Is the product available for multiple platforms? Equipment standardization and is an important factor for many users. Some of the OEM manufacturers of optical drives provide solutions for several platforms such as AT, PS/2, Macintosh, Amiga and Sun whereas others support only one platform or operating system. In most cases the optical drives themselves are the same and one changes only the controller or adapter kit to fit the specific platform.

Is the product easy to install? Newer high technologies need not be difficult to install and use. The installation should be automated and should include a utility that pretests for conflicts with other devices already installed. How many users know which I/O ports, interrupt channels or memory addresses are already in use? Once installed, the optical drive should behave like another system disk.

What is the size of the device driver? Device driver impact can range in size from 6k to 30k. The larger device drivers have been known to cause high performance application programs to hang.

Does the product support 600 Megabyte 512 byte/sector media? The operating systems for DOS, Novell, Unix, Macintosh, Sun and Amiga, support only 512 byte/sector (600 Mbytes) media and do not recognize 1024 byte/sector (650 Mbytes) media. Products that use the 650 Mbyte cartridges must patch or modify the operating system, resulting in creation of non-standard and proprietary media.

Is it a mature product? Nobody wants to operate on the "Bleeding Edge of Technology". All new products have some bugs that have to be worked out. Selection of a mature product that has been through the first few maintenance upgrades can save a lot of pain and prevent loss of critical data.

Do the recording method and capacity comply with industry standards? Some people still say that Beta is better than VHS, but which has become the standard and which is now obsolete? Since the media has a projected shelf life from 15 to 40 years, it is essential that it conforms to a standard that can be read by multiple brand name drives. The ISO standard includes only 600 and 650 Mbytes capacities and the recording method is continuous composite.

Does the product have reasonable pricing? The pricing scale is wide, for what appears to be functionally equal products the price can differ by as much as $4,000. The lowest priced products generally don't pass the above criteria and the higher priced products don't offer any additional advantages.

This technology represents an ideal storage solution for a growing number of users. Reasonable care taken in drive selection will ensure maximum compatibility and satisfaction.

William Fraser is the sales manager of XYXIS Corporation, an OEM manufacturer of erasable optical disk subsystems.

DISTRIBUTION PRICING

XYXIS ERASABLE OPTICAL SUBSYSTEMS

	List	Quantity per order			
		1	2-5	6-9	10+
XY600RW-HS Optical Drive	$4,995	2,995	2,795	2,695	Quote
XY600RW-HS INT Optical Drive	$4,575	2,745	2,545	2,445	Quote
XY600RW Optical Drive	$4,000	2,400	2,250	2,150	Quote
XY128RW Optical Drive	$1,995	1,395	1,295	1,195	Quote
XY128RW INT Optical Drive	$1,770	1,260	1,160	1,060	Quote
Macintosh Interface	250	150	140	135	Quote
AT-DOS Int-P/I/O-No Boot	325	195	185	175	Quote
AT-DOS Interface-P/I/O	595	350	335	320	Quote
AT-DOS Interface-DMA	695	415	400	385	Quote
PS/2-DOS Interface	895	535	515	505	Quote
AT-OS/2 Interface	995	595	565	535	Quote
PS/2-OS/2 Interface	1,150	695	650	625	Quote
EISA-DOS Interface	995	595	565	535	Quote
AT-Novell Interface	995	595	565	535	Quote
PS/2 Novell Interface	1,150	695	650	625	Quote
SUN Micro Interface	1,195	695	675	645	Quote
DEC QBUS Interface	1,825	1,095	1,070	1,050	Quote
DEC UNIBUS Interface	2,325	1,395	1,350	1,320	Quote
DEC ULTRIX Interface	1,595	950	925	900	Quote
RS6000 Interface	1,395	835	815	795	Quote
Silicon Graphics Interface	1,395	835	815	795	Quote
Atari Interface	450	270	250	225	Quote
Amiga Interface	250	150	140	135	Quote
UNIX, XENIX, AIX Interface	Quote	Quote	Quote	Quote	Quote

Interface prices based on total kits purchased

	List	1-5	6-9	10-25	26+
Rewritable Cartridges 128M	75	50	48	46	Quote
Rewritable Cartridges standard	225	135	125	120	Quote
Rewritable cartridges glass	275	165	155	150	Quote

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