

Removable Rigid Disk Technology - Iomega® REV™ Drive & Disks



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THIC Inc.

The Premier Advanced Recording Technology Forum



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What is an Iomega® REV™ drive?

- ◆ 2.5" hard drive with removable disks
- ◆ Speed, ease of use, and capacity of a hard drive with the removability and portability of tape or CD
 - Many times faster than tape, CD, or DVD
- ◆ Easy to use drag & drop transfer
- ◆ Durable protected disk
- ◆ Removable disks provide lower cost of ownership for media rotation and archives





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What are REV disks used for?

- ◆ Data Backup and Disaster Recovery
 - Automatically backup data on a scheduled or continuous basis
 - Quickly recover system in the event of a hard disk failure
- ◆ Business Continuity
 - Run system directly from a REV drive in the event of a hard disk failure—no lost productivity waiting to repair system
- ◆ Data Storage
 - Store or archive data for over 30 years
- ◆ Data Transportation
 - Move large files between systems or locations





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Iomega® REV™ Drive

Iomega REV External Drive

Iomega REV Internal Drive

Interlocking Stacking Feature, Plus Finger Grip Aid

Firewire, SCSI, USB 2.0 Interface

Rubber Grips for Easy & Secure Handling



ATAPI, SATA, SCSI Interface



3 1/2" & 5 1/4" Brackets

- 25 MB/sec maximum native transfer rate
- 35GB/90GB* Capacity
- Rugged interchangeable media

Eject Button with Color LED to Show Drive Activity

* Compressed capacity assuming 2.6:1 data compression with "high" compression on Iomega Automatic Backup Pro software. Capacity may vary and is data and software dependent.



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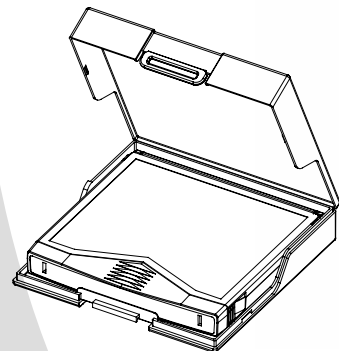
Iomega® REV™ Disk

35GB Native (up to 90 GB compressed)

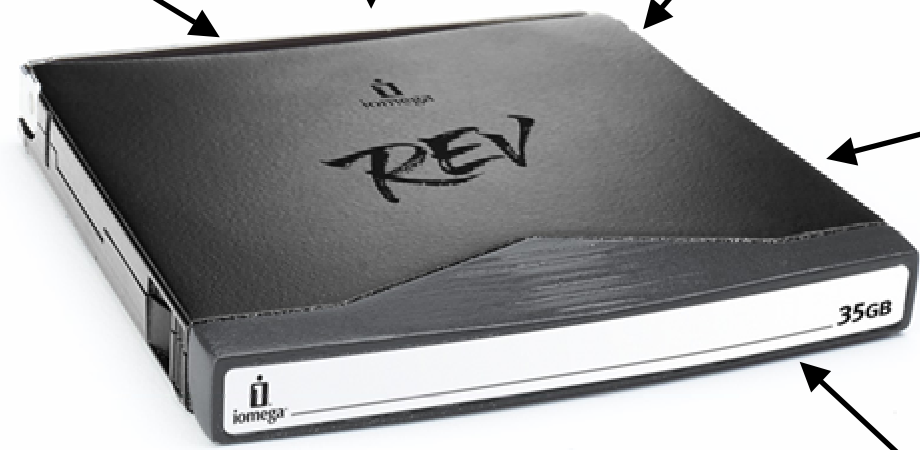
Leverages industry standard 2.5" drive components

Advanced sealing and air filtration keeps dust & dirt out

Spindle motor is inside for improved reliability



Durable translucent plastic case protects your Iomega REV disk when not in use



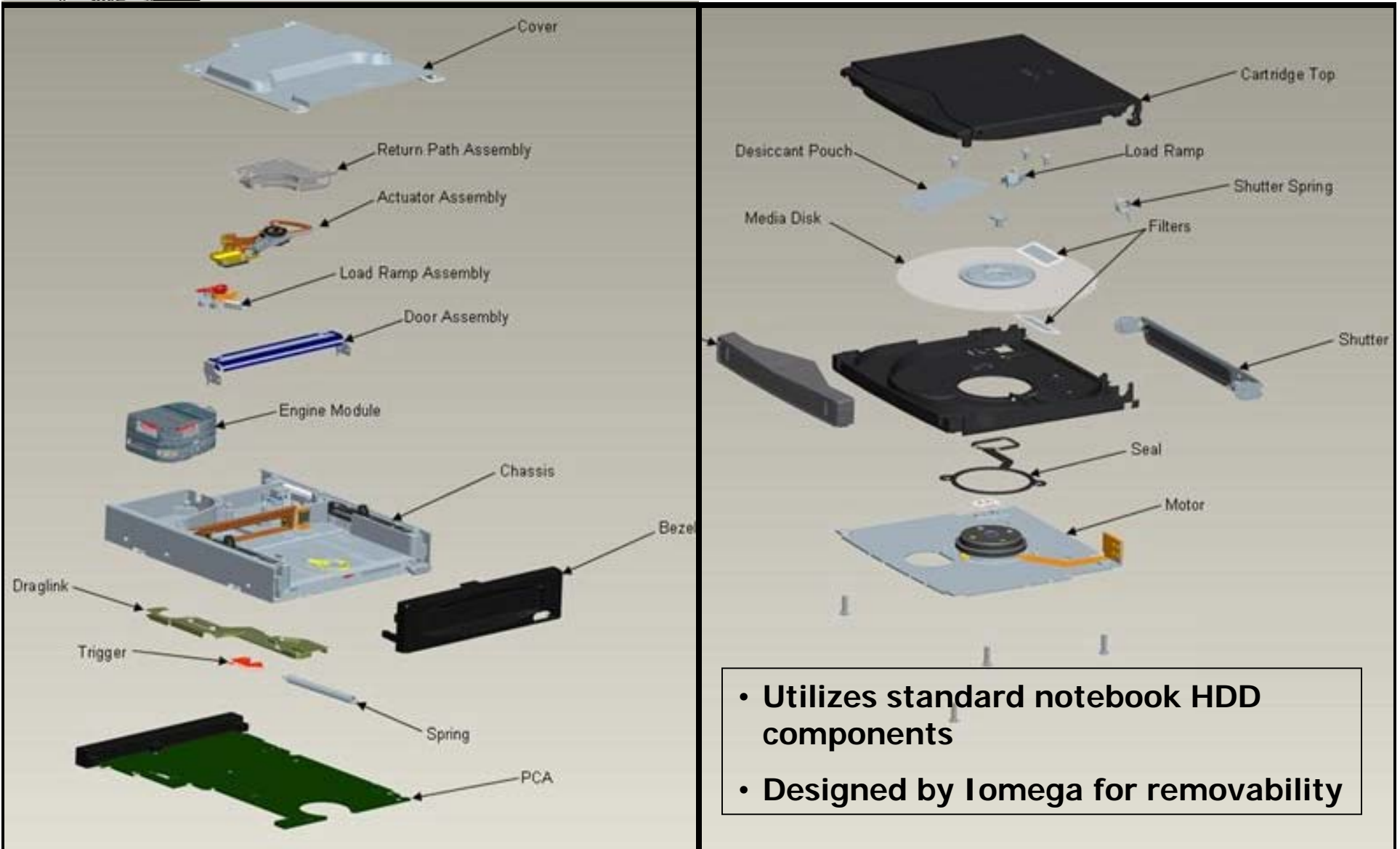
Estimated 30-year shelf life on Iomega REV disks

Label (optional bar code labels available)





REV Drive & Disk Components





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Iomega REV Technology

- ◆ Capacity – 35 GB native
- ◆ Data throughput – 25 MB/sec max sustained
- ◆ Embedded password access protection
- ◆ Bootable
- ◆ Disk type – 2.5" diameter rigid glass substrate (one)
- ◆ Head type – Giant Magneto Resistive (GMR) (two)
- ◆ Areal density – 61.16 Gbps
- ◆ Linear density – 695 Kbp
- ◆ Track density – 88 Ktp
- ◆ Cartridge size (HxWxL) – 10mm x 77mm x 75mm
- ◆ Motor spin rate – 4200 rpm
- ◆ Hard error rate – 10^{15}



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REV Contamination Control

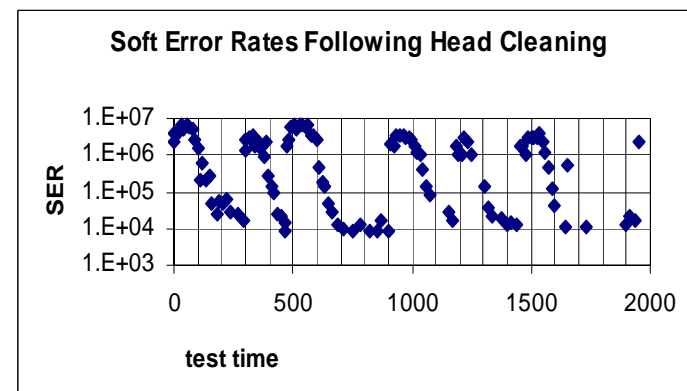
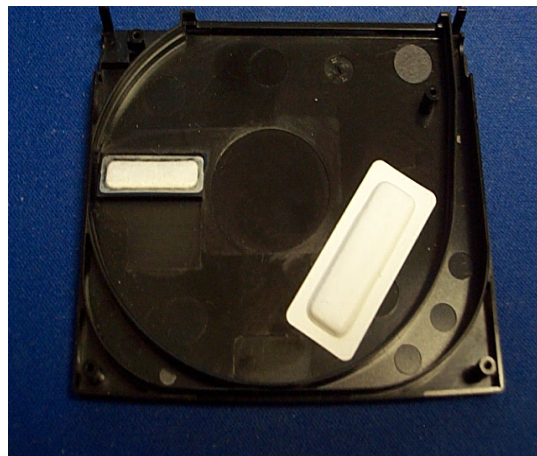
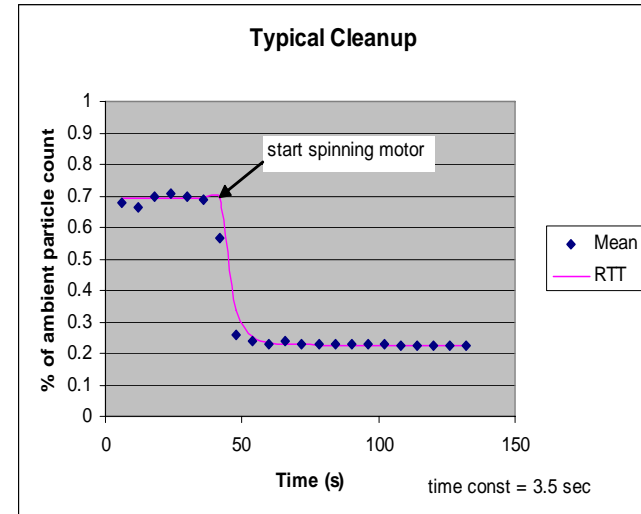
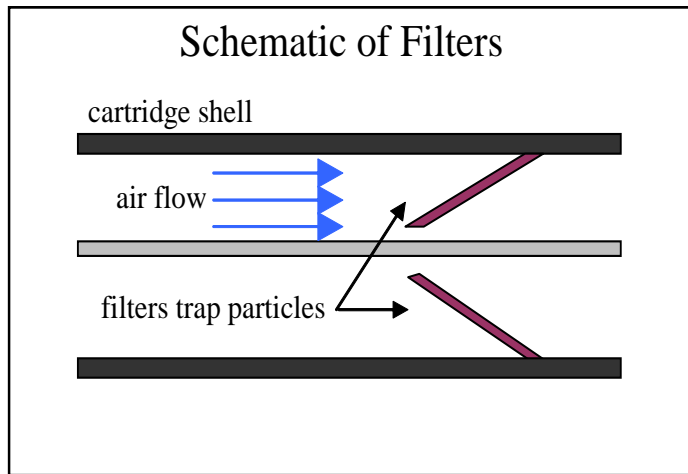
◆ Contamination Control Strategy

- Start clean
 - Use only HDD approved materials and component cleaning processes
- Stay clean
 - Sealing of cartridge when not inserted into drive
 - Minimize contamination ingestion during insertion
 - Mating seals form clean chamber upon insertion
 - Recirculating filters clean air during operation
- Handle remaining contamination
 - Powerful 2-level error correction code (ECC)
 - Active head cleaning feature



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REV Contamination Control





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REV Disks Resilient to Shock & Vibration

- ◆ Disk slip
 - Cartridge is designed to permit some plastic deformation, which reduces the magnitude of the mechanical shock to the disk and hub
- ◆ Media damage
 - Surface areas are sufficiently far from the disk surface
 - Heads engage away from the edge of the disk
- ◆ Motor or bearing damage
 - Standard 2.5" HDD components design for portable applications
- ◆ Damage to the cartridge shells or motor base-plate
 - materials that are resistant to brittleness or impact damage
- ◆ Pick up of contamination on the outside of the cartridge
 - Debris on the exterior of the shells should remain outside this chamber
 - Debris will be purged by two recirculation filters inside the cartridge



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Designed for Performance and Removability

- ◆ REV utilizes UDF file system for improved format capacity and removability
 - FAT32 is limited to 32GB format capacity and 4GB per file
 - NTFS does not support transportable media
 - UDF has neither of these limitations
- ◆ REV disks have native support for access protection

Criteria	REV UDF	NTFS	FAT32
Transportable Media Support?	Yes	No	Yes
Maximum Format Size	Beyond disk capacity	Beyond disk capacity	32GB
Maximum File Size	Beyond disk capacity	Beyond disk capacity	4GB

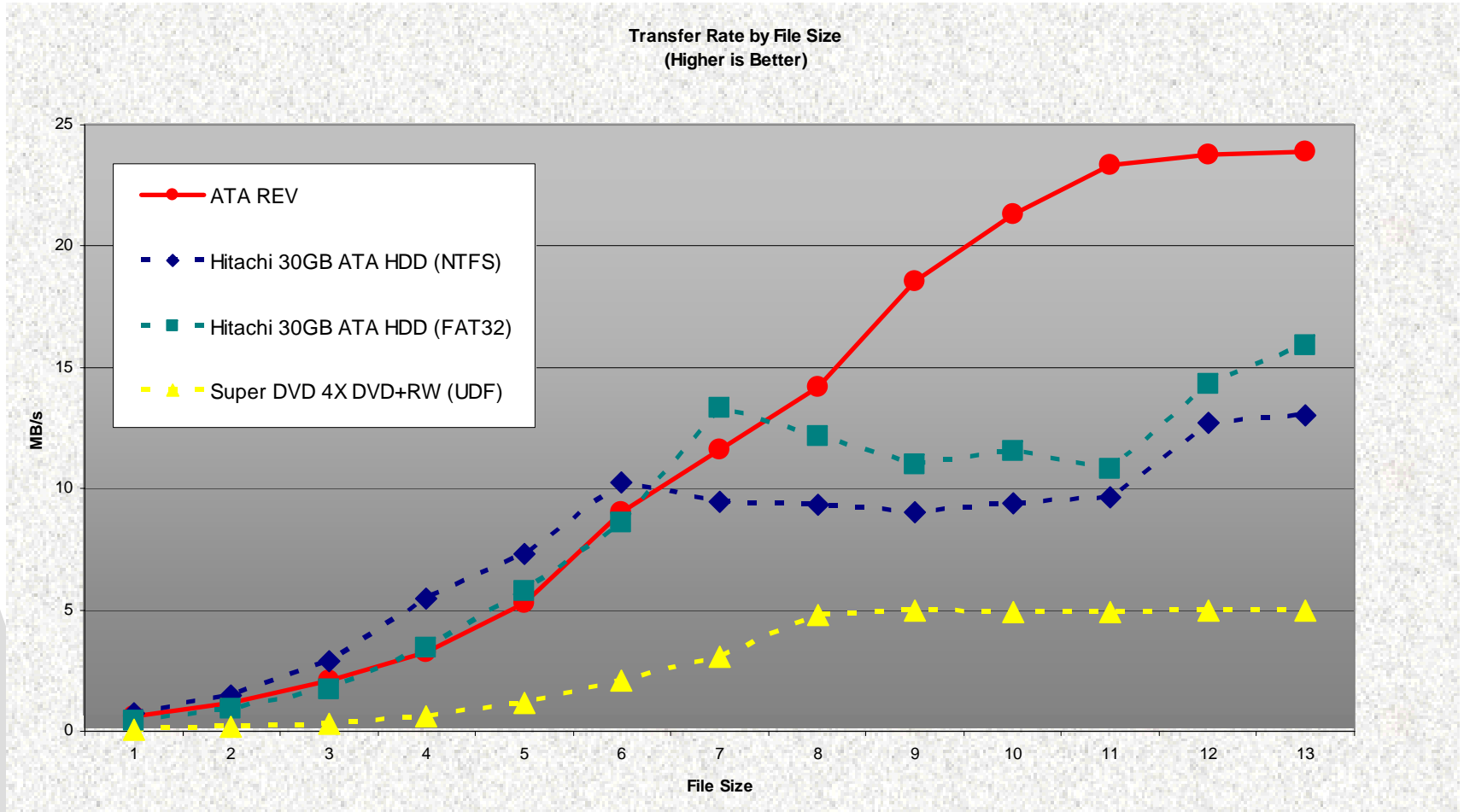


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Throughput by File Size

REV UDF Performance bests other 2.5" drives with large files

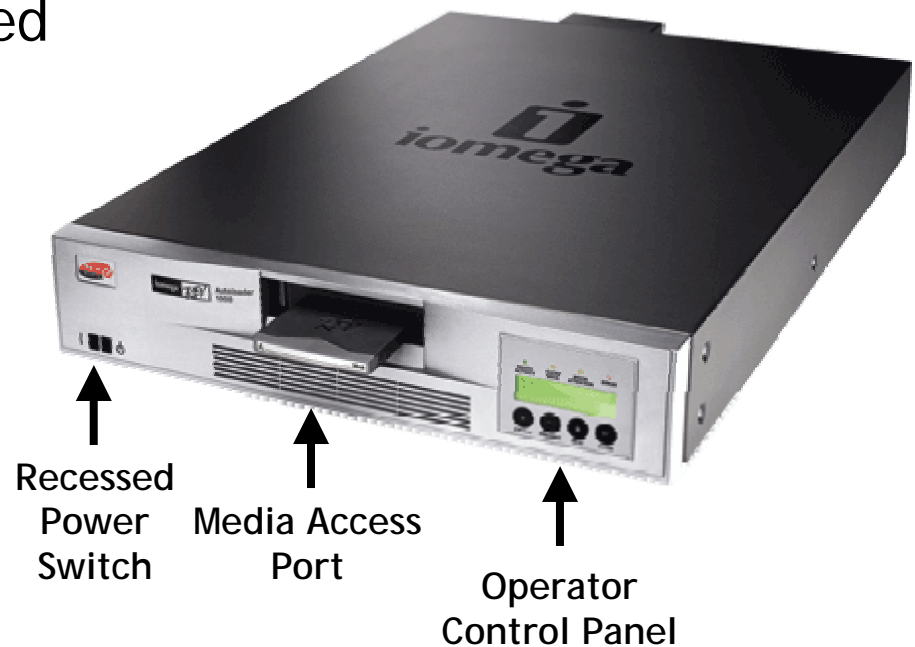




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Iomega REV Autoloader 1000

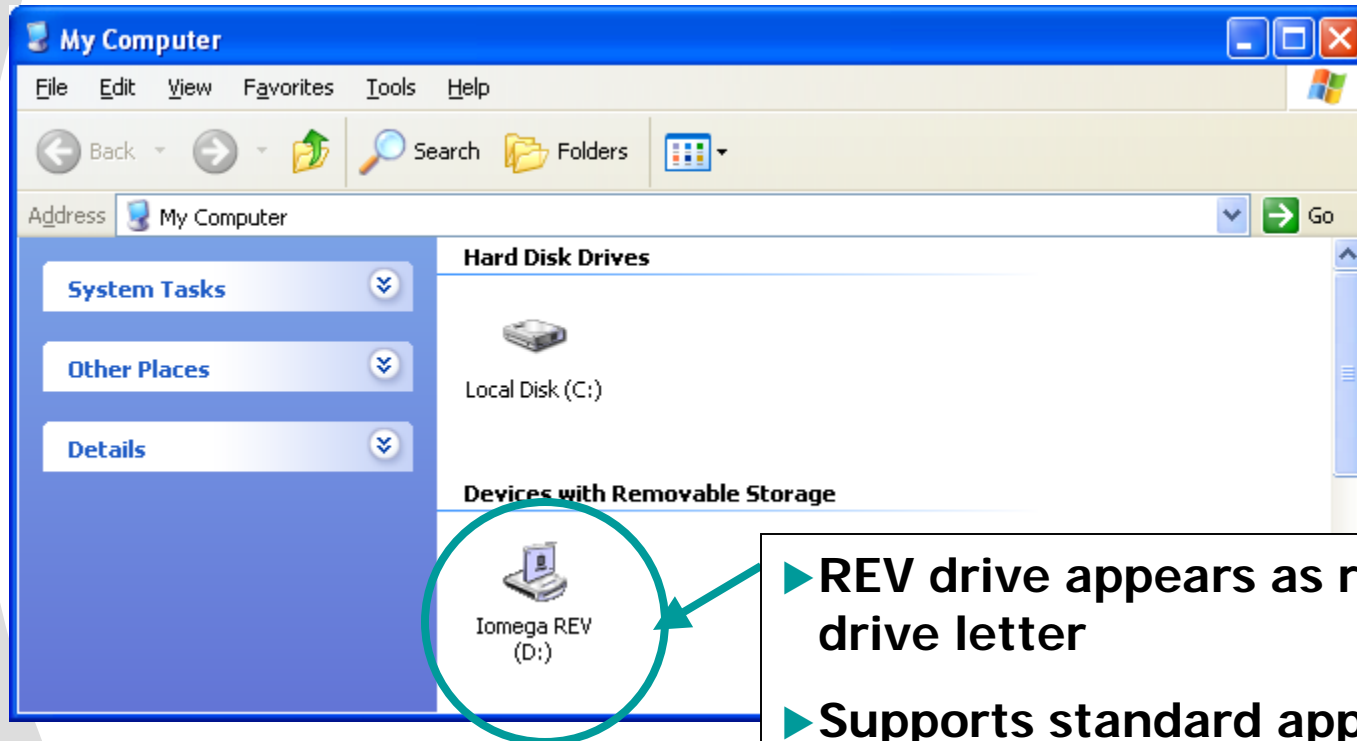
- ◆ 2U rack mount or desk top unit
- ◆ 10 REV disk slots, 350 GB native capacity (up to 700 GB compressed)
- ◆ Includes CA ArcServe 11.1 with Disaster Recovery Option
- ◆ Data transfer: 25MB/sec. maximum, 20MB/sec. average
- ◆ Zero maintenance required with Automatic Internal Head Cleaning and Air Filtration
- ◆ Single REV Internal SCSI drive





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Iomega REV Drives are Simple to Use



- ▶ REV drive appears as regular drive letter
- ▶ Supports standard application software
- ▶ Supports drag & drop operations



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Quick Access to Advanced Features

◆ Right-click functions include standard utilities such as:

- Password Protection
- Format
- Create bootable disk

The image shows a sequence of three windows illustrating the workflow:

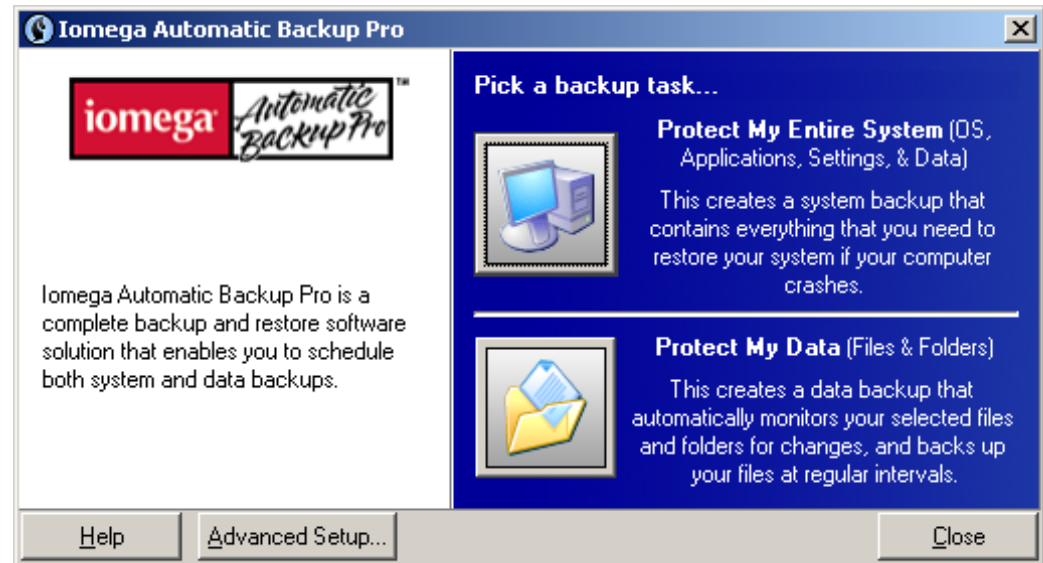
- Context Menu:** A right-click context menu is open over a folder named 'movies'. The 'Format...' option is highlighted.
- Format Disk (F:) Dialog:** This dialog box is open, showing the 'Format Options' section. The 'Quick Format' checkbox is checked. Below it, the 'Make Disk Bootable' checkbox is unchecked. There are radio buttons for 'Windows ISO Image' and 'Linux ISO Image', and a text field for 'Boot Image Location'.
- iomega Access Protection Dialog:** This dialog box is open, showing the current state of the disk as 'Protection Disabled'. The 'Enable Access Protection' checkbox is checked. There are two password input fields labeled 'Password' and 'Verify Password', both containing masked characters (*****).



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Iomega Automatic Backup Pro

- ◆ “Set it and forget it” – file backup on a scheduled or continuous basis
 - Data backup protects frequently changing files and folders
 - System backup protects operating system, programs, settings & configurations
- ◆ Span disks to accommodate larger backups
- ◆ Supports incremental backups
- ◆ Restore files, folders, or an entire system from any time
- ◆ Password protection
- ◆ AES-based encryption
- ◆ Data compression
- ◆ Boot directly from REV disk – no need for CD



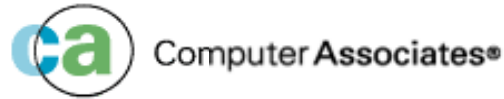


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3rd-Party Software Support for REV

CommVault Systems

QiNetix™ 5.0



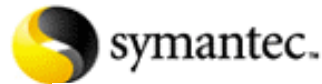
BrightStor® ARCserve® 9.x, 11.x



Retrospect® 6.5



Backup Edge 2.0



Norton Ghost™ for REV



Backup Exec™ 9.1



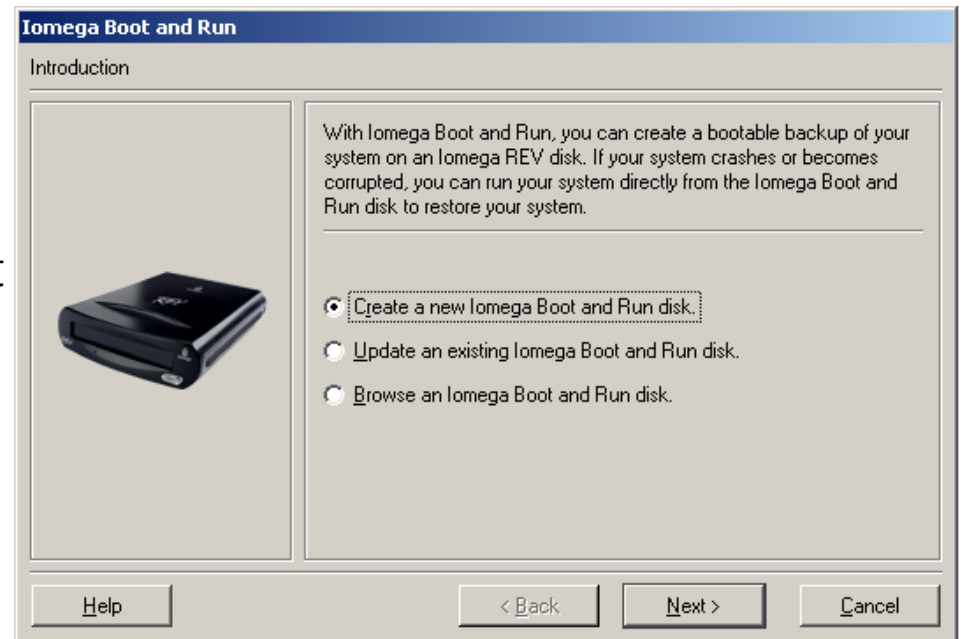
TapeWare® 7.x



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Iomega Boot & Run™

- ◆ Practically eliminate system downtime due to hard drive failure
- ◆ Run applications and access data directly from REV disk
 - In the event of a hard drive failure, allows user to run system from a REV disk until the primary hard drive can be repaired
 - System resumes immediate operation even without a primary hard drive
 - No technical expertise or support required
 - System is up-and-running almost immediately without lengthy restore operation
- ◆ System can run indefinitely from REV Boot & Run Disk
 - Primary hard drive may be replaced days later with no system down-time





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REV Survey Highlights

- ◆ Customer registration feedback suggests that REV drives are addressing the targeted markets and are being purchased for their intended use. For example:
 - 82 % of REV drives are being used in a business setting,
 - 88% of those are being purchased by companies with less than 100 employees, suggesting that the REV system's value proposition is resonating with small sized businesses,
 - 66% of REV drive users are using their systems for backup and long term archiving,
 - 40% of our early buyers purchased REV to replace their existing tape back up systems and 26% replaced an optical system.



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REV has earned many Awards

- ◆ CeBIT America 2004 Best of Show
- ◆ PC Magazine – Editor’s Choice
- ◆ PC Magazine – 5-Star Rating
- ◆ American Photo Editor’s Choice
- ◆ PC World – 4-Star Rating
- ◆ Australian PC World–4.5 Star Rating
- ◆ SA Computer Magazine–Editor’s Choice
- ◆ SA Computer Magazine–5-Star Rating
- ◆ PC Home Seal of Quality Award
- ◆ PC Plus – 9-Star Rating
- ◆ Custom PC Magazine Stamp of Approval Award
- ◆ Business Info Editor’s Choice
- ◆ PC Pro Recommended
- ◆ Byte Recommended Product Award
- ◆ The Independent – 5-Star Rating
- ◆ Mikro PC – Product of the Year
- ◆ PC Plus – Editor’s Choice



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