

INTRODUCTION

The Diamond Cipher ExDrive features the new generation of eSATA hard drive enclosures with the 256-bit AES hard encryption and choice of ECB or CBC mode. The encryption is FIPS certified to ensure absolute data security should the drive get stolen or lost. The crypto engine inside the Diamond Cipher enclosure handles all the encryption and decryption on the fly with no detectable performance degradation on data transfer. Using a native eSATA interface, the Diamond Cipher ExDrive supports the highest performance possible today through an externally connected hard drive enclosure.

Designed for accommodating any standard 3.5" SATA / SATA II hard drive, the Diamond Cipher ExDrive provides data transfer speeds of approximately three times the maximum throughput of traditional drive enclosures utilizing standard USB or Firewire interfaces. When connected via eSATA interface, drives contained inside the durable and heat resistant Diamond enclosures are even capable of booting Operating Systems through a compatible eSATA port on a motherboard or add-in card. With the optional 2.5" hard drive mounting bracket, any 2.5" SATA hard drive can also be installed into the Diamond Cipher drive enclosure.

The Diamond Cipher ExDrive Kit is the ideal external drive solution for large capacity data storage and security requirements. When connected to Host Controllers with RAID capability, multiple Diamond Cipher ExDrive can be implemented with fault-tolerance and increased data throughput RAID configurations which can be easily relocated as external devices. With the size slightly larger than a VCR cassette, the Diamond Cipher drive enclosure comes with the Addonics SATA direct interface design that provides an eSATA connector for high speed eSATA interface, as well as an additional SATA connector on the back. This SATA connector allows the Diamond drive enclosure to be used as a removable cartridge via an optional Diamond drive cradle installed inside the 5 1/4" drive bay of any computer.



DIAMOND CIPHER ENCLOSURE SIMPLE INSTALLATION

STEP1

Use a cross-shaped screwdriver to turn the cover securing screw into the "OPEN" position. Slide the aluminum cover towards the back end of the Diamond Cipher enclosure and remove it.



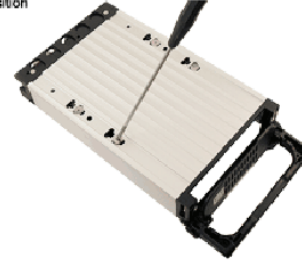
STEP2

Carefully place the SATA or IDE hard drive with the label facing up into the Diamond Enclosure. Push the hard drive towards the back end to secure the drive connectors onto the Diamond Enclosure's SATA or IDE connector.



STEP3

Turn the Diamond Enclosure over with the hard drive mounting holes facing up. Use the included flat head screws to secure the hard drive onto the bottom of the enclosure. Slide the enclosure cover back onto the enclosure, and turn the screw to the "LOCK" position.



FEATURES

Encryption features (for Diamond Cipher only)

- Full disk encryption via a hardware-based NIST and CSE certified cryptographic AES engine
- FIPS 140-2 certified Crypto Module.
- Choice of **ECB or CBC** mode of encryption
- High performance - Data is encrypted and decrypted on the fly by a certified cryptographic engine inside an ASIC without taking any CPU resources
- Encryption / Decryption via a hardware key , just like using a regular key to open a door.
To enable the encryption and access the drive, simply the Cipher key into the keyhole of the Diamond Cipher enclosure prior to turn on the power.
- Simple to deploy with no training required, no software to install and no password to remember
- Platform independency - There is no software or driver to install to use Addonics encryption products. As a result, it can be deployed in any systems running any OS. This is important in organization with multi platform computing and legacy systems.

Drive enclosures features

- Connect to computer via eSATA port
- Support large hard drive beyond 137G with single partition
- Can be used as a boot drive via eSATA connection
- Optional USB 3.0 to eSATAp adapter for USB 3.0 / 2.0 connection.
- Used as an internal hot-swap removable hard drive in a 5 1/4" drive bay with optional Diamond Drive Cradles.
- No interface cabling between drive and enclosure for reliable connection.
- No switch to set between internal and external hard drive application
- Compact size for easy transportation - slightly larger than a VCR cassette
- Sturdy aluminum body for use in rough environments
- Well ventilated design, good heat conduction without fan for quiet operation
- LED for both power, drive access and Cipher key activation
- Simple hard drive installation
- Optional 2.5"/1.8" converter kit
- OS support
- eSATA - DOS, Windows 95, NT(SP6), 98SE, Me, 2000, XP, Vista, Windows 7, Windows 7, Mac, Linux and Solaris
- USB - Windows 98SE, Me, 2000, XP, Vista, Windows 7, Windows 7, Mac, Linux and Solaris

SPECIFICATIONS

Encryption type - ECB or CBC mode	256-bit AES hardware encryption via a hardware-based NIST and CSE certified cryptographic AES engine
Supported Drive Type	3.5" / 2.5" SATA 1.5Gbps or 3.0Gbps or 6.0Gbps
Supported Interface for Drive Cradle	<ul style="list-style-type: none"> • SATA • IDE, USB, or SCSI (with optional converter boards)
Supported Interface for Drive Enclosure	<p>eSATA for external connection and SATA for internal connection via Diamond drive cradle</p> <p>USB 3.0 / 2.0 with optional eSATA - USB adapter (ASU3ESA)</p>
Supported Large Hard Drive (over 137G)	Yes
Power Source	<p>Internal Drive Cartridge System or Mobile Rack - from PC power supply</p> <p>Drive Enclosure or External Drive Cartridge System - from 110/220 power adapter</p>
Cooling Fan	Optional for drive enclosure
LED Indicators	<p>For power and drive access on drive enclosure and drive cradle</p> <p>For Cipher key activation on drive enclosure</p>
Material Construction	Aluminum
Supported OS	<ul style="list-style-type: none"> • USB 3.0 - Windows 2000, XP, 2003, Vista, Windows 7, Mac OS X, Linux Kernel 2.6 and above • USB 2.0 - DOS, Windows 2000, XP, 2003, Vista, Windows 7, Mac OS X, Linux Kernel 2.4 and above, Solaris 8 10/00 or later release. • SATA - DOS, Windows NT4(SP6), 98SE, Me, 2000, XP, 2003, Vista, Windows 7, Windows 7, Mac OS X, Linux Kernel 2.4 and above or any OS that supports SATA hard drive
Dimensions	<p>Drive enclosure: 8.19 x 4.57 x 1.46 in. (208 x 116 x 37 mm.)</p> <p>Drive Cradle: 8.93 x 5.75 x 1.61 in. (227 x 146 x 41 mm.)</p>
Weight	<p>13.6 oz (enclosure without hard drive)</p> <p>15.2 oz (drive cradle)</p>
File Systems	FAT, FAT32, NTFS and HPFS
Operating Temperature	0 °C to +50 °C
Operating Humidity	5% to 95% (non condensing)
Warranty	One Year
RoHS Compliant	Yes

System Requirements

- PC/AT or Compatible System
- One available 5 1/4" drive bay or one of the following ports: SATA, eSATA, USB 2.0 and USB 1.1
- Pentium or greater
- Minimum 32 MB RAM
- 10 MB minimum free hard disk space
- One of the following operating systems: DOS, Windows NT(SP6), Windows 98SE / 2000, 2003, Me, XP, Vista, Windows 7, Windows 7, Mac OS, Linux, Solaris