

Single DataTale Portable Enclosure

TQ-M12H



USB 2.0
eSATA
FireWire 400
FireWire 800

User's Manual



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GENERAL INFORMATION

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The product information provided in this manual is subject to change without prior notice and does not represent a commitment on behalf of the vendor. The vendor assumes no liability or responsibility for any errors that may appear in this manual.

NOTICES AND CLASSIFICATIONS

FCC-B Radio Frequency Interference Statement

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

This device may not cause harmful interference.

This device must accept any interference received, including interference that may cause undesired operation.



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

CONTACT US

We are committed to offer economical, high-quality connectivity and storage enclosure solutions to the market. Your questions, inquiries or comments are welcomed. For Technical Support, please go to our website at

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PRECAUTIONS FOR THE ENCLOSURE

- ◆ The main circuit board of the Enclosure is susceptible to static electricity. Proper grounding is required to prevent electrical damage to the Enclosure or other connected devices, including the host computer. **Always** place the Enclosure on a smooth surface and avoid all dramatic movement, vibration and percussion.
- ◆ Do **NOT** allow water to enter the Enclosure.
- ◆ Installation of additional equipment in the host computer may be required. Visit our website to download the latest product information updates.
- ◆ Do **NOT** attempt to service this device yourself. Disassembling the Enclosure's inner parts will expose you to dangerous voltages or other hazards.
- ◆ Do **NOT** block the ventilation. Proper airflow is required to ensure reliable operation and to prevent overheating.
- ◆ Do **unplug** the Enclosure from the electrical outlet when not in use to provide an ecological friendly environment.
- ◆ **Use only** the power supply cable provided with the Enclosure.













INTRODUCTION

Thank you for purchasing the Single DataTale 3.5-inch HDD Portable Enclosure. The Single DataTale 3.5-inch HDD Portable Enclosure provides easy access and convenient travel for your hard drive with all four universal interfaces available.



Please thoroughly read and follow the instructions provided in this manual. Failure to do so may result in damage to the Enclosure, and any or all of the connected devices.

Features

-  Supports current SATA II compliant HDDs, fully backward compatible with SATA 1.0 and SATA 1.0a compliant HDDs
-  Supports Hi-Speed USB (USB2.0 connection), IEEE 1394b (FireWire 800 connection), and eSATA (eSATA connection)
-  Supports USB Mass Storage Class under Windows 2000, XP and 2003
-  Combines enclosure and 1394 repeater functionality (Daisy chain)
-  Connects to host by plug-n-play, not requiring any IT expertise or software installation
-  Reduces power consumption with HDD spin down support
-  Prevents damages from over-tightened HDDs with Auto-limiting segmented screws
-  Dissipates heat efficiently with aluminum housing and reduced noise due to the fanless design
-  Provides all 4 universal interface connections right out of the box with all cables provided
-  Prevents sliding with TPU (Thermoplastic Polyurethane) edges
-  Simplifies HDD installation by using the patented SmartGuider™ mechanism and enables effortless HDD access with portability
-  Features twist locks for hard drive portable security



Any loss, corruption, or destruction of data is the sole responsibility of the user. Under no circumstances will the manufacturer be held liable for the recovery or restoration of any data.



SmartGuider™ is a trayless device that utilizes the simplicity of a handle and screws. The integrated handle is attached to the HDD with auto-limiting segmented screws. Then, the entire setup can be slide into the unit by aligning the screws with the specially designed guides. This enables flexibility in removal and insertion of the HDD with ease.

System Requirement


To use the Single DataTale 3.5-inch HDD Portable Enclosure, the minimum system configuration in the host computer require the following:

PC

- + 266MHz or faster CPU (Windows Vista requires a minimum 800MHz CPU)
- + 64MB of RAM (Windows Vista requires 512MB of RAM)
- + Microsoft Windows 2000, XP, 2003, or Vista
- + One available eSATA port, USB 2.0, IEEE 1394a, or IEEE 1394b port

MAC

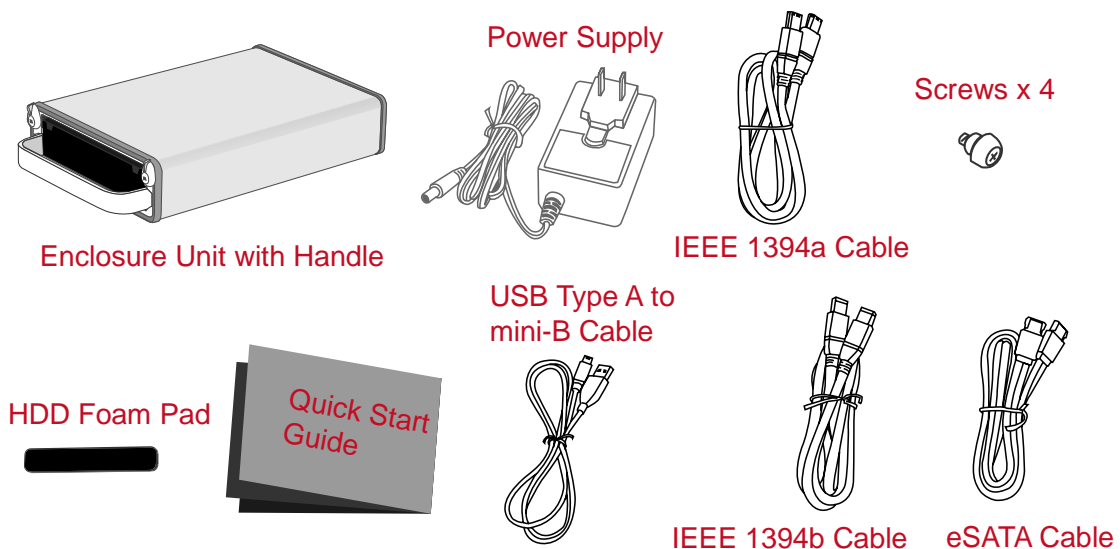
- + Macintosh PowerPC or Intel Core Duo processor
- + 64MB of RAM (Mac OS X 10.4 requires 256MB of RAM)
- + Mac OS X 10.2 or higher (PowerPC) or Mac OS X 10.4 (Intel) or higher
- + One available eSATA port, USB 2.0, IEEE 1394a, or IEEE 1394b port


 3.5-inch SATA compatible hard drive is required for the Enclosure. Once the HDD is formatted, the actual available storage capacity can vary depending on the selected operating environment (normally 5-10 % less).

Optional Accessories

- + eSATA PCI, PCI-X, or PCI-Express Card

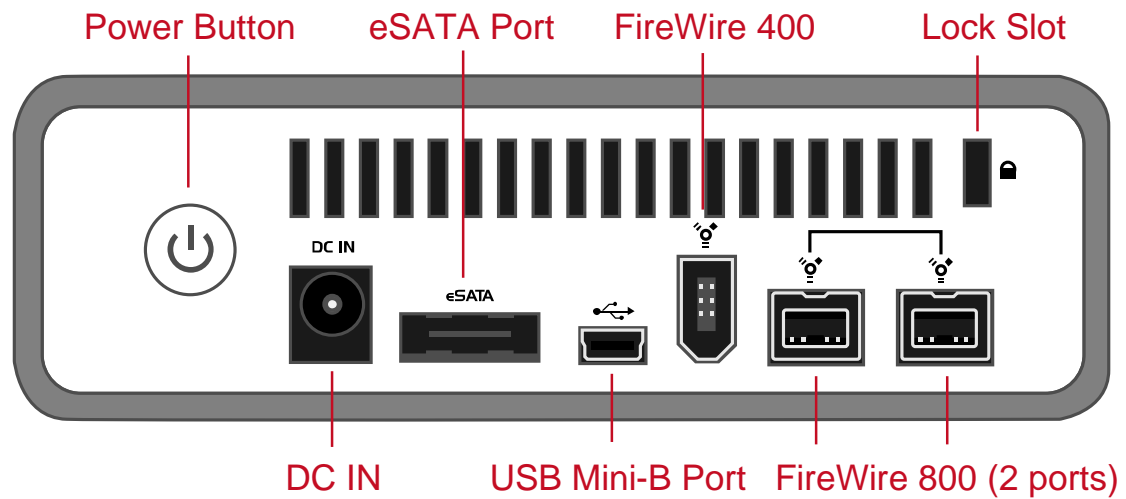
Package Contents




 Please keep all package contents and packaging material in the event that the product must be returned.

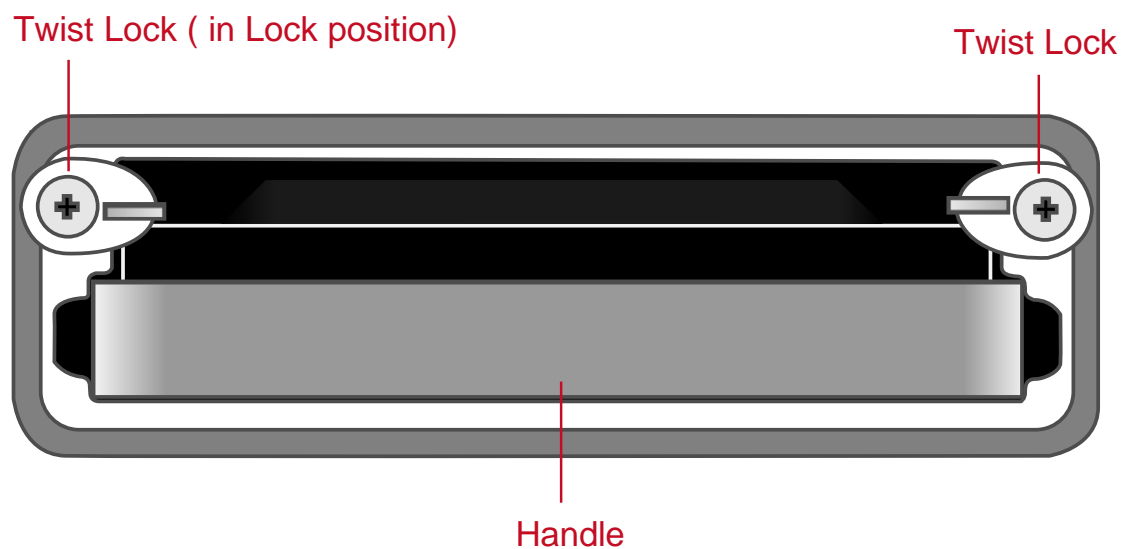
SYSTEM UNIT VIEWS

Front View



 The current operating status will be indicated by the Power Button.

Rear View

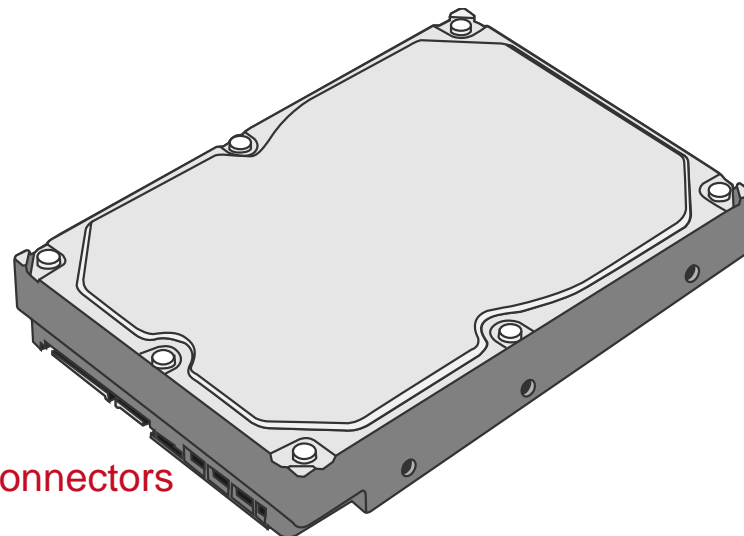


INSERTING/REPLACING THE HARD DRIVE IN THE ENCLOSURE

1. Take out the handle from the Enclosure itself and locate the HDD screws in the packaging box.

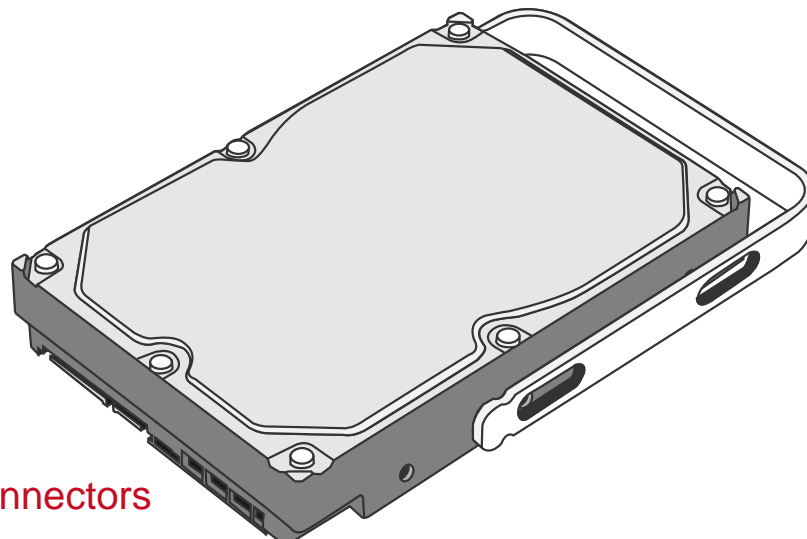
(Fasten the Handle on the HDD)

2. Place the HDD with the metal cover side facing up and ensure that the interface connectors are oriented toward your left side.



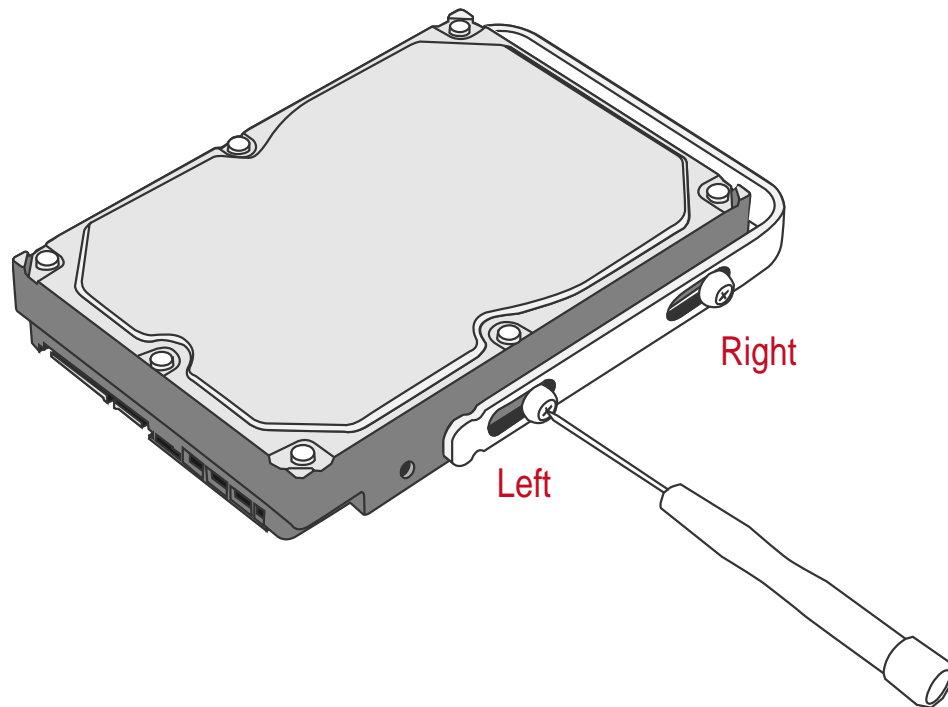
Connectors

3. Position the handle to the HDD end, which is facing away from the interface connectors, and align it with the screw hole openings.

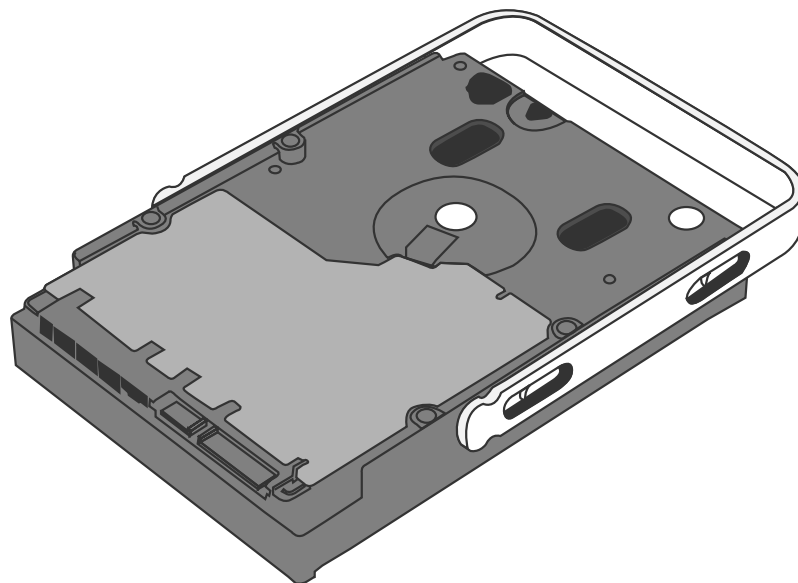


Connectors

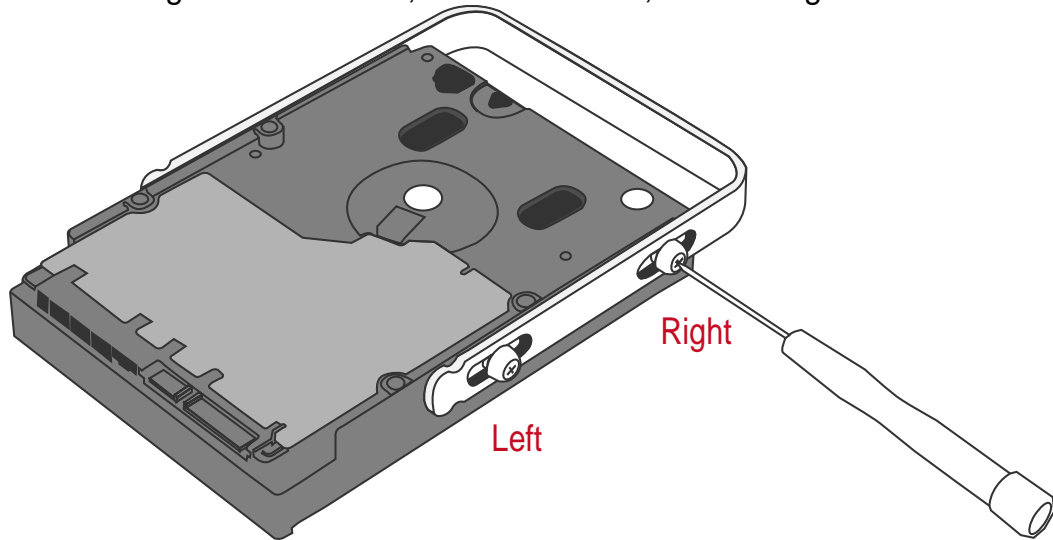
4. Fasten the handle onto the HDD by inserting and tightening the screws, the left one first, then the right one.



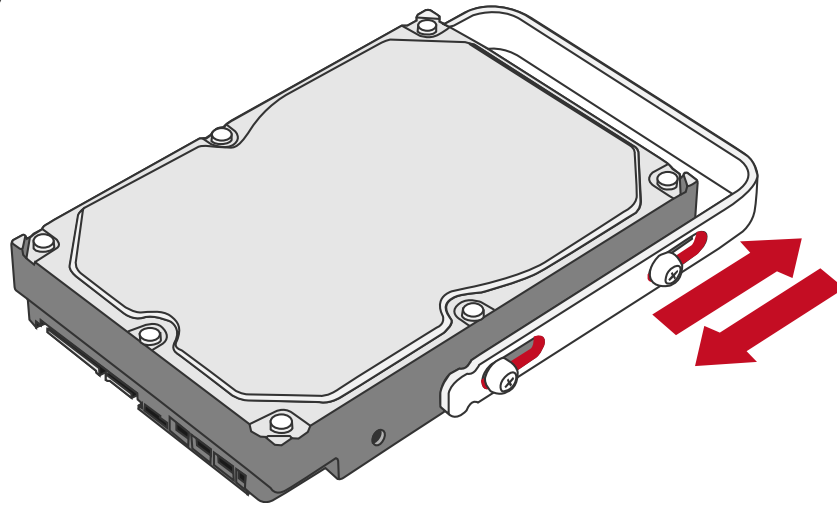
5. Now, flip the HDD so it is facing you with the PCBA (Printed Circuit Board) on top and the unfasten handle side facing you.




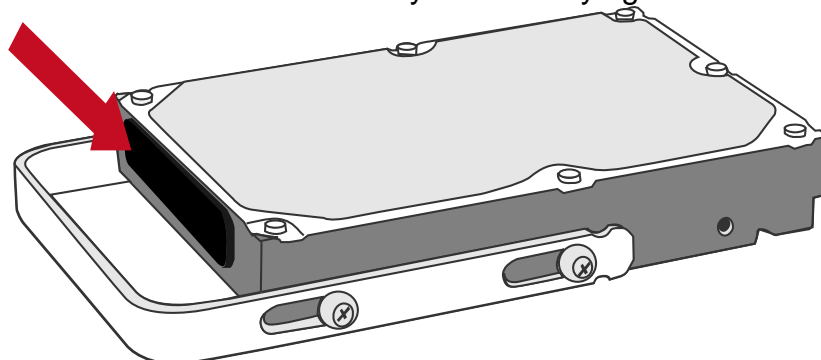
6. Insert and tighten the screws, the left one first, then the right one.




7. Finally, test sliding the handle to make sure the holes glide smoothly on the screw guides.



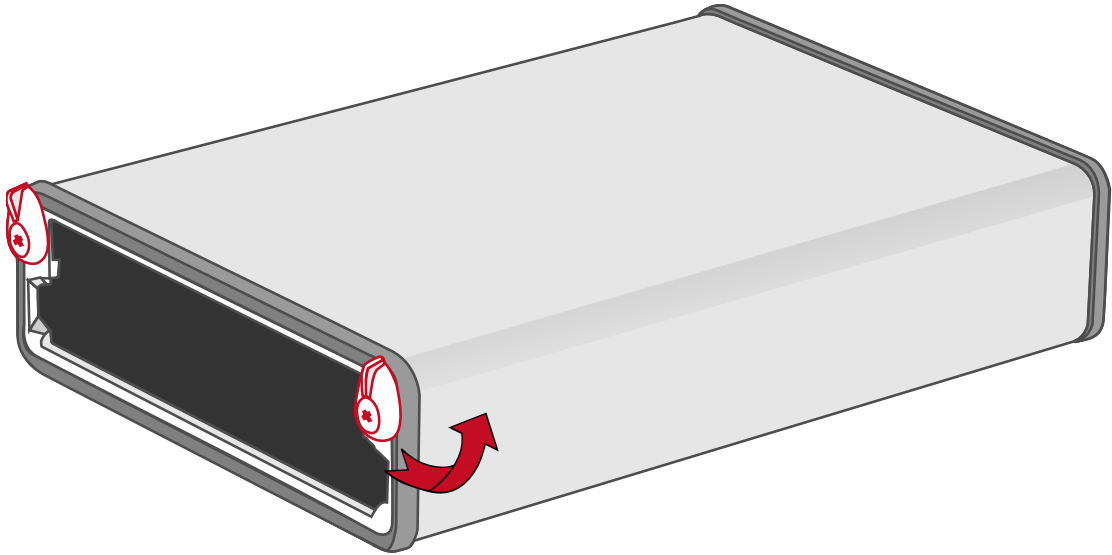
 The auto-limiting segmented screws are designed to prevent the HDD or/and the handle from damages due to over-tightening. Furthermore, this design makes the handle slide easily without any tightness.



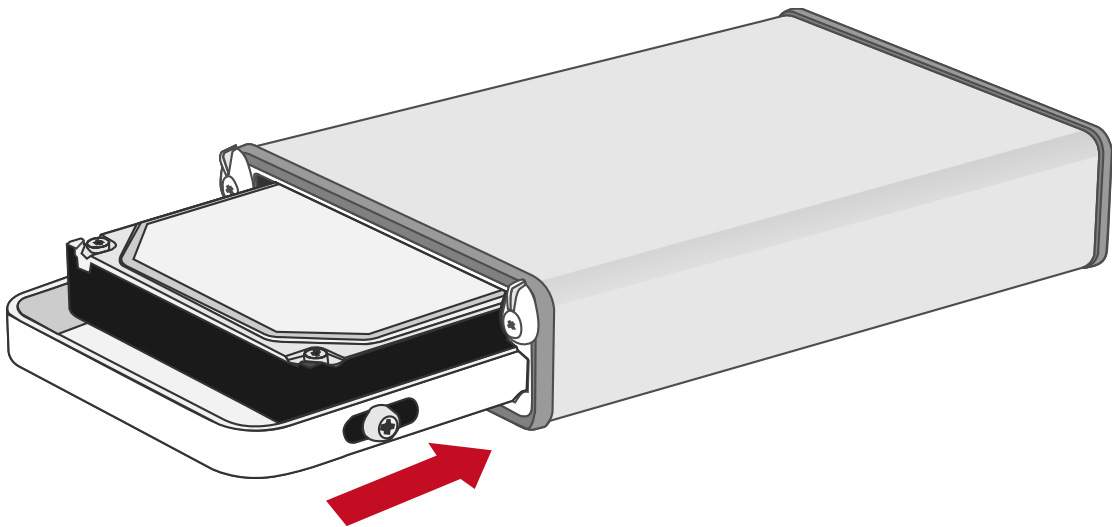
 An optional accessory included in the package called the "HDD Foam Pads" may be placed onto the HDD end, facing away from the interface connectors, to help prevent unnecessary touching to the HDD surfaces during removal and insertion.


(Inserting the HDD into the Enclosure)

8. Place the Enclosure with its rear view facing you (side with the Twist Locks) and the Twist Locks on the upward position. Make sure the Twist Locks are in the “unlock” position (lined up with the edges of the casing).

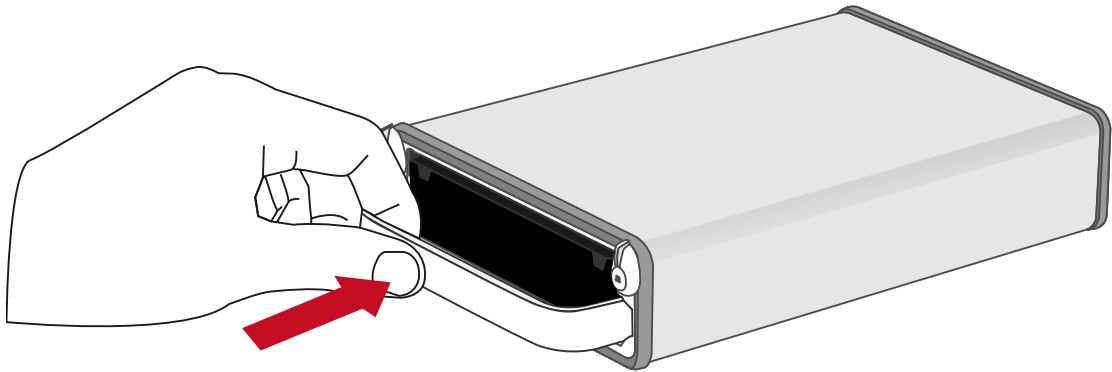



9. Hold the HDD with the metal cover side and the handle attached facing upward. Align the handle with the guide rails and hold the front view end of the Enclosure with your other hand.



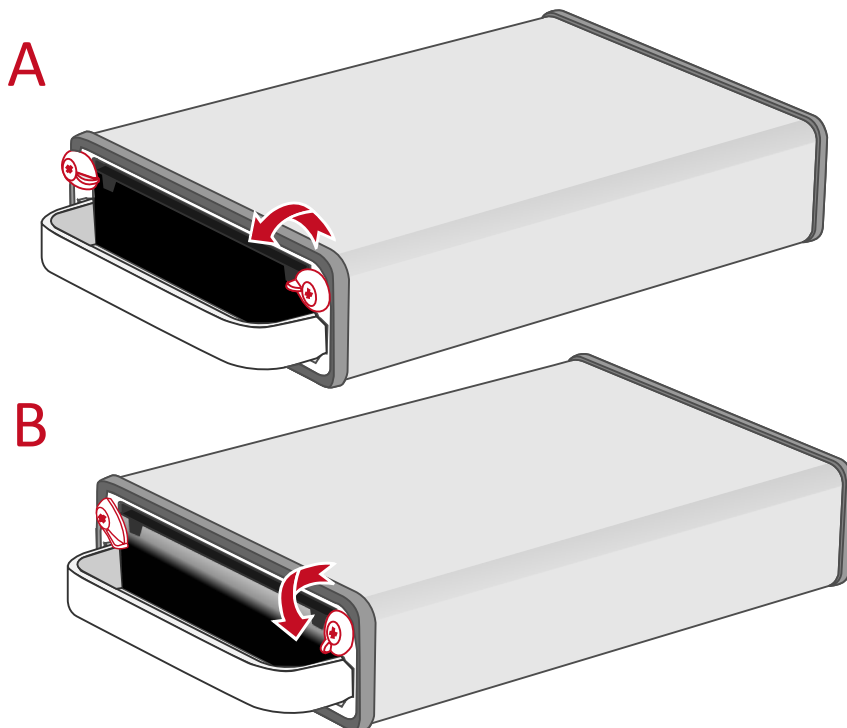
 When inserting the HDD on its reverse side, the SmartGuider™ System won't be able to align and the HDD cannot be inserted.

- Slide the HDD into the Enclosure and firmly push forward until a “thump” sound is heard.



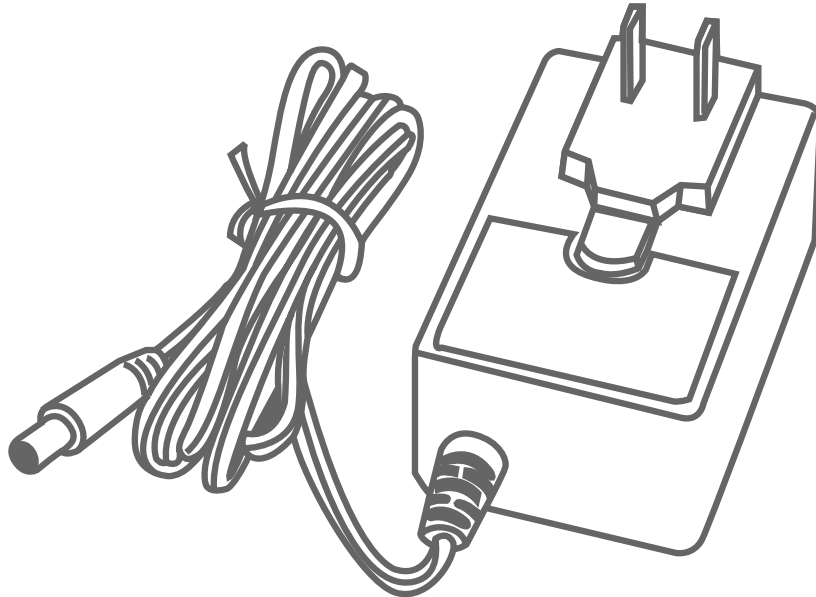
 In most cases, the HDD must be push forward firmly, until a “thump” sound is heard, to ensure that the connector of HDD is properly inserted to the connector inside the Enclosure.

- For typical size HDDs, turn the Twist Locks inward 90 degrees (see option A). For smaller footprint HDDs, turn the Twist Locks inward around 140 degrees (see option B). Make sure the Twist Locks are in the “lock” position and securely hold the HDD in place. Now, the Enclosure is ready for connection to a computer!

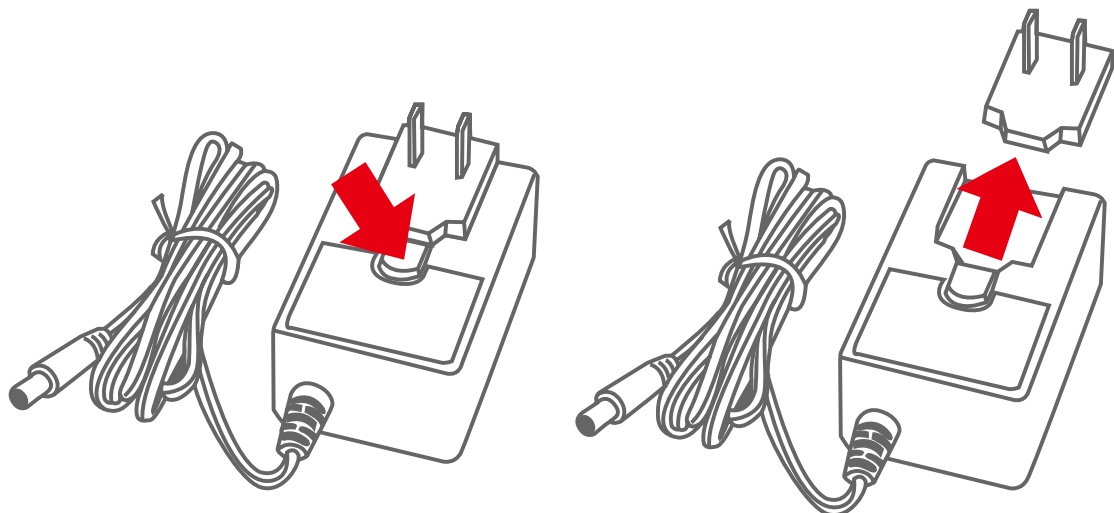


PUTTING ON/SWITCHING CONVERTOR PLUG HEAD ON AC/DC ADAPTER

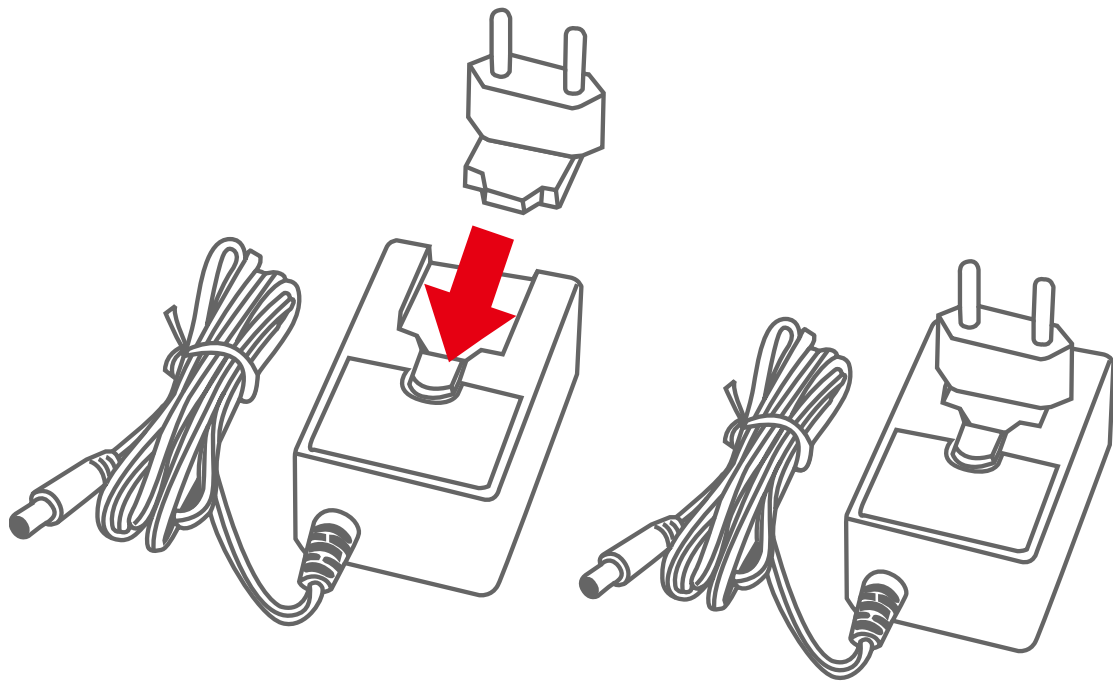
1. Find the Power Supply and its applying convertor plug head(s) in the package.



2. Press the click release and slide the existing convertor plug head from the Power Supply.



3. Then, slide the selected convertor plug head onto the Power Supply. Now, it is ready to be plugged into an outlet and the Enclosure!



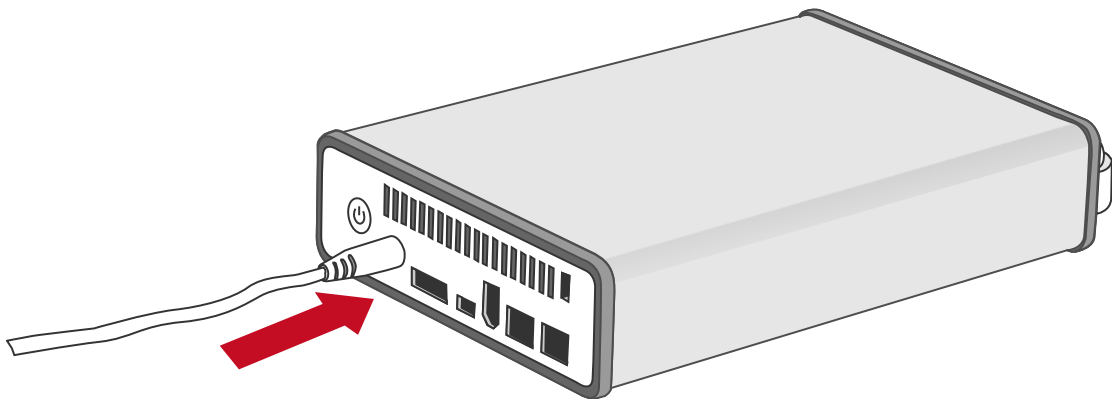
CONNECTING THE ENCLOSURE TO A COMPUTER

Complete the following steps to connect the Enclosure to a host computer.

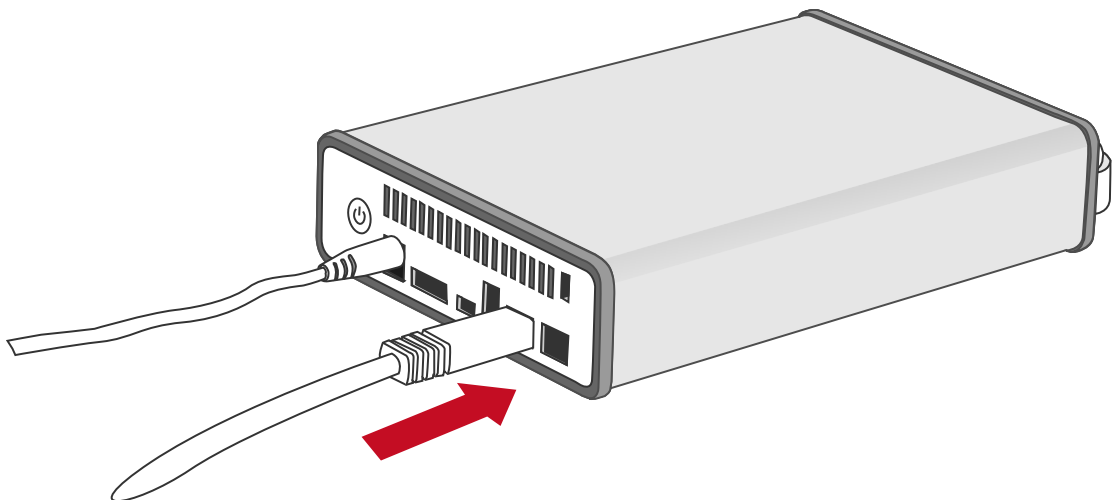


The Enclosure should only be connected to a host computer via one interface. Connection of the Enclosure to a computer via two or more interfaces simultaneously is not recommended.

1. Connect the Power Supply to the Enclosure.

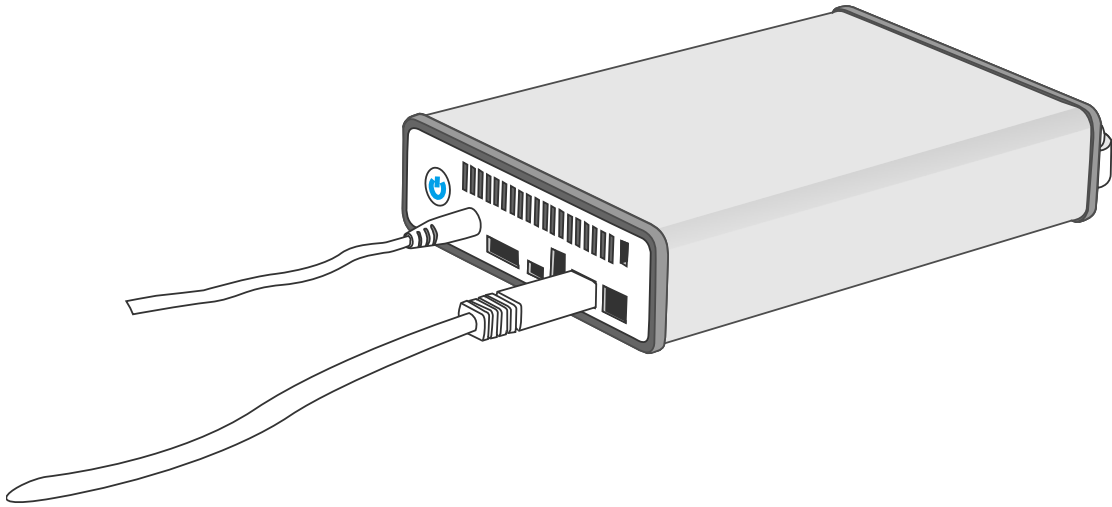



2. Insert both ends of the USB 2.0, eSATA, FireWire 400, or FireWire 800 cable(s) into the corresponding port of the Enclosure and the host computer.



It is highly recommended to select only one interface to do data transfers.


3. Press the Power Button to turn “on” the Enclosure. When connected, with or without the HDD inside the Enclosure, the Power Button will become steadily blue. If the HDD is being accessed, the Power Button will flash in blue. Now, the Enclosure is ready to be used!



 Due to compatibility issues, if you use the eSATA interface to do the data transfer, the Silicon Image eSATA host controller is highly recommended.

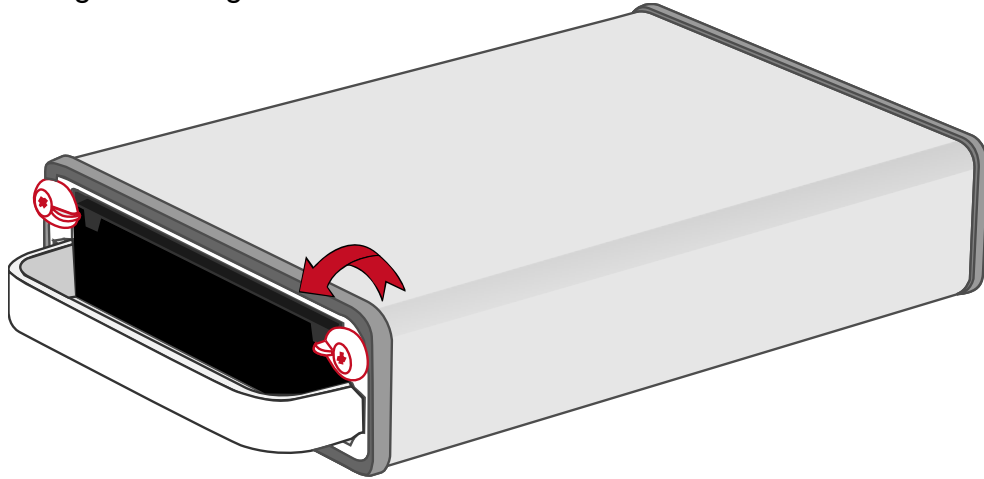
Connecting Multiple Devices

Using FireWire 400 or 800, you can connect other computer hardware or digital devices to your Enclosure. This connection is called “Daisy chain”. Items connected to the Enclosure may be such as digital video camera, another HDD, DVD writer, and much more. However, you must use the same interface in order for the Daisy Chain to work. The computer will not recognize different interfaces if they are all used at the same time. In addition, if a mix of connections is used, the resulting speed will be limited to the lowest one available.

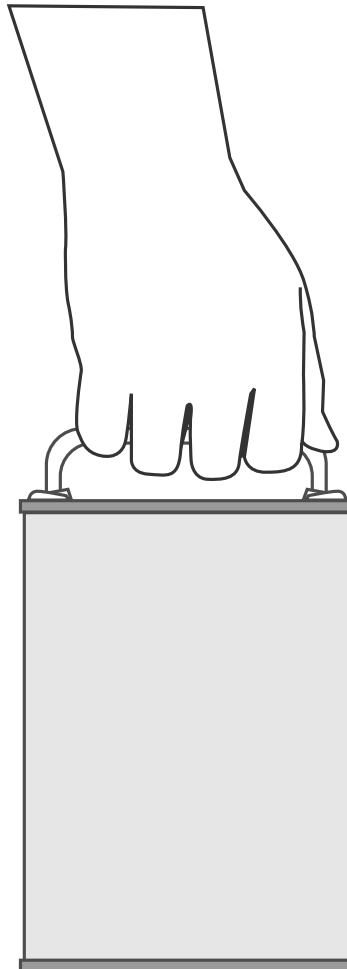
 When an additional FireWire connector is plugged in, the connector will be viewed as a “daisy chain” port. When an additional USB or eSATA connectors is plugged in, the connector will be viewed as its originate port, either USB or eSATA respectively.

PORTABILITY WITH EASE AND CONVENIENCE

1. First, insert the HDD inside the Enclosure. Then, twist both sides of the locks on the rear end of the Enclosure to securely block the HDD from falling out during travel.



2. Now, the Enclosure is ready to be carried with you anywhere with ease and comfort!



SAFE REMOVAL OF THE ENCLOSURE

Safe removal of the Enclosure from the host controller is highly recommended, especially when switching interfaces. In order to safely remove your Enclosure from the host controller, you would need to eject the device on your host controller system.



If using a Mac System, safe removal of the Enclosure from the host for all interfaces is necessary.



If using a PC System, safe removal of the RAID System from the host depends on the interface. Most current USB and FireWire host controllers handle USB and FireWire devices as external devices; thus, it is highly recommended that the Enclosure be safely removed from the host if you are using either one of the interfaces. However, if you are using the eSATA interface, depending on the eSATA controller, the host may handle external eSATA HDD devices as internal HDD devices. If so, safe removal of the Enclosure from the host is unnecessary.

EXTERNAL BOOTUP

External Bootup may be required if the user has two different operating systems set up in both the host computer and the Enclosure.

PC

The External Bootup with different interface:

OS \ Interfaces	USB 2.0	FireWire	eSATA
Windows	No	No	Yes
DOS	Yes	No	Yes
Linux	No	No	Yes

MAC

The External Bootup varies with different platform and interfaces:

Platform \ Interfaces	USB 2.0	FireWire	eSATA	
			Mac driver built-in	No driver built-in
Power PC CPU (G4 or Later)	No	No	Yes	No
Intel-based CPU	Yes	No	Yes	No



If the computer does not come with eSATA interface and an optional eSATA card is added, choosing the card that comes with the built-in driver in the operation system is highly recommended.

eSATA PCI EXPRESS CARD INSTALLATION

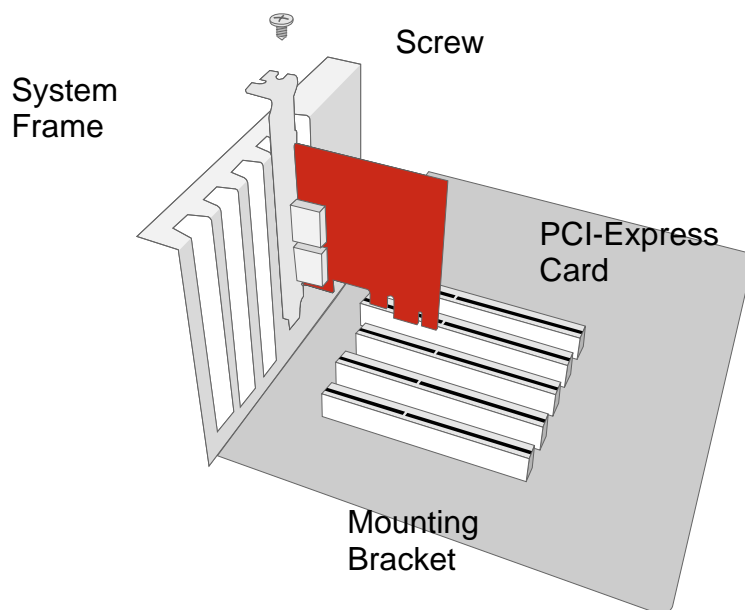
Complete the steps provided in this section to install the eSATA PCI Express Card to use with the Enclosure. The eSATA PCI Express Card provides a host computer with two Windows and Mac compatible eSATA ports.

System Requirements

- ✚ Windows 2000 with Service Pack 4 or later
- ✚ Windows XP with Service Pack 2 or later
- ✚ Windows 2003 with Service Pack 1 or later
- ✚ Mac OS 10.4.x or later
- ✚ An available PCI-Express slot
- ✚ CD-ROM or DVD-ROM drive

Hardware Installation

1. Power "off" and unplug your computer.
2. Remove the housing of your computer and locate an available PCI-Express slot on your motherboard.
3. Insert the card in the available PCI-Express slot. Ensure that the card is firmly seated in the slot.
4. Replace the housing of your computer.



Driver Installation

Follow the provided prompts to complete the driver installation.

For the Windows system, the “Add New Hardware Wizard” will open automatically. Insert the installation CD included in the package, navigate to and open the installation file.

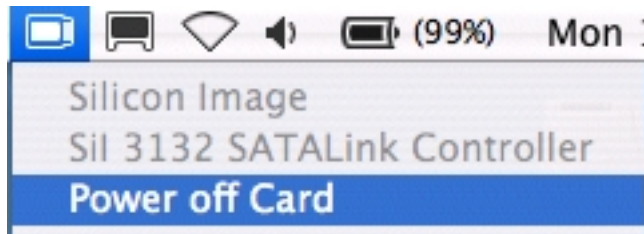
For Mac OS, insert the installation CD and locate the Mac driver installation file. Follow the provided instructions to complete the driver installation.



Please refer to User’s Manual under eSATA Host Card on our website.

Verify Driver Installation

Mac OS:

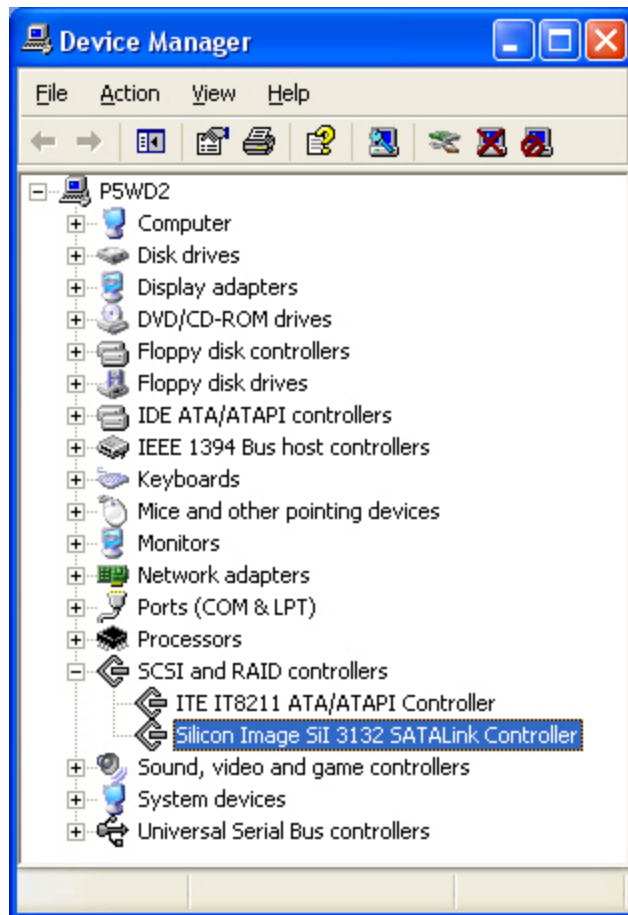


If a driver installation failure error message appears after restarting the computer, follow the recommendations provided in the error message.

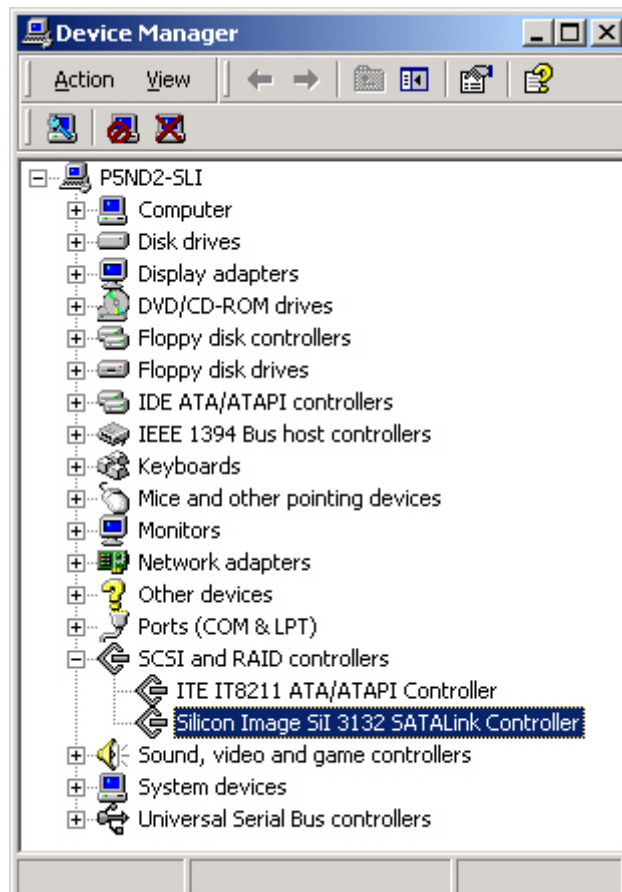
Windows OS:

1. Right-click the **My Computer** icon on your desktop and choose **Manage** from the pop-up menu.
2. Double-click **Device Manager**.
3. Double-click **SCSI** and **RAID** controllers.
4. Verify that the **Sil 3132 SATALink Controller** appears, as shown below.

Windows 2003 and XP:



Windows 2000:



Q&As

HDD Capacity

Q: All my HDDs are at least 1TB or above, will the Enclosure be able to support the gigantic storage capacity?

A: Yes, the Enclosure will be able to support any HDD over 1TB size capacity.

Q: I would like to format my hard drives with the FAT (a.k.a. File Allocation Table) format, which can be read and written by both Mac and PC. Is there any limitation on its capacity?

A: Yes, please check the table below for reference.

File System	NTFS	FAT32	FAT (Format by Win2000 / WinXP)	FAT16
Capacity Limitation	Vista: 16384TB XP: 2TB	Windows: 32GB Mac: 2TB	4GB	2GB

Discrepancy in Reported & Actual Size Capacity

Q: If I have a 750GB HDD, why does the RAID System only recognizes the HDD available space as to be less than 750GB?

A: Many customers are confused by their host systems when it reports a discrepancy between reported capacity and actual capacity. Several factors can come into play when your host system views and reports the capacity of a hard drive. There are actually two different numbering systems used to express units of storage capacity:

Binary, which says that a kilobyte is equal to 1024 bytes; and
Decimal, which says that a kilobyte is equal to 1000 bytes.

Most commonly used to display storage capacity is in Decimal. The surprising fact is that even though it seems like you will have more bytes under Binary, the Decimal calculation system actually presents a greater storage capacity. More information on capacity issues can be found at the Seagate website under FAQs.

http://www.seagate.com/ww/v/index.jsp?locale=en-US&name=Storage_Capacity_Measurement_Standards_-_Seagate_Technology&vgnnextoid=9493781e73d5d010VgnVCM100000dd04090aRCRD

APPENDIX: SPECIFICATIONS

Model Name	TQ-M12H
Connector	eSATA x 1, USB 2.0 x 1, 1394a x 1, 1394b x 1
HDD Support	3.5" SATA HDD
Data Transfer Speed	eSATA: up to 3Gbit/sec USB 2.0: up to 480Mbit/sec 1394a: up to 400Mbit/sec 1394b: up to 800Mbit/sec
System Material	Aluminum case with plastic parts
Status Indicator	Power Button
Power Supply	Input: AC 100-240 V Output: DC +12V/1.5A
Dimension	183 (L) x 127 (W) x 40 (H) mm
Weight (without HDD)	405 G
Certification	CE, FCC



The Single DataTale Portable Enclosure is good partner for the DataTale 2 & 4-bay RAID Systems. When you have your DataTale RAID System under JBOD or Mirror mode, it's a good idea to use the Single DataTale to access data from the individual drives while on travel. The SmartGuider™ makes HDD installation as easy as 1-2-3.