

DataTale 3.5" Portable HDD Enclosure

Where do you store your value - anywhere!



USB 2.0
eSATA
FireWire 400
FireWire 800

User's Manual



Rev.02

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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 www.onnto.com.tw

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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 AC/DC Adapter provided with the Enclosure.

INTRODUCTION

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

The installation instructions in this manual apply to the following models:

- ✚ TQ-M12H (SATA-eSATA/USB 2.0/FireWire 400/FireWire 800 combo)
- ✚ TD-M11H (SATA-eSATA/USB 2.0 combo)



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 1394a (FireWire 400 connection), IEEE 1394b (FireWire 800 connection), or eSATA (SATA-eSATA connection)
- ✚ Combines Enclosure and 1394 repeater functionality (TQ-M12H only)
- ✚ 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 open-back mechanism
- ✚ Prevents sliding with TPU (Thermoplastic Polyurethane) edges
- ✚ Simplifies HDD installation by using the SmartGuider* mechanism and enables effortless HDD access with portability
- ✚ Features Twist Locks for hard drive portable security



SmartGuider is a tray-less 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.



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.

System Requirement

To use the DataTale Portable 3.5-inch HDD 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).

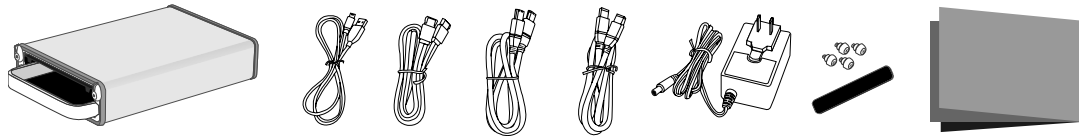
Optional Accessories

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

Package Contents

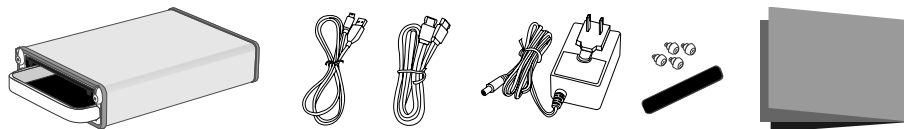
To get started, please review the package contents for each model.

TQ-M12H



- Enclosure Unit with Handle
- USB Type A to mini-B Cable
- IEEE 1394a Cable
- IEEE 1394b Cable
- eSATA Cable
- AC/DC Adapter
- 4 HDD Screws
- Thermal-shield Pad
- Quick Start Guide

TD-M11H



- Enclosure Unit with Handle
- USB Type A to mini-B Cable
- eSATA Cable
- AC/DC Adapter
- 4 HDD Screws
- Thermal-shield Pad
- Quick Start Guide

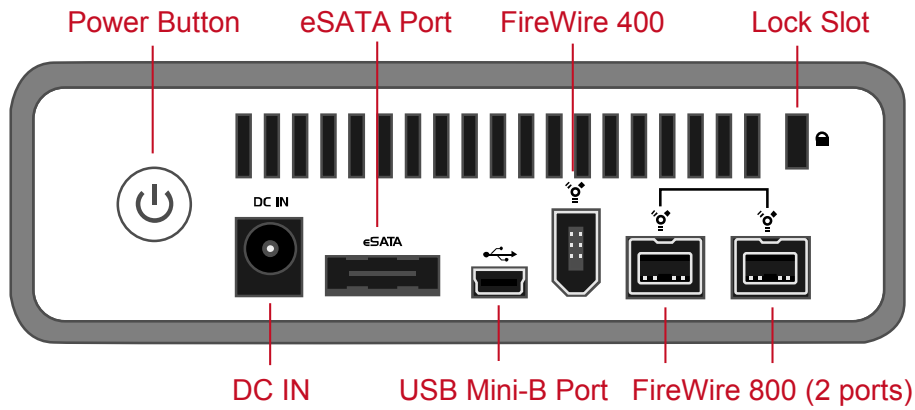


Please keep all package contents and packaging material in the event that the product must be returned.

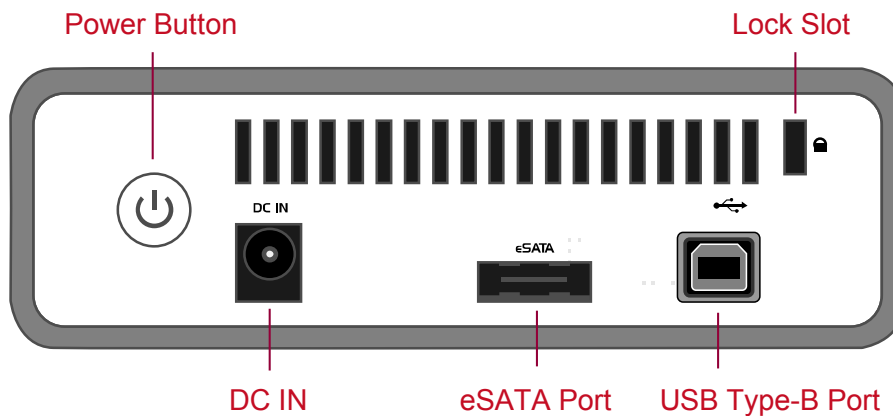
SYSTEM UNIT VIEWS


Front View

TQ-M12H SATA-eSATA/USB 2.0/FireWire 400/FireWire 800

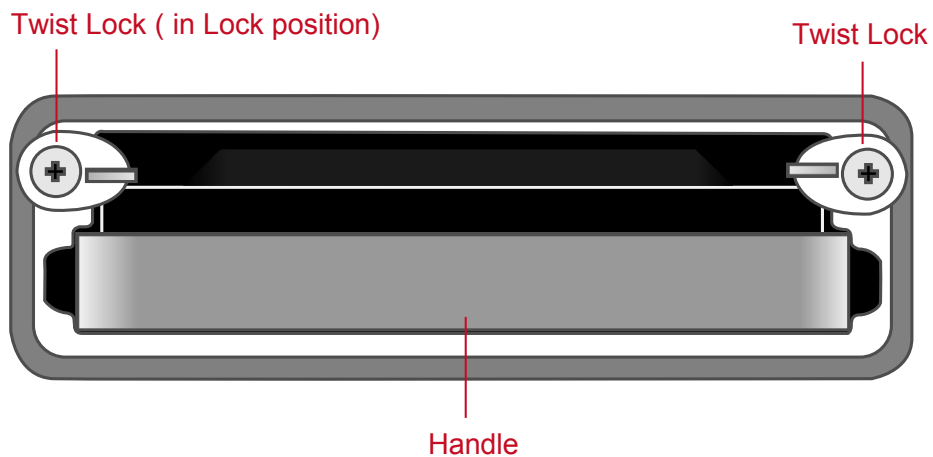


TD-M11H SATA-eSATA/USB 2.0



 The Power Button will indicate the current operating status.

Rear View



ASSEMBLING THE 3.5" SATA HDD ENCLOSURE

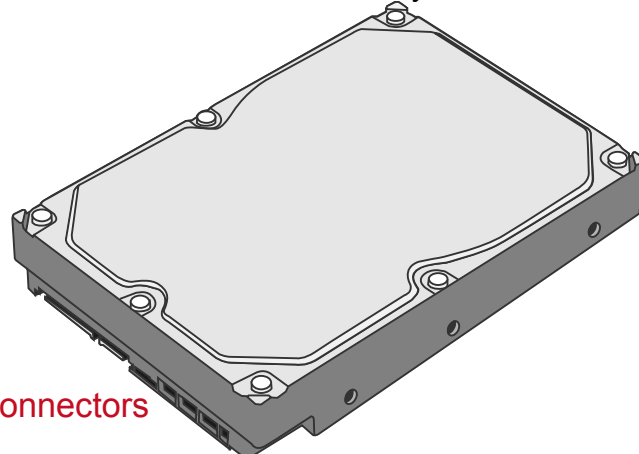
To begin using the 3.5" SATA HDD Enclosure, simply install a 3.5" SATA hard drive into the Enclosure by completing the following assembly steps:



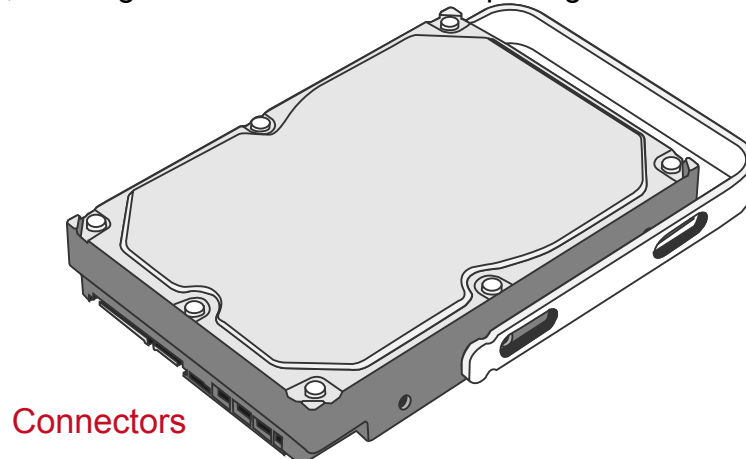
It is normal for the SATA hard drive and FireWire 800 chipset to consume more power. In this Enclosure's design, the open-back aluminum case serves as a kind of heat sink and dissipates heat inside the enclosure more efficiently by emitting into the environment. To prevent touching the high-temperature hard drive surfaces directly, it is highly recommended to place the Thermal-Shield Pad on the hard drive before the hard drive is installed.

(Fasten the Handle on the Hard Drive)

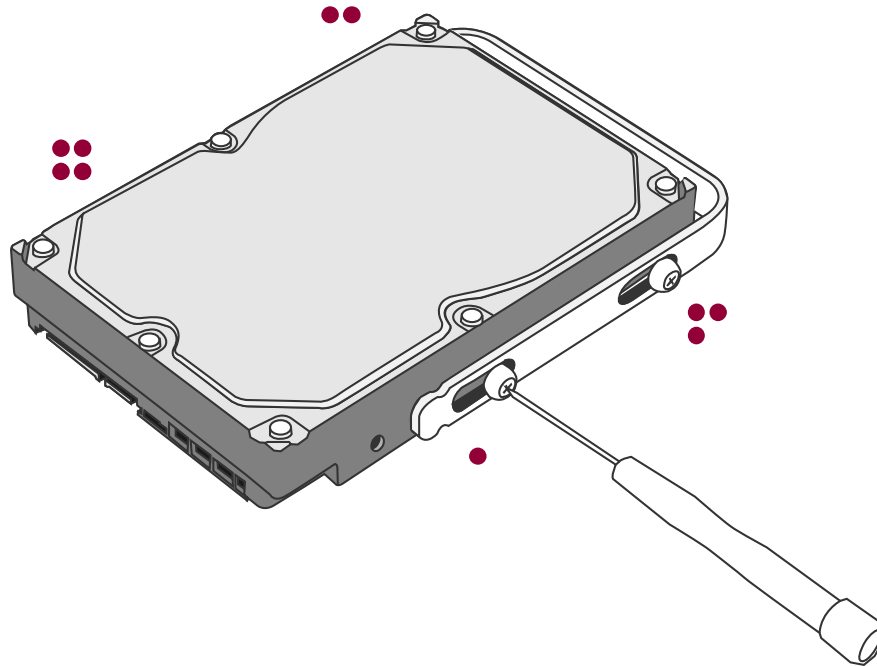
1. Place the hard drive with the metal cover side facing up and ensure that the interface connectors are oriented toward your left side.



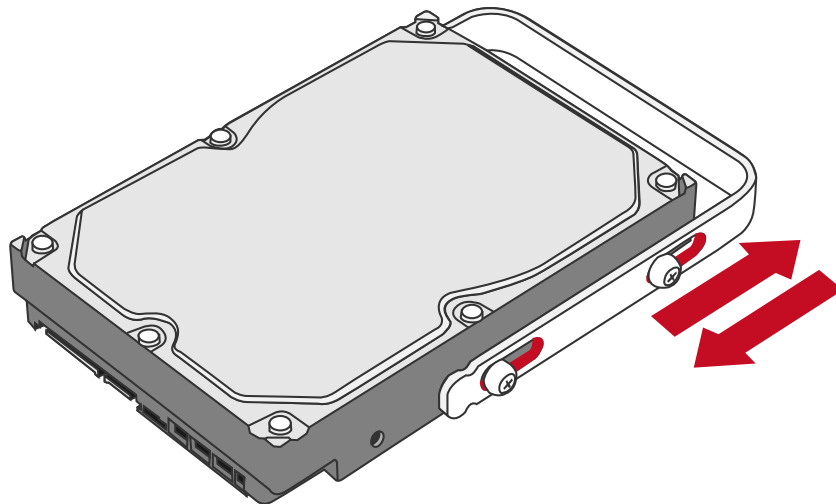
2. Position the handle to the hard drive end, the end without interface connectors, and align it with the screw hole openings.




3. Locate the auto-limiting segmented screws included inside the package. Insert the first screw and fasten the handle onto the hard drive. Tighten the first screw securely to ensure that proper alignment is maintained. Repeat the same for the remaining 3 screws.



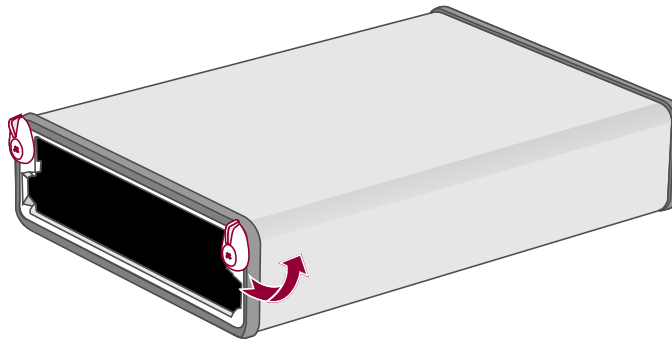
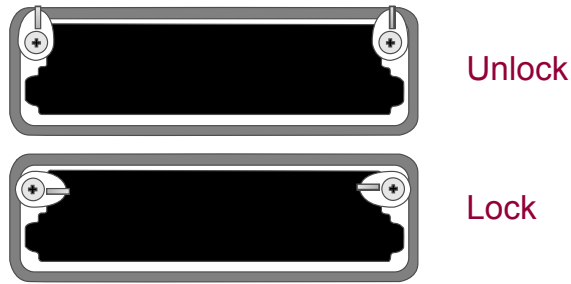
4. After the auto-limiting segmented screws are tightened, test slides the handle to make sure that the handle glide smoothly.



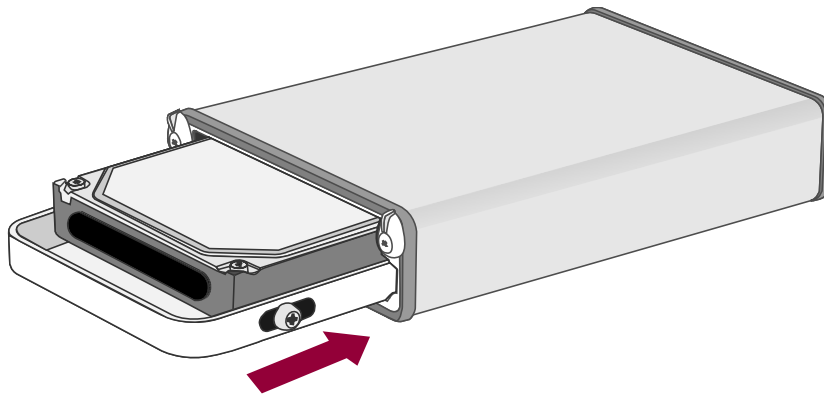
 The SmartGuider Package includes one hard drive handle and four auto-limiting segmented screws. The auto-limiting segmented screws are designed to prevent the hard drive and/or the handle from damages due to over-tightening. Furthermore, the SmartGuider design makes the handle slide easily without any tightness.


(Inserting the Hard Drive into the Enclosure)

5. Place the Enclosure with its open-back (side with the Twist Locks) facing you. Make sure the Twist Locks are in the “unlock” position (lined up with the edges of the casing).

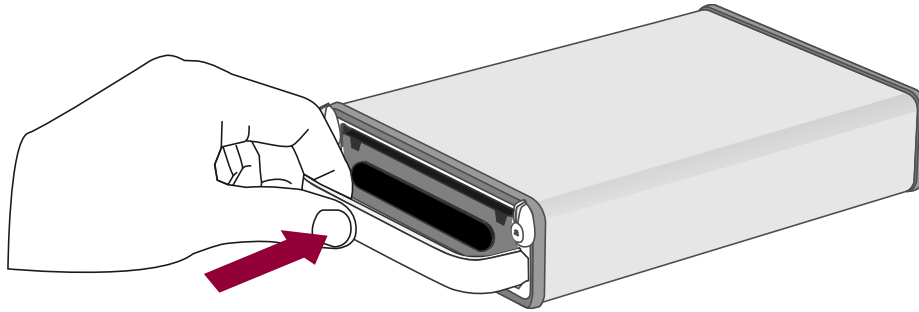


6. Hold the hard drive. Align the SmartGuider (with the hard drive) into the guide rails.

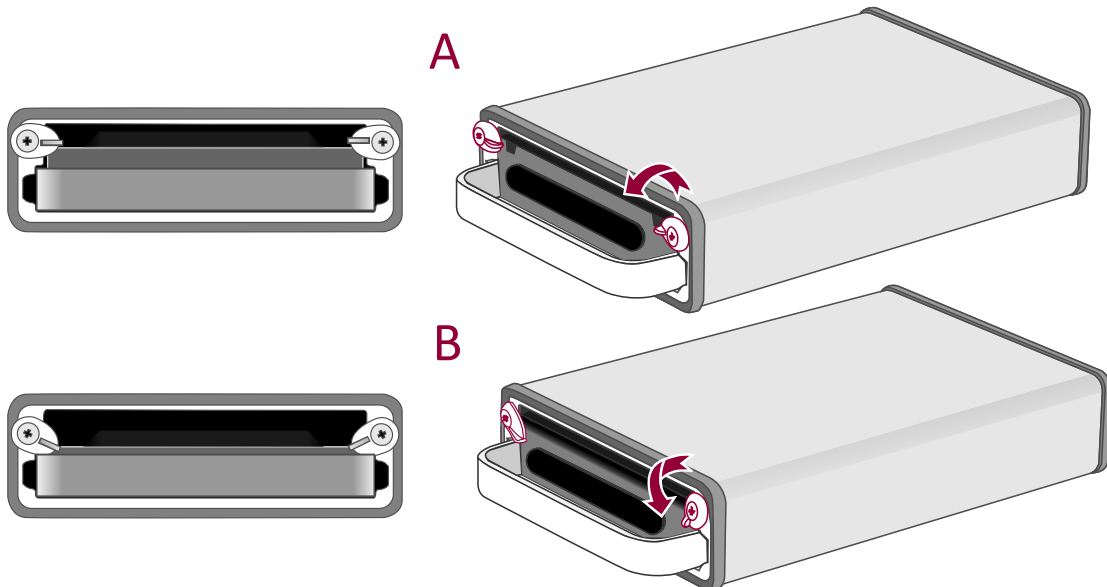


 The Thermal-Shield Pad must be placed on the hard drive before installation. When the hard drive is inserted on its reverse side, it won't be able to align and the hard drive cannot be inserted.

- Slide the hard drive into the Enclosure and firmly push forward until a “thump” sound is heard. Ensure that the connectors of the hard drive are properly attached to its receptacle inside the housing.

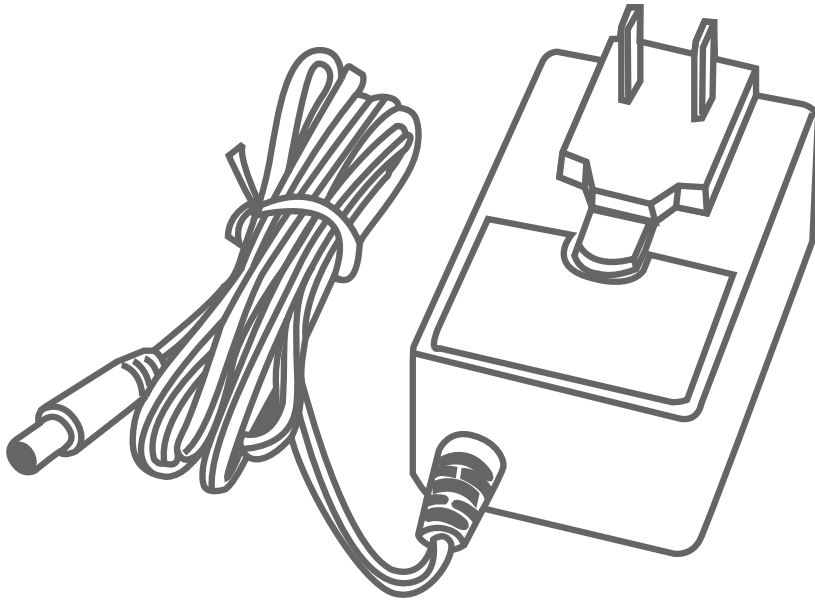


- For typical-sized hard drive, turn the Twist Locks inward 90 degrees (see option A). For smaller footprint hard drive, turn the Twist Locks inward around 140 degrees (see option B). Make sure the Twist Locks are in the “lock” position and securely hold the hard drive in place. Now, the Enclosure is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

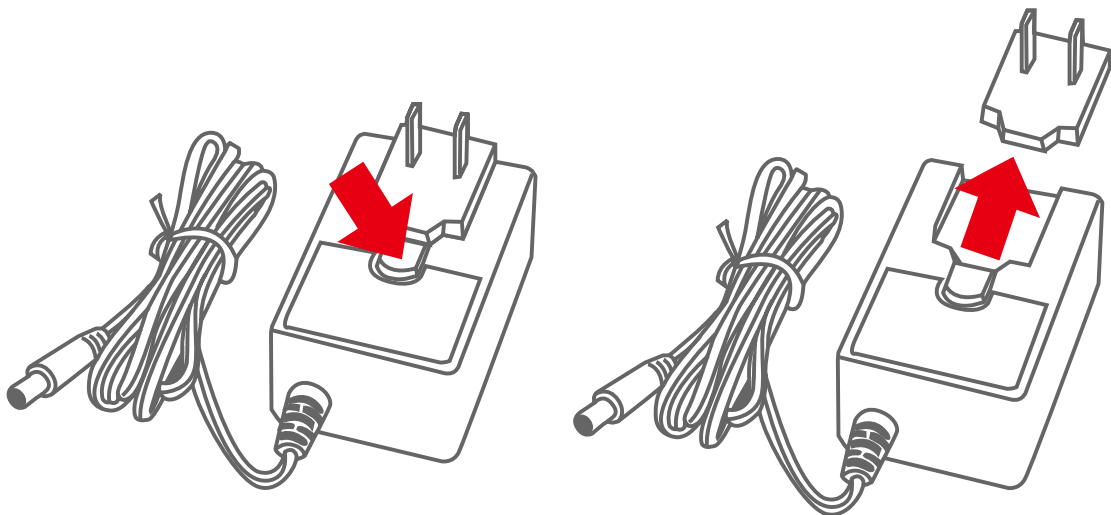


PUTTING ON & SWITCHING POWER PLUG ON AC/DC ADAPTER

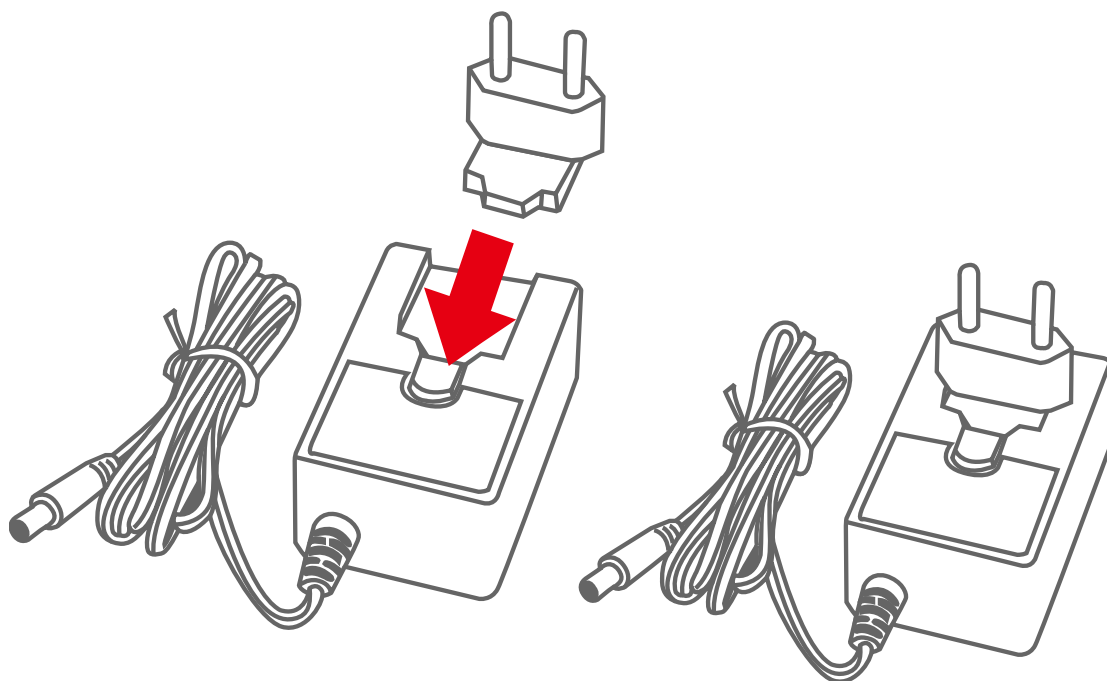
1. Find the AC/DC Adapter in the package. The package may include different types of plug heads vary by region.



2. Press the click release and slide the existing Power Plug from the AC/DC Adapter.




3. Slide the selected Power Plug onto the AC/DC adapter. Now, it is ready to be used!

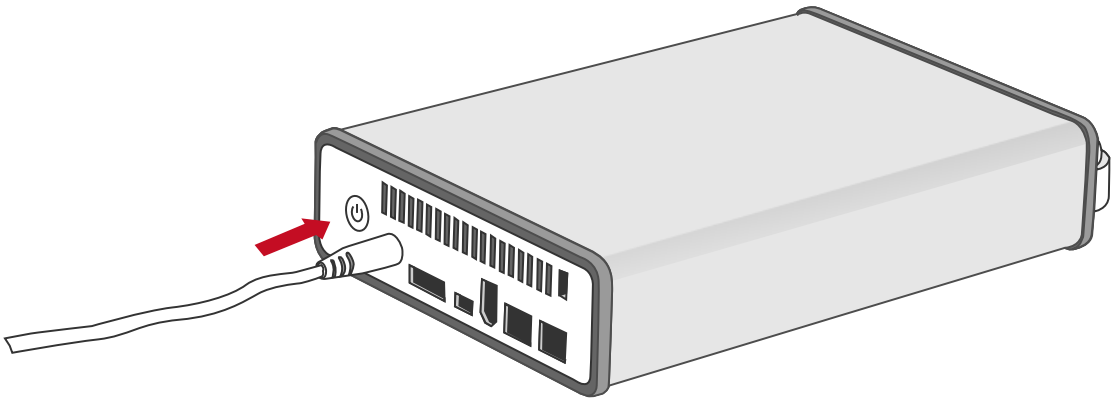


CONNECTING THE ENCLOSURE TO A COMPUTER

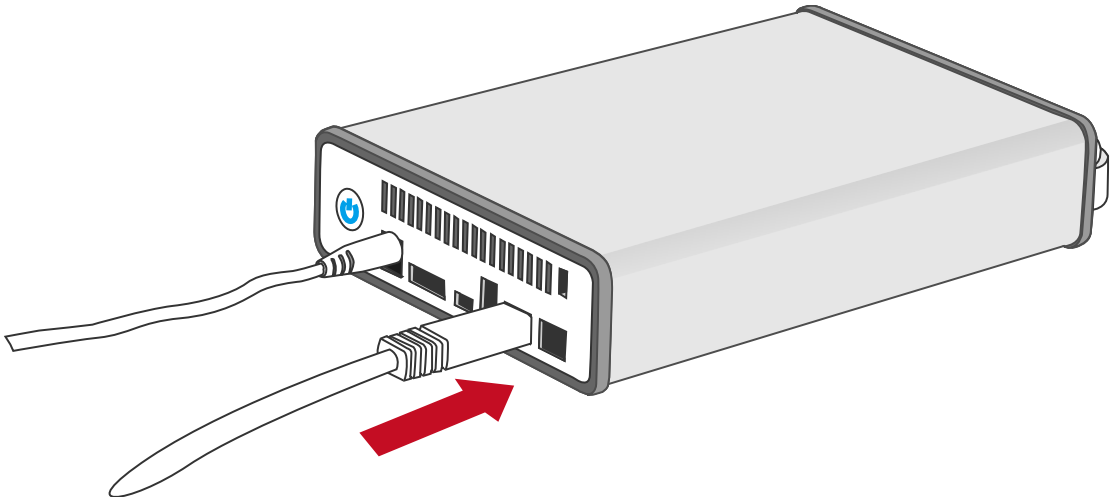
Complete the following steps to connect the Enclosure to a host computer.


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

1. Connect the AC/DC adapter to the Enclosure. Then, press ON the Power Button to ensure that the LED Indicator (Color BLUE) is active.

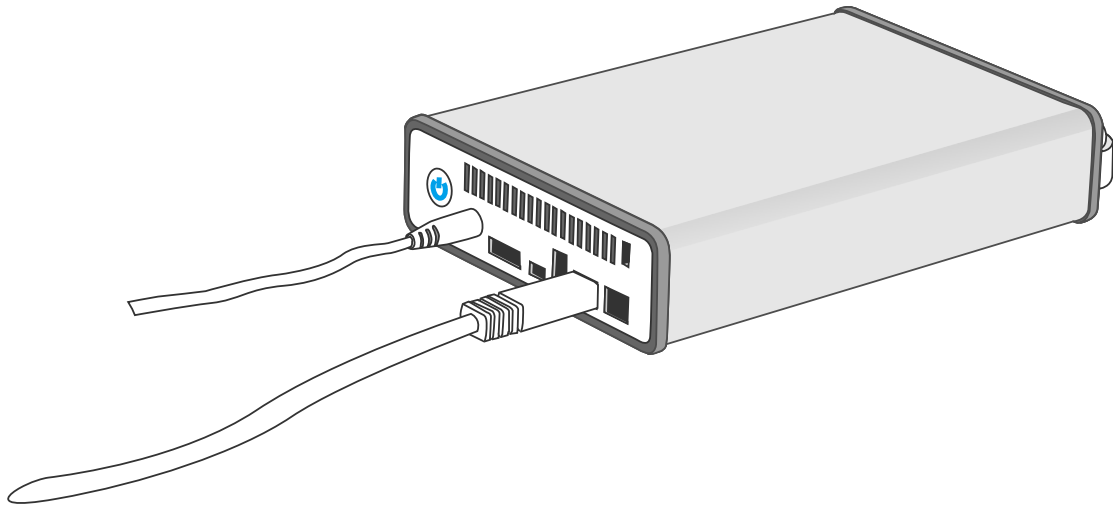


2. Insert the USB 2.0, eSATA, or FireWire 400/800 connector into the corresponding port of the Enclosure, and connect the cable to the host computer.



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

3. The External Hard Drive (the Enclosure with hard drive installed) should be detected by the host computer. When the hard drive is being accessed, the Power Button (LED Indicator) will flash in blue.

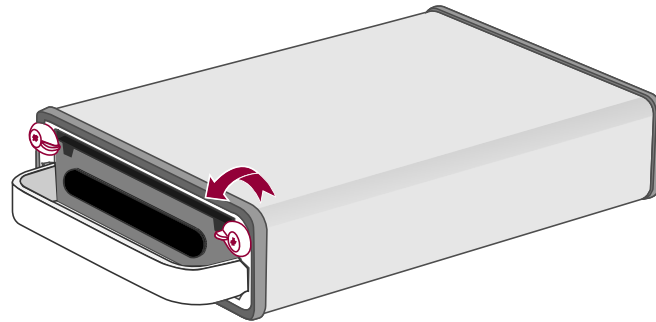


Connecting Multiple Devices

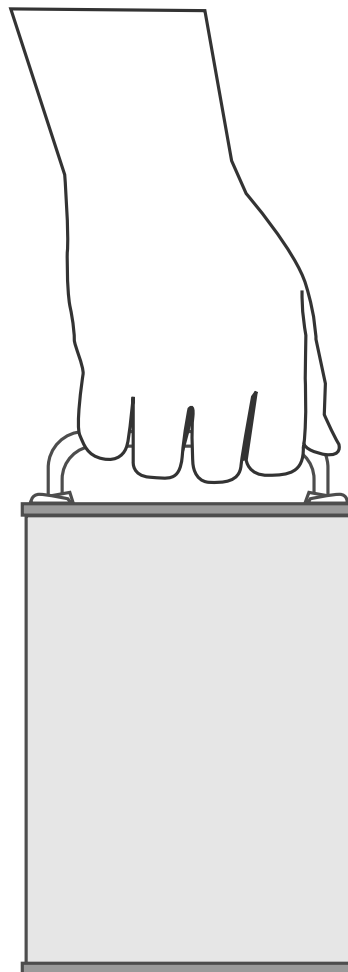
Using FireWire 400 or 800 to connect to the host, you can connect other computer hardware or digital devices to your Enclosure. This connection is called “Daisy Chain”. Items connected to the Enclosure may be such as digital video camera, another HDD, DVD writer, and much more. Since TQ-M12H has two FireWire 800 ports, it is highly recommended to use FireWire 800 to connect to the host, and Daisy Chain with another FireWire 800 connector to maximum speed transfer.

PORTABILITY WITH EASE & CONVENIENCE

1. Secure the hard drive position well with the Twist Locks to prevent the hard drive from falling out during travel or movement.



2. Now, the External Hard Drive is ready to be carried around 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, 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	CoreDuo	Yes	No	Yes	No
	Core2Duo Or Later	Yes	Yes	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

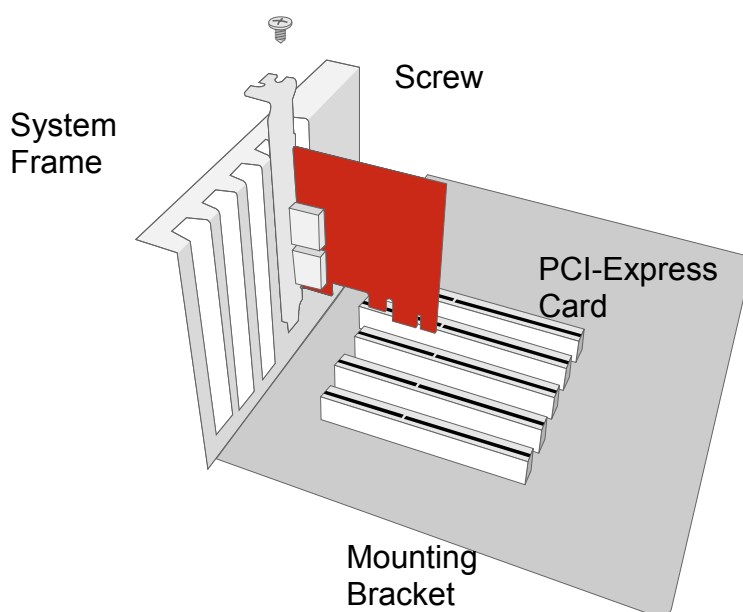
Complete the steps provided in this section to install the eSATA PCI Express Card to use with the Enclosure. The eSATA PCI Express Card provides a host computer with two Windows and Mac compatible eSATA ports.

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.

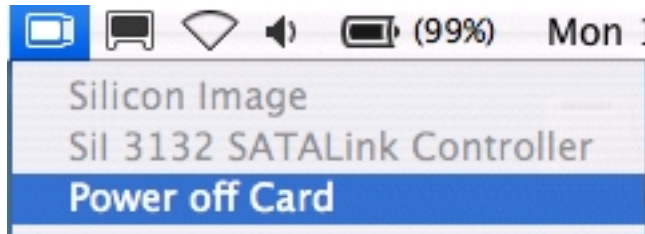
For Mac OS, insert the installation CD and locate the Mac driver installation file. Follow the provided instructions to complete the driver installation.



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

Verify Driver Installation

Mac OS:

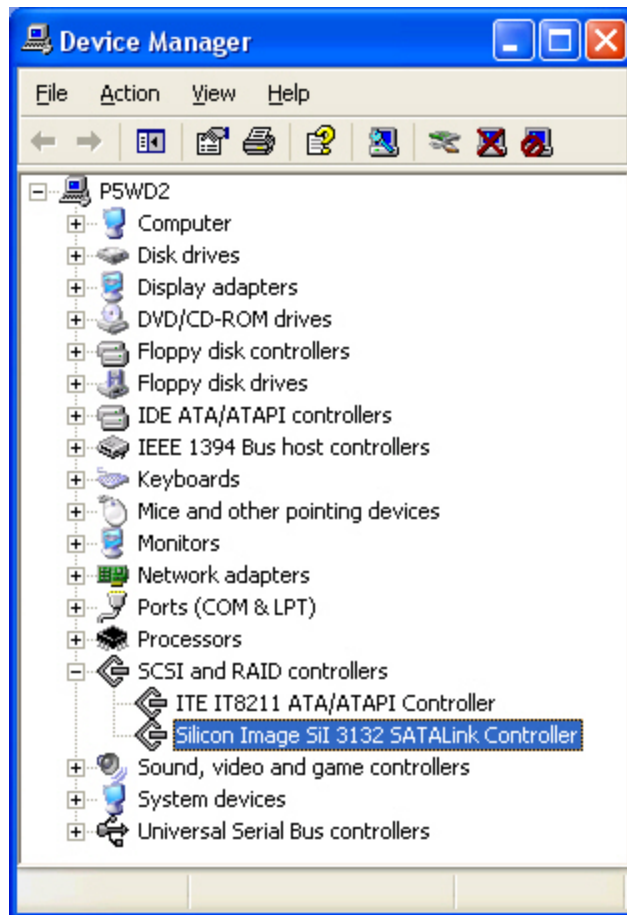


If a driver installation failure error message appears after restarting the computer, follow the recommendations provided in the error message.

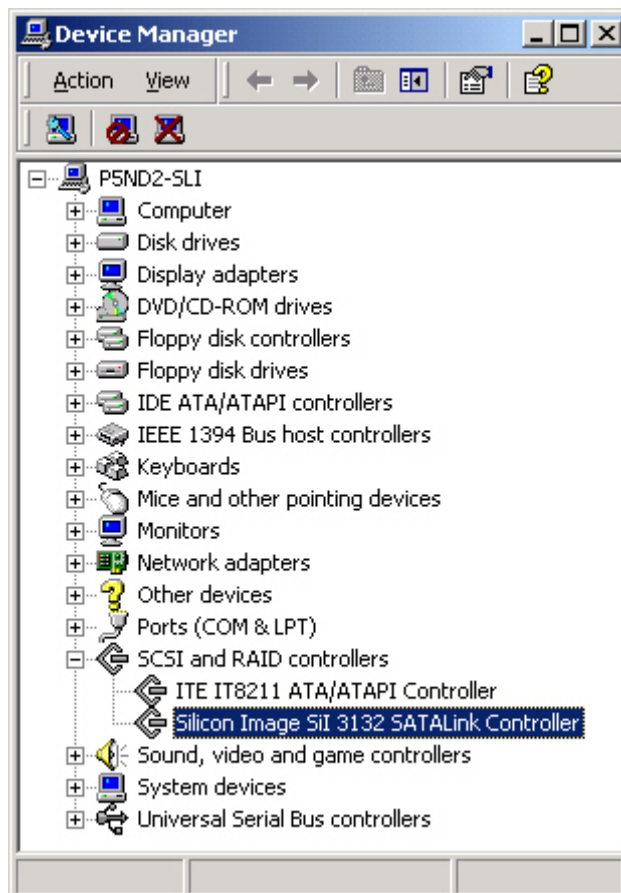
Windows OS:

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	TD-M11H
Connector	eSATA x 1, USB 2.0 x 1, 1394a x 1, 1394b x 2	eSATA x 1, USB 2.0 x 1
HDD Support	3.5" SATA HDD	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	eSATA: up to 3Gbit/sec USB 2.0: up to 480Mbit/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)	430 G	415 G
Certification	CE, FCC	CE, FCC



The 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 DataTale Portable Enclosure to access data from the individual drives while on travel. The SmartGuider* makes HDD installation as easy as 1-2-3.