

SuperSpeed USB 3.0 to Dual 3.5in SATA Trayless HDD Enclosure

SAT3520U3R



*actual product may vary from photos

DE: Bedienungsanleitung - de.startech.com

FR: Guide de l'utilisateur - fr.startech.com

ES: Guía del usuario - es.startech.com

IT: Guida per l'uso - it.startech.com

NL: Gebruiksaanwijzing - nl.startech.com

PT: Guia do usuário - pt.startech.com

For the most up-to-date information, please visit: www.startech.com

FCC Compliance Statement

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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of Trademarks, Registered Trademarks, and other Protected Names and Symbols

This manual may make reference to trademarks, registered trademarks, and other protected names and/or symbols of third-party companies not related in any way to StarTech.com. Where they occur these references are for illustrative purposes only and do not represent an endorsement of a product or service by StarTech.com, or an endorsement of the product(s) to which this manual applies by the third-party company in question. Regardless of any direct acknowledgement elsewhere in the body of this document, StarTech.com hereby acknowledges that all trademarks, registered trademarks, service marks, and other protected names and/or symbols contained in this manual and related documents are the property of their respective holders.

Table of Contents

Introduction	1
Packaging Contents	1
System Requirements.....	1
Front View	2
Rear View	2
Installation	3
Hardware Installation	3
Driver Installation.....	4
Using the Storage Device	5
RAID Modes.....	6
Specifications	7
Technical Support	8
Warranty Information	8

Introduction

The SAT3520U3R USB 3.0 to Dual 3.5in SATA Trayless Hard Drive Enclosure makes adding fast external storage easy, by turning any two 3.5in internal SATA hard drives into an external hard drive. Featuring a trayless system that eliminates having to mount and fasten the hard drive into the enclosure or tray, for quick and easy installation or removal.

Using the SuperSpeed USB 3.0 interface, which is up to 10 times faster than the previous USB 2.0, makes backing up and transferring large files faster than ever, while still being usable on older USB 2.0 systems. With built in RAID capabilities (0, 1, BIG, JBOD), the two drives can be combined for speed, redundancy or capacity or even left as separate drives for whatever your situation needs.

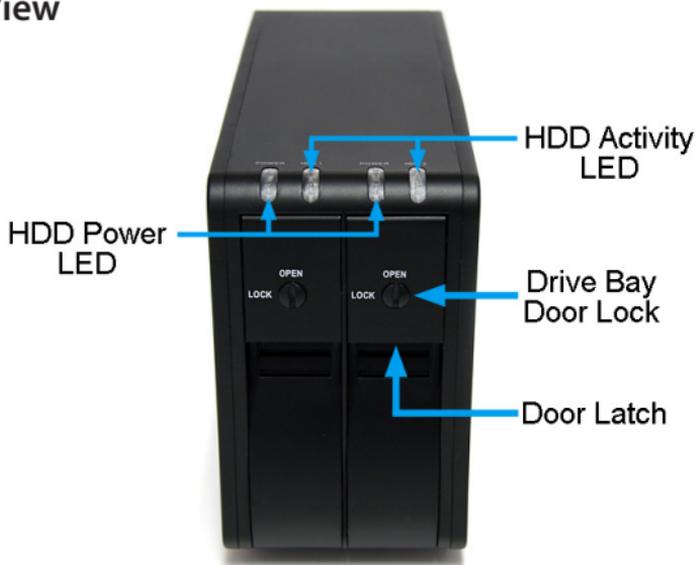
Packaging Contents

- 1 x Dual Drive SATA HDD Enclosure
- 1 x USB 3.0 Cable
- 1 x Universal Power Adapter
- 3 x Power Cord (NA/UK/EU)
- 1 x Instruction Manual

System Requirements

- USB enabled computer with available USB port
- Available AC electrical outlet
- Microsoft® Windows® 2000/XP/Server 2003/Vista/Server 2008 R2/7 (32/64-bit), or Apple® Mac OS® X, or Linux®

Front View



Rear View



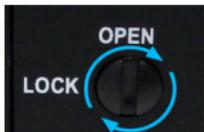
Installation



WARNING! Hard drives and storage enclosures require careful handling, especially when being transported. If you are not careful with your hard disk, lost data may result. Always handle your hard drive and storage device with caution. Be sure that you are properly grounded by wearing an anti-static strap when handling computer components or discharge yourself of any static electricity build-up by touching a large grounded metal surface (such as the computer case) for several seconds.

Hardware Installation

1. Turn the door lock for the drive bays clockwise to the OPEN position.

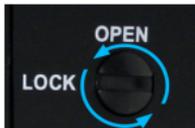


2. Pull the door latch forward and let the door swing open downwards.
3. Slide the bare 3.5in SATA hard drive into the bay, with the label side facing towards your left.
4. Once the SATA drive is almost fully inserted, close the door and make sure the door latch fully engages.



*installation photos for reference only

5. Turn the door lock counter clockwise to the LOCK position.



6. Once both SATA drives are installed, connect the external power adapter to the enclosure.
7. Press the power switch on the rear of the enclosure and the Power LED for both hard drives should light up solid.

8. Connect the USB 3.0 cable from the enclosure to the host computer system.

NOTE: A USB 2.0 cable can be used in place of the USB 3.0 cable, however the enclosure will only run at USB 2.0 speeds.

9. Select the RAID mode you wish to use with the slide switch on the rear of the enclosure and press the RESET button. See “**RAID Modes**” for more information.



10. Once the mode is set, the drive(s) will be detected by the operating system.

NOTE: If the enclosure has not been accessed for more than 5 minutes, the fan will turn off. Also, if the USB cable is not connected, or the host computer system goes into sleep/hibernation mode, the hard drive and fan will spin down.

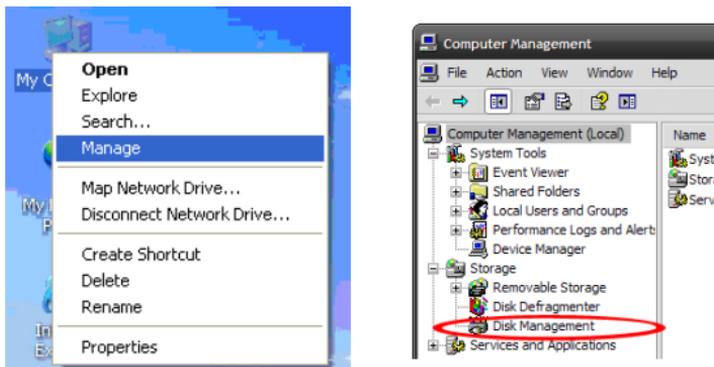
Driver Installation

No driver installation is required for the supported operating systems, as this hard drive dock is natively supported, so the drivers are already installed.

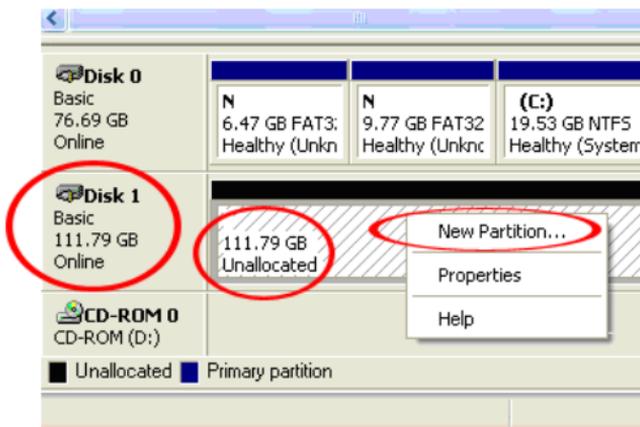
Using the Storage Device

Windows 2000/XP/Vista/7

If you are using brand new hard drives that do not contain any data, or after changing between RAID Modes, then you will first need to prepare the hard drive for use before you can write data to them. From the main desktop, right-click on “My Computer” (“Computer” in Vista/7), then select Manage. In the new Computer Management window, select Disk Management from the left window panel.



Locate the Disk that says it is “Unallocated” (check hard drive capacity to confirm it’s the correct hard drive) and then right-click in the section that says “Unallocated” and select “New Partition”.



RAID Modes

RAID Mode	Description
Normal	Normal (JBOD) leaves the hard drives as independent disks. The operating system will treat them each separately. Different sized hard drives can be used in this mode.
RAID 0	RAID 0 (Stripe) combines both hard drives into a single large disk array. Data is split in half evenly across each disk simultaneously. Read/write performance is increased as a result as is disk space, but failure of any one disk will result in permanent data loss. Identical hard drives must be used in this mode.
RAID 1	RAID 1 (Mirror) writes the same data to both hard drives, creating mirror copies. This provides redundancy in case one drive fails, but only provides one drive worth of storage space. Identical hard drives must be used in this mode.
BIG	BIG (Concatenation) combines (end-to-end) multiple hard drives into a single large disk. When one hard drive becomes full, data is then written to the second. The operating system will only see a single hard drive. This provides large amounts of storage space, but no performance or redundancy benefits. Different sized hard drives can be used in this mode.

1. To switch RAID modes, first power on the enclosure.
2. Connect to the host computer system with a USB cable.
3. Set the selector switch to the desired mode.
4. Press the "Reset" button and wait several seconds.
5. The new mode should now be set and detected by the host computer.

NOTE: After changing Modes, the new disk(s) will need to be formatted.



Rebuild Mode

In RAID1 mode, if one of the drives fail, the HDD LED will not light up. Replacing the drive, will cause the enclosure to automatically enter rebuild mode. The HDD LED will flash to indicate that the RAID1 array is being rebuilt. Depending on the size of the drives, this may take several hours to a full day.

Specifications

Number of Drive Bays	2
Host Interface	SuperSpeed USB 3.0
Chipset ID	JMicron JMS551
External Connectors	1 x USB 3.0 type B female 1 x DC Power
LEDs	2 x Drive Power 2 x Drive Activity
Fans	1 x 55mm
Maximum Data Transfer Rate	USB 3.0: 5 Gbps
Compatible Hard Drives	3.5in SATA hard drives
RAID Modes	0, 1, JBOD, BIG
Insertion Rating	15, 000 cycles
Power Adapter	12V DC, 3000 mA, center positive
Enclosure Material	Aluminum and Plastic
Operating Temperature	5°C ~ 80°C (41°F ~ 176°F)
Storage Temperature	-40°C ~ 70°C (-40°F ~ 158°F)
Humidity	8% ~ 90% RH
Dimensions	214.0mm x 82.5mm x 134.0mm
Weight	886g
Compatible Operating Systems	Windows 2000/XP/Server 2003/Vista/ Server 2008 R2/7 (32/64-bit), Mac OS X**, Linux

** If used with the Apple Mac OS operating system, this device will function in USB 2.0 mode only as Apple does not yet support USB 3.0

Technical Support

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit www.startech.com/support and access our comprehensive selection of online tools, documentation, and downloads.

For the latest drivers/software, please visit www.startech.com/downloads

Warranty Information

This product is backed by a two year warranty.

In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

Limitation of Liability

In no event shall the liability of StarTech.com Ltd. and StarTech.com USA LLP (or their officers, directors, employees or agents) for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of business, or any pecuniary loss, arising out of or related to the use of the product exceed the actual price paid for the product. Some states do not allow the exclusion or limitation of incidental or consequential damages. If such laws apply, the limitations or exclusions contained in this statement may not apply to you.

Hard-to-find made easy. At StarTech.com, that isn't a slogan. It's a promise.

StarTech.com is your one-stop source for every connectivity part you need. From the latest technology to legacy products — and all the parts that bridge the old and new — we can help you find the parts that connect your solutions.

We make it easy to locate the parts, and we quickly deliver them wherever they need to go. Just talk to one of our tech advisors or visit our website. You'll be connected to the products you need in no time.

Visit www.startech.com for complete information on all StarTech.com products and to access exclusive resources and time-saving tools.

StarTech.com is an ISO 9001 Registered manufacturer of connectivity and technology parts. StarTech.com was founded in 1985 and has operations in the United States, Canada, the United Kingdom and Taiwan servicing a worldwide market.