

2 Bay USB 3.0 RAID 3.5in HDD Enclosure

SAT3520U3SR



*actual product may vary from photos

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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.

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Introduction

The SAT3520U3SR USB 3.0 to Dual Bay 3.5" SATA External RAID Enclosure turns two 3.5" SATA (SATA I, SATA II, SATA III) hard drives into an external RAID array through a USB 3.0 connection. Large capacity drives (tested with up to 4TB per bay) can be used to greatly enhance your computer's storage/backup capabilities. Built-in support for multiple RAID modes (RAID 0, 1, JBOD) enables the enclosure to fit the role you most need; whether it's greater capacity or data redundancy. The drives can also be configured for non-RAID operation, so both drives remain independent. Compliant with the SuperSpeed USB 3.0 specification, which can provide up to 5 Gbps of data bandwidth (10x more than USB 2.0), large amounts of data can be transferred or streamed faster than before. Backward compatible with USB 2.0 however, this enclosure can still be used on older systems. The SAT3520U3SR is backed by a StarTech.com 2-year warranty and free lifetime technical support.

Packaging Contents

- 1x Dual Drive Enclosure
- 1x USB 3.0 Cable
- 1x Screw Kit
- 1x Plastic Stand
- 1x Universal Power Adapter
- 3x Power Adapter Plug (NA/EU/UK)
- 1x Instruction Manual

System Requirements

- USB 3.0 enabled computer system with available USB port
- AC electrical outlet
- Microsoft® Windows® XP/ Server 2003/ Server 2008 R2/ Vista/ 7/ 8 (32/64-bit), or Apple® Mac OS® X, or Linux®

Front View



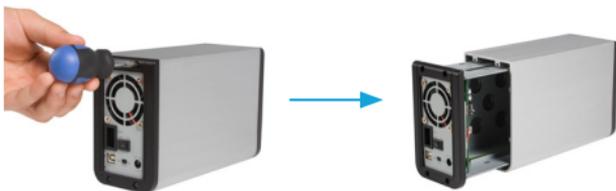
Back View



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.

1. Remove the four screws holding the rear panel in place (2x top edge, 2x bottom edge) then slide the entire rear panel assembly out from the enclosure.



*actual product may vary from photos

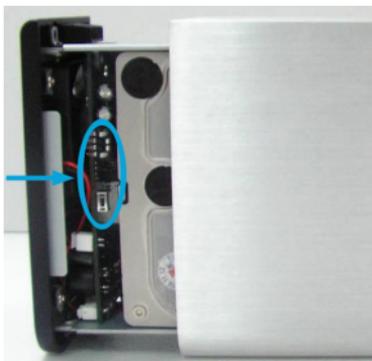
2. Place the first 3.5" SATA hard drive into the top drive bay, then slide it toward the rear panel until the drive interface is firmly connected to the SATA connector. Repeat this step with the second 3.5" SATA hard drive, using the remaining bay.



3. Secure the SATA drives to the frame, using the provided screws.



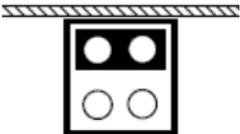
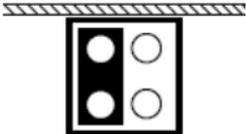
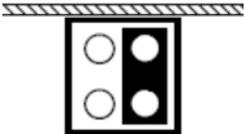
4. Select the operating mode for the enclosure using the Jumper located on the inside of the rear panel assemble (see section "RAID Mode" for details).



5. Once you have set the Mode Jumper to the desired RAID mode, connect the external power adapter to the rear panel assembly. Turn the enclosure on.
6. Wait at least several seconds for the enclosure to fully power up then press the Reset Button, located near the jumpers, to set the RAID mode.
7. Wait several seconds for the enclosure to initialize the RAID mode, then turn the enclosure off, and disconnect the external power adapter.
8. Reassemble the enclosure by sliding the rear panel assembly back into the enclosure casing.
9. Fasten the rear panel by replacing the 4 screws removed in Step 1.

RAID Mode

The enclosure can be configured to operate in one of three modes (Normal/JBOD, RAID 0, RAID 1). Switching between the different modes is accomplished through the jumper and reset button located on the inside of the enclosure.

Mode	Jumper Position	Description
Normal		<p>Normal (JBOD) leaves the hard drives as independent disks. The operating system will treat them each separately.</p> <p>Different sized hard drives can be used in this mode.</p>
RAID 0		<p>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 capacity, but failure of any one disk will result in permanent and total data loss.</p> <p>Identical hard drives must be used in this mode.</p>
RAID 1		<p>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.</p> <p>Identical hard drives must be used in this mode.</p>

Changing Modes

1. Disassemble the enclosure so you can access the internal jumper and reset button on the drive bay cage.
2. Set the jumper to the desired mode.
3. Power on the enclosure and press the reset button.

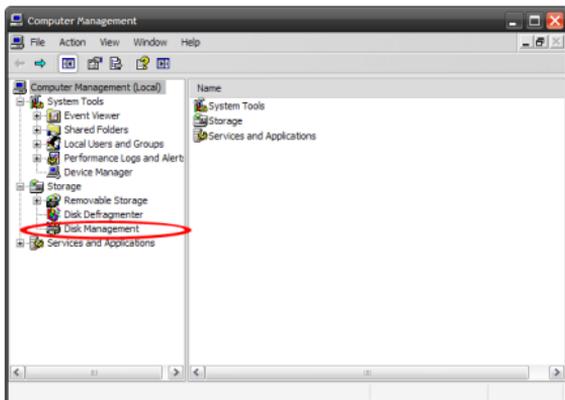
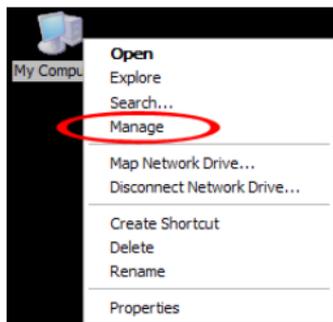
Rebuild Mode

In RAID1 mode, if one of the drives fails the HDD LED will not light up. Replacing the drive, will cause the enclosure to automatically enter rebuild mode when connected to a host computer. The HDD LEDs will flash at different rates 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 or more.

Using the Storage Device

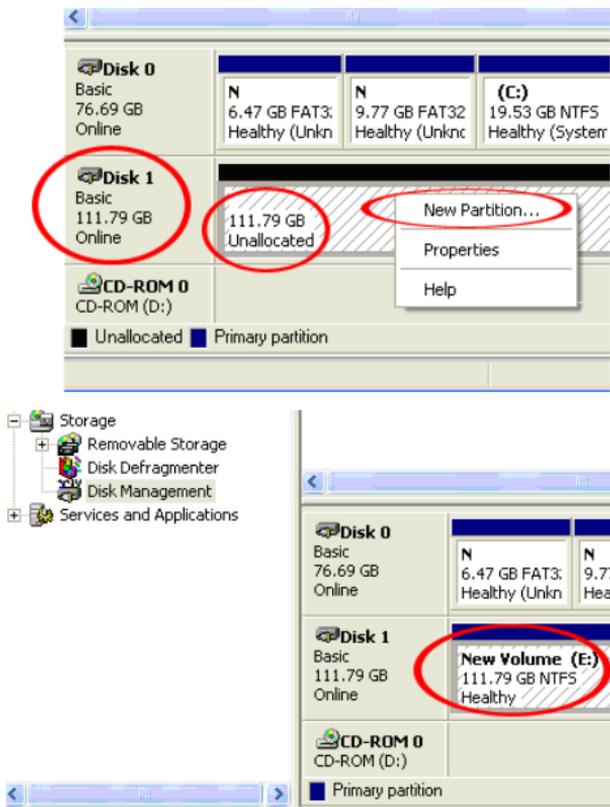
Windows XP/Vista/7/8

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/7/8), 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”.

The New Partition Wizard will appear. Follow the instructions in the wizard to complete setting up the drive. Once complete, the Disk should show up as “Healthy” with a drive letter assigned (i.e. E:). This drive letter should now appear within My Computer.



If you are installing a hard drive that already has data on it, then after plugging it in, the drive should automatically show up with a drive letter assigned within My Computer.

Specifications

Number of Drive Bays	2
Host Interface	USB 3.0 SATA revision 2.x
Chipset ID	Asmedia ASM1051 Silicon Image SiI5923
External Connectors	1 x USB 3.0 type B female 1 x DC Power
LEDs	1 x Power 2 x Drive Power/Activity
Compatible Hard Drive Type	3.5" SATA hard drives
Fans	1 x 50mm
Maximum Data Bandwidth	USB 3.0: 5 Gbps
Raid	0, 1, JBOD
Enclosure Material	Aluminum and Plastic
Power Adapter	12V DC, 3000mA, center positive
Operating Temperature	0°C ~ 70°C (32°F ~ 158°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)
Humidity	10% ~ 90% RH
Dimensions	192.0mm x 75.0mm x 125.0mm
Weight	1280g
Compatible Operating Systems	Windows XP/ Server 2003/ Server 2008 R2/ Vista/ 7/ 8 (32/64-bit), Mac OS X (*USB 2.0 mode only), Linux

Technical Support

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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.

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