Dual 3.5" SATA Hard Drive Enclosure

ESATCASE2
SATCASE2U2
SATCASE2U2R

Instruction Manual

Actual product may vary from photo

StarTech.com
The Professionals' Source for Hard-to-Find Computer Parts

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

Thank for purchasing a StarTech.com Dual Hard Drive Enclosure. Featuring a sturdy aluminum casing to protect stored drives and provide maximum heat dissipation, this product is the perfect storage solution for RAID applications, or configurations requiring large storage capacity.

Features

- Hot swappable
- Driverless installation
- Sturdy aluminum casing
- Cooling fan

Before You Begin

System Requirements

ESATCASE2:

- Pentium-based computer with available eSATA connection
- An available power receptacle
- SATA/SATA 2.0 hard drives

SATCASE2U2:

- Pentium-based computer with available USB/USB 2.0 connection
- An available power receptacle
- SATA/SATA 2.0 hard drives

SATCASE2U2R:

- Pentium-based computer with available USB/USB 2.0 connection
- An available power receptacle
- SATA/SATA 2.0 hard drives

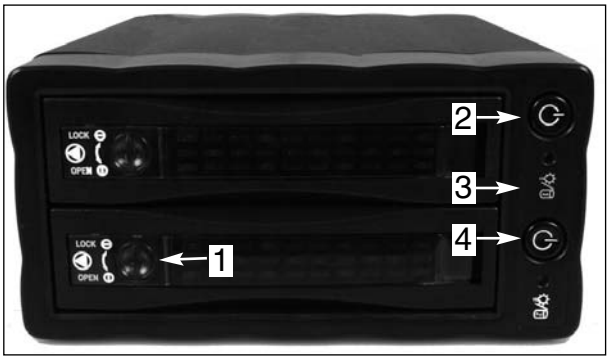
Contents

This package should contain:

- Dual Hard Drive Enclosure (1)
- eSATA cable (2) (**ESATCASE2** only)
- USB cable (2) (**SATCASE2U2 and SATCASE2U2R only**)
- Power adapter (1) (2pc.)
- Driver CD (For Windows 98 installation)

Hardware Guide

Front Panel



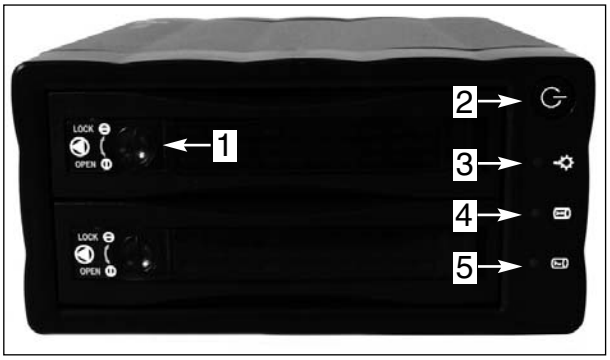
ESATCASE2:

1 - Locking Dial & Button

2 - Power Button (HDD 1)

3 - Power/Access LED

4- Power Button (HDD 2)



SATCASE2U2:

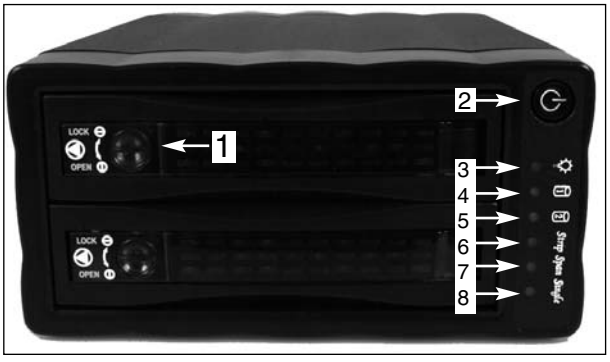
1 - Locking Dial & Button

2 - Power Button

3 - Power LED

4 - Activity LED (HDD 1)

5 - Activity LED (HDD 2)



SATCASE2U2R:

1 - Locking Dial & Button

2 - Power Button

3 - Power LED

4 - Activity LED (HDD 1)

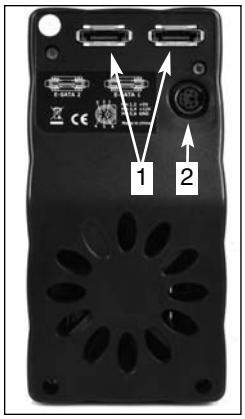
5 - Activity LED (HDD 2)

6 - Striping Mode LED

7 - Spanning Mode LED

8 - Single Mode LED

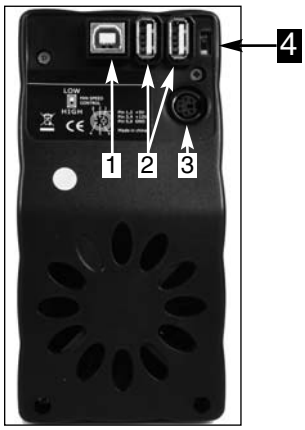
Rear Panel



ESATCASE2:

1 - eSATA Ports (x2)

2 - 5V/12V Power port



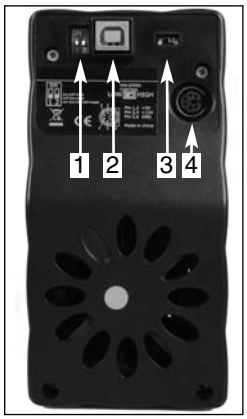
SATCASE2U2:

1 - USB Type 'B' Port

2 - USB Hub (2x USB Type 'A')

3 - 5V/12V Power port

4 - Fan Setting Switch (High and Low RPM Settings)



SATCASE2U2R:

1 - RAID Setting Dip Switch

2 - USB Type 'B' Port

3 - Fan Setting Switch (High and Low RPM Settings)

4 - 5V/12V Power port

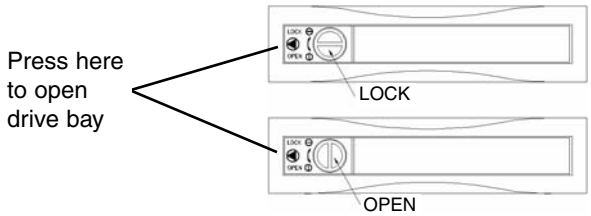
Installation

Hard Drive installation

To ensure a quick and easy device installation, please read through this section carefully before attempting to install the device.

WARNING! Hard drives, like all computer equipment, can be severely damaged by static electricity.

1. To remove the drive tray(s) from the enclosure: Turn the locking dial to the **OPEN** position (counter-clockwise). Following this, press on the button to open the locking arm:



2. Once the locking arm is open, pull the hard drive tray out of the enclosure.

3. Place the hard drive you wish to install in the tray (label side up), aligning the mounting holes located on the bottom of the drive with the mounting holes located on the bottom of the tray.

4. Fasten the drive to the tray using the provided screws.

5. Insert the drive tray (containing the hard drive) into the slot made available in step 2. Close the locking arm, until you hear a click.

6. **Optional**: To secure the drive tray in the enclosure, turn the locking dial to the **LOCK** position (clockwise).

7. To add a second drive, follow steps 1-6, using the remaining (empty) drive tray.

Connecting the drive enclosure to a computer

ESATCASE2

Note: Please do not connect SATCASE2U2R to the host computer, until initial RAID configuration is complete. For further instructions, please refer to **SATCASE2U2R - Setting up the RAID function**.

To connect the drive enclosure to a host computer, connect one end of an eSATA cable, to the eSATA port located on the rear panel of the drive enclosure. Connect the remaining end of the eSATA cable to an available eSATA port on your host computer.

SATCASE2U2

To connect the drive enclosure to a host computer, insert the USB Type 'B' connector into the port provided on the rear panel of the enclosure. Connect the remaining end of the USB cable to an available USB port on your host computer.

Connecting the drive enclosure to a power source

1. The included power supply is comprised of two components. Connect the two components, by inserting the female power plug into the main adapter.

2. Insert the male power plug into an available power receptacle.

3. Insert the remaining 7-pin, 5V/12V power connector to the power port, on the rear panel of the enclosure.

Using the newly installed drive(s)

Once the drives have been installed in the enclosure, and the enclosure is connected to a host computer, power the individual drives by pressing the power switch for the drive you wish to access. This will enable the computer to use the drive, as though it were installed directly in the computer. When the drive is powered, the POWER LED will illuminate.

To shut down power to the drive, simply press and release the power button. Upon doing so, the power LED will no longer be illuminated.

SATCASE2U2R

Setting up the RAID function

Once the drives have been suitably mounted in the enclosure and have been powered on, automatic RAID configuration will begin based on the dip switch settings on the rear panel. **Note:** Please power on the RAID enclosure, prior to connecting to the host computer, to ensure that RAID has been built before connecting.

The following chart illustrates available dip switch combinations, and the resulting RAID functions:

Mode	1	2
Strip	On	Off
Span	Off	On
Single	On	On
Single	Off	Off

Once the RAID configuration has completed, connect the enclosure to the host computer in order to format the RAID built drives. Once the drives have been formatted, they are ready for use.

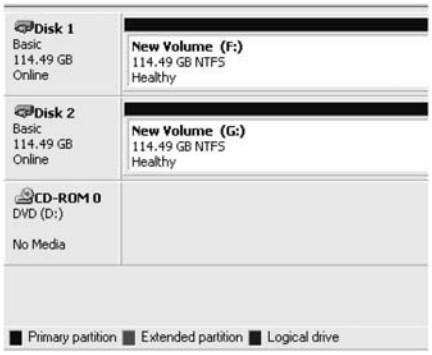
Single mode (JBOD)

To configure the installed drives as Single drives, please ensure that both dip switches are set to either the **ON** or **OFF** position (Factory default).

To format the drives:

1. Right-click on **My Computer**, and left-click on **Manage**.

2. Double-click on **Storage,** then double-click on **Disk Management** to view the attached drives, which will appear as follows. Right-click on each drive, and format accordingly:



Removing installed drives from the enclosure

Please note: Removing a hard drive from the enclosure while the drive is busy, can result in lost data. To remove one of the drives, please open the **Safely Remove Hardware** icon located in the taskbar, which will launch the following screen. Highlight the drive you wish to remove, and click on the **Stop** button:

Once the drive has been stopped:

1. Turn the locking dial covering the drive you wish to remove, to the **OPEN** position.

2. Press the lock button until the locking arm swings open.

3. Gently pull the drive out of the enclosure.

Striping (Strip) Mode

Warning: Please backup any original data prior to building your RAID configuration, as all data wil be lost due to format.

To configure your drives for RAID 0, please set the dip switches accordingly, based on the chart on **page 5**. Turn on the enclosure for the RAID to automatically be built.

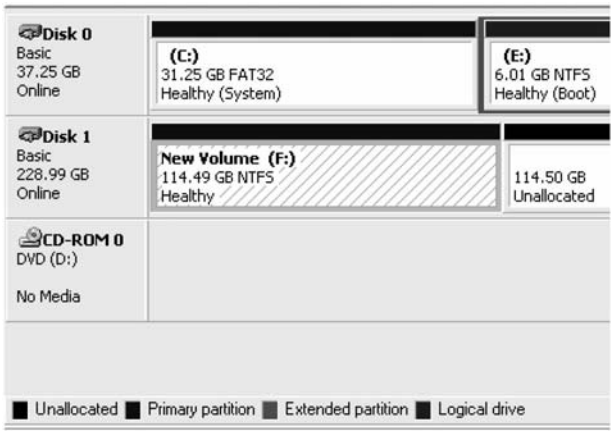
Once the RAID has been built, turn off both disks using the main power button on the enclosure. Once the drives have been powered down, connect the enclosure to the host computer using the USB cable provided. Following connection, restore power to the enclosure and format the drives,

1. Right-click on **My Computer**

2. Left-click on **Manage**.

3. Double-click on **Storage,** then double-click on **Disk Management** to view the attached drives, which will appear as follows. Right-click on each drive, and format accordingly:

Note: RAID has been configured to include both drives as a single drive. Please remove any existing partitions.

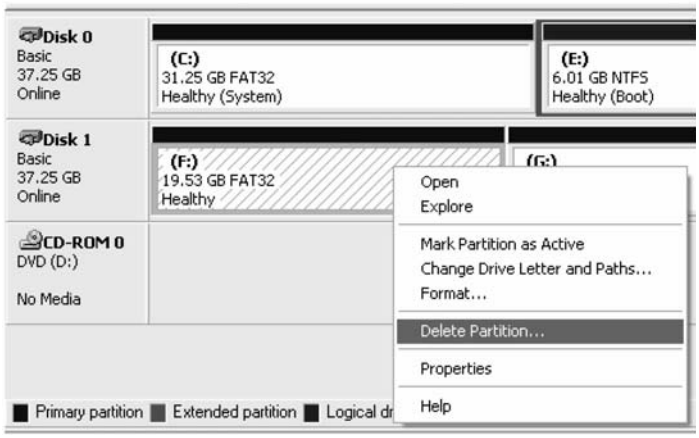


RAID 0 rebuilds both hard drives into a single, double-sized drive. With this type of RAID configuration, if one drive fails, the entire RAID build will crash. However, as data storage is spread over both hard disks, performance is much faster than on a standard, single disk configuration.

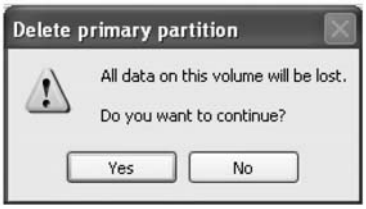
Please note: For optimum performance, it is strongly recommended that two identical hard drives are used. If the two drives are not the same size, RAID can only be built to a

capacity equal to twice the size of the smaller drive (i.e. if a 200GB hard and 100 GB hard drive are used, the total capacity of the RAID build will equal 200GB).

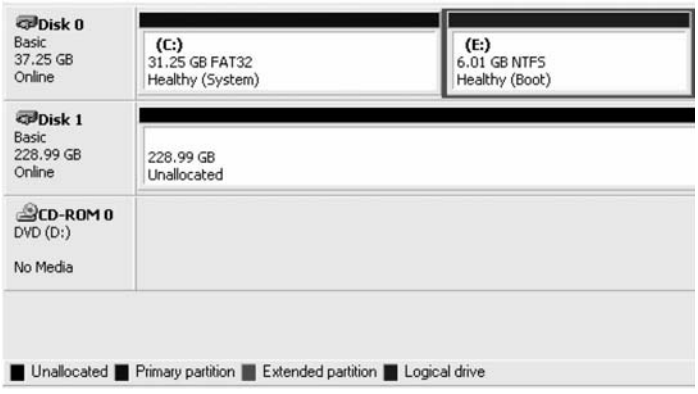
To delete any existing partitions (from within **Disk Management**), right-click on the drive you wish to modify, and select **Delete Partition**:



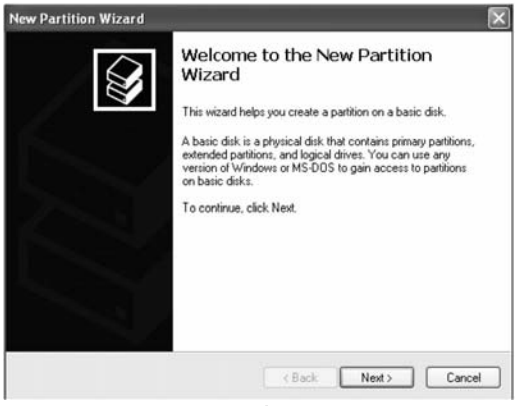
Note: all data will be lost from the partitioned space, upon deletion:



Click '**Yes**' to combine both drives into a single, larger drive.

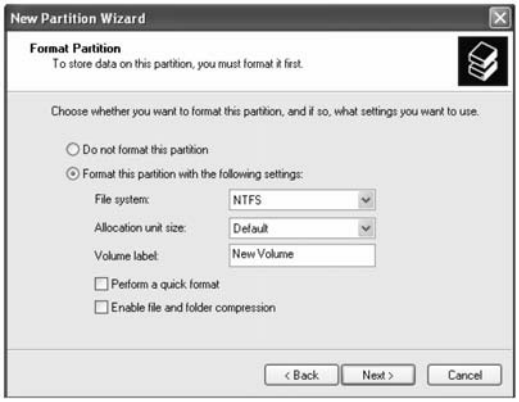


Once the drives have been combined, a new partition will need to be created. Right-click on the unallocated space, and select **New Partition** to launch the **New Partition Wizard**:

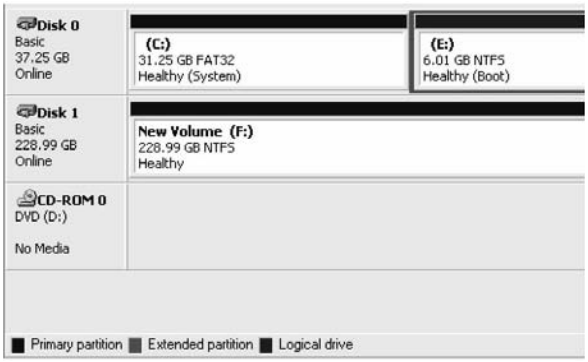


Select the partition type, and click next.

Set the HDD size and partition type, then Click **Next**:



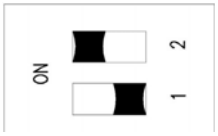
Once the RAID set has been built, it should appear as follows, in **Disk Management**. Note that the two individual drives have been combined:



Spanning (SPAN) Mode

Spanning Mode offers no fault tolerance, and no redundancy. If either hard drive fails, the Span function will fail. Span HDD capacity is equivalent to the total of the two hard disks.

To select JBOD, please set dip switch 1 to the **OFF** position, and switch 2 to the **ON** position:



Please note: Changing dip switch settings while RAID is being built, or is working can result in data loss/damage.

Specifications

SATCASE2U2

Regulatory Certifications	CE, ROHS
Data Transfer Rate (Max.)	480Mbps
Product Dimensions	200x149x70mm (7.9 x 5.9 x 2.8”)
Connectors	USB Type ‘B’ Port (1) USB Hub (2x USB Type ‘A’) 5V/12V Power port
Interface	SATA /150, SATA II /300

ESATCASE2

Regulatory Certifications	CE, ROHS
Data Transfer Rate (Max.)	**SATA /150**: 150Mbps **SATA /300**: 300Mbps
Chipset	Oxford 921DS
Product Dimension	200x149x70mm (7.9 x 5.9 x 2.8”)
Connectors	eSATA (2) 5V/12V Power port (1)
Interface	SATA /150, SATA II /300

SATCASE2U2R

Regulatory Certifications	CE, ROHS
Data Transfer Rate (Max.)	480Mbps
Chipset	Oxford 921DS
Product Dimensions	200x149x70mm (7.9 x 5.9 x 2.8”)
Connectors	USB Type ‘B’ Port (1) 5V/12V Power port
Interface	SATA /150, SATA II /300

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.

Warranty Information

This product is backed by a one-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.

About StarTech.com

StarTech.com is “The Professionals’ Source for Hard-to-Find Computer Parts”. Since 1985, we have been providing IT professionals with the quality products they need to complete their solutions. We offer an unmatched selection of computer parts, cables, server management solutions and A/V products and serve a worldwide market through our locations in the United States, Canada, the United Kingdom and Taiwan.

Visit **www.startech.com** for complete information about all our products and to access exclusive interactive tools such as the Parts Finder and the KVM Reference Guide. StarTech.com makes it easy to complete almost any IT solution. Find out for yourself why our products lead the industry in performance, support, and value.

Revised: 15 March 2007 (Rev. A)