Hamlet

2BAY RAID SYSTEM USB 3.0 MOBILE

RAID Enclosure for Two 2.5” SATA Hard Drives

USER MANUAL

HXDAS25

www.hamletcom.com

Dear Customer,
thanks for choosing an Hamlet product. Please carefully follow the instructions for its use and maintenance and, once this item has run its life span, we kindly ask You to dispose of it in an environmentally friendly way, by putting it in the separate bins for electrical/electronic waste, or to bring it back to your retailer who will collect it for free.

We inform You this product is manufactured with materials and components in compliance with RoHS Directive 2011/65/EU (2002/95/CE); WEEE Directive 2002/96/CE, 2003/108/CE Italian Legislative Decree 2005/151 and EMC Directive 2004/108/EC for the following standards:
EN 55022: 2010
EN 61000-3-2: 2006 + A1: 2009 + A2: 2009
EN 61000-3-3: 2008
EN 55024: 2010

CE

The complete CE declaration of conformity of the product can be obtained by contacting Hamlet at info@hamletcom.com.
The information on the importer for your country can be found in the "About Us" section of the Hamlet website at www.hamletcom.com.

Trademarks and changes

All trademarks and company names mentioned in this manual are used for description purpose only and remain property of their respective owners.
The material in this document is for information only and subject to change without notice.

Introduction

Features

- Supports JBOD, RAID0,RAID1,Normal mode
- Enhanced data protection and high-performances storage
- Support with USB3.0 high speed reach up to 5.0Gbps
- Supports Plug-play and Hot-plug
- Support mode select by RAID switch

Specifications

- Inner Interface: SATA
- Outer Interface: USB3.0
- Date Transfer rate: Support USB 3.0 super-speed (5Gbps)
- Complies with USB 2.0 high speed (480Mbps), USB 1.1 Low speed (1.5Mbps)
- Suitability: 2 x 2.5" SATA HDD
- Supports Plug-play and Hot-plug
- Power Supply: DC5V supplied by the Computer
- Material: Aluminum
- OS Compatibility: Windows XP/Vista/7/8,Linux and Mac OS 10.4 or above
- Dimension: 139.5 x 88 x 35 mm (L x W x H)

System Requirements

- Minimum Pentium II/50MHz or Apple G4 processor
- Minimum 64MB RAM
- Windows XP/VISTA/7/8, Mac OS 10.4 and above
- One available USB port

Supported Hard Drives

- One or two 2.5" SATA I/II hard drives (1.5/3.0 Gbps)
- Capacity up to 1TB x2
- Hard drives of identical capacities are recommended
- Supports large volumes in excess of 2TB

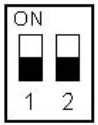
Package Contents

- Dual bay enclosure 2.5”
- USB 3.0 cable
- USB power cable
- Manual
- Screws & screw driver

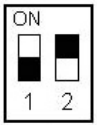
Setting the RAID Mode

RAID (Redundant Array of Independent Disks) is a set of technology standards for teaming disk drives to improve fault tolerance and performance.
The RAID mode should be set before installing the drives and then first formatting the drives.

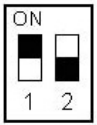
1. Make sure the power is off.
2. Set the RAID switch and select your preferred RAID mode. There have 2 mode switch in the inner of the product, it can form 4 kinds of different ways through these 2 switches, it can realize 4 kinds of different functions as below.



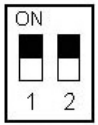
Normal Mode
[OFF/OFF]



BIG Mode
[OFF/ON]



RAID0 Mode
[ON/OFF]



RAID1 Mode
[ON/ON]

3. Install the hard drives as illustrated in the next pages.
4. Connect the device to the computer USB 3.0 port, HDD LED should turn ON to indicate the hard drives were detected.
5. Format the drives.

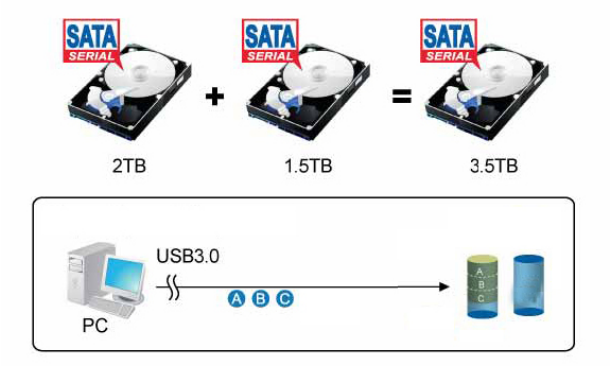
Note: Changing the RAID mode will require you to re-format the drivers. Make sure to backup all existing data first.

Normal Mode (Non-Raid)

Normal mode, it's the default setting of HDD enclosure, and will not use any RAID mode. In Normal condition, both of the two hard disk mode inside the enclosure are in independent operation state, and also will be identified as the two separate hearts in the system, users can choose any hard drive for storing files. If one piece of hard disk is damaged, the other piece of hard disk data would not be influenced.

BIG Mode (JBOD/Spanning)

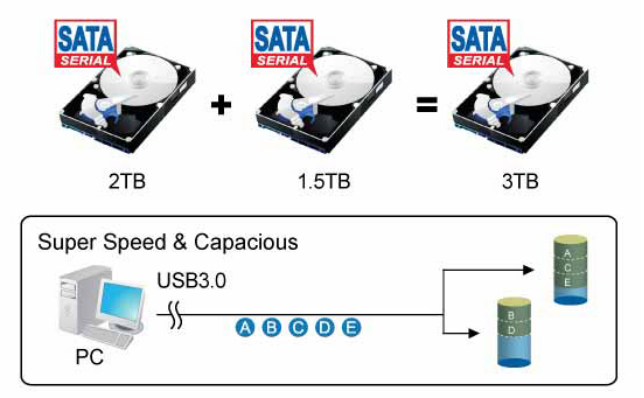
In JBOD mode two hard disk will simply be bound for one, the merger hard drive performance will be same as single hard disk. The total capacity of the portable hard disk equal to the sum of two hard drive capacity. In this mode the system starts to storage from the first disk and switches to the second hard drive when the storage space of the first disk is. If one of the two HDDs appears damaged, then all of the data in the two hard disk will be lost.



FAST Mode (RAID 0/Striping)

FAST mode it's also our familiar RAID 0 mode. In RAID 0 state, data storage is divided into two parts, respectively in two hard disk storage, then the theory storage speed of hard disk is twice the one of single block hard disk.

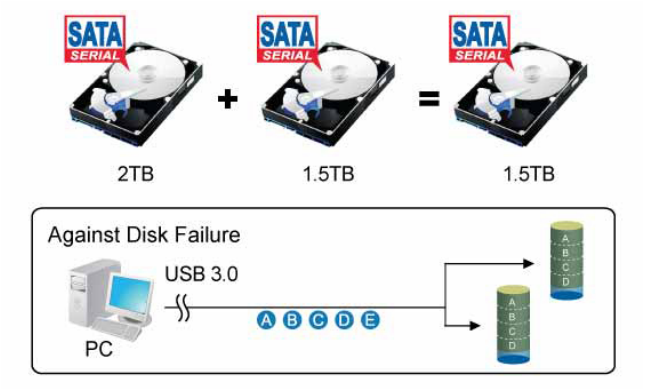
The actual capacity equals to twice the smaller capacity of the one hard drive (between the two hard disk). The deficiency of RAID 0 is that any piece of hard disk is failure, the whole RAID on data will not be restored.



SAFE Mode (RAID 1/Mirroring)

Safe mode is RAID 1 mode. In this state, two hard drives are closely mirrored. The actual capacity of portable hard drive equals to the smaller capacity one, storage speed is same.as a single block of hard disk. The advantage of RAID 1 lies that any piece of hard disk stored data losing, others can not lose, its weakness is the capacity loss of hard drive is bigger.

For this reason the RAID 1 mode is the ideal storage solution for very important material such as databases or personal data.

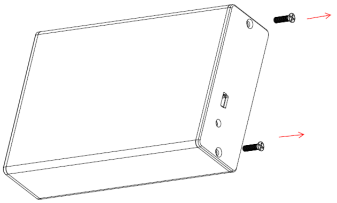


System Setup

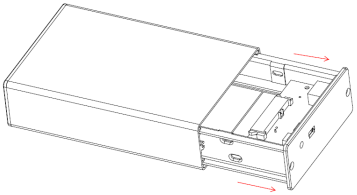
Hard Drive Installation

Follow the instruction below to install the hard drives.

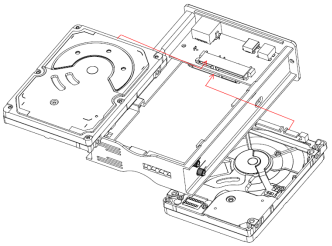
1. Take out the two screws on the rear panel.



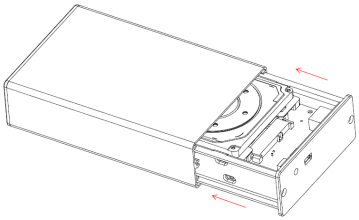
2. Pull out the inner HDD tray from the aluminum shell.



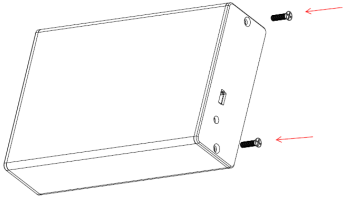
3. Insert the HDDs into the 7+15P SATA connectors on the corresponding PCBA. Fix the HDDs by HDD buckle.



4. Insert the inner HDD tray back into the aluminum housing.



5. Close the rear cover. The HDDs installation is now completed.



Connect to computer

1. Connect the mini USB end of the USB cable into the mini USB port of the HDD enclosure.
2. Connect the other end of the USB cable (type A) into any active USB port of the computer.
3. Connect the USB power cable to the enclosure and into an available USB port of the computer.
4. Let OS search and install the driver automatically.
5. Use the disk management tool (PC) or disk utility (Mac) to create a new partition and format the drives.
6. Open “My Computer” to see your external hard drive ready to use.

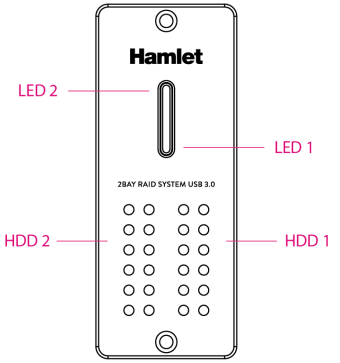
Note:
To enjoy USB 3.0 super speed up to 5Gbps,your computer must be equipped with built-in USB 3.0 ports or a USB 3.0 host PCI-e card. You should use the included USB DC power cable to provide extra power.

It is not possible to add more drives to an existing RAID array without re-formatting it. When adding additional drivers at a later point, they will only be detected after the device has been restarted and the drivers have been re-formatted.

Replacing Hard Drives

When one drive fails, the HDD LED will display below state:

1. If HDD1 fails: LED1 is off.
2. If HDD2 fails: LED2 is off.



If one drive fails and the RAID mode is set to RAID0 or JBOD, the data will be lost and the system can not be accessed again until the drive have been replace.

1. Check the HDD LED state and replace the faulty drive. The power must turn off when replacing the drive.
2. For RAID 0 and JBOD, restart the system and then format the drives again.
3. For Non-RAID (Normal Mode), simply format the new drive.

FAQs

Can I use external USB hub?
Yes, USB hub works in the same way as the computer USB ports.

My computer doesn't have USB 3.0 port, can I use USB 3.0 host adaptor?
USB 3.0 host adapter works in the same way as the built-in USB ports.

What file system should I choose to format my drive?
This will depend on how you want to use the drive but in general, we recommend:

- Windows XP/VISTA/7 → NTFS
- Mac OS X → HFS+ (Mac OS Extended)
- To use it on both PC and Mac → FAT32 (single file size is limited to 4GB)

How many drives can fail before I loose my data?
For RAID 0 and JBOD, any drive failure will result in the data being lost. For RAID 1,more than one drive failure at the same time will mean the data can not be recovered anymore. For Non-RAID, only the data on the defective drive will be lost.