

User's Manual

EXTERNAL 5 BAY *USB3.0* & eSATA ENCLOSURE



SY-ENC50118

Chapter 1

Read me first

1-1 About this Manual

Thank you very much for your purchasing of Quick SERV. **HS-406U3E**, the "EXTERNAL 4 BAY SATA TO USB 3.0 & eSATA Enclosure"

- This manual describe the complete details and operating instruction of this products Please read the manual before using the product.
- We reserve the right of any change in the specifications without notice.

1-2 The policy of software and the information of this manual

◆ The policy of software program

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1. The information in this manual is subject to change without notice.
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Chapter 2 Introduction

2-1 Introduction

Quick Serv. HS-506U3S supports maximum 4 SATA HDD, and the latest USB 3.0 technology, the data transfer rate up to 5Gb/s; eSATA data transfer rate up to 3Gb/s. Supports the SATA Port Multiplier function, Supports auto power on-off mode according to the USB & eSATA bus power

2-2 Specifications

■ Dimension

L255 x W136x H188 mm (except a projection part)

■ Weight

2.4 KGS or 6.5 lbs (Doesn't include the Hard Disk)

■ Interface

- Host Interface: USB 3.0 , eSATA
- HDD Device: SATAI/II

■ Power supply specifications

The input: 100V - 240V

The output: +12V 10A (maximum)

It may not work normally, if power consumption over than the above standard.

■ Operating Environment

Temperature 41 °C - 95 °F

Humidity 20% - 80% (a thing without dew condensation)

2-3 System requirements

■ Support OS

IBM PC/AT compatible machine (including the NEC PC-98NX series) with USB3.0 or USB2.0 / SATA I or SATAII interface.

The following series (only a model released in after March, 2001 of the PowerPC deployment copes) of Apple Macintosh

* PowerMac G4/G5, PowerBookG4, i-Book, e-Mac, each model of Mac mini.

* Recommend what is used in an USB3.0 equipment model.

<Attention>

- The below model may not work normal so that there is a possibility it does not support the updated model(s) of machines.
 - The DynaBook PORTAGE, Satellite series (a thing of the K6 CPU deployment) made by Toshiba
 - Aptiva E series (a thing of the AMD K6 CPU deployment) made by IBM, The e-note M260 series made by SOTEC.
- 3566/3567/3576/3581/ 3590 which made by HP/COMPAQ.
- It is not guaranteed of compatibility in all environments.
- There is the case assume that specific machinery, affinity with software are out of support.

■ Interface

HDD Device: SATA I/II interface

* Host(include Apple Mac series): USB3.0 interface or eSATA interface

■ The Operating System

Windows7/ Windows Vista / XP Home Edition SP-1/Professional SP-1 /Windows 2000 Professional SP-3 , Windows Me and Windows 98SE or later version. (# 1, 2, 3)

After Apple Mac OS X 10.3 (recommended in 10.3.9 or 10.4 latest edition)

#1. Not applicable to use one volume more than 137GB or 137GB at “combine mode” in Windows ME / 98SE.

#2. It is not guaranteed that works with Windows 98(a first edition).

The LBA(Logical Block Addressing) of IDE interface compatible with 3.5” and 2.5” Hard disks (Need Optional 2.5” to 3.5” Adapter)

Notice: This product can not work with power source from USB bus power only. Please connect the attached power supply cord by all means.

Chapter 3 Package contents and parts description

3-1 Package contents

Please check the package contents when you open the package.

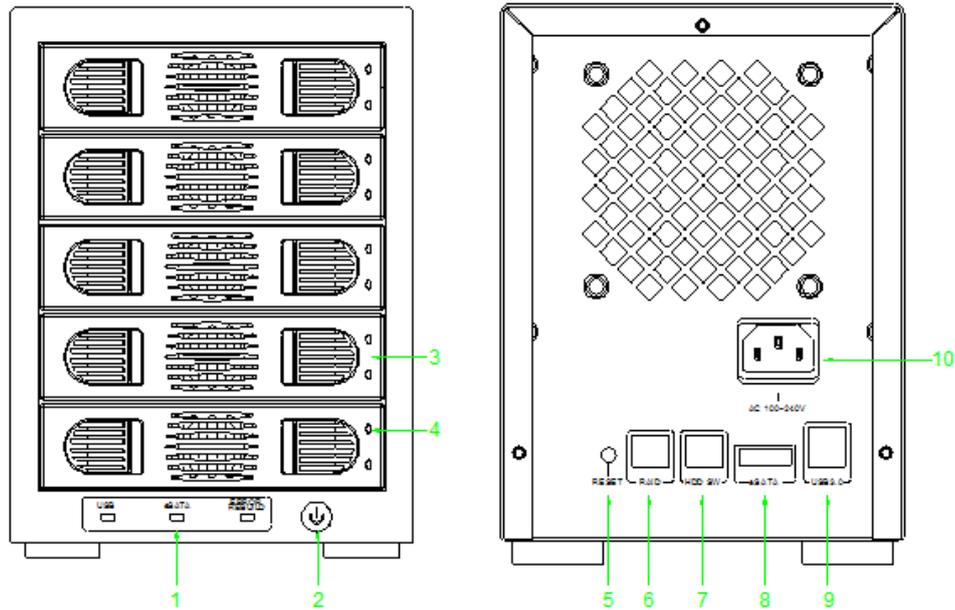
1. main unit
2. USB 3.0 Cable
3. eSATA Cable
4. 25 pieces of installation screws for 2.5" HDD
5. Power Cable
6. Users manual Disk
7. Screws

			
Main body X1	USB3.0 cable X1	eSATA cable X1	CD X1
			
Power CableX1		Screwsx20	

Please contact your dealer's support center if there are items missed in the package.

In addition, please keep the box and packing materials, which may be used in the case of the transportation such as repair or removal.

3-2 Parts description



1) USB/ eSATA LED:

ESATA LED : Connect with eSATA interface

USB LED : Connect with USB3.0 interface

Rebuild LED: RAID rebuild then, LED will flash the color is yellow . When RAID error , LED will lighting.

2) **Power switch:** Press the power button then power ON, Press the power button 5 seconds then Power OFF

3) **HDD TRAY :** Take out the HDD tray by pressing the middle part of the tray

4)HDD TRAY LED:

: Blue for the hard disk working properly , Bright red for the hard disk not normal, flashing red is rebuilt disk array data.

: Flashing red is hard disk to read and write

5) **RESET:** still press the RESET button for 15sec when you change RAID mode

6)**RAID:** The setting of RAID mode switch, detail please see 4-2

7) **HDD SW:** Each DIP switch controls each of 5 HDD Power

8) **eSATA Port:** connected to an eSATA port of a PC with an attached SATA cable.

9) **USB 3.0 Port:** Connected to an USB 3.0 port of a PC with an attached USB3.0 cable

5) **Power :** Connect to an AC power outlet with the attached power supply cable.

Chapter 4 HDD installation and setting of a hard disk

4-1 To install the Hard disks

Please remove the plug from the power supply outlet before assembling the hard disk, it will cause an electric shock and/or damage if not disconnected.

4-1-1. HOW TO INSTALL 3.5" Hard Disks

	<p>1. Take out the HDD tray by pressing the middle part of the tray, and removed the side plate on the each side of tray.</p>
	<p>2. Put the HDD in the tray and make sure the HDD screw hole is the same position as the tray.</p>
	<p>3. Fix the HDD and tray by pressing the side plate into the tray, and connect with the HDD.</p>
	<p>4. Please make sure all HDD tray is at the right position, then install the tray into the device ,then connect the SATA or USB 3.0 cable and turn on the device</p>

4-1-2: HOW TO INSTALL 2.5" Hard Disks

	<p>1. Uninstall the right Fixed Bracket</p>
	<p>2. Fixed 4pcs Screw to 2.5" HDD</p>

4-2 The setting of mode switch

Here, explain the definition of DIP switch which is allocated at rear side of the case.

A, Pls. Setting every Dip/SW off then turn on the power, still press the RESET button for 15sec, then shut down the device(for resetting all mode) B. Setting new mode, pls. follow the mode list as below, press the setup button for 15sec after turn on the power,

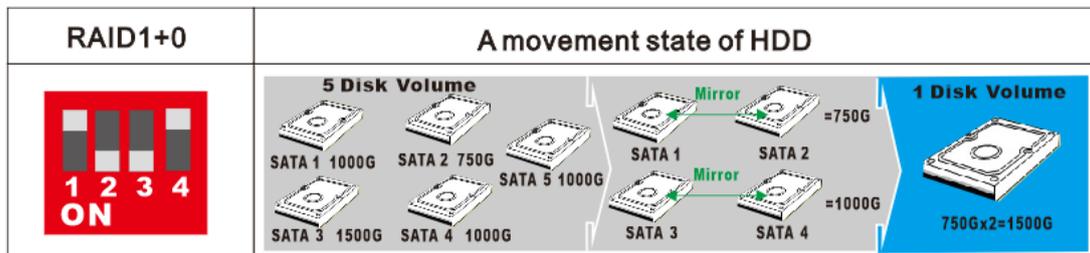
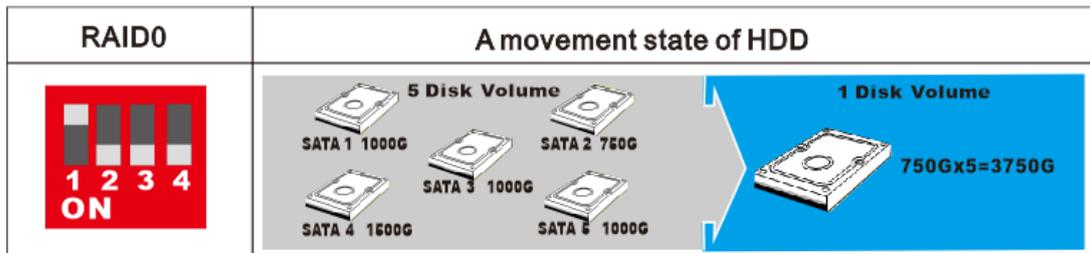
From the left, is "DIP switch 1", "DIP switch 2" and "DIP switch 3" "DIP switch 4".

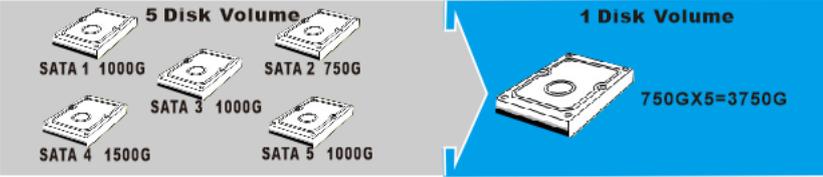
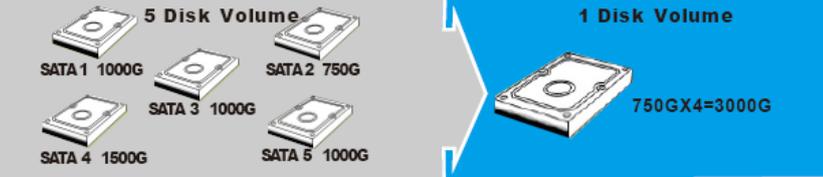
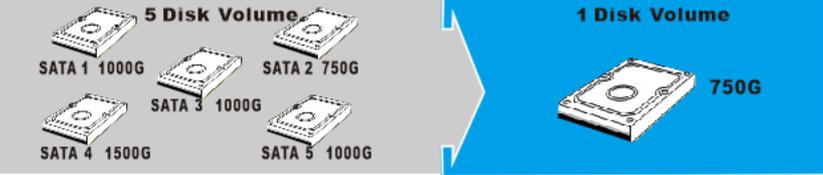
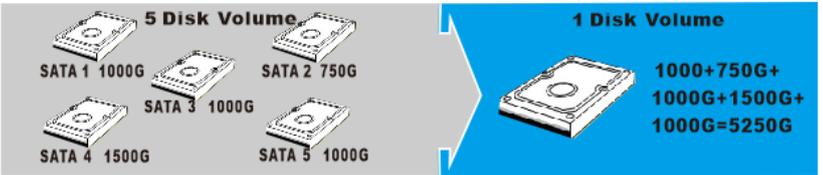
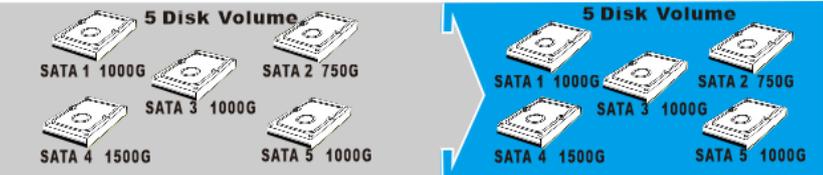


Reset: pls. press Reset button when change any kind of the mode.

ITEM	S/W 1	S/W 2	S/W 3	S/W4	RAID MODE
1	OFF	ON	ON	ON	RAID 0
2	OFF	ON	ON	OFF	RAID1 / RAID10
3	OFF	ON	OFF	OFF	RAID 3
4	OFF	OFF	ON	OFF	RIAD 5
5	OFF	OFF	ON	ON	CLONE
6	OFF	ON	OFF	ON	LARGE
7	OFF	OFF	OFF	OFF	NORMAL

4-2-1 The Mode Function S/W definition



<p>RAID3</p> 	<p>A movement state of HDD</p>  <p>5 Disk Volume</p> <p>SATA 1 1000G SATA 2 750G</p> <p>SATA 3 1000G SATA 5 1000G</p> <p>SATA 4 1500G</p> <p>1 Disk Volume</p> <p>750GX5=3750G</p>
<p>RAID5</p> 	<p>A movement state of HDD</p>  <p>5 Disk Volume</p> <p>SATA 1 1000G SATA 2 750G</p> <p>SATA 3 1000G SATA 5 1000G</p> <p>SATA 4 1500G</p> <p>1 Disk Volume</p> <p>750GX4=3000G</p>
<p>Clone</p> 	<p>A movement state of HDD</p>  <p>5 Disk Volume</p> <p>SATA 1 1000G SATA 2 750G</p> <p>SATA 3 1000G SATA 5 1000G</p> <p>SATA 4 1500G</p> <p>1 Disk Volume</p> <p>750G</p>
<p>Large</p> 	<p>A movement state of HDD</p>  <p>5 Disk Volume</p> <p>SATA 1 1000G SATA 2 750G</p> <p>SATA 3 1000G SATA 5 1000G</p> <p>SATA 4 1500G</p> <p>1 Disk Volume</p> <p>1000+750G+ 1000G+1500G+ 1000G=5250G</p>
<p>Normal</p> 	<p>A movement state of HDD</p>  <p>5 Disk Volume</p> <p>SATA 1 1000G SATA 2 750G</p> <p>SATA 3 1000G SATA 5 1000G</p> <p>SATA 4 1500G</p> <p>5 Disk Volume</p> <p>SATA 1 1000G SATA 2 750G</p> <p>SATA 3 1000G SATA 5 1000G</p> <p>SATA 4 1500G</p>

4-2-2 The Mode Function via management software.

Products come with the RAID management software disk, pls. follow the direction of the software to set the every mode by PC, it is the way to set every mode by the click via PC.

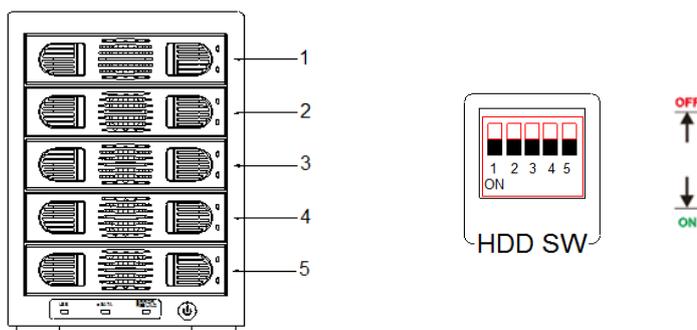


Attention

1. "The number of HDD which show on a PC" is combination number when implemented 4X HDDs to this device.
2. When you use a combine mode, it is required to initialize the virtual disk volume. Please be careful because it is erased entirely.
3. It is impossible to read internal data of the HDD which is working in combine mode change to normal mode or change the installation position of HDD.
4. Before you change the setting mode, make sure that you have backup the data of the HDD which is working at any change of mode. It is necessary to initialization the new disk volume (partition setting and Format). Please backup the data of HDD before you change mode.

4-2-3 Control each HDD's power via HDD power switch

The HDD Power setting DIP S/W on the rear side can set the power connection of each individual HDD installed, the HDD Power setting provides excellent protection on the HDD which is not working. Each DIP switch controls each of 5 HDD trays



Chapter 5 Initialization and formatting the hard disk

5-1 Initialization in Windows 2000 / XP/ Vista /WIN7/Win8

CAUTION! Partitioning and formatting a disk drive will delete the data in the HDD. We assume NO responsibility for your data lost if without a backup before your proceed Partitioning and formatting.

You must be logged on as an administrator or a member of the Administrators group in order to initialize a hard disk on the system of WINDOWS 2000/XP/VISTA/WIN7 OS

With Windows 2000/XP/VISTA/WIN7 use the “**Disk Management**” program to install your disk. This program is located in “Computer Management”.

Windows can support a disk volume at FAT32 over 32GB, but the format utility cannot format the disk volume over 32GB. If you want to format a disk volume at FAT32 mode over 32GB then you need the third party’s utility to format the disk volume. Like the “Partition Magic” from “Power Quest”.

5-2 An initialization procedure in Mac OS X

Execute “**Disk Utility**” to initialize an individual disk. Please initialize the disk volume with “Mac OS expansion”!

Normal mode Initialization

The very first time you use the USB 4X HDD in normal mode, Mac only shows the master HDD, you will need to execute the “Disk Utility” to partition the slave HDD.

Chapter 6 How to use this product

6-1 Using the USB 4X HDD

In WINDOWS, hot swapping is allowed with some limits. To avoid system failure, always follow the steps below to hot UN-PLUG your USB3.0 device in Windows.

6-2 Basics operation

■ Connect to a PC

1. Start your computer and wait until the OS has been loaded.
2. Please connect the USB cable from the device to PC's USB port.
3. Connect the power cord from the USB 4X HDD device to the outlet of the AC power and turn ON the enclosure. You can see the "Power LED" is ON, and the IDE0 and IDE1 LED will be turn on to off after the HDDs is ready.

Note: Make sure the PC is turn on now otherwise the device will not turn on until the PC is started.

■Disconnect the enclosure from a PC

Before disconnecting the USB 4X HDD enclosure from the PC please follow the following steps to remove the USB cable.

	<ol style="list-style-type: none"> 1. Click on the “Unplug or eject hardware” indicator on the task bar in computer screen display. 2. Click on the command bar “Stop USB Mass Storage -Drive(F:)” to disable the device you wish to remove. Please! Check the drive letter to be disconnected if there are multiple devices connected
	<ol style="list-style-type: none"> 3. When the screen prompt appears, read the instructions carefully. If the system indicates that you not to remove the device, DO NOT remove the device. You should exit the present program which accesses your USB 4X HDD device and return to Step 1.
	<p>For Mac PC is you must drag the “USB 4X HDD” icon to the “Trash” to eject the device.</p> <p>Otherwise, a “Device Removal” warning message icon will pop up to warn you that the data might have been lost or damaged.</p>

Chapter 7 Trouble Shooting

■ the RAID device is not recognized when connect to a computer. Or the RAID device does not work well.

- Check the status and connection of the power switch and the power supply outlet.
- Check whether the connection of the USB 3.0 cable is firmly connected.
- Check the jumper of each hard disk which is set correctly.
- Check if each HDD is well installed in the enclosure.
- Check device driver is installed for your OS.
- Please check the OS limitation of filing system and partition capacity vs. what you are using.

■ “A disk management” screen cannot start in Windows 2000/XP.

- You must be logged on as an administrator or a member of the Administrators group in order to initialize hard disk at the system of WINDOWS 2000/XP.

■ Transfer speed is slow even if I have access to USB.

- Check whether the USB port is working in USB3.0 mode.
- Check whether it is connected to a port of USB1.1./ 2.0 / 3.0
- If you are using a USB HUB to PC, please confirm that HUB is a USB3.0 HUB.
- When other USB device are connected to the PC at same time, it might slow down the transfer speed at the USB3.0 port; Please remove other USB device(s) from the computer.
- Check whether you use an USB cable that comes with this product.

■ Cannot use this product by specific software (a disk tool and backup software).

- Specific software (Note1), cannot use this product.

Please use other software whether that case uses a hard disk of the normal deployment for a PC.

Note1: About specifications of software, please check with software vender for detail.

■ Windows does not start when start this product was connected, Or it hangs up on PC starting process.

■ In Windows 98 SE and Mac OS cannot recognize HDD's which were already formatted on Windows 2000 / XP.

- There is a limitation to the filing system and partition capacity of the OS. Please confirm which OS is installed in the PC.

The following lists show you filing system of Operating System.

OS	filing system		
	NTFS	FAT32	HFS
Windows 98 SE	×	○	×
Windows ME	×	○	×
Windows 2000Pro	○	○ #1	×
Windows XP	○	○ #1	×
Mac OS	×	○ #2	○

#1. When formatting USB 4X HDD in Microsoft Windows with FAT32 format, limit of the capacity is up to 32GB. If you need to use one volume at FAT32 format over 32GB then you need third part's utility to initialize and format it.

#2. When sharing USB 4X HDD with Windows OS, it is necessary to format the USB 4X HDD within FA32 format in Windows side

■ **The volume space is less then hard disk specification, the hard disk space that it is recognized, and is displayed less than capacity of the hard disk.**

- Because calculation methods are different, there is a little it, and capacity recognized on the OS after a format is displayed than real capacity. This calculates capacity indication of a hard disk at 1GB =1000MB, but a calculation on the OS is calculated at 1GB =1024MB.

Following table shows you the different of capacity of the 1.2 TB volume size, before and after format.

HardDisk	1.2TB	1,200GB	1,200,000MB
OS	1.09TB	1,117GB	1,144,409MB