

6 x IDE Hard Disk Case for USB 2.0 Interface

User's Manual

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Chapter 1 Read me first

1-1 Beginning

Thank you very much for purchasing “USB 6x HDD case”

- This manual is an introduction of this product and operative method. Please read this book before use this product.
- Please! contact us about contents of this manual if we became aware of a suspicious point or error by any chance.
- For product improvement, we can change appearance or one part of specifications without a notice.

With Chapter 1, it is mentioned an attention matter at the top used this product for, acceptable use policy of software.

With Chapter 2, it is mentioned about a summary of this product, specifications, system requirement.

With Chapter 3, it is mentioned about contents thing, a name of each main body part of this product.

With Chapter 4, setting of this product, a way of connection are really mentioned about a method to use by an implementation method of a hard disk.

With Chapter 5, it is mentioned about an installation procedure of a driver of this product.

With Chapter 6, it is mentioned a method to initialization of HDD.

With Chapter 7, it is mentioned about how to use this product.






With Chapter 8, it is mentioned a common question.



Any loss, corruption and destruction of data is the sole responsibility of the user, and under no circumstances will be held liable for the recovery or restoration of this data. You are highly recommended to keep TWO copies of your data.







1-2 Attention in handling

- Please! use this product safely justly
 - Please! Read this attention matter before use by all means, and please use it according to the items mentioned justly.
 - Please keep this manual after reading.
- Notes for Safety Operation
 - Before operating this device, be sure to check the following items.

 <p>Warning</p>	<p>Possibility to be due to the human body by the great damage shows assumed contents when user does the wrong handling in defiance of this indication.</p>
 <p>Attention</p>	<p>Possibility or outbreak only for the damage of a thing that a person is due to by the damage shows assumed contents when user does the wrong handling in defiance of this indication.</p>
	<p>This sign tells content to promote attention (including warning).</p>
	<p>A mark of a slanted line tells an act of prohibition.</p>
	<p>This sign tells an act to want you to go by all means.</p>



Warning

 Strictly observance	When use this product, please keep absolutely carefully about the warning that a maker of a PC and peripheral equipment of use orders, attention indication.
 Prohibited from disassembling	Prohibited from disassembling or repaired this product by oneself and disintegrate, and please do not remodel it. If caused a fire and an electric shock, a burn, trouble. Please ask your distributor for repair. If disintegrate and remodeled it, there are charged repair and situation even if it is in a guarantee period.
 Pull the plug	Smoke appears and a strange smell or a sound, please pull the plug of an outlet immediately. This is the reason normally cause a fire / an electric shock .
 Notice of fire	When connect this product, it is confirmed a connection method in this manual by all means, and please warn the following. * When Pick up a thing on a cable NOT pull it/ bend it/imposition . Or it will cause a fire and trouble. * Emit smoke from the main body of PC and a cable when make a mistake in a connector and a cable to connect, and there can be causing a fire. * Please never connect the LAN cable which can leave feeding. When connected a LAN cable considered to be it, feeding emits smoke, and there can be causing a fire.
 Strictly observance	Please completely insert a power supply plug in an outlet. cause shortstop, fever, and there might be a fire, an electric shock. On the occasion of connection of this product, disassembly, please confirm connection / a disassembly method in this manual by all means. It becomes cause by the fact that a fire / an electric shock / movement is bad when doing wrong operation.
 Strictly prohibit Paint with water	To avoid the main body wet, please do not use it in a bathroom. Or it will cause a fire / an electric shock. Please warn, a bathroom, rainy weather, the shore during a snowfall, use in a waterside particularly. Please do not treat this product by a wet hand. Or it will cause an electric shock and trouble of this product.



Attentions before using this product



Prohibit from foot wiring housing

Please connect a power supply outlet to a power supply outlet directly if possible.
At AC power core foot wiring housing, if use of several outlet possibly causing a fire.



Prohibit

Please do not cover it with a book or a thing around the device.
This will cause a fire / trouble by overheat.



Prohibit

Please keep the device away from the place that is easy to cause shock and vibration.
Please keep the device away from a place with high temperature and high humidity and high dust. Do not expose the drive to direct sunlight or heat.
Make sure the device is located at least one meter away from sources of high frequency and magnetic disturbance (TV, Speaker, Mobile phone etc) in order to avoid data loss and operational problems.



Prohibit

Do not turn off the device or unplug the USB cable when the access LEDs are lighting, also do not reset PC. This will cause trouble, and make data lost.



Attention

Do not let children play with the device. Children can not recognize the possible danger.



Attention

Do not cover the device with any other things, it will disable the cooling system and cause the temp increase of the HDD. This will cause the HDD fail to working. Be sure using the device at room temperature.



Attention

Every time after you update your data, make back-up copies on the external storage medium. We do not assume liability for data loss or damage to data storage unit, and no claims can be accepted for damages resulting from loss of data or consequential losses.



Attention

Please do not install software in this product. There is the situation that software (word processor software, game software) cannot take advantage of by the reason why a program carried out at the time of OS start is not found in normally.

1-3 Acceptable use policy of software and an attention matter of a manual

◆ A software guarantee rule (a use consent book)

Please keep it as the proof that had this manual proves that a user of this product (we say" a consent program" including a program manual/another manual product attachment document as follows) and agree to a use consent contract with our company carefully.

1. Please use a consent program for this in a possible form in the single computer system which visitor oneself owns.
2. Prohibit copying / a reproduction of a consent program.
3. We do it without consent by a prior document of our company and assume that we do not let you use it for the third person by a loan of a consent program or other methods.
4. We do it without consent by a prior document of our company, and it is assumed that I do not do a change of a consent program or remodeling.
5. We cannot use a consent program for lease business such as a rental.
6. Caused by use of a consent program, and, about the directly indirect damage that a user takes, no responsibility carries our company on its back.
7. Our company does the next service for a consent program as far as a user follows the above each item clause.
8. When six acts to violate an either article matched from above 1, there can be a thing receiving Copyright Act legal sanctions by associated laws and ordinances.

◆ An attention matter with this manual

1. There is a case to change without a notice about contents of this manual.
2. If made it about this manual contents to be absolutely sure, but there was an error or an aware mark by any chance addressed to our company please contact us.
3. **Because we cannot take responsibility for all regardless of the above, about the result that applied software and this manual, please understand it.**

* Microsoft is a registered trademark of Microsoft Corporation.

MS DOS, Windows Me, Windows 2000 and the Windows Xp logo are trademarks of Microsoft Corporation.

* Macintosh and Mac OS are registered trademarks of Apple Computer, Inc.

* In addition, a company name / product name mentioned in this book is a trademark of the companies or a registered trademark.

* As for this book, a right such as a copyright is protected by "Copyright Act".

Chapter 2 Introduction

2-1 Product summary

Support maximum 6 HDD drives with COMBINATION function. It is desirable to be able to use all these disks as a single volume. There are 12 kinds of combination for max 6 hard disks. Combination can combine 6 drives into larger logical volumes. For example, Combine 6 HDD each volume has 500GB to a 3TB volume, it is very ideal for audio/video professional working with large amounts of DV and DVD video or professional 2D/3D image files.

Note # 1: When connect one volume more than 137GB or more than the combined volume than 137GB, the version of OS needs after Windows 2000 SP-3/ Windows XP SP-1 or later. In Windows 98SE / ME, you can not make one volume (a partition) more than 137GB or more than 137GB at “a combine mode”.

Note # 2: When connect one volume more than 2TB the version of OS needs after Windows 2003 SP-1/ Windows Vista or later. Also need to set the DIP switch 6 to ON.

2-2 Specifications

- **Dimension**
240*145*270mm (except a projection part)
- **Weight**
About 3.7 Kg (Not include the Hard Disk)
- **Interface**
USB 2.0
- **Power supply specifications**
The input: 100V / 240V
The output: +5V 6.0A / +12V 10.0A (a maximum)
Please warn it may not work normally, if a consumption electronic current of a total 6 hard disk over than the above standard.
- **Operating Environment**
Temperature 5 °C - 35 °C
Humidity 20% - 80% (a thing without dew condensation)

2-3 System requirement

■ Hardware requirement

IBM PC/AT compatible machine (including the NEC PC-98NX series) with USB2.0 or USB1.1 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 USB2.0 equipment model.

<Attention>

* Below model may not work normally so that there is a possibility that do not support with the next model of machines normally.

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.

- * If use this product as USB1.1, update of BIOS of a PC is necessary in PRESARIO 3566/3567/3576/3581/3590 which made by HP/COMPAQ.
- * It is not guaranteeing compatible in all environment.
- * There is the case assume that specific machinery, affinity with software are out of support.

■ Interface

USB2.0/1.1 interface

- * Personal PC (include Apple Mac series) with USB2.0 interface.

■ Supported OS

Windows 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. Cannot use one volume more than 137GB or 137GB at “a combine mode” in Windows ME / 98SE.
- #2. Do not guarantee that works with Windows 98(a first edition).
- #3. Download a driver for Windows 98SE from “<http://www.geocities.com/usb4hdd/>”.
- #4. A Hard disk with “E-IDE compatible “ is supporting LBA mode.

Notice: Most of the Hard disk drive which is less than 540M, and the Cylinder is less than 1024 is not support LBA.

Notice: This product can not work with 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 confirm contents when you open this product.

■ Please check content below

The following things are included in this product. Please confirm whether all things are included in a package first.

1. One main body of this product
2. One USB cable
3. One power supply cable
4. 14 pieces plastic guide for 3.5" HDD
5. 28 pieces of installation screws for 3.5" hard disks
6. User's manual



Case



USB Cable



Power Cable



3.5" HDD Guide rail



Screw for 3.5" HDD

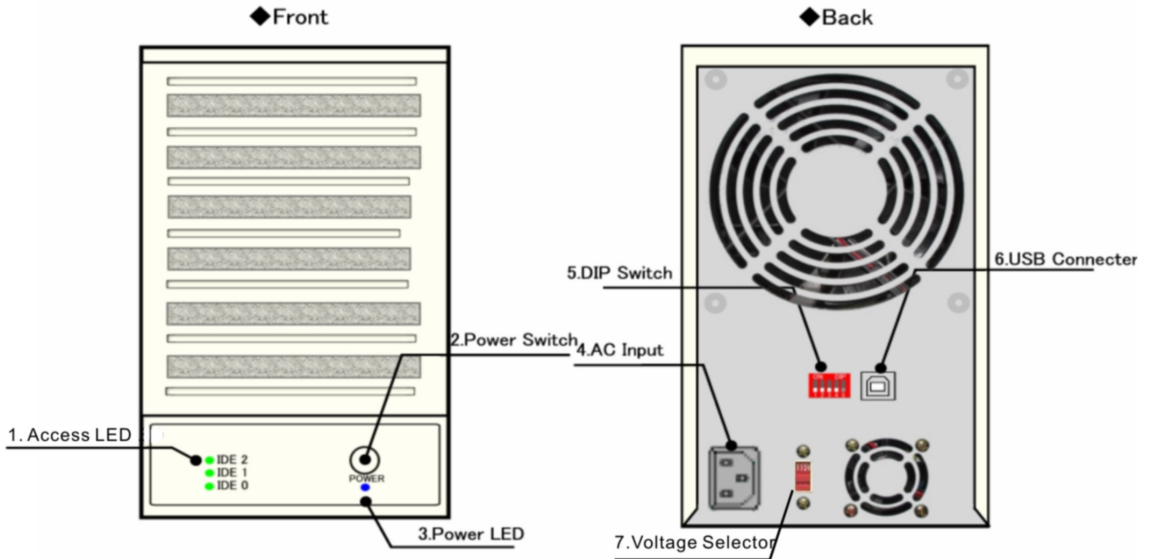


User's Manual

Please contact your distributor's support center if there was a lack item in package.

In addition, please keep a box and packing materials carefully, and please use it in the case of the transportation such as repair

3-2 Parts description



1) **Access LED:** HDD access indicate LED.

IDE 2 is used for HDD5 and HDD5.

IDE 1 is used for HDD3 and HDD4.

IDE 0 is used for HDD1 and HDD2.

2) **Power switch:** ON/OFF switch of device power.

When power supply clutch ability (P.19) acts, It links a power supply of a PC.

3) **Power supply LED:** This LED is used to indicate the status of power of the device.

4) **Power connector:** Please connect to an outlet for family outlet with the attached power supply cable.

5) **DIP switch:** COMBINATION mode setting switch. For the detail please refer to the Chapter 4-2.

6) **USB connector:** connected to an USB port of a PC with an attached USB cable.

7) **Voltage Selector:** Select the AC input Voltage according the Country/Region.



The power supply is preset for the country/region in which you purchased the PC. If you move to another country/region, please make sure you check its voltage requirements before plugging your PC into an AC power outlet.

Chapter 4 About the assembling and setting of a hard disk

4-1 Assembling the hard disks








Please remove the plug of a power supply outlet before assembling the hard disk, in case it will cause an electric shock and trouble or damage.



If you do not assemble four hard disks, only assemble one Hard disk, please install a hard disk from Master.(HDD-1) of CN1 in condition of 2 Hard disk, please make sequentially at Master(HDD-1) and Slave(HDD-2).

	<p>1. Pushing lightly to the concavity of the panel as the left side figure show to open the front door.</p>
	<p>2. Install 3.5 inches use installation screw in a hard disk, and please set the “jumper” of each hard disk.</p>
	<p><important></p> <p>Please set of jumpers of Hard disk mode in the following way; HDD-1 is Master, HDD-2 is Slave, HDD-3 is Master, HDD-4 is Slave, and HDD-5 is Master, HDD-6 is slave which like a left figure showing.</p> <p>Please! Refer the hard disk manual to set the mode of hard disk drive</p>

	<p>4. When Assemble the hard disk in the case, please mount HDD in the order of HDD-1 → HDD-2 → HDD-3 → HDD-4 → HDD-5 → HDD-6.</p>
	<p>5. Connect IDE0 cable to HDD-1 & HDD-2 at the first and then connect the HDD-3 & HDD-4 to IDE1 cable. At the latest connect the IDE3 cable to HDD-5 and HDD-6. and then connect the HDD power cable to the HDD.</p> <p> You must install hard disk from HDD-1 if you do not install full of 6 pieces hard disk.</p>
	<p>After the installation, please close the front cover.</p>
	<p># How to open the cover of the case</p> <p>Please take off the metal cover by removing three screws which are allocated at rear side, and letting the cover off the case by sliding the cover to the rear.</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 DIP switch” which has six bits in all.

From the left, is “DIP switch 1”, “DIP switch 2” ... “DIP switch 6”.

The COMBINATION mode can be setting from DIP switch 1-4. The combination definition can be found at page 17.

“DIP switch 5” is “Automatic Power control” of this product.

“DIP switch 6” is “OS select” of this product.

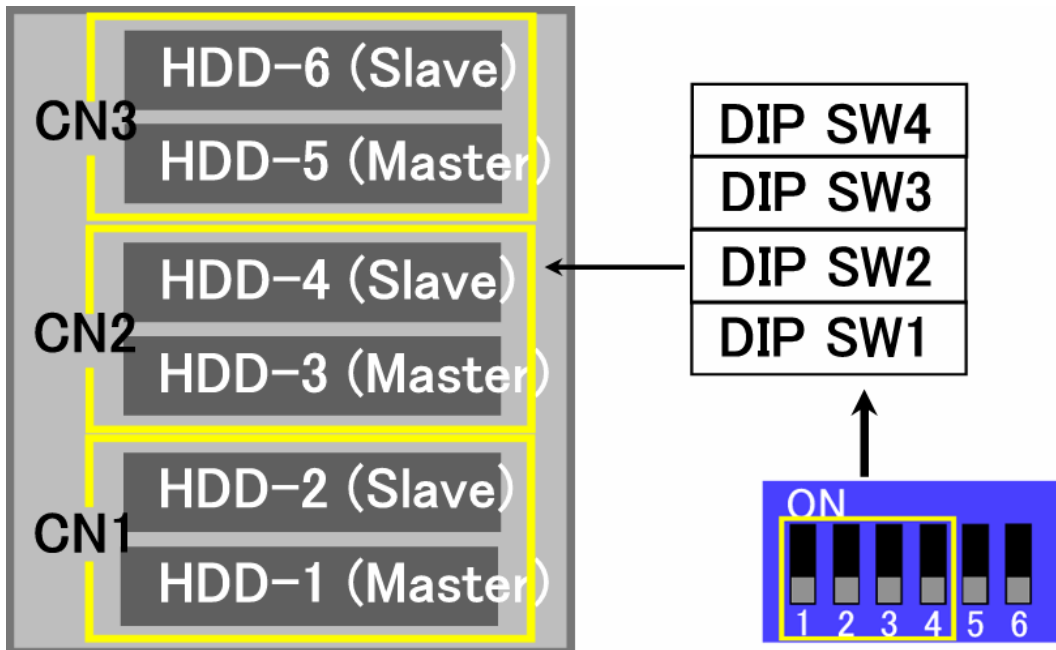
4-2-1 The Combination (BIG) function

A **Combination** mode is the mode which is convenience to be able to combine plural hard disks as volume “of one” on a PC.

For example, it seems to be connected to only hard disk one of 1.8TB (300GB x 6) from a PC when implement four hard disks of 300GB and set all four of them in a COMBINATION mode.

The COMBINATION combines drives into large logical volumes, it provides no fault tolerance, nor does it provide any improvements in performance compared to the independent use of its constituent drives. Change the position and combine mode or damage of the hard disk will cause the data lost. It is strongly recommend you to back the data before you do any change to the hard disk.

This product supports 8 kinds of combine mode. You can set combination of the DIP switch 1-4 to choose combine mode as the following:



1. Combine 6X HDD: DIP switch 1 & 3 ON, DIP switch 2 & 4 OFF

DIP1 & DIP3 set to the “ON” position to combine the HDD1~ HDD6 to one virtual volume. From PC’s “Disk Manager”, it is recognized as **one** hard disk drive with the capacity is sum of HDD1, HDD2, HDD3, HDD4, HDD5 & HDD6.

2. Combine 5X HDD: DIP switch 3 ON, DIP switch 1, 2 & 4 OFF

The hard disks of HDD1 ~ HDD5 are combined to one virtual volume.

HDD6 works as an independent hard disk drive.

From PC’s “Disk Manager”, it is recognized as **two** hard disk drives by the PC.

3. Combine 4X HDD: DIP switch 1& 2 ON DIP switch 3 & 4 OFF

Four hard disks of HDD1 ~ HDD4 are combined to one virtual volume.

HDD5 & HDD6 work as two independent hard disk drives.

From PC’s “Disk Manager”, it is recognized as **three** hard disk drives by the PC.

4. Combine 3X HDD: DIP switch 2 ON, DIP switch 1, 3 & 4 OFF

HDD1, HDD2 & hdd3 are combined to one virtual single volume.

HDD4, HDD5 and HDD6 work as independent hard disk drives.

From PC’s “Disk Manager”, it is recognized as **four** hard disk drives by the PC.

5. Combine 2X HDD: DIP switch 1 ON, DIP switch 2, 3 & 4 OFF

HDD1 and HDD2 are combined to one virtual single volume.

HDD3, HDD4, HDD5 & HDD6 work as independent hard disk drives.

From PC’s “Disk Manager”, it is recognized as **five** hard disk drives by the PC.

6. Double combine Mode:

There are four ways to combine two groups of hard disks. At this way you can get two combined virtual hard disk volume as you wish.

6-1DIP switch 4 ON, DIP switch 1, 2 & 3 OFF

HDD1, 2 & 3 are combined into one disk volume. HDD4, 5 & 6 are combined in to one disk volume.

At this way there are **two** disk drives are detected by PC. The first one disk volume size is the sum of HDD1, HDD2 & HDD3 the size of the other one is sum of HDD4, HDD5 and HDD6.

6-2 DIP switch 2 & 4 ON, DIP switch 1 & 3 OFF

HDD1, 2, 3 & 4 are combined into one disk volume. HDD 5 & HDD6 are combined in to one disk volume. At this way there are **two** disk drives are detected by PC. The first one disk volume size is the sum of HDD1, HDD2, HDD3 & HDD4 the size of the other one is sum of HDD5 and HDD6.

6-3 DIP switch 1, 2 & 4 ON, DIP switch 3 OFF

HDD1, 2 & 3 are combined into one disk volume. HDD 4 & HDD5 are combined in to one disk volume. The HDD 6 is an independent disk drive. At this way **there** are three disk drives are detected by PC. The first one disk volume size is the sum of HDD1, HDD2 & HDD3 the size of the second is sum of HDD4 and HDD5. The other is HDD6

6-4 DIP switch 3 & 4 ON, DIP switch 1 & 2 OFF

HDD1 & HDD2 are combined into one disk volume. HDD 3 & HDD4 are combined in to one disk volume. The HDD5 & HDD6 are independent disk drives. At this way there are **four** disk drives are detected by PC. The first one disk volume size is the sum of HDD1 & HDD2 the size of the second is sum of HDD3 and HDD4. The third is HDD5 and the last is HDD6

7. Triple combine mode: DIP switch 1 & 4 ON, DIP switch 2 & 3 OFF

HDD1 & HDD2 are combined into one disk volume. HDD 3 & HDD4 are combined in to one disk volume. The HDD5 & HDD6 combined into one disk volume. At this way there are **three** disk drives are detected by PC. The first one disk volume size is the sum of HDD1 & HDD2 the size of the second is sum of HDD3 and HDD4. The third is sum HDD5 and the HDD6.

8. Normal Mode:

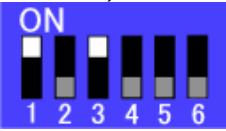

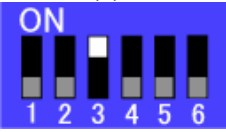
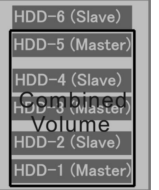
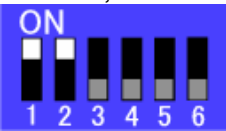

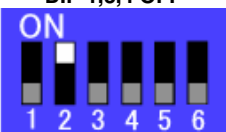

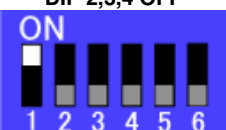

Set DIP 1~4 to OFF position to disable the COMBINATION function. HDD1, HDD2, HDD3, HDD4, HDD5 & HDD6 are acting as independent disk drive volumes.









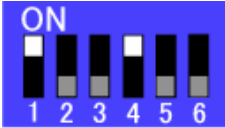

From PC's "Disk Manager", it is recognized as **6** hard disk drives.

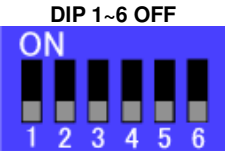

* The definition of DIP switch for the COMBINATION mode is listing as follows.

Please! Follow up the setting to choose the combination that you need.

(Please! Refer the attention items from Page 21 of 31)

Combine Mode (※Note 2,3.4.5.6)	DIP SW	Combination of hard disks		Disk Drive number in PC
Combine 6X HDD	DIP 1,3 ON DIP 2,4 OFF 		HDD 1~6 combined	1
Combine 5X HDD	DIP 3 ON DIP 1,2,4 OFF 		HDD 1~5 combined	2
Combine 4X HDD	DIP 1,2 ON DIP 3,4 OFF 		HDD 1~4 combined	3
Combine 3X HDD	DIP 2 ON DIP 1,3,4 OFF 		HDD 1~3 combined	4
Combine 2X HDD	DIP 1 ON DIP 2,3,4 OFF 		HDD 1~2 combined	5

Combine Mode (※Note 2,3,4,5,6)	DIP SW	Combination of hard disks		Disk Drive number in PC
<p>Double Combine -1</p>	<p>DIP 4 ON DIP 1,2,3 OFF</p> 		<p>HDD 1~3 combined</p> <p>HDD 4~6 combined</p>	<p>2</p>
<p>Double Combine -2</p>	<p>DIP 2,4 ON DIP 1,3 OFF</p> 		<p>HDD 1~4 combined</p> <p>HDD 5~6 combined</p>	<p>2</p>
<p>Double Combine -3</p>	<p>DIP 1,2,4 ON DIP 3 OFF</p> 		<p>HDD 1~3 combined</p> <p>HDD 4~5 combined</p>	<p>3</p>
<p>Double Combine -4</p>	<p>DIP 4 ON DIP 1,2,3 OFF</p> 		<p>HDD 1~2 combined</p> <p>HDD 3~4 combined</p>	<p>4</p>
<p>Triple combine</p>	<p>DIP 1,4 ON DIP 2,3 OFF</p> 		<p>HDD 1~2 combined</p> <p>HDD 3~4 combined</p> <p>HDD 5~6 combined</p>	<p>3</p>

Combine Mode (※Note 2,3,4,5,6)	DIP SW	Combination of hard disks	Disk Drive number in PC
Normal mode			<p>HDD 1,2,3,4,5,6</p> <p>6</p>



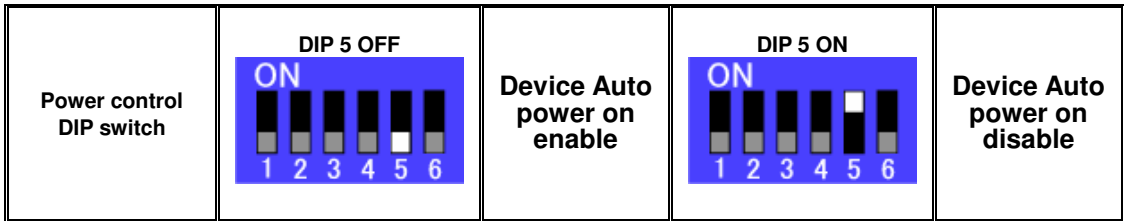
Attention

1. “The number of HDD which is showed on PC” is combination number when implemented 6X HDD drives to this device.
2. When you use a combine mode, it is required to initialize the virtual disk volume. The data in hard disk drives will be destroyed. Please be careful before you initialize the hard disk drives.
3. The HDD will be working at normal mode, if only one physical HDD is present in the combination. For example, set HDD1 and HDD2 to work at 2X HDD combine mode but there is HDD1 assembled in the case, the HDD1 will work as normal mode.
4. It is impossible to read the data from the combined disk drive if you change the installation sequence of hard disk drive. Please do not change the hard disk drive sequence after you store data into the disk drives.
5. Before you change the setting of the COMBINATION mode, make sure that you have backup the data of the HDD. It is necessary to initialization (partition setting and Format) after you change the combination mode of the device. Please backup the data of HDD before you change mode!
6. It is need to turn off the device power by unplug the and plug the AC power cable after change the setting of DIP switch.

4-2-2 Automatic HDD Power On-Off control setting

Set DIP switch 5 “ON”, than this device will turn on/off the power of HDD and fan according with PC power on/off. For this mode the power switch must be turned on. Also the power of HDD and fan will be

turned off after unplug the USB cable, if you reconnect the USB cable into PC's and the device the power of HDD and fan will be turned on automatically.



When “DIP switch 5” is ON regardless of the power switch of the device, the power will auto power of at the following conditions:

- Safe removed the device from PC.
- PC is turn to sleep mode.
- PC power off by soft-command.
- USB cable is disconnected from PC.

The status of power LED will be turned ON/OFF according the power of HDD and fan ON/OFF.

#1: Automatic power ON/OFF in some situation cannot be used. (You can find more detail at Chapter 8 Troubleshooting.)

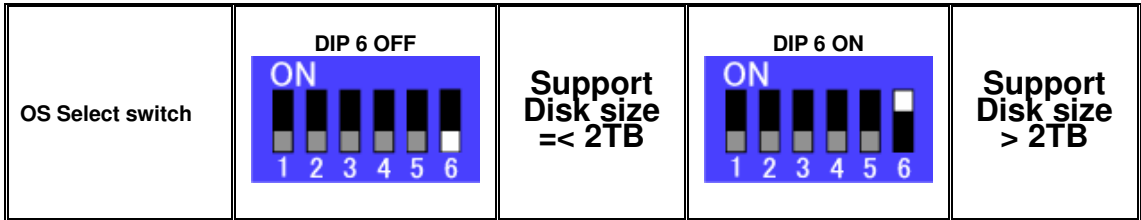
#2: Please disconnect the power cable from outlet or turn off power switch when you changed DIP switch setting.

4-2-3 DIP switch 6: OS select switch for disk size over 2TB

The Windows XP/2000 is using the master boot record (MBR) disk partitioning style, which supports volumes limit at 2 terabytes. If the combined volume is over 2TB, only 2TB disk space can be used by Windows XP/2000.

The Windows 2003 sp1 & the future Windows Vista support the GUID partition table (GPT) disk partitioning style supports volumes up to 18 ExaBytes(EB) in size.

DIP switch 6 is used for select partion table mode. **(NOTE : 1,2,3)**



※ Note1 : Windws 2000 / Windows XP & Mac OS can not support the hard disk capacity over 2TB. If your are using these OSs, please set the “DIP 6” at “OFF” position!

Instatl 6 pieces hard disk drives into the case and disk drive capacity is 500G. The combine mode is set at Combine 5X HDD mode. You will get two disk volume from the 6hdd case. The capacity of the combined disk is 500GB*5=2500GB=2.5TB which is over 2TB. You need to set the DIP switch 6 according your OS which is install in your PC. The following table show you combined result with the different OS and DIP SW6 ON/OFF position

DIP SW 6 \ OS			Remark
Windows XP, 2000 or MAC OS			The OS do not support disk volume over 2TB. The combined volume can not find by WINDOWS XP/2000.
Windows Vista Windows 2003 sp1 or Itanium-based Windows Xp			Windows Vista, 2003sp1 and Itanium-based Windows Xp support the disk volume over 2TB at “GPT” partition.

※ Note 2 : Only can set the DIP SW6 to on position when you are using Windows 2003 Server SP-1or Windows Vista or Itanium-based WindowsXP computer. The GUIDpartition table “GPT” is supported by Windows 2003 Server SP-1or Windows Vista or Itanium-based WindowsXP computewhich can support volume size up to 18 exabytes.

※ Note 3 : You can find the information of “GPT” siak partion from Microsoft TechNet web side.

Chapter 5 Connection with a PC and installation of a driver

Connect to PC.

1. Start your computer and wait until the OS has been loaded.
2. Connect the power core from the USB 6X HDD device's outlet to the outlet of power and turn on the device's power switch you can find the IDE0 and IDE1 LED will be turn on to off after the HDD is ready. Please confirm that "power supply LED" is turned on.
3. Please connect the USB cable from the device to PC's USB port.
4. Follow the instruction to install the device to your PC.

It will take few minutes at the very first time connected this product to the PC for OS to find the device.

5-1 Using at Windows ME / 2000Pro / XP

In Windows ME / 2000Pro / XP recognized the connected USB 6X HDD case automatically.

5-2 Installation of a driver in Windows 98 SE

If you are using at the Win 98SE, you need to install the device driver, follow the instruction on the screen to install the USB device driver.

You can download the driver from <http://www.geocities.com/usb4hdd/driver.zip>. Please unzip the driver.zip file to the folder for the place to save the driver files.

5-3 In the case of the use Mac OS

Apple Mac OS X 10.3 (recommended in 10.3.9 or 10.4 latest edition) will recognize the connected USB 6X HDD case automatically.

Chapter 6 Initialization and format the hard disk

6-1 Initialization in Windows 2000 / XP

CAUTION! Partitioning and formatting a disk drive will delete the data in the HDD. We assume NO responsibility for your lost data.

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.

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

Windows can support a disk volume at FAT32 over 32GB, but the format utility can not 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” of “PowerQuest”.

6-2 Initialization in Windows ME / 98SE

Execute the “**FDISK**” program at “MS-DOS” prompt to initialize and format the USB 6XHDD in Windows ME/ 98 SE environment.

For addition, please refer to a help file of Windows.

Under Windows 98SE /Me can not format over 32GB. And under Windows 98SE / Me user use FDISK (Under DOS). FDISK not support over 137GB HDD. You need the third party’s utility to format the disk volume over 32GB at windows Me and 98.

6-3 An initialization procedure in Mac OS X

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

Normal mode Initialization

At the very first time using the USB 6X HDD at normal mode, Mac only shows the master HDD, you need to execute the “Disk Utility” to partition the slave HDD.

Chapter 7 How to use this product

7-1 Using the USB 6X HDD

For WINDOWS, hot swapping is allowable with more limits. To avoid system failure, always follow the bellow steps to hot UN-PLUG your USB2.0 device in Windows.

7-2 Basics operation

■ Connection to a PC

When Windows starts normally, can freely connect the USB cable to 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 core from the USB 6X HDD device's AC input port to the outlet of the power and turn on the device's power switch. You can find the IDE0, IDE1 and IDE2 LED will be turn on to off after the HDDs are ready.



If the DIP SW5 is at "ON" state the USB 6X HDD will turn on the power after USB port is connected to the PC's USB port.

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

■Remove it from a PC

Before disconnect of an USB 6X HDD from PC please following the steps to remove the USB cable.

 The image shows two screenshots from a Windows taskbar. The top screenshot shows the 'Unplug or eject hardware' icon (a hand pulling a plug) next to the system clock which reads '2:43 PM'. The bottom screenshot shows the context menu that appears when the icon is clicked, with the option 'Stop USB Mass Storage Device - Drive(F:)' highlighted. The system clock in this screenshot reads '9:15 AM'.	<ol style="list-style-type: none">1. Click on the "Unplug or eject hardware" indicator on the task bar.2. Click on the command bar "Stop USB Mass Storage -Drive(F:)" to stop the device your want to remove. <p>Please! Check the drive letter you want to disconnect if there have multiple devices</p>
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	<p>3. When the screen prompts, read the instruction carefully.</p> <p>If the system prompts you not to remove the device, DO NOT remove the device. You should exit the present program which access your USB 6X HDD device and return to Step 1.</p>
	<p>For the Mac PC you must drag the “USB 6X HDD” icon to the “Trash” to eject the device.</p> <p>Otherwise a “Device Removal” warning message icon will pop up to warn you the data might have been lost or damaged.</p>

Chapter 8 Trouble Shooing

■ It is not recognized even if I connect this product. Or do not work justly.

- Check the state of power switch & power supply outlet.
- Check the USB cable is attached from the device to PC's USB port.
- Check the jumper setting of each hard disk drive is set correctly.
- Check the master/salve setting of disk drives are attached at same IDE cable.
- Confirm that installation of a driver is done justly.
- If the device is connected this product via USB HUB, please put it in an USB port of a PC directly, and Please test it again.
- There is a limitation to a filing system and partition capacity according the OS which you using.

■ “A disk management” cannot run 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.

- Please confirm whether the USB port is working at USB2.0 mode.
- Please confirm whether it is connected to a port of USB1.1.
- When go through USB HUB to PC, please confirm that HUB is an USB2.0 HUB.
- When other USB device is connected, there is the situation of transfer speed becomes slow. Please take off other USB device.
- Please use an USB cable which is came with this product.

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

- On the 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.

■ **Do not understand a setting method of a jumper of a Hard disk.**

- Please set setting of a jumper of a Hard disk in order of HDD1 (Master) HDD2 (Slave), HDD3 (Master) HDD4 (Slave), HDD5 (Master) HDD6 (Slave).

A jumper setting method of the hard disk is written with labels around the top surface of a Hard disk or an IDE connector. Also you can find the setting guide from hard disk vender's Web side.

Note: When put on only one hard disk made by Western Digital, please set setting of a jumper in "Single".

■ **Windows does not start when start a PC with this product was connected. Or it is hang up at PC starting process.**

■ **Power can not turn on at auto power on-off mode.**

- Have you confirm setting of a BIOS setup menu of the PC? and if there is a setting item such as "USB Legacy Device" or "USB Legacy Support"? Set this in "Disable" mode (invalidity), and please test it again.

If the USB 6X HDD still cannot turn on the power after change the setting of BIOS. Please disconnect the USB cable from PC and restart your PC. After the Windows was full loaded then connect the USB 6X HDD to the PC.

In addition, about a start method of BIOS, a setup menu, please refer the instruction manual of PC or an instruction manual of a mother board.

■ **In Windows 98 SE environment, I installed HDD more than 64GB, but do not exactly recognize that capacity.**

- When you use Fdisk.exe to partition a hard disk that is larger than 64 GB (64 gigabytes, or 68,719,476,736 bytes) in size, Fdisk does not report the correct size of the hard disk. To resolve this problem immediately, download the fix by clicking the download link later in this article or contact Microsoft Product Support Services to obtain the fix.

<http://support.microsoft.com/default.aspx?scid=kb; ja; 263044>

■ **In Windows 98 SE and Mac OS cannot recognize HDD which already formatted in Windows 2000 / XP.**

- There is a limit to a filing system and partition capacity to be under by use (recognition) by the OS of use. Please confirm whether the OS installed in a PC of by the following lists can use a filing system of this product.

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

#1. When format USB 6X HDD in Microsoft Windows with FAT32 format, it is limit the capacity up to 32GB.

If you need use one volume at FAT32 format over 32GB then you need third part's utility to initialize and format it.

#2. When share USB 6X HDD with Windows OS, it is necessary to format the USB 6X 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 an 1.2 TB volume, before and after format.

■ **Can not find a combined disk volume which is over 2TB.**

Please check the section of **4-2-3 DIP switch 6: OS select switch for disk size over 2TB.**

PART NO:
MMPM356HDD001

