# Dual 2.5" SATA Mobile RAID

### **User Manual**

English



LINDY No. 20288



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## **Device Overview**



- 2. Place one or two hard driver(s) in the slot. Make sure the SATA connector is lined up with the connector inside the Mobile Rack.
- **3.** Carefully push the hard driver into the Mobile Rack, So that the drive's SATA connector is seated securely, then close the door and lock it.

Note: It must be in the lock position when in use. This prevents unexpected removal while working.

#### Note:

- 1. Users are advised to disable the device from the computer before unplugging the cable or turning off the device.
- 2. If the hard drive does not support ACCESS signal, then the HDD ACTIVE LED will not flash when the hard drive is in use.
- 3. If the system cannot detect the device, please go to device management and enable it.
- 4. Do not open the door or turn off the power of the Mobile Rack while the hard drive is busy, this may cause damage to you hard drive.
- 5. It must be in the lock position when in use. This prevents unexpected removal while working.
- 6. Do not force the door to open while it is locked, otherwise, you will damage the lock.

## **RAID Information**:

**Caution:** Changing the RAID mode destroys data stored on the Mobile Rack, If you have saved data on the drives, back up data before following these steps.

1. **JBOD (Non-RAID):** The two physical disks read as two independent hard drives in a



single housing, so that two logical volumes mount on the desktop. Therefore, the computer will show two separate drives.

**Note:** When using the e-SATA connector, the computer must support port multiplier for this function to work.

The failure of one disk will not affect the other disk. Therefore, the data on the working drive will be intact and functioning.

2.



**BIG (Concatenation):** The two physical drives are combined so that one single

yet larger logical volume mounts on the desktop, offerining maximum possible capacity (the available capacities of each disk are combined).

**Note:** If one physical disk fails, the data on both disks will become inaccessible. If you are concerned about

data security, we highly recommend using Safe configuration (RAID 1 mode).

3. Fast (RAID 0 Mode): The two physical drives are stripped together so that one larger logical volume mounts on the desktop, offering the maximum possible capacity like in Big mode (the available capacities of each disk are combined) yet with greater speed than the Big mode (the speed of each disk runs faster to a certain level).

> Note: If one drive fails, the data on both disks will become inaccessible.

4. Safe (RAID 1 Mode): The two physical drives are "mirrored" (RAID 1) so that one single logical volume mounts on the desktop. All of the data on one drive will be recoverable from the other drive (the available capacity of one drive cannot exceed the available capacity of the other drive).

> Note: If one physical disk fails, the data can be immediately recovered from the second disk. No data will be lost if one drive fails.

5. Safe33:



- RAID 1 (SAFE 33%) + (BIG 67%), 33% of memory space on both hard drives will be operating under RAID 1 mode, and the rest of the hard drive memory on both disks will be assorted into BIG.
- 6. Safe50:



RAID 1 (SAFE 50%) + (BIG 50%), 50% of the memory in both disks will be RAID 1, and the rest of the hard drive memory on both disks will be assorted into BIG.

7. GUI ONLY:



Use SteelVine Manager Software to configure the HDD Mode.

Only under GUI ONLY mode, SteelVine Manage can change the hard drive memory mode, on other modes, SteelVine Manager can monitor the hard drive statue, not change that.

**Note**: Changing the Mobile Rack hard drive storage policy, according to the above seven mode, need to turn the Mode Select to a new position which you want to change, then press Mode change button to reset, so the latest storage policy take effect.

After effected, you need to click"My Computer"  $\rightarrow$  "Management"  $\rightarrow$  "Hard drive management" then



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continue to repartition and reformat the Mobile Rack hard drive.

# **RAID** notification

- **1.** It is better to use the same hard drive brand and memory capacity to use the RAID functions.
- 2. When using eSATA connector to set JBOD function, if the host cannot support port multiplier function, the computer may not be able to detect 2 hard drives simultaneously. (You may need to purchase the optional port multiplier eSATA controller card to get the enclosure working properly)

## SteelVineManager Software Installation

- For Windows XP /SP2/Server 2003
   Insert the software driver CD into the CD-ROM drive.
   Vista to install files on the disk
   :\HDD Enclosures\Sil5744\Windows\57xxSteelVine\_V5.1.24B:
   Double-click "SETUP.exe"
- 2. The following window will be seen

👹 57xx SteelVine				
Welcome to the 57xx Ste	eelVine Set	up Wizard	Silicon Image.	
The installer will guide you through the sto storage processor volume management s	eps required to insta oftware on your cor	all Revision 5.1.24 of nputer.	the 57xx SteelVine	
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.				
	Cancel	< <u>B</u> ack	Next >	

#### 3.Click "Next", select "I Agree"



4. Select "Just me", Click "Next"



5. After showing the following Window, Click "Close" to exit.



6. Click "Yes" to restart your system.



7. Once completed you will see a new icon in the Task Bar



# Starting the SteelVine Manager

#### Click Start > Program Files > Silicon Image > 57XX SteelVine > SteelVineManager.

Once started, the SteelVine Manager Application icon can be found in the Notification Tray located at the bottom right hand corner of the screen. Double click the notification tray icon to open the SteelVine Manager GUI status window. The SteelVine Manager icon remains active in the notification tray even if you close the SteelVine Manager window. It can be closed by right-clicking on the icon and selecting "**Exit**".



The SteelVine Manager starts with the Status Window visible so you can monitor the SteelVine Storage Reference Designs connected to the host computer. Up to four SteelVine Storage Reference Designs can be managed through a single session. When the SteelVine Storage Reference Design is set to GUI mode, you can access the Basic Configuration Wizard from the Status window. From there, you can optionally use the Advanced Configuration Wizard to create multi-volume configurations.

🚯 57xx SteelVine Manager					
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Topology 	S/N #12345678				
		Temperature	Fan Speed	Drive #0	Drive #1
	Box Status	N/A	N/A	Normal	Normal
	Drive S/N			S10UJD0S697769	S10UJD0S699354
	Exp. S/N			S10UJD0S697769	S10UJD0S699354
		Policy	Total	Drive #0	Drive #1
	Capacity			149.051 GB	149.051 GB
	Volume #0	BIG	298.101 GB	149.051 GB	149.051 GB
Silicon Image				Refresh	

Select menu options and follow the instructions in the remainder of this guide to configure SteelVine Storage Reference Designs. When prompted, enter the administrative password (default password is **admin**).

#### **Toolbar Buttons on the Status Window**

Button	Tooltip	Description		
20	Configure Box	Opens the Basic Configuration Wizard. (appears only when using GUI Configuration mode)		
30	Schedule Disk Verify	Schedule a disk Verify activity. (appears only when one or more SAFE volumes exist)		
♪	Configure Pop-Ups	Configure the Pop-Up messages.		
	View Policy Settings	Shows the Rebuild Policy settings that are defined by the GPI pins (appears only when one or more SAFE volumes exist)		
<b>9</b>	Show Event Log	View the Event Log.		
	Specify Firmware	View the current version or download an updated version of the SteelVine Storage Processor firmware.		
	Email Notification	Configure the operation of email message notification.		
<b>.</b>	Backup Button	Configure the third party backup application that should be launched when the Backup Button is pressed on the SteelVine Storage Reference Design.		
	Drive Locking	Enable/disable the hard drive data security mechanism (not implemented yet).		

## **RAID** function set

1. To access the Basic Configuration Wizard, click on the **Configure Box** icon along the top of the SteelVine Manager Status Window.



- 2. To protect against unintended changes, the SteelVine Manager prompts for a password the first time you access the Wizard. Enter the administrator password. The default password is **admin**.
- 3.

🚯 57xx SteelVine M	? 🛛	
To change the firmware Please input your passw	requires a password. ord now.	
[		
Silicon	Cancel	OK

4. The Basic Configuration Wizard dialog will appear. (For BIG Mode)



5. In "Storage Policy", select your configuring MODE

: JBOD, SAFE (RAID1) , BIG, SAFE33, SAFE50, FAST (RAID0) , click "Ap ply" take on the following Window, set  $OK_{\circ}$ 

🚯 57xx SteelVine Manager					
<u>File E</u> dit <u>H</u> elp					
🚵 🗘 🄗 📮 🕉 🛃					
Topology 12345678	S/N #12345678				
		Temperature	Fan Speed	Drive #0	Drive #1
	Box Status	N/A	N/A	Normal	Normal
	Drive S/N			S10UJD0S697769	S10UJD0S699354
	Exp. S/N			S10UJD0S697769	S10UJD0S699354
		Policy	Total	Drive #0	Drive #1
	Capacity			149.051 GB	149.051 GB
	Volume #0	BIG	298.101 GB	149.051 GB	149.051 GB
				_	
VSilicon Image				Refresh	

6. Open"My Computer"→"Computer management"→"Disk management". Delete the disk partition of the Mobile Rack.

7. To repartition and reformat the Mobile Rack, then BIG Mode setting OK, that is under work.

**NOTE:** The manner of setting JBOD, SAFE(RAID1), SAFE33, SAFE50, FAST(RAID0) is the same as the above.

## Radio Frequency Energy, Certifications

#### FCC Warning

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 technician for help

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation

#### **CE Statement, EMC Compatibility**

This device complies with EN Standards EN55022 and EN55024 according to the relevant EC EMC Directive. It must be used with shielded cables only to maintain EMC compatibility.

Dieses Produkt entspricht den einschlägigen EMV Richtlinien der EU und darf nur zusammen mit abgeschirmten Kabeln verwendet werden.

#### **LINDY Herstellergarantie**

LINDY gewährt für dieses Produkt über die gesetzliche Regelung hinaus eine zweijährige Herstellergarantie ab Kaufdatum. Die detaillierten Bedingungen dieser Garantie finden Sie auf der LINDY Website aufgelistet bei den AGBs.



## WEEE (Waste of Electrical and Electronic Equipment), Recycling of Electronic Products

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. The wheelie bin symbol shown indicates that this product must not be disposed of with household waste. Instead the product must be recycled in a manner that is environmentally friendly. For more information on how to dispose of this product, please contact your local recycling centre or your household waste disposal service. Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products.

More details can be obtained from your national WEEE recycling agency.

#### Germany / Deutschland

Die Europäische Union hat mit der WEEE Direktive umfassende Regelungen für die Verschrottung und das Recycling von Elektro- und Elektronikprodukten geschaffen. Diese wurden von der Bundesregierung im Elektround Elektronikgerätegesetz – ElektroG in deutsches Recht umgesetzt. Dieses Gesetz verbietet vom 24.März 2006 an das Entsorgen von Elektro- und Elektronikgeräten über die Hausmülltonne! Diese Geräte müssen den lokalen Sammelsystemen bzw. örtlichen Sammelstellen zugeführt werden! Dort werden sie kostenlos entgegen genommen. Die Kosten für den weiteren Recyclingprozess übernimmt die Gesamtheit der Gerätehersteller.

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