



# User Guide

## Z Snap-In Disk Array (Z4SNHU3)

[www.addonics.com](http://www.addonics.com)

v8.1.11

### Technical Support

If you need any assistance to get your unit functioning properly, please have your product information ready and contact Addonics Technical Support at:

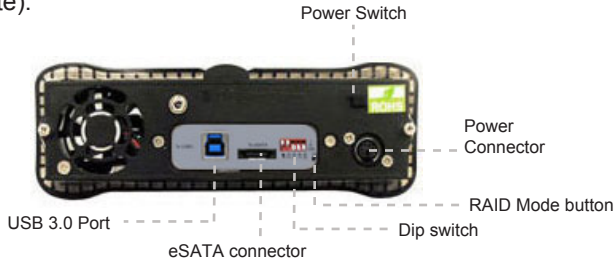
**Hours: 8:30 am - 6:00 pm PST**

**Phone: 408-453-6212**

**Email: <http://www.addonics.com/support/query/>**

# Installation

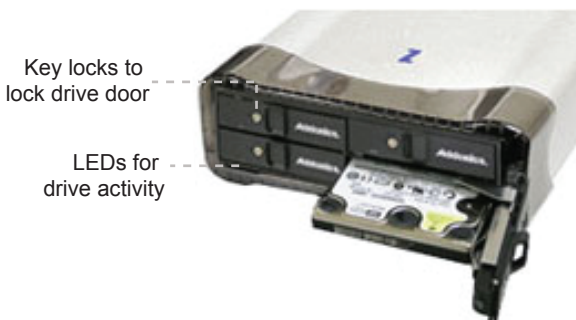
1. Install drives as described in the Disk Installation section.
2. Connect the AC power adapter's input to a wall outlet and the output cable to the Z Disk Array's power connector.
3. Connect either the USB 3.0 or eSATA cable from the Z Disk array to the computer.
4. Configure the Port Multiplier as described in the Port Multiplier section.
5. Turn on the unit using the power switch on the back next to the power connector (see note).



# Disk Installation

1. Be sure the lock on each drive door is unlocked. If not, use the key that came with the Z Snap-In Disk Array to unlock the drive door. Pull on the door lever to swing open the drive door all the way.
2. Slide a 2.5" SATA hard drive into the drive slot with the drive connector side facing in and the label side up. The drive should slide all the way into the slot with very little resistance. Forcing the drive into the slot will cause permanent damage to the drive or the Snap-In enclosure.
3. Once the drive is all the way into the drive slot, close the door all the way till the drive door latches securely. This will engage power and data connection with the hard drive. You may lock the drive door with the key.
4. To remove the hard drive from the enclosure, simply follow the step 2 – 3 in reverse.

**Note:** Hot swapping the drives must be supported by the host adapter. Powering the cabinet on or off or inserting or removing drives when connected to a host adapter that does not support hot swapping will cause undesirable results.



# Port Multiplier

## Default factory DIP Switch setting:

### SW1 – RAID Setting DIP Switch

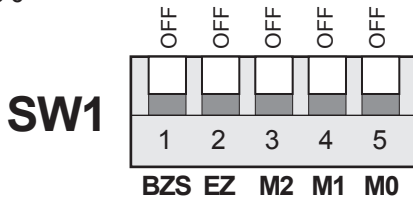
BZS – Error buzzer function

EZ – Automatic rebuilding to spare drive (one of the drives on the raid is set as a spare). If EZ is ENABLED and a drive failure occurs, the spare will automatically act as a drive replacement and rebuilding will automatically start.

M2 – RAID mode 2

M1 – RAID mode 1

M0 – RAID mode 0



1. Error buzzer function is ENABLED (BZS) when dip switch is in OFF position
2. Auto-rebuilding to spare drive is DISABLED (EZ)
3. Individual drive mode is ENABLED (M0~M2)

| Raid Mode                             | Dip Switch Settings              |  |                      |     |     |
|---------------------------------------|----------------------------------|--|----------------------|-----|-----|
|                                       | 1                                | 2  | 3                    | 4   | 5   |
| Individual Drive<br>(Factory Default) | OFF                              | OFF                                      | OFF                  | OFF | OFF |
| 0                                     | OFF                              | OFF                                      | ON                   | ON  | ON  |
| 1 and 10                              | OFF                              | OFF                                      | ON                   | ON  | OFF |
| 3                                     | OFF                              | OFF                                      | ON                   | OFF | OFF |
| 5                                     | OFF                              | OFF                                      | OFF                  | ON  | OFF |
| Clone                                 | OFF                              | OFF                                      | OFF                  | ON  | ON  |
| Large                                 | OFF                              | OFF                                      | ON                   | OFF | ON  |
|                                       | Enable<br>ERR Buzzer<br>Function | Auto-<br>Rebuilding<br>to Spare<br>Drive | Port Multiplier Mode |     |     |

## Setting the RAID Mode:

1. For Windows users, install the JMicron HW RAID Manager located on the SATA Controller CD. In the CD, go to Configuration Utilities > JMB393. This manager can be used to create and monitor the status of the RAID volume.

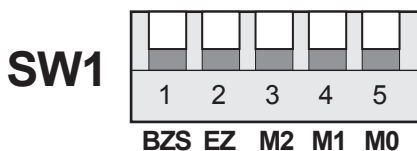
It is recommended to use the default factory RAID DIP switch setting when using the JMicron HW RAID Manager.

2. Modify the RAID mode on the 5-port HPM-XU using DIP switch

Recommended to be used on operating system without JMicron HW RAID Manager support like Linux, Mac & Solaris. Windows users can also use the procedure below.

**Note: Steps A to D need to be performed each time the raid mode is modified.**

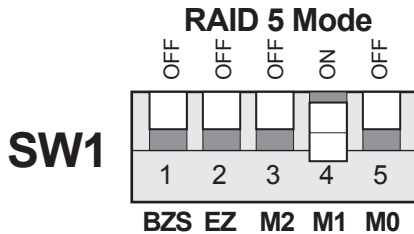
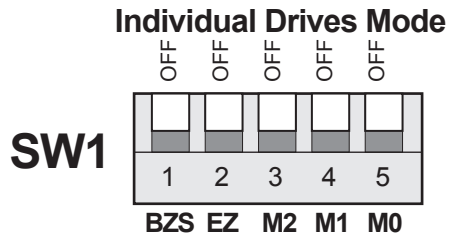
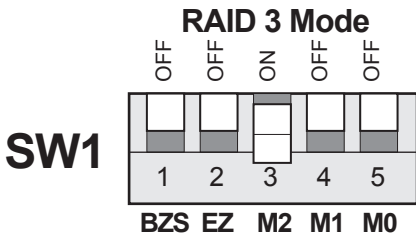
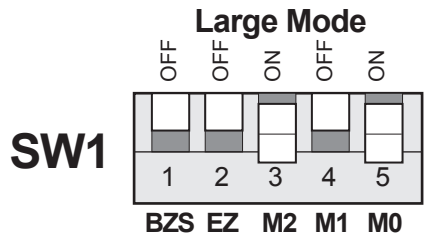
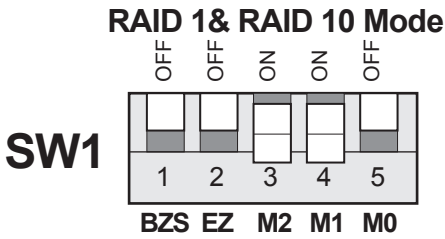
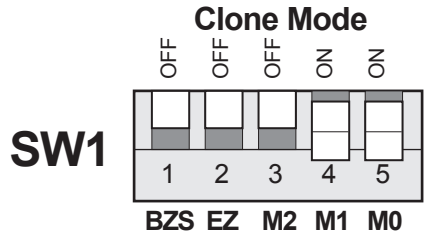
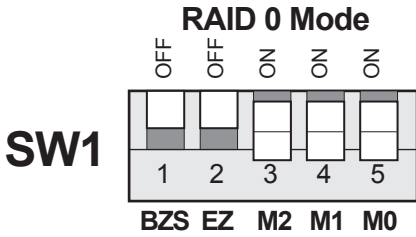
- a. Set the DIP switch to factory default setting.



- b. Press the RAID setting button with a ball point pen.
- c. While pressing the RAID setting button turn on the system power where the HPM is connected. The buzzer will sound while holding the RAID setting button. Release it after at least 5 seconds for hardware initialization. A single beep will be heard to indicate initialization is completed. The above steps act as a reset.
- d. Power off the system power.
- e. On the DIP switch, change (M0 to M2) setting to the desired RAID mode using the diagram below.

All settings on the diagram shows

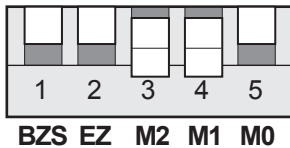
- Error buzzer function is ENABLED
- EZ function is DISABLED.



## RAID Setting Notes:

**SW1**

### RAID 1& RAID 10 Mode

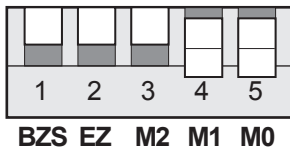


When 2 drives are connected to the HPM-XU, and DIP switch is set to this setting, the 2 drives will be configured as a 2-drive RAID1 array.

When 4 drives are connected to the HPM-XU, the 4 drives will be configured as a 4-drive RAID10 array.

**SW1**

### Clone Mode



Clone's action is similar to RAID1. However, all of the hard drives will be mirrored. Clone mode is useful especially when users like to copy data from a source hard drive to the drives connected to the HPM-XU.

- f. Press the RAID setting button with a ball point pen.
- g. While pressing the RAID setting button turn on the system power where the HPM is connected. The buzzer will sound while holding the RAID setting button. Release it after at least 5 seconds for hardware initialization. A single beep will be heard to indicate initialization is completed.
- h. Verify if the RAID array is detected by the system.
- i. If the 5-port HPM-XU is connected to the motherboard onboard SATA, on the CMOS setup utility, the raid array will display as "Addonics H/W RAID5" if setup as a RAID5 array.
- j. If the 5-port HPM-XU is connected to an eSATA host controller card, on the RAID BIOS, the raid array will display as "Addonics H/W RAID0" if setup as a RAID0 array.
- k. If booted into Windows, in Disk Drives under Device Manager, the raid array will display as "Addonics H/W LARGE" if setup as a LARGE array.
- l. Once raid array is verified, you can set the buzzer either ON or OFF.

## Notes on Spare Drives using the Easy RAID Setting (EZ)

When EZ function is ENABLED, the auto-rebuilding to spare drive is automatic. The degraded RAID group will start rebuilding automatically by using the existing spare drive.

\* Spare drive can be either plugged after RAID building or a new drive can be plug as the spare drive when RAID rebuild is required.

When will rebuild action start?

- When the raid fails and EZ is enabled, the HPM-XU will automatically rebuild the RAID group using the spare.
- When the raid fails and EZ is disabled, the HPM-XU will NOT rebuild the raid group unless you install a good drive to replace the failed drive.

## CONTACT US

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