



User Guide

Snap-In 25 RAID

(AERD25SN35)

www.addonics.com

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/>

Overview



Drive Installation

Open the front panel by pressing the front panel button on the left side toward the right. Swing the door open all the way, then insert drives SATA connector first, label side up as shown, until they stop. Drives should slide into the enclosure easily, do not force them. Snap the cover closed over the drives.



Hot Swapping

The cabinet itself may be disconnected from its SATA host, or both drives may be ejected from the unit without shutting down the operating system. However, the SATA controller connected to the unit must support the Hot Swapping feature to avoid malfunction of the controller or operating system, and any safe removal steps needed must be taken to avoid loss of data.

Port Multiplier Compatibility

When configured as a set of individual drives, the Snap-In 25 RAID will only work with a Port Multiplier aware host. Identify your host controller and check with its hardware manufacturer if you are unsure. Addonics offers several Port Multiplier aware host adapters. If the SATA host adapter is not port multiplier aware, only the top drive may appear, or none at all.

Using identical drives for RAID 0 or RAID 1 is strongly recommended. Creating a RAID 0 or 1 using drives that are not all the same size will result in all members using only as much space as the smallest member. Creating a RAID using drives that have different performance will degrade the overall performance of the array.

Activity LED

The Activity LED glows to indicate the unit has power and blinks to indicate activity. It does not show RAID status.

Mode Switch

The Mode switch has four settings, described in detail below:

Jbod

This setting creates a non-RAID array called LARGE.

Number of drives: 2

Unit capacity: 100% of all drives together regardless of differences in size

Fault tolerance: cannot withstand the loss of any drives without losing data.

However, some data may be recovered as long as the top drive carrying the file system data (boot record, directory, etc.) remain online. LARGE mode is neither a RAID nor is it a JBOD. It works by declaring the sum of all available space of the member drives as a single unit, without striping the data. After the first member is filled, new data is stored on the second.

RAID 1

This setting creates a Mirror Set.

Number of drives: 2

Unit capacity: size of the smallest member.

Fault tolerance: RAID 1 can withstand the loss of one drive without losing data.

RAID 1 works by duplicating the exact same data on both drives.

RAID 0

This setting creates a Stripe Set.

Number of drives: 2

Unit capacity: size of the smallest member times two.

Fault tolerance: none - if either member is lost all data is lost.

RAID 0 "stripes" the file system across the array by placing "chunks" of data sequentially between drives in a specific order.

Nor

This setting allows the drives to act independently of each other ("JBOD mode").

Number of drives: 1 or 2.

Unit capacity: N/A (100% of each individual drive)

Fault tolerance: none

JBOD mode offers both connected units to the host adapter, no RAID is defined at all.

NOTE: JBOD mode with two drives requires a SATA controller featuring Port Multiplier support.

Using the Mode Switch

The unit will only set up a RAID or LARGE array if it is currently set for independent drives (Mode Switch set to “Nor”). If an array is defined and a different array setting is desired, the unit must be powered up one time with the Mode Switch set to “Nor” before a new array will be created. Otherwise, simply set the switch to the desired setting and power up the unit. Leave the Mode Switch set to the desired array type.

NOTE: Setting or modifying the mode destroys all data.

Using the JMicron RAID Manager

Windows users may install the JMicron HW RAID Manager application located on the SATA Controller CD, or download it from http://addonics.com/drivers/driver_list.php. In the CD, browse to Configuration Utilities → JMB393.

Mac and Linux users may download those versions of the same utility from http://addonics.com/drivers/driver_list.php under “Port Multiplier & Hub.”

The JMicron RAID Manager can be used to monitor the health status of the RAID drives, and provide status alerts with dialog boxes and even email.

Using the JMicron RAID Manager to create or modify an array is NOT recommended. The Mode Switch should be set to the desired type of array at all times to prevent data loss.

CONTACT US

www.addonics.com

Phone: 408-573-8580

Fax: 408-573-8588

Email: <http://www.addonics.com/sales/query/>