# Chapter 5: "Hot Swap"

This chapter explains how to remove and install the "Hot-Swap" parts without interrupting the data access while the disk array is on.

The "Hot-Swap" parts include:

- Hard Disk Drives
- Cooling Fans

Follow the steps below and refer to the diagrams to remove and install the "Hot-Swap" parts.

## Removing / Installing Hard Disk drives

#### a. Unlock the HDD tray

(When a HDD error occurs, the HDD LED indicator lights up "RED")

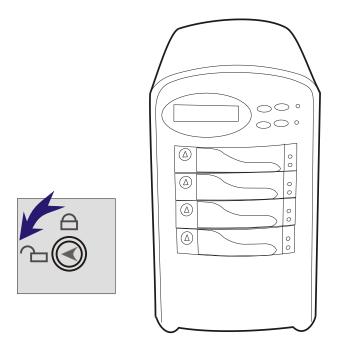


Figure: Swap HDD (Unlock)

### b. Gently pull-out the HDD tray

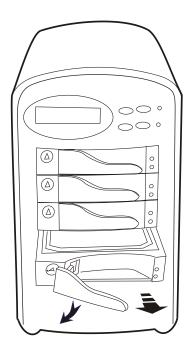


Figure : Swap HDD ( Pull-out )

### c. Unscrew and unplug the cables

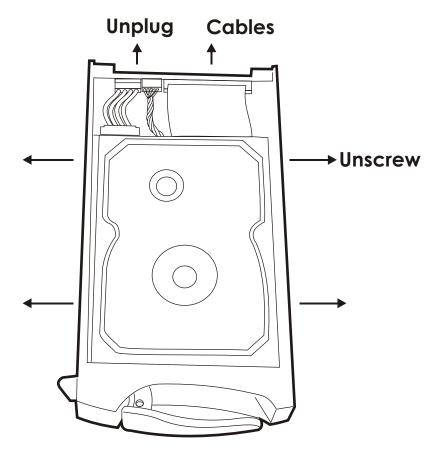


Figure : Swap HDD ( Unplug cables )

#### d. Replace with a new Hard Disk Drive

It must be same capacity or greater than the faulty drive, if you replace with a Hard disk Drive of insufficient capacity, the Disk Array's built-in buzzer will sound and the intelligent Auto-Rebuild function will not be started.

\* For best performance, we recommend you swap with an identical Hard Disk Drive.

#### e. Gently Slide-in the HDD tray and lock up to start the Auto-Rebuild

When you have installed the replacement disk drive, screw in all the screws and plug in the cables, you may now gently slide in the HDD tray into the chassis and lock up it.

\* Data Auto-Rebuild will be started automatically when you lock up the HDD tray.

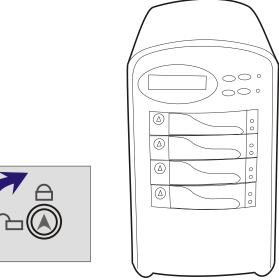




Figure: Swap HDD (Lock Up)

## Removing / Installing Cooling Fans

Unscrew the Fan door and open the door.

! Caution: Be careful, the high speed rotating fans may harm you. Don't touch the rotating Fans, If necessary, Unplug the Fan power connector first.

#### **Unscrew Here!**

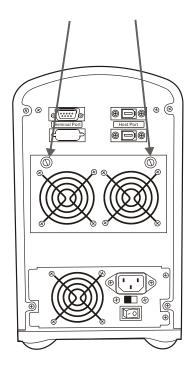


Figure: Swap cooling Fan (Unscrew)

- Unplug the Fan connector
- Unscrew the faulty cooling fan and replace with a good one
  - ☆Important! The cooling fan's air flow must point to the fan door, please refer to the label on the cooling fan.
- Plug in the fan connector, close the fan door and screw it in
  - ! Caution: The cooling fan will rotate immediately when you plug in the fan power connector.
- ☆ The Cooling Fan will only fit in one orientation.

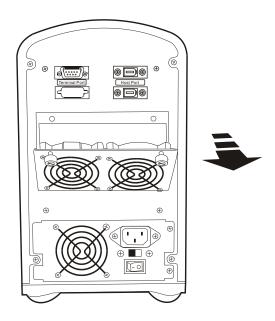


Figure: Swap Cooling Fan (swap with a new Fan)

### **Technical Specifications**

Microprocessor Intel i960RM RISC processor

Cache Memory 64MB\*

Maximum 512MB

DRAM Slots One

Module Type 144 Pin DIMM

DRAM Type SDRAM
DRAM Speed PC100/133
Parity Non-Parity
Read Cache Read-Ahead
Write Cache Write Back\*

Stripe Size Variable ( $8 \sim 128$ KB)

Firmware Flash EEPROM ,256K x 8

Hardware XOR Accelerate Build-In

IEEE 1394 I/O Processor TI TSB43AB22

Serial Port 1x RS232 (Asynchronous) Port

Ba ud Rate 115,200 (Bits Per Second)

Da ta Bits 8
Sto p Bit 1
Pari ty None

RAID Levels 0, 1, 0+1, 3 or 5

Data Transfer Rate Up to 400Mbits

Interface: Host Channel 1\* IEEE 1394A Firewire

Disk Channels 4\* EIDE ATA-100

Drives Hot Swap, User Replaceable

Up to Four 3.5" drives (1" height)

Maximum Fault

**Tolerant Capacity** 

>480 GB

Drive MTBF >1,000,000 hrs

Host Requirement Host Independent

Operating Systems O/S Independent and Transparent

Data Rebuild Automatic Data Regeneration

LCD Display Panel 2 x 16 Characters

Cooling Fans 6 cm Ball Bearing Fan

2 Fans

Power Supply Capacity 200W

AC Input Voltage 115 / 230V (+/10%), 60/50 Hz

**Environmental** 

Relative Humidity 10% to 85% Non-condensing

Temperature Operating:  $5^{\circ}$ C ~  $40^{\circ}$ C

Storage:  $-25^{\circ}\text{C} \sim 60^{\circ}\text{C}$ 

Safety testing Under apply UL, CE and FCC Class B Dimensions 165mm(W) \* 295mm(D) \* 280mm(H)

Weight 7 kgs ( W/O Disk Drive )

<sup>&</sup>quot; \* " Default Settings

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