# Chapter 2 : " Getting Started "

## **General Overview**

This chapter helps you get ready to use the Disk Array. It gives you :

- Unpacking & Checklist
- Choosing a place for Disk Array
- Identifying Parts of Disk Array
- Power Source
- Installing the Hard Disk Drives
- Host Linkage
- Power-On and Self-test
- LED Display and Function Keys
- LCD Status Display

The following illustrations will help you read the further sections.

## Special Note :

RAID should never be considered a replacement for doing regular backup. It's highly recommended to conduct a backup strategy for critical data.

## **Unpacking & Checklist**

Before unpacking your Disk Array , prepare a clean and stable place to put the contents of your Disk Array's shipping container on. Altogether, you should find the following items in the package :

- The Disk Array
- One AC power cord
- One External SCSI cable
- Keys (For HDD Trays)
- User Manual
- RS-232 Cable

Remove all the items from the carton. If anything is missing or broken , please inform your dealer immediately. Save the cartons and packing materials that came with the Disk Array. Use these materials for shipping or transporting the Disk Array.



#### Figure : Checklist

## Choosing a place for Disk Array

When selecting a place to set up your Disk Array, be sure to follow the guidelines as below:

- Place on a flat and stable surface.
- Use a stand that supports at least 50kgs for this Disk Array. (HDD included )
- Place the Disk Array close enough to the computer for the Disk Array's External SCSI cable to reach it.
- Use a grounded wall outlet.
- Avoid an electrical outlet controlled by wall switches or automatic timers. Accidental disruption of the power source may wipe out data in the memory of your computer or Disk Array.
- Keep the entire system away from potential sources of electromagnetic interference, such as loudspeakers, cordless telephones, etc.

### Caution !

Avoid direct sunlight, excessive heat, moisture, or dust.

Identifying Parts of the Disk Array

Front View



Figure : Front View

- 1. LCD Status Display Panel
- 2. HDD Trays 1  $\sim$  8
- 3. Power Supply Status Indicator ( light up Green / Red )
- 4. Function Keys (  $\uparrow$  ,  $\downarrow$  , Enter , ESC )
- 5. Power-On Indicator (PWR Unit 1, PWR Unit 2)
- 6. Host Computer Access Indicator
- 7. HDD Tray Lock ( Lock / Unlock )
- 8. HDD Status Indicator (From left to right: Error (Red), Access (Yellow), Power-On (Green))
- 9. Front Cover

**Rear View** 



Figure : Rear View

- 1. Host channel adapter Port
- 2. RS232 Adapter (Terminal Port)
- 3. Cooling Fans
- 4. Power Supply Unit Switch (On / Off)
- 5. Power Supply Unit 1 LED Indicator (Green)
- 6. Power Supply Unit 1 (Upper)
- 7. Power Supply Unit 2 ( Lower )
- 8. Reserved #2 Host Channel Port
- 9. Fan Door Screws
- 10. Power Supply fail Indicator (RED)
- 11. Power Supply Alarm Reset Switch
- 12. AC Power Source Input Socket
- 13. AC Voltage Select Switch (115V/230V)

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14. Power Supply Unit Switch ( On / Off )

### Power Source

### Choosing a Working Voltage

The system can run either on AC 115V (+/10%) or AC 230V (+/10%), Slide the AC voltage select switch on both of the two power supply units to the correct position which corresponds with the wall outlet supply voltage.

### Warning !

Wrong AC Voltage input will harm the power supply and cause serious damage to the Disk Array.



Figure : Power Source

! This Disk Array must be grounded

This Disk Array is supplied with an AC power cord equipped with a 3-wire grounding type plug. This is a safety feature and it is important to only use a 3-wire grounded mains power cord.

## Installing the Hard Disk Drives

Step 1 : Open the front cover.



Figure : Installing HDD step 1

- Step 2 : Unlock the HDD tray by turning the Key-lock to the correct position.
- Step 3 : Gently Pull out the HDD tray.



Figure : Installing HDD step 2, 3

- Step 4 : Insert HDD into the tray
- Step 5 : Screw in the hard drive. (Use the correct size, type and thread)
- Step 6 : Cabling, Connect the Data cable , SCSI ID cable & Power cable.



Figure : Installing HDD step 4, 5, 6

- Step 7 : Gently slide in the HDD tray.
- Step 8 : Lock the HDD tray. When powered on the Green LED will light up.



Figure : Installing HDD step 7, 8

## Host Linkage

With the HDD(s) installed correctly, you are ready to connect the Disk Array to your Host computer.

Use a shielded twisted-pair SCSI cable to connect your Host computer to the Disk Array's built-in 68 pin SCSI adapter port.

Connect the Host computer as shown below :



Figure : Host linkage

### Caution !

For safety reasons, make sure the Disk Array and Host Computer are turned off when you plug-in the SCSI cable.

## Power-On and Self-Test

When you connect the Disk Array to the Host computer, You should press the ON/OFF Power Supply Switch on both of the power supply Hot-Swap units and the Main Switch. It will turn the Disk Array on and the Self-Test will be started automatically.



Figure : Power-On & Self-Test

## LED Display & Function Keys

### **OLED** Display

Shown below is the LED Display. Please refer to the illustration, the LEDs inform you of the Disk Array's current operating status. Upon activating a certain function, the corresponding LED indicator should turn on indicating that the feature is engaged.



Figure : LED Display

LED	Descriptions
1. Power Unit 1 Indicator	light up : <b>"Green"</b> , it lights when the Power Unit 1 is plugged and operating functionally.
2. Power Unit 2 Indicator	light up : <b>"Green"</b> , it lights when the Power Unit 2 is plugged and operating functionally.
3. Host Computer Access Indicator	light up : <b>"Yellow</b> " , Indicates Host computer is currently accessing the Disk Array
4. HDD Power-On Indicator	light up : " <b>Green"</b> , It lights when the HDD frame is locked and Power-On
5. HDD Access Indicator	light up : " <b>Yellow"</b> , when HDD is accessed
6. HDD Error Indicator	light up : <b>"Red"</b> , when HDD is not installed or HDD error

## Function Keys

The four function keys at the top of the front panel perform the following functions :

(↑) Up Arrow / Right Arrow	Use to scroll the cursor Upward / Rightward		
( $\downarrow$ ) Down Arrow / Left Arrow	Use to scroll the cursor Downward / Leftward		
(Enter)	Use to confirm a selected item		
(ESC)	Use to exit a selection		

## LCD Status Panel

Located the LCD panel, the LCD status panel informs you of the Disk Array's current operating status at a glance. Upon activating a certain function, a symbol or icon corresponding to that function will appear in the display window. The symbol will remain in the display window indicating the status of the Disk Array.

### Identifying the status on the LCD

The following illustration shows the symbols (characters) been used and their representation.

A description of each of the symbols in LCD display window :

0	On-line and functional	
R	Error occur	
I	Identifying Disk Drive	
S	Spare Disk Drive	
Х	Disk Drive not installed	
W	Warning : Disk Drive with too many Bad Sectors	

Example of the LCD status display window :

# 00000SXX R5 ID:0

This informs you :

a.	HDD 1 $\sim$ HDD 5	:	Online
b.	HDD 6	:	It is a Spare disk drive
C.	HDD 7 $\sim$ HDD 8	:	Not installed
d.	RAID Level	:	In " RAID Level 5 "
e.	SCSI ID	:	ln " ID# 0 "