Chapter 4 : " Advanced Information "

This chapter describes more information about your Disk Array. The following items are describes in detail.

- Memory Expansion
- RAID Controller
- Updating Firmware
- Capacity Expansion (On-Line Expand)

Memory Expansion

Your Disk Array comes with 64MB of memory that is expandable to a maximum of 512MB.

These expansion memory module can be purchased from your dealer.

- Memory Type: 3.3V PC100/133 SDRAM 144pin DIMM.
- Memory Size : Supports 144pin DIMMs of 64MB, 128MB, 256MB or 512MB.
- Height : 1.15 Inches (29.2 mm).

64MB	8(8Mx8), 8(4Mx16) or 4(8Mx16)
128MB	16(8Mx8), 8(16Mx8), 8(8Mx16) or 4(16Mx16)
256MB	16(16Mx8), 8(32Mx8) or 8(16Mx16)
512MB	16(32Mx8)



- Installing Memory Modules :
 - 1. Unscrew & Remove cover



Unscrews

Figure : Remove Cover

2. Install the memory

a. The DIMM memory modules will only fit in one orientation.

b. Press the memory module firmly into socket from a 45 degree angle, make sure that all the contacts are aligned with the socket.

c. Push the memory module forward to a horizontal position.



Front Panel

Figure : Controller

Advanced Information



Updating Firmware

1. Setup your VT100 Terminal

Please configure the VT100 terminal setting to the values shown below :

VT100 terminal (or compatible) set up

Connection	Serial Port (COM1 or COM2)
Protocol	RS232 (Asynchronous)
Cabling	Null-Modem cable
Baud Rate	115,200
Data Bits	8
Stop Bit]
Parity	None

Setup VT100 Terminal

Example : Setup VT100 Terminal in Windows 95

Step 1.



Step 2.



Step 3. Enter a name for your Terminal.

New Connection - Hy	perTerminal	
<u>File Edit View Call Ira</u>	ansfer <u>H</u> elp	
02 8 8	8	
	Connection Description	? ×
-	New Connection	
	Enter a name and choose an icon for the cor Name: RAID	onnection:
	Loon Solution (1997) (
	ОК	Cancel
Disconnected	Auto detect SCROLL CAP	PS NUM Capture Print echo

Step 4. Select a connecting port in your Terminal.

D e 93 - D2		212	
-	RAID		
	Enter details for the phone r	number that you want to dial:	
	Country code: United Sta Area code: 02	es of America (1)	
	Phone number:	Com1	
		0K Cancel	

Step 5. Port parameter settings

COM1 Properties	? ×	1
Port Settings		
Bits per second: 115200		- 1
Data bits: 8	×	
Earity: None		
Stop bits: 1		
Elow control: None	×	- 1
Advanced	Restore Defaults	- 1
OK Car	icel Apply	

Step 6.



Step 7. Select emulate VT100 mode

RAID - HyperTerminal Ele Edit View Call Iransfer Help		
Ele Edit View Qall Iransfer Help	RAID Properties Connect To Settings Function, arrow, and ctil keys act as Image: Connect To Windows keys Backspace key sends Image: Connect To Del Date Con+H Emulation: Auto detect Image: Con+H Antoil Terminal Setup ANSI Image: Con+H Visewdata Image: Con+H V152 recting or disconnecting ASCII Setup OK	2 X
Connected 0:01:45 VT100	19200 8-N-1 SCROLL CAPS NUM Capture	Print echo

After you have finished the VT100 Terminal setup, you may restart your Disk Array and press " Ctrl + D " keys (in your Terminal)to link the Disk Array and Terminal together.

Press Ctrl

+

to display the disk array Monitor Utility

screen on your VT100 Terminal.

D

Start to Update Firmware

1. Move the cursor to " Update ROM " and press "Enter".

ase input key: ' '')'		
Moni	itor Utility v2.5I	+
FCD	OUTPUT	1
No Configurati	lon (C,H,S,M) = (26480, 16, 63, 16)	
MENU	DMA Mode = 0x84 4	
-Main Menu+	DISK: #4 ST313620A	
e-Contig RAID	(C, H, S, M) = (26480, 16, 63, 16)	- 11
AID Level	DMA Mode = 0x84 4	- 31
lot Spare Disk	DISK: #3 9T3136ZUA	
Set SCSI ID	(C, H, S, M) = (26480, 16, 63, 16)	
ermination	DMA Mode = Ux84 4	- 3 H
et Password	DISK: #2 ST31362UA	- 3 H
ave & Restart	(C, H, S, M) = (26480, 16, 63, 16)	
n-Line Expand	DMA Mode = UX84 4	#
pdate ROM	DISK: #1 ST31362UA	#
	(C, H, S, M) = (26480, 16, 63, 16)	#
	DMA Mode - 0x84 4	#
	DISK: #/ STSISSEUA (0.0 0 M) = (26400 16 63 16)	#
	(C, n, 3, M) = (20400, 10, 03, 10)	#
	Illee NURAN config info	#
	Date working configured	#
	TALD HOC CONFIGURED.	77

Warning !

Unpredictable results will occur if firmware update is attempted during Host computer and Disk Array activity. All activity to the controller should be stopped before updating firmware. 2. Press "Y" to download the new firmware and press "Y" again to confirm the Update.



3. Select transfer " Send Text File " and press Enter.



4. Locate the new Firmware file on your PC.

RAID - HyperTerminal Fie Edt View Cal Iransfer Help (_ _ N
Be: shu Art Be: To		
File name: A_II24s Files of type: Text file (*.TXT)	Qpen Cancel	
Connected 0:01:35 VT100	19200 8-N-1 SCROLL CAPS NUM 0	apture Print echo

5. Press " Go " to confirm to download the new firmware.



- 6. Type " **Go** " to reconfirm and the firmware will begin to be reprogrammed.
- 7. After verifying, please **restart the Disk Array** to activate the new firmware.



Capacity Expansion

The RAID capacity can be expanded by add one or more Disk Drive into the existing RAID group and properly setup procedures.

- 1. Add new HDD into the RAID system.
- 2. Configuration through the RS-232 Terminal mode, move the cursor to " **On-Line Expand** " and " **Enable** " and press " **Enter** " to confirm it.
- (If you have not add any new HDD into the RAID group the " **Enable** " item will not show up.)

🎨 RAID - HyperTerminal	
<u>Eile Edit View Call Iransfer Help</u>	
D 2 <u>88</u> <u>80</u>	
AZ: Move Cursor, ESC: Exit, Enter: Enter,	Tab: Switch to Output Area
Please input key: ' '')'	
+ Monitor	Utility v2.5I+
I TCD	OUTPUTI
00003333 R5ID:0	DISK: #4 ST313620A
MENU	(C,H,S,M) = (26480, 16, 63, 16)
+Main Menu+	DMA Mode = 0x84 4
Re-Config RAID	DISK: #3 ST313620A
RAID Level	(C, H, 3, M) = (26480, 16, 63, 16)
Hot Spare Disk	DMA Mode = 0x84 4
Ilset SCSI ID	DISK: #2 ST31362UA
Termination	(C, H, S, M) = (26480, 16, 63, 16)
Il Set Password	DMA Mode = 0x84 4
Save & Restart	DISK: #1 ST3I362UA
Unt-Line Expand	(C, H, S, M) - (20400, 10, 63, 10)
I opt-Line Expand+	DTAR MODE - 0X01 1 #
LI TENADIS	(C + g - M) = (26490 - 16 - 62 - 16) #
	DNA Mode = 0x84 4
	Disk config info found #
	Use NVRAM config info.
	(BATD5): Strine = 64 #
	RAID Member: Disk(1234) #
lli	Hot-Plug function ready. #
+	+
AZ: Move Cursor, ESC: Exit, Enter: Enter,	Tab: Switch to Output Area
Connected 0.09-24 V/T100 115200 0.N.4 CCDDU	CADC MUN Cashua Pristacha
connected 0.06.24 JV1100 J115200 8-N-1 JSCHULL	Jose Juan Jospine Jenniecho