

## Chapter 4 : " Advanced Information "

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

- Memory Expansion
- RAID Controller
- Updating Firmware

### Memory Expansion

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

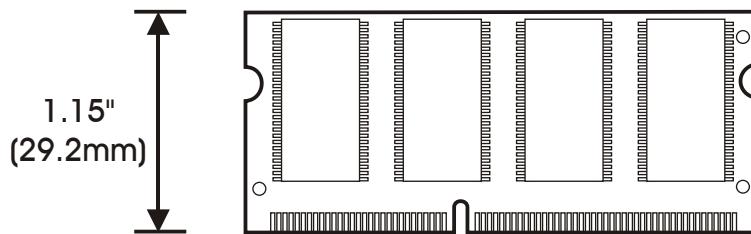
These expansion memory module can be purchased from your dealer.

- 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 ).

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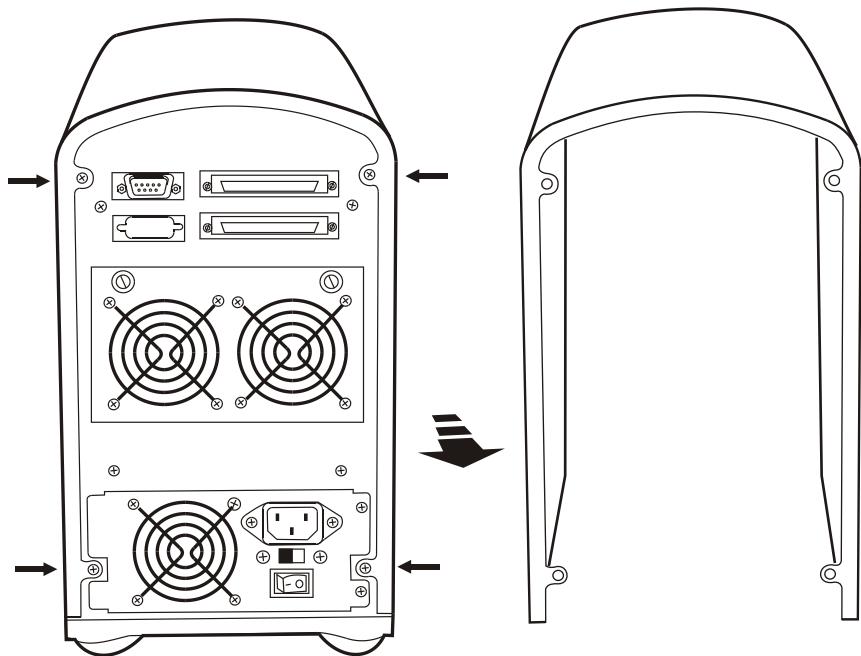
64MB	8(8Mx8), 8(4Mx16) or 4(8Mx16)
128MB	16(8Mx8), 8(16Mx8), 8(8Mx16) or 4(16Mx16)
256MB	16(16Mx8), 8(32Mx8) or 8(16Mx16)
512MB	16(32Mx8)

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- **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.

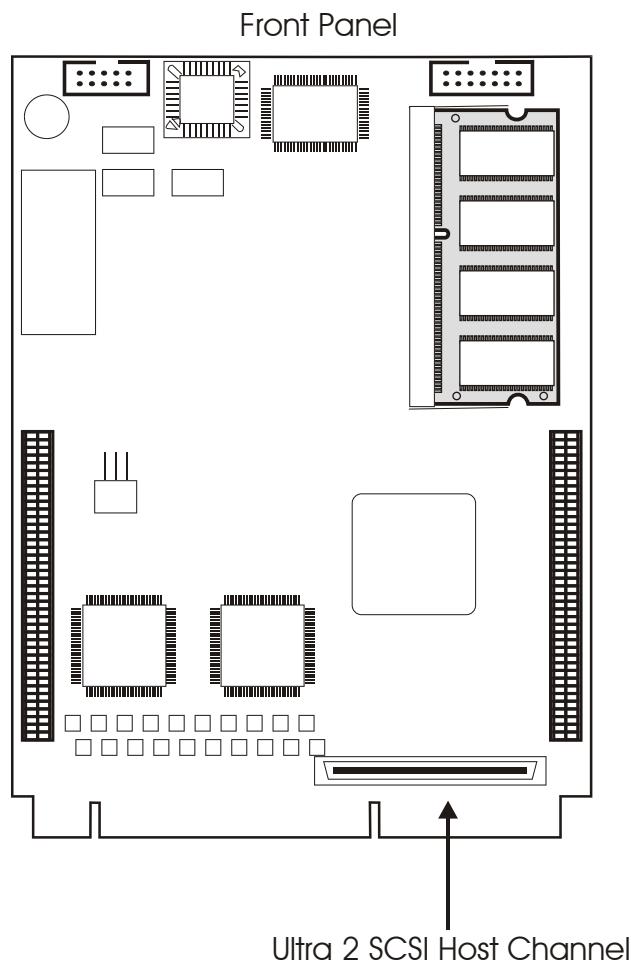
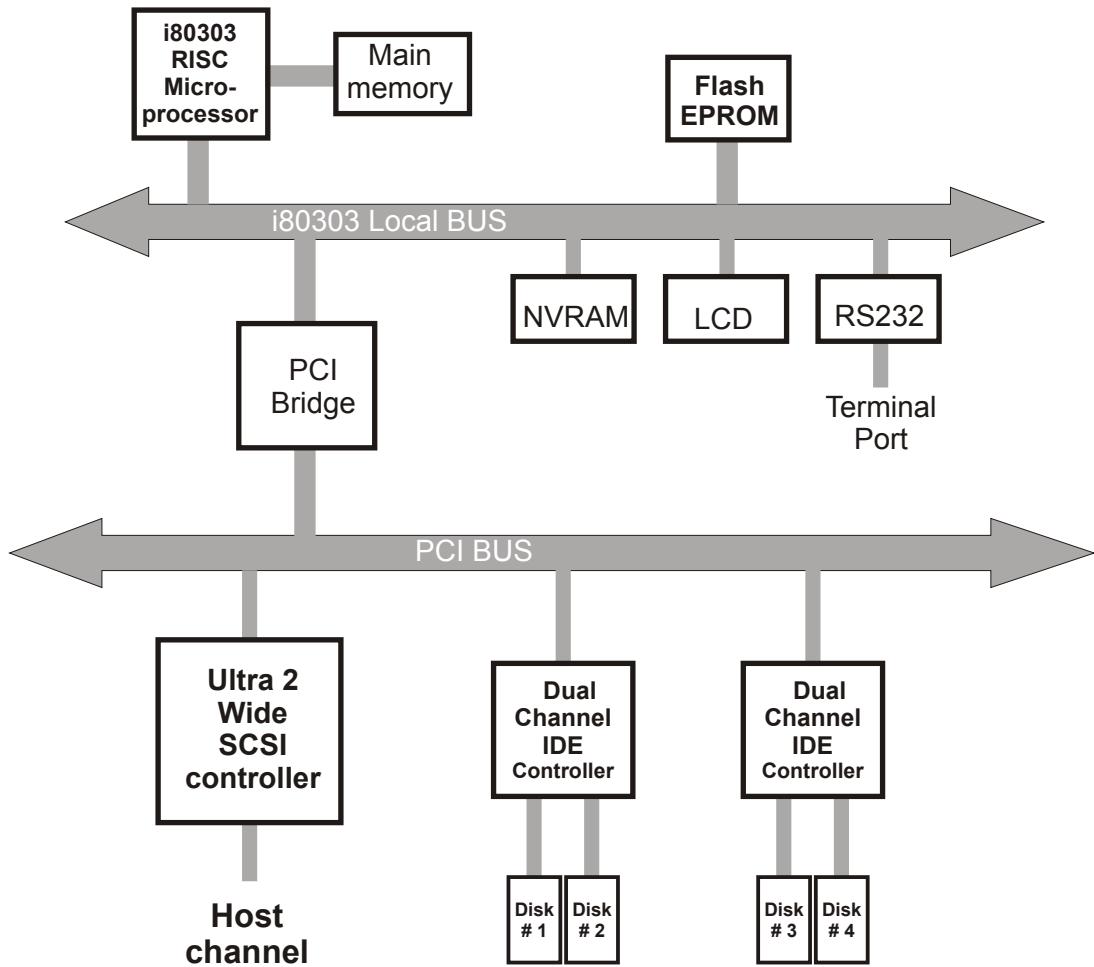


Figure : Controller

Disk Array Controller Block Diagram



### Updating Firmware

#### 1. Setup your VT100 Terminal

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

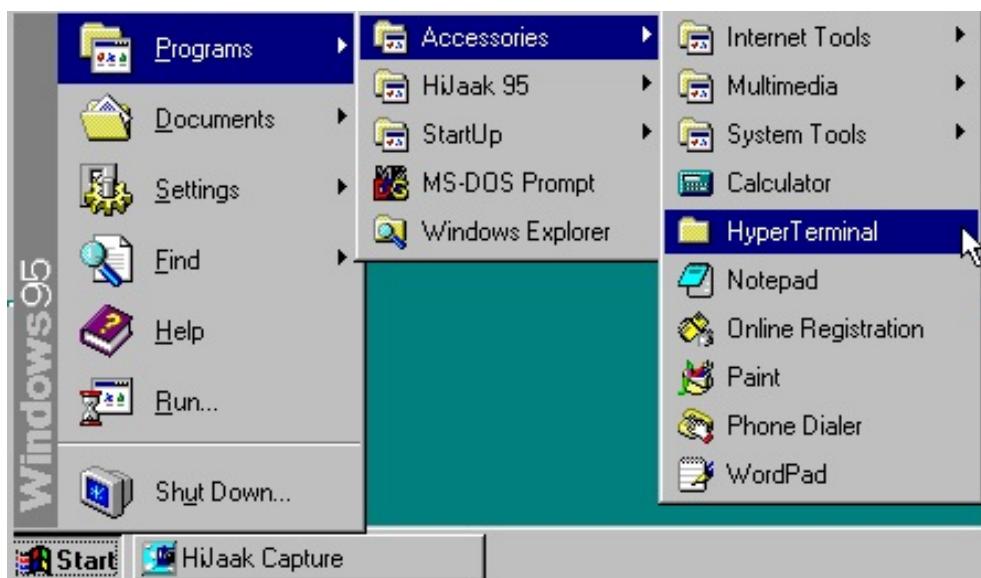
VT100 terminal ( or compatible ) set up

Connection	Serial Port ( COM1 or COM2 )
Protocol	RS232 ( Asynchronous )
Cabling	Null-Modem cable
Baud Rate	115,200
Data Bits	8
Stop Bit	1
Parity	None

### Setup VT100 Terminal

#### Example : Setup VT100 Terminal in Windows®

Step 1.

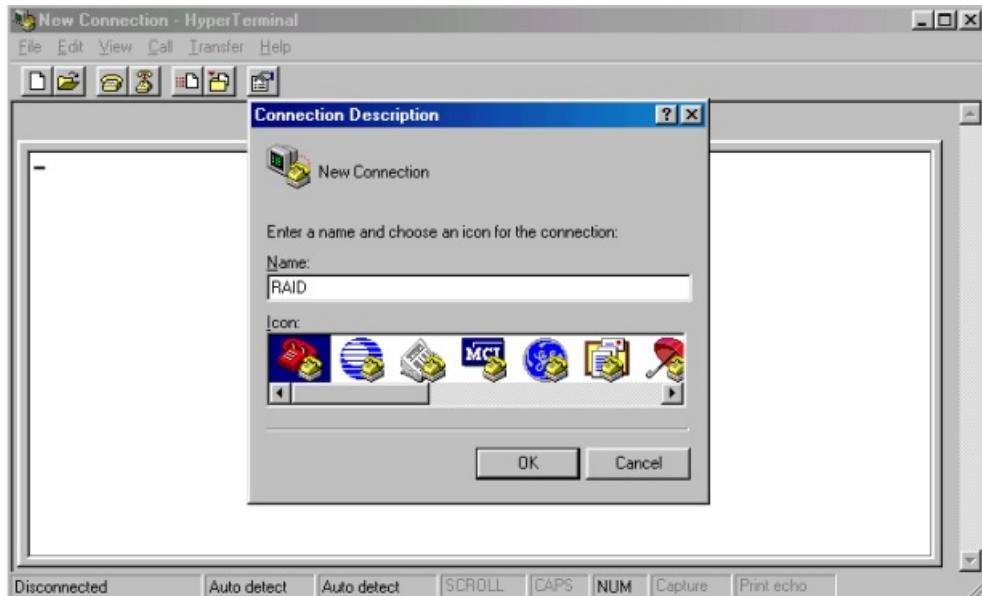


Step 2.



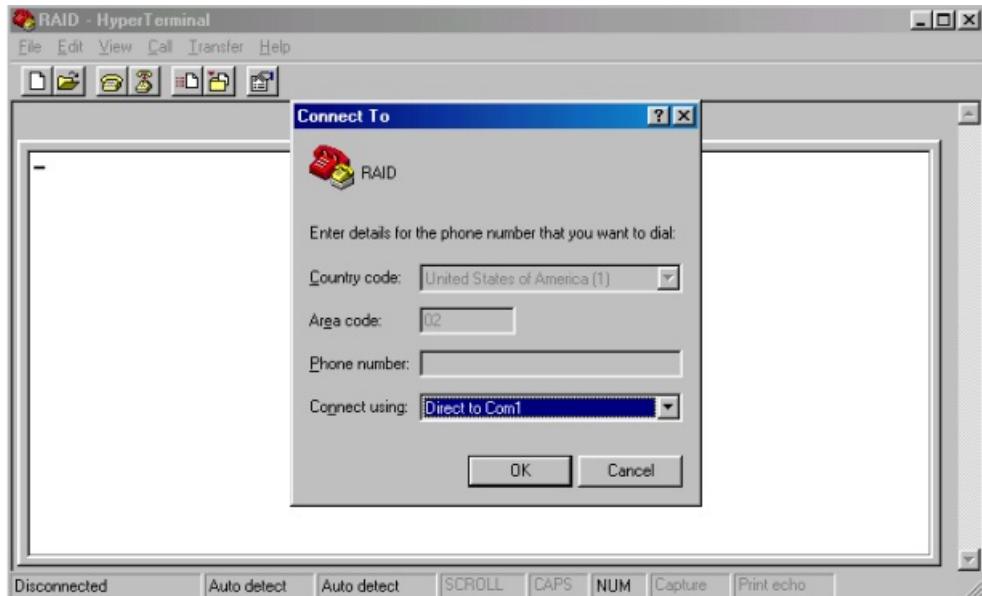
## Advanced Information

Step 3. Enter a name for your Terminal.



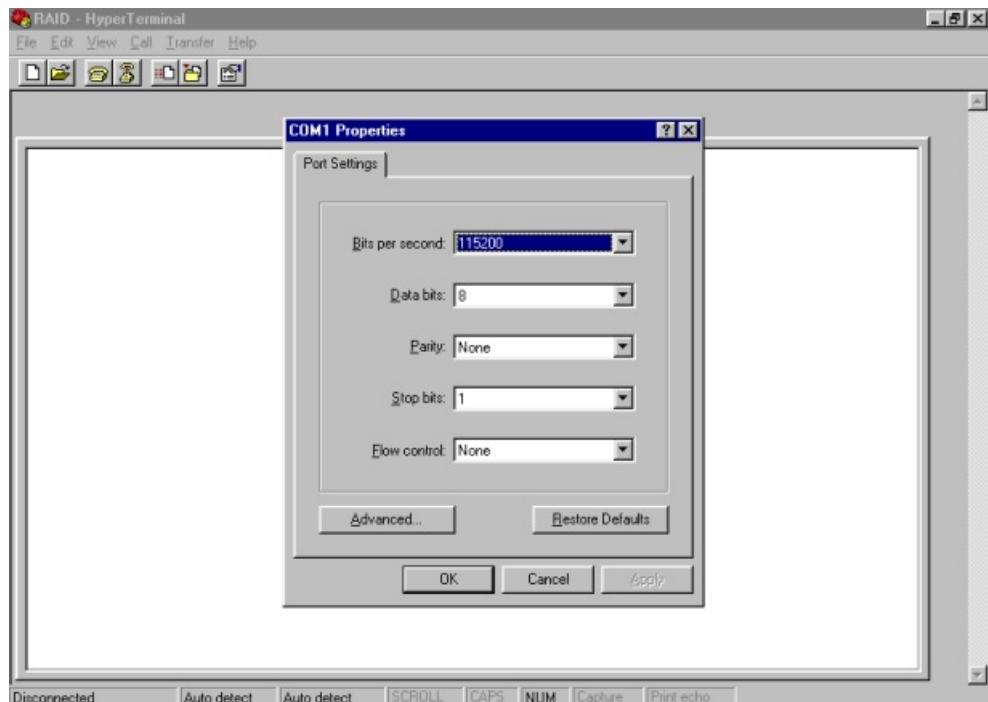
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Step 4. Select a connecting port in your Terminal.



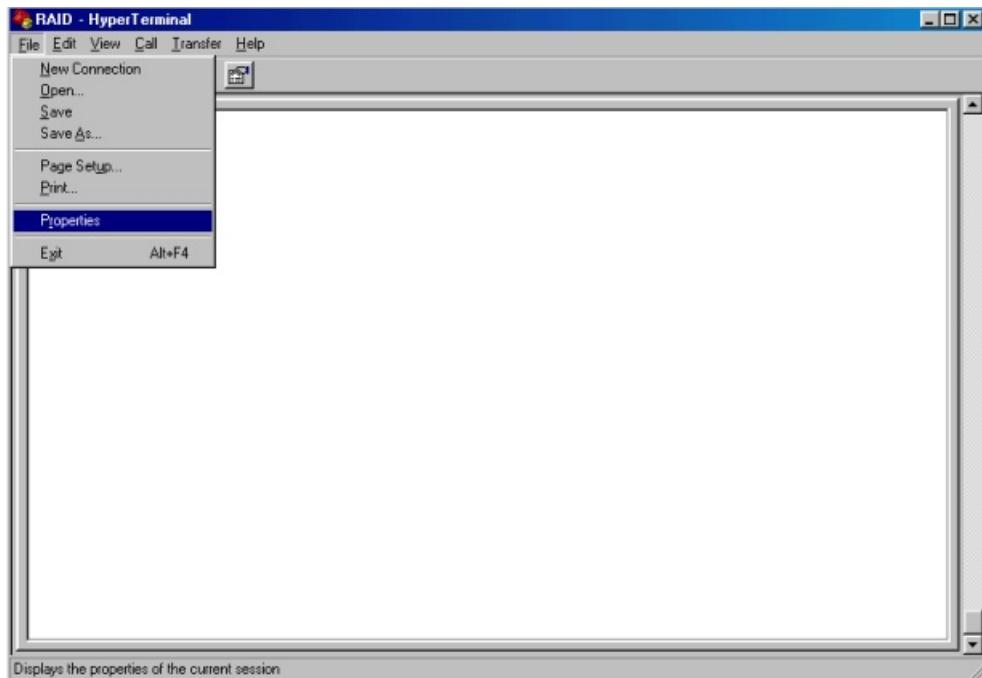
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### Step 5. Port parameter settings



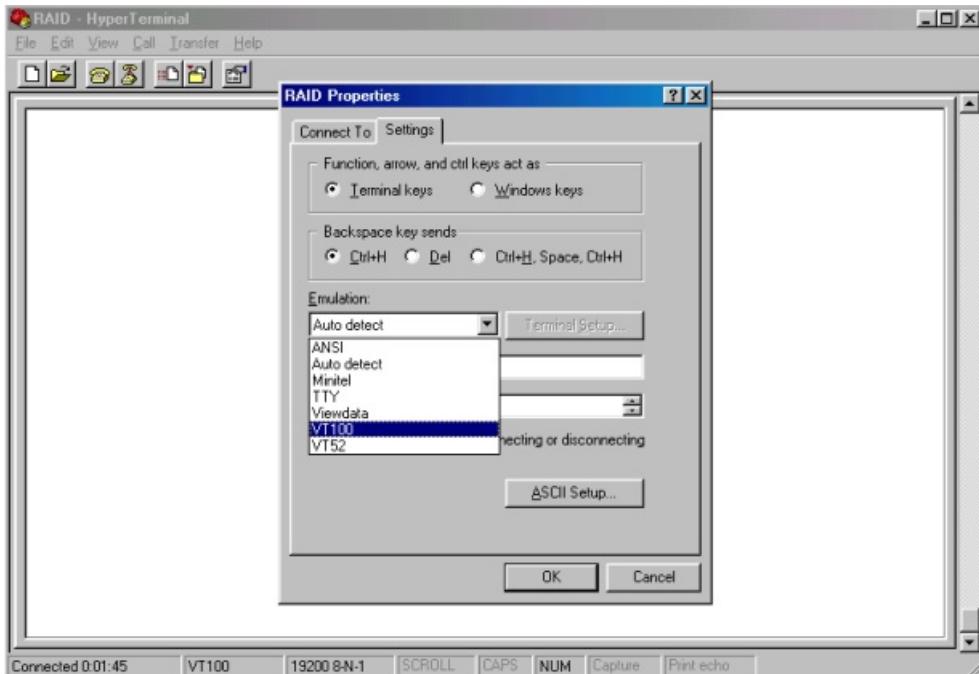
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Step 6.



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### Step 7. Select emulate VT100 mode

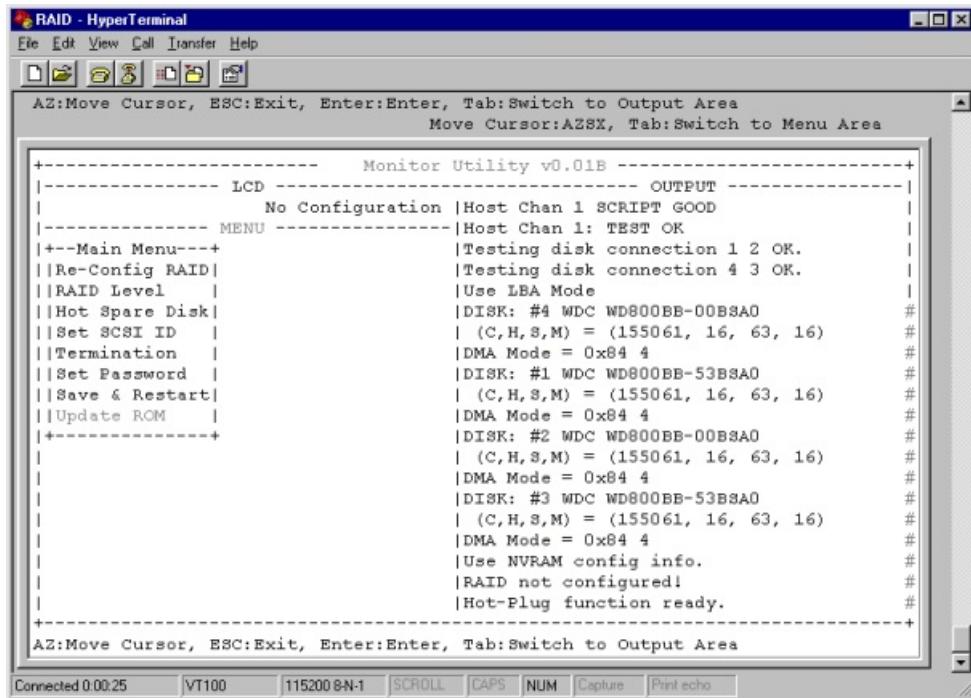


After you have finished the VT100 Terminal setup, you may restart your Disk Array and press " Ctrl + D " keys ( in your Terminal )to link the Disk Array and Terminal together.

Press **Ctrl** + **D** to display the disk array Monitor Utility screen on your VT100 Terminal.

### Start to Update Firmware

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



RAID - HyperTerminal

File Edit View Cell Transfer Help

AZ:Move Cursor, ESC:Exit, Enter:Enter, Tab:Switch to Output Area  
Move Cursor:AZSX, Tab:Switch to Menu Area

```
+-----+ Monitor Utility v0.01B +-----+
|----- LCD -----| OUTPUT
|----- MENU -----| No Configuration |Host Chan 1 SCRIPT GOOD
|-----+-----+| Host Chan 1: TEST OK
+--Main Menu---+| Testing disk connection 1 2 OK.
||Re-Config RAID||| Testing disk connection 4 3 OK.
||RAID Level||| Use LBA Mode
||Hot Spare Disk||| DISK: #4 WDC WD800BB-00BSAO
||Set SCSI ID||| (C, H, S, M) = (155061, 16, 63, 16)
||Termination||| DMA Mode = 0x84 4
||Set Password||| DISK: #1 WDC WD800BB-53BSAO
||Save & Restart||| (C, H, S, M) = (155061, 16, 63, 16)
||Update ROM||| DMA Mode = 0x84 4
+-----+| DISK: #2 WDC WD800BB-00BSAO
| (C, H, S, M) = (155061, 16, 63, 16)
| DMA Mode = 0x84 4
| DISK: #3 WDC WD800BB-53BSAO
| (C, H, S, M) = (155061, 16, 63, 16)
| DMA Mode = 0x84 4
| Use NVRAM config info.
| RAID not configured!
| Hot-Plug function ready.
+-----+
AZ:Move Cursor, ESC:Exit, Enter:Enter, Tab:Switch to Output Area
```

Connected 0:00:25 VT100 115200 8-N-1 SCROLL CAPS NUM Capture Print echo

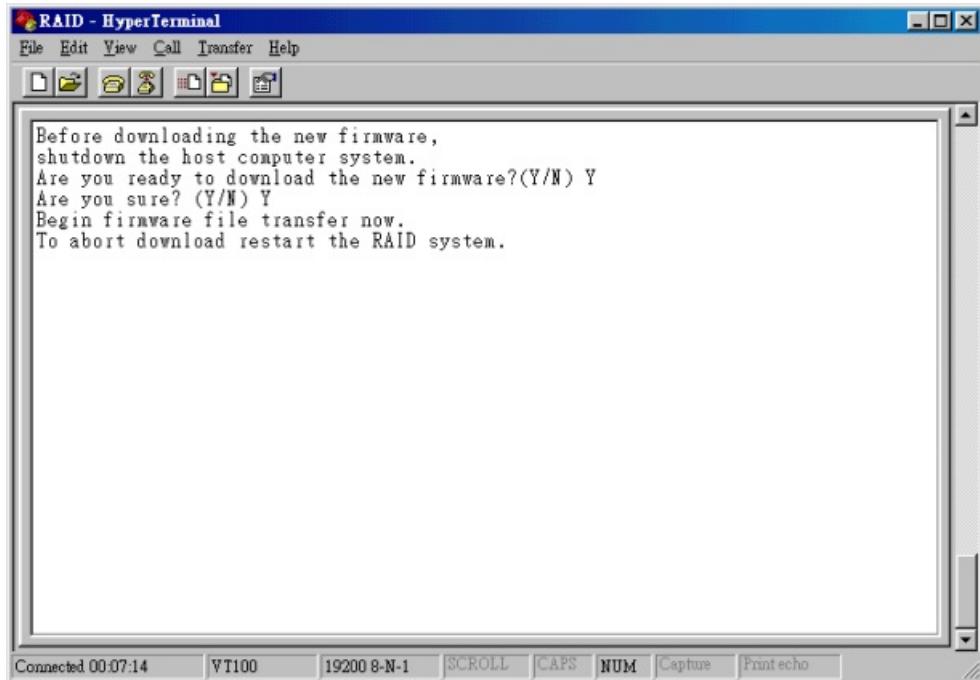
### Warning !

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.

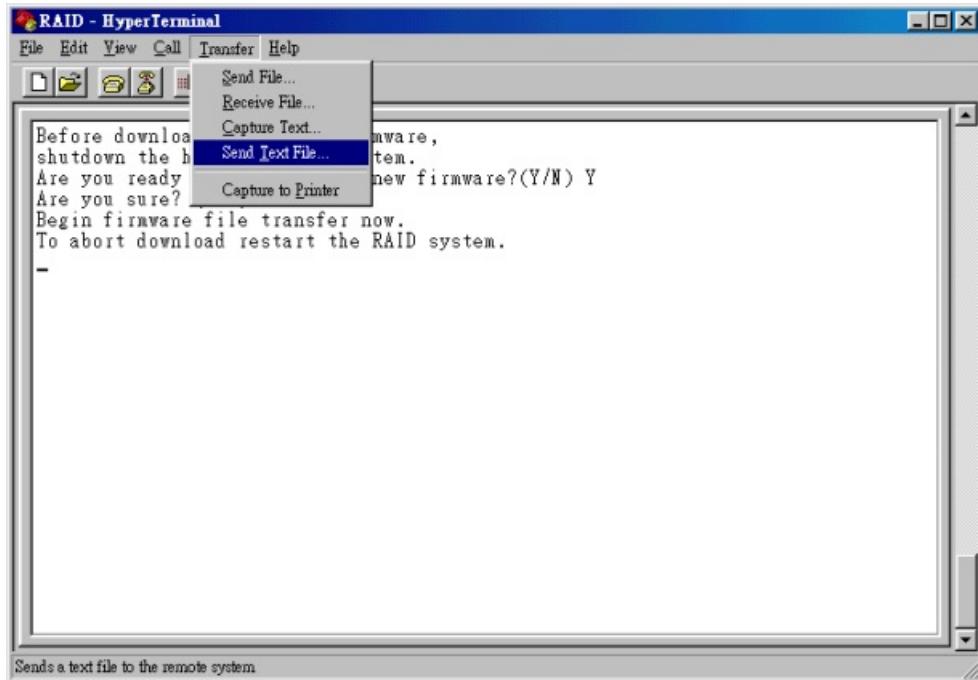
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2. Press "Y" to download the new firmware and press "Y" again to confirm the Update.

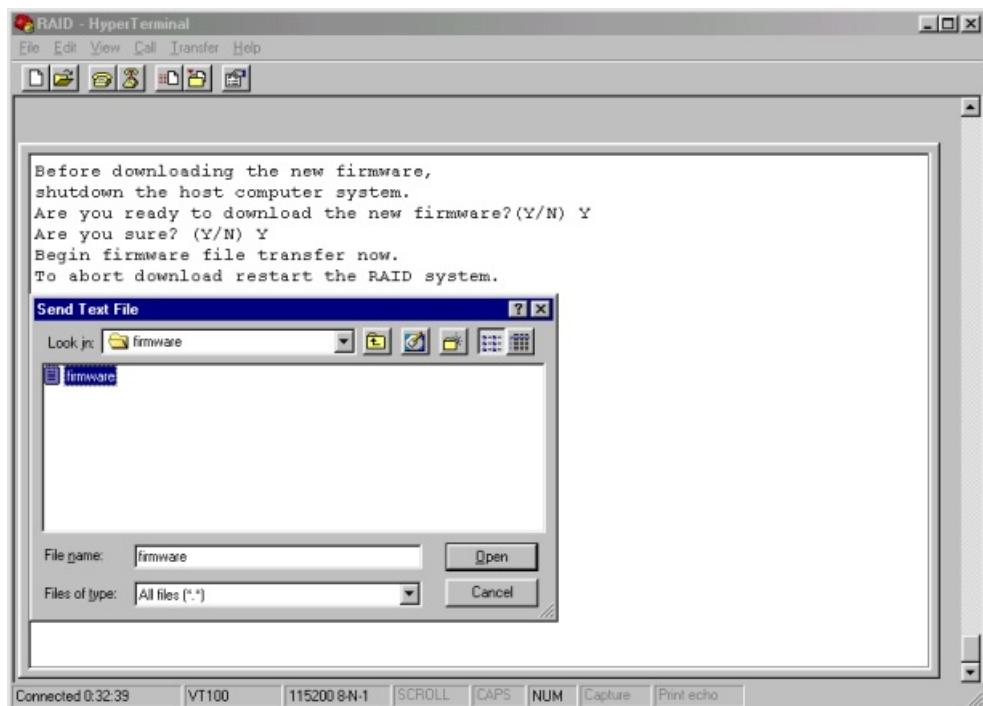


3. Select transfer " **Send Text File** " and press Enter.



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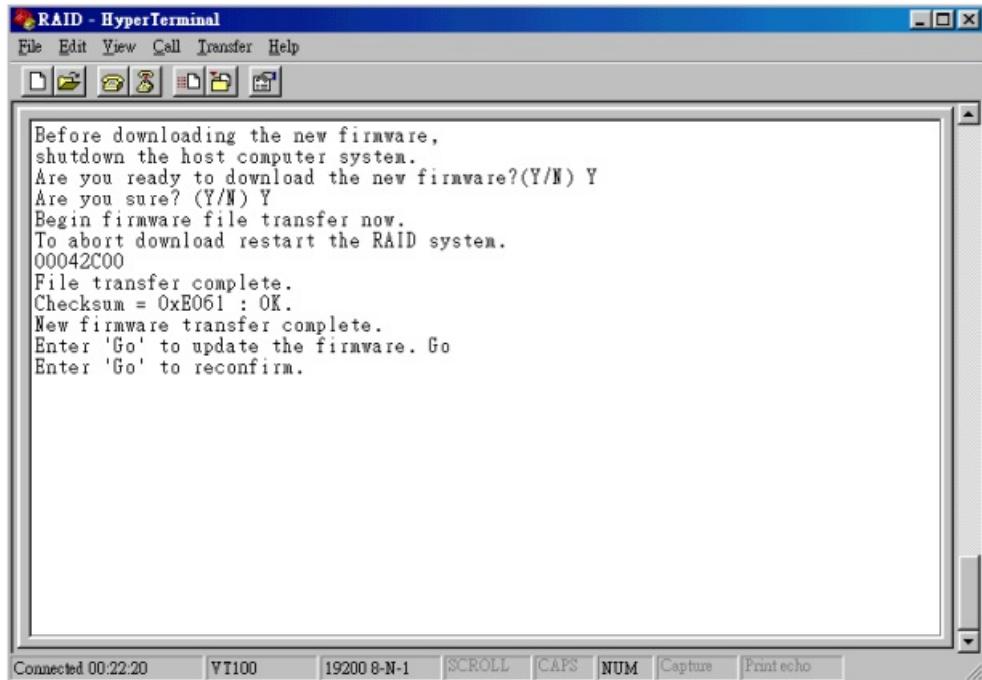
4. Locate the new Firmware file on your PC.



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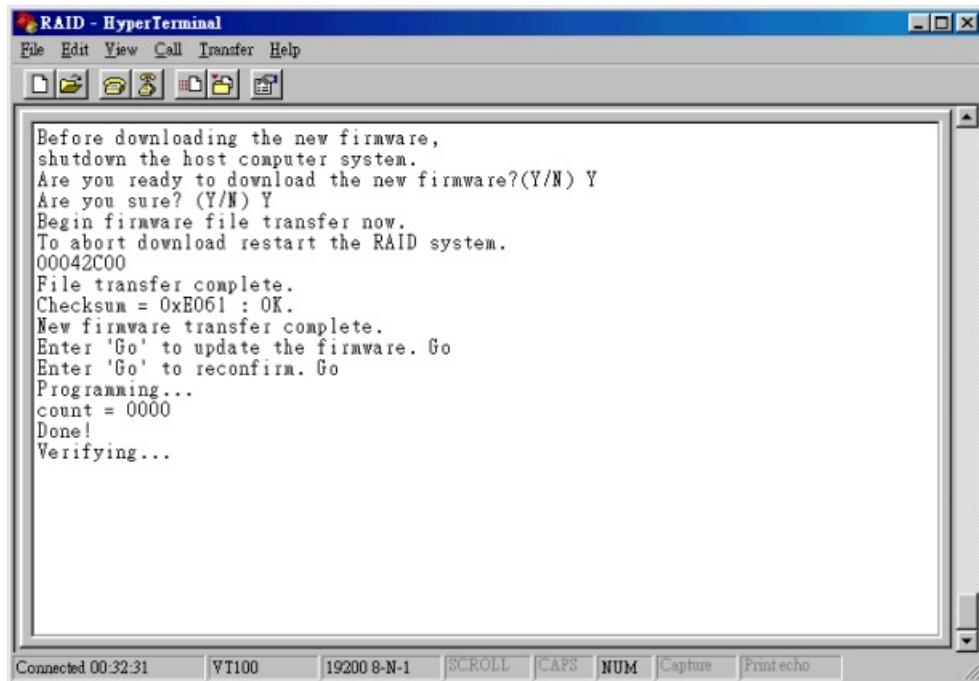
5. Press " Go " to confirm to download the new firmware.



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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.



RAID - HyperTerminal

File Edit View Call Transfer Help

Connected 00:32:31 VT100 19200 8-N-1 SCROLL CAPS NUM Capture Print echo

```
Before downloading the new firmware,
shutdown the host computer system.
Are you ready to download the new firmware?(Y/N) Y
Are you sure? (Y/N) Y
Begin firmware file transfer now.
To abort download restart the RAID system.
00042C00
File transfer complete.
Checksum = 0xE061 : OK.
New firmware transfer complete.
Enter 'Go' to update the firmware. Go
Enter 'Go' to reconfirm. Go
Programming...
count = 0000
Done!
Verifying...
```