

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)

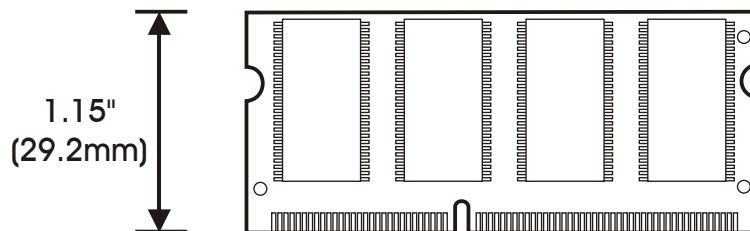
Memory Expansion

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.

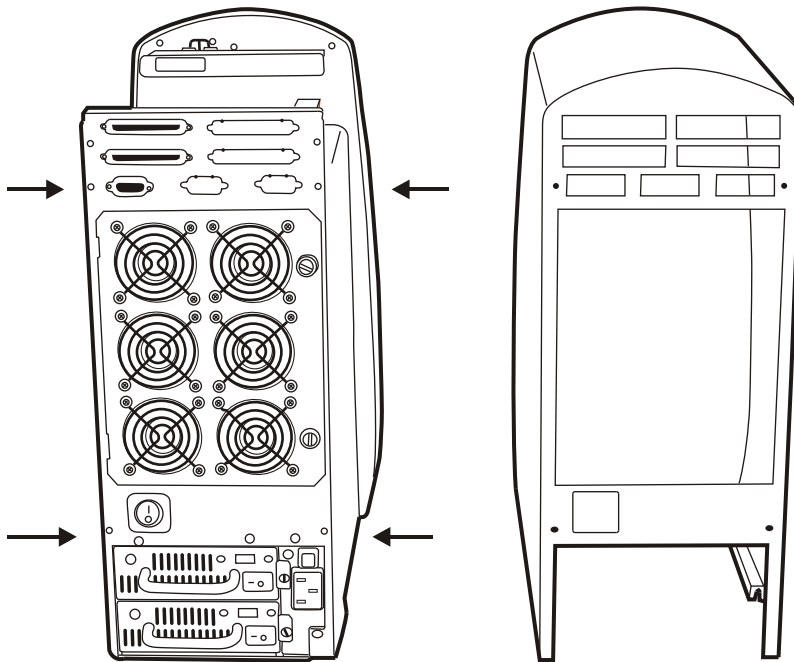
- Memory Type : 3.3V PC100/133 SDRAM 144pin DIMM.
- Memory Size : Supports 144pin DIMMs of 64MB, 128MB, 256MB or 512MB.
- Height : 1.15 Inches (29.2 mm).

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

- The DIMM memory modules will only fit in one orientation.
- Press the memory module firmly into socket from a 45 degree angle, make sure that all the contacts are aligned with the socket.
- Push the memory module forward to a horizontal position.

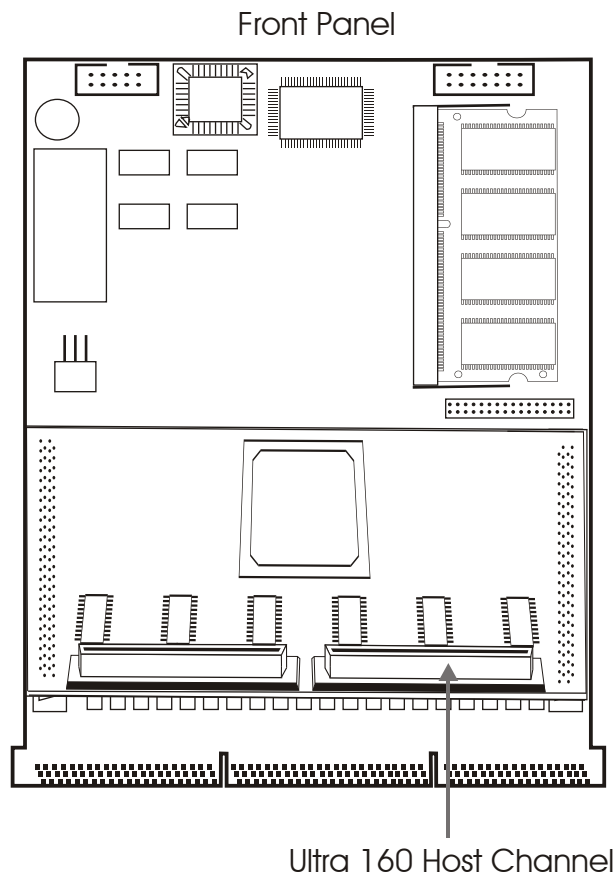
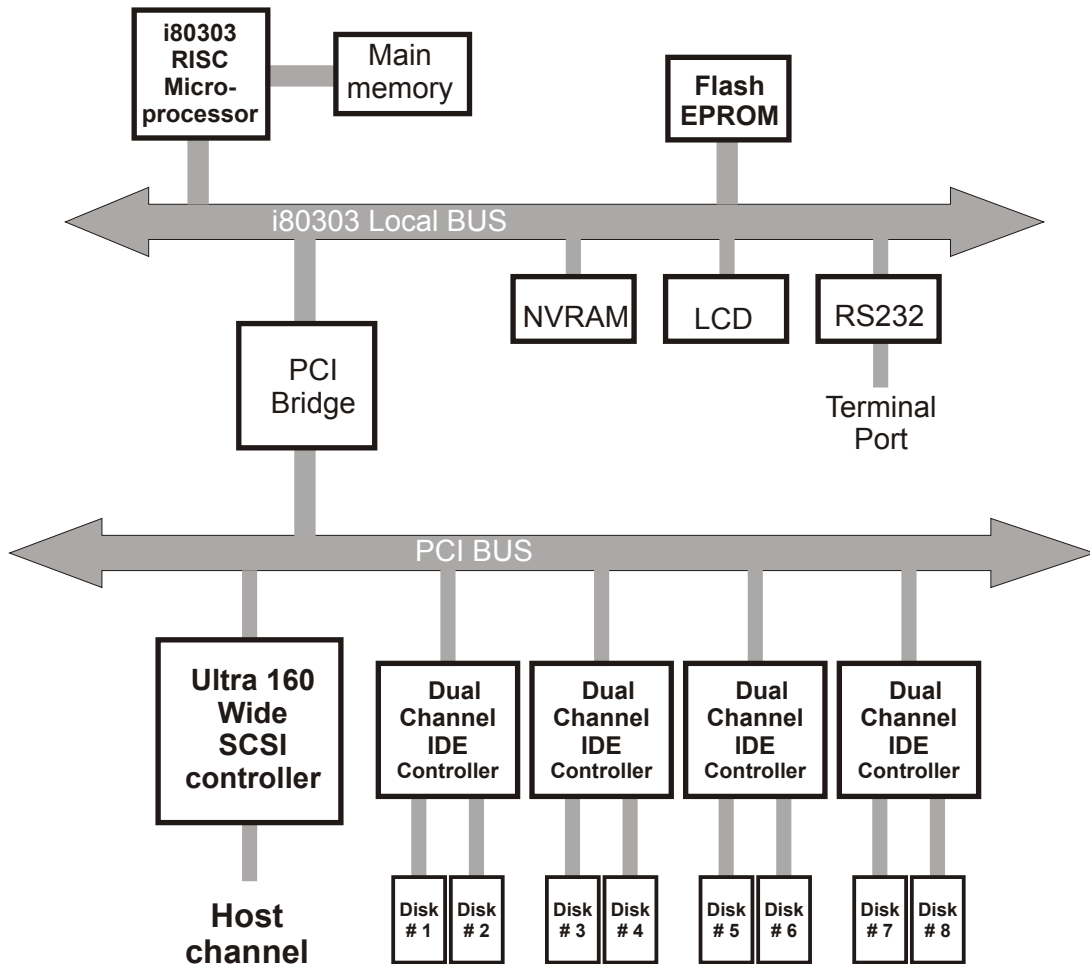


Figure : Controller

Disk Array Controller Block Diagram



Updating Firmware

1. Setup your VT100 Terminal

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

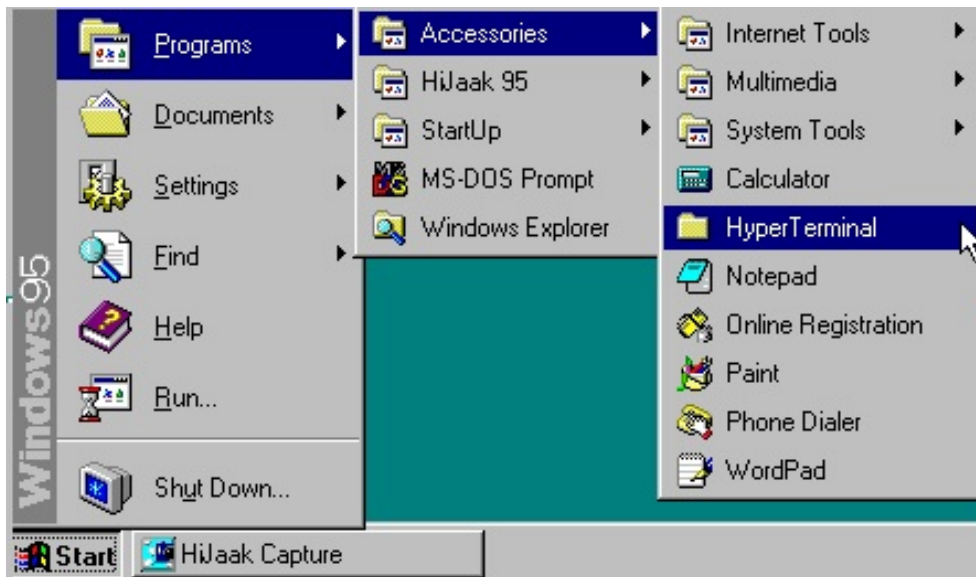
VT100 terminal (or compatible) set up

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® 95

Step 1.

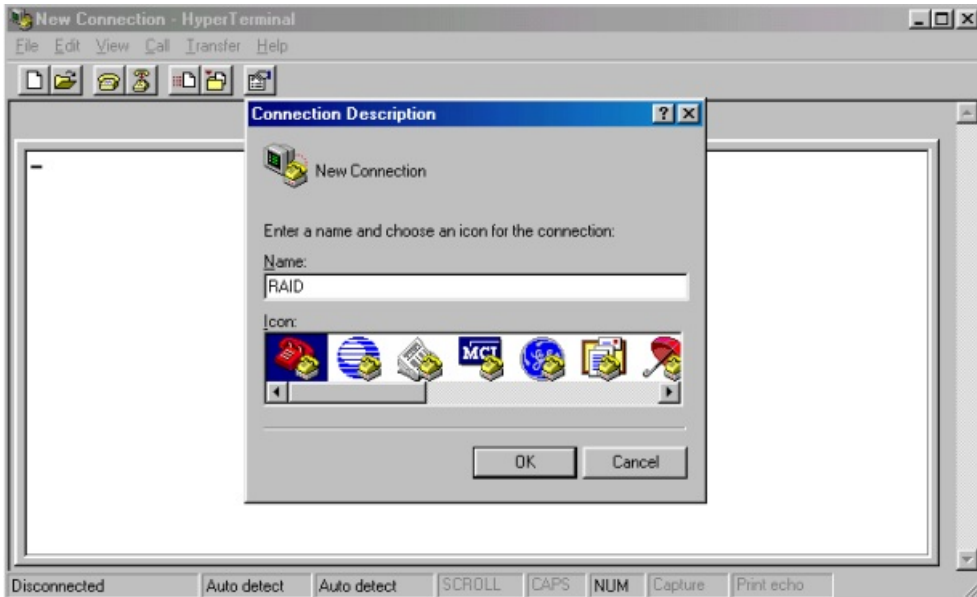


Step 2.



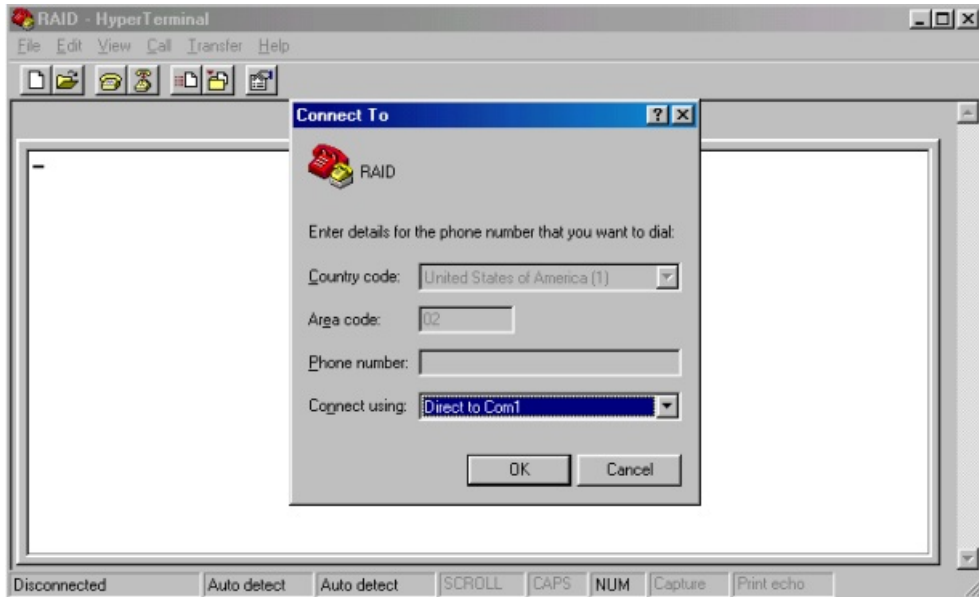
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Step 3. Enter a name for your Terminal.



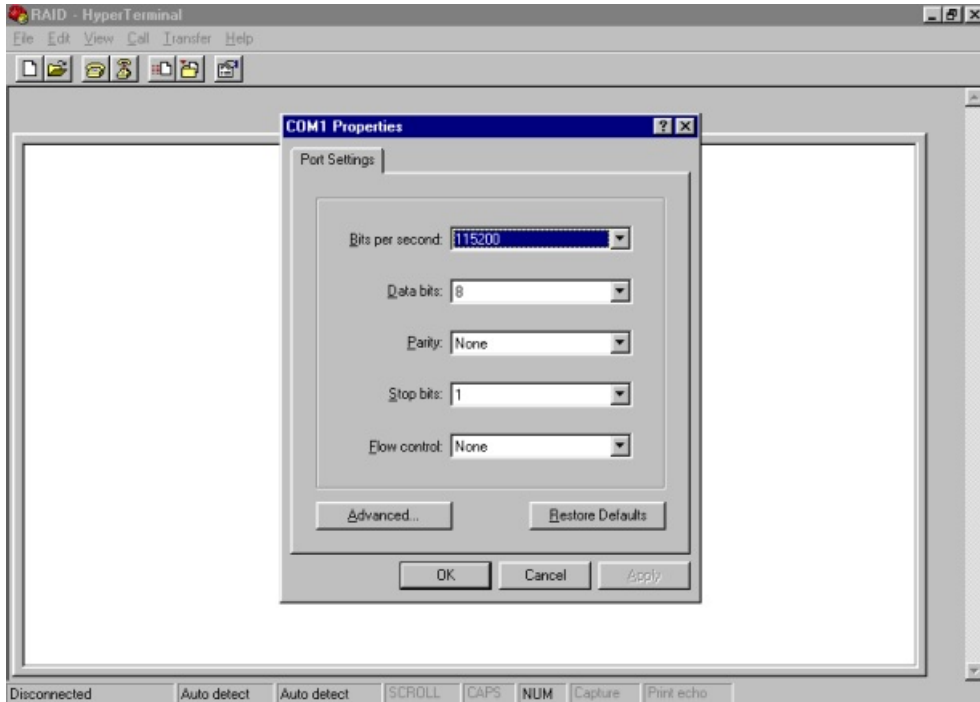
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Step 4. Select a connecting port in your Terminal.

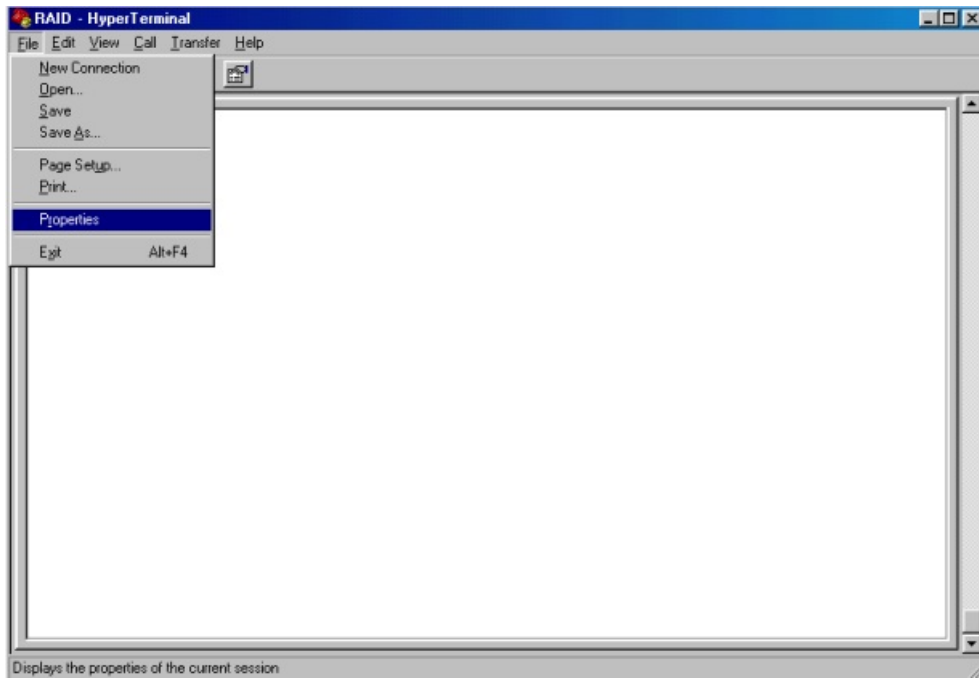


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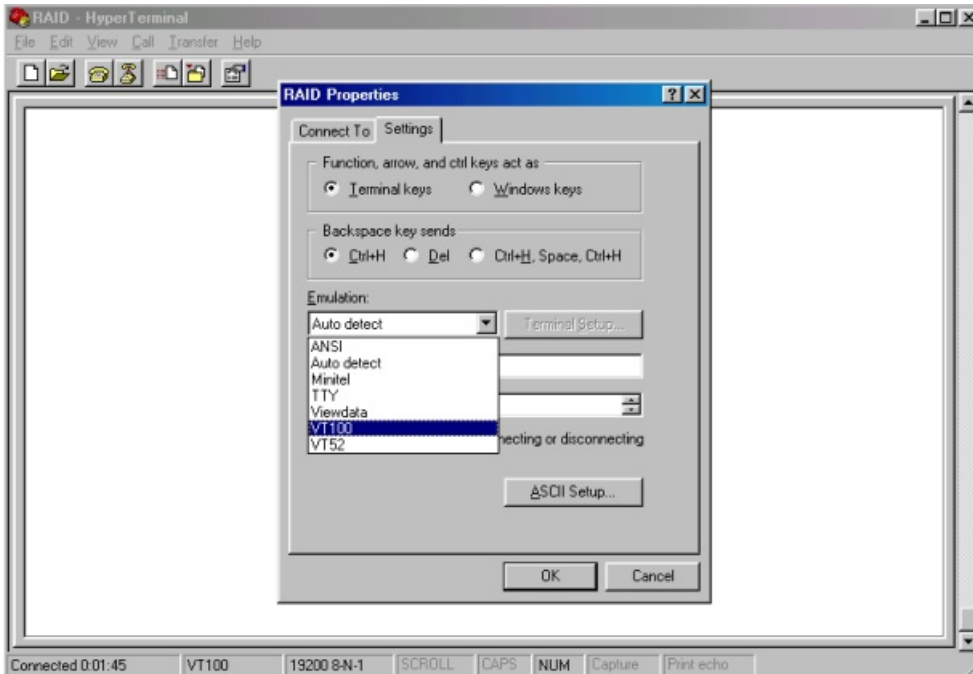
Step 5. Port parameter settings



Step 6.



Step 7. Select emulate VT100 mode

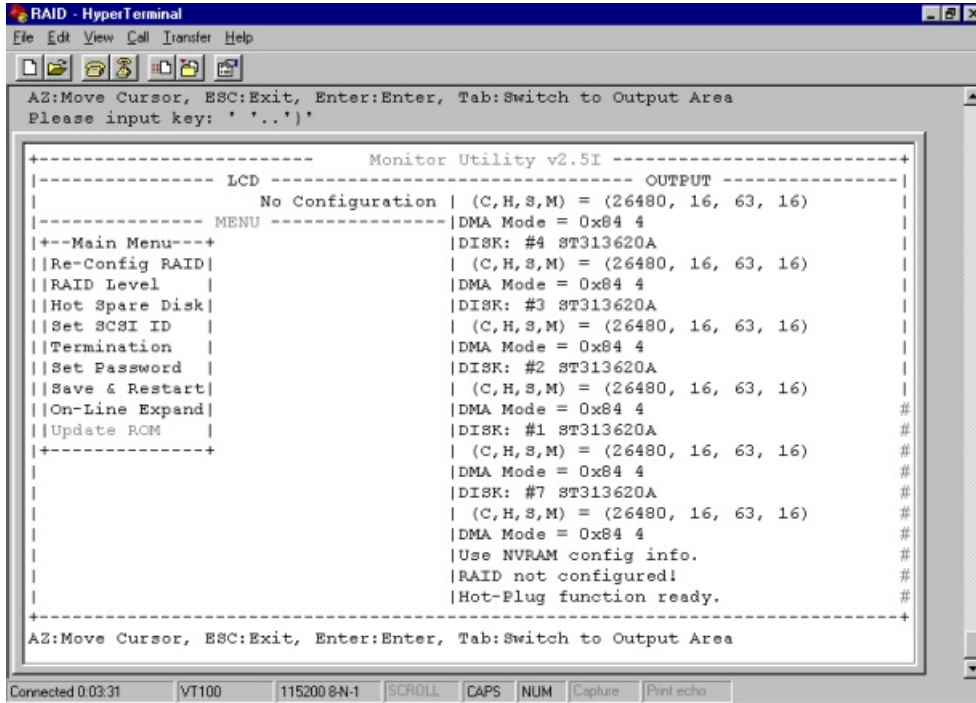


After you have finished the VT100 Terminal setup, you may restart your Disk Array and press " Ctrl + D " keys (in your Terminal)to link the Disk Array and Terminal together.

Press  +  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 Call Transfer Help

AZ:Move Cursor, ESC:Exit, Enter:Enter, Tab:Switch to Output Area
Please input key: ' * . , ' ) '

+-----+
|-----+ Monitor Utility v2.5I +-----+
|-----+ LCD +-----+ OUTPUT +-----+
|-----+ No Configuration | (C,H,S,M) = (26480, 16, 63, 16)
|-----+ MENU +-----+ DMA Mode = 0x84 4
|+---Main Menu---+ | DISK: #4 ST313620A
| |Re-Config RAID| | (C,H,S,M) = (26480, 16, 63, 16)
| |RAID Level | | DMA Mode = 0x84 4
| |Hot Spare Disk| | DISK: #3 ST313620A
| |Set SCSI ID | | (C,H,S,M) = (26480, 16, 63, 16)
| |Termination | | DMA Mode = 0x84 4
| |Set Password | | DISK: #2 ST313620A
| |Save & Restart| | (C,H,S,M) = (26480, 16, 63, 16)
| |On-Line Expand| | DMA Mode = 0x84 4
| |Update ROM | | DISK: #1 ST313620A
|+-----+ | (C,H,S,M) = (26480, 16, 63, 16)
| | | | DMA Mode = 0x84 4
| | | | DISK: #7 ST313620A
| | | | (C,H,S,M) = (26480, 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

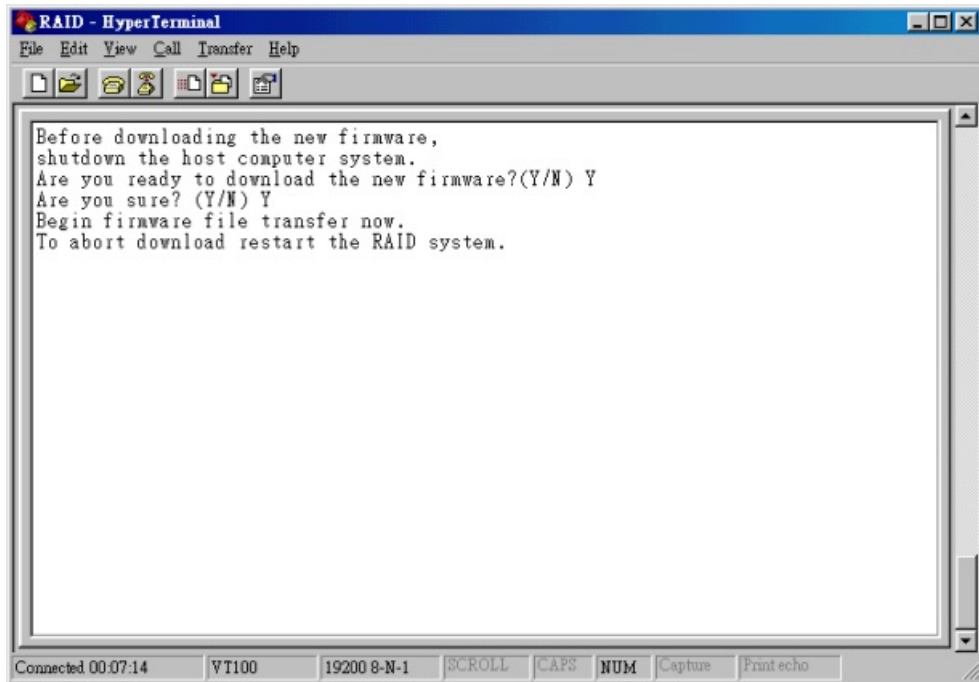
Connected 0.03:31 VT100 115200 8-N-1 SCROLL CAPS NUM Capture Print echo
```

Warning !

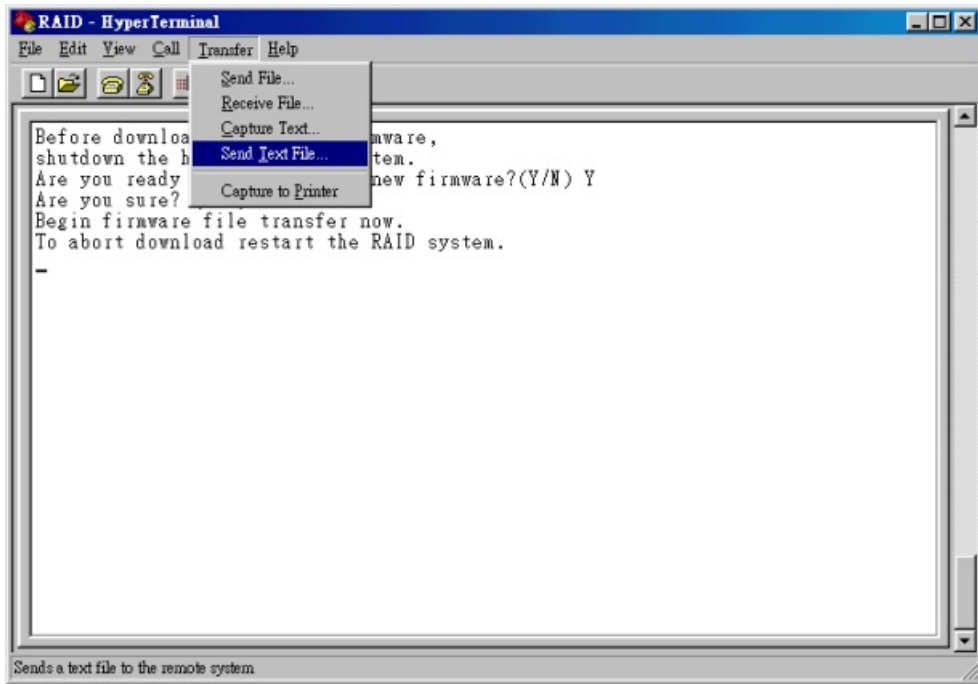
Unpredictable results will occur if firmware update is attempted during Host computer and Disk Array activity. All activity to the controller should be stopped before updating firmware.

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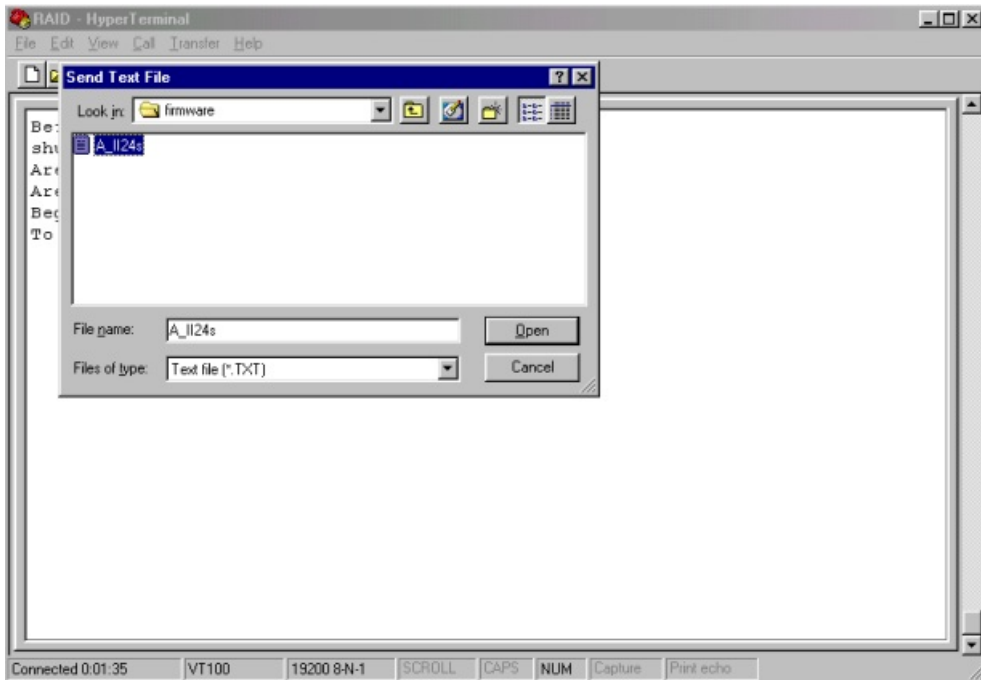
2. Press "Y" to download the new firmware and press "Y" again to confirm the Update.



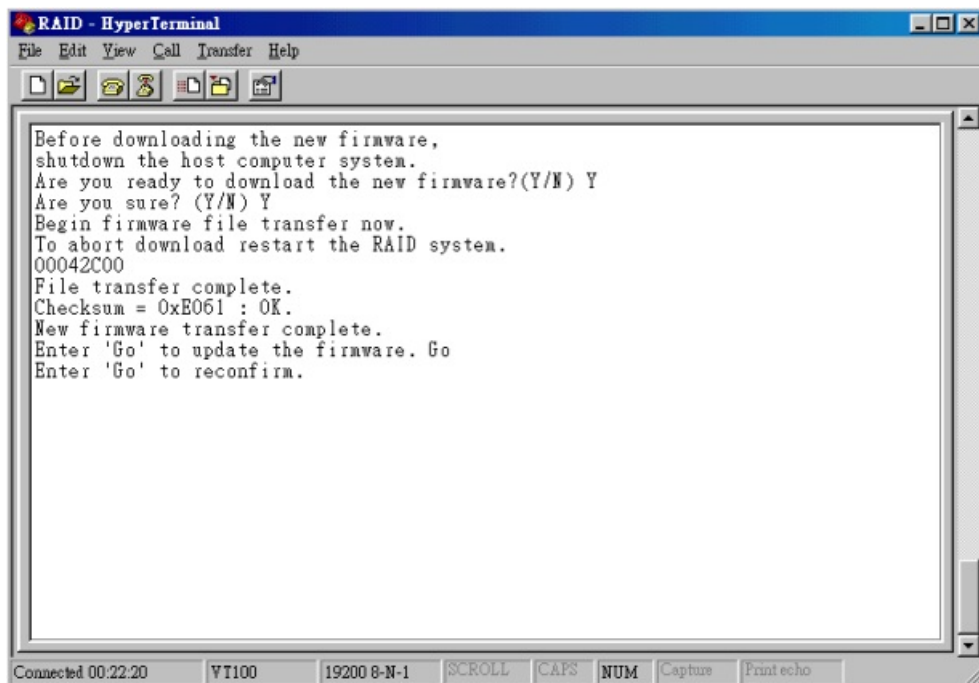
3. Select transfer " **Send Text File** " and press Enter.



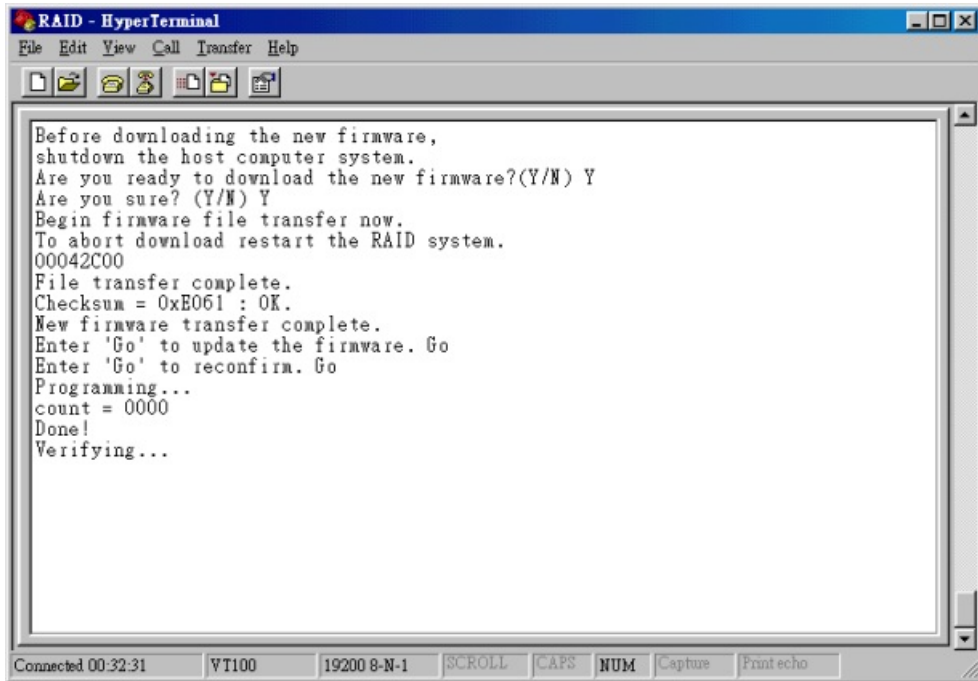
4. Locate the new Firmware file on your PC.



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.



```
RAID - HyperTerminal
File Edit View Call Transfer Help
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...
```

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.)

