

# **Profile XP** PVS3000 & 3500 MEDIA PLATFORMS FOR STANDARD AND HIGH DEFINITION Installation Guide **SOFTWARE VERSION 5.4** 071-8255-01 **JULY 2004** the most watched worldwide

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### **Revision Status**

Rev Date	Description
February 23, 2004	First release. 071-8255-00
23 July 2004	Removed PFC500 and PRF500 RAID

## Before getting started

This installation guide provides step-by-step instructions for installing the PVS 3000 and PVS 3500 Media Platforms using factory default settings. After installing the Profile XP Media Platform using this installation guide, you can refer to the *Profile XP System Guide* to customize system settings for your installation.

For Grass Valley Customer Support information, refer to page 45 of this Installation Guide.

## About channels and factory default configuration

Profile applications use channels to control disk recording and playback. A channel defines a grouping of Profile XP video, audio, and timecode resources and is identified by a unique name. Profile XP software supports three channel types: Recorder channel, Player channel, or Player/Recorder channel. For more information on channel types and creating or modifying channels, refer the *Profile XP System Guide*.

Your Profile XP Media Platform is shipped with default Recorder and Player channels. These default channels are named Vtr1, Vtr2, Vtr3 and so on. The following table describes the video and audio connections you'll make for the two channel types. On the pages that follow, you'll find specifics about the type and number of default channels in your system, and their video and audio I/O connections.

Default channel type	Video I/O connections	Audio connections <sup>a</sup>	Timecode I/O
Recorder	1 SD SDI video input or 1 HD SDI video input	2, 4, or 8 audio I/Os	Uses the internal timecode generator.
Player	1 SD SDI video output or 1 HD SDI video output	2, 4, or 8 audio I/Os	Recorded timecode is used to generate VITC on the HD SDI video output

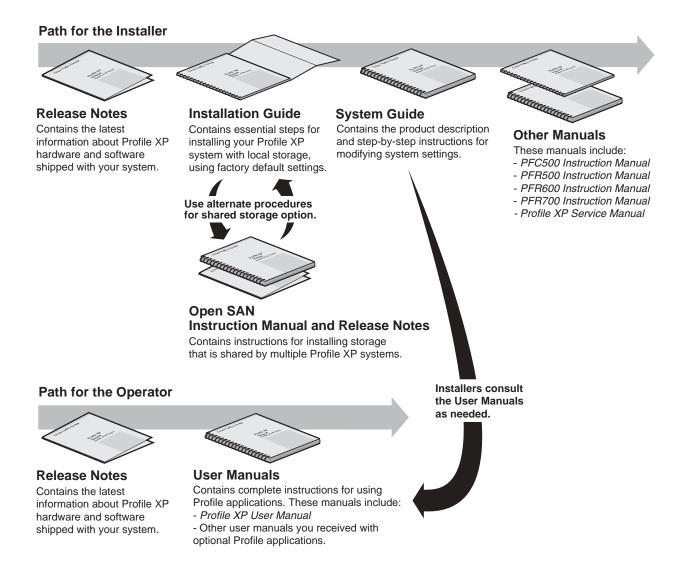
a. The number of audio I/Os is determined by your PVS 3000 Series model and the number of Audio boards installed.

## **Rack-mounting the Profile XP Media Platform Chassis**

This procedure assumes you have already rack-mounted the PVS 3000 or PVS 3500, PFR 600 or PFR 700 Fibre Channel RAID Chassis, I/O Panel, and audio interface option as required. For rack-mounting information, see Appendix C, "Rack Mounting Information and Rear Panel Drawings" in the *Profile XP System Guide*.

## **Referring to Related Documentation**

This manual is part of a full set of support documentation for the Profile XP Media Platform. The following illustrates how to use the Profile XP documentation depending on the task you are performing.



## **Referring to Safety Summaries**



WARNING: Be sure to review all safety precautions listed in the Profile XP System Guide in order to avoid personal injury and prevent damage to this product and its peripheral products.

## **Checking standard accessories**

Your Profile XP Media Platform is shipped with several standard accessories as shown in the table. Locate the accessories you need for your installation and proceed.

Standard PVS3000 Accessories		
Keyboard and Mouse	Ethernet Cable	
I/O Panel and interface cable	Windows NT Software Disk and Documentation	
Rack-mount slides	Profile XP Software CD-ROM and Release Notes	

## About PVS3000 and PVS3500

The PVS 3000 Series introduces the ability to use standard and high definition hardware in the same Media Platform. Various models provide different capabilities, depending on the hardware and software licenses that you purchase.

### **PVS3000**

The PVS 3000 provides separate SD and HD hardware in a single Media Platform. You can define SD and HD channels that can run concurrently in your system.

SD channels allow you to record SD clips in MPEG (I-frame, Long GoP, or D-10), DVCPRO 25, and DVCPRO 50 formats using your standard definition SDI inputs. You can play clips in any combination of these formats on any SD channel using an SDI output.

HD channels let you record and play high definition clips with your HD-SDI inputs and outputs.

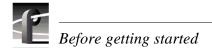
### **PVS3500**

The PVS 3500 includes an Agile Output software license that enables you to play SD and HD clips through an HD decoder.

If your Definition Independent HD/SD Player channel includes a standard definition SDI output, SD clips play out normally, and all HD clips are down-converted to SD format with the aspect ratio conversion that you set with Configuration Manager.

If your HD/SD Player channel includes an HD-SDI output, all HD clips play out in the configured output format for your system (1080i or 720p), and all SD clips are up-converted to HD format with the aspect ratio conversion that you set with Configuration Manager.

NOTE: SD clips must be in MPEG 4:2:0 format to play out on a Definition Independent channel.



## System power-off and reboot procedure

When you power-off or reboot your Profile XP Platform and RAID storage system, you must follow the proper sequence as described in the following procedure.

NOTE: If your Profile XP Media Platform is part of an Open SAN, disregard this procedure, and refer to the instructions in the Open SAN Instruction Manual for shutting down the Open SAN.

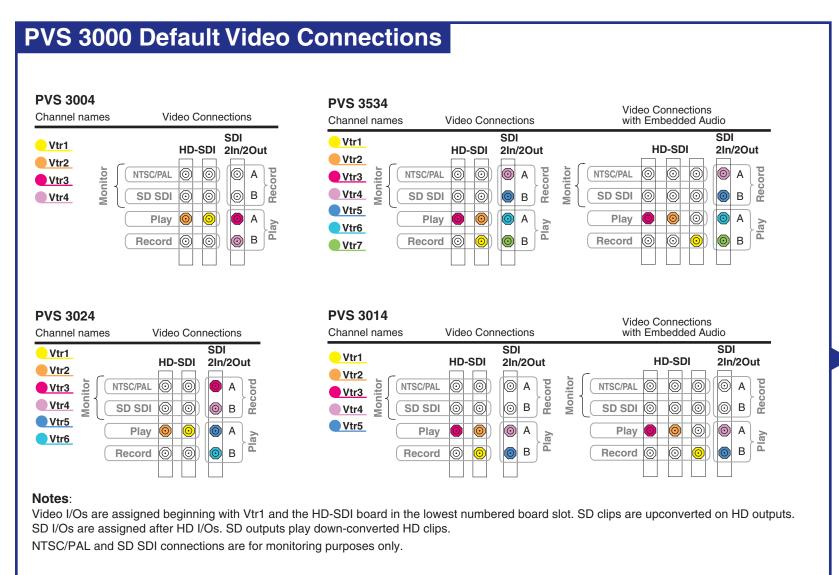
- 1. Power-off the RAID storage system by powering-off the RAID Controller chassis prior to, or at the same time as the RAID Expansion chassis.
- 2. Wait approximately 30 seconds for the disk drives to spin down, then power-on all RAID Expansion chassis, then all RAID Controller chassis. Always power-on the RAID Expansion chassis prior to, or at the same time as the RAID Controller chassis.
- 3. Wait for RAID storage initialization, as follows:
  - **PFR700 RAID Storage systems** Wait until all disk access LEDs are steady approximately 4 minutes. The controller READY LED must be ON, the front Power LED must be ON, and the front Service LED must be OFF. (Refer to the *PFR 700 Instruction Manual* to interpret other disk access LED or status LED behavior.)
  - **PFR 600 RAID Storage systems** Wait until all disk access LEDs are steady green—approximately 4 minutes. The rear panel 7-segment LED displays the chassis address. (Refer to the *PFR 600 Instruction Manual* to interpret other disk access LED or 7-segment LED behavior.)

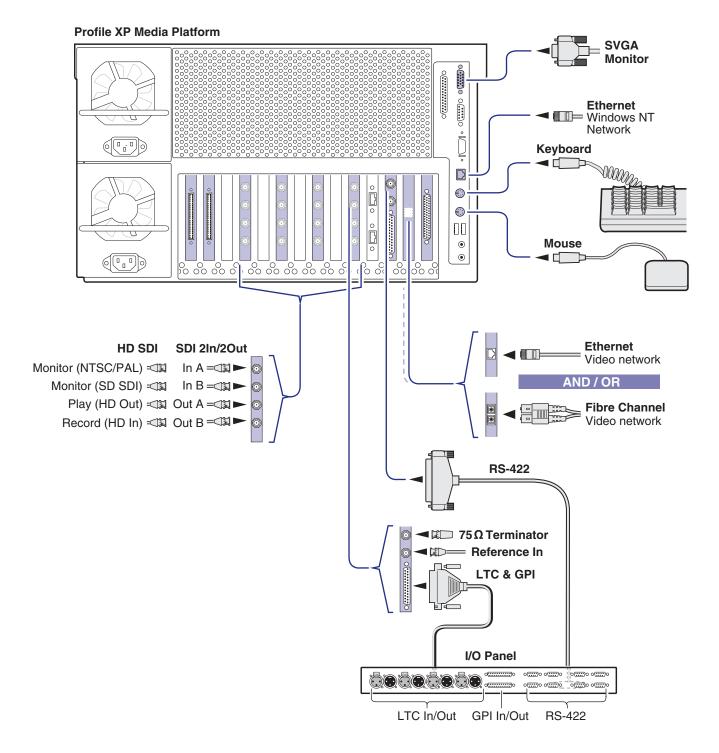
On the Profile XP Media Platform, shut down and restart the Windows operating system. Wait for auto-logon as described in "Start your system" on page 13.



## Set up system hardware and connect video

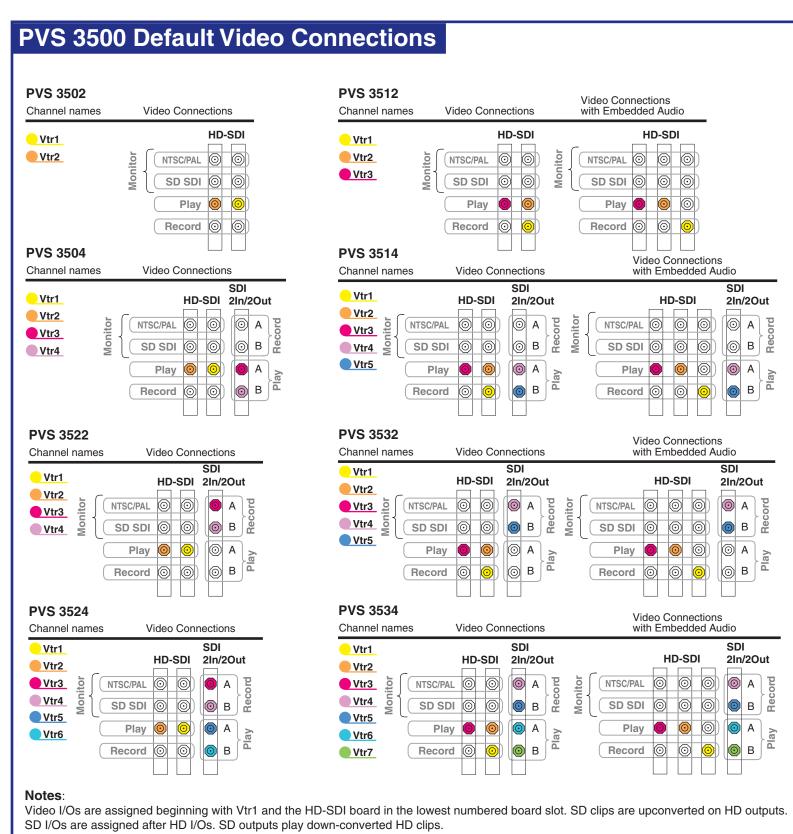
Using the diagrams on this or the following page, set up the system hardware as shown, then locate your PVS 3000 Series model (PVS 3000 or PVS 3500) under Default Video Connections. Use the color coding to make the video I/O connections for the recorder and player channels.

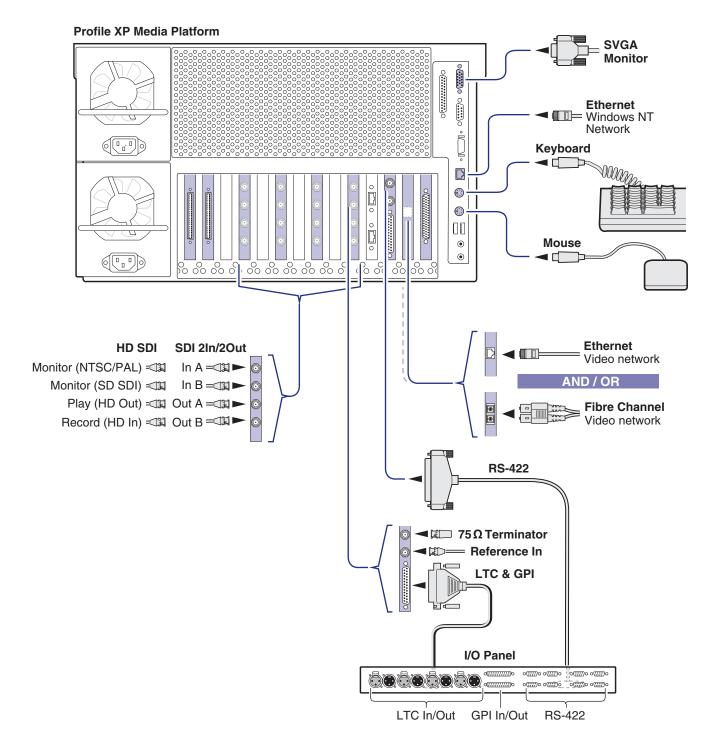




23 July 2004

PVS 3000 & 3500 Series Installation Guide



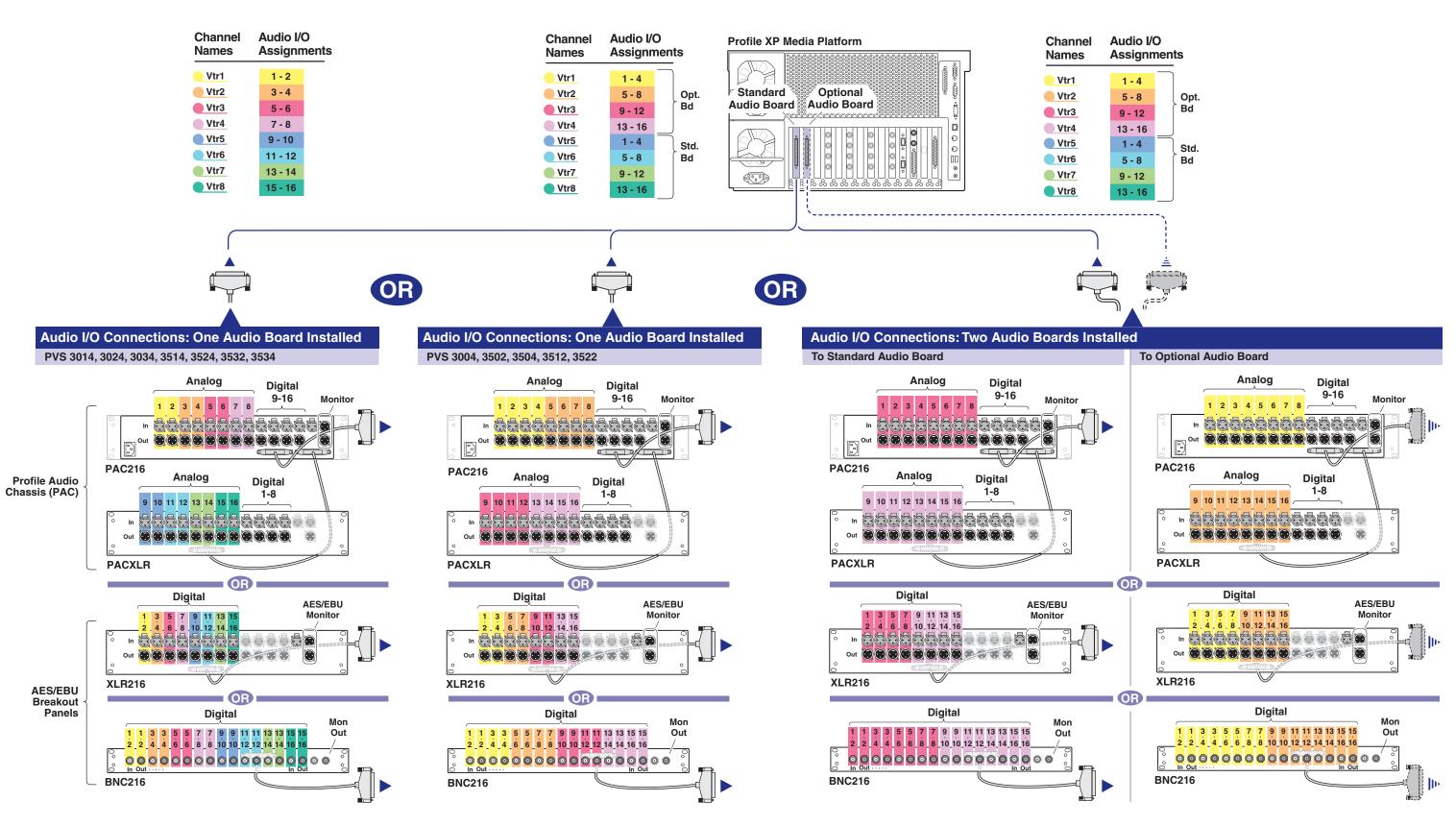


NTSC/PAL and SD SDI connections are for monitoring purposes only.

PVS 3000 & 3500 Series Installation Guide

## 2 Connect audio

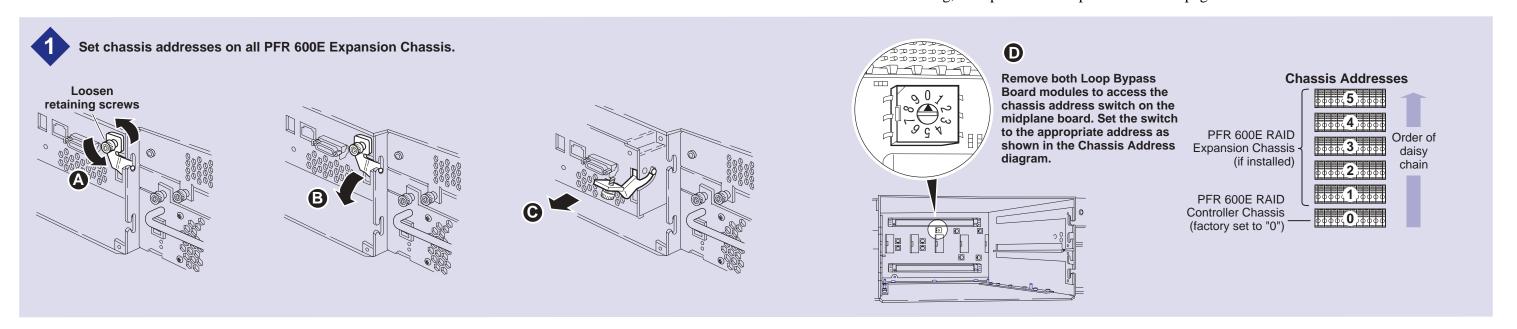
Determine if your PVS 3000 Series media platform has one or two audio boards installed as shown on this diagram, then use the color coding to determine the audio I/O connections for each video channel for your model.

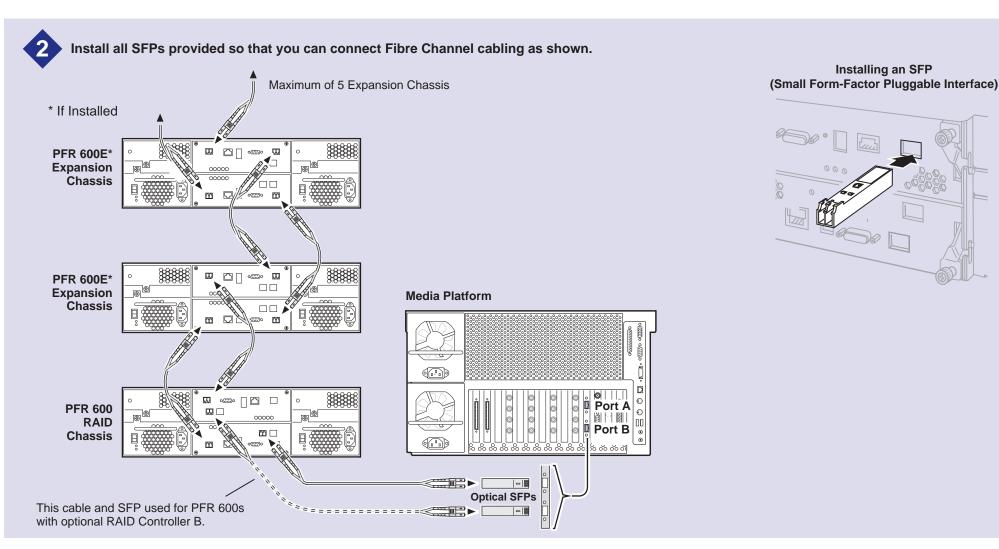


IMPORTANT: If you are installing your PVS 3000 Series (PVS 3000 or PVS 3000 Series) as part of an Open SAN, do not perform this RAID storage setup. Instead, follow the instructions in the Open SAN Instruction Manual for setting up RAID storage.

## Set up the RAID Storage: PFR600/E (Local storage only)

Use this diagram to set up the PFR 600/E chassis addresses and to connect Fibre Channel cabling, then proceed to step 3a on the next page.



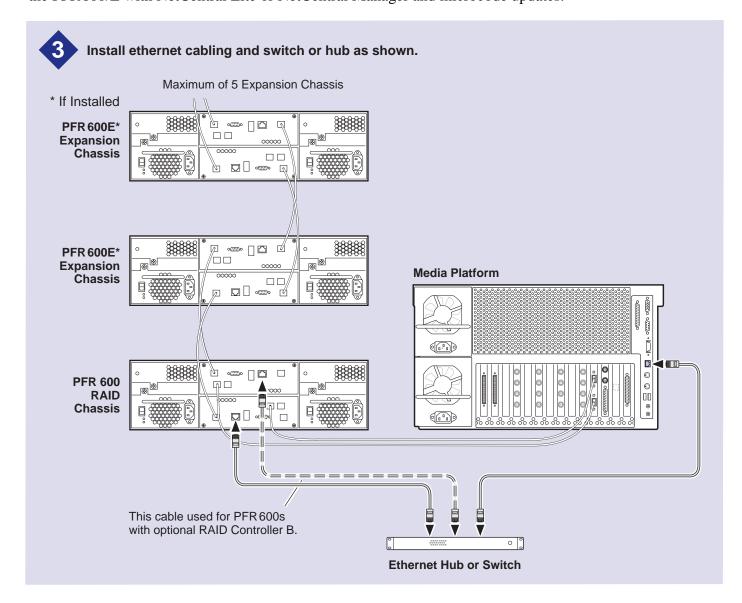


PVS 3000 & 3500 Series Installation Guide

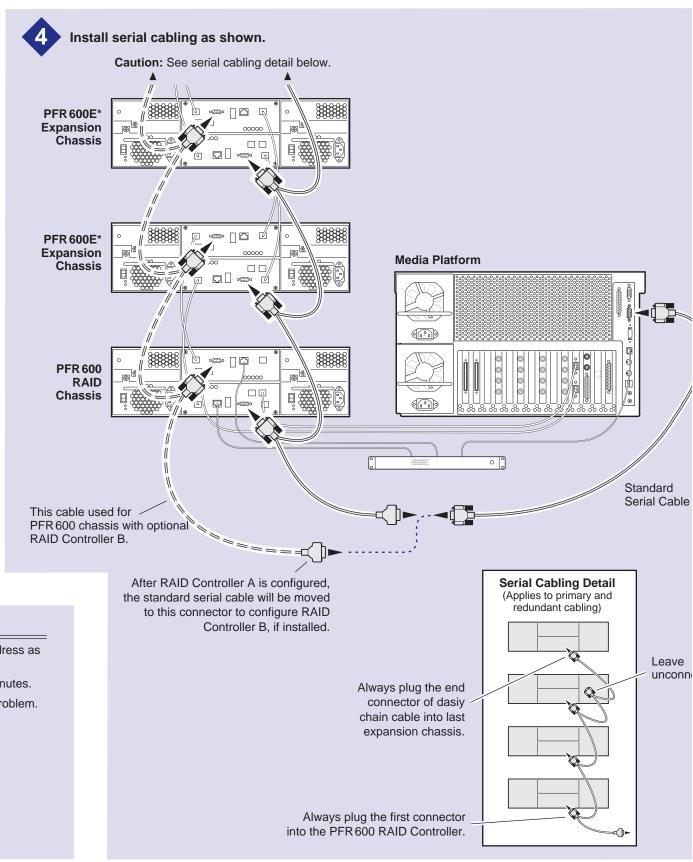


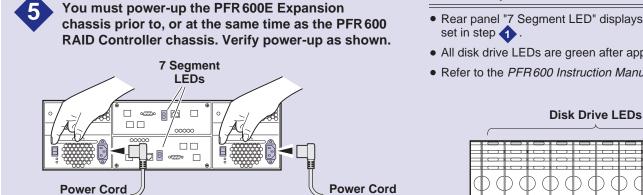
## Set up RAID Storage: PFR600/E (Local storage only)

Use this diagram to connect Ethernet and serial interface cabling required for monitoring the PFR 600/E with NetCentral Lite or NetCentral Manager and microcode updates.



IMPORTANT: If you are installing your PVS 3000 as part of an Open SAN, do not perform this RAID storage setup. Instead, follow the instructions in the Open SAN Instruction Manual for setting up RAID storage.





(115V/230V)

Connect power cords, and turn on power as shown.

(115V/230V)

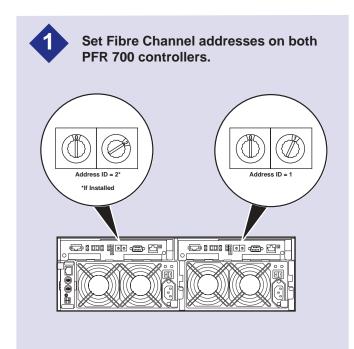
## **Power-up Verification**

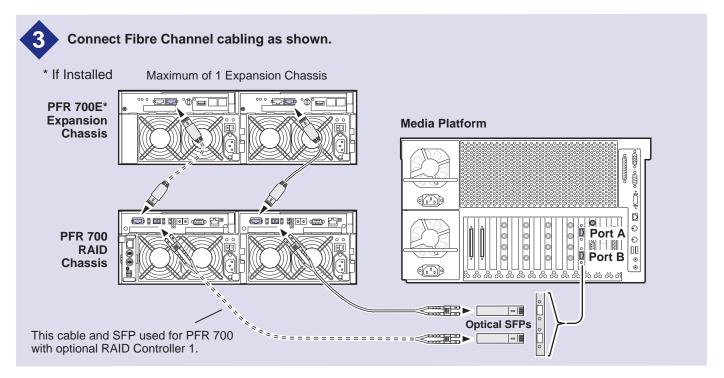
- Rear panel "7 Segment LED" displays the chassis address as
- All disk drive LEDs are green after approximately 3 minutes.
- Refer to the PFR 600 Instruction Manual if there is a problem.

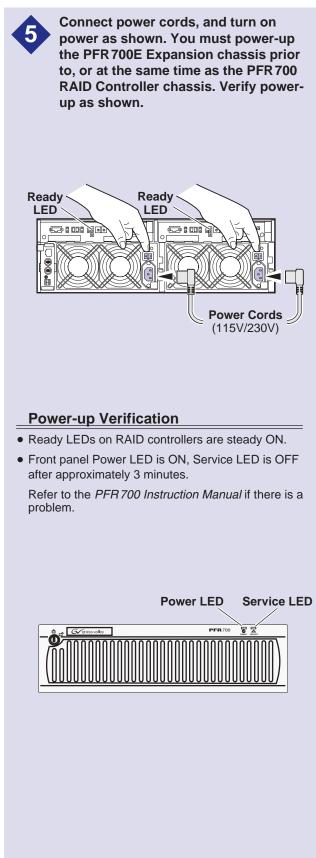
23 July 2004 PVS 3000 & 3500 Series Installation Guide IMPORTANT: If you are installing your PVS 3000 as part of a Media Area Network, do not perform this RAID storage setup. Instead, follow the instructions in the Open SAN Instruction Manual for setting up RAID storage.

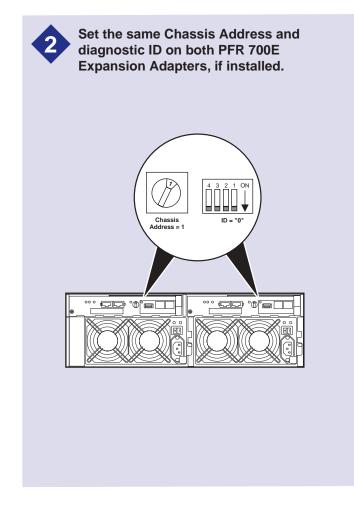


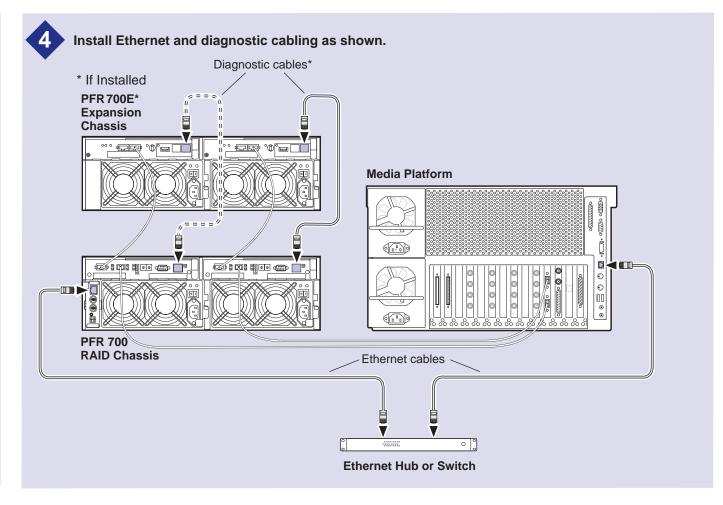
Use this diagram to set up the PFR 700/E Fibre Channel addresses and to connect Fibre Channel, Ethernet, and diagnostic cabling.











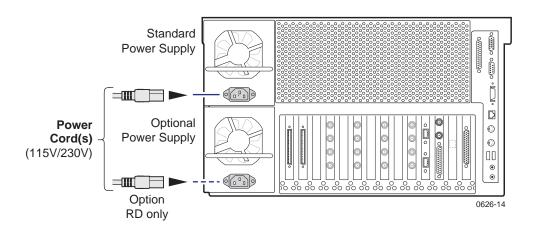
PVS 3000 & 3500 Series Installation Guide

## 4 Start your system

IMPORTANT: If you are installing your Profile XP Media Platform as part of an Open SAN, disregard this step. Instead, follow the instructions in the Open SAN Instruction Manual for starting your Profile XP Media Platform.

To start your system:

1. Connect power cords to the Profile XP Media Platform and all peripheral devices.



2. Turn on power to all peripheral devices connected to the Profile XP Media Platform.

NOTE: Do not power-on the Profile XP Media Platform until the RAID storage system is fully initialized. Refer to RAID storage power-up verification steps on pages 10-12.

3. Turn on the Profile XP Media Platform using the front panel standby switch, and wait for Windows NT to initialize and perform auto-logon. The Windows NT desktop will appear after successful auto-logon.

During initialization, the Profile XP system software checks the RAID storage system for a video file system. Since at first power-up one is not found, an error message may be displayed regarding loss of the video file system.

Proceed with the next procedure to create a new video file system.

NOTE: You must use the proper power-off sequence when turning off or rebooting the Profile XP Platform and RAID storage system. Refer to "System power-off and reboot procedure" on page 6.



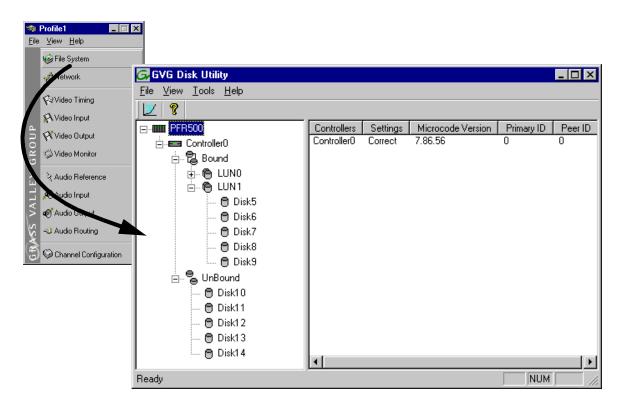
## **6** Create a video file system

IMPORTANT: If you are installing your Profile XP Media Platform as part of an Open SAN, disregard this step. Instead, follow the instructions in the Open SAN Instruction Manual for starting your Profile XP Media Platform.

Before you can use your Profile XP Media Platform system, you must create a video file system on the Fibre Channel RAID Chassis using the Disk Utility.

NOTE: If you want to configure some drives as hot spare drives, do not perform this procedure. Instead, perform the procedures found in Chapter 3 of the Profile XP System Guide in the section titled "Configuring RAID storage using GVG Disk Utility", then proceed with the next procedure in this guide.

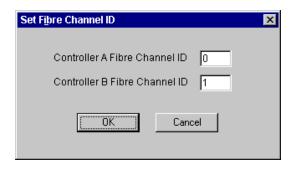
To create a video file system:



2. Click File System to start the GVG Disk Utility.

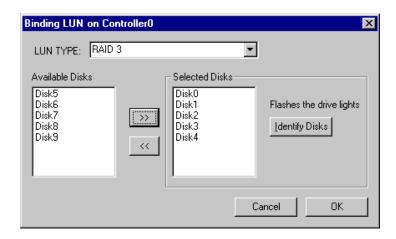


- 3. If you are configuring a PFR 600 storage system, perform the following steps to set the Fibre Channel ID, otherwise, proceed to step 4.
  - a. Expand the tree view and right-click the **Controller0** icon under PFR 600, then select **Set Fibre Channel ID** in the context menu.



- b. In the Set Fibre Channel ID dialog box, enter IDs as shown, then click **OK**.
- c. Click **OK** in the Operation Successful dialog box.
- d. Cycle the power on the RAID Controller chassis. Leave the power off for about 30 seconds before powering on again. You can leave the Expansion chassis powered on during this time.
- e. After the RAID Controller chassis has finished initializing, restart the Windows NT operating system on the Profile XP Platform.
- f. Start Configuration Manager using the desktop shortcut or by selecting **Start** | **Programs** | **Profile Applications** | **Configuration Manager**.
- g. In Configuration Manager dialog box appears. click **File System** to start the GVG Disk Utility.
- 4. Expand the tree view and identify bound LUNs and unbound disks by their placement in the hierarchy of the tree view.
- 5. If there are unbound LUNs displayed in the tree view, you must perform the following steps, otherwise, proceed to step 6.
  - a. To bind unbound disks, right-click the **Unbound** node for a controller, then select **Bind LUNs** in the context menu. Peer controllers that share the same set of disks are automatically selected as a pair.

The Binding LUN... dialog box opens showing all unbound disks for the controller listed in the Available Disk list.



- b. Select RAID 3 using the LUN TYPE drop-down box.
- c. Select five contiguous disks, then click the add button to add them to the Selected Disks list. (TIP: Use 'shift-click' to select disks.)
- d. Click **OK** to close the Binding LUN... dialog box and begin the binding process. The Progress Report dialog box opens, showing the status of the binding process.
- e. Repeat step a through step d for all unbound disks on all remaining controllers displayed in the tree view.

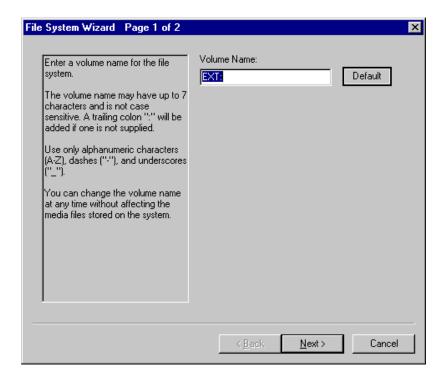
NOTE: PFR600 controllers take less than a minute to bind a LUN, but can bind only one LUN at a time. You must wait until binding is completed before binding the next LUN. PFR700 controllers take several hours to bind a LUN, but allow multiple binding processes at the same time.

f. Upon 100% completion, click **Close** in Progress Report window.

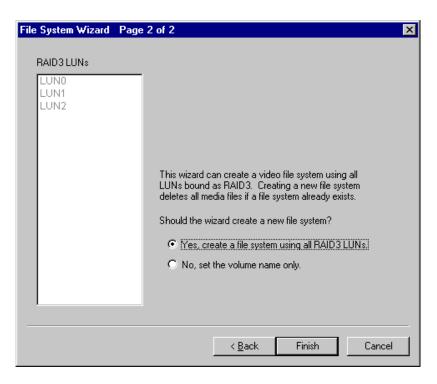
### NOTE: Do not proceed until all LUNs are finished binding.

- g. Restart the Windows NT operating system on the Profile XP Platform.
- h. Start Configuration Manager using the desktop shortcut or by selecting **Start** | **Programs** | **Profile Applications** | **Configuration Manager**.
- i. In Configuration Manager, click File System to start the GVG Disk Utility.
- 6. In the GVG Disk Utility main menu, click **Tools | Make File System**. The File System wizard appears.



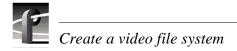


7. Enter a volume name or accept the default name, then click **Next**.



- 8. Select Yes, create a file system using all RAID3 LUNs, then click Finish.
- 9. Click **OK**, in the warning message box. The Progress Report window appears showing the create file system task status.

- 10. Upon 100% completion, click **Close** in Progress Report window.
- 11. When the reboot message appears, click **OK**, then restart the Windows NT operating system on the Profile XP Platform.
- 12. Continue with the next procedure in this guide.



## 6 Set up PFR600 network settings

This procedure explains how to modify factory default PFR 600 network and SNMP settings for monitoring with NetCentral Lite or NetCentral Manager.

PFR 600 network is set up using a console program accessed through the serial port on the RAID Controller and Hyperterminal, running on the Profile XP system. Both RAID controllers must be configured if the optional RAID Controller B is installed. Refer to the *Profile XP Service Manual* for information on using NetCentral Lite.

## Modifying network and SNMP settings on RAID Controller A

This procedure assumes the PFR 600 is cabled and powered-up as shown on pages 10 and 11.

To configure PFR 600 network and SNMP settings:

- 1. Start a Hyperterminal session using the following steps:
  - a. Click Start | Programs | Accessories | Hyperterminal | HyperTerminal.
  - b. In the Connection Description dialog box, type pfr, then click **OK**.
  - c. In the Connect To dialog box, click OK.
  - d. In the Com1 Properties dialog box, click **Restore Defaults**, then click **OK**. (9600, 8 bits, parity none, stop bit 1, flow control none) A flashing cursor appears in the terminal window.
- 2. Use the instructions in the following table to modify RAID controller settings.
- >>> CAUTION: Use only the PFR 600 commands specified in this procedure. Modifying some system parameters may render your RAID chassis inoperable.

Instructions	Text entered and displayed in terminal window	
Press <b>Enter</b> to receive the command prompt, then type reboot, and press <b>Enter</b> .	Ciprico# reboot	
NOTE: If you fail to receive the command prompt, check cabling and verify Hyper Terminal setup. Try cycling the power on the RAID Controller chassis. You can leave the Expansion chassis on. The boot screen should appear.		



## Set up PFR600 network settings

Instructions	Text entered and displayed in terminal window
The boot screen appears. After default settings are displayed,	Rebooting now - this will kill this shell.
press any key within 10 sec, otherwise, the RAID	Ciprico Web Manager Copyright Ciprico Inc. 2000
controller will initialize and	NETWORK INTERFACE PARAMETERS:
display a command prompt.	IP address on LAN is 192.168.0.11
NOTE: If you miss the 10	LAN interface's subnet mask is 255.255.25.0
second window, type	COMMUNICATION PARAMETERS:
reboot again when the	Serial channels will use a baud rate of 9600
command prompt appears,	HARDWARE PARAMETERS:
then press Enter, or try	This board's MAC Address is 0:20:46:11:14:23
cycling the power on the RAID Controller chassis.	APPLICATION PARAMETERS: Boot Ciprico Network Server
You can leave the Expansion	Mail and SNMP notification will occur for Hardware changes,
chassis on. The boot screen	Warnings, and Critical events.
should appear.	SNMP TRAP CONFIGURATION:
**	TRAP COMMUNITY NAME 'public'
	TRAP MANAGER #1 IP Address 192.168.0.10
	After board is reset, start-up code will wait 10 seconds
	To change any of this, press any key within 10 seconds.
Press <b>Enter</b> to modify settings.	(M)odify any of this or (C)ontinue? [M]
	For each of the following questions, you can press <return> to select the value shown in braces, or you can enter a new value.</return>
Press <b>Enter</b> to configure a	NETWORK INTERFACE PARAMETERS:
LAN interface.	Do you want a LAN interface? [Y]
Type the IP address for this RAID Controller, then press <b>Enter</b> .	IP address(0.0.0.0 = RARP, 255.255.255 = DHCP/BOOTP)? [192.168.0.11] <enter address="" ip="" your=""></enter>
NOTE: RAID Controller A and the optional RAID Controller B must use different IP addresses. Also, the subnet must match the	
Profile XP subnet unless a gateway is used.	
Type the subnet mask value, then press <b>Enter</b> .	Subnet mask for LAN (0 for none)? [255.255.255.0] 255.255.255.0
If a gateway is used, type y, then press <b>Enter</b> , to provide a Gateway address, otherwise, just press <b>Enter</b> to continue.	Should there be a default gateway for packet routing? [N]
	COMMUNICATION PARAMETERS:
Press <b>Enter</b> to accept defaults.	Baud rate for serial channels [9600]

Instructions	Text entered and displayed in terminal window	
	APPLICATION PARAMETERS:	
Press <b>Enter</b> to accept defaults.	Boot Choices: [1]Factory Flash Loader or [2]Ciprico Network Server Your Choice (1 or 2)? [2]	
Type 1, then press <b>Enter.</b>	Mail and SNMP notification level: 1 (most verbose) through 5 (off)?	
[NOTE: The default value may appear different than shown here.]		
Press Enter.	Modify User Password? [N]	
Type y, then press <b>Enter</b> .	Modify SNMP Trap Information? [N] y	
Type public, then press <b>Enter</b> .	Trap Community Name? [] public	
Type the Profile XP IP address, then press Enter. Add additional trap destinations, if needed (up to four total), or press Enter a number of times to advance to the next step—Modify SNMP MIB Communities.	You may enter up to 4 Hosts to receive Traps sent by this device Enter Trap Manager #1 IP Address? [0.0.0.0] 192.168.0.10 Enter Trap Manager #2 IP Address? [0.0.0.0] Enter Trap Manager #3 IP Address? [0.0.0.0] Enter Trap Manager #4 IP Address? [0.0.0.0]	
NOTE: You can enter the factory default IP address for your Profile XP system (192.168.0.10) unless you are modifying it for an existing network.		
Press Enter.	Modify SNMP MIB Communities? [N]	
Press Enter.	Modify Mail parameters? [N]	
Press Enter to accept defaults.  NOTE: Default value may appear different than shown here.	How long (in seconds) should CPU delay before starting up? [10]	
RAID controller configuration is displayed showing your settings.	NETWORK INTERFACE PARAMETERS: IP address on LAN is 192.168.0.11 LAN interface's subnet mask is 255.255.255.0 COMMUNICATION PARAMETERS: Serial channels will use a baud rate of 9600 HARDWARE PARAMETERS: This board's MAC Address is 0:20:46:11:14:23 APPLICATION PARAMETERS: Boot Ciprico Network Server Mail and SNMP notification will occur for Hardware changes, Warnings, and Critical events. SNMP TRAP CONFIGURATION: TRAP COMMUNITY NAME 'public' TRAP MANAGER #1 IP Address 192.168.0.10 After board is reset, start-up code will wait 10 seconds	



## Set up PFR600 network settings

Instructions	Text entered and displayed in terminal window		
Type c, then press Enter.	(M)odify any of this or (C)ontinue? [M] c		
Wait for non-volatile storage update.	Updating non-volatile storage. This may take a whileDone		
Wait for initialization.	Initializing Enclosure Services InterfaceDone		
NOTE: If the network cable is not connected, the console stops at the message "Waiting for Ethernet Link". If you cannot connect network cabling at this time, cycle the power on the PFR 500 Controller chassis, then continue with this procedure.			
Wait for reboot, plus 10 seconds, to allow the Enclosure Services Interface initialization to start.	Rebooting now for new system parameters to take effect  Ciprico Web Manager Copyright Ciprico Inc. 2000  NETWORK INTERFACE PARAMETERS: IP address on LAN is 192.168.0.11 LAN interface's subnet mask is 255.255.255.0  COMMUNICATION PARAMETERS: Serial channels will use a baud rate of 9600  HARDWARE PARAMETERS: This board's MAC Address is 0:20:46:11:15:81  APPLICATION PARAMETERS: Boot Ciprico Network Server Mail and SNMP notification will occur for Warnings and Critical events.  SNMP TRAP CONFIGURATION: TRAP COMMUNITY NAME 'public' TRAP MANAGER #1 IP Address 192.168.0.10 After board is reset, start-up code will wait 10 seconds		

Instructions	Text entered and displayed in terminal window  Initializing Enclosure Services InterfaceDone		
Wait for initialization, then			
proceed to step 3 of this	Started Monitor		
procedure.	Started SNMP Agent		
	Started FTP Flash Loader		
NOTE: If the network cable	Started Web Server		
is not connected, the console	Started Telnet Server		
stops at the message			
"Waiting for Ethernet	**********		
Link". If you cannot	* Ciprico Web Manager Network Server *		
connect network cabling at	* Revision: 2.3.7 *		
this time, cycle the power on	* Compiled: 01/23/02 00:28:24 CST *		
the RAID Controller chassis,	**************		
then proceed to step 3	Ciprico#		
following this table. You will			
not be able to monitor			
yourRAID chassis with			
NetCentral, or update its			
firmware.			

- 3. If the optional RAID Controller B is installed, perform the following steps, otherwise, proceed to step 4.
  - a. Move the standard serial cable connector to the daisy chain cable connected to to RAID Controller B.
  - b. Repeat the instructions for modifying network and SNMP settings in step 2 of this procedure.
- 4. Exit Hyperterminal.

Now that the RAID controller network and SNMP settings are configured, you can proceed to "Start NetCentral Lite monitoring software" on page 29.

25



## Set up PFR700 network settings

This procedure explains how to modify factory default PFR 700 network and SNMP settings for monitoring with NetCentral Lite or NetCentral Manager.

Refer to the Profile XP Service Manual for information on using NetCentral Lite.

## Configuring PFR 700 network and SNMP settings

Network and SNMP settings are set and stored on the LAN card. Therefore the PFR 700 RAID chassis, including its one or two RAID controllers, is a single networked device. This is different than other PFR series RAID devices in which each controller is a networked device.

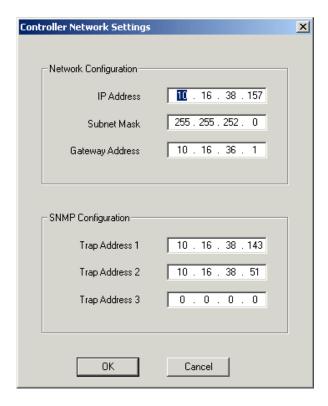
You can use the GVG Disk Utility to configure the following settings for the PFR 700 RAID chassis:

- · IP address
- · Subnet mask
- · Gateway Address
- SNMP trap destinations

To configure these settings, do the following:

1. In the GVG Disk Utility, right-click the icon for a PFR 700 controller and select **Set** Network Properties. The Controller Network Settings dialog box opens.





- 2. Enter network settings for the RAID chassis.
- 3. For each SNMP manager to which you want to send SNMP trap messages, enter the IP address of the PC hosting the manager. If you are monitoring the PFR 700/E with your NetCentral Lite on your Profile XP Media Platform, enter its IP address. If you are monitoring the PFR 700/E with NetCentral, enter the IP address of the NetCentral server (NetCentral 4.x and higher) or NetCentral monitoring station (NetCentral 3.x and lower).
- 4. Click **OK** to save settings and close.

Now that the RAID controller network and SNMP settings are configured, you can proceed to "Start NetCentral Lite monitoring software" on page 29.

## Start NetCentral Lite monitoring software

NetCentral Lite monitoring software is installed and preconfigured to run on your Profile XP Media Platform to monitor system status. Using NetCentral Lite, you can check status information for all major subsystems in the Profile XP Media Platform and receive alert messages when a subsystem is operating at reduced capacity or is no longer functioning.

Since the Profile XP network and SNMP settings are preconfigured at the factory, you can start NetCentral now to begin monitoring your Profile XP's subsystems.

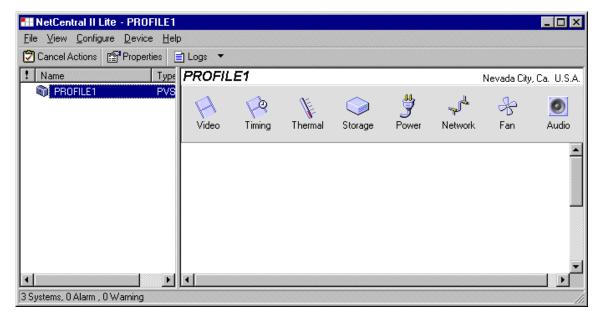
NOTE: If you are connecting your Profile XP system to a network, and need to reconfigure network settings, you must refer to the NetCentral Lite setup instructions in the Profile XP Service Manual to reconfigure SNMP settings.

## Starting NetCentral Lite on the Profile XP system

Use the following steps to start NetCentral Lite and begin monitoring the Profile XP Media Platform.

To start NetCentral Lite:

- 1. Click Start | Programs | NetCentral | NetCentral Lite. After NetCentral Lite starts, the NetCentral icon is displayed in the system tray of your Windows task bar. The moving block in the icon provides visual confirmation that the system is operational, using these colors to indicate device status level:
  - Green = Normal; Red = Warning; Red = Alarm/Dead or Off-line
- 2. Double click the NetCentral icon in the system tray to display the NetCentral window. Refer to the *Profile XP Service Manual* for information on using NetCentral Lite monitoring software.





## Adding the PFR 600 or PFR 700 RAID storage device

This procedure explains how to add the PFR 600 or PFR 700 Fibre Channel RAID Chassis to the NetCentral device list. This step is required in order to monitor the RAID chassis.

To add the PFR 600 or PFR 700 RAID storage chassis to the device list:

- 1. In the NetCentral main menu, click File | Add Device.
- 2. In the Add Device dialog box, enter the IP address or host name for RAID Controller A, then click **OK**. You can use the following default address if you have not modified network settings: controller A = 192.168.0.11.

NetCentral contacts RAID Controller A, and adds it to the device list. The RAID Controller is labeled using the controller IP address or the host name if network name resolution is setup for the Profile XP system. (Refer to "Setting up a simple network" in the *Profile XP System Guide*.)



- 3. Repeat step 1 and step 2 for RAID Controller B, if installed. You can use the following default address if you have not modified network settings: controller B = 192.168.0.12.
- 4. Refer to the *Profile XP Service Manual* for information on using NetCentral Lite monitoring software.

## Select audio I/O format

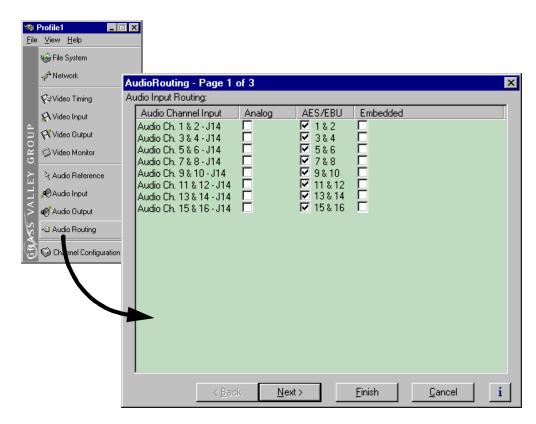
You must verify the audio I/O format for the audio channels assigned to the default video channels and change it if required.

The Profile XP Media Platform supports three audio I/O formats: AES/EBU, embedded audio, and analog audio formats. An interface chassis is required for analog audio and AES/EBU digital audio. If you are using only embedded audio, no interface chassis is required.

## Select audio input format

To select audio input format:

1. Click **Audio Routing** in the Configuration Manager window. The Audio Input Routing dialog box appears.

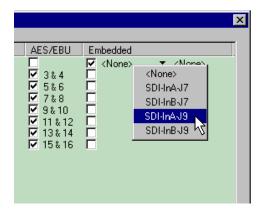


2. Select the audio input format for each audio channel pair.



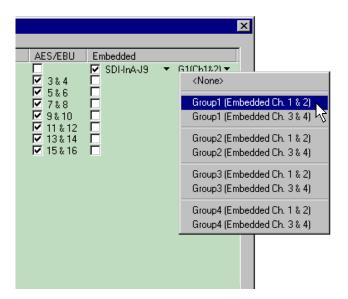
- 3. If you selected embedded audio format, perform the following steps for each audio channel input pair requiring embedded audio:
  - a. Click the left-hand drop-down list arrow in the Embedded column for the channel pair you want to configure, and select a video input as shown.

NOTE: With one audio board, only the first 4 video inputs are selectable.



b. Click the right-hand drop-down list arrow in the Embedded column for the channel pair you want to configure, and select an audio group and channel pair as shown.

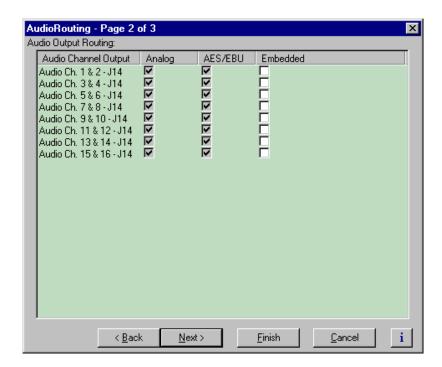
NOTE: Up to two audio groups (8 audio channels) can be extracted from a single video input.



## Select audio output format

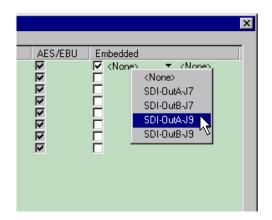
To select audio output format:

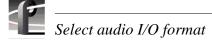
1. Click **Next** to navigate to Page 2 of the Audio Output Routing dialog box as shown.



- 2. For AES/EBU or Analog audio, no selection is required. These audio formats are selected automatically when the system sees the audio interface is attached.
- 3. Select embedded audio output using the following steps:
  - a. For embedded audio, select the **Embedded** check box for each audio channel pair that require embedded audio.
  - b. Click the left-hand drop-down list arrow in the **Embedded** column for the channel pair you want to configure, and select a video output as shown.

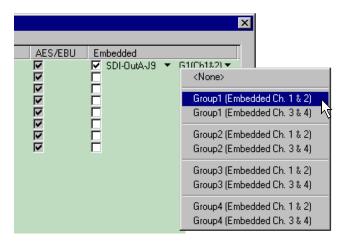
NOTE: With one audio board, only the first 4 video outputs are selectable.





c. Click the right-hand drop-down list arrow in the Embedded column for the channel pair you want to configure, and select an audio group and channel pair as shown.

NOTE: Up to two audio groups (8 audio channels) can be embedded on a single video output. Embedded audio can only be allocated by groups of 4 channels. In some cases, with two audio boards installed, you may have to select embedded audio outputs first, then select the audio inputs for each audio board to be able to select all the desired embedded outputs.



- 4. Click **Finish** to save your settings.
- 5. Continue with the next procedure in this guide to test your system setup.

## Test your system setup using VdrPanel

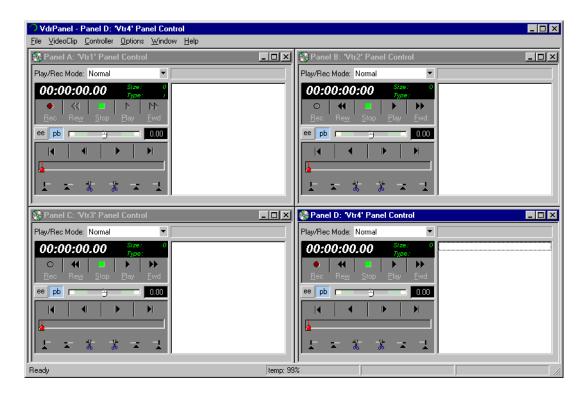
In this step, you will use VdrPanel in local control to test the record and play channels. This procedure assumes you have video and audio signals connected to the inputs of all record channels and have a way of monitoring the video, audio, and timecode outputs.

In systems without record channels you must use the video network to transfer a clip from another Profile. (See "Using Media Manager" in the 23 February 2004).

To test channels using VdrPanel:

1. Start VdrPanel using the desktop shortcut or by selecting **Start | Programs | Profile Applications | VdrPanel**. The VdrPanel window appears.

NOTE: The first time VdrPanel runs, a panel opens for each default record and play channel. The number of default channels depends on your model. Refer to "Default Video Connections" on page 5.



- 2. Record a short clip, a few seconds in duration as follows:
  - a. Click the Record button in the panel for a record channel. Recording starts. The Size display indicates compressed frame sizes during record as timecode advances in the Timecode display.
  - b. Click the **Stop** button to end the recording. Notice the clip name in the clip list is #1.



## Test your system setup using VdrPanel

- 3. Load and play a clip on each Play Channel as follows:
  - a. Click anywhere in the panel for a Play Channel.
  - b. Select VideoClip | Load Clip to open the Load Clip dialog box.
  - c. Select clip #1 in the clip list, then click **OK** to load the clip.
  - d. Click **Play** and verify that video, audio are present at the channel outputs. If you have a problem, refer to the Chapter 10, "Solving Common Setup Problems" in the *Profile XP System Guide*.
- 4. Use steps 2 and 3 to test all record and play channels.
- 5. Continue with the next procedure in this guide to adjust video timing.



## Adjust video output timing

All playback channels are zero timed by default, however, video output timing adjustment is provided to meet downstream timing requirements if needed. In this procedure you will load a clip and verify the output timing for each play channel.

To adjust video output timing:

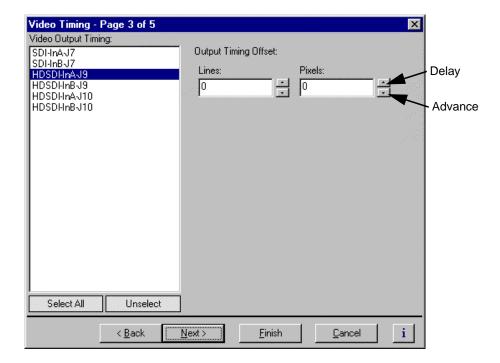
- 1. In VdrPanel, load and playback a clip as follows:
  - a. Click anywhere in the panel for the first Play Channel.
  - b. Select Video Clip | Load Clip to open the Load Clip dialog box.
  - c. Select a clip to load, then click **OK**.



- d. Click the **ee** ( ee ) button in the panel.
- e. Repeat step a through step d for all Play channels.



- 2. Select **Video Timing** in the Configuration Manager window. Page 1 of the Video Timing dialog box appears.
- 3. Click **Next** to navigate to page 2 of 3.



4. Select the video output from the list, then adjust the video output timing with the timing controls.

## NOTE: Use the Select All button to enter the same offset for all video outputs.

- 5. Repeat step 4 for each video output.
- 6. Click **Finish** to save your settings.
- 7. Continue with the next procedure in this guide to select RS-422 control protocol.

## Select an RS-422 control protocol

PVS 1100 remote control protocols are shown in the table. Follow the procedure indicated for the remote control protocol you want to use. If you are not using RS-422 control, you can skip this step

Protocols Available	Application to Use	Procedure to Follow
VDCP Control Odetics Protocol BVW Protocol	VdrPanel	Setting up RS-422 remote control in VdrPanel
Profile Protocol	Prolink	Setting up RS-422 remote control using Prolink (Profile protocol)
RS-422 or Ethernet Network	AMP <sup>a</sup> application	Setting up AMP remote control

<sup>&</sup>lt;sup>a.</sup> Advanced Media Protocol (AMP) - AMP is an extension of the Odetics protocol.

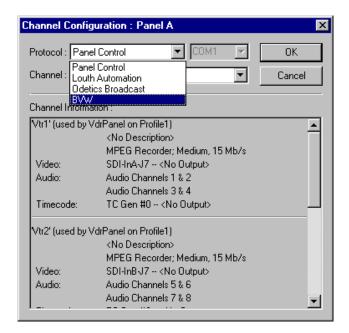
NOTE: Some third-party applications also support the General Purpose Interface (GPI). Refer to your vendor's documentation for instructions on using GPI triggers.



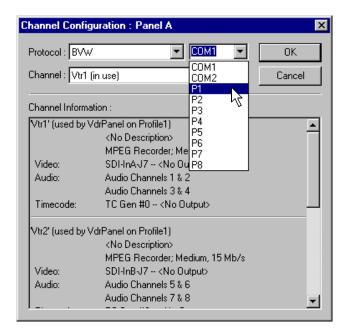
## Setting up RS-422 remote control in VdrPanel

To setup a VdrPanel for remote control:

- 1. If VdrPanel is not already running, start it using the desktop shortcut or by selecting **Start | Programs | Profile Applications | VdrPanel**. The VdrPanel window appears.
- 2. In VdrPanel, click in the panel you want to set up for remote control.
- 3. Choose **Controller | Configure** to open the Channel Configuration dialog box, then select a control protocol using the **Protocol** drop-down list as shown.



4. Select a serial port using the port select drop-down list as shown. COM1 and COM2 are RS-232 ports on the PVS 1100 rear panel. P1 through P8 are RS-422 ports on the I/O Panel.



- 5. Click **OK** in the Channel Configuration dialog box.
- 6. Repeat step 2 through step 5 for the remaining panels.
- 7. Test the system using your automation controller.

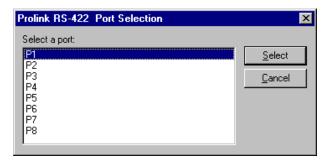
This completes all the procedures in this *Installation Guide*. Refer to the *Profile XP System Guide* for more information on customizing settings for your application.

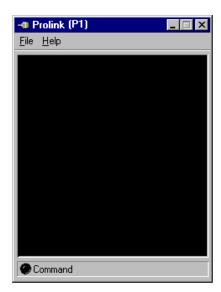


## Setting up RS-422 remote control using Prolink (Profile protocol)

Use this procedure to start and set up Prolink to control the PVS 1100 using Profile protocol.

- 1. Close VdrPanel if you used it earlier to test your record and play channels.
- 2. Open Prolink using the shortcut on the desktop or by selecting **Start | Programs | Profile Applications | Prolink**.
- 3. Select an RS-422 serial port, then click **Select**. The Prolink window appears.





- 4. Test the PVS 1100 system using your controller.
- 5. Repeat steps 2-4 for the number of control ports you need to control the PVS 1100 using Profile protocol.

NOTE: For more information on the Prolink user interface see Chapter 8, "Controlling the Profile XP Remotely" in the Profile XP System Guide.

This completes all the procedures in this *Installation Guide*. Refer to the *Profile XP System Guide* for more information on customizing settings for your application.

## **Setting up AMP remote control**

You can use Advanced Media Protocol (AMP) to control a Profile XP system channel. This protocol is an extension of the Odetics protocol and is supported through the Profile XP AMP application. External control devices can be connected via RS-422 serial connectors, or an Ethernet network connection.

The AMP application acquires a single channel (Player, Recorder, or Player/Recorder) at a time.

The AMP application interface runs in the following modes:

- Local control mode The Profile XP channel can be controlled by either the local AMP application or by third party applications such as a hardware controller or a software application.
- Status mode The Profile XP channel is controlled by a remote application and the local AMP application only monitors activities on the channel.

When you are using a remote application, AMP protocol supports the use of a two-head model in that two clips are loaded simultaneously, as follows:

- Active clip The AMP "preset id" is considered the active clip that controls channel resources.
- Preview clip The AMP "preview preset id" is considered the preview clip. Generally the preview clip begins playing after the active clip completes, at which point the preview clip becomes the active clip.

## **Configuring AMP protocol control**

To configure a Profile XP channel for control by the AMP protocol, do the following:

- 1. Make sure that the channel you intend to control by the AMP protocol is not currently allocated to an application.
- 2. Open *C:/profile/ampclient.exe*. The AMP application opens.

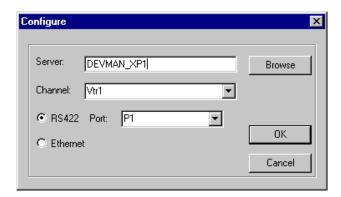




3. Click the **Configure** button,

- or -

On the **File** menu, click **Configure**. The Configure dialog box opens.



- 4. On the **Channel** drop-down list, select the local Profile XP channel to be controlled by AMP protocol.
- 5. Select either **RS422** or **Ethernet** for the type of communication you are using for AMP protocol. If you select RS422, also select the **Port** you are using.
- 6. Click **OK** to save changes and close. If the selected channel is currently allocated to another application, a message informs you that it is not available.

After a pause (indicated by "Connecting...Please wait" in the status bar) the selected channel is allocated to the AMP protocol. The channel remains allocated as long as the AMP application remains open.

You can now control the Profile XP channel with the AMP protocol using a remote AMP application or device. To control the channel with the AMP protocol using the local AMP application, see "Using the AMP application for local control" in the *Profile XP System Guide*.

## **Grass Valley Product Support**

To get technical assistance, check on the status of problems, or report new problems, contact Grass Valley Product Support via e-mail, the Web, or by phone or fax.

## **Web Technical Support**

To access support information on the Web, visit the product support Web page on the Grass Valley Web site. You can download software or find solutions to problems by searching our Frequently Asked Questions (FAQ) database.

World Wide Web: http://www.thomsongrassvalley.com/support/ Technical Support E-mail Address: gygtechsupport@thomson.net

## **Phone Support**

Use the following information to contact product support by phone during business hours. Afterhours phone support is available for warranty and contract customers.

United States	(800) 547-8949 (Toll Free)	France	+33 (1) 34 20 77 77
Latin America	(800) 547-8949 (Toll Free)	Germany	+49 6155 870 606
Eastern Europe	+49 6155 870 606	Greece	+33 (1) 34 20 77 77
Southern Europe	+33 (1) 34 20 77 77	Hong Kong	+852 2531 3058
Middle East	+33 (1) 34 20 77 77	Italy	+39 06 8720351
Australia	+61 3 9721 3737	Netherlands	+31 35 6238421
Belgium	+32 2 3349031	Poland	+49 6155 870 606
Brazil	+55 11 5509 3440	Russia	+49 6155 870 606
Canada	(800) 547-8949 (Toll Free)	Singapore	+656379 1390
China	+86 106615 9450	Spain	+ 34 91 512 03 50
Denmark	+45 45968800	Sweden	+46 87680705
Dubai	+ 971 4 299 64 40	Switzerland	+41 (1) 487 80 02
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## Authorized Support Representative

A local authorized support representative may be available in your country. To locate the support representative for your country, visit the product support Web page on the Grass Valley Web site.

## **Profile Users Group**

You can connect with other Profile XP Media Platform users to ask questions or share advice, tips, and hints. Send e-mail to profile-users@thomson.net to join the community and benefit from the experience of others.

