



Profile System Software 2.5.6 Release Notes

Table of Contents

<i>Grass Valley Group Product Support</i>	2
<i>What's New</i>	3
<i>Version 2.5.6 Performance</i>	6
<i>MPEG Closed Captioning Techniques</i>	8
<i>New System Boards</i>	8
<i>Software Installation</i>	9
<i>Installing Profile System Software 2.5.6</i>	9
<i>New Startup Procedures</i>	10
<i>Updating EDR Firmware</i>	12
<i>Updating Fibre Channel Microcode</i>	13
<i>Updating the RS-422 interface board device driver</i>	14
<i>Removing the existing RS-422 device driver</i>	14
<i>Installing the RS-422 Board Device Driver</i>	14
<i>Upgrading Media Drive Microcode</i>	21
<i>Media Manager Notes</i>	21
<i>Version Compatibility</i>	22
<i>Installing Profile System Software 2.2.5</i>	22
<i>Installing Profile System Software 2.4.5</i>	24
<i>Profile Protocol Resources Utility</i>	25
<i>Using the Profile Protocol Resources Utility</i>	25
<i>Ethernet Interface Configuration</i>	28
<i>EDR Memory Requirements</i>	29
<i>Using Fibre Channel</i>	30
<i>Installing Fibre Channel</i>	30
<i>Fibre Channel Compatibility</i>	30
<i>Concurrent Fibre Channel Copies</i>	30
<i>Microsoft Windows NT Support</i>	32
<i>Installing Windows NT 4.0</i>	32
<i>Upgrading to Windows NT 4.0 Without a LAN Card</i>	33
<i>Known Problems</i>	34



Grass Valley Group Product Support

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World Wide Web	http://www.grassvalleygroup.com/support/
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What's New

>>> *Version 2.5.6 of Profile System Software requires:*

- *Windows NT 4.0 with Service Pack 3 and the Year 2000 hotfix. You'll find more information about the Windows NT requirement in the section called "Microsoft Windows NT Support" on page 32. Please note that this release is not approved for operation with Windows NT 3.51.*
- *A PDR200 or PDR300 system. PDR100 systems equipped with enhanced disk recorder (EDR) cards are also supported. Generally, only PDR100 systems with the installed Fibre Channel upgrade are equipped with enhanced disk recorder cards.*

>>> *Do not install Profile System Software 2.5.6 on PDR100 systems which are not equipped with enhanced disk recorder cards.*

>>> *Do not install Profile System Software 2.5.6 on PDR400 systems, or on systems which have DVCPRO upgrade cards installed.*

>>> *You must have increased enhanced disk recorder memory (RAM) to use the following features:*

- *MPEG support*
- *32-track audio*
- *Fibre Channel streaming*
- *Profile Library Systems (PLS)*

Refer to "EDR Memory Requirements" on page 29 for more information.

>>> *If you use third-party applications, check with your vendor before installing or using this software release. If your automation system or third party application does not yet support Profile System Software 2.5.6, Grass Valley Group recommends that you install Profile System Software 2.2.5 or higher, which has been qualified by most vendors. You'll find instructions on how to install Profile System Software 2.2.5 in "Version Compatibility" on page 22.*



Version 2.5.6 contains a number of major enhancements introduced in earlier Profile System Software releases:

- Profile systems are now equipped with three, five, or eight 18GB media drives, and support the 18GB Low Profile (LP) drives.
- You can use the following new capabilities with your Profile Library Systems (PLS20, PLS200, DST312, and DST412):
 - Store MPEG clips
 - Store Complex Movies (masters)
 - Stream clips to and from the archive
 - Store up to 48 tracks (audio, video, and timecode) per clip
- The new Resource Manager lets you assign MPEG resources to the following applications, which can now use MPEG clips in all of their operations:
 - Time Delay
 - Tool Box Editor
 - List Manager

NOTE: Be sure to obtain versions of these applications that are compatible with Profile System Software 2.5.6.

- Fibre Channel streaming transfers (TekXfr) now support Complex Movies (masters), in addition to simple clips.
- Whenever you use Media Manager to copy or move material, streaming is used whenever possible between Profile systems, and with Profile Library Systems (archives). To ensure optimal use of streaming capabilities, make sure that all the systems in your Video Network are running Profile System Software 2.5.6 or higher.

Media Manager now allows you to copy entire bins, not just individual clips. Media Manager also provides preview frames of MPEG clips and masters.

- An updated Comtrol RocketPort RS-422 interface board driver corrects several problems found in earlier versions of the driver.
- Updated Fibre Channel microcode is included in this release. Be sure to update your Fibre Channel microcode after installing this version of Profile System Software to ensure optimal performance of your Profile system and your Fibre Channel switch.
- Profile developers can now implement clip transfers using standard FTP commands over Fibre Channel. Refer to the Profile SDK for more information.
- The optional Fibre Channel Switch lets you improve the bandwidth of your Video Network by eliminating the shared bandwidth required by Fibre Channel Arbitrated Loops. The switch ensures that transfers between any two Fibre Channel devices use all the available bandwidth between those two devices only, and no others.

-
- The optional Fibre Channel Multicast software allows you to send material from one Profile system to up to eight other Profile systems with a single command. Multicast operation requires the use of a optional Profile Fibre Channel Switch. You cannot use the optional multicast capabilities in a loop environment.
 - The new PRS 255 provides 18GB media drives in the optional Profile RAID. A full, twenty-drive PRS 255 unit lets you store about 12 hours of 24-Mb video. The PRS 255M provides a second RAID controller board, which allows you to increase your storage bandwidth without connecting a second RAID device.
 - New Profile Video File Servers which include internal media disks are now shipped from the factory with a Demo Clips bin in the default dataset. You can play these clips to verify your cabling, as well as your MPEG decoders and JPEG codecs.
 - You can use the new **Profile Protocol Resources** utility to configure resources for use with Profile Protocol RS-422 control devices such as the PRC 100. The new utility provides a point-and-click interface that allows you to assign JPEG or MPEG resources, set bit-rates, and assign audio channels, for example. You may still edit *.cfg* files manually if you are more comfortable with this method of assigning resources. See “Using the Profile Protocol Resources Utility” on page 25 for more information.
 - This release increases to 10,000 the number of clips that you can store on your Profile Video File Server, assuming that your system has enough disk space and that each of your clips is composed of one video track, four audio tracks, and one time code track. The true limit is imposed by the media file system, which can store approximately 60,000 media files, with one media file created for each video, audio, and time code track you specify for a clip.

If you're upgrading from a previous version of Profile System Software, you'll also notice improved performance in operations involving the listing of clips (enumeration), such as loading VdrPanel.



Version 2.5.6 Performance

The following tables describe the maximum video data rate available per channel on the Profile Video File Server when all channels are in use. The maximum video data rate per channel depends on the Profile model, the type of storage, and the number of storage disk drives in the system. The Profile Video File Server can be configured with either RAID or non-RAID storage. Refer to Table 1, Table 2, and Table 3 to determine the maximum video data rates for various Profile models and storage options.

Table 1. Maximum Video Data Rates Per Channel With Non-RAID Storage

Profile Models with Non-RAID Storage	Maximum Video Data Rate Per Channel (When All Channels Are In Use)		
	3 Internal Drives	5 Internal Drives	8 Drives (Internal or PDX218)
PDR202	48Mb/s	48Mb/s	48Mb/s
PDR204	not available	48Mb/s	48Mb/s
PDR312	24Mb/s	50Mb/s	50Mb/s
PDR304	24Mb/s	50Mb/s	50Mb/s
PDR324	not available	24Mb/s	24Mb/s
PDR 316	not available	24Mb/s	24Mb/s
PDR308	not available	18Mb/s	24Mb/s

Table 2. Maximum Video Data Rates Per Channel With PRS255 RAID Storage Chassis

Profile Models with the PRS255 RAID Storage Chassis	Maximum Video Data Rate Per Channel (When All Channels Are In Use)			
	5 Drives	10 Drives	15 Drives	20 Drives
PDR202	24Mb/s	48Mb/s	48Mb/s	48Mb/s
PDR204	not allowed	36Mb/s	36Mb/s	48Mb/s
PDR312	24Mb/s	24Mb/s	24Mb/s	24Mb/s
PDR304	24Mb/s	24Mb/s	24Mb/s	24Mb/s

Table 3. Maximum Video Data Rates Per Channel With PRS255M RAID Storage Chassis

Profile Models with the PRS255M RAID Storage Chassis	Maximum Video Data Rate Per Channel (When All Channels Are In Use)		
	10 Drives	15 Drives	20 Drives
PDR 312	50Mb/s	50Mb/s	50Mb/s
PDR 304	24Mb/s	50Mb/s	50Mb/s
PDR 324	24Mb/s	24Mb/s	24Mb/s
PDR 316	not allowed	24Mb/s	24Mb/s
PDR 308	not allowed	18Mb/s	24Mb/s

You can select the video data rate the Profile system uses to record the video signal. When selecting video data rates, be sure not to exceed the total Profile system bandwidth. Fibre channel transfers, archive operations, and high bandwidth recording or playout may require that you reduce the data rate on other channels or operate fewer channels at one time. Although playout and recording take priority over other operations, exceeding your Profile system bandwidth may result in record or playback problems. For information on setting the video data rate in Profile applications software, refer to the appropriate sections of the *Profile Family User Manual*



MPEG Closed Captioning Techniques

Profile System Software 2.5.6 provides the ability to store up to three lines of uncompressed Vertical Blanking Interval (VBI) information along with your clips. “Using VdrPanel” in the *Profile PRO Series User Manual* describes how to store VBI data in uncompressed form. However, storing VBI information in uncompressed form can add up to 1Mb/sec to your storage requirements.

If you are recording at higher video data rates (above 8Mb/s), your VBI information can probably be successfully compressed and stored along with the video.

If you are recording your video at lower data rates but do not wish to store your VBI information in uncompressed form, you may wish to try storing your VBI data in compressed form using the technique described here.

MPEG-2 compression works on macro-blocks of 16 by 16 pixels. If closed captioning information is contained in the same macro-block as active video, the two will be compressed together, which will degrade the closed captioning. By ensuring that only black is compressed with the closed captioning information, the compression degradation is minimized.

Since closed captioning information is placed on line 21 in 525-line video, you should follow these guidelines when recording video with closed captioning information in MPEG format. They will help ensure optimum closed captioning integrity, even at lower bitrates.

1. Set the MPEG encoder to begin encoding at line 6, and end at line 261.
2. Where possible, ensure that lines 6 to 20 contain black.

This technique will allow you to minimize the degradation of closed captioning information at lower bitrates. You may also improve your results by using 4:2:0 encoding at very low bitrates.

New System Boards

Profile systems may include the following new boards as standard equipment:

- A new CPU card that integrates a faster CPU, the S-VGA, and the Ethernet LAN cards into a single unit. Please note that this change requires different display and network drivers from previous Profile systems. These drivers are installed at the factory.

NOTE: Be sure to set your Ethernet Interface speed to either 10BaseT or 100BaseT as described in “Ethernet Interface Configuration” on page 28.

- A new RS-422 card that can accept up to eight simultaneous active connections. This card also requires a new driver, which is installed at the factory.

Software Installation

You can install this release of Profile System Software 2.5.6 on any Profile Video File Server (PDR200 or PDR300), or on any PDR100 equipped with enhanced disk recorder cards (generally, any PDR100 with Fibre Channel). Your Profile system must also have the correct version of Windows NT installed (see “Microsoft Windows NT Support” on page 32).

You can also use the CD-ROM to install Profile System Software and the Media Manager application on a PC running the supported version of Windows NT. Be sure to specify that you’re not installing on a Profile system when the prompt appears on the screen.

Installing Profile System Software 2.5.6

Profile System Software 2.5.6 is installed at the factory on all current Profile systems. If you’re installing a new Profile Video File Server, you do not need to install this software. Refer to the *Profile Family User Manual* to learn how to start using your Profile Video File Server right away.

Follow these steps to upgrade from earlier versions of Profile System Software to Profile System Software 2.5.6.

>>> ***Do not delete the contents of the c:\profile directory before installing Profile System Software 2.5.6.***

1. Log out of the system to ensure that no applications are running.
2. Hold the Shift key down during start-up to prevent auto-logon as user *profile*.
3. Log in as *administrator*. The default *administrator* password on a Profile system is *triton*.
4. Run `\releases\2.5\disk1\setup.exe` from the Profile System CD-ROM. Use My Computer or Network Neighborhood to locate the appropriate CD-ROM drive, either the optional drive directly connected to your Profile system, or a drive on a remote machine accessible through a network connection.

NOTE: You can also install Profile System Software 2.5.6 from diskettes that you make yourself. Refer to \releases\2.5\readme.txt on the Profile System CD-ROM for instructions on how to create Profile System Software diskettes.

5. Follow the instructions displayed by *setup*.
6. When prompted, confirm whether you are installing the software on a PC or a Profile system.
7. After a successful installation, *setup* will shut down and prompt you to restart the system.



8. After restarting, you must ensure that your Enhanced Disk Recorder (EDR) board contains the latest version of firmware. Update the EDR firmware by following the instructions in “Updating EDR Firmware” on page 12.
9. If your Profile system is connected to a Fibre Channel switch, you must also install the latest version of Fibre Channel switch-compatible microcode. Refer to “Updating Fibre Channel Microcode” on page 13 for instructions on how to do this.
10. Update your RS-422 interface board driver as described in “Updating the RS-422 interface board device driver” on page 14.
11. Update your emergency repair disk by inserting the floppy disk in the A drive and running *rdisk.exe*.

NOTE: If you wish to manage Profile operation over a network from a remote system, or transfer media to or from a Profile system through Fibre Channel, you must start PortServer on the Profile system before performing these operations.

New Startup Procedures

NOTE: When running Profile System Software 2.5.6, you should not place applications in the Startup group to start them automatically upon login. You must use the supplied pdrstart.bat file, described here, to start applications and services.

Before running any Profile application or after halting PDR Service (**vdrsvc -stop**), you must run the Host Transfer Service (**htssvc**), a program that handles streaming requests. When Profile System Software 2.5.6 was installed, an icon for *pdrstart.bat* was placed in the *All Users* (4.0) Startup folder. This is an icon for the Startup shortcut in *c:\WINNT\Profiles\All Users\Start Menu\Programs\Startup\pdrstart.bat* which simply points to the file *c:\profile\pdrstart.bat*.

After installing Profile System Software 2.5.6, you can add commands—such as `start vdrpanel`—to *c:\profile\pdrstart.bat* if you want to start Profile applications automatically. Place any commands under the line `REM Add Your applications AFTER this line` and before the line `@GOTO EXIT REM Add your apps BEFORE This Line...` If you currently have any other batch files or icons under either *All Users* or *Common*, remove these files and place the desired commands in *pdrstart.bat*.

If you experience any problems starting some applications on startup, you should try increasing the value of the `sleep` parameter (in seconds) to give other services more time to start.

A copy of the default *c:\profile\pdrstart.bat* follows:

```
@echo off
REM Place this batch file in the startup group
REM This batchfile will start up the htssvc and
REM other apps after the 960 is fully up.
REM
REM Rules: always have "wait960 first"
REM     always have htssvc next
REM     always have the 5 second pause next
REM
REM     then add your own custom startup stuff....
REM
@wait960 360
@if errorlevel 1 goto failed
@echo SUCCESS!
start htssvc.exe
sleep 5
REM start portsrvr
REM start portmap
REM start chgserver

REM Add Your applications AFTER this line

@GOTO EXIT REM Add your apps BEFORE This Line...
:FAILED
@echo FAILURE!
:EXIT
```



Updating EDR Firmware

Profile System Software 2.5.6 includes a new version of Enhanced Disk Recorder (EDR) firmware, which improves data transfers inside your Profile System. Grass Valley Group recommends that you update your EDR firmware after you install Version 2.5.6. This version of firmware is compatible with all EDR boards.

NOTE: The reprogramming uses the file c:\profile\edr_isp.all. Do not alter this file in any way as it may lead to incorrect programming of parts.

To update firmware:

1. Close any applications that may be running on the system.
2. At a command line, type **vdrsvc -stop** and then press Enter. This stops the PDR Access Service. The service will not stop if all applications have not been shut down.
3. Choose **Start | Programs | PDR Debug Tools | Update EDR Firmware** or double-click the **Update EDR Firmware** icon. A window appears.
4. The program warns you to shut down any applications that may be running and to stop the PDR Access Service. If you have already done so, as instructed in steps 1 and 2, type **y**. Otherwise, type **n**, and return to step 1.
5. The update procedure steps through the reprogramming of the components, giving progress information as it proceeds. It retries up to three times to reprogram parts in the event of verification errors. After reprogramming all parts, a summary is provided that describes what has been done.

NOTE: Be sure to shut down Windows NT and power off the system before continuing.

6. If parts have failed to program, power down the Profile unit completely, power it up again, and then run the program again. If the programming fails again, the EDR board may be defective, contact Grass Valley Group support. If the parts are correctly programmed, restart the Profile system.

Updating Fibre Channel Microcode

This release provides two versions of Fibre Channel board microcode. You must choose which one to use depending on your environment. The two versions are:

- **Loop compatible.** This version is loaded on your Fibre Channel board at the factory. Use this microcode with Fibre Channel hubs, when your Video Network includes only Profile Systems and SGI Fibre Channel Servers. You can reload this microcode with the **FC Loop-mode Microcode** icon in the Profile Debug Tools folder.
- **Switch compatible.** Use the **FC Switch-mode Microcode** to load this updated version of microcode onto your Fibre Channel board if you are connecting your Profile system to a Fibre Channel Switch. In addition, you must set switch mode on with the `fcconfig -s on` command, or with the appropriate check box in Configuration Manager's Configure Fibre Channel dialog box.

You should also use the switch compatible version of microcode if you are connecting your Profile system to Fibre Channel devices from other manufacturers. Please note that this inter-operable microcode has not been optimized for loop operations.

Follow these instructions to use either of these icons to load Fibre Channel microcode.

1. Close any applications that may be running on the system.
2. At a command line, type `vdrsvc -start` and then press Enter. This starts the PDR Access Service if it is not already started.
3. Choose **Start | Programs | PDR Debug Tools | FC Switch-mode Microcode**. or **Start | Programs | PDR Debug Tools | FC Loop-mode Microcode**. A window appears.
4. The program asks if you want to continue. Type **Y**.
5. The program now reads the new image of the microcode from `c:\profile\etc\gfcucode.img`. The program automatically copies the old microcode to the file `c:\profile\etc\gfcucode.old`.
6. Restart the Profile system in order for the microcode update to take effect.
7. Use the Fibre Channel Configuration dialog box or the `fcconfig` command to verify that switch mode is on or off according to your needs. Each icon establishes settings that should be appropriate for most uses.



Updating the RS-422 interface board device driver

If you are updating your Profile System Software from a version earlier than 2.4.5, you must update your Comtrol RocketPort RS-422 interface board driver after you install your new version of Profile System Software.

If your Profile system is not equipped with a Comtrol RocketPort RS-422 board, you must not update the RS-422 interface board driver. Follow steps 1 to 5 of “Removing the existing RS-422 device driver” to determine your RS-422 interface board type.

Removing the existing RS-422 device driver

Before you can install the updated RS-422 device driver, you must first remove the current driver.

1. Power On the Profile system and logon as *Administrator* using these steps.
 - a. Power On the Profile system and hold the **Shift** key down during start-up to prevent auto-logon as user *profile*. Be sure to hold down the shift key until the logon dialog box appears.
 - b. Logon as *administrator*. The factory default *administrator* password on a Profile system is *triton*.
2. Open Control Panel by choosing **Start | Settings | Control Panel**.
3. Double-click the **Network** icon.
4. The Network dialog box appears. Click the **Adapters** tab.

NOTE: *If Comtrol RocketPort RocketModem does not appear on the list of Network Adapters, click Cancel and do not proceed with this driver update. The updated driver is not compatible with other RS-422 interface boards.*

5. Highlight the **Comtrol RocketPort RocketModem** and then click the **Remove** button.
6. When prompted “*Do you wish to continue?*”, click **Yes**.
7. Close the Network dialog box.
8. Restart the system and logon again as *Administrator*.

You are now ready to install the updated RS-422 device driver.

Installing the RS-422 Board Device Driver

After removing the old RS-422 board device driver and re-starting the system, you are ready to install the driver for the RS-422 board. Use the following instructions to install the driver.

To install the RS-422 device driver:

1. Make sure you are logged on as *Administrator*. The factory default password on the Profile system for *Administrator* is *triton*.

-
2. Open the Control Panel by choosing **Start | Settings | Control Panel**.
 3. Double-click the **Network** icon.
 4. The Network dialog box appears. Click the **Adapters** tab.
 5. Click the **Add** button, and then the **Have Disk** button.
 6. When you are prompted, type **c:\profile\drivers\rocket** as the path of the directory containing the driver files (see Figure 1) and click **OK**.

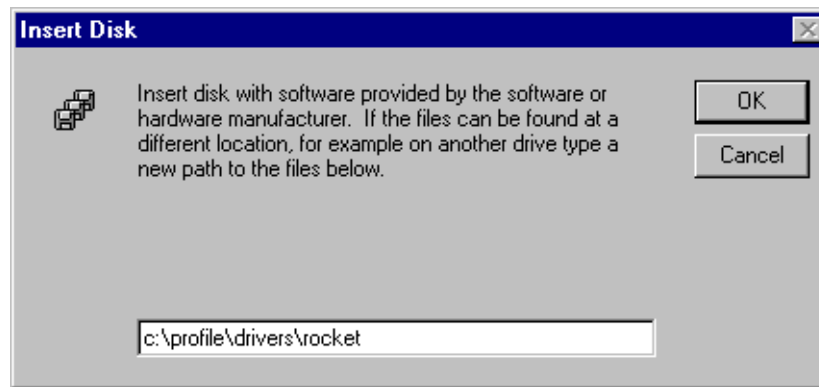


Figure 1. Type the path to the device driver files

7. The Select OEM Option dialog box appears (see Figure 2). Ensure that the Control RocketPort RocketModem is selected, then click **OK**.

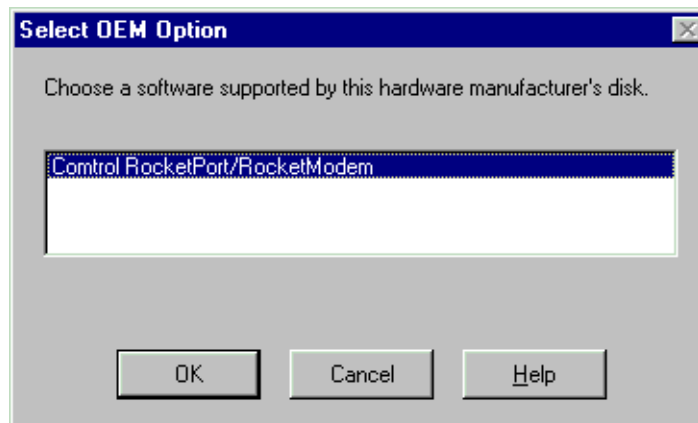


Figure 2. Select the RocketPort driver.



8. The Add Device Wizard starts. Click **Next** to continue, then select ISA bus as the bus type (see Figure 3) and click **Next** again.



Figure 3. Select the ISA bus type.

9. Select RocketPort as the board type (see Figure 4), then click **Next**.

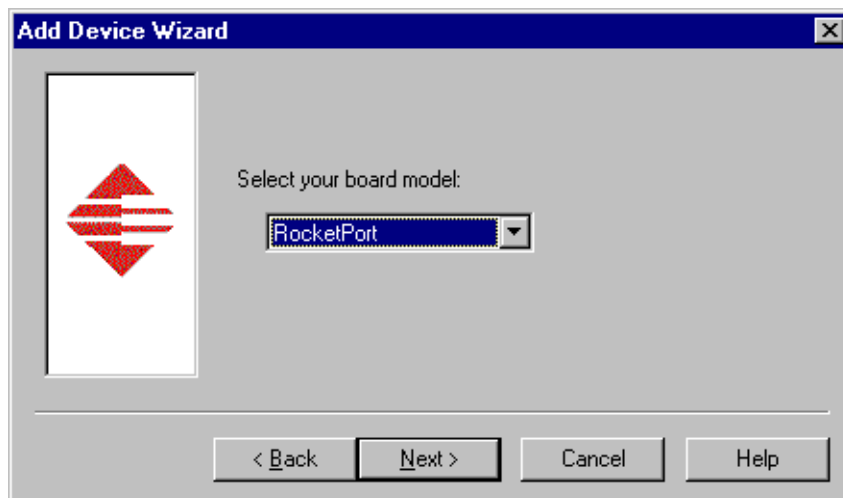


Figure 4. Select RocketPort board model.

10. Select eight ports on the hardware (see Figure 5), then click **Next**.



Figure 5. Select eight ports.

11. Set the I/O Base Address to 180 Hex (see Figure 6), then click **Next**.

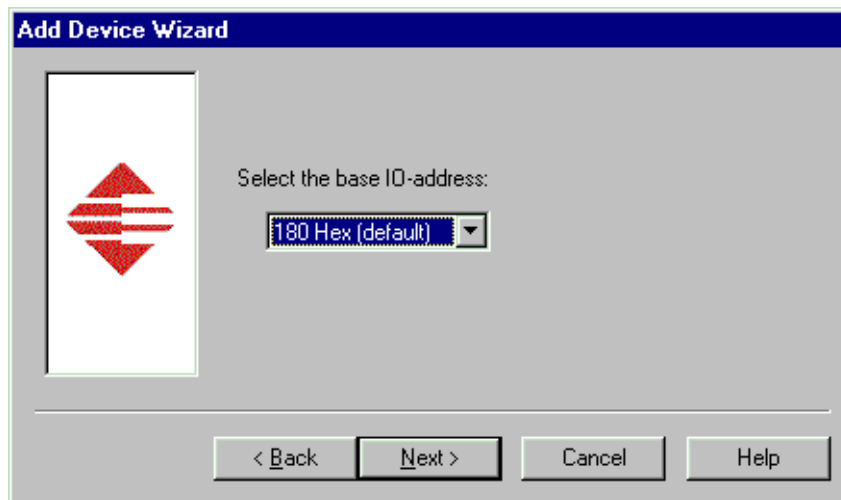


Figure 6. Set the I/O Base Address to 180.

12. Click **Finish** to close the Add Devices Wizard (see Figure 7) and open the Device Properties dialog box.

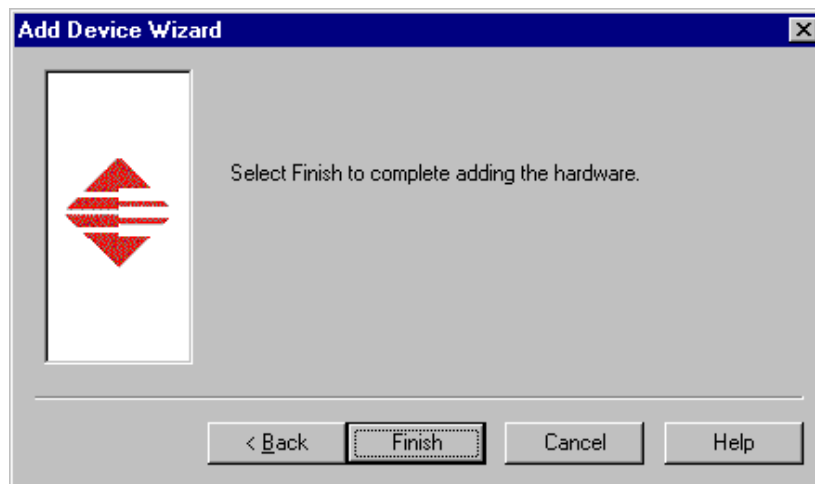


Figure 7. Finish the driver installation.

13. Ensure that the Starting COM Port is set to **COM3** and that the I/O Base Address is set to **180 Hex**, then click **OK** to close the Device Properties dialog box (see Figure 8).

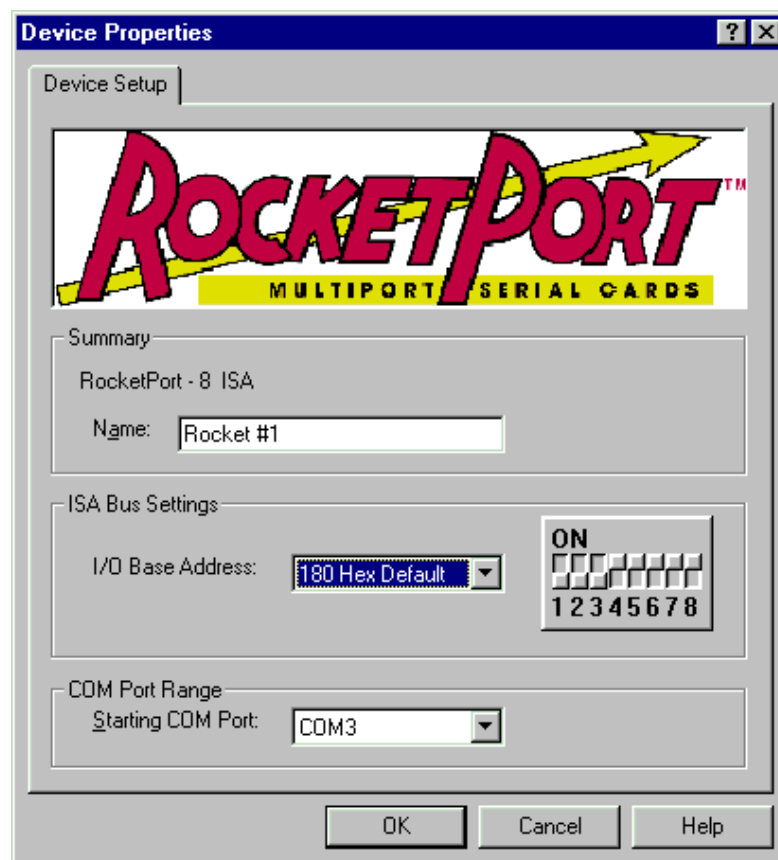


Figure 8. Select COM3 as the starting port.

-
14. Choose the Options tab in the Control RocketPort/RocketModem Setup dialog box (see Figure 9).

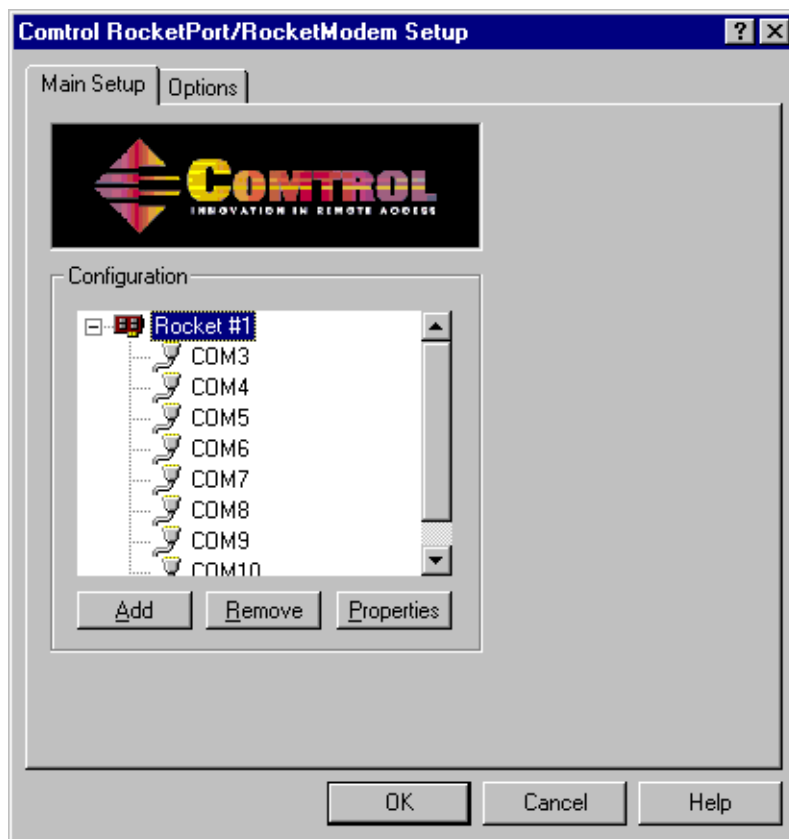


Figure 9. Choose the Options tab.



15. In the **Options** tab (see Figure 10), set the **Scan Rate(ms)** to 1ms.

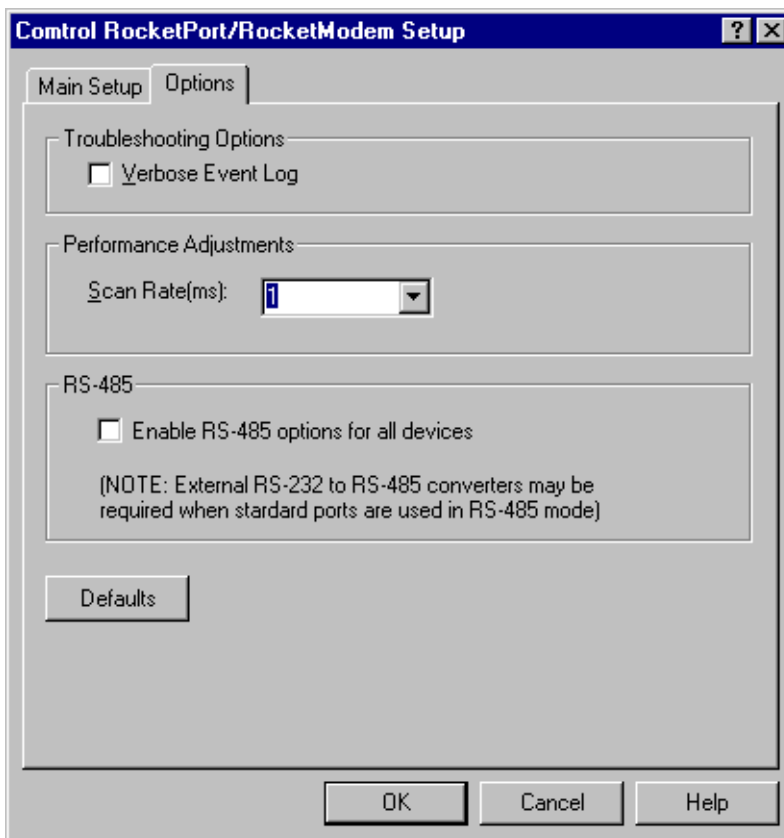


Figure 10. Set the scan rate to 1ms.

16. Choose **OK** to accept your changes in the RocketPort/RocketModem Setup dialog box.
17. Chose **OK** to save new configuration settings and exit the setup.
18. Click **Close** in the Network dialog box.
19. Restart the system. Logon as *Profile*. The factory default password for the *Profile* user account is *profile*.

Upgrading Media Drive Microcode

Grass Valley Group strongly recommends that you upgrade the microcode on all your media drives to the latest version. The following table lists the microcode files included in this release. Refer to “Using the Profile Disk Utility” in the *Profile Family User Manual* for instructions on how to load microcode onto your media drives.

Table 1: Profile Microcode Files

Drive type	Model	Microcode File Name
Seagate 4 GB	ST15150	cu4w6001.lod
Seagate 9GB	ST19171	cu9w6004.lod
IBM 18GB 10K	DMVS18D	ibm18g10k.lod
IBM 18GB	DGHSI18D	ibm18g_b.lod

Model numbers may appear with suffixes such as W or WD. The listed microcode file can be used for all drives with the same model number, regardless of the suffix.

NOTE: *Grass Valley Group does not support media drives purchased from other vendors.*

Media Manager Notes

- The version of Media Manager included with this release cannot be used to manage material on a Profile XP. Bins and clips on a PVS 1000 or PVS 2000 will not be visible in this version of Media Manager. If you need to manage material on both PDR 300s and PVS 1000s, use the version of Media Manager included with Profile System Software version 4.0 release or higher.
- Streamed Fibre Channel copies transfer only the material between clip marks, not the entire media file.
- Do not set the physical read-only switch or tab on a library data tape or cartridge.
- Clips created with Profile System Software 2.5.6 show the clip’s correct video format and length based on the clip’s properties. Clips created with Profile System Software versions prior to Version 2.5.6 may show the Profile system’s current video format, and the clip’s timecode (length) is based on the current video format.
- If you lose an Ethernet connection to any system on your network (disconnected cable, for example), you must reconnect to that machine from all Media Manager sessions on all systems to reestablish proper communications.



Version Compatibility

Grass Valley Group strongly recommends that you install Profile System Software 2.5.6 or higher on *all* systems on a video network. This will ensure optimum performance and minimize incompatibilities.

Along with other enhancements and new features, Profile System Software 2.5.6 introduces several improvements to Fibre Channel networking, including streaming of complex movies, Fibre Channel Switch support, and new configuration settings.

NOTE: Profile systems running Version 2.5.6 can not transfer clips to or from Profile systems running Profile System Software versions earlier than 2.2.2.

If you are unable to upgrade all of the Profile systems on a video network to Profile System Software 2.5.6, you must install Version 2.2.5 on all Profile systems on the same video network as Profile systems running Version 2.5.6. Grass Valley Group recommends that you upgrade those systems to Profile System Software 2.2.5 first, then upgrade your other systems to Profile System Software 2.5.6.

You cannot perform streaming Fibre Channel transfers (TekXfr) to or from Profile systems running Version 2.2.5. However, you can transfer files to and from Profile systems running Version 2.2.5 with the *PdrCopyMovie* command, or by using Media Manager.

NOTE: You must not store MPEG or DVCPRO clips on Profile systems running Version 2.2.5.

In addition, if you use third-party applications, you must check with your vendor before installing or using Profile System Software 2.5.6. If your automation system or third party application does not yet support Profile System Software 2.5.6, Grass Valley Group recommends that you install Profile System Software 2.2.5, which has been qualified by most vendors. The following section describes how to install Profile System Software 2.2.5.

Installing Profile System Software 2.2.5

If your third-party software application or automation system does not yet support Profile System Software 2.5.6, or if you cannot immediately install Profile System Software 2.5.6 on all systems in your video network, you should install Profile System Software 2.2.5 on all systems which will not be running Version 2.5.6.

NOTE: You must not install Profile System Software 2.2.5 on any Profile system equipped with MPEG boards, DVCPRO boards, or with a second ASPB (32-channel audio). Should you wish to install Profile System Software 2.2.5 such a system, you must first remove the MPEG or DVCPRO board or boards, remove the second ASPB, and remove any MPEG or DVCPRO clips from the system before installing Profile System Software 2.2.5.

The following instructions explain how to install Profile System Software 2.2.5 on a system which currently has Version 2.5.6 installed.

-
1. Log out of the system to ensure that no applications are running.
 2. Hold the Shift key down during start-up to prevent auto-logon as user *profile*.
 3. Log in as *administrator*. The default administrator password on a Profile system is *triton*.
 4. Ensure that all Profile applications are closed, such as Configuration Manager, VDR Panel, HtsSvc, etc. Be sure to check the Task Bar for any minimized applications, and that no other systems are connected to the local machine.
 5. Stop the Portmap service and disable its automatic startup. To do this:
 - a. Select **My Computer** on the desktop, choose **Control Panel | Services**.
 - b. From the Services dialog window, select the **Portmap** service and click **Stop**.
 - c. Click **HW Profiles**, then choose **Disable**. Click **OK** to close the dialog box.
 - d. Click **Startup**, then choose **Disabled**. Click **OK** to close the dialog box.
 - e. Close the Services dialog box, then close the Control Panel window.
 6. Remove *pdrstart.bat* from the All Users startup group. To do this:
 - a. In the My Computer window, delete *c:\Winnt\Profiles\All Users\Desktop\HtsSvc*. This will remove the HtsSvc icon from the desktop, as it is not supported in Version 2.2.5.
 - b. In the My Computer window, delete *c:\Winnt\Profiles\All Users\Start Menu\Programs\Startup\PDRStartup*. This will remove all requests to start *PDRStartup.bat*, and will prevent *HtsSvc.exe* from starting.
 - c. Close the My Computer window.
 7. Use Media Manager to delete any MPEG or DVCPRO clips from the systems media disks (all internal and external datasets).
 8. Run the *c:\releases\2.2\setup.exe* program. (Choose **Start | Run**.)

NOTE: You can also install Profile System Software 2.2.5 from the CD-ROM. Run \releases\2.2\setup.exe from the appropriate drive, either on the local machine, or from a remote connection using File Manager or Network Neighborhood.

9. Follow the instructions displayed by setup.
10. When prompted, confirm whether you are installing the software on a PC or a Profile system.
11. After a successful installation, setup will shut down and prompt you to restart the system. Log on as *Administrator* again.
12. Update your emergency repair disk by inserting the floppy disk in the **A** drive and running *rdisk.exe*.



NOTE: Fibre Channel configuration settings made in Version 2.5.6 will not be carried over to Version 2.2.5. You must use *fcconfig* in Version 2.2.5 to configure Fibre Channel.

13. Use **Start | Shut Down** to log on as user *Profile*, password *Profile*. This will enable the autologon as user *Profile* at the next startup.

You'll find complete documentation for Profile System Software 2.2.5 in the *\manuals* directory of the CD-ROM. The *Profile Family User Manual* and the *Profile Release Notes* are both available in Adobe Acrobat 3.0 format, as *.pdf* files. If required, you can install Acrobat Reader 3.0 from the *\acrobat3* directory on the CD-ROM. Run the *.exe* file located in that directory.

You can order printed copies of Version 2.2.5 documents from your Grass Valley Group Sales representative. Use the following part numbers when ordering these manuals.

Table 1. Version 2.2.X document part numbers

Profile Family User Manual	070-9955-XX
Profile 2.2.4 Release Notes	070-9957-XX

Installing Profile System Software 2.4.5

You may install Profile System Software 2.4.5 on a system which is currently running Version 2.5.6. To do this:

1. Use the **FC Loop-mode Microcode** icon in the Profile Debug Tools folder to load the Profile System Software 2.4.5-compatible microcode on your Fibre Channel card. Profile System Software 2.4.5 does not support operation with a Fibre Channel Switch.
2. Install Profile System Software 2.4.5 as instructed in the accompanying Release Notes.

Profile Protocol Resources Utility

Version 2.5.6 includes a new utility that you can use to assign Profile resources to channels under Profile Protocol control. The description of this utility provided in the Profile Family User Manual is not up to date. The following section contains updated information on the Profile Protocol Resources Utility.

Using the Profile Protocol Resources Utility

When you start the Profile Protocol Resources utility by double-clicking its icon, a large dialog box similar to the one shown in Figure 11 appears.

The available Profile resources are displayed in the dialog box. Note that these resources will vary according to the features of each Profile system. For example, while JPEG codecs are available on all Profile systems, MPEG encoders appear as resources only on Profile models that are so equipped.

The **Add Video**, **Add Audio**, and **Add Timecode** buttons add the resources you select to the configuration file under construction. Each time you click the “Add” button for a set of resources, the resources are tagged as “Used” except for shared resources, such as a Video Input, which you can use several times.

The **Clear** button removes the “Used” tags from resources that have been added but not yet saved; the **Clear All** button clears all “Used” tags in the dialog box, including those for resources that have been saved. The **Create File** button allows you to save the temporarily stored information in the permanent configuration file.

Resources being used by other applications (such as VdrPanel) are tagged as “In Use.” If you wish to add “In Use” resources to the configuration file, exit Profile Protocol Resources, free the resources in the other Profile applications, then restart Profile Protocol Resources.

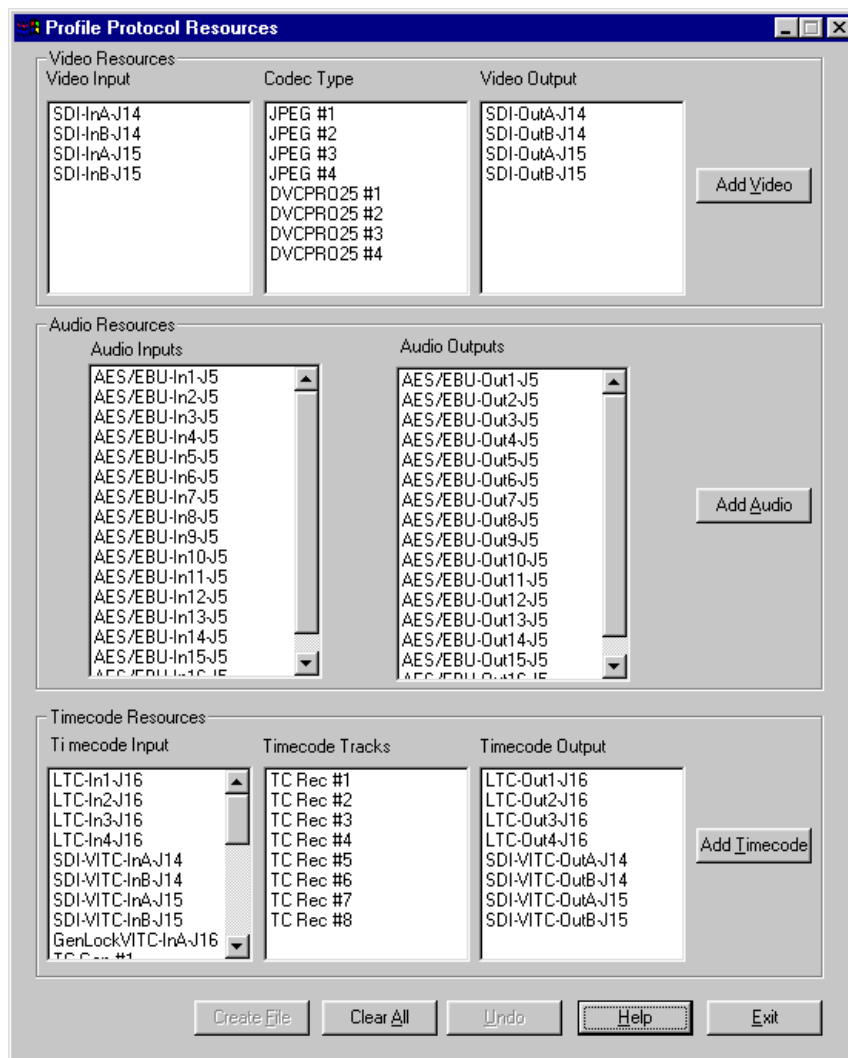


Figure 11. The main Profile Protocol Resources dialog box

To create a configuration file:

1. Select the video input, codec or encoder, and video output you wish to add to the configuration file and click the **Add Video** button. If you wish to assign more than one video codec or encoder to a channel, repeat the process.

In the dialog box which appears, select a compression setting for your recordings and click **OK**. Refer to “Using VdrPanel” in the *Profile Family User Manual* for an explanation of the compression settings.

2. Select one or more audio inputs. The output that corresponds to each input is automatically selected. Click the **Add Audio** button.
3. Select timecode input, tracks, and output and click **Add Timecode**. Repeat the process

for each timecode resource you wish to add.

4. Click the **Create File** button to save the file. When the Save As dialog box appears, enter a file name that your application will use when it opens the port. The configuration file should be stored in the default *C:\profile\configs* directory, and must have a *.cfg* extension. For example, you must create *vtr1.cfg*, *vtr2.cfg*, etc. files for use with the PRC 100.
5. Choose **OK** to write the configuration file.

You have now completed creating a configuration file for your Profile Protocol application. Use this file when you open the desired port from the application, such as the PRC 100. You should create as many files as you require for your application.



Ethernet Interface Configuration

If you connect your Profile Video File Server to an Ethernet network, be sure to set the Ethernet Interface driver to match the speed of your network, either 10BaseT or 100BaseT. To set the Ethernet Interface speed:

1. Choose **Settings | Control Panel** from the **Start** menu.
2. Double-click **Network**, then select the **Adapters** tab in the Network dialog box.
3. Select the **Intel EtherExpress PRO Adapter**, then click the **Properties** button.
4. In the Properties dialog box, click the **Settings** button for the Intel EtherExpress PRO Adapter.
5. In the Basic Settings panel, select the appropriate speed, either 10Mbps or 100Mbps, from the Network Speed drop-down list box.

***NOTE:** The Auto speed setting may not work correctly with some Ethernet hubs and switches. Grass Valley Group does not recommend the use of the Auto setting.*

6. Click **OK** to close all of the open dialog boxes, and reboot your system.

EDR Memory Requirements

The following new features and planned future enhancements require increased memory on the EDR (enhanced disk recorder) master and slave boards. This memory, called JPEG memory in the Profile log, is used as buffer memory between the media disks and the rest of the system.

- MPEG support
- 32-track audio
- Fibre Channel streaming
- Profile Library Systems (PLS)

Current production of the EDR master and slave boards includes this increased memory, 64 MBytes per board. If you wish to use any of these new features on an older PDR 200 that does not have the required memory, you must purchase and install the available EDR memory upgrade kit.

To see the amount of memory you have on the Master and Slave EDR boards, choose **Start | Programs | PDR Debug Tools | PDR Diagnostics | Master EDR** from the Windows NT 4.0 desktop. If your system does not have 64 MBytes of memory on both the master and the slave EDR, you will need two service kits— one kit for the Master and one for the Slave— each with two 32 MByte SIMMs.

If you have a large file system, Grass Valley Group recommends that you also upgrade the local i960 memory on the EDR master board to 32 MBytes. This memory is called RTS memory in the Profile log. You will need one kit for this upgrade, containing one 32 MByte SIMM, replacing the existing 16 Mbyte SIMM.

Contact your Grass Valley Group representative or Grass Valley Group Support to obtain these memory upgrades.



Using Fibre Channel

Profile System Software 2.5.6 supports Fibre Channel Video Networking on Profile systems. You can use the Media Manager application, or the *listnames* and *copymovie* commands to manage your material on the Video Network. Refer to the *Profile Family User Manual* for more details. The following sections provide additional information about Video Networking.

Installing Fibre Channel

You must run *HtsSvc.exe* to use TekXfr commands. *HtsSvc.exe* is started by the *pdrstart.bat* file, as mentioned in “New Startup Procedures” on page 10.

To avoid address conflicts on your video network, you should configure your Fibre Channel settings, such as the Fibre Channel address, **before** you make your Fibre Channel cable connections.

If you're adding a VideoGateway to your video network, you should complete the installation and configuration of all your Profile systems before adding the VideoGateway. You must connect VideoGateway to an existing, working video network.

Fibre Channel Compatibility

Due to enhancements in Fibre Channel support introduced in Profile System Software 2.5.6, you should install Version 2.5.6 on all systems in your Fibre Channel network, including remote PCs. This will ensure complete compatibility between systems, and make new features available to all units on the network.

Applications written to take advantage of the new TekXfr API commands can benefit from the ability to perform concurrent operations on clips. For example, an application could allow a clip to be transferred to another machine as it is being recorded, or to play out as it is being transferred. Tool Box Editor and Media Manager will allow you to use these new capabilities. Both clips and masters (complex movies) can be transferred with the TekXfr commands in Version 2.5.6.

If you have installed Profile System Software 2.5.6 and change Fibre Channel configuration settings, then revert to a previous release, the Fibre Channel settings will revert to what they were before the Version 2.5.6 software was installed. Reinstalling the Version 2.5.6 software will restore the configuration settings to the values set from the previous Version 2.5.6 installation, regardless of any configuration changes made while running under the older version.

Concurrent Fibre Channel Copies

Profile Fibre Channel transfers are dependent on system and network bandwidth. You must manage the use of your systems, especially a system used as a server, to ensure acceptable performance.

The Profile video disk recorder assigns the highest priority to audio and video record and playback operations. Any other operations, such as Fibre Channel transfers, will be performed with remaining system bandwidth.

By using the following techniques, you can manage your server's bandwidth to meet your needs.

1. Reduce video input and output channel usage on the server system. Try recording at a lower bit rate (Most recording time), or record and play on fewer channels.
2. Limit to three the number of simultaneous transfers from a single system.

NOTE: In some circumstances, performing four or more simultaneous copy operations from a single system may result in a failed transfer. The clip will not be present on the destination system, and an error message will appear on both the client and the server systems. If this occurs, re-initiate the transfer, making sure that there are no more than three transfers to or from that system at the time of the request.

Only one copy operation (PdrCopyMovie) to a system is permitted at any one time. Applications will usually queue transfers to a system, and the transfers will occur sequentially. If an application displays an error message instead of queuing, wait until the first transfer is complete, then request the next transfer. Media Manager copies one item at a time, queuing additional copy requests until the transfer is complete.

If you use the new TekXfr commands to perform streaming transfers of clips, you can usually perform concurrent transfers of up to three clips to or from a system at faster than real time transfer speeds, depending on the clip bitrate settings. As with any other Fibre Channel operation, you must be aware that video playout and record operations will be allocated bandwidth first.



Microsoft Windows NT Support

Your new Profile video disk recorder is preloaded with all of the required software, including Windows NT 4.0 with Service Pack 3 and the Year 2000 hotfix. The `c:\i386` directory contains all the Windows NT 4.0 installation files that normally would be found on the installation diskettes or on the CD-ROM. Profile administrators can use files in this directory if they need to add drivers or other software to the default installation. Service Pack 3 is located in `c:\i386\nt40sp3`. The year 2000 hotfix is located in `c:\i386\nt40sp3y2k`.

To upgrade to Profile System Software 2.5.6, your Profile system must be running Windows NT 4.0 with Service Pack 3 and the Year 2000 hotfix. The version of Windows NT appears on the screen during system startup.

The following section explains how to upgrade to Windows NT4.0.

Installing Windows NT 4.0

Your Profile system must be running Windows NT 4.0 to run Profile System Software 2.5.6. You may have to install a Windows NT 4.0 upgrade to meet this requirement.

Profile System Software 2.5.6 fully supports operation under Windows NT 4.0, provided you also install Service Pack 3. You can download Service Pack 3 from the Microsoft FTP site at:

`ftp://ftp.microsoft.com/bussys/winnt/winnt-public/fixes`

For example, U.S. customers can find instructions on how to download Service Pack 3 in:

`ftp://ftp.microsoft.com/bussys/winnt/winnt-public/fixes/usa/nt40/ussp3/`

You should also install the Windows NT 4.0 Year 2000 hotfix. You'll find the hotfix on the same Microsoft FTP site. For example, U.S. customers will find the Year 2000 hotfix for Windows NT 4.0 at this location:

`ftp://ftp.microsoft.com/bussys/winnt/winnt-public/fixes/usa/nt40/hotfixes-postSP3/y2k-fix/`

Windows NT 4.0 may be available on CD-ROM only. If your Profile Disk Recorder is connected to a LAN, you can upgrade your operating system over the network from a remote PC.

If you can't upgrade to Windows NT 4.0 over a network connection, contact Profile Customer Support for information on how to obtain a CD-ROM reader for your Profile system.

NOTE: To ensure a trouble-free transition to Profile System Software 2.5.6 and Windows NT 4.0, be sure to perform the following steps in order. Failure to do so may result in system hangs or uninitialized services.

- 1. Install Profile System Software 2.5.6.***
- 2. Upgrade to Windows NT 4.0.***

-
3. Copy the contents of the `\i386` directory on the CD-ROM to the `\i386` directory on the Profile system disk.

If you can't update the contents of the `\i386` directory on the Profile system disk, you must remove the directory, as it contains Windows NT 3.51 files which are incompatible with Windows NT 4.0.

4. If your Profile system is not equipped with a network (LAN) card, follow the instructions in “Upgrading to Windows NT 4.0 Without a LAN Card” on page 33.
5. Shut down and restart your system.

Upgrading to Windows NT 4.0 Without a LAN Card

If you upgrade to Windows NT 4.0 on a Profile system which is not equipped with a LAN card, you must follow this procedure after installing Windows NT 4.0 to ensure that all services start correctly.

1. Log in as *administrator*.
2. Choose **Start | Settings | Control Panel**, then double-click the **Network** icon.
3. Click the **Adapter** tab.
4. Select **MS Loopback Adapter**, then click **OK**.
5. Select **Frame Type 802.3**. Click **OK**. When prompted for a path, enter either appropriate Windows NT Setup diskette or the CD-ROM.
6. Click **Close**.
7. Click the **Protocols** tab, then click the **Properties** button, and select the **MS Loopback Adapter** in the drop-down box in the middle of the screen.
8. Enter 192.168.20.2 as the IP address.
9. Click **OK**, then reboot the system when prompted.
10. Accept the following error message during the reboot: “At least one service or driver failed to start.” To prevent this message from appearing during subsequent reboots:
 - a. Start Event Viewer and note that the EtherExpress Driver did not load. This driver is requested by the setting established in this procedure, but is not required for operation without a LAN card.
 - b. Disable the EtherExpress Driver by using **Control Panel | Devices**.
11. Verify your settings by typing `ping 192.168.20.2` or `ping <machine_name>` from the MS-DOS command line.



Known Problems

Please note the following limitations in Profile System Software 2.5.6.

The reference numbers included in some problem descriptions (15413, for example) refer to the Grass Valley Group problem-tracking database. Please use these numbers if you contact Grass Valley Group Customer Support about these problems.

Startup

Problem	Applications placed in the Startup group don't start correctly.
Workaround	All Profile internal software must be initialized and running before starting applications. Use a batch file in the Startup group (such as <i>pdrstart.bat</i> , included with this release) to delay starting the desired applications, or start the applications manually.
Problem	Occasionally, the Profile system does not power up correctly. Errors in the <i>Profile.log</i> file indicate hardware failures of known-good equipment.
Workaround	To quickly work around this problem, choose Start Programs PDR Debug Tools Restart VDR Service . Only one restart is required in most cases, but occasionally a second Restart is needed.
Problem	Using Windows NT 4.0, occasionally PDR Access Control won't start when you boot your system. Applications such as VdrPanel will display an error message and will not start.
Workaround	There are three known causes of this problem. <ol style="list-style-type: none">1. VdrPanel starts before PDR Access Control during boot. Restart VdrPanel after PDR Access Control has started.2. You must install the required Service Pack when using Windows NT 4.0. Refer to "Microsoft Windows NT Support" on page 32 for instruction on how to obtain Service Packs and hotfixes.3. In a networked environment, you must ensure that no two devices have the same name.
Problem	Profile applications may not start, or may perform more slowly than normal.
Workaround	You should limit the total number of local and remote (network or serial control) Profile applications to eight or fewer. Having too many Profile applications running concurrently depletes system resources, and may produce unpredictable results. Try to close unneeded applications whenever possible. Note that due to its design, the Tool Box Editor must be counted as two Profile applications.

Recording

- Problem** You can't create a new clip, even though there's disk space available. For example, VdrPanel won't provide a new clip name.
- Workaround** Check the number of files in the `c:\pdrmovie_db` directory structure. If that number is large (close to 10,000), you may have reached the set limit of clips for your system. You must reduce the number of clips on your system.
- Problem** Changing a recording from open-ended to loop, then playing the clip in loop mode in another panel results in the playback overtaking the recording and displaying black (POL1019).
- Workaround** Avoid changing a recording from open-ended to loop.
- Problem** Switching between asynchronous video sources when recording MPEG clips with long GOP structure results in black frames being recorded.
- Workaround** If you can't synchronize your video sources, avoid switching between sources while recording, or use I-frame only.
- Problem** Occasionally, serial digital video outputs may momentarily have no signal when you start VdrPanel. This only occurs when the video channel is set to E to E, and Auto-Timing is disabled (POL1112).
- Workaround** Wait a few seconds for the serial digital output to initialize. You can avoid this problem by enabling auto-timing on that video channel.
- Problem** When recording an MPEG clip, the timecode advances but the size remains at zero, resulting in an empty clip.
- Workaround** If auto-timing is enabled, make sure that the reference signal input to the reference-genlock board is properly connected, or, if there is no external reference supplied to the reference genlock board, disable auto-timing. You enable or disable Auto-timing in the Configuration Manager. Select **Video Input** from the configuration tree, then from the list of video inputs, select the one exhibiting the problem. The dialog box for that input contains the checkbox for Enable Auto-Timing and the Auto-Timed indicator.



Video

Problem	Video shifts up and black appears at the bottom of the screen when using the optional Mix/Effects card.
Workaround	Set timing to E to E when using the optional Mix/Effects card.
Problem	On some systems, analog composite inputs shift slightly compared to other inputs when using the optional Mix/Effects card.
Workaround	Contact Grass Valley Group Customer Support for the latest information on this problem.
Problem	An MPEG encoder/decoder or decoder-only board does not work, and the following messages appear in <i>Profile Log</i> <i>pci_mhb_get: timeout err at get start for handle 0x4 boardNo 1 procNo 1 size 5</i> <i>pci_mhb_get: timeout err at get start for handle 0x3 boardNo 1 procNo 0 size 5</i>
Workaround	You must run the Update EDR Firmware utility to download the latest version of EDR firmware to the board.

Audio

Problem	There is no analog audio output on a PDR200.
Workaround	Analog audio outputs are muted by default on the PDR200. Use Configuration Manager (Line Level tab in Analog Audio Output) to unmute the outputs.
Problem	PDR200 analog audio inputs aren't available to applications.
Workaround	When connecting the PAC208 or 216 to the PDR200, be sure to use Configuration Manager to set the desired audio inputs to Analog.
Problem	Pops are audible on the recorded material when some channels in the same audio group are playing and some are recording.
Workaround	Groups of four Profile audio channels (1, 2, 3, and 4, for example) use a common clock to time signals. If you split a group of audio channels and use some for input and some for output (for example, two for input and two for output), either the input or the output will be using a clock which is not synchronized to the corresponding video signal. You should avoid splitting groups of four audio channels wherever possible. If you must split a group of four audio channels, use Profile Configuration Manager to change the audio configuration for those channels. They must all be set to use the System clock.

-
- Problem** Pops may be present during insert edits when switching from Playback to E to E on a source deck. The following messages appear in *Profile Log*:
- Au board 2: Bad average sample count = 822.550000*
Au board 2: corrected average sample count = 818.744444
3 missing Jpeg DMA 1800 912353 3512 3526 35133535 6829 3514
- Workaround** Avoid changing the mode of source machines during record operations. The change in signal timing may adversely affect audio quality.
- Problem** Pops may be present during insert edits while in BVW emulation, with the following error messages in *Profile Log*:
- Au board 2: Bad rate src = PLAY_CLK, expected RECORD_CLK*
Au board 1: Bad rate src = RECORD_CLK, expected PLAY_CLK
- Workaround** Using Configuration Manager, change the audio input configuration to use Play Clock in the Select Audio Record Clock Source panel.
- Problem** When using embedded audio, pops and clicks start occurring in the audio, and the profile.log includes a message mentioning “LOCKED flag false”
- Workaround** These symptoms usually indicate a hardware problem, often as the result of a hardware upgrade. Internal Sharc Net audio cables or their matching connectors on the Serial Digital video board or the Audio Signal Processing Board may be damaged, or one of the boards may have an internal problem.
- Problem** On some systems, the analog audio output occasionally becomes muted (POL1099)
- Workaround** In Configuration Manager, choose Audio Output, then Line Level. Check and then clear the Mute box. The audio will be unmuted.
- Problem** The Audio Configuration command is not available in the Option menu to set recording quality, playback quality, or audio scrubbing. (16121)
- Workaround** You can open the System Audio Configuration dialog box to make these settings by clicking the System Audio Configuration button on the Configuration Manager tool bar.



Profile Applications

Problem	Media Manager locks up and can't be restarted.
Workaround	Use Process Viewer from the PDR Debug group to kill both the <i>mediamgr.exe</i> and <i>vmhwcom.exe</i> processes.
Problem	Applications in the Startup group don't run, or display error messages.
Workaround	In Version 2.5.6, <i>htssvc</i> must be started before other applications can run. Use <i>pdrstart.bat</i> to manage the starting order of your applications. You'll find more information about <i>pdrstart.bat</i> in "New Startup Procedures" on page 10.
Problem	Media Manager won't start, and a message mentioning <i>vmhwcom</i> appears on the screen.
Workaround	The Profile System Software 2.5.6 installation program was unable to register <i>vmhwcom</i> . To do this manually, enter the following commands at the MS-DOS prompt: <i>regsvr32 vmhwcomproxy.dll</i> <i>vmhwcom /regserver</i>
Problem	Media Manager shows a new date for a file after it was used as the source of a copy operation.
Workaround	The clip creation date displayed in the clip properties is unchanged. The displayed date is the Modified date, which changes to show that the clip was locked during the copy operation.
Problem	You cannot change GOP structure to I-frame only while using VdrPanel in BVW Insert/Edit mode.
Workaround	Change the panel to BVW protocol, change the GOP structure, then change the panel back to BVW Insert/Edit mode.
Problem	Remote operations fail between Profile systems or PCs running Profile System Software versions 2.2.X and 2.5.X.
Workaround	Version 2.5.6 does not support operation with systems running versions earlier than 2.2.2. While Grass Valley Group recommends that all systems running together be upgraded to Version 2.5.6, you may contact Grass Valley Group Support to obtain Version 2.2.5 if you require a version of 2.2.X that is compatible with the current version.
Problem	An error message appears upon selecting File New in Tool Box Editor.
Workaround	Close the error message box, then enter the local Profile system name in the resulting Connect dialog box.

-
- Problem** The Transcode utility in Media Manager will not transcode locked clips (POL1102).
- Workaround** Use VdrPanel to unlock clips before transcoding them.
- Problem** Tool Box Editor, List Manager, and Media Manager display clip durations than other applications such as PRC 100 for the same clips.
- Workaround** Tool Box Editor, List Manager, and Media Manager display all 525/60 durations in drop-frame, corresponding to clock time. Other Profile applications display the total number of fields divided by 30, which does not always accurately reflect clock time.
- Problem** Free disk space is reduced to an unacceptable level on the Profile system drive, or on a remote PC.
- Workaround** You can free up some disk space by carefully deleting unused files. The following files can be safely deleted in the specified situation.

Table 2. Profile files that can be deleted

If you:	You can delete:
Never use Tool Box Editor	c:\profile\tbxeedit.exe c:\profile\tbxeedit.tsf c:\profile\tbxeedit.hlp c:\profile\tbxeedit.cnt
Never use List Manager	c:\profile\listmgr.exe c:\profile\listmgr.tsf c:\profile\listmgr.hlp c:\profile\listmgr.cnt c:\profile\evntsch.dll c:\profile\teksch.dll c:\profile\schedrv.dll c:\profile*.mmf
Never use Time Delay	c:\profile\tdelay.exe c:\profile\tdelay.tsf c:\profile\tdelay.hlp c:\profile\tdelay.cnt
Installed on a PC	c:\profile\diag*.* c:\profile*.96d on the PC only



Fibre Channel

- Problem** A request for a PdrCopyMovie operation times out without response. Operations such as Fibre Channel copies using Media Manager are slow.
- Workaround** Increasing the number of systems connected together on a Fibre Channel loop tends to slow copy operations between systems or to Profile Library Systems. In extreme cases, PdrCopyMovie operations may take several minutes. Try to limit the number of active connections between Profile systems to those you really need at any time.
- Problem** The Clear button in the Fibre Channel Configuration dialog box in System Configuration clears the Fibre Channel address immediately, even if you choose Cancel to close the dialog box (POL1094).
- Workaround** Avoid pressing the Clear button unless you want to change the address. If you inadvertently press Clear, you can retrieve the Fibre Channel information from *Profile.log*.
- Problem** Under some very rare conditions, Media Manager may report that a Fibre Channel streaming transfer has failed, even though the requested transfer completed successfully. (PRI2327)
- Workaround** Check the transferred material to ensure that it is valid.
- A streaming transfer has stream context both on the i960 and within the dll. A rare race condition can occur when the i960 completes a stream and informs the dll of that fact while the dll is processing an XfrGetStatus() request. The dll may allow the XfrGetStatus() call to query the i960 about the just-completed call. This causes a failure, as the i960 has released all context on the stream. XfrGetStatus() returns false and GetLastError() will not have a valid error set.
- Issue a second XfrGetStatus() call. It will succeed, and the status will indicate that the stream is done. If not, then you have a real failure.
- Problem** Clips transferred to a Profile system running Profile System Software version 2.2.X lose their attributes, incorrectly displaying drop-frame when they are non-drop frame, etc. (15959)
- Workaround** Profile System Software version 2.4 introduced extended clip information in Fibre Channel transfers. Earlier versions of Profile System Software are unable to interpret this additional information. Grass Valley Group recommends that you upgrade all Profile systems on your video network to version 2.4.4.1 or higher.

Problem	Transfers of clips with predefined lengths (such as loops, clips modified with BVW Insert Edit, or clips whose recording was initiated with the VdrShuttleAtGenTc API command) will not copy all of the clip material if the transfer is initiated while the clip is still being recorded. (9966)
Workaround	Wait for the recording to complete before initiating the transfer. Avoid transferring clips being recorded in loop mode.

Disk Management

Problem	When starting Disk Utility, an Unable to Connect to Service message appears, and the application does not start.
Workaround	You must be logged on as Administrator to run Disk Utility. In addition, all other applications and services must be shut down before running Disk Utility. Some applications and services take a long time to shut down. Wait a minute, then try starting Disk Utility again.

Profile Library Systems

Problem	A PLS200 Library System can't be controlled by more than one device. For example, if a local application is controlling the Library System, a remote serial device is unable to perform any Library tasks.
Workaround	If Media Manager is running locally on a Profile system with a Profile Library System or Data Tape Drive, remote Media Managers connected to that same Profile system will not show the tape device if the local Media Manager was the first to connect. If a remote Media Manager is the first to connect to the Profile system, the local Media Manager will also show the tape device.
Problem	When restoring a clip from a PLS200 Library System, the clip can't be played until the restore operation is completed.
Workaround	This is a limitation of this release. The capability will be added in a future release.
Problem	It is difficult to manage space in PLS partitions because the actual clip size may be unknown and the free space in partitions is not visible.
Workaround	New PLS commands have been added that provide the clip size (PlsGetClipSize) and return the free space in a set of partitions (PlsGetPartitionMap).



PRC 100

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| Problem | When using the PRC 100 in Gang Mode, you cannot add a clip to the slave channel. |
| Workaround | You must add all clips to the slave channel before you start Gang Mode. |
| Problem | Using the Preliminary version of the PRC 100 configuration utility, a “Resources not available” message appears on the PRC 100 display. |
| Workaround | Re-install the Preliminary version of the PRC 100 Configuration Utility in the <i>c:\profile</i> directory, not the default <i>c:\profile\unsupported</i> directory. When prompted by the setup program, do not overwrite the file <i>mfc42.dll</i> (choose No). |
- The new Profile Protocol Resources utility, included with this release, includes both JPEG and MPEG configuration capabilities.

BVW Controllers

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| Problem | BVW Insert/Edit operations performed by the RM-450 are off by a consistent number of frames. |
| Workaround | Profile systems require BVW commands to be sent as though they were controlling a BVW-75 VTRs. You must not press the Learn button on the RM-450 while controlling a Profile system, which may interfere with the controller’s setup. If you do press learn while connected to a Profile system, you must perform a new setup of your RM-450 by connecting it to a BVW-75 (or equivalent) and pressing Learn again. |

Louth Protocol

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| Problem | Using Louth protocol, the Skip command may cause one or two erroneous frames to be displayed (POL891). |
| Workaround | There is no current workaround for this problem. Please report any occurrence of this problem to Grass Valley Group Support. |
| Problem | Using Louth automation, you see Lost Connection error messages. |
| Workaround | A new RS-422 board and driver are available which allow for up to eight channels under Louth control. Contact Grass Valley Group support for information on obtaining this board. |

Profile Protocol

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| Problem | Setting I-frame only in the Profile Protocol configuration file, either manually or with the new Profile Protocol Configuration utility, results in long-GOP recordings. |
| Workaround | There is no workaround for this problem at this time. You may choose to edit material in JPEG, then transcode it to MPEG later. (15327) |

APIs

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| Problem | Slave Mode, set by the VdrSetPlayMode() command, does not work as expected (DEV170). |
| Workaround | Contact Grass Valley Group Support for the latest information on this problem. |
| Problem | VfsCopySegment() calls do not work as expected for network transfers. |
| Workaround | VfsCopySegment() is no longer supported for network transfers. This call continues to be supported for LOCAL copies. Consult the latest Profile SDK documentation for more information on workarounds. |
| Problem | Calls to PdrCopyMovie() using PdrCopyType PdrExtractMedia and PdrCopyType PdrRenderedMedia do not work as expected for network transfers. |
| Workaround | These types are no longer supported for network transfers, only LOCAL copies. Consult the latest Profile SDK documentation for more information on workarounds. |

Diagnostics

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| Problem | When selecting SerialUA (rev 0) Video I/O Tests VITC Tests in PAL mode, the selected test will fail for either channel. |
| Workaround | Prior to running PAL mode tests, the system must be configured for PAL mode using Configuration Manager. Note that when this is done, the NTSC tests will fail. |
| Problem | When selecting SerialUA (rev 0) Video I/O Tests EDH Tests in PAL mode, the selected test will fail for either channel. |
| Workaround | Prior to running PAL mode tests, the system must be configured for PAL mode using Configuration Manager. Note that when this is done, the NTSC tests will fail. |

