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## **Profile Version 2.1 Release Notes**

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## Tektronix Product Support

You can get technical assistance, check on the status of problems, or report new problems by contacting our Product Support Group.

### United States and Canada

Monday–Friday 5:30AM–5:00PM Pacific Time  
(800) 547-8949

### Europe

Monday–Friday 9:00AM–5:30PM

Austria	222-799-3535	Netherlands	010-495-4255
Belgium	02-714-3401	Norway	22-83-85-69
Denmark	3543-5259	Spain	91-564-4692
Finland	161-691-98559	Sweden	08-679-8419
Germany	069-935-25001	Switzerland	041-210-6009
Italy	44-1908-681-706	United Kingdom	01908-681-703
Luxembourg	400-848	Other	44-1908-681-703

**Email:** EuroProfile@tek.com

### Asia and South America

Australia	61-2-888-7066	Korea	82-2-528-5299
Brazil	55-11-543-1911	Mexico	52-5-666-6333
Hong Kong	852-2585-6688	Singapore	65-356-3900
Japan	81-3-3448-3111	Taiwan	886-2-765-6362

### World Wide

**24-hour Emergency Hotline (503) 685-2345** (Contract and warranty customers)

<b>World Wide Web</b>	<a href="http://www.tek.com/Profile/Support">http://www.tek.com/Profile/Support</a>
<b>FTP Site</b>	ftp.tek.com (IP address: 134.62.48.21)
<b>Email</b>	ProfileSupport@tek.com
<b>Users Group</b>	profile-users@tek.com

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## What's New

>>> *Version 2.1 of Profile System Software requires:*

- *Windows NT 4.0 with Service Pack 2, or Windows NT 3.51 with Service Pack 4 and its hotfix. You'll find more information about the Windows NT requirement in the section called "Microsoft Windows NT Support" on page 11.*
- *A new media file format. If you're upgrading from Profile System Software version 1.4.X or earlier, you can't use existing clips with this upgrade. You must create a new file system on your disks as described in "Software Installation" on page 5, then recapture your material for use with this version.*

>>> *If you use third-party applications, check with your vendor before installing this software release.*

This is a complete Tektronix Profile Video Disk Recorder software distribution set that replaces all earlier versions of Profile software and contains a number of major enhancements:

- Profile Video File Server (PDR200) support, including:
  - New audio architecture
  - New audio API
  - 9-GByte media drives
- New Configuration Manager to replace the Configuration Tool.
- PDX208 expanded storage support



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The following features were introduced in version 2.0 of Profile System Software:

- Video Networking support with the optional Fibre Channel card.
- Off-line media storage support with the optional Profile Library.
- The new Profile Disk Utility.
- New control of signal timing through the system.
- Improved support of the optional Mix/Effects card.
- Windows NT 4.0 support.

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## Software Installation

If you have just received a new Profile system, Profile System Software is already installed and you do not need to perform the following procedure.

Follow these steps to upgrade from Profile System Software 2.0 or earlier to Profile System Software 2.1.

***NOTE: After upgrading from Profile System Software version 1.4.X or earlier, you must run the Profile Disk Utility and create a new file system on the media disks. Use the instructions in the chapter called, “Using the Profile Disk Utility” in the Profile Family User Manual. Please note that creating a new file system removes all clips left on the system. After the new file system has been created, restart the system and recapture your material.***

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-logout as user *profile*.
3. Log in as *administrator*. The default *administrator* password is *triton*.
4. Insert the first install disk into the disk drive. Run the *a:\setup.exe* program. (Choose **File | Run** from *Program Manager*.)
5. Follow the instructions displayed by *setup*.
6. After a successful installation, setup will shut down and restart the system.
7. Update your emergency repair disk by inserting the floppy disk in the A drive and running *rdisk.exe*.



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## Upgrading Seagate Microcode

We strongly recommend that you upgrade the microcode on all Profile-resident SCSI drives to revision 6001 (also called revision 15) if you have not already done so. The upgrade fixes a drive hang problem and a start-up delay problem. This upgrade is nondestructive and does not require that you reformat your video file system. Follow these steps to upgrade the microcode:

1. Run the Profile Disk Utility.
2. Select the all the drives, then choose **Load Microcode**.
3. Locate the `c:\profile\cu4w6001.lod` microcode file and click **Open**.

***NOTE:** Allow roughly 6–12 minutes for the upgrade, depending on the number of disks your system has.*

## Stargate Serial Driver

This release includes an updated driver for the Stargate serial card. This driver fixes a very occasional problem with the serial driver on system start-up. You should install this driver if you upgrading from Profile System Software earlier than 1.4.X.

1. Log in as *administrator*.
2. Start **Control Panel**.
3. Select **Network | Stargate Driver | Update**.
4. When prompted, provide the path `c:\profile\drivers\stargate`.
5. After the driver is installed, you will be prompted to reboot.

## Video Card Drivers

We have included optimized drivers for Profile video cards that may improve performance over the default Windows NT 3.51 drivers and may correct pixel dropouts on your display. If you install either of these drivers, Windows NT notifies you that they are *down-level* drivers. You can safely ignore this message.

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You can install these drivers using the Display icon in Control Panel. The drivers are located in:

- *c:\profile\drivers\ultimate* for Profile systems with Ultimate VGA cards.
- *c:\profile\drivers\cirrus* for recent Profile systems with Cirrus-based VGA cards.

***NOTE: Windows NT 4.0 includes updated drivers for both Ultimate and Cirrus-based VGA cards. You should use these drivers instead of the ones included in the c:\profile\drivers subdirectories.***

## **VdrPanel Startup Under Windows NT 4.0**

If you're installing Profile System Software Version 2.1 on a Profile system running Windows NT 4.0, you should install the software on the *VdrPanel Startup Patch* diskette after you install the System Software. The patch ensures that VdrPanel starts correctly when you login as Profile. To use the *Vdrpanel Startup Patch*:

1. Login as Profile or Administrator.
2. Insert the *Vdrpanel Startup Patch* diskette in the A drive.
3. Choose **Start | Run**, then type *a:\setup* in the command line text box.

The setup program will change the icon in the Startup group for the user called Profile so that it runs *vdrpanel.bat* instead of *vdrpanel.exe*. The batch file inserts a delay before starting *vdrpanel.exe* to ensure that all Windows NT services have completed their initialization.

***NOTE: If other applications you place in the Startup group don't start correctly, you may wish to create similar batch files to delay their startup. You can use c:\profile\vdrpanel.bat as a model for your batch files.***



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## Changes in Operation

Existing Profile users should be aware of several changes in operation. Versions prior to Version 1.4.X of system software required that you manually load the real-time system by a command-line application. This manual operation is no longer necessary due to addition of the PDR Access Control service (see the *Profile User Manual* for details on the operation of this service). You should be aware of the following:

- The Version 1.3.X command window which loaded the real time system is no longer displayed.
- If you're accustomed to viewing the information in the old command window, you should run **Profile Log** from the PDR 100 Applications group to view the same information.
- You cannot accomplish Fibre Channel transfers between Profile systems running Profile System Software version 2.0 and version 2.1. You should upgrade all Fibre Channel-equipped Profile systems to version 2.1.

## TimeDelay

***NOTE: If you are a TimeDelay user, you will receive a warning message about program version incompatibility. This message can be ignored as TimeDelay 1.0 is compatible with version 2.1.***

Due to a timing fix in release 2.1, the time delay values specified need to be decreased by one frame to compensate for a fixed offset in the TimeDelay system. For example, use a time delay value of 00:04:59:29 for a five minute delay.

## Tool Box

If you install Tool Box 1.0 on a system running Profile System Software version 2.1, you must prevent the system software version of `c:\profile\tekvfs.dll` from being replaced by the Tool Box version. To do this:

1. Temporarily rename `c:\profile\tekvfs.dll` to some safe name (*safe.dll*, for example).
2. Install the Tool Box software.
3. Rename the preserved file (*safe.dll*, for example) back to `c:\profile\tekvfs.dll`.



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## RAID Support

To use the PRS 200 RAID Storage with your Profile Video Disk Recorder:

1. Remove the PDX Disk Expansion unit, if installed. You cannot connect both a PRS 200 and a PDX to the same Profile Video Disk Recorder.
2. Install up to eight PRS 200s (or four PRS 200As) per SCSI connector as described in the *Profile RAID Storage Instruction Manual* included with the unit. Use consecutive SCSI ID numbers starting at 8.
3. When installing PRS 200 units on a four-channel Video Disk Recorder:
  - a. You must install matching pairs of PRS 200 units on the two external SCSI connectors.
  - b. Both PRS 200 units in a pair must have the same number of drives and the same SCSI ID number, different from any other pair or other device. Use IDs 8, 9, 10....
4. If you configure your PRS 200s as two external file systems, the first unit or pair of units of the second file system must be set to SCSI ID 12.
5. Start the PRS 200s first, wait two minutes, then start your Profile system.
6. Run the Profile Disk Utility and configure the PRS 200s as an external file system. If you configure the PRS 200s as two external file system, the second file system must use the PRS 200 units with SCSI IDs of 12 and higher.

The PRS 200 will support full Profile Video Disk Recorder operation with up to one disk failure per LUN (Logical Unit Number, a grouping of five disks). If more than one disk failure occurs in a single PRS 200 (but in different LUNs), you must completely repair one of the failures before starting the repair of the next failure. Repairing two failures at the same time will adversely affect RAID performance.

***NOTE: This release of Profile System Software (version 2.1) does not support the use of internal media drives on a Profile Disk Recorder with PRS 200s. When configuring a Profile system for use with one or several PSR 200s, use the Disk Utility to exclude internal disks from all data sets.***



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## Using Fibre Channel

Version 2.1 of Profile System Software supports Fibre Channel Video Networking on Profile systems. You can use the *listnames* and *copymovie* commands to manage your material on the Video Network. The following sections provide additional information about Video Networking.

### Fibre Channel Compatibility

Due to enhancements in Fibre Channel support introduced in version 2.1 of Profile System Software, Profile systems with System Software 2.0 will not be able to transfer files to or from Profile systems running System Software 2.1, and vice versa. Upgrading Fibre Channel-equipped Profile systems to System Software 2.1 will ensure that you benefit from the enhancements and maintain compatibility between your systems.

### 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 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 to or from a single system.

***NOTE: In some circumstances, performing four or more simultaneous copy operations to or 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.***

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## 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 2. 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 2 is located in `c:\i386\USSP2_NT400`.

To upgrade to Profile System Software Version 2.1, your Profile system must be running either Windows NT 3.51 or 4.0. The version of Windows NT appears on the screen during system startup.

The following sections explain how to upgrade to Windows NT 3.51 or 4.0. In most areas, Windows NT 3.51 is no longer available, so you should follow the instructions on how to upgrade to Windows NT 4.0

### Installing Windows NT 3.51

- Acquire a Windows NT 3.51 diskette upgrade from your local software vendor. The SKU number is 236-074-570; the title is “Microsoft Windows NT Workstation Operating System Version 3.51 Special Step-Up Edition.” If you don’t know of a local software vendor, call for recommendations from Tektronix Rapid Response Group at (503) 685-2345.
- Follow the instructions enclosed in the Windows NT upgrade, selecting an Express Setup when prompted.
- Agree to all defaults during setup except one: If you have an older PDR 100 with a Micro-Labs Ultimate TrueColor/XL video card, Install will note that `w32.sys` is older and ask you to confirm overwriting it. Do *not* overwrite it. If you accidentally overwrite this driver, you can reinstall the recommended version by following instructions in `c:\profile\drivers\ultimate\readme.txt`.
- If your Profile does *not* have a network card installed:
  - After installation completes, reboot and log in as *administrator*.
  - From Control Panel, start **Network**, then choose **Add Software | RPC Configuration**.
  - After this is installed, reboot the Profile again.

The upgrade process takes approximately one hour.



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## Windows NT 3.51 Registry Problem

In Windows NT, a registry stores configuration and application settings. Because of a bug in Windows NT 3.51, its backup registry is not updated properly. This does not affect normal operation of the Profile, but we recommend that you download Service Pack 4 from the Microsoft FTP site. The service pack fixes several problems, including the one with the registry. You can download this fix from:

*[ftp://ftp.microsoft.com/bussys/winnt/winnt-public/fixes/usa/NT351/ussp4/i386/SP4\\_3511.EXE](ftp://ftp.microsoft.com/bussys/winnt/winnt-public/fixes/usa/NT351/ussp4/i386/SP4_3511.EXE)*

***NOTE: If you install Service Pack 4, you must also install the hotfix described in:***

*<ftp://ftp.microsoft.com/bussys/winnt/winnt-public/fixes/usa/nt351/hotfixes-postSP4/SMSS-fix/Q148485.txt>*

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## Installing Windows NT 4.0

Due to limited availability of Windows NT 3.51, you may have to upgrade Windows NT 4.0 to run Profile System Software version 2.1.

Profile System Software version 2.1 fully supports operation under Windows NT 4.0, provided you also install Service Pack 2. You can download Service Pack 2 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 2 in:

*ftp://ftp.microsoft.com/bussys/winnt/winnt-public/fixes/usa/nt40/ussp2/*

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 version 2.1 and Windows NT 4.0, be sure perform the following steps in order. Failure to do so may result in system hangs or uninitialized services.***

- 1. Install Profile System Software 2.1.***
- 2. Upgrade to Windows NT 4.0.***
- 3. Run netenabl.bat from the c:\profile directory. (For example, use Start | Run, then type in the file name.)***
- 4. If your Profile system is not equipped with a network (LAN) card, run netdsabl.bat from the c:\profile directory.***
- 5. Shut down and restart your system.***



## Known Problems

Problem	New PRC 100 configuration files are created during the Profile System Software 2.1 installation, making custom configuration files inaccessible.
Workaround	The installation program backs up the existing PRC 100 configuration files in the <i>c:\profile\configs</i> directory. To use your custom files, rename files with the <i>.original</i> extension so that they have <i>.cfg</i> extensions.
Problem	Audible pops may be present during insert edits while in BVW emulation, with the following error messages in <i>profile.log</i> :  <i>Au board 2: Bad rate src = PLAY_CLK, expected RECORD_CLK</i>  <i>Au board 1: Bad rate src = RECORD_CLK, expected PLAY_CLK</i>
Workaround	Using Profile Configuration Manager, change the audio input configuration to use Play Clock in the Select Audio Record Clock Source panel.
Problem	Audible pops may be present during insert edits when switching from Playback to EE on a source deck. The following messages appear in <i>profile.log</i> :  <i>Au board 2: Bad average sample count = 822.550000</i> <i>Au board 2: corrected average sample count = 818.744444</i>  <i>3 missing Jpeg DMA 1800 912353 3512 3526 35133535</i> <i>6829 3514</i>
Workaround	Avoid changing the mode of source machines during record operations. The change in signal timing may adversely affect audio quality.

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Problem	Audio pops are audible on the recorded material when some channels in the same audio group are playing and some are recording.
Workaround	<p>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.</p> <p>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.</p>
Problem	Occasionally, when restoring material from a PLS200 Library System tape, the tape ejects before the restore operation is finished.
Workaround	Restart the restore operation. This problem will be fixed in a future release of Profile System Software.
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	Limit control of the PLS200 to a single device at a time. A future release of Profile System Software will allow for multiple controlling devices.
Problem	The initial request for a PDRCopyMovie operation times out without response.
Workaround	Make a second request for the PDRCopyMovie. All requests after the first request will respond within 10 msec. as documented. However, the first request in a session may require up to 600 msec. for a response to allow for initialization procedures.



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**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.

1. VdrPanel starts before PDR Access Control during the boot. Restart VdrPanel after PDR Access Control has started.
2. You must install Service Pack 2 when using Windows NT 4.0. Refer to "Microsoft Windows NT Support" on page 11 for instruction on how to obtain Service Pack 2
3. In a networked environment, you must ensure that no two devices have the same name.

**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 2500), you may have reached the set limit of clips for your system.

The number of clips on a system is limited by a registry entry. If you need to record more clips, you can use *regedt32.exe* to increase that limit. The limit is set by Max Movies under the *\Software\Tektronix\Profile\PdrMovie* key. If you create complex movies (masters) from applications such as the Tool Box Editor, you may also have to modify Max Media References. Note that increasing these limits allocates more Windows NT disk space for the clip database.

Please contact your third-party software vendor or Tektronix Customer Support before changing these registry entries.



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## Software Modifications

The following issues that existed in release 1.4.17 have been addressed in the Profile System Software 2.1 release. This is a comprehensive list. Many items in the list address low-level programming issues that only impact internal or external software developers of the Profile. Other items are minor problems that few users would encounter. As part of the comprehensive customer problem reporting system, Tektronix endeavors to correct as many concerns as possible—large and small. The information is provided as a service to you in case you have had a specific concern regarding your existing software.

***NOTE: If you need more information, contact the Rapid Response Group at (503) 685-2345.***

- PdrGetFirst/LastTc d/n interpolate invalid timecode (PRO302).
- Odetics applications can not sense LTC (PRO 301).
- Vdrpanel displayed clip names differ from 1.3 (PRO 264).
- Embedded Audio is now supported for 2-channel Profiles and supports the Professional Bit.
- Support for setting audio media fades (PEP-9607180).
- Support for automatic clip deletion (PEP-9608020).
- Support for up to 16 RAID systems.
- Extended support for Seagate drives.
- Exception on VdrAttachOpenMovie (PRI594).
- Remote VfsGetVideoFileFormat always returns NTSC (PRI605).
- Remote VdrGet\*RecordCapacity returns wrong values (PRI606).
- QEA support for improved sample distribution (PRO275).
- VdrAttach\* d/n clean movie info if call fails (PRO318).
- Prolink disappears under heavy port opens/closes (PRO324).
- “Ragged” movies attached wrong (PRO338).
- VdrPanel race condition, (Odetics can miss outpost) (PRO341).



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- Remote VdrGetCurrentTimecode rtns bcd (PRO343).
  - Remote Vdr\*Media\* calls return bad handles (PRO347).
  - Remote VdrGet[resourceinfo] calls return 0 (PRO348).
  - Tekvdr rtns wrong media handle for fitted media (PRO369).
  - Louth, overshoots out point by a couple frames (PRO359).
  - Improved VITC detection on embedded audio cards (PRO255).
  - VdrPanel, can't delete clip if close/chg panel with clip loaded (PRI729).
  - Robust recovery from video without audio embedded slaved audio does not set levels correctly.