

# Pinnacle Systems miroVIDEO™ editing boards and Adobe® Premiere® 5.0

*Supplement to the miroVIDEO DC30 plus User's Guide V.1.1 /GB December 1997 760044  
Supplement to the miroVIDEO DC50 User's Guide V.1.0 /GB June 1998 160099*

## USING A miroVIDEO EDITING BOARD WITH ADOBE PREMIERE 5.0

This document provides the necessary information to work successfully with your Pinnacle Systems miroVIDEO board and Adobe Premiere 5.0. It describes the steps required to produce high quality video with this hardware / software combination. Some of these descriptions differ from your Pinnacle Systems miroVIDEO manual, in such cases please refer to this Adobe Premiere 5.0 addendum. This document replaces the older descriptions in previous manuals.

Please note that this document provides general information. You will find additional product specific information in the release notes that comes with the Adobe Premiere 5.0 compatible drivers for your Pinnacle Systems miroVIDEO editing board. Please make sure to read these release notes in addition to this document.

### Overview

Adobe Premiere 5.0 is a completely new version of Adobe's popular video editing application. To make best use of it, you need new, Adobe Premiere 5.0 optimized driver software for your miroVIDEO editing board. This especially applies to the use of miroINSTANT Video (with miroVIDEO DC30 *plus*, DC50 and DV300), because the Adobe Premiere 5.0 version of miroINSTANT Video is significantly different from the version for Adobe Premiere 4.2.

The basics remain, though. With Adobe Premiere 5.0 and a compatible Pinnacle Systems miroVIDEO editing board you get a highly productive, professional video editing solution.

### Installation

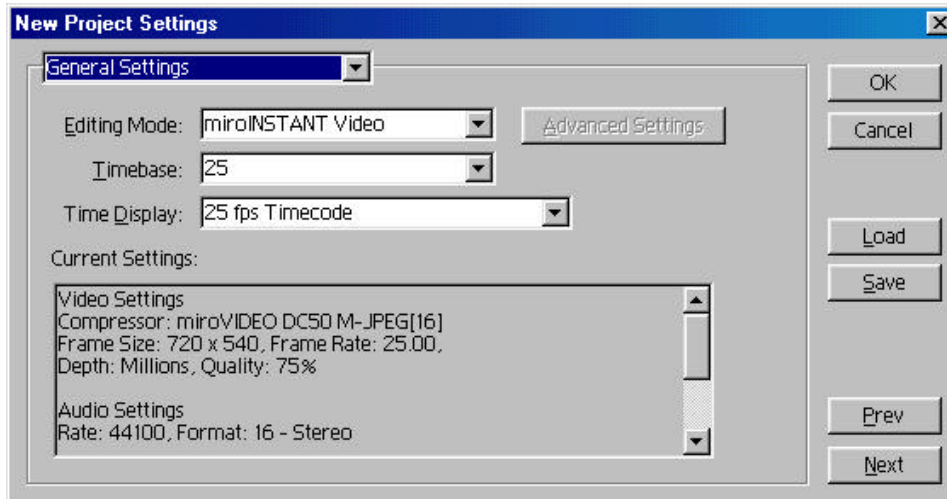
If you already use a Pinnacle Systems miroVIDEO editing board: First remove the old drivers (those, that are not Adobe Premiere 5.0 compatible). To do so, choose uninstall in the miroVIDEO program group from the Windows start menu. We recommend you also uninstall Adobe Premiere 4.2 or earlier versions as well.

Next, install Adobe Premiere 5.0 on your PC. Please note down in which directory you install it.

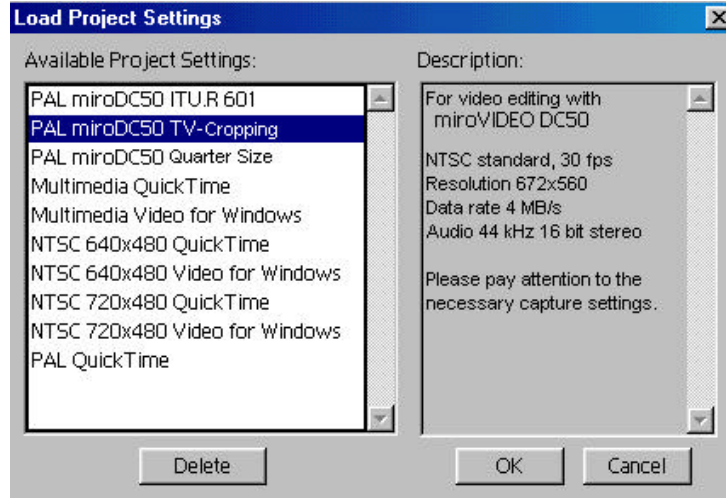
Next install your miroVIDEO editing board and its Adobe Premiere 5.0 compatible software as described in the miroVIDEO manual. If the miroVIDEO installer asks you for the location of the Adobe Premiere 5.0 directory (on *custom install* or if the installer cannot find the Premiere 5.0

directory), enter it from your earlier note. See the release notes file for driver installation details.

Now start Adobe Premiere 5.0. Click the *Load* button in the New Project settings dialog box.



Select one of the miroVIDEO settings that have been installed for your miroVIDEO editing board (See your user manual for details). Please note that, because the miroVIDEO installer removes settings that are incompatible with your Pinnacle Systems miroVIDEO editing board, some of the settings described in the Premiere 5.0 manual may not be shown. You can find these in directory named “backup” within the Premiere 5.0 settings directory.



Click *OK* to use the miroVIDEO setting. The Premiere 5.0 project settings are now adapted to your miroVIDEO editing board.



If you don't use one of the presets supplied for your miroVIDEO board, or change the Adobe Premiere 5.0 settings manually, the miroVIDEO editing board and miroINSTANT Video 5.0 may not work properly.

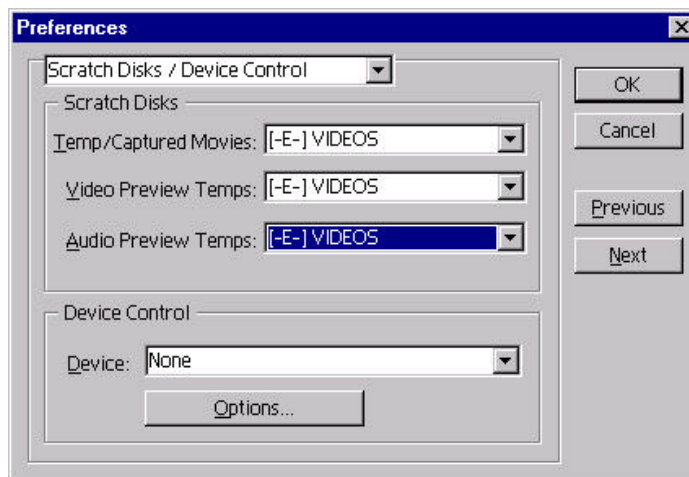
The supplied presets automatically set the output resolution, rendering field order, audio format and other Adobe Premiere 5.0 parameters to values proper for working with your miroVIDEO editing board.

# CAPTURE VIDEO WITH PREMIERE 5.0

## General

Premiere 5.0 offers video capture capabilities. In this chapter we describe how you can capture video from within Premiere 5.0, depending on the Pinnacle Systems miroVIDEO board and the operating system you use. Before you are able to capture video, you need to select the capture drive. This is the drive to which your AVI files will be recorded. It should be fast enough and offer enough free space for digital video recording. See your Pinnacle Systems miroVIDEO manual for how to find which hard drives are fast enough.

To choose your Capture disk, select *Preferences/Scratch Disk* from the Premiere file menu. The Preferences dialog box will appear, allowing you to choose the location for your files:



Select fast hard drives for all three types of files, *Temp/Captured Movies*, *Video Preview Temps* and *Audio Preview Temps*.

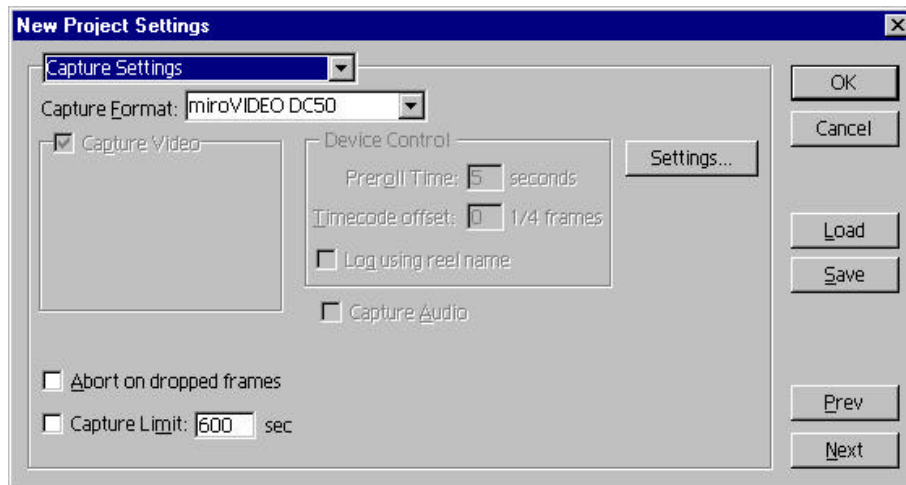
## Capture under NT4.0 with miroVIDEO DC30 *plus*

With this hard- and software combination it is not possible to capture video within Premiere 5.0. Please use the separate "miroVIDEO Capture" application from the miroVIDEODC30 *plus* program group for video capturing. Make sure to match the Premiere 5.0 project settings with the capture settings, such as frame resolution.

## Capture with miroVIDEO DC50 under NT4.0

With the DC50 you get a capture module that works with Premiere 5.0 and Windows NT 4.0. If Premiere 5.0 has been installed previously, this module will be installed automatically with the miroVIDEO DC50 drivers,.

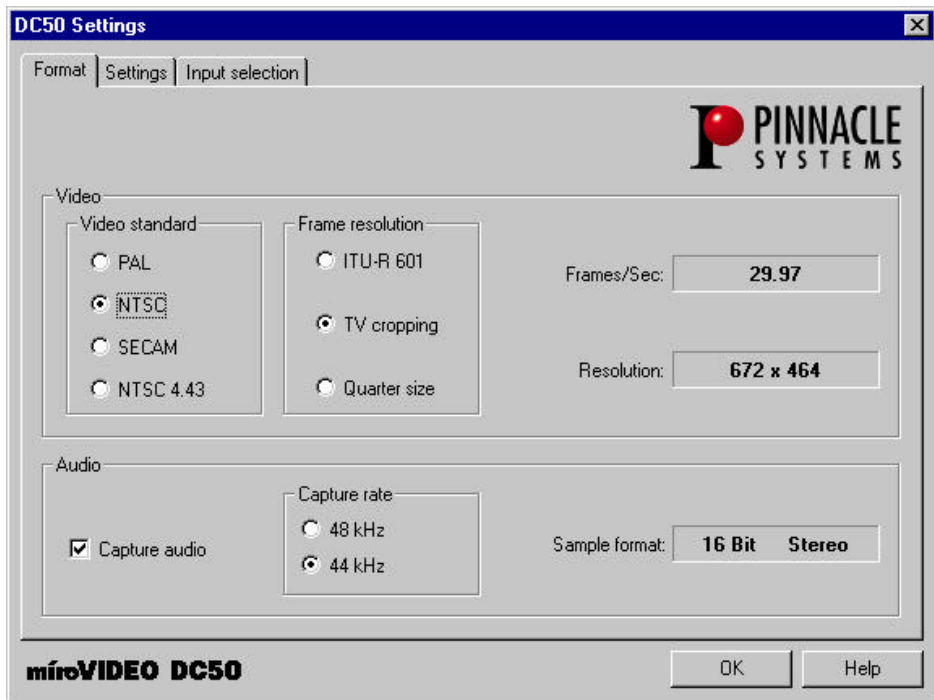
The default Capture Format is set to miroVIDEO DC50, if you use one of the miroDC50 project settings.



Important: After loading one of the appropriate settings, open the *Capture settings* dialog box, even if you do not want to change any settings. This is required to make Premiere 5.0 switch to the miroVIDEO DC50 capture module, otherwise the capture module will not be initialized.

By clicking on the *Settings* button you can open the *Settings* dialog box. Here you can set several parameters for the video and audio inputs. The box consists of three tab pages:

**Format** The *Format* tab allows you to choose the capture format. **It is strongly recommend to not change these settings.** They are automatically established according to the setting you have selected. If you do make changes here, the capture format would be different from the Premiere Rendering and Output format.



If you want to create a new project with other capture format settings you should load the appropriate Preset. This is the only way to keep capture format and Premiere playback format the same.

**Settings** The *Settings* tab allows you to choose the Image settings, control the audio level and to adjust video compression/data rate. For details please refer to the online help by clicking the help button.



**Input** The *Input selection* tab allows you to select the audio and video inputs.

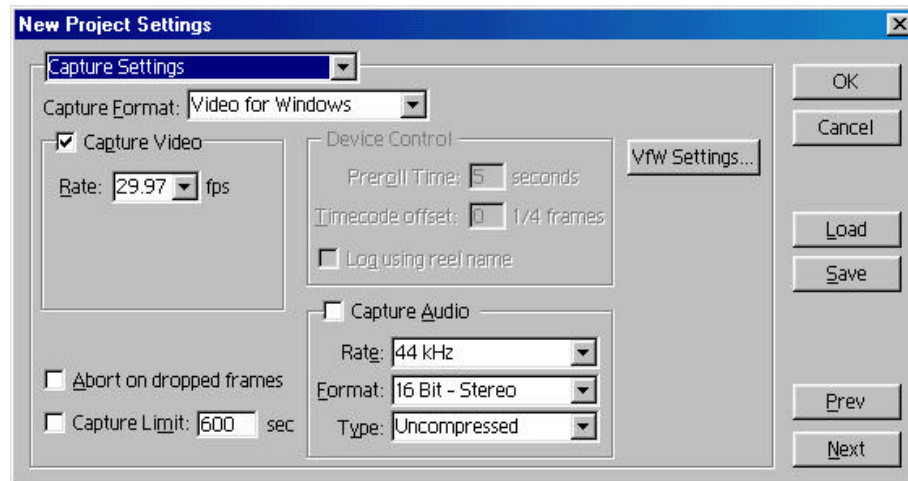


After having chosen the desired inputs, close the DC50 Settings dialog by clicking *OK*.

Now you can record video clips to your hard drive using the Movie Capture function of Premiere 5.0. To do this, select *Capture/Movie Capture* from the File menu.

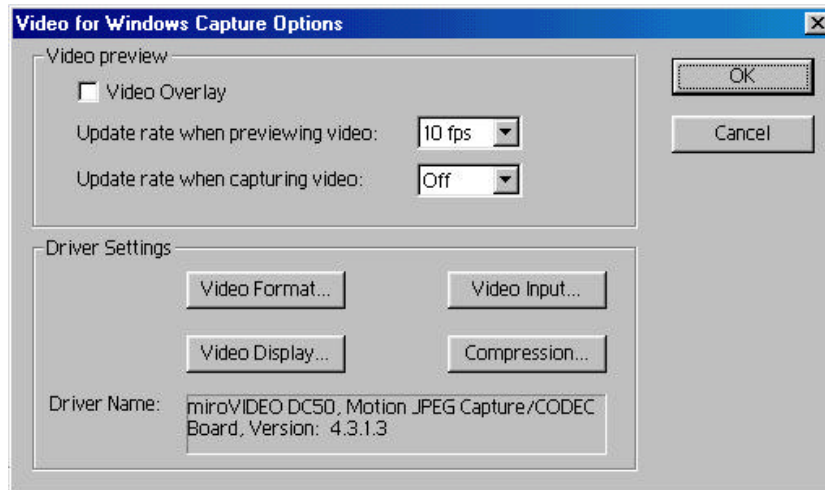
## **Capture under Window95 (98) with Video DC30 *plus* and miroVIDEO DC50**

For Windows 95/98 there is no special Pinnacle capture module required. The *Video for Windows* capture module of Premiere 5.0 is used instead. In the *Capture Settings* dialog box *Video for Windows* should be selected as the Capture Format.



Clicking on *VfW Settings* opens the *Video for Windows Capture Options* dialog and lets you choose your capture settings.

Clicking on the *Video Format*, *Video Input*, and *Video Display* buttons opens the dialogs that are described in the miroVIDEO manual.



## miroINSTANT VIDEO 5.0

### What is miroINSTANT Video 5.0?

miroINSTANT Video 5.0 is a playback module for Adobe Premiere 5.0 that works with certain Pinnacle Systems miroVIDEO editing boards (miroVIDEO DC30 *plus* and miroVIDEO DC50 are currently supported, miroVIDEO DV300 is planned to be supported as well). It requires Adobe Premiere 5.0 compatible software drivers for the board.

There are some slight differences in the miroINSTANT Video 5.0 operation depending on the Pinnacle Systems miroVIDEO editing board you use. Please see the board specific sections later in this document and the release notes file that comes with your Adobe Premiere 5.0 compatible drivers. If you are used to working with miroINSTANT Video with Adobe Premiere 4.2, see the *Changes From Previous Versions* section.

### Major Benefits of miroINSTANT Video 5.0

When editing video tapes using Adobe Premiere 5.0, the use of miroINSTANT Video 5.0 offers three major advantages:

- ♦ Productivity is increased by greatly reducing (up to 90%!) the amount of rendering time required to output your project after editing is completed. Instead of rendering the whole project, only effects and transitions are rendered.
- ♦ Valable hard disk space is saved (up to 50%!) since only effects and transitions are rendered. Video segments that are not effected are not re-created and the original clip is used.
- ♦ the maximum duration of your productions is increased. Without miroINSTANT Video 5.0 the whole production must fit into a single AVI file, limited to a maximum size of 2GB. This would only allow a



maximum project duration of less than 7 minutes when working at a high data rate. Using miroINSTANT Video 5.0, the maximum project duration is 3 hours. This makes long format work on a PC possible.

## **System requirements for running miroINSTANT Video 5.0**

To make use of miroINSTANT Video you need a PC system that fulfills both the system requirements for running Adobe Premiere 5.0, see Adobe's documentation and that for your miroVIDEO editing board. You also need a graphics board capable of showing video overlay in combination with your miroVIDEO editing board (see the release notes, the compatibility section on the pinnaclesys.com website and the board specific sections at the bottom of this document for more information).

## **How to use miroINSTANT Video 5.0**

When editing a project with Adobe Premiere 5.0, miroINSTANT Video must be selected as the Editing Mode in the Project/Settings/General dialog. This is set automatically when using the miroVIDEO preset.

Open a new Adobe Premiere project using one of the miroVIDEO presets, and the miroINSTANT Video window will appear (See your manual and release notes for when to select which preset).



miroINSTANT Video 5.0 will now remain active and will handle smooth video playback using the miroVIDEO editing board.

Note that Adobe Premiere 5.0 projects must fulfill certain conditions to be compatible with miroINSTANT Video 5.0 and the Pinnacle Systems miroVIDEO editing boards (See the "Limitations" section in this document). With miroINSTANT Video, some things in Adobe Premiere work other than described in the Adobe Premiere manual. Please read the miroINSTANT Video 5.0 documentation for important details.

If you ever install Adobe Premiere 5.0 after having installed the miroVIDEO editing boards driver software, you must re-install miroINSTANT Video 5.0 and the Adobe Premiere 5.0 preset files - otherwise video playback with Adobe Premiere 5.0 will cease to work.

## **How does it work?**

Whenever you play video clips or parts of the timeline in the Adobe Premiere 5.0 monitor window, miroINSTANT Video 5.0 does two things:

- ♦ it plays back the video using the miroVIDEO editing board, so that it can be watched on a TV, connected video monitor, or printed to tape.



- ♦ it makes sure that all source clips and rendered effects play back smoothly, without interruptions between individual AVI files. This way, the playback from the timeline can be directly printed to tape. Without miroINSTANT Video 5.0, you would encounter stuttering and dropped frames during the timeline playback. You would have to render the entire project before you are able to print it to tape.

You can start the miroINSTANT Video 5.0 playback by hitting the <Enter> key after selecting the work area you want, and activating the monitor or timeline window. The playback can be stopped by hitting the <ESC> key.



In the Adobe Premiere 5.0 documentation, this way of playback is called “Preview”. When using miroINSTANT Video 5.0, this “Preview” mode works at full quality and is the output and print to tape mode as well. The Adobe Premiere 5.0 standard way of outputting the final production may now

be bypassed.

### miroINSTANT Video window

This window indicates that miroINSTANT Video is active.

When miroINSTANT Video 5.0 is installed, selected as the Editing Mode and active (see above), the miroINSTANT Video window is visible. It is displayed in front of all other Adobe Premiere 5.0 windows. The window indicates that miroINSTANT Video 5.0 is active and will be used for playback.

#### Film strip

Below the Pinnacle Systems logo there is a horizontal film strip. This acts as an indicator for the playback status. If all images in the strip are black, then the whole project can be played by miroINSTANT Video 5.0.

In this case the project is ready to be printed to tape.



If some of the film strip frames are red, then some parts of the project can not currently be played by miroINSTANT Video 5.0. If you scrub or play, these parts will not show on the video output of your miroVIDEO editing board.



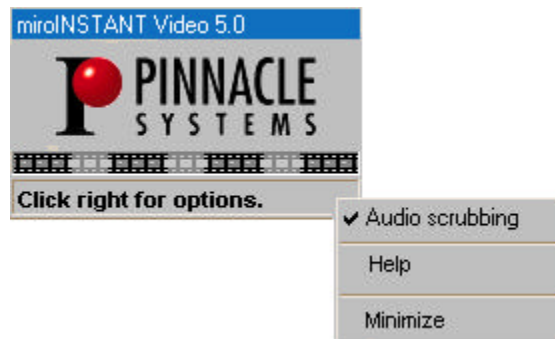
To ensure the whole project is, you have to activate the Adobe Premiere 5.0 preview function, i.e. by hitting the <Enter> key.

If your work area is only a part of the whole timeline, then the work area may be fully playable even if the film strip shows red frames.

**Status line** Normally, there is a status line at the bottom of the window that shows different information depending on what mode of operation miroINSTANT Video 5.0 is currently in. The status line is not visible if the window has been minimized (see miroINSTANT Video menu below).

**Dropped frames Indicator** If you are currently playing parts of the timeline, meaning that video plays in the right video window within the Adobe Premiere 5.0 monitor window, the status line shows the number of video frames that have been dropped during the current playback. For smooth playback this number must be zero. If the number of dropped frames is not zero, see the troubleshooting section below. This message will stay in the status line until another action is performed.

**miroINSTANT Video menu** By moving the mouse pointer to any part of the miroINSTANT Video window and clicking the right mouse button, you can activate the miroINSTANT Video 5.0 menu. There are three menu items.



**Audio scrubbing** By default, audio scrubbing is switched on. This means if your project contains audio you will hear the audio playback not only when playing clips or the whole project, but also when scrubbing within the project (see Adobe Premiere 5.0 manual for details on scrubbing and playing). This is the standard Adobe Premiere 5.0 behavior, but it results in a performance loss when scrubbing sections of audio that haven't previously been rendered (see the Adobe Premiere 5.0 manual for details on audio rendering and how to tell which parts have been rendered).

If you switch off Audio scrubbing in the miroINSTANT Video 5.0 menu by selecting the Audio scrubbing menu item, there will be a different behavior: You will now hear audio only when playing clips or the project, not when scrubbing – but the scrubbing performance and frame rate will be higher. Try putting a video clip with audio into the source monitor and comparing the scrubbing performance with Audio scrubbing switched on and off. Playback will still contain any associated audio tracks regardless of the Audio scrubbing mode.

**Help** You can access the miroINSTANT Video 5.0 online help by selecting the menu item Help from the miroINSTANT Video menu. Please do this if you have any questions or problems using miroINSTANT Video 5.0.

**Minimize/Restore** The third item in the menu is used to change the size of the miroINSTANT Video window. If the window is at normal size, the menu item is named Minimize, and will reduce the window size so that only the window title bar remains visible.

A screenshot of a blue window title bar with the text "miroINSTANT Video 5.0" in white.

If the window is at minimized size the menu item is named Restore, and will bring back the window to normal size. You may keep the miroINSTANT Video window minimized during editing to have the maximum space available for other windows, and restore it to normal size for printing your production to tape in order to see the dropped frames information.

## Modes of operation

**Video output** In Adobe Premiere 5.0 there are many modes of video display. You can play, scrub or preview, use the trim or slip/slide tools, the monitor window can be in single view or dual view mode with attached or detached controls, and many more. The Adobe Premiere 5.0 documentation describes all of these modes on the PC screen – without using miroINSTANT Video. When using miroINSTANT Video, there is the additional video output to your TV / video device. This is active most of the time, but not always. In addition, the PC screen display is different from the standard Adobe Premiere 5.0 behavior in some cases.

Details: (“shown on TV” means output by the Pinnacle Systems miroVIDEO editing board to connected video devices and/or screens):

- ♦ When playing or scrubbing using the left set of controls in the monitor window, single clips are shown on the PC screen and on TV simultaneously. You can use this mode to print single clips to tape.
- ♦ When using the trim mode or the slip and slide tools, the video is shown on the PC screen only.
- ♦ When outputting the timeline (<Enter> key) or playing the timeline after you called the 'Render Selection' function, the timeline content will play both on the PC screen and on TV out. The Pinnacle Systems miroVIDEO board's output signal will be continuous. This is the mode you should use for printing your project to tape.
- ♦ When you scrub or play parts of the timeline, the output depends on the timeline content: If you scrub through parts / effects that have not been rendered by Adobe Premiere yet, there will be no TV output or one of the source clips will be shown.  
When playing, the same limitations apply to the PC screen output during these parts of your project.  
All parts of the timeline that do not need rendering or have already been rendered will be played on the PC screen and on TV out.
- ♦ When the source and program monitors are linked, the content of the active monitor will be shown on the PC screen and on TV out, the other monitor will display on the PC screen only.

**Audio output** The audio parts of the clips and projects you play back with miroINSTANT Video 5.0 are output using two different devices: One is the Pinnacle Systems miroVIDEO editing board, outputting audio through its analog or digital connectors. The other one is the standard Windows audio device (i.e. your Soundblaster card). In some cases, the miroVIDEO editing board can act as standard audio device, see details below.

Audio is output through the miroVIDEO editing board when you:

- ♦ play an AVI file that is compatible with your Pinnacle Systems miroVIDEO editing board using the source monitor or a clip window.
- ♦ do a preview playback of parts of the timeline, with **all** the audio in the work area having already been rendered by Adobe Premiere 5.0.

The audio is output through the standard audio device in all other cases, when you:

- ♦ scrub and audio scrubbing is not switched off in the miroINSTANT Video menu.
- ♦ playback in the program monitor, and some parts of the audio in the work area have not yet been rendered by Adobe Premiere.
- ♦ play a clip in the source monitor or clip window, that has an incompatible format.

## Rendering previews

miroINSTANT Video 5.0 behaviour depends on whether the audio and the video effects have already been rendered or not. Here is a summary about how you can do this rendering. The following always applies to the currently selected work area in the timeline window, and only renders things that have not already been rendered:

- ♦ To render audio only, select Project / Render Audio
- ♦ To render audio and the necessary parts of the video, select Project / Render Selection
- ♦ To render audio and the necessary parts of the video, and immediately start the playback of the work area (can be stopped by hitting the <ESC> key), select Project / Preview or hit the <Enter> key



All this is called 'Preview' in Adobe Premiere 5.0 terms, but it actually is full quality output with miroINSTANT Video 5.0.

## Limitations

Video clips that have any speed other than the standard 100% (including reverse play) cannot be played directly by miroINSTANT Video 5.0. To make these clips play, they must first be rendered to the new speed. For this, select the clip, open the clip menu and select Video/Field Options. Set the correct options for the clip's desired speed (see Adobe Premiere 5.0 manual, *Processing Interlaced Video Fields*). Now set the work area to the area of the project you want to play, and press <Enter>.

Uncompressed still images, or any clips that are not compressed with the compression format supported by your miroVIDEO editing board, cannot be played to TV out directly; they must be rendered and transcoded to the correct compression format first. The same applies to clips with the wrong

resolution – note that the resolution of an INSTANT Video production is defined by the first video clip in the timeline, all others must have the same resolution to play back with miroINSTANT Video 5.0 without transcoding. To transcode all parts of the work area into the correct format use the preview function (<Enter> key). Before transcoding, the incompatible clips will not be shown on TV out.



All video clips in a project must have the same video resolution, the same frame rate, the same compression format and the same audio format (same sampling rate and same sample size and same number of channels) in order to be played by miroINSTANT Video 5.0

without previous rendering.

## **miroVIDEO DC50 and miroINSTANT Video 5.0**

The required driver version for running miroINSTANT Video 5.0 is: 1.10  
You should always use the latest (highest version number) released driver, please see [www.pinnaclesys.com](http://www.pinnaclesys.com)

Recommended audio settings: 48 kHz 16 bit stereo

Supported video and compression formats: See miroDC50 presets

When using Windows 95/98, the DC50 can act as the default audio device and handle all audio output

Operating Systems:

- ♦ Windows 95 OSR 2.1 or Windows 98 recommended
- ♦ Windows NT 4.0 SP 3 recommended.

When using Windows NT 4.0, a separate sound card is required.

Recommended graphics card: Must support DirectDraw overlay surface, see compatibility list on [www.pinnaclesys.com](http://www.pinnaclesys.com)

## **miroVIDEO DC30 *plus* and miroINSTANT Video 5.0**

The required driver version for running miroINSTANT Video 5.0 is: 1.3.1 (Win9x), 1.2 (Win NT4).

You should always use the latest (highest version number) released driver, please see [www.pinnaclesys.com](http://www.pinnaclesys.com)

Audio settings must be 44.1 kHz 16 bit stereo.

Supported video and compression formats: See miroDC30 *plus* presets

When using Windows 95/98, miroVIDEO DC30 *plus* can act as the default audio device and handle all audio output.

Operating Systems:

- ♦ Windows 95 OSR 2.1 or Windows 98 recommended
- ♦ Windows NT 4.0 SP 3 recommended.

When using Windows NT 4.0, a separate sound card is required

Recommended graphics card: Must support DirectDraw overlay surface, see compatibility list on [www.pinnaclesys.com](http://www.pinnaclesys.com).

## **Changes from previous versions**

miroINSTANT Video 5.0 for Adobe Premiere 5.0 differs significantly from the previous miroINSTANT Video for Adobe Premiere 4.2.

The new version works only with Adobe Premiere 5.0. There is no longer a menu item in the Adobe Premiere menu to call miroINSTANT Video 5.0, nor a special miroINSTANT Video play window. Instead, miroINSTANT Video 5.0 is now fully integrated into the Adobe Premiere 5.0 user interface. It is always active once it is selected as the Editing Mode. Playback is started simply by hitting the <Enter> key within the timeline window, and can be stopped with the <ESC> key.

As a result, a number of the previous troubleshooting hints for miroINSTANT Video do not apply to miroINSTANT Video 5.0.



# NOTES

# NOTES