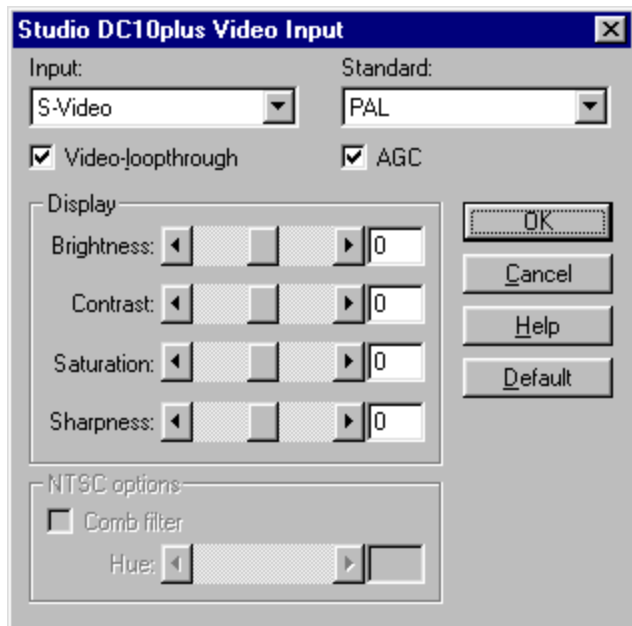


Studio DC10plus Video Input

The dialog box *Studio DC10plus Video Input* allows you to determine all the settings concerning your video source.



- [Input](#)
- [Standard](#)
- [Video loopthrough](#)
- [AGC](#)
- [Display](#)
- [NTSC options](#)
- [Default](#)

● [Glossary](#)



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Input

Here you can select the Studio DC10*plus* Video input to which the video source connects: composite or S-Video. This setting remains unchanged. If you connect a video source to another video input, you have to select the other input. If not, no video image appears on your monitor.

If you connect a video source supporting another video standard than the one selected, choose the correct [Standard](#).

Standard

Here you select the video standard of a video source:

- PAL
- NTSC
- SECAM.



Studio DC10*plus* does not convert between standards, i.e. if you digitize PAL video, you need to choose a PAL-Premiere preset and the result will be output in PAL format by Studio DC10plus.

Video loopthrough

If you activate the Video loopthrough check box, the input video signal will be directly transmitted to the output connectors of the Studio DC10*plus* and will be output on a connected control monitor. Deactivate the check box in order to view a test picture on the monitor.

● If your player is at the same time the recording device, i.e. it is connected to the video input as well as to the video output of the Studio DC10*plus*, you need to deactivate the Video loopthrough check box in order to avoid video feedback.

AGC

If you activate the *AGC* (**A**utomatic **G**ain **C**ontrol) check box, Studio DC10*plus* automatically adapts to the brightness of the source material during the recording. Please deactivate the *AGC* check box if the brightness jitters during the capture process.

Display

Allows you to modify the *Brightness*, the *Contrast*, the *Saturation* and the *Sharpness*.

This will have an impact on the video signal during digitalization. If you want to edit the unchanged video material, you need to set the sliders on the default settings.

NTSC options

If you selected *NTSC*, you can select special NTSC options: *Comb Filter* is a filter especially designed for NTSC which improves the composite signal quality. You can only enable Comb Filter if you selected a composite input.

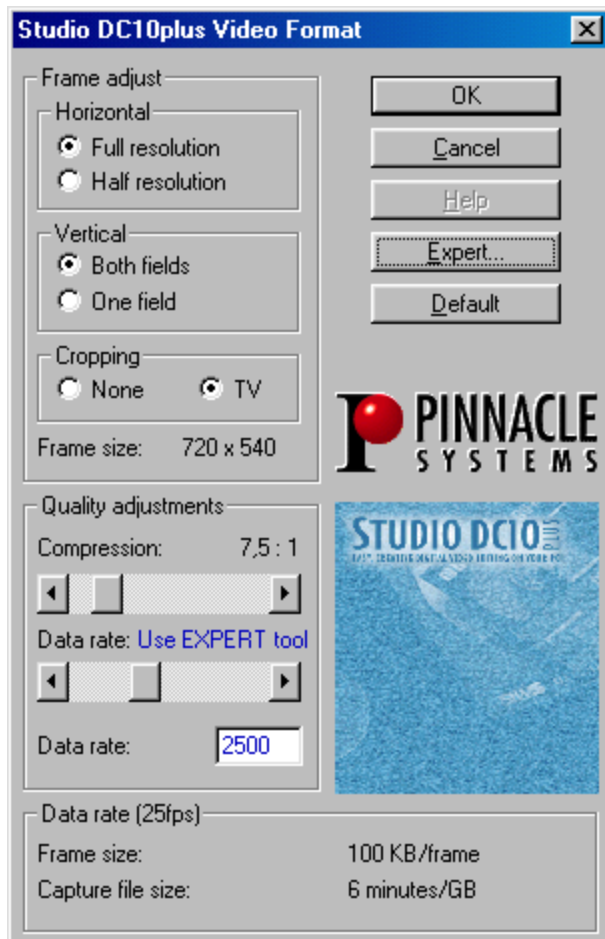
You can additionally change the NTSC *Hue*.

Default

The *Defaults* button restores all default settings. The default settings have the value 0.

Studio DC10plus Video format

The *Studio DC10plus Video Format* dialog box allows you to set the resolution and the quality for video digitalization.



- [Frame adjust](#)
- [Quality adjustments](#)
- [Data rate](#)
- [Expert](#)
- [Default](#)

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Frame adjust

Here you can select the image size of the video clip:

Horizontal

When selecting Full resolution (default), all pixels of a video clips will be digitized, when selecting Half resolution, every second pixel is digitized: pixels which have not been digitized are interpolated from the digitized pixels.

Vertical

If you enabled Both fields, Both fields are recorded, when enabling One field, only one field is digitized.

Cropping

Here you can select the image section.

- None: When enabling *None*, you capture the complete TV image including the image margin which normally is not visible on the TV screen.
- TV: When enabling *TV*, you choose the normal TV image size. The complete captured video is shown on the TV monitor. Image data from the image margin which are not important will be omitted and the quality increases.

Shows the current size (width and height in pixels).

Quality adjustments

Here, you determine the amount of data of the compressed video and thus the quality. The entries for compression, data rate, frame size, and capture time depend on each other.

Compression

The slider *Compression* helps you to determine the compression factor. This factor reduces the amount of data of the digitized video sequence compared to the uncompressed data during capturing. A low compression factor stands for high quality, a high compression factor stands for lower quality. If you change the position of the compression slider, you automatically change the position of the *Data rate* slider as well.

Data rate

The data rate slider allows you to determine the data rate for capturing the video sequence. Changing the position of the Data rate slider, changes automatically the position of the Compression slider. The set data rate will be displayed.

High data rate means high quality. If a certain, material dependent data rate is reached, the maximum quality is reached as well (no visible difference compared to the input signal), a further increasing of the quality is impossible.

If the determined data rate is getting too high for your computer system, a warning message will appear. For that, it is necessary to previously measure the performance of the hard disk with [miroVIDEO EXPERT](#).

Data rate

Displays in dependence on the set compression and data rate the image volume (the amount of compressed data per image) as well as the capture size (the recordable video duration per GB hard disk space).

Default

The *Default* button restores all default settings.

Expert...

The *Expert...* button opens [miroVIDEO EXPERT](#), the test program for the hard disk transfer. This program measures the attainable data rate of your PC system and your hard disk(s).

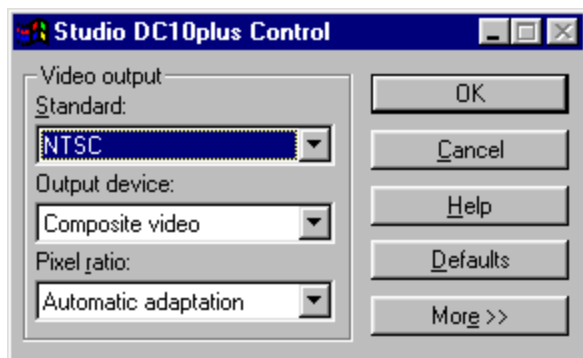
Studio DC10plus Control

The *Studio DC10plus Control* dialog box allows you to determine the settings concerning the playback of the video sequences, saved on the PC.

Click the Studio DC10plus button in the task bar to open Studio DC10plus Control. Make the required settings. You can also make the settings clicking the right mouse key.

You can, however, start Studio DC10plus Control before starting an application for editing or playing back video (especially recommended for Adobe Premiere). This ensures that Studio DC10plus drivers remain loaded. In this way, you can access your video clips faster.

● While playing back a video clip, you cannot change the settings in Studio DC10plus Control. The settings take effect after restarting the playback.



- [Video output](#)
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Video output

Standard

Allows you to manually determine the video standard for the outputs of the Studio DC10*plus*:

- PAL
- NTSC

With Studio DC10*plus* no standard conversion is possible, i.e. digitized and edited PAL video can not be output in PAL format, the same applies to NTSC. The default selection for the pixel ratio "Automatic adaptation" enables an automatic detection and setting of the playback standard as well. So, there will be no need to set the standard manually.

Pixel ratio

Allows you to choose between the following options:

- Automatic adaptation
- Square pixels.

Automatic adaptation is the default setting. When working with Studio DC10*plus* there is no need to change this setting, as the video standard as well as the resolution will be detected automatically by the Studio DC10*plus* driver.

If you have chosen the option *Automatic Adaptation*, also the setting *Standard* will be set correctly.

More

The *More >>* button enlargens the Studio DC10*plus* Control by the *Overlay Settings* and *AVI Cache Settings* sections.



- [Overlay settings](#)
- [AVI Cache settings](#)
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Overlay settings

Activate overlay

The overlay enables the playback of video sequences not only as analog signals at the outputs of the Studio DC10*plus*, but simultaneously in the window on the computer monitor. This function is usually activated.

If the *Activate overlay* check box is deactivated, no image will be displayed on the computer monitor while playing back a video sequence.

Pinnacle logo

If you activate the *Pinnacle logo* check box, the Pinnacle logo will be displayed in the upper right corner of the video window while playing back the video sequence. This indicates that the video is played back simultaneously at the outputs of the Studio DC10*plus*, but here, of course, without logo.

The setting of the overlay resolution as well as the logo setting only refer to the [Overlay Surface](#) function. When using [Primary Surface](#) or when the overlay function is deactivated, these options appear in light gray.

High resolution

This is the default setting. If the option *High resolution* has been chosen, the video will be played back on the computer monitor in high image quality.

Therefore, also the option *Activate overlay* must be activated. As playback mode, *overlay surface* must be chosen, and your graphics board together with the installed drivers must be able to produce an overlay surface in the current resolution and color depth.

For playback in overlay mode, several MBytes of image data must be transmitted per second by Studio DC10*plus* to your graphics board via the PCI bus. This is no problem with state-of-the-art PCs and graphics boards. If your system does not offer the necessary performance, image interferences might occur in the video window: Only a section of varying size at the upper window edge will be played back fluently, in the lower window section the video will get stuck again and again.

In this case, you should equip your PC with a graphics board of higher performance or with a faster mother board. For the moment, it might be helpful to choose a lower overlay resolution.

Medium resolution

If the image interferences, described above, occurs when the High resolution option has been chosen, select the option *Medium resolution* instead. Then, the video will be transferred from the Studio DC10*plus* to the graphics board in limited quality and a limited amount of data. In this case, the bus will be less charged and the image interferences should be avoided.

● Limiting the image quality and the amount of data only refers to the playback in the window: the high quality of Studio DC10*plus* during video editing and playback will not be affected.

Low resolution

If the described image interferences still occur when the option Medium resolution has been chosen, try the option *Low resolution*. Obviously, your computer system is overcharged, probably it does not meet the requirements of Studio DC10*plus*.

AVI Cache settings

miroAVI Cache is a software developed for playing back videos with Studio DC10*plus* jerklessly and with a synchronous lip movement. In order to playback videos and to output them via the Studio DC10*plus*, the videos must be in MJPG format.

miroAVI Cache is always activated, when miroINSTANT Video is used and when it has been chosen in the MediaPlayer explicitly under Device.

Synchronized start

If the Synchronized start check box is activated and you start playing back a video sequence with miroAVI Cache, a dialog box will appear in case the whole cache is occupied. Click OK, and the playback will be started immediately and without any jerks. This mode is especially appropriate for recording accurate video material with a VCR. For that, first start the playback of the video with Studio DC10*plus*, then, after the dialog box of the miroAVI Cache has appeared, start recording with the VCR and click OK in the dialog box at the same time.

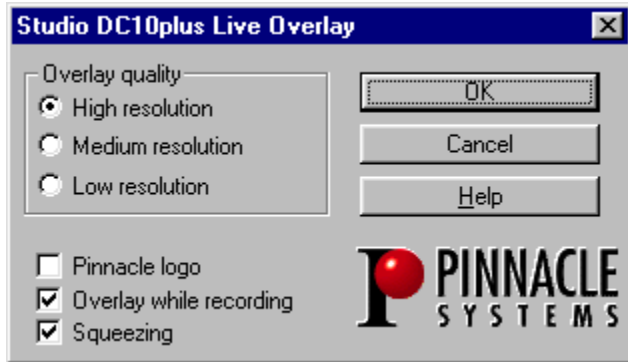
The synchronized start can be deactivated, if you do not want to record the played back video onto a tape. This might cause some jerks at the beginning of the playback, but it avoids the dialog box each time you use the playback.

Default

The *Default* button restores all default settings.

Studio DC10plus Live Overlay

The *Studio DC10plus Live Overlay* dialog box allows you to set the overlay properties while recording.



- [Overlay quality](#)
- [Pinnacle logo](#)
- [Overlay while recording](#)
- [Squeezing](#)

- [Glossary](#)
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Overlay quality

High resolution


This is the default setting. The option *High resolution* displays the video in high quality in the PC window. For this purpose Overlay Surface must be selected as representation mode, and your graphics board together with the installed drivers must be able to produce an [Overlay Surface](#) in the current resolution and color depth.

For displaying in overlay mode several MBytes of image data must be transmitted per second to your graphics board by Studio DC10*plus* via the PCI bus. This is no problem for state-of-the-art PCs and graphics boards. If your system does not offer the necessary performance, image interferences might occur in the video window. Only a section of changing size at the upper edge of the window will be displayed fluently, in the lower window section the video will get stuck again and again.

In this case, you should equip your PC with a graphics board of higher performance or a faster mother board. For the moment, choosing a lower overlay resolution might help.

Medium resolution

If the selection of High resolution causes the image interferences, described above, choose the option *Medium resolution*. Via this option the video is transferred from the Studio DC10*plus* to the graphics board with a reduced quality and a reduced amount of data. This reduces the strain on the bus, so that image interferences should be avoided.

 The reduction of image quality and data amount only refers to the representation inside the window. This does not effect the high quality of Studio DC10*plus* during video editing and playback.

Low resolution

If the described image interferences continue to appear at Medium resolution, choose the option *Low resolution* instead. Obviously, your computer system is immensely overcharged. Probably, it does not meet the requirements of Studio DC10*plus*.

Pinnacle logo

If you activate the *Pinnacle logo* check box, the logo will appear during recording. But only if the function [Overlay Surface](#) is used for displaying the video in the window.

Overlay while recording

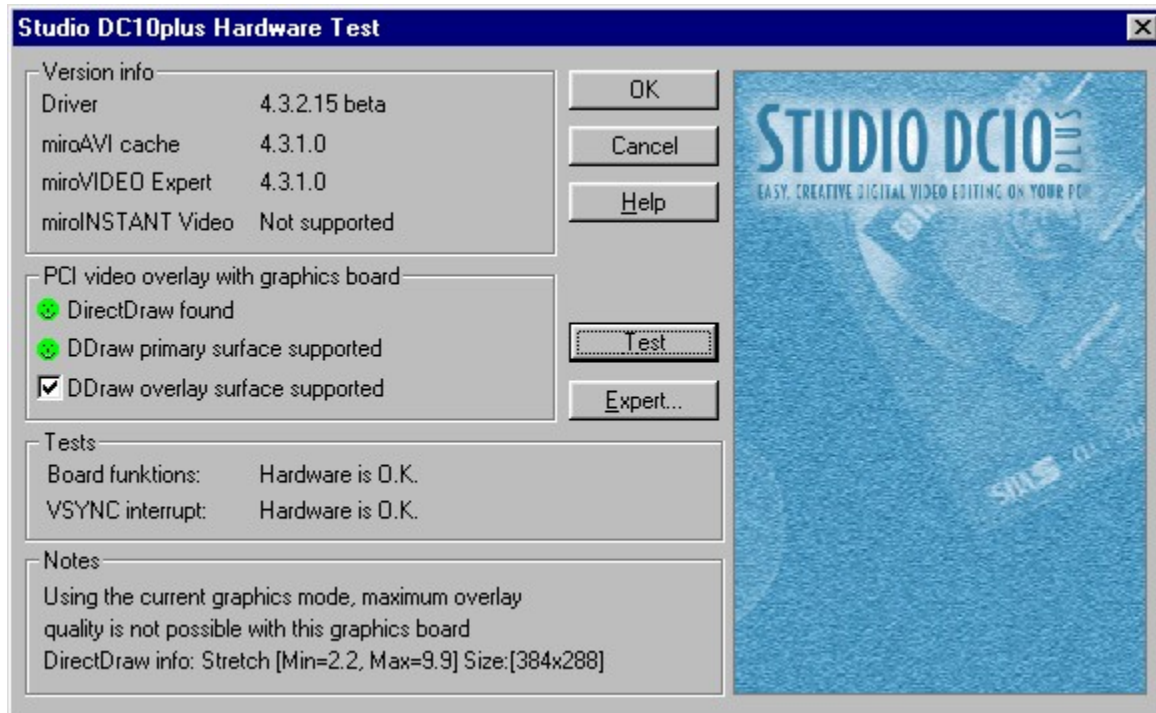
If the *Overlay while recording* check box is activated, the video will be displayed as overlay on the computer monitor during recording.

Squeezing

By activating the *Squeezing* check box, the content of the overlay window will be adapted during recording to each size and position of the window.

Studio DC10plus Hardware Test

The *Studio DC10plus Hardware Test* dialog box gives information about the current software version, the overlay capabilities of your PC system, and allows you to test your system. In order to test the speed of the data transfer, please open the [miroVIDEO EXPERT](#)



- [Version info](#)
- [PCI video overlay with graphics board](#)
- [Tests](#)
- [Notes](#)
- [Test](#)
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Version info

Gives you information about the driver version of Studio DC10*plus* currently installed in your computer system, the version of miroAVI Cache, miroVIDEO Expert, and the version of miroINSTANT Video.

PCI overlay with graphics board

DirectDraw found

If during configuration, a current version of DirectDraw together with the corresponding graphics board's driver will be found on your computer, a green symbol will automatically appear in front of the option DirectDraw found.

If no current version of DirectDraw is found, a red symbol will appear instead, and no overlay will be possible. This means, during analog video output no video will be displayed at the same time in the window of the PC monitor. In this case, it is recommended to install DirectDraw and possibly new graphic drivers.

DDraw primary surface supported

If your computer supports [Primary Surface](#) in the current graphic mode, a green symbol automatically appears in front of the option DDraw primary Surface supported.

If, currently, the primary surface is not supported, e.g. in 256 colors graphic mode, there will be no overlay representation with the function primary surface at the moment.

DDraw overlay surface supported

If your computer supports [Overlay Surface](#) in the current graphic mode, the DDraw overlay surface supported check box will be activated automatically.

As the overlay surface representation has advantages compared to the primary surface representation, it is set by default, when both representation options are possible.

If your graphics board supports the overlay surface only insufficiently, meaning only in a few graphic modes or with bad image quality, the overlay surface check box can be deactivated. In this case, the video will be represented on the primary surface.

Tests

Here, the results of the hardware test will be displayed (button [Test](#)).

Notes

In this section, information about the current configuration of Studio DC10*plus* is displayed.

Test

Clicking on the *Test* button, starts the hardware test. This test checks the hardware configuration of your computer system.

First of all, the test checks, if a Studio DC10*plus* board is already installed in your computer. If this is the case, the board's functioning will be tested. If the result of the test is positive, next to the Board functions the message Hardware is O.K. will be displayed.

Afterwards, the test verifies, if the necessary interrupt has been allocated to Studio DC10*plus* by the PC system. If this is the case, also next to the VSYNC interrupt the message Hardware is O.K. will be displayed.

If you have not yet started the test program for the hard disk transfer miroVIDEO Expert, or if you have not yet saved the detected values, [miroVIDEO EXPERT](#) will open automatically after the hardware test.

Expert

The *Expert...* button opens the test program for the hard disk transfer [miroVIDEO EXPERT](#).

Overlay

Studio DC10*plus* supports the **primary surface** as well as the **overlay surface**.

With the **primary surface** no clipping is possible, i.e. if during overlay you drag another window on the overlay window and remove it again, some parts of the image will remain on the place of overlay. The primary surface is limited to a size of 360 x 288 pixels.

As the **overlay surface** can be produced with a considerable less amount of system resources and additionally without any limitations to the resolution, you should generally – if your board supports it – activate the *DDraw overlay surface supported* check box.

If overlay is impossible, this might have several reasons:

- Your graphics board does not support an overlay surface or a primary overlay.
- The overlay surface does not function with the selected resolution (●. Choose another resolution and less colors).
- The graphics board's driver does not support an overlay surface (Please install the latest driver for your graphics board).

● The primary surface does not function with resolutions of 8 Bit (256 colors).

