miroVIDEO DC1

README for version 2.04

This text contains important information for the user of the miroVIDEO DC1 system. If you encounter any problems when working with the DC1, please read the manual and this text.

During installation:

If you have an older version of the miroVIDEO DC1 software installed on your PC, please remove this old software using Control Panel / Drivers before installing the new driver.

Combination with miroMOVIE (pro):

If you use the DC1 in combination with a miroMOVIE (pro) board, and you want to use only the overlay features of the MOVIE, you must either use the MOVIE's other input connector or disconnect the DC1 and MOVIE or activate the DC1's video loopthru by starting Video Capture.

Resolution limits:

When recording video to the harddisk, the maximum resolution is 320x240 with NTSC (384x288 with PAL or SECAM). When you create a DC1-compressed movie using Video Editor or Premiere, you should not exceed this limits, because you wouldn't get any higher video output quality. The DC1 hardware, however, is able to handle up to 590x442 on compression/decompression and up to 288 lines at any width when putting out sequences to video.

Handling 'miroVIDEO DC1 Display':

As soon as the DC1 driver is active, the Display dialog is visible either as an icon or as open dialog box. Whenever the DC1 hardware is in use, for example to display a movie, the dialog box cannot be opened. When the box is open, the hardware is temporarily locked and cannot perform any compression or decompression.

Compression of 8-bit files like 'flics':

When you want to compress 8-bit (256 colors) files for video output with the miroVIDEO DC1 using Microsoft's VidEdit, you have to set 'Video / Video Format' to 24 bit after loading the 8 bit file. Otherwise the DC1 MJPEG driver wouldn't appear in the list of compressors.

Working with Adobe Premiere 1.1:

In Premiere, several settings must be correct to allow for trouble-free work with the miroVIDEO DC1.

- for capturing video using Premiere's Capture application, 'Capture directly to memory' should be checked and a capture file should be preallocated.
- within Premiere, the Preview Options must be set to Cache Nothing. The preview window size should match the resolution of the digitized clips, other important settings are described in the DC1 manual.

Known bugs with Adobe Premiere 1.1:

- For the setting of the timescale for featuring to 1 minute in Construction View, effects are not represented and can't be modified in this feature. Workaround: Choose another scale than 1 minute if you want to place it (larger or smaller 1) minute).

Working with Adobe Premiere 4.0 LE:

Adobe Premiere 4.0 LE has the capability to work with presets for a project. These presets contain the settings for the video-codec, the audio samplerate and the videoformat. The miroVIDEO DC1 driverdisk contains two presets.

How to use the presets:

- Exit Adobe Premiere 4.0 LE

- Copy the two files PRST0000.PST and PRST0001.PST into the PLUGINS subdirectory of Premiere (e.g. C:\PREMIERE\PLUGINS)

When Premiere 4.0 LE is started the next time the two presets are available.

Adobe Premiere 4.0 LE and Win95

If you have problems with the DC1 Display by using Adobe Premiere 4.0 LE, you have to delete the file premiere.ini in the Windows\System-directory first and then reinstall Adobe Premiere 4.0 LE.

Installing miroVIDEO DC1 drivers for Windows 3.1/3.11

The miroVIDEO DC1 package includes the miroVIDEO DC1 MJPG capture driver and a program (MIROXPRT.EXE) which measures the data transfer rate of your hard disk under Windows 3.1/3.11 (HD Speed Utility). The miroVIDEO DC1 installation program installs the miro software automatically.

To install the miroVIDEO DC1 MJPG capture driver, a video capture application such as Adobe Premiere or Video for Windows has to be installed! If a capture driver has already been installed on your system, you will be notified during the installation. This driver is then deactivated.

To install and configure the software, proceed as follows: If you have not done so already, start Windows. Insert the miro 婦 in system drivers for WINDOWS 3.1 for miroVIDEO DC1 disk. In the Program Manager select File and the Run... command. Depending on which disk drive you use, enter a:\install <Return> or b:\install <Return>. Click OK to continue with the installation.

If no current Video for Windows version and no other video capture program

is installed on your system, you will be requested if you want to install Adobe Premiere now because otherwise the miroVIDEO DC1 installation cannot succeed.

Select miroVIDEO DC1 drivers.

Click Install to proceed with the installation. Then, the miro drivers and the hard disk test utility are copied to the hard disk and the miroVIDEO DC1 program group is created. The miroVIDEO DC1 configuration program is started. During a first-time installation you are now requested to specify an address range for the miroVIDEO DC1 board. I/O Address Range:

miroVIDEO DC1 uses 16 addresses starting from the selected address. Accept/change the default I/O address range.

If no other hardware components occupy the selected address range, you go to the miroVIDEO DC1 Hardware Setup window by clicking Continue. If the address range is occupied, select another setting to go on with the configuration.

miroVIDEO DC1 Hardware Setup

This dialog box sets the I/O Address Range, the Memory Window, the Interrupt, and the DMA Channel.

You can also activate/deactivate 0 Wait State and the Burst Mode.

I/O Address Range:

During the first-time installation you have already specified the address range.

This should not be changed. If you want to change the setting, however, you can select another address range here.

Memory Window:

By enabling the Use Memory Window option, you can boost the miroVIDEO DC1 performance for unpacking compressed video and for the preview. miroVIDEO DC1 uses a 16 KB video memory area starting with the selected address. For some computers, the address for the Use Memory Window option cannot be used because another hardware component already uses this address. In this case, select another memory window.

If this does not succeed, verify in the BIOS setup if the memory window has been cached or shadowed.

The memory window you have selected in the miroVIDEO DC1 Hardware Setup, must not be cached or shadowed. Please also refer to your computer's documentation.

For some computers, disturbances may occur in the miroVIDEO DC1 video image on the computer monitor if the memory window has been switched on. Switching off the memory window may solve this problem.

0 Wait State:

This function accelerates the data transfer via the ISA bus and should be activated.

In case of conflicts, especially with old computer models, this function should be deactivated.

Interrupt:

Four interrupt vectors are available. The used interrupts are dimmed.

DMA Channel:

The DMA channel for the data transfer can be set to 5, 6, and 7.

Use DMA Burstmode:

Enabling the DMA burst mode, accelerates the data transfer. By default, the DMA burst mode is switched on.

For some computers, the burst mode may not function properly. When capturing or playing back video, frames may be lost or there may occur patterns in the image. In this case, disable the DMA burst mode.

Active Video Capture Device:

If you have another capture board installed in your computer, there is an additional option. Enter here, if you want the miroVIDEO DC1 or the other board to be the Active Video Capture Device.

Conflicts

After having exited the miroVIDEO DC1 Hardware Setup dialog box with OK, the installation is completed. Reboot the computer for the hardware settings to take effect. The settings are tested and if conflicts are recognized you will be notified.

Make absolutely sure to eliminate address conflicts! If a conflict which the software does not recognize causes a system crash, check the I/O addresses and the interrupt vector of other installed boards. Eliminate the conflict!

Result of the installation

After the installation the VIDEODC1.DRV, DC1SETD.HLP, DC1SD.HLP, DC1FD.HLP, MIROVXD.386 files, and the hard disk speed utility (MIROXPRT.EXE) have been copied to the Windows system directory (default: C:\WINDOWS\SYSTEM). The SYSTEM.INI and CONTROL.INI files have been complemented.

The installation program excludes the selected memory window in the CONFIG.SYS and in the SYSTEM.INI file in the line which calls the Memory Manager you use (EMM386, QEMM, 386Max).

Example: If you use the EMM386 Windows Memory Manager for the configuration described above, the installation program enters the following in the CONFIG.SYS line which calls the Memory Manager: X= 350-35F. In addition, the installation program excludes this memory area in the [386Enh] section of the SYSTEM.INI file and enters for example: X=350-35F. For further information, refer to your Windows documentation. In the Program Manager the miroVIDEO DC1 group has been created containing the miroVIDEO DC1 Configuration, the miroVIDEO DC1 Information and the miro HD Speed Utility.

Changing the hardware settings

To change the hardware settings later, click on the miroVIDEO DC1 Configuration icon in the miroVIDEO DC1 program group. Then, the miroVIDEO DC1 Hardware Setup appears where you can change the settings.

Installing the miroVIDEO DC1 drivers for Windows 95

To install the miroVIDEO DC1 drivers under Windows 95, proceed as follows: Double-click the My computer icon. Open the Control Panel. Enable Add New Hardware. The Add New Hardware Wizard window appears. Click Next. When being requested, if you want the system to check whether there is new hardware, answer No because the system will not find miroVIDEO DC1. Now you are back in the Add New Hardware Wizard window. Click Next. Click sound, video and game controller. Click Next. Click Have Disk... to specify from which drive you want to install the miro drivers.

The default is drive A:\. If the disk is located in another drive, change to this drive and to the directory. Click OK. Select miroVIDEO DC1, Motion JPEG Capture/CODEC Board and click Next. Click Next, to accept the resource settings specified by Windows 95. The miroVIDEO DC1 driver and the INF files are copied to the Windows 95 system directory (C:\WINDOWS\SYSTEM). To exit the installation, click Next. Restart the system. You can now use your miroVIDEO DC1 board. Change settings Windows 95 configures the hardware settings (addresses, interrupts, and DMA channels) automatically. To change the settings configured by Windows 95, open the Control Panel and double-click the System icon. Open the Device Manager. Double-click the Audio Video and Game controller icon and select miroVIDEO DC1 Motion JPEG Capture CODEC Board. Click on Resources. You can change the settings in two different ways. The first one allows you to change the base configuration, the second one to change the resource settings (memory window, address, interrupt, DMA channel). First possibility Disable user automatic settings. Under Settings based on: you see the configurations offered by miroVIDEO DC1: configuration 0 (default): memory window enabled configuration 1: memory window disabled. By using configuration 0 (memory window enabled), you can boost the miroVIDEO DC1 performance for unpacking compressed video and for the preview. miroVIDEO DC1 uses a 16 KB video memory area starting with the selected address. Second possibility Disable user automatic settings. Click on Change settings.... Select the setting you want to change (address, interrupt, DMA channel); all further settings will be displayed. Change the desired setting and click OK. If necessary, change further settings, If you have changed the settings under Change settings..., these cannot be changed, this means that Windows 95 cannot change them even if another less flexible hardware component needs these settings. In case of a hardware conflict. change the miroVIDEO DC1 settings. Changing further settings To change further miroVIDEO DC1 settings, open the Control Panel and double-click Multimedia. Under Advanced you find miroVIDEO DC1. Double-click this entry. Select the device type Video Codec or Video Capture. Double-click miroVIDEO DC1 and click Settings. The miroVIDEO DC1 Hardware Settings window appears. Here you can enable/ disable the Burstmode and 0-Wait State.

0 Wait State:

This function accelerates the data transfer via the ISA bus and should be activated.

In case of conflicts, especially with old computer models, this function should be deactivated.

Use DMA Burstmode: Enabling the DMA burst mode, accelerates the data transfer. By default, the DMA burst mode is switched on. For some computers, the burst mode may not function properly. When capturing or playing back video, frames may be lost or there may occur patterns in the image. In this case, disable the DMA burst mode. Result of the installation After the installation the VIDEODC1.DRV, DC1SETD.HLP, DC1SD.HLP, DC1FD.HLP, MIROVXD.386 files, and the hard disk speed utility (MIROXPERT.EXE) have been copied to the Windows system directory (default: C:\WINDOWS\SYSTEM). The SYSTEM.INI file have been complemented.

VidCap32 for Windows 95

Using the DC1 under Windows 95 we recommend for capturing AVI files the VidCap32 of Microsoft, which is also available on the installation disk of the miroVIDEO DC20. VidCap32 fully supports the 32Bit capture-class, so that you can reach higher data rates during capturing.

Known bugs:

VidCap32 sets default the capture file to C:\CAPFILE.AVI. If you llike to set another drive for capturing, it could happen that VidCap32 stops with a General Protection Fault (GPF). Start once again the VidCAp32, ignore the error message that the device is already active and set now the desired drive for capturing. Close now VidCap32 and start Windows 95 again.