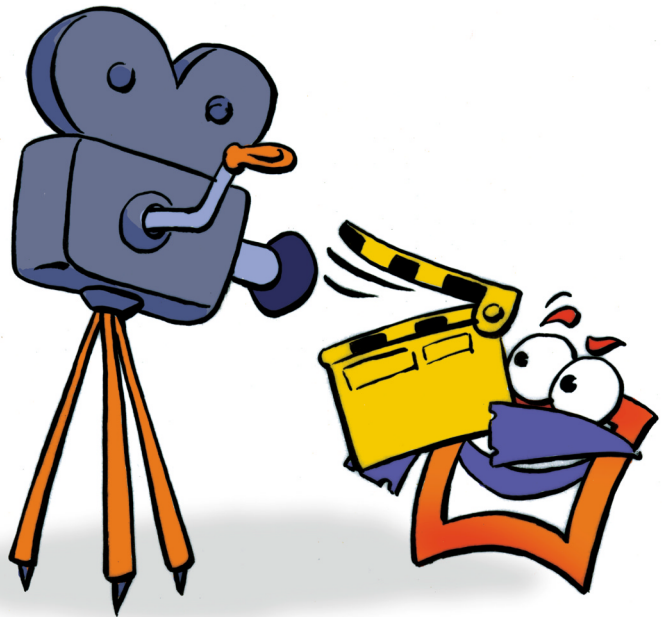


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Video Capture Utility

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Manual



Tutorial



Reference



Effects

VIDEO CAPTURE UTILITY

Contents

Foreword.....	4
Starting and Exiting Video Capture Utility	5
Preferences	5
Capture Type	5
Image and Audio Settings	5
Video Format	5
Video Source	6
Compression.....	6
Display	6
Audio	7
Determining the Frame Rate.....	7
Capture to Memory	7
Capturing to the Hard Disk	8
Video Preview.....	8
Capture File Setup	8
Video Capture.....	9
Saving Captured Files.....	9
Opening a Video File.....	10
Determining the Video Sequence.....	10

Foreword

Video Capture Utility is a separate program which can be used for digitizing video and audio signals.

Capturing is the transfer of video signals from a source, such as a video camera or player, into a file stored on a computer.

The Utility can also be used for simple editing of existing video clips, in as much as the in and out point can be redefined.

To capture your videos onto a computer you will need a video capture board. The Video Capture Utility only digitizes your video footage, MoviePack should then be used for editing and processing.

Video footage can be transferred in real-time or as single frames. Video capture in real-time captures the video signal without breaking the natural play-back sequence. If the time required to capture one frame is greater than the interval between the frames, capture in real-time will not be possible.

The single frame capture mode can be used to capture complex image sequences.



Please read the information and documentation provided by the video board manufacturer. Ensure that your video capture board is properly connected to the video source (camera, player).



Manual



Tutorial



Reference



Effects


Starting and Exiting

You can start the Video Capture Utility using the Windows Explorer. The Video Capture Utility Mdmcap32.exe file is located in the MoviePack installation directory.

To exit the program select **Exit** from the **File** menu (shortcut **ALT + F4**). If changes have not been saved before exiting the program, a dialog box will appear asking you whether you want to save the changes or not. Click **Yes** to save the changes, click **No** to directly exit the Video Capture Utility.

Preferences

From the **Options** menu select **Capture Options** (shortcut **Ctrl + F**). Here you can select the capture type, audio format and video preferences.

-  If your video board does not support all the functions of Video Capture Utility, the unsupported functions will appear gray (inactive) in the dialog boxes and menu options and cannot be accessed.

Select the desired preferences in the field **Capture Type**:

- Normal (natural sequence with determined frame rate)
- Single Frame (frame by frame capture)
- Step Capture (in determined intervals)

Capture Type


Video format, video source, compression options, overlay and audio preferences can be selected in the **Capture Type** dialog box by clicking the **Format**, **Source**, **Compression** or **Display** button.

Image and Audio Settings

In the dialog box **Capture Options** you can select the image size and color depth as well as other options. The availability of the various options is dependent on the video board installed on your computer.

Video Format

- ▶ Open the dialog box **Video Format** by clicking the **Format** button in the **Video** field. Select the desired options and apply your selection by clicking **OK**.

-  Please consult your video board documentation if some options are not available.

Video Source


In the dialog box **Video Source** you can determine the video format and video input.

- ▶ In the **Video** field, click the **Source** button to open the **Video Source** dialog box.

The options are dependent on your video board and the video board driver. You can, for example, select format, input and video and quality, e.g.:

- Video format: NTSC, PAL, SECAM, ...
- Video input: Composite, S-Video, ...
- Enhancer: brightness, contrast, ...


Make your selection and apply the settings by clicking the **OK** button.

-  The video source options are determined exclusively by the video board and its driver.

Compression

The driver of your video board determines the dialog box containing the compression options. Compression can also be switched on or off.


- ▶ In the **Video** field, click the **Compression** button to open the **Compression** dialog box. Make your selection and apply the settings by clicking the **OK** button.

-  In general hardware compression results in substantially better capturing. However, you may have to experiment before you find the optimal setting.

Display

If this function is supported, the signal characteristics of the overlay can be determined.

- ▶ In the **Video** field, click the **Display** button to open the **Display** dialog box. Make your selection and apply the settings by clicking the **OK** button.

-  This button is only active if overlay is supported.



Manual



Tutorial



Reference



Effects

If your hardware supports audio capture, audio can also be captured synchronously with video.

- ▶ In the **Audio** field, select **Capture Audio**. Then select the desired audio format and sampling rate from the lists available.

If you want to capture in real-time, you will have to determine the frame rate. Enter the amount of frames that should be captured per second. The frame rate for video sequences is normally 25 frames/sec PAL, 30 frames/sec NTSC.

Higher frame rates can be selected for shorter sequences, however they should not be compressed (as the compression process requires more processing power).

- ▶ Enter the desired frame rate in the numerical field.
- ▶ Using the option **Capture Limit** allows you to limit the capturing time. Enter in seconds how long the video should be captured.
- ▶ If you have a MCI driver installed on your system, you can select the option **Use MCI** to control the video source.

If you have enough RAM on your system, you can capture the entire video sequence directly to the memory. This is recommended.

- ▶ Select **Capture to Memory**, if you have sufficient RAM available.

Please note:

- ☺ Check whether or not there are unnecessary drivers installed in the various configuration files which may take up excessive space on your computer. The more memory available, the longer you can capture.
- ☺ If you have a fast computer system, you can compress during capturing. Compressing while capturing allows you to save longer videos to the memory. However, it may be necessary to reduce the frame rate, otherwise frames may be dropped.

Audio




Determining the Frame Rate

Capture to Memory

Capturing to the Hard Disk

If you do not have enough memory available, you will have to capture your video to hard disk or to another mass memory device.

Please note:


-  Use high performance disks as they offer higher data rates.
-  The hard disk should be defragmented. Defragmented hard disks have higher access times and can slow down the capturing process.
-  Long videos require a lot of storage space. Please ensure that there is sufficient room available on your hard disk before you start capturing.

Video Preview

If you would like to preview the video prior to or during capturing, simply open the preview window.

- ▶ Select **Preview Window** from the **Options** menu.

If your video board and graphics card support overlay technology, you should use this function, as overlay requires substantially less computing power. The video images are written directly from the video board into the image area of the preview window. The frame motion is smoother and the burden on the processor is considerably lessened.

- ▶ From the **Options** menu, select **Overlay**.
-  If your video board does not support the overlay function, this command is inactive (grey).

Capture File Setup

During video capturing, a temporary files is created on your hard disk until the digitized video is saved as an AVI file.

You can determine the size and the directory of this file in the **Set Capture File** dialog box.

- ▶ From the **File** menu, select the command **Set Capture File**.



Manual



Tutorial



Reference



Effects

- ▶ Select the drive and directory where the file should be created.

The file size should also be specified. Failure to do so may result in the size of the file not being continuously expanded during capturing, as the disk lacks contiguous space. The file will then be fragmented which is time-consuming and may lead to dropped frames.

- ▶ Click **Preallocate**, enter the file size in Mbytes.
- ▶ Apply the setting by clicking **OK**.

Video Capture

Various methods can be used to optimize the quality, size and frame rate of the video. The best way to ensure high quality is to capture directly to the main memory. This is much faster than capturing to the hard disk. However, the length of the video is limited by the amount of memory available. To begin capturing:

- ▶ From the **Capture** menu, select **Start Capture** (shortcut **Ctrl + R**).
- ▶ To alter the capture preferences, click the **Options** button to open the **Capture Options** dialog box. Make your selection and apply the settings by clicking **OK**.
- ▶ Click **Start Capture**.

Saving Captured Files

After capturing is complete, you must save the data as an AVI file. The captured file is lost once the program is closed.

- ▶ From the **File** menu, select **Save Video as** (shortcut **Ctrl + S**).
- ▶ Select a drive and directory and enter a filename in the **File Name** field.
- ▶ Click **Save**.

Opening a Video File

You can use the preview window to edit existing video files.

- ▶ From the **File** menu, select **Open** (shortcut **Ctrl+O**).

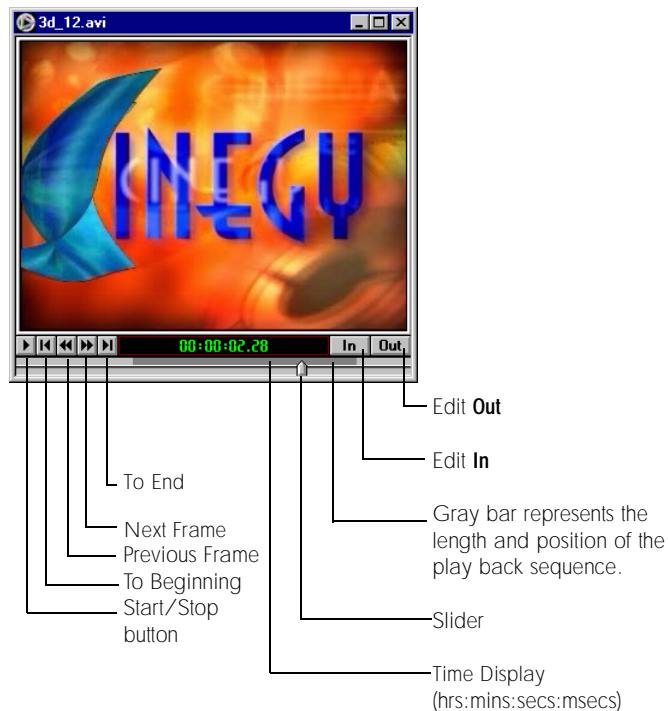
Determining the Video Sequence

- ▶ Select the starting point by moving the slider, then click **In**.
- ▶ Select the end point by moving the slider, then click **Out**.

The gray bar shows the position and length of the pre-edited video.

- ▶ Press play to start the video.

The altered video can be saved using the current name or a new name. The video can be started, stopped, forwarded, rewound and edited using the buttons available.





Manual



Tutorial



Reference



Effects

