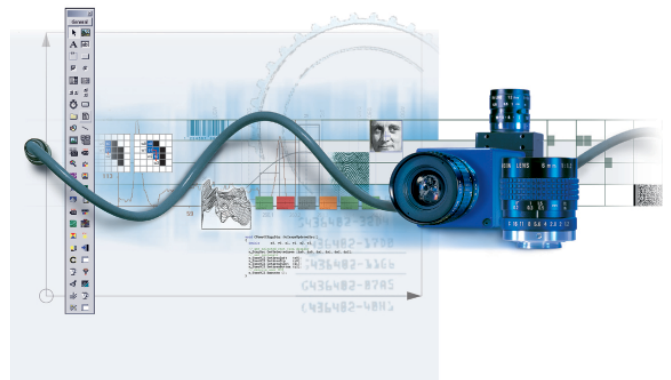


► Common Vision Blox - High quality image processing software



One of the most important advantages that Common Vision Blox offers when compared to other software libraries, is the fact that in addition to the commonly used tools for classic machine vision applications, Common Vision Blox also offers a wide range of highly optimised tools and algorithms covering broader areas. The optimised and flexible control of recording hardware also makes it extremely useful as a powerful development tool for systems where the recording and reproduction of either images or video sequences is required in a wide variety of applications.



► CVB Movie - Recording of video data to hard disk

Using CVB Movie, video sequences can be recorded as AVI-files directly to hard disk and can then be played back using either the Image Manager or any other play-back software.

CVB Movie uses the many trigger capabilities and hardware independence of CVB and is therefore far ahead of other recording systems in terms of flexibility and efficiency. Using an appropriately configured computer with an adequate RAID-disk, it is possible to achieve impressive data rates above 70 Mbyte/s.

As CVB Movie already uses the DirectShow Video Codecs available to the system at the time of the recording, various memory formats can be used. Depending on the Video Codec selected, even video files compressed with the most modern compression algorithms can be recorded. Naturally the Video Codecs used have to be available on both, the recording and play-back systems.

In industrial and scientific machine vision there are many application areas where the continuous recording of sequences may be used. The stored video data might be used for documentation and/or later analysis. Besides the continuous recording of camera data, it is also possible to record pre-selected images (i.e. only images showing defective parts).

As the videos can be played-back in CVB Image Manager, they can also be used for development purposes or for testing machine vision software in cases where no online recording is possible.



Application areas for CVB Movie

- Separation of image recording and image analysis
- Recording of memory intensive image sequences directly onto the hard disk
- Recording of portable, compressed video sequences, i.e. for email dispatch for use in feasibility studies
- Archival of error images within a system in the form of a single, compressed file for efficient data transmission for use in remote system surveillance

Windows and DirectShow are registered trademarks of Microsoft.

► CVB Sequence - Recording monochrome image sequences into system memory

CVB Sequence is used to record image sequences into system memory (RAM). The DLL offers functions for recording, storing, loading and re-playing of 8-bit image sequences. The recorded sequences can be stored in a ring buffer, thus allowing not only the recording of a pre-determined number of images after a start-signal, but also the indefinite recording of images until a stop-signal is received, or the recording of a pre-determined number of images after a stop signal. The start and stop signals are controlled by call-back functions, with the maximum length of an image sequence being limited only by the available memory (RAM) on the host computer. In order to save both, memory and computing power, it is also possible to select only part of an image for the recording of a sequence. During the recording only this selected area of the image is recorded.

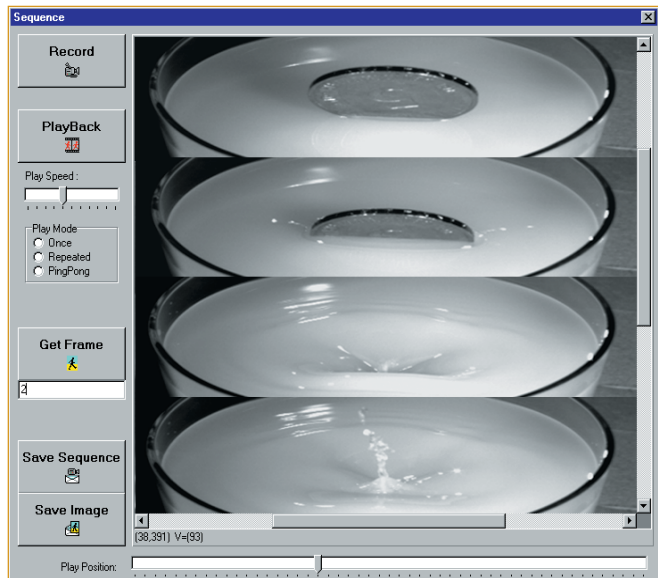
Due to the flexibility of the core of Common Vision Blox, the Image Manager, various image sources can be selected and in addition, single triggering and synchronization of the image sequence is possible for recording purposes.

After recording an image sequence, CVB Sequence offers many different playback options, for example, the sequence can be re-played in slow motion or in a continuous mode.

CVB Sequence also allows specific access to single images within a sequence which can then be extracted or overwritten. For archival or documentation purposes, the entire sequence can either be stored as a single file or in the form of separate image files.

Application areas for CVB Sequence

- The analysis of a fast processes in slow motion
- The analysis of slow processes in accelerated motion
- Buffering of images for subsequent execution



► CVB Movie & CVB Sequence - perfect teamwork!

CVB Movie and CVB Sequence is the perfect combination when developing solutions for image recording systems and together provide unprecedented efficiency and flexibility. Not only because such

a system can replace any dedicated sequence recorder available on the market at a fraction of the cost, but also because it offers the advantage of creating a truly customer-specific user interface.