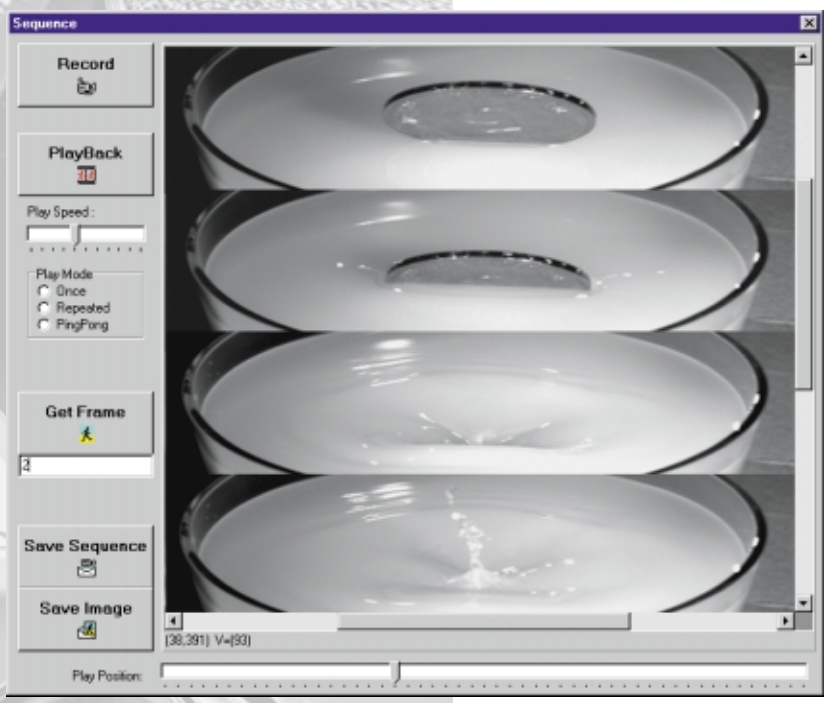
▸ Sequence

powered by

COMMON VISION BLOX



Software tool for recording image sequences

STEMMER® IMAGING

▸ Sequence

The software tool Sequence is used for recording image sequences. The DLL provides functions for recording, storing, loading and playing back 8-bit image sequences. The recorded sequences are cached in the main memory of the image processing computer. The maximum length of an image sequence depends on the amount of main memory installed in the computer. To save memory space and improve performance, it is possible to define an image region for recording sequences. In this case, only the corresponding part of the image is recorded.
8-bit and 24-bit framegrabbers can be used as image sources. However, if color framegrabbers are used, it is only possible to record one of the three color planes. It should be noted that the recording speed with 8-bit linear VPAT framegrabbers (e.g. PcVision) is significantly higher than with non-linear VPAT framegrabbers (e.g. ICP-STD-RGB).

Industrial applications

Although sequence recording is mainly used in scientific imaging for motion studies Common Vision Blox Sequence offers a wide range of industrial applications.

Just think about an application that has to inspect a number of products passing the camera on a carrier fastly.

While the time between the products on one carrier is too short for the image acquisition and the complete image processing there might be a lot of time between two carriers.

So why not recording all images of one carrier with Common Vision Blox Sequence first. Then working out the image processing on the recorded images afterwards without timing problems before the next carrier arrives.

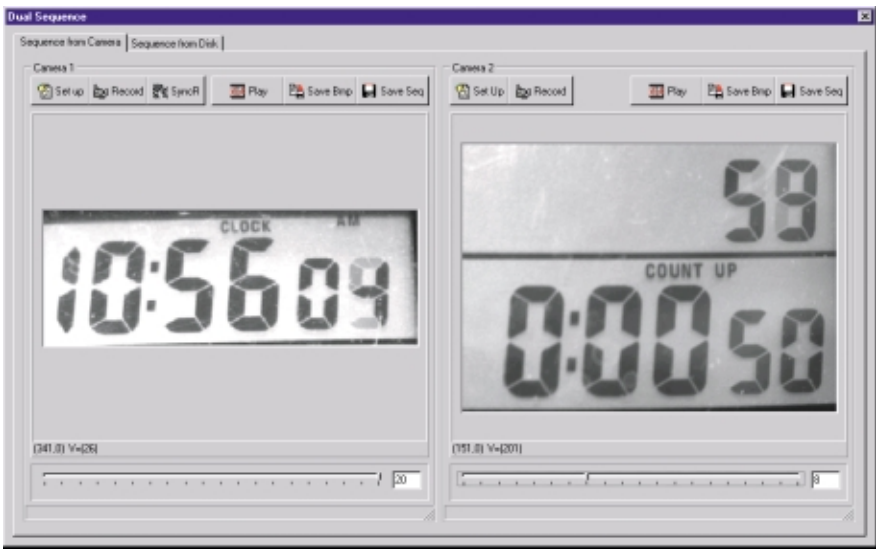
Beside the fact that there is no need to speed up your acquisition and processing by expensive cameras and computer hardware your application will be less critical if any additional filtering or inspection has to be included afterwards.

▸ Sequence memory

The sequence memory is a ring memory. This means that in addition to the simple recording of a predefined number of images following a start signal, it is also possible to record an endless loop until a stop signal is received (or until a defined number of images have been recorded after a stop signal). The start and stop signals are controlled with callback functions.

▸ Sequence functions

Once the image sequence has been recorded, Sequence provides functions to play back the sequence. The sequence can be slowed down or played cyclically in an endless loop.
Furthermore, Sequence allows you to access specific images in an image sequence. Single images can be extracted or overwritten. For archiving and documentation purposes, the entire sequence can be stored as a single file or as separate image files.
There are also functions for loading and playing back sequences which have already been stored, provided that sufficient memory is available to reload the image sequences from hard disk.



▸ System requirements

The following requirements should be met to fully exploit the functionality and performance of Sequence:

- PII, 400 MHz or better with as much RAM as possible (at least 128 MB).
- Framegrabber card should provide linear data and be equipped with onboard memory (e.g. PcVision).
- No other programs or hard disk accesses should increase the load on the system during recording.
- If several recordings are to be made simultaneously, the programmer should ensure that multithreading is properly handled.

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