Smart Binoculars

Project Code: SB-02

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Project Overview
A Driver program whose functions are
1. Co-ordination of information flow between input and output
2. Synchronization between input and output devices
3. Display of three-dimensional videos

Fig. 1 Stereograph of a picture

Objectives
1. Decomposition of common software structure of a video system
2. Increase in flexibility of system extension

Fig. 2 System Block Diagram
Methodology

Fig.2 System Software Flow Chart

When one frame is extracted from the movie, the translator system will create two images from that frame. They are the left and right images for each eye.

The two created images will be displayed sequentially, say left image and then right image.

After that, the next frame will be extracted from the movie. The same procedure will be repeated for each frame.

By doing that, the slight relative distance between each frame will be interpreted as difference in depth.
Summary

The system achieves high adaptability to users and satisfactory compatibility.

Different movie sources can be treated as the inputs of this system. Users can watch the produced three dimensional movies and observe the depth effect through the shutter-glass goggles on the cathode-ray tube monitor.

The capability of this product represents a realization of the shutter-glass methodology to produce visual three dimensional effects by planar images.

Further Extensions
- Implementation of real-time videos as input
- More user-friendly interface
- Implementation of additional video-processing algorithms