

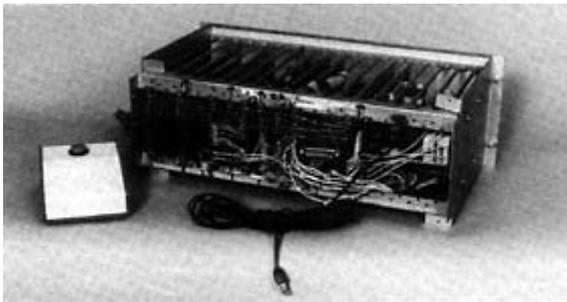
## Jones Frame Buffer (Spatial and Intensity Digitizer), 1977 DAVID JONES



Kit Galloway, Dave Jones, Jack Henry Moore, founders of VIDEOHEADS, at the Melkweg, Amsterdam, 1972



Dave Jones and friends.



Jones Frame Buffer, 1976. Collection of Gary Hill, Seattle Washington.

WHEN WE MADE OUR FIRST unofficial grand tour through Europe as the self-acclaimed ambassadors of video, we were picked up by a very young looking, lean man at the Luxembourg airport. We got into his rental car and headed off to Paris. The man had obviously not slept much and was not in the mood for conversation. Somewhere after Verdun he started to speak.

We learned a lot about Jack Moore, about the time in Amsterdam, the Melkweg and Mr. Mori at "Sony of France". Dave Jones had just left for the States and it would be a couple of years before we meet him.

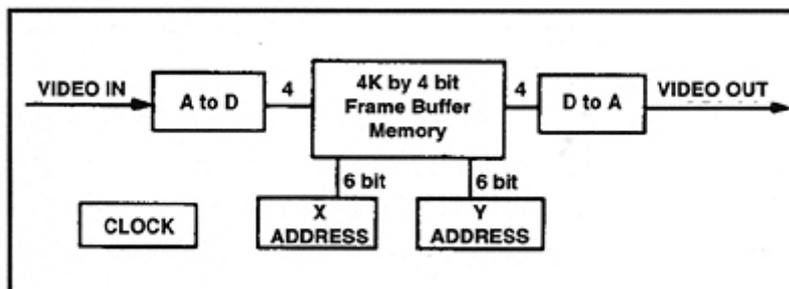
On the other hand, that same night in Paris we met Depuoy and his colorizer. I cannot recall the functions now, but I still remember the front panel. The device is now with Don Foresta in Paris and needs some reconstruction. I am afraid it will fall between the cracks for this show.

Jones has become the favorite designer for the up-state New York people but it took this show for us to get closer to him.

By the way, our Paris driver was Kit Galloway. We have had many encounters with him since, latest this fall through the Electronic Cafe. Steina played her violin, remote-controlling a laserdisk performance over the telephone from Santa Fe to Los Angeles.

W.V.

DAVE JONES IS A Canadian-born video artist and engineer who has been producing video tapes and performances for over 21 years and developing image-making tools for over 19 years. He has worked with electronics since he was ten. At age 12 he built a shortwave radio from a kit, then in high school he built an AM radio station. After high school he helped to run a mixed-media performance troupe in Europe, known as Video Heads. In the seventies he built, modified, and repaired video equipment for artists and organizations throughout New York State, and began in 1974 working with E.T.C. designing and building video tools for their studio. He was involved in video performances and installations at and E.T.C. and elsewhere. During the late seventies, continued designing analog imaging tools and began to work on the first of many digital imaging machines. He also helped develop the computer system at E.T.C. and wrote the software for it. The early 80s were spent working both in industry and the arts, including the designing of hardware and writing of software for the Amiga computer. Image processing tools designed by Dave Jones are in use in artist's studios around the world as well as in schools. Jones has become known for innovative and powerful video tools that let artists explore the signal.



## FRAME BUFFER

Dave Jones explored early digital video processing techniques through design work at the Experimental Television Center (ETC) in Binghamton N.Y. In April 1977 he created the 64 by 64 frame buffer, which stores images as a pattern of 64 horizontal by 64 vertical squares, with a choice of 16 grey levels per square. The cost of memory and analog to digital conversion limited the number of grey levels and resolution. These limitations yielded a video image meshed into a charming box-like grid of intensity, that is frozen or held under front panel control.

A 4 bit, 16 level video-speed Analog to Digital Converter, samples the monochrome video input. This is fed to a 4K by 4 bit static Random Access Memory (RAM), where it is held on command by a front panel push button, locked to the vertical interval. The output of the frame

buffer memory passes to the output Digital to Analog converter, changing the video signal back to its analog form. When running "live" the image bypasses the frame buffer memory, passing straight to output. When "frozen," the image is pulled from the frame buffer, showing the last stored picture. A horizontally/ vertically locked address counter supplies the timing for the memory. A later addition allowed control of the write pulse by an external signal, developing a coarse keying between the stored and live image. The coarse "mosaic" and 16 level contouring of video intensity are components of image style seen in the 64 by 64 buffer.

J.S.