FRAME GRAB SPECIFICATIONS FOR 275/475 SOLID-STATE MEMORIES

Input Video:                Composite video; 1 V p-p, 75 ohms,  
                             2:1 interlace; 525 or 625 lines/frame.

Input Remote Strobe:       TTL, ground true  
                             Pulse, 1 μs min; initiates record cycle;  
                             Ground - continuous load and display.  
                             High/Open - holds frame succeeding the  
                             trailing edge of strobe command.

Controls:                  - Black Level  
                             - Video Amplitude  
                             - Manual Strobe

Conversion Rate:           5 Mhz max

Resolution & Grayscale:    Dependent on population of memory.

Frame Grab is a factory-installed option only and requires 275 genlock  
sync and display card for proper operation.
FRAME GRAB OPTION

DESCRIPTION

The frame grab option for the CVI Model 275 provides real-time A/D conversion of an incoming video signal, storing the digital result in the memory with simultaneous display.

This conversion process is continuous while the CONVERT signal (either front panel pushbutton or remote) is present, and converts the frame following the end of the CONVERT signal. This final frame is then retained in the memory and displayed.

The frame grab option may be strapped for single-field operation for use with the Model 275A single-field memories.

OPERATION

The CONVERT signal is TTL compatible, ground true, and may be a pulse as short as 1 μs. A pulse convert signal results in the conversion of the single frame following the pulse.

Front panel LEVEL and OFFSET controls are best set by holding the CONVERT signal true and adjusting offset and gain such that both black and white picture areas are approaching the limits of the converter. This can be determined by observing the output for loss of detail and/or noise in these areas.
SIMPLIFIED BLOCK DIAGRAM
275 VIDEO EXPANDER