

# MODEL 6088A MULTI-CHANNEL VIDEO DATA ENCODER

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## FEATURES

- *Three (3) RS170, NTSC (RS-170A) video channels.*
- *Inserts up to three lines of alphanumeric characters anywhere in each display.*
- *Independent vertical and horizontal character size selection for each channel.*
- *Independent Dual Mode Video Data Encoder, inserts both edge encoded data and scanline-encoded data into each video channel.*
- *Fixed boresight reticle independently selectable for each channel via keyboard.*
- *Individual programmable movable reticle for each channel.*
- *Three 21 bit parallel ports and one RS-232 Serial Port.*
- *IRIG B serial time code decoder.*
- *IRIG B Serial time code generator.*
- *IRIG/RS-170 and RS-170A (NTSC) Synchronizers.*
- *Built in GPS Receiver.*
- *Detachable 101 key desktop keyboard with rack mountable slide tray.*
- *Non-volatile memory*



The ITS Model 6088A is a multiple channel asynchronous Video Insertion Generator that provides for the insertion of annotation, graphics and machine readable data, derived from a variety of sources, into three applied video signals. The unit includes an IRIG/GPS synchronization system that provides for the synchronization of both monochrome and color cameras to IRIG B or GPS time. The generated sync is compared with the actual video and an alarm is set when genlock is lost.

The operator has complete control over configuration and programming of the 6088A. User programming is simplified by extensive "on screen" prompting. Once programmed, all data and configuration tables remain in non-volatile memory.

# Model 6088A Multi-Channel Video Data Encoder

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## SPECIFICATIONS

- **Video Input** Standard 525/60 composite video 2:1 interlace, black negative per EIA RS-170 or NTSC, 1 volt peak-to-peak. Input impedance 75 ohm or Hi-Z, selectable.
- **Video Out** Identical to video input except with annotation and symbols added and DC restored. Output level 1 volt peak-to-peak nominal.
- **Video Amplifier Bandwidth** >20MHz  $\pm$  1db
- **IRIG B Input** IRIG B standard serial time code (IRIG Document 200-98). Input level 500 mv peak-to-peak to 15 volts peak-to-peak with modulation ratio from 2:1 to 6:1. Display resolution is 0.1 msec.
- **IRIG B Output** IRIG B standard serial time code. Output level = 3 Volts peak to peak, modulation ratio = 3:1
- **RS-170A Sync Out** Standard EIA RS-170A composite video black burst sync. 1 volt peak to peak with color burst. 59.94 Hz field rate. Synchronized to IRIG B with vertical sync referenced to the transition to the first day of the year.
- **RS-170 Sync Out** Standard EIA RS-170 composite video sync. 1 volt peak to peak. 60 Hz field rate. Synchronized to IRIG B with vertical sync referenced to within 250 usec of even second transitions.
- **RS-170A Sync In** Standard EIA RS-170A composite video black burst sync. 1 volt peak to peak with color burst. 59.94 Hz field rate.
- **RS-170 Sync In** Standard EIA RS-170 composite video sync. 1 volt peak to peak. 60 Hz field rate.
- **Azimuth, Elev, Range In** 3 ea., 21 bit binary, TTL input positive true with 100K pulldown. Port includes data request (Data Strobe) output with rate of 62 KHz.
- **RS232C Port** EIA RS-232C serial asynchronous, 9600 baud 8 bit, no parity.
- **Data Strobe** Data request signal output, TTL negative true, 1 usec wide.
- **Memory** SRAM module with integral lithium battery.
- **Character Set** 96 character ASCII
- **Package**
  - Size: 19 inch rack mountable, 5-1/4 inches high, 15 inches deep.
  - Weight: 20 lbs.
- **Environment**
  - Temperature 0 to +50°C
  - Humidity 95% (internal non-condensing)
  - Storage Temperature -30 to +60°C
- **Power** 100 to 250 VAC, 50/60Hz.

