

MODEL 6145B HIGH SPEED IRIG PROCESSOR

FEATURES

- Synchronizes the NAC HSV500 C³ High Speed Video Camera to an applied IRIG B time signal.
- Insert time message into video.
- Inserts Azimuth & Elevation value into video via 21 bit parallel ports.
- Inserts user generated annotation into video.
- Includes Scanline data-into-video encoder
- Setup and operation may be done using included keyboard or via RS-232 port.
- Mounts to top of NAC HSV500 C³ High Speed Video System (see picture above)



DESCRIPTION

The Model 6145B IRIG Processor is an accessory to the NAC HSV500 C³ High Speed Video System, which provides for the synchronization of the video field with IRIG time and the insertion of an IRIG time message and other data into the viewed scene. It detects and demodulates the IRIG B serial time signal, phase locks the video sync to the decoded signal and generates a numeric time message which is inserted into the HSV500 C³ image via the Data Mix port.

The 6145B includes a Scanline Data Encoder that inserts machine readable data into two scanlines per field. The position of the encoded scanline data is user selectable. Encoded data includes Azimuth, Elevation, Time and five bytes of other user-entered data. The data can be read by an ITS Model 6142A Dual Mode Video Data Decoder.

Parallel and serial ports provide for the insertion of Azimuth, Elevation and ASCII messages. Two parallel input and two parallel output ports provide for sensing Azimuth and Elevation data which is routed from the source to other instrumentation such as the ITS Model 6088A. The 6145B can generate a data strobe or if it detects a strobe from another device will pass it through. Additionally, Keyboard/RS232 inputs are available which allow the Model 6145B to generate alphanumeric annotation as input from the optional keyboard or from an external terminal or computer via the RS232 port.

The unit is housed in a 13.5" x 9.7" x 2" sheet metal enclosure designed to mount on top of the HSV500 C³ recorder assembly. It is powered by 115VAC.

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SPECIFICATIONS

IRIG Input	IRIG B Standard serial time code (IRIG Standard 200-98).
Time Display Resolution	0.0001 seconds.
Video Output	TTL levels, compatible with NAC HSV500 C ³ "Data Mix" input port. 75 ohm impedance.
Sync Output	Low True, CMOS levels HD and VD drive signals. 75 ohm impedance.
Keyboard	"PC" style alphanumeric.
Scanline Encoded Data	Scanline, Data-Into-Video IAW Optical Systems Group Document 452-86, Section 8.
RS232 I/O	EIA RS232C, 9600 baud
Parallel Input Ports	21 bit binary, TTL input positive true with 10K pulldown. Azimuth Port includes data request (Data Strobe) output with rate of 62 KHz
Parallel Output Ports	Same as input ports.
Data Strobe Out	Data request signal output, TTL negative true, 1 usec wide
Display Annotation Format	32 characters per line, 30 lines maximum.
Environment	
Temperature	0° to 55°C
Humidity	85% non-condensing
Power	115VAC 50/60Hz 5 watts