MODEL 6055C-4
FOUR CHANNEL VIDEO/IRIG INSERTER

Eon Instrumentation, Inc. Since 1961

FEATURES

- *Decodes and inserts IRIG B time message into four asynchronous video signals.*

- *Generates and inserts up to 1920 alphanumeric characters each into each video channel.*

- *Inserts Countdown Clock, synchronized with the applied IRIG B time signal.*

- *Provides 20 discrete, event/alarm inputs (five per channel). Messages are user programmable*

- *Two fonts, each with horizontal and vertical size selection.*

- *Independent insertion of machine-readable digital information using left edge encoding method on each video channel.*

- *Independent insertion of boresight reticle on each video channel. User selectable formats.*

- *80 character backlit LCD Display, displays time, status and operator setup prompting.*

- *RS-232C and Ethernet ports provide means for remote control and annotation of display.*

- *Detachable keyboard provides means for the operator to annotate and format video display locally.*

- *Accepts RS170, NTSC, S-Video input or PAL*

DESCRIPTION

The ITS Model 6055C-4 Multi-channel IRIG Inserter provides for the insertion of alphanumeric messages, IRIG time and countdown clock, into four, asynchronous, RS-170, NTSC, PAL or S-Video signals. Annotation, positioning of the IRIG time message and positioning of the alarm messages can be done via the keyboard and/or the RS-232 or Ethernet ports. The IRIG time may also be transmitted over the RS-232 and Ethernet ports upon command from the keyboard or either port. Twenty discrete control inputs, five per channel, are used to enable the alarm messages with either a TTL level or a contact closure. A loss of IRIG B input causes the 6055C-4 to automatically switch to an internal real time clock. If it is desired to operate the unit without IRIG B input this clock may be set by either the keyboard or via the RS-232 or Ethernet port. The Countdown Clock is set via the keyboard or remotely and controlled by two discrete TTL inputs.

Operator setup prompting is provided via the front panel LCD display. The 6055C-4 has two modes of insertion, constant contrast and white with black border, independently selectable for each channel via front panel switches. The overlay intensity is controlled by front panel controls.

Inserted messages are composed from a 96-character ASCII set. The characters are formed on a 7x9 or 5x7 pixel format, as selected by the operator. A size multiplier, 2X horizontal and 2X vertical, is individually selectable.   Insertion mode is selectable as constant contrast or white with black border. When operating with NTSC or RS170 video applied, and with the 7x9 character format selected, a full character field of 22 lines of 60 characters each is possible. With the X2 horizontal the field becomes 22 lines of 30 characters and with both X2 horizontal and X2 vertical the field is reduced to 11 lines of 30 characters.

The Data Encode function provides for the encoding of time and selected text independently into each video channel, using the "Left Edge" method. The data may be machine read using any decoder meeting the RCC document 452-86 section 7 specification, such as the ITS models 6042 and 6142A Decoders

The unit is housed in a 2U rack mountable aluminum enclosure, 19 inches wide, 3.5 inches high, and 15 inches deep. It is powered by 100 to 240VAC, 50/60 Hz.

MODEL 6055C-4 FOUR CHANNEL VIDEO/IRIG INSERTER

SPECIFICATIONS

Video Channels	Four, asynchronous, each with two outputs
Video In 1	Composite, 525/60 interlaced, 2:1 black negative, one volt peak-to-peak, in accordance with EIA RS-170, NTSC or PAL 625/50, auto selected. (each channel)
Video In 2	Standard S-Video Y/C. (each channel)
Input Impedance	75 ohms
Video Amplifier Bandwidth	>20 MHz ±1dB
Video Out 1, 2	Same as Video In, except with annotation added and DC restored; Output level is 1 volt peak-to-peak (output as specified when terminated with a 75 ohm load)
IRIG B Input	IRIG B standard serial time code (IRIG Standard 200-04). Input level 500mv peak-to-peak to 5 volts peak-to-peak with modulation ratio from 2:1 to 4:1.
IRIG Time Display resolution	User selectable from 1 second to 100 microseconds
Encoded Data	Video left-edge encoding method. Format IAW RCC document 452-86 section 7.
Data Input (Message enable)	TTL negative true, 20 discrete lines, five designated for each channel.
Countdown Clock control	TTL negative true, two inputs: RUN/HOLD and PRESET.
Countdown Clock range	- 99:59.99 (corresponding to minutes, seconds and hundredths of seconds to +99:59.99.
RS-232C	EIA RS-232C serial, 8 bit, no parity, 1 stop bit. Baud rate selectable from 4800 to 115200
Ethernet	Standard TCP/IP protocol, 10/100 Mbit/sec . IP address, gateway address, subnet mask and telnet port are set by operator.
Boresight Reticle	Three operator selectable formats, symmetrical close center crosshair, 24 scan lines high, inverted (full screen with 24 scanline open center and a full screen closed crosshair
Keyboard	PS2 101 key, detachable.
Character Generator	96-character ASCII set, 7X9 or 5X7 pixel format, selectable. Expanded mode: 2X horizontal and 2X vertical individually selectable. Insertion mode is selectable: constant contrast or white with black border.
Message Generator	Twenty, user programmable eight character messages, five for each channel. Displayed upon application of low input on discrete data input. .
Power Requirements	100 to 240VAC 50/60, 15 Watts.

Temperature
    Operating
    Non-operating
	
	0° to 50°C (32° to 122°F)
	-20° to 70°C (-4° to 158°F)

Humidity	85% non-condensing

Package
    Size:
    Weight:
	
	19 inch rack mountable, 3.5 inches high, 15 inches deep.
	8 lbs.