

## FEATURES

- Inserts both Scanline and Edge encoded data, singly or simultaneously.
- Inserts up to 63 bytes of scanline encoded data per field into standard 525 line RS-170 or RS-170A (NTSC) video.
- Inserts up to 21 bytes of edge-encoded data per field into standard 525 line RS-170 or RS-170A (NTSC) video
- Error correction (hamming) code and LRCC generation.
- IRIG B Time Code decoder and video time inserter.
- Inserts up to 30 lines of 32 alphanumeric characters or 30 lines of 64 alphanumeric characters, selectable via bus.
- Automatically synchronizes with composite video input, no external vertical or horizontal sync required.
- Generates and inserts Boresight Reticle



## DESCRIPTION

The ITS Model 6172 can simultaneously encode data in two different formats, scanline and left edge, into standard RS170 or RS-170A video. The 6172 also provides for the insertion of up to 30 lines of 32 alphanumeric characters each. The character generator produces the full 96 character ASCII set plus an additional 32 special characters. A Boresight reticle fixed to the center of the raster is also inserted. Both parallel and serial ports are included to receive data to be displayed and/or encoded. The unit has an IRIG B time code decoder and time inserter which generates a time message that can be displayed any where in the display and/or included in the scanline and edge encoded data.

Operator setup is accomplished via a front panel keypad and operator prompting is provided by an LCD display. All setup information is stored in non-volatile memory.

The 6172 is housed in a 19 inch rack mountable aluminum enclosure, 3.5 inches high by 10 inches deep. It is powered by 100 to 240VAC, 50/60Hz.

# Model 6172 Dual Mode Video Data Encoder

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## SPECIFICATIONS

<b>Video In</b>	Composite, 525/60 interlaced, 2:1 black negative, one volt peak-to peak, in accordance with EIA RS-170 or RS-170A (NTSC). Connector is BNC.
<b>Input Impedance</b>	75 ohms, differential input.
<b>Video Signal Degradation</b>	Exceeds requirements of EIA RS-250B, Short Haul.
<b>Video Out (1 and 2)</b>	Same as video in except with character and encoded data added. Connectors are coaxial BNC (output as specified when terminated with a 75 ohm load).
<b>Time Code Input</b>	IRIG B serial time code IAW IRIG Standard 200-98, Input level .5 to 15 volts peak to peak with modulation ratio from 2:1 to 6:1. Input connector: BNC
<b>Character Generator</b>	96-character ASCII set plus 32 special characters displayed in a 5 X 7 pixel format. Insertion mode is constant contrast.
<b>Boresight Reticle</b>	91 x 91 pixel open centered fixed crosshair, with center dot. Enabled/Disabled via front panel keypad.
<b>Scanline Encoded Data</b>	Scan Line, Data-Into-Video IAW RCC Optical Systems Group Document 452-86, Section 8. Maximum encoded data per field is 504 bits (63 bytes).
<b>Edge Encoded Data</b>	Left edge encoded, method and format IAW Optical Systems Group Document 452-86, Section 7. Maximum encoded data is 168 bits, (21 bytes).
<b>Serial Data Port</b>	Standard EIA RS-232C. Baud rate: 2400, 4800, 9600, 19.2K, Selectable.
<b>Parallel Data Port</b>	Eight bit, TTL compatible with handshake and vertical sync output.
<b>Display Update</b>	Full update, alphanumeric and encoded data can occur each video field. Inserted data remains until overwritten or cleared.
<b>Power</b>	100 to 240VAC, 50/60Hz
<b>Temperature Operating Nonoperating</b>	0° to 50°C (32° to 122°F) -20° to 70°C (-4° to 158°F)
<b>Humidity</b>	95% non-condensing
<b>Size</b>	19-inch rack mountable, 3.5 inches high, 10 inches deep.