



DX-2200 SD/HD-SDI Text & Graphic Inserter

with PiP OSD & SDi Loop Output

Overview

The Microtronix DX-2200-TI-24 is a low latency single port SDI video text and graphic inserter supporting PIP, alpha blended text and graphic overlay / on-screen display (OSD) on progressive, progressive segmented frame (PsF) and interlaced SD and HD video.

Up to 48 independent text or graphic fields on each of three overlay layers can be displayed and positioned as required. The text can independently be controlled for: color, size, font and background color. Enhanced on-screen display (OSD) capabilities include; alpha blending and multi-layering of both text and graphic fields, and dynamic positioning of text and graphic components.

With full support of embedded audio and VBI metadata, the DX-2200-TI-24 is designed for use in broadcast, professional video recording studio and high-end video surveillance applications. A second SDI input can be used for a PiP display overlaid on the primary input. Two SDI outputs are provided: one with the overlay and the other a clean loop-thru output of the primary video source.

The product is optionally available to OEM's as an open printed circuit board for incorporation into embedded video system.



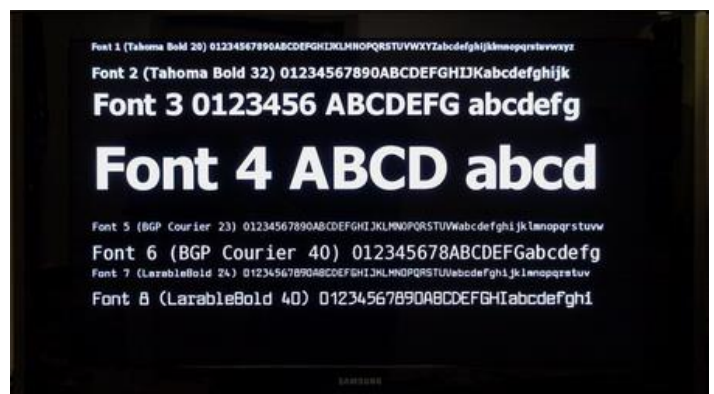
Text & Graphic Overlay Features

- Display of 48 text or graphic Fields per layer
- Alpha blending of the text & graphic elements
- Alpha blended keying of graphic overlays
- Opacity control of text and graphics overlay
- Independent color selection of text fields & background
- Three independent overlay layers
- Dynamic positioning of text and graphic overlay components
- On-screen frame counter
- Independent ON/OFF control of text & graphics fields
- X-Y position control
- Ten text sizes
- Basic straight-line drawing, rectangles & corner markers
- Permanent retention of text & graphic in flash memory
- High-speed RS-232 Serial Control Port
- Auto parsing of NMEA 0183 GPS data sentences

Sample Displays



Alpha Blended PIP



Sample of available text sizes for OSD

Technical Specifications

Description

The unit can be controlled via a RS-232 Serial Control Port or by switches. Up to forty-eight independent Text fields and forty graphic elements can be overlaid (inserted) onto the video stream. The overlay text and graphics are delivered to the unit through the RS-232 Serial Control Port. An extensive command set allows for full control of size, font type, color, position, transparency and background color and background transparency.

The unit is designed for use in broadcast, professional video recording, surveillance, point-of-sale, security and embedded applications requiring live text insertion with no degradation of the video content. The product passes all video content including audio channels and embedded metadata.

User text, graphics overlays and custom user configurations can be stored in on-board flash. The unit has 2MB of flash available for storing and graphic images uploaded through the serial port using a JAVA Software Uploader utility.

A second serial data port can be configured to receive and parse POS and NMEA 0183 data sentences for display as overlay text.

Hardware Features



- RS-232 Serial Control port
- Two 75Ω SD/HD SDI inputs
- One 75Ω SD/HD SDI overlay output
- One 75Ω SD/HD SDI pass-thru output

- Power: 12VDC @ 650mA from 120/240VAC adapter (18VDC maximum)
- Dimensions: 3.35" x 5.2" x 1.1" (D x W x H)
- Operating Temperature: 0C to 40C

Software Features

Video Formats

- NTSC 480i @ 29.97 frames per second (fps)
- PAL 576i @ 25 fps
- 720p @ 25 / 29.97 / 30 / 59.94 / 60 fps
- 1080i @ 25 / 29.97 / 30 fps
- 1080p @ 23.98 / 24 / 25 / 29.97 / 30 fps
- 1080PsF @ 23.98 / 24 / 25 / 29.97 / 30 fps

Other Features

- Less than one frame of video delay input to output
- Passes audio and embedded metadata
- Flash storage of user configuration, text fields and graphic elements
- User defined operation of DIP and toggle switch
- Frame Counter OSD
- JAVA software application for uploading graphics

Ordering Information

Part Number

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DX-2200-TI-24

SD/HD-SDI Text & Graphics Inserter with PIP OSD & SDI Loop Output

Sales Contacts

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