



# DX-2200-SW

## Dual-view 2x1 SDI Switcher

Supports: PIP, PAP, Split-screen & Text/Graphics OSD

### Overview

The Microtronix DX-2200 is a high-quality professional grade seamless 2x1 SD/HD-SDI video switcher supporting: dual-view alpha blended Picture-in-Picture (PIP); side-by-side Picture-and-Picture (PAP); split-screen and alpha blended text and graphic overlay on-screen display (OSD) and a Standby Switcher mode of operation.

The DX-2200 SDI Video Switcher is designed for: broadcast, professional camera recording systems and high-end surveillance applications requiring glitch-free video switching, OSD and dual-view display of two SD/HD-SDI video sources.

Two SDI outputs are provided: one for the switcher output 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.



### Features & Sample Displays

- Seamless/glitch free frame synchronous video switching between video inputs and across all modes of operation
  - Dual-view PIP, PAP and Split-Screen displays
  - 2x1 4.2.2 RGB SD/HD-SDI video switching
  - Digital Zoom: 28 steps of 0.25 from 1x to 8x
  - Auto detection of input video format
  - Alpha blended text & graphic overlay on screen display:
- Modes of operation:
    - ✓ 2x1 full-screen switcher
    - ✓ Alpha blended PIP
    - ✓ Dual display: side by side and vertically stacked PIP
    - ✓ Split-screen display
  - Auto Standby Switching: output switches to active input on signal loss



**Alpha Blended PiP**



**Digital Zoom PIP**



**Dual-view side-by-side**



**Available Text Sizes for OSD**

# Technical Specifications

## Description

Designed to operate with non-synchronous video sources, Microtronix proprietary frame synchronous switching IP ensures seamless, glitch-free video output whether: switching between inputs, swapping inputs for PIP display, or when switching modes of operation between PIP, Side-by-Side (Picture-and-Picture) dual display or Split-Screen display. Switching occurs between frames for progressive video and between fields for interlaced video. The unit supports most standard interlaced, progressive and Progressive segmented Frame (PsF) video formats.

The unit is controlled either manually using a toggle switch and a 4-position DIP switch or dynamically under the control of a computer via RS-232 Serial Control Port commands. The size and position of the PIP window is fully configurable via the Serial Control Port. Additional serial commands provide for: alpha blending of PIP video and text/graphics OSD, multi-function switching transitions, dynamic text overlay (with color, size and position control), drawing of straight lines/rectangles and digital zoom of the video inputs. The user also has the option to re-assign the use of switches to support custom modes of operation.

## Hardware Features



- RS-232 Serial Control Port
- Two 75Ω SD/HD SDI inputs
- One 75Ω SD/HD SDI switcher output

- One 75Ω SD/HD SDI pass-thru output
- Power: 12VDC @ 1.0A from 120/240VAC adapter
- Dimensions: (D x W x H) 5.5" x 7.25" x 1.625"

## 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 / 1080PsF @ 23.98 / 24 / 25 / 29.97 / 30 fps

### Other Features

- On-screen frame counter
- Alpha blended wipe/video switching transitions
- Supports up to 48 independent text & graphic fields
- Configurable background color
- Text size, color, and position control
- JAVA software application for uploading graphics

## Ordering Information

| Part Number   | Description                            |
|---------------|--|
| DX-2200-SW-02 | Dual-view 2x1 SD/HD-SDI Video Switcher |

## Sales Contacts

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NOTE: This product does not support metadata and embedded audio.

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