



# LEI-504

## 3G HD/SD-SDI & ASI 4x1 Switcher



The LEI-504 is a four input video switcher that provides a convenient, low cost way to route high definition and standard definition serial digital signals. It is a Multi Definition (MD) SDI 4X1 video switcher capable of equalizing and reclocking all common serial digital signals, since it supports both standard definition and high definition signals, this makes it the ideal SD/HD/3G video switcher for any application. This switcher is compatible with 270Mb/s, 1.5Gb/s, and 3Gb/s Serial Digital Interface signals and can also be used for ASI and SMPTE 310M (19.4Mb/s) signals. The re-clocking will automatically be turned off when used for ASI and SMPTE signals.

### Automatic Equalization and Re-Clocking

The unit automatically equalizes the incoming SDI signal, compensating for greater than 1000 feet of cable at 270Mbps, greater than 250 feet of cable at 1.485Gbps, and greater than 100 feet of cable at 2.97Gbps. The signal is then re-clocked, with automatic rate detection for all popular data rates. The LEDs on the front panel will indicate the data rate of the output video.

### Vertical Interval Switching

The LEI-504's versatility is illustrated by its ability to switch from SD to HD, SD to 3G, HD to 3G, and vice versa. Another unique feature of this unit is its ability to vertical interval switch when the inputs are synchronous. Vertical interval switching means that the switch takes place in the vertical interval of the video and no glitch will be seen in the active area of the video.

### Exceptional Technical Support

The LEI-504 Closed Caption Decoder is backed by the Link Electronics standard 10-year warranty and 24/7 free customer support. It meets the innovative, high performance, flexibility, and reliability requirements of all Link Electronics products.

## Features

- 4 X 1 Switcher
- SD/HD/3G A&B SDI
- Automatic Equalization
- Automatic Re-Clocking
- Vertical Interval Switching with

- Inputs in Sync
  - Input rates from 270 MB/S to 3 GB/S
  - ASI and SMPTE 310 Compatible

- Signal Locked LED
- Passes Embedded Audio
- Rate Detect LEDs



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### Signal Digital Interface Input:

Number of Inputs:	4
Connector:	BNC
Impedance:	75 ohms
Data rates:	270 Mb/s, 1.48Gb/s, 3Gb/s
SMPTE standards:	259 M, 292 M, and 424 M
DC offset:	0.5V maximum
Signal level:	800mv $\pm$ 10%
Input Cable Length Max:	
SD @ 270Mb/s:	1000 feet
HD @ 1.485Gb/s:	250 feet
3G @ 2.97Gb/s:	100 feet

### Serial Digital Interface Outputs:

Number of outputs:	One (1)
Connector:	BNC
Impedance:	75 $\Omega$
Format:	Follows Input
Signal Level:	800mVp-p $\pm$ 10%
DC Offset:	$\pm$ 100mV
Jitter Improvement:	5%
Additive Jitter:	
SD @ 270 Mb/s:	16ps pp, Typical
HD @ 1.48 Gb/s:	20ps pp, Typical
3G @ 2.97 Gb/s:	22ps pp, Typical
Rise & Fall Time:	
HD:	220ps Max
SD:	800ps Max
Overshoot:	8% of Amplitude

### Front Controls & Indicators:

Input Selection:	Four momentary switches with LEDs
Re-clocker Locked:	Bi-Color LED
SD Rate Detect:	Green LED
HD Rate Detect:	Green LED
3G Rate Detect:	Green LED

### Environment/Power (PWT-400):

Temperature:	0° to 50°C Ambient
Humidity:	0% to 90% non-condensing
Power:	5 Watts
Voltage:	5VDC
Adapter Voltage:	100-240VAC 50-60Hz

### Mechanical:

Height:	1.0 Inch.
Width:	5.5 Inch.
Length:	9.25 Inch.
Weight:	1.5 Lbs.



The manufacture reserves the right to change specifications without notice

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