

MicroVideo

HDK 300 serial digital keyer

Features

The Microvideo HDK 300 Digital Keyer allows captions or logos to be added to a background picture. They can be faded in and out with transitions initiated by GPI, RS232, front panel or TCP/IP. A mix function allows a fade between 2 sources so that it can also be used as a simple two channel fader. The Keyer is transparent to embedded audio and other ancillary data.

Preview output allows you to view the effect of adding the caption or logo before actually keying onto the main program output. The keyer module is housed in a 1U rack frame and works with all other Microvideo modules to provide a complete branding/video processing suite.

Internal processing is done to 12 bit resolution ensuring the highest quality of picture. The HDK 300 is transparent to embedded audio and VBI signals.

At a glance

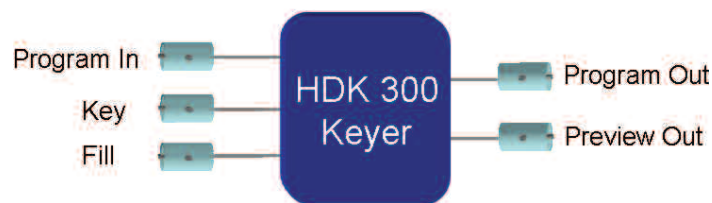
- HD-SDI or SD-SDI input
- Mix and additive modes provided
- Fade to black (with internally generated black screen)
- 12 bit processing for highest quality results
- Control of key, gain and offset
- Level triggered programmable GPIs
- Relay bypass maintains primary feed on loss of power
- Full control and status monitoring through card edge LED's
- Remote control and monitoring



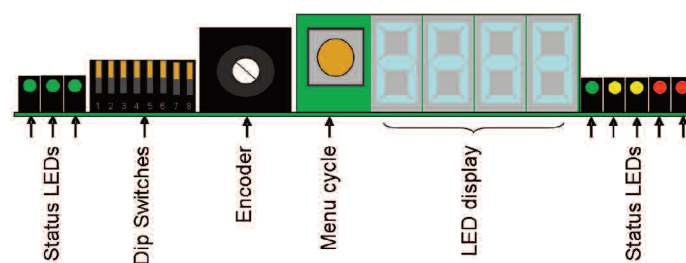
Applications

- production
- post production
- channel identification
- branding
- keying from external graphics generator

Block Diagram



Card-edge Controls



Rear module



Input

SD/HD Serial Video Standard	SMPTE 425M (3Gb/s) SMPTE 259M (270Mb/s) SMPTE 292M (1.5Gb/s) up to 1080p/60
Number of Inputs	Program, Key, Fill
Equalization	Automatic to 75m @ 1.5Gb/s with Belden 1694A or equivalent cable.
Return Loss	> 10dB up to 3Gb/s, >15dB up to 1.5Gb/s

Output

HD Serial Video Standard	As per input
Number of Outputs	Program, Preview
Signal Level	800mV nominal
DC Offset	0V \pm 0.5V
Rise and Fall Time	90ps nominal for HD 3Gb/s, 600ps nominal for SD 270Mb/s
Overshoot	< 10% of amplitude
Return Loss	> 10dB up to 3Gb/s, > 15dB up to 1.5Gb/s
Wideband Jitter	< 0.2UI

Miscellaneous

Weight Approx	175g
Operating Temp	0 °C to +50 °C ambient
Dimensions	16 x 100 x 237 mm (HxWxD)
Electrical	Voltage +5Vdc

Frames

FR1U-10	Rack mounting 1U frame with single PSU and 6 slots for Series 300 cards
FR1U-20	Rack mounting 1U frame with dual PSU and 4 slots for Series 300 cards
FR3U-10	Rack mounting 3U frame with single PSU and 15 slots for Series 300 cards
FR3U-20	Rack mounting 3U frame with dual PSU and 15 slots for Series 300 cards