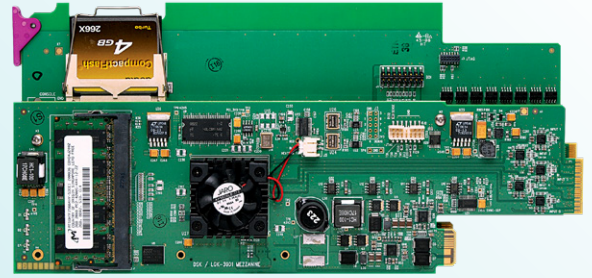


DSK-3901

3G/HD/SD

Downstream

Keyer



Promote your brand and efficiently deliver your channels.

The Densité® DSK-3901 from Grass Valley® is a low-cost, modular downstream keyer, with two independent pairs of fill and key inputs. This 3G/HD/SD keyer is ideal for inserting two external character generator feeds over program video. Up to 10 channels of keying can be housed in a single 3 RU Densité 3 frame.

An integrated audio mixer provides eight-channel voiceovers, as well as audio clip storage and payout. Background audio is automatically ducked during voiceovers. Audio can be accepted as embedded audio or as four external AES inputs. The audio mixer features separate processing for the program and the preview chains.

A dedicated full preview channel offers an operator the option to feed the same signal to the program and preview chains, or use a different signal for the preview chain using the Fill-2 input.

The DSK-3901 can be manually controlled by the Branding Panel, and under automation using the widely adopted Oxtel protocol.



The DSK-3901 channel branding processor provides dual fill and key inputs and eight channel audio voiceovers.

Key Features

- Downstream keyer with dual, independent fill and key inputs
- Independent preview output
- Module is housed in Densité 3 frame, with up to 10 cards (channels) per frame
- Supports 3G/HD/SD (1080p, 1080i, 720p, 576i, 480i, 59.94 Hz and 50 Hz)
- Uses widely adopted Oxtel automation protocol (Ethernet, RS-232/422)

- Manual control options, including Xpanel GUI, and GV Orbit® and iControl™ PC-based control
- Eight channel voiceover option available

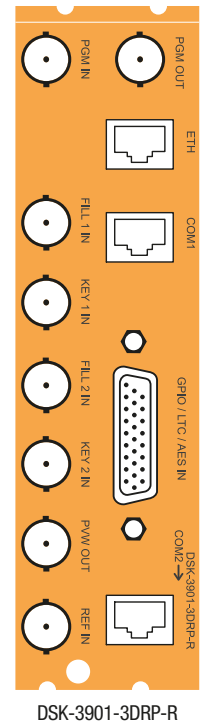
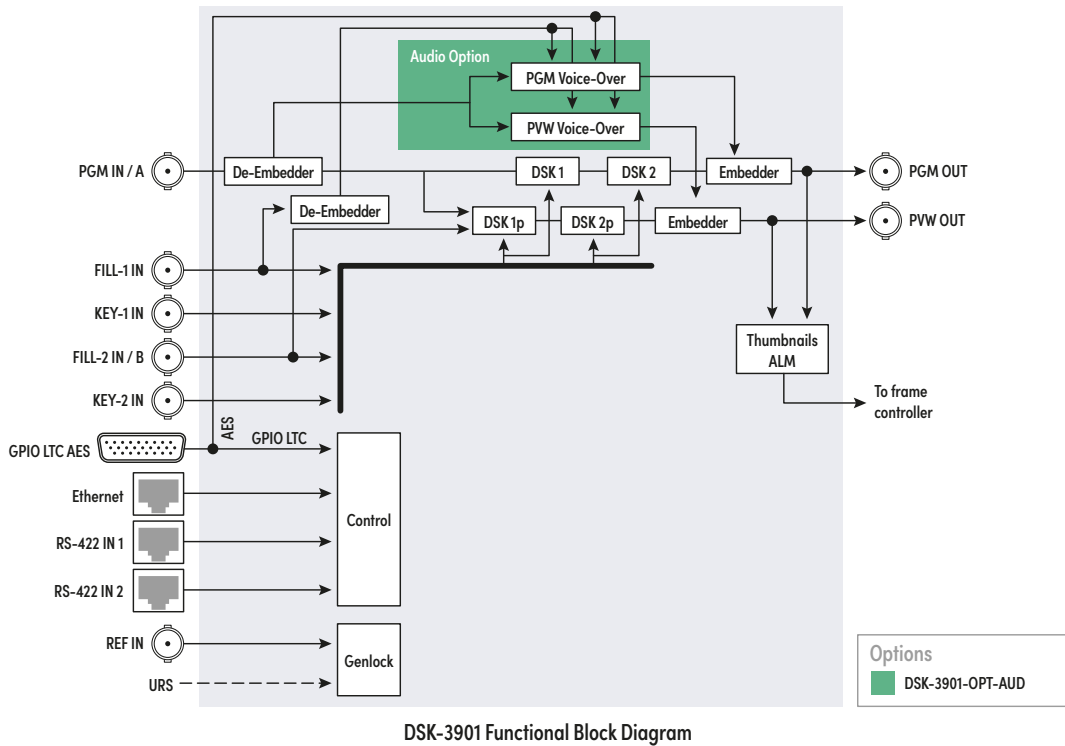
Robust design

- Compact flash memory for O/S
- Rugged Linux architecture
- Densité 3 frame offers redundant, hot-swappable power supplies

- Mechanical bypass of program input
- Easy diagnostics via Densité 3 front panel and GV Orbit or iControl monitoring and control systems

Comprehensive Densité range

- DSK-3901 can be easily combined with other Densité modules in the 3 RU frame, including routers, DAs, converters and monitoring modules



Specifications

Program and Fill And Key Inputs

Signal: 3G/HD/SD-SDI SMPTE ST 424, SMPTE ST 292, and SMPTE ST 259-C compliant

Supports data rates of 270, 1483.5, 1485, 2967, 2970 Mb/s

Cable length (Belden 1694A):

- 60m (180 ft.) at 3 Gb/s
- 120m (360 ft.) at 1.5 Gb/s
- 300m (1,000 ft.) at 270 Mb/s

Return loss*:

- >15 dB for up to 1.5 GHz
- >10 dB from 1.5 GHz to 3 GHz

Program and Preview Outputs

Signal: 3G/HD/SD-SDI SMPTE ST 424, SMPTE ST 292, and SMPTE ST 259-C compliant

Supports data rates of 270, 1483.5, 1485, 2967, 2970 Mb/s

Return loss*:

- >15 dB for up to 1.5 GHz
- >10 dB from 1.5 GHz to 3 GHz

Jitter (wideband):

- HD/SD: <0.2 UI
- 3 Gb/s: <0.3 UI

Reference Input

Signal:

- SMPTE ST 170/SMPTE ST 318/ITU 624-4/ BUT 470-6 or comp. sync
- SMPTE ST 274/SMPTE ST 296 tri-level sync

Return loss: >35 dB up to 5.75 MHz

Serial Control

Connector: RJ45

Signal: RS-232/RS-422

Data rate: 9600, 19200, 38400, 57600, 76800, 115200

Video Processing Performance

Signal path: 10 bits

Embedded Audio Processing Performance

Quantization: 20-24 bits

Sampling: 48 kHz, synchronous

Number of channels: 16, 4 groups

Electrical

Power: 25W

* Return loss figures may differ when signal is routed through the bypass relay.

Ordering

		Options	Description
DSK-3901	3G/HD/SD downstream keyer		
DSK-3901-SD	SD downstream keyer	DSK-3901-OPT-AUD	Audio voiceover option
DSK-3901-3DRP-R	Double rear connector panel	DSK-3901-HD-UPG	Upgrade from SD to 3G/HD for DSK-3901-SD
Housing frame	Description	DSK-3901-UPG	Upgrade to LGK-3901 channel branding processor
Densité 3 frame	Housing frame with (1) PSU (AC IN), (1) Ethernet controller with front control panel, blank rear panels	Remote control	GV Orbit, iControl, iControl Solo

This product may be protected by one or more patents. For further information, please visit: www.grassvalley.com/patents

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