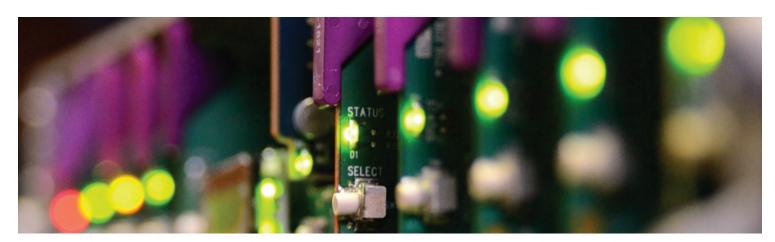


Datasheet

DSK-3901

3G/HD/SD Downstream Keyer





Promote your brand and efficiently deliver your channels.

The Densité DSK-3901 from Grass Valley, a Belden Brand, 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 playout. 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.





 $The \ DSK-3901 \ channel \ branding \ processor \ provides \ dual \ fill \ and \ key \ inputs \ and \ eight \ channel \ audio \ voice overs.$

www.grassvalley.com 1

KEY FEATURES

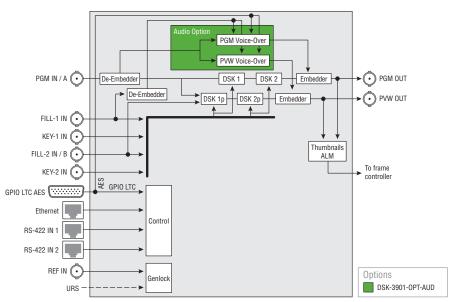
- · Downstream keyer with dual, independent fill and key inputs
- Independent preview output
- Module is housed in Densité 3 frame, with up to 10 cards (channels) per frame
- Supports 3G/HD/SD (1080p, 1080i, 720p, 576i, 480i, 59.94 Hz and 50 Hz)
- Uses widely adopted Oxtel automation protocol (Ethernet, RS-232/422)
- Manual control options, include Branding Panel, Xpanel GUI and iControl PC-based control
- Eight channel voiceover option available

Robust design

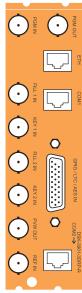
- · Compact flash memory for O/S
- · Rugged Linux architecture
- Densité 3 frame offers redundant, hot-swappable power supplies
- · Mechanical bypass of program input
- Easy diagnostics via Densité 3 front panel and iControl monitoring and control system

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



DSK-3901 Functional Block Diagram



DSK-3901-3DRP-R

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

DSK-3901 3G/HD/SD downstream keyer
DSK-3901-SD SD downstream keyer
DSK-3901-3DRP-R Double rear connector panel

Housing frame Description

Densité 3 frame Housing frame with (1) PSU (AC IN), (1) Ethernet controller with front control

panel, blank rear panels

Options Description

DSK-3901-OPT-AUD Audio voiceover option

DSK-3901-HD-UPG Upgrade from SD to 3G/HD for DSK-3901-SD Upgrade to LGK-3901 channel branding processor RCP-BR Branding panel remote control panel remote control

Remote control iControl, iControl Solo, RCP-200

GVB-1-0361B-EN-DS



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