

DSK-3901

3Gbps/HD/SD downstream keyer



The Densité DSK-3901 is a low cost, single card downstream keyer, with two independent pairs of fill and key inputs. This 3Gbps/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 3RU Densité 3 frame.

An integrated audio mixer provides eight channel voice-overs, as well as audio clip storage and playout. Background audio is automatically ducked during voice-overs. 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.

KEY FEATURES AND BENEFITS

Modular, 3Gbps / HD / SD downstream keyer

- > Single card 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 3Gbps/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 voice-over

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 & control system (see page 635)

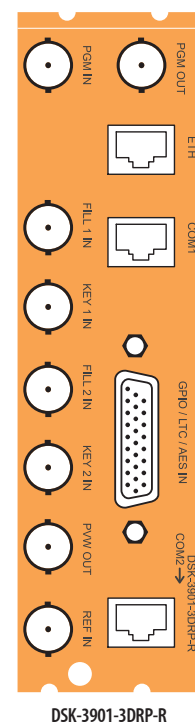
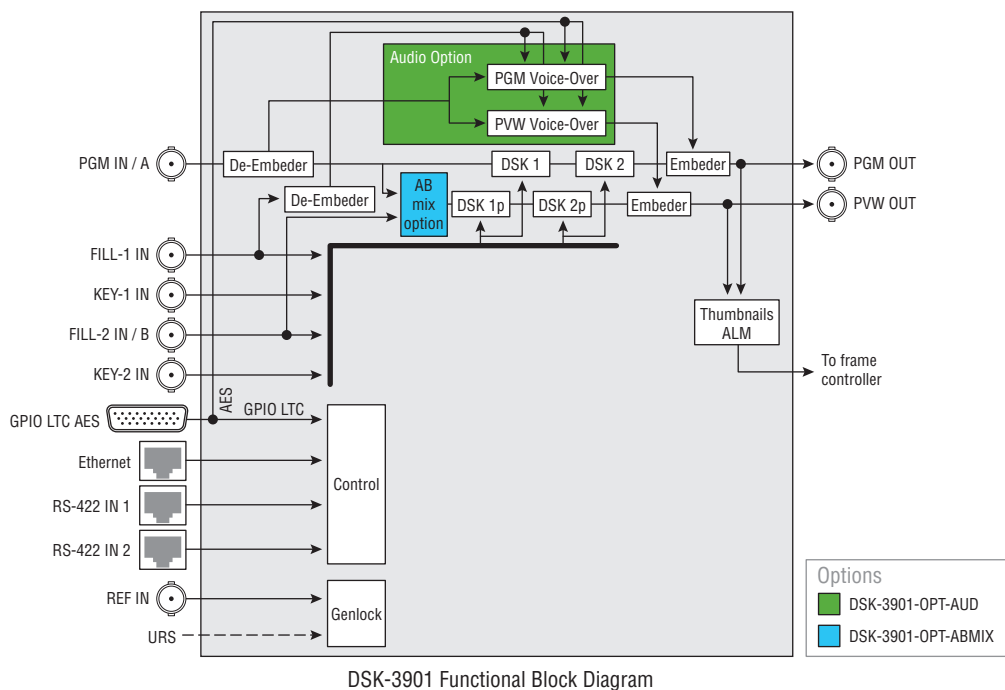
Comprehensive Densité range

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



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

Please refer to **Master control switching and channel branding** section for more information on the DSK-3901 (see page 465).



TECHNICAL SPECIFICATIONS

PROGRAM AND FILL/KEY INPUTS

Signal: 3G/HD/SD-SDI SMPTE 424M, 292M, and 259M-C compliant
Supports data rates of 270, 1483.5, 1485, 2967, 2970 Mbps

Cable length (Belden 1694A): 60 m (180') @ 3Gbps
120 m (360') @ 1.5Gbps
300 m (1000') @ 270 Mbps

Return loss *: >15 dB for up to 1.5 GHz
>10 dB from 1.5 GHz to 3 GHz
* Return loss figures may differ when signal is routed through the bypass relay

PROGRAM AND PREVIEW OUTPUTS

Signal: 3G/HD/SD-SDI SMPTE 424M, 292M, and 259M-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

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

Jitter (wideband): HD/SD: <0.2 UI
3Gbps: <0.3 UI

REFERENCE INPUT

Signal: SMPTE 170M/SMPTE 318M/ITU 624-4/ BUT 470-6 or comp. Sync
SMPTE 274M / SMPTE 296M tri-level sync

Return loss: >35 dB up to 5.75 MHz

SERIAL CONTROL

Connector: RJ-45
Signal: RS-232/422
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: 25 W



ORDERING INFORMATION

DSK-3901	3G/HD/SD downstream keyer
DSK-3901-SD	SD Downstream keyer
DSK-3901-3DRP	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
LGK-3901-OPT-AUD	Audio voice-over option
DSK-3901-OPT-ABMIX	AB mix option
DSK-3901-HD-UPG	Upgrade from SD to 3G/HD for DSK-3901-SD
DSK-3901-UPG	Upgrade to LGK-3901 channel branding processor
RCP-BR	Branding panel remote control panel

Remote control iControl, iControl Solo, Xpanel, RCP-BR, RCP-200 *

* For full list of supported cards, visit <http://www.miranda.com/RCP-200>