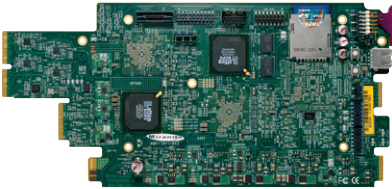
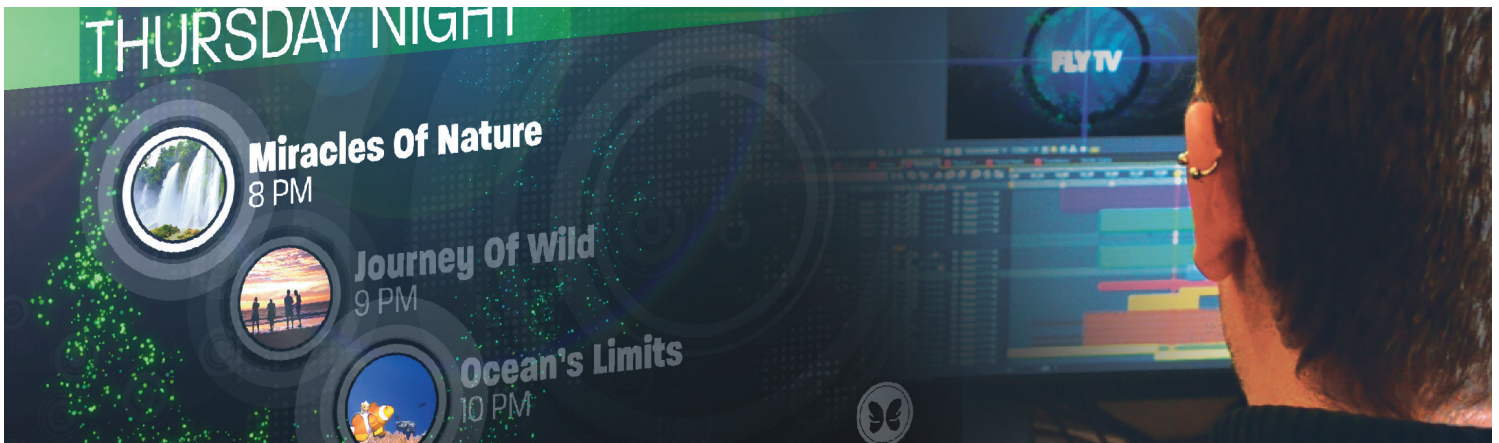


# LGK-3901

3G/HD/SD Channel Branding Processor



Promote your brand and efficiently deliver your channels.

The Densité LGK-3901 from Grass Valley, a Belden Brand, is a low cost, modular channel branding processor, capable of inserting up to five layers of graphics into 3G/HD/SD. Three of the keying layers can be fed by internally stored still/animated graphics, and two layers are fed by external graphics devices. It also offers character generation, clock insertion, EAS support and audio clip/voiceover playback. The LGK-3901 is ideal for pre-rendered graphics.

A template-based character generator can insert a crawl layer or a static (dynamically updated) text layer. High quality characters are output with 256 level anti-aliasing, with easy drop shadow and transparency control. Unicode characters in Truetype fonts, are available from 6 to 600 pixels, in any RGB color. The EAS option (U.S.) enables emergency text and voiceovers to be inserted (requires an A to D converter to provide AES input).

An optional video mixer that essentially converts the card into an Imagestore-Modular can be added, providing on-card A/B mix effects. The LGK-3901-ISM-UPG option allows video from A and B (PGM IN and FILL-2) sources to be mixed together, providing the background video source for the PGM keyers. The mixer can be configured to either cut or fade the video.

An optional integrated audio mixer provides eight channel voiceover/audio clip storage/playout. Background audio is automatically ducked during voiceovers. Audio can be accepted as embedded audio or by four external AES inputs.

The LGK-3901 can be used with the Vertigo Suite's work order management, graphics preparation, asset management and playout automation workflow tools. The Vertigo Suite streamlines graphics operations in localized and distributed environments, and contributes to lower costs, faster delivery and greater creativity.

# LGK-3901 3G/HD/SD Channel Branding Processor

## KEY FEATURES

### Modular, 3G/HD/SD branding processor

- Modular master control and branding processor
- 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, PresStation, Vertigo Xpanel GUI, and iControl PC-based control

### Multilayer channel branding

- Five independent keying layers: three can be fed by internally stored stills/animations, and two layers are fed by external graphics devices (dual fill and key inputs)
- Integral storage capacity of up to 4000 images/animations
- Independent preview output
- Automated character generation for static or data-driven text rendering and crawls
- In-vision digital/analog clock insertion (with CG option)
- Emergency Alert System (EAS) support (USA only)
- Multichannel voiceovers and audio clip playback\*
- Temperature sensor option

### Master control switching

- AB video mixing option, with 16 channel audio mixing (requires LGK-3901-ISM-UPG)\*
- X-fade, V-fade and asymmetric V-fade transitions

### Streamlined workflow

- Fully compatible with Vertigo branding graphics automation and asset management system for highly productive, cost-saving workflows
- Easy integration into a familiar After Effects based workflow, using the Vertigo After Effects plug-in

### Robust design

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

### Comprehensive Densité range

- LGK-3901 can be easily combined with other Densité modules in the 3 RU Densité frame, including signal processors, DAs, and multiviewers

\*Option

## 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 (196 ft.) at 3 Gb/s
- 120m (393 ft.) at 1.5 Gb/s
- 300m (984 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
- 3G: <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-232/422

**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

LGK-3901-4GB	3G/HD/SD logo inserter with 4 GB storage
LGK-3901-8GB	3G/HD/SD logo inserter with 8 GB storage
LGK-3901-16GB	3G/HD/SD logo inserter with 16 GB storage
LGK-3901-32GB	3G/HD/SD logo inserter with 32 GB storage
LGK-3901-4GB-SD	SD logo inserter with 4 GB storage
LGK-3901-8GB-SD	SD logo inserter with 8 GB storage
LGK-3901-3DRP-R	Double rear connector panel with bypass relay

### Housing frame

Densité 3 frame

### Description

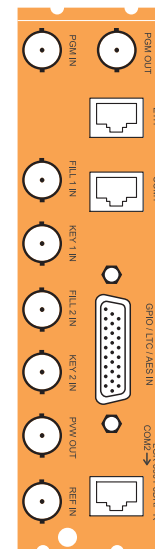
Housing frame with (1) PSU (AC IN), (1) Ethernet controller with front control panel, blank rear panels (up to 10 LGK-3901 processors per 3 RU frame)

### Options

LGK-3901-OPT-TXT	Easytext character generator (includes analog/digital clocks)
LGK-3901-OPT-EAS	EAS support – U.S. only
LGK-3901-OPT-AUD	Audio/voiceover option
LGK-3901-ISM-UPG	Option to upgrade to ISM
LGK-3901-OPT-TEMP	Temperature probe option
LGK-3901-8GB-UPG	Upgrade to 8 GB storage
LGK-3901-16GB-UPG	Upgrade to 16 GB storage
LGK-3901-32GB-UPG	Upgrade to 32 GB storage
LGK-3901-HD-UPG	Upgrade from SD to 3G/HD for LGK-3901-SD

Remote control

iControl, iControl Solo, Xpanel, RCP-BR, RCP-200



LGK-3901-3DRP-R



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