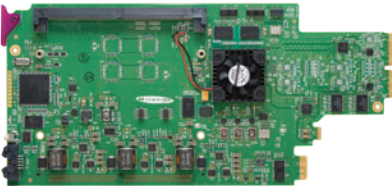
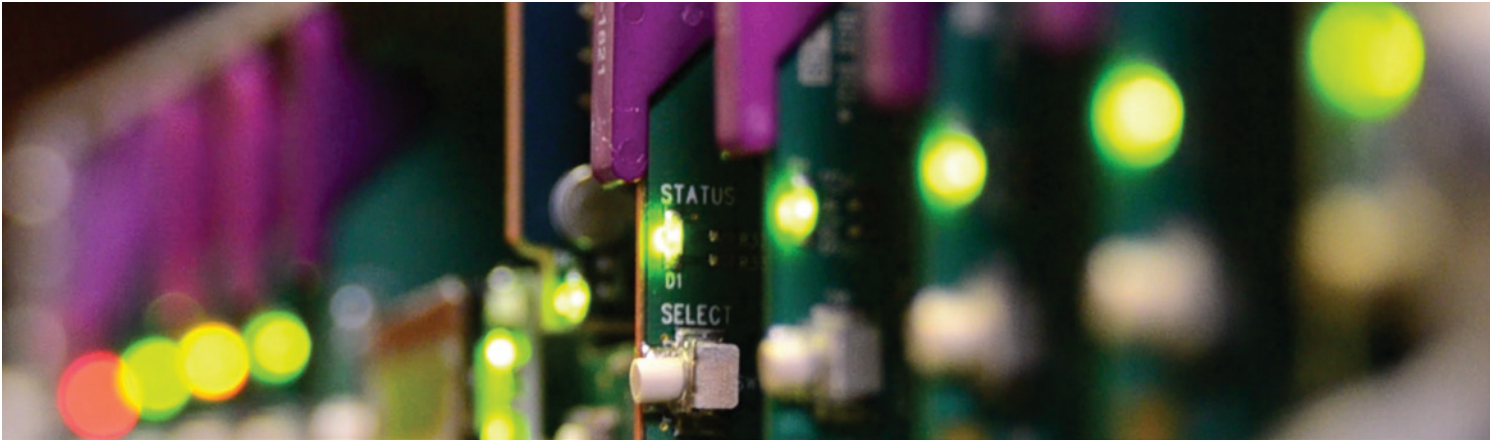


LNS-3901

3G/HD/SD Line Synchronizer



Space-saving, modular platform for advanced signal processing.

The LNS-3901 from Grass Valley, a Belden Brand, is a 3G/HD/SD line synchronizer capable of handling hot switches between sources of the same format and phased by less than 10 lines compared to the reference. The output timing can be programmed from $\frac{1}{2}$ to $10\frac{1}{2}$ lines after the 0H of the reference. The reference signal can be an analog blackburst, tri-level sync or the internal URS frame reference signal provided by the REF-1801.

The LNS-3901 is a very high density card. Up to 20 cards can fit in a Densité 3 frame. It is also a low cost solution to synchronize video signals at the output of a router and prevent downstream video glitches. Using the appropriate rear module, a bypass relay is available to automatically bypass the card's processing when the card loses power or if it is removed from the frame.

All card parameters and statuses can be controlled or monitored through iControl.



LNS-3901 3G/HD/SD Line Synchronizer

KEY FEATURES

- 3G/HD/SD input
- Supports 3 Gb/s level A and level B (dual link)
- Automatic detection of video input format
- Flexible external reference or internal URS frame reference input
- Clean output on video input “hot switches” within a 10-line window

- Output timing can be adjusted from ½ to 10½ lines after reference
- Automatic passthrough of all ancillary data, VBI and embedded audio
- Removes high and low frequency jitter out of the video signal
- Bypass relay on the -R rear module

SPECIFICATIONS

Video Input/Output

Signal:

- SMPTE-259M-C (270 Mb/s)
- SMPTE-292M (1.485, 1.485/1.001 Gb/s)
- SMPTE-424M (2.970, 2.970/1.001 Gb/s)

Supported formats:

- SD: 480i59.94, 576i50
- HD: SMPTE-274M: 1080i59.94, 1080i50
- HD: SMPTE-296M: 720p59.94, 720p50
- HD: 1080p23.98SF
- 3G: 1080p59.94, 1080p50
- SMPTE-425M level A, Level B (dual link)

Cable length*:

- 300m (984 ft.) Belden 1694A at 270 Mb/s
- 150m (492 ft.) Belden 1694A at 1.485 Gb/s
- 120m (393 ft.) Belden 1694A at 2.970 Gb/s

Return loss*:

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

Jitter:

- HD, SD: <0.2 UI
- 3G: <0.3 UI

Reference Input

Signal:

- SMPTE 170M / ITU 624-4 blackburst
- SMPTE 274M / SMPTE 296M tri-level sync

Video Processing Performance

Signal path: 10 bits

Latency:

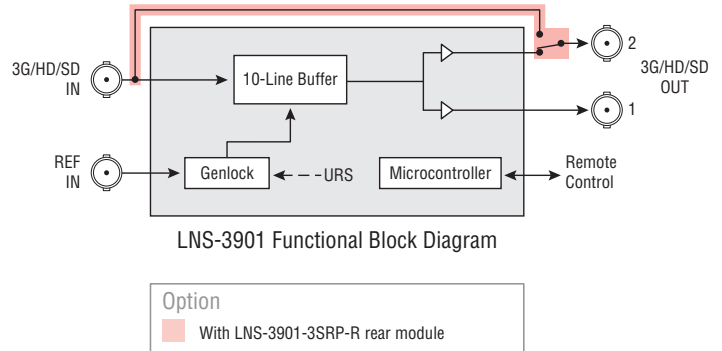
- SD: 7.4 μs
- HD: 2.7 μs
- 3G: 1.4 μs

Output timing relative to reference: From ½ line to 10½ line user selectable

Electrical

Power: 11W

* Cable length and return loss specifications will be reduced when using the second output of LNS-3901-3SRP-R rear connector panel.



ORDERING

Densité 3 frame

- LNS-3901
- LNS-3901-3SRP
- LNS-3901-3SRP-R

Housing Frame

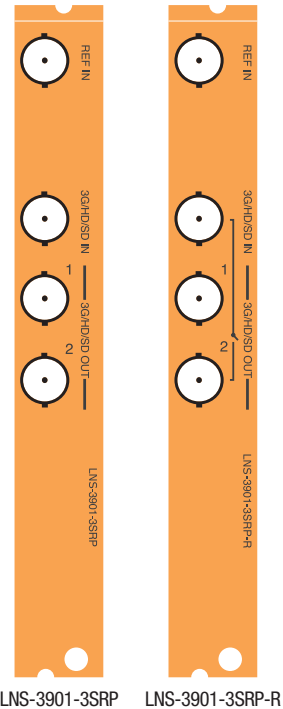
Remote control

Description

- 3G/HD/SD line synchronizer
- Single rear connector panel
- Single rear connector panel with relay bypass

Densité 3 frame

iControl, iControl Solo



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GVB-1-0401B-EN-DS