

LNS-3901 – Upgrade Package 9.1.3

UPGRADE PACKAGE RELEASE HISTORY

Release Version	Comprising:		Release Date	Version Details	User Manual for this release (Grass Valley document #)
	Firmware Version	Software Version			
9.0.0	9.0.0	9.0.0	2014.07.04	(go)	M932-9400-111
9.1.0	9.1.0	9.1.0	2015.01.15		M932-9400-111
9.1.1	9.1.1	9.1.1	2015.02.11		M932-9400-111
9.1.2	9.1.2	9.1.2	2015.10.15		M932-9400-111
9.1.3	9.1.3	9.1.3	2017.06.19		M932-9400-111

NOTES: The iControl compatibilities shown below are officially supported by Grass Valley. Earlier versions may also work, with bugs or limited features.

The Reference number (Ref#) given for each feature or bug in these Release Notes refers to internal Grass Valley documentation.

UPGRADE PACKAGE: 9.1.3

Firmware version: 9.1.3 (CPU: Build 3, FPGA: Build 436)

Release date: 2017-06-17

iControl compatibility: 5.0 and later

iControl Solo compatibility: 6.0 and later

RCP-200 compatibility: Not supported

Hardware compatibility: This upgrade package applies to all existing hardware assemblies.

BUGS FIXED IN THIS RELEASE

Ref #	Description
LNS3901-93	3G-Level B output default delay is a little longer than other input formats. 3G-Level B DL output re-aligned with external NTSC and URS-29.97Hz references.
LNS3901-94	Changing the input signal format causes the horizontal delay value on I-Control returns to 0. A fix has been applied to properly reflect the displayed horizontal output delay with the actual output delay after a video format change.
LNS3901-95	3G-SDI Level A/B 1080p59.94, horizontal delay on I-Control is twice as much as the actual delay. A fix has been applied, for 3G-Level A and 3G-Level B DL, to properly display the programmed horizontal output delay with the actual output delay. The displayed horizontal timing is no longer displayed as 2x the output delay.

UPGRADE PACKAGE: 9.1.2

Release date: [2015-10-15](#)

iControl compatibility: [5.0 and later](#)

iControl Solo compatibility: [6.0 and later](#)

RCP-200 compatibility: [Not supported](#)

Hardware compatibility: [This upgrade package applies to all existing hardware assemblies.](#)

BUGS FIXED IN THIS RELEASE

Ref #	Description
LNS3901-88	Audio noise at output after a switch or format change. Noise remains. After a switch is executed, the produced audio no longer generates persistent noise and CRC errors.

UPGRADE PACKAGE: 9.1.1

Release date: [2015-02-11](#)

iControl compatibility: [5.0 and later](#)

iControl Solo compatibility: [6.0 and later](#)

RCP-200 compatibility: [Not supported](#)

Hardware compatibility: [This upgrade package applies to all existing hardware assemblies.](#)

ENHANCEMENTS & NEW FEATURES

Ref#	Description

BUGS FIXED IN THIS RELEASE

Ref #	Description
LNS3901-82	Enabling bypass relay issues an all clear to I-Control and front panel. The front panel and I-Control now indicate an error or carrier loss when bypass is enabled.
LNS3901-83	Disabling the Bypass function renders the output with a different format for 3G sources. The output format returns to the same format as the input.

KNOWN BUGS & LIMITATIONS

Ref #	Description
LNS3901-81	Removing input on rear with bypass relay may still assert a carrier detected. When a rear with the bypass relay is used and the input signal is physically removed or no signal is routed to the input, the LNS-3901 output video content may toggle between black and noise. This is due to a hardware limitation.

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UPGRADE PACKAGE: 9.1.0

Release date: 2015-01-15

iControl compatibility: 5.0 and later

iControl Solo compatibility: 6.0 and later

RCP-200 compatibility: Not supported

Hardware compatibility: This upgrade package applies to all existing hardware assemblies.

ENHANCEMENTS & NEW FEATURES

Ref#	Description
LNS3901-53	Add URS support for 1080i119Hz input. The 1080i119.88 3G-B (EVS XT) source now supports both NTSC and URS-59 reference sources.
LNS3901-49	Add support for URS and 10-field ID references To correctly synchronize a 1080p23sF/1080p23 output signal with a reference source, the 10-field sequence identifier, SMPTE-318, needs to be embedded within the reference. This identifier may be extracted from the URS-59 reference signal provided a REF-1801 is installed within the same frame and an analog NTSC reference signal, conforming to SMPTE-170M and which contains the SMPTE-318 10-field sequence identifier, is connected to it. This information instructs the card the timing relation between 59Hz and 23 Hz to ensure the output timing relative to the NTSC reference connected to the REF-1801 is always correctly timed. The LNS-3901 must be configured to use the internal URS reference signal derived from the REF-1801.

BUGS FIXED IN THIS RELEASE

Ref #	Description
LNS3901-51	Forward the VPID from the input to the output without modification Incoming VPID is transferred, without modification, to the output.
LNS3901-52	Output video vertical offset when input video is cycled. With any reference connected, removing and re-inserting the input video renders the output with a vertical offset. In addition, the output timing with respect to reference is way off. Only by cycling the reference, changing format, or changing output timing V/H would place the output correctly. This has been repaired.
LNS3901-62	3G-B Input timing off when 0H at input and faulty when beyond a few lines. The input 0H timing measurement for 3G-B and URS-59 has been realigned and measurement can now go beyond a few lines.
LNS3901-63	3G-B DL output not aligned with URS. There was a misalignment at the output with respect to URS. Field inverted. It is now repaired.
LNS3901-64	1080i119Hz Output not aligned with NTSC reference signal. The 1080i119Hz output is now properly aligned to the external NTSC and URS-59 reference sources.
LNS3901-67	3G-B output may sometimes unlock when switching at the input. When deglitching between 2 3G-B sources and, say, an NTSC reference, the output sometimes loses lock after a switch. This has been repaired.
LNS3901-79	Switching between HD sources with different VPID's causes content glitches. When switching between HD sources with different VPID's, the output video content glitches. This has been repaired.

KNOWN BUGS & LIMITATIONS

Ref #	Description
DSERV-922	<p>Scroll bar horizontal range may be out of spec for 1080p23sF.</p> <p>The H timing scroll bar for 1080p23sF may be out of range. It will show the previous format's range. The front panel menu does not exhibit this problem.</p>

UPGRADE PACKAGE: 9.0.0

Release date: 2014-07-04

iControl compatibility: 5.0 and later

iControl Solo compatibility: 6.0 and later

RCP-200 compatibility: Not supported

Hardware compatibility: This upgrade package applies to all existing hardware assemblies.

ENHANCEMENTS & NEW FEATURES

Ref#	Description
LNS3901-38	Implement support for Sony's 1080i119.88 format with as NTSC reference signal This new mode was implemented against Sony's camera HDC-2500 operating in 1080i119.88 3G-B (EVS XT). The VPID must be 0x8A 0x16 0x30 for the first three bytes.

BUGS FIXED IN THIS RELEASE

Ref #	Description

KNOWN BUGS & LIMITATIONS

Ref #	Description
LNS3901-40	Only an NTSC reference signal connected to the reference connector is supported for Sony's 1080i119.88 format. Under any other condition, a reference mismatch error will be reported to the user.

UPGRADE PACKAGE: 1.1.0

Release date: 2014-02-04

iControl compatibility: 5.0 and later

iControl Solo compatibility: 6.0 and later

RCP-200 compatibility: Not supported

Hardware compatibility: This upgrade package applies to all existing hardware assemblies.

ENHANCEMENTS & NEW FEATURES

Ref#	Description
	<p>Advanced programmable line synchronizer with low processing delay</p> <p>The LNS-3901 was designed to support hot switches between two inputs up to 10 lines apart. The output timing is programmable and can be set from 0.5 to 10.5 lines after the reference. The processing delay was optimized for all formats including 3G Level B-DL.</p>

BUGS FIXED IN THIS RELEASE

Ref #	Description

KNOWN BUGS & LIMITATIONS

Ref #	Description
LNS3901-10	<p>Limitation - 1080p23SF supported only with SMPTE 318 with URS</p> <p>To correctly synchronize a 1080p23SF input format with the reference, you have to use an NTSC black burst reference which has a SMPTE 318M information and connect it to the REF-1801. This information will tell the card the timing relation between 59Hz and 23 Hz to ensure all cards have exactly the same output timing. Without it, all 23pSF output will be synchronous, but they may have a different output timing adjustment. The cards must be configured to use the internal URS reference signal coming from the REF-1801 card.</p>