AMX-3981 – Upgrade Package

Upgrade Package Release History

Release Version	Comprising:		Release Date	Version Details	User Manual for this release (Grass Valley document #)
	Firmware Version	Software Version			
9.1.2	9.1.1	9.1.2	2017-06-19	(go)	922-99M00-310
9.1.1	9.1.0	9.1.1	2015-04-01	(go)	922-99M00-310

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: 9.1.2

Firmware version: 9.1.1 (CPU:307, FPGA:2054)

Release date: 2017-06-19

iControl compatibility: 5.00+

iControl Solo compatibility: 6.00+

RCP-200 compatibility: NA

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

BUGS FIXED IN THIS RELEASE

Ref #	Description
AMX3981-470	**3G-LB-DS Line 1123 Stream 2 is missing** The last active line of field 2 of stream 2 was set to black. With this firmware, the line is bypassed to the output.

KNOWN BUGS & LIMITATIONS

Ref#	Description
32645	**Output timing aligned only with URS** According to previous limitation document, we recommended using the URS and a REF-1801 with a black burst with SMPTE 318M reference for this project. The card will be correctly aligned when using the URS reference.
33018	**Support only audio and VANC/HANC in link A of 3G Level B Dual Stream** The EAP/AMX/ADX-3981 can only support 16-channel of embedded audio and HANC/VANC on the "Link A" stream. Therefore, the card will delete any audio or HANC/VANC present on link B and it will not be present at the output.
33187	**Freeze Type forced to black for 3G Level B Dual Stream** The AMX-3981 cards were not designed to handle two streams 1080i59Hz in a 3G Level B video input. Because the card does not know how to freeze an image with a dual stream, it will always freeze to a

	black image.
33621	**Audio modules won't work for 1080p23sF** Audio module won't work at this frame rate.
33570	**Dolby metadata won't work for 1080p23sF** We don't support Dolby E and dolby metadata at this frame rate.
33885	**HANC/VANC packets with 3G Level B Dual Link may appear on Link B** In 3G Level B Dual Link, the HANC/VANC packets (AFD, ATC, Dolby Metadata …) at the output of the card may sometimes appear either on Link A or on link B when the card conditions change (after power-up, hot switch, reference changes, etc…). This does not affect the operations with other Miranda cards which will detect the presence of those packets on both links.
33622	**Fingerprint won't work for 3G Level B Dual Stream and 1080p23sF** This feature is not supported for this format. For now, fingerprints have not been designed to work at all for that format.
33623	**Thumbnails not supported in 3G Level B Dual Stream.** The thumbnails will appear as a blur of the images between both links since the card is not able to separate Link A from Link B. Therefore, it is not fully supported although we still display them in iControl to show video motion and presence.
33624	**1080p29SF reported as 1080i59** The 1080 29pSF format is very similar to the 1080i 59Hz format in terms of TRS synchronization. Therefore, the cards will always report 1080i 59Hz in iControl regardless if 1080 29pSF or 1080i 59 Hz is present at the video input. There will be no other impacts or limitations on the card's processing.

PREVIOUS RELEASES

UPGRADE PACKAGE: 9.1.1

Firmware version: 9.1.0 (CPU:304, FPGA:2054)

Release date: 2015-04-01

iControl compatibility: 5.00+

iControl Solo compatibility: 6.00+

RCP-200 compatibility: NA

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

ENHANCEMENTS & NEW FEATURES

Ref#	Description
AMX3981-443	**Preserve incoming VPID** All VPID bytes of the video input shall be preserved in the video output for the following input formats: • 3G level A • 3G level B Dual-Link
AMX3981-451	**Loudness is no more an option (always enabled → free)**

BUGS FIXED IN THIS RELEASE

Ref #	Description
AMX3981-450	**Vertical timing adjustment in level B inverses field**
ADX3981-109	**Blank (unresponsive) UI panel with dual stream sources** After updating the card to version 910, the iControl panel opens blank: unable make any selection, the card is not responding. This occurs if the input is Dual Stream while the update is performed.

	WORKAROUND: Toggling input format will resolve the issues.

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FIRMWARE VERSION: 910 (MICRO:263, FPGA:2054)

Release date: 2014-10-31

iControl compatibility: 4.13 (build 039) and up

iControl Solo compatibility: 4.13 (build 39) and up

RCP-200 compatibility: 1.5.0 (build 771) and up

Hardware incompatibility: This firmware applies to all existing hardware assembly.

BUGS FIXED IN THIS RELEASE

Ref #	Description
AMX3981-439	**Link A/B inversion after output timing update on 1080p59.94/1080p50 level B Dual Link**

KNOWN BUGS & LIMITATIONS

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FIRMWARE VERSION: 910 (MICRO:256, FPGA:2054)

Release date: 2014-09-28

iControl compatibility: 4.13 (build 039) and up

iControl Solo compatibility: 4.13 (build 39) and up

RCP-200 compatibility: 1.5.0 (build 771) and up

Hardware incompatibility: This firmware applies to all existing hardware assembly.

BUGS FIXED IN THIS RELEASE

Ref #	Description
AMX3981-437	**Link A/B inversion on 1080p59.94/1080p50 level B Dual Link**

KNOWN BUGS & LIMITATIONS

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FIRMWARE VERSION: 910 (MICRO:255, FPGA:1824)

Release date: 2012-12-26

iControl compatibility: 4.13 (build 039) and up

iControl Solo compatibility: 4.13 (build 39) and up

RCP-200 compatibility: 1.5.0 (build 771) and up

Hardware incompatibility: This firmware applies to all existing hardware assembly.

BUGS FIXED IN THIS RELEASE

Ref #	Description
37776	**Switch line 1080p23sF**
37779	**3Gig VPID correction**
37933	**Video Actif offset on 1080p59.94 Level B**

ENHANCEMENTS & NEW FEATURES

Ref#	Description
33626	**Support new formats** Added support for 1080p23sF and 3G level B dual stream (2x1080i59)
33627	**Support SMPTE 318 with URS** To correctly synchronize a 1080p23SF input format with the reference, it is strongly recommended 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.

Release Notes

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