Release Notes

XIP-3901-UDC-IP

Release History

Release Version	Comprising:		Release Date	User Manual for this Release (Grass Valley Document #)
	Firmware Version	Software Version		
1.2.0	1.2.0.439	1.2.0	2020-09-03	13-03065-010 Rev. AJ
1.1.0	1.1.0.93	1.1.0	2020-07-17	13-03065-010 Rev. AH
1.0.1	1.0.1.414	1.0.1	2020-05-04	13-03065-010 Rev. AG
1.0.0	1.0.0.412	1.0.0	2020-04-27	13-03065-010 Rev. AG

NOTES: The iControl / GV Orbit 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: 1.2.0

Firmware version: 1.2.0 (CPU 1.2.0.439, FPGA 1.2.0.111)

Release date: 2020-09-03

GV Orbit: 1.0+

GV Convergent: 2.1.2

iControl compatibility:7.51+

iControl Solo compatibility: 7.51+

RCP-200 compatibility: N/A

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

Release type: Official release

ENHANCEMENTS & NEW FEATURES

Ref #	Description
XIPUDCIP-2278	**Default value for PTP announce interval changed to 1 second** Aligning the product with SMPTE recommended value.
XIPUDCIP-2276	**Additional PTP lock status** Better feedback to distinguish between a slaved PTP from a fully slaved and locked PTP that is respecting proper standard deviation.
XIPUDCIP-2247	**Default value for RGB gamut legalizer changed to disabled** Legalizer distorts, when enabled, some HDR configuration. e.g.: full range processing.

XIPUDCIP-2218	**Support of Metadata Type-1 DID** Type-1 DID (greater than 127) support. UI panel will gray the irrelevant SDID in this case.
XIPUDCIP-2132	**Video proxy output stream** In addition to video output stream 1, a “video proxy” output (video 2) offers a lower resolution intended for “auxiliary” destinations not requiring 12G, such as multiviewers and replay units. The proxy is available on Path 1 only.

BUG FIXES

Ref #	Description
XIPUDCIP-2307	**Timecode generator time zone selection may produce wrong offset** UTC+5 to UTC+14 are not producing the expected offset on output.
XIPUDCIP-2277	**Output video format cannot be change when video receiver is disabled** Invalid/corrupted output when output format changed without a valid input.
XIPUDCIP-2245	**OpenVas high issues (August data feeds)** Fixed all High priority issues: Mainly the embedded Jetty server needed for NMOS.
XIPUDCIP-2222	**Timecode still generated when no PTP present** An improper output timecode is generated at the output when not locked to PTP.
XIPUDCIP-2213	**PTP in "faulty state" occasionally** Problem with hardware transmission timestamp resulted in some peculiar condition which in turn may unlock the PTP slaved clock.
XIPUDCIP-2207	**Video sender in error after boot-up when associated receiver is disabled** No video output when no input video was ever seen on input since last boot-up.

Ref #	Description
XIPUDCIP-2187	**Receiver in error with some wide sender sources** Some 2110-21 compliant sources may not work.
XIPUDCIP-2158	**Receivers not working properly after disabling and re-enabling Ethernet interface.** Disabling (shutting down) an interface and re-enabling it does not restore previously active receivers.
XIPUDCIP-2107	**Audio output mixer and mixer does not work correctly after a factory default** Audio output mixer and mixer will not be configured properly after a factory default.
XIPUDCIP-2091	**UDC2 output audio1 ch1-2 phase incorrect after reboot** Very rarely, after a reboot, audio 1 ch1-2 phase may be incorrect.
XIPUDCIP-1606	**Toggling an audio receiver syntonize mode should force latency computation** When using audio group sync, enabling/disabling syntonize mode will refresh worst latency timing and resync all audio on it.
XIPUDCIP-1586	**Can't route Audio SMPTE ST 2110-31 through NMOS** Joining a 2110-31 stream through NMOS is not working. XIP-3901 falsely thinks the stream is 2110-30.

KNOWN BUGS

Ref #	Description
XIPUDCIP-2229	**Downmix LTRT audio may not be properly aligned with the original channels (video group sync).** Downmixing takes longer than the video processing time; thus making it impossible to properly compensate audio delay before its transmission.
XIPUDCIP-2212	**Selected Metadata DID/SDID processing may not work** VANC metadata might not be detected and/or passed properly.
XIPUDCIP-2209	**Metadata output stream latency discrepancy from video** ANC metadata alignment is late by 1 frame compared to video.
XIPUDCIP-2173	**No error reported with unmatched profile type (sender -30 to receiver -31)** According to audio profile and stream type, audio receiver may not flag unmatched sender-receiver error.
XIPUDCIP-2167	**Wrong primary on a duplicated stream pair not flagged as an error.** Duplicated receivers with redundancy will not flag an error if one of the duplicated pair changes its primary IP address to an invalid stream. Workaround: Always match primary and secondary for all streams, duplicated or not.
XIPUDCIP-2167	**Changing a duplicated stream to an invalid input ip address does not behave normally** Joining streams from the same address twice and then changing one of them to an invalid stream confuse the receiver: output still listen to the previous configuration. Workaround: stop all duplicated streams and restart them.

Ref #	Description
XIPUDCIP-2166	**Metadata configuration cannot be changed when 'Process' is selected** When a given DID/SDID is chosen with the process mode, it is unable to switch to another DID/SDID that doesn't support the process mode. Workaround: select pass or block before changing the metadata type
XIPUDCIP-2103	**Wrong NMOS registry status when ETH port is down or disabled** When the interface port managing NMOS fails, goes down, or is disabled, the NMOS registry keep reporting that the card is registered. Workaround: Set NMOS Mode to "OFF" and then to "IS-04 & IS-05" to refresh NMOS registration status.
XIPUDCIP-2089	**Outputs might be momentarily disturbed when enabling ETH1/2 Ports** When enabling ETH1 or ETH2, Outputs might be momentarily disturbed.
XIPUDCIP-1885	**Black arrow indicating multiple usage of the same IP stream does not behave normally** Joining streams from the same address twice will confuse the receiver if joining another address: black arrows, from the UI, will not accurately display the duplication. Workaround: stop all duplicated streams and restart them.
XIPUDCIP-1585	**Audio Receiver confused after trying to get out from "duplicated" mode.** Joining audio streams from the same address twice will confuse the audio receiver if joining another address. Workaround: Reboot card.

UPGRADE PACKAGE: 1.1.0

Firmware version: 1.1.0 (CPU 1.1.0.93, FPGA 1.1.0.58)

Release date: 2020-07-17

GV Orbit: 1.0+

GV Convergent: 2.1.2

iControl compatibility:7.51+

iControl Solo compatibility: 7.51+

RCP-200 compatibility: N/A

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

Release type: Official release

ENHANCEMENTS & NEW FEATURES

Ref #	Description
XIPUDCIP-1984	**Receivers support 23.98/29.97 video formats** Support the following new video formats: 1080p23.98, 1080p29.97, 2160p23.98 and 2160p29.97.
XIPUDCIP-1985	**Senders support 23.98/29.97 video formats** Support the following new video formats: 1080p23.98, 1080p29.97, 2160p23.98 and 2160p29.97.
XIPUDCIP-2061	**New video format conversions** Input-Output conversions which include: • 1080p23 to 1080i59, 1080p59, 2160p23 and 2160p59 • 1080p29 to 1080i59, 1080p59, 2160p29 and 2160p59 • 1080p59 to 1080p29 and 2160p29 • 2160p23 to 1080p23, 1080i59, 1080p59 and 2160p59 • 2160p29 to 1080p29, 1080i59, 1080p59 and 2160p59
XIPUDCIP-2060	**Output timecode follows video conversion** Input time code will be properly converted to match output video scan rate conversion.

XIPUDCIP-1990	**Adjustable level of video detail enhancement of the down-converter** Down-scaling of video resolution provides controls for Horizontal and Vertical detail enhancement.
XIPUDCIP-2032	**Video Gain, Black Level, Hue and Saturation & RGB Color Correction with Gamma** Video procamp: Master gain, Luma gain, Chroma gain, Black level and Hue adjustments. Color corrector: RGB Gain, Offset and Gamma adjustments.
XIPUDCIP-2030	**Adjustment of video signal levels to meet legal broadcast requirements** RGB gamut legalization can be activated to meet legal broadcast requirements.
XIPUDCIP-2031	**Manual / NMOS colorimetry of incoming video stream** Controls to manually specify the video colorimetry of the input video stream. NMOS operations will override the colorimetry with the one inside the SDP file when joining a new ST 2110-20 stream with IS-05.
XIPUDCIP-1987	**Timecode generator based on PTP and TLV** Generation of timecode metadata in the 2110-40 output stream based on the incoming LTC or on the PTP. ST 2059 PTP profile TLV management messages are also handled in order to handle time zone, jam sync and drop frame flag.

BUG FIXES

Ref #	Description
XIPUDCIP-2214	**Last few pixels on last line delayed by 1 frame** On some conversions, the last 16 pixels are from previous frame.
XIPUDCIP-2104	**Video/Metadata/Audio receivers might not start after a reboot.** If receivers were previously configured & enabled they might not join their stream upon a reboot on certain occasions.

Ref #	Description
XIPUDCIP-2095	**Buffer level adjustment is not accurate.** Buffer levels will not accurately follow the network tolerance adjustment.
XIPUDCIP-1994	**RTP timestamp can be wrong after boot-up** Output RTP timestamp are not in sync to PTP after a boot-up.
XIPUDCIP-1991	**FEC error counter** Changing FEC configuration might create a problem where the FEC error counter will count rapidly.
XIPUDCIP-1979	**JTNM ST-2110-31 test fails Level A test as 1ms/6ch is not supported** The SMPTE ST-2110-31 standards stipulate that all devices shall support Level A conformity which says 2, 4 and 6ch must be supported at 1ms packet time.
XIPUDCIP-1969	**JTNM IS-04 Test Suite fails** Fixed faulty tests. Only deprecated tests 13 and 14 are not supported.
XIPUDCIP-1963	**NMOS device label does not follow node label change** Device label of senders and receivers are not updated properly on NMOS label change.

KNOWN BUGS

Ref #	Description
XIPUDCIP-2229	**Downmix LTRT audio may not be properly aligned with the original channels (video group sync).** Downmixing takes longer than the video processing time; thus making it impossible to properly compensate audio delay before its transmission. Workaround: Add 1 or more video frame delay (Additional Frame Delay).
XIPUDCIP-2187	**Receiver in error with some wide sender sources** Some 2110-21 compliant sources may not work.
XIPUDCIP-2173	**No error reported with unmatched profile type (sender -30 to receiver -31)** According to audio profile and stream type, audio receiver may not flag unmatched sender-receiver error.
XIPUDCIP-2167	**Wrong primary on a duplicated stream pair not flagged as an error.** Duplicated receivers with redundancy will not flag an error if one of the duplicated pair changes its primary IP address to an invalid stream. Workaround: Always match primary and secondary for all streams, duplicated or not.
XIPUDCIP-2166	**Metadata configuration cannot be changed when 'Process' is selected** When a given DID/SDID is chosen with the process mode, it is unable to switch to another DID/SDID that doesn't support the process mode. Workaround: select pass or block before changing the metadata type
XIPUDCIP-2158	**Receivers not working properly after disabling and re-enabling Ethernet interface.** Disabling (shutting down) an interface and re-enabling it does not restore previously active receivers. Workaround: Restart all receivers

Ref #	Description
XIPUDCIP-2107	**Audio output mixer and mixer does not work correctly after a factory default** Audio output mixer and mixer will not be configured properly after a factory default. Workaround: Reboot card.
XIPUDCIP-2103	**Wrong NMOS registry status when ETH port is down or disabled** When the interface port managing NMOS fails, goes down, or is disabled, the NMOS registry keep reporting that the card is registered. Workaround: Set NMOS Mode to “OFF” and then to “IS-04 & IS-05” to refresh NMOS registration status.
XIPUDCIP-2091	**UDC2 output audio1 ch1-2 phase incorrect after reboot** Very rarely, after a reboot, audio 1 ch1-2 phase may be incorrect.
XIPUDCIP-2089	**Outputs might be momentarily disturbed when enabling ETH1/2 Ports** When enabling ETH1 or ETH2, Outputs might be momentarily disturbed.
XIPUDCIP-1586	**Can't route Audio SMPTE ST 2110-31 through NMOS** Joining a 2110-31 stream through NMOS is not working. XIP-3901 falsely thinks the stream is 2110-30. Workaround: Manually select 2110-31 operation through the control panel.
XIPUDCIP-1585	**Audio Receiver confused after trying to get out from DA mode.** Joining audio streams from the same address twice will confuse the audio receiver if joining another address. Workaround: Reboot card.

UPGRADE PACKAGE: 1.0.1

Firmware version: 1.0.1 (CPU 1.0.1.414, FPGA 1.0.0.287)

Release date: 2020-05-04

GV Orbit: 1.0+

GV Convergent: 2.1.2

iControl compatibility:7.51+

iControl Solo compatibility: 7.51+

RCP-200 compatibility: N/A

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

Release type: Official release

BUG FIXES

Ref #	Description
XIPUDCIP-2133	**NMOS IS-05 Audio and Metadata routing** Joining metadata or audio essence via NMOS IS-05 routing is not working as expected. IGMPv3 source and multicast IP address are not properly updated.

KNOWN BUGS

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XIPUDCIP-2107	**Audio output mixer and mixer does not work correctly after a factory default.** Audio output mixer and mixer will not be configured properly after a factory default. Workaround: Reboot card.

Ref #	Description
XIPUDCIP-2104	**Video/Metadata/Audio receivers might not start after a reboot.** If receivers where previously enabled they might not join any stream upon a reboot. Workaround: Manually stop and start each receivers / Reboot card.
XIPUDCIP-2103	**Wrong NMOS registry status when ETH port is down or disabled** When the interface port managing NMOS fails, goes down, or is disabled, the NMOS registry keep reporting that that the card is registered. Workaround: Set NMOS Mode to "OFF" and then to "IS-04 & IS-05" to refresh NMOS registration status.
XIPUDCIP-2095	**Buffer levels adjustment is not accurate.** Buffer levels will not accurately follow the network tolerance adjustment.
XIPUDCIP-2089	**Outputs might be momentarily disturbed when enabling ETH1/2 Ports** When enabling ETH1 or ETH2, Outputs might be momentarily disturbed.
XIPUDCIP-1991	**FEC error counter** Changing FEC configuration might create a problem where the FEC error counter will count rapidly. Workaround: Reboot card.
XIPUDCIP-1585	**Audio Receiver confused after trying to get out from DA mode.** Joining audio streams from the same address twice will confuse the audio receiver if joining another address. Workaround: Reboot card.

UPGRADE PACKAGE: 1.0.0

Firmware version: 1.0.0 (CPU 1.0.0.412, FPGA 1.0.0.287)

Release date: 2020-04-27

GV Orbit: 1.0+

GV Convergent: 2.1.2

iControl compatibility:7.51+

iControl Solo compatibility: 7.51+

RCP-200 compatibility: N/A

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

Release type: Official release

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Ref #	Description
XIPUDCIP-2107	**Audio output mixer and mixer does not work correctly after a factory default.** Audio output mixer and mixer will not be configured properly after a factory default. Workaround: Reboot card.
XIPUDCIP-2104	**Video/Metadata/Audio receivers might not start after a reboot.** If receivers where previously enabled they might not join any stream upon a reboot. Workaround: Manually stop and start each receivers / Reboot card.
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