

IPG-3901

RELEASE HISTORY

Release Version	Comprising:		Release Date rele	User Manual for this
	Firmware Version	Software Version		release (Grass Valley document #)
<u>1.4.1</u>	1.4.0	1.4.1	2017-03-17	M3036-9900-134
<u>1.4.0</u>	1.4.0	1.4.0	2017-03-17	M3036-9900-134
1.3.9	1.3.9	1.3.9	2017-03-17	M3036-9900-134
1.3.8	1.3.8	1.3.8	2017-01-30	M3036-9900-134
1.3.7	1.3.7	1.3.7	2017-01-13	M3036-9900-134
1.3.6	1.3.6	1.3.6	2016-11-25	M3036-9900-134
1.3.4	1.3.4	1.3.4	2016-10-04	M3036-9900-134
1.3.3	1.3.3	1.3.3	2016-08-24	M3036-9900-132
1.3.2	1.3.2	1.3.2	2016-07-07	M3036-9900-132
1.2.0	1.2.0	1.2.0	2016-04-29	M3036-9900-120
1.1.0	1.1.0	1.1.0	2016-02-26	M3036-9900-110
1.0.3	1.0.3	1.0.0	2015-12-07	M3036-9900-100
1.0.2	1.0.2	1.0.0	2015-11-13	M3036-9900-100
1.0.1	1.0.1	1.0.0	2015-08-31	M3036-9900-100

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: 1.4.1

Firmware version: 1.4.0 (CPU 4; FPGA ENC&ENC 203; FPGA DEC&DEC 204; FPGA ENC&DEC 202)

Release date: 2017-12-13 iControl compatibility: 7.10+

iControl Solo compatibility: 7.10+

RCP-200 compatibility: NA

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

Release type: General Availability.

BUGFIXES

Ref#	Description
	Make available for General public
	Remove previous limitation where only the "1920x1080@50i" format was supported.

Ref#	Description	
STAR-2710	Invalid format reported in the "Gateway Status" panel for TICO Decoders After a reboot, the format of signals going into TICO decoders may be reported as "Invalid format".	
STAR-2396	SDI output may glitch when IP Streams are enabled/disabled when the card is unreferenced Unreferenced, SDI output may glitch if new IP Streams are enabled or existing IP streams are disabled/enabled Workaround: Lock the IPG-3901 on the external reference or URS	
STAR-2442	Source Specific Multicast not working in iGMPv3 The iGMPv3 Source Specific Multicast is not working Workaround: Use iGMPv3 any source	
STAR-1950	4K output links take too much time to stabilize without a reference When enabling TICO 1 - DEC or TICO 2 - DEC gateway without a reference the 4K output links will take over 5 minutes to get stable. Workaround: use a reference, black burst or URS	



	Gateways missing on KMX-3901-IN-IP-D-3+TRP
DSERV-2161	With the KMX-3901-IN-IP-D-3+TRP rear, gateway MV IN 7 and MV IN 8 are missing
STAR-1749	Factory default may not reset all parameters Factory default is not resetting all the parameters and this is an issue only when "Card parameters" and "Network settings" are selected together for a factory default. Workaround: Apply the factory on the "Card parameters" first followed by "Network settings"
STAR-1703	Loading a profile may take 5 seconds When loading a previously saved profile from disk, it may take up to 5 seconds to bring certain parameters (including TICO gateway enable) to appear on the screen correctly.
STAR-1754	DUM Upgrade works only from 1.2.0 to a newer version Using Densite Upgrade Manager (DUM), we can upgrade from v1.2.0 to newer versions including 1.3.1. But we can't downgrade to older version including 1.2.0 after this upgrade. Workaround: Users looking to downgrade to version lesser than 1.2 can still use manually update the SD card to the required versions. To upgrade the SD card, refer to the manual
STAR-1755	Firmware upgrade through iControl Densite Upgrade Manager (DUM) need iControl Solo and an FTP connection to IPG-3901 ETH1 The firmware upgrade using DUM requires FTP connection through IPG-3901 ETH1 and an iControl Solo. Users should have this iControl solo installed on a machine that is connected to the media switch. The upgrade will go through the switch from iControl solo to the IPG-3901 ETH1. Refer to Annex 1 at manual.
DSERV-2031	<pre>IPG-3901 incompatibility problem with XIO-4901 Up to v1.2.0, IPG-3901 iControl service panel will not work simultaneously with XIO-4901 service panel. Workaround: Users should update the IPG-3901 to version 1.3.2 or higher & also should ensure that the latest XIO-4901 service is installed in the iControl platform to get IPG-3901 to work simultaneously with XIO-4901</pre>



UPGRADE PACKAGE: 1.4.0

Firmware version: 1.4.0 (CPU 4; FPGA ENC&ENC 203; FPGA DEC&DEC 204; FPGA ENC&DEC 202)

Release date: 2017-09-28 iControl compatibility: 7.10+

iControl Solo compatibility: 7.10+

RCP-200 compatibility: NA

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

Release type: Limited functionality. See "LIMITATIONS" below.

BUGFIXES

Ref#	Description
STAR- 3138	SMPTE 2022-6 flagged Outgoing SMPTE 2022-6 streams are flagged as synchronized

Ref#	Description	
LIMITATIONS	*** Only 1920x1080@50i format is supported ***	
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STAR-2396	SDI output may glitch when IP Streams are enabled/disabled when the card is unreferenced Unreferenced, SDI output may glitch if new IP Streams are enabled or existing IP streams are disabled/enabled Workaround: Lock the IPG-3901 on the external reference or URS	
STAR-2442	Source Specific Multicast not working in iGMPv3 The iGMPv3 Source Specific Multicast is not working Workaround: Use iGMPv3 any source	
STAR-1950	4K output links take too much time to stabilize without a reference When enabling TICO 1 - DEC or TICO 2 - DEC gateway without a reference the 4K output links will take over 5 minutes to get stable.	



	Workaround : use a reference, black burst or URS
DSERV-2161	Gateways missing on KMX-3901-IN-IP-D-3+TRP With the KMX-3901-IN-IP-D-3+TRP rear, gateway MV IN 7 and MV IN 8 are missing
STAR-1749	Factory default may not reset all parameters Factory default is not resetting all the parameters and this is an issue only when "Card parameters" and "Network settings" are selected together for a factory default. Workaround: Apply the factory on the "Card parameters" first followed by "Network settings"
STAR-1703	Loading a profile may take 5 seconds When loading a previously saved profile from disk, it may take up to 5 seconds to bring certain parameters (including TICO gateway enable) to appear on the screen correctly.
STAR-1754	DUM Upgrade works only from 1.2.0 to a newer version Using Densite Upgrade Manager (DUM), we can upgrade from v1.2.0 to newer versions including 1.3.1. But we can't downgrade to older version including 1.2.0 after this upgrade. Workaround: Users looking to downgrade to version lesser than 1.2 can still use manually update the SD card to the required versions. To upgrade the SD card, refer to the manual
STAR-1755	Firmware upgrade through iControl Densite Upgrade Manager (DUM) need iControl Solo and an FTP connection to IPG-3901 ETH1 The firmware upgrade using DUM requires FTP connection through IPG-3901 ETH1 and an iControl Solo. Users should have this iControl solo installed on a machine that is connected to the media switch. The upgrade will go through the switch from iControl solo to the IPG-3901 ETH1. Refer to Annex 1 at manual.
DSERV-2031	<pre>IPG-3901 incompatibility problem with XIO-4901 Up to v1.2.0, IPG-3901 iControl service panel will not work simultaneously with XIO-4901 service panel. Workaround: Users should update the IPG-3901 to version 1.3.2 or higher & also should ensure that the latest XIO-4901 service is installed in the iControl platform to get IPG-3901 to work simultaneously with XIO-4901</pre>



UPGRADE PACKAGE: 1.3.9

Firmware version: 1.3.9 (CPU 51; FPGA ENC&ENC 196; FPGA DEC&DEC 197; FPGA ENC&DEC 198)

Release date: 2017-03-17 iControl compatibility: 7.10+

iControl Solo compatibility: 7.10+

RCP-200 compatibility: NA

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

Release type: Limited functionality. See "LIMITATIONS" below.

BUGFIXES

Ref#	Description
STAR- 2480	On boot, there is a risk that one or both ETH ports are not working The probability of happening is about 4%. Workaround: Reboot the card.
STAR- 2624	Software crash after several reboots The card is unusable when in that case. The probability of happening varies but reported approximately as one at every 60 boots. Workaround: Reboot the card.

Ref#	Description	
LIMITATIONS	*** Only 1920x1080@50i format is supported ***	
STAR-2710	Invalid format reported in the "Gateway Status" panel for TICO Decoders After a reboot, the format of signals going into TICO decoders may be reported as "Invalid format".	
STAR-2396	SDI output may glitch when IP Streams are enabled/disabled when the card is unreferenced Unreferenced, SDI output may glitch if new IP Streams are enabled or existing IP streams are disabled/enabled Workaround: Lock the IPG-3901 on the external reference or URS	
STAR-2442	Source Specific Multicast not working in iGMPv3	



	The iGMPv3 Source Specific Multicast is not working Workaround: Use iGMPv3 any source
STAR-1950	4K output links take too much time to stabilize without a reference When enabling TICO 1 - DEC or TICO 2 - DEC gateway without a reference the 4K output links will take over 5 minutes to get stable. Workaround: use a reference, black burst or URS
DSERV-2161	Gateways missing on KMX-3901-IN-IP-D-3+TRP With the KMX-3901-IN-IP-D-3+TRP rear, gateway MV IN 7 and MV IN 8 are missing
STAR-1749	Factory default may not reset all parameters Factory default is not resetting all the parameters and this is an issue only when "Card parameters" and "Network settings" are selected together for a factory default. Workaround: Apply the factory on the "Card parameters" first followed by "Network settings"
STAR-1703	Loading a profile may take 5 seconds When loading a previously saved profile from disk, it may take up to 5 seconds to bring certain parameters (including TICO gateway enable) to appear on the screen correctly.
STAR-1754	DUM Upgrade works only from 1.2.0 to a newer version Using Densite Upgrade Manager (DUM), we can upgrade from v1.2.0 to newer versions including 1.3.1. But we can't downgrade to older version including 1.2.0 after this upgrade. Workaround: Users looking to downgrade to version lesser than 1.2 can still use manually update the SD card to the required versions. To upgrade the SD card, refer to the manual
STAR-1755	Firmware upgrade through iControl Densite Upgrade Manager (DUM) need iControl Solo and an FTP connection to IPG-3901 ETH1 The firmware upgrade using DUM requires FTP connection through IPG-3901 ETH1 and an iControl Solo. Users should have this iControl solo installed on a machine that is connected to the media switch. The upgrade will go through the switch from iControl solo to the IPG-3901 ETH1. Refer to Annex 1 at manual.
DSERV-2031	IPG-3901 incompatibility problem with XIO-4901 Up to v1.2.0, IPG-3901 iControl service panel will not work simultaneously with XIO-4901 service panel.



 $\underline{\text{Workaround}}$: Users should update the IPG-3901 to version 1.3.2 or higher & also should ensure that the latest XIO-4901 service is installed in the iControl platform to get IPG-3901 to work simultaneously with XIO-4901



UPGRADE PACKAGE: 1.3.8

Firmware version: 1.3.8 (CPU 48; FPGA ENC&ENC 186; FPGA DEC&DEC 188; FPGA ENC&DEC 185)

Release date: 2017-01-30 iControl compatibility: 7.10+

iControl Solo compatibility: 7.10+

RCP-200 compatibility: NA

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

Release type: Limited functionality. See "LIMITATIONS" below.

BUGFIXES

Ref#	Description	
	SDI In 1 appears to be stuck as an OUTPUT	
STAR- 2503	The customer has an IPG, where the "SDI In 1" is showing the directional arrow as being an SDI output. The customer is unable to make the change to push it back.	
	This issue occurs because the direction has been changed through the REST API and the card allowed it. But through the iControl interface, the illegal directions are prevented.	

Ref#	Description	
LIMITATIONS	*** Only 1920x1080@50i format is supported ***	
STAR-2480	On boot, there is a risk that one or more of the ETH ports do not start up Customer has 160-190 IPG-3901 cards. On each startup of their truck, they find between that 4 to 6 IPG cards have failed to start the network connectivity. By reseating the IPG card, they find the network interface starts up.	
STAR-2396	STAR-2396 SDI output may glitch when IP Streams are enabled/disabled when the card is unreferenced Unreferenced, SDI output may glitch if new IP Streams are enabled or existing IP streams are disabled/enabled Workaround: Lock the IPG-3901 on the external reference or URS	



STAR-2442	Source Specific Multicast not working in iGMPv3 The iGMPv3 Source Specific Multicast is not working Workaround: Use iGMPv3 any source
STAR-1950	4K output links take too much time to stabilize without a reference When enabling TICO 1 - DEC or TICO 2 - DEC gateway without a reference the 4K output links will take over 5 minutes to get stable. Workaround: use a reference, black burst or URS
DSERV-2161	Gateways missing on KMX-3901-IN-IP-D-3+TRP With the KMX-3901-IN-IP-D-3+TRP rear, gateway MV IN 7 and MV IN 8 are missing
STAR-1749	Factory default may not reset all parameters Factory default is not resetting all the parameters and this is an issue only when "Card parameters" and "Network settings" are selected together for a factory default. Workaround: Apply the factory on the "Card parameters" first followed by "Network settings"
STAR-1703	Loading a profile may take 5 seconds When loading a previously saved profile from disk, it may take up to 5 seconds to bring certain parameters (including TICO gateway enable) to appear on the screen correctly.
STAR-1754	DUM Upgrade works only from 1.2.0 to a newer version Using Densite Upgrade Manager (DUM), we can upgrade from v1.2.0 to newer versions including 1.3.1. But we can't downgrade to older version including 1.2.0 after this upgrade. Workaround: Users looking to downgrade to version lesser than 1.2 can still use manually update the SD card to the required versions. To upgrade the SD card, refer to the manual
STAR-1755	Firmware upgrade through iControl Densite Upgrade Manager (DUM) need iControl Solo and an FTP connection to IPG-3901 ETH1 The firmware upgrade using DUM requires FTP connection through IPG-3901 ETH1 and an iControl Solo. Users should have this iControl solo installed on a machine that is connected to the media switch. The upgrade will go through the switch from iControl solo to the IPG-3901 ETH1. Refer to Annex 1 at manual.
DSERV-2031	IPG-3901 incompatibility problem with XIO-4901 Up to v1.2.0, IPG-3901 iControl service panel will not work simultaneously with XIO-4901 service panel. Workaround: Users should update the IPG-3901 to version 1.3.2 or higher & also should ensure



that the latest XIO-4901 service is installed in the iControl platform to get IPG-3901 to work simultaneously with XIO-4901



UPGRADE PACKAGE: 1.3.7

Firmware version: 1.3.7 (CPU 45; FPGA ENC&ENC 186; FPGA DEC&DEC 188; FPGA ENC&DEC 185)

Release date: 2017-01-13 iControl compatibility: 7.10+

iControl Solo compatibility: 7.10+

RCP-200 compatibility: NA

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

BUGFIXES

Ref#	Description
STAR- 2438	TICO not supported on 1.3.6 version
	The ARP table of the network gateway is not kept up to date
	In what follows, the term gateway refers to a network gateway whose function is to route packets between IP domains. In that sense, a gateway can be an IP router, a computer or a layer 3 switch.
<u>STAR-</u> <u>2097</u>	In multicast , the MAC address of the IPG-3901 needs to be in the ARP table of the gateway. Otherwise, the packets streamed to a multicast address from the IPG-3901 will not be forwarded at all by the gateway. It is the responsibility of the IPG-3901 to keep its MAC address in the ARP table of the gateway.
	There are multiple reasons why the MAC address of the IPG-3901 would not be in the ARP table of the gateway. For example, reconfiguring or rebooting the gateway would cause the problem.

Ref#	Description
LIMITATIONS	*** Only 1920x1080@50i format is supported ***
	On boot, there is a risk that one or more of the ETH ports do not start up
STAR-2480	Customer has 160-190 IPG-3901 cards. On each startup of their truck, they find between that 4 to 6 IPG cards have failed to start the network connectivity. By reseating the IPG card, they find the network interface starts up.
STAR-2396	SDI output may glitch when IP Streams are enabled/disabled when the card is unreferenced Unreferenced, SDI output may glitch if new IP Streams are enabled or



	existing IP streams are disabled/enabled Workaround: Lock the IPG-3901 on the external reference or URS
STAR-2442	Source Specific Multicast not working in iGMPv3 The iGMPv3 Source Specific Multicast is not working Workaround: Use iGMPv3 any source
STAR-1950	4K output links take too much time to stabilize without a reference When enabling TICO 1 - DEC or TICO 2 - DEC gateway without a reference the 4K output links will take over 5 minutes to get stable. Workaround: use a reference, black burst or URS
DSERV-2161	Gateways missing on KMX-3901-IN-IP-D-3+TRP With the KMX-3901-IN-IP-D-3+TRP rear, gateway MV IN 7 and MV IN 8 are missing
STAR-1749	Factory default may not reset all parameters Factory default is not resetting all the parameters and this is an issue only when "Card parameters" and "Network settings" are selected together for a factory default. Workaround: Apply the factory on the "Card parameters" first followed by "Network settings"
STAR-1703	Loading a profile may take 5 seconds When loading a previously saved profile from disk, it may take up to 5 seconds to bring certain parameters (including TICO gateway enable) to appear on the screen correctly.
STAR-1754	DUM Upgrade works only from 1.2.0 to a newer version Using Densite Upgrade Manager (DUM), we can upgrade from v1.2.0 to newer versions including 1.3.1. But we can't downgrade to older version including 1.2.0 after this upgrade. Workaround: Users looking to downgrade to version lesser than 1.2 can still use manually update the SD card to the required versions. To upgrade the SD card, refer to the manual
STAR-1755	Firmware upgrade through iControl Densite Upgrade Manager (DUM) need iControl Solo and an FTP connection to IPG-3901 ETH1 The firmware upgrade using DUM requires FTP connection through IPG-3901 ETH1 and an iControl Solo. Users should have this iControl solo installed on a machine that is connected to the media switch. The upgrade will go through the switch from iControl solo to the IPG-3901 ETH1. Refer to Annex 1 at manual.



IPG-3901 incompatibility problem with XIO-4901

Up to v1.2.0, IPG-3901 iControl service panel will not work simultaneously with XIO-4901 service panel.

DSERV-2031

<u>Workaround</u>: Users should update the IPG-3901 to version 1.3.2 or higher & also should ensure that the latest XIO-4901 service is installed in the iControl platform to get IPG-3901 to work simultaneously with XIO-4901



UPGRADE PACKAGE: 1.3.6

Firmware version: 1.3.6 (CPU 40; FPGA ENC&ENC 176; FPGA DEC&DEC 181; FPGA ENC&DEC 185)

Release date: 2016-11-25

iControl compatibility: 7.10+

iControl Solo compatibility: 7.10+

RCP-200 compatibility: NA

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

BUGFIXES

Ref#	Description
STAR- 2386	Too much variability in SDI output timing when locked on external or URS reference The timing latency varies much more when reference is applied to the IPG carrying out the IP-to-SDI output conversion
STAR- 2088	Duplicate Join and Leave in IGMPv2 may cause over subscription issues Duplicate Join and leave messages were displayed in Redundancy mode for IGMPv2 only after a stream leaving which may caused over subscription issue.

Ref#	Description
STAR- 2438	TICO not supported on 1.3.6 version Workaround: For TICO features, use IPG-3901 1.3.4 release
STAR- 2396	SDI output may glitch when IP Streams are enabled/disabled when the card is unreferenced Unreferenced, SDI output may glitch if new IP Streams are enabled or existing IP streams are disabled/enabled Workaround: Lock the IPG-3901 on the external reference or URS
STAR- 2442	Source Specific Multicast not working in iGMPv3 The iGMPv3 Source Specific Multicast is not working Workaround: Use iGMPv3 any source
STAR- 2097	Rebooting/reconfiguring a network switch fails to cause the IPG to re-issue/respond to ARP Reconfiguring a network router or repowering it will not cause the IPG to



	update the routers ARP cache. This requires the MAC address of the IPG to be programmed into the switch for fully multicast scenarios. Note that hot swapping an IPG with a replacement will require the MAC address to be manually updated in the switch at the same time.
STAR- 1950	4K output links take too much time to stabilize without a reference When enabling TICO 1 - DEC or TICO 2 - DEC gateway without a reference the 4K output links will take over 5 minutes to get stable. Workaround: use a reference, black burst or URS
DSERV- 2161	Gateways missing on KMX-3901-IN-IP-D-3+TRP With the KMX-3901-IN-IP-D-3+TRP rear, gateway MV IN 7 and MV IN 8 are missing
STAR- 1749	Factory default may not reset all parameters Factory default is not resetting all the parameters and this is an issue only when "Card parameters" and "Network settings" are selected together for a factory default. Workaround: Apply the factory on the "Card parameters" first followed by "Network settings"
STAR- 1703	Loading a profile may take 5 seconds When loading a previously saved profile from disk, it may take up to 5 seconds to bring certain parameters (including TICO gateway enable) to appear on the screen correctly.
STAR- 1754	DUM Upgrade works only from 1.2.0 to a newer version Using Densite Upgrade Manager (DUM), we can upgrade from v1.2.0 to newer versions including 1.3.1. But we can't downgrade to older version including 1.2.0 after this upgrade. Workaround: Users looking to downgrade to version lesser than 1.2 can still use manually update the SD card to the required versions. To upgrade the SD card, refer to the manual
STAR- 1755	Firmware upgrade through iControl Densite Upgrade Manager (DUM) need iControl Solo and an FTP connection to IPG-3901 ETH1 The firmware upgrade using DUM requires FTP connection through IPG-3901 ETH1 and an iControl Solo. Users should have this iControl solo installed on a machine that is connected to the media switch. The upgrade will go through the switch from iControl solo to the IPG-3901 ETH1. Refer to Annex 1 at manual.
DSERV- 2031	<pre>IPG-3901 incompatibility problem with XIO-4901 Up to v1.2.0, IPG-3901 iControl service panel will not work simultaneously</pre>



with XIO-4901 service panel.

<u>Workaround</u>: Users should update the IPG-3901 to version 1.3.2 or higher & also should ensure that the latest XIO-4901 service is installed in the iControl platform to get IPG-3901 to work simultaneously with XIO-4901





UPGRADE PACKAGE: 1.3.4

Firmware version: 1.3.4 (CPU 33; FPGA ENC&ENC 176; FPGA DEC&DEC 181; FPGA ENC&DEC 175)

Release date: 2016-10-04

iControl compatibility: 7.10+

iControl Solo compatibility: 7.10+

RCP-200 compatibility: NA

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

BUGFIXES

Ref#	Description
STAR-	IPG-3901 stops working properly after a couple of days
2094	IPG-3901 stopped working because of memory leaks in the software application

Ref#	Description
STAR- 2097	Rebooting/reconfiguring a network switch fails to cause the IPG to re-issue/respond to ARP Reconfiguring a network router or repowering it will not cause the IPG to update the routers ARP cache. This requires the MAC address of the IPG to be programmed into the switch for fully multicast scenarios. Note that hot swapping an IPG with a replacement will require the MAC address to be manually updated in the switch at the same time.
STAR- 1950	4K output links take too much time to stabilize without a reference When enabling TICO 1 - DEC or TICO 2 - DEC gateway without a reference the 4K output links will take over 5 minutes to get stable. Workaround: use a reference, black burst or URS
DSERV- 2161	Gateways missing on KMX-3901-IN-IP-D-3+TRP With the KMX-3901-IN-IP-D-3+TRP rear, gateway MV IN 7 and MV IN 8 are missing





UPGRADE PACKAGE: 1.3.3

Firmware version: 1.3.3 (CPU 27; FPGA ENC&ENC 176; FPGA DEC&DEC 181; FPGA ENC&DEC 175)

Release date: 2016-08-24

iControl compatibility: 7.10+

iControl Solo compatibility: 7.10+

RCP-200 compatibility: NA

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

BUGFIXES

Ref#	Description
<u>STAR-</u> 1979	Assigning an IP stream to a gateway (IP-to-SDI) may cause glitches on another gateway The problem happen when the IP stream is already used by another gateway, Trying to assign the same IP stream to another gateway may cause a glitch on the first gateway EX: Gateway SDI OUT 1 <- IP Stream A Gateway SDI OUT 2 <- IP Stream B If we try to assign IP Stream A to SDI OUT 2, SDI OUT 1 may lose momentarily IP Stream A
STAR- 2036	Glitches on the 4K outputs Illegal words on the 4K outputs were causing equipment to unlock on the received 4K (TICO Decoder)



UPGRADE PACKAGE: 1.3.2

Firmware version: 1.3.2 (CPU 23; FPGA ENC&ENC 153; FPGA DEC&DEC 156; FPGA ENC&DEC 154)

Release date: 2016-07-07 iControl compatibility: 7.10+

iControl Solo compatibility: 7.10+

RCP-200 compatibility: NA

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

ENHANCEMENTS & NEW FEATURES

Ref #	Description
STAR-1241	TICO option New TICO option has been added to IPG-3901. With this option, the users will have the possibility to encode TICO over IP and decode TICO from IP and the card now supports 4K links in 2SI and SDQS.
STAR-332	Firmware upgrade through iControl Densite Upgrade Manager (DUM) Starting from v1.3.2 release, the user can also upgrade the firmware using iControl Densite Upgrade Manager (DUM) in addition to the SD card upgrade through the IPG card. Please note that it is possible to upgrade from v1.2.0 to a newer version but downgrade to v1.2.0 is not allowed from v1.3.2 and above.
STAR-918	Test Pattern 1080p Support for Test Pattern 1080p format is now available on the card

Ref #	Description
	TICO encoder 4K links status do not follow the scan rate settings
STAR-1690	4K links status will not trigger a problem if the incoming 4K is not on the same frame rate than the Scan rate setting For example, 4K links status will not trigger an error if the incoming 4K is 59Hz and the scan rate on the "Reference" panel is set to 50Hz. Any other invalid scenarios to the input signal status will be reported at the TICO "config." page.



STAR-1651	No TICO Test pattern is offered for TICO gateways Test pattern feature is not available for TICO gateways and is available for normal gateways in all supported format.
STAR-1761	Test Pattern will disrupt TICO encoders and decoders When using TICO, clicking "Force ALL" check box on the test pattern panel will put the TICO encoders and decoders on errors. Also enabling test pattern for SDI inputs and outputs used for the TICO before enabling TICO encoder or decoder will put the TICO encoder or decoders on errors Workaround: When using the TICO option, do no hit the "Force ALL" check box on the test pattern panel. Also disable test pattern checkbox from corresponding gateways before enabling TICO encoder or Decoder
STAR-1749	Factory default may not reset all parameters Factory default is not resetting all the parameters and this is an issue only when "Card parameters" and "Network settings" are selected together for a factory default. Workaround: Apply the factory on the "Card parameters" first followed by "Network settings"
STAR-1703	Loading a profile may take 5 seconds When loading a previously saved profile from disk, it may take up to 5 seconds to bring certain parameters (including TICO gateway enable) to appear on the screen correctly.
STAR-1754	DUM Upgrade works only from 1.2.0 to a newer version Using Densite Upgrade Manager (DUM), we can upgrade from v1.2.0 to newer versions including 1.3.1. But we can't downgrade to older version including 1.2.0 after this upgrade. Workaround: Users looking to downgrade to version lesser than 1.2 can still use manually update the SD card to the required versions. To upgrade the SD card, refer to the manual
STAR-1755	Firmware upgrade through iControl Densite Upgrade Manager (DUM) need iControl Solo and an FTP connection to IPG-3901 ETH1 The firmware upgrade using DUM requires FTP connection through IPG-3901 ETH1 and an iControl Solo. Users should have this iControl solo installed on a machine that is connected to the media switch. The upgrade will go through the switch from iControl solo to the IPG-3901 ETH1. Refer to Annex 1 at manual.
DSERV- 2031	IPG-3901 incompatibility problem with XIO-4901 Up to v1.2.0, IPG-3901 iControl service panel will not work simultaneously with XIO-4901 service panel.



<u>Workaround</u>: Users should update the IPG-3901 to version 1.3.2 or higher & also should ensure that the latest XIO-4901 service is installed in the iControl platform to get IPG-3901 to work simultaneously with XIO-4901



UPGRADE PACKAGE: 1.2.0

Firmware version: 1.2.0 (CPU 16, FPGA 33)

Release date: 2016-04-29

iControl compatibility: 7.10+

iControl Solo compatibility: 7.10+

RCP-200 compatibility: NA

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

ENHANCEMENTS & NEW FEATURES

Ref #	Description
STAR- 1222	Added Ethernet port bandwidth aggregation It is now possible to use the secondary Ethernet port for extending the amount of bandwidth available to 20 GigE
STAR- 1393	Default IP port for gateways is 1000 which can conflict with reserved port assignment IANA reserved port assignments go up to 1023, so a default gateway port of 1000 can cause a conflict. This has been resolved by setting the default gateway IP port to 10,000.

BUGFIXES

Ref#	Description
QTAD	MAC addresses generated for multicast streams may be incorrect
<u>STAR-</u> <u>1307</u>	In previous versions the generated MAC address for a given multicast IP stream may have been incorrect. A fix was made to ensure the correct MAC addresses are generated.

	Ref #	Description
	STAR-	Card alarms and iControl alarms are not disabled one ETH2 Operation mode : OFF or Aggregation
1391	1391	Based on the chosen Operation mode (OFF & Aggregation) the ETH2 alarm or/and Backup alarms are not disabled



STAR-959	We are missing Card alarms and iControl/GSM alarms for the reference The support of the card alarm and the iControl/GSM alarm is not supported for the support of the reference
STAR-918	Test pattern in 3G is not available The test pattern is only available in SD and HD (720p and 1080i).
STAR-907	Potential bandwidth problem When an IGMP v3 Source is specified for multicast and the IPG-3901 is using about 90% of its IP bandwidth (e.g. 6 x HD or 3 x 3G), changing the input IP address/port settings on any of the active gateways might cause an overloading of the switch. This results in a brief (approximately 5 seconds) interruption of all multicast traffic on the switch. Workaround: To avoid the loss of all inputs, we recommend that you disable the gateway while its IP address or port is being changed.
STAR-888	Densité Upgrade Manager not supported Upgrading the card through the Densité Upgrade Manager (DUM) is not supported. To upgrade the card, follow the instructions provided with the upgrade package.
STAR-803	SDI jitter may be outside specifications In some situations, the SDI output jitter may be outside of the timing jitter specifications (10Hz). This may occur when the input streams have too much IP packet jitter or the Output on Error Mode is set to configurable color and activated. This issue can be resolved by ensuring the SDI output is locked to a reference.
STAR-720	Output on Error over Test Pattern The Output on Error will be activated when the test pattern is enabled for a gateway and the global test pattern format doesn't match the format specified for that gateway.



UPGRADE PACKAGE: 1.1.0

Firmware version: 1.1.0 (CPU 20, FPGA 33)

Release date: 2016-02-26

iControl compatibility: 7.10+

iControl Solo compatibility: 7.10+

RCP-200 compatibility: NA

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

ENHANCEMENTS & NEW FEATURES

Ref #	Description
STAR- 1288	System-wide Scan Rate moved to Reference tab The System-wide Scan Rate panel, which used to be on the Gateway Config tab, is now displayed on the Reference tab. This new location is consistent with other card configuration options and allows easier problem diagnosis of external reference and URS issues.
STAR-983	Support for the IPG-3901-3+DRP rear connector panel Support was added for the IPG-3901-3+DRP, which is the new rear connector panel used to install the IPG-3901 card in the new Densité 3+ FR1 and Densité 3+ FR4 frames
STAR-950	SDI output locked to reference Support was added to the IPG-3901 to allow genlocking of SDI outputs. The IPG-3901 can now lock its outputs to an external reference and/or URS. This functionality is configured using the new Reference tab in iControl. When the SDI outputs are locked to a reference, output jitter is significantly reduced and conforms to or exceeds the SDI output timing jitter specification. Please note that although SDI outputs can be locked to a common reference, the SDI outputs can not yet be phase aligned. This will be addressed in a future release.

BUGFIXES

Ref#	Description
STAR- 1194	IPG-3901 cards may lose their MAC address upon reboot
	An issue was identified whereby IPG-3901 cards could lose their network MAC addresses if they lost power or were removed from their frame during a reboot. This was corrected so that the cards



are more resilient to power loss during reboot and the MAC addresses are no longer lost.

Ref #	Description
STAR-959	We are missing Card alams and iControl/GSM alarms for the reference The support of the card alarm and the iControl/GSM alarm is not supported for the support of the reference
STAR-918	Test pattern in 3G is not available The test pattern is only available in SD and HD (720p and 1080i).
STAR-907	Potential bandwidth problem When an IGMP v3 Source is specified for multicast and the IPG-3901 is using about 90% of its IP bandwidth (e.g. 6 x HD or 3 x 3G), changing the input IP address/port settings on any of the active gateways might cause an overloading of the switch. This results in a brief (approximately 5 seconds) interruption of all multicast traffic on the switch. Workaround: To avoid the loss of all inputs, we recommend that you disable the gateway while its IP address or port is being changed.
STAR-888	Densité Upgrade Manager not supported Upgrading the card through the Densité Upgrade Manager (DUM) is not supported. To upgrade the card, follow the instructions provided with the upgrade package.
STAR-803	SDI jitter may be outside specifications In some situations, the SDI output jitter may be outside of the timing jitter specifications (10Hz). This may occur when the input streams have too much IP packet jitter or the Output on Error Mode is set to configurable color and activated. This issue can be resolved by ensuring the SDI output is locked to a reference.
STAR-720	Output on Error over Test Pattern The Output on Error will be activated when the test pattern is enabled for a gateway and the global test pattern format doesn't match the format specified for that gateway.



UPGRADE PACKAGE: 1.0.3

Firmware version: 1.0.3 (CPU 244, FPGA 76)

Release date: 2015-12-07

iControl compatibility: 7.00+

iControl Solo compatibility: 7.00+

RCP-200 compatibility: NA

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

BUGFIXES

Ref#	Description
	FPGA bin file can reduce chip lifetime on the long term
STAR- 1094	The vendor tool used to generate the binary file had a bug that causes a small leakage current that could damage the device in the long term.
	WORKAROUND: Update the code stored on the SD card with this version

Ref #	Description
STAR-907	Potential bandwidth problem When an IGMP v3 Source is specified for multicast, and the IPG-3901 is using about 90% of its IP bandwidth (e.g. 6 x HD or 3 x 3G), changing the input IP address/port settings on any of the active gateways might cause an overloading of the switch, resulting in a brief (e.g. about 5 seconds) interruption of all multicast traffic on the switch. Workaround: To avoid the loss of all inputs, it's a good idea to disable the gateway while its IP address or port is being changed.
STAR-888	Densité Upgrade Manager not supported Upgrading the card through the Densité Upgrade Manager (DUM) is not supported. To upgrade the card, follow the instructions provided with the upgrade package.
STAR-803 STAR-890	SDI jitter may be outside specifications In some situations, the SDI output jitter may be outside of the specifications for the timing jitter (10Hz).



	The situations are: the input streams have too much IP packet jitter, the Output on Error Mode is set to configurable color and activated.
STAR-918	Test pattern in 3G is not available The test pattern is only available in SD and HD (720p and 1080i).
STAR-720	Output on Error over Test Pattern The Output on Error will be activated when the test pattern is enabled for a gateway and the global test pattern format doesn't match the format specified for that gateway.



UPGRADE PACKAGE: 1.0.2

Firmware version: 1.0.2 (CPU 240, FPGA 76)

Release date: 2015-11-13

iControl compatibility: 7.00+

iControl Solo compatibility: 7.00+

RCP-200 compatibility: NA

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

BUGFIXES

Ref#	Description
STAR- 1048	iControl panel not opening on some IPG-3901 cards Some SD cards have a corrupted data partition and prevent the iControl UI panel to open. WORKAROUND: Get a new a new SD card from the factory. Do not reuse the old SD card on an IPG-3901.

Ref #	Description
STAR-907	Potential bandwidth problem When an IGMP v3 Source is specified for multicast, and the IPG-3901 is using about 90% of its IP bandwidth (e.g. 6 x HD or 3 x 3G), changing the input IP address/port settings on any of the active gateways might cause an overloading of the switch, resulting in a brief (e.g. about 5 seconds) interruption of all multicast traffic on the switch. Workaround: To avoid the loss of all inputs, it's a good idea to disable the gateway while its IP address or port is being changed.
STAR-888	Densité Upgrade Manager not supported Upgrading the card through the Densité Upgrade Manager (DUM) is not supported. To upgrade the card, follow the instructions provided with the upgrade package.
STAR-803 STAR-890	SDI jitter may be outside specifications In some situations, the SDI output jitter may be outside of the specifications for the timing jitter (10Hz).



	The situations are: the input streams have too much IP packet jitter, the Output on Error Mode is set to configurable color and activated.
STAR-918	Test pattern in 3G is not available The test pattern is only available in SD and HD (720p and 1080i).
STAR-720	Output on Error over Test Pattern The Output on Error will be activated when the test pattern is enabled for a gateway and the global test pattern format doesn't match the format specified for that gateway.





UPGRADE PACKAGE: 1.0.1

Firmware version: 1.0.1 (CPU 237, FPGA 76)

Release date: 2015-09-14

iControl compatibility: 7.00+

iControl Solo compatibility: 7.00+

RCP-200 compatibility: NA

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

Ref #	Description
STAR-907	Potential bandwidth problem When an IGMP v3 Source is specified for multicast, and the IPG-3901 is using about 90% of its IP bandwidth (e.g. 6 x HD or 3 x 3G), changing the input IP address/port settings on any of the active gateways might cause an overloading of the switch, resulting in a brief (e.g. about 5 seconds) interruption of all multicast traffic on the switch. Workaround: To avoid the loss of all inputs, it's a good idea to disable the gateway while its IP address or port is being changed.
STAR-888	Densité Upgrade Manager not supported Upgrading the card through the Densité Upgrade Manager (DUM) is not supported. To upgrade the card, follow the instructions provided with the upgrade package.
STAR-803 STAR-890	SDI jitter may be outside specifications In some situations, the SDI output jitter may be outside of the specifications for the timing jitter (10Hz). The situations are: the input streams have too much IP packet jitter, the Output on Error Mode is set to configurable color and activated.
STAR-918	Test pattern in 3G is not available The test pattern is only available in SD and HD (720p and 1080i).



Output on Error over Test Pattern

STAR-720

The Output on Error will be activated when the test pattern is enabled for a gateway and the global test pattern format doesn't match the format specified for that gateway.