

IPG-3901

Release History

Release Version	Comprising:		Release Date	Version Details	User Manual for this release (Grass Valley document #)
	Firmware Version	Software Version			
1.2.0	1.2.0	1.2.0	2016-04-29	(go)	M3036-9900-120
1.1.0	1.1.0	1.1.0	2016-02-26	(go)	M3036-9900-110
1.0.3	1.0.3	1.0.0	2015-12-07	(go)	M3036-9900-100
1.0.2	1.0.2	1.0.0	2015-11-13	(go)	M3036-9900-100
1.0.1	1.0.1	1.0.0	2015-08-31	(go)	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: 1.2.0

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	<p>Added Ethernet port bandwidth aggregation</p> <p>It is now possible to use the secondary Ethernet port for extending the amount of bandwidth available to 20 GigE</p>
STAR-1393	<p>Default IP port for gateways is 1000 which can conflict with reserved port assignment</p> <p>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.</p>

BUGFIXES

Ref#	Description
STAR-1307	<p>MAC addresses generated for multicast streams may be incorrect</p> <p>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.</p>

KNOWN BUGS & LIMITATIONS

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

STAR-959	<p>We are missing Card alarms and iControl/GSM alarms for the reference</p> <p>The support of the card alarm and the iControl/GSM alarm is not supported for the support of the reference</p>
STAR-918	<p>Test pattern in 3G is not available</p> <p>The test pattern is only available in SD and HD (720p and 1080i).</p>
STAR-907	<p>Potential bandwidth problem</p> <p>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.</p> <p>Workaround: To avoid the loss of all inputs, we recommend that you disable the gateway while its IP address or port is being changed.</p>
STAR-888	<p>Densité Upgrade Manager not supported</p> <p>Upgrading the card through the Densité Upgrade Manager (DUM) is not supported. To upgrade the card, follow the instructions provided with the upgrade package.</p>
STAR-803	<p>SDI jitter may be outside specifications</p> <p>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.</p>
STAR-720	<p>Output on Error over Test Pattern</p> <p>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.</p>

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	<p>System-wide Scan Rate moved to Reference tab</p> <p>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.</p>
STAR-983	<p>Support for the IPG-3901-3+DRP rear connector panel</p> <p>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</p>
STAR-950	<p>SDI output locked to reference</p> <p>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.</p> <p>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.</p> <p>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.</p>

BUGFIXES

Ref#	Description
STAR-1194	<p>IPG-3901 cards may lose their MAC address upon reboot</p> <p>An issue was identified whereby IPG-3901 cards could lose their network MAC addresses if they</p>

	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.
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KNOWN BUGS & LIMITATIONS

Ref #	Description
STAR-959	<p>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</p>
STAR-918	<p>Test pattern in 3G is not available The test pattern is only available in SD and HD (720p and 1080i).</p>
STAR-907	<p>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.</p> <p>Workaround: To avoid the loss of all inputs, we recommend that you disable the gateway while its IP address or port is being changed.</p>
STAR-888	<p>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.</p>
STAR-803	<p>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.</p>
STAR-720	<p>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.</p>

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
STAR-1094	<p>FPGA bin file can reduce chip lifetime on the long term 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.</p> <p>WORKAROUND: Update the code stored on the SD card with this version</p>

KNOWN BUGS & LIMITATIONS

Ref #	Description
STAR-907	<p>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.</p> <p>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.</p>
STAR-888	<p>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.</p>
STAR-803	<p>SDI jitter may be outside specifications In some situations, the SDI output jitter may be outside of the specifications for the timing jitter (10Hz).</p>

STAR-890	The situations are: <ul style="list-style-type: none">- 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	<p>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.</p> <p>WORKAROUND: Get a new a new SD card from the factory. Do not reuse the old SD card on an IPG-3901.</p>

KNOWN BUGS & LIMITATIONS

Ref #	Description
STAR-907	<p>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.</p> <p>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.</p>
STAR-888	<p>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.</p>
STAR-803 STAR-890	<p>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:</p>

	<ul style="list-style-type: none"> - the input streams have too much IP packet jitter, - the Output on Error Mode is set to configurable color and activated.
STAR-918	<p>Test pattern in 3G is not available</p> <p>The test pattern is only available in SD and HD (720p and 1080i).</p>
STAR-720	<p>Output on Error over Test Pattern</p> <p>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.</p>

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.

KNOWN BUGS & LIMITATIONS

Ref #	Description
STAR-907	<p>Potential bandwidth problem</p> <p>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.</p> <p>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.</p>
STAR-888	<p>Densité Upgrade Manager not supported</p> <p>Upgrading the card through the Densité Upgrade Manager (DUM) is not supported. To upgrade the card, follow the instructions provided with the upgrade package.</p>
STAR-803 STAR-890	<p>SDI jitter may be outside specifications</p> <p>In some situations, the SDI output jitter may be outside of the specifications for the timing jitter (10Hz). The situations are:</p> <ul style="list-style-type: none"> - the input streams have too much IP packet jitter, - the Output on Error Mode is set to configurable color and activated.
STAR-918	<p>Test pattern in 3G is not available</p> <p>The test pattern is only available in SD and HD (720p and 1080i).</p>

[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.

