IRG-3401 – Upgrade Package 1.0.1

Upgrade Package Release History

Release Version	Comprising:		Release Date	Version Details	User Manual for this release (Grass Valley document #)
	Firmware Version	**Software Version**			
1.0.1	1.0.1	1.0.1	2016.01.26	(go)	M945-9900-100
1.0.0	1.0.0	n/a	2013.09.06	(go)	M945-9900-100
0.0.1	0.0.1	n/a	2013.07.31	(go)	M945-9900-100

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: 1.0.1

Release date: 2016.01.26

iControl compatibility: 5.00+

iControl Solo compatibility: 6.00+

RCP-200 compatibility: NA

Custom software compatibility: NA

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

ENHANCEMENTS & NEW FEATURES

Ref#	Description
	N/A

BUGS FIXED IN THIS RELEASE

Ref #	Description
IRG-221	**Arp request not processed after IRG-3401 reboots** When configured using unicast addresses, the card streaming was not restarting by itself after a reboot. The user needs to press the apply button for the streaming to restart. This issue is now resolved and the streaming restart by itself after a reboot in unicast mode. Multicast mode was unaffected by this bug.

KNOWN BUGS & LIMITATIONS

Ref #	Description
IRG-1	**Ethernet types and protocols supported** This version of the IRG-3401 only supports the following protocols : *ARP* ; *IPv4* ; *ICMP* ; *IGMP* ; *UDP* and *TCP*.
IRG-99	**Power outage or card removal during upgrade** Be careful not to unplug the card from the frame until the upgrade process is completed. Doing so (or a power outage when the update is in progress) may lead to corruption causing boot-up problems. This limitation should be fixed in the next release.
IRG-124	**Ethernet port configuration** To avoid confusion and various network problems, the IP addresses of card`s two Ethernet ports should <u>not</u> be set in the same subnet.
IRG-176	**Maximum throughput accepted by the card** We estimate the maximum throughput that could be handled correctly by the card`s twelve gateways at 800Mbps. We strongly recommend not exceeding it. Doing so may lead to loss of packets.
IRG-191	**Backup port status on the Ethernet side** It is not possible to get the various stream statuses of the Ethernet *backup* port while using the *Main* port. In any case, only the statuses of the "*in use*" port will be displayed to the user.
IRG-213	**FEC packets not present in ethernet port mirroring** When the Ethernet side is used as output and with port redundancy active, UDP packets carrying transport streams are transmitted simultaneously on both Ethernet ports (main and backup). This is called port mirroring. However, when FEC is used, the FEC packets won't be

	transmitted on the <u>backup</u> port. The stream will consequently be seen as a UDP-type stream on this port. This will be fixed in a future release.

PREVIOUS RELEASES

UPGRADE PACKAGE: 1.0.0

Release date: 2013-09-06

iControl compatibility: 4.44 build 518 and up

iControl Solo compatibility: 4.44 build 518 and up

RCP-200 compatibility: NA

Custom software compatibility: NA

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

ENHANCEMENTS & NEW FEATURES

Ref#	Description
	N/A

BUGS FIXED IN THIS RELEASE

Ref #	Description
IRG-158	**Input buffer for the IP to ASI direction** The IRG-3401 is now able to receive streams with jitter from the IP side and output it in conformance with the specifications on the ASI side as long as the jitter on the IP side stays within the Pro-MPEG Code of Practice #3 specification.
IRG-160	**Inaccurate statistics in the network tab** The Statistics tab has been modified and the info located there is now reliable.
IRG-167	**Issues with RTP + FEC** Previous issue with RTP and FEC causing loss of packets has been corrected and this mode can now be used efficiently.
IRG-194	**Host messages received on Ethernet port 2 (backup port)** This limitation present in the previous release has now been removed and host messages can

| | now be sent and received from the backup port. |

KNOWN BUGS & LIMITATIONS

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UPGRADE PACKAGE: BETA 0.0.1 BUILD 129

Release date: 2013-07-31

iControl compatibility: 4.43

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

ENHANCEMENTS & NEW FEATURES

Ref#	Description
	N/A

BUGS FIXED IN THIS RELEASE

Ref #	Description
	N/A

KNOWN BUGS & LIMITATIONS

Ref #	Description
IRG-99	**Power outage or card removal during upgrade** Be careful not to unplug the card from the frame until the upgrade process is completed. Doing so (or a power outage when the update is in progress) may lead to corruption causing boot-up problems.
IRG-124	**Ethernet port configuration** To avoid confusion and various network problems, the IP addresses of card`s two Ethernet ports should <u>not</u> be set in the same subnet.
IRG-158	**Input buffer for the IP to ASI direction** When the streams received from IP contains too much jitter or are too "bursty", the IRG-3401 may not be able to output it on the ASI side correctly. The bitrate of the ASI output feed by

	this IP socket will vary a bit more than what it should. Improvements are left to do and they are planned for the next phase.
IRG-160	**Inaccurate statistics in the network tab** Most of the statistics under the "*Network – Statistics"* tab are stuck at 0 or displayed invalid numbers. None of the information displayed in this tab should be considered for now. This should be fixed for the next phase.
IRG-167	**Issues with RTP + FEC** We actually have some issues with the FEC (forward error correction) that causes loss of packets and we suggest not using the RTP with FEC enabled with this version. This should be fixed for the next release.
IRG-176	**Maximum throughput accepted by the card** We estimate the maximum throughput that could be handled correctly by the card`s twelve gateways at 800Mbps. We still have some validation to do regarding this limit but we strongly recommend not exceeding it with this release. Doing so may lead in loss of packets.
IRG-194	**Host messages received on Ethernet port 2 (backup port)** Due to some limitations that should be fixed for the next release, we had to restrict the ability of Ethernet port 2 (backup port) to receive and answer to host messages received from the network. (for example, the PING command)