

## HCO-3901

### Release History

Release Version	Comprising:		Release Date	User Manual for this release (Grass Valley document #)
	Firmware Version	Software Version		
<a href="#">1.2.6</a>	1.2.6.9	1.2.6	2017.08.18	M981-9900-126
<a href="#">1.2.5</a>	1.2.5.6	1.2.5	2017.03.17	M981-9900-124
<a href="#">1.2.4</a>	1.2.4.5	1.2.4	2016.09.07	M981-9900-124
<a href="#">1.2.3</a>	1.2.3	1.2.3	2016.02.15	M981-9900-123
<a href="#">1.2.1</a>	1.2.1	1.2.1	2014.11.26	M981-9900-120
<a href="#">1.2.0</a>	1.2.0	1.2.0	2014.09.30	M981-9900-120
<a href="#">1.1.1</a>	1.1.0	1.1.1	2014.07.15	M981-9900-110

**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: 1.2.6

Firmware version: [1.2.6.9](#)

Release date: [2017.08.18](#)

iControl compatibility: [5.00+](#)

iControl Solo compatibility: [6.00+](#)

RCP-200 compatibility: [1.9.1](#)

Hardware compatibility: [This upgrade package applies to all existing hardware assemblies.](#)

## ENHANCEMENTS & NEW FEATURES

Ref#	Description
<b>HCO3901-263</b>	<b>Latching relay command pulses are too short</b> In Manual mode or in Auto mode, the command pulses sent by the HCO-3901 to the latching relay on the rear panel are now as long as required by the relay specification.
-	<b>New firmware for compatibility with rear HCO-3901-X4RP for 4 x 3G-A switching</b>

## KNOWN BUGS & LIMITATIONS

Ref #	Description
-	When switching out from Bypass mode to Manual mode, the input will switch briefly from Bypass to Input 3 and then to the previously set input. This is noticed on the iControl interface and an optional Remote control.

## UPGRADE PACKAGE: 1.2.5

Firmware version: 1.2.5.6

Release date: 2017.03.17

iControl compatibility: 5.00+

iControl Solo compatibility: 6.00+

RCP-200 compatibility: 1.9.1

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

## ENHANCEMENTS & NEW FEATURES

Ref#	Description
<b>HC03901-253</b>	<b>Fan Alarm Messages flood iControl</b> Alarm de-bouncing was added to de-bounce the fan alarm thus reducing the number of messages sent to iControl.
<b>HC03901-255</b>	<b>Memblock/RestorePoint function corrupts User Presets</b> Added user presets to Restore Point.
<b>HC03901-256</b>	<b>Copying card profiles corrupts User Presets</b> Added user presets to Restore Point.

## UPGRADE PACKAGE: 1.2.4

Firmware version: 1.2.4.5

Release date: 2016.09.07

iControl compatibility: 5.00+

iControl Solo compatibility: 6.00+

RCP-200 compatibility: 1.9.1

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

## ENHANCEMENTS & NEW FEATURES

Ref#	Description															
<b>DSERV-1957</b>	<b>New ALC filter labels</b> New ALC filter labels were added to be consistent with other Grass Valley products.															
<b>DSERV-2088</b>	<b>Loudness value reported in GSM</b> The ALC loudness value is now reported in GSM.															
<b>HCO3901-241</b>	<b>Support of new rear panel : HCO-3901-3DRP-R-EX</b>															
<b>HCO3901-231</b>	<p><b>Implement automatic preview mode (PVW 1, PVW 2, PVW 3)</b> Implement "Auto-preview" mode as on HCO-1822. This is implemented for all 3 preview outputs.</p> <p>When PVWx (preview x) is in "Auto" mode, the PVWx output is as follows:</p> <table border="1"> <thead> <tr> <th>Operation mode of the <u>card</u></th> <th>PGM</th> <th>PVWx</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Auto</td> <td>Input 1</td> <td>Input 2</td> </tr> <tr> <td>Input 2</td> <td>Input 1</td> </tr> <tr> <td rowspan="3">Manual</td> <td>Input 1</td> <td>Input 2</td> </tr> <tr> <td>Input 2</td> <td>Input 1</td> </tr> <tr> <td>Input 3</td> <td>Input 3</td> </tr> </tbody> </table>	Operation mode of the <u>card</u>	PGM	PVWx	Auto	Input 1	Input 2	Input 2	Input 1	Manual	Input 1	Input 2	Input 2	Input 1	Input 3	Input 3
Operation mode of the <u>card</u>	PGM	PVWx														
Auto	Input 1	Input 2														
	Input 2	Input 1														
Manual	Input 1	Input 2														
	Input 2	Input 1														
	Input 3	Input 3														

## BUGS FIXED IN THIS RELEASE

Ref #	Description
<b>DSERV-1774</b>	<b>iControl Panel: Miranda ALC programs 4-8</b> Missing support for programs 4 to 8 of the Miranda ALC.
<b>DSERV-2142</b>	<b>iControl Reference tab has wrong text labels</b> The iControl Reference tab contains incorrect text labels for reference input selection when HCO-3901-3SRP-R rear is used.

## UPGRADE PACKAGE: 1.2.3

Release date: [2016.02.15](#)

iControl compatibility: [5.00+](#)

iControl Solo compatibility: [6.00+](#)

RCP-200 compatibility: [1.9.1](#)

Hardware compatibility: [This upgrade package applies to all existing hardware assemblies.](#)

## ENHANCEMENTS & NEW FEATURES

Ref#	Description															
	<p><b>NCO for TVB to implement automatic preview mode (PVW 1)</b>            This feature is implemented as an NCO ("ANC") and is available to other customers upon request.</p> <p>Preview 1 behaves differently from Preview 2 and 3            User loses control of preview 1.</p> <table border="1" data-bbox="264 1178 812 1596"> <thead> <tr> <th>Operation mode</th> <th>PGM</th> <th>Preview 1</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Auto</td> <td>Input 1</td> <td>Input 2</td> </tr> <tr> <td>Input 2</td> <td>Input 1</td> </tr> <tr> <td rowspan="3">Manual</td> <td>Input 1</td> <td>Input 2</td> </tr> <tr> <td>Input 2</td> <td>Input 1</td> </tr> <tr> <td>Input 3</td> <td>Input 3</td> </tr> </tbody> </table> <p>3G format and input 3 are not supported</p>	Operation mode	PGM	Preview 1	Auto	Input 1	Input 2	Input 2	Input 1	Manual	Input 1	Input 2	Input 2	Input 1	Input 3	Input 3
Operation mode	PGM	Preview 1														
Auto	Input 1	Input 2														
	Input 2	Input 1														
Manual	Input 1	Input 2														
	Input 2	Input 1														
	Input 3	Input 3														

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## KNOWN BUGS & LIMITATIONS

Ref #	Description
<b>DSERV-1774</b>	<b>iControl Panel: Miranda ALC programs 4-8</b> Missing support for programs 4 to 8 of the Miranda ALC.

## UPGRADE PACKAGE: 1.2.1

Release date: [2014.11.27](#)

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
<b>HCO3901-224</b>	3db offset on PCM channel when following a Dolby pair with Clean Switch enabled Fix: ALC module was updated.

## KNOWN BUGS & LIMITATIONS

Ref #	Description
<b>DSERV-1774</b>	iControl Panel: Miranda ALC programs 4-8 Missing support for programs 4 to 8 of the Miranda ALC.



## UPGRADE PACKAGE: 1.2.0

Release date: [2014.09.30](#)

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
<a href="#">001.00.016464</a>	<p><b>Full support of 3G Lvl A video format</b></p> <p>The 1080p59/50 video format are now handled and processed by the card as every other supported format.</p>

## BUGS FIXED IN THIS RELEASE

Ref #	Description
HCO3901-190	<p><b>False ASI Detection on HD SDI inputs</b></p> <p>A false ASI detection on the HD SDI input caused the card to the switch over the backup input</p>

## KNOWN BUGS & LIMITATIONS

Ref #	Description
<b>DSERV-1774</b>	<p><b>iControl Panel: Miranda ALC programs 4-8</b></p> <p>Missing support for programs 4 to 8 of the Miranda ALC.</p>

DSERV-650	<p><b>Timing display error on format change</b></p> <p>The cleanswitch feature could only be used when both inputs have the same video format. If the formats are not the same, a timing error will be reported by the card.</p>
DSERV-645	<p><b>3G level B indication is not supported</b></p> <p>As this format is not supported, any 3G level B signal sent to the card will be reported as a <i>video error</i>.</p>
24794	<p><b>Metadata packet insertion during 3G Level B outputs.</b></p> <p>During 3G Level B operation, there may be situations where output Ancillary Time Code (ATC) packets will be inserted on Link B. Asynchronous sources with respect to the reference may insert ATC packets on Link B instead of Link A. If the source and reference are synchronous, then ATC packets may find themselves on Link B depending on the source's timing with respect to the reference. An aligned input places ATC packets on the proper link (Link A).</p> <p>This situation does not occur when no reference is installed.</p>

## UPGRADE PACKAGE: 1.1.1

Release date: [2014.07.15](#)

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

## BUGS FIXED IN THIS RELEASE

Ref #	Description
DSERV-426	<p><b>HCO-3901 with 2-input rear panel does not correctly report input selection</b></p> <p>When an HCO-3901 is installed with an HCO-3901-3SRP-R rear panel (single slot width; 2 inputs), the alarms that report the input selection give incorrect status reports; e.g. both could be reported as "green", which is an impossible situation. NB this situation does not apply to the HCO-3901-3DRP-R (double slot width; 3 inputs) rear panel.</p> <p><b>FIX:</b> The status is now reported correctly. In passing, several items were corrected to disable references to Input 3 when using the 2-input rear panel.</p>

## KNOWN BUGS & LIMITATIONS

Ref #	Description
24794	Metadata packet insertion during 3G Level B outputs.

During 3G Level B operation, there may be situations where output Ancillary Time Code (ATC) packets will be inserted on Link B. Asynchronous sources with respect to the reference may insert ATC packets on Link B instead of Link A. If the source and reference are synchronous, then ATC packets may find themselves on Link B depending on the source's timing with respect to the reference. An aligned input places ATC packets on the proper link (Link A).

This situation does not occur when no reference is installed.

## Firmware version: 110

Release date: 2013-12-12

iControl compatibility: 4.45 and up

iControl Solo compatibility: 4.45 and up

RCP-200 compatibility: NA

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

### ENHANCEMENTS & NEW FEATURES

Ref #	Description
	<p><b>Implemented limited 3 input functionality</b></p> <p>Input 1 and 2 retain original function as main and backup with optional clean switch. Input 3 does not support clean switch option, and it cannot be switched automatically based on input probing. Input 3 is not protected by bypass relay. Only IN1 and IN2 are, with the appropriate rear panel (-R) Input 3 when selected would not be displayed in the program or preview thumbnails of the iControl service panel</p> <p>Switching to Input 3 is done in one of four ways:</p> <ul style="list-style-type: none"> <li>- Using card edge menu</li> <li>- Manually using iControl interface</li> <li>- GSM (iControl script)</li> <li>- GPI trigger</li> </ul> <p>When the card is in AUTO switch mode between IN1 and IN2 and both inputs fail, the alarms reported by iControl will advise the user of the situation. The user could then action a GPI to switch to an alternate (IN3) video source. The card will then be forced to MANUAL mode and user intervention will be required to resume AUTO mode.</p> <p>When the user configures AUTO mode again, the card will select IN1 by default unless the user selects IN2 manually before.</p>
	<p><b>Update of ALC module to the latest standard EBU R-128</b></p>
	<p><b>Update of Finger printing module to the latest SMPTE standard</b></p>

## BUGS FIXED IN THIS RELEASE

Ref #	Description
38203	The 3rd input that ANC 900 enabled is still available using the HCO-3901-3SRP-R rear even though this rear only has 2 physical inputs. The end result is that the 3rd input is still selectable on the card edge and iControl.
HCO3901-180	<b>Active video shifted</b> With ALC option and Cleanswitch disabled, video was one line shifted

## KNOWN BUGS & LIMITATIONS

Ref #	Description
34305	Audio Channel Status not updated when changing SD audio embed setting

## Firmware version: 101

Release date: 2013-01-22

iControl compatibility: 4.30 (build 36) and up

iControl Solo compatibility: 4.30 (build 36) and up

RCP-200 compatibility: NA

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

## ENHANCEMENTS & NEW FEATURES

Ref #	Description

## BUGS FIXED IN THIS RELEASE

Ref #	Description
37961	On bypass disable output drivers
38134	False Failover on input 2 when changing from manual to auto mode
38135	Remove input as a reference source on cleanswitch on card edge menu

## KNOWN BUGS & LIMITATIONS

Ref #	Description
34305	Audio Channel Status not updated when changing SD audio embed setting

## Firmware version: **100**

Release date: [2012-08-13](#)

iControl compatibility: [4.30 \(build 36\) and up](#)

iControl Solo compatibility: [4.30 \(build 36\) and up](#)

RCP-200 compatibility: [NA](#)

Hardware incompatibility: [This firmware applies to all existing hardware assemblies.](#)

### ENHANCEMENTS & NEW FEATURES

Ref #	Description
	Initial release

### BUGS FIXED IN THIS RELEASE

Ref #	Description

### KNOWN BUGS & LIMITATIONS

Ref #	Description
34305	Audio Channel Status not updated when changing SD audio embed setting