

## Engineering Release Notes

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You can update your card by downloading the new Update software by going to the **Support>Firmware** link at www.cobaltdigital.com. Download "Firmware Update Guide", which provides simple instructions for downloading the latest firmware for your card onto your computer, and then uploading it to your card through DashBoard<sup>TM</sup>.

## Software updates are field-installed without any need to remove the card from its frame.

The table below lists released software versions and describes the corresponding functions additions, improvements and/or corrections.

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## Software updates are field-installed without any need to remove the card from its frame.

The table below lists released software versions and describes the corresponding functions additions, improvements and/or corrections.

Software Version (Date)	Description
Rev 2.111 (7/26/2021 – present) All 9934-AUD-PRO models All BBG-1034-AUD-PRO models	Improvements:  • Improves audio DSP core utilization status reporting. If core usage (due to enabling multiple DSP functions for a given core) exceeds 99% and a core oversubscription condition is then detected, the Core Status DashBoard display turns red and displays Core x oversubscribed.
	<b>Note:</b> Download row on website for this card/device model includes DSP firmware rev 2.1 which is needed along with card firmware to implement the improvement described here.
Rev 2.098 (10/20/2020 – 7/26/2021) All 9934-AUD-PRO models All BBG-1034-AUD-PRO models	<ul> <li>Corrections:</li> <li>Closed captioning status when CC source is analog input bridge mode to SDI.</li> <li>Fixes incorrect per-channel audio delay choices for audio bus channels 5 thru 16.</li> <li>Fixes parity error in two UDWs of ATC timecode packets.</li> <li>Additions/Improvements:</li> <li>Adds controls to explicitly set HRD flags in apply ST352 VPID (OETF and colorimetry) in SDI output video.</li> <li>Adds UDP Raw ANC data insertion mode.</li> <li>Adds DSP Auto Adjust Delay feature that provides alert if additional video delay is needed to restore lip sync for program video using card DSP functions (such as RTLL and/or Dolby encoding).</li> <li>SD card recovery process improved and allows recovery to most recently installed firmware, licensing, and saved presets.</li> <li>Where video quality event screening is present (option +QC), adds failover choice to stay on failover input choice even if primary input "comes back", thereby preventing bouncing between two input choices if primary input is unreliable.</li> <li>Adds Bootloader Revision field in card Product Info tab. Shows revision or if card requires bootloader update.</li> </ul>
Rev 2.083 (5/10/2019 – 10/20/2020) All 9934-AUD-PRO models All BBG-1034-AUD-PRO models	<ul> <li>Corrections:         <ul> <li>(BBG-1000 variants only) Fixes rare cases where certain front-panel button presses could result in unit front-panel control lock-up.</li> </ul> </li> <li>Improves presets performance where large-scale manipulations could occur (such as Delete All Presets). Also provides enhanced stability and conformity when accessing presets from both DashBoard™ remote control and the built-in web browser UI.</li> <li>Note: 9934-AUD-PRO-DSP download row on website includes DSP firmware rev 2.0. Unless target -DSP device does not contain this version, this firmware does not need to be uploaded to the card/device (i.e., no new DSP version exists since the last firmware release).</li> </ul>

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Software Version (Date)	Description
Rev 2.079 (1/17/2019 – 5/10/2019) All 9934-AUD-PRO models All BBG-1034-AUD-PRO models	<ul> <li>Improvements:         <ul> <li>Adds Parameter Blast checkbox (located on the Admin &gt; System tab). When enabled, Parameter Blast can reduce the time it takes for a card/device to appear and populate in DashBoard (this is especially relevant where high-latency connections are present). This is facilitated by reducing some handshakes on initial DashBoard setup where control settings are static (not being manipulated) while the card is first appearing. (Note that the frame network card is the arbiter of all frame/card communications and in some cases may not accept full extent of parameter blast under some conditions.)</li> </ul> </li> <li>Corrections:         <ul> <li>Removes nuisance error warning in DashBoard during firmware upgrades that model is not recognized.</li> </ul> </li> <li>Note: 9934-AUD-PRO-DSP download row on website includes DSP firmware rev 2.0. Unless target -DSP device does not contain this version, this firmware does not need to be uploaded to the card/device (i.e.,</li> </ul>
Rev 2.078 (12/19/2018 – 1/17/2019) All 9934-AUD-PRO models All BBG-1034-AUD-PRO models	Improvements:  • Adds new preset functionality including new controls for deleting all presets on a card and managing how preset uploads get processed.  • Extends max EAS crawl length from 256 to 2048 characters.  • Increases per-channel audio delay from 800ms to 1500ms.  • WebUI improvements.  • Improved page loading time.  • All controls and status parameters supported and displayed (previously, some controls/parameters were not exposed on WebUI).  • User-selectable page color/background schemes (which are persistent across power cycling and/or reboots).  • Logo Insertion tabs now display the name of each graphic. The name of each graphic is also displayed in the Event Setup tab under the Event Action column. (This functionality requires uploading graphic files into bin files using the latest posted web conversion tool at http://a.cdi-eng.com:55080/cgi-bin/image_upload.py  Full compatibility is maintained meaning older graphics bin files will work with new firmware and new graphics BIN files with the name encoded will work with older firmware versions.
Rev 2.037 (5/11/2018 – 12/19/2018) All 9934-AUD-PRO models All BBG-1034-AUD-PRO models	<ul> <li>Improvements:</li> <li>Adds DSP Usage ("fuel gauge") to indicate percentage of DSP cores being utilized. Helps prevent over-allocation.</li> <li>Reduction in openGear frame traffic for reporting card parameter updates.</li> <li>Changes device name to "AUD-PRO-DSP" which is current ordering name.</li> <li>DSP Dolby Decode adds Auto-Detect Else Mute and Auto-Detect Else Pass PCM modes</li> <li>Corrections:</li> <li>Corrects mis-calibration of DashBoard audio level meters (bars). Full red = 0dBFS; Red/yel point = -10 dBFS; Yel/green point = -20 dBFS.</li> <li>Note: This release consists of the card basic upgrade .bin file 9934-AUD-PRO-DSP_rev_2.037.bin file and the Audio DSP upgrade file DSP_Upgrade_rev_2.0.bin file. Both files need to be uploaded to the device for full upgrade spoecified here (order of uploading does not mattter).</li> </ul>
Rev 2.014 (8/14/2017 – 5/11/2018) All 9934-AUD-PRO models All BBG-1034-AUD-PRO models	Corrections: Corrects case where device is not licensed with Frame Sync option +FS, device would repeatedly toggle lock mode parameter. This had no effect on signal processing but resulted in nuisance "Autosave Pending" card state messages and unnecessarily performed writes to the device log file.
Rev 2.011 (6/23/2017 – 8/14/2017) Ali 9934-AUD-PRO models Ali BBG-1034-AUD-PRO models	• Initial release