

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™. **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
2.077 (12/17/2018 – present) 9922-2FS / BBG-1022-2FS models	<p>Improvements:</p> <ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> - 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). • Trouble Slate and 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.
2.052 (7/3/2018 – 12/17/2018) 9922-2FS / BBG-1022-2FS models	<p>Improvements:</p> <ul style="list-style-type: none"> • Various stability improvements. • New WebUI which exposes all user controls • Improvement allows multiple SCTE104 insertions on same frame • Reduction in openGear frame traffic for reporting card parameter updates. <p>Corrections:</p> <ul style="list-style-type: none"> • Corrects mis-calibration of DashBoard audio level meters (bars). Full red = 0dBFS; Red/yel point = -10 dBFS; Yel/green point = -20 dBFS.
2.031 (1/4/2018 – 7/3/2018) 9922-2FS / BBG-1022-2FS models	<p>Additions:</p> <ul style="list-style-type: none"> • Adds audio output flex mixing, including output downmixers as flex mix sources. • Allows user-selectable ST352 VPID insertion as regenerated (default mode) or pass-thru mode where ST352 VPID is passed untouched. • (Option +TTS) Adds support for additional non-English language options. <p>Improvements:</p> <ul style="list-style-type: none"> • Various stability improvements. <p>Corrections:</p> <ul style="list-style-type: none"> • Fixes cases where GPI level-based triggering was used in conjunction with event actions, changes of level state may not always have been detected (resulting in the combined triggering not being executed). • (Option +SCTE104-FAST only) Fixes cases where a "0" would be inserted at the start of a UPID string in a SCTE104 <i>insert_segmentation_descriptor</i> operation, resulting in the last character of the UPID being dropped. • Addresses issue where non-PCM audio can spontaneously mute on outputs in rare cases of rapid input interruption/resumption. • (Option +SCTE104) Corrects UI typo in the log on +SCTE104 insertion page. • Corrects case where 23.98 frame formats would always be accepted regardless of how the input video filtering controls were set. • (Option +CQS) Fixes CQS-related issue with dual path configurations.
2.000 (5/26/2017 – 1/4/2018) 9922-2FS / BBG-1022-2FS models	<p>Additions:</p> <ul style="list-style-type: none"> • Adds support for +EAS on Path 2 (both crawls are based from the same COMM input and will display identically. An added control allows setting the crawl insertion destinations (path 1 or 2, or both). Crawl insertion on both paths is supported even if the paths are carrying different formats. • Adds new layers to presets supporting path-specific nesting (actions set to affect only one path while not affecting the other when a related preset is invoked).

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Software Version (Date)	Description
1.251 (5/11/2017 – 5/26/2017) 9922-2FS / BBG-1022-2FS models	<p>Corrections:</p> <ul style="list-style-type: none"> • Addresses a production compatibility issue. • Fixes nuisance “modified” card state message when no changes were actually made. • Fixes cases where card may not show in DashBoard when enabling Event-Based Loading
1.235 (11/29/2016 – 5/11/2017) 9922-2FS / BBG-1022-2FS models	<p>Additions:</p> <ul style="list-style-type: none"> • Adds Alarms DashBoard tab, which allows input video error conditions (missing, frozen, or black frame, CC loss, audio missing) to be propagated as a card general Warning (yellow) or Error (red) alarm. Maintains a log in DashBoard of all logged alarm activity, which can also be downloaded as Alarm.txt files. A Syslog IP function allows alarm propagation directly over IP (card must be fitted with Rear Module having a dedicated IP port or frame capable of per-card dedicated IP communications). • Adds video input raster size/frame rate filtering which allows rejecting formats as being considered valid inputs which do not meet user-set parameters (for example, filtering set for 720p 5994 only will reject and consider as Disabled by User any raster size/frame rate not meeting this criteria). <p>Note: The added user interface controls in this firmware version will not display or function properly on older versions of DashBoard. Version 7.0.0 or newer is recommended.</p>
1.232 (11/10/2016 – 11/29/2016) 9922-2FS / BBG-1022-2FS models	<p>Additions:</p> <ul style="list-style-type: none"> • (Option +EAS only) Adds +EAS option support (available only for Path 1 program). <p>Improvements:</p> <ul style="list-style-type: none"> • Adds explicit controls to use frame network card or direct network connection for NTP source • (Option +TTS only) Creates SSH public keys directory. This is to assist using public key SSH auth for +TTS using SCP to copy payout files to card. • (Option +SCTE104-FAST only) Improvements to accuracy of +SCTE104-FAST insertion for out-of-time-order messages.
1.231 (10/13/2016 – 11/10/2016) 9922-2FS / BBG-1022-2FS models	<p>Corrections:</p> <ul style="list-style-type: none"> • Fixes cases where GPI level-based triggering was used in conjunction with event actions, changes of level state may not always have been detected (resulting in the combined triggering not being executed). • (Option +SCTE104-FAST only) Fixes cases where a “0” would be inserted at the start of a UPID string in a SCTE104 <i>insert_segmentation_descriptor</i> operation, resulting in the last character of the UPID being dropped. <p>Improvements:</p> <ul style="list-style-type: none"> • (Option SCTE104-FAST only) SCTE104 messages inserted via +SCTE104-FAST with an expired UTC timestamp are now immediately inserted (previously rejected since the insertion time was expired).
1.224 (9/1/2016 – 10/13/2016) 9922-2FS / BBG-1022-2FS models	<p>Corrections:</p> <ul style="list-style-type: none"> • Corrects case where Frame Sync “On Loss of Video”, when set to Flat Field, could instead output a test pattern during the LOS intervals. This typically occurred only with intermittently present input LOS or large shifts in input timing. This is now corrected for any input LOS condition.
1.212 (8/3/2016 – 9/1/2016) 9922-2FS / BBG-1022-2FS models	<p>Additions:</p> <ul style="list-style-type: none"> • Adds support for multicast IP de/insertion with IGMPv3 support and source filtering • IP de/insertion using data-over-audio maintains IP packet structure. • IP de/insertion using data-over-audio capable of continuously de/inserting multiple packets per frame. • Adds general purpose “Event Timers” that can be used in conjunction with event-based actions. • (option +SCTE104) Adds support for SCTE104 messages as triggers for event actions. • (option +LOGO) +LOGO option can now be enabled/disabled using event actions. • Adds support for option +EAS.
1.197 (5/16/2016 – 8/3/2016) 9922-2FS / BBG-1022-2FS models	<p>Corrections:</p> <ul style="list-style-type: none"> • Fixes Known Issue noted in 1.193 thru 1.196. Both paths now allow independent LOS actions per the respective path control settings. • Although not normal product usage, if unrelated formats such as NTSC and PAL were carried on different paths, a corruption could result on the path related to current frame sync setting (for example, if a PAL signal was accidentally applied to Path 2 while Path 1 was carrying NTSC). This correction allows the intended path matching the frame sync format to pass uncorrupted regardless of signal on other the path. • Fixes DashBoard nuisance issue of “dummy” analog out reticules insertion control on Path 2 Reticules sub-tab.

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Software Version (Date)	Description
1.196 (4/11/2016 – 5/16/2016) 9922-2FS / BBG-1022-2FS models	<p>Corrections:</p> <ul style="list-style-type: none"> Fixes case where custom audio delay settings would not return to default settings when a default preset was applied. <p>Known Issues:</p> <ul style="list-style-type: none"> If Path 1 Framesync Output upon LOS is set for Disable Output, this will also cause Path 2 to also disable its output upon path 2 LOS. To make certain either path will output a raster selection upon LOS, make certain both Path 1 and Path 2 are set for any LOS choice other than Disable Output.
1.193 (3/23/2016 – 4/11/2016) 9922-2FS / BBG-1022-2FS models	<p>Additions:</p> <ul style="list-style-type: none"> Adds Silence selection as a source choice for input audio channel selections. <p>Known Issues:</p> <ul style="list-style-type: none"> If Path 1 Framesync Output upon LOS is set for Disable Output, this will also cause Path 2 to also disable its output upon path 2 LOS. To make certain either path will output a raster selection upon LOS, make certain both Path 1 and Path 2 are set for any LOS choice other than Disable Output.
1.191 (3/17/2016 – 3/23/2016) 9922-2FS / BBG-1022-2FS models	<p>Additions:</p> <ul style="list-style-type: none"> Adds SNMP support; adds button for SNMP MIB file download. Adds button to clear SDI error count/OK time. Adds silence as an output audio routing source. (Option +T-SLATE) Allows support of option +T-SLATE. Option provides graphic file upload and manual/quality-event invoke of trouble slate raster insertions. (Option +LOGO) Allows support of option +LOGO. Option provides graphic file upload and user-controlled insertion of logo “bug” onto active video.
1.184 (1/20/2016 – 3/17/2016) 9922-2FS / BBG-1022-2FS models	<p>Corrections:</p> <ul style="list-style-type: none"> Fixes case where some parameters were not properly displayed when using an OGCP-9000 Remote Control Panel. AES and analog audio output controls now properly control sources using card/device downmixer and flex mixers (fixes known issue noted in version 1.179 below). <p>Additions:</p> <ul style="list-style-type: none"> (Option +TTS) Allows support for Spanish characters (as extended ASCII, UTF-8 and UTF-16) and encoding when licensed with option +TTS and Spanish-language TTS option +2L-SPAN. (Option +TTS) Additional XML parser options added.
1.178 (12/7/2015 – 12/16/2015)	<ul style="list-style-type: none"> This release is superseded by release 1.179. Use version 1.179.
1.179 (12/16/2015 – 1/20/2016) 9922-2FS / BBG-1022-2FS models	<p>Corrections:</p> <ul style="list-style-type: none"> Fixes a potential remote control (DashBoard, etc.) communications drop-out condition in long-term use under certain conditions. <p>Known Issues:</p> <ul style="list-style-type: none"> When using AES or analog audio outputs sourced from audio output Downmix or Output Flex Mix sources, AES and/or analog output channel Gain, Mute, and Invert DashBoard controls may not be honored (control settings will have no effect on output). These outputs are fully usable, but will not be controllable by these controls. Parameters such as gain will remain at default null settings. (+TTS option) TTS routing and program ducking is not affected by this issue and will play out as set using the Text to Speech Audio Routing DashBoard controls. This issue exists for earlier releases also.
1.175 (11/24/2015 – 12/7/2015) 9922-2FS / BBG-1022-2FS models	<p>Corrections:</p> <ul style="list-style-type: none"> (+TTS option): Invalid XML files no longer cause card to dropout of DB. (+TTS option): Watch folders reconnect after reboot of servers hosting SMB shares. (+TTS option): CIFS share status would report total number of files incorrectly in some cases. Improves de-embedder alignment checking to avoid falsely flagging align errors for out-of-sequence but valid audio. Incoming CC is stripped when insertion is enabled. DashBoard controls added to remove and regenerate closed-captioning, with line no. control for regenerated insertion.
1.175 (cont.) (11/24/2015 – 12/7/2015) 9922-2FS / BBG-1022-2FS models	<p>Known Issues:</p> <ul style="list-style-type: none"> Timecode burn-in will only produce a burn-in when the card is outputting (passing) ATC_VITC timecode data. However, regardless of input or card-generated (free run) timecode source, burn-in can be accomplished by making certain ATC_VITC Insertion is set to Enabled on corresponding SD or HD insertion controls on the Timecode tab. (-2FS models with option +ANC only) While this product has separate Ancillary Data Processors for Path 1 and Path 2, the Path 1 and Path data over audio (SMPTE 337) output embedding choices are limited to using Path 1 embedded L/R data choice.

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Software Version (Date)	Description
1.158 (10/27/2015 – 11/12/2015) All 9922-2FS / BBG-1022-2FS models	<p>Corrections:</p> <ul style="list-style-type: none"> • For +TTS option, files fetched via FTP could get corrupted in some cases. • All TTS functionality now contained within TTS licensed functions and not other licensed functions (this affected GPO or user presets as a result of TTS playout status actions). <p>Improvements/Additions:</p> <ul style="list-style-type: none"> • +TTS enhancements: <ul style="list-style-type: none"> • XML parser parent field is true parent not just immediate parent.
1.120 and earlier (prior – 9/14/2015) All 9922-2FS / BBG-1022-2FS models	<ul style="list-style-type: none"> • Initial releases