



## Cobalt Digital Inc.

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## Engineering Release Notes

You can update your card by downloading the new Update software by going to the **Support>Firmware** link at [www.cobaltdigital.com](http://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.

- Notes:**
- Some features and/or functions described below are available on a card only when certain licensable features have been activated (e.g., DSP loudness processing licensed feature), or card equipped with corresponding daughtercard (e.g., Dolby® encoder module).
  - Date ranges are approximate. Software versions listed may not be available for all COMPASS™ cards; refer to **Support>Firmware** web page for specific card firmware availability.
  - If a card to receive a firmware upgrade currently shows **Software Release Number** as version 1, **do not proceed** with an upgrade using the file obtained from the Support>Firmware link. Instead, contact Cobalt Digital support for your upgrade file. You will instead receive a special upgrade file via e-mail. When this upgrade file is uploaded to the card, from that point on the card will be able to receive any subsequent upgrades via the normal, general web download method described above.

Software Version (Date)	Description
Release 3404 (8/18/2014 – present)	<b>Improvements:</b> <ul style="list-style-type: none"> <li>• Timecode module now detects whether selected input timecode is drop frame or non-drop frame, with drop or non-drop being preserved for any output timecode. (Where timecode is outputted for a 23.98 film rate, non-drop frame is always outputted.)</li> </ul>
Release 3391 (5/5/2014 – 8/18/2014)	<b>Corrections:</b> <ul style="list-style-type: none"> <li>• Fixes possible momentary loss of output when incoming AFD code change occurs during active video interval.</li> </ul>
3367 (11/18/2013 – 5/5/2014) (9085 Only)	<b>Additions:</b> <ul style="list-style-type: none"> <li>• Allows an auxiliary stereo pair (such as SAP) to be sent to an OGCP-9000 remote control panel with option +LM-P along with the main 5.1 audio metering stream. The secondary program metering stream emanates from the same card as the main metering stream and can be assigned a different device item in the control panel Select Device menu (for example, "Device 4: Frame A Slot 6 Main" and "Device 5: Frame A Slot 6 SAP").</li> </ul> <p>This allows simultaneous sessions to be performed from data emanating from a single 9085 card.</p>
3314 (10/22/2012 – 5/5/2014)	<b>Additions:</b> <ul style="list-style-type: none"> <li>• On cards with HD/SD up-down-cross convert scaler, provides CEA708 closed captioning support to transfer CEA708 from 1080psf2398 to other HD formats. Also supports transfer of CEA708 from HD formats to 1080psf2398 when scaler set to output 1080psf2398. When scaling to SD, CEA708 is converted to CEA608, line 21 closed captioning.</li> </ul>
3305 (9/7/2012 – 10/22/2012)	<b>Improvements:</b> <ul style="list-style-type: none"> <li>• Closed-captioning processing updated to handle intermittent caption feeds without adding repeats in characters or words. (Prior releases could result in repeated characters for feeds where toggling between frames with valid characters and then null characters, and so on occurred.)</li> </ul> <b>Known Issue:</b> <ul style="list-style-type: none"> <li>• With Framesync set to Input Video mode, negative settings for Vertical Delay (Lines) control can result in a choppy, corrupted video output. (This setting is not a normal, practical use case. Framesync is typically set to a frame reference when vertical delay control is used.)</li> </ul>
3302 (5/30/2012 – 9/7/2012)	Addresses a manufacturability requirement for new hardware builds. <b>Note:</b> Current cards in field use do not require this upgrade.
3267 (4/5/2012 – 5/30/2012)	<b>Corrections:</b> <ul style="list-style-type: none"> <li>• Fixes Dolby pair pass-thru corruption on cards with +UM (upmixing) option when upmixer may inadvertently be "looking at" Dolby channels as inputs. This could occur even if upmixing was disabled (set to "Bypass").</li> </ul> <b>Additions:</b> <ul style="list-style-type: none"> <li>• Allows +LM-C (Loudness Metering option) licensing by itself, and not as previously only being available in conjunction with +UM (Upmixing) or +LP (Loudness Processing) options.</li> </ul>

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<b>Software Version (Date)</b>	<b>Description</b>
3255 (9/19/2011 – 4/5/2012)	<p><b>Additions:</b></p> <ul style="list-style-type: none"> <li>• DTVCC CEA708 closed captioning support. All packet-based closed captioning insertion on output can be enabled or disabled using GUI control on scaler and non-scaler card models.</li> <li>• <b>Uptime</b> status display shows running time elapsed since last card power-cycle or reboot.</li> </ul>
3242 (7/28/2011 – 9/19/2011)	<p><b>Additions:</b></p> <ul style="list-style-type: none"> <li>• Allows most 9000-series cards (including up/down conversion cards such as 9061) to be licensed for added Linear Acoustic® Upmax™ upmixing and Aeromax™ 5.1/stereo loudness processing optional features. (AES SRC is disabled when running loudness processing.)</li> </ul>
3222 (6/27/2011 – 7/28/2011)	<p><b>Improvements:</b></p> <ul style="list-style-type: none"> <li>• On cards licensed for Loudness Processing and Loudness Metering, moves loudness metering point to loudness post-processed channels. Enhanced message processing to improve handling of metering data while allowing faster parameters updates between card and remote control.</li> <li>• On cards equipped with Scaler, removes compression from video processing when scaler is engaged.</li> </ul>
3196 (3/29/2011 – 6/27/2011)	<p><b>Corrections:</b></p> <ul style="list-style-type: none"> <li>• Correct possibility of erroneous running audio/RS-485 LTC output when input timecode is missing. If input timecode changes to not present, audio LTC mutes and RS-485 rests at non-counting state.</li> </ul> <p><b>Additions:</b></p> <ul style="list-style-type: none"> <li>• Adds “Mute Audio LTC on Output Freeze” control that allows muting of audio LTC when VTR source is paused.</li> </ul>