



9992-ENC Firmware Version 1.2.X Release Notes

Version 1.2.2:

- Fix a problem that caused an interoperability issue with libRIST when receiving from a Cobalt Encoder.
- Fix a problem whereby the encoder would fail to recognize Closed-Captions using ST 334 ancillary data packets.
- Fix a problem whereby the Encoder 3 and Encoder 4 channels failed to recognize EIA-608 Line 21 captions.
- Fix a problem whereby the line number coded in the ST 2038 payload was incorrect.

Version 1.2.1:

- This version has no user-visible changes. Internal Manufacturing improvements only.

Version 1.2.0 New Features:

- DSP support up to version 2.5.
 - DSP 2.5 includes some minor video quality improvements.
 - DSP 2.4 includes some minor video quality improvements.
 - Also supports version 2.3.
- Added SRT support to the mainline code.
- Updated the AAC audio encoder to the latest libraries.
- Add support for VSF TR-06-4 Part 1 Source Adaptation and VSF TR-06-2 Null Packet Deletion in RIST.
- Increased the number of saved configuration files to 50.
- Add a CPU utilization measurement and alarm to the Product tab.
- In multi-channel mode, turn off encoder channels if the CPU utilization is excessive.
- Performance improvements for RIST operation.
- Added an HLS alarm that works in the same way as the RTMP alarm.
- Added a feature to HLS where in HTTP POST mode where the URL is split into multiple sections in the GUI.
- Added a feature to allow setting arbitrary source UDP ports in the IP Outputs.
- Additional performance increase in RIST, HLS and RTMP.
- Implement an overall bit rate limit for card. The 9992-ENC will not accept a configuration that exceeds the bit rate limit.
- Speed-up of initial parameter refresh in DashBoard.
- Add support for the XML sideload through the frame interface, to speed up DashBoard startup.
- Add the ATSC AC3 descriptor to the PMT when encoding Dolby.
- Add support for the 9992-2ENC-4K Model.
- Enable the Frame Interface for OG-3/OG-X and BBG-1300 frames.
- Add support for firmware update over the Frame Interface (transparent to the user).
- Increase the number of available RIST destinations and tunnels to 8.
- Add support for setting the OP-47 Page Number in the PMT.



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- Add OP-47 Caption support.
- Increase the maximum allowed video bit rate.
- Increase the frequency of NTP synchronization.
- In RIST mode, add support synchronization information in the SR message.
- Impose a minimum one-frame interval between distinct SCTE-35 packets since some third-party devices cannot handle back-to-back messages.
- Add support for SCTE-35 signaling in the HLS manifest (compatible with YouTube).
- Add support for accepting multiple normal requests in the same SCTE-104 message.
- Add VPID information to the Video Inputs tab.
- Add an automatic mode whereby the video signal settings are set by the VPID values.
- Add a control to clip the QP in AVC mode.
- Add SCTE-35 signaling support to HLS.
- Downmix support control is now available through SNMP.
- Add surround-to-stereo downmix support for Dolby and AAC.
- Supports firmware uploads of up to 64 Mbytes.
- Add source IP address filtering to RIST tunnels.
- Timing improvements on SDI inputs. Internal change only.
- Add a fan alarm for boards with hardware version 2 and higher.

Version 1.2.0 Bug Fixes:

- Fixed a corner-case issue whereby in some rare situations, the local RSA/ECDSA certificates would not be signed by the local CA.
- Fixed a corner-case routing issue that happened if the Frame Interface were placed in the same network as one of the streaming interfaces. In this case, the default gateway (if defined) for the streaming interface would be assigned to the frame interface, and any RIST/SRT streams attempting destined to other subnets and assigned to that streaming interface would not work.
- Fixed a very intermittent crash related to parameter changing in AAC audio.
- Fix line 21 caption extraction in SD (was not working before).
- Fix a bug in the HLS SNMP MIB, which prevented SNMP access to the Enable Host Header and Host Header variables.
- Fix an MPTS creation bug: if two encoder instances were set to the same program number and routed to the same output, the encoder failed to resolve the conflict and produced an invalid MPTS containing two programs with the same number.
- Fixed a metadata bug in MPEG-2 only where the size of the active image was coming out as 1088 instead of 1080, for 1920x1080 signals.
- Fix an SNMP access issue to the encoder bit rate configurations.
- Fix an audio buffer model violation in HEVC.
- Fix the audio buffer model compliance for RIST and HLS.



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- Fix a bug whereby if the encoder suffered an overflow due to excessive CPU utilization, it would not recover until it was restarted.
- Fix a rare crash on HLS parameter setup.
- Fix A/V sync offset on Dolby Surround.
- RIST DTLS: fixed incorrect signature algorithm selection from DTLS client.
- Solve an issue whereby the encoder would appear to hang while doing a firmware update if the auto-reboot box was checked.
- Fixed a GUI issue whereby switching in and out of RTMP mode made the PID configuration GUI in the Advanced Tab disappear.
- Fix a small issue with 1.1.9 whereby parameters would not be restored correctly from previous versions.
- Fix an SNMP type mismatch from string to integer in the DID variable.
- Fix the HE-AAC frame size for correct operation.
- Work around a DataSafe issue that could cause a crash and restart.
- Fix an audio drop problem that could cause the encoder to lose A/V sync and restart.
- Fix a low-frequency, intermittent issue whereby DNS translation would incorrectly fail.
- Cosmetic change: use audio "service" instead of audio "channel" in the GUI.
- Event log changes to reduce CAN bus traffic. Internal change only.
- Fix Ethernet output selection in RIST mode and for RIST Tunnels.
- Remove repeated entries in the event log to further reduce CAN bus traffic.
- Fix an issue whereby SMPTE ST 2038 data was not coming out in ASI/IP mode.
- Fixed an A/V sync issue with Dolby pass-through when the framesync was enabled.
- Fixed an issue with Dolby pass-through in RIST and HLS modes.
- Fixed an issue that prevented Dolby pass-through to operate with SD signals.