



## 9992-DEC Firmware Version 0.5.X Release Notes

### Baseline version: 0.5.0

#### Version 0.5.1

- Add audio PID selection control.
- Add manual audio A/V sync offset control.
- Add A/V sync drift correction.
- Add audio level control and reporting.

#### Version 0.5.2

- No user-visible changes.

#### Version 0.5.3

- Add a startup clock alarm to the log if a daughtercard clock failure is detected.
- Intermittent audio corruption fix.
- Provide DNS server priority control in the Network tab.

#### Version 0.5.4

- Correct the Ethernet LED programming.
- Fixed an intermittent bug whereby the SDI outputs would have no signal.

#### Version 0.5.5

- Bug fix: ASI Port 2 was locking to content but not passing data to the decoder.
- Bug fix: if there were multiple multicasts with the same UDP port, the decoder was not able to separate the data.

#### Version 0.5.6

- Add support for RIST Main Profile (VSF TR-06-2) Tunneling.
- Fix a bug whereby the decoder program selectors would sometimes not update.

#### **Version 0.5.7**

- This version will recognize DSP Version 1.7.

#### **Version 0.5.8**

- When converting CC from the bitstream to ST-334M ANC packets, change the sequence number on stream discontinuities.
- Fix an intermittent video corruption issue when genlock is enabled.

#### **Version 0.5.9**

- Add support for RIST Main Profile (VSF TR-06-2) DTLS Encryption.

#### **Version 0.5.10**

- Fix a bug whereby the decoder would fail to recognize that an ASI stream changed and would not parse the new stream, thereby stopping the decode process.

#### **Version 0.5.11**

- Increase the performance of the ASI inputs. They can now work at close to line rate (216 Mb/s)
- Reset the program selector when the decoder program is restarted, to ensure that the programs are correctly listed in the drop-down menu.

#### **Version 0.5.12**

- Add support for remapping of UDP destination address in RIST tunnels.
- Improve recovery time for broken DTLS connections in RIST Main Profile.
- Handle (broken) RIST Main Profile endpoints that code a zero source IP address.

#### **Version 0.5.13**

- Fix a RIST Simple Profile issue whereby the decoder, when receiving a multicast, would respond to its own RTCP packets.

#### **Version 0.5.14**

- Add support for the transport stream monitor (+TSMON license).
- Add support for decoding audio streams that are not sampled at 48 kHz, and converting these to 48 kHz for embedding.
- Robustness improvements.
- Add support for the RIST Simple Profile RTT Echo message.
- Fix multicast reception in RIST Main Profile Reduced Mode.

- Fix support for the ECDSA and NULL cipher suites in RIST Main Profile (would not connect in previous versions).

#### **Version 0.5.15**

- Fix an issue whereby the board would respond on the backplane Ethernet when installed in an OG-3 or OG-X frame.
- CAN bus reliability improvements.
- Fix a possible issue whereby the decoder would require a 4K license for a 1920x1080 signal.

#### **Version 0.5.16**

- Add support for automatically configuring the SDI output based on the incoming signal.

#### **Version 0.5.17**

- Fix an issue whereby the automatic SDI configuration was not setting correctly the signal type, causing the output to fail in some situations (configuration-dependent).

#### **Version 0.5.18**

- Fixed an issue whereby the decoder would become inaccessible in DashBoard if it encountered some stream error conditions.

#### **Version 0.5.19**

- Corrected the frame accuracy of the HDR metadata insertion – it was one frame late.

#### **Version 0.5.20**

- Corrected an issue where the decoder would not auto-restart under error conditions.
- Manual restarts are now logged to aid in support issues.
- Add support for source address filtering and source-specific multicast (SSM).
- Add support for redundant UDP reception.
- Add bonding support for RIST.

#### **Version 0.5.21**

- Corrected an issue where the decoder would stall on unicast streams and had to be manually restarted.

#### **Version 0.5.22**

- Fix an issue whereby the FEC UDP ports were being opened in RIST mode.

#### **Version 0.5.23**

- Improvements to the ASI performance.
- Disable latency controls if the firmware does not actually support them.

#### **Version 0.5.24**

- 4K decoding was broken in version 0.5.19. This version has a preliminary fix for it. Ancillary data insertion in 4K mode is one frame off with this fix.

#### **Version 0.5.25**

- Final fix for the 4K decoding problem, correcting the ancillary data insertion.

#### **Version 0.5.26**

- Solve some decoder core errors when stopping.
- Remove the Low Latency mode from the Decoder Mode tab as it was not operational.
- Remove Low Latency GDR decoding in dual-decode mode as it is not actually supported.

#### **Version 0.5.27**

- Add support for the 2.0 DSP firmware.
- Add network packet loss logging.

#### **Version 0.5.28**

- CAN bus error recovery improvements.
- Add logging for A/V Resync events
- Add a control to set the level of network packet loss logging (previously hardcoded to 1%).

**Version 0.5.29**

- Add restart on frozen video.
- Fix a core error when stopping the decoder.

**Version 0.5.30**

- Fix an issue that cause the decoder to malfunction when switching between single and dual channel decoding with actual video running.

**Version 0.5.31**

- Fix embedded audio channel ordering in Group 4.

**Version 0.5.32**

- Fix the VPID value in 4K Quad-Link Square Division.

**Version 0.5.33**

- Fix an internal data corruption that caused occasional video glitches, even when the data was correctly received.

**Version 0.5.34**

- Improvements to the firmware update mechanism.

**Version 0.5.35**

- Add support for decoding 4Kp24/25/29.97/30 in Quad-Link HD mode.

**Version 0.5.36**

- Fix a cosmetic bug whereby the details of the program list would occasionally not completely update. This bug had no functional impact.
- Fix a rare bug whereby, under some conditions, the decoder would not produce SDI output.

#### **Version 0.5.37**

- Add support for decoding 4Kp24/25/29.97/30 in single-link 6G-SDI mode.

#### **Version 0.5.38**

- Fix a bug whereby AAC audio with multiple access units per PES packet was not being decoded correctly.
- Enhance the RIST implementation to deal with short outages.

#### **Version 0.5.39**

- Minor SDI output jitter improvements.
- Fix a decoder crash when attempting to decode 4K in HD mode.
- Fix a network input configuration issue that would cause the decoder to miss a configuration change if it were stopped.
- Fix a loss of output if genlock was changed on-the-fly. Genlock changes now cause a restart.

#### **Version 0.5.40**

- Improvements to genlock alignment.
- Genlock changes again are implemented on-the-fly without restarting the device.

#### **Version 0.5.41**

- Add initial RIST Main Profile Authentication support.
- ASI input logging improvements.

#### **Version 0.5.42**

- RIST Main Profile authentication support is complete.
- RIST Main Profile encryption is now under license control.
- Fix a cosmetic issue whereby the audio language descriptor was not being parsed for LPCM audio.
- Add the ability to download and restore the CA key.

#### **Version 0.5.43**

- Fix an issue whereby the ASI input would become corrupted on rare occasions under high bit rate.

**Version 0.6.0**

- Introduce RTMP Client and Server support.
- Fix an issue whereby genlock would not achieve frame synchronization for Reference 2.