PRISM 25GE
Media Analysis Platform

Release Notes

This document supports firmware version 2.0.1

www.tek.com

077-1653-01

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- Worldwide, visit www.tek.com to find contacts in your area.

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Release notes

This document describes new features, improvements, and limitations of firmware version 2.0.1 for the PRISM 25GE Media Analysis Platform.

NOTE. This software release only applies to the products

MPI2-25 and MPX2-25

MPI2-10 and MPX2-10 with 25GE upgrade kit

MPI and MPX with 25GE upgrade kit

New features and improvements

- Support for the new MPI2-25 and MPX2-25 PRISM 25GE Media Analysis platforms.
- 10GE IP interfaces use SFP+ modules (10GBASE-SR and 10GBASE-LR).
- 25GE IP interfaces use SFP28 modules with option 25GE (25GBASE-SR and 25GBASE-LR).
- Uncompressed 4K/UHD 50/59.94/60 over ST2110-20 IP with option FMT-4K.
- Four SD/HD/3G SDI inputs are standard. 12G support on all inputs is available with option FMT-4K.
- 25GE upgrade kits are available for MPI, MPX, MPI2-10, and MPX2-10 products.

Resolved Issues

- SDI 12G audio now works on SDI inputs 2, 3, and 4.
- Fixed reliability issues of NMOS operation in certain network environments.
- AUX Output of ST2110 UHD input signals is now supported.
- IP stream capture at 10/25GE is now supported.
- Aux Out is now stable if one ST2022-7 input is removed in the presence of errors.
- Locking to SDI 6G signals no longer requires first locking to a 12G signal.

General limitations

- Check the Tektronix Web site (www.tek.com/downloads) for any firmware updates to the PRISM monitor.

SDI SFP Loop-through

- SDI loop-through to SDI SFP modules is not yet supported.

ST2022-6 streams

- All ST2022-6 streams are required to have RTP Payload Type of 98.

ST2110 streams

- The sequence error detection includes the extended sequence number available in ST2110 streams. The error counter is based on the combined sequence numbers.
- ST2110-21 VRx and CMAX measurements are not supported in SD and 4K/UHD formats.

IP Generator application

- When configuring the IP Generator for Seamless Switching with the ip_gen_config API, setting both paths is required using the scope operators IP1 and IP2.
- SD 525 signal generation in ST2110-20 has a skewed color bar alignment when motion is enabled. It is recommended to only use this signal for IP layer testing.

Trace applications

- If Convert to Rec. 709 mode is enabled and the gamut exceeds the 709 gamut, traces may have distortions in the Waveform, Vector, and Diamond applications.

Audio application

- Audio application may indicate CRC errors for Dolby stream except Dolby E format.
- When Dolby audio is included in SDI signals or ST2022-6 streams, undecoded Dolby data is sent out of the headphone port.
- There is no description in api / help for Audio Session.
- SDI 6G audio is not supported.

Preset

Presets don't save:

- HDR measurement thresholds in Picture Settings,
- Dolby program to decode in Audio application Settings,
- Audio channel pair that appears after pressing Volume in the Status bar.

IP Graphs application

- When the instrument is powered on with no IP input stream connected, the graphs in the IP Graphs application may show a false-event spike.
- The TS-DF graph gets invalid data when PTP is locking.
- The PIT graph may see a large value when changing inputs.

PTP Graphs application

- The PTP Graphs application shows incorrect data when no PTP Master is present.
- When the instrument does not lock to PTP, the measurements using PTP timing information can be corrupted. Set the PTP domain to a number that is not in use to avoid this issue.

PTP

- When no PTP Master is present, the PTP message rates will be erroneously reported as infinite (INF).
- If PTP in Mixed SMPTE mode will not lock, try setting Communication Mode to Multicast and then back to Mixed SMPTE mode.

Control IP Port address assignment in DHCP mode

- When you have the instrument configured so that the Control IP Port address is assigned using DHCP and a DHCP failure occurs, the Control IP Port address display in the Settings > Network submenu does not indicate that a DHCP failure has occurred. If this issue occurs, you may have to manually configure the Control IP Port address.

AUX Out

- If the PIT jitter is greater than 125 µs, decoded content such as picture and waveform and the AUX Out signal may become unstable.
- When the input signal is switched externally, the AUX Output may take time to lock to the new signal.
- The AUX Out connector will not output a valid signal when these ST2022-6 input signal formats are present:
  - 525i 59.94
  - 1080P 23.98, 24, 29.97
  - 1080sF 23.98, 25, 30
- AUX Output of ST2110 SD input signals is not supported.
- AUX Output of 6G SDI input signals is not supported.

SDI Input

- The instrument will not lock to a 12G-SDI signal without sync byte insertion. Sync byte insertion is required in the SMPTE ST 2082 standard.

IP Input

- A reboot is recommended after changing Data Rate or FEC settings in Settings > Network > Video IP Port.

Picture application

- False color is only supported for HD and UHD formats.

SDI Generator application

- The SDI generator will generate 3G Level A and 12G test patterns, but there is an inter-channel timing issue for these formats.
- The color bar signal from generator application has an inter-channel timing issue, it should be used only for confidence monitoring.

Version downgrading

- Downgrading to versions earlier than 2.0 is not allowed for instruments with 25GE hardware.