This document supports firmware version 1.8.

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Release notes

This document describes new features, improvements, and limitations of firmware version 1.8 for the PRISM Media Analysis Platform.

New features and improvements

- Support for extended display products MPX2-DUALDSP and MPI2-RACK-MD
- Quad inter-link timing measurement for 4K Quad SDI link format
- CIE application
- False color picture with presets for BT.2408 and common camera HDR false color definitions
- Single-link 6G and Quad-link HD formats
- General RTP-based IP streams, targeted for Sony NMI and JPEG-XS/ST2110-22 analysis
General limitations

This firmware release has the following general limitations. Please check the Tektronix Web site (www.tek.com/downloads) for any firmware updates to the PRISM monitor.

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.

Power-on error message
- When your PRISM is powering on, an error message may be displayed. The following error message is harmless and will not affect the operation of the instrument.
  Ignoring BGRT: failed to map image header memory

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
- When Dolby audio is included in SDI signals or ST2022-6 streams, the bar display in the Audio application may indicate CRC errors.
- When Dolby audio is included in SDI signals or ST2022-6 streams, undecoded Dolby data is sent out of the headphone port.
- Selection of an audio channel pair (after pressing the Volume button in the Status Bar) is not saved as a preset.

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.

The menu option for a 7 day trend interval has been removed. This option will be reinstated in a future firmware release. Any presets that have been saved with the 7 day trend interval will be changed to use the 1 day trend interval setting.

**PTP Graphs application**

- The PTP Graphs application shows incorrect data when no PTP Master is present.
- The menu option for a 7 day trend interval has been removed. This option will be reinstated in a future firmware release. Any presets that have been saved with the 7 day trend interval will be changed to use the 1 day trend interval setting.
- 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).

**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 you notice this issue, you may have to manually configure the Control IP Port address.

**SDI Out**

- SDI Output is not functional and should not be used with a ST2110 source.
- If the PIT jitter is greater than 125 μs, decoded content such as picture and waveform and the SDI Out signal may become unstable.
- When the input signal is switched externally, the SDI output may take time to lock to the new signal.

**SDI In**

- 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.
- The signal formats supported by SDI inputs 1 through 4 changed with firmware version 1.6:
  - SDI inputs 1 and 3 support SD/HD/3G/12G signals.
  - SDI inputs 2 and 4 support SD/HD/3G signals.
SFP+ ports
- SDI SFP+ loop-throughs are not supported for SD formats.
- Optical SFP+ modules, Active Direct Attach Cables (DACs), and Active Optical Cables (AOCs) are supported on the 10 GbE SPF+ ports. Passive DACs are not supported.

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

External displays
- The MPI2 can drive a maximum of 1 external display. The MPX2 can drive a maximum of 2 external displays.

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
Please note the following items before downgrading your software:
- It is strongly recommended not to downgrade to a version earlier than 1.7.1.
- If you are downgrading to a software version earlier than 1.6, you will need to recreate or resave your presets after you downgrade.
- If you are downgrading to a software version earlier than 1.6, Event Log and graph data will be deleted.