



PRISM
Media Analysis Platform
Release Notes

This document supports firmware version
1.6 Build 360 and above.

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Contacting Tektronix

Tektronix, Inc.
14150 SW Karl Braun Drive
P.O. Box 500
Beaverton, OR 97077
USA

For product information, sales, service, and technical support:

- In North America, call 1-800-833-9200.
- Worldwide, visit www.tek.com to find contacts in your area.

Release notes

This document describes new features, improvements, and limitations of firmware version 1.6 Build 360 and above for the PRISM Media Analysis Platform.

New features

The new features introduced with firmware version 1.6 enable users to:

- Monitor a variety of IP statistics using comprehensive SMPTE 2110 measurement sets:
 - SMPTE2110-10: PTP and RTP-Timestamp based “Stream timing” measurements
 - SMPTE2110-20: RTP layer monitoring and Video decoding
 - SMPTE2110-21: Network compatibility model / Virtual receiver buffer model simulation
 - SMPTE2110-30: RTP layer monitoring and Audio decoding
 - SMPTE2110-40: RTP layer monitoring
 - SMPTE2022-7: Seamless packet reconstruction and Path 1 / 2 timing difference measurements
- Control the instrument from system management software using NMOS (IS-04/IS-05), SDP Viewer (RFC4566), and API to discover, register, configure inputs, and select the active input for monitoring
- Ensure proper SMPTE 2022 and 2110 redundant system operation using seamless switching
- Test new or changing facility configurations using optional SDI and ST2110 IP signal generators (Option MP-GEN)
- Detect IP packet errors, monitor the packet inter arrival time (PIT), and time stamped delay factor (TS-DF) for ST 2022-6 to allow engineers to observe issues that may cause intermittent loss of Video, Audio, or Data
- Adjust trace and graticule brightness using the intensity controls in the display settings
- Adjust magnification of the trace in the Vector application using Gain in the settings menu
- Verify wide color gamut compatibility using 3D LUT in the Picture application

Improvements

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

- 4K Quad Link SDI audio**
- Quad Link Audio was not functional. This issue is resolved in firmware release 1.6 build 360.

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.

- 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.
 - Convert to Rec. 709 mode is not supported for SD signals.
- 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
(Option MP-IP-MEAS only)**

- 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.

Video Session application

- The Video Session application is not applicable for ASPEN.

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 message rate reporting**
- 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.

- ST2110**
- AUX SDI Output is not functional and should not be used with a ST2110-20 source.

- SDI Out**
- If the PIT jitter is greater than 125 μ s, decoded content such as picture and waveform and the SDI Out signal may become unstable.

- SDI In**
- The instrument cannot 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 have 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.

Version downgrading The preset structure has changed, software version 1.6 will migrate earlier presets. However, old firmware is not compatible with new presets. Please note the following items before downgrading your software:

- If you are downgrading to a software version earlier than 1.6, you will need to create or re-save your presets.
- If you are downgrading to a software version earlier than 1.6, Event Log and graph data will be deleted.

- 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 10GbE SFP+ ports. Passive DACs are not supported.