

**PRISM Media Analysis Platform Release Notes** 

This document supports firmware version 1.5.

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# Release notes

This document describes new features, improvements, and limitations of firmware version 1.5 for the PRISM Media Analysis Platform.

### **New features**

- **Version 1.5** The following new features were introduced with firmware version 1.5:
  - New comprehensive production tool set supporting 4K / WCG / HDR content creation:
    - Waveform display settings added to support HDR monitoring
    - Stop Display application added for monitoring video signals with a variety of transfer functions in a consistent manner (requires Option MP-PROD)
    - Diamond application added to reliably detect invalid colors. (requires Option MP-PROD)
    - Dynamic range / color space conversion is available in Waveform, Vector and Diamond display applications, allowing operators to match the skin tone and the color in BT. 709 Gamma / Gamut display using the Convert to Rec. 709 setting (requires Option MP-PROD)
  - SDI / IP hybrid interface supporting up to 4K resolution, up to 2160p60 format support with 12G-SDI / Quad 3G-SDI interface, and up to 1080p60 format with SMPTE 2022-6/7
  - Quad Link input configuration and UHD/4K Mode added (requires MP-FMT-4K)
  - Gamma and Color Gamut drop-down menus added to the input settings to define the characteristics of the video signal
  - Flexible display configuration with Full / Quad / Vertical extended tile modes
  - Eye Display application added to view an eye pattern diagram of the SDI input (requires Option PHY-12G)
  - Jitter Display application added to display the wave shape of the jitter and allows for additional time-domain information (requires Option PHY-12G)
  - Added the Message Center to view instrument messages and eject mounted devices

# **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.

#### **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.
- When two traces are selected in two tiles, a trace may sometimes flash. You can exchange the applications in those two tiles to stop the flashing.

### **IP Session application**

RTP Marker error detection does not work when a ST2110 stream is monitored.

#### **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 and accuracy is improved when locked to PTP.
- 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 and ST2110-20 preview.

#### 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.

# ST2022-7 seamless switching

■ The 10 GbE SFP+ port 2 cannot be used as a general purpose input. The port can be used only as Path 2 in a ST2022-7 system.

#### ST2110-20 preview

The following applications/features are not functional and should not be used with a ST2110-20 source. ST2110-20 is a preview of a feature to be available in a future software release.

- Timing application
- Video Session application
- HBRMT parameters and L5 RTP Marker bit in the IP Session application
- AUX SDI Output

### **SDI Out**

- If the PIT jitter is greater than 125 μs, decoded content such as picture and waveform and the SDI Out signal may become unstable.
- 12G transport loop-throughs on the SDI SFP+ outputs are not supported (SD/HD/3G are supported). You can use the SDI Out connector for 12G loop-through, however, it must be selected for monitoring to appear at the connector.
- SDI Out nominal amplitude for 12G signals is 915 mV. Nominal amplitude for SD/HD/3G signals remains at 800 mV.