



**PRISM**  
**Media Analysis Platform**  
**Release Notes**

This document supports firmware version 1.6.

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# Release notes

This document describes new features, improvements, and limitations of firmware version 1.6 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

## General limitations

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

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| <b>IP Generator application</b>                           | <ul style="list-style-type: none"><li>■ When configuring the IP Generator for Seamless Switching with the <code>ip_gen_config</code> API, setting both paths is required using the scope operators IP1 and IP2.</li><li>■ 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.</li></ul>  |
| <b>Trace applications</b>                                 | <ul style="list-style-type: none"><li>■ If Convert to Rec. 709 mode is enabled and the gamut exceeds the 709 gamut, traces may have distortions.</li><li>■ Convert to Rec. 709 mode is not supported for SD signals.</li></ul>  |
| <b>Audio application</b>                                  | <ul style="list-style-type: none"><li>■ When Dolby audio is included in SDI signals or ST2022-6 streams, the bar display in the Audio application may indicate CRC errors.</li><li>■ When Dolby audio is included in SDI signals or ST2022-6 streams, undecoded Dolby data is sent out of the headphone port.</li><li>■ Selection of an audio channel pair (after pressing the Volume button in the Status Bar) is not saved as a preset.</li></ul>   |
| <b>IP Graphs application<br/>(Option MP-IP-MEAS only)</b> | <ul style="list-style-type: none"><li>■ 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.</li><li>■ The TS-DF graph gets invalid data when PTP is locking.</li><li>■ The PIT graph may see a large value when changing inputs.</li><li>■ 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.</li></ul> |
| <b>Video Session application</b>                          | <ul style="list-style-type: none"><li>■ The Video Session application is not applicable for ASPEN.</li></ul>  |

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| <b>PTP Graphs application</b>                          | <ul style="list-style-type: none"><li>■ The PTP Graphs application shows incorrect data when no PTP Master is present.</li><li>■ 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.</li><li>■ 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.</li></ul> |
| <b>PTP message rate reporting</b>                      | <ul style="list-style-type: none"><li>■ When no PTP Master is present, the PTP message rates will be erroneously reported as infinite (INF).</li></ul>  |
| <b>Control IP Port address assignment in DHCP mode</b> | <ul style="list-style-type: none"><li>■ 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 &gt; 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.</li></ul>  |
| <b>ST2110</b>  | <ul style="list-style-type: none"><li>■ AUX SDI Output is not functional and should not be used with a ST2110-20 source.</li></ul>  |
| <b>SDI Out</b>   | <ul style="list-style-type: none"><li>■ If the PIT jitter is greater than 125 <math>\mu</math>s, decoded content such as picture and waveform and the SDI Out signal may become unstable.</li></ul>   |
| <b>SDI In</b>  | <ul style="list-style-type: none"><li>■ The instrument cannot lock to a 12G-SDI signal without sync byte insertion. Sync byte insertion is required in the SMPTE ST 2082 standard.</li><li>■ The signal formats supported by SDI inputs 1 through 4 have changed with firmware version 1.6:<ul style="list-style-type: none"><li>- SDI inputs 1 and 3 support SD/HD/3G/12G signals.</li><li>- SDI inputs 2 and 4 support SD/HD/3G signals.</li></ul></li></ul>  |

**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.