Tektronix®

PRISM
Media Analysis Platform

Release Notes

This document supports firmware version 1.7.1.

www.tek.com

077-1293-08

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Release notes

This document describes new features, improvements, and limitations of firmware version 1.7.1 for the PRISM Media Analysis Platform.

New features

The new features introduced with firmware version 1.7.1 enable users to:

- Timing measurement enhancements:
  - SDI timing vs. Analog external reference
  - Analog external reference timing vs. PTP
  - SDI timing vs. PTP
  - Analog external reference termination or loop-through options
- Video/Reference lock indication in the Status Bar, including timing drift indication
- The Picture display application now has selectable format status information, which users can manually position within the application tile
- Lightning display application
- Magnification/gain and position control through on-screen tools for the Waveform, Vector, Lightning, and Stop Displays
- Vertical and horizontal cursor read outs in the waveform display
- 16 channel audio support carried in a single ST2110-30 stream
- Audio balance control
- Additions to RESTful API

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.

Power-on error message

- When your PRISM is powering on, a 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`

Missing hardware information

- When your PRISM is unresponsive to any video input after the system boots, you may be experiencing an uncommon behavior. This behavior can be caused by the hardware not being recognized during the system boot.

  To verify, go to the **Settings > Utilities > Version** menu and confirm that every item under **Hardware** has a value. If some of the values are empty, then the hardware was not recognized.

  A reboot of your PRISM will usually fix the problem. If a reboot does not fix it, contact customer support.

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 (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.

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.

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.

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.

Version downgrading

Please note the following items before downgrading your software:

- After you have upgraded to version 1.7.1, it is strongly recommended not to downgrade to an earlier version.
- 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.

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 SPF+ ports. Passive DACs are not supported.