



PRISM
Media Analysis Platform
Release Notes

This document supports firmware version 1.10.2
www.tek.com



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Release notes

This document describes new features, improvements, and limitations of firmware version 1.10.2 for the PRISM Media Analysis Platform.

New features and improvements

- Audio session and Channel correlation meter are added to the Audio application. (requires MP-AUD-UP license on MPI/MPX and MP2-AUD license on MPI2-10/MPX2-10)
- Line Select function is added to the trace applications (Waveform, Vector, Diamond/Lightning, Stop, CIE) with highlighting of the selected line in the Picture application.
- Datalist application to display the data of input SDI signal (1.5G, 3G Level A, 12G) in HEX. (requires MP-ENG-MEAS or MP-ENG-MEAS-UP for MPI/MPX, and MP2-ENG or MP2-QC for MPI2-10/MPX2-10)
- Dolby Status application for showing metadata in Dolby E Embedded Audio in SDI signals. (requires MP-DLBY-UP for MPI/MPX and MP2-DLBY for MPI2-10/MPX2-10)
- Dolby E decoding feature for Embedded Audio in SDI signals added to the Audio application. (requires MP-DLBY-UP for MPI/MPX and MP2-DLBY for MPI2-10/MPX2-10)
- HDR Measurements in the Picture application to indicate the picture area with brightest%, darkest%, contrast ratio, and picture area outside of ITU-R BT.709 / DCI-P3 color space. (requires MP-PROD or MP-PROD-UP for MPI/MPX, and MP2-PROD for MPI2-10/MPX2-10)

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.S
 - ST2110 streams with SD format will not be decoded unless SDI Out loop-through is disabled. To disable loop-through, go to Settings > Output and select Generator as the SDI Output.

- 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
 - Audio application may indicate CRC errors for Dolby stream except Dolby E format.
 - When Dolby audio is included in SDI signals or ST2022-6 streams, undecoded Dolby data is sent out of the headphone port.
 - Video must be present to monitor audio in ST2110 streams.
 - There is no description in api / help for Audio Session.

- Preset
 - Presets don't save:
 - HDR measurement thresholds in Picture Settings,
 - Dolby program to decode in Audio application Settings,
 - Audio channel pair that appears after pressing Volume in the Status bar.

- 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.

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| PTP Graphs application | <ul style="list-style-type: none">■ The PTP Graphs application shows incorrect data when no PTP Master is present.■ 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 | <ul style="list-style-type: none">■ 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 | <ul style="list-style-type: none">■ 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 | <ul style="list-style-type: none">■ 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.■ The SDI Out connector will not output a valid signal when the following ST2022-6 input signal formats are present:<ul style="list-style-type: none">- 525i 59.94- 1080P 23.98, 24, 29.97- 1080sF 23.98, 25, 30■ Loop-through of ST2110 SD input signals on the SDI Out connector is not supported.■ Loop-through of 6G input signals on the SDI Out connector is not supported. |
| SDI In | <ul style="list-style-type: none">■ 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. |
| SFP+ ports | <ul style="list-style-type: none">■ 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 SFP+ 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.