Copyright © Tektronix. All rights reserved. Licensed software products are owned by Tektronix or its subsidiaries or suppliers, and are protected by national copyright laws and international treaty provisions.

Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specifications and price change privileges reserved.

TEKTRONIX and TEK are registered trademarks of Tektronix, Inc.

Dolby, Dolby Audio, and the double-D symbol are trademarks of Dolby Laboratories.

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.
# Table of Contents

Release notes ........................................................................................................ 1
New features and improvements ............................................................................. 1
General limitations ............................................................................................ 1
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.
- 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.
PTP Graphs application

- 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

- 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

- 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:
  - 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

- 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

- 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 SPF+ ports. Passive DACs are not supported.
Release notes

**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.