PRISM

Media Analysis Platform

Release Notes

This document supports firmware version 2.1.1

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D00010030

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Release notes

This document describes new features, improvements, and limitations of firmware version 2.1.1 for the PRISM Media Analysis Platform.

NOTE. *This software release applies to the following products:*

- *MPI2-25 and MPX2-25*
- *MPI2-10 and MPX2-10*
- *MPI and MPX*

New features and improvements

- Support for the 8K quad SDI inputs with these monitoring features (requires option FMT-8K):
  - 7680x4320 resolution at p50, p59.94, and p60 frame rates
  - Up to 32 channels of audio
- Audio programs (mono, stereo, 5.1, 7.1) can be configured when setting up SDI or IP inputs.
- Dolby E Guard Band measurements (requires option AUD or DLBY).
- Decode of Dolby E metadata transmitted over ancillary data packets (requires option AUD or DLBY).
- Audio loudness readout (requires option AUD).
- New Anc Session application to monitor ancillary data transmitted over SDI and IP signals (requires option ENG, QC, or ENG-MEAS).
- Up to 5 light meter measurements at selectable points in a Picture (requires option PROD).
- Source ID overlay can be displayed on the Picture.
- Timecode readout is available on the Status Bar.
- Closed Captions can be decoded and overlaid on the Picture. Supported formats include CEA-608, CEA-708, OP-47, and ST2031 (requires options ENG-MEAS, ENG, or QC).

General limitations

This firmware release has the general limitations listed in this section. Check the Telestream website at www.telestream.net/video/resources.htm#Software for any firmware updates to the PRISM monitor.

SFP Ports

- SDI loop-through to SDI SFP modules is not yet supported on the following products:
  - MPI2/MPX2-25
  - MPI/MPX that have been upgraded to 25G
  - MPI2/MPX2-10 that have been upgraded to 25G
- SDI loop-through to SDI SFP modules is not supported for SD formats.
- Optical SFP modules, Active Direct Attach Cables (DACs), and Active Optical Cables (AOCs) are supported on the SFP Ports.

  Passive DACs are supported on MPI/MPX and MPI2/MPX2-10 products if they include the 25G upgrade.

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.
- ST2110-21 VRx and CMAX measurements are not supported in SD and 4K/UHD formats.

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.
- The IP Generator may not lock to PTP at power-up. If you know there is a valid incoming PTP signal, go to the IP Generator application Settings menu, ensure that Reference is set to PTP, disable the generator, then re-enable the generator. The generator should then be locked to PTP.

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.
- Audio bar paging is not saved in presets. If the input has many audio channels, there can be multiple pages of audio bars to display. When recalling a preset, the first page of audio bars will always be displayed.
- Dolby Loudness Dialogue Level may incorrectly show NA when the active audio channel is changed, using the program selection at the bottom of the audio bars or by selecting an audio pair in the Status Bar Volume menu. This can be resolved by selecting the active channel in the banner of the Dolby Status application.
- Video must be present to monitor audio in ST2110-30 audio streams.

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).
- If PTP Mixed Mode does not lock after reboot, change the PTP domain to a different number then change it back to the correct PTP domain. PTP should be then be locked.

Control IP Port

- 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 this issue occurs, you may have to manually configure the Control IP Port address.

Video Output Ports

- MPX and MPX2 should be booted with a monitor attached to ensure that the video subsystem is properly initialized. If this is not always possible, a DisplayPort Display EDID Emulator Plug may be used.

Aux Out

- If the PIT jitter is greater than 125 µs, decoded content such as picture and waveform and the AUX Out signal may become unstable.
- When the input signal is switched externally, the AUX Output may take time to lock to the new signal.
- AUX Output of SD input signals is not supported.
- ST2110-30 is not available on the AUX OUT connector for products that support 25G IP streams.

SDI Input

- 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.

IP Input

- A reboot is recommended after changing Data Rate or FEC settings in Settings> Network > Video IP Port.

Picture application

- False color is only supported for HD and UHD formats.
- The Lightmeter function does not support the following input signals:
  - SLog3 (Live HDR) gamma
  - 3G Level B format
  - 8K format

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.

Datalist Application

- The Ancillary Data Flag (ADF) is not shown correctly for 12G SDI inputs on MPI/MPX and MPI2/MPX2-10 products without the 25G upgrade. ADF is shown as 0x002 0x3FD 0x3FD whereas it should be 0x000 0x3FF 0x3FF.

Power-on error message

- When your PRISM is powering on, an error message may be displayed. This error message is harmless and will not affect operation of the instrument.
  `Ignoring BGRT: failed to map image header memory`

Version downgrading

- Downgrading to versions earlier than 2.0 is not allowed for instruments with 25GE hardware.