SDI Control Point

Release Notes

November   –   Rev

2021   2021.3

KAYA INSTRUMENTS

www.kayainstruments.com

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1 Introduction

1.1 Safety precautions

Please take the time to read through the precautions listed below in order to prevent preventable and unnecessary injuries and damage to you, other personnel or property. Read these safety instructions carefully prior to your first use of the product, as these precautions contain safety instructions that must be observed. Be sure to follow this manual in order to prevent misuse of product.

⚠️ **Caution! Read Carefully and do not disregard these instructions.**
In the event of a failure, disconnect the power supply Disconnect the power supply immediately and contact our sales personnel for repair. Continuing to use the product in this state may result in a fire or electric shock.
If an unpleasant smell or smoking occurs, disconnect the power supply. Disconnect the power supply immediately! Continuing to use the product in this state may result in a fire or electric shock. After verifying that no smoking is observed, contact our sales personnel for repair.
Do not disassemble, repair or modify the product. This may result in a fire or electric shock due to a circuit shortage or heat generation. Contact our sales personnel prior to inspection, modification or repair.
Do not place the product on unstable surfaces. Otherwise, it may drop or fall, resulting in injury to persons or the camera.
Do not use the product if dropped or damaged. Otherwise, a fire or electric shock may occur.
Do not touch the product with metallic objects. Otherwise, a fire or electric shock may occur.
Do not place the product in dusty or humid environments, nor where water may splash. Otherwise, a fire or electric shock may occur.
Do not wet the product or touch it with wet hands. Otherwise, the product may fail or it may cause a fire, smoking or electric shock.
Do not touch the gold-plated sections of the connectors on the product. Otherwise, the surface of the connector may be contaminated by sweat or skin-oil, resulting in contact failure of a connector, malfunction, fire or electric shock due to static electricity discharge.
Do not use or place the product in the following locations. ▪ Unventilated areas such as closets or bookshelves. ▪ Near oils, smoke or steam. ▪ Next to heat sources. ▪ A closed (and not running) car where the temperature becomes high. ▪ Static electricity replete locations ▪ Near water or chemicals. Otherwise, a fire, electric shock, accident or deformation may occur due to a short circuit or heat generation.
Do not place heavy objects on the product. Otherwise, the product may be damaged.
Be sure to discharge static electricity from body before touching any sensitive electronic components. The electronic circuits in your computer and the circuits on the *Iron* camera and *KAYA boards* are sensitive to static electricity and surges. Improper handling may seriously damage the circuits. In addition, do not let your clothing come in contact with the circuit boards or components. Otherwise, the product may be damaged.

1.2   Disclaimer

KAYA Instruments will assume no responsibility for any damage that may ensue by the use of this product for any purpose other than intended, as previously stated. Without detracting from what was previously written, please be advised that the company will take no responsibility for any damages caused by:

- Earthquake, thunder strike, natural disasters, fire caused by use beyond our control, willful and/or accidental misuse and/or use under other abnormal and/or unreasonable conditions.
- Secondary damages caused by the use of this product or its unusable state (business interruption or others).
- Use of this product in any manner that contradicts this manual or malfunctions that may occur due to connection to other devices. Damage to this product that is out of our control or failure due to modification
- Accidents and/or third parties that may be involved.

Additionally, **KAYA Instruments** assumes no responsibility or liability for:

- Erasure or corruption of data caused by the use of this product.
- Any consequences or other abnormalities following the use of this product

2   Release notes

The purpose of this document is to describe the changes, enhancements, and bug fix report for new version release of SDI Control Point software.

2.1   Release notes 2021.3 version

2.1.1   New features

1.   Genlock configurations are now available:
   -   Genlock Crosslock
   -   Genlock vertical offset
   -   Genlock horizontal offset
   -   Genlock termination

2.2   Release notes 2021.2 version

2.2.1   New features

1.   12bit processing pipe for better calculation accuracy.
2.   Re-implemented 'Export/Import to file' for better compatibility with camera's configurations.
3.   Added support of 'Statistics ROI' for compensation algorithms, including graph visualization.
4.   Added 'Camera ROI' offset to control the physical image origin output from the sensor.
5.   Added SDI Timecode configurations.
6.   Added RS485 interface support.
7.   Extended Auto Exposure configuration parameters to control the algorithm response time and thresholds.
8.   Added Auto Gain additionally to Auto Exposure.

2.2.2   Fixes and improvements

1.   Extended camera's user settings save/load to support up to 8 different sets.
2.   Replaced 'Analog Gain' scaling and synchronization, instead of 'ISO'.
3.   Improved synchronization between GUI controls and current device settings.
4.   Improved video mode change latency and stability.
5.   Fixed issues in RGB-to-YCbCr conversion matrix synchronization with video mode.
6.   Improved 'Knee' function's consistency.
7.   Improve gamma correction and Lut table visualization, calculations and update response time.
8.   Improved overall command response time.
9.   Fixed problem with image artifacts when camera parameters are changed.
10. Fixed Genlock support - external synchronization of multiple cameras.
11. Improved White Balance calculations and available pre-sets.

2.3   Release notes 2021.1 version (service pack 1)

2.3.1   New features

1.   Genlock configurations are now available:
   -   Genlock mode
   -   Genlock status
   -   Genlock loss-of-link filter

2.3.2   Fixes and improvements

1.   Documentation improvements.
2.   Fixed issue: White balance reset to default values.

2.4   Release notes 2021.1 version

2.4.1   New features

1.   A list of commands is now available in debug terminal.
2.   Reset to default buttons were added to all image processing parameters allowing to quickly undo changes.
3.   Added system temperature events in debug terminal.

2.4.2   Fixes and improvements

1.   Documentation improvements.
2.   Numerous GUI bug fixes and visualization of image processing features.
3.   Installation improvements.
4.   Fixed issue: Auto exposure and ISO (Analog Gain) dependency.
5.   Fixed issue: Availability of white balance preset and adjustment.
6.   Fixed issue: Instability of load/save settings process.

2.5   Release notes 2020.2 version

2.5.1   New features

1.   Firmware update logic for KAYA cameras was implement.

2.5.2   Fixes and improvements

1.   Fixed issue: Serial port usage on Windows 10 OS.
2.   Fixed issue: Camera-GUI command synchronization.

2.6   Initial release 2020.1 version

Please refer to KAYA SDI Control Point user manual for description and usage.