

Release Notes Firmware Version 2.0.1

We welcome any suggestions, questions, and bug reports.

Please send your enquiries to: support@chromasens.de

General Notes

- Downloading this package requires at least GCT version 1.0.4a
Do not use applications newer than 3.21.0 with bitstreams older than 5.14.0!
The camera might be unable to boot!

Changes and new Features

- This package supports four color channel mode (RGB + NIR)
- Introduced GainAutoStatus feature to check the status of automatic gain control.
- GainControlRegion parameters are based on sensor pixel, offset and width are independent of Binning, ReverseX.
- The DSNU/PRNU plane size can vary now. It depends on the amount of correction values being part of the LUT. Before it was fixed to 15360.
- Feature ImageCalibrationMode implemented:
 - ImageCalibrationModeDSNU
 - prepares internal image processing for generating calibration image (DSNU)
 - ImageCalibrationModePRNU
 - prepares internal image processing for generating calibration image (PRNU)
 - CalibrateDSNUInternal: Creates DSNU reference internally.
 - CalibratePRNUInternal: Creates PRNU reference internally.
- Introduced sensor sensitivity feature to set the sensor sensitivity.
- Introduced FrameActiveExtendLines feature.
- Added two new features SensorRegionWidth and SensorRegionOffsetX to read the sensor coordinates.
- When ColorTransformation "RGB -> sRGB" is active always returns gamma is disabled
- Extended the length of user set comment to 128 chars
- Introduced feature to display the last loaded user set
- Added "All" Entry in GainControlRegionChannelSelector to set all entries or to get averaged value
- Added EnumEntry "AdjustTargetValueToMaxVideo" to feature GainAuto, to calibrate the gain auto target values.
- Added new feature InfoBlockMode.
- File download (close operation) is more responsive now.
Large control channel timeout values of 90s are not required anymore.
Please check the feature reference for timeout specification.
- Added NoCache and pInvalidators to support GCT 2.x

Bug Fixes

- Fixed Bug: The FileOperationStatus was not set for Read/Write operations
- The min line time was not updated when setting the region parameters.
(For GCR, Binning, Pixelformat, Decimation too)

- When device hardware code was not initialized the boot file was not loaded and the camera appeared as 5K for the first time.
This can lead to wrong initialization for device hardware code for 10K cameras indicating them as 15K.
- There was problem using GCT 2.0 and firmware package 2.0.0 when loading file from camera to PC.
The bug has been fixed.

Incompatibilities

- The behaviour of reverseX has changed.
Before the sensor content was reversed and the OffsetX feature kept same. Now when enabling/disabling the reverseX feature the OffsetX is adapted to keep the region of interest coordinates on the sensor same.
- Removed compatibility for old DSNU/PRNU reference format when first valid pixel was starting from 1.