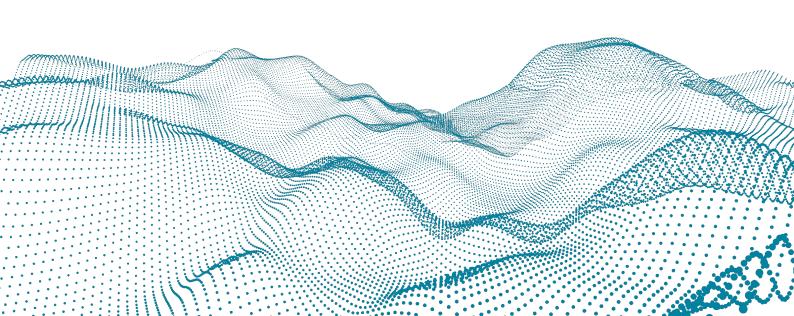
roboception

Roboception GmbH | October 2024

SGM® Producer CHANGELOG



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1 24.10.0 (2024-10-11)

1.1 Improvement and Fixes

- Under Windows without GPU, improving speed of stereo matching on the CPU by vectorization (this was already done under Linux)
- · Making chunk parameters in the nodemap independent of general nodemap parameters

2 24.07.1 (2024-09-12)

2.1 Improvement and Fixes

- rc_calib: Improved auto exposure setting for calibration
- Locking throughput parameters during streaming
- Added streamable flag to most changable parameters and fixed some linking between parameters
- · Added default throughput reduction in case of limited link speed for Windows

3 24.07.0 (2024-07-24)

3.1 Improvement and Fixes

- Fixed passing timeout for discovery of devices through SGM producer to transport layer
- Added invalidators for PTP offset and status parameters in GenlCam nodemap
- Waiting for 200 ms until proceeding after unexpected exceptions to throttle down in case of errors
- Ensure that last error is properly set

4 24.04.1 (2024-05-27)

4.1 Improvement and Fixes

- Fixed applying self calibration offset also to manual calibration
- rc calib now suggests recalibration if self-calibration counter > 0
- The stereo module now automatically re-triggers image acquisition when software trigger is enabled and if it skips images due to auto exposure adaptation
- Providing camera firmware version in DeviceFirmwareVersion parameter instead of duplicating DeviceVersion
- Fixed namespaces of custom parameters in nodemap and increased size of DeviceManufactureInfo to 48 bytes
- rc_viewer now uses low quality for computing depth images on startup when running without GPU and images are bigger than 3 Mpixel

5 24.04.0 (2024-04-19)

5.1 New Features

- Added binning for rc_viscore
- Added trigger support for rc_visard NG
- Added automatic software retriggering for getting internally needed images, e.g. for HDR or if Out1 is set to ExposureAlternateActive

5.2 Improvement and Fixes

- Increased image timeout for rc_visard to 1.1 s and report timeout as warning instead of error
- Suppress errors when setting TriggerActivation and ensure consistency by re-applying
- · Change timeout message from error to trace level
- · Renaming of manual and public changelog for consistency

6 24.01.0 (2024-01-09)

6.1 New Features

- Added SynchronizedAlternateComponents mode to parameter AcquisitionMultiPartMode
- Calibration (rc_viscore only)
 - Added parameters RcCalibrationFlip for mirroring the annotated calibration images
 - Added RcCalibrationAutoAccept and ChunkRcCalibrationNextPose to support calibration via robot
 - Added calibration image flipping, auto accept and next pose feedback to rc_calib tool
- Manual
 - Describing all proprietary GenlCam parameters in manual
 - Added description of proprietary GenlCam calibration interface

6.2 Improvement and Fixes

- Fixed not delivering images when HDR is turned on right after startup
- Added smoothing of input images for stereo when matching is done in full resolution, which reduces image noise and can lead to significant improvement
- Return PTP offset of left camera instead of worst case offset as also timestamp is taken from left camera
- · Fixed wrong rpath in TGZ packages

7 23.10.0 (2023-10-24)

7.1 Improvement and Fixes

Much faster adaptation of auto exposure from overexposed images for rc_viscore camera

8 23.07.0 (2023-07-25)

8.1 New Features

 rc_check: Added posibility to set some defaults for rc_viscore that is stored in calibration file on the camera

8.2 Improvement and Fixes

- rc_check, rc_calib and rc_viewer: Use relative rpath for finding libraries under Linux to permit relocating directory
- · Fixed issues for using Matrix Vision producer as transport layer
- Added printing device version and info as debug on opening the connection
- Added printing used system filenames to debug log output

9 23.04.1 (2023-04-28)

9.1 New Features

Added LineInverter, RcLineRatio and ChunkRcLineRatio for rc_viscore

9.2 Improvement and Fixes

• Fixed not loosing first SW/HW trigger after switching trigger mode on (rc viscore)

10 23.04.0 (2023-04-20)

10.1 Improvement and Fixes

- rc_calib: Fixed sometimes not accepting save button in rc_calib tool
- rc_viewer changes for rc_viscore:
 - Added more controls for trigger
 - Added possibility to invert the out1 signal
 - Added possibility to reduce the output signal width

11 23.01.2 (2023-02-23)

11.1 Improvement and Fixes

• Fixing performance and memory issue of rc_viewer tool that occured with rc_viscore as sensor

12 23.01.1 (2023-02-23)

12.1 New Features

- Added hardware and software triggering for rc_viscore
- All tools (rc_check, rc_calib and rc_viewer) are now available as Applmage for Linux x86_64

12.2 Improvement and Fixes

- Pre-selecting depth computation in low quality for rc_viscore if no GPU is available
- Added storing backup of rc_viscore calibration and license with rc_check tool
- · Minor fixes and updating of manual

13 23.01.0 (2023-01-25)

13.1 New Features

- Added rc_viewer tool for live 3D visualization and testing
- Allow changing gain when using HDR mode
- Added controlling HDR mode on rc_visard (only available with rc_visard firmware >= 23.01.0)

13.2 Improvement and Fixes

Improved switching between HDR and other exposure control modes

- Fixed seeing sometimes projector pattern in images without projector in ExposureAlternateActive mode
- Fixed rc_check responding wrongly with no access instead of missing in some cases

14 22.10.1 (2022-11-22)

14.1 New Features

- HDR auto exposure mode for rc_viscore
- Added GenICam parameters to set link throughput limitation for rc_viscore
- Setting link throughput limit to current link speed as default (currently only for Linux)
- Added possibility to set link throughput limit in rc_calib tool

14.2 Improvement and Fixes

· Clarified output of rc_check tool

15 22.10.0 (2022-10-14)

15.1 New Features

• Added support for Ubuntu 22.04 LTS

15.2 Improvements and Fixes

· Minor performance improvements

16 22.07.2 (2022-08-11)

16.1 New Features

Added TLDisplayName to the nodemap of the system module

16.2 Improvements and Fixes

- Added table with GPU memory and FPS to manual
- Increased default frame rate for rc_viscore from 8 Hz to 9 Hz
- Single and multi frame acquisition now returns with the correct number of requested images
- Under Windows, restrict search for transport layers by default to rc_genicam_api sub-directory

17 22.07.1 (2022-07-21)

17.1 Improvements and Fixes

• Increased limit for maximum exposure time from 20 ms to 30 ms in Out1High and AdaptiveOut1 auto exposure mode

18 22.07.0 (2022-07-15)

18.1 Improvements and Fixes

Implemented gamma parameter for rc_visard (if rc_visard firware version >= 22.07.0)

19 22.04.2 (2022-05-30)

19.1 Improvements and Fixes

- · Fixed finding libraries under Windows
- Added version for ARM64

20 22.04.1 (2022-05-11)

20.1 Improvements and Fixes

• Set Gamma to 1 in rc_calib program as calibration grid detection relies on linear mapping.

21 22.04.0 (2022-04-26)

21.1 New Features

- New tool for checking connection and configuration of rc_viscore sensor (rc_check)
- rc_visard and rc_viscore sensors serve as dongle, i.e. USB dongle not needed any more
- Added parameter Gamma for controlling gamma factor for rc_viscore sensors and using default of 0.5

21.2 Improvements and Fixes

- Make package installation relocatable by specifying the transport layer paths at runtime
- Fixed bug with changing calibration states, limited size of annotated calibration image and limited auto exposure time
- Showing min/max error during verification of calibration in rc_calib
- · Fixed switching of calibration and monocalibration radio buttons
- · Fixed possibility to change Gain during auto exposure
- Fixed TL type for rc_viscore

22 22.01.0 (2022-01-18)

22.1 New Features

- Support for new rc viscore sensor
- Calibration program (rc_calib) for rc_viscore sensor

22.2 Improvements and Fixes

- Use AcquisitionAlternateFilter only if ExposureAlternateActive is set for out1
- Limiting maximum exposure time to 20 ms in Out1High and AdaptiveOut1 mode
- · Changed way of limiting memory for stereo matching
- Explicitely testing rc_visard for IOControl license to improve error message in log file
- Fixed auto exposure adapting to report 0 if further adaptation is not possible

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23 21.10.0 (2021-10-23)

23.1 New Features

• Added GenlCam parameter DepthExposureAdaptTimeout

23.2 Improvements and Fixes

- Fixed internal single frame trigger timestamp
- Added some debug log output for single shot stereo
- Fixed always complaining about pending trigger
- Fixed crashing when connection to rc_visard is interrupted
- · Fixed disabling of depth smoothing
- Removing prefix rc_ from IDs and combining internal interfaces of same type

24 21.07.0 (2021-07-16)

• First stable version of producer for rc_visard

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SGM[®]Producer

CHANGELOG

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Tutorials: https://tutorials.roboception.com
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Documentation: https://doc.rc-visard.com

https://doc.rc-viscore.com https://doc.rc-cube.com

https://doc.rc-randomdot.com

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