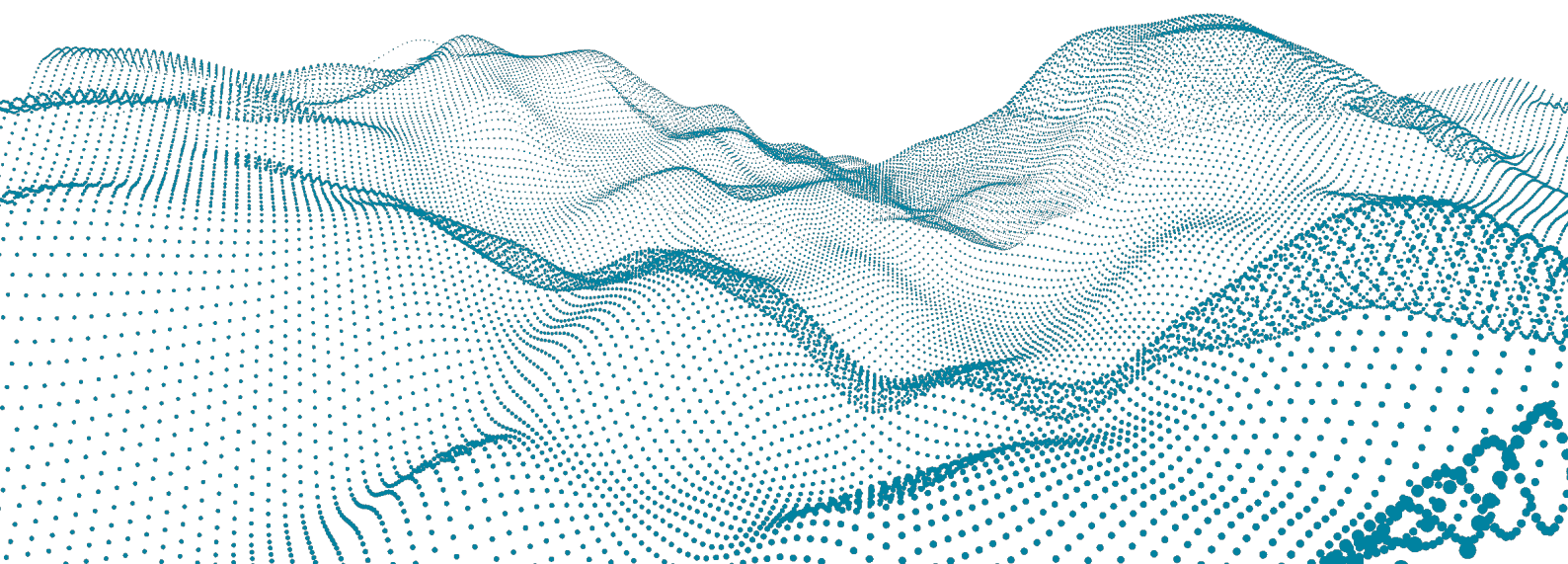


# roboception

Roboception GmbH | May 2024

## **rc\_visard\_ng** 3D Stereo Sensor

FIRMWARE CHANGELOG



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## 1 24.04.1 (2024-05-08)

### 1.1 Improvements and Fixes

- Camera (rc\_camera):
  - Limit max exposure time to 23ms and set that as default.
  - Fixed reporting out1 reduction without delay when camera trigger is on.
  - Fixed turning off triggering and resetting exposure time and gain when enabling / disabling temporary exposure settings (for camera calibration).
- All rc\_reason detection modules:
  - Trigger camera if needed (i.e. when no depth image needed, but camera in trigger mode).
- BoxPick+Match (rc\_boxpick):
  - Fix crash in grasp computation in some corner cases when object is partly outside the image.
- WebGUI:
  - Minor fixes and improvements.
  - Disable exposureAdaptTimeout on DepthImage page when in Continuous mode.
  - Bring back progress bar on template and CAD element upload.

## 2 24.04.0 (2024-04-23)

### 2.1 New Features

- Camera (rc\_camera):
  - Support for triggering camera (software or hardware) via new parameters:
    - \* acquisition\_mode
    - \* trigger\_source
    - \* trigger\_activation
- WebGUI:
  - New collision check visualization: Show contact point and provide collision category (in collision with LoadCarrier, Matches or PointCloud, etc.) in 3D visualisation for all rc\_reason modules.

### 2.2 Improvements and Fixes

- TagDetect (rc\_april\_tag\_detect, rc\_qr\_code\_detect):
  - Allow setting size also when no ID or only family is given and allow size filtering also in these cases.
- LoadCarrier (rc\_load\_carrier):
  - Improve detection for some corner cases.
  - Add detection timeout of 25s
- BoxPick+Match (rc\_boxpick):
  - Allow grasps only on unoccluded item surface.
- WebGUI:
  - SilhouetteMatch: Draw unchecked grasps in yellow color.
  - Gripper: keep global element and TCP pose when changing the parent

## 3 24.01.1 (2024-03-11)

### 3.1 Improvements and Fixes

- Ensure gRPC server can always start by adding port to reserved ports.
- Don't scale down visualization images.
- Hand-Eye Calibration (rc\_hand\_eye\_calibration):

- Forcing detection of whole grid again as partial detection could result in degraded calibration in some corner cases. Instead exclude overexposed grid points from calculation.
- Excluding grids if more than 16 calibration points (i.e. 4 squares) are over-exposed.
- EKI Bridge (rceki\_bridge):
  - Log received and sent messages with info level so they show up in WebGUI log for ease of KRL program debugging.
- REST-API:
  - Prevent manually setting time to a date before firmware build time.
- WebGUI:
  - Minor improvements.

## 4 24.01.0 (2024-01-29)

first public release

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