EPSON Compact Vision 3.2.0.1 Release Notes
November 2, 2022

Thank you for using the EPSON Compact Vision system.   This document contains the latest information for this firmware release.   Please read before using this software.

Changes for version 3.2.0.1

1. Fixed search for the Geometric tool when SearchWinType is Arc.

2. Fixed search for the Blob tool when SearchWinType is RotatedRectangle.

3. Fixed a problem where error 7325 can sometimes occur if RC+ is not shutdown properly.

4. Fixed a problem where error 7713 was occurring when VSet for DistCorrectCal was executed and there is no PC Vision option license.

5. Fixed a problem where after teaching a model, the model is no longer considered as taught after a new calibration is created.

6. Fixed a memory leak that occurred when a search window has don't care pixels.

Changes for version 3.2.0.0

1. Supports Compact Vision systems CV2-LB, CV2-SB, and CV2-HB and continues to support Compact Vision systems CV2-SA and CV2-HA.

Changes for version 3.1.6.1

1. Fixed a problem for AbortSeqOnFail.   When set to true, all subsequent objects in the sequence did not execute.

Changes for version 3.1.6.0

1. Supports new vision features added in EPSON RC+ 7.0 v7.5.3.

Changes for version 3.1.5.0

1. Supports new vision features added in EPSON RC+ 7.0 v7.5.2.

2. Added support for GigE 12MP camera models acA4024-8gm and acA4024-8gc.

3. Fixed aspect ratio for video displays.   Now images sizes with aspect ratios other than 4:3 are supported.

4. Fixed a problem for when an invalid drive letter was specified for VSaveImage and VSaveModel.   Previously, error 7527 (Vision processor.   Critical error.) was occurring.

5. Fixed a problem for when a task was completed, the hardware trigger used by another task was not working.

6. Fixed a problem where if project 2 was being used, but there was no project 1, then the CV unit could not boot up.

7. CV units can now use external USB hard disks for image and model files.

8. Fixed a problem for CodeReader. If comma"," is included in text result, the character string after the comma could not be obtained with VGet.

Changes for version 3.1.4.1

2. Fixed a problem where when a model origin is changed for an object, the new origin position is not used at runtime.
3. Fixed a problem CheckClearanceFor operation for Edge. Not all results were displayed after an Edge result was not found.

Changes for version 3.1.4.0

1. Fixed a problem for when the IP address or mask has leading zero(s).   After applying the address/mask changed, the system became inoperative.
2. Fixed a problem for when certain IP address subnets were used, the system became inoperative.
3. Added support for the Description property used for sequences, objects, and calibrations, which was added in EPSON RC+ 7.0 v7.5.1.
4. Fixed RejectOnEdge for Correlation.
5. Fixed a problem for CodeReader when CodeType is set to EAN13 and Code128OutputChecksum is set to True.
6. Fixed TotalArea for ArcInspector when using multi-search.

Changes for version 3.1.3.2

1. Fixed a memory leak problem which occurred when a vision sequence was run with the ShowProcessing property set to False.

Changes for version 3.1.3.1

1. Fixed a problem for strobed image acquisition.   The CV2-A unit became unresponsive after VRun is executed for a sequence with RuntimeAcquire set to Strobed.

Changes for version 3.1.3.0

The following items require EPSON RC+ 7.0 v7.5.0 or greater.
1. Added support for connection password.   This also requires robot controller firmware 7.5.0.0 or greater.   See the Vision Guide Hardware 7.0 manual for details.
2. Added support for Arc search windows for Correlation, Blob, Geometric, OCR.
3. Added ability for OCR to search for curved text.

4. Added ThresholdMethod for Blob, Contour, ImageOp Binarize which supports LocalAdaptive thresholding.   See the Vision Guide Properties and Reference manual for details.
5. Added support for don't care pixels for the Polar tool.

Changes for version 3.1.2.0

The following items require EPSON RC+ 7.0 v7.4.8 or greater.

1. Added BinarizeAdaptive operation for ImageOp.
2. Fixed ImageOp MinRGB and MaxRGB for VSet.
3. Fixed vision statistics reset when project 2 was being used.
4. Fixed VLoadModel for when the model width and height are different than the current model.
5. Fixed a problem where sometimes a Line object configured to be perpendicular to another line was not positioned. When using Compact Vision.

Changes for version 3.1.1.3

1. Fixed a problem for Geometric ModelOrgFindCenter if there were previous ImageOp steps in the sequence.

Changes for version 3.1.1.2

1. Removed limitation for Correlation and Geometric search window size when usin.ng acA5472 cameras. Previously, the search window size was limited to 4096 x 4096. Now the window can be the full image size of 5472 x 3648. EPSON RC+ v7.4.6 or greater is also required.
2. Fixed a problem for the Polar tool where sometimes the Angle result was negative.

Changes for version 3.1.1.1

1. Fixed a problem where error 7322 occurs when video is displayed on the CV monitor and the RC+ Run window with video display is used in monitor mode then closed before a program is started.

Changes for version 3.1.1.0

1. Added support for acA5472-5gm and acA5472-5gc GigE cameras.
2. Added support for Vision Guide clearance checking.
3. Fixed a problem for strobe trigger for acA3800 GigE cameras.

Changes for version 3.1.0.5

1. Added support for acA3800-10gc GigE camera.

Changes for version 3.1.0.4

1. Fixed a problem when using project 2 for Line, LineFinder, BoxFinder.

2. Fixed a problem when using project 2 where if a vision object is deleted, and new objects added, then an exception occurs when the sequence is run.
3. Fixed a problem when using project 2, and the project is changed from None to project 2 on the CV Monitor display configuration.

Changes for version 3.1.0.3

1. Fixed VTeach for ImageOp when Operation is ColorFilter.
2. Fixed a problem for the VTeach status value.

Changes for version 3.1.0.2

1. Fixed a problem for Vision Guide file restore.   In some cases, when File | Restore was executed in RC+ for Vision Guide, the CV would hang up.
2. Fixed a problem for Vision Guide where search windows and model windows were changed to default sizes if the sequence was run in the controller but no video was displayed in RC+, then the Vision Guide window was opened.

Changes for version 3.1.0.1

1. Fixed a problem for Timeout property for Geometric and Correlation tools.   The tools were not timing out during initial rough search.
2. Fixed a problem for Vision Guide where sometimes Correlation could not find a part near the boundary of the search area.

Changes for version 3.1.0.0

1. Supports new vision tools and properties supported in EPSON RC+ 7.4.0.
2. Fixed a problem where CF disk free space in CV2A decreases if the trigger signal to a camera is frequently input during exposure time when RuntimeAcquire is Strobed.

Changes for version 3.0.1.2

1. Fixed a problem for the RC+ tool wizard when used with a calibrated upward camera.   If there was a video display on the CV monitor, RC+ could not define the tool (a timeout occurred with the CV connection).

Changes for version 3.0.1.1

1. Fixed a problem for changing Geometric don't care pixels.   If a model was already taught and saved, then changing the don't care pixels did not cause the model to be saved again.
2. Fixed a problem for Correlation don't care pixels.   After don't care pixels are added and the EPSON RC+ 7.0 Vision Guide window is re-opened, the don't care pixels cannot be seen.
3. Fixed a problem for VDefLocal calibration plate detection.   The CV2A was hanging up during plate detection.

Changes for version 3.0.1.0

1. Fixed a problem for local calibration plate detection when the EPSON RC+ 7.0 client version is 7.3.1 or greater.
2. Added support for calibration DistCorrectType which was added to EPSON RC+ v7.3.3.
3. Added support for OCR DictionaryType property which was added to EPSON RC+ v7.3.3.

Version 3.0.0.0

Compact Vision firmware v3.0.0.0 and greater supports the CV2-SA and CV2-HA Compact Vision systems.   It cannot be used with CV2 and CV1 Compact Vision systems.

Connecting with Models CV2A and CV2B

The CV2A and CV2B Compact Vision Systems support connection with EPSON RC+ v7.1.1 or greater.   Older EPSON RC+ products cannot connect with CV2 and will hang up or issue an error message if a connection is attempted.   This includes EPSON RC+ 5.0 all versions, EPSON RC+ 6.0 all versions, and EPSON RC+ 7.0 v7.0.x and v7.1.0.

Firmware

Compact Vision firmware v3.0.0.0 or greater is required for the CV2-SA and CV2-HA Compact Vision Systems.

Compact Vision firmware v3.2.0.0 or greater is required for the CV2-LB, CV2-SB, and CV2-HB Compact Vision Systems.