

EPSON RC+ 7.1.0 Release Notes

July 8, 2014

Thank you for using EPSON RC+ 7.1.0. This document contains the latest information for this release. Please read before using this software.

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Documentation

All RC+ manuals are in PDF format and are installed on the PC hard disk. These manuals are accessible from the EPSON RC+ 7.0 environment Help menu.

Getting Started

Read the Getting Started chapter in the EPSON RC+ 7.0 User's Guide. This chapter will refer you to the RC700 Controller manual Installation chapter. This contains information for initial connections and start up.

What's New in version 7.1.0

General

1. Now supports Windows 8.1.
2. Now up to 3 external robot drive units are supported for the RC700 controller.
3. Added User Remote Outputs feature.
4. Added new Robot Manager wizards for Boxes, Planes, and Pallets.
5. Improved the Robot Manager Tool Wizard, including adding an option to define a 2D tool for a 6 axis robot.
6. Added video display for the Robot Manager Jog & Teach page.
7. Added I/O Monitor and Command Window toolbar buttons on the Robot Manager.
8. Supports operation as standalone PC system (without controller and robot).
9. I/O labels can now be up to 32 characters in length.
10. Added realtime I/O status to the I/O Monitor.
11. Now InReal and OutReal values can be displayed in the I/O Monitor custom view.
12. Task Manager now has CPU usage column.
13. Virtual controller now supports real RS232 and TCP/IP ports.

Vision Guide

14. Added new vision tools: Arc Inspector and Line Inspector.
15. Correlation and Geometric tools now support multiple model samples.
16. Enhanced Geometric search.
17. OCR supports multiple character samples and Japanese characters.
18. Edge supports search along arc.
19. DefectFinder now supports RotatedRectangle and Circle search window types.
20. When re-teaching models with don't care pixels for Correlation and Geometric tools, you can now choose to keep the previously taught don't care pixels if the model size has not changed.
21. Added ability to draw rectangles and ellipses for don't care pixels.
22. Added pan and zoom to ShowModel dialog.
23. New RobotToolXYU result.
24. New RobotPlacePos result and wizard.
25. New RobotUOffset calibration property and wizard.
26. Added ColorStretch operation to ImageOp.
27. Added HSV support for Color Match and ImageOp.
28. Added "Show only active object" button to the Vision Guide window toolbar.
29. Added mouse cursor position and pixel color to the Vision Guide window status bar.

RC+ API

30. New high level LabVIEW library.
31. API now supports multiple command threads in the controller.
32. New RCAPINet.dll that replaces SpelNetLib70.dll and SpelNetLib70_x64.dll.

What's Fixed in version 7.1.0

General

1. Fixed a problem where sometimes a label was not displayed after adding a new item in an I/O Monitor custom view.
2. UByte, UShort, Int32, and UInt32 data types are now displayed correctly in the Variable Display dialog.
3. Fixed auto Windows login for 64 bit Windows.
4. Fixed several minor GUI issues.

RC+ API

5. Fixed a problem when executing vision commands from the RC+ 7.0 API. Sometimes a hang-up or invalid format error could occur.
6. Fixed a problem where if a GigE camera could not be initialized, a message box was being displayed, which had to be answered by the operator. Now an exception occurs for the Spel Initialize method when a camera could not be initialized.
7. Fixed a problem where sometimes an application would not finish when a form was being disposed that contained a SpelVideo control.
8. Fixed the Disconnect method. It was not functioning.

GUI Builder

9. Fixed a problem where a TextBox would not display variable status if it was not configured at design time.
10. Now the click event fires for ListBox or ComboBox when an item is selected.

Vision Guide

11. Fixed an issue for ExposureTime. If it was set back to 0, it had no effect.
12. Fixed a problem where if calibration was attempted for a robot camera before connecting to the controller, an exception occurred.
13. Changed the specification for PC Vision ArcFinder AngleStart and AngleEnd properties. Now the range can be up to 360 degrees (AngleStart = 0, AngleEnd = 360).
14. Added range checking for Geometric ScaleFactorMin, ScaleFactorMax, and ScaleFactorTarget for PC Vision.
15. Fixed a problem where if strobed acquire was being used and the Display Video checkbox on the Run window was checked or unchecked, the VRun statement could hang until all tasks were stopped. The problem also could occur when the Run window was displaying video, and it was activated while strobed acquire was being used.

Vision Guide 7.0

Error 6507 can occur during project import

If you import a project from a version of EPSON RC+ before EPSON RC+ 7.0 which used Frame Grabber vision or Smart Camera (SC300 or SC1200), and the Geometric search tool, you may see error 6507, which indicates that the Geometric model(s) used in the project could not be loaded. EPSON RC+ 7.0 cannot use these old versions of Geometric models, so you will need to re-teach the models after project import.