

EPSON RC+ 5.3.0 SP1 Release Notes

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Thank you for using EPSON RC+ 5.3.0. 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 RC+ environment Help menu.

Getting Started

Read the Getting Started chapter in the EPSON RC+ 5.0 User's Guide. This chapter will refer you to the RC170 Controller manual Installation chapter. This contains information for initial connections and start up.

Installing Service Pack 1

EPSON RC+ 5.0 Ver.5.3.0 Service Pack 1 is included on the current Ver.5.3.0 installation CD. It is not automatically installed with the Ver.5.3.0 installation program. It must be installed separately. If your system was configured at the factory, the service pack will already be installed.

How to verify if Service Pack 1 is installed

1. Run EPSON RC+ 5.0.
2. Select Help | About.
3. If the service pack is installed, the version number will be 5.3.0 SP1.

How to install Service Pack 1

To install Service Pack 1:

1. Navigate to the \EpsonRC50\Service_Packs directory on the installation CD.
2. Run the file **erc530sp1.exe** and follow the on screen instructions.

How to uninstall Service Pack 1

To uninstall Service Pack 1:

1. Open Add / Remove Programs in the Windows Control Panel.
2. Select EPSON RC+ 5.0 and run it to uninstall.
3. Run the EPSON RC+ 5.0 Ver.5.3.0 installer from the installation CD to re-install it.

What's Fixed in version 5.3.0 SP1

1. Fixed a problem where if a point was re-taught from Robot Manager | Jog & Teach, the point label was erased.
2. Fixed a problem where if one or more source files was not stored in the controller, then Project | Build did not send the latest object files to the controller. You can set which source files are stored in the controller from Project | Properties | Source Files in Controller.
3. Fixed a problem where errors 3914 to 3918 sometimes occurred during project build.

What's New in version 5.3.0

1. Torque control commands are supported. See the description for TCLim in the help or SPEL+ Language Reference manual. This feature requires controller firmware version 1.8.0.0 or later.
2. RS robot types are supported.
3. Remote Ethernet control device is supported. This feature requires controller firmware version 1.8.0.0 or later.
4. Windows DPI 120 setting is supported.

What's Fixed in version 5.3.0

1. I/O Labels are now sorted by bit or port when printed out.
2. Added overwrite confirmation when creating a new file in the project that already exists in the project directory.
3. Smart camera communication errors no longer occur if the Windows DPI setting is not normal (96).
4. Improved project synchronization. Now if a file is changed in the controller since the last project build, the project synchronization dialog is displayed when the PC is connected to the controller. For example, if a point file in the controller is changed via the teach pendant, and the same point file is later changed offline on the PC, then when the PC is connected, the project synchronization dialog is displayed and the user can decide which file to use.
5. Fixed compile errors for GoTo line.
6. Fixed errors that can occur if two or more of the following functions are used in the same statement: TaskState, TaskDone, TaskInfo.
7. Fixed several minor GUI bugs.
8. Fixed several documentation errors in the manuals and help.

Vision Guide 5.0

EPSON Smart Camera Firmware v1.0.0.4

EPSON Smart Camera firmware version v1.0.0.4 is supplied with the EPSON RC+ 5.3.0 installer.

To update the firmware in your Smart Camera:

1. Open Setup | Vision.
2. Select the desired Smart Camera.
3. Click the Update Firmware button.
4. Navigate to the \EpsonRC50\vision\firmware directory on the EPSON RC+ installation drive.
5. Select the vgsc1004.bin file.
6. Click Open to start the update.

Items fixed in v1.0.0.4:

1. The RobotU result for Line objects now works correctly when used with VGet.
2. Now when ScaleEnable is set to False for the Geometric tool, only objects with a Scale result of 1.0 are found.
3. The IP address of the camera can no longer be set to a subnet or broadcast address.
4. Improved connection between PC and Smart Camera after communication has been lost, such as a cable disconnection.

ImageFile Property

The EPSON Smart Camera supports one image file stored in each camera project. When an ImageFile is specified for a sequence, it is copied to the camera when the sequence is selected from the Vision Guide GUI.

You can use the SaveImage property to save an unlimited number of images on the PC.

Using one camera from two controllers

The EPSON Smart Camera supports two vision projects. Each vision project can be used by one controller, so two controllers can use the same camera. Project 1 is used by default. To use project 2, change the camera project number from RC+ Project | Properties | Vision.

Offline Mode

When you open the Vision Guide window, RC+ attempts to communicate with the Smart Cameras configured in Setup | Vision. If communication cannot be initiated, a message box is displayed stating that one or more Smart Cameras cannot be connected and asking if you would like to open Vision Guide in offline mode. Answer Yes to enter Offline Mode. In Offline Mode, you can edit Sequences, Objects, and Calibrations. To enter Online Mode, close the Vision Guide window, then open it again.

Importing from EPSON RC+ 3.x and 4.x with Vision Guide

You can import projects that were created in EPSON RC+ 3.x and 4.x that used the Vision Guide option.

To import a project:

1. In EPSON RC+ 5.0, select Project | Import.
2. Select PC and click Next.
3. Select EPSON RC+ 3.x / 4.x for the Project Type.
4. Select the drive and project to import and continue with the wizard.

Please review the following information regarding imported EPSON RC+ 4.x projects:

- Vision calibrations are imported, but the associated calibration data is not imported. You will need to run your calibrations after import.
- the RobotU vision result is changed. In EPSON RC+ 4.x, RobotU was reported with 0 degrees aligned with the robot world Y axis. Now RobotU is reported with 0 degrees aligned with the robot world X axis.
- Maximum NumberToFind is changed. In Vision Guide 5.0, the maximum NumberToFind for any multi-result object is 100. During import, NumberToFind is reduced to 100 if necessary.
- Calibration properties cannot be set at runtime.
- VCalPoints and VCal are not supported. Vision calibrations cannot be executed at runtime.
- Vision model properties cannot be set at runtime.
- VTeach is not supported. Vision models cannot be taught at runtime.
- OCR and Code Reader objects are currently not supported in Vision Guide 5.0. During import, OCR objects are converted to Correlation objects, and Code Reader objects are converted to Blob objects.

Camera connected to another PC warning message

Normally, if one PC tries to connect to a Smart Camera that is already connected to another PC or controller, you will see a message box stating this.

However, sometimes if the Ethernet cable is disconnected or if the RC+ process is terminated while connected to a Smart Camera, then on the next connection attempt, you may receive the message described above. In this case, reset the camera from Setup | Vision, or power cycle the camera. Then rebuild the current project using Project | Rebuild. Smart Camera firmware v1.0.0.4 reduces the occurrence of this problem.