

EPSON RC+ 4.1.4 Release Notes

July 23, 2008

Thank you for using EPSON RC+ 4.1.4. This document contains the latest information for this release. Please read before using this software.

DOCUMENTATION	1
GETTING STARTED	1
UPGRADING FROM PREVIOUS VERSIONS OF EPSON RC+	1
INSTALLING ON WINDOWS XP FOR OFFLINE DEVELOPMENT	2
ITEMS FIXED IN EPSON RC+ 4.1.4	2
EPSON RC+ UPGRADE	4
AUTO START DOES NOT WORK AFTER UPGRADING FROM 3.X VERSIONS	4
VISION GUIDE	4
CHANGING FRAME GRABBER FROM METEOR TO MORPHIS	4
CHANGING MEMORY SIZE FOR SYSTEMS USING VISION GUIDE.....	5
VB GUIDE	5
RUNDIALOG FOR VISION GUIDE CAN HANG	5
UPGRADING FROM 3.X VERSIONS	5
OFFLINE DEVELOPMENT	6
TO EDIT FIELDBUS LABELS OFFLINE	6

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+ User's Guide. This chapter will refer you to the RC520 / RC420 Controller manuals Installation chapter. This contains information for initial connections and start up.

Upgrading from Previous Versions of EPSON RC+

You may install EPSON RC+ 4.1.4 without uninstalling the previous version. This is recommended because the upgrade software will know which options were previously installed and your system configuration will be preserved.

1. If your current system is running on Windows NT 4.0, you must first upgrade to Windows 2000 Professional before upgrading to EPSON RC+ 4.1.4.

- a. Execute MKVER before upgrading to save your system configuration. Select Tools | Maintenance, then click MKVER. Enter a name and save it to floppy.
 - b. Upgrade Windows NT 4.0 to Windows 2000.
 - 1) Boot Windows NT.
 - 2) Insert the Windows 2000 CD.
 - 3) When asked if you want to upgrade the current version of Windows, answer Yes.
 - 4) The Windows 2000 installation will preserve the registry and previous applications.
 - c. Install Windows 2000 Service Pack 4. This service pack must be installed before you can install EPSON RC+ 4.1.4.
2. Install EPSON RC+ 4.1.4. During installation, the options that were installed previously should be checked. The previous robot and drive unit configurations will be restored.

Note: When upgrading Vision Guide systems, you may receive an error during vision driver installation concerning mtxdma drivers. These errors can be ignored. Also, the RC+ installer will first remove the previous vision system drivers and reboot the system. Then it will continue installation.

3. EPSON RC+ 4.1.4 ships with Adobe Reader. On new installations, the reader is automatically installed. When upgrading RC+, Adobe Reader is not upgraded. You can manually upgrade by running the Adobe Reader installer found on the RC+ installer CD in the Adobe_Reader directory.

Installing on Windows XP for offline development

EPSON RC+ 4.1.4 can be installed on a Windows XP system for offline development only. You can edit and compile your projects. You cannot install the SPEL drivers on a Windows XP system, so programs will not run. Also, if Vision Guide is installed, only VGA mode is supported.

Items fixed in EPSON RC+ 4.1.4

This is a revised list of items fixed in EPSON RC+ 4.1.4:

1. Fixed problem for multiple Sony HR70 cameras in progressive scan mode. A Y shift of an acquired image could occur. To correct the problem, please use the hr70c1 camera interface.
2. Fixed problems for VCreateSequence and VDeleteSequence when VSaveProps was not being called. Errors would occur if the Vision Guide window was opened after running.
3. The Sentinel hardlocks will now work again.

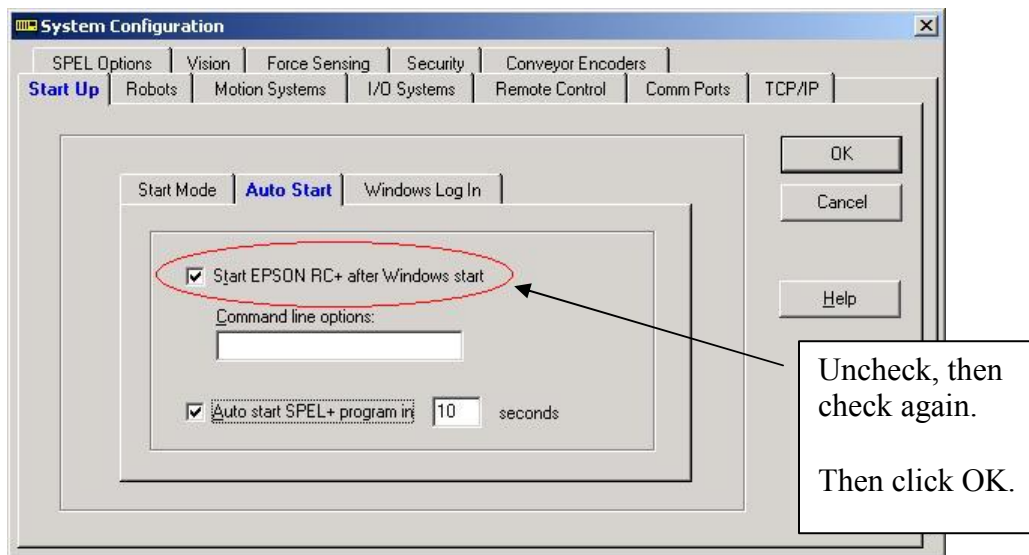
4. Fixed a problem where if a camera was disconnected, live video could no longer be displayed.
5. The EdgeType property is now copied when an Edge object is copied.
6. Fixed a problem for Japanese descriptions in I/O labels and User Errors. Sometimes the text was being chopped or RC+ was crashing.
7. Fixed a problem where the bottom of the video image was sometimes black when using cameras in async reset mode.
8. Fixed VSet for ExposureTime.
9. Fixed a problem where errors were occurring if a vision sequence that used a robot camera was being run in offline mode.
10. Fixed a problem where RC+ did not reset all ISA outputs if the port size was 16 and the number of ports / board was greater than 2.
11. Fixed error 91 which occurred when the Operator Window was closed and there was no vision system.
12. Fixed a problem where a duplicate image could sometimes occur when a Sony HR70 camera was being used in async reset mode. To correct the problem, please use the hr70a1 camera interface.
13. Fixed SPELVideo control. Video was not being displayed in v4.1.3.
14. Improved vision reload time after all tasks are stopped and changes to vision properties were not saved with VSaveProps. Correlation, Polar, and Geometric models are not reloaded unless they were changed at runtime.
15. Fixed a problem where the image is sometimes very light or black when using multiple async reset cameras with RuntimeAcquire for one or more cameras set for stationary acquire and different exposure times are used.
16. Fixed error 9068 which occurred if the Halt button on the Task Manager is clicked twice quickly.
17. Fixed a problem where all outputs were not being reset if the port width is 16.
18. Fixed a problem where when a vision model was being taught and an ImageOp is used in a previous sequence step, the ImageOp results were not being used for the taught model.

EPSON RC+ Upgrade

Auto start does not work after upgrading from 3.x versions

If RC+ was configured to auto start after Windows start, it will no longer start up automatically after upgrading to a 4.x version. This is easily fixed.

1. Run EPSON RC+. Click **Change Startup Mode**. Select **Program / Debug**, then click **OK**.
2. Select Setup->System Configuration. On the **Start Up** tab, click the **Auto Start** tab. Uncheck **Start EPSON RC+ after Windows start**. Then check it again. Click **OK**.



3. Continue working in RC+ or exit the application.

Vision Guide

Changing frame grabber from Meteor to Morphis

If you are using a system that has a Meteor2 frame grabber and you are replacing it with a Morphis frame grabber, follow these instructions:

1. Uninstall RC+.
2. Shutdown the PC.
3. Remove the Meteor2 frame grabber board.
4. Install the Morphis frame grabber board.
5. Install EPSON RC+ 4.1.4 and select the Morphis vision option.

Changing memory size for systems using Vision Guide

If you want to change the size of memory used on your system and you are using Vision Guide, you must do a repair installation after upgrading memory. If you do not repair the RC+ installation, Windows will not recognize the memory changes and the vision system will not work properly. Follow these steps to upgrade memory:

1. Shutdown the system.
2. Upgrade the memory.
3. Start the system.
4. Run the RC+ installer.
5. Select the repair option and continue.

The repair installation will uninstall the vision drivers, reboot the system, then reinstall the vision drivers using the new memory size.

VB Guide

RunDialog for Vision Guide can hang

When executing RunDialog for Vision Guide, your VB application can hang. Also, when running other dialogs, the title bar for the dialog flashes 3 times when the dialog is first displayed.

This is due to a setting in Windows XP that by default prevents background applications from taking focus. To turn off this feature, set the value for the following registry setting to 0: HKEY_CURRENT_USER\ControlPanel\Desktop\ForegroundLockTimeout. Then, reboot Windows.

Upgrading from 3.x versions

After upgrading to EPSON RC+ 4.1.4 from 3.x versions, you must upgrade your SPELCom and SPELVideo controls in your VB projects that use VB Guide.

Follow these steps:

1. Open your VB project.
2. Select Components from the Project menu.
3. Check the EPSON SPELCom 4.0 ActiveX Control and EPSON SPELVideo 4.0 Active X Control (if required) and click OK.
4. For every form that has a SPELCom or SPELVideo control, delete the control, then replace it with the new control from the tool box.
5. Select Components from the Project menu.
6. Uncheck EPSON SPELCom 3.0 ActiveX Control and SPELVideo 3.0 ActiveX Control.
7. Save changes.
8. Compile your project.

Offline Development

To edit Fieldbus labels offline

Before you can edit Fieldbus I/O labels on an offline system, you must copy the \EpsonRC\Fbusio\fbus.dat file from the online system to the same folder on the offline system.