Thank you for using EPSON RC+ 4.1.5. This document contains the latest information for this release. Please read before using this software.

**DOCUMENTATION**

**GETTING STARTED**

**UPGRADING FROM PREVIOUS VERSIONS OF EPSON RC+**

**INSTALLING ON WINDOWS XP FOR OFFLINE DEVELOPMENT**

**WHAT'S NEW IN EPSON RC+ 4.1.5**

**ITEMS FIXED IN EPSON RC+ 4.1.5**

**EPSON RC+ UPGRADE**

**AUTO START DOES NOT WORK AFTER UPGRADING FROM 3.X VERSIONS**

**VISION GUIDE**

**CHANGING FRAME GRABBER FROM METEOR TO MORPHIS**

**CHANGING MEMORY SIZE FOR SYSTEMS USING VISION GUIDE**

**VB GUIDE**

**RUN DIALOG FOR VISION GUIDE CAN HANG**

**UPGRADING FROM 3.X VERSIONS**

**OFFLINE DEVELOPMENT**

**TO EDIT FIELDbus LABELS OFFLINE**

**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+ 4.1.5 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+ 4.1.5.
   a. Execute MKVER before upgrading to save your system configuration. Select Tools | Maintenance, then click MKVER. Enter a name and save it to floppy.
      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+ 4.1.5.

2. Install EPSON RC+ 4.1.5. 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+ 4.1.5 ships with Abode 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+ 4.1.5 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.

### What’s new in EPSON RC+ 4.1.5

1. The Morphis / 84 frame grabber is now supported.

### Items fixed in EPSON RC+ 4.1.5

1. Fixed a problem where sometimes the wrong sequence graphics were displayed after executing VSaveImage.

2. Fixed internal error 13 that occurred when a frame dependency object was deleted but a Code Reader was using the frame.
3. Fixed program editor memory leak. When the program was reformatted, such as after changing the case of a declared variable, unnecessary memory was being used.

4. Fixed internal error 11 (divide by zero) that sometimes occurred if the first vision sequence contained only an ImageOp object.

5. Fixed a problem where after deleting conveyors, you could not delete the last remaining conveyor.

**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+ 4.1.5 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+ 4.1.5 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
   ActiveX 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.