

# EPSON RC+ 4.0.0 Release Notes

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Thank you for using EPSON RC+ 4.0.0. 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+ 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+ 4.0.0 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+ 4.0.0.
  - 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+ 4.0.0.
2. Install EPSON RC+ 4.0.0. 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.

## Installing on Windows XP for offline development

EPSON RC+ 4.0.0 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.

## RC+ Upgrade

### ***Syntax for memory I/O commands has changed***

The \$ identifier prefix for memory I/O is no longer needed. If you open a previous project or enter a statement using \$ memory I/O, the statements will be converted to the new commands and syntax. The new commands have the same names as the memory I/O commands used in the VB Guide SPELCom control.

The table below shows some examples.

<b>Old memory I/O statement</b>	<b>New memory I/O statement</b>
On \$1	MemOn 1
If Sw(\$1) = On Then	If MemSw(1) = On Then

### ***Syntax for direct point expression has changed***

Now when you want to specify a direct point in a motion command, you must use the XY function. Previously, XY was implicit. If you open a previous project or enter a statement using a direct point expression, the statements will be converted to the new syntax.

The table below shows some examples.

<b>Old direct point statement</b>	<b>New direct point statement</b>
Go 100, 200, -25, 0	Go XY(100, 200, -25, 0)
TLSet 1, 10, 10, 0, 0	TLSet 1, XY(10, 10, 0, 0)

## **VB Guide Upgrade**

After upgrading to EPSON RC+ 4.0.0, 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.

## **Vision Guide**

### ***Mobile Calibration with upward camera***

When using an upward camera for a mobile calibration reference point, the RobotLocal property must be the same for the upward camera calibration and the mobile camera calibration.

### ***JAI (Pulnix) CV-A1 Camera in Progressive Scan Mode***

The Vision Guide manual shows unnecessary camera box connections for HSYNC and VSYNC for the JAI CV-A1 camera when used in progressive scan mode. You must omit these connections.

### ***Sentech 1100b Camera in Async Reset Mode***

The Vision Guide manual shows the wrong camera type for the Sentech 1100b when used in async reset mode. The correct camera type is 1100bdpa.