

EPSON RC+ 4.0.1 Release Notes

August 27, 2004

Thank you for using EPSON RC+ 4.0.1. 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+	2
INSTALLING ON WINDOWS XP FOR OFFLINE DEVELOPMENT	2
RC+ UPGRADE	3
SYNTAX FOR MEMORY I/O COMMANDS HAS CHANGED	3
SYNTAX FOR DIRECT POINT EXPRESSION HAS CHANGED.....	3
VB GUIDE UPGRADE	4
VISION GUIDE	4
MOBILE CALIBRATION WITH UPWARD CAMERA	4
VISION PROPERTIES ARE NOW RESTORED AFTER ALL TASKS STOPPED	4

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+ 4.0.1 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+ 4.0.1.
 - 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+ 4.0.1.
2. Install EPSON RC+ 4.0.1. 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+ 4.0.1 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 v3.x.x 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.

Old memory I/O statement	New memory I/O statement
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.

Old direct point statement	New direct point statement
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+ 4.0.1 from 3.x.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.

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.

Vision properties are now restored after all tasks stopped

If you use VSet, VTrain, or VTeach at runtime, then after all tasks are stopped, all vision properties are restored, unless you execute VSaveProps to save runtime changes. This restore operation may take several seconds if there are large models.