



# Controller Update for ProcessLogix R500.1 SP1 and R510.0 Software

Catalog Number 1757-PLX52

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**IMPORTANT**

- This update is required for all ProcessLogix R500.1 SP1 and R510.0 Servers and Engineering Workstations in systems using at least one 1757-PLX52 catalog revision H01 or later controller. 1757-PLX52 catalog revision G01 modules must be returned to Rockwell Automation for replacement with H01 or later modules. Refer to Knowledgebase Tech Note ID 38321 for details.
  - This update is optional but recommended for all ProcessLogix R500.1 SP1 and R510.0 Servers and Engineering Workstations in systems using only 1757-PLX52 catalog revision F01 and earlier controllers.
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## Contents of Update

This update contains the following software:

- New firmware and EDS files for the 1757-PLX52 controller
- New NTools software
- New ver\_rev file

## Before You Begin

Before beginning the installation, download the appropriate update file to your ProcessLogix Servers and Engineering Workstations:

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**IMPORTANT**

Download the update that corresponds to your current ProcessLogix software.

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- ProcessLogix R500.1 SP1 CPM Update.exe
- ProcessLogix R510.0 CPM Update.exe

This document does not contain controller installation instructions. Refer to 1757-PLX52 ProcessLogix Controller Installation Instructions, publication 1757-IN901.

This document refers to the Installation and Upgrade Guide and Knowledge Builder Software that was shipped with your ProcessLogix software.

## Required System Components

The following software components must be installed before you install this update:

- Windows 2000 Service Pack 3 or 4 or Windows XP
- Internet Explorer, version 6.0 or 6.0 SP1
- ProcessLogix R500.1 SP1 or R510.0

## Corrected Anomalies

This table lists anomalies corrected in this update.

Anomaly #	Description
Lgx00062387	New hardware qualification: CPM Cat. Rev. H01
Lgx00065420	Loss of synchronization between Secondary/backup & Primary due to Checksum error

## Install the Server Update

You must complete this procedure on all Servers in your ProcessLogix system. If you have a redundant Server pair, you must complete the following procedure on SERVERB first, then repeat the procedure for SERVERA. Be certain that SERVERA is the Primary Server before beginning the installation.

1. Close all ProcessLogix applications.
2. Double-click ProcessLogix R5xx.x CPM Update.exe (where 5xx.x indicates your current ProcessLogix software version).
3. At the Update dialog, click Setup.

The following files are installed.

File Type	Revisions	Location and File Name
Firmware	AV 500.1-01.18 BV 500.1-01.18	C:\Honeywell\tps50\system\bin\cee5.pcm <sup>(1)</sup> C:\Honeywell\tps50\system\bin\cee50.pcm <sup>(1)</sup> C:\Honeywell\tps50\system\bin\lcpmboot.pcm
NTools	PS500.1-01.18	C:\Honeywell\tps50\system\bin\ntools.exe
EDS	NA	C:\Program Files\Rockwell Software\RSCCommon\ProcessLogix\EDS\0001000E00110B00.eds

<sup>(1)</sup> To flash Redundant controllers, use cee50.pcm: cee5.pcm is applicable only to Non-Redundant controllers.

4. At the Installation Complete dialog, click OK.

If you have a non-redundant Server, skip to Register EDS Files on page 5. If you have a redundant Server pair, continue with Verify that Servers Are Synchronized.

## Verify that Servers Are Synchronized

This procedure is required only for a redundant Server pair.

1. Verify that Servers are synchronized.
  - a. On the Primary Server, click Start > Programs > ProcessLogix Server > Station.
  - b. Click View > System Status > Server Redundancy.
  - c. Verify that the display shows green LED indicators for the following states:

Primary Server

- Running

AB Parts

Backup Server

- Synchronized
- Running

Link Status

- Link 0 (LNK00) - OK Active link
- Link 1 (LNK01) - OK (only applies if you are using a dual LAN)

**2.** Skip to step 3 if all LED indicators are green.

Follow these steps to synchronize the Servers if the Backup Server Synchronized LED indicator is red.

- Verify that the Backup Server Running LED indicator is green.
- Click the Oper field in the lower-right corner of the display.
- Type *mng*r in the Station Logon dialog and click OK.
- Click Synchronize.
- Type *Y* and press Enter when the Synchronize Databases (Y/N) prompt appears.

Depending on your configuration, this may take some time to complete.

- Wait for the synchronization to complete (Synchronization Complete prompt appears) and verify that the display shows green LED indicators for the following states:

Primary Server

- Running

Backup Server

- Synchronized
- Running

Link Status

- Link 0 (LNK00) - OK Active link
- Link 1 (LNK01) - OK (Only applies if you are using a dual LAN)

**3.** Repeat all sections of the Install the Server Update procedure on SERVERA.

Refer to Install the Server Update on page 3.

**4.** Verify that SERVERA is now Primary and the Servers are synchronized after the update has been installed on both SERVERA and SERVERB.

## Register EDS Files

Complete the following steps to register the EDS file.

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**IMPORTANT**

You must register the EDS files on every Server in your ProcessLogix system.

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1. Click Start > Program > Rockwell Software > RSLinx Tools > EDS Hardware Installation Tool.
2. Click Add/Remove.
3. At the Register Device dialog, select Register a single file.
4. Browse to C:\Program Files\Rockwell Software\RSCCommon\ProcessLogix EDS\0001000E00110B00.eds and click Open.
5. At the Register Device dialog, click Next.
6. At the EDS file Installation Test Results dialog, click Next.
7. At the Change Graphic Image dialog, click Next.
8. At the Final Task Summary dialog, click Next.
9. At the Completing the EDS Wizard dialog, click Finish.
10. Right-click the My Computer icon and select Manage.
11. Expand Services and Applications and select Services.

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**IMPORTANT**

In the following step, RSLinx software is restarted. This action also restarts the ProcessLogix Control Data Access Server service, which will temporarily interrupt Control Builder communication with the controller.

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12. Right-click RSLinx and select Restart.
13. At the Restart Other Services dialog, click Yes.
14. Close the Computer Management dialog.

## Save the Controller Snapshots

After you install the update on your Servers, save the controller snapshots.

1. In the Control Builder Monitoring tab, expand the CPM to display the CEE folder icon.
2. Click the CEE folder icon.
3. To upload the existing controller database, click Tools > Upload with Contents.
4. Click Continue.

This may take considerable time to complete, depending on the amount of CM and SCMs (and their number of function blocks and/or the number of Steps and Transitions) currently assigned to this CEE.

5. Select the CPM.
6. Click Tools > Snapshot > Save Controller Snapshot.

### IMPORTANT

For redundant controller pairs, the Save Controller Snapshot option is available only for the Primary controller.

7. Click Continue.

This Saves the controller database with contents to a Snapshot file (\*.snapshot) in the Engineering Repository directory.

8. Repeat for all 1757-PLX52 controllers.

## Install the 1757-PLX52 Controller

Use this table to choose which option to use when installing your controller.

If you are	Select	On Page
Installing a non-redundant 1757-PLX52 catalog revision H01 controller	Option 1	7
Replacing a redundant 1757-PLX52 catalog revision F01 or earlier controller with a 1757-PLX52 catalog revision H01 controller	Option 2	8
Adding a 1757-PLX52 catalog revision H01 controller as a Secondary controller when upgrading to a redundant controller pair from a 1757-PLX52 catalog revision F01 or earlier non-redundant controller	Option 3	10

## Option 1: Install a Non-redundant Controller

**ATTENTION**

The following steps should be performed with the systems off-process. Be certain that your process is off control before you continue. This means the 1757-PLX52 controller should be in the Idle state.

1. Install the 1757-PLX52 catalog revision H01 controller.

Refer to 1757-PLX52 ProcessLogix Controller Installation Instructions, publication 1757-IN901.

2. Flash all 1757-PLX52 controllers.

Refer to the table on page 3 for firmware locations.

**IMPORTANT**

When at least one 1757-PLX52 catalog revision H01 controller is added to any system, all 1757-PLX52 controllers (1757-PLX52 catalog revision H01 and all 1757-PLX52 catalog revision F01 or earlier controllers) must be flashed by using the firmware provided in this update.

In the Installation and Upgrade Guide, refer to Loading 1757-PLX52, TC-MUX021, or 1757-FIM Boot and Personality Images.

3. Use NTools software to confirm the firmware revision.

## Option 2: Replace a Redundant Controller

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**ATTENTION**

The following steps should be performed with the systems off-process. Be certain that your process is off control before you continue. This means the 1757-PLX52 controller should be in the Idle state.

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**IMPORTANT**

### Redundant Chassis Firmware Upgrade Precautions

When updating 1757-PLX52 controllers in a redundant chassis pair (RCP), you must turn the Secondary chassis power **off**, so you can update the firmware for the 1757-PLX52 controller in the powered chassis while it is in a Primary with no partner state.

Once the 1757-PLX52 controller in the powered chassis is updated, turn this chassis' power **off** and turn the other controller chassis' power **on** to repeat the firmware update for the other 1757-PLX52 controller in the RCP. This avoids possible confusion caused by the logical change in the Network Addresses in response to a controller switchover.

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1. Turn the Secondary chassis power **off**.
2. Replace the Secondary 1757-PLX52 catalog revision F01 or earlier controller with a 1757-PLX52 catalog revision H01 controller.

Refer to 1757-PLX52 ProcessLogix Controller Installation Instructions, publication 1757-IN901.

3. Turn the Primary chassis power **off**.
4. Turn the Secondary chassis power **on**.
5. Flash the Secondary 1757-PLX52 controller.

Refer to the table on page 3 for firmware locations.

In the Installation and Upgrade Guide, refer to Loading 1757-PLX52, TC-MUX021, or 1757-FIM Boot and Personality Images.

6. Use NTools software to confirm the firmware revision.
7. If you are replacing only the Secondary of a redundant 1757-PLX52 catalog revision F01 or earlier controller, skip to step 9.



8. Replace the Primary 1757-PLX52 catalog revision F01 or earlier controller with a 1757-PLX52 catalog revision H01 controller.

Refer to 1757-PLX52 ProcessLogix Controller Installation Instructions, publication 1757-IN901.

9. Turn the Secondary chassis power **off**.
10. Turn the Primary chassis power **on**.
11. Flash the Primary 1757-PLX52 controller.

Refer to the table on page 3 for firmware locations.

In the Installation and Upgrade Guide, refer to Loading 1757-PLX52, TC-MUX021, or 1757-FIM Boot and Personality Images.

12. Use NTools software to confirm the firmware revision.
13. Turn the Secondary chassis power **on**.
14. Allow the controllers to synchronize.

This could take from 1 to 3 minutes.

15. Flash all remaining 1757-PLX52 controllers.

Refer to the table on page 3 for firmware locations.

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**IMPORTANT**

When at least one 1757-PLX52 catalog revision H01 controller is added to any system, all 1757-PLX52 controllers (1757-PLX52 catalog revision H01 and all 1757-PLX52 catalog revision F01 or earlier controllers) must be flashed by using the firmware provided in this update.

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In the Installation and Upgrade Guide, refer to Loading 1757-PLX52, TC-MUX021, or 1757-FIM Boot and Personality Images.

### Option 3: Add Controller Redundancy to a Non-redundant F01 Controller

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**ATTENTION**



The following steps should be performed with the systems off-process. Be certain that your process is off control before you continue. This means the 1757-PLX52 controller should be in the Idle state.

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1. Install the Secondary 1757-PLX52 catalog revision H01 controller and the associated hardware.

In the Installation and Upgrade Guide, refer to Adding 1757-PLX52 Controller Redundancy to R5xx.x Non-Redundant 1757-PLX52 Controller Configurations.

Refer to the table on page 3 for firmware locations.

2. Flash all remaining 1757-PLX52 controllers.

Refer to the table on page 3 for firmware locations.

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**IMPORTANT**

When at least one 1757-PLX52 catalog revision H01 controller is added to any system, all 1757-PLX52 controllers (1757-PLX52 catalog revision H01 and all 1757-PLX52 catalog revision F01 or earlier controllers) must be flashed by using the firmware provided in this update.

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In the Installation and Upgrade Guide, refer to Loading 1757-PLX52, TC-MUX021, or 1757-FIM Boot and Personality Images.

3. Use NTools software to confirm the firmware revision.

## Restore the Controller Snapshots

After you install the controller, restore all 1757-PLX52 controller snapshots.

1. On the Monitoring tab, right-click the CPM and select Snapshot > Restore Controller from Snapshot.
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**IMPORTANT**

For redundant controllers pairs, the Restore Controller from Snapshot option is available only for the Primary controller.

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2. Click Continue.
3. Repeat for all remaining 1757-PLX52 controllers.

## Install the Client Update

Complete the following steps to install the update on your Engineering Workstations.

1. Close all ProcessLogix applications.
2. Double-click ProcessLogix R5xx.x CPM Update.exe (where 5xx.x indicates your current ProcessLogix software release).
3. At the Update dialog, click Setup.
4. At the Installation Complete dialog, click OK.

## Update Confirmation

Follow these steps to confirm that the update was properly installed on your system.

1. Using Windows Explorer web browser, open the C:\Honeywell\TPS50\System\Bin\ver\_rev.txt file.

If the file contains the line “02/16/07: 1757-PLX52 B w/ Red. FW CC entry updated”, the update was installed properly.

2. From the Start menu, select Programs > Process Engineering Tools > NTools.
3. From the Help menu, select About Network Tools.

If the screen indicates “Version PS500.1-01.18”, the update was installed properly.

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