ControlLogix Analog Servo Modules, **Firmware Revision 16**

Catalog Numbers 1756-HYD02, 1756-M02AE, 1756-M02AS

When to Use These Release **Notes**

Use these release notes for information about these firmware revisions.

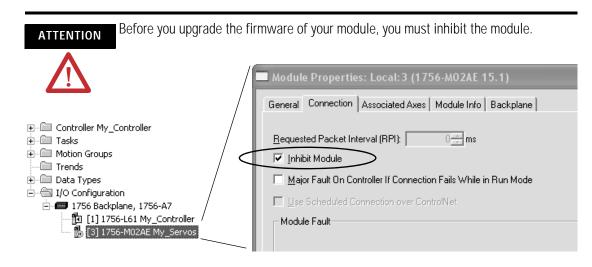
Module	Cat. No.	Revision
ControlLogix 2-axis Hydraulic Servo Module	1756-HYD02	16.1
ControlLogix 2-axis Analog Encoder Servo Module	1756-M02AE	16.1
ControlLogix 2-axis Analog SSI Servo Module	1756-M02AS	16.2

Compatible Revisions

To use this revision, update your system as follows.

Update	To Version/Revision
RSLinx software	2.51 or later
RSLogix 5000 software	16
ControlLogix controller	16

Before You Begin



This disables the axes and makes updating the module easier.



Enhancement

This enhancement that has been made in the revision of firmware listed. The left most column of the table indicates the modules where the enhancement has been made.

Cat. No.	Firmware Revision	Enhancement	Description
1756-HYD02 1756-M02AS	16.1	Loss of Feedback detection	With RSLogix 5000 software version 16, the Loss-of-Feedback (LOF) detection has been enhanced for the 1756-M02AS and 1756-HYD02 modules to now recognize the LOF while the servo loop is off or disabled (MSF), as well as the prior check for LOF while the servo loop is on (MSO).

Corrected Anomaly

The following anomaly has been identified and corrected in the module firmware revision listed. The left most column of the table indicates the module that the anomaly was corrected in.

Cat. No.	Firmware Revision	Anomaly	Description
1756-M02AS	16.2	Actual Position of a rotary axis calculated beyond the unwind limit.	For an axis configured on the 1756-M02AS module as rotary, and the feedback configured as absolute SSI feedback, the resulting Actual Position when crossing the rollover unwind position could result in a value greater than the configured Position Unwind.
			Modification to the calculation of the Actual Position to avoid Actual Position values higher than the Unwind Position were made.

Known Anomaly

This table lists a confirmed anomaly in the module firmware revision listed. The left most column of the table indicates the module where the anomaly occurs.

Cat. No.	Firmware Revision	Anomaly	Description
1756-M02AE	16.1	Axis fault occurs after updating the 1756-M02AE Analog Servo Module Firmware to revision 16.1 using Firmware Supervisor.	Use this workaround to correct this anomaly. For more information about updating modules with Firmware Supervisor, refer to the Logix5000 Controllers Design Considerations Reference Manual, publication 1756-RM094. 1. Use ControlFlash software to install the 1756-M02AE Analog Servo Module revision 16.1 (Kit 2) firmware update. You can also obtain the firmware update by downloading it from the MySupport website at http://support.rockwellautomation.com/firmware.asp. 2. Use Windows Explorer to navigate to the directory where ControlFlash is installed. The default directory is CxProgram Files\ControlFlash. 3. From the install directory, navigate to this subdirectory. - Directory where ControlFlash is installed>\00001\0010\0003 4. If present, delete these .NVS files: - 99523201.NVS - 9N-15038.NVS 5. Use Windows Explorer to navigate to this directory. CxProgram Files\Common Files\Rockwell\CFOldKits\0001\0001\0003 6. If present, delete these NVS files: - 99523201.NVS - 99523201.NVS - 9N-15038.NVS 7. Clear the CompactFlash image on all controllers that will be used to update 1756-M02AE cards. a. In RSLogix 5000 software, go online with the controller. b. On the Controller Properties dialog, click on the Nonvolatile Memory tab. c. Click Load/Store. d. From the Automatic Firmware Updates pull-down menu, select Disable and Delete Files From Image. e. Click Store. 8. Store the new image to the controller's CompactFlash card. a. In RSLogix 5000 software, go online with the controller. b. On the Controller Properties dialog, click on the Nonvolatile Memory tab. c. From the Automatic Firmware Updates pull-down menu, choose Enable and Store Files to Image. d. Click Store.

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Installation Assistance

If you experience a problem within the first 24 hours of installation, please review the information that's contained in this manual. You can also contact a special Customer Support number for initial help in getting your product up and running.

United States	1.440.646.3434 Monday – Friday, 8 a.m. – 5 p.m. EST
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