



SLC 500 DeviceNet Scanner Module Firmware

Cat. No. 1747-SDN/B, Revision 6.002

Purpose

These release notes describe enhancements, corrected anomalies and other important information for this revision and previous revisions of the 1747-SDN DeviceNet™ scanner module firmware.

Use this document with the 1747-SDN DeviceNet Scanner Module User Manual, publication 1747-6.5.5, August 2000 and 1747-SDN DeviceNet Scanner Module Installation Instructions, publication 1747-IN058, available online at www.rockwellautomation.com/literature.

IMPORTANT Due to application-specific anomalies within firmware revisions 7.005 and 7.006, firmware revision 6.002 is being re-released. Revision 6.002 does not include the AutoScan or embedded EDS file features. If you have not experienced any of the anomalies described on page 2 and want to flash upgrade this scanner module to firmware revision 7.006, please contact Rockwell Automation Technical Support at 440-646-3223.

What This Document Describes

For Information About:	See page:
Revisions 7.005 and 7.006 Known Anomalies	2
Revision 6.002 Electronic Data Sheet Requirement	2
Revision 6.002 Enhancements	3
Revision 6.002 Corrected Anomalies	3
Revision 5.001 Enhancement	4
Revision 4.026 Enhancement	4

Revisions 7.005 and 7.006 Known Anomalies

Firmware revisions 7.005 and 7.006 contain the following known anomalies:

- Inability to flash update the module if connections to all slave devices are not made. The scanner module displays a 98 error.
- Certain application programs (ladder programs) may cause the SLC controller to fault due to exceeded shared memory lock time. The SLC controller displays a 57 error. The scanner module does not display an error.
- Internal performance changes may cause timing dependant applications to fail.
- Saving ADR data may cause the scanner module to fault upon next power cycle. The scanner module displays a E9 error. Upon next power cycle, the scanlist and configuration data defaults to “out of box” values.
- If a slave in the scanlist does not match the identity of the slave at that address on the network, the scanner module does not communicate with that slave again. After the mismatch is resolved, you have to cycle power to the scanner module to reestablish communication.

If you have not experienced any of these anomalies and want to flash upgrade this scanner module to firmware revision 7.006, please contact Rockwell Automation Technical Support at 440-646-3223.

Revision 6.002

Electronic Data Sheet Requirement

The 6.002 firmware revision of the scanner module requires the latest EDS file for RSNetWorx for DeviceNet software. If the software displays the device as an unknown device, then you must download the latest EDS file.

You can get the latest EDS file online at:

<http://www.ab.com/networks/eds>

Once you are at this location:

1. Select `DeviceNet`
2. Enter the catalog number: `1747-SDN`
3. Enter Major Revision: `6`
4. Enter the Minor Revision: `2`
5. Select `Search`

For more information, contact Rockwell Automation Technical Support at 440.646.3223.

Enhancements

Enhanced Explicit Message Pass-Through Capability

With the 6.002 firmware revision, the size of the M0/M1 file could be expanded to 395 words. This can accommodate a larger pass-through message than previous firmware revisions. For example, this enhanced capability now allows DeviceNet PanelView terminal downloads.

M1 File Includes Device Active Table Section

With this revision, words 206 through 209 in the M1 file are now used for the Device Active Table. The scanner assigns one bit in consecutive order to consecutive device addresses starting at node 0 at M1.S.206/0. If a bit is set, it indicates that the node is in the scanner's scan list and has successfully communicated with the scanner module. The bit is reset if the scanner tries to communicate to the node but the node has gone offline.

Immediate Input/Output

With this revision, the scanner will act upon immediate input and output instructions (IIM, IOM) from the SLC 500™ programmable controller.

Corrected Anomalies

Anomaly	Description
Reset I/O run bit in scanner copy of I/O during transition to processor Program mode.	This would prevent immediate change from Idle to Run mode before the I/O scan of the processor when the processor transitions to Run mode. This anomaly has been corrected.
Unwanted information from a previous connection remained when the former connection timed out while waiting for a fragment ack.	This prevented a new connection from being established since the connection state was incorrect. This anomaly has been corrected.
Check for error after setting EPR on slave connection.	If a device state conflict error is returned by a slave when the EPR bit is set, the scanner would not report the error. This anomaly has been corrected.

Revision 5.001

Enhancement

Scan List Commit in Run/Idle

With the 5.001 firmware revision, with the scanner module in Idle mode, the scan list can be committed to the scanner module's memory while the programmable controller is in Run mode.

Revision 4.026

Enhancement

Electronic Keying

With the 4.026 firmware revision, Electronic keying was enhanced to include Major and Minor revision checking.

DeviceNet is a trademark of ODVA, Open DeviceNet Vendors Association.
SLC 500 and RSNetWorx for DeviceNet are trademarks of Rockwell Automation.

www.rockwellautomation.com

Corporate Headquarters

Rockwell Automation, 777 East Wisconsin Avenue, Suite 1400, Milwaukee, WI, 53202-5302 USA, Tel: (1) 414.212.5200, Fax: (1) 414.212.5201

Headquarters for Allen-Bradley Products, Rockwell Software Products and Global Manufacturing Solutions

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

Europe: Rockwell Automation SA/NV, Vorstlaan/Boulevard du Souverain 36-BP 3A/B, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

Asia Pacific: Rockwell Automation, 27/F Citicorp Centre, 18 Whitfield Road, Causeway Bay, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Headquarters for Dodge and Reliance Electric Products

Americas: Rockwell Automation, 6040 Ponders Court, Greenville, SC 29615-4617 USA, Tel: (1) 864.297.4800, Fax: (1) 864.281.2433

Europe: Rockwell Automation, Brühlstraße 22, D-74834 Elztal-Dallau, Germany, Tel: (49) 6261 9410, Fax: (49) 6261 17741

Asia Pacific: Rockwell Automation, 55 Newton Road, #11-01/02 Revenue House, Singapore 307987, Tel: (65) 351 6723, Fax: (65) 355 1733