



ControlNet-to-DeviceNet Linking Device

Catalog Number 1788-CN2DN

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About This Publication

This release note describes enhancements and corrected and known anomalies for the ControlNet-to-DeviceNet Linking Device, catalog number 1788-CN2DN, firmware revisions 1.020...1.024.

Enhancements

This section describes enhancements by firmware revision number.

Firmware Revision	Enhancement	Description
1.024	Improved recovery after ControlNet cable break	1788-CN2DN linking device more reliably reestablishes connections when either or both the ControlNet tap and trunk cable is disconnected and reconnected.
1.023	Increased number of explicit message request buffers	Increased the number of explicit message request buffers from 16 to 64 to improve performance when a DeviceNet network receives simultaneously a large number of requests from a ControlNet network.
1.020	Offlink connection support	1734-ADN POINT I/O modules can now be configured by RSNetWorx for DeviceNet software through the linking device.
	DeviceNet LED indicators definitions consistent with other Rockwell Automation DeviceNet scanners	The definitions of the DeviceNet LED indicators (Module Status, DNet Network Status, and DNet I/O Status) have been changed to be consistent with other Rockwell Automation DeviceNet scanners.

Corrected Anomalies

This section describes corrected anomalies by firmware revision number.

Firmware Revision	Corrected Anomaly	Description
1.024	Power-up after more than 64 KB of Auto Device Replace (ADR) configuration data downloaded to the 1788-CN2DN linking device	Resolved an anomaly that resulted in the 1788-CN2DN linking device not correctly powering up after a power cycle when more than 64 KB of ADR configuration data was downloaded to the linking device.
	Transmission of anomalous data on the ControlNet network	Corrected an anomaly in which the 1788-CN2DN linking device may transmit anomalous data on the ControlNet network. The packet containing this anomalous data may be received as a valid packet by another device, such as a controller.

Firmware Revision	Corrected Anomaly	Description
1.023	Corrupted data or dropped explicit message on DeviceNet network	When multiple simultaneous explicit messages are received from the ControlNet network and the messages are addressed to the devices on the DeviceNet network, the 1788-CN2DN linking device could send corrupted data on the DeviceNet network or it could drop the explicit message and reply with a device does not exist status.
	Incorrect reply service code	If an explicit message is addressed to the linking device through loopback (the path is CN2DN, Port 2, 1788-CN2DN linking device's DeviceNet address), the reply service code was wrong when the response was sent.
	Corrupted data or hard fault on DeviceNet network	If a large (>250 bytes in most cases) explicit message was sent to the linking device through loopback or to a device on the DeviceNet network, the linking device could send out corrupted data on the DeviceNet network or hard fault.
	Improperly freed connection record	When a group 2 only device drops an explicit message, a connection record was not properly freed. The linking device does not respond to a browse when all connection records were in use.

Firmware Revision	Corrected Anomaly	Description
1.021	I/O data size mismatch error not indicated	If you changed a slave device's Transmit or Receive size in the linking device's scanlist without changing the slave's corresponding Transmit or Receive size, and maintained the I/O connection between the linking device and the slave device during the process, the linking device would not indicate an I/O data size mismatch error (ERROR code 77) when put back into RUN mode. The linking device would continue to transmit valid output data, but the input data would not be updated (the last known data would be sent).
	Linking device would not send further explicit messages to a slave device without an I/O connection	<p>If the linking device could not establish an I/O connection to a slave device due to configuration problems, the linking device would not send further explicit messages to that device. When this occurs, these conditions may take place:</p> <ul style="list-style-type: none"> • The slave device in question would not appear in an RSLinx software browse dialog, or would be missing from a subsequent browse. • The linking device would not attempt to reestablish a connection to that slave device once the linking device got into this state (until the linking device was reset or the DeviceNet cable was disconnected and reconnected).

Known Anomalies

This section describes known anomalies by firmware revision number.

Firmware Revision	Corrected Anomaly	Description
1.020	Incorrectly reported upgrade failures	When flash updating a linking device from revisions prior to 1.020, the ControlFlash tool might report a time-out error and report the upgrade as a failure. The upgrade was probably successful in spite of the reported error. If this occurs, you should flash upgrade the module again. This error should not be reported again.

Install New EDS Files

Follow this procedure to install the appropriate electronic data sheet (EDS) file for the 1788-CN2DN linking device.

1. Visit the RSNetWorx software website at <http://www.ab.com/networks/eds>.
2. To locate a specific EDS file, select the Device Type, Network, Brand, and Catalog Number.
3. Save the EDS file to the appropriate directory on your system.

Additional Resources

Refer to these publications for more information about the 1788-CN2DN linking device.

Resource	Description
ControlNet-to-DeviceNet Linking Device Installation Instructions 1788-IN052	Provides details about how to mount and configure the linking device, and technical specifications.
DeviceNet Modules in Logix5000 Control Systems User Manual DNET-UM004	Provides information about using RSLogix 5000 software to configure and communicate between DeviceNet modules, controllers, and other devices in the DeviceNet network.

You can view or download publications at <http://literature.rockwellautomation.com>. To order paper copies of technical documentation, contact your local Rockwell Automation distributor or sales representative.

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For an additional level of technical phone support for installation, configuration, and troubleshooting, we offer TechConnect Support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://support.rockwellautomation.com>.

Installation Assistance

If you experience a problem with a hardware module 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 module up and running.

United States	1.440.646.3223 Monday – Friday, 8am – 5pm EST
Outside United States	Please contact your local Rockwell Automation representative for any technical support issues.

New Product Satisfaction Return

Rockwell tests all of its products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning, it may need to be returned.

United States	Contact your distributor. You must provide a Customer Support case number (see phone number above to obtain one) to your distributor in order to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for return procedure.

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