



# **ControlNet-to-DeviceNet Linking Device**

Catalog Number 1788-CN2DN

### **How to Use These Release Notes**

These release notes describe enhancements, changes, and known anomalies in release 1.023 of the ControlNet-to-DeviceNet linking device, catalog number 1788-CN2DN.

Use these notes along with your ControlNet-to-DeviceNet Installation Instruction, publication 1788-IN052C-EN-P, and the user manual, publication 1788-UM053A-EN-P, which are available through the Automation Bookstore: [www.theautomationbookstore.com](http://www.theautomationbookstore.com).

### **Enhancements between Version 1.023 and Version 1.021**

We increased the number of explicit message request buffers from 16 to 64 to improve performance when a DeviceNet™ network receives simultaneously a large numbers of requests from a ControlNet™ network.

### **Changes between Version 1.023 and Version 1.021**

We corrected these anomalies in firmware version 1.023:

- When the ControlNet network sends multiple simultaneous explicit messages addressed to devices on the DeviceNet network to the linking device, the 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.
- If an explicit message is addressed to the linking device through loopback (the path is CN2DN, Port 2, CN2DN's DeviceNet address), the reply service code is wrong when the response is sent.
- If a large (>250 bytes in most cases) explicit message is 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.
- When a 'group 2 only' device drops an explicit message, a connection record is not properly freed. You will find that the linking device is not responding to a browse when all connection records are in use.

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## Changes between Version 1.021 and Version 1.020

We corrected these anomalies in firmware version 1.021:

- 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).
- 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:
  - The slave device in question would not show up in an RSLinx™ browse window, or would become missing in 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 is reset or the DeviceNet cable is disconnected and reconnected).

## Changes between Version 1.020 and Version 1.014

We made these changes in firmware version 1.020:

- Offlink Connection support – 1734-ADN POINT I/O devices can now be configured by RSNNetWorx™ for DeviceNet through the linking device.

- The 'Build Identification Number' has been removed from the Product Naming String of the linking device. This change does not affect the functionality of the product.
- A new EDS file (V.1008) is released through the RSNetWorx website ([www.ab.com/networks/eds/](http://www.ab.com/networks/eds/)). This EDS file corrects the connection parameters for the Input Only connections. It also adds three preferred connections for the 1747-SCNR and PLC5C series F rev. C or later devices.
- The definitions of the DeviceNet LEDs (Module Status, DNet Network Status, and DNet I/O Status) have been changed to be consistent with other Rockwell DeviceNet scanners. See 1788-IN052C-EN-P and/or 1788-UM053A-EN-P for details.

## Known Anomalies

When flash updating a linking device from versions prior to 1.020, ControlFlash 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.

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