



1203-CN1 Quick Start Guide

Last revised: May 17, 1999

The following is a summary of the steps required to install and configure a 1203-CN1 ControlNet™ communications module. Page references below are to the CN1 manual (July, 1998 revision).

This document is provided as a convenience to users of the 1203-CN1 module to aid in its installation and configuration. It is **NOT** a substitute for the user manual, which contains detailed instructions and important safety information with which users should be familiar.

This document is also available from Rockwell Automation on the Internet at the following address:
<http://www.ab.com/drives/std drives/1203cn1/QuickStartGuide.pdf>

INSTALLATION

1. Set the ControlNet node address of the module using the pushbutton switches. (p. 2-4)
2. Rest the back of the module on the top edge of the DIN rail, and snap the module downward onto the rail. (p. 2-5)
3. Connect the SCANport cable from drive or splitter to the connector on the front of the module. (p. 2-6)
4. Connect ControlNet cable(s) to the appropriate connectors on the front of the module. (p. 2-6)
5. If you intend to reconfigure the module or use software such as DriveExplorer™ to configure the drive, connect the 1203-SFC serial cable to the connector on the right side of the module (shiny side up). (p. 3-3)
6. Connect power to the module at the terminals at the lower right corner of the module: +24V on bottom row of terminals, common on top row. (p. 2-7)

DEFAULT MODULE CONFIGURATION

The module's default configuration is listed below:

- Logic command/reference enabled, all datalinks disabled (2 words in and out on ControlNet connection).
- Serial port speed is 9600 bps.
- The module will cause the drive to fault if the PLC-5 goes idle or a ControlNet connection closes or times out.

If this configuration matches your application, no further module configuration is required. However, you must still use RSNetWorx to map the module into the PLC-5's data table.

CHANGING THE MODULE CONFIGURATION

1. Run HyperTerminal on the computer to which the module is connected. Select the communications port you've connected to and a speed of 9600 bps. (p. 3-3)
2. Hit Enter to bring up the configuration menu. Choose option 1 to edit module parameters.
3. (General instructions for editing parameters) Use the up/down arrow keys to locate a parameter to change. Once a parameter is located, use the left/right arrow keys to scroll through available parameters, or use the digit keys to enter a numeric value. Press Enter to save your change, or Esc to discard it. (p. 3-8) A complete list of parameters can be found in Appendix B of the manual.
4. To enable/disable logic command/reference or datalink transmission, set parameters 4-8.
5. To change the action of the module when the PLC-5 goes idle, set parameter 9.
6. To change the action of the module when a network connection closes or times out, set parameter 10.
7. If you selected "Fault Cfg" as an idle or network fault action, set parameters 11-20 with the commands to send to the drive in these cases. (These commands should place the drive in a "safe state" for your application.) Fault configurable data changes take effect immediately - a module reset is not required if only these parameters are changed.
8. To change the serial port speed between 9600 and 19,200 bps, set parameter 21.
9. After changing parameters other than fault configurable data, set parameter 22 to Enable to restart the module and make your changes take effect. (You may also set parameter 22 to Set Defaults to reset the module's configuration to its factory setting.)

MAPPING THE MODULE INTO THE PLC-5

1. Start up RSNetWorx for ControlNet (version 1.07 or higher) on a PC connected to the PLC-5 to be mapped. (p. 4-2)
2. Click the Online checkbox in the toolbar, and choose your connection to the PLC-5. (p. 4-3)
3. Click the Edits Enabled checkbox in the upper left corner of the screen. (p. 4-13)
4. Choose Network/Properties from the menu bar. Review the settings for the network and change if necessary. Press the OK button when done. (p. 4-13)
5. Locate the PLC-5 on the map. Right click on it, then choose ControlNet Configuration from the popup menu. (p. 4-6)
6. In the ControlNet Configuration window, click on the line representing the drive/module to be added to the map. While this line is selected, choose Insert/Device Connection from the menu bar. (p. 4-7)
7. Set the input and output sizes for the connection according to the module's configuration: 2 words if logic command/reference is enabled, plus 2 words for each datalink enabled. Both the input and output sizes must be equal to this value.
8. If you have specific N-file addresses in mind for the connection data, set them in the Input, Output, and Status address columns. Otherwise, choose Configuration/Auto Map/Selected Entries to have addresses assigned automatically. Make note of these addresses for programming the PLC-5. (p. 4-9)
9. Choose Network/Save from the menu bar. Press the OK button in the confirmation dialog box. Choose a name under which to save the configuration file on the PC. (p. 4-10)
10. If you have no further entries to map into the PLC-5, exit the map editor and RSNetWorx. (p. 4-11). Otherwise, repeat steps 2-9 for additional entries.

PROGRAMMING I/O INTO THE PLC-5

1. The I/O you have chosen will appear in the N files that you selected while mapping the module into the PLC-5. The first word of I/O will appear at the element number provided to RSNetWorx. Additional words follow in consecutive element numbers.
2. If enabled, logic command/reference are the first two words of the output image, and logic status/feedback are the first two words of the input image. Otherwise, no space is allocated for the logic command/reference.
3. Enabled datalinks appear immediately following the logic command/reference. There is no space allocated for disabled datalinks (e.g., if logic command/reference and datalinks B and C are enabled, the six words of I/O are in the following order: logic command/reference, datalink B, and datalink C).
4. The user manual for the drive will show the format of the logic command, status, reference, and feedback for that drive. This format is **NOT** consistent between all drives.
5. Messaging (configuration or low-priority data acquisition) to the drive or module may be done with a MSG instruction in the PLC-5 program. Chapter 6 of the manual contains examples of performing messaging, and Appendix C lists the N files in the module that are accessible by the PLC-5.

TECHNICAL SUPPORT

Rockwell Automation technical support for drives products may be reached at (414) 512-8176.