

Automation Direct Do-more PLC

Information Sheet for Crimson v3.0+

Compatible Devices

Do-more Series PLCs

Verified Device

H2-DM1E

Overview

The Do-more PLC driver provides access to the built-in memory blocks accessible in the Do-more Series of programmable logic controllers. User memory blocks and heap items are not currently supported.

Device Configuration

Some configuration is necessary for successful communication between a Red Lion device and a Do-more PLC. Below is information on configuring both RS-232 serial and UDP Ethernet communications in the Do-more Designer and Crimson 3.0 software.

RS-232 Serial Configuration

Do-more Designer:

From the Do-more Designer software, open the System Configuration from the PLC menu. Under CPU configuration entry, find the settings for Serial Port Mode and select the "Do-more Programming" radio button. Then click the Device Settings button and configure the serial port settings as desired. Transmit Control should be set to Unconditional and RTS Control should be set to "Follows Transmitter". Make a note of the settings for baud rate, data bits, stop bits and parity as these will be needed to configure Crimson 3.

Crimson 3.0:

From the Communications tab in the Navigation pane, click on the desired RS-232 port and click the Pick button. The Do-more PLC driver can be found under the manufacturer "Automation Direct – Koyo".

After creating the device, configure the Port Settings to match the baud rate, parity and data and stop bits configured in the Do-more software above. Enable the ping if desired -- this will help to detect a loss of communication sooner. If the ping is enabled, select a valid register from the V memory block to ping. Typically the default ping register is acceptable. Finally, enter the password used to log onto the PLC. If no password is set on the PLC, then this field should be left blank.

UDP Ethernet Configuration:

Do-more Designer:

The onboard Ethernet port is configured using the NetEdit utility included with the Do-more designer software. When first opening Do-more Designer, NetEdit can be found under the Applications section of the Launchpad pane. More information on using the NetEdit utility can be found in the help file for Do-more designer. Set the IP address of the PLC using NetEdit and make a note of it as it will be used to configure Crimson 3 below.

Crimson 3.0:

Select one of the Protocols under the network port, then chose the Do-more PLC driver, found under the manufacturer "Automation Direct – Koyo". Click on the new device to see the Device Options.

Set the IP address to match that configured above. Most applications can use the default UDP port, but it can be changed if needed. Enable the ping if desired, this will help to detect communication loss sooner. If the ping is enabled, select a valid register from the V memory block to ping. Typically the default ping register is acceptable. Finally, enter the password used to log onto the PLC. If no password is set on the PLC, then this field should be left blank.

Accessible Data

Prefix	Description
ST	System Status Bits
DST	System Status Longs
SDT	System Time and Date Structures
X	Discrete Input Bits
Y	Discrete Output Bits
WX	Analog Input Words
WY	Analog Output Words
C	Program Control Bits
V	Unsigned 16-bit Integer Variables
N	Signed 16-bit Integer Variables
D	Signed 32-bit Integer Variables
R	Floating Point Variables
T	Timer Structures
CT	Counter Structures
SS	Short Strings (64 characters)
SL	Long String (256 characters)
UDT	User Time and Date Structures
PL	Peerlink Shared Memory
DLX*	DirectLogic X Bits
DLY*	DirectLogic Y Bits
DLC*	DirectLogic C Bits
DLV*	DirectLogic V Words
MI	Modbus Input Bits
MC	Modbus Coil Bits
MIR	Modbus Input Register Words
MHR	Modbus Holding Register Words
LastMSG	System Messages
LastERR	System Error Messages

*These registers are accessed using octal addressing.

Cable Information

Red Lion CBLKOY00 for serial connections
Standard Ethernet cable for Ethernet connections

Revision History

6/10/2014 – Created