

DX100 OPTION ADDENDUM

FOR ETHERNET/IP BOARD
ROBOT AS AN ADAPTER TO A COMPACTLOGIX OR CONTROLLOGIX
PLC (SCANNER) CONFIGURATION EXAMPLE
(PCU-ETHIO FOR INPUT ONLY VERSION MADE BY Molex)

Upon receipt of the product and prior to initial operation, read these instructions thoroughly and retain for future reference.

MOTOMAN INSTRUCTIONS

- MOTOMAN-ETHERNET/IP BOARD INSTRUCTIONS
- DX100 INSTRUCTIONS
- DX100 OPERATOR'S MANUAL
- DX100 MAINTENANCE MANUAL

The DX100 operator's manual above corresponds to specific usage.
Be sure to use the appropriate manual.

Part Number: 165022-1CD
Revision: 1



MANDATORY

General items related to safety are listed in Section 2 of the *DX100 Controller Manual*. To ensure correct and safe operation, carefully read the *DX100 Controller Manual* before reading this Addendum.



CAUTION

- Yaskawa Motoman may modify this model without notice when necessary due to product improvements, or changes in specifications.
- If such a modification is made, the manual number will also be revised.
- If the addendum is damaged or lost, contact a Yaskawa Motoman Customer Service Representative to order a new copy. The representatives are listed on the back cover of this addendum. Be sure to tell the representative the manual number listed on the front cover.
- YASKAWA is not responsible for incidents arising from unauthorized modification of its products. Unauthorized modification voids the products warranty.

Introduction

This addendum supplies an example of a robot as an adapter to the CompactLogix or ControlLogix PLCs which is the scanner in this configuration. The robot controller is the adapter in this EtherNet/IP network.

Hardware In Use:

- 151164-3 - PCI EtherNet/IP Card

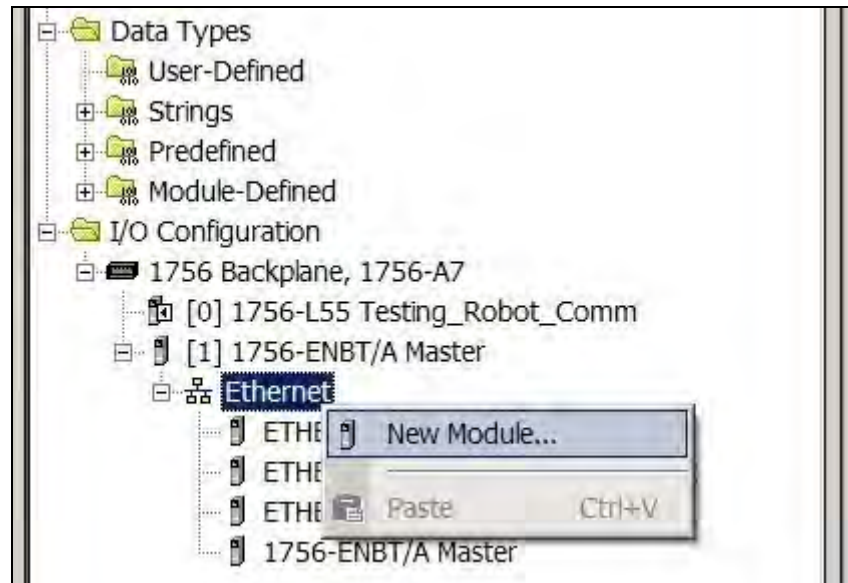
DX100 Software:

- DS2.10 and above

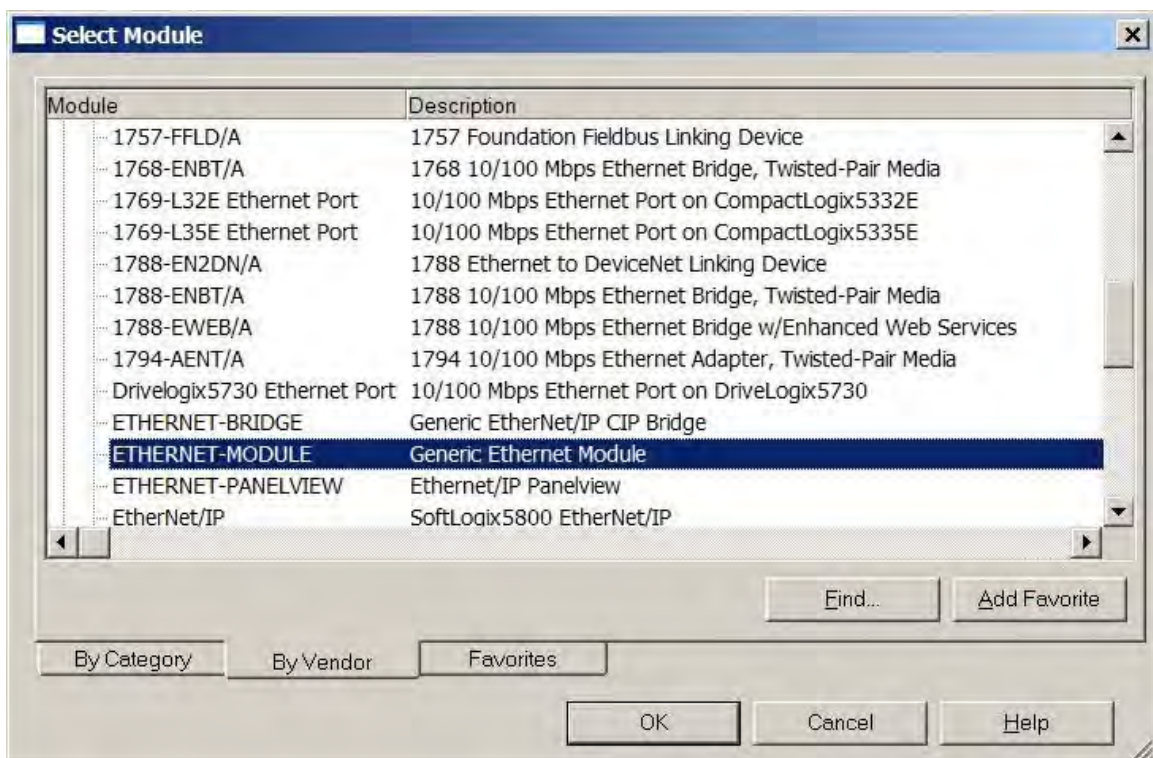
Configuration Example - Robot as Adapter to CompactLogix or ControlLogix PLC (Scanner)

PLC Configuration with RSLogix 5000:

1. Add Robot to the Ethernet network through the project explorer on the left hand side:



2. Select the [ETHERNET-MODULE] from the module list.



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Configuration Example - Robot as Adapter to CompactLogix or ControlLogix PLC (Scanner)
 PLC Configuration with RSLogix 5000:

3. Setup the modules properties to match the properties setup in the robot controller.



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Input Instance ID in PLC = Output Instance ID in Robot
 Output Instance ID in PLC = Input Instance ID in Robot
 (The Configuration Instance must be set to a value other than zero, even though the size will be set to zero.)

Module Properties: EtherNet_Comm (ETHERNET-MODULE 1.1)

General | Connection | Module Info

Type: ETHERNET-MODULE Generic Ethernet Module
 Vendor: Allen-Bradley
 Parent: EtherNet_Comm
 Name: DX100_PCI_EthIP_Card
 Description:

Comm Format: Data = SINT

Address / Host Name
 IP Address: 192 . 168 . 1 . 30
 Host Name:

Connection Parameters

	Assembly Instance:	Size:	
Input:	100	20	(8-bit)
Output:	200	20	(8-bit)
Configuration:	55	0	(8-bit)
Status Input:			
Status Output:			

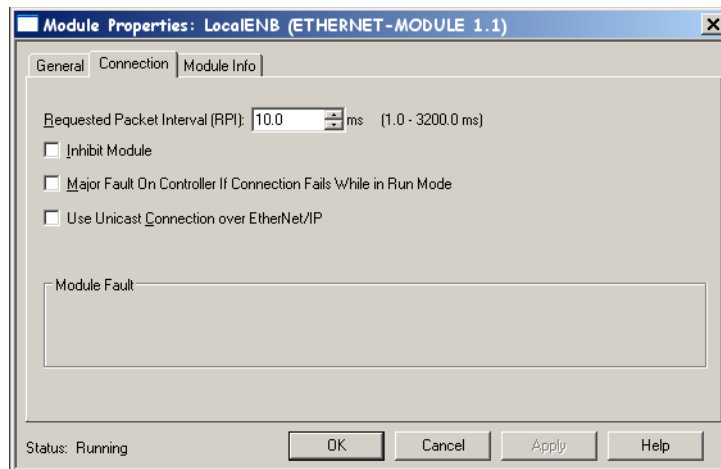
Status: Running

OK Cancel Apply Help

*Notice data type selected was [SINT]

Configuration Example - Robot as Adapter to CompactLogix or
ControlLogix PLC (Scanner)
PLC Configuration with RSLogix 5000:

4. If using a RSLogix version 18.00.00 or greater, uncheck the setting [Use Unicast Connection over EtherNet/IP]. This setting is not available in earlier versions of RSLogix and can be ignored.



DX100 Configuration in Maintenance Mode

1. Login to {MANAGEMENT MODE} or higher on the **SECURITY** screen.



2. Select EtherNet/IP (PCU-ETHIO) card on the **OPTION BOARD STANDARD** screen.



Configuration Example - Robot as Adapter to CompactLogix or
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DX100 Configuration in Maintenance Mode

3. Select the "first" {DETAIL} option on the PCU-ETHIO screen.

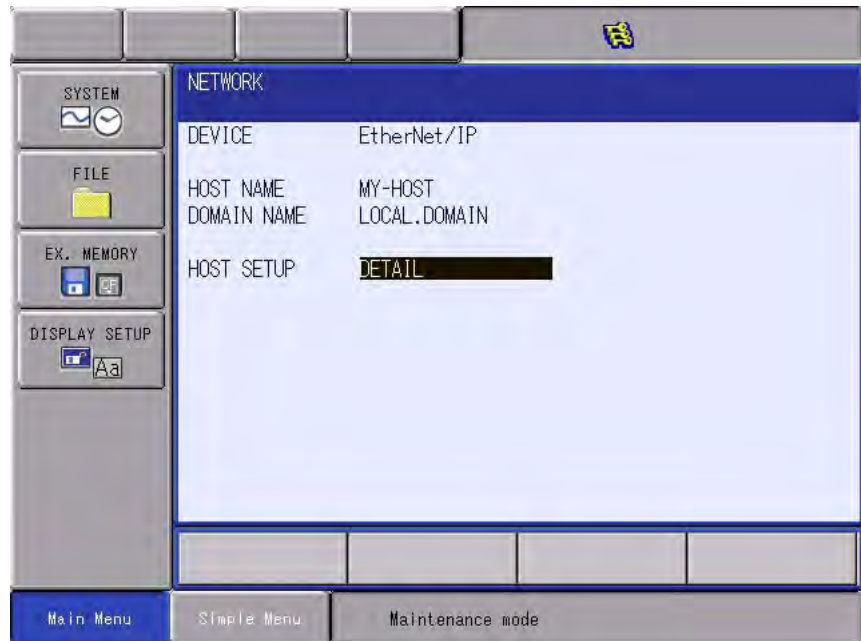


4. On the **PCU-ETHIO** screen select [DETAIL] for the {ETHERNET} to navigate to the **NETWORK** screen to change the IP address of this card.

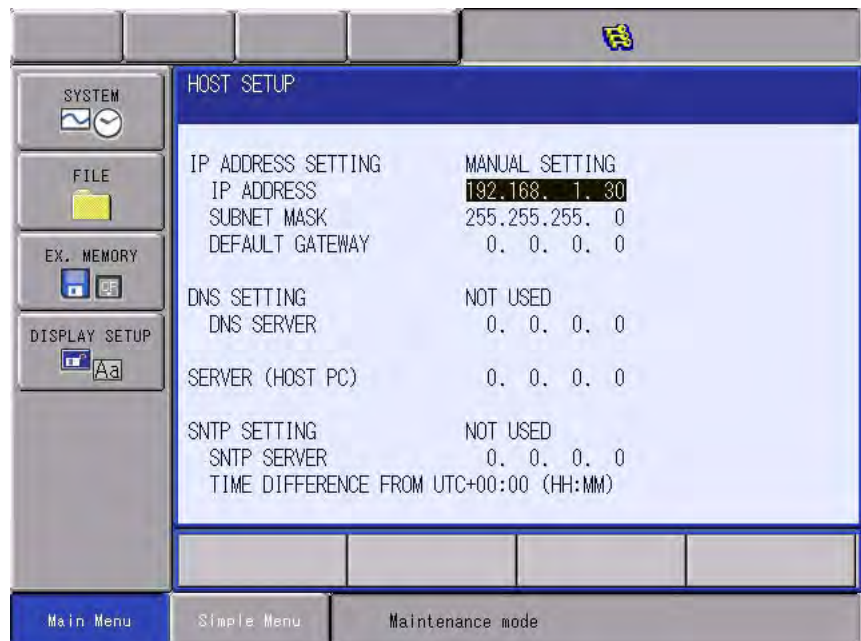


Configuration Example - Robot as Adapter to CompactLogix or ControlLogix PLC (Scanner) DX100 Configuration in Maintenance Mode

5. Continue digging into the menu until the **NETWORK** screen appears and then select [DETAIL] for {Host Setup}.

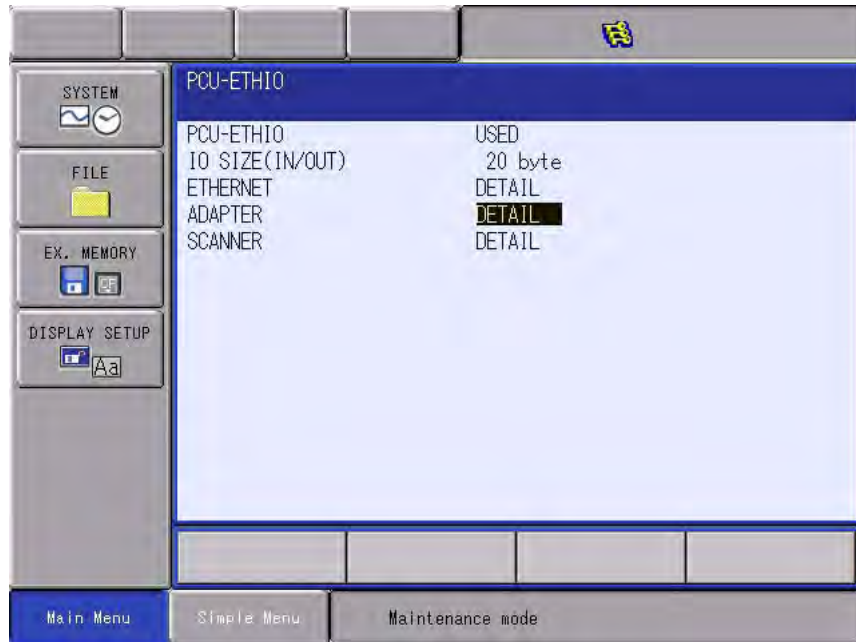


6. Change the **IP ADDRESS** to match the {IP ADDRESS} specified in step 3 of the "PLC Configuration with RSLogix 5000."



Configuration Example - Robot as Adapter to CompactLogix or
ControlLogix PLC (Scanner)
DX100 Configuration in Maintenance Mode

7. Exit the previous screens until reaching the **PCU-ETHIO** screen. Now select the [DETAIL] settings under {ADAPTER} to finalize the communication settings.



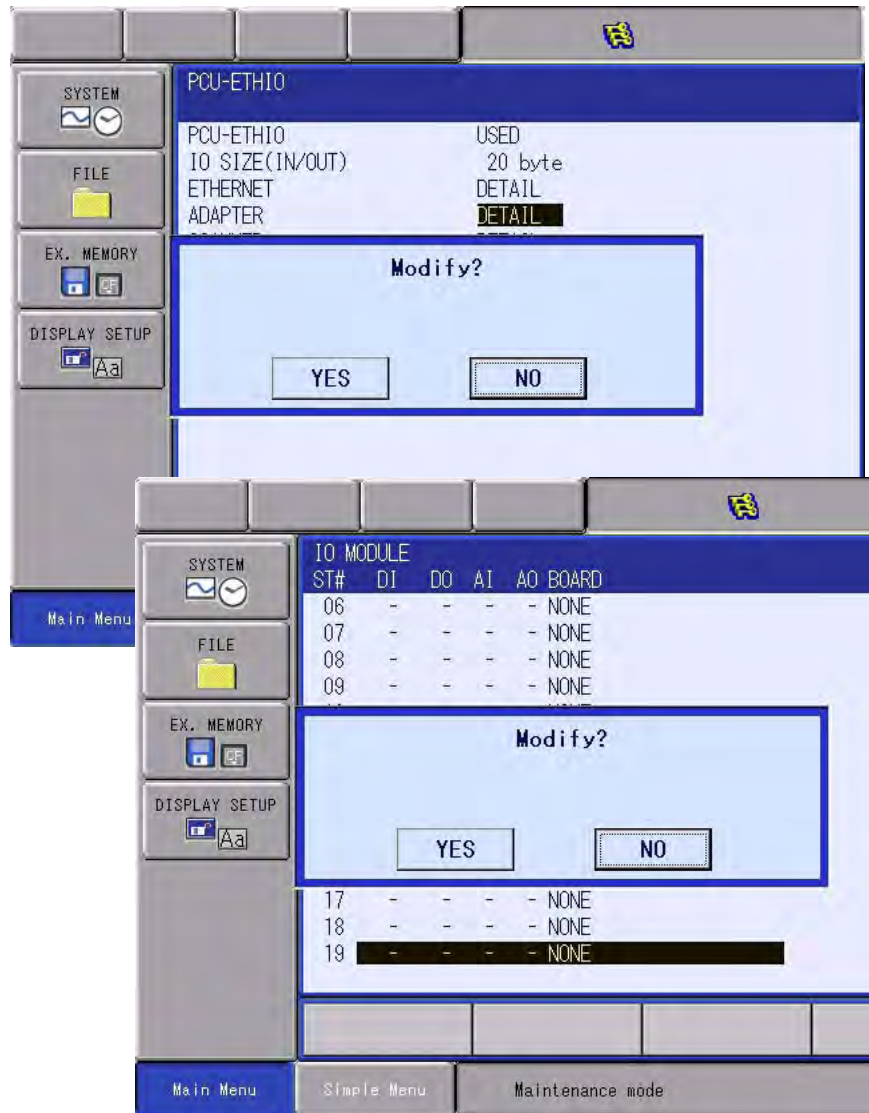
8. Change the {ADAPTER} to [ENABLE] and match the [INPUT SIZE] and [OUTPUT SIZE] to the settings in *step 3* of the “PLC Configuration with RSLogix 5000:”



- The Input Instance # from the PLC = Output Instance # from the DX100.
- The Output Instance # from the PLC = Input Instance # from the DX100



9. Select [YES] at all the **Modify?** prompts.



10. Reboot the DX100 and communication should be established.

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Specifications are subject to change without notice
for ongoing product modifications and improvements.