

Quick Start Guide

Zlinx 485



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Check for All Required Hardware

- o Zlinx485 Base Module
- o Expansion Modules
- o Zlinx 485 Manager Software on CD
- o RJ45 to serial cable

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Hardware Installation

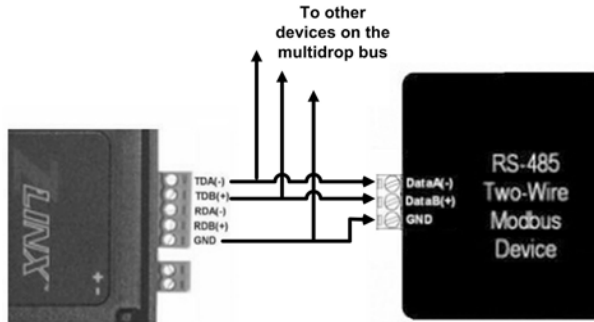
- o Select a mounting location
- o If mounting expansion modules, remove plastic covers from the 14 pin 2mm bus on each side
- o Mount and connect together the Base and Expansion Modules (expansion modules on right side of base)
- o Connect field wiring to Zlinx Base Module
 - o Serial/Modbus wiring in section 3
 - o Digital or Analog I/O in Section 4
 - o Connect 10 to 30 VDC power to the base module
 - o Wattage depends on the total number of and type of modules being used – manual

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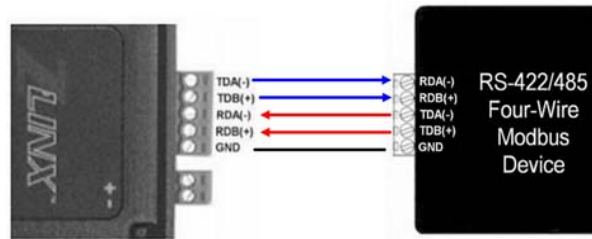
Modbus/Serial Wiring

- o Connect field wiring to Zlinx serial terminals as shown in the following diagrams:

2 Wire Connection



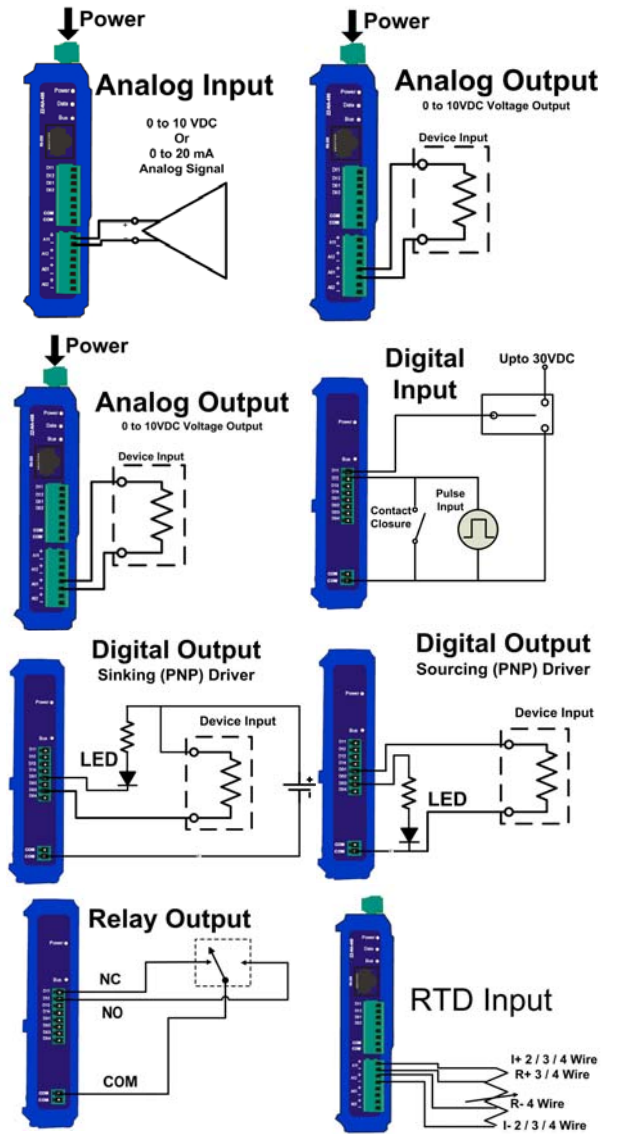
4 Wire Connection



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Modbus/Serial Wiring

- o Connect field wiring to Zlinx 485 terminals as shown in the following diagrams:



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Install Zlinx 485 Software

- o Insert the software CD. Installation should launch automatically. If not, click Start, Run, [drive]:\setup.exe
- o OS Supported: Windows ME/2000/XP
- o Follow the prompts to install the Zlinx 485 Manager.

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Start Zlinx 485 Manager

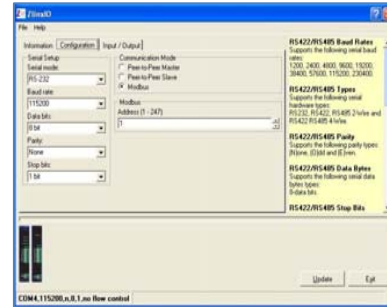
- o Connect a PC serial port (COM! to 16) to the Programming Module using an RJ45 to serial cable.
- o **Click Start\Programs\B&B Electronics \Zlinx\Zlinx IO** and it will search for attached modules on start up. Zlinx I/O Manager will open and display the Information tab showing model and version numbers of attached Base and Expansion modules.
 - o Make sure all base modules have the same firmware revision.*
 - o Make sure all the expansion modules have the same firmware version.*

*Can be verified under the "Information" tab.

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Configure Modbus or Peer-to-Peer

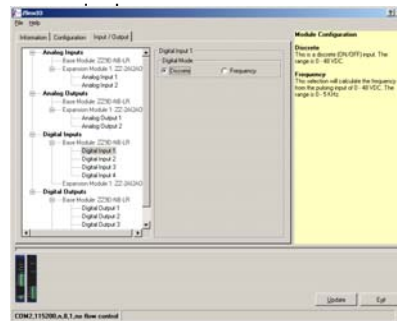
- o Zlinx 485 modules are configured as Modbus nodes or serial links in Peer-to-Peer mode.
 - o To configure the Zlinx 485 for **Modbus mode**:
 - o Select **Configuration tab**
 - o Select **Modbus** option
 - o Type **Modbus Address** in the address box
 - o The allowable range of Modbus addresses is from 1 to 247. The default address is 1
 - o To configure the Zlinx 485 for **Peer-to-Peer Slave or Master mode**:
 - o Select **Configuration tab**
 - o Select **Peer-to-Peer Slave** or **Master** button
 - o Set the **Peer-to-Peer Slave** or **Master** address from 1 to 247. Default value is 1
- If I/O points don't update in **Master Mode**, increase **Polling Rate** values (seconds between polls).



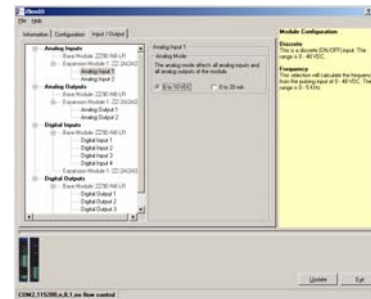
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Configure Input / Output

- o On the Input/Output tab, check to see that all modules and I/O point are listed
- o Highlight the I/O type used
- o Set Digital Inputs for Discrete or Frequency County,



- o Set Analog Inputs/Outputs for 1 to 10 VDC or 20mA as needed (setting one sets all for module)



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Operation / Test

LED Indications During Normal Operation

LED	Status	Function
Power (RED)	Solid	Power Applied
Data (Green)	Off	No Data Link
	Blinking	Data Traffic
Bus (Green)	Off	No Local Bus
	Blinking	Local Bus Traffic

System Test Procedure using Modscan32 Program
(This program can be downloaded through various web sites)

Configure Z485 as follows:

- o Baud Rate Setting: 9600, N, 8, 1
- o Modbus Mode
- o Slave Address 1
- o Launch and configure Modscan32
- o Main Menu
 - o Address = 1
 - o Length = 16
 - o Modbus Point Type = 02:Input Status
 - o Device ID = 1
- o Communications Set Up (Connection Tab)
 - o Select COM Port from Connect Using pull down
 - o Select 9600 from Configuration Baud pull down
 - o Select 8 from Configuration Word Length pull down
 - o Select None from Configuration Parity pull down
 - o Select 1 from Configuration Stop Bits pull down
- o Protocol Selection
 - o Select RTU under Transmission Mode
 - o Select nothing under "DANIEL/ENRON/OMNI"
 - o Enter 1500 in Slave Response Time Out Block
 - o Enter 5 in Delay Between Polls
 - o Click OK to Exit
 - o Click OK again to Exit Main Connection Details
- o The program should now operate. There two counters that count the "number of polls" and "valid slave responses." They don't need to be the same, but they should both increment and be close to each other. Inputs can be toggled and the status should change in the Modbus table