

# Quick Start Guide

## Zlinx Wireless Modbus I/O

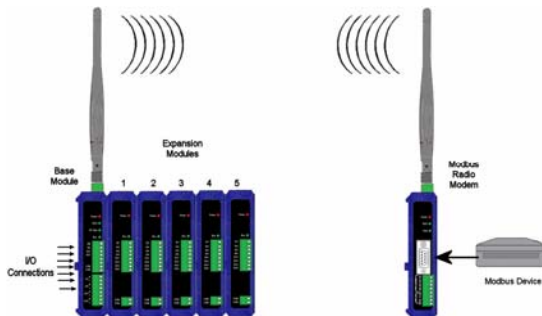


### 1 Check for All Required Hardware

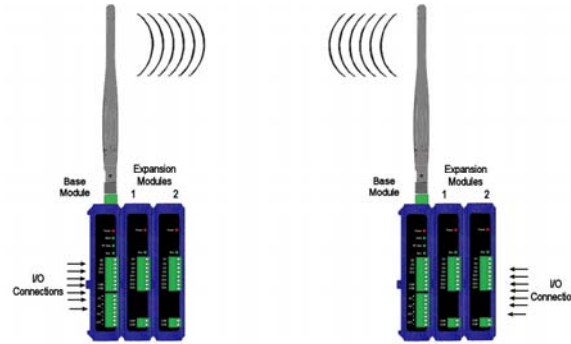
- o Zlinx I/O Base Module and Expansion Modules
- o ZZ-PROG1 Programming Module
- o This Quick Start Guide
- o Zlinx Wireless Modbus I/O Manual
- o Zlinx I/O Manager software on CD
- o Straight-through serial cable

### 2 Select Peer-to-Peer or Modbus System

- o If the Zlinx I/O is to be used in Modbus mode, select a radio modem to match the Zlinx I/O Base Module

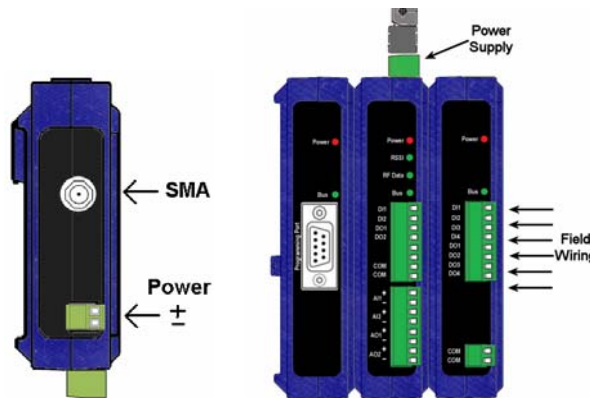


- o If the Zlinx I/O is to be used in Peer-to-Peer mode, select the Base and Expansion Modules required for the location and coverage distances.



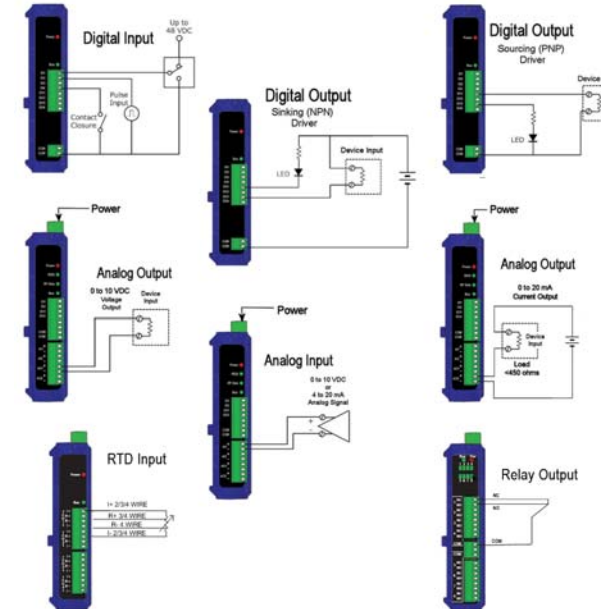
### 3 Hardware Installation

- o Perform an installation site survey to ensure adequate RF coverage and select a mounting location.
- o Mount and connect together the Base and Expansion Modules (Expansion Modules on right side of Base).
- o Plug the Programming Module into Base or Expansion Module.
- o Connect field wiring to Zlinx I/O terminals.
- o Connect power to the Base Module:
  - o 24 VAC or 10 to 46 VDC
  - o 24 VAC or 10 to 46 VDC (if any sourcing DOs in system)
- o Refer to Installation manual for power and wattage requirements.



### 4 Connect Field Wiring

- o Connect field wiring to Zlinx I/O terminals as shown in the following diagrams.



### 5 Install Zlinx I/O Software

- o Insert the software CD. Installation should launch automatically. If not, click Start, Run, [drive]:\setup.exe.
- o Follow the prompts to install the Zlinx I/O Manager.

### 6 Start Zlinx I/O Manager

- o Connect a PC serial port (COM1 to 16) to the Programming Module using a straight-through serial cable.

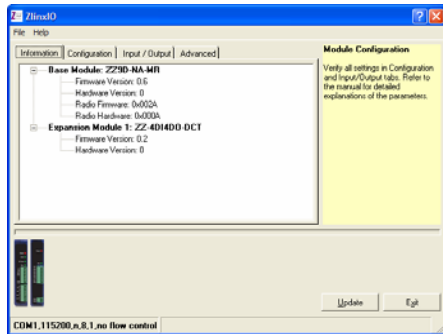


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- o Click Start\Programs\B&B Electronics\Zlinx\Zlinx IO and it will auto-search for attached Zlinx modules on startup. Zlinx I/O Manager will open and display the Information tab showing model numbers, version numbers of attached Base and Expansion Modules.
  - o Make sure all base modules have the same firmware revision\*
  - o Make sure all expansion modules have the same firmware version\*
- \*This can be verified under the "Information" tab.

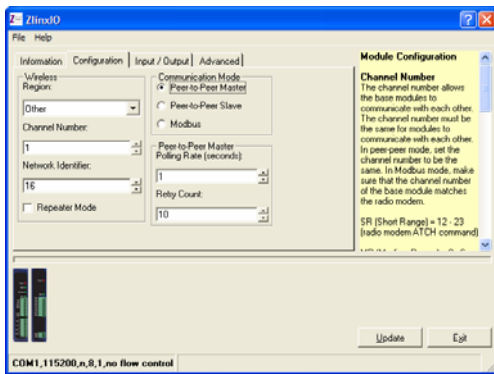


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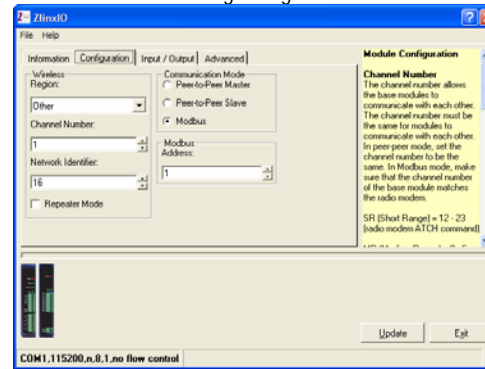
**Configure Communication Modes**

On the Configuration tab:

- o Select Peer-to-Peer (PTP) Master or Peer-to-Peer (PTP) Slave if communicating between two Zlinx I/O Base Modules.
- o Set the Peer-to-Peer Master/Slave address to match.
- o Set Polling Rate to update at an acceptable rate.
- o Set Retry Count for number of tries before lost communication indication is required.



- o Select Modbus Mode to communicate with a Modbus RF modem.
- o Set the Modbus address to the address number desired for the module being configured.



- o Configure Wireless settings:
- o Set Region to your region.
- o Set Channel Number to match device you will be communicating with (Modbus radio modem or peer Zlinx Base module)

| Type/Range of Module | Base Channel Number Range |
|----------------------|---------------------------|
| Short Range (SR)     | 12 to 23                  |
| Medium Range (MR)    | 0 to 6                    |
| Long Range (LR)      | 0 to 9                    |

- o Set Network Identifier to match device you will be communicating with.

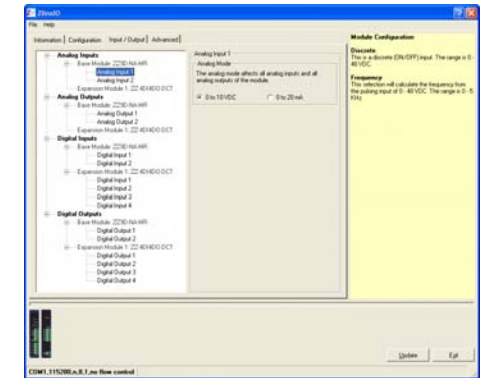
| Type/Range        | Base Network ID Range |
|-------------------|-----------------------|
| Short Range (SR)  | 0 to 255              |
| Medium Range (MR) | 16 to 255             |
| Long Range (LR)   | 17 to 255             |

- o Set MR and LR radio modems' destination address (ATDT) to 0xFFFF.
- o Select Repeater checkbox, if the Base is to be a repeater. Note ONLY the (MR/LR) version supports this.
- o Click Update to save configuration.

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**Configure Input/Output**

- o On the Input/Output tab, check to see that all modules and I/O points are listed.
- o Set Analog Inputs and Outputs for 0 to 10 VDC or 0 to 20 mA as required (setting one sets all analog I/O for that module).
- o Set Digital Inputs for Discrete or Frequency Counter, as required.



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**Operation**

| LED           | STATUS                        | FUNCTION   |
|---------------|-------------------------------|--|
| Power Red     | Solid                         | Power applied  |
| RSSI Tricolor | Off<br>Red<br>Yellow<br>Green | No radio signal<br>Weak radio signal<br>OK radio signal<br>Strong radio signal |
| RF Data Green | Off<br>Blinking               | No radio link data<br>Radio link data TD/RD traffic                            |
| Bus Green     | Off<br>Blinking               | No local bus data<br>Local bus data TD/RD traffic                              |

Refer to Troubleshooting Section of Manual if operation is not successful.



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