Quick Start Guide
ZP8D-24RM-LR
Radio Modem

1 Check for All Required Hardware

- ❑ ZLINX™ ZP8D-24RM-LR
- ❑ This Quick Start Guide
- ❑ CD with ZLINX™ Manager Software and manual
- ❑ Antenna
- ❑ Terminal Block (Attached)
- ❑ Additional items required but not included:
  - o 10 – 48 VDC / 18 – 30 VAC) 6.0 W Power Supply
  - o Serial Cable

2 Install Zlinx™ Manager Software

- ❑ Insert the CD into your CD ROM Drive. The Zlinx™ Manager Install Wizard should start. Follow the on-screen instructions to install the software.
- ❑ If auto run is disabled, locate the MSI file on the CD and double click it. The Install Wizard should start. Follow the on-screen instructions.

3 Connect Power Supply

- ❑ A 10 to 48 VDC or 18 to 30 VAC external power supply is required.
- ❑ Connect the power supply to the power terminal block located on the top of the radio modem.

4 Connect Serial Cable & Antenna

- ❑ Connect a straight through RS-232 cable between the Radio Modem and your PC.
- ❑ Connect the antenna to the Radio Modem.

5 Start the Zlinx™ Manager Software

- ❑ Start the Zlinx™ Manager Software.
- ❑ Click the Radio Modem Button.
- ❑ Click the Radio Modem Configuration Button.
  - o Select your COM port and configure it for 9600 baud, Data Bits: 8, Parity: None, Stop Bit: 1.
- ❑ Click the Connect Button.
- ❑ When the software locates the Radio Modem, the Basic Modem Settings Screen will be displayed. This screen will display the Model Number, Function Set Type, Firmware Version, Network Identifier, Destination Address, Baud Rate, and Parity.
- ❑ If the settings where changed from the default, Auto Modem Search can be used to locate the modem. The Auto Search will use a sequence of COM Ports and settings until a response is received. If there is still no response, double check the power supply and serial cable. Also, make sure that no other devices are attached and that the unit is not set to RS-422/485 2-wire.
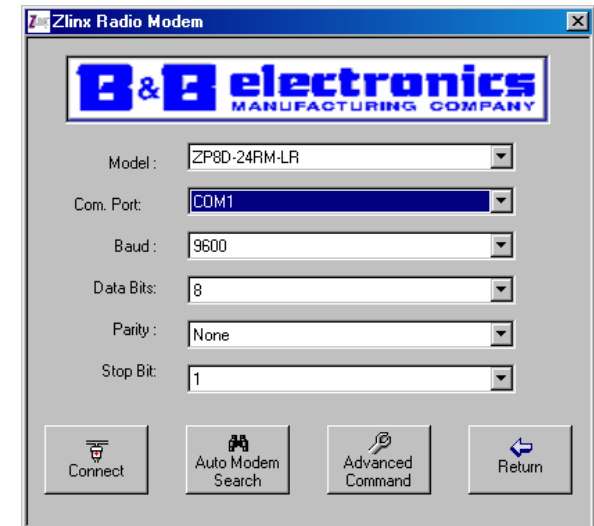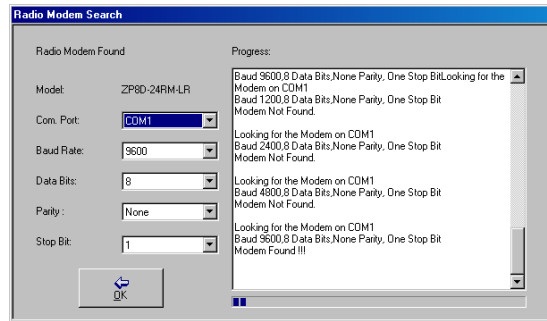
Zlinx™ Manager Start Screen

Radio Modem Options Screen

On-line Configuration Screen

International Headquarters: 815-433-5100 *www.bb-elec.com*
European Headquarters: +353 91 792444 *www.bb-europe.com*

Radio Modem Found Screen

Radio Modem Search

Radio Modem Found   Progress:

Model: ZP8D-24RM-LR

Com. Port: COM1

Baud Rate: 9600

Data Bits: 8

Parity :   None

Stop Bit: 1

Baud 9600,8 Data Bits,None Parity, One Stop BitLooking for the
Modem on COM1
Baud 1200,8 Data Bits,None Parity, One Stop Bit
Modem Not Found.

Looking for the Modem on COM1
Baud 2400,8 Data Bits,None Parity, One Stop Bit
Modem Not Found.

Looking for the Modem on COM1
Baud 4800,8 Data Bits,None Parity, One Stop Bit
Modem Not Found.

Looking for the Modem on COM1
Baud 9600,8 Data Bits,None Parity, One Stop Bit
Modem Found !!!

OK

Radio Modem Not Found Screen

Radio Modem Connection

Radio Modem Not Found!!!

1. Check Serial Cable

2. Check Power

3. Retry Search

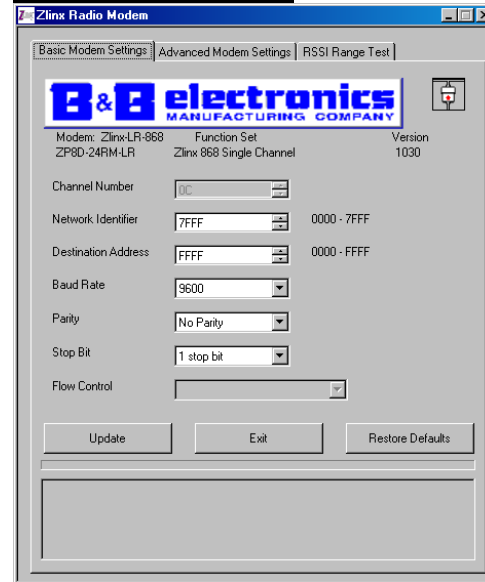Auto Modem Search   Cancel

6

Setup the Radio Modem

❑ Select a unique Network Identifier. This is especially important if you have other units operating in the same area.
❑ Set the Destination Address to FFFF (broadcast).
❑ If desired, you can change the baud rate and parity on the Basic Modem Settings Screen. Remember to change your COM port to match.

❑ Click the Update Button to store the settings.
❑ Click the Advanced Modem Settings TAB. Check the Power Level (PL). Select the appropriate power level for your application. For bench testing, PL should be set to 0 and Radio Modems should be separated by at least 1 meter. When using higher power levels, separate the modems by at least 7 meters.
❑ If you changed any settings, store them by clicking the Update button.

Basic Modem Settings Screen

Zlinx Radio Modem

Basic Modem Settings | Advanced Modem Settings | RSSI Range Test

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Modem: Zlinx-LR-868   Function Set   Version
ZP8D-24RM-LR   Zlinx 868 Single Channel   1030

Channel Number   DC

Network Identifier   7FFF   0000 - 7FFF

Destination Address   FFFF   0000 - FFFF

Baud Rate   9600

Parity   No Parity

Stop Bit   1 stop bit

Flow Control

Update   Exit   Restore Defaults

7

Set up your second Radio Modem

❑ Exit Configuration. Power off the Radio Modem (wait at least 30 seconds before re-applying power to this Radio Modem.
❑ Configure your second Radio Modem using the same procedure. Do not proceed to the RSSI Range Test step until you have a second modem configured. Two properly configured units are required to proceed to the next step.
❑ Configure the second unit with the same settings.

8

RSSI Range Test

❑ Set one of your modems to Loopback Mode. Loopback connections can be made using the RS-422/485 interface by setting switch 1 and 2 to ON and 3 and 4 to OFF (internal loopback with echo on). You can also use the DB9 connections by bridging pins 2 and 3.
❑ On the Radio Modem that is NOT set up for Loopback Mode, run the RSSI Range Test. Observe the following indications:
  o The DATA and RSSI will flash as data is sent between the two units.
  o Test results will be displayed on the RSSI Range Test Screen.

9

Configure to Match Your Serial Devices

❑ Configure the Radio Modems to match the serial devices you will be connecting to.
❑ If baud rates faster than 2400 are required, the master unit must not use more than 10% of the available transmit time during each 60 minute period.
❑ The DB9 is wired as a DCE device. If you are connecting to another DCE device, a cross-over cable will be required.
❑ For the RS-422/485 terminals, TD is output, RD is input. Ensure you match the signal polarity.
  o 2-Wire Mode: TD and RD are connected with switch 1 and 2.
  o Wiring Examples are located in the manual.
❑ You are now ready to install your Radio Modems in the field.

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