RTI

ZB-Pro
2.4GHz Network Management Tool

Reference Guide

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

Industry Canada Compliance Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes:

1. Ce dispositif ne peut causer des interférences nuisibles.
2. Cet appareil doit accepter toute interférence reçue y compris des interférences qui peuvent provoquer un fonctionnement indésirable.

DECLARATION OF CONFORMITY (DOC)
The Declaration of Conformity for this product can be found on the RTI website. (www.rticontrol.com/declaration-of-conformity)

Safety Suggestions

Read and Follow Instructions. Read all safety and operating instructions before operating the unit.

Retain Instructions. Keep the safety and operating instructions for future reference.

Heed Warnings. Adhere to all warnings on the unit and in the operating instructions.

Heat. Keep the unit away from heat sources such as radiators, heat registers, stoves, etc., including amplifiers that produce heat.

Power Sources. Use only power sources of the type described in the operating instructions, or as marked on the unit.

Water and Moisture. Do not use the unit near water—for example, near a sink, in a wet basement, near a swimming pool, near an open window, etc.

Object and Liquid Entry. Do not allow objects to fall or liquids to be spilled into the enclosure through openings.

Servicing. Do not attempt any service beyond that described in the operating instructions. Refer all other service needs to qualified service personnel.

Damage Requiring Service. The unit should be serviced by qualified service personnel when:

- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit does not appear to operate normally or exhibits a marked change in performance.
- The unit has been dropped or the enclosure has been damaged.

Limited Warranty

RTI warrants its products for a period of three (3) years (one year for included battery packs); or for a period of time compliant with local laws when applicable from the date of purchase from RTI or an authorized RTI distributor.

This warranty may be enforced by the original purchaser and subsequent owners during the warranty period, so long as the original dated sales receipt or other proof of warranty coverage is presented when warranty service is required.

Except as specified below, this warranty covers all defects in material and workmanship in this product. The following are not covered by the warranty:

Damage resulting from:

1. Accident, misuse, abuse, or neglect.
2. Failure to follow instructions contained in this Guide.
3. Repair or attempted repair by anyone other than Remote Technologies Incorporated.
4. Failure to perform recommended periodic maintenance.
5. Causes other than product defects, including lack of skill, competence or experience of user.
6. Shipment of this product (claims must be made to the carrier).
7. Being altered or which the serial number has been defaced, modified or removed.

Contacting RTI

For news about the latest updates, new product information, and new accessories, please visit our web site at: www.rticorp.com

For general information, contact RTI at:
Remote Technologies Incorporated
5775 12th Ave. E Suite 180
Shakopee, MN 55379
Tel. (952) 253-3100
info@rticontrol.com

Service & Support

If you are encountering any problems or have a question about your RTI product, please contact RTI Technical Support for assistance (see the Contacting RTI section of this guide for contact details).

RTI provides technical support by telephone or e-mail. For the highest quality service, please have the following information ready, or provide it in your e-mail.

- Your Name
- Company Name
- Telephone Number
- E-mail Address
- Product model and serial number (if applicable)

If you are having a problem with hardware, please note the equipment in your system, a description of the problem, and any troubleshooting you have already tried.
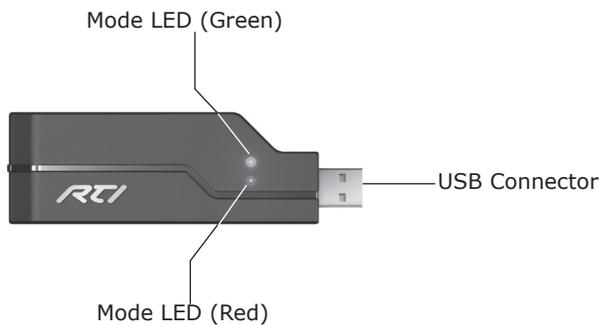
Please do not return products to RTI without a return authorization.

The ZB-Pro is a Professional Network Management Tool for use with RTI 2.4GHz wireless ZigBee® networks. Attached to a standard USB port of a PC, the ZB-Pro communicates with ZM-24 Transceiver Modules via 2.4GHz RF. It can be used for several purposes which are enabled automatically by the specific *Integration Designer*® software function that is being used.

Some of these functions include:

- Downloading firmware into a ZM-24 2.4GHz Transceiver Module.
- Downloading network configuration into a ZM-24 2.4GHz Transceiver Module.
- Troubleshooting ZigBee® wireless networking issues.

Key Features

- Updates the firmware in the ZM-24 Transceiver Module.
- Downloads network configuration data into a ZM-24.
- Designed to aid ZigBee® wireless network troubleshooting.
- No external power supply is required. Power is derived directly from USB port.
- Feedback LEDs confirm various operations.

Product Contents

Contents within the box include the following items:
- One (1) ZB-Pro 2.4GHz Network Management Tool
- One (1) ZB-Pro Reference Guide
- One (1) 6" USB A-A Extension Cable

Installation & Operation

Mode LED (Green)

USB Connector

Mode LED (Red)

Operation

Follow these steps to configure or update a ZM-24 Tranceiver Module using the ZB-Pro:

1. Insert the ZB-Pro into an available USB port of a PC.
2. Start *Integration Designer®* software program.
3. Place the powered RTI ZM-24 Transceiver Module withing 10 feet (3m) of the ZB-Pro.
4. Open the *Integration Designer®* "Communications" menu.
5. Click on "Configure ZM-24 Wireless Repeater".
6. Follow the *Integration Designer®* wizard instructions for the specific operation being performed.

Note: A longer USB extension cable may be used to bring the ZB-Pro closer to a ZM-24.

Specifications

Power Requirements	Powered directly from USB port.
RF Frequency Range	2.4 GHz
Wireless Networking	IEEE 802.15.4 (ZigBee® Networking)
Operating Temperature	+32°F to +122°F (+0°C to +50°C)
Operating Humidity	5% to 95% non-condensing
Dimensions	4.3" x 1.4" x .7" (109mm x 35mm x 16mm)
Weight	1.1 oz. (32 grams)

All specifications are subject to change.

Troubleshooting

USB COMMUNICATION ISSUES

If neither of the ZB-Pro Mode LEDs illuminate while performing the specific *Integration Designer®* function follow these steps:

- Ensure that the ZB-Pro is seated properly into a powered USB port. If necessary, use 6" USB A-A extension cable that is provided.
- Verify that your PC has the RTI USB driver installed correctly. If you do not have the driver installed, use the zbpro_usb.exe installation file located in the following directory on your PC: "\program files\rti\integration designer\drivers"
- Reboot your PC.

RF COMMUNICATION ISSUES

- Verify that ZM-24 Transceiver Modules being used as "repeaters" have been powered correctly.
- Move ZM-24 Transceiver Module closer to ZB-Pro - 10 feet (3m) or less.
- Try a different ZM-24 Transceiver Module if possible.
- Refer to ZM-24 operation guide for RF communication troubleshooting steps.
- Refer to the Dealer section of the RTI website for further troubleshooting steps: www.rticontrol.com/dealer/