

## 900 Series Installation Instructions

### Pit TransPondIT® Model 915-44-24



#### Description

#### **PIT INSTALLATION ONLY**

The Pit TransPondIT Model 915-44-24 is designed for pit installations only and attaches to an electronic coded register (ECR) water meter. The Pit TransPondIT sends meter data via RF signal to a receiving unit called HandTrackIT®, FastTrackIT® or CellTrackIT®.

#### Caution:

**This product is only authorized for use in water pit installations using metal enclosures, and only for below-ground use. Changes or modifications not expressly approved by Advanced Technology RAMAR Ltd could void the user's authority to operate the equipment. See FCC Information below.**

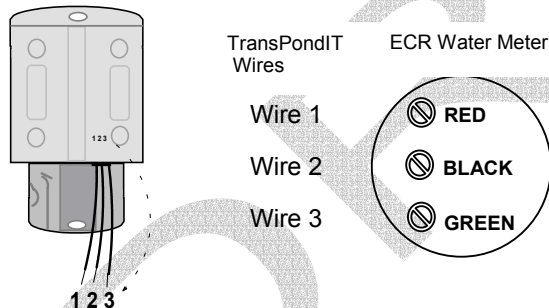
**NOTE:** This model is capable of interfacing with single pulse meters. Refer to the Quick Reference Guide for more detail.

#### Required Tools and Equipment

The following items are recommended for proper installation of the Pit TransPondIT:

- 3M® Type UY2 gel-filled splice connectors and crimping pliers
- Computer running Windows XP®, 2000®, 98®, or NT®
- ConFigIT® Device (Mod Strike 14 or higher) & ConFigIT Software Version 6.2 (or higher)
- ConFigIT Cable Part Number 330-190-10 (Lemo) or 320-300-10 (9 pin Dtype)
- 4 AA batteries or power cable
- HandTrackIT, FastTrackIT, or CellTrackIT receiver with connecting cable

#### Wire Connections – ECR



#### Wire Connections – Single Pulse Meter

Pulse Output – Wire 1  
Ground – Wire 2  
Tamper – Wire 3

#### Transmitter

The transmission can be configured for different intervals. The default interval is 5 seconds. (Refer to the detailed ConFigIT operating instructions for more information.)

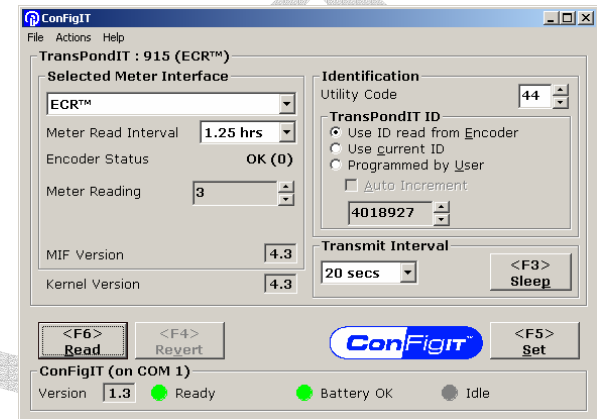
#### Warnings and Precautions

This sheet provides instructions needed to successfully connect the Pit TransPondIT meter interface unit (MIU) to an ECR water meter and to configure it. This guide is merely a supplement to training in the operation of RAMAR 900 Series AMR equipment. For training information, email [training@ramartech.com](mailto:training@ramartech.com).

#### Configuration

The Pit TransPondIT user parameters are set with the ConFigIT box. The following picture illustrates typical configuration settings for ECR meter.

#### ConFigIT Screen Settings



#### Installation Procedure

1. Connect the Pit TransPondIT to the meter register using 3M® Type UY2 gel-filled splice connectors.
2. Configure the Pit TransPondIT using the ConFigIT device. Refer to the *ConFigIT Manual* for detailed information on setting the user specific parameters.  
**NOTE: To use the Pit TransPondIT with encoded register set the meter interface to 'ECR'. To use with single pulse meter, set to 'Pulse'.**
3. Mount the Pit TransPondIT using approved mounting methods. Position the Pit TransPondIT so that the front of the unit faces the direction of the receiver.
4. Verify that the signal is received with the appropriate receiving device from the desired location.
5. Verify that the reading corresponds to the visual indication on the meter register.

#### Tamper Reading (or Encoder Status)

With meter interface set to 'ECR':

- |    |                                    |
|----|------------------------------------|
| 0  | Proper operation                   |
| 64 | No communication from register     |
| 68 | Undefined data error from register |

With meter register set to pulse, the tamper reading indicates count of number of disconnections of tamper wire. The value should be recorded at time of connection and any subsequent increments should be investigated. The range is 0 to 63.

#### Obtaining Help

Contact Technical Support at the number listed below from 8:30 AM to 5:30 PM EST Monday through Friday.

**AT RAMAR LLC PO Box 110127 Research Triangle Park, NC 27709 Toll Free: 1-888-98-RAMAR**

© 2003 AT RAMAR LLC. All rights reserved. RAMAR, the AT RAMAR LLC logo, TransPondIT, ConFigIT, HandTrackIT, FastTrackIT and CellTrackIT are trademarks or registered trademarks of Advanced Technology RAMAR Limited in the United States and/or other countries. All other company names, brand names, and product names are the property of their respective holder(s). AT RAMAR LLC is an Agent for AT RAMAR Ltd. RAMAR reserves the right to change specifications or other product information without notice. This publication could include technical inaccuracies or typographical errors. Mar 2003

#### FCC Information



The Pit TransPondIT has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 or television reception, which can be determined by turning the equipment on and off, 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 receiver

**This device is only authorized for use in water pit installation using metal enclosures comparable in mechanical construction to the type specified in the filing ( see examples below), and only for below-ground use.**

#### Typical Pit Mounting Examples

**The Pit TransPondIT is only approved for use in these types of below-ground installations.**

Placement of the Pit TransPondIT within the enclosure is important for satisfactory performance. By following these examples, optimum results will be achieved.

#### Example 1: Obround Yokebox

The Yokebox includes three metal castings; a base, upper body and lid. The unit measures 10 $\frac{1}{2}$ " long by 7 $\frac{1}{8}$ " wide by 11" deep.



The Pit TransPondIT is mounted in a vertical manner above the water line with the unit facing the direction of the reader.

#### Example 2: Square Hand Hole



The Square Hand Hole includes three metal castings; a base, cylindrical body and square lid. The unit measures 7" wide by 12" deep. The Pit TransPondIT is mounted in the center of the bottom of the pit with the unit facing the direction of the reader.

#### Example 3: Round Meter Box



The round meter box includes three metal castings; a base, body and lid. It measures 12" wide by 15" deep. The Pit TransPondIT is mounted in a vertical manner at the top of the pit with the unit facing the direction of the reader.

**AT RAMAR LLC PO Box 110127 Research Triangle Park, NC 27709 Toll Free: 1-888-98-RAMAR**

© 2003 AT RAMAR LLC. All rights reserved. RAMAR, the AT RAMAR LLC logo, TransPondIT, ConFigIT, HandTrackIT, FastTrackIT and CellTrackIT are trademarks or registered trademarks of Advanced Technology RAMAR Limited in the United States and/or other countries. All other company names, brand names, and product names are the property of their respective holder(s). AT RAMAR LLC is an Agent for AT RAMAR Ltd. RAMAR reserves the right to change specifications or other product information without notice. This publication could include technical inaccuracies or typographical errors. Mar 2003