

ConFigIT for the Field Manual

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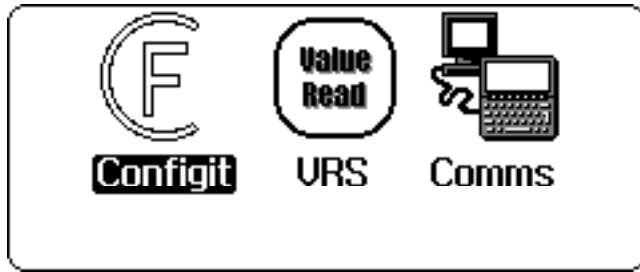
1. Introduction

ConFigIT for the Field by ABT Water Treatment, Inc. is a software program for the Psion Workabout that allows you to configure TransPondIT devices in the field as you are installing them. The only equipment needed, aside from a Psion Workabout and TransPondITs to configure, is the ConFigIT device with its included cable. You may also want ValueRead, which is another program for the Psion Workabout by ABT Water Treatment, Inc. that will read water meters either by manual reading, TouchRead, or RF reading using RAMAR's TransPondITs.

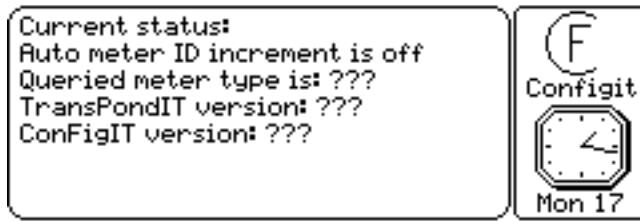
ConFigIT for the Field is written to be as intuitive and easy-to-use as possible. If you are familiar with the PC version of the ConFigIT software, then this program should be very easy to learn; you should read through this manual quickly anyway to get a good feeling for this program. You should read the manual that came with the PC ConFigIT software for a hardware background on the TransPondIT and the ConFigIT, and to get a more in-depth feel for how the RAMAR equipment works.

2. Getting Started

Start by turning on the handheld, highlight the Configit icon, and then press enter.

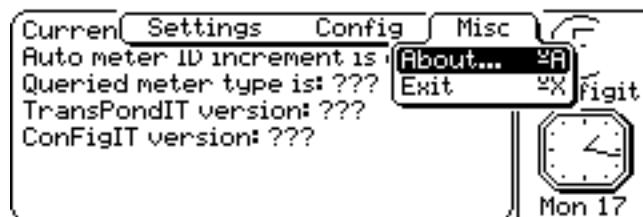
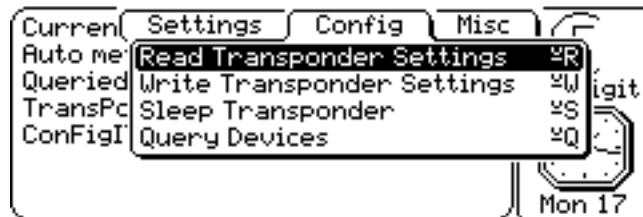


You should see the main screen, which is similar to this one:



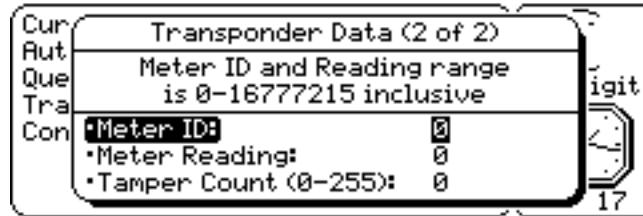
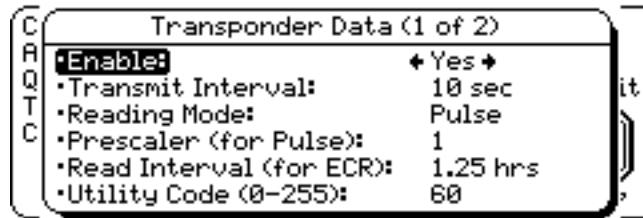
The main screen gives you current status information, such as whether the meter ID is incremented after every time you write information to a TransPondIT, the secondary reading mode that the TransPondIT supports (if any), and the TransPondIT and ConFigIT version numbers. When the meter type and version info has question marks after them, it means that this information is unknown. The status information is updated after any menu item from the Config menu is executed successfully. The Query Devices command only updates the "Queried meter type is:" part.

If you press the Menu key, you can see the available commands:



3. Transponder Setup and Configuration Descriptions

The first thing you will most likely want to do is edit the transponder setup. If you choose the Edit Transponder Setup menu item from the Settings menu, you should see the following two dialog boxes:



These fields are used for both reading and writing a configuration to a TransPondIT. The field descriptions are as follows:

Enable: The possible values for this field are “Yes” and “No”. If this field is “Yes”, it means that the TransPondIT is active (i.e., the TransPondIT will send out signals to the HandTrackIT); if the field is “No”, it means that the TransPondIT is “asleep” (i.e., the TransPondIT will not send out any signals to the HandTrackIT). Setting this field to “No” and choosing Write Configuration from the Config menu is the same as choosing the Sleep Transponder menu item from the Config menu, except the Sleep Transponder command does not change the Enable value in the dialog box.

Transmit Interval: This field describes how often the TransPondIT will transmit its meter ID, reading, and tamper count values. The possible values for this field are: 10 sec, 20 sec, 40 sec, 1.25 min, 2.5 min, 5 min, 10 min, 20 min, 40 min, 1.25 hrs, 2.5 hrs, 5 hrs, 10 hrs.

Reading Mode: This describes how the TransPondIT will try to read the attached meter head. The possible values for this field are “Pulse” and “Secondary”. All the TransPondITs support pulse generator meters, but the secondary meter type for a TransPondIT is different and it depends on what type of TransPondIT you purchased. The possible meters that can be read in this mode are: short single-pulse meters, dual-pulse meters, ABB Scancoder, Sensus SRII, Schlumberger ARB5, Schlumberger ARB6, and Fusion. The secondary meter type supported is shown on the main screen after the text that says “Queried meter type is:”. This text is updated after the successful execution of any command under the Config menu.

Prescaler (for Pulse): This field is only used if the pulse mode is selected. If X is the value in the prescaler field, then the TransPondIT will increment its meter reading once for every X pulses from the meter it receives. Possible values for the prescaler are 1, 2, 10, and 100. The setting of this field depends on the pulse meter you are using.

Read Interval (for ECR): For encoded meters (i.e., if you use the “Secondary” setting and not the “Pulse” setting), this is the interval that the TransPondIT will use to refresh its meter reading and meter ID of the currently attached meter. The possible settings for this field are: 1.25 hrs, 2.5 hrs, 5 hrs, and 10 hrs.

Utility Code (0-255): This is a number that you use to separate your meters from those of a nearby utility, or to group your water, gas, and electric meters into different utility code numbers so you can read them independently. The standard value for this field is 60, and the field accepts a range of numbers from 0 to 255 inclusive. You should contact RAMAR to obtain a utility number.

Meter ID: This is the identification number of the TransPondIT if it is used for pulse meters, or it is the ID of the currently connected meter head if the TransPondIT is using an encoded reading mode. Possible values for this field include any number within the range of 0 to 16,777,215 inclusive.

Meter Reading: The reading of the currently attached meter. Possible values for this field include any number within the range of 0 to 16,777,215 inclusive.

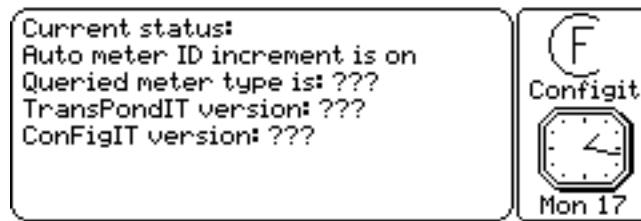
Tamper Count (0-255): For the pulse mode, this is a count of how many times the tamper wire has been disconnected from the grounding wire. For a TransPondIT operating with an encoded meter, this field is used to describe up to 8 possible fault conditions. One fault condition of particular interest while configuring TransPondITs is fault number 64, which means the TransPondIT is not connected to the meter head properly. This field can hold values ranging from 0 to 255 inclusive.

4. Menu Item Descriptions

All the menu items in the Settings menu modify the TransPondIT configuration in some way:

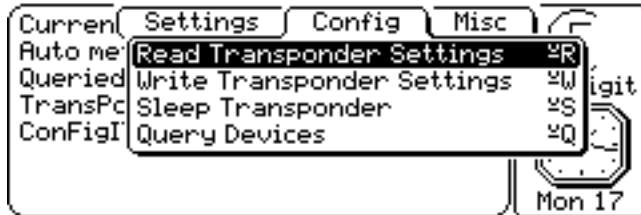


The Edit Transponder Setup shows you the dialog boxes where you can view and change the transponder settings directly. The Auto Increment Meter ID menu item will toggle whether meter IDs are increased by one or not. If auto increment is on, the software will increase the Meter ID field by one for every successful transponder setting. The screen will say “Auto meter ID increment is on” when this is set (the software starts up with this off):

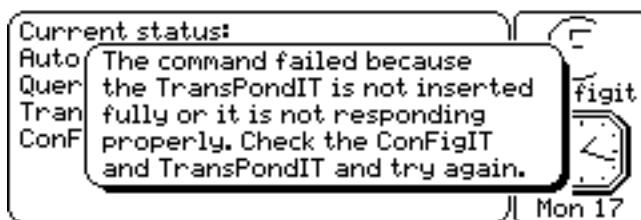


The Clear Settings command will set all the information in the setup dialog boxes to their default settings.

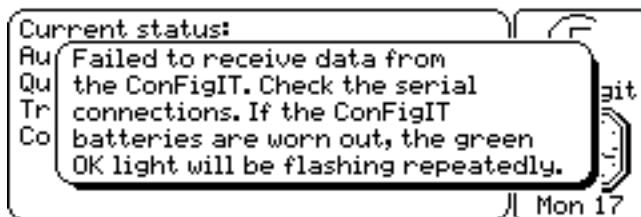
Every item in the Config menu gets and sends information to the ConFigIT. You need to fully insert a TransPondIT into the ConFigIT cavity, make sure the ConFigIT is properly connected to the Psion, and make sure the ConFigIT has 4 AA batteries in it before any of these menu items will work correctly:



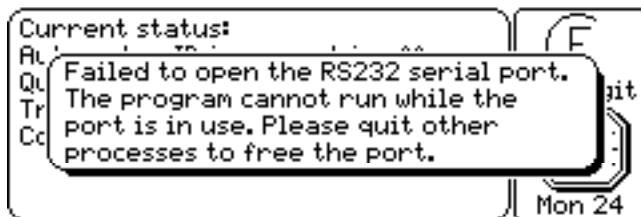
If the ConFigIT is connected properly but either a TransPondIT is not responding properly or it is not fully inserted into the ConFigIT cavity, a message will be displayed after about 2 seconds:



If the ConFigIT is not connected properly, its batteries are low, or there are no batteries in the ConFigIT, then this message will be displayed after about 4 seconds:

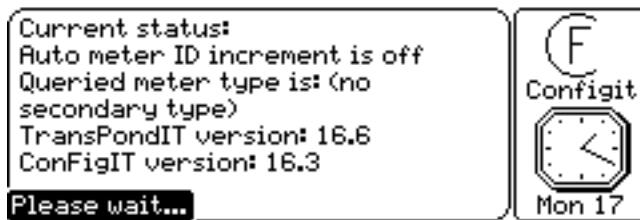


If another program is using the RS232 serial port, then the following message will be displayed:

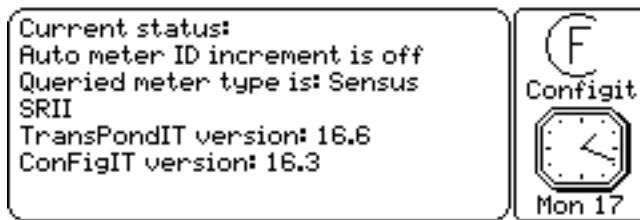


The program will quit immediately after you acknowledge the dialog box. You can (and probably should) choose the “Exit all applications” menu item under the Apps menu to cause all other applications to quit if this happens, and then try your configurations again.

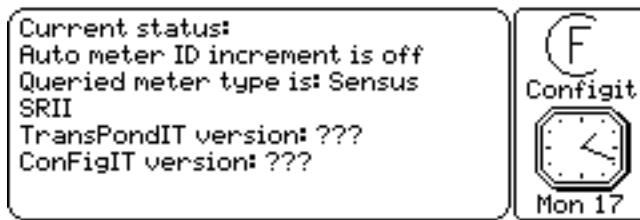
If the serial I/O is taking awhile or the ConFigIT is not connected, then you will see a blinking “Please wait...” in the lower left-hand corner of the screen before a failure is reported or before any information is updated:



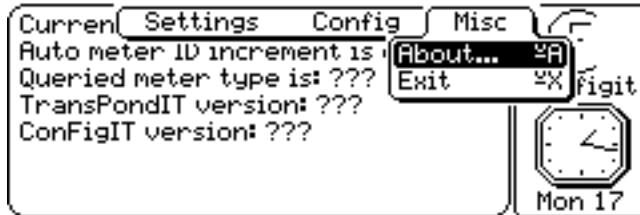
The Read Transponder Settings menu item will get the configuration information from the ConFigIT so you can view and modify the data using the Edit Transponder Setup menu item from the Settings menu. It will also update the current status region:



The Write Transponder setting will cause the data from the Edit Transponder screen to be written to the TransPondIT, and it updates the current status region. If auto meter ID increment is on, this will increase the meter ID by one if the write is successful. Sleep Transponder will deactivate the transponder (i.e., the command will cause the TransPondIT to stop sending readings) without modifying any settings, and it updates the current status region. Query Devices will only update the secondary meter type display in the current status region on the main screen. It does not modify any settings:



The Misc menu contains all the functions of the program that do not deal with configuring TransPondITs:



If you choose “About...”, then you will get some information about the program:

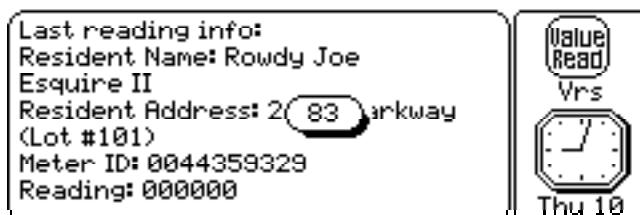


Choosing Exit will leave the program.

5. Bug reporting

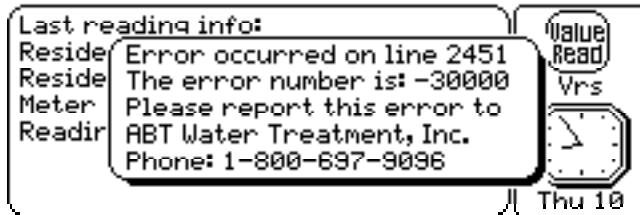
The ConFigIT for the Field software is made to be as intuitive and as easy to use as possible, and it goes through extensive and thorough testing before a public release. If something doesn't seem to perform correctly or intuitively, then please report what the software does and suggest what the software should do. Feature requests for future versions are also welcome.

It is also possible that some debugging text may have been left in the code accidentally, resulting in a cryptic dialog box showing up on the screen, as in the following example:

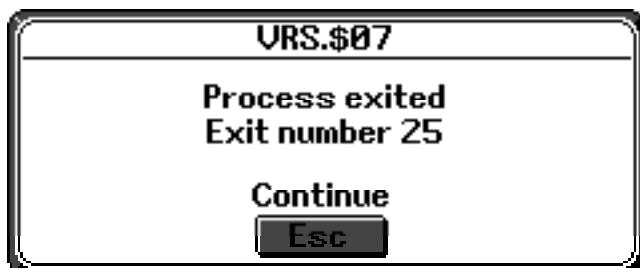


Please report when something like this happens. To make the dialog box go away, simply press the Enter key.

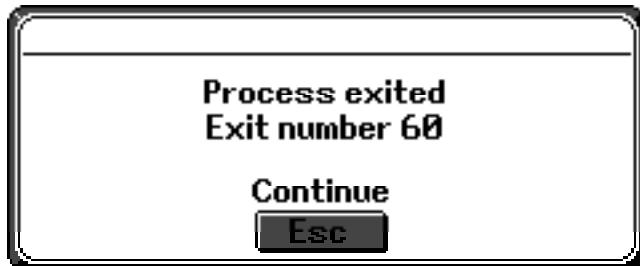
Some bugs or machine states may also cause internal miscellaneous errors to occur, resulting in a dialog box similar to this one:



If this happens, please report the line and error number reported in the dialog box. You may want to press the Psion+control+shift+"S" key to take a snapshot of the screen, and view the screenshot later on your main workstation. It is also possible that a fatal program fault may cause the program to be panicked, resulting in a screen that looks similar to this one:



You might also get a screen that doesn't show the process name and process number (i.e., the "VRS.\$07" will not appear at the top of the screen), as in this screenshot:



Please report the exit number as soon as possible so we can fix the problem. In any of these cases, one can start the program again and continue what you were doing when the bug occurred.

If the Workabout "locks up" (i.e., you press keys but nothing seems to happen), then try soft resetting the machine by pressing Psion+control+delete. If nothing happens, then remove the main battery and reinsert it (this will force a reset, and your files should be left intact). This may also help clear up inexplicable problems with the software. As long as the backup lithium battery is in place and has enough charge, then the program and any associated files will remain intact in either event. **Warning:** be careful not to hard reset the machine by pressing Psion+shift+control+delete, as this will delete the software and any associated files. The software will require reinstallation.