

Badger GALAXY	GALAXY Endpoint Programming	Installation and Operation Manual
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Features of the Badger® GALAXY® Endpoint (Transmitter) Programmer

With the Badger GALAXY IR Programmer you can:

- Capture the Endpoint's meter reading and radio status.
- Turn off the Endpoint's radio.
- Reset the Endpoint's odometer and the tamper status, following a wire repair (needed only when connected to an RTR encoder).
- Pause the Endpoint's radio.

Handheld Requirements

- Handheld must run the Windows® Mobile 5 Operating System or newer
- Handheld must have a serial port

Getting Started

When powered on, the handheld opens up to the home screen:

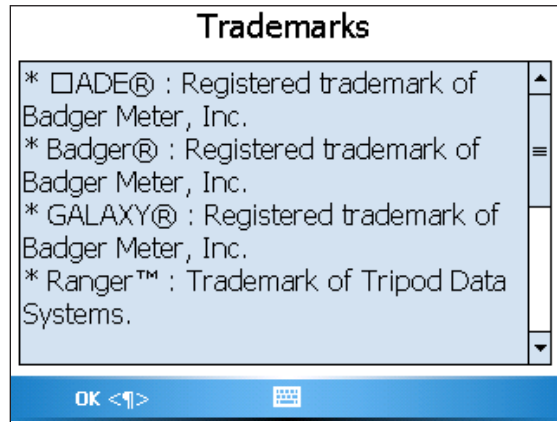


To start the GALAXY IR Programmer from the handheld home screen, follow these steps:

1. Click the **GALAXY Programmer** icon to start GALAXY IR and open the login screen.



2. If you want to view GALAXY IR's Trademarks screen, touch the **Trademarks** button or press the **T** key. The Trademarks screen opens.



3. To return to the login screen, touch **OK** or press **Enter** on the keyboard.
4. To open GALAXY Programmer's main menu, enter your user ID in the **User** field, and touch **Continue** or press **Enter** on the keyboard.

The Badger Field Applications screen opens.



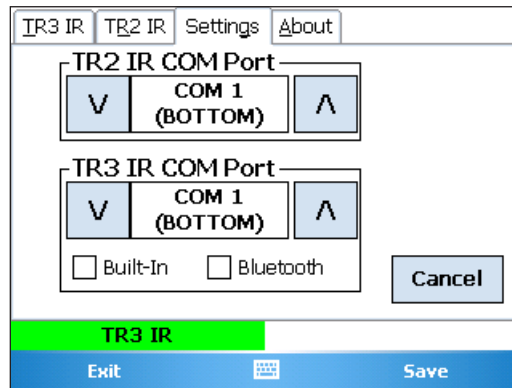
Selecting a TR2 or TR3

At the GALAXY Programmer screen, you must select either the TR2 or TR3 product. To make the selection, touch either the **TR3 IR** tab, or the **TR2 IR** tab at the top of the screen. The TR2 option is used for all modules that require a magnetic swipe to switch to communications mode.

Setting the Handheld's IR Communications Port

The handheld's IR communications port is set to the default of COM1 for both the TR2 and TR3 Endpoints. To change the default setting, follow these steps, starting from the GALAXY Programmer screen:

1. Touch the **Settings** tab to open the IR COM Port screen.



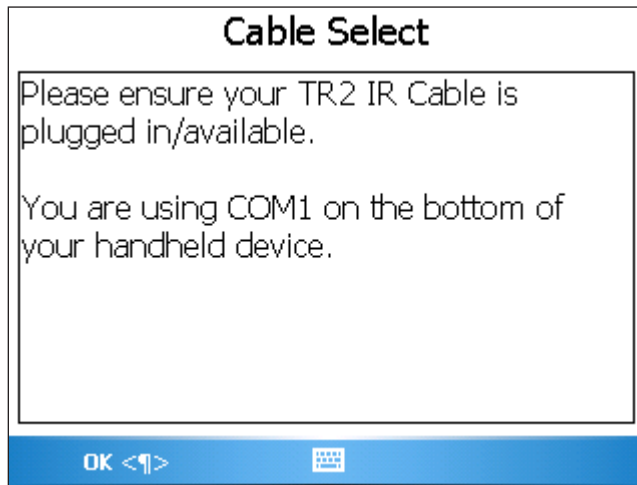
2. Touch the down arrow (V) or the up arrow (A) next to device you want to change to make your COM Port selection.
3. Touch **Save** to accept the new selection.
4. Touch **Exit** to return to the Galaxy Programmer screen.

Programming a TR2 Endpoint

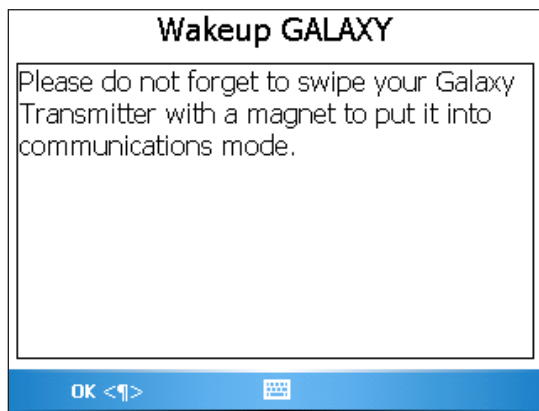
To program a TR2 Endpoint, follow these steps from the GALAXY Programmer screen:



1. Touch the **TR2 IR** tab. The following alert message opens:



2. Verify that your TR2 IR cable is plugged into the COM1 port at the bottom of the unit, and touch **OK**. The following alert message opens.



3. Swipe your GALAXY Endpoint with a magnet to put it into communications mode. To activate: Hold the Endpoint so that the infrared ports are at the 12 o'clock position, and hold the magnet at the 3 o'clock position for three seconds.



4. Touch **OK** or press **Enter** on the keypad. The TR2 IR programming screen opens.

IR3 IR	TR2 IR	Settings	About
Program		ID/Serial #:	<input type="text"/>
		Firmware Ver.:	<input type="text"/>
		Type:	<input type="text"/>
		Reading:	<input type="text"/>
Xmit Intrvl:	<input type="text"/>	Disconnect Count:	<input type="text"/>
Xmit Count:	<input type="text"/>	Leak Count:	<input type="text"/>
		MAGNET SWIPE	
Exit		Read < >	

Note: If the Endpoint is not in communications mode, a reminder message, *MAGNET SWIPE*, appears in the lower-right area of the screen. This reminder will remain until you perform a magnetic swipe on the Endpoint. You will not be able to program the TR2 until the Endpoint has been swiped and the *MAGNET SWIPE* message is cleared from the screen.

Reading and Programming the Endpoint

Before reading and programming the Endpoint, verify that:

- The IR cable is plugged into the Endpoint.
- The Endpoint has been swiped with the magnet and is in communication mode.

To read and program the Endpoint, follow these steps from the Programming screen:

1. Align the IR head with the IR Port on the Endpoint, and touch **Read** or press **Enter** at the keyboard.



The software will communicate with the Endpoint and display the current reading and status information, similar to the screen below.

TR3 IR	TR2 IR	Settings	About
Program	ID/Serial #:	30632	
	Firmware Ver.:	5.33	
	Type:	RX4 (ENC)	
	Reading:	2	
Xmit Intrlvl:	360	Disconnect Count:	7
Xmit Count:	589	Leak Count:	0
TR2 IR			
Exit		Read <↑>	

Programming the RTR Endpoint

Note: This procedure is for an RTR Endpoint only. It will not work for an ADE Endpoint. If you try to program an ADE Endpoint with this procedure, the number you enter at Step 2 will be replaced by an actual reading.

To program the RTR Endpoint, follow these steps:

1. Touch the **Reading** button to activate the Reading text field.
2. Enter your initial read in the **Reading** text entry field and touch **Program**. This will set your RTR Endpoint to start at the specified amount.
3. Touch **Exit** to return to the main screen.

TR3 Endpoints

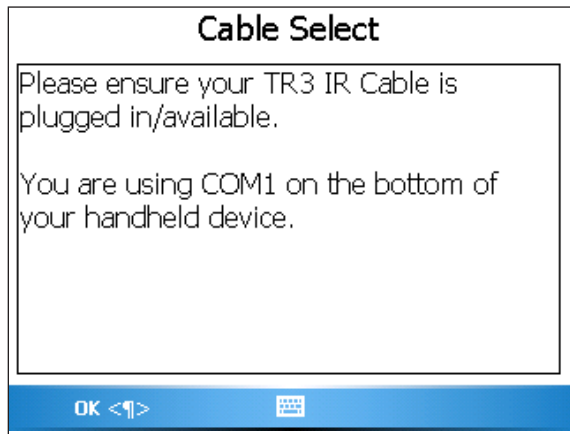
The procedures in this section describe how to program the TR3 Endpoint.



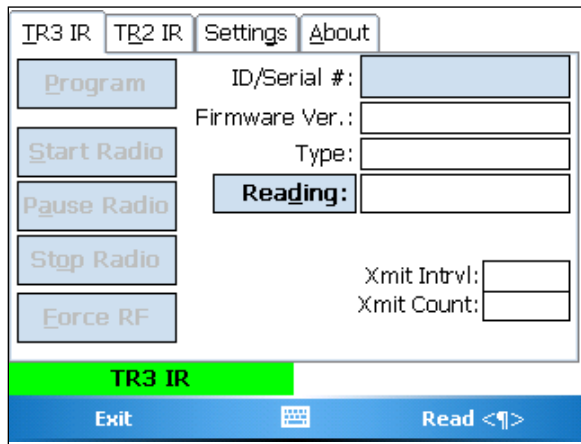
Starting Up the TR3 Endpoint

To start up the TR3 Endpoint for the first time, follow these steps:

1. Touch the **TR3 IR** tab, the following alert appears prompting you to verify that your TR3 IR cable is plugged in.



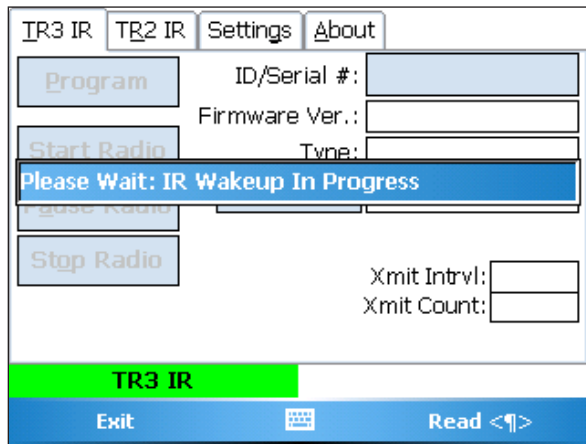
2. After you have verified that your TR3 IR cable is plugged into the COM1 port, touch **OK**. The TR3 programming screen opens.



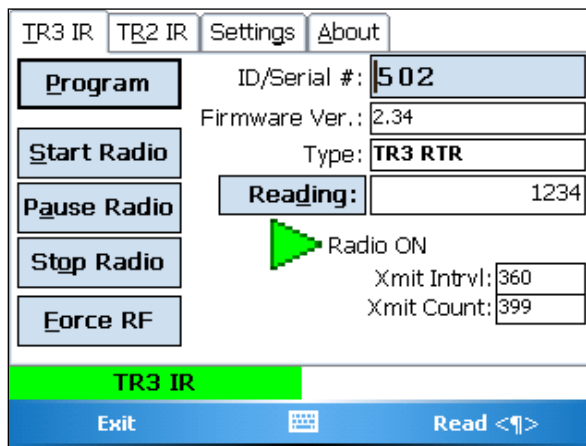
Note: The TR3 Endpoint is shipped in a sleep mode and will not be reading. Once water begins flowing, the Endpoint will automatically begin reading.



3. To receive a reading, line up the IR Programming head with your Endpoint and touch **Read** or press **Enter** on the keyboard. A screen similar to the following opens:



The Endpoint will go through a start-up process, and you will see a screen similar to the following:



To get a reading, touch **Read**. The read value appears in the **Reading** text-entry field. The green arrow indicates that the radio is on. You also will be able to view any alarms, such as a tamper or leak alert.

Getting a Reading and Programming the Endpoint

To program the Endpoint, simply click the **Reading** button. To activate the text field, enter the value you want for the Endpoint and touch **Program**.

Note: This programming function will only work with an RTR Endpoint. If you attempt to program an ADE Endpoint, the number you enter will be replaced by the actual reading.

Starting, Stopping and Pausing the Radio

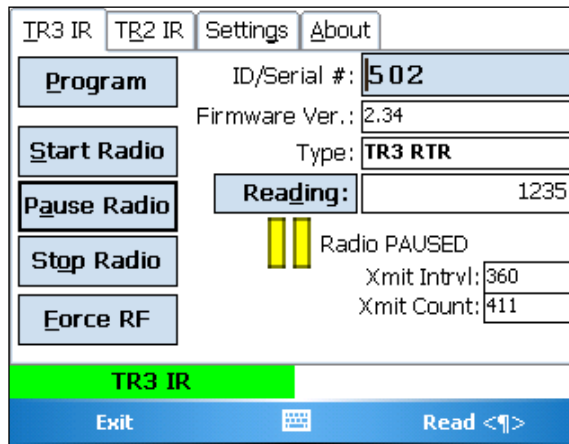
Your GALAXY Endpoint is shipped in sleep mode. As soon as water begins flowing through the meter, the Endpoint will wake up and begin reading. Because of this, no programming is needed to initially start the Endpoint.

You will only need to start a Endpoint if it has been manually stopped or paused, as described in the following procedures.

Pausing the Radio

To pause the radio, follow this step:

- Touch **Pause**. This puts the Endpoint in a paused state. This state will be indicated on the application screen by the pause indicator (the two vertical bars) and *Radio PAUSED*. The radio will begin transmitting again when water starts flowing.



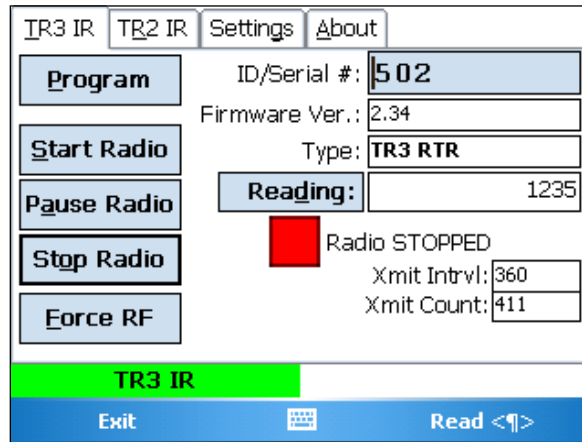
Starting the Radio

To manually start the Endpoint again, touch **Start Radio**. The radio will begin transmitting. This will be indicated on the application screen by the green arrow and *Radio ON*.

Stopping the Radio

If you need to ship a Endpoint via air for servicing, you need to stop your radio. To stop a radio, follow this step.

- Touch **Stop Radio**. The radio will stop sending. It will be indicated on the application screen by the red square and *Radio STOPPED*.



To restart the radio, touch **Start Radio**.

Forcing a Read

If you need to force a transmission of the TR3, follow this step.

- Touch the Force RF button.

Once a transmission has successfully completed, you will see the new data on your gateway monitor. If the reading or transmission was unsuccessful, you will see a display, similar to the following.

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