



Neptune® 360™
Field Manager Users' Guide



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Neptune® 360™ Field Manager Users' Guide
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Chapter 1: About Neptune[®] 360[™] Field Manager

Welcome to the Neptune[®] 360[™] Field Manager app. The Neptune 360 Field Manager app is designed for "in-the-field" programming of the Neptune registers using a cellular phone or tablet while paired with a Bluetooth[®] LE Field Programmer mouse. The app can interrogate registers through an attached receptacle after installation is complete. This feature provides a means of testing the final installation and eliminates the need to remove a register for reprogramming.



Neptune 360 Field Manager currently supports the programming of water registers. Support for R900G endpoint programming will be addressed in a future version of the application.

Supported Devices and Operating Systems

The Neptune 360 Field Manager supports Android[™]* and Apple[®] operating systems for both phones and tablets. Neptune has tested the mobile application on the following operating systems. Neptune performs additional testing as new versions of these operating systems are made available in the market.

Android[™] Operating Systems:

- 7.0.X Nougat.
- 7.1.X Nougat.
- 8.1.X Oreo.
- 9.0.X Pie.
- 10.0.X .
- 11.0.X.

Android Devices

Neptune does not recommend using Neptune 360 Field Manager with the following devices due to Bluetooth pairing issues with the Field Programmer mouse.

- Samsung Galaxy S7.
- Nexus 6P.

* Android is a trademark of Google LLC.



Neptune recommends testing the Bluetooth connection between the Android device and the Field Programmer mouse while using Neptune 360 Field Manager. The mouse maintains a Bluetooth connection with a device if you actively use the mouse for programming. The mouse automatically sleeps after 15 minutes of inactivity.

iOS Operating Systems:

- 10.3.1 and higher.
- 11.X.X.
- 12.X.X.
- 13.X.X.
- 14.X.X.

iOS Devices

Neptune 360 Field Manager supports the following iOS devices.

- iPhone®.
- iPad®.

Required Devices

Following are the devices required to use Neptune 360 Field Manager:

- Mobile device – Android or iOS phone or tablet that runs one of the supported operating systems listed above.
- Bluetooth® LE Field Programmer mouse.

This chapter includes the procedures to download and log in to the Neptune[®] 360[™] Field Manager.

Downloading the Application

Complete the following steps to download the Neptune 360 Field Manager app.

1. Open the Google Play Store (Android[™]*), or the App Store (Apple[®]) on your device.
2. Search for Neptune 360 Field Manager.
3. Tap one of the following to install the app:
 - **Install**, for an Android device, and then go to step 4.
 - **Get**, for an iOS device. You can now open the app and log in.
4. On your Android device, review the app permissions, and then tap **Accept** to continue the download.

* Android is a trademark of Google LLC.

Logging In to the Neptune® 360™ Field Manager App

Complete the following steps to log in to the Neptune 360 Field Manager.

1. Open the app.

The Login screen is displayed.

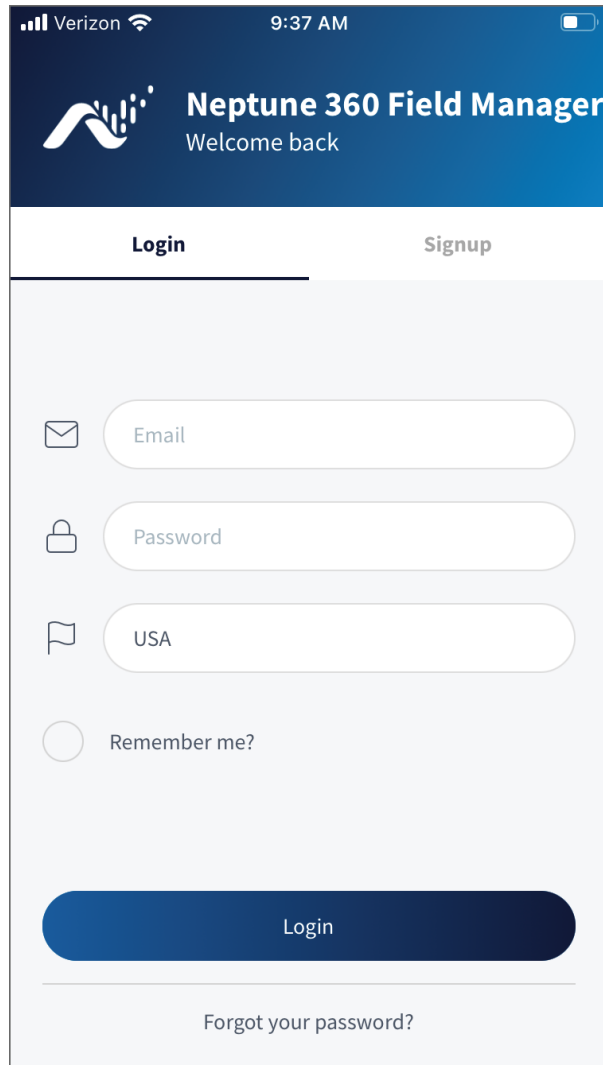


Figure 1 – Login Screen

2. Type your Neptune 360 credentials, then tap **Login**.
3. If you do not have a Neptune 360 subscription, you can still use the app. Tap **Signup** and then create an account.

Logging Out of the Neptune® 360™ Field Manager App

Complete the following steps to log out of Neptune 360 Field Manager.

1. Tap the menu icon in the top left of the screen to display the menu options that slide to the right.

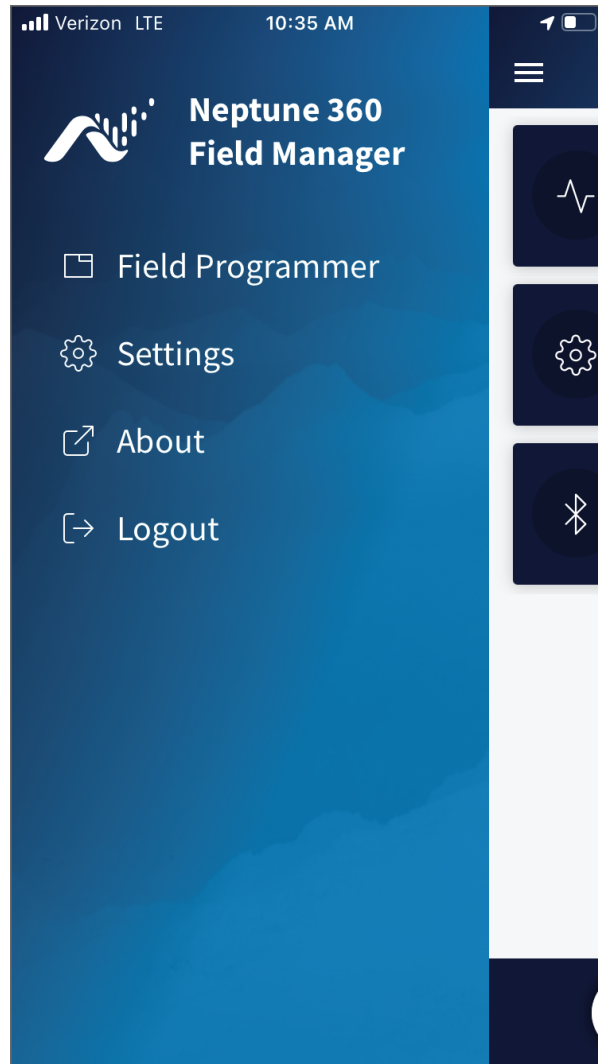


Figure 2 – Logging Out of App

2. Tap **Logout** to log out of the app.

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This chapter provides the steps to:

- Program a Register – use the Field Programmer mouse.
- Manage Register Formats – set up programming preferences.
- Connect – search for a Field Programmer mouse using Bluetooth®.
- Disconnect – disconnect from a connected Field Programmer mouse.

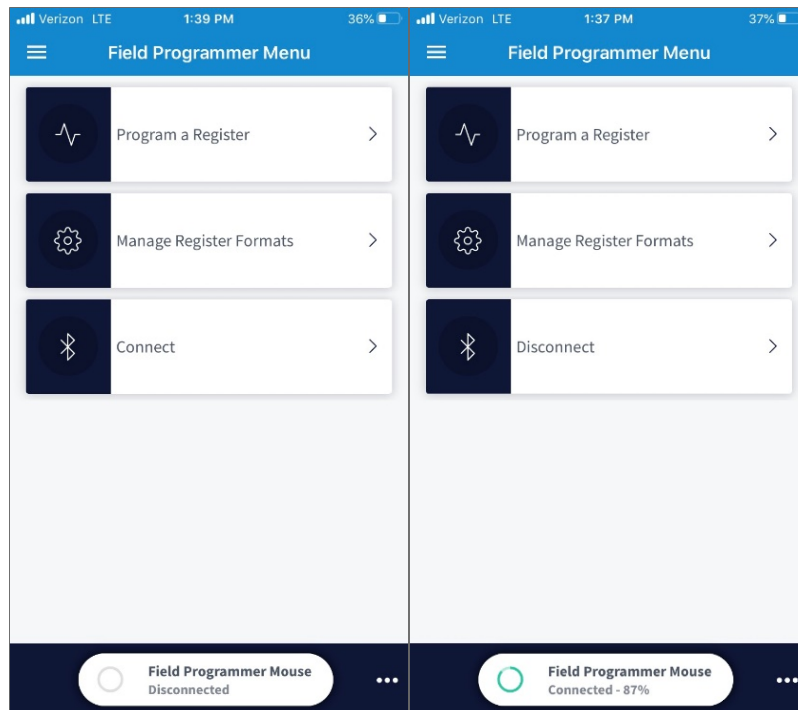


Figure 3 – Field Programmer Menu

Connecting the Field Programmer Mouse

Complete the following steps to connect a Bluetooth device to the Field Programmer mouse.

1. Enable Bluetooth on your device.
2. Turn on the mouse and make sure it is in range.
3. Tap **Connect** to search for a mouse, and then select your mouse from the list of found devices. The status indicator at the bottom of the screen changes to **Connected**.

4. If you want to terminate the connection, tap **Disconnect**.



Store the device in -20°C to $+50^{\circ}\text{C}$ temperatures, when not in use.



Figure 4 – Field Programmer Mouse (Model Number: 13820-000)



CAUTION: Contains Lithium-Ion battery. Do not open, crush, heat above $+60^{\circ}\text{C}$ ($+140^{\circ}\text{F}$) or incinerate. Follow manufacturer's instructions.

Do not dispose in a landfill, follow proper lithium-ion battery disposal / recycling instructions as dictated by local waste management authority.

Using the Field Programmer Mouse

Complete the following steps to use the Field Programmer mouse.

1. Press the push button to turn on the mouse and begin searching for a device.
The indicator light blinks while searching then turns solid after it connects.
2. Press the push button while connected to the device to execute a query or program.



The mouse automatically sleeps after 15 minutes of inactivity. If the mouse is unpaired from the app, the mouse attempts to reconnect for 60 seconds prior to going to sleep. To reset the mouse, press and hold the push button for 16 seconds.

Reading a Register

To read a register with the mouse, complete the following steps.

1. Confirm that the mouse is connected to the app.
2. Select the **Program a Register** option.
3. Tap the ellipsis in the bottom right corner of the screen.

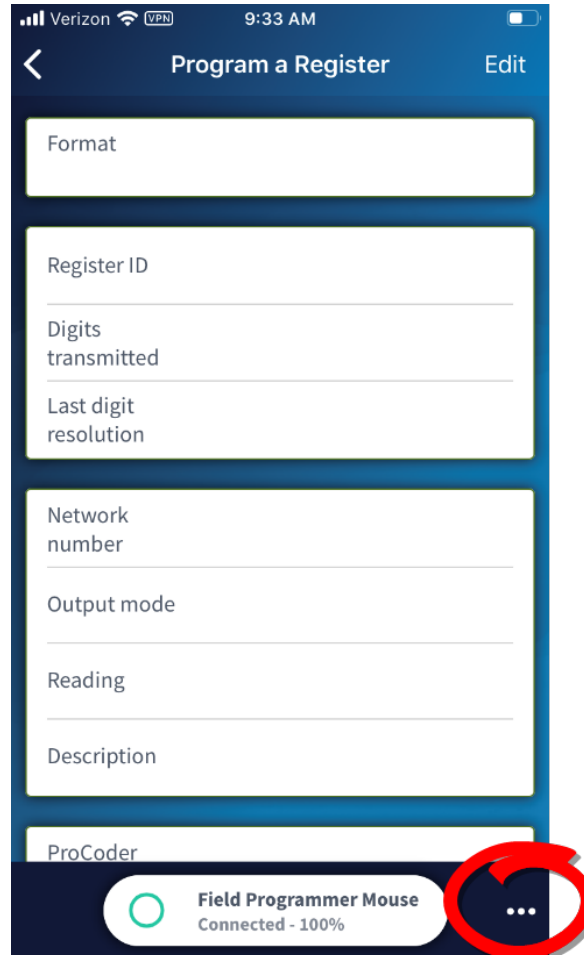


Figure 5 – Reading a Register

4. Tap Query & Read.

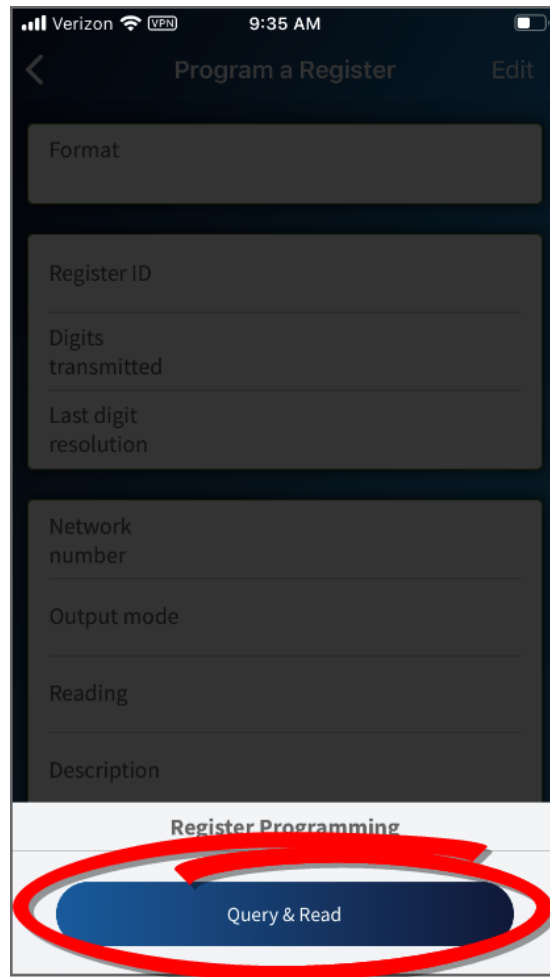


Figure 6 – Query and Read

5. Select how the mouse connects to the register. Choose one of the following methods:
 - Align the mouse with the register, and then tap **Inductive coil**.
 - Attach alligator clips to the corresponding wire color of the register, and then tap **2-wire** to use the mouse without the touch receptacle.
 - Attach alligator clips to the corresponding wire color of the register, and then tap **3-wire** for registers programmed for RF endpoints or other 3-wire devices.

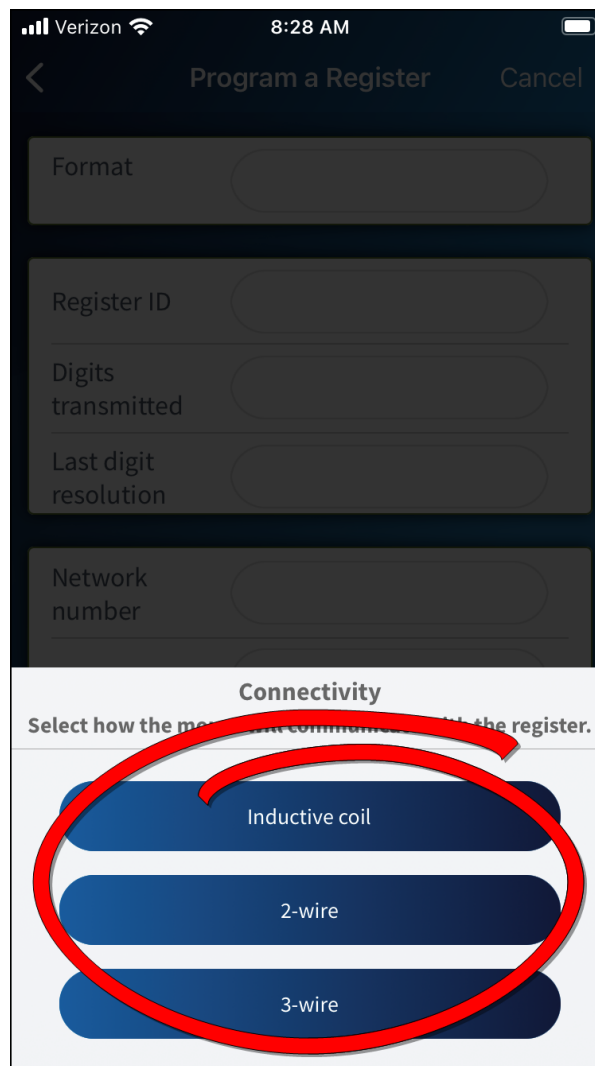


Figure 7 – Method to Connect Register

6. The mouse queries the register and the app displays the current register format.

Programming the Register

To program a register with the mouse, complete the following steps.

1. Confirm that the mouse is connected to the app and is attached to the endpoint.
2. Select **Program a Register**.
3. Tap **Edit**.

You can also tap the **Edit** button after reading a register. Refer to the **Reading a Register** section.

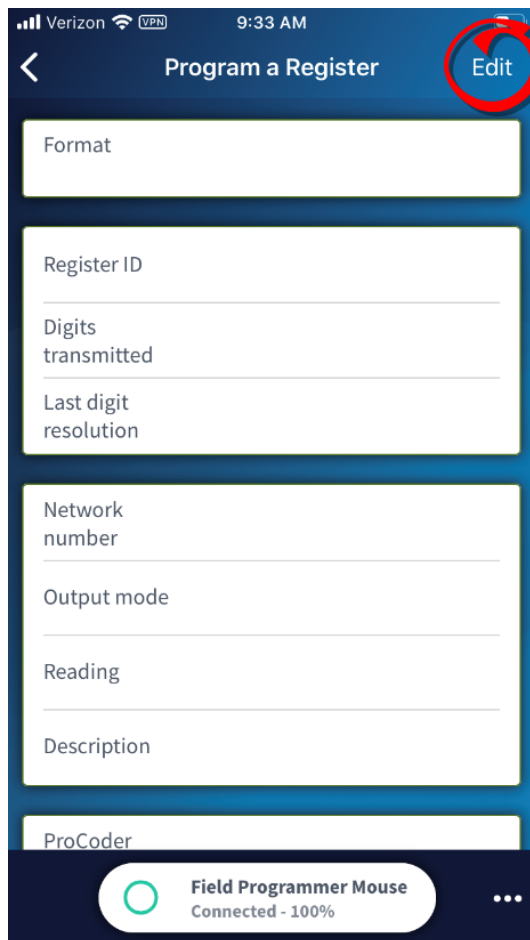


Figure 8 – Edit the Format

4. Select how the mouse connects to the register. Choose one of the following methods. See Figure 9 on page 13.
 - Align the mouse with the register, and then tap **Inductive coil**.
 - Attach alligator clips to the corresponding wire color of the register, and then tap **2-wire** to use the mouse without the touch receptacle.
 - Attach alligator clips to the corresponding wire color of the register, and then tap **3-wire** for registers programmed for RF endpoints or other 3-wire devices.

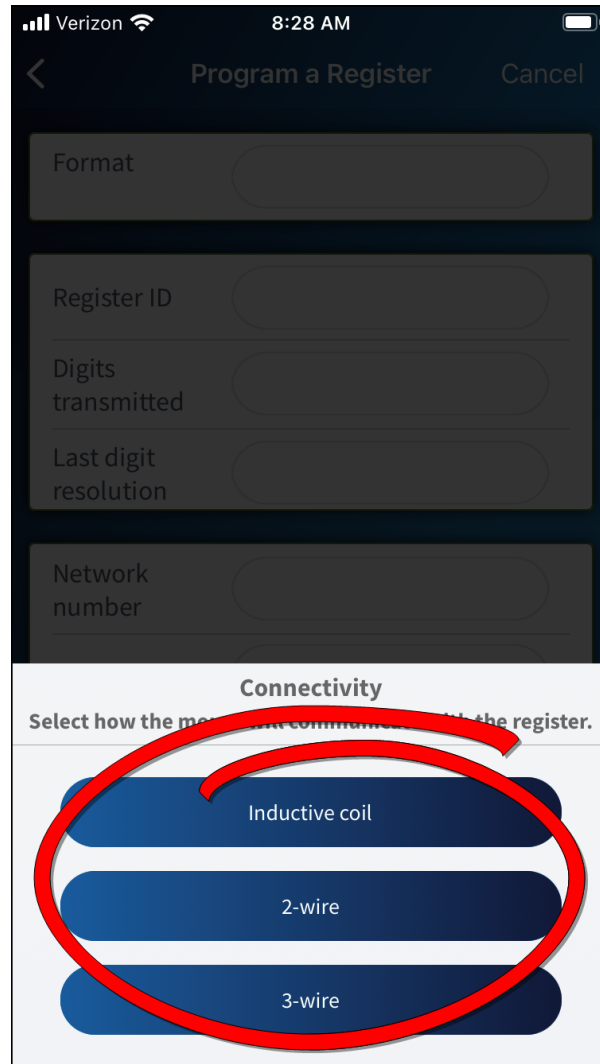


Figure 9 – Method to Connect Register

5. Update the register's configuration.
 - Use the **Format** field to select a saved format. Selecting a different format populates the other fields beneath it for a new configuration.
 - Use the **Register ID** field to type the ID or serial number of the register.
 - In the **Dials transmitted** field, type the number of meter reading digits to return a reading device from the register.
 - In the **Description** field, type any new meter information, such as size or location (up to three alphanumeric characters).
 - The **ProCoder output** field only affects ProCoder registers. The field is either **Standard** or **ProRead only**.
6. Tap the ellipsis in the bottom right corner of the screen, and then tap **Program** to finalize configuration changes.

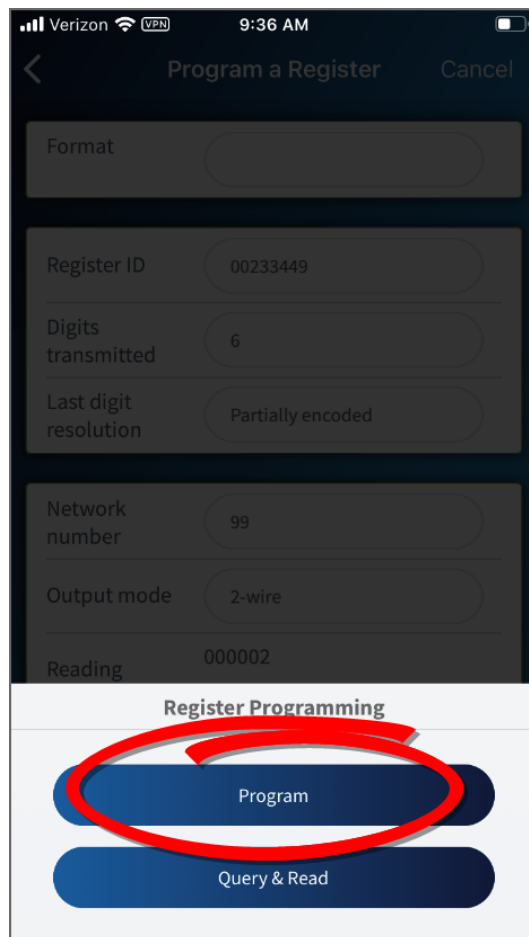


Figure 10 – Program the Register

7. Select **OK** to confirm the configuration..

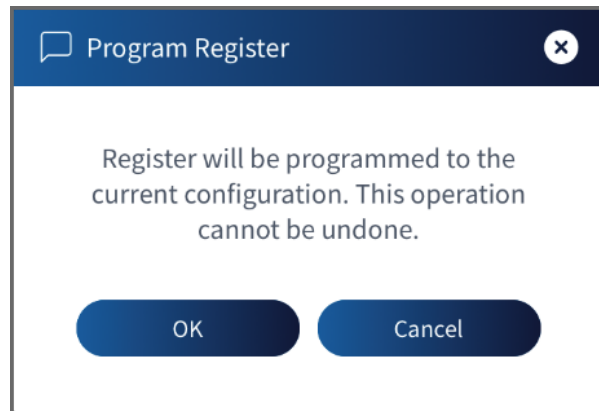


Figure 11 – Confirm Configuration

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Chapter 4: Manage Register Formats

The Manage Register Formats function shows a list of formats that only your utility uses. This eliminates unused formats and reduces errors. This chapter takes you through the process of managing register formats.

Adding or Removing a Standard Format

This section provides the procedures for adding or removing a standard format.

Adding a Standard Format

Complete the following steps to add a standard format.

1. In the Available Formats section, tap the white star icon (☆) next to the format you want to add.

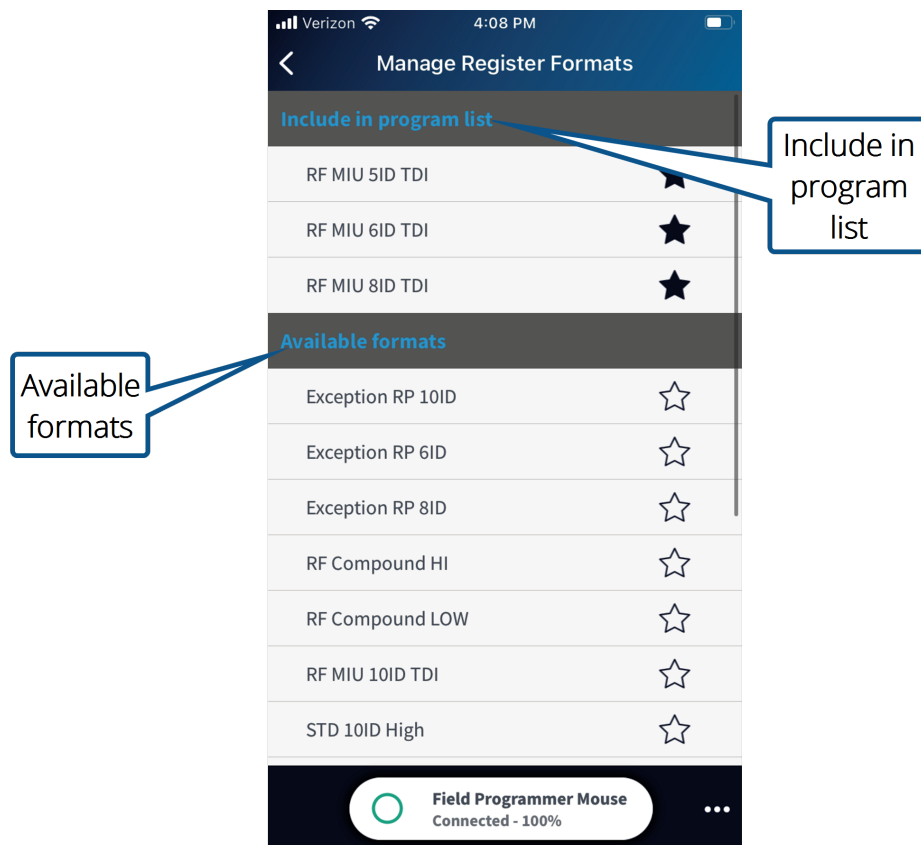


Figure 12 – Manage Register Format

The format now appears in the Include in program list.

Removing a Standard Format

Complete the following steps to remove an existing format.

1. In the Include in program list, tap the blue star icon (★) next to the format you want to remove.

The standard format now appears in the **Available Formats** section of the screen.



You cannot permanently delete Standard formats.

Creating or Deleting a Custom Format

This section includes the procedures to create and delete a custom format.

Creating a Custom Format

Complete the following steps to create a new custom format.

1. Tap ⋮ located at the bottom right of the screen.

The **Create New Format** button is displayed.

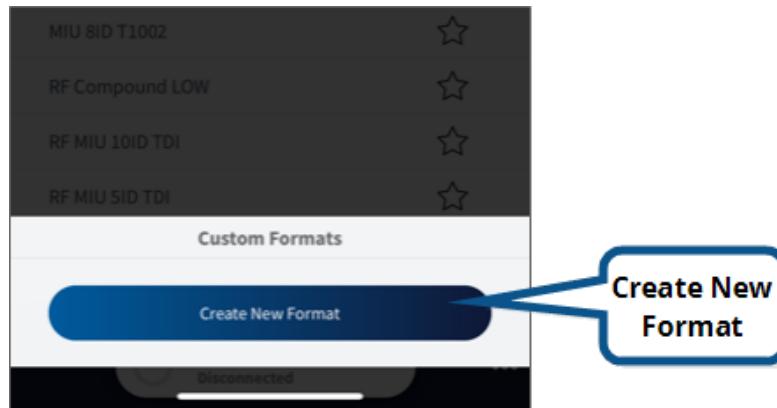


Figure 13 – Create New Format

2. Tap **Create New Format** to open the **Format Details** screen.



Figure 14 – Format Details

3. Tap the **Format Name** field, and then type the name for the custom format.
4. Tap the **Template** field to auto-fill configurations from an existing format. The fields are editable.
5. Tap the **Register ID length** field and select a value between one and ten, for the number of digits the Register ID contains.
6. Tap the **Output mode** field and select how to read registers programmed with this format:
 - **2-wire** for use without a receptacle.
 - **3-wire** for use with an endpoint or other 3-wire device.

7. Tap the **Output collection** field to select how to read the register.
 - **Single** for registers installed on one meter.
 - **Network** for two or more registers that are read together.
8. If **Output collection** is set to **Network**, tap the:
 - **Network number** field to assign the register a unique number within the network.
 - **Network size** field and adjust the number of registers in the network.



If the Network number is 99, the Network size field is editable.


9. Tap **View format** to see the format output as a string (read-only).
10. Tap **Save** to save the custom format.

Permanently Delete a Custom Format

This section includes the steps to delete a custom format.



You cannot permanently delete Standard formats.

1. Click the trash can icon () next to the custom format you want to delete.

The system permanently deletes the custom format.

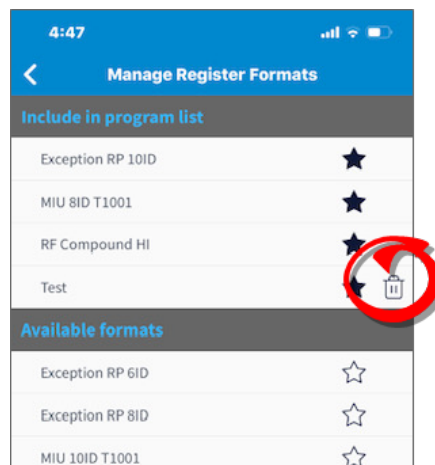


Figure 15 – Delete Custom Format

B

Bluetooth

A wireless technology standard used for exchanging data between fixed and mobile devices over short distances using short-wavelength UHF radio waves in the industrial, scientific, and medical radio bands, from 2.402 GHz to 2.480 GHz, and building personal area networks.

D

Dials transmitted

The number of meter reading digits the register returns to a reading device.

M

MIU

Meter Interface Unit, also known as an endpoint.

R

Register ID

The ID or serial number of the register.

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