Technical Note

Triggering Binding Mode on a **MultiHop** Radio Using a Host System

To use a Modbus host controller to trigger binding mode on a MultiHop radio, the following conditions are required:

- The MultiHop radio is configured as a master radio
- The firmware version of the master MultiHop radio is v2.9C or higher

From the Modbus host controller:

1. Write a decimal value of 256 to Modbus register 6371 of the data radio.
   The data radio enters the binding mode.
2. Verify the two LEDs on the data radio are flashing red alternatively during the binding mode. For the board level data radio, the LED should be flashing green and red alternatively during the binding mode.

To disable the binding mode, write a 0 to register 6371.

Verifying the Firmware Version of the **MultiHop** Radio

To verify the data radio's firmware version, you can use the MultiHop Configuration Tool (MHCT) or the LCD menu system.

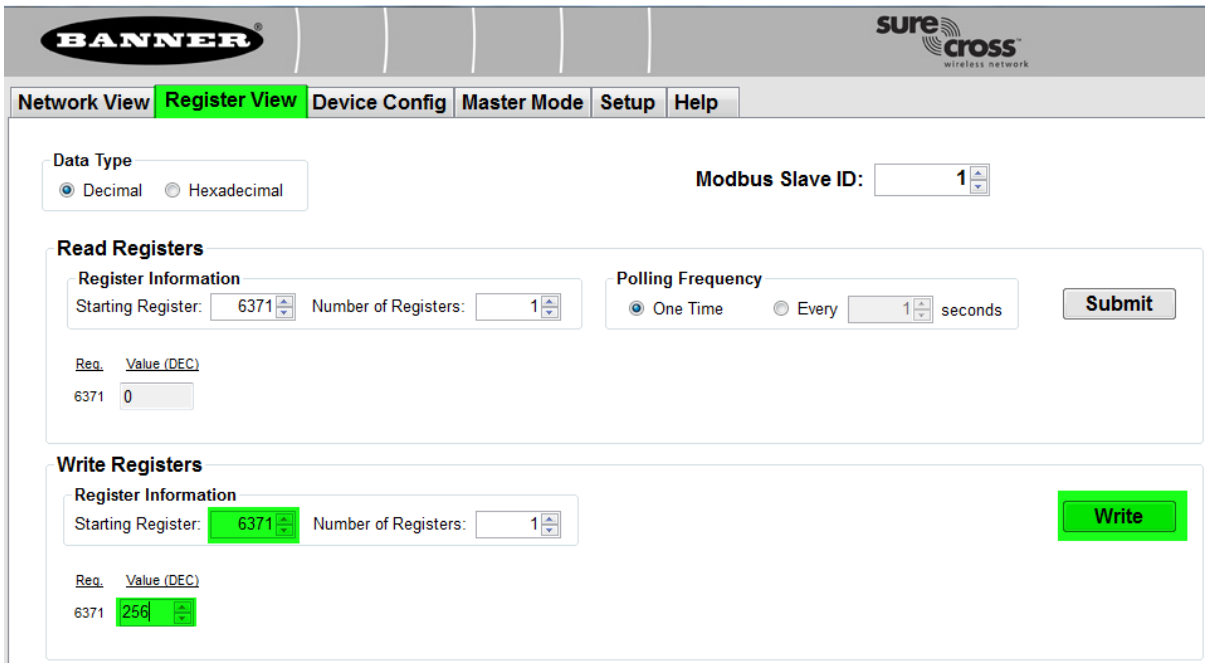
1. To use the MultiHop Configuration Tool software:
   a) Go to the Device **Config** tab.
   b) Under Read Firmware Version, click From Device.
2. To use the LCD menu system:
   a) Single-click button 1 to advance through the top level menu until you reach *FCTRY.
   b) Within the *FCTRY menu, the values automatically display in a loop. Note the RADIO FMVER value that displays; this is your radio firmware version.

Triggering Binding Mode on a **Multihop** Radio Using the MHCT

The MultiHop Configuration Tool (MHCT) software can be used to simulate the procedure with the computer acting as the Modbus host controller.

To use the MultiHop Configuration Tool to enter binding mode:

1. Go to the Register View tab.
2. Under Write Registers, enter 6371 for the starting register.
3. In the Value drop-down box, enter 256.



4. Click Write to send the value to the MultiHop master radio.
   The data radio enters binding mode.
5. Verify the LEDs on the data radio are flashing red alternatively during the binding mode. For the MultiHop board modules, the LED flashes green and red alternatively while in binding mode.

To disable the binding mode, write a 0 to register 6371.

Triggering Binding Mode on a Gateway from a Host System

To use a Modbus host controller system to trigger binding mode on the Gateway, the following condition is required:

- Gateway's LCD version is 3.2A or higher

To use a Modbus host controller to enter binding mode:

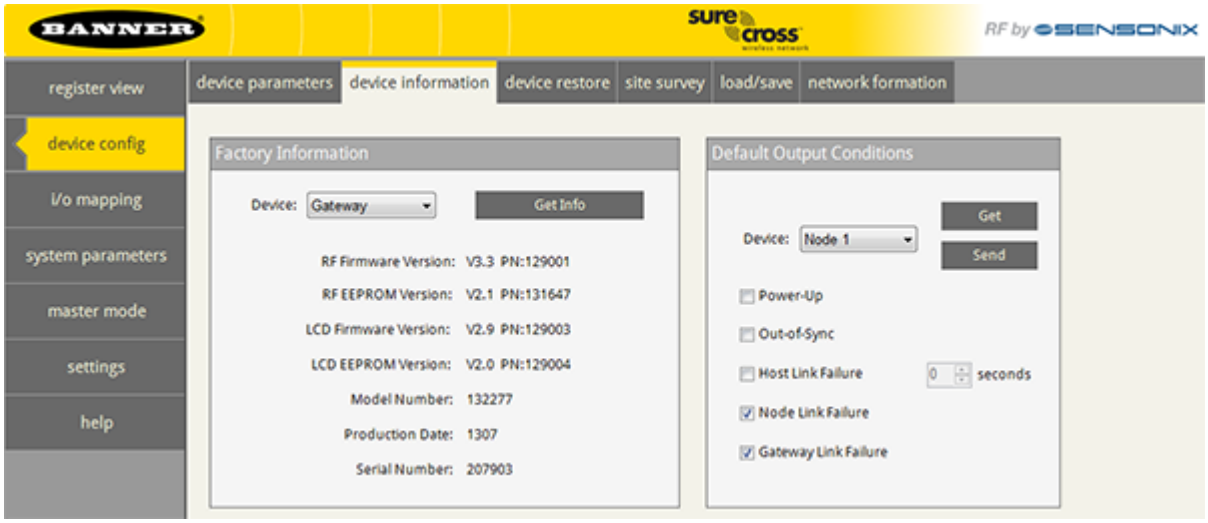
1. Write the value 256 to the Gateway's register 6371.
   The Gateway enters binding mode.
2. Verify the Gateway's LEDs flash red alternatively. For board module Gateways, the LED flashes green and red alternatively when in binding mode.

To disable binding mode, write a 0 to register 6371.

Verifying the Firmware Version of the Gateway

Use the User Configuration Tool to verify the LCD firmware version.

1. Connect the Gateway to your PC and launch the User Configuration Tool.
2. From the device **config** tab, select device **information**.
3. Select Gateway from the Device drop-down list.
4. Click Get Info.



The UCT queries the Gateway for its information and displays it on the screen. As shown in this example screen shot, this Gateway does not have the correct LCD version to use this feature.

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