SureCross Wireless Technical Note

DC Latching Operation

The DC latching devices operate the solenoid output as a single discrete output.

When using the DX80 User Configuration Tool to map discrete inputs to the DC latching device output, multiple outputs may appear to change together as a result of only one input changing. Although only one device is changing value, the other DC Latching devices are set to the same value. Because the solenoid physically makes noise, it is interpreted as being the wrong state but is actually correct.

Unfortunately, when all DC Latching devices activate with every input change, energy is wasted every time the device is told to go to the same state. This can be changed by adjusting the Report Type of the specific input to analog instead of discrete. With discrete inputs, the system attempts to optimize the radio frequency messaging by sending all discrete values in one transaction, resulting in this behavior. As an analog input, the system sends only the input that changes, eliminating the extra same-to-same transitions.

Use the DX80 User Configuration Tool to set the Report Type of each input mapped to a DC Latching output to an analog report type.

1. Click Get to see the current value of the Report Type. The default setting for this field is zero for a discrete input.
2. Change the Report Type to 1 and click Send. Do this for each discrete input that is mapped to a DC Latching output.