Setting a Threshold on an Analog Input

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Technical Note

Initial Steps and Equipment Needed

To turn on a light or alarm based on an analog sensor reading, set a threshold on the analog input.

Required equipment includes:

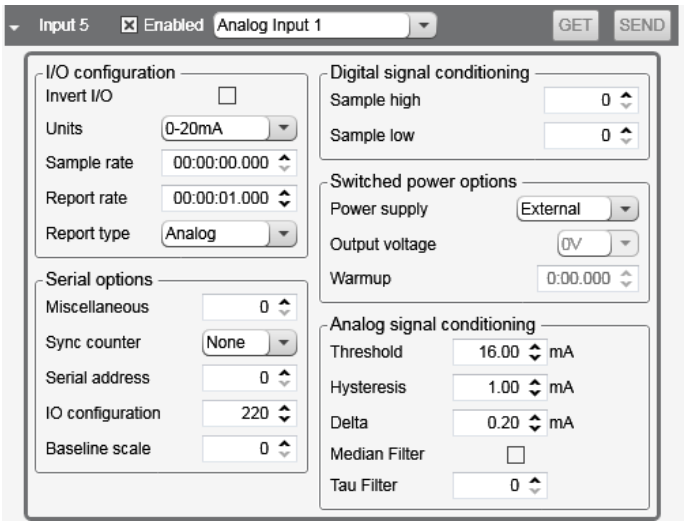
- Wireless DX80 Node
- Analog sensor wired to Node 1's I/O 5 (for example), such as a tank level sensor
- Windows-based PC running the User Configuration Tool v2 (downloaded from the Banner website)

1. Connect the network's Gateway to your PC.
2. Set the threshold on the analog input.
3. Map the Node's input to an output on the Gateway to trigger a light or alarm.
4. Repeat these steps for each sensor you'd like to monitor.

Set a Threshold on an Analog Input

Set a threshold on an analog input to define a clear on and off value.

1. Go to the **Configuration** > Device **Configuration** screen, click GET Gateway.
   The Gateway's configuration information is downloaded from the Gateway to the User Configuration Tool (UCT).
2. Click GET Node on the Node 1 line to retrieve the same configuration information about Node 1.
3. Click the arrow on the left side of the Node 1 line.
   The input and output points for Node 1 display.
4. Select Enabled for Input 5.
   Input 5 is "turned on" for Node 1.
5. Click the arrow next to Input 5 to display Input 5's parameters.
6. Set the Threshold to 16 mA. Set the Hysteresis to 1 mA.



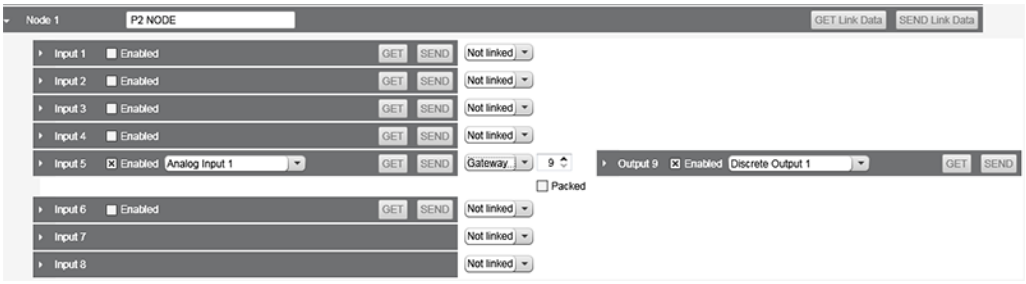
When the Threshold is set to 16 mA and the Hysteresis is set to 1 mA, the output energizes when the signal is above 16 mA and remains on until the signal drops below 15 mA. For more information about Threshold and Hysteresis, refer to *Threshold and Hysteresis*.

7. Click SEND on the Input 5 line to send this information to the network.

Map a Node's Analog Input to a Gateway's Discrete Output

1. Go to the Linking > Linking **Configuration** screen.

2. Click the arrow next to Node 1.
   The inputs display in a list.
3. For the input 5 that is enabled and configured, select Gateway from the drop-down list.
4. Select I/O point 9 from the drop-down list and verify it is enabled on the Gateway.



5. Click SEND Link Data on the Node 1 line to send the I/O linking information back to the devices.
   A light or alarm connected to the Gateway's discrete output 1 should turn on when the threshold is reached on the analog input of Node 1.