Introduction
The Maretron WIF-RK30880-E is an accessory for the RIM100 Run Indicator Module. The WIF-RK30880-E will indicate presence of water in the diesel fuel being monitored, indicating that it is time for the fuel filter to be drained.

Instructions
Please follow these instructions to connect the WIF-RK30880-E to the NMEA 2000 network via a Maretron RIM100 Run Indicator Module. The wiring diagram appears in Figure 1 on the reverse side of this page. The diagram shows a connection to channel #1, but connections to other channels are similar.

1. Install the WIF-RK30880-E per the manufacturer’s instructions packaged with the device.

2. Add a wire (18AWG or larger) between
   a. the terminal of the indicator light which is connected to the 1A fuse recommended by the manufacturer (the other side of the fuse is connected to the 12/24VDC supply), and
   b. the positive terminal on the selected run detection channel on the RIM100.
   For this example, add a wire between the indicator light terminal connected to the 1A fuse and RIM100 terminal V1+ (Please refer to Figure 1).

3. Add a wire (18AWG or larger) between
   a. the terminal of the indicator light which is connected to the water in fuel sensor via the yellow wire, and
   b. the negative terminal on the selected run detection channel on the RIM100.
   For this example, add a wire between the indicator light terminal connected to the yellow wire coming from the water in fuel detector and RIM100 terminal V1- (Please refer to Figure 1).

4. Use a Maretron DSM150 or DSM250 display (firmware 1.3.5 or higher), or the DSM250 Viewing function of Maretron N2KAnalyzer software, or other Maretron display product capable of configuring the RIM100 to set the switch channel mode (indicated as “Channel #x Mode” on the DSM250) for the appropriate channel to the “Enable” setting. For this example, you would set “Channel #1 Mode” to “Enable”.

5. Supply Power to the NMEA 2000 network, Verify that the switch channel indicates an “off” (normal) state using Maretron N2KView software, N2KAnalyzer, or other product capable of displaying switch indicator state.

6. Remove the water in fuel indicator from the fuel filter and test the water in fuel indicator by shorting together the two terminals of the water in fuel indicator with a wire. Verify that the switch channel indicates an “on” state.

7. Reinstall the water in fuel indicator into the fuel filter per the manufacturer’s instructions and verify that the switch channel indicates an “off” (normal) state.
Water in Fuel Detection Kit (installed per manufacturer’s directions)

**Figure 1 - Wiring Diagram**

### Device Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger Threshold</td>
<td>47KΩ</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40° to 250°F (-40°C to 121°C)</td>
</tr>
<tr>
<td>Connector</td>
<td>½&quot;-20 UNF</td>
</tr>
<tr>
<td>Power</td>
<td>12 or 24 VDC</td>
</tr>
<tr>
<td>Housing</td>
<td>Glass-filled nylon</td>
</tr>
</tbody>
</table>

For installation support, please contact:

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