





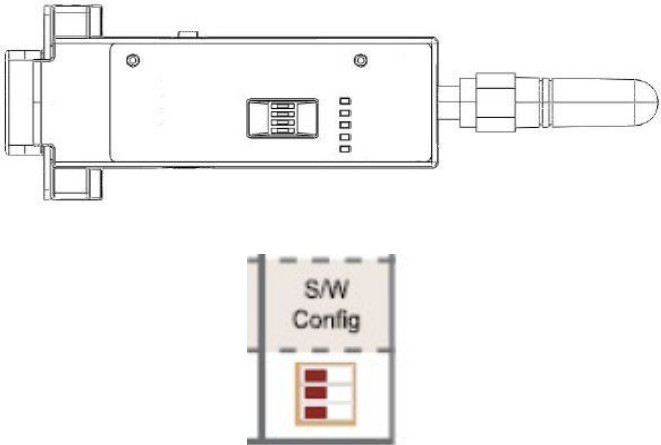
**Trimble 5600**  
**Bluetooth Dongle for SurvPRO using v5.6.2**

Step	Action	Display
1	<p>Replacing the Trimble radios used with the Trimble 5600</p> <p>Instructions for SurvPRO v5.6.2, TDS/Spectra Precision Ranger Robotic instrument configuration, two Parani Bluetooth Dongles and a Trimble 5600 Robotic Total Station.</p> <p>NOTE: If the client has a long range Bluetooth data collector then the second Parani long range Bluetooth adapter would not be needed.</p> <p><b>Contact eGPS if you wish to purchase these items:</b></p> <p><b>TWO of each of the following:</b></p> <ul style="list-style-type: none"> <li>Parani-SD1000 Bluetooth Serial Adapter               <ul style="list-style-type: none"> <li>(Qty 1) DB9 Female to Male Gender / Null modem gender changer (included with each SD1000)</li> </ul> </li> <li>Dipole Antenna - RP-SMA Right-Hand Thread, 5dBi</li> <li>Extended Battery pack for Parani-SD1000</li> <li>External Power Adapter - Includes one of four regional power plugs</li> </ul> <p><b>ONE</b> 5600 Geodimeter to Data Collector Cable w/ Power Clips</p>	

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2	<p>Note; The data collector instrument configuration will need to be set to communicate with the instrument directly.            Name: Trimble Parani (suggestion)            Brand: Trimble Direct Connect            Model: 5600 Auto Detect            Serial Port: Com 1</p> <p>Established Parani BT connection setup:            See page three to set Parani communication from scratch</p> <p>a) Power On the 5600 Robot with the data collector connected by the cable to the instrument and battery</p> <p>b) Run through the leveling/calibration routine</p>	
3	<p>a) Once the leveling routine is completed, disconnect the Data Collector and plug in the OFF Bluetooth Dongle with / DB9 adapter to the serial port that the collector was plugged in to. Once it is plugged in, turn on the Dongle.</p>	
4	<p>a) Connect the other OFF Bluetooth Dongle to the Data, once it is plugged in to the Ranger port turn on the Dongle.</p> <p>The setup is complete and you should now be able to survey.</p> <p>Whenever you move the instrument or power it down you will need to start from step 2 again.</p>	

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1	<p style="text-align: center;"><b>Parani Bluetooth Dongle Set up instructions</b></p> <p><b>a.)</b> On the Bluetooth Dongle, attach the extended life battery, attach the long range 5dBi antenna – short range pictured, and set the dip switches to S/W Config as shown (standard setting when newly purchased)</p> <p>To Pair the two Bluetooth devices:</p> <p><b>b.)</b> For easy reference attach Null modem gender changer / DB9 adapter to SD1 then turn on both Parani. Once on, reset both of them by pressing the Factory Reset Button (paper clip works perfectly).</p> <p><b>c.)</b> Press the Pairing Button of SD1 for 2 seconds until Mode LED blinks 3 times every 3 seconds. Keep the power ON.</p> <p><b>d.)</b> Press the Pairing Button of SD2 for 2 seconds until Mode LED blinks 3 times every 3 seconds. Now press again the Pairing Button for 2 seconds until Mode LED blinks every second.</p> <p><b>e.)</b> Wait for SD1 &amp; SD2 to connect to each other until the Connect LED's of SD1 and SD2 blink every 1 second. It takes about 10 seconds to make a connection. If there are many Bluetooth devices nearby, it may take longer.</p> <p><b>f.)</b> Turn SD1 off and on. Mode LED blinks twice in green every 3 seconds.</p> <p><b>g.)</b> Turn SD2 off and on. Mode LED blinks in green every second.</p> <p><b>h.)</b> Now SD1 and SD2 are configured to make an automatic connection to each other whenever they are powered on.</p>	 <p>The diagram shows the Parani Bluetooth Dongle with an antenna attached. Below it, a close-up of the 'SW Config' section shows three dip switches. The top switch is in the 'up' position, and the bottom two switches are in the 'down' position.</p>