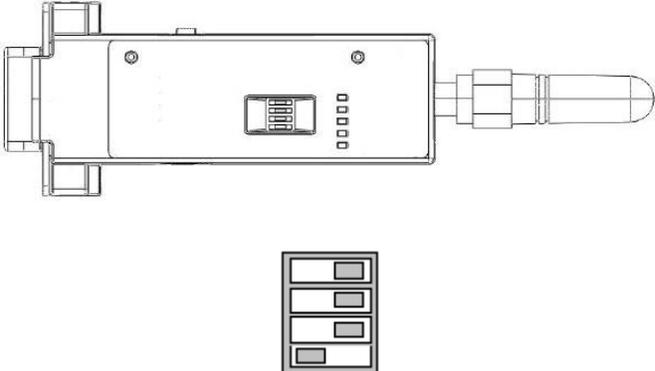


Trimble 5600 Bluetooth Dongle

Step	Action	Display
1	<p>The purpose of this guide is to show the basics of replacing the Trimble radios used with the Trimble 5600/ TDS Ranger Robotic instrument configuration with two Parani Bluetooth Dongles, one for the Robot and one for the Data Collector.</p> <p>The same setup should work with any Data collector that has a serial port and no long range Bluetooth. If the client has a long range Bluetooth data collector then the second Parani long range Bluetooth adapter would not be needed.</p> <p>Below is a list of the items used:</p> <p>Contact eGPS to purchase TWO of each of the following:</p> <ul style="list-style-type: none">Parani-SD1000 Bluetooth Serial AdapterDipole Antenna - RP-SMA Right-Hand Thread, 5dBiExtended Battery pack for Parani-SD1000External Power Adapter - Includes one of four regional power plugsDB9 Female to Male Gender5600 Geodimeter to Data Collector Cable w/ Power Clips	



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Step	Action	Display
2	<p>a.) On the Bluetooth Dongle, attach the extended life battery, attach the long range 5dBi antenna, and set the dip switches to 9600 baud rate as shown.</p> <p>To Pair the two Bluetooth devices:</p> <p>b.) Turn on SD1 and SD2 and reset both of them by pressing Factory Reset Button.</p> <p>c.) Press the Pairing Button of SD1 for 2 seconds until Mode LED blinks 3 times every 3 seconds. Keep the power ON.</p> <p>d.) 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>e.) Wait for SD1 & 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>f.) Turn SD1 off and on. Mode LED blinks twice in green every 3 seconds.</p> <p>g.) Turn SD2 off and on. Mode LED blinks in green every second.</p> <p>h.) 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 Trimble 5600 Bluetooth Dongle. The top part is a perspective view of the device, which is a rectangular box with a long antenna extending from the right side. The bottom part is a close-up view of the control panel, showing several buttons and LEDs. The buttons are labeled with symbols: a power button, a factory reset button, and two pairing buttons. The LEDs are labeled with symbols: a mode LED, a connect LED, and a power LED.</p>

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Step	Action	Display
3	<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> <p>Note; The data collector instrument will need to be set to communicate with the instrument directly. The normal Baud rate setting will be 9600, 8, None, 1</p>	
4	<p>a) Once the leveling routine is completed disconnect the Data Collector and plug in the Bluetooth Dongle (the Dongle should be Off) to the serial port that the collector was plugged in to. You will need to use the Null modem gender changer included with the Bluetooth Dongle, once it is plugged in turn on the Dongle.</p> <p>Note; the Bluetooth Dongle used to initiate the pairing should be at the Robot. If you do not get communication, switch the dongles.</p>	
5	<p>a) Connect the other Bluetooth Dongle to the Data collector (it should be Off) and the once it is plugged in 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 3 again.</p>	