



Connecting a XDL Rover 2 and a GeoExplorer via Bluetooth

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To connect the Pacific Crest XDL Rover 2 to a Trimble® GeoExplorer™ and stream data over Bluetooth, do the following:

1. Ensure that the XDL Rover 2 has the latest firmware (available on <http://pacificcrest.com/support.php?page=updates>):
 - XDL modem firmware v1.18
 - I/O firmware v1.10
2. Ensure all Bluetooth devices from GeoExplorer are deleted from the Bluetooth device list that is shown in the GeoExplorer. This frees up COM ports for serial interaction
3. Switch on Bluetooth on XDL Rover 2 and wait for it to initialize
4. Search for Bluetooth devices from the GeoExplorer
5. When it asks for a passcode, type in "1234"
6. After it pairs successfully, the Bluetooth LED on XDL Rover 2 turns off and blinks every few seconds stating that it has paired
7. A message shows on the GeoExplorer stating that the unit has paired. Tap "Advanced" and activate "serial port" by tapping on the check box next to it
8. Scroll across to "COM Ports"
9. Select "New outgoing port"
10. Select XDL Rover 2 from the list
11. Assign a COM port to XDL Rover 2 by tapping on the drop down arrow and selecting either COM5 or COM6. The GeoExplorer lists COM5 and COM6 as Bluetooth serial ports
12. Tap "Save"

Verify that the connection is working by doing the following with the GeoExplorer's GPS Controller app:

1. On the main menu select "Setup"
2. Tap "Real Time Settings"
3. Choice1: Select "External source"
4. Choice2: Select "wait for real-time"
5. Tap the wrench button on Choice 1
6. Under "Connection method," select "Serial Port"
7. Under "Port" select "COM6: XDLROVER1234567890" from drop down list
8. Ensure the port settings in the GeoExplorer are identical to those in the XDL Rover 2

9. Tap “Done”
10. Tap “Done” on the next screen
11. From main menu select “Real Time”
12. You will see that corrections are streaming and the byte counter is ticking over.

The GeoExplorer will automatically reconnect if either unit temporarily switches off. The GeoExplorer will reconnect to the XDL Rover 2 within 10 – 20 seconds after the Bluetooth initializes on the XDL Rover 2 and starts to stream corrections again. The same is true if the GeoExplorer switches off and the XDL Rover 2 stays on.

It is important to remember the following things when using the Bluetooth modules in the GeoExplorer 6 and 7 series.

1. Both Geo 7 and Geo 6 have COM5 and COM6 available for a Bluetooth serial link. Either port may be used to establish a Bluetooth serial link to an XDL Rover 2
2. On the Geo 7, if the end user is using a laser range finder the unit defaults to using COM5 for the range finder and only COM6 will be available for a Bluetooth serial link to the XDL Rover 2
3. If no COM ports are accessible when creating a “new outgoing port,” you will need to find out if any existing external devices, such as rangefinders, GNSS receivers, total stations, etc., are already using COM5 or COM6. You may do this by checking the unit’s “Bluetooth -> COM Port” menu. If any such devices are using either of the two available COM ports, you should delete the “outgoing port” to free up either COM5 or COM6
4. Never delete a Bluetooth serial device that has an assigned outgoing port directly from the Bluetooth device list. Doing so will cause the COM port(s) assigned to that particular device to lock up. This is a known bug in the Windows Mobile OS. Once locked out, that COM port is no longer accessible for a Bluetooth serial link. The only way to free up the locked COM port(s) is to factory-reset the unit
5. Unchecking the secure connection option when configuring a new “outgoing port” helps achieve a more reliable connection.