

Setting Up Bluetooth Connections for Raven XP

These instructions will help you set up Bluetooth devices such as GPS and XM weather units for use with your Raven XP tablet. The procedure used is very similar for any XM tablet computer that uses Bluetooth and therefore these instructions can be applied to computers and devices other than the Raven XP. Once you understand the basic concept, the procedure is basically the same.

Overview

In general the process involves “introducing” the Bluetooth devices to the tablet so that when software is run that needs these devices, the software knows how to call each one and begin “talking” to them.

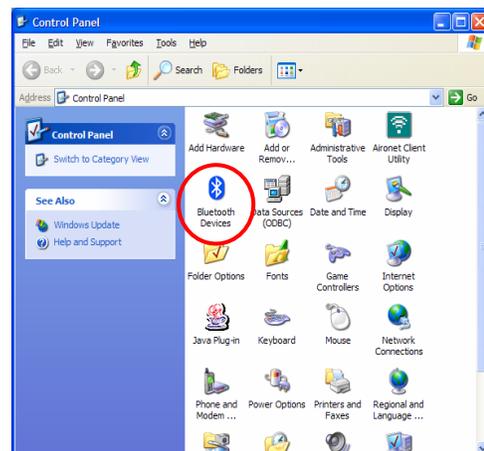
Every Bluetooth device (GPS, XM unit, tablet computer, headset, cell phone, etc.) has a radio transceiver in it that broadcasts and receives on the Bluetooth frequencies. Each transceiver has a unique serial number so that once a conversation is taking place between two devices no other devices can interfere with it. That’s the good part. The bad part is that you have to “train” the devices to talk to one-another in the first place so you can control the devices used for each software application very specifically. Actually, it’s not so bad and only takes a few minutes.

Setting Up Bluetooth Links

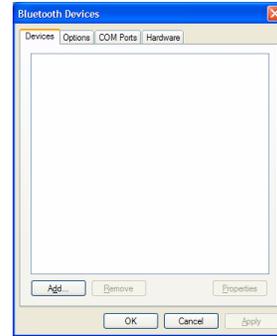
There is software on your tablet that allows you to manage Bluetooth (hereafter called BT) devices that will talk to that computer. You create links to each BT device before you start the AnywhereXP software. These links “teach” the tablet about each device to be used and its specific serial number. All the BT devices will be managed using this BT software, even if all devices are not used all the time. Once the links are created, you will start AnywhereXP and configure it using these links.

The Raven XP’s BT radio is on all the time and there is no way apparent to turn it off. The Motion LS800 provides controls in the Motion Dashboard software to turn wireless and BT on and off as required.

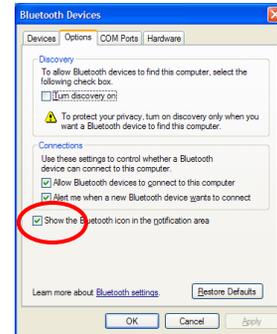
To open the BT manager software on the Raven XP, either double-tap the BT icon in the lower right corner of the display (in the system tray near the time) or, if you do not see the icon, open the Control Panel and tap the BT icon there. To open the Control Panel, tap Start, and then tap Control Panel. Now tap the BT icon.



The window shown at right will open.



The first thing to do is tap the Options tab and make sure the checkbox “Show the BT icon in the notification area” is checked. This way the BT icon will show in the lower right corner.

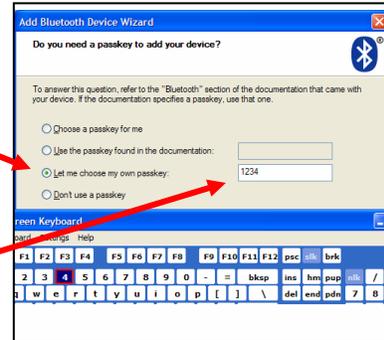


Now tap the Devices tab and perform the following procedure:

1. Turn on or apply power to your BT devices. You can power them both (assuming XM and GPS) even though you actually create link to them one at a time.
2. Tap the Add... button. The Add BT Wizard starts.
3. Check the box that states “My devices is set up and ready to be found.” The “Next” button will illuminate.
4. Tap Next. The system will begin searching for BT devices and a list of those found will be displayed after a few seconds. (See right)
 - a. The XM weather unit will be listed as “XM Blue SPP”.
 - b. The Garmin GPS10 will be listed as “Garmin GPS 10”.
 - c. The Sentinel BT GPS will be listed as “HI-xxxx” where the x’s are the model number.
5. Tap one device (GPS or XM) to highlight it and then tap Next.



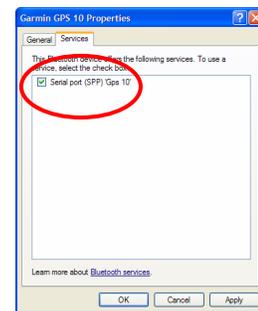
6. Now a window appears that asks about passcodes. See right. There are four choices.
7. Tap the third: “Let me choose my own passkey”. The data entry box to the right illuminates.
8. Tap once in the entry box in preparation for data entry.
9. Press the keyboard button on the front of the Raven XP to open the keyboard.
10. Tap in the codes as applicable to your device:
 - a. For XM weather radio: 0
 - b. For Garmin GPS10: 1234
 - c. For Sentinel BT GPS: 0000



11. Close the keyboard (press the button again) and tap Next. The system will begin creating a shortcut for the device.
12. The final window that appears tells you the device link has been created properly and the COM ports to which it has been assigned. Record the Outgoing COM port number for set up in AnywhereXP.



13. Tap Finish.
14. The original BT devices window will now be shown once again and the shortcut for the device you just handled will be shown in the box.
15. Once more step. Tap once on the icon you just created and then tap Properties.
16. Now tap the Services tab. A after a few seconds, the services available for that device will be listed. You should see “Serial Port etc...” as an example.
17. Check the box and tap OK.
18. A couple of balloons will pop up showing a new device has been found, etc. Also, you’ll notice the Device name has “passkey enabled” under it.



If you just created the link for the GPS and do not have a weather system, then you’re done. Proceed to Configure AnywhereXP below.

If you created the link for the GPS and have a weather system, you must now add the link for the XM weather unit. Go to Step 2 above and perform the same steps, but this time for the device you didn’t enter the first time through. *It does not matter which device you enter first but you must record the COM port assigned to each device so you can configure AnywhereXP properly.*

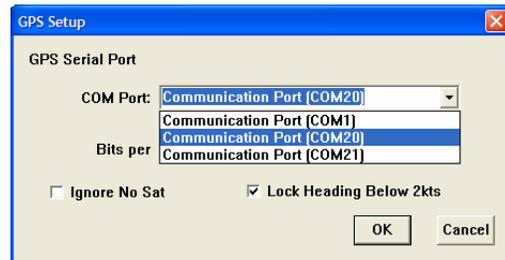
Configuring AnywhereXP for the first time after installation

Once the BT devices are configured, close the BT manager software and start AnywhereXP by double-tapping on the desktop icon.

Since this is the first time you're running the software after installation and since the BT devices were configured, no GPS or weather data will be received by the program because the program does not yet know on what COM ports the data will be received. You will now tell it that information.

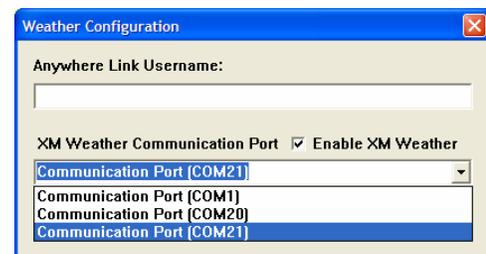
First, the GPS:

1. Make SURE your GPS is on and not just charging (the GPS10 units will power themselves off after 10 minutes or so if they are not connected to a BT unit such as the tablet).
2. Tap the Settings menu, then tap GPS Settings. After a few seconds the GPS Setup window will open as shown at right.
3. Drop down the COM port selection box (little down arrow at right end of box) and tap the COM port to which the GPS was assigned in the BT set up.
4. Tap the checkbox "Lock heading below 2kts".
5. Leave the Bits as they are.
6. Tap OK.
7. Now a "balloon" opens at the bottom of the screen that tells you a BT device is attempting to connect to your computer. Tap the balloon (not the X) to open the passcode entry box.
8. Tap in the entry box to place the cursor there.
9. Open the keyboard by pressing the button on the front of the computer.
10. Tap the same code that you entered in the set up (depending on the device type).
11. Close the keyboard and then tap Next.
12. You'll see that the device is connecting. For the GPS10, the blue light will flash slowly now. For the Sentinel BT the blue light will be on steady.
13. If the GPS is outside in view of the satellites you will see a ground speed similar to that of your current speed (most likely zero knots), an altitude close to your current altitude, and the map should 'snap' to your current position.



Now, if you have an XM weather system:

1. Make SURE your XM unit is on.
2. Tap the Settings menu, then tap Weather Configuration. After a few seconds the Weather Configuration window will open as shown at right.
3. Drop down the COM port selection box (little down arrow at right end of box) and tap the COM port to which the XM unit was assigned in the BT set up.
4. Tap the checkbox "Enable XM Weather".



5. Tap OK.
6. You'll see that the device is connecting as the blue light will be on steady and the green/red will be steady or flashing green.
7. If the XM antenna is outside in full view of the southern sky, you should see the WX Age status progress from INIT to REQST to GOOD, indicating good signal strength.

Restarting the AnywhereXP Software

At the moment, the GPS Bluetooth connection will require your input of the passcode each time the GPS has been turned off and restarted. This is being reviewed and we hope to have it corrected soon. Never-the-less, if you close the AnywhereXP software and then restart it *without* turning off the GPS, you will not need to re-enter the code. But once you shut down (i.e. power down) the entire system including the GPS, you will need to reenter the codes.

See the Raven XP Operation Manual for more information on starting and shutting down the system.