

Serial Bluetooth adapter Setup guide for Windows 8.1 64-bit

(Tested in Oracle VM VirtualBox version 4.3.6 r91406)

We are in this example using the UCBT232EXA serial Bluetooth adapter and the ES-388 USB Bluetooth dongle which has a CSR (Cambridge Silicon Radio 41B14) based chipset. Both are available from www.usconverters.com. We cannot guarantee same functionality if you are using a USB Bluetooth dongle with a different chipset.



UCBT232EXA
Serial Bluetooth adapter

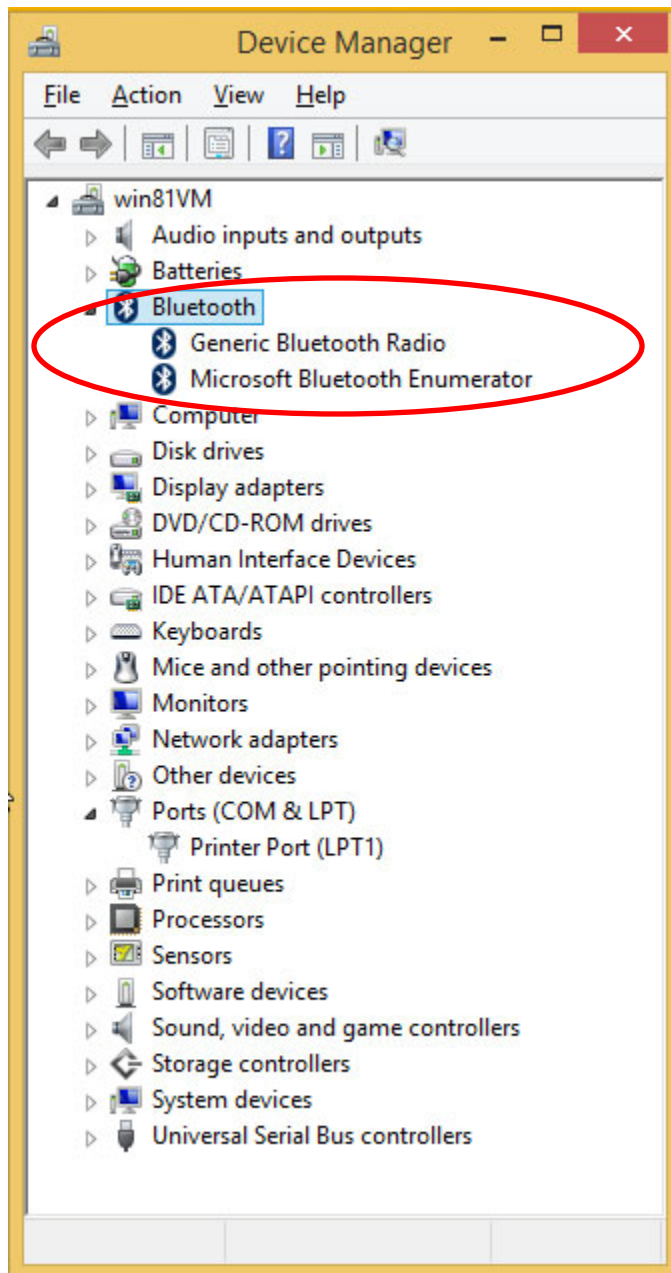


ES-388
USB Bluetooth dongle

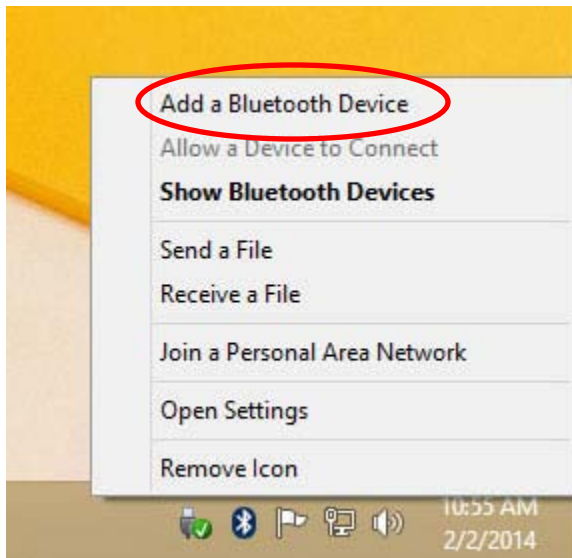


Insert the USB Bluetooth dongle into your computer's USB port.

Check in Device Manager that it is recognized by your computer.

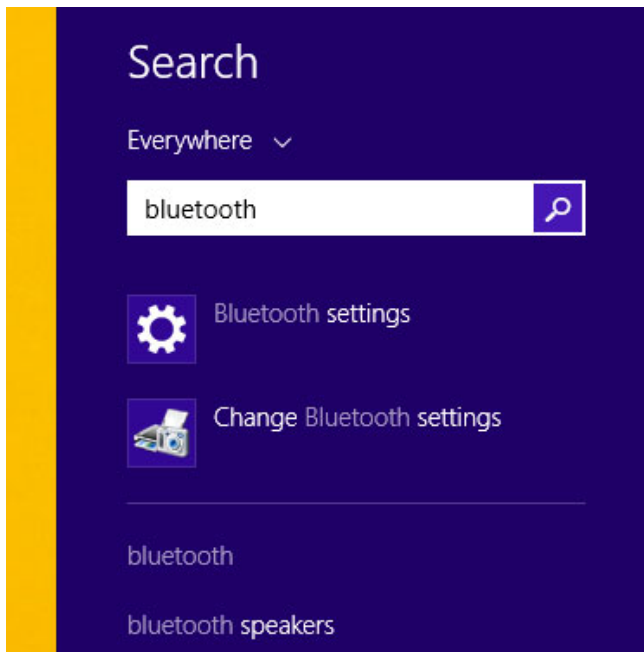


Click the Bluetooth icon in the lower task bar:

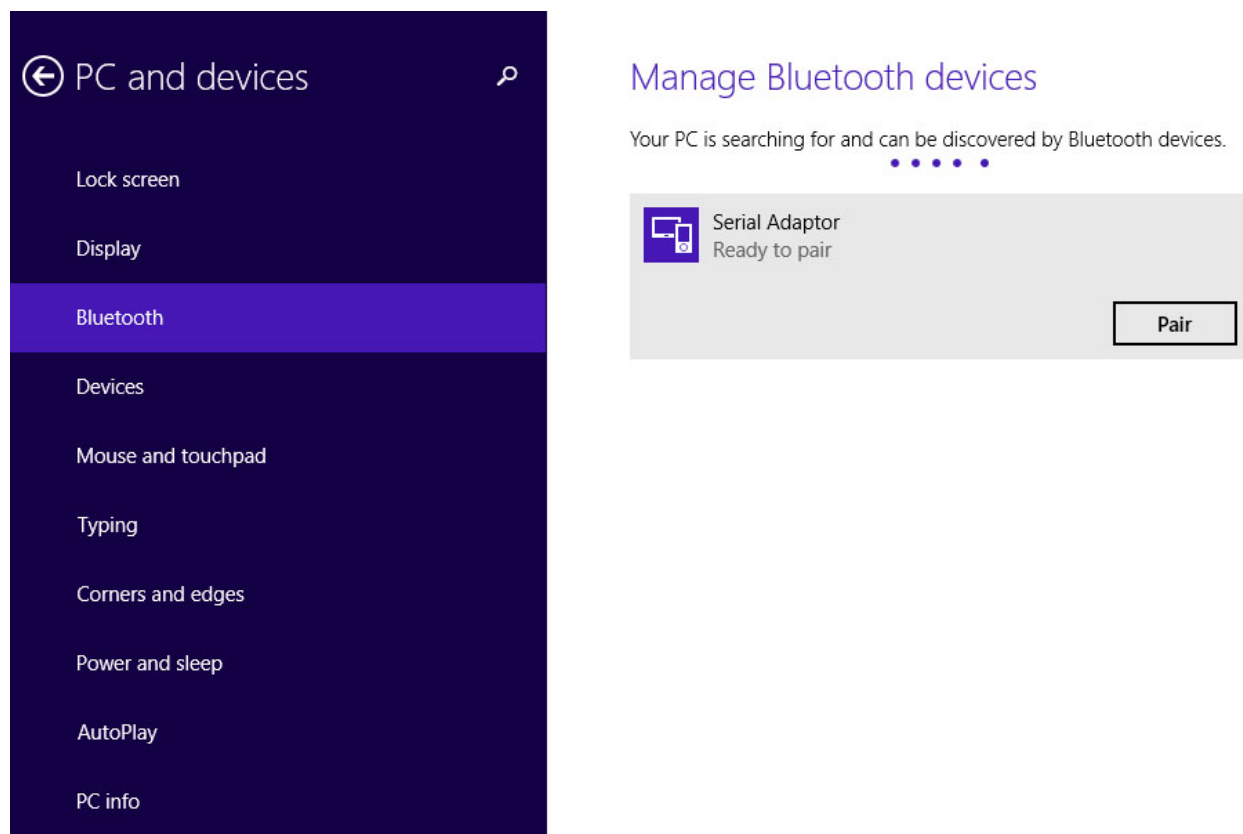


And select "Add a Bluetooth Device".

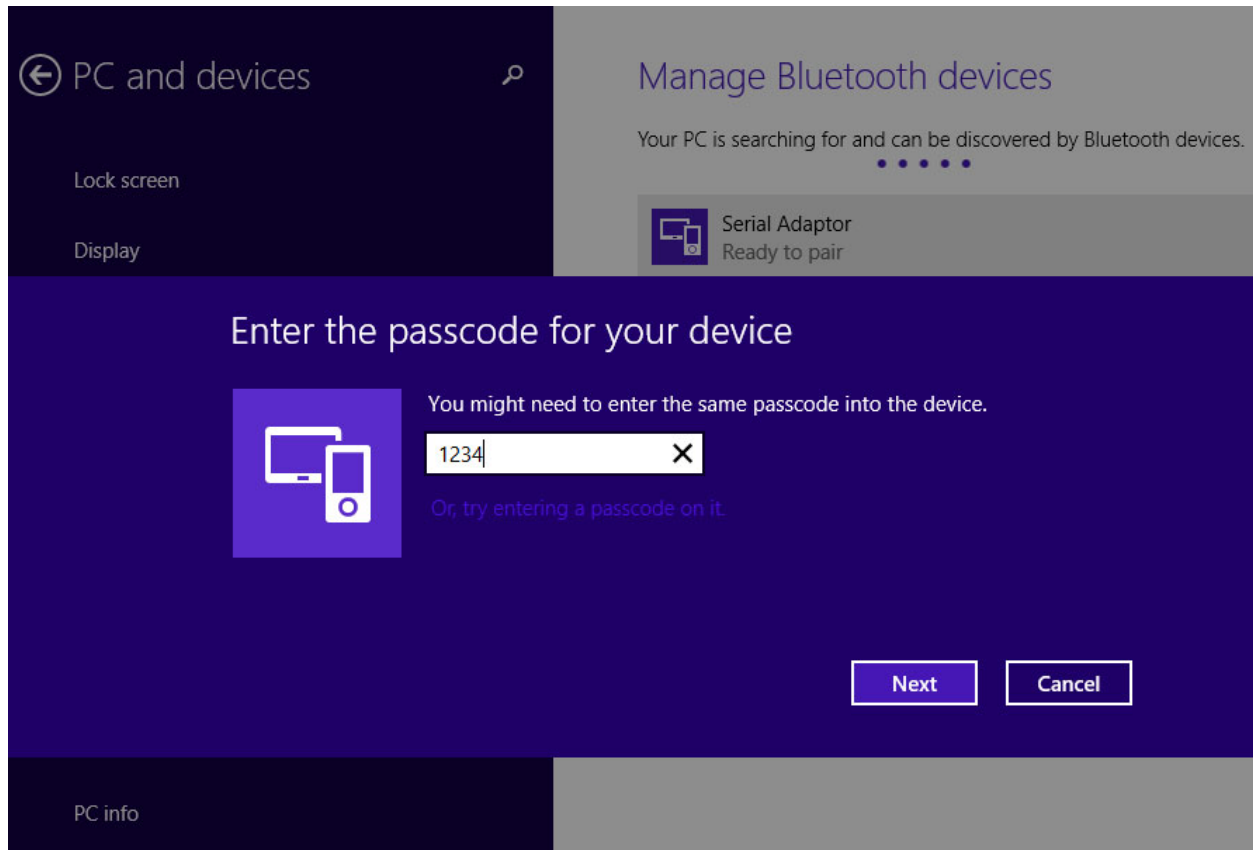
If for some reason the Bluetooth icon does not appear in the lower task bar, you can instead search for "Bluetooth" and select "Bluetooth settings":



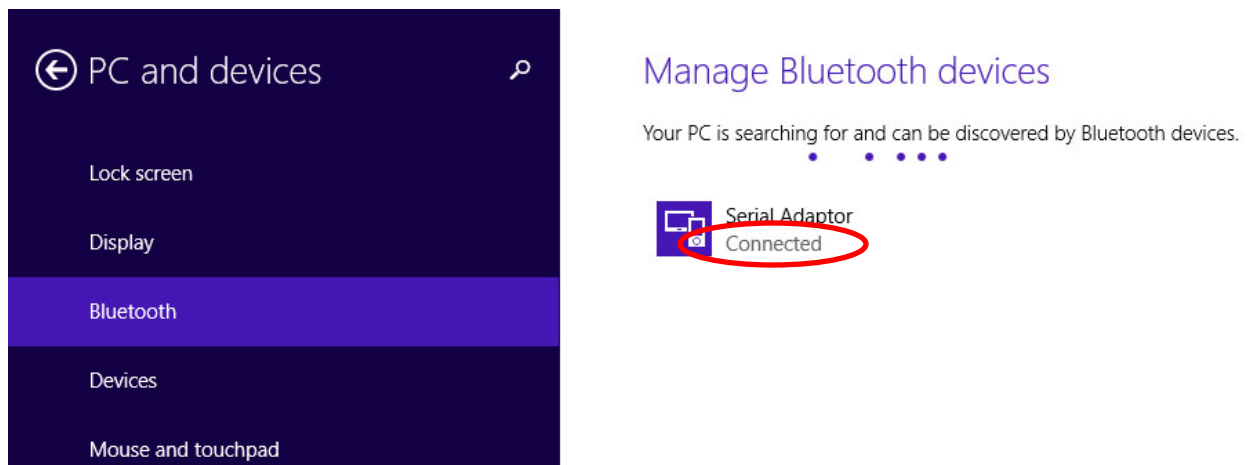
The Bluetooth management screen will open. Click the “Serial Adaptor” and click “Pair”:



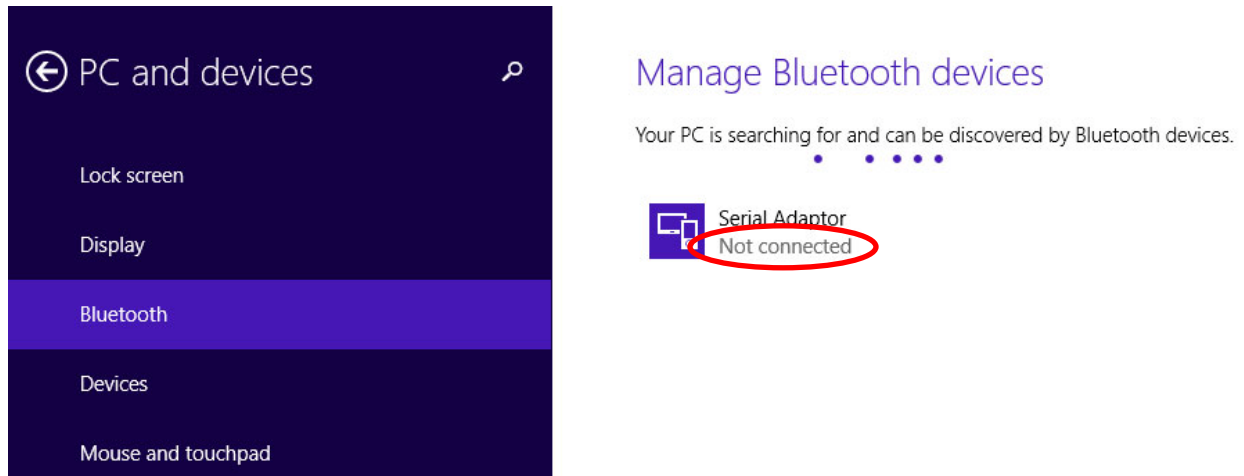
Enter the pairing code “1234” and click “Next”



Windows will now show that the serial adapter is connected:

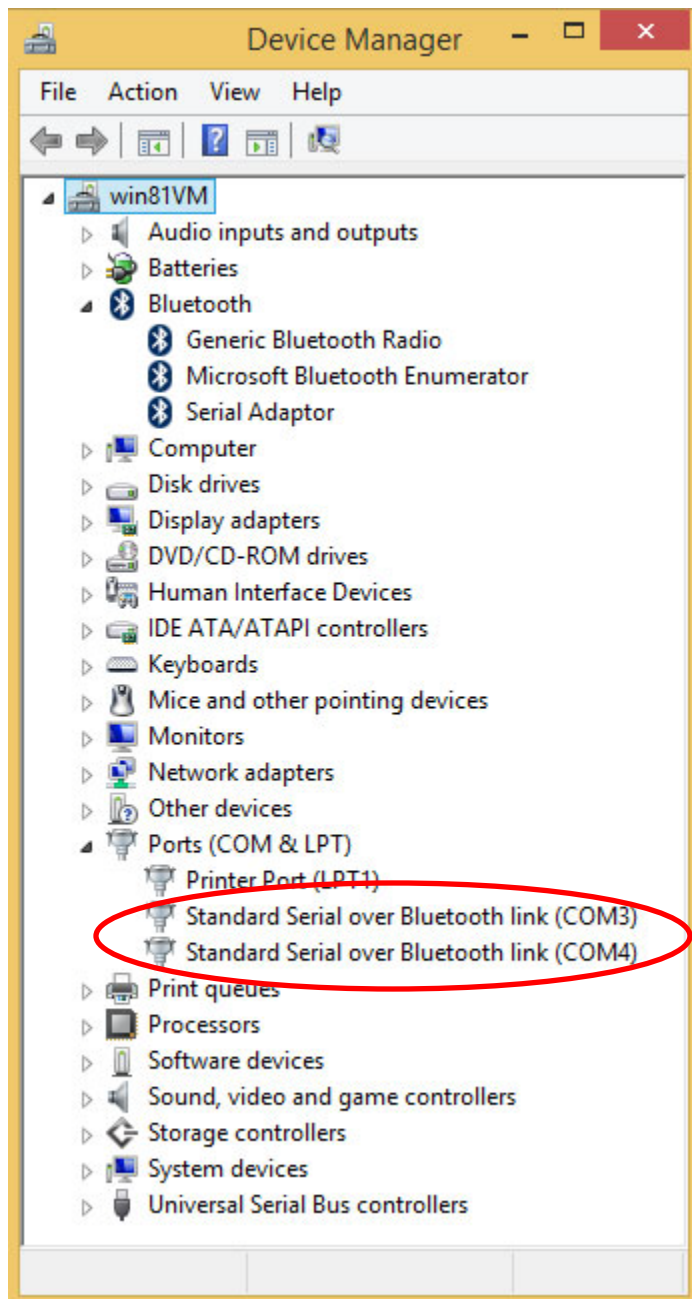


And after a few seconds it will show “Not connected”:

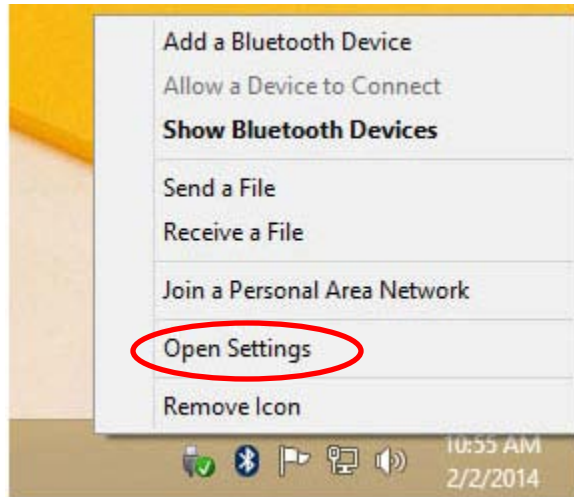


This means that the serial adapter's COM port is closed; however the adapter is still paired and connected over Bluetooth to your computer.

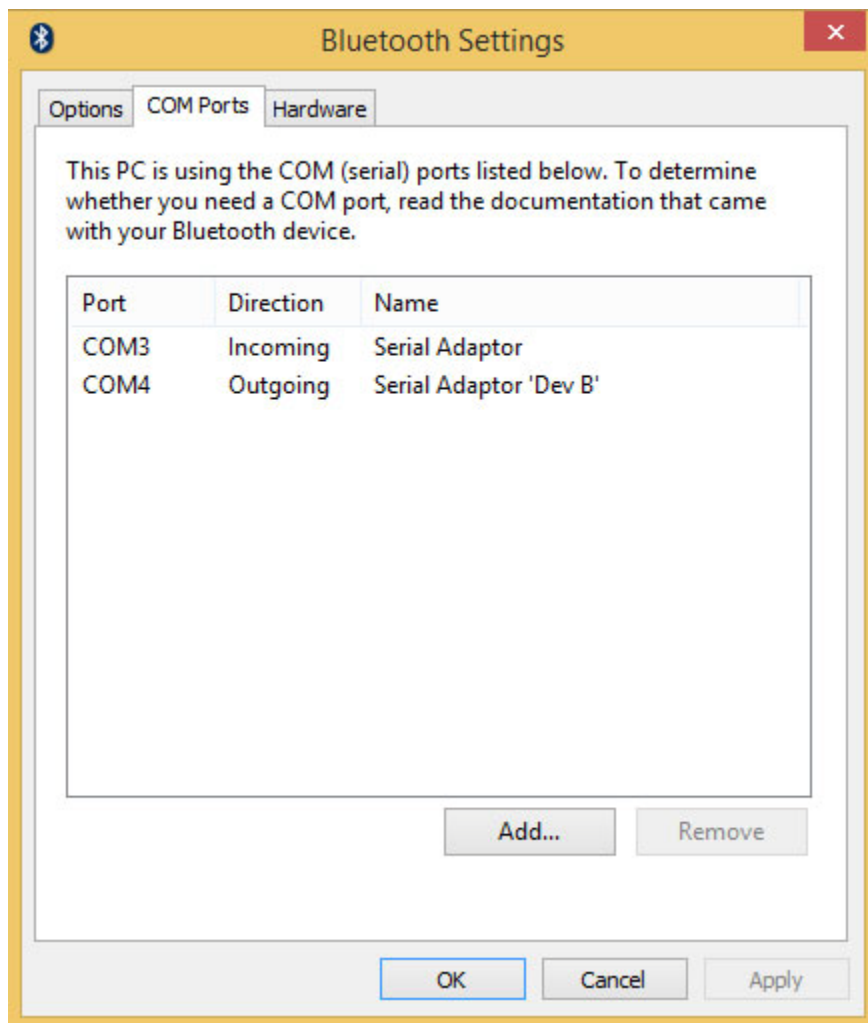
In Device Manager you should now see the two serial over Bluetooth COM ports created by the USB Bluetooth dongle (even Windows says “Not connected”):



By selecting “Open Settings” from the Bluetooth menu in the task bar:



You will also be able to see the created COM ports under the “COM Ports” tab:



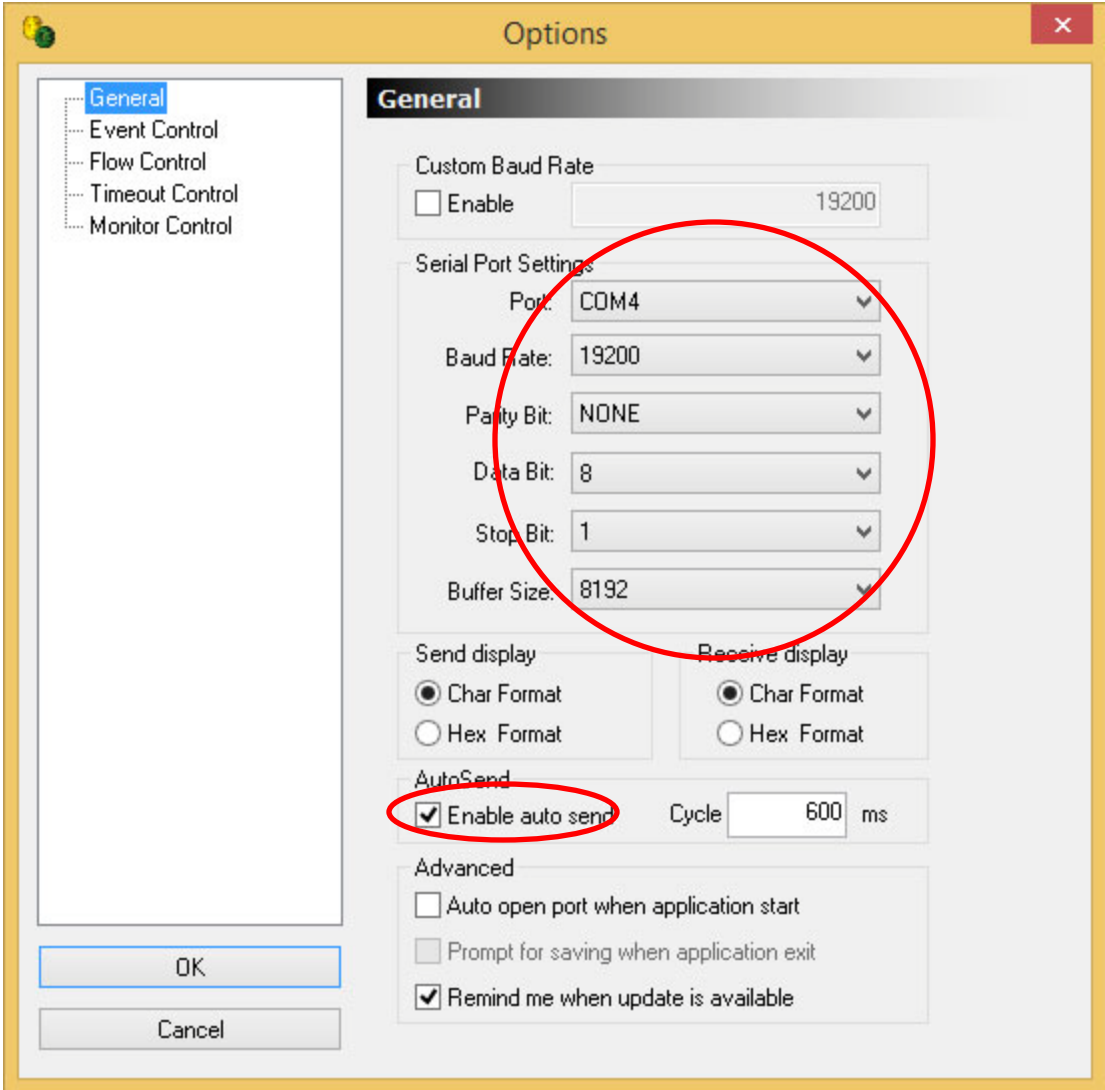
Make a loop-back test to verify communication.

To verify that the UCBT232EXA is working properly and paired and connected successfully you can make a loop-back test. In this test you will check if you can send data from your computer out through your computer's Bluetooth (which actually is a virtual serial COM port over Bluetooth) to the TX (transmit) wire on the UCBT232B/EXA (pin 2), loop it back (by the help of a paper clip) and then receive it back on the RX (receive) wire of the UCBT232EXA, and finally receive it back on your computer.

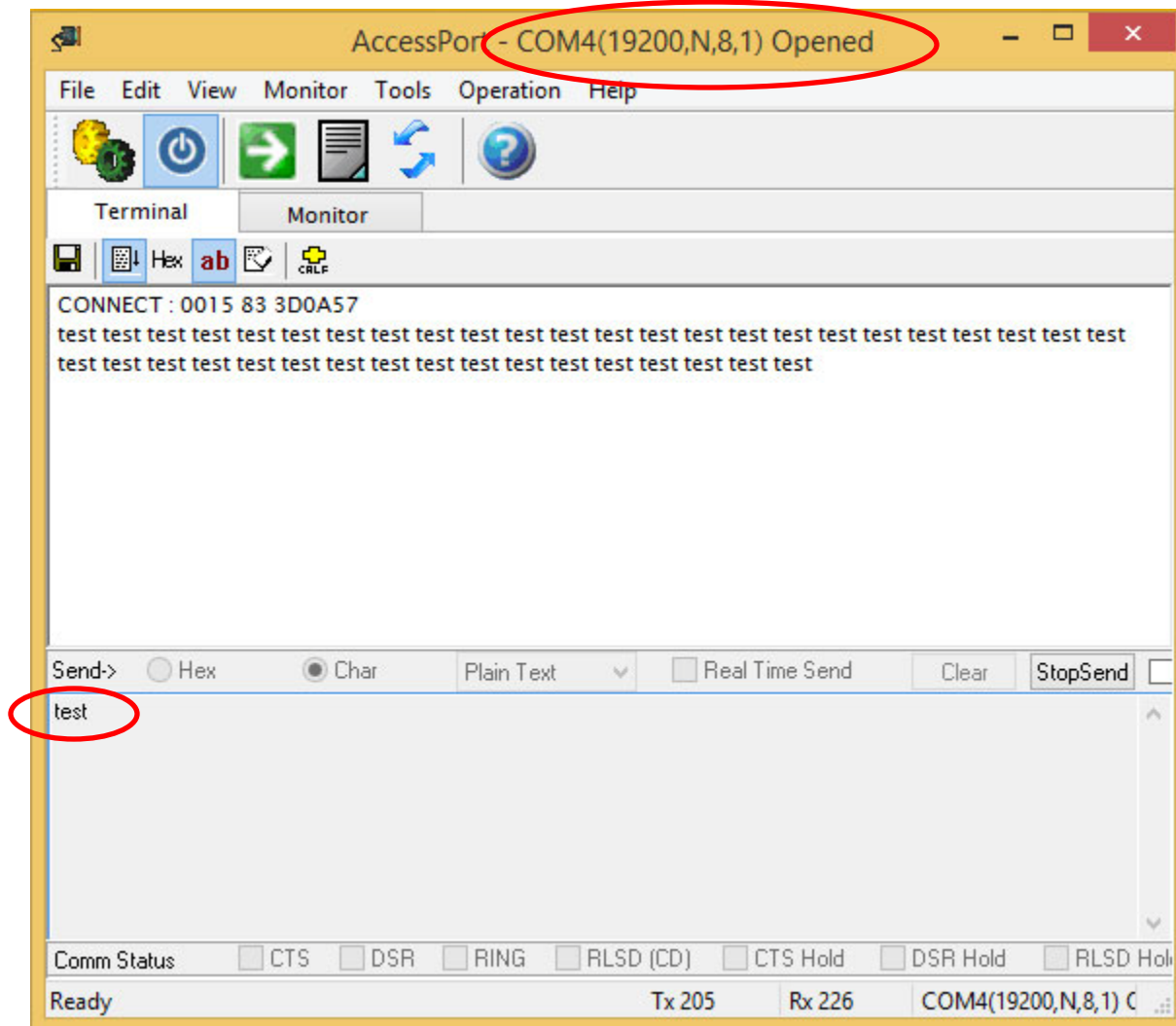
1. First pair and connect the UCBT232EXA with your computer as described earlier in this guide.
2. Loop-back TX to RX (pin 2 to pin 3) at the DB9 connector of the serial adapter. Use for example a paperclip:



3. Download the terminal software AccessPort from www.usconverters.com.
4. Start AccessPort.
5. Click Tools > Configuration and enter the parameters of the UCBT232EXA at the outgoing COM port which it has created, in this case COM4. It is important you enter the correct COM port number otherwise you will not be able to communicate with the UCBT232B/EXA.



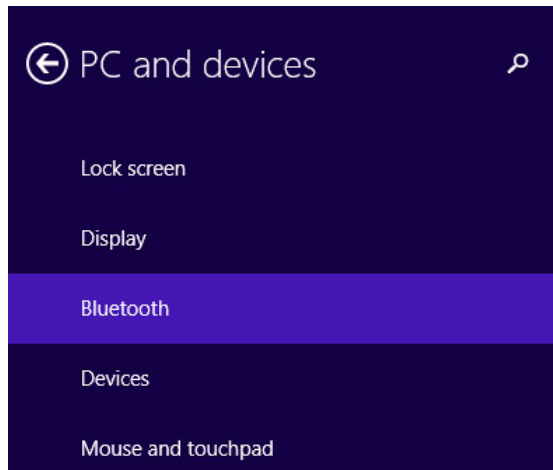
Click “OK” and the port will open. Enter a text string in the lower (send) window and if the adapter is connected successfully you will see the text string received back in the upper (receive) window:



When the port is open the blue LED light on the serial adapter should be solid on.

If AccessPort cannot open the port this is an indication that the UCBT232EXA is not properly paired or connected or the port for some other reason has not successfully been created, or perhaps you entered the wrong COM port number in AccssPort Configurations.

Looking again at Windows Bluetooth management, since the adapter's COM port is now open, it now shows that the adapter is connected:



Manage Bluetooth devices

Your PC is searching for and can be discovered by Bluetooth devices.

