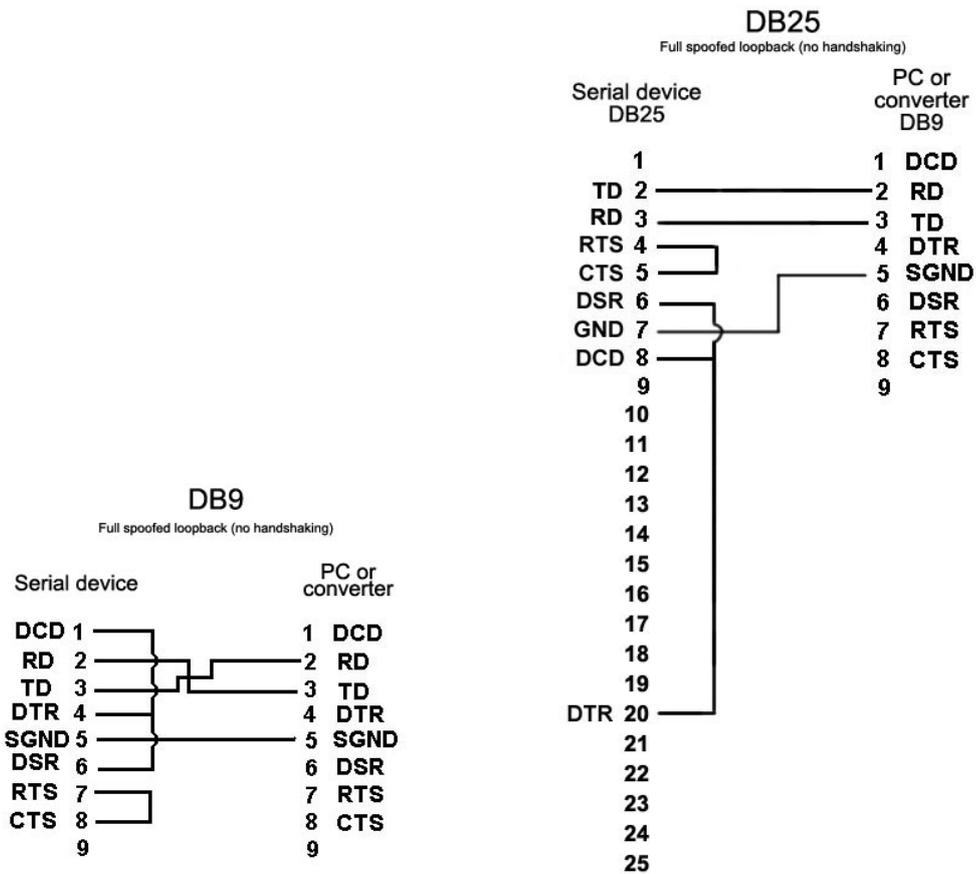


My Serial Wireless adapter can't communicate, ..why?

There can be many reasons why you can't communicate with your device using a serial wireless adapter such as a **Serial to WiFi adapter**, **Serial Bluetooth adapter** or a **Serial Wireless RF radio**. We will here go through some of the most common problems. Please check each suggestion described below to properly troubleshoot the problem you experience.

1. Make sure all the serial adapter's serial port settings are correct and match your serial device's port settings: Baud rate, number of data bits, flow control etc.
2. If your serial device communicates through a COM port or a specific channel, make sure that the serial adapter's COM port or channel and also your serial device's software, if you use such, is correct/matching. In short, the serial adapter's COM port must match your serial device's COM port, and your software must 'look' for the virtual COM port number created by the virtual COM port software.
3. If your serial adapter is a WiFi based adapter, disable all antivirus software, firewalls and security certificates, as these may prevent the adapter from communicating with the specified IP address on the network.
4. If your serial device is a DTE device then you may need to use a null modem adapter. A null modem adapter swaps the TX and RX wires. Check your device's user manual or datasheet to find out on which pins TX and RX are located in the DB9 connector.
5. If there is a DTE/DCE switch on your serial adapter then make sure it is in the correct position.
6. Try disabling flow control on both the adapter and your device if possible.
7. If your device requires handshake signals to operate, you might in some cases need to loop-back these. Often looping back RTS to CTS (Pin 7 to Pin 8) with a jumper is sufficient (see table below).
8. Your device may need some of the flow control signals (RTS, CTS and/or DSR, DTR, DCD). Some devices require only the RTS/CTS signals, other devices require all signals. If your device requires a flow control signal but the other side does not provide this signal, then the signal will be missing, and communication can't start. Loop-back jumpers as shown in the images below can in most cases solve this problem. Generally, hardware flow control should be disabled on the wireless adapter (if possible) when these loop-back jumpers are used. Often the easiest way to make these loopback jumpers is to make a custom cable/adapter or open the serial connector for the serial device side.



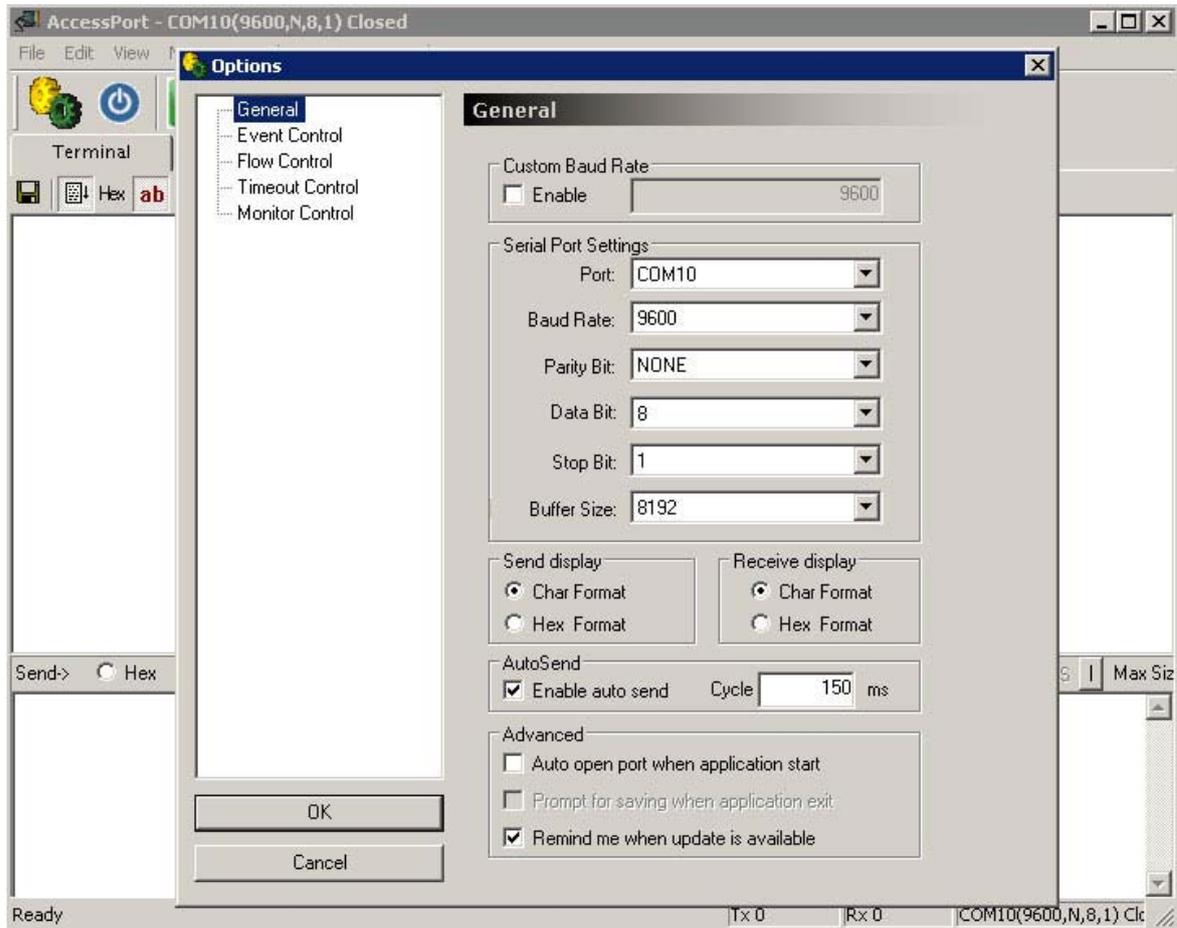
DB9
Put a jumper to short out pin 1, 4, 6 and another jumper on pin 7 and 8.

DB25
Put a jumper to short out pin 4 and 5 and another jumper on pin 6, 8 and 20.

Making a loop-back test

To verify that your wireless adapter is working properly you can make a loop-back test.

1. Download the software AccessPort from www.usconverters.com
2. Connect your wireless adapter to your COM port.
3. Start AccessPort.
4. Click Tools > Configuration and enter the parameters (baud rate, COM port etc.) of the wireless adapter at the COM port which it has created, in this case COM 10.



5. Make a DB9 loop-back test-plug according to below table (looping back only Tx to Rx is usually sufficient, however not always):

