

Abstract: This document covers the steps necessary to pair up and connect a BlueSnapXP (Extended Range Bluetooth RS232) module to a BlueSnapUSB adaptor.

Before you begin, you will need to have the following items/information ready.

- 1) Null modem cable (to connect from PC to BlueSnapXP, more than likely DB9F to DB9F)
- 2) Async Terminal Program (NOT HyperTerminal, Google search for TeraTerm or other Async Terminal Program of your choice)
- 3) A PC/Notebook to connect both BlueSnapXP (via serial null modem cable) and BlueSnapUSB
- 4) Configuration settings for your RS232 device. This will be the device that the BlueSnapXP will connect.
 1. Comm Parameters: Bit (Baud) Rate, Parity, Data Bits, Stop Bits (ex. 9600,n,8,1)
 2. Data Flow Control requirements (Hardware, Software or NONE)

Configuring BlueSnapXP

You should first verify the flow control settings for your BlueSnapXP, you will need to open the cover and remove/replace jumpers as required for your implementation. Please refer to the BlueSnapXP configuration document.

Configuring BlueSnapXP

- Connect your BlueSnapXP to your computer's serial port via a serial NULL MODEM cable. (Note which Serial COM port is being used for BlueSnapXP).
- Turn on BlueSnapXP.
- Launch your Async Terminal Emulation Program and connect to the COM port with the following COM settings, 115200(9600), N, 8, 1 None (115200(9600) Bps, No Parity, 8 Data Bits, 1 Stop Bit, No/Software Flow Control)
 - If DIP SWITCH #4 is OFF then Bit Rate is 115200, if ON then 9600
 - Flow Control should be set according to prior configuration
- Your BlueSnapXP should be flashing the first LED (Green).
- Initiate a connection in your Async Terminal Program to the BlueSnapXP.
- In your terminal program type >> \$\$\$ <CR> (Note: Depending on your settings you may NOT see the \$\$\$ on screen)
- You should see the prompt >> CMD (if not, enter \$\$\$ <CR> again)
- When you see the CMD prompt, the LED on the BSXP will be "fast flashing"
- At this point, you can enter commands to the BlueSnap for your local configuration. Please see BlueSnapXP configuration documents for further details
- The steps that follow, will configure your BlueSnapXP's Bluetooth settings to work optimally with your BlueSnapUSB. **

D<CR>	Display Current Settings
	* Write Down entry "BTA=####...." you will use this info in configuring the BlueSnapUSB
SP,1234 <CR>	Set Security Pin Code to 1234
SM,0 <CR>	Set Mode to Bluetooth Slave Mode
SA,0 <CR>	Set DISABLE Authentication
R,1	Reset/Reboot the BlueSnapXP

** After successful execution of each command, the BlueSnapXP will respond with >> AOK

** <CR> is just ENTER on the keyboard.

At this point, you should disconnect the BlueSnapXP from the cable to your PC and connect it to your RS232 device." Do not power off the BlueSnapXP. After installing the BlueSnapXP, return to your computer and configure the BlueSnapUSB. Connect your Async Terminal Program the BlueSnapUSB. Use the following communication parameters (115200, N,8,1, No Flow Control)

Configuring BlueSnapUSB

The procedure to connect and enter command mode on the BlueSnapUSB is similar to the one for the BlueSnapXP. Please make sure that you know COM port device that the BlueSnapUSB is using.

- Connect your BlueSnapUSB to an available USB port (if not already connected) . If you are prompted to install drivers for the BlueSnapUSB, you can download them from <http://www.serialio.com/downloads>
- Note: After drivers are installed, you can verify the COM port settings in Windows XP by going to START > SETTINGS > CONTROL PANEL and choosing SETTINGS. In settings go to the HARDWARE tab and choose the DEVICE MANAGER button. Scroll down to PORTS and click on the "+". You will see a list of devices and a port associated with the device. The BlueSnapUSB will be displayed a USB SERIAL PORT (COM#)
- Your BlueSnapXP should be flashing the LED (Green).
- Initiate a connection in your Async Terminal Program to the BlueSnapXP.
- In your terminal program type >> \$\$\$ <CR> (Note: Depending on your settings you may NOT see the \$\$\$ on screen)
- You should see the prompt >> CMD (if not, enter \$\$\$ <CR> again)
- When you see the CMD prompt, the LED on the BlueSnap will be "fast flashing"
- At this point, you can enter commands to the BlueSnap for your local configuration. Please see BlueSnap configuration documents for further details

For BlueSnapUSB enter the commands below. After successful execution of each command, the BlueSnapUSB will respond with >> AOK. If not, then enter the command again.

<i>SP,1234 <CR></i>	Set Security Pin Code to 1234
<i>SM,3 <CR></i>	Set Mode to Bluetooth Auto Master Mode
<i>SA,0 <CR></i>	Set DISABLE Authentication
<i>SR,<###.#></i>	Sets the address of the remote BT device (the <###.#> should be the 12-Digit BT Addr of the BlueSnapXP written down in BlueSnapXP configuration)
<i>R,1</i>	Reset/Reboot the BlueSnapXP

After the reboot is complete, you may need to reconnect the BlueSnapUSB to your Async Terminal Program. Follow the steps above to return to command mode. Enter the following commands:

D<CR>	Display Settings (You should see a display like the following:)
	Settings
	BTA=000A3A20D8F7
	BTName=BlueSnap-D8F7
	Baudrt=115K
	Parity=None
	Mode =Auto
	Authen=0
	Encryp=0
	PinCod=1234
	Bonded=0
	Rem=000A3A23FFA8

Note the last line "Rem" should have the info for the BlueSnapXP. At this point enter the following command.

C<CR> Attempts to connect BlueSnapUSB to the remote BT device entered in previous

At this point, the BlueSnapUSB will continue to flash momentarily and then should turn solid. It is now connected to the BlueSnapXP. You can verify this by going to the BlueSnapXP and seeing that the power LED (Green) should also be solid.

You should now be able to receive/send data between your PC and the console. To test connectivity you can take your laptop out of range ~30 meters. (You should see the BlueSnapUSB's connection LED flash.) Slowly return towards the console and the reconnect should happen automatically (Connection LED solid blue). You can also remove the BlueSnapUSB from your computer, wait a few seconds (or minutes, hours, etc...) and then reinsert (into SAME USB port) and in a few seconds the Connection LED will flash then turn solid.

This procedure will configure the BlueSnap(s) to talk to each other and keep a persistent pairing. You should not have to issue any additional commands to either unit to have them connect.