

BlueConsole

www.blueconsole.com

BlueConsole2

User's Manual

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1.0 Introduction

BlueConsole2 provides true wireless Bluetooth access to RS232 serial ports. It uses an innovative technique to obtain power from existing RS232 hardware handshaking leads. BlueConsole eliminates the need for serial cables, AC adapters, or USB to serial adapters. You will enjoy convenient, untethered access to telecommunications, medical, industrial, scientific, or other RS232 equipment. RS232 devices with sufficient power on the hardware handshaking leads will self-power the BlueConsole adapter. For devices which have insufficient power or lack hardware handshaking leads, you can conveniently connect a 9V battery to provide power.

BlueConsole is available with a DB9 DTE Male, DB9 DCE Female, or an RJ45 modular 8 pin connection. Adapters can be used to provide a DB25 or null-modem style connection.

BlueConsole Features

- True Wireless Bluetooth Access to RS232 Serial Ports
- Powered Directly from RS232 Handshaking Lines - No AC Adapter Required
- Access your RS232 equipment with no wires up to 100m
- No Drivers or Software Required other than a PC/Mac/PDA with Bluetooth
- Use two BlueConsole adapters for Physical RS232 Cable Replacement
- Small, lightweight, and tested with a variety of RS232 Interface Equipment
- Compliant with Bluetooth 2.0 Specification
- Easy to use Config Utility to adjust parameters such as Baud-rate, PIN code, Discoverability, and Device Name
- Convenient 9V battery connection allows BlueConsole to still work with devices that have insufficient power or no hardware handshaking leads
- Flash Upgradeable Firmware for Investment Protection
- Complete <BREAK> Support for RS232 Device Compatibility
- Flexible connection options including DB9 Male, DB9 Female, DB25, or Cisco RJ45
- MultiPoint Forwarding Allows up to 7 Clients to Simultaneously Interact with BlueConsole

2.0 Connecting to BlueConsole from a Native Bluetooth Client

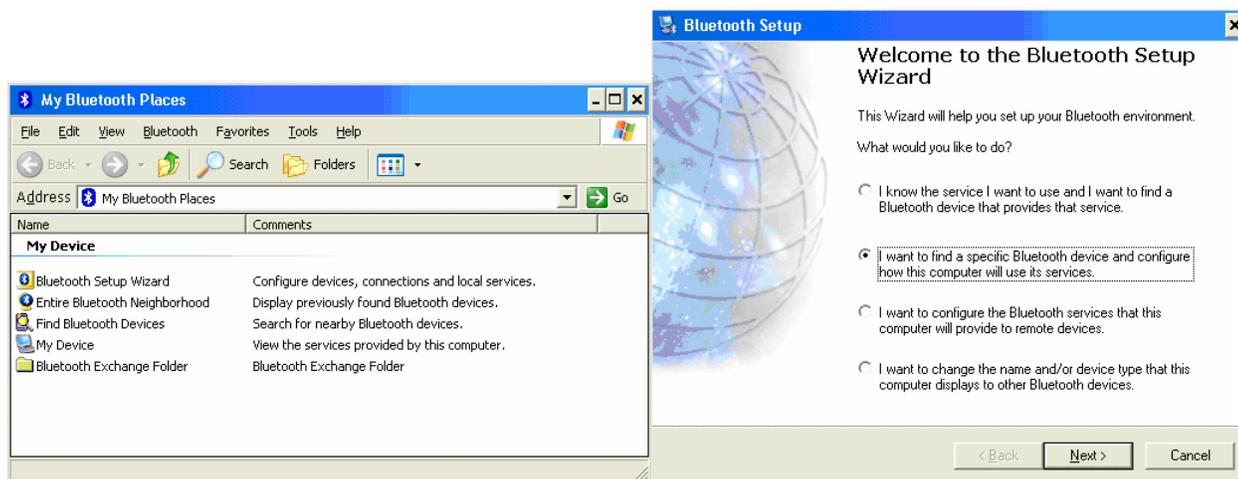
Connecting to BlueConsole from a Bluetooth Client involves these simple steps:

- Ensure your BlueConsole has power by either plugging it into a known-good RS232 device or using a 9V battery
- Discover BlueConsole from your Bluetooth equipped PC / Mac / PDA (Note the default PIN code for BlueConsole is 1234)
- Add the BlueConsole SPP (serial port profile) to your system as a Virtual COM Port
- Connect to BlueConsole using your favorite Terminal Program or Application

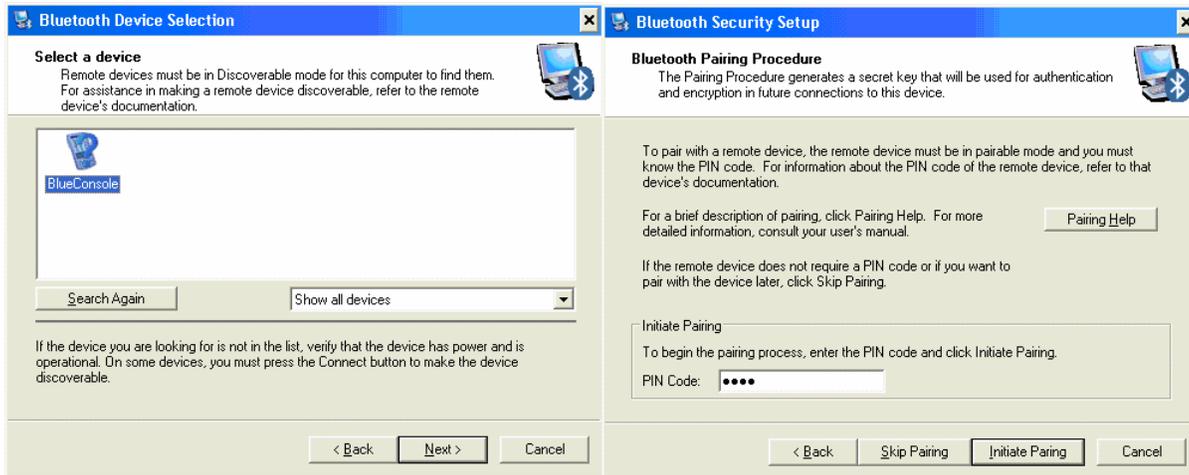
2.1 Connecting from a Windows XP PC with WidComm/Broadcom Bluetooth Drivers

WidComm/Broadcom has one of the industry leading Bluetooth software solutions for PC systems. You can identify that your PC has Widcomm drivers by the icon “My Bluetooth Places” being present. Use the following procedure to add BlueConsole to your system with WidComm drivers:

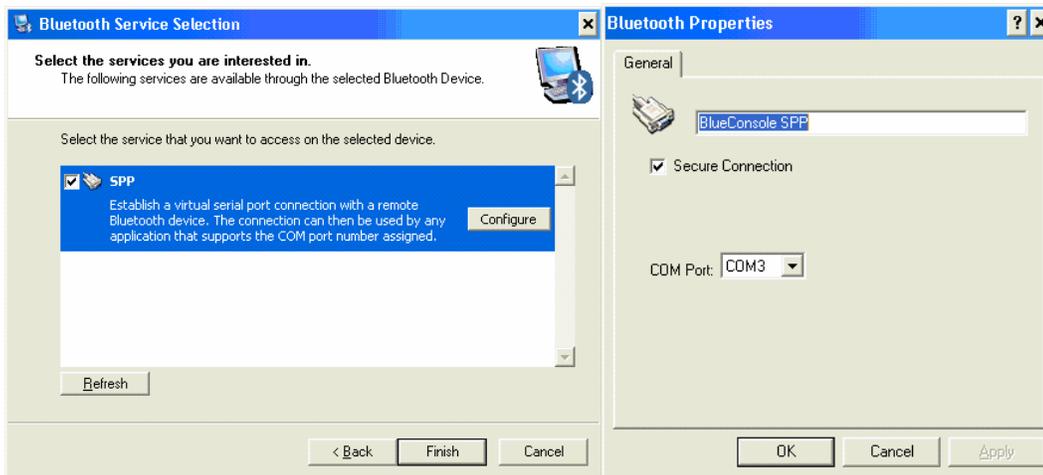
1. Click on “My Bluetooth Places” from your Desktop or Start Menu.
2. Click on “Bluetooth Setup Wizard”, then Select “I want to find a specific Bluetooth device” and click Next.



- BlueConsole should appear in the list. Click on it then click Next. Enter 1234 as the PIN code and click “Initiate Pairing”.



- Select the SPP (serial port profile) and click Configure. (Note: If the SPP Service does not appear, you may need to Add another COM Port under Bluetooth, Advanced Configuration, Client Applications.) Ensure that “Secure Connection” is checked and select which COM port you want to use on your PC. Click OK and Finish.



- You will see the BlueConsole SPP added under My Bluetooth Places. You can now access your COM port using Hypterminal or other terminal software.



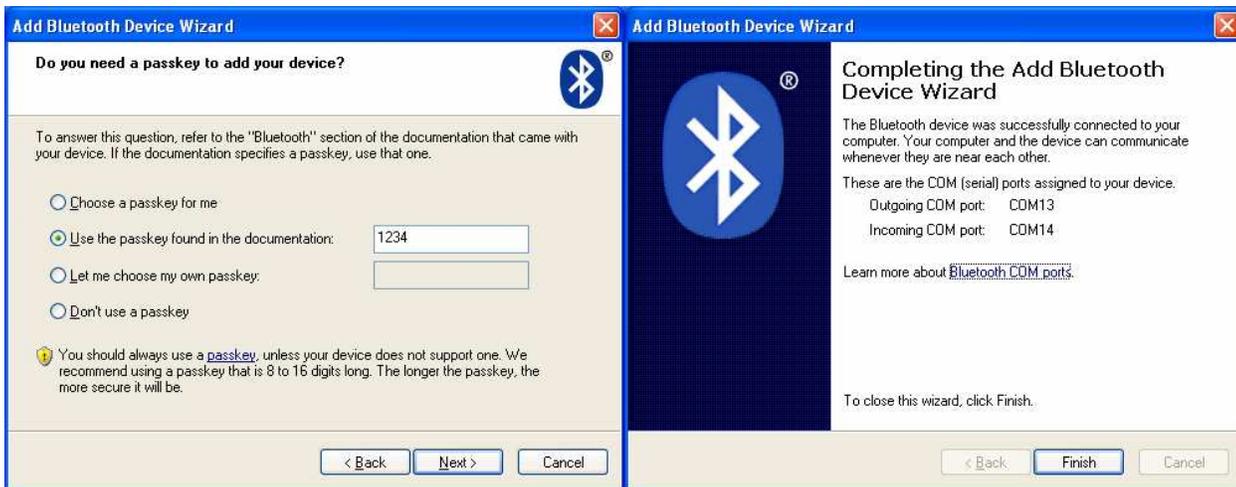
2.2 Connecting from a Windows XP PC with Native Microsoft Bluetooth Drivers

Microsoft added native Bluetooth support in Windows XP SP2. A PC using the Microsoft drivers can be identified by the option “Bluetooth Devices” appearing under Settings/Control Panel. Use the following procedure to add your BlueConsole device to an XP SP2 system with Microsoft Windows XP Native Bluetooth support:

1. From Settings/Control Panel, click “Bluetooth Devices”
2. Check the “My device is set up” box and click Next. Select BlueConsole from the Discovered device list and click Next.



3. Select “Use a passkey found in the documentation”, Enter 1234 (default) for the passkey and click Next. Windows will now add your BlueConsole device and assign two COM ports. Note you will only use the Outgoing COM port to connect to BlueConsole. You can safely delete the Incoming COM port if you like.

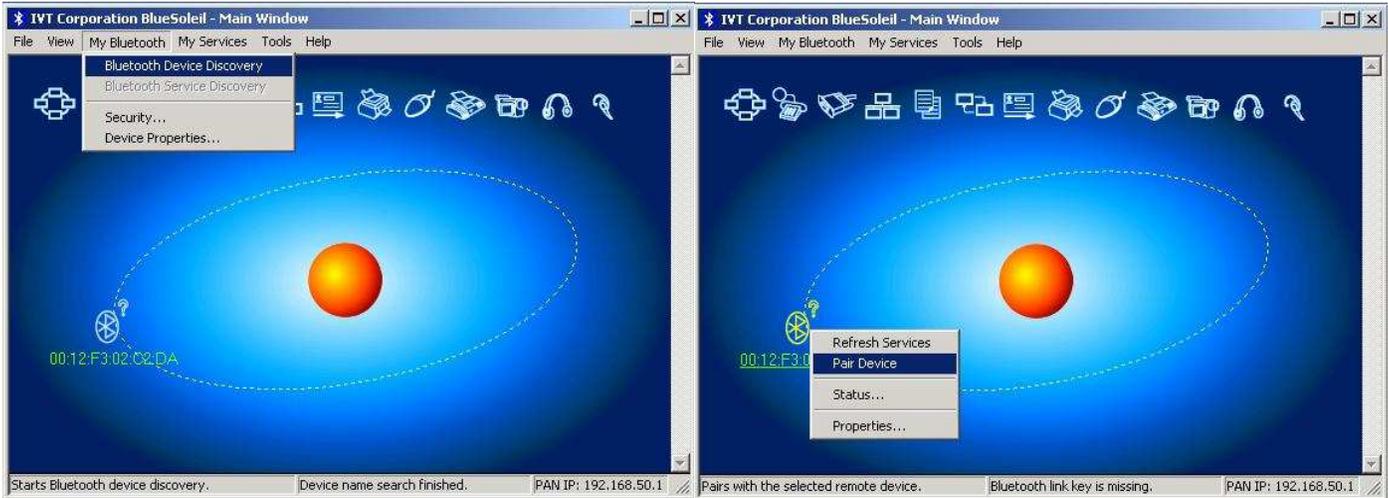


4. Use Hyperterminal to test your BlueConsole Outgoing COM port:

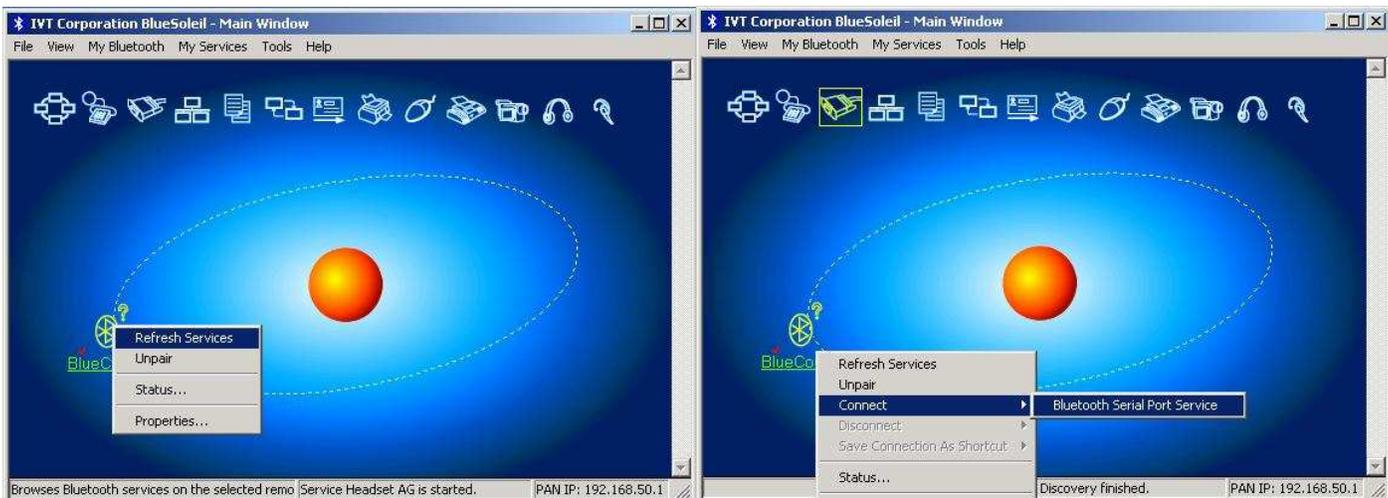
2.3 Connecting from a Windows XP PC with BlueSoleil Drivers

IVT BlueSoleil is a Bluetooth driver set bundled with some low cost USB Bluetooth dongles. Use the following procedure to add BlueConsole to your system with BlueSoleil drivers:

1. From the MyBluetooth menu, Click “Bluetooth Device Discovery”. It should Discover your BlueConsole adapter, however may not display the name. Right-click the BlueConsole Device and choose “Pair Device”. Enter 1234 as the PIN Code. BlueSoleil should display a red check-mark to indicate Pairing was successful.



2. Right-click the BlueConsole device and choose Refresh Services to Discover the Serial Port Profile (SPP). Choose Connect, then “Bluetooth Serial Port Service”. Note the assigned COM Port number of the Outgoing Connection, and answer “Yes” to connect when a Windows application uses the COM port.



3. You should now be able to connect to your BlueConsole adapter from your application or terminal program. Note that the BlueSoleil software must be running on the PC in order to use Bluetooth services. A Bluetooth logo in your Windows tray indicates BlueSoleil is running.

2.4 Connecting from a Palm/Treo PDA

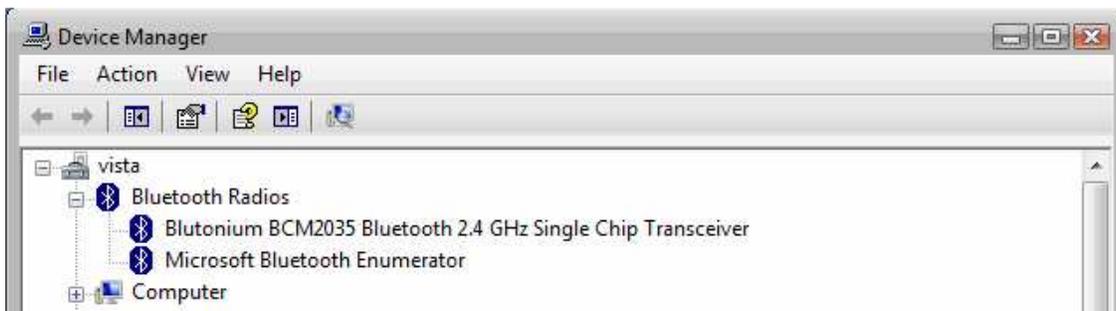
Modern Palm and Treo devices are equipped with Bluetooth. These can be identified by the Bluetooth logo in the upper right corner of the Home display. In order to Discover your BlueConsole adapter, click on the Bluetooth icon on your PDA and choose “Setup Devices”, “Trusted Devices”, then “Add Device”. Select “Show: Nearby Devices”. Your “BlueConsole” device should be in the display.

You can obtain free Bluetooth terminal software called TriConnect at <http://tridone.com>. After installing and running TriConnect on your PDA, choose “Bluetooth Connect” from the menu and select your BlueConsole adapter. Tridone sells a more advanced version the Triconnect software if additional features are needed.

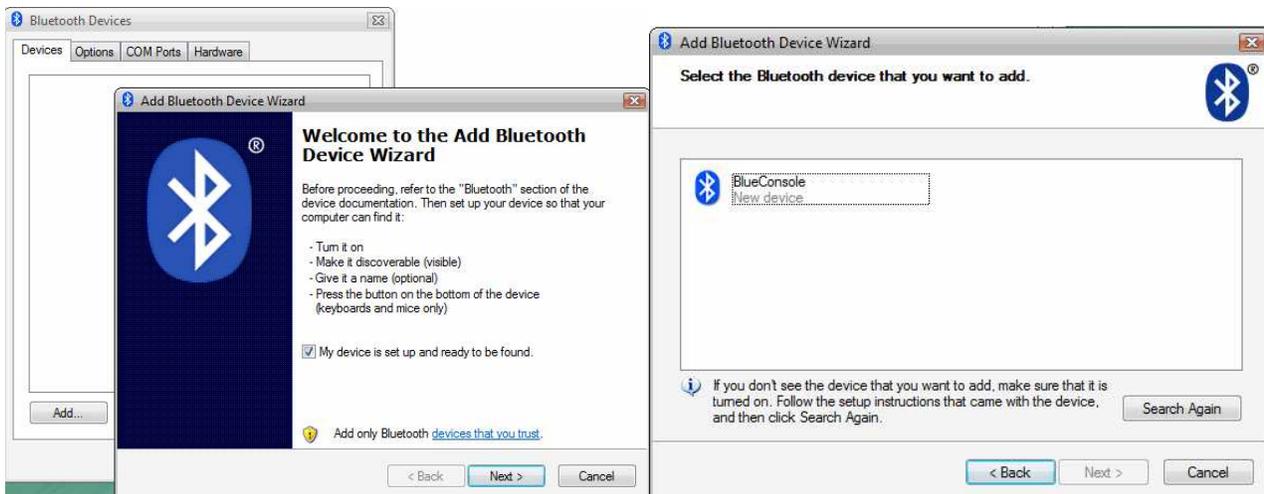
2.5 Connecting from Microsoft Windows Vista

Windows Vista has integrated Bluetooth support similar to Windows XP SP2.

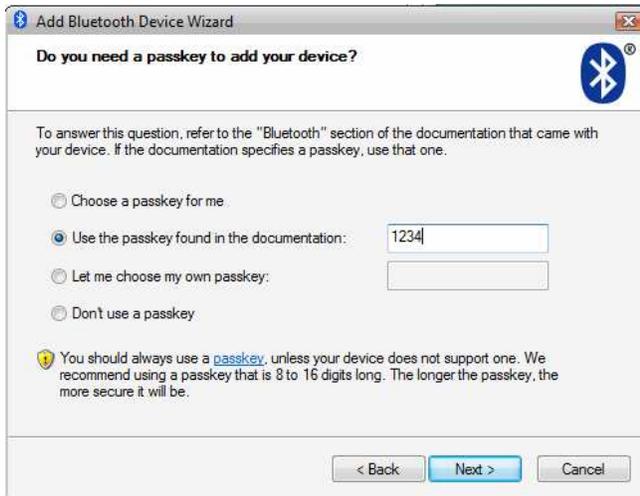
1. Make sure your PC Bluetooth adapter and driver is detected and working in Windows Vista under Control Panel, Hardware & Sound, Device Manager.



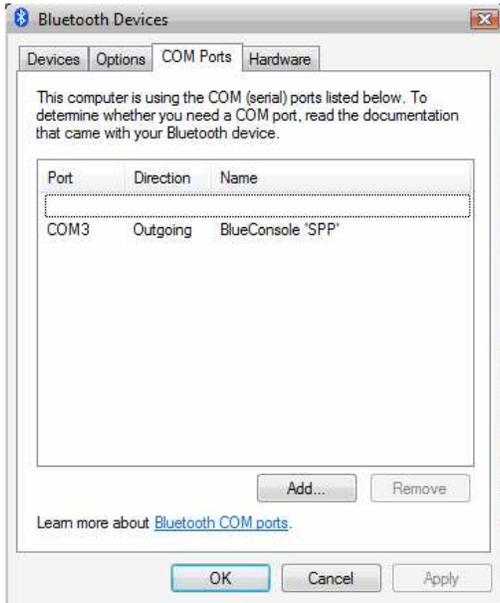
2. Click Start, Control Panel, Network & Internet, Bluetooth Devices. Check the “My device is set up” box and click Next. Select BlueConsole from the Discovered device list and click Next.



3. Select "Use the passkey found in the documentation" and enter "1234" as the PIN. Click Next.



4. Delete the Incoming COM Port. Note the Outgoing COM number (COM3 in this example):

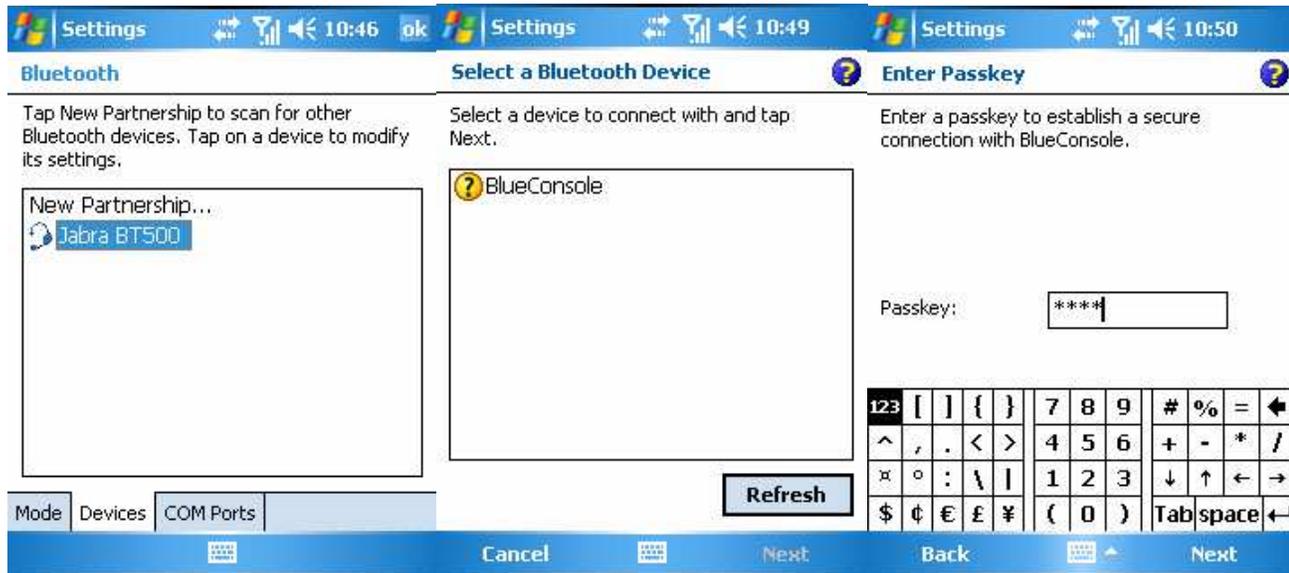


5. Microsoft has removed the Hyperterminal program in the Windows Vista release. You can still use third party terminal programs such as Teraterm, Procomm, and SecureCRT.
6. Download and install the latest Teraterm Pro from: <http://sourceforge.jp/projects/ttssh2> . Be sure to download the English (non-Japanese) version of the open source software. Note only the Teraterm component is required for the install – the others can be de-selected.
7. Run Teraterm Pro, select 'Serial', and then select the Outgoing COM port that was created for your BlueConsole adapter.

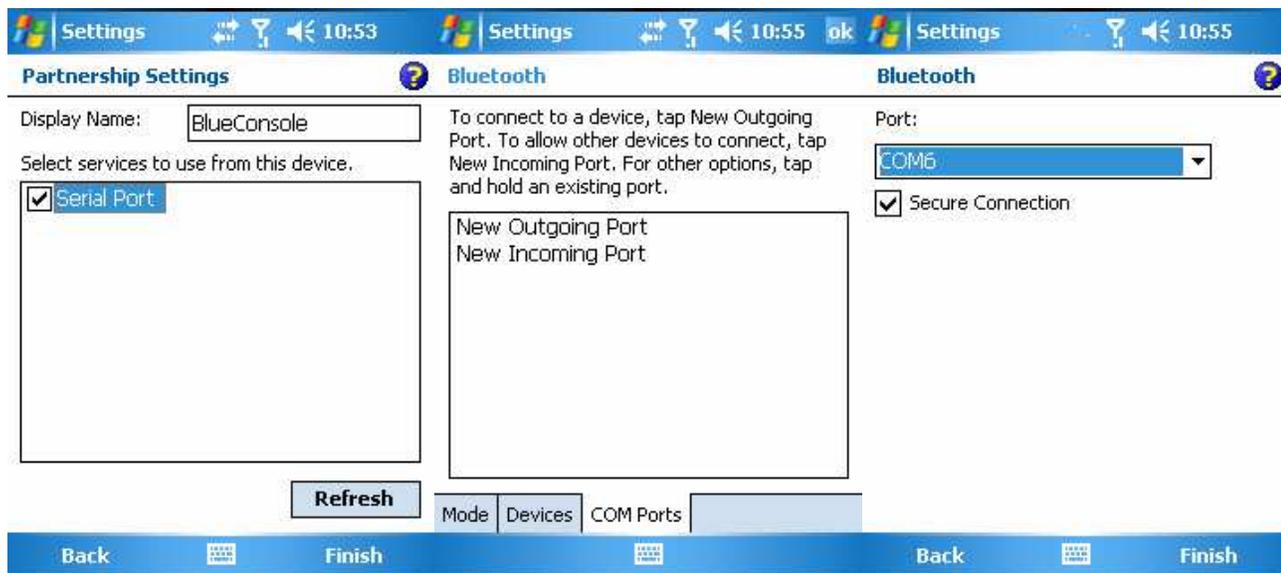
2.6 Connecting from Windows Mobile PocketPC (2003, WM5, WM6)

These connection instructions are for Bluetooth equipped PocketPC and PocketPC Phones running Windows Mobile 2003 or later software.

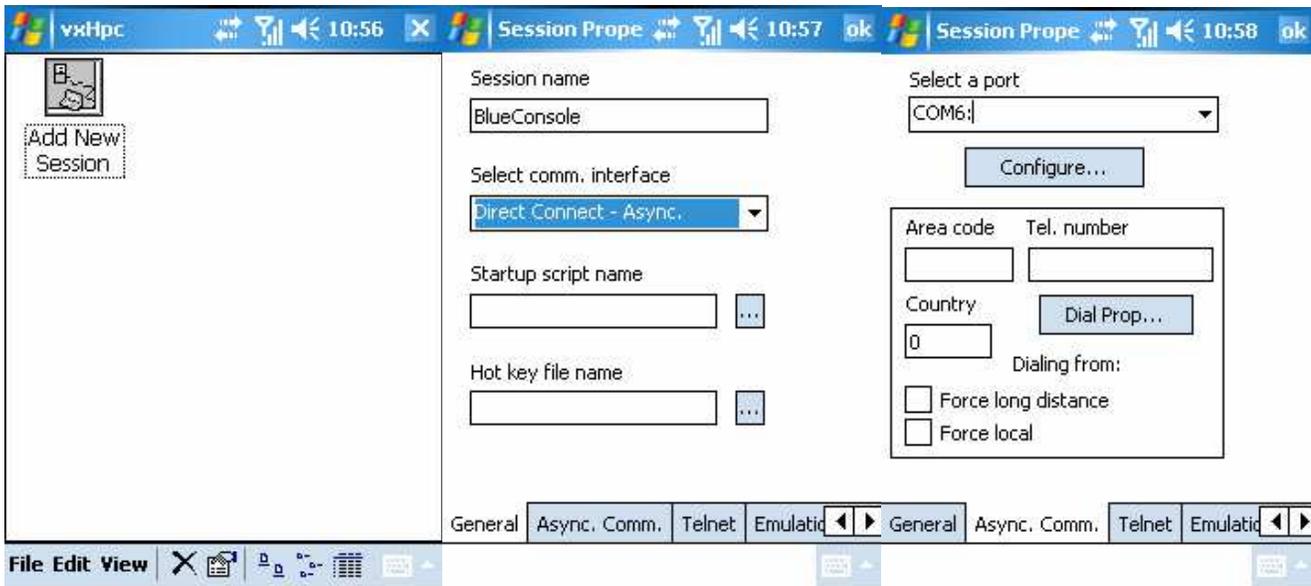
1. Click “Start”, “Settings”, “Connections”, “Bluetooth”, “Devices”. Click “New Partnership...” to Discover your BlueConsole adapter. Select “BlueConsole”, enter the Passkey value (1234 is the Default), and click Next.



2. Check the “Serial Port” box and click “Finish”. Click “COM Ports”, and then “New Outgoing Port”. Check the “Secure Connection” box and make note of the COM port number assigned by Windows (COM6 in this example) then click Finish.

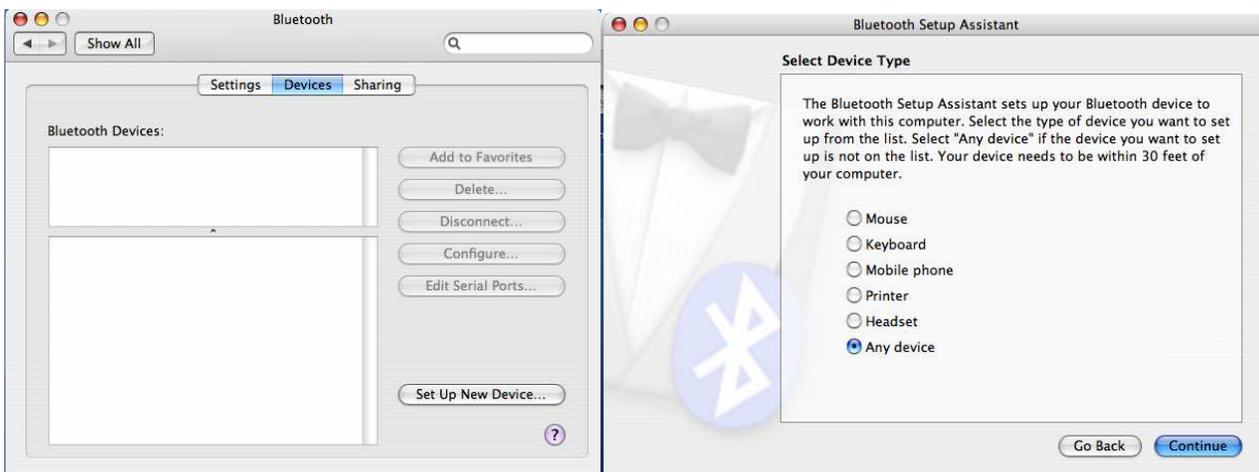


- Windows Mobile 5.0 does not come with terminal emulation software. There are three shareware terminal programs for PocketPC systems that you can try via ActiveSync:
 - PocketTTY – DejaVu Software - <http://www.dejavusoftware.com/pocketty>
 - mToken – Choung Networks - <http://choung.net/mToken>
 - VxHPC – Cambridge Computer - <http://www.cam.com/vxhpc.html>
- Launch VxHpc. Click “Add New Session”, name the session “BlueConsole”, and select “Direct Connect – Async.” from the drop-down box. Click “Async. Comm.” and manually type the port number from Step 2 followed by a colon (e.g. COM6:). Click “ok” and you are ready to connect to your BlueConsole adapter by double-clicking the BlueConsole session.

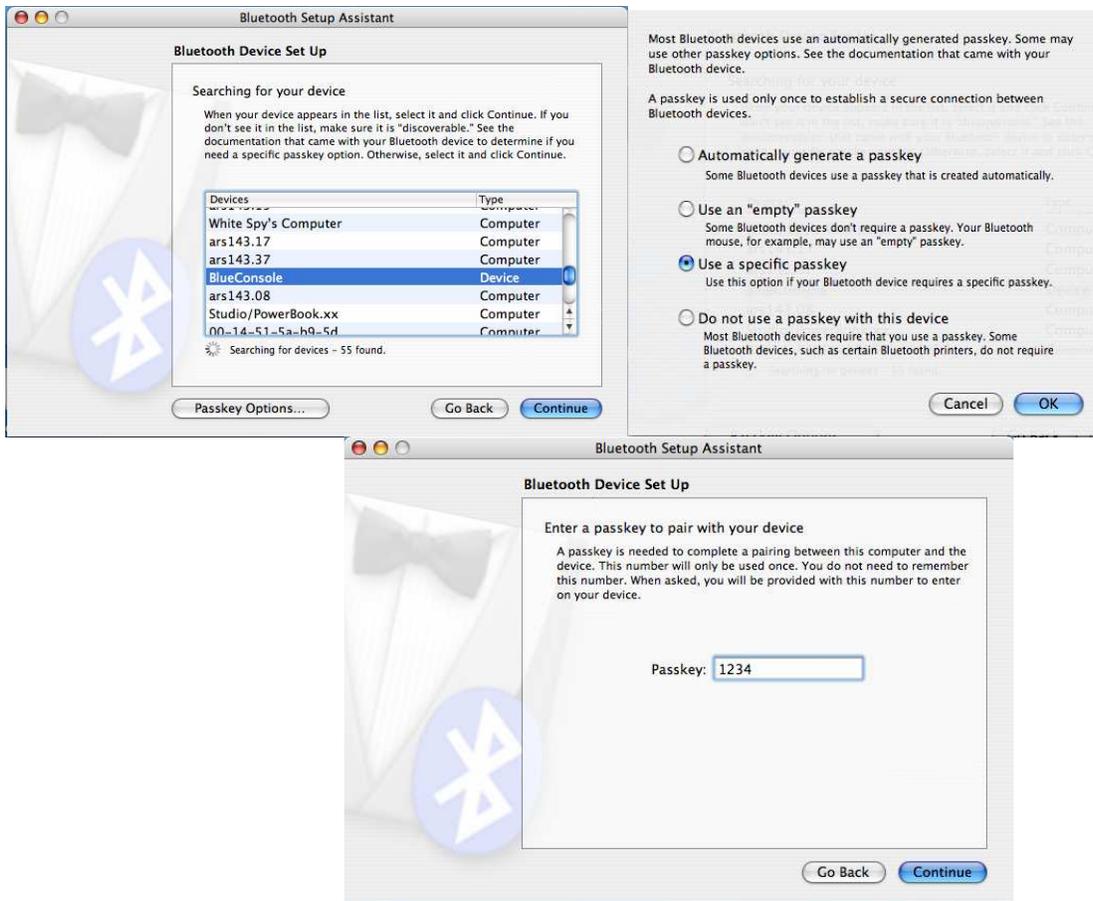


2.7 Connecting from Apple Mac OS X

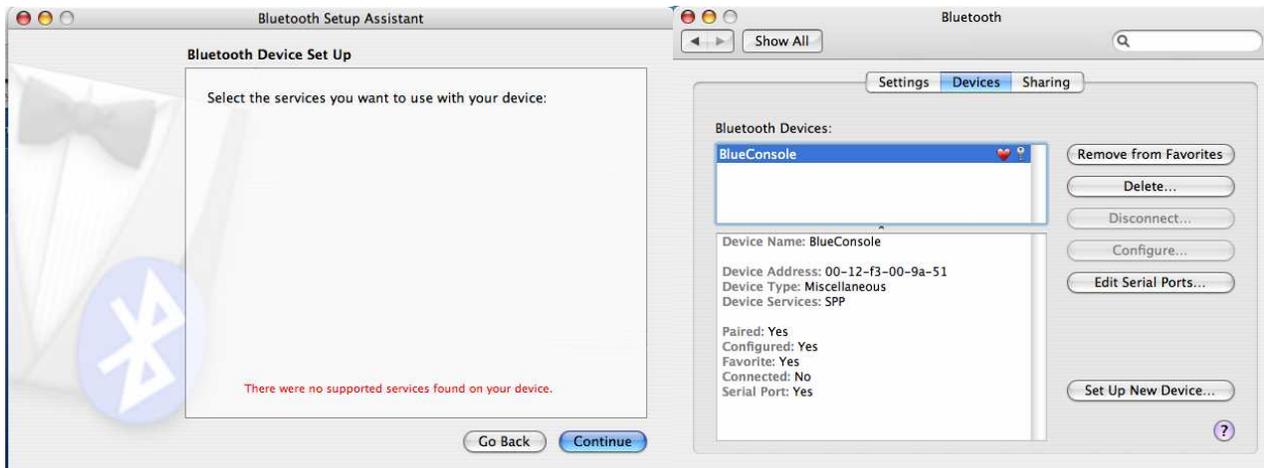
- Select “System Preferences” from the Mac OS Dock. Launch the Bluetooth Setup tool under Hardware/Bluetooth. Click “Set Up New Device”, choose “Any Device”, and click Continue.



- Find your BlueConsole device from the Discovered device list. Click PassKey Options, select “Use a specific passkey”, and click OK then Continue. Enter 1234 as the Passkey.



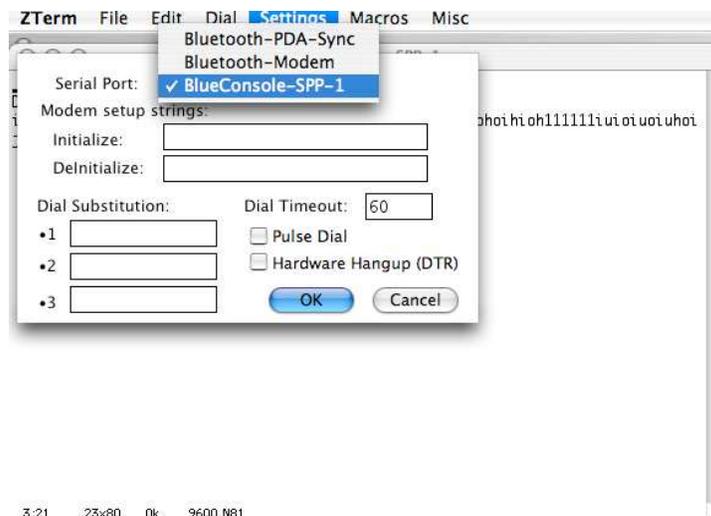
- The Bluetooth Setup Assistant will say “There were no supported services found on your device”. This is normal. Click Continue then Quit. Go back into the Bluetooth Setup tool again and BlueConsole will be Paired with your Mac.



- Click on Edit Serial Ports. Click the + button to add the BlueConsole SPP profile as a virtual Serial Port. Check “Require Pairing for security” and note the Port Name. Click Apply.



- You now need a terminal program to access your virtual Serial Port. Apple no longer ships a Serial Port Terminal program with Mac OS X. However you can download a popular Shareware terminal program called Zterm from here. Be sure to download the Zterm version for Mac OS X.
<http://homepage.mac.com/dalverson/zterm>
- Launch Zterm. Click Settings then Modem Preferences. Click on your BlueConsole virtual Serial Port which should have a name like BlueConsole-SPP-1. Remove any Initialize strings since there is no real modem present. Click OK and you should be Connected to your BlueConsole adapter.



2.8 Connecting from Linux with BlueZ Bluetooth Drivers

Modern versions of the Linux kernel have integrated the BlueZ protocol stack (www.bluez.org). It is recommended that you use the Linux 2.6 kernel for the latest Bluetooth USB driver support. However this procedure may also work with later versions of the Linux 2.4 kernel.

1. Edit the `/etc/Bluetooth/hcid.conf` file. Towards the end, delete the comment `#` on ‘auth enable’ and ‘encrypt enable’ to make BlueZ use Authenticated/Encrypted connections. Note on some Linux distributions this step may not be required.
2. Start Bluetooth Support

```
# /etc/init.d/bluetooth start (start the BlueZ Linux Bluetooth drivers)
(Note: You can rename /etc/rc.d/rc.5/K90bluetooth to S90bluetooth to start during bootup)
# /etc/init.d/bluetooth status (show status of Bluetooth processes)
```
3. Verify you can see your local USB Bluetooth Adapter:

```
# lsusb (list local USB devices)
# hciconfig -a (list Bluetooth manufacturer, attributes, and HCI layer status)
(Ensure HCI is UP RUNNING PSCAN ISCAN AUTH ENCRYPT)
```
4. Attempt to Discover your BlueConsole:

```
# hcitool scan (Scan/Discover nearby Bluetooth devices – note the MAC address)
Scanning ... 00:12:F3:00:9A:51 BlueConsole
```
5. Create a tty device binding to the BlueConsole MAC address using RFCOMM:

```
# rfcomm bind 0 00:12:F3:00:9A:51 (Bind BlueConsole to device /dev/rfcomm0:)
(Note you can store Automatic Bindings in the /etc/bluetooth/rfcomm.conf file)
```
6. Setup the Linux Minicom Terminal Program to Communicate with your new tty device:

```
# minicom -s (Run Minicom Setup Menu)
Under “Serial Port Setup”, change the “Serial Device” to /dev/rfcomm0
Choose “Save setup as dfl” to save the Minicom default settings.
```
7. Connect to BlueConsole from your Minicom Terminal:

```
# minicom -o (Run Minicom terminal without sending any Modem commands)
The BluePIN Helper dialog should appear. Enter 1234 as the BlueConsole PIN Code
# minicom -o (Wait a few seconds and run minicom again once pairing is complete)
(Note: Use <CTL-A> Z then Q to quit the Minicom Terminal Program)
```
8. Other Useful Commands (where `<bdaddr>` is the MAC address of BlueConsole):

```
L2ping <bdaddr> (Ping remote BlueConsole)
hcitool info <bdaddr> (Show info about remote BlueConsole)
hcitool con (Show current Bluetooth connections)
rfcomm (Show RFCOMM connections and status)
vi /etc/bluetooth/hcid.conf (Bluetooth HCI Setup Options)
vi /etc/bluetooth/rfcomm.conf (Store Auto-loaded RFCOMM bindings)
rm /etc/bluetooth/link_key (Delete stored Pairing/Link keys to start over)
man (Manuals for hcid, rfcomm, hcitool, hciconfig, l2ping, sdptool, minicom)
```

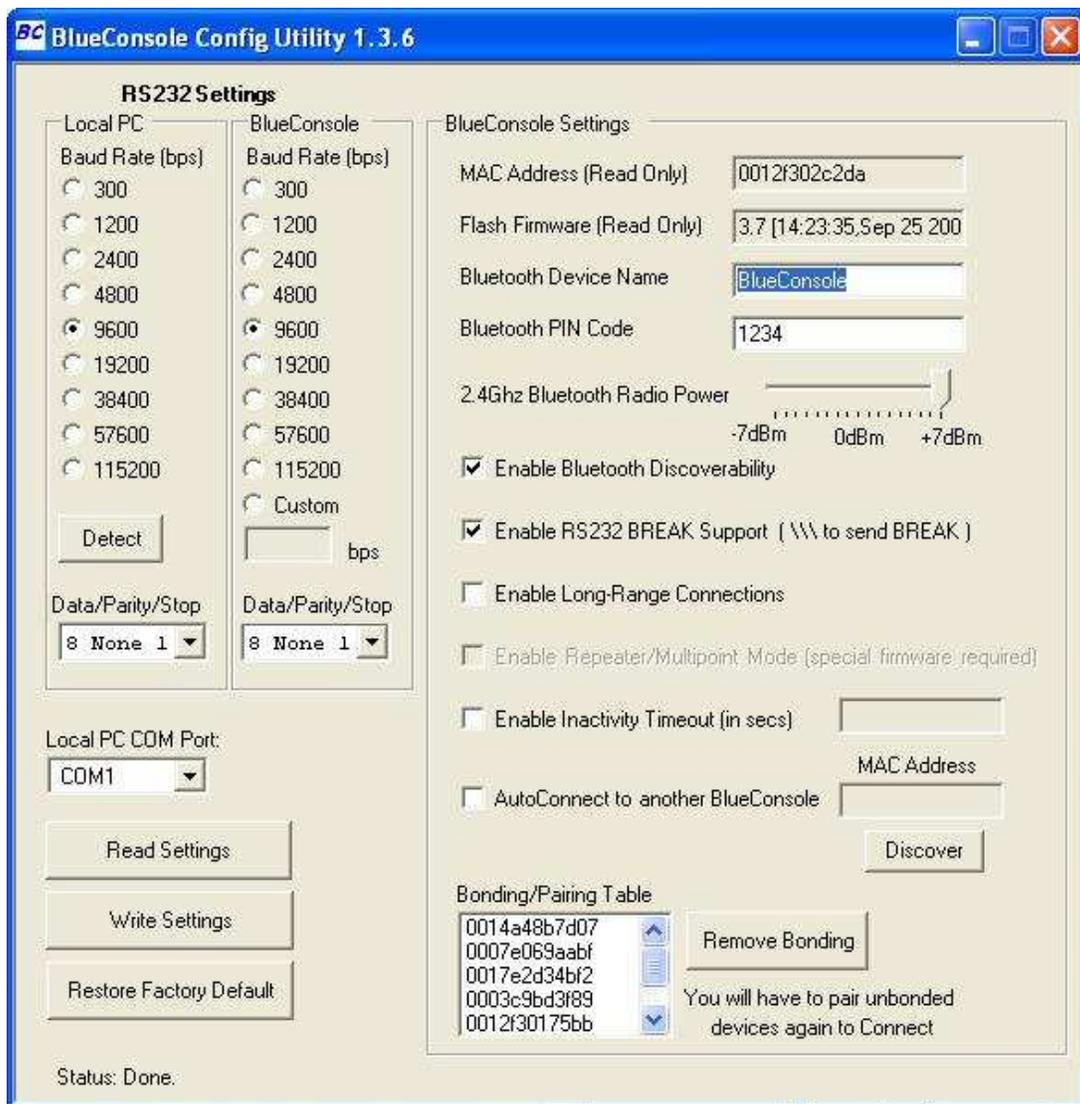
3.0 Changing BlueConsole Settings with the Config Utility

BlueConsole settings can be changed using the BlueConsole Config Utility downloadable at <http://www.blueconsole.com/downloads.htm>. The Config Utility requires that the Microsoft .NET Framework be installed on a Windows XP computer (see the README file). If you have a Mac or other non-Windows platform, you can also configure BlueConsole from the Command-Line. See the Application Note on Configuring BlueConsole from the Command-Line for more details.

The Config Utility connects from your PC to Blueconsole over a Serial/COM port. This can be either a physical DB9 COM port on the PC, or over a wireless Bluetooth Virtual COM port (see Section 2.0). Note that on a Bluetooth Virtual COM port, the RS232 settings are not used – and any baud rate setting will work.

Also note that changing the baud-rate on a Bluetooth Virtual COM port in your terminal or application program will NOT update the BlueConsole RS232 port baud rate. You must use the Config Utility to set the Baud-rate, Databits, and Parity for the BlueConsole RS232 port to talk to your RS232 device.

The BlueConsole Config Utility screen will look like the following:



Baud Rate – Local PC: Baud Rate for your Local PC Serial Port to Communicate with BlueConsole for Configuration. This field is not used when Configuring over a Bluetooth (over the air) Connection.

Baud Rate - BlueConsole: When Reading the BlueConsole Config, this displays the current baud rate setting on BlueConsole. When Writing to BlueConsole, this specifies the new baud rate for the BlueConsole RS232 port. Custom baud rates from 256bps to 115200bps are also supported. The Default is 9600 baud.

Data Bits, Parity, and Stop Bits – Local PC: Data Bits and Parity for your Local PC Serial Port to Communicate with BlueConsole for Configuration. This field is not used when Configuring over a Bluetooth (over the air) Connection.

Data Bits,Parity, and Stop Bits – BlueConsole: When Reading the BlueConsole Config, this displays the current Data Bits and Parity setting rate on BlueConsole. When Writing to BlueConsole, this specifies the new Data Bits and Parity setting for the BlueConsole RS232 port. The Default is 8 bits, No Parity, 1 Stop Bit.

Detect Button: If you don't know the RS232 settings for BlueConsole, this button serves as a last resort. It will try every RS232 Setting combination to try and Detect BlueConsole's current RS232 settings.

Local PC COM Port: Specifies the PC COM Port for communication with BlueConsole. This can either be a physical Serial COM port on the PC, or a virtual COM port over a Bluetooth Connection.

MAC Address: When Reading the BlueConsole Config, this displays the current BlueConsole hardware MAC address.

Firmware Release: When Reading the BlueConsole Config, this displays the current BlueConsole firmware version.

DeviceName: When Reading the BlueConsole Config, this displays current Device Name. When Writing to BlueConsole, this specifies the new desired Device Name. Default is "BlueConsole".

PIN Code: When Reading the BlueConsole Config, this displays the current Pairing PIN Code. When Writing to BlueConsole, this specifies the new desired Pairing PIN Code. Default is 1234.

2.4Ghz Bluetooth Radio Power: When Reading the BlueConsole Config, this indicates the current power level of the Bluetooth radio. When Writing the BlueConsole Config, this specifies the new radio power level. You should only reduce the radio power if it is desirable to reduce the Bluetooth range. Reducing the radio power will not significantly reduce Blueconsole power consumption or 9V battery life. Default is Full Power.

Enable Bluetooth Discovery: When Reading the BlueConsole Config, this displays the current Discovery State. When Writing to BlueConsole, this specifies the new desired Discovery State. Discovery On will allow clients to perform Discovery for new Pairings with BlueConsole. Discovery Off prevents new Clients from seeing BlueConsole for higher security after Pairing is complete. Default is "On".

Enable RS232 <BREAK> Support: This option allows you to turn RS232 <BREAK> transmission support On or Off. Use the character sequence \\ to actually send an RS232 <BREAK> from a terminal program. See the Application Note: Sending an RS232 <BREAK> for more details. Default is "On" if supported.

Enable Long-Range Connections: This option enables a more aggressive Page-Scan by the BlueConsole Bluetooth radio. By scanning more often, initial connections from Bluetooth Clients can occur faster and from slightly longer distances. This is at the expense of slightly greater power consumption. Enable this option if long range is the highest priority for your application. Default is “Off”.

Enable Repeater/Multipoint Mode: When Reading the BlueConsole Config, this displays the current Repeater/Multipoint Mode state. When Writing to BlueConsole, this specifies the new desired Repeater/Multipoint state. In order to use Repeater or Multipoint Modes, you must load special firmware on BlueConsole. See the Application Notes for details on the Repeater and Multipoint features. Default is “Off”.

Enable Inactivity Timeout: You can optionally enable an Inactivity Timeout on BlueConsole. When there is a Bluetooth connection which has been idle for the Timeout Period (in seconds), the Bluetooth connection is dropped. Default is “Off”.

AutoConnect to another BlueConsole: This feature is used for connecting two wireless BlueConsole adapters together as a physical cable replacement. Setting Auto-Connect to “On” will cause the Master BlueConsole unit to call a Slave BlueConsole on startup. When enabled, you must supply the MAC address of the BlueConsole Slave unit you want to connect to. Only enable AutoConnect on the Master. Default is “Off”.

“Discover” button for AutoConnect: The Discover button is used for AutoConnect cable replacement between two BlueConsole adapters. The Master BlueConsole will attempt to Discover another Blueconsole unit and provision the AutoConnect feature. See the section on Serial Cable Replacement for more details.

Bonding/Pairing Table: When Reading the BlueConsole Config, this displays the devices that have previously Bonded/Paired and established link encryption keys with BlueConsole. The MAC addresses of the Paired clients are displayed in the list box.

Remove Bonding: This button removes a Pairing/Bonding entry from BlueConsole. Note that after deleting a Bonding entry, that Client device will no longer be able to Connect to BlueConsole until it is Paired again. When configuring over a Bluetooth Connection, be careful not to delete your own Bluetooth Client.

Read BlueConsole Settings: This button connects to BlueConsole and Reads all the current Configuration Settings. The fields in the Config Utility GUI will all be updated to reflect the current BlueConsole settings.

Write BlueConsole Settings: This button connects to BlueConsole and Writes the Configuration Settings. The updates you populated in the Config Utility fields will be written to the BlueConsole flash memory.

Restore Factory Default: This button connects to BlueConsole and restores the Factory Default Settings. It does not delete any Bonding/Pairing entries from BlueConsole.

4.0 Configuring RS232 Serial Cable Replacement (AutoConnect)

You need two BlueConsole adapters to accomplish physical RS232 cable replacement. We will refer to these two BlueConsole units as the “Master” and the “Slave”. The Slave requires no configuration other than the default BlueConsole settings. The Master will be configured to “AutoConnect” to the Slave’s MAC address on power up.

Cable Replacement Configuration

- Attach 9V batteries to ensure you have adequate power on both BlueConsole adapters
- Connect the “Master” BlueConsole adapter to a Local DB9 Serial/COM Port of a Windows PC with an adapter or null modem.
- Run the BlueConsole Config Utility.
- Click “Discover” to Read the current settings and Discover the Slave unit MAC Address
- Click “Write Settings” to save the Configuration.
- Also adjust the Baud Rate of the Master & Slave if necessary using the Config Utility. The default is 9600 baud, 8 bits, No Parity.

Cable Replacement Testing

Once configured, you can connect the BlueConsole Master and Slave to your RS232 devices. To facilitate initial testing you should use 9V batteries to ensure you have power. Once they operate correctly in this mode, you can test whether they will line power without a battery. It is likely that the “Master” unit will always need a 9V battery to operate. The “Slave” unit will likely operate with line power from your RS232 device. You can also swap the Master and Slave between your RS232 devices to try to achieve inline power.

Note that if the BlueConsole Master loses connection to the Slave, it will continuously attempt to reconnect every 10 seconds. You can disable the AutoConnect feature by un-checking the AutoConnect box and performing a “Write Settings” on the Master.

Cable Replacement Troubleshooting

- Have you tested a physical serial cable first to ensure your devices talk without BlueConsole
- Use a 9V battery for testing to ensure each BlueConsole has power
- Verify the baud rate and serial port settings of BlueConsole match your RS232 devices
- Verify the PIN code matches on both the “Master” and “Slave”
- Be sure you only configured AutoConnect on the “Master” BlueConsole unit. It is not needed on the “Slave” unit.
- Is the MAC Address of the Slave correctly entered in the Master Autoconnect section?
- Use Software or Xon/Xoff flow control if possible for initial testing
- Power cycle both BlueConsole adapters (disconnect from DB9 and pull the 9V battery)
- If you are using a PC, close your software Terminal Program and reconnect
- Verify your BlueConsole adapters MACs show up in each others Bonding List

5.0 Specifications

Size: 1.3" X 2.4" X .6" (3.3cm X 6cm X 1.5cm) 1oz (29g)

Power Input: *Option 1: 4V – 15V on RS232 Hardware Handshake pins or Pin 9*

Option 2: 9V Battery (if Option 1 fails)

Note: Isolation and reverse voltage protection is provided between all power sources

Bluetooth Power Class: Class 1 Device 5mW +7dBm

Operating Frequency: 2.402 – 2.480Ghz / 79 X 1Mhz Channels with Adaptive Frequency Hopping

Distance: ~100m Unobstructed. ~20-50m Obstructed.

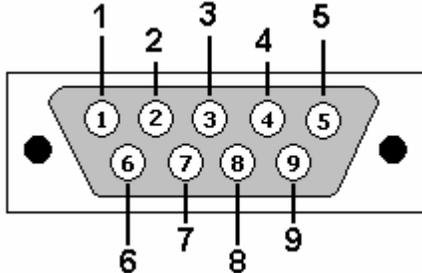
Bluetooth 2.0 Qualification: QPLN Reference B02598

Wireless Security: E0 Encryption and SAFER+ Authentication via PIN Code

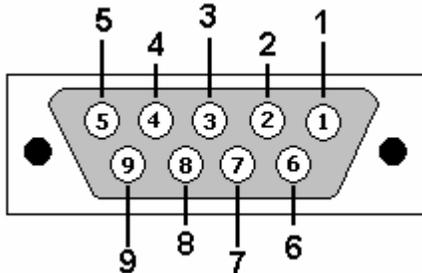
Operating Temperature: -30°C to 75°C

RS232 Speed: 300bps to 230Kbs (including non-standard baud rates)

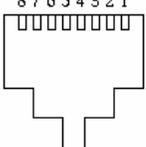
DB9 DTE Male Version - RS232 Pin-Out

 <p>Front of BlueConsole DB9 Male</p>	<p>Pin 1: DCD <- (can be used to power BlueConsole) Pin 2: RXD <- (Tx from RS232 device to BlueConsole) Pin 3: TXD -> (Tx from BlueConsole to RS232 device) Pin 4: DTR -> Pin 5: GND Pin 6: DSR <- (can be used to power BlueConsole) Pin 7: RTS -> Pin 8: CTS <- (can be used to power BlueConsole) Pin 9: RI <- (can be used to power BlueConsole)</p>
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DB9 DCE Female Version - RS232 Pin-Out

 <p>Front of BlueConsole DB9 Female</p>	<p>Pin 1: DCD -> Pin 2: RXD -> (Tx from BlueConsole to RS232 Device) Pin 3: TXD <- (Tx from RS232 device to BlueConsole) Pin 4: DTR <- (can be used to power BlueConsole) Pin 5: GND Pin 6: DSR -> Pin 7: RTS <- (can be used to power BlueConsole) Pin 8: CTS -> Pin 9: RI <- (can be used to power BlueConsole)</p>
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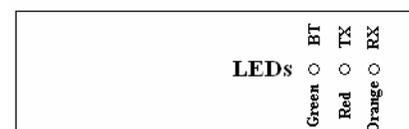
RJ-45 Version - RS232 Pin-Out (Cisco/DEC pinout)

<p>looking at the front of a male connector 8 7 6 5 4 3 2 1</p> 	<p>Pin 1: <- RTS (can be used to power BlueConsole) Pin 2: <- DTR (can be used to power BlueConsole) Pin 3: <- RXD (Tx from RS232 device to BlueConsole) Pin 4: GND Pin 5: GND Pin 6: -> TXD (Tx from BlueConsole to RS232 device)</p>
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Monitoring LEDs (on some DB9 Model BlueConsole2 Adapters)

Green / BT Illuminated when there is an Active Bluetooth Connection.
 Red / TX Illuminated when Blueconsole is Transmitting data on the RS232 port
 Orange / RX Illuminated when Blueconsole is Receiving data on the RS232 port

(BlueConsole Side View)



6.0 Troubleshooting

Cannot Discover my BlueConsole via Bluetooth

- Attach a 9V battery to ensure BlueConsole is getting power
- Make sure the 9V battery is not dead
- Bring your Computer and BlueConsole closer together to rule out distance
- Power cycle your BlueConsole adapter
- Ensure your PC Bluetooth software is indeed working and the Bluetooth radio is On
- Try another PC/PDA equipped with Bluetooth to Discover BlueConsole
- Connect BlueConsole to a local COM port and run the Config Utility (see section 3.0)
- Verify Discoverability is not turned off on BlueConsole (see section 3.0)

Can Discover BlueConsole, but cannot Connect to it via Bluetooth

- Power cycle your BlueConsole adapter
- Power cycle your PC to ensure there are no hiccups with your Bluetooth software
- Delete and Re-Pair BlueConsole with your Client/PC Bluetooth software again
- Be sure you are using the correct PIN code (default is 1234)
- Be sure you have enabled a “Secure Connection” for your COM port with Widcomm drivers
- Connect BlueConsole to a local COM port using the Config Utility (see section 3.0)
- Validate the PIN code on BlueConsole (see section 3.0)
- Delete the current Bonding/Pairing entries from BlueConsole and your PC (see section 3.0)

Can Discover and Connect to BlueConsole, but can't send/receive data to my RS232 device

- Ensure DB9 or RJ45 on BlueConsole is fully seated into RS232 device
- Use the Config Utility to set the correct baud-rate and serial settings for BlueConsole.
- Verify the serial port settings and baud-rate of BlueConsole match your RS232 device
- If you are seeing garbage, it is usually an indication of improper baud rate setting
- Use the Config Utility over a Bluetooth connection to verify the serial port settings
- Try a DB9 Null-Modem and/or Gender-Changer to adjust for DCE or DTE
- Power cycle your BlueConsole adapter
- Try a local PC COM port and cable to verify your RS232 device is indeed working
- Disconnect and reconnect to BlueConsole from your Terminal/Application program

Cannot connect to BlueConsole via Local PC COM port with the Config Utility

- Connect a 9V battery to ensure your BlueConsole indeed has power
- Ensure the correct adapter is being used to connect to your PC COM Port
 - (DB9 female null modem or RJ45 to DB9 female shell)
- Ensure DB9 or RJ45 on BlueConsole is fully seated into your PC
- Be sure you are selecting the correct COM port in the Config Utility
- Be sure you are using the correct PC COM Port Baud Rate
- Click the “Detect” button in the Config Utility to try every possible RS232 setting
- Attempt a connection over a Bluetooth Virtual COM Port to BlueConsole
- Run the Config Utility using your Bluetooth COM port. Read the Settings and verify the BlueConsole RS232 port settings
- Try the Config Utility on a different PC