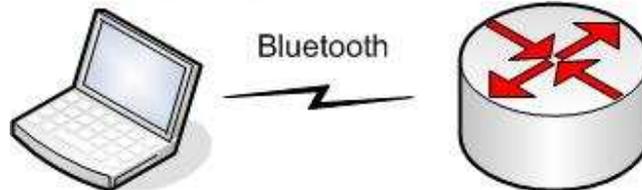# BlueConsole

Application Note: Configuring BlueConsole from the Command Line

You may customize your BlueConsole adapter to better suit your needs. However take care when doing so that you do not forget your Bluetooth PIN code or serial settings. Configuring BlueConsole from the Command Line is an alternate choice for those that don't wish to use the Windows GUI Config Utility.

Customization of BlueConsole from the Command Line uses simple AT style commands. You can use these AT commands over a Bluetooth terminal connection, or use a DB-9 female shell connected to a Local COM port on your PC. When programming BlueConsole be sure to connect a 9V battery and configure your terminal program (e.g. HyperTerminal) for "Software" or "Xon/Xoff" flow control.

To enter AT configuration commands, you must switch BlueConsole from "Data" mode to "Command" mode. This is done using the escape sequence /// . This sequence must be typed quickly (within 500ms). When BlueConsole has successfully entered "Command" mode it will respond with "OK".

Example Steps to enter Command-Mode:
- *Connect to BlueConsole over Bluetooth using a Terminal Program (over Bluetooth or a Local COM port on a PC)*
- *(Wait 1 second)*
- *///   (type rapidly)*
- *(Wait 1 second)*
- *AT<Enter> – OK should echo*

Viewing Current BlueConsole Settings

AT*AILBA? View Bluetooth Hardware Device Address
Example:
>   *AT*AILBA?*
>   **AILBA:0012f3009a51*

AT*AILVI?   View current BlueConsole Firmware Version
Example:
>   *AT*AILVI?*
>   **AILVI: 3.5 [11:53:32,Feb 01 2006]","1.0","3.1050","Philips Semi"*

AT*AMRS?   View Current RS232 Settings (see section 3.2 for definition)
Example:
>   *AT*AMRS?*
>   **AMRS:5,1,1,1,2*

AT*AGLN?   View Current Device Name
Example:
>   *AT*AGLN?*
>   **AGLN:"BlueConsole"*

AT*AGFP?   View Current Bluetooth Pairing PIN Code
Example:
>   *AT*AGFP?*
>   **AGFP:"1234"*

AT*AGDM? View Discoverability Status (1 = Off, 3 = On)
Example:
>   *AT*AGDM?*
>   **AGDM:3*

AT*AGBD?   View Devices which have Bonded & exchanged link keys with BlueConsole
Example:
>   *AT*AGBD?*
>   **AGBDE:0014a48b7d07,1,""*
>   **AGBDE:0003c9bd3f89,1,"'*

Changing Serial Port Settings

Use the following command to alter the RS232 serial port settings of your BlueConsole adapter. If you choose to change these settings, be careful to remember what you set them to.

AT* AMRS=<baud_rate>, <data_bits>,<stop_bits>,<parity>, 2, 1, <store_startup>

Parameters:

<baud_rate>	<data_bits>	<stop_bits>	<parity>
300	1: 8 bits (default)	1:1 bit (default)	1:none (default)
1200	2: 7 bits	2:2 bits	2:odd
2400			3:even
4800			
9600 (default)			
19200			
38400	<store_startup >		
57600	0: No. Temporarily change the RS232 port until next power cycle		
115200	1: Yes. Store these changes permanently in the flash for use on next reset.		

Non-Standard Baud Rates
(Any value from 256 – 136000)

Examples:
57600 baud, 8 data bits, 1 stop bit, no Parity, use on next reset, write to flash
AT*AMRS=57600,1,1,1,2,1,1

9600 baud, 8 data bits, 1 stop bit, no parity, use on next reset, write to flash
AT*AMRS=9600,1,1,1,2,1,1

Restoring to Data-Mode

If you make temporary changes to the baud rate or other serial settings, you may use the following command to restore BlueConsole back to Data-Mode with the new Serial Settings:

AT*ADDM
(BlueConsole returns to Data-Mode)

Changing Bluetooth Settings

- **Changing the Device Name (default is "BlueConsole"):**
  AT*AGLN=<Name>,1
  Example:
  *AT*AGLN="BlueConsole_0001",1*

- **Changing Bluetooth Discoverability Mode (default is On):**
  *AT*AGDM=3,1 (turn ON discoverability)*
  *AT*AGDM=1,1 (turn OFF discoverability)*

  Note: Once you have added the BlueConsole COM port to your PC as a trusted device, you will still be able to connect to your BlueConsole adapter even if Discoverability is off. You may want to turn off Discoverability so others cannot see your BlueConsole adapter.

- **Change Bluetooth Pairing PIN code (default is 1234):**
  AT*AGFP=<pin code>,1
  Example:
  *AT*AGFP="0987654321",1*

- **Delete a Bonding/Pairing and associated link key:**
  AT*AGUB=<address>
  Example:
  *AT*AGBD?   (show current bondings)*
  *AGBDE:0014a48b7d07,1,""
  *AT*AGUB=0014a48b7d07*

Resetting your BlueConsole to Factory Default

You can use the following AT commands over a Bluetooth connection or Local COM port to restore your BlueConsole adapter to factory defaults. Keep in mind that in order to connect via Bluetooth you must know the current PIN code, and in order to connect via a local COM port you must know the serial settings.

Resetting to Factory Defaults:
///	*(send escape sequence)*
*AT*AMRS=9600,1,1,1,2,1,1*	*(9600 baud, 8 bits, No Parity, 1 Stop Bit)*
*AT*AGLN="BlueConsole",1*	*(Device Name = BlueConsole)*
*AT*AGDM=3,1*	*(Discoverability = On)*
*AT*AGFP="1234",1*	*(PIN Code = 1234)*