EGBC-04 Bluetooth module
AT Command Manual
rev 1r0. ©2007 e-Gizmo Mechatronix Central

Note:

EGBC-04 Bluetooth module will respond to AT commands only when switch to parameter mode (pin 15 CLR = GND).

<CR> = Carriage Return

AT : Communication Test

Command	Response	Parameter
AT <CR>	**OK**	**No**

AT+UARTMODE: Set/Inquire UART settings

Command	Response	Parameter
AT+UARTMODE=<Para1>,<Para2><CR>	**OK**<CR>	**<Para1>:Stop bit** **0 = 1 stop bit** **1 = 2 stop bits** **<Para2>:parity bit** **0 = No parity** **1 = odd parity** **2 = even parity bit**
AT+ UARTMODE?<CR>	**OK**<CR> **+UARTMODE:<Para1>, <Para2>**<CR>	

Default UART parameters:
      Stop Bit = 0 – 1 stop bit
      Parity = 0 - none

AT+FLOWCONTROL: Set/ Inquire UART Flow control mode

Command	Response	Parameter
AT+FLOWCONTROL=<Para1> <CR>	**OK**<CR>	**<Para1>:** **0: No Flow control** **1:Use hardware Flow control**
AT+ FLOWCONTROL?<CR>	**OK** <CR> **+FLOWCONTROL:<Para1>**<CR>	

AT+BAUD: Set/ inquire UART Baud Rate

Command	Response	Parameter
AT+BAUD=<Para1><CR>	**OK** <CR>	**Para1: Baud rate (1200,2400,4800,9600,19200,38400,57600, 115200,230400,460800,921600,1382400)**
AT+BAUD?<CR>	**OK** <CR> **+BAUD:<Para1>** <CR>	**Default: 9600**

Note: Baud rate parameter change applies to data rate during normal operation only.
Baud rate remains at 9600 baud during parameter setting mode.

AT+AUTH: Set/ inquire if Authorization is Required

Command	Response	Parameter
AT+AUTH=< Para1> <CR>	**OK** <CR>	**Para1:** **0 = Authorization disabled** **1 = Authorization enabled**
AT+AUTH?<CR>	**OK** <CR> **+AUTH:<Para1><CR>**	**Default: Enabled**

Enabling authorization will require password authentication before any device can
connect access EGBC-04 bluetooth services. The default password is 1234. Change
this password as described in the next section.

Password authentication is automatically done between paired modules.

AT+PASSWORD: Set Password

Command	Response	Parameter
AT+PASSWORD=< Para1><CR>	**OK** <CR>	**Para1: Password** **Default: 1234**
AT+PASSWORD?<CR>	**OK** <CR> **+PASSWORD: < Para1><CR>**	

AT+NAME: Set/ inquire Device Name

Command	Response	Parameter
AT+NAME=< Para1><CR>	**OK**<CR>	**Para1: Device name**
AT+NAME?<CR>	**OK**<CR> **+NAME:<Para1>**<CR>	**Default: eGizmo EGBC04**

AT+CLASS: Set/ inquire Device Type

Command	Response	Parameter
AT+CLASS=< Para1> <CR>	**OK** <CR>	**Para1: device type (length up to 6 characters only)**
AT+CLASS?<CR>	**OK** <CR> **+CLASS:<Para1>**<CR>	**Default: 000000**

AT+ROLE: Set /Inquire Master-Slave

Command	Response	Parameter
AT+ROLE=< Para1><CR>	**OK** <CR>	**Para1:** **0 = Slave** **1 = Master**
AT+ROLE?<CR>	**OK** <CR> **+ROLE:<Para1>**<CR>	**Default: Slave**

AT+BIND: Set/ inquire Binding

Command	Response	Parameter
AT+BIND=<Para1> <CR>	**OK** <CR>	**Para1:** **0 = Always bind to a Paired Master** **1 = Not bind** **Default: 1**
AT+BIND?<CR>	**OK** <CR> **+BIND:<Para1>**<CR>	

This function has meaning only when the device is configured as slave. When set to always bind, it will communicate only to the Master module it had bonded to, even after the power is turn OFF and ON.

AT+RADDR: Set/ Inquire Paired Device Address

Command	Response	Parameter
AT+RADDR=\<Para1><CR>	**OK** <CR>	**Para1: Remote Bluetooth address**
AT+ RADDR?<CR>	**OK** <CR> **+RADDR:\<Para1>**<CR>	

Master bluetooth module: The master will keep searching for the specified remote Bluetooth device until a successful connection is made (or cancelled by the user).

Slave Bluetooth module: The slave module will connect (bind) only to a remote master with the indicated address if set to bind (AT+BIND=0).

AT+CLEARADDR: Clear Paired Device Address

Command	Response	Parameter
AT+CLEARADDR<CR>	**OK** <CR>	**None**

This command removes all remote device address the module had been paired to.

The EGBC-04 module, when configured as master, stores address of successfully paired slave modules. This allows the authentication process to be skipped the next time around, resulting in fast reconnection.

AT+INQ: Inquire Remote Device Address

Command	Response	Parameter
AT+INQ<CR>	**OK**<CR> **+INQRESU:\<Para1>**<CR> **+INQCOMP**<CR>	**\<Para1>:Bluetooth address**

AT+CANCEL: Cancel remote Bluetooth Device Inquiry

Command	Response	Parameter
AT+CANCEL<CR>	**OK** <CR>	

AT+LADDR: Inquire native Bluetooth Address

Command	Response	Parameter
AT+LADDR?<CR>	**OK** <CR> **+LADDR:<Para1>**<CR>	**Para1:Native Bluetooth address**

AT+SNIFF: Set/ inquire Sniff Power Saving mode

Command	Response	Parameter
AT+SNIFF=<Para1>,<Para2>,<Para3>,<Para4><CR>	**OK**<CR>	**Para1: maximum** **Para2: minimum** **Para3: test** **Para4: overtime** **Default:0,0,0,0**
AT+SNIFF?<CR>	**OK** <CR> **+SNIFF:<Para1>,<Para2>,<Para3>,<Para4>**<CR>	

AT+LOWPOWER: Set/Inquire Low Power Mode

Command	Response	Parameter
AT+LOWPOWER=<Para1><CR>	**OK** <CR>	**<Para1>:** **0 = Disable Low Power Function** **1 = Enable Low Power Function**
AT+ LOWPOWER?<CR>	**OK** <CR> **+LOWPOWER:<Para1>**<CR>	

AT+SCANTIME: Set /Inquire Scan Time

Command	Response	Parameter
AT+SCANTIME=<Para1>,<Para2>, <Para3>,<Para4> <CR>	**OK** <CR>	**Para1: Scan Interval Time** **Para2: Scan Time-out** **Para3: Inquiry Interval** **Para4: Inquiry Time-out** **Default: 2048,18,2048,18**
AT+SCANTIME? <CR>	**OK** <CR> **+SCAN:<Para1>,<Para2>, <Para3>,<Para4>** <CR>	

AT+LED: Set/ Inquire LED and I/O Alternate Functions

Command	Response	Parameter
AT+LED=<Para1>,<Para2><CR>	**OK** <CR>	**Para1: Link Indicator** **Para2: Power Indicator**
AT+LED? <CR>	**OK** <CR> **+LED:<Para1>,<Para2>** <CR>	

The EGBC04 has two LED indicators and two outputs that are user configurable. Para1 defines the Link indicator assignment; Para2 defines the Power indicator assignment.

Valid Parameters values:

0 = on board yellow LED
1 = on board red LED
2 = OUT1
3 = OUT0

Default values:
Para1 = 0   yellow LED functions as Link indicator
Para1 = 1   red LED functions as Power indicator

Caution: Parameter values 4 and up are reserved for system use. Entering these values can result to unpredictable behavior.

Examples:

AT+LED=2,0<CR>

Assigns Link Indicator to OUT1 and Power Indicator to yellow LED

AT+LED=1,3

Red LED functions as Link Indicator, and OUT0 as the power indicator.

AT+DATAMODE: Set/ Inquire Data Mode Post Disconnection Action

Command	Response	Parameter
AT+ DATAMODE=<Para1> <CR>	**OK** <CR>	**<Para1>:** **0 = Data buffer contents retained and are automatically send to the remote device after reconnection.** **1 = Data buffer cleared on disconnection**
AT+ DATAMODE? <CR>	**OK** <CR> **+DATAMODE:<Para1>** <CR>	

AT+RESTART: Software Restart

Command	Response	Parameter
AT+ RESTART<CR>	**OK** <CR>	None

AT+RESET: Reset to Factory Default

Command	Response	Parameter
AT+RESET<CR>	**OK** <CR>	**None**

AT+VERSION: Inquire Firmware Version

Command	Response	Parameter
AT+VERSION?<CR>	**OK** <CR> **+VERSION:<Para1>**<CR>	**Para1: Firmware version No.**