Bluetooth modules AT Command Manual

Notice：Only when the Bluetooth modules work in the condition of Parameter Setting (turn the switch of Cmd Data to the Cmd side), the parameter setting command will be allowed. After update parameter setting, turn back the switch of Cmd Data to the Data side.)

Command 1：Test command

Command	Response	Parameter
AT	OK	No

Command 2：Set/ inquire about baud rate

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

Notice ：After update baud rate, if it is not default 9600, you also have to set 9600 baud rate in future parameter setting. Use what you set baud during the time of data communicating.

Command 3：Set/ inquire if be authorized

Command	Response	Parameter
AT+AUTH=< Para1>	OK	Para1 ： 0 No need to authorize, or else need to authorize 默认：需要鉴权
AT+AUTH？	OK ＋AUTH：<Para1>	

Authorization：Bluetooth modules provide the function of security certification. You Can not communicate other than user get across the authorization. If it is paired module, this process will be completed automatically.（Default password ：1234）

Command 4：Set authorized password

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

AT+PASSWORD？	OK +PASSWORD: < Para1>	

Command 5：Set/ inquire about name

Command	Response	Parameter
AT+NAME=< Para1>	OK	Para1：Device name Default：JINOU3264
AT+NAME？	OK ＋NAME：<Para1>	

Command 6：Set/ inquire about device type

Command	Response	Parameter
AT+CLASS=< Para1>	OK	Para1：device type（ length must be limited d in 6 bytes） Default：000000
AT+CLASS？	OK ＋CLASS：<Para1>	

Command 7：Set /Inquire about device part

Command	Response	Parameter
AT+ROLE=< Para1>	OK	Para1：0 is slave, or else it is master. Default：Slave
AT+ROLE？	OK ＋ROLE：<Para1>	

Command 8：Clear up memorized address

Command	Response	Parameter
AT+CLEARADDR	OK	No

Memorize address: After the pair between the two modules is successful, master will memorize the other module Bluetooth address.

Command 9：Set/ inquire about Sniff saving power mode

Command	Response	Parameter
AT+SNIFF=<Para1>,<Para2>,<Para3>,<Para4>	OK	Para1：maximal time Para2：minimal time

AT+SNIFF？	OK ＋SNIFF：<Para1>,<Para2>,<Para3>,<Para4>	Para3：tentative time Para4：overtime Default：0，0，0，0（decimalist）

Command 10：Renew default set

Command	Response	Parameter
AT+RESET	OK	无

Command 11：Set /Inquire about the Parameter of inquiry Scan and connecting Scan

Command	Response	Parameter
AT+SCANTIME=<Para1>,<Para2>,<Para3>,<Para4>	OK	Para1 ： Connect distant time Para2：Connect sustaining time Para3 ： Inquire about distant time Para4 ： Inquire about distant time Default：2048，18，2048，18（ Decimalist ）
AT+SCANTIME？	OK ＋SCAN：<Para1>,<Para2>,<Para3>,<Para4>	

This parameter affects system power.

Command 12：Set/ inquire if be bound

Command	Response	Parameter
AT+BIND=< Para1>	OK	Para1：0 be absent to bind address，or else bind address. Default：Not bind address
AT+BIND？	OK ＋BIND：<Para1>	

Bind address：For slave, If memorized address, disallow to be inquired or paired, only can be connected by device which be memorized. For master, If memorized address, try to connect the device which be memorized all through. When the address is bound, therefore, once the device memorized address, the connection only can be happened between the device and the other which be memorized, however it will not be able to connect with others. If you want to connect with other devices, you must erase memorized address.

Not bind address：Slave can be inquired and paired ; After encounters failed connecting with memorized device for several times, master erases memorized address automatically, and restarts to inquire and pair new device.

If you hope to connect with fixed device, you ’d better bind address.

Command 13：Inquire about program version No.

Command	Response	Parameter
AT+VERSION？	OK ＋VERSION：<Para1>	Para1：Program version No.

Command 14：Set/ Inquire about Indicator light

Command	Response	Parameter
AT+LED=<Para1>,<Para2>	OK	Para1：”Connect indicator” PIO Default is PIO 0 (yellow light) Para2：”Power indicator” PIO，Default is PIO 1（Red light）
AT+LED?	OK ＋LED：<Para1>,<Para2>	

There are eight IO on Bluetooth chip ：PIO0～PIO7，Embedded modules can elicit four IO：PIO0，PIO1，PIO2，PIO3。Thereinto,PIO0 connect yellow indicator light,PIO1 connect red indicator light,PIO2 Connect PIN 17 ，PIO3 Connect PIN 16. PIO0～PIO3 can be set as the embedded module’s connecting PIN or the indicated output PIN of power supply.

Modify the indicating output PIN by command, for example,

AT+LED=2,3 //Set PIO2（PIN 17）AS connecting indicated output PIN, Set PIO3（PIN 16）AS power supply indicated output PIN.

AT+LED=3,2 //Set PIO3（PIN 16）AS connecting indicated output PIN, Set PIO2（PIN 17）AS power supply indicated output PIN.

AT+LED=0,1 //Set PIO0（Yellow light）AS connecting indicated output PIN, Set PIO1（Red light）AS power supply indicated output PIN.

AT+LED=1,0 //Set PIO1(Red light)AS connecting indicated output PIN, Set PIO0（Yellow light）AS power supply indicated output PIN.

AT+LED=0,2 //Set PIO0（Yellow light）AS connecting indicated output PIN, Set PIO2（PIN 17）AS power supply indicated output PIN.

AT+LED=1,3 //Set PIO1(Red light)AS connecting indicated output PIN, Set PIO3（PIN 16）AS power supply indicated output PIN.

Notice ：Parameter：The value of Para1，Para2 must be chosen from 0 to 3, Or else it leads to abnormal system working. Because the other IO have been occupied by system.

Command 15：Set/ Inquire about remote Bluetooth address

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

When carry out this command and set the other Bluetooth address, as the master, The Bluetooth modules wouldn't like to try to connect the Bluetooth address until connect successfully, Except the way of cancelling address by key-press or the command of cancelling address.
When Bluetooth modules as the slavers,
If they are not bound, they can be connected by the other master;
If they are bound, they can set bound address by this command.

Command 16：Inquire about native Bluetooth address

Command	Response	Parameter
AT+LADDR？	OK ＋LADDR：<Para1>	Para1 ： native Bluetooth address

Notice ：When carry out the command of 15, its format must be same to the format of native or remote Bluetooth address what you inquired about.

Command 17：Software Restart

Command	Response	Parameter
AT+ RESTART	OK	

Bluetooth modules program will restart after send this command, no need to break off power supply.

Command 18：Set/Inquire about serial communication mode

Command	Response	Parameter
AT+UARTMODE=<Para1>,<Para2>	OK	<Para1>：Stop bit 0：bit1(stop bit) 1：bit2(stop bit) <Para2>：parity bit 0：None parity bit 1：odd parity bit 2：even parity bit
AT+ UARTMODE?	OK ＋UARTMODE：<Para1>,<Para2>	

Command 19：Inquire about remote Bluetooth device

Command	Response	Parameter
AT+INQ	OK +INQRESU：<Para1> inquire result +INQCOMP inquire completedly	<Para1>： Bluetooth address

Command 20：Cancel inquiring about remote Bluetooth device

Command	Response	Parameter
AT+CANCEL	OK	

Command 21：Set/Inquire about Low power mode

Command	Response	Parameter
AT+LOWPOWER=<Para1>	OK	<Para1>： 0 ： Nonsupport low power 1：support
AT+ LOWPOWER?	OK ＋LOWPOWER：<Para1>	

Command 22：Set/ Inquire about Data processing mode in the condition of disconnecting

Command	Response	Parameter
AT+ DATAMODE=<Para1>	OK	<Para1>： 0：Data hold into buffer, It will be sent to the other device after connect successfully. 1：Data will be throw away in the condition of disconnecting
AT+ DATAMODE?	OK ＋DATAMODE：<Para1>	

Command 23：Set/ Inquire about Flow control mode

Command	Response	parameter

AT+ FLOWCONTROL=<Para1>	OK	<Para1>： 0: No Flowcontrol 1 ： Use hardware Flowcontrol
AT+ FLOWCONTROL?	OK ＋FLOWCONTROL：<Para1>	