

DX-BT05 4.0 Bluetooth Module

AT COMMANDS

DX-SMART BT05 Bluetooth Module

Users can through a serial interface and DX-BT05 chips for communication, serial interface use Tx、Rx two root signal lines, the baud rate support 1200,2400,4800,9600,14400,19200,38400,57600,and 115200 bps. The default of baud rate is 9600 bps.

AT COMMANDS INSTRUCTIONS

NOTE:

All of the commands must line feeds character end: \r\n or use carriage return. The commands are effective when the module is disconnected.

(注：发 AT 指令时必须回车换行，AT 指令只能在模块未连接状态下才能生效，一旦蓝牙模块与设备连接上，蓝牙模块即进入数据透传模式，AT 指令不区分大小写，均以回车、换行字符结尾：\r\n)

1、Test command:

Command	Answer	Parameter
AT	OK	None

2、Query versions:

Command	Answer	Parameter
AT+VERSION	+VERSION=<Param>	Param: versions

3、Query MAC address:

Command	Answer	Parameter
AT+LADDR	+LADDR=<Param>	Param: MAC address

4、Query\set name: (effective after reset)

Command	Answer	Parameter
AT+NAME<Param>	+NAME=<Param> OK	Param: the name of device Default: "BT05" Longest: 18 byte
AT+NAME	+NAME=<Param>	

Example:

1. send set command:

AT+NAME DX-BT05\r\n ——set the name of device: DX-BT05

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return:

+NAME=DX-BT05\r\n ——set the name of device: “DX-BT05” succeed

OK\r\n

2. send query command:

AT+NAME\r\n ——query the name of device

return:

+NAME=BT05\r\n ——the name of device: “ BT05”

5、Query\set—PIN: （effective after reset）

Command	Answer	Parameter
AT+PIN<Param>	+PIN=<Param> OK	Param: 6 bit PIN Default: “000000”
AT+PIN	+PIN =<Param>	

6、Query\set—Module type authentication work: （effective after reset）

Command	Answer	Parameter
AT+TYPE<Param>	+TYPE=<Param> OK	Param: （0~3） 0——NO PIN 1——Simple pair 2——Password pair 3——Pair and binded Default: 0
AT+TYPE	+TYPE =<Param>	

7、Query\set—BAUD:

Command	Answer	Parameter
AT+BAUD<Param>	OK	Param: BAUD（bits/s） Value（decimalism）： 1——1200 2——2400 3——4800 4——9600
AT+BAUD	+BAUD=<Param> OK	

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		5——19200 6——38400 7——57600 8——115200 9——230400 Default: 4
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Example: set the baud: 9600

1. send set command:

`AT+BAUD4\r\n`

return:

`+BAUD=4\r\n`

`OK\r\n`

2. send query command:

`AT+BAUD\r\n`

return:

`+BAUD=4\r\n`

8、Query\set—serial port stop bit:

Command	Answer	Parameter
AT+STOP<Param>	+STOP=<Param> OK	Param: (0、1) 0——1 stop bit 1——2 stop bit Default: 0
AT+STOP	+STOP=<Param>	

9、Query\set—serial port parity bit:

Command	Answer	Parameter
AT+PARI<Param>	+PARI=<Param> OK	Param: (0、1、2) 0—no parity 1—Odd Parity Check 2—even parity check
AT+PARI	+PARI=<Param>	

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		Default: 0
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10、Query\set—Broadcast time interval:

Command	Answer	Parameter
AT+ADVI<Param>	OK	Param: 0~F
AT+ADVI	+ADVI=<Param> OK	0——100ms 1——152.5ms 2——211.25ms 3——318.75ms 4——417.5ms 5——546.25ms 6——760ms 7——852.5ms 8——1022.5ms 9——1285ms A——2000ms B——3000ms C——4000ms D——5000ms E——6000ms F——7000ms Default: 0

11、Query\set—Whether to inform PC connection status (slave mode):

Command	Answer	Parameter
AT+NOTI<Param>	+NOTI=<Param> OK	Param: (0, 1) 0— not notice 1— notice
AT+NOTI	+NOTI=<Param>	Default: 0

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12、Query\set—Notify the PC connection state format (slave):

Command	Answer	Parameter
AT+NOTP<Param>	+NOTP=<Param> OK	Param: (0、1) 0—default format 1—Contain the address information
AT+NOTP	+NOTP=<Param>	Default: 0

Note: Contain the address information : OK+CONN0x647F5DD92D51

13、Query\set—The module type :

Command	Answer	Parameter
AT+IMME<Param>	+IMME=<Param> OK	Param: (0、1) 0——Electricity is working 1——Power on waiting for instructions
AT+IMME	+IMME=<Param>	Default: 0

14、Start work command:

Command	Answer	Parameter
AT+START	OK	None

15、Query\set—Service UUID :

Command	Answer	Parameter
AT+UUID<Param>	+UUID=<Param> OK	Param: 0x0001~0xFFFE Default: 0xFFE0
AT+UUID	+UUID=<Param>	

16、Query\set—Characteristic :

Command	Answer	Parameter
AT+CHAR<Param>	+CHAR=<Param> OK	Param: 0x0001~0xFFFE Default: 0xFFE1
AT+CHAR	+CHAR=<Param>	

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17、Query\set—iBeacon switch :

Command	Answer	Parameter
AT+IBEA<Param>	+IBEA=<Param> OK	Param: (0、1) 0—close iBeacon 1—open iBeacon Default: 0
AT+IBEA	+IBEA=<Param>	

iBeacon UUID: 74278BDA-B644-4520-8F0C-720EAF059935

18、Query\set—iBeacon UUID (0) :

Command	Answer	Parameter
AT+IBE0<Param>	+IBE0=<Param> OK	Param: 00000001~FFFFFFFFE Default: 74278BDA
AT+IBE0	+IBE0=<Param>	

iBeacon UUID: 74278BDA-B644-4520-8F0C-720EAF059935 (red mark)

19、Query\set—iBeacon UUID (1) :

Command	Answer	Parameter
AT+IBE1<Param>	+IBE1=<Param> OK	Param: 00000001~FFFFFFFFE Default: B6444520
AT+IBE1	+IBE1=<Param>	

iBeacon UUID: 74278BDA-B644-4520-8F0C-720EAF059935 (purple mark)

20、Query\set—iBeacon UUID (2) :

Command	Answer	Parameter
AT+IBE2<Param>	+IBE2=<Param> OK	Param: 00000001~FFFFFFFFE Default: 8F0C720E
AT+IBE2	+IBE2=<Param>	

iBeacon UUID: 74278BDA-B644-4520-8F0C-720EAF059935 (blue mark)

21、Query\set—iBeacon UUID (3) :

Command	Answer	Parameter
AT+IBE3<Param>	+IBE3=<Param>	Param:

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	OK	00000001~FFFFFFFFE
AT+IBE3	+IBE3=<Param>	Default: AF059935

iBeacon UUID: 74278BDA-B644-4520-8F0C-720EAF059935

(black mark)

22、Query\set—iBeacon Marjor :

Command	Answer	Parameter
AT+MARJ<Param>	+MARJ=<Param> OK	Param: 0x0001~0xFFFE Default: 0xFFE0
AT+MARJ	+MARJ=<Param>	

23、Query\set—iBeacon Minor :

Command	Answer	Parameter
AT+MINO<Param>	+MINO=<Param> OK	Param: 0x0001~0xFFFE Default: 0xFFE1
AT+MINO	+MINO=<Param>	

24、Query\set—iBeacon Measured Power :

Command	Answer	Parameter
AT+MEA<Param>	+MEA=<Param> OK	Param: 0x00~0xFF Default: 0xC5
AT+MEA	+MEA=<Param>	

25、Soft reset (reset after 500ms) :

Command	Answer	Parameter
AT+RESET	OK	None

26、Default Settings (Default Settings after 500ms) :

Command	Answer	Parameter
AT+DEFAULT	OK	None

27、Set whether to electricity into low power consumption:

Command	Answer	Parameter
AT+PWRM<Param>	+PWRM=<Param>	Param: (0、1)

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	OK	0—Into the low power consumption
AT+PWRM	+PWRM=<Param>	1—normal operation Default: 1

28、Into the low power consumption (It can be search after enter) :

Command	Answer	Parameter
AT+SLEEP	+SLEEP OK	None

29、Query\set—Master/ Slave mode:

Command	Answer	Parameter
AT+ROLE<Param>	+ROLE=<Param> OK	Param: (0、1) 0—Slave 1—Master Default: 0
AT+ROLE	+ROLE=<Param>	

Note: the character set will automatically restart and come into effect. In the hardware setup master-slave mode, you can use AT + ROLE check, set up command can't change the master-slave mode.

30、Inquire Bluetooth advice (master mode) :

Command	Answer	Parameter
AT+INQ	OK	None

Example:

Send INQ command:

AT+INQ\r\n

return:

OK\r\n

+INQS\r\n

—— start

+INQ:0 0x001583000001\r\n

—— Bluetooth advice 0

+INQ:1 0x001583000002\r\n

—— Bluetooth advice 1

。 。 。

。 。 。

+INQE\r\n

—— end

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Devices Found x

(x is a number)

31、Connect the remote device (master mode) :

Command	Answer	Parameter
AT+CONN<Param>	linkage information	Param: Inquire the number 1~9

Example (If found the advice 1 : 0x001583000001) :

Send connect command:

AT+CONN1\r\n

—— connect the advice of number 1

return:

+Connecting>>0x001583000001\r\n ——Connecting

+Connected>>0x001583000001\r\n ——Connected

32、Connect the remote specified address of the device:

Command	Answer	Parameter
AT+CONA<Param>	linkage information	Param: MAC address Example: 0x112233445566

33、Set the module power:

Command	Answer	Parameter
AT+POWE<Param>	+POWE=<Param> OK	Param: (0、1、2、3) 0—— -23dB 1—— -6dB 2—— 0dB 3—— +4dB (only CC40 support) Default: 2—— 0dB
AT+POWE	+POWE=<Param>	

XX、Help:

Command	Answer	Parameter
AT+HELP	Command help information	None

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