

# Bluetooth Dual Mode SPP/HID Module AT Command Specification

Module Model

WBTDS01 - BT4.0+BLE/BT3.0/BT2.1+EDR

# 1. Functional description

## ● Overview

The WBTD01 is a highly integrated BT4.0 (BLE), BT3.0, BT 2.1 + EDR module with embedding HID, and SPP profile. It's easy to develop your product via UART interface to communicate with our module by using AT command format.

## ● AT Commands Introduction

- ASCII format
- <CR>: ASCII code 0x0d
- <LF> :ASCII code 0x0a

## ● AT Commands Supporting List

Input Command	Definition
AT+VER	Read Bluetooth module firmware revision.
AT+DNAME	Set Bluetooth device name.
AT+URATE	Set Bluetooth device host interface baud rate.
AT+AUTOCON	Bluetooth enters automatically pairing mode.
AT+PROFILE	Set Bluetooth profiles.
AT+IOSKB	Enable or disable iOS software keyboard.
AT+HIDKEY	Send HID key.
Output Command	Definition
+CON	When Bluetooth makes connection
+DISCON	When Bluetooth makes disconnection

## ● AT Commands Return Code List

Return Value	Definition
OK<CR><LF>	Indicates success.
0<CR><LF>	Indicates hardware error.
1<CR><LF>	Indicates no AT command support.

## 2. AT commands specification

- **AT+VER**

*This function reads Bluetooth module firmware revision.*

**Syntax:**

AT+VER=?<CR><LF>

**Return Value:**

VER02A <CR><LF>

- **AT+DNAME**

*This function sets Bluetooth device name.*

**Syntax:**

AT+DNAME=WBTD01<CR><LF>

**Return Value:**

Return OK<CR><LF> indicates success.

- **AT+URATE**

*This function sets Bluetooth device host UART interface baud rate.*

**Syntax:**

AT+URATE=115200<CR><LF> (default)

**Return Value:**

Return OK<CR><LF> indicates success.

- **AT+AUTOCON**

*This function Let Bluetooth module enters automatically pairing mode.*

**Syntax:**

AT+AUTOCON=1<CR><LF> - BT will retry to pair previous connection device. (default)

AT+AUTOCON=0<CR><LF> - BT will not retry to pair previous connection device.

**Return Value:**

Return OK<CR><LF> indicates success.

- **AT+PROFILE**

*This function sets Bluetooth profiles.*

**Syntax:**

AT+PROFILE=Bit[7:0]<CR><LF> (Bit2: HID switch, Bit1: SPP switch, Bit0: BLE switch)

**Return Value:**

Return OK<CR><LF> indicates success.

- **AT+IOSKB**

*This function enables or disables iOS software keyboard.*

**Syntax:**

AT+IOSKB=1<CR><LF>

**Return Value:**

Return OK<CR><LF> indicates success.

- **AT+HIDKEY**

*This function sends HID key.*

**Syntax:**

AT+HIDKEY=AT+HIDKEY=[Byte 1 - Modifier definition key] + [Byte 2 - HID scan code]

[Byte 1 - Modifier definition key] means modifier status,

Bit7: RightGUI,

Bit6: RightAlt,

Bit5: RightShift,

Bit4: RightControl,

Bit3: LeftGUI,

Bit2: LeftAlt,

Bit1: LeftShift,

Bit0: LeftControl

[Byte 2 - HID scan code] means HID scan code

**Return Value:**

Return OK<CR><LF> indicates success.