

Bluetooth (Dual Mode) Operation Instruction

1. Pin instruction

Pin name	Type	Electric level	Description	Remarks
VCC			5V power input terminal	
GND			5V power ground wire	
TX	OUTPUT	5V	Serial port communication output terminal	
RX	INPUT	5V	Serial port communication input terminal	
DTR	OUTPUT	5V	Data terminal ready	
RST	INPUT	5V	Module resetting pin; low electric level being effective	

2. Function introduction

The function of Bluetooth (Dual Mode) is to transfer Bluetooth communication to serial port communication, namely to transfer the received Bluetooth data to serial port data output and send out the received serial port data in Bluetooth mode. It is duplex communication and it is compatible with Bluetooth 2.1+EDR and 4.0 protocols. When using Bluetooth 2.1+EDR protocol communication, the highest speed within 10 meters can be up to 8K bps, while the communication speed of 4.0 protocol can be up to about 1K bps.

3. Operation instruction

(1) Install our APP control software in your mobile equipment (like cell phone);

(2) Insert Bluetooth module into the socket interface of wireless module of mCore main control panel. After the power is on, the indicating lamp in the module is in off state for the first three to four seconds and then becomes in twinkling state. The twinkling indicating lamp means that Bluetooth module has not been connected with your equipment. After your equipment is connected with the module, the indicating lamp will keep in on state.

(3) When the module indicating lamp twinkles, turn on the Bluetooth of your equipment and search Bluetooth device, and select the Bluetooth device named "Makeblock" to make the connection among the found device.

(4) After successful connecting, open APP software installed in the first step and then you can start to control the main control panel of mCore.

4. Specifications

Dimension: 30mm*20mm*14mm (Length x Width x Height)

Software Version: V1.1

Hardware Version: V1.1

5. FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following

measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: 2ACWW1300133B Or Contains FCC ID: 2ACWW1300133B "

when the module is installed inside another device, the user manual of this device must contain below warning statements;

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product