

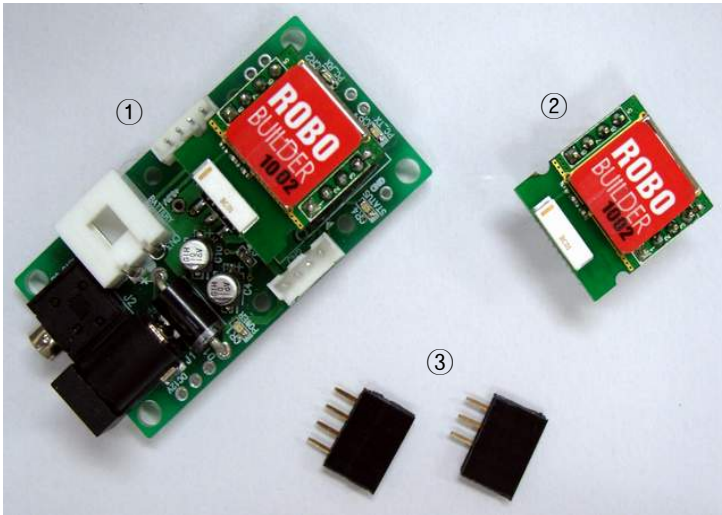
USER's GUIDE for Bluetooth Kit [RBX-BLTOOTHCOM]

2008.06.03
ROBOBUILDER

■ Introduction

RBX-BLTOOTHCOM is used by users who needs to control the RoboBuilder via wireless bluetooth communication. Based on configuration, users can use either a PC or a separate controller in order to control RoboBuilder.

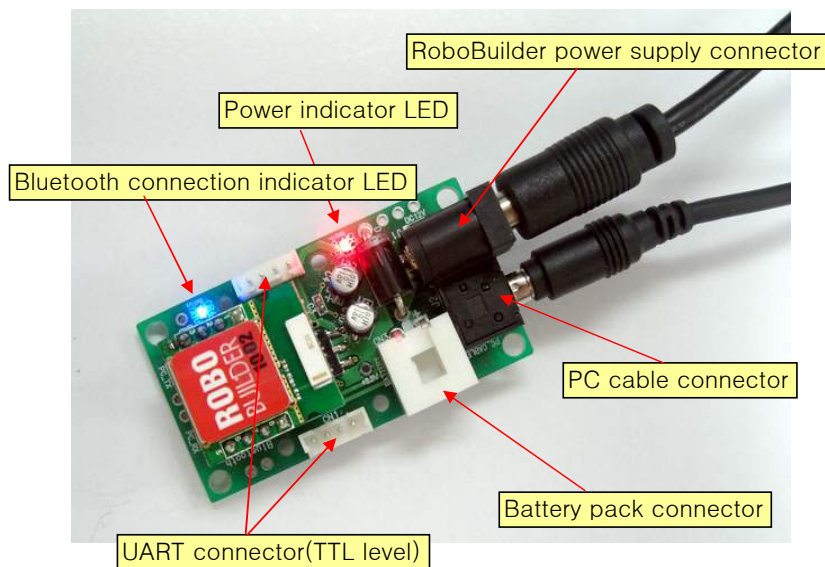
■ Parts Included



- ① one Bluetooth Board for PC connection
- ② one Bluetooth Board for Control Box
- ③ two Sockets for the installation of item ②
- ④ one Software CD

■ Connect the Bluetooth Board to PC

- Power indicator LED : This LED turns on red when the power is supplied.
- Bluetooth connection indicator LED : This LED turns on blue when the bluetooth communication connected.
- This board is paired with the other board which to be installed in the control box.
- The baud rate is fixed at 115200bps.
- It is recommended that users apply the RoboBuilder Power Supply(DC12V) that is provided in the kit package.

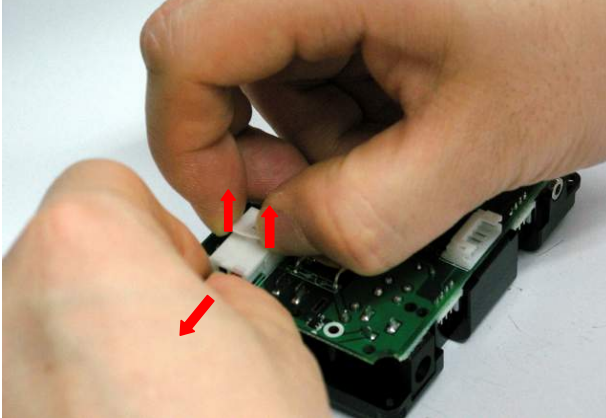


▪ Install the other Bluetooth Board inside the Control Box

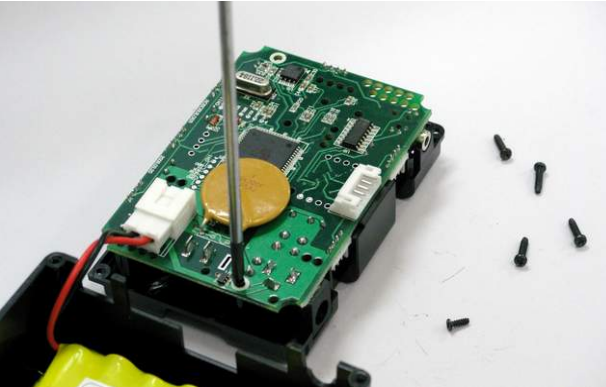
step1. Unscrew and remove the four screws on the corners of the RBC control box.



step 2. Remove the rear plastic cover and separate the battery connector.



step 3. Unscrew and remove the two screws holding the circuit board to the front cover.

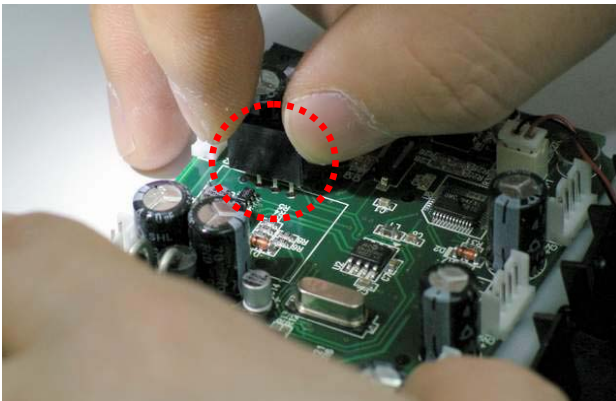


step 4. Separate and turn over the circuit board.

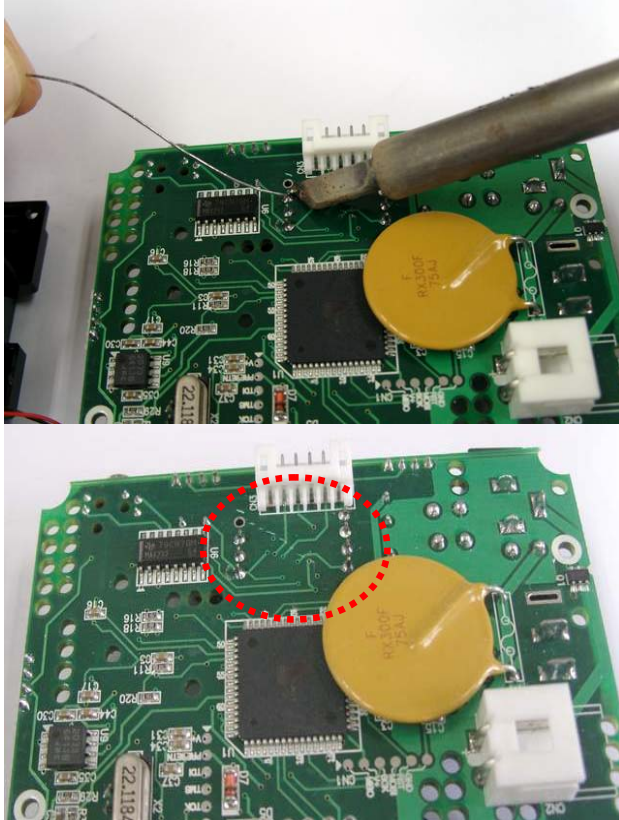
Insert the two sockets to prepare for the installation of the bluetooth board.

There are one 3-pin socket and one 4-pin socket included in the kit.

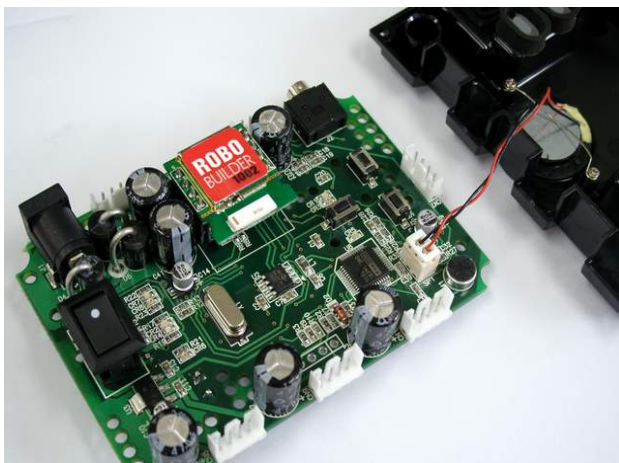
The 3-pin socket is inserted as shown below (be cautious about its position and direction).



step 5. Turn over the circuit board and solder the seven pins of the two sockets.



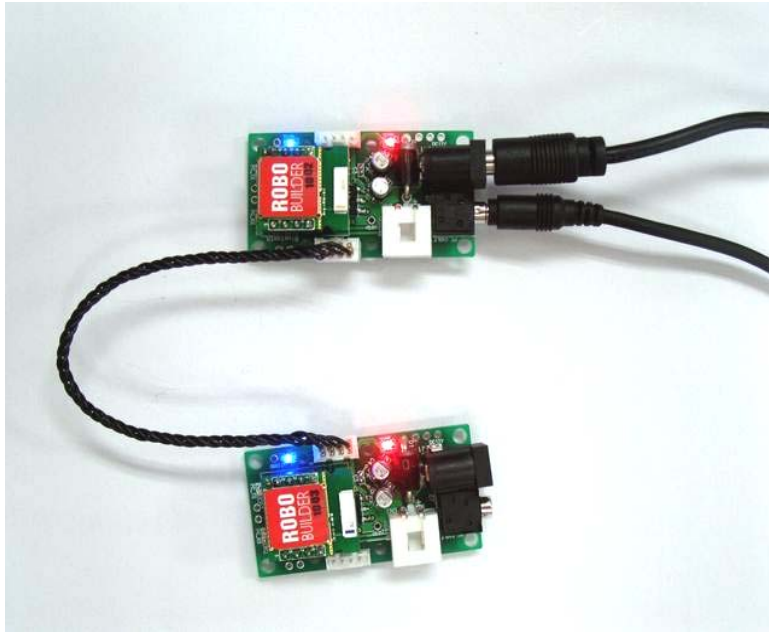
step 6. Install the bluetooth board on the two sockets as shown below (be cautious about its direction).



step 7. Assemble the RBC control box to complete the installation. Follow the steps 3, 2, and 1 reversely.

▪ Example Configurations of the Bluetooth Communication Channel

1. Use one communication channel to control multiple robots
 - 1) Connect multiple bluetooth boards in parallel with one serial port so that multiple robots receive identical commands.
 - 2) Use the wCK cable to connect multiple bluetooth boards [max 3 boards expandable]
 - 3) In order to connect more than three bluetooth boards, solder a jumper wire to the PC cable connector and connect to the next bluetooth boards. Or users can separately design a Y-shape multiple PC cables.



2. Use multiple communication channels to control different robots
 - 1) Connect a separate serial port to each bluetooth board and just connect the power in parallel.
 - 2) Users can modify and use the wCK cables to distribute the power. Remove the two strands in the middle in order to avoid communication interference.

