ROBOTIS e-Manual v1.15.00

# BT-210

### Part Photo



### **Product Usage**

BT-210 uses Bluetooth communication to allow the modules to interact via serial communication (UART). The compatible products are shown below:

(Please refer to the compatible part for instructions on how to connect the device.)

• BT-210 : CM-100A, CM-530 : Wireless control, Wireless download

CM-510, CM-700, CM-900 : Wireless control (Firmware update required)

#### \*\* Caution

- The following are not compatible with BT-210.
  - 1. Remote Controller : RC-100, RC-100A
  - 2. Controller : CM-100, CM-5, CM-2+

#### [Example]

- Able to control the OLLO Bug using Bluetooth communication.
  - Connect BT-210 onto the OLLO Bug controller (CM-100A)
  - Able to wirelessly control the OLLO with the Android smart phone by connecting the BT-210 onto the OLLO.
- Using the PC to control the controller via Bluetooth communication.
  - Connect BT-210 onto the CM-900 and connect onto the Bluebooth port.

• Able to mount the BT-201 onto the Bioloid Premium kit's controller (CM-530)

Please be sure to connect the device while the controller is turned off. Damage may occur if the device is connected while the power is turned on.

## **Communication Mode**

utilizes a pairing mechanism that allows reliable 1:1 communication.

[1:1 Communication]

- When using two BT-210s, it is possible to set one as the "Master" and the other as the "Slave" use the device to communicate with each other. Also, It is possible to use the BT-210 with a smart phone—with the Bluetooth capability—by setting BT-210 to "Slave mode" and pairing the two devices to each other.
- When the power is initially supplied to the BT-210, the blue LED blinks. Once the pairing is successful the blinking stops and the blue LED light is maintained.

### **Pin Assignment Information**



- 1. RXD : Bluetooth Module's Receive Signal terminal
- 2. TXD : Bluetooth Module's Transmit Signal terminal
- 3. VCC : Bluetooth Module's Supply Voltage ( 3.3V )
- 4. GND : Bluetooth Module's Ground Level (0v)

# H/W Specification

- Weight: 4.51g
- Size : 18mm X 30mm X 9.1mm
- Bluetooth : Bluetooth Specification 2.1 Support
- Effective Communication Distance: 10M
- Frequency : 2.4 GHz ISM Band

- Bandwidth : MAX 250kbps
- Default Baud rate : 57600bps
- Sensitivity : -81dBm (Typical)
- Transmit Power : 4dBm(Typical)
- Bluetooth Profile Supported : SPP (Serial Port Profile)
- Operational Voltage : 3.3V
- Consumed Current : 48mA (Max)
- Operating Temperature : -40 °C  $\sim$  85 °C
- Baud rate Range : 1,200bps 400,000bps
- Antenna : Chip Antenna
- Interface : UART (3.3V Level)
- Conducted Net Power : -6~4dBm(Class 2)

