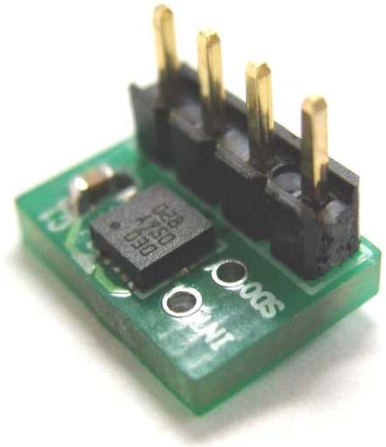
RBX-ACL3A01 built-in instruction

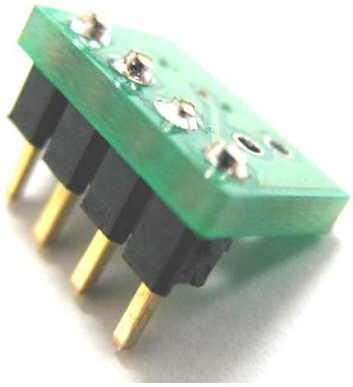
31st July, 2008 ROBOBUILDER

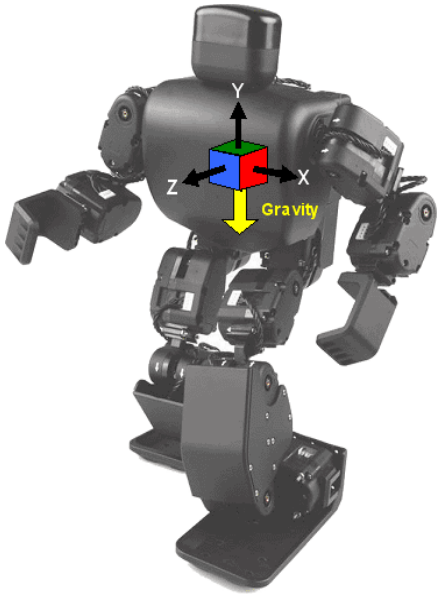
Introduction

This RBX-ACL3A01 sensor is for using acceleration sensor function in Robobuilder Kit Series by equpping into RBC (Control Box)
You can use "Acceleration function" in Action Builder after equipping into RBC (Control Box).

Specification







Measured X, Y, Z axis value is indicated by integral number from −7 to +7.
Integral number 1 can be translated as “1/4g”.
Note) g : gravity acceleration

For instance, Value would be X=0g, Y=0g, Z=−1g if Robot lies down, because all gravity acceleration direction is minus(−).
Therefore, you can judge whether Robot is lies down or not, as long as you check acceleration data would be
−1< X < 1, −1 < Y < 1, −5 < Z < −3

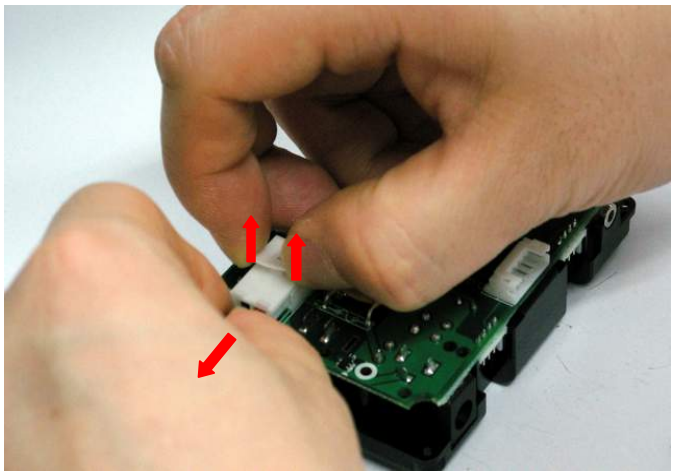
Required Parts

Control Box (RBC)
: RBC-08128NNN, RBC-08128YNN
Control Box firmware
: RBC firmware 2.09 or above
Action Builder Software
: Action Builder 1.10 or above

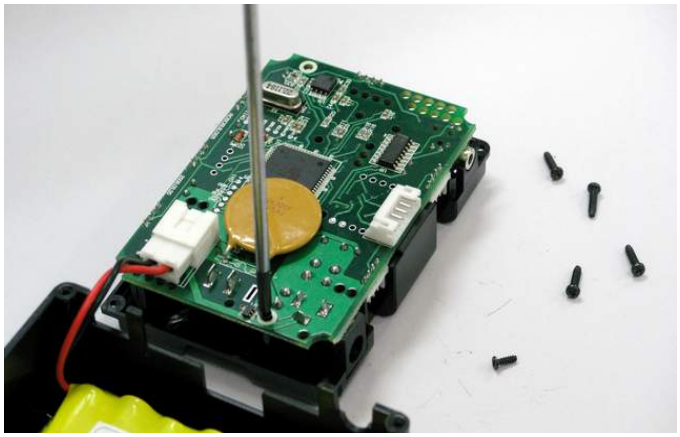
Equip "Acceleration Sensor" into Control Box

1. Unscrew the bolt in four edges by using "+" driver.

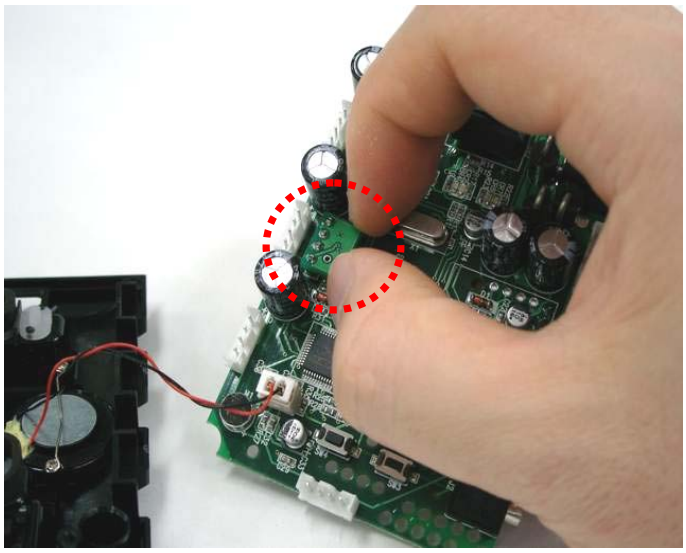
2. Open the Control Box cap, then disconnect battery connector



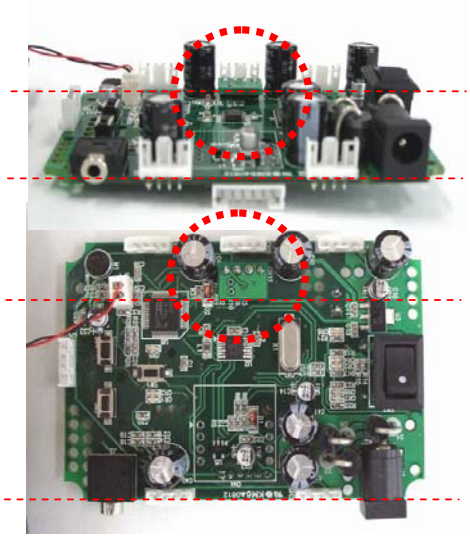
3. Unscrew 2 board fixing bolts.

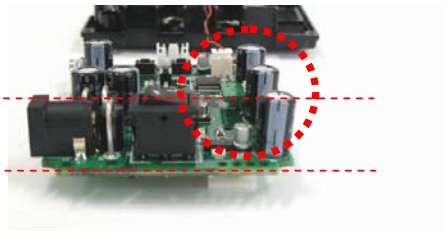


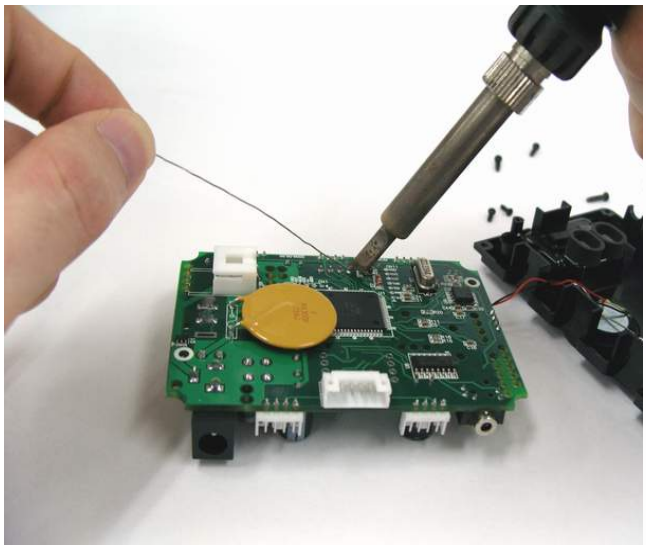
4. Take out Board from the cap, then insert Acceleration Sensor Board as shown in the below photo (please careful with Position, Direction.)

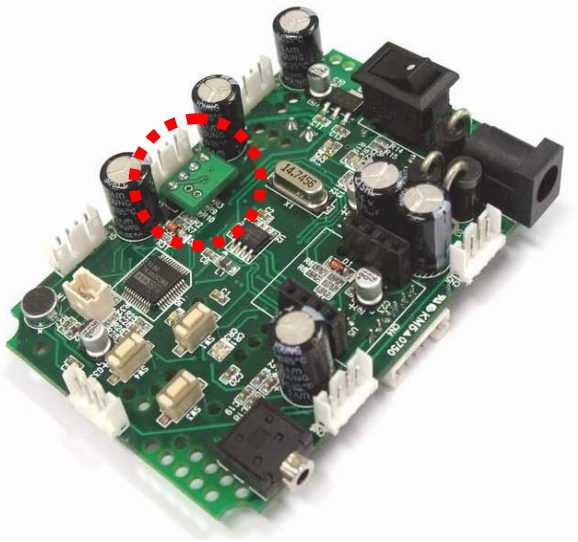


5. Solder Acceleration Sensor Board with Control Box horizontally as much as it could (4 pin soldering).









6. Assemble the parts in reverse order (Step 3-> Step 2-> Step1), Complete !