Instructions for my project

*Please refer to XBee_servos_v2 to run this program

(this direction)

Hold the 3-axis accelerometer as the picture indicated.(which is exactly the straight upside)

Basic moving function:

1. Forward: Tilt the sensor's front side down to make the car move forward for a short period of time.

Application here:

(i)When encountering obstacle, the car will first burst out "Watch out" warning indications and then make a 180 degrees turn.

(ii)When going upward on a slope, the car will say "Going up!" and modify its speed if it's too slow(<60)

(iii)When going downward on a slope, the car will say "Going down!" and modify its speed if it's too fast(<30)

2. Backward: Tilt the sensor back side down to make the car move backward for a period of time

Application here:

(i)When moving backward, the pizoespeaker will make warning sound, and the two LED lights will be turned on.

3. Turn right: Tilt the sensor right side down to make the car make a 90 degrees right turn.

Application here:

(i)One of the LED light will blink for 1 second and then keep blinking while rotating as direction light.

4. Turn left: Tilt the sensor left side down to make the car make a 90 degrees left turn.

Application here:

(i)Another LED light will blink for 1 second and then keep blinking while rotating as direction light.

Other applications:

(i)Speed modifying while on the plane ground:

Flip the sensor upside down, tilt the left side up, the car will say "speed up!" and modify its speed faster by 20.

Tilt the right side up, the car will say "speed down!" and slow down its speed by 20.

If encountering upper or lower limit, 100 and 20, the car will say "Top speed" and "Too slow" respectively, and leave its speed unchanged.

(ii)When the sensor is upside down, tilt the front end down will make the car sing an ABC song.