

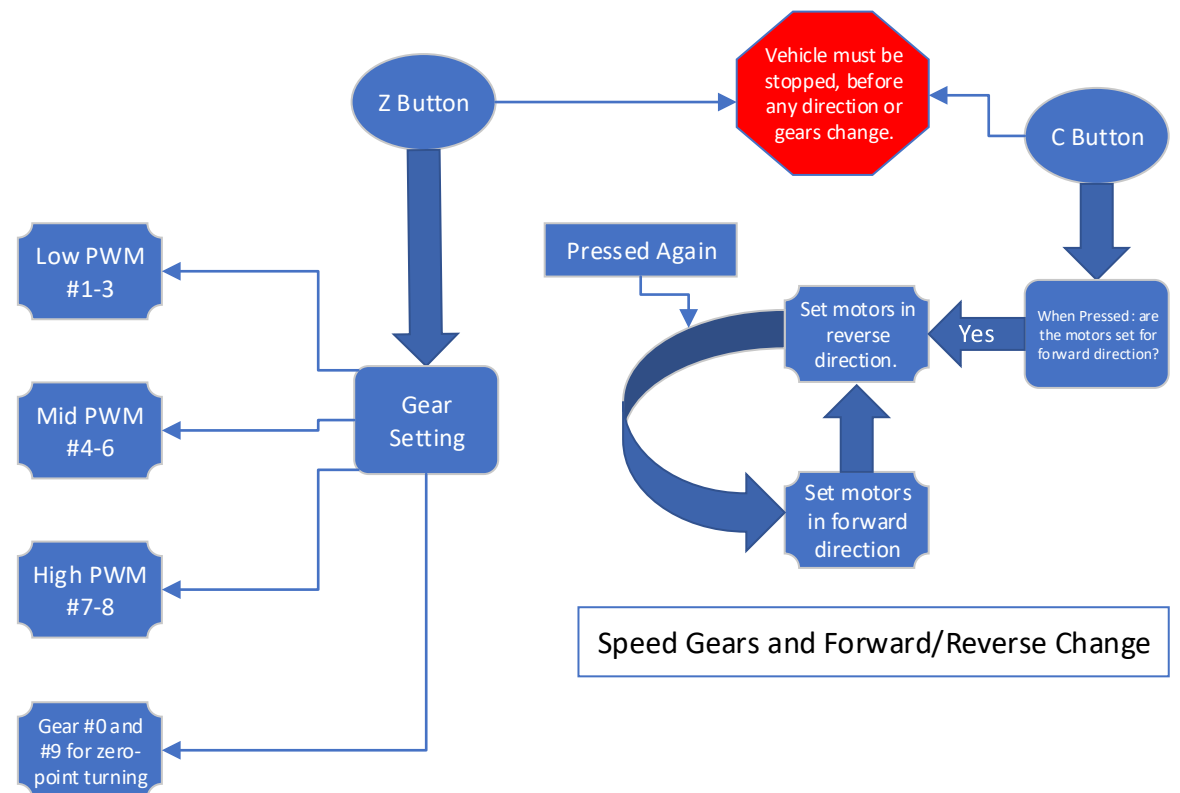
## Driving System Guide

When the joystick is at the center, the cart will not brake and throttle (the neutral stop). When the joystick is above y-axis of 132, the joystick will speed up accordingly to the joystick position. For example, the person move y-axis above 15%, it will moved at 15% speed. At 50% above y-axis, moved at 50% speed and so on. Cart will be adjusting the speed continuously with the change of joystick position. This will be similar with the e-brake, but when the joystick is below y-axis 124.

When steering the cart left/right, the most efficient way to turn is to go into zero-point turning gear when the RGB segment display 0 or 9. In this mode, the user will have to slightly move above y-axis and then move left/right to turn in that direction. In this gear, the user can also brake below y-axis 124.

For the speed gears or reverse changing, the cart must be stopped in order to change for safety. Press the Z-button to change the gear. Press the C-button to toggle the motor direction change, where the default is forward. User will hear a beep from the electrical box if the cart is in reverse.

In the gear setting, there are 10 different gears. From gear #1-3, it is they are set to lower pwm for lower speed. However, the motor controller also have a built in low-high gears so they will adjust to that. As such in gear #4-6, the wheel are set to a higher pwm for faster speed, and adjust with the motor controller low-high gears. In gear #7-8, the cart is set to max pwm for max speed and only adjust to low-mid gears within the motor controller. Lastly, in gear #0, #9, the user will be able to do zero-point turning where 0 is lower speed and 9 is higher.



Speed Gears and Forward/Reverse Change