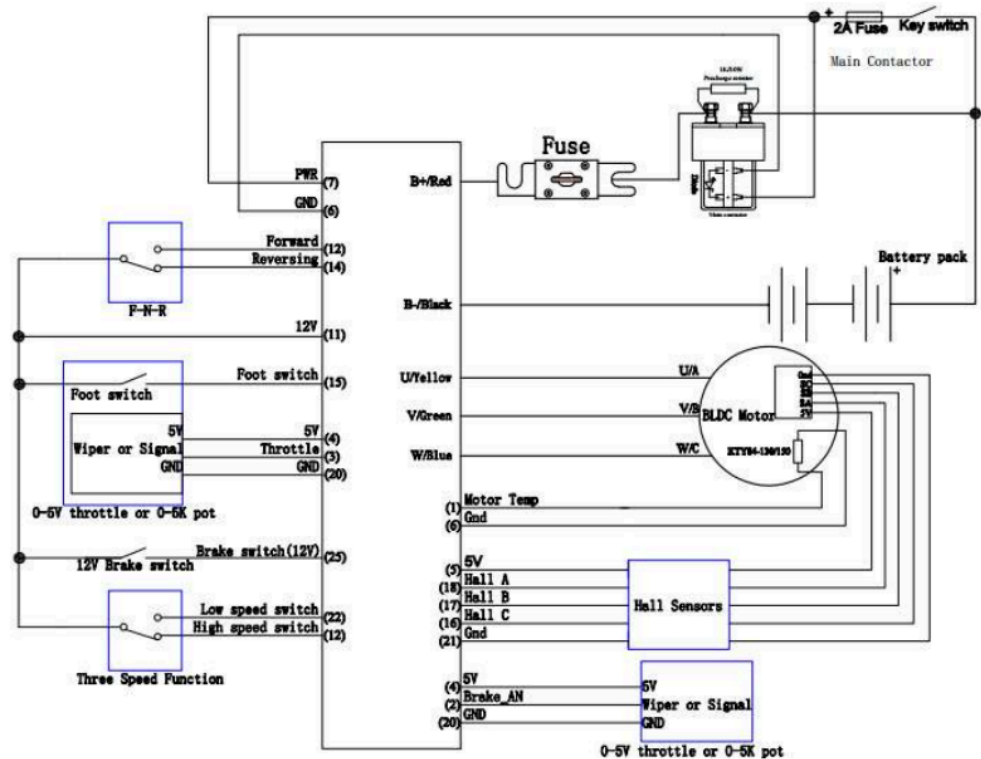


3.2.2 Standard Wiring of KLS-N Controller



1) Lists of parameters

- high/low-volt(battery warning) :- 20~86, depends on the controller
- Current percentage
- Battery limit(in terms of current)
- Identification angle:- tells about basic working/state of different parameters?
- Throttle pedal using hall sensor(ranges given by TPS LOW ERR, TPS HIGH ERR)--> range can be changed if absolutely necessary, but advised to keep it the same so as to avoid errors etc.
- TPS deadlow→ assigns what the starting pt.(5~40)
- TPS deadhigh→ assigns the throttle end pt.(60~95)
- Brake sensor→ mainly for regen
- Brake sensor deadhigh and deadlow → starting and end pt. Of brake
- Max o/p frequency→ affects the top speed of motor(shouldn't exceed 1000hz)
- Max speed(rpm) → fwd speed(100% of max speed) rev speed(10-20% of max speed) (IMPORTANT, DEFAULT IS 100% FOR BOTH)
- Three speed control (or) F-N-R control from pin-12 (both can't be together)
 - Working** pin-22 is lowspeed, pin-12 is high speed and pin-11(when both are disconnected is medium speed)

- m) Pulse-width modulation frequency:- suitable for hub motor with strict quiet control. (must not exceed 20KHz)(can be changed based on practical uses)
- n) Brake H pedal→ will make sure the throttle o/p is omitted when brake is still being used
- o) NTL H Pedal
- p) Joystick:- allows both forward and reverse throttle without using reverse switch(FNR architecture is used with joystick rather than three gear)
- q) Footswitch ; - when disabled its like kill-switch except doesn't kill the engine. Just doesn't take the throttle o/p. Like Neutral(only when the footswitch is disabled)
- r) Boost:- max throttle o/p for a short time(mode-enabled) even when throttle isn't operated(if boost isn't used in pin 2 then brake regen(mode-disable) is used in pin 2(i.e., only one function)
- s) Cruise control:- hold it for 5 secs then the controller will get into cruise(can't be done when rpm<500 (and/or) in reverse)
- t) Anti-slip:- will prevent the vehicle rolling backwards on downhill faster and faster.If gear ratio is high it can help stop the motor
- u) Change direction :- if the angle is not what you're expecting after finishing of angle direction operation. It'll be updated to what you want after power-resupply