

This is the new version of the hitch timer controller.

This version uses a controller (in this case Arduino nano for testing). It controls the timing between user clicks on the switch.

If the user transitioned from up to down or down to up directons, the code will give a configurable short delay time and then applies the transition.

- The circuit is equipped with a potentiometer (RP1: Speed Ref) that controls the output voltage to the controller (0 5V).
 SW1 is a representation of the user hitch switch. It is pulled down by a 10k resistor.
 U2 is an optocoupler used to map the PWM signal from the controller to the associated voltage (between 0 and 5V).
 U3 is another optocoupler used to reset the signal pin form the controller. It is mandatory because the controller will not ramp up unless a low-to-high voltage is applied to its signal pin.

Results: The circuit operated perfectly. However, the controller needs an external power supply for a reliable functioning. A seperate DC-DC converter will be used to supply the controller.

TITLE: Main				REV: 1.0	
	Company: NLAS				Sheet: 1/1
		Date:	2023-05-02	Drawn By: Raja	
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