



For Jared Cummings' complete instructions, including software code, on how to build your own perfect steering device, go to <http://rbi.ims.ca/4400-555>.

Jared's Ride Isn't Fly, but the Steering's Perfect

PERFECT STEERING MECHANISM PARTS LIST

Amt	Part Description	Allied Part #
	AC/DC Converter 5 Vac 1200 mA	218-1001
	Stepper	324-2190
	LCD screen (16x2)	789-2019
	Toggle switch	948-0049
	Stepper motor Inver CMD	568-9170
	20kΩ Potentiometer (LCD contrast)	754-0154
	Keypad	948-0011
	5V Regulator NTE:ARR	935-3020
	angle ".ET"	270-1196

Additional parts required: PIC 16F84A micro-controller, stepper motor, keypad encoder, any small DC motor

So he always stays on course, Jared designed a mechatronic device that simulates perfect steering in an automobile. The small-scale, single-wheel model determines the speed of wheel rotation from the magnitude of the curve it's traveling. It works by setting the initial speed of a PIC-controlled dc motor, then uses a manual-input turn radius to vary the speed of the motor and advance a PIC-controlled stepper motor one visible step (7.5 deg) in the specified direction.

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