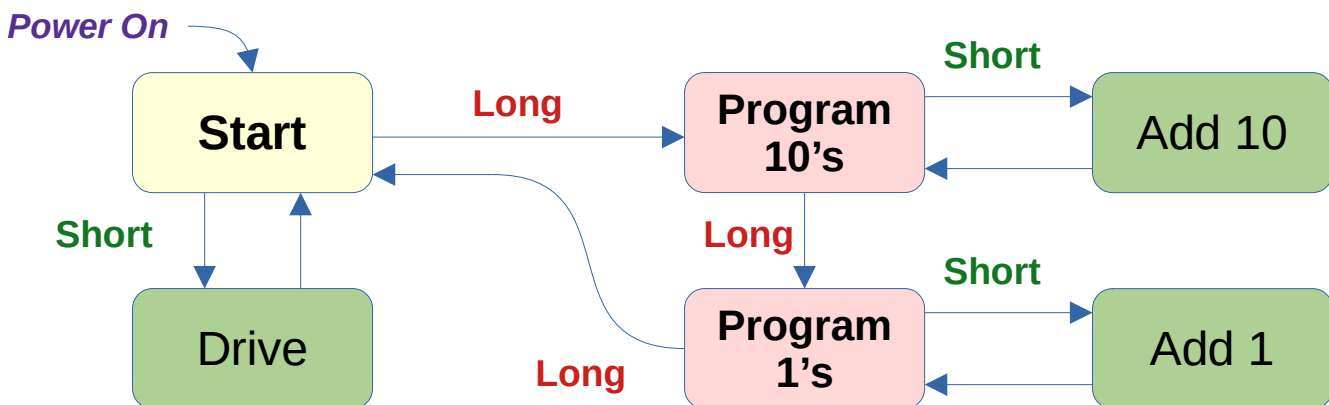# Car Test / Programming

Initial test and sensor calibration:

Hold the button down, Turn on power switch, hold button 3s, release
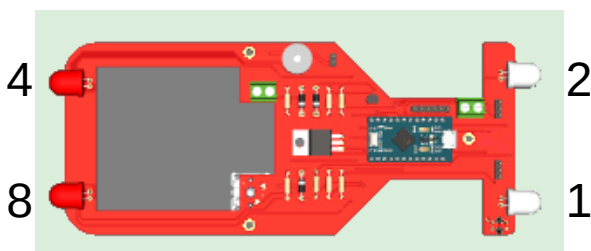It should beep, blink all LEDs and twitch the motor.

Spin the right front wheel until the short beeps stop.
Tap the button to switch to driving mode (red LEDs only on)
If anything doesn't work, check your wiring!

Driving: Press the button on the bottom once
The car should beep, drive forward, and stop

Programming – you can change the distance the car runs
The distance is in wheel revolutions
Use the button on the bottom – short or long press

Power On

Start	**Long** →	**Program 10's**
Short ↓		**Short** → Add 10
Drive	**Long**	**Program 1's** → **Short** Add 1

Current setting displayed in binary (base two) on LEDs

Binary 8 4 2 1	Decimal	Binary 8 4 2 1	Decimal
0 0 0 0	0	0 1 0 1	6
0 0 0 1	1	0 1 1 1	7
0 0 1 0	2	1 0 0 0	8
0 0 1 1	3	1 0 0 1	9
0 1 0 0	4	1 0 1 0	10
0 1 0 1	5		

Car Test / Programming

The car measures distance by counting pulses from an optical sensor on the right front wheel.

Put a piece of tape on the wheel. It should be a color which contrasts with the wheel color.

The sensor needs to be calibrated once, following this procedure:

Hold the button down, *Turn on power switch,* *hold button 3s, release*
It should beep, blink all LEDs and twitch the motor.

Spin the right front wheel until the short beeps stop.

During the beeping, the maximum and minimum light intensities seen by the sensor are recorded to set a threshold.

Press the button once after the beeping stops.