SumoBot pin layout (Orange Robotics)

Sunday, April 8, 2018

5:15 PM

* + Distance sensor 1 (Dst 1)
    - Out>A0
    - Vcc>5v
    - Gnd>gnd 1 (pwr)
  + Distance sensor 2 (Dst 2)
    - Out>A1
    - Vcc>
    - Gnd>
  + Reflectance sensor 1 (Ref 1)
    - Out>3
    - Vin>3.3v (should go in 5v?)
    - Gnd>gnd 2 (pwr)
  + Reflectance sensor 2 (Ref 2)
    - Out>2
    - Vin>vin
    - Gnd>
  + Motor 1
    - Out1,out2
  + Motor 2
    - Out3,out4
  + Motor driver (Md, Md 1, Md2)
    - Driver: Gnd>Gnd (pwm)
    - Motor 1: ena,in1,in2>8,7,6
    - Motor 2: enb,in3,in4>9,5,4

|  |  |  |  |
| --- | --- | --- | --- |
| Pin | item | Color wire (on arduino) | Breadboard (BB) (+ positive strip) (- negative strip) |
| 2 | Ref 2 | yel |  |
| 3 | Ref 1 | yel |  |
| 4 | Md 2 | grn |  |
| 5 | Md 2 | orng |  |
| 6 | Md 1 | grn |  |
| 7 | Md 1 | orng |  |
| 8 | Md 1 | grn |  |
| 9 | Md 2 | orng |  |
| A0 | Dist 1 | wht |  |
| A1 | Dist 2 | wht |  |
| Gnd (pwm) | Md | purp |  |
| Gnd 1 (pwr) | Dst 1 | red |  |
| Gnd 2 (pwr) | Ref | Blk, | - |
| BB | Ref 1 | blu | - |
| BB |  | blu | - |
| 5v | Dst 1 | Grn | + |
| BB | Ref 1 | Prp | + |
| BB | Ref 2 | blu | + |

Info on how to use a breadboard: <https://www.sciencebuddies.org/science-fair-projects/references/how-to-use-a-breadboard>