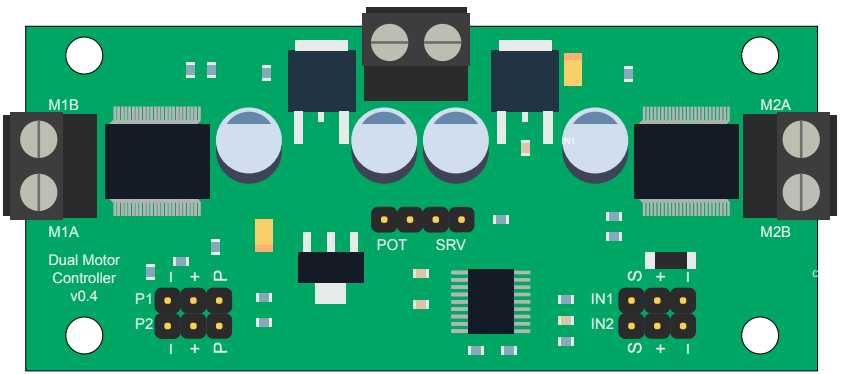
ACTOBOTICS®
DREAM • DESIGN • BUILD • REPEAT

DUAL MOTOR CONTROLLER
HOOKUP GUIDE



PRO TIP: PAY ATTENTION TO THE JUMPERS ON THE PINS IN THE MIDDLE OF THE BOARD. THEY DETERMINE THE MODE.

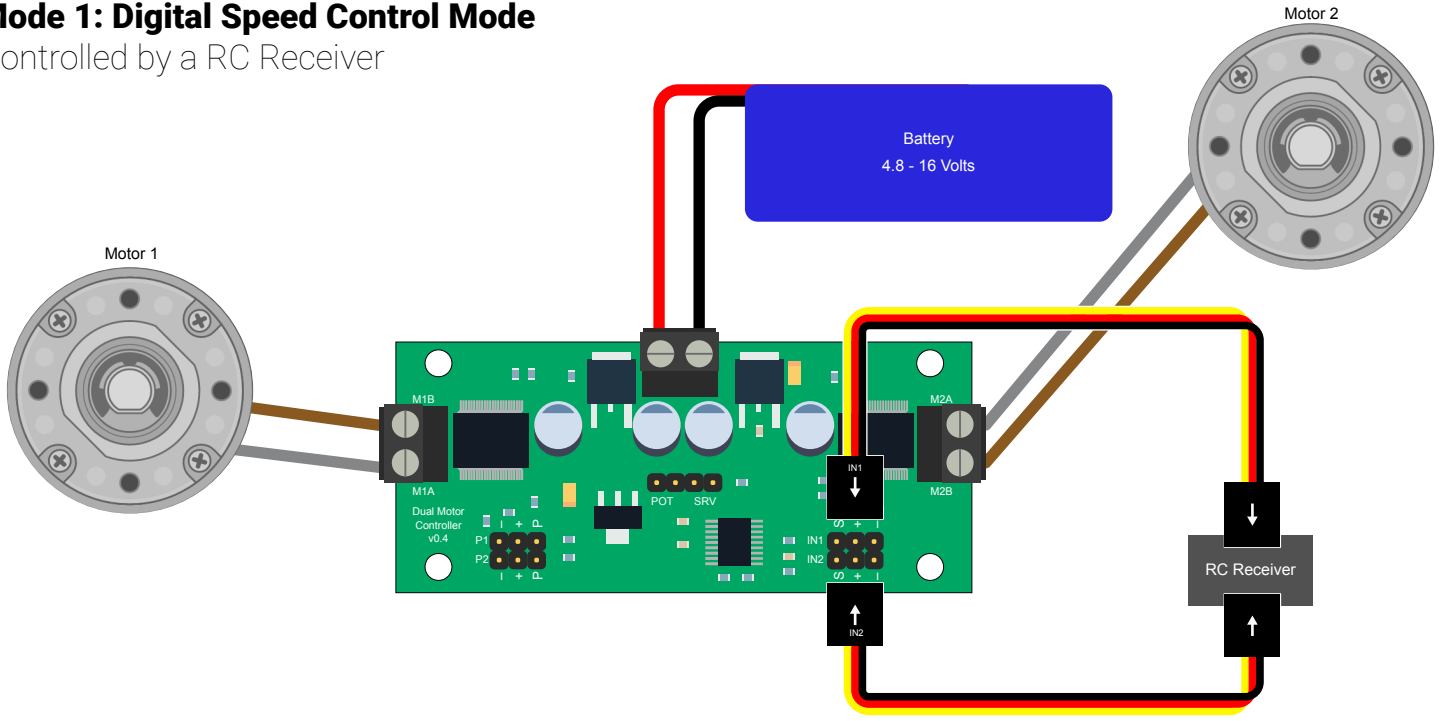
PRO TIP: CHANGE THE MODE WHEN THE DMC IS OFF.

PRO TIP: READ THROUGH ALL THE PRO TIPS BEFORE USING THE DMC.

ACTOBOTICS DREAM • DESIGN • BUILD • REPEAT DUAL MOTOR CONTROLLER

Mode 1: Digital Speed Control Mode

Controlled by a RC Receiver



PRO TIP: THE DMC CAN HANDLE 10A COTINUOUS, 30A PEAK PER CHANNEL.

PRO TIP: THE PWM SIGNAL RANGE IS FROM 1,000 µs TO 2,000 µs (microseconds)

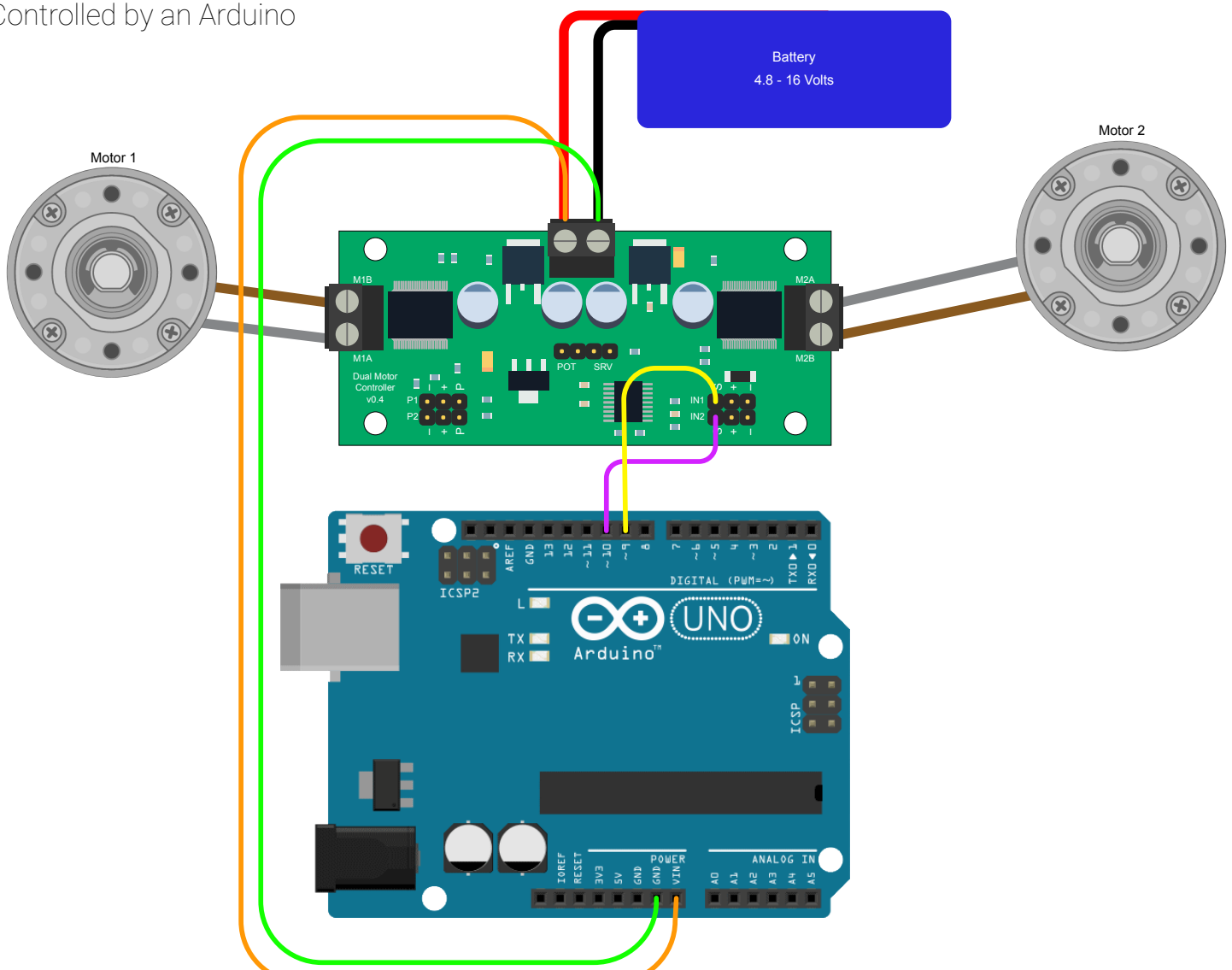
PRO TIP: REFER TO YOUR RECEIVER'S MANUAL TO KNOW THE CORRECT SERVO LEAD ORIENTATION.

ACTOBOTICS DUAL MOTOR CONTROLLER

DREAM • DESIGN • BUILD • REPEAT

Mode 1: Digital Speed Control Mode

Controlled by an Arduino



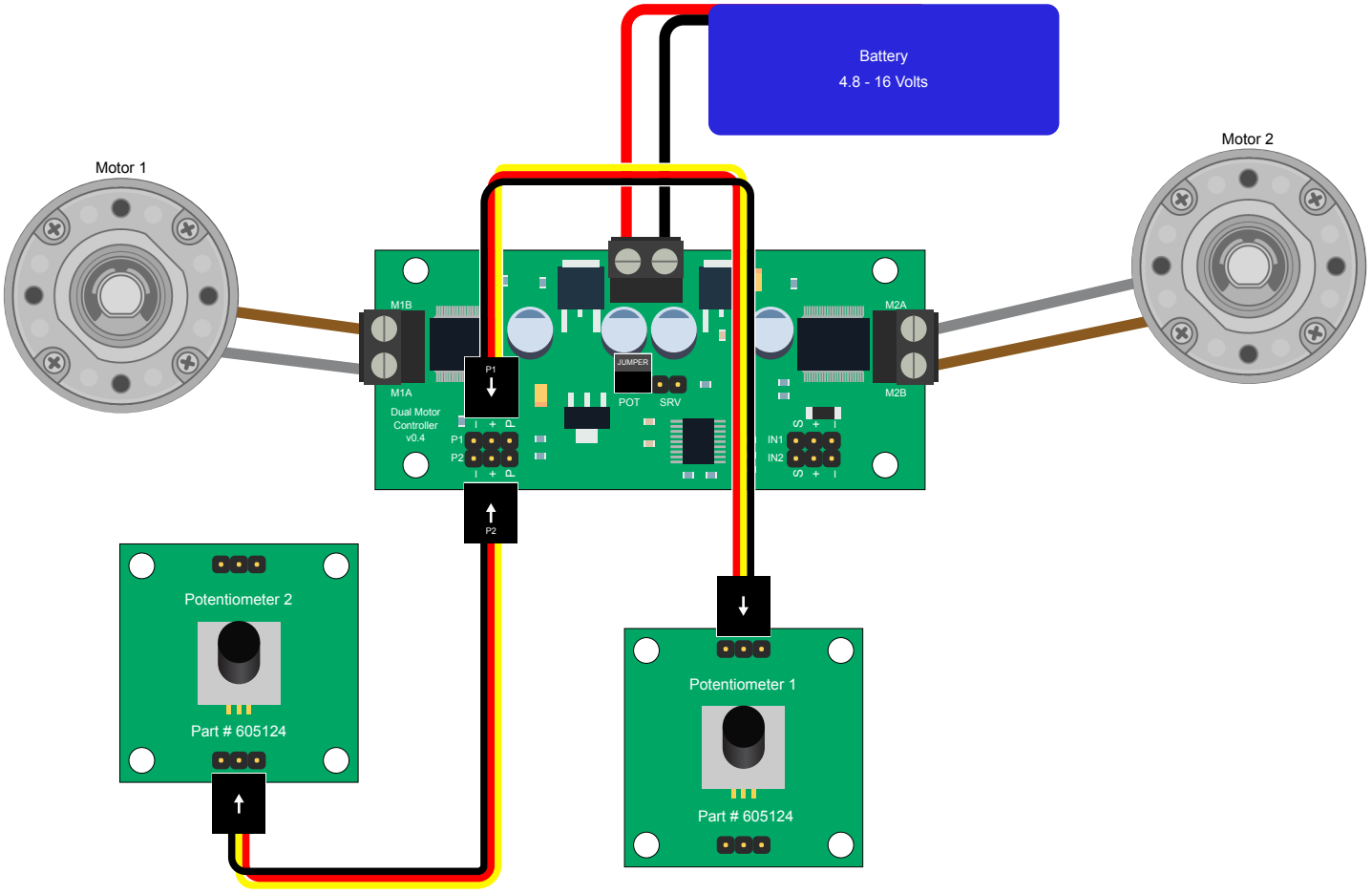
PRO TIP: YOU COULD ALSO POWER THE ARDUINO FROM ANY OF THE + & - PINS ON THE MOTOR CONTROLLER

PRO TIP: THE PWM SIGNAL RANGE IS FROM 1,000 µs TO 2,000 µs

ACTOBOTICS® DREAM • DESIGN • BUILD • REPEAT DUAL MOTOR CONTROLLER

Mode 2: Analog Speed Control Mode

Controlled by a Potentiometer



PRO TIP: NOTE THE YELLOW POT WIRES SWITCHING BETWEEN THE MIDDLE AND THE SIDE.

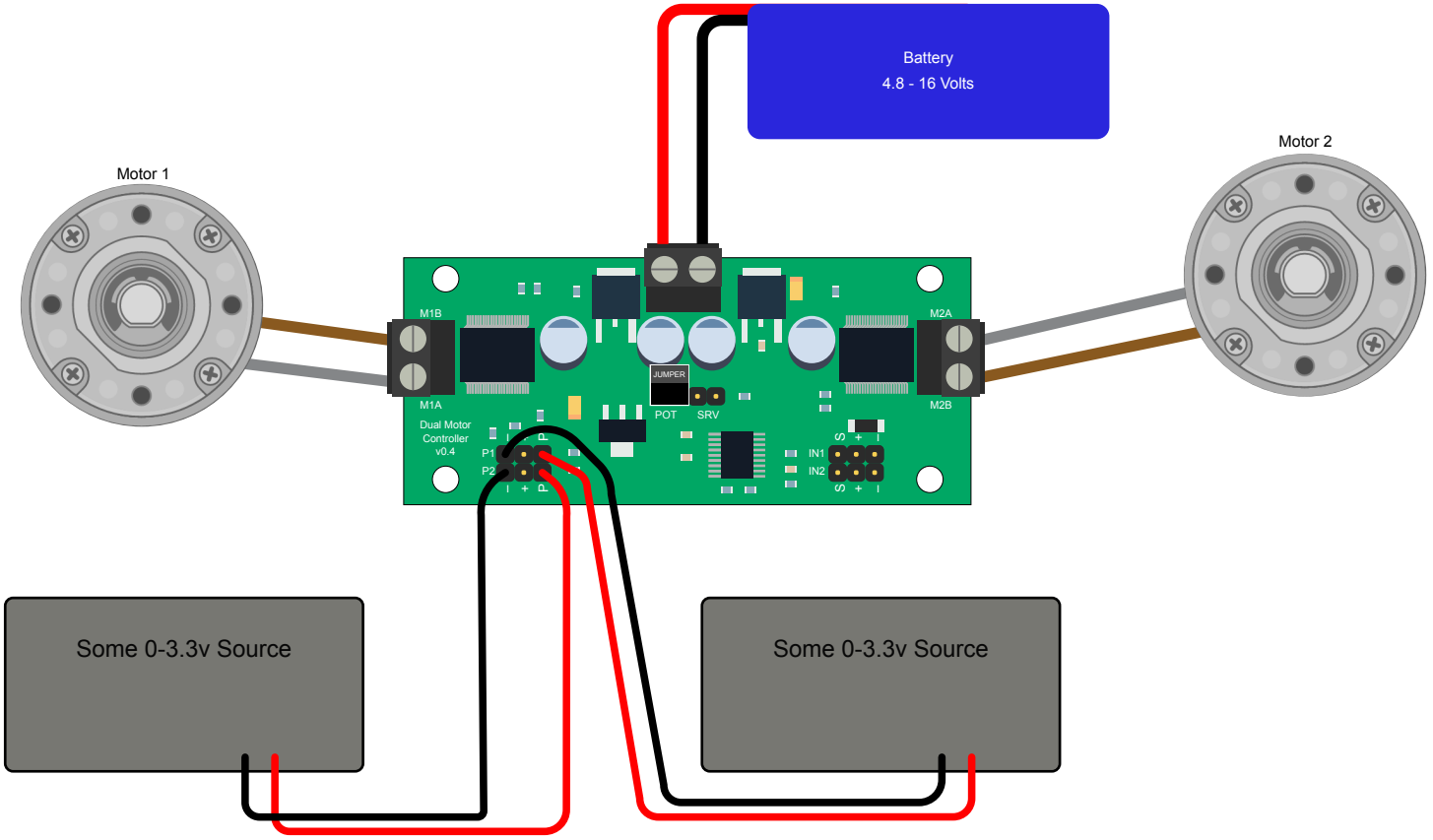
PRO TIP: THE POTS ACT AS VOLTAGE DIVIDERS.

PRO TIP: PART # 605124 IS A 5K POT... BUT YOU CAN USE ANYWHERE BETWEEN A 1K THROUGH A 100K POT.

ACTOBOTICS DREAM • DESIGN • BUILD • REPEAT DUAL MOTOR CONTROLLER

Mode 2: Analog Speed Control Mode

Controlled by a Voltage Source

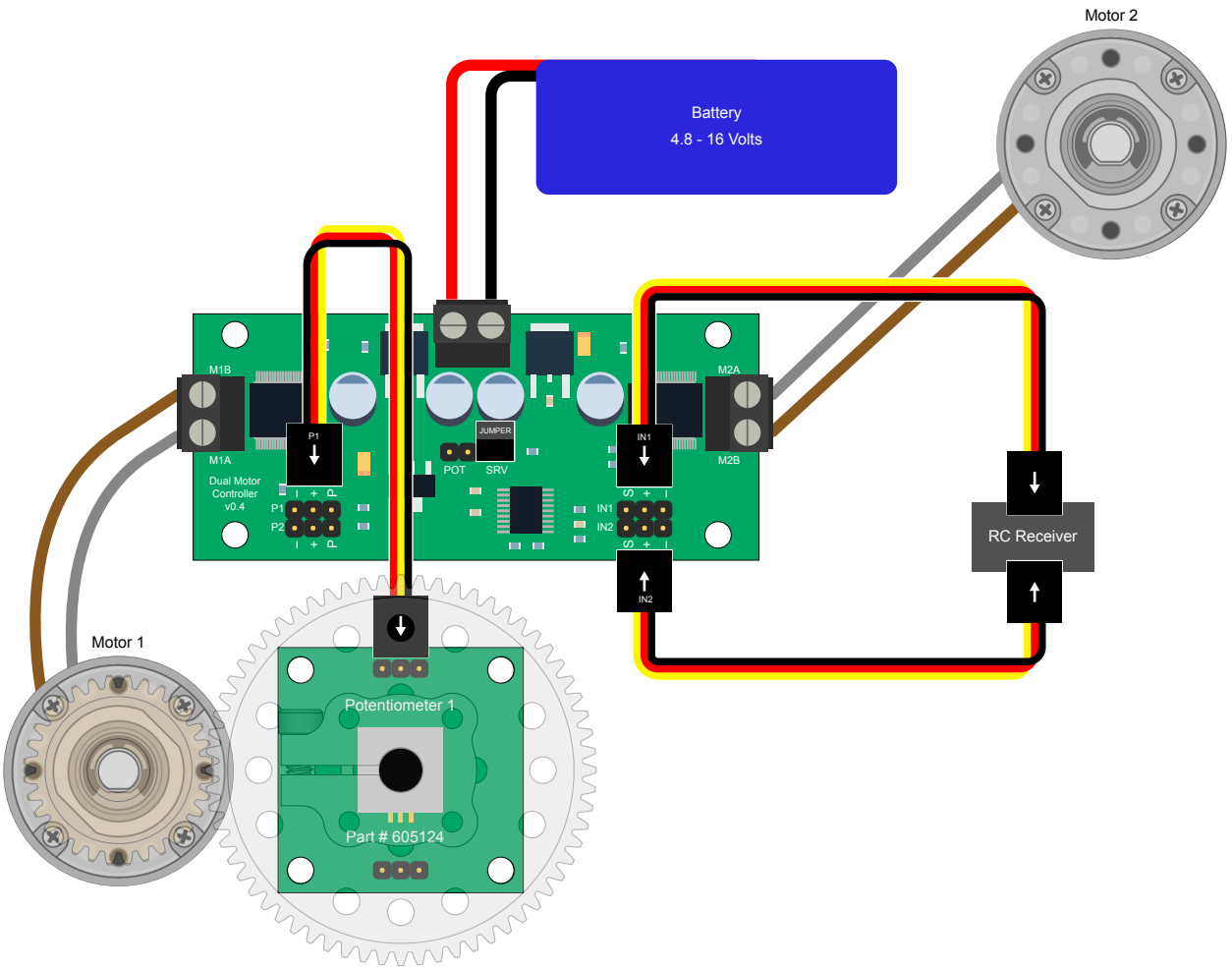


PRO TIP: THE VOLTAGE BEING SUPPLIED NEEDS TO BE BETWEEN 0-3.3V.

ACTOBOTICS® DREAM • DESIGN • BUILD • REPEAT DUAL MOTOR CONTROLLER

Mode 3: Split Mode

Position Control for Motor 1 (making it act like a servo), Digital Speed Control for Motor 2



PRO TIP: SET UP MOTOR 1 TO PHYSICALLY ROTATE POT1.

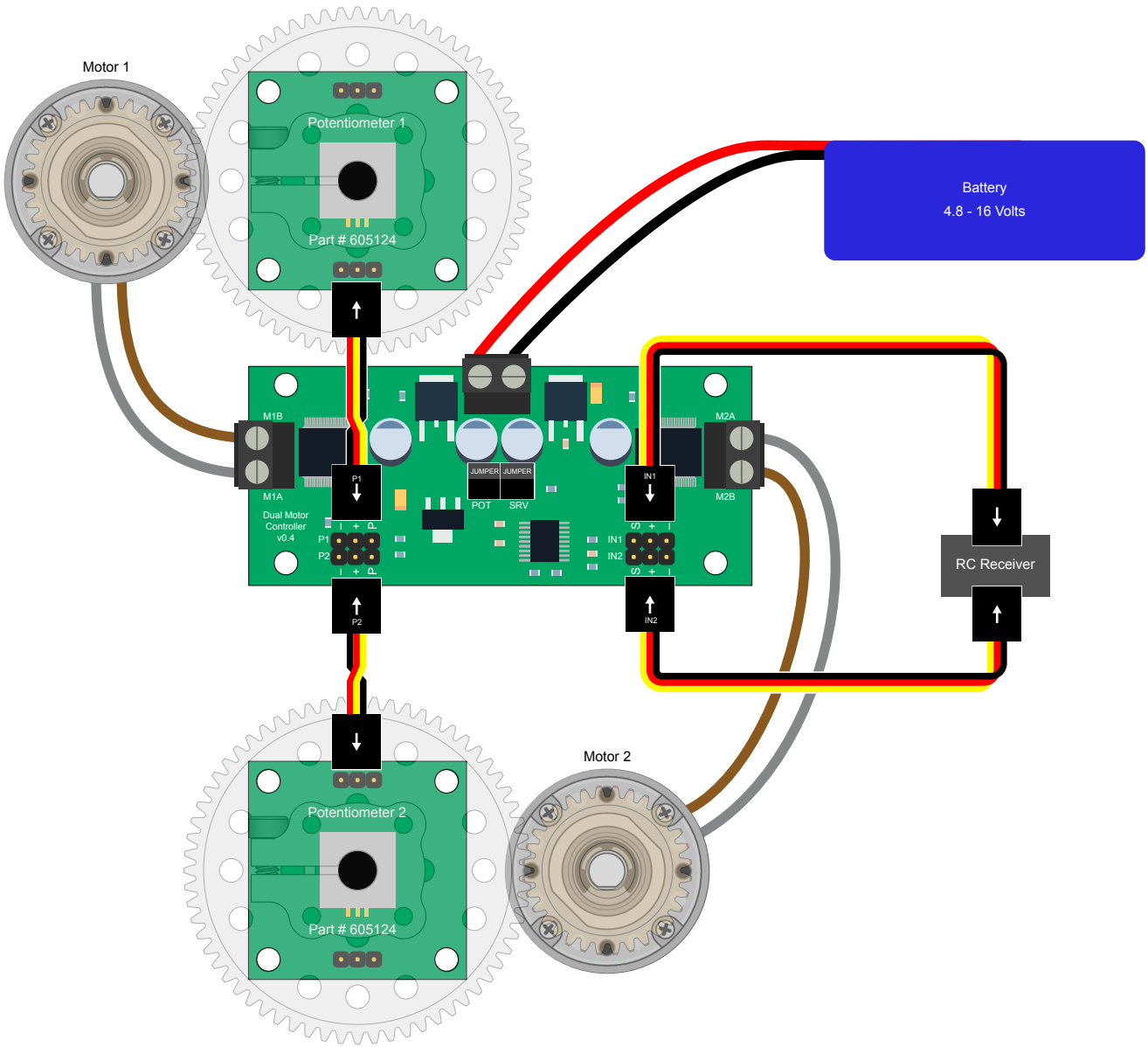
PRO TIP: CHANGING THE MOTOR POLARITY (SWAPPING THE GREY & BROWN WIRES) CHANGES THE MOTOR DIRECTION

PRO TIP: REFER TO YOUR RECEIVER'S MANUAL TO KNOW THE CORRECT SERVO LEAD ORIENTATION.

DUAL MOTOR CONTROLLER

Mode 4: Position Control Mode (aka Servo Mode)

Controlled by a Potentiometer & PWM Signal

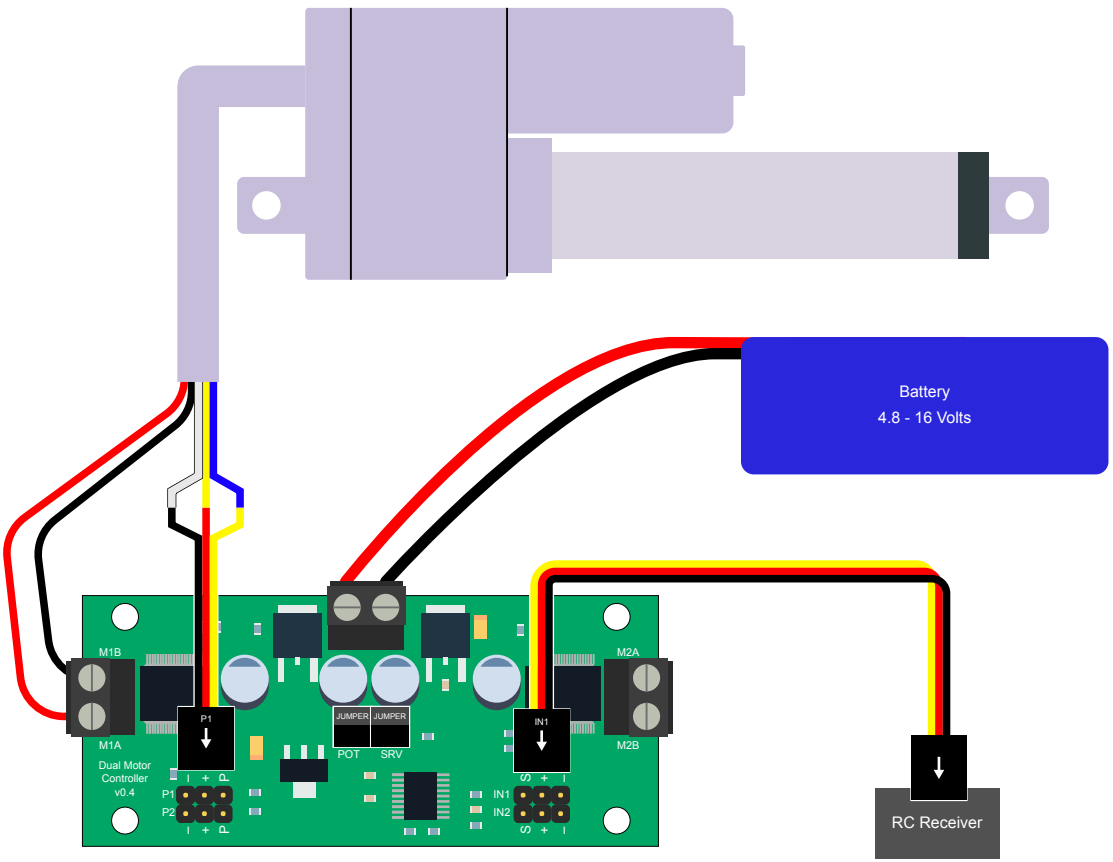


PRO TIP: REFER TO YOUR RECEIVER'S MANUAL TO KNOW THE CORRECT SERVO LEAD ORIENTATION.
PRO TIP: SET UP MOTOR 1 TO PHYSICALLY ROTATE POT1. SAME GOES FOR MOTOR 2 AND POT 2.

ACTOBOTICS® DREAM • DESIGN • BUILD • REPEAT DUAL MOTOR CONTROLLER

Mode 4: Position Control Mode (aka Servo Mode)

Controlling a Linear Actuator



PRO TIP: REFER TO YOUR LINEAR ACTUATOR'S DOCUMENTATION TO KNOW WHICH WIRE IS WHICH - THE WIPER GOES TO P.

PRO TIP: THE POT IN THE ACTUATOR CAN BE ANYWHERE BETWEEN A 1K THROUGH A 100K POT.

PRO TIP: YOU COULD CONTROL 1 LINEAR ACTUATOR ON CHANNEL 1 IN MODE 3...
OR TWO LINEAR ACTUATORS (ONE ON EACH CHANNEL) IN MODE 4.