



To determine the likely Vref for your motor, you need to know the motor's rated current and the A4988 driver's sense resistor value. Most A4988 drivers come with a 0.1-ohm sense resistor by default.

You mentioned earlier that your motor has a current rating of 2A. To calculate the Vref using the A4988 driver with a 0.1-ohm sense resistor, you can use the following formula:

$$V_{ref} = (\text{Current Limit} * 8 * \text{Sense Resistor Value})$$

In this case:

$$V_{ref} = (2A * 8 * 0.1 \text{ ohm}) = 1.6V$$

So, the likely Vref for your motor would be 1.6V. To set the potentiometer on the A4988 driver, adjust it so that the voltage between the potentiometer's middle pin (VREF) and GND is 1.6V. This will provide the appropriate current limit for your 2A motor.

