



Part Number: DFR0429

Description: Gravity: DC Micro Metal Gear Motor w/Driver – 50:1

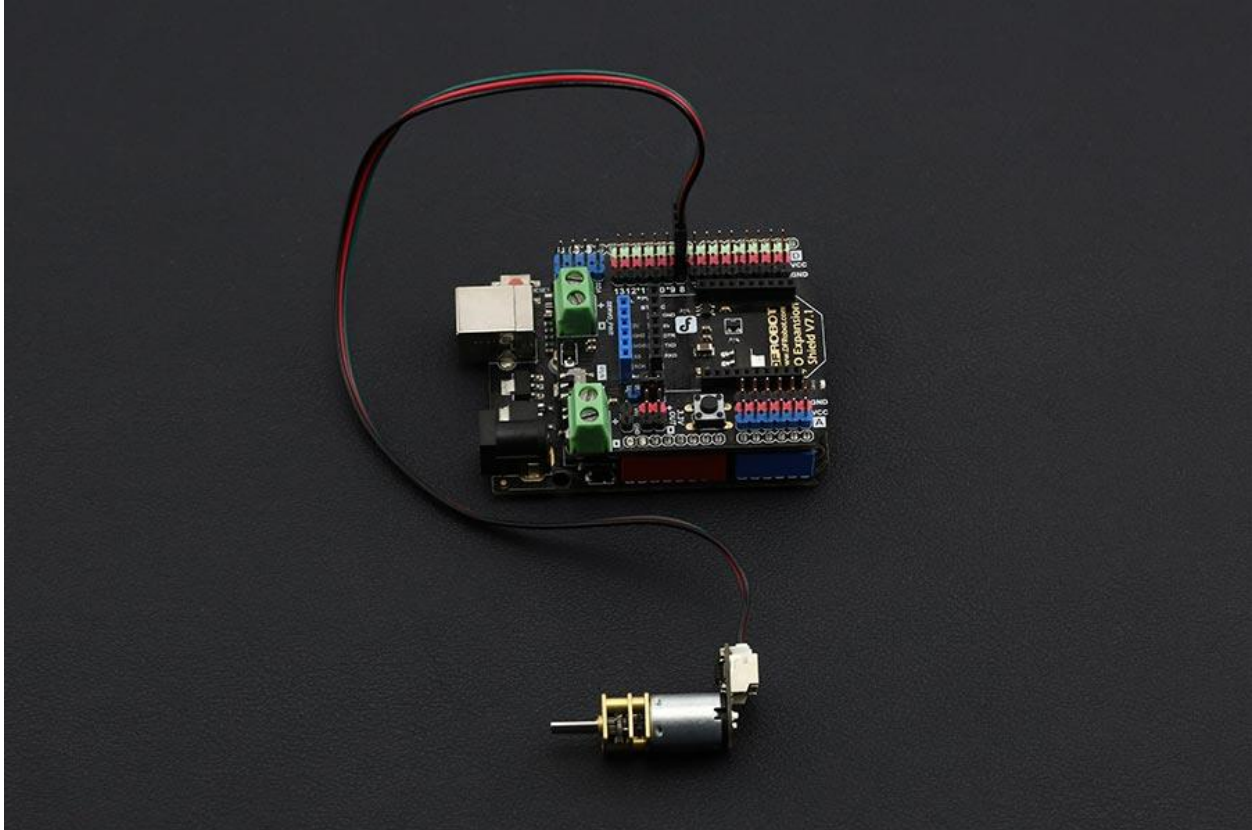
## ***INTRODUCTION***

An ordinary DC motor requires an H Bridge to work with a microcontroller such as an UNO. For newcomers to electronics, the process of finding the right motor driver, connecting it to the MCU and learning the relevant electronic theory can be confusing and frustrating when you just need something to work quickly. We hope that using the DC Micro Metal gear motor changes this.

The new micro DC geared motor is easy to operate - using the DFRobot "Gravity" interface, you are able to control the motor using only one control signal. Easily implement forward/reverse control and speed control via PWM. This motor also combines the features of a DC motor and 360 degree servo. We have also increased the stop range and reduced standby power consumption, so the current draw is less than 1mA without signal control. The Arduino Servo library supports up to 12 motors on most Arduino boards and 48 on the Arduino Mega. More function could be found on [Arduino Servo page](#). Ideal for DIY projects!

NOTE: The embedded control chip will consume a small amount of the input voltage, therefore the motor voltage will be slightly reduced. The motor speed will also be slightly slower than the rated motor speed.





## ***SPECIFICATION***

- Operating voltage: 3.5V - 8V
- Reduction ratio: 50:1
- No load current: 40mA@6V (approx)
- Static current: < 1mA (no PWM control signal input)
- Interface: Gravity 3-Pin
- PPM signal resolution: 1us
- PPM signal pulse width range: 500us-2500us
- Clockwise pulse width range: 500us-1400us (500us speed maximum)
- Stop pulse width range: 1400us-1600us
- Anticlockwise pulse width range: 1600us-2500us (2500us speed maximum)
- PWM frequency: 500 Hz.

## ***SHIPPING LIST***

- DC Micro Metal Gear Motor w/Driver - 50:1 x1
- Gravity 3-Pin cable x1