Servo

Overview

Servo is a type of geared motor that can only rotate 180 degrees. It is controlled by sending electrical pulses from your 2560 R3 board. These pulses tell the servo what position it should move to. The Servo has three wires, of which the brown one is the ground wire and should be connected to the GND port of 2560, the red one is the power wire and should be connected to the 5v port, and the orange one is the signal wire and should be connected to the Dig #9 port.

Component Required:

1 x Mega2560 R3

1 x Servo (SG90)

3 x M-M wires (Male to Male jumper wires)

Component Introduction

SG90

Universal for JR and FP connector

Cable length : 25cm

No load; Operating speed: 0.12 sec / 60 degree (4.8V), 0.10 sec / 60 degree (6.0V)

Stall torque (4.8V): 1.6kg/cm

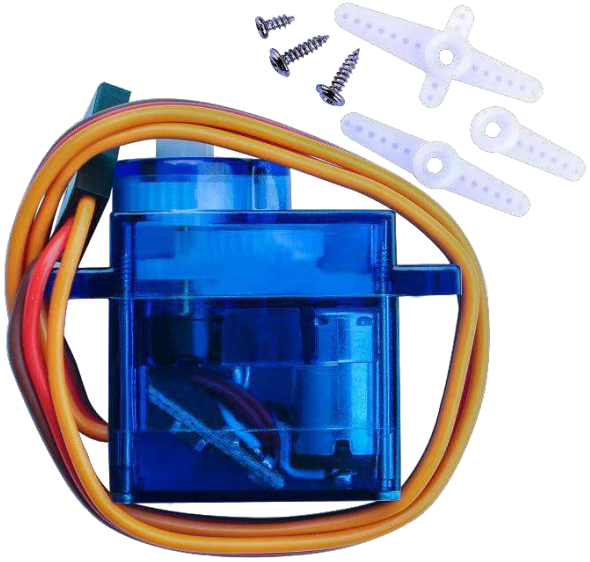
Temperature : -30~60'C

Dead band width: 5us

Working voltage: 3.5~6V

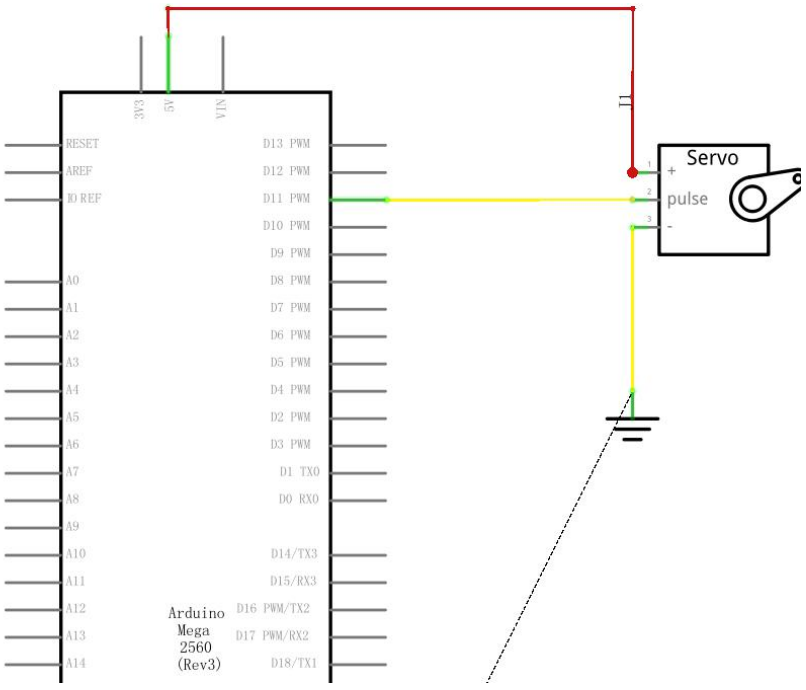
Dimension : 1.26 in x 1.18 in x 0.47 in (3.2 cm x 3 cm x 1.2 cm)

Weight : 4.73 oz (134 g)

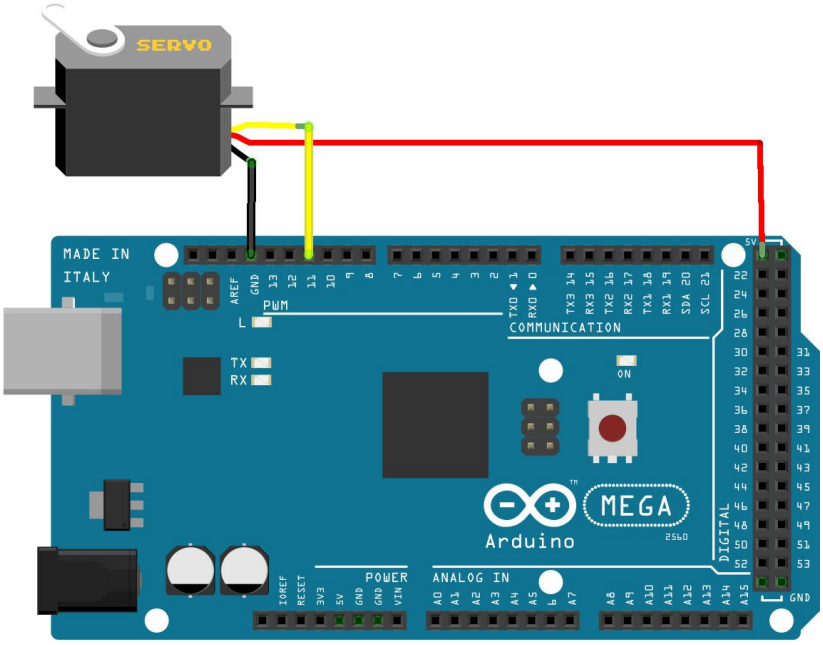


Connection

Schematic



Wiring diagram



Code

After wiring, please open the program in the code folder-"Servo" and click UPLOAD to upload the program. See "Blink" for details about program uploading if there are any errors.

Before you can run this, make sure that you have installed the < Servo> library or re-install it, if necessary. Otherwise, your code won't work. For details about loading the library file, see "Arduino IDE useful manual.pdf"