

How to wire motor controller TI SN754410 to drive a servo motor

Pin	Connection
1	Pi GPIO (any free pin)
2/7/10/15	Pi GPIO (any free pin)
3/6/11/14	Motor (positive terminal)
4/5	Ground (PI and Battery must have same ground)
8	Positive battery terminal (4.5 – 36 V)
16	Pi 5V (or battery)

Wiring note

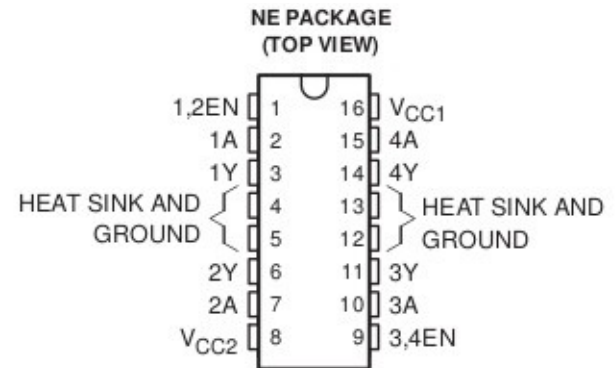
Servo motors are controlled through one output only, hence 4 servos can be controlled by one chip (or 2 servos + 1 DC motor, which needs two outputs).

Battery note

Servos usually take 5V input. If the battery supplying the chip is higher voltage, you need a voltage regulator.

How to drive the motor

The length of pulses on the pin encodes the position of the motor and is controlled in software (e.g., <http://abyz.co.uk/rpi/pigpio>).



FUNCTION TABLE
(each driver)

INPUTS†		OUTPUT
A	EN	Y
H	H	H
L	H	L
X	L	Z

H = high-level, L = low-level

X = irrelevant

Z = high-impedance (off)

† In the thermal shutdown mode, the output is in a high-impedance state regardless of the input levels.