

H-Bridge Motor Control

```
9
10 //H-bridge Motor Control
11 const int EN=9; //Half Bridge 1 Enable
12 const int MC1=3; //Motor Control 1
13 const int MC2=2; //Motor Control 2
14 const int POT=A0; //POT on Analog Pin 0
15
16 int val = 0; //for storing the reading from the POT
17 int velocity = 0; //For storing the desired velocity (from 0-255)
18
19 void setup()
20 {
21     pinMode(EN, OUTPUT);
22     pinMode(MC1, OUTPUT);
23     pinMode(MC2, OUTPUT);
24     Serial.begin(9600);
25     brake(); //Initialize with motor stopped
26 }
27
28 void loop()
29 {
30     val = analogRead(POT);
31     Serial.print("Potentiometer: (");
32     Serial.print(val);
33     Serial.print(") <=> Motor: (");
34     //go forward
35     if (val > 562)
36     {
37         velocity = map(val, 563, 1023, 0, 255);
38         forward(velocity);
39         Serial.print(velocity);
40     }
41
42     //go backward
43     else if (val < 462)
```

