Digital POT

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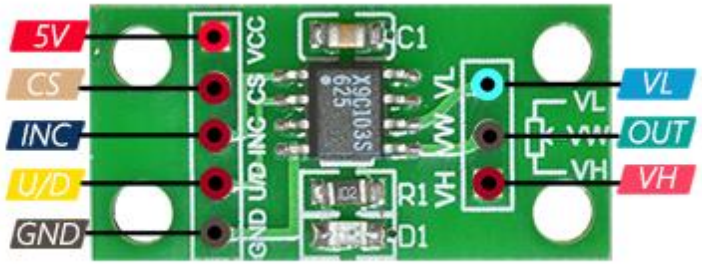

X9C103S Digital Potentiometer Module Pinout
This sensor has 8 wires:

VCC: Module power supply – 5V
CS: Chip Select. Active LOW
INC: Changing resistor command
U/D: UP / Down. Adjusting resistor
GND: Ground
VL: Voltage Low
VW: Voltage Wiper is the voltage output of the adjustable wiper contact
VH: Voltage High

```
/*
  * For this example, connect your X9C103P (or the like) as
follows:
 * 1 - INC - Nodemcu pin 4
 * 2 - U/D - Nodemcu pin 5
 * 3 - VH  - 5V
 * 4 - VSS - GND
 * 5 - VW  - Output: 150 Ohm resistor -> LED -> GND
 * 6 - VL  - GND
 * 7 - CS  - Nodemcu pin 0
 * 8 - VCC - 5V
 */


#include <DigiPotX9Cxxx.h>
float analogPin = A0;
DigiPot pot(4,5,0);
float v = 0;
float v1 = 0;

void setup() {
  Serial.begin(115200);
}
```

```
void loop() {
  Serial.println("Starting");

  for (int i=0; i<100; i++) {
    Serial.print("Increasing, i = ");
    Serial.println(i, DEC);
    pot.increase(1 );
    Serial.print("Analog Vol = ");
    v = analogRead(analogPin);
    Serial.println(v);
    float v3 = map(v, 0, 1024, 0, 5000);
    Serial.print(v3/1000);
    Serial.println(" V");
    delay(1000);
    if (v3 == 5000) {break;}
  }

  for (int i=0; i<100; i++) {
    Serial.print("Decreasing, i = ");
    Serial.println(i, DEC);
    pot.decrease( 1);
    Serial.print("Analog Vol = ");
    v1 = analogRead(analogPin);
    Serial.println(v1);
    float v2 = map(v1, 0, 1024, 0, 5000);
    Serial.print(v2/1000);
    Serial.println(" V");
    if (v2 == 000) {break;}
    delay(1000);
  }

}
```

DigiPot.ino

```
25  Serial.println("Starting");
26
```

Serial Monitor ×

Message (Enter to send message to 'NodeMCU 1.0 (ESP-12E Module)' on 'COM5')

```
0.15 V
Decreasing, i = 65
Analog Vol = 16.00
0.08 V
Decreasing, i = 66
Analog Vol = 1.00
0.00 V
Decreasing, i = 67
Analog Vol = 1.00
0.00 V
Decreasing, i = 68
Analog Vol = 0.00
0.00 V
Starting
Increasing, i = 0
Analog Vol = 6.00
0.03 V
Increasing, i = 1
Analog Vol = 24.00
0.12 V
Increasing, i = 2
Analog Vol = 39.00
0.19 V
Increasing, i = 3
Analog Vol = 55.00
0.27 V
Increasing, i = 4
Analog Vol = 69.00
0.34 V
Increasing, i = 5
Analog Vol = 85.00
0.41 V
Increasing, i = 6
Analog Vol = 101.00
0.49 V
```