



ADKeyboard Module (SKU: DFR0075)



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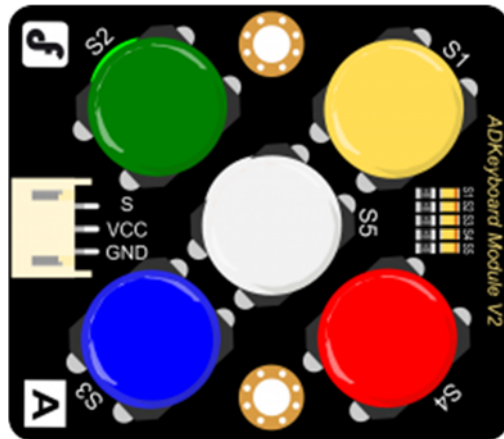
Introduction

This keyboard uses an analog input to read the five key state which saves IO resource for the Arduino. It can be used together with our IO Expansion Shield_For Arduino(V5)_ (SKU:_DFR0088) to make amazing interactive project.

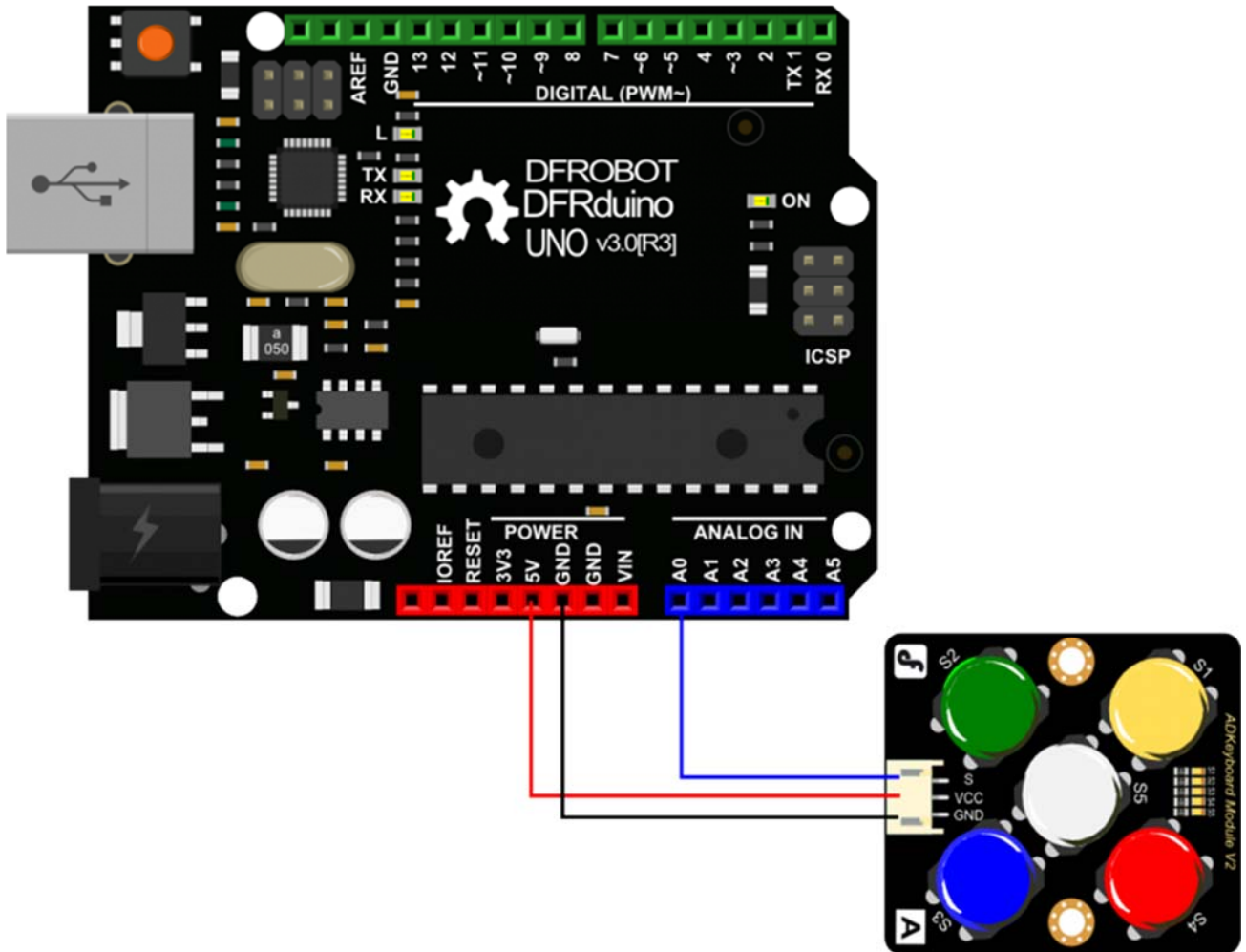
Specifications

- Supply voltage: 5V
- Interface: Analog
- Size: 40x33mm

Pin out Diagram



Wiring Diagram



Sample Code

```
//ADKeyboard Module
//Developed by DFRobot.com
//Last modified 30/11/2011
//Version 1.0
int adc_key_val[5] = {600,650, 700, 800, 900 };
int NUM_KEYS = 5;
int adc_key_in;
int key=-1;
int oldkey=-1;
void setup()
{
  pinMode(13, OUTPUT); //we'll use the debug LED to output a heartbeat
  Serial.begin(9600); // 9600 bps
}

void loop()
{
  adc_key_in = analogRead(0); // read the value from the sensor
  digitalWrite(13,LOW);
  key = get_key(adc_key_in); // convert into key press

  if (key != oldkey) // if keypress is detected
  {
    delay(50); // wait for debounce time
    adc_key_in = analogRead(0); // read the value from the sensor
    key = get_key(adc_key_in); // convert into key press
    if (key != oldkey)
    {
      oldkey = key;
      if (key >=0){
        digitalWrite(13,HIGH);
        switch(key)
        {
```

```

        case 0:Serial.println("S1 OK");
            break;
        case 1:Serial.println("S2 OK");
            break;
        case 2:Serial.println("S3 OK");
            break;
        case 3:Serial.println("S4 OK");
            break;
        case 4:Serial.println("S5 OK");
            break;
    }
}
}
}
delay(100);
}
// Convert ADC value to key number
int get_key(unsigned int input)
{
    int k;
    for (k = 0; k < NUM_KEYS; k++)
    {
        if (input < adc_key_val[k])
        {
            return k;
        }
    }
    if (k >= NUM_KEYS)k = -1; // No valid key pressed
    return k;
}
}

```