

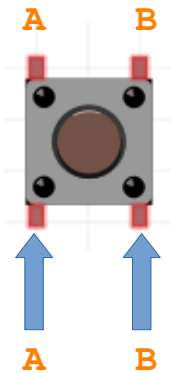


Tactile Button is a mechanical switch.

It has a button on the outside and two separate metal plates inside the casing, plate A and plate B with both coming out of the casing.

When the button is pressed and held-down, the two metal plates, A and B will be connected.

When the button is released, the two metal plate will be separated.



Apart from connecting and disconnecting physical circuit connections.

We can also detect the state of the button from our Program. We can find out whether it is pressed down or released, which can be used to control the behaviour of other devices in our program.

STEMKRAF - TUTORIAL PARTS

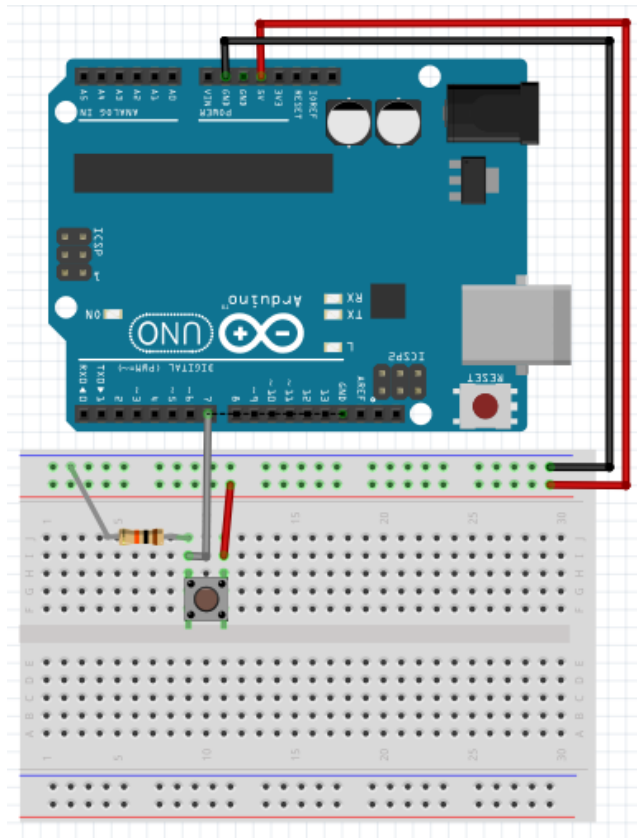
<https://github.com/teaksoon/stemkraf>

Program: tp03A_tactile_digital_raw

(1/2): tactile digital pin raw reading

:

: by TeakSoon Ding for STEMKRAF (OCT-2021)



Hardware:

1x Arduino Uno

1x Solderless Breadboard

Jumper wires

1x Tactile Switch

1x Resistor 10Kohm

STEMKRAF - TUTORIAL PARTS

<https://github.com/teaksoon/stemkraf>

```
Program: tp03A_tactile_digital_raw
(2/2): tactile digital pin raw reading
:
: by TeakSoon Ding for STEMKRAF (OCT-2021)
```

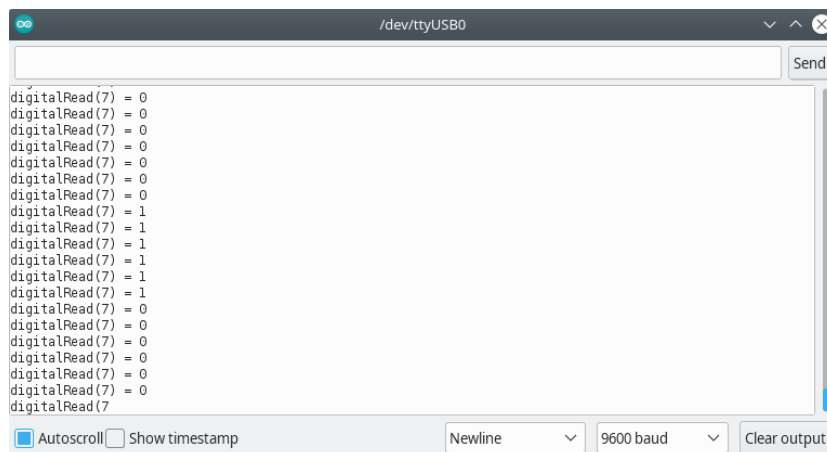
```
// Program: tp03A_tactile_digital_raw
//          : tactile digital pin raw readings
//          :
//          : by TeakSoon Ding for STEMKRAF ( OCT-2021 )
// -----
#define TACTILE_PIN 7

void setup() {
  pinMode(TACTILE_PIN, INPUT);

  Serial.begin(9600);
  Serial.print("\nSerial Monitor\n");
}

void loop() {
  int pinValue;
  pinValue = digitalRead(TACTILE_PIN);
  Serial.print("\ndigitalRead(7) = "); Serial.print(pinValue);
}
```

- Upload this program with the Arduino IDE Software
- Open up the Serial Monitor from the Arduino IDE Software
- Press and hold down the tactile button and see the Serial Monitor Screen
- Release the tactile button and see the Serial Monitor Screen



Our tactile button is connected to 5V, GND and Pin 7 on the Arduino Uno Board.

Our Program is reading the Pin 7 non-stop and displaying its value on the Serial Monitor screen.

When the button is pressed and held-down (the plates inside the tactile are connected), Pin 7 will receive 5V. Our program code, `digitalRead(7)` will give is the value of 1 and gets displayed.

When the button is released (the plates inside the tactile are disconnected), Pin 7 will receive 0V. Our program code, `digitalRead(7)` will give is the value of 0 and gets displayed