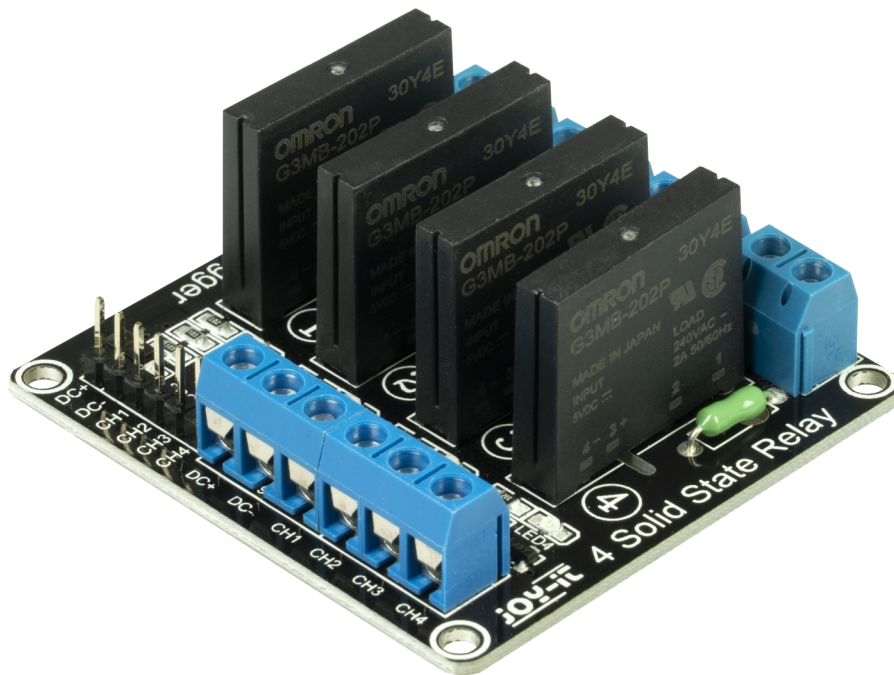


SOLID STATE RELAYS

SBC-SSR01



1. GENERAL INFORMATION

Dear customer,

thank you very much for choosing our product.

In following, we will introduce you to what to observe while starting up and using this product.

Should you encounter any unexpected problems during use, please do not hesitate to contact us.

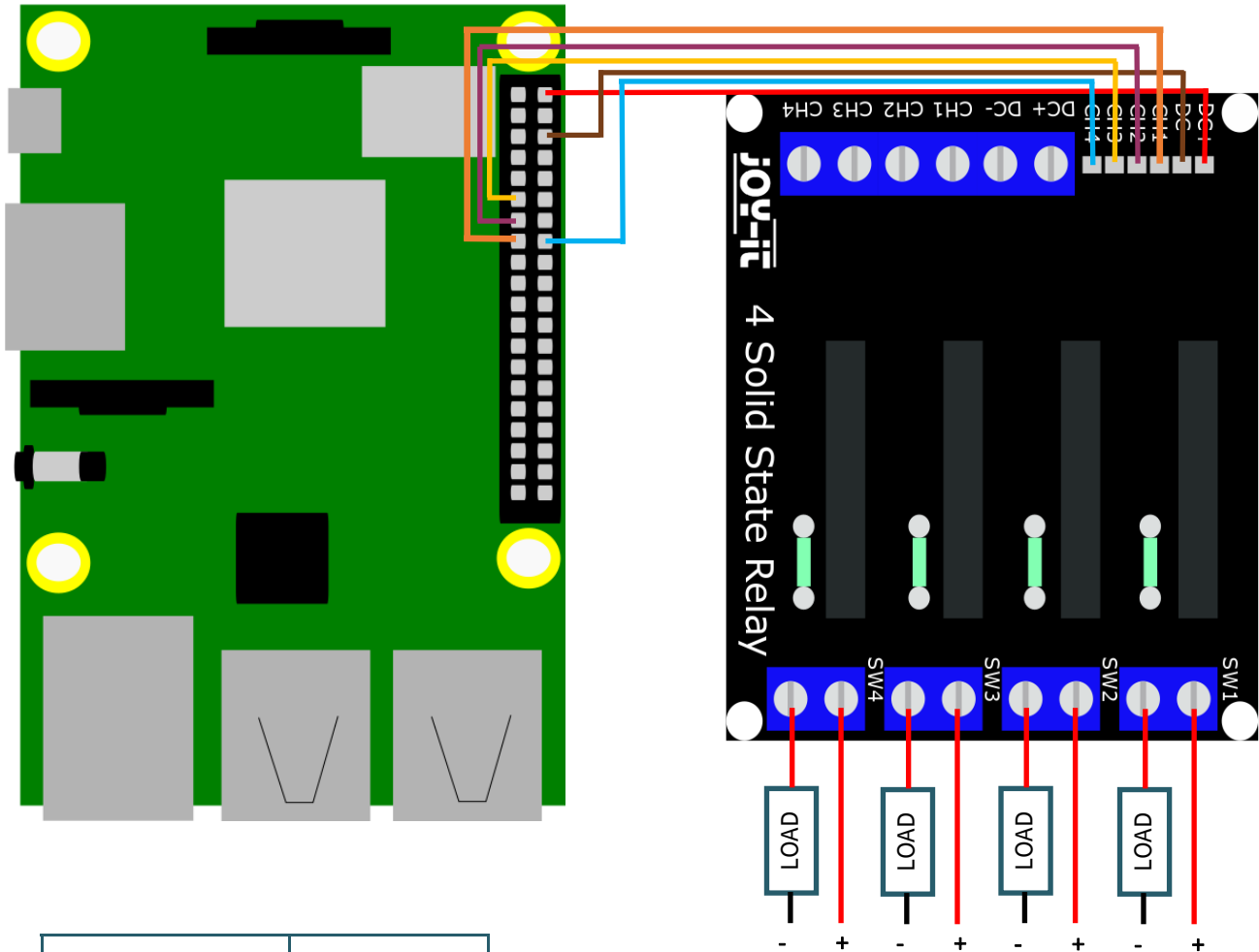
Caution!



This product may only be installed by a qualified electrician for your own safety! Working on electric devices/ systems implies hazard of strokes which may cause serious injuries or even death!

2. SETUP WITH THE RASPBERRY PI

Wiring:



Raspberry Pi	SSR01
5V (Pin 2)	DC+
GND (Pin 6)	DC-
BCM 22 (Pin 15)	CH1
BCM 27 (Pin 13)	CH2
BCM 17 (Pin 11)	CH3
BCM 23 (Pin 16)	CH4

Caution!



The relays can only handle loads from 100 V to 240 V AC and maximum 2 A.

This product may only be installed by a qualified electrician for your own safety! Working on electric devices/ systems implies hazard of strokes which may cause serious injuries or even death!

2. SETUP WITH THE RASPBERRY PI

Code example:

If the signal pin is set to high, the output is enabled.

In the following code example, all output are enabled every 10 seconds for 5 seconds.

```
from time import sleep
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BCM)

CH1 = 22
CH2 = 27
CH3 = 17
CH4 = 23
GPIO.setup(CH1, GPIO.OUT)
GPIO.setup(CH2, GPIO.OUT)
GPIO.setup(CH3, GPIO.OUT)
GPIO.setup(CH4, GPIO.OUT)

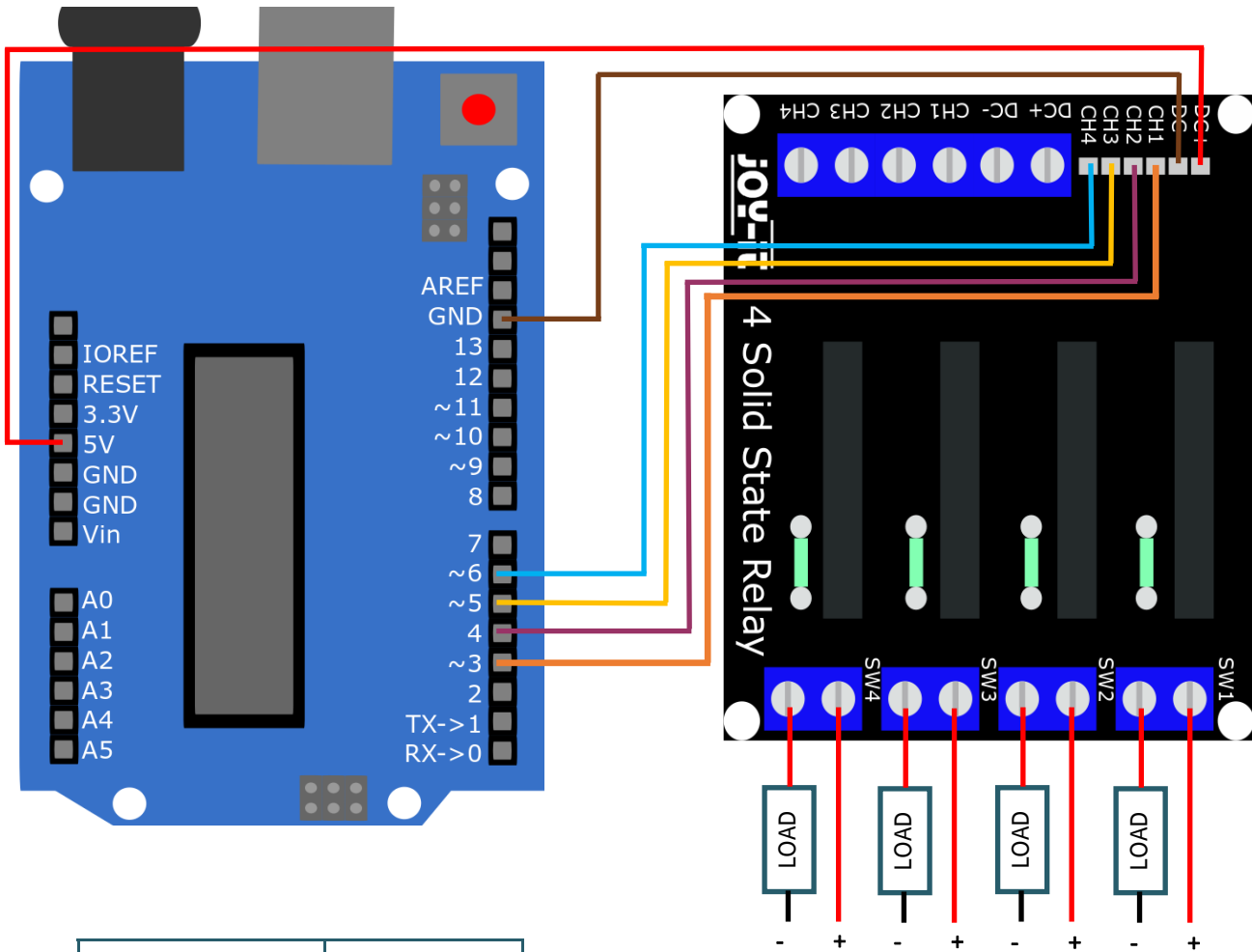
try:
    while True:
        print ("Enable all outputs")
        GPIO.output(CH1, GPIO.HIGH)
        GPIO.output(CH2, GPIO.HIGH)
        GPIO.output(CH3, GPIO.HIGH)
        GPIO.output(CH4, GPIO.HIGH)
        sleep(5)

        print ("Disable all outputs")
        GPIO.output(CH1, GPIO.LOW)
        GPIO.output(CH2, GPIO.LOW)
        GPIO.output(CH3, GPIO.LOW)
        GPIO.output(CH4, GPIO.LOW)
        sleep(5)

except KeyboardInterrupt:
    GPIO.cleanup()
```

3. SETUP WITH THE ARDUINO

Wiring:



Arduino	SSR01
5V	DC+
GND	DC-
Digital Pin 3	CH1
Digital Pin 4	CH2
Digital Pin 5	CH3
Digital Pin 6	CH4

Caution!



The relays can only handle loads from 100 V to 240 V AC and maximum 2 A.

This product may only be installed by a qualified electrician for your own safety! Working on electric devices/ systems implies hazard of strokes which may cause serious injuries or even death!

3. SETUP WITH THE ARDUINO

Code example:

If the signal pin is set to high, the output is enabled.

In the following code example, all outputs are enabled every 10 seconds for 5 seconds.

Before uploading, make sure that you have set the correct board and port in your Arduino IDE.

```
void setup() {  
  
  Serial.begin(9600);  
  pinMode(3, OUTPUT);  
  pinMode(4, OUTPUT);  
  pinMode(5, OUTPUT);  
  pinMode(6, OUTPUT);  
  
}  
  
void loop() {  
  
  Serial.println("Enable all outputs");  
  digitalWrite(3, HIGH);  
  digitalWrite(4, HIGH);  
  digitalWrite(5, HIGH);  
  digitalWrite(6, HIGH);  
  delay(5000);  
  
  Serial.println("Disable all outputs");  
  digitalWrite(3, LOW);  
  digitalWrite(4, LOW);  
  digitalWrite(5, LOW);  
  digitalWrite(6, LOW);  
  delay(5000);  
  
}
```

4. ADDITIONAL INFORMATION

Our information and take-back obligations according to the Electrical and Electronic Equipment Act (ElektroG)



Symbol on electrical and electronic equipment:

This crossed-out dustbin means that electrical and electronic appliances do not belong in the household waste. You must return the old appliances to a collection point.

Before handing over waste batteries and accumulators that are not enclosed by waste equipment must be separated from it.

Return options:

As an end user, you can return your old device (which essentially fulfils the same function as the new device purchased from us) free of charge for disposal when you purchase a new device.

Small appliances with no external dimensions greater than 25 cm can be disposed of in normal household quantities independently of the purchase of a new appliance.

Possibility of return at our company location during opening hours:

Simac Electronics GmbH, Pascalstr. 8, D-47506 Neukirchen-Vluyn, Germany

Possibility of return in your area:

We will send you a parcel stamp with which you can return the device to us free of charge. Please contact us by e-mail at Service@joy-it.net or by telephone.

Information on packaging:

If you do not have suitable packaging material or do not wish to use your own, please contact us and we will send you suitable packaging.

5. SUPPORT

If there are still any issues pending or problems arising after your purchase, we will support you by e-mail, telephone and with our ticket support system.

E-Mail: service@joy-it.net

Ticket system: <http://support.joy-it.net>

Telephone: +49 (0)2845 98469-66 (10-17 o'clock)

For further information please visit our website:

www.joy-it.net