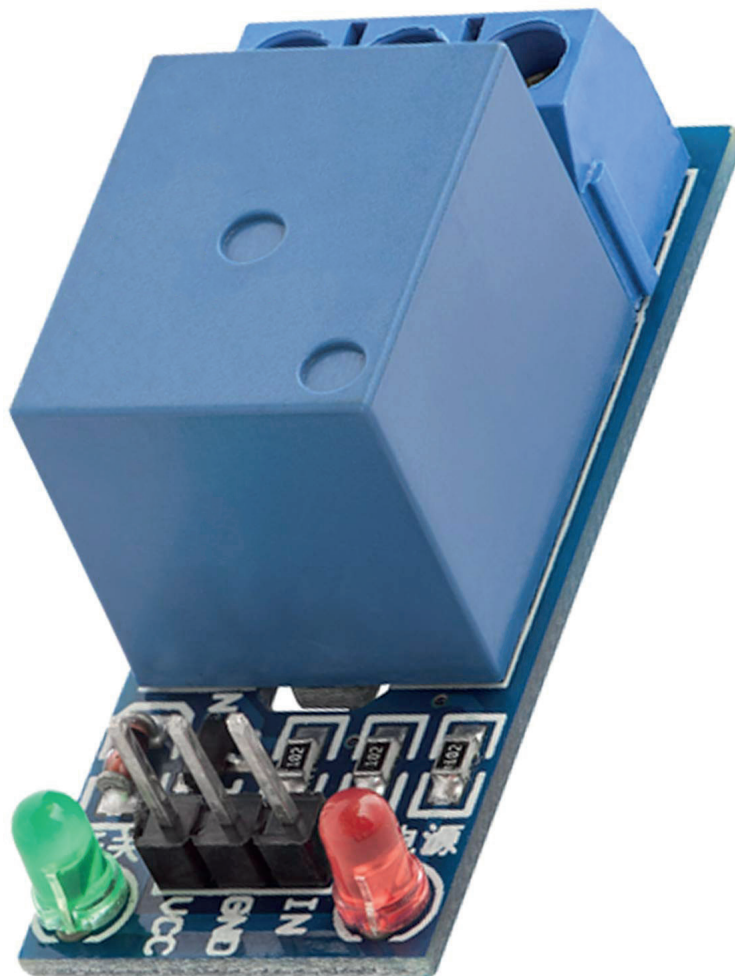


KF-3011-Relais Modul Datenblatt



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1. Brief Data

This Relay Module has three pins, VCC, GND and Signal. It can act as switch if the circuit and the load circuit have different supply voltage. It is commonly used if the load circuit is AC. It is a switch used to connect isolated connection from the circuit using a circuit signal. It has red LED that turns on every time the coil is energized or the signal pin has high input.

Specifications:

Maximum AC current and voltage: 5A 50VAC

Maximum DC current and voltage: 5A 30VDC

There is a normally open and one normally closed contact» To make the coil of relay energized you must have an input of 5VDC in the signal pin (logic 1)

2. Module Pin Configuration



+	5V Power Supply
-	Ground
S	Control Signal
NC	Normally Closed
NO	Normally Open
COMMON	Common

3. Operating Principle

There are two fixed contacts, a normally closed one and a normally open one.

When the coil is not energized, the normally open contact is the one that is off, while the normally closed one is the other that is on.

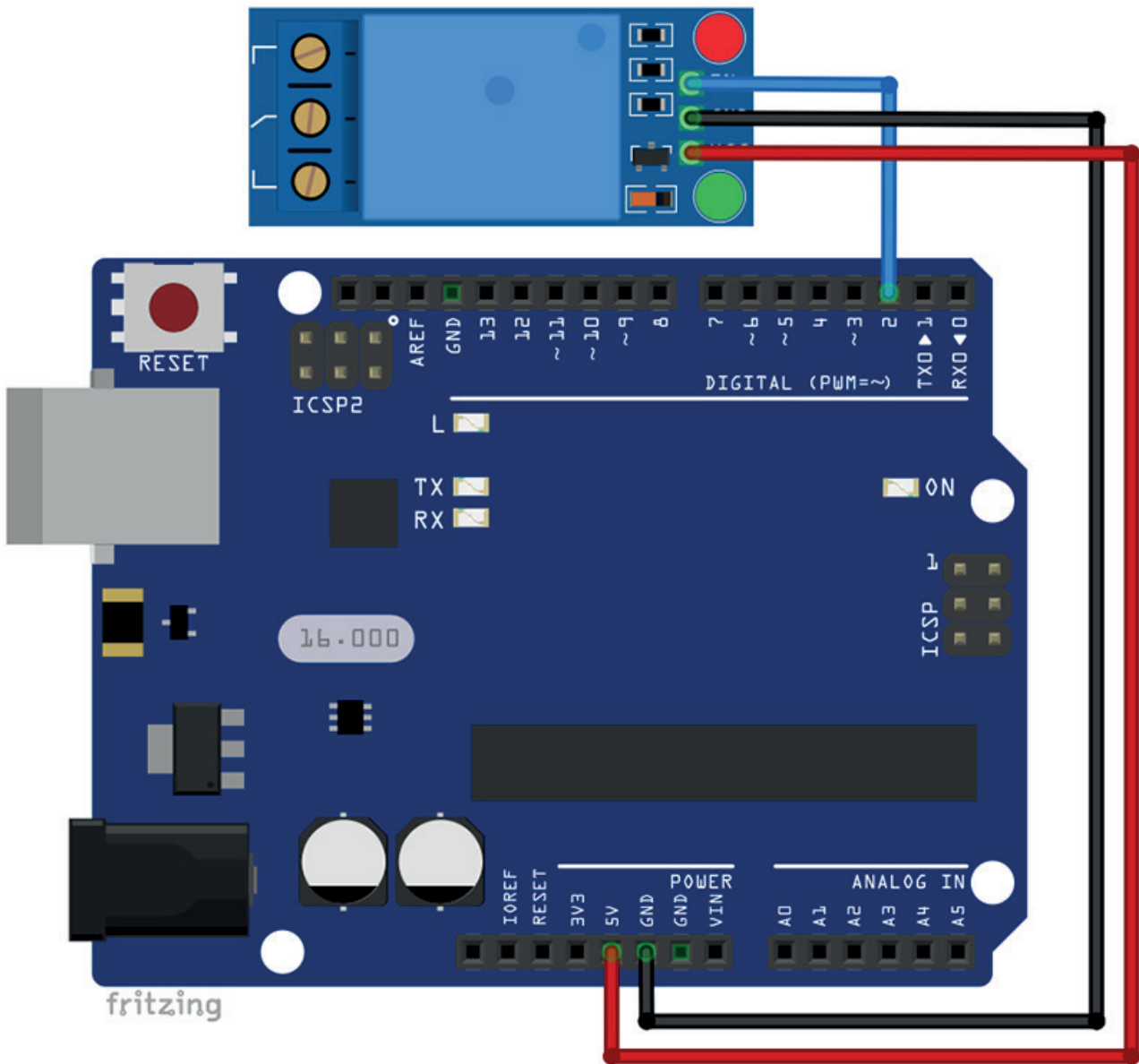
Supply voltage to the coil and some currents will pass through the coil thus generating the electromagnetic effect. So the armature overcomes the tension of the spring and is attracted to the core, thus closing the moving contact of the armature and the normally open (NO) contact or you may say releasing the former and the normally closed (NC) contact. After the coil is de-energized, the electromagnetic force disappears and the armature moves back to the original position, releasing the moving contact and normally closed contact. The closing and releasing of the contacts results in power on and off of the circuit.

4. Testing Setup

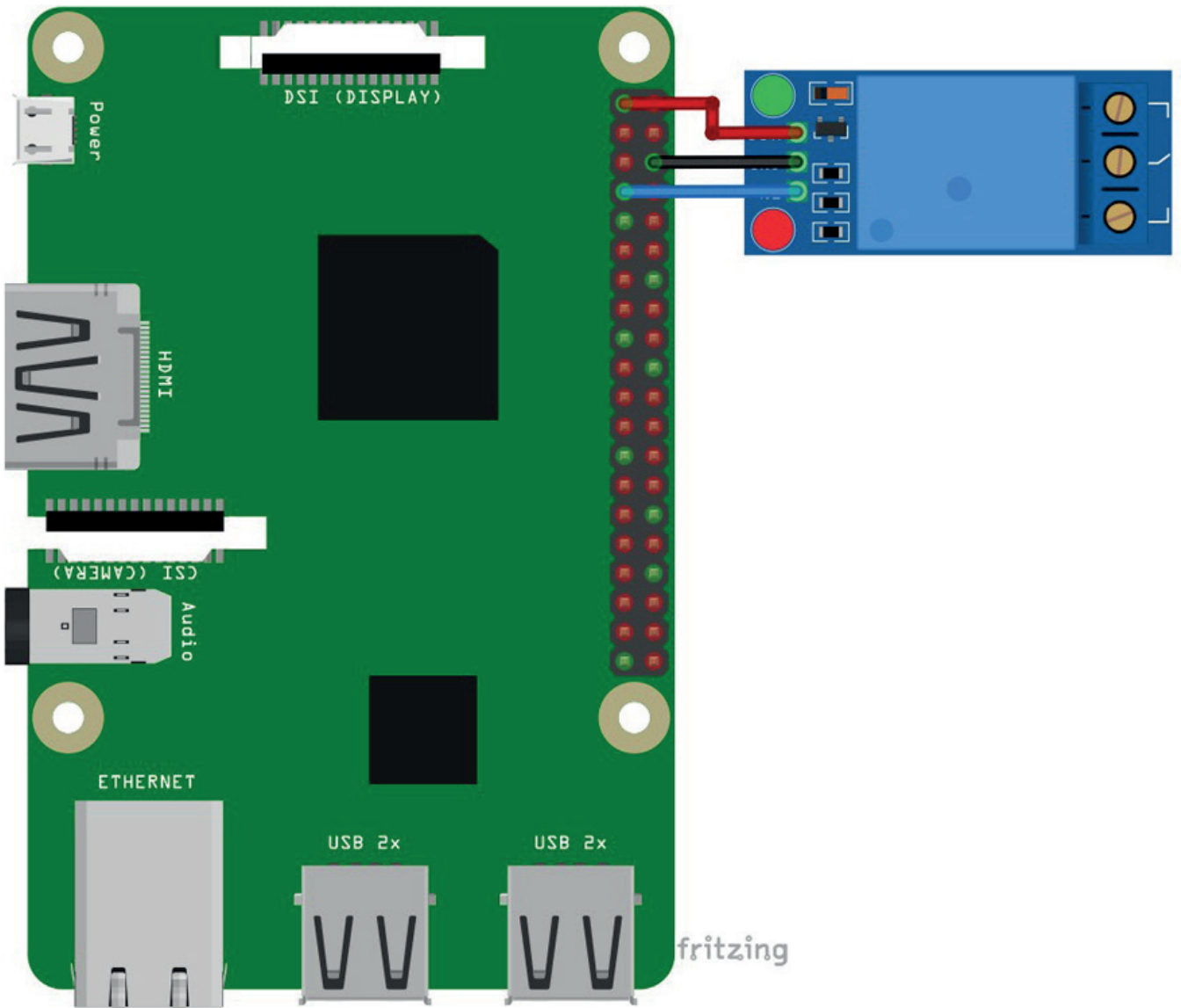
1. Please check all the connections from the given Connection Diagram.
2. Type the sample program in your Sketch then upload.
3. The buzzer will turn on every two seconds.

* You can also hear the tich of relay every two seconds

5. Connection Diagram



Module Pin	Microcontroller Pin
IN	D2 - Blue Wire
GND	GND - Black Wire
VCC	5V - Red Wire



Module Pin	Microcontroller Pin
VCC	3V3 - Red Wire (Pin 1)
GND	GND - Black Wire (Pin 6)
IN	GPIO4 - Blue Wire (Pin 7)



SAFETY WARNING!

When doing projects that are connected to mains voltage, misuse may lead to serious electrical shock!

For the sake of your own safety, be 100% sure what you are doing! Otherwise, ask someone who knows!

According to Current regulations, working with mains voltage is reserved for qualified electricians only!

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