

# Grove - Dry-Reed Relay



## Introduction

The Grove-Dry-Reed Relay is a relay module which works through magnetizing the vibration reed via the current in the coils. Compared to electromagnetic relays, the contacts completely sealed is the biggest feature of the Dry-Reed Relay. Besides, it features simplicity in construct, compactness, fast speed and long life, which make it widely applied in many fields such as microelectronic detection, Automatic Control etc.

## Feature

- Grove Interface
- High Speed
- Good stability
- Long contact life
- Contact fully sealed

## Specification

Item	Min	Typical	Max	Unit
Voltage	4.8	5.0	5.2	VDC
Coil Resistance	225	250	275	$\Omega$
Pick-Up Voltage	3.75			VDC

Switching Current(Max)	0.5			A
Switching Voltage(Max)	120 VAC/60VDC			-
Carrying Current(Max)	1.0			A
Operate Time(Max)	1.0			mS
Release Time(Max)	0.5			mS
Mechanical Life(at no load)	1×10 <sup>8</sup> operations			-
Ambient Temperature	-30	/	70	°C

## Usage

The Dry-Reed Relay can support up to 60VDC 1A load. You can use it to control resistance load, **but it is not applicable to inductive load(such as Motor).**

the usage if this Dry-reed relay is quite alike that of common relays.

- Connect electric light to Grove - Dry-Reed Relay and power for electric light.
- Connect Grove - Dry-Reed Relay to port D2 of Grove - Base Shield and plug it into Arduino/Seeeduino.

- Upload the below code. Please click [here](#) if you do not know how to upload.

```
int Relay = 2;

// the setup routine runs once when you press reset:
void setup() {
  // initialize the digital pin as an output.
  pinMode(Relay, OUTPUT);
}

// the loop routine runs over and over again forever:
void loop() {
  digitalWrite(Relay, HIGH);    //the Relay close(HIGH is the voltage level)
  delay(5000);                  // wait for five seconds
  digitalWrite(Relay, LOW);     //the Relay normally open by making the
  voltage LOW
  delay(5000);                  // wait for five seconds
}
```

- The electric light will light up for seconds ,then off for seconds, repeatedly.For the special applications, you may need to write the code by yourself.

## Support

If you have questions or other better design ideas, you can go to our [forum](#) or [wish](#) to discuss.