

# Unit Relay

SKU:U023



## Description

**Unit Relay** is a single-channel relay control high-voltage driving unit. It is based on the HK4100F-DC5V-SHG relay and provides SPDT (Single Pole Double Throw) switching, supporting high-voltage on/off control up to AC 220V@3A / DC 30V. This unit is directly driven by a single GPIO logic level and features physical isolation as well as a status indicator LED. It communicates via a Grove HY2.0-4P interface and adopts a LEGO-compatible hole design, enabling flexible integration with LEGO structures or screw mounting. It is suitable for safe power management scenarios in smart homes, appliance control, and automation equipment.

## Features

- Channel Type: 1 x SPDT Relay
- Load Capacity: AC 220V@3A or DC 30V@3A
- Status Indicator: Relay Status LED
- Control Method: Direct Single GPIO Level Drive
- Communication Interface: Grove HY2.0-4P
- 2 x LEGO-Compatible Holes
- Development Platform
  - UiFlow1

- UiFlow2
- Arduino IDE

## | Includes

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- 1 x Unit Relay
- 1 x HY2.0-4P Grove cable (20cm)
- 1 x 3.96 terminal

## | Applications

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- Remote control of high-power appliances such as refrigerators, air conditioners, TVs, etc.

## | Specifications

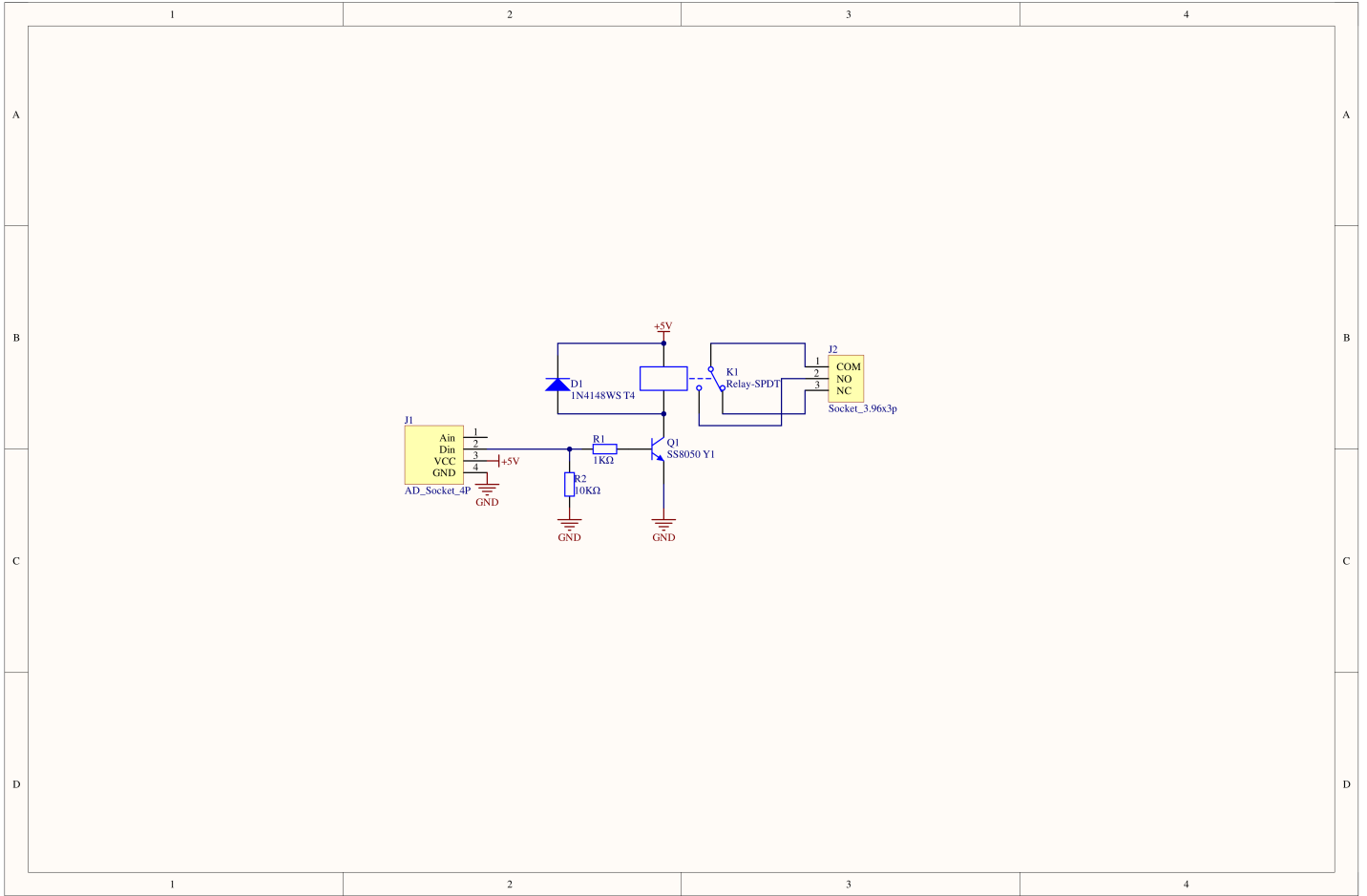
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Specification	Parameter
Single relay power consumption	5V@40mA
Coil action time	6ms
Coil release time	4ms
Product Size	48.0 x 24.0 x 8.0mm
Product Weight	9.5g
Package Size	138.0 x 93.0 x 9.0mm
Gross Weight	17.1g

## | Schematics

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- [Unit Relay Schematics PDF](#)

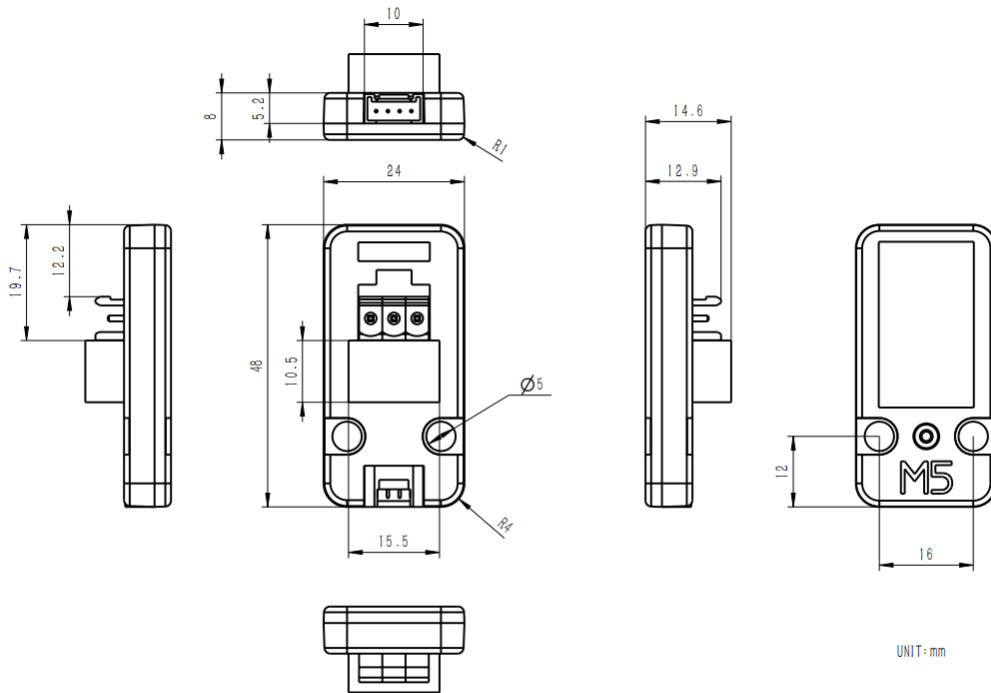


## PinMap

## Unit Relay

HY2.0-4P	Black	Red	Yellow	White
PORT.B	GND	5V	DIN	NC

## Model Size



## Structure

- [Unit Relay Structure Files](#)

## Datasheets

- [Relay Datasheet](#)

## Softwares

### Arduino

- [Unit Relay Test Example with M5Atom](#)
- [Unit Relay Test Example with M5Core](#)
- [Unit Relay Test Example with M5Core2](#)
- [Unit Relay Test Example with M5StickC](#)
- [Unit Relay Test Example with M5StickC-Plus](#)

### UiFlow2

- [UiFlow2 Docs](#)

### EasyLoader

Easyloader	Download Link	Notes
Unit Relay Test Easyloader	<a href="#">download</a>	/

## | Video

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- Relay coil cycling on/off, contacts used as switches for circuit control.

[Relay\\_UNIT.mp4](#)

- **Controlling Home Lights with UIFlow and RELAY Unit**

[Blinking a bulb with the M5 Relay unit..mp4](#)