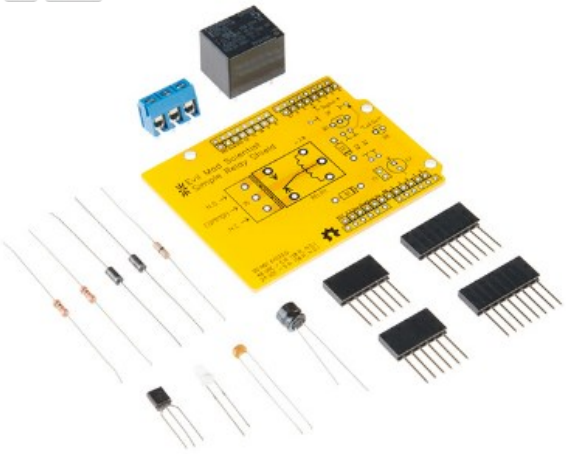

Relay Shield v2.0

DEV-13769 ROHS

DESCRIPTION INCLUDES DOCUMENTS

This Relay Shield v2.0 from Evil Mad Scientist is a simple Arduino add-on that gives your Arduino the ability to control a single electromechanical relay for switching loads of up to 24VDC or 40VAC. Each Relay Shield comes equipped with a single pole - double throw (SPDT) sealed relay which can handle a current load of up to 5A. This means that when current is applied to the coil it throws a simple changeover switch, terminating the connection from the NC (Normally Closed) contact to ground and closing the NO (Normally Open) contact. Use them to switch high voltage/high current devices. As this is a shield, it is powered straight from the 5V power supplied by your Arduino, simply slide it into your Arduino or shield-compatible board (like the RedBoard) and you will be good to go!

The relay shield is controlled through pin Digital 4 on your Arduino via a transistor labeled "Q1". When output Digital 4 on your Arduino is low, the relay shield will connect the NC pin to the "Common" pin of the screw terminal. When output Digital 4 goes high, the “Coil On?” LED will light up and the relay shield will instead connect the NO pin to the "Common" pin of the screw terminal. Version 2.0 of this shield adds the ability to control the mechanical relay from a pin other than D4.

The Relay Shield is sold as an easy-to-assemble kit and includes everything listed below with clear assembly instructions listed in the documents section.

Tags

ARDUINO KIT RELAY SHIELD

Relay Shield v2.0 Product Help and Resources

SKILLS NEEDED

Core Skill: **Soldering**

This skill defines how difficult the soldering is on a particular product. It might be a couple simple solder joints, or require special reflow tools.

Skill Level: Rookie - The number of pins increases, and you will have to determine polarity of components and some of the components might be a bit trickier or close together. You might need solder wick or flux.
See all skill levels

Core Skill: **DIY**

Whether it's for assembling a kit, hacking an enclosure, or creating your own parts; the DIY skill is all about knowing how to use tools and the techniques associated with them.

Skill Level: Noob - Basic assembly is required. You may need to provide your own basic tools like a screwdriver, hammer or scissors. Power tools or custom parts are not required. Instructions will be included and easy to follow. Sewing may be required, but only with included patterns.
See all skill levels

Core Skill: **Electrical Prototyping**

If it requires power, you need to know how much, what all the pins do, and how to hook it up. You may need to reference datasheets, schematics, and know the ins and outs of electronics.

Skill Level: Competent - You will be required to reference a datasheet or schematic to know how to use a component. Your knowledge of a datasheet will only require basic features like power requirements, pinouts, or communications type. Also, you may need a power supply that?s greater than 12V or more than 1A worth of current.
See all skill levels

COMMENTS 5 | REVIEWS 0

Comments

Looking for answers to technical questions?

We welcome your comments and suggestions below. However, if you are looking for solutions to technical questions please see our Technical Assistance page.

Log in or register to post comments.

Member #670926 / about 3 years ago / ★ 1

Just got this relay shield and the relay is too long. Its body is too long and it interferes with the three wire screw connector. There is no way to shift the connector around to make the relay fit. Either a smaller length relay is needed or new holes for the connector need to be drilled. I wrote evil made scientists about this and hope to hear from them first but i'm interested in Sparkfun's thoughts.

> Member #670926 / about 3 years ago / ★ 1
>
> I just wanted to update this post. Evil Mad Scientist's replied to my email within 15 minutes. They are correcting the problem. Hats off to their terrific customer service!
>
> Sparkfun- You might want to check the kits you have in stock because EMS said several kits went out with this relay fitment issue.

Member #894191 / about 3 years ago / ★ 1

Hi The links for the documentation (assembly instruction, etc) do not work. Could you provide a working site address, please?

ftc / about 4 years ago / ★ 1

I have a 6 amp 110V sump pump that I would like to switch on and off. Looking at the data sheet for the relay it say 10 amps max, is it safe to switch the sump pump with this? Does 6 amps max mean that the sump pump will not draw more than 6 amps or that it takes 6 amps when it is running?

Thanks!

bi3nary / about 4 years ago / ★ 1

Is that supposed to read "40VAC"?

SparkFun Electronics ® / **6333 Dry Creek Parkway, Niwot, Colorado 80503**