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SPARKFUN MONSTER MOTO SHIELD

DESCRIPTION

FEATURES

DOCUMENTS

Voltage max: 16V

· Maximum current rating: 30 A

Practical Continuous Current: 14 A

Current sensing available to Arduino analog pin

MOSFET on-resistance: 19 mΩ (per leg)

· Maximum PWM frequency: 20 kHz

Thermal Shutdown

• Undervoltage and Overvoltage shutdown



















SparkFun Monster Moto Shield 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: Noob - Some basic soldering is required, but it is limited to a just a few pins, basic through-hole soldering, and couple (if any) polarized components. A basic soldering iron is all you should need. See all skill levels

Core Skill: Robotics

This skill concerns mechanical and robotics knowledge. You may need to know how mechanical parts interact, how motors work, or how to use motor drivers and controllers.



Skill Level: Rookie - You will be required to know some basics about motors, basic motor drivers and how simple robotic motion can be accomplished.

See all skill levels

Core Skill: Programming

If a board needs code or communicates somehow, you're going to need to know how to program or interface with it. The programming skill is all about communication and code.



Skill Level: Rookie - You will need a better fundamental understand of what code is, and how it works. You will be using beginnerlevel software and development tools like Arduino. You will be dealing directly with code, but numerous examples and libraries are available. Sensors or shields will communicate with serial or TTL.

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: Rookie - You may be required to know a bit more about the component, such as orientation, or how to hook it up, in addition to power requirements. You will need to understand polarized components. See all skill levels





Customer Reviews

★ ★ ★ ☆ 4 out of 5	5
★ ★ ★ ☆ 4 out of 5	5

Based on 3 ratings:

5 star	1
4 star	1
3 star	1
2 star	0
1 star	0

Currently viewing all customer reviews.

1 of 2 found this helpful:

★ ★ ★ ★ Great Motorshield and Great Customer Support

about 3 years ago by Member #699105 ✓ verified purchaser

So I ordered this to resolve a over heating issue using an arduino motor shield. Worked great. I can run my bot now using 2x12v dc motors without issue.

My initial order a capacitor popped from a bad unit and the team at sparkfun responded quickly and got me a replacement for my project and answered my setup questions.

 $\star \star \star \star \star \Delta$ As good as I hoped it would be.

last year by Member #317634 ✓ verified purchaser

I put it into a balancing robot, a 5ft tall balancing robot weighing about 60lbs. or more. Each motor draws around 6A under light load, locked rotor is probably in excess of the 30A rating, but should never happen. I did have to add a heat sink. The motors are quite powerful with very snappy response. After trying several options, including some designs of my own, this is the first drive amp to actually work in this project. Thank you SparkFun for a drive amp that can drive sizable motors.

about 5 months ago by Member #1173550 ✓ verified purchaser

This was an easy setup to get up and running in the Studio 7. The software I pulled from the Googled tutorial had some issues, yet it was enough for me to understand the part and get some motors spinning. Careful when adding connectors to the shield; The USB to shield can be shorted out to the arduino if not careful, I almost made this mistake on first power up ... no sparks!!



















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In 2003, CU student Nate Seidle blew a power supply in his dorm room and, in lieu of a way to order easy replacements, decided to start his own company. Since then, SparkFun has been committed to sustainably helping our world achieve electronics literacy from our headquarters in Boulder, Colorado.

No matter your vision, SparkFun's products and resources are designed to make the world of electronics more accessible. In addition to over 2,000 open source components and widgets, SparkFun offers curriculum, training and online tutorials designed to help demystify the wonderful world of embedded electronics. We're here to help you start something.

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