



LEARN

BLOG

SUPPORT



LOG IN

REGISTER

{}

PRODUCT MENU

find products, tutorials, etc..



EDUCATION

AVC FORUM

HOME

PRODUCT CATEGORIES / MOTOR ACCESSORIES / WHEEL ENCODER KIT

EL ENCODER NI

Wheel Encoder Kit



DESCRIPTION

FEATURES

DOCUMENTS

• Supply Voltage: 3-24V

Supply Current: 4mA per sensor

Output Voltage: 26V Max

Output Current: 25mA Continuous



@ images are CC BY 2.0



Wheel Encoder Kit Product Help and Resources

SKILLS NEEDED

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: Experienced - Your experiences should include working with stepper motors and feedback system. You may need to understand how encoders and more complex control systems work.

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.

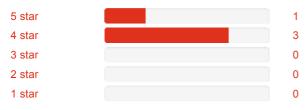


Skill Level: Noob - You don't need to reference a datasheet, but you will need to know basic power requirements. See all skill levels

Customer Reviews



Based on 4 ratings:



Currently viewing all customer reviews.

2 of 2 found this helpful:

$\bigstar \bigstar \bigstar \bigstar \Leftrightarrow \Box$ Approximating travel distance

about 3 years ago by Member #344289 ✓ verified purchaser

The encoder is working well for me. I've mounted the magnetic disk on the drive shaft of a 4x4 car, after removing the rubber backing. I had first tried mounting the disk on an axle, but I over tightened the wheel nut and broke the disk. It looks like a washer made of steel, but it is more brittle than I expected. It is working well on the drive shaft for counting revolutions, approximating travel distance.

\star \star \star \star Easy to setup and use

about 3 years ago by Member #570288 ✓ verified purchaser

I was able to install the discs on my existing DAGU motors, no problem. It took a little bit of wrangling and ties to get the Hall Effect sensors in the right place. Then I was able to read the change in state on the encoders using the attachInterrupt() call in Arduino.

1) A pullup resistor on the output line was useful to get clear signals. 2) If you use the CHANGE sense type for attachInterrupt, then you will get all the rising and falling signals (8) and get the most resolution.

https://plus.google.com/+MarkWomack0/posts/X8C7rvfbdUT

★ ★ ★ ☆ Pullup resistor

about 2 years ago by Zap ✓ verified purchaser

How do I determine what size of pullup resistor to use?

ROB-24601 replied on June 15, 2016:

The short answer - for most applications, anything from 3.3k to 10k is fine.

For the long answer, check here: https://learn.sparkfun.com/tutorials/pull-up-resistors.

★ ★ ★ ☆ Worked Great!

about 2 years ago by Member #773073 ✓ verified purchaser

Bought this kit as a supplement for the RedBot robot kit that you offer. The item(s) worked as needed to get motor feedback to perform more complex tasks.



















SUBSCRIBE TO NEWSLETTER

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.

About Us

Feeds 50
Jobs

Contact

Programs

Become a Community Partner
• Community Stories
Custom Kit Requests

Tell Us About Your Project
Sell Your Widget on SparkFun
Become a SparkFun Distributor

Large Volume Sales

Help

Customer Service

Shipping Return Policy FAQ

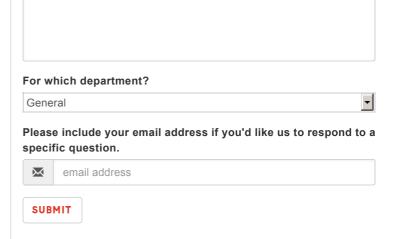
Chat With Us

Community

Forum

SparkFun IRC Channel Take the SparkFun Quiz SparkFun Kickstarter Projects

Distributors



SparkFun Electronics ® / Niwot, Colorado / Customer Service / Site Map / Terms of Service / Privacy Policy

Questions? Feedback? powered by Olark live chat software