

Hockey Puck Designer Kit

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2. Assorted magnets
3. 5 pin connector
4. 9v Battery clip and cable
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CONNECTOR PINOUT

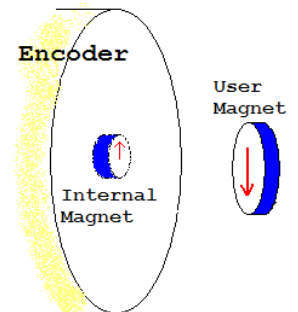
1. +V
2. GND
3. CH A Output
4. CH B Output
5. Mkr (Zero) Output

WATCH IT WORK THROUGH THE LEDS

The CH A and CH B LEDs blink as the encoder senses rotation. The Mkr (zero) LED blinks one pulse per rotation. Watching the lights blink is a great indication that the encoder is working and to observe its behavior. You can also connect a counter or PLC.

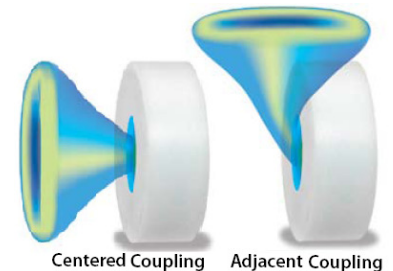
HOW DOES THE ENCODER WORK?

There is a 6mm magnet internally enclosed within the Delron packaging. This is the magnet sensed by the electronics. As the designer, you use another magnet to cause the internal magnet to rotate using magnetic coupling... North to South / South to North.



IS THERE A SWEET SPOT FOR THE USER MAGNET?

Not really, but some locations are better than others. With the Internal Magnet located in the center an obvious sweet spot is directly in front of the center. But there are other less obvious positions for the User Magnet, such as adjacent. As long as the two magnets remain coupled, the encoder will continue to track the User Magnet.



POSSIBILITIES

Part of the fun of playing with the kit is to see what affect a particular magnet will have on the behavior of the encoder. Besides the rotary encoder, possible uses include linear sensor, proximity sensor and through shaft rotary sensor. A multi-pole user magnet will cause multiple rotations of the internal magnet, acting as a resolution multiplier.

CAN I GET MORE MAGNETS?

Yes, from multiple sources. Joral Devices can provide you more and different magnet, but there are multiple venders with huge variations of magnets available on the Internet. The magnets in the kit are made of Neodymium and 'magnetized across the face'.

One world wide supplier : www.arnoldmagnetics.com

Other US based online sources : www.engconcepts.net , www.adamsmagnetic.com

**In order to make the best use of your time
please call us for a brief discussion.**

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