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Vernier Sensor - Motion Detector
☺ SEN-12875

DESCRIPTION   INCLUDES   FEATURES   DOCUMENTS

This is the Vernier Motion Detector, a simple sensor that can be used to collect position, velocity and acceleration data of moving objects. This Vernier sensor can be used to study the motion of walking individuals, bouncing objects, a swinging pendulum, or anything else that moves.

These Motion Detectors can measure moving objects as close as 15 cm in front of them and as far as 6 meters away with a resolution of 1 mm. These Vernier sensors are also equipped with a pivoting head to help the user gain a different angle of view of a moving object and a sensitivity switch to produce higher quality data.

Vernier Software and Technology has been a leader in data collection and analysis for educators world-wide. They were amongst the first companies to design and promote the use of computers, sensors, and data collection in K-12 classroom laboratory experiments.

Note: Due to manufacturer's restrictions, we can only ship these to the USA. Sorry world!

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Vernier Sensor - Motion Detector Product Help and Resources

VIDEOS   SKILLS NEEDED

SparkFun Vernier Sensors
PUBLISHED ON MAY 9, 2014

COMMENTS 6   REVIEWS 0

Customer Comments

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Shpoople / about 4 years ago / ★ 3

I prefer the picture with the quarter over the picture without. It just tells me so much more about it.

> 📌 **RobertC.** / about 4 years ago / ★ 2
>
> I'm kinda thinking we need to do a half-dollar for these.
>
>> **Member #365102** / about 4 years ago / ★ 2
>>
>> How about a banana for scale?
>>
>>> **Member #534973** / about 4 years ago / ★ 1
>>>
>>> I guess that would depend on the banana

Roger K. / about 4 years ago / ★ 1

That's a packaged Polaroid 6500 ultrasonic range finder (originally invented for Polaroid auto-focus cameras). Polaroid made sensor kits available in the early 1990's (a kit contained two of the gold foil sensor modules and two PC boards with the analog and digital circuitry). Polaroid no longer makes these modules, but third parties have copied it and currently sell them. If anyone is interested, here's a link to a PDF datasheet for the Polaroid 6500 module. It's super easy to use and produces VERY good quality range information. The 6500 is the best ultrasonic sensor I've used, by far.

http://www.robotstorehk.com/6500.pdf

One important thing to know is that the 6500 boards use a LOT of current (around 2 amperes) for a few milliseconds. Therefore, you need around a 470uF to 1000uF capacitor across the module VCC and GND or else the module will crash your microcontroller.

Member #138152 / about 4 years ago / ★ 1

Could this be used to track a baseball?

START SOMETHING.

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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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For which department?
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