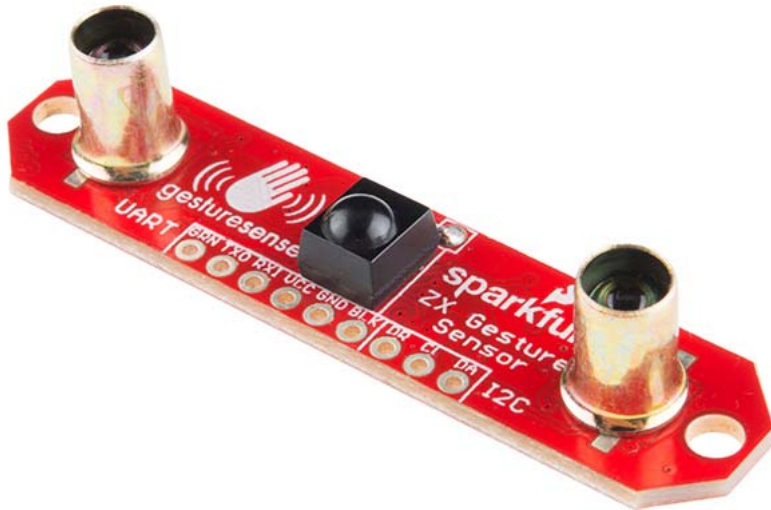




ZX Distance and Gesture Sensor

SEN-12780 ROHS ✓ ✱

★★★★★ 3



\$24.95

1	quantity
<input checked="" type="radio"/>	36 in stock
\$24.95	1+ units
\$23.70	10+ units
\$22.46	25+ units
\$21.21	100+ units

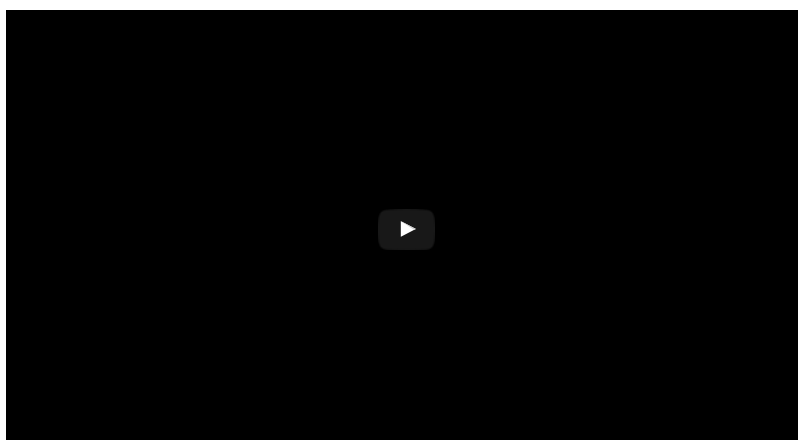
Need larger quantities?
Check out our Volume Sales program

© images are CC BY-NC-SA 3.0

Description: The ZX Distance and Gesture Sensor is a touchless sensor that is capable of looking for simple gestures. Developed in conjunction with XYZ Interactive, the sensor uses their GestureSense® technology to recognize the distance of an object away from the sensor up to about 10 inches (~25cm) and the location of the object from side to side across the sensor in about a 6 inch (~15cm) span. You will be able to use I²C or UART to communicate with the ZX Sensor via an Arduino-based microcontroller as well as a computer.

On board each ZX Sensor you will find two IR LEDs (inside the brass tubes) and one IR receiver (in the middle). The brass tubes that protect the IR LEDs are actually to block any infrared light going directly from the LEDs to the receiver (we want the light to bounce off an object first). With these IR pieces you will easily be able to ascertain both the Z axis and the X axis of an object (hence the name). In addition to providing Z- and X- axis data about an object, the ZX Sensor is also capable of detecting simple gestures. We have also clearly labeled all the pin outs on the board as well as signifying if they are needed in I²C or UART communication.

Note: Be sure to check out the Hookup Guide in the *Documents* section below for instructions on how to get your ZX Sensor started, load the code and library, and a list of supported gestures.



Features:

- Operating Voltage: 3.3V - 5V
- Z-Axis Recognition Range: 10 Inches (~25cm)
- X-Axis Recognition Range: 6 Inches (~15cm)
- 4 Supported Gesture Commands
- I²C or UART Communication

Documents:

- Schematic
- Eagle Files
- Hookup Guide
- XYZ I²C Register Map
- Datasheets
 - PIC16F1823
 - TSAL6100 (IR LED)
 - BRM-2A18 (IR Receiver)
- GitHub (Design Files)
- GitHub (Library & Example Code)

Recommended Products



SPARKFUN RECOMMENDED
SparkFun RedBoard - Programmed with Arduino
DEV-12757
\$19.95
★★★★☆ 112



SPARKFUN RECOMMENDED
SparkFun FTDI Basic Breakout - 5V
DEV-09716
\$14.95
★★★★☆ 81



SPARKFUN RECOMMENDED
Ultrasonic Sensor - HC-SR04
SEN-13959
\$3.95



SPARKFUN RECOMMENDED
Break Away Headers - Straight
PRT-00116
\$1.50
★★★★☆ 20

COMMENTS 67

REVIEWS ★★★★★ 3

TUTORIALS 1

Customer Reviews

★★★★☆ 4.7 out of 5

Based on 3 ratings:

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

2 of 2 found this helpful:

★★★★☆ Sensor Works Great

about a year ago by CitoNinja verified purchaser

Works exactly how I wanted it to. I did notice that Voltage changes have an effect on the distance readings.

3 of 3 found this helpful:

★★★★★ This thing makes a very cool RGB light switch. Very cool !!!

about a year ago by Member #701882 verified purchaser

I started testing this ZX sensor with my Arduino and wired to an RGB LED to control switching and colour changes. The gestures can switch the device and the depth changes can control colour. I can't do this with any single device any other way. Love it. Thanks !!!

★★★★★ Thank you SparkFun and Maker community

about a year ago by XYZ Biz ✓ verified purchaser

We have tested out both the delivery and support from SparkFun on these sensors and are very happy. We have also sponsored some Hackathons and continue to be impressed with some of the creative applications of our sensor technology that is coming from the crowd. If anyone has suggestions for improvements or additions to future sensor modules, please send to makers@xyzinteractive.com
