Arduino & U
Distance Me

- **Available o**
  - **Free Ship** orders abo
  - COD availa order abov
  - Pay with U Coupons
  - **Special Bu** Companies
  - Get Specia WhatsApp(

Highlights

Branding Fre

- No Brand N PCB & Proj
- 100% Worl
- Tested Pro

Documentati

- Free Projec
- Printed Sho
- Printable S

Support

- Demo Vide
- Technical S
- Get Discou

NOTE: This Kit Includes Pre-programmed Arduino Board you don't need to upload code until you have to change anything. **NOTE:** This kit required soldering & circuit testing skills, buy this kit if you have good soldering skills, otherwise you can also buy 'ready to use' project for same topic.

Click Here to Buy Ready to Use Kit.

Read More

SKU: PH_EPK_003

Price: ~~₹3,200.00~~ Original price was: ₹3,200.00.₹ 1,599.00Current price is: ₹1,599.00.

Stock: instock

Categories: Arduino, Engineering project kit (EPK), Hobby DIY kits

Tags: Arduino Development, Arduino Nano, Arduino Projects, Distance Measurement, Distance Meter, DIY distance measurement with Arduino, DIY electronics, DIY Kits, Electronic Gadgets, Electronics Accessories, Engineering Projects, Measurement Tools, Prototyping Tools, Robotics Components, Sensor-based Projects, Ultrasonic Sensor

Product Description

Kit Includes :

- Electronic Parts (listed in product image)
- Circuit Diagram
- Project Code
- Printed Circuit Board (PCB)
- Printed Short Report

Prerequisite Requirements

Hardware :

1. Soldering Iron (Buy Now)
2. Soldering Paste (Buy Now)
3. Soldering Wire (Buy Now)
4. Soldering Stand (Buy Now)
5. Wire Cutter (Buy Now)
6. Screw Driver (Buy Now)

Software :

1. Arduino IDE (optional) - Download Now

Demo Video - How to Download Arduino IDE ?

Skills:

1. Arduino Programming (optional)
2. Soldering (Click Here for Free Tutorial)
3. Circuit Testing

INTRODUCTION:

The techniques of distance measurement using ultrasonic in air include continuous wave and pulse echo technique. In the pulse echo method, a burst of pulses is sent through the transmission medium and is reflected by an object kept at specified distance. The time taken for the pulse to propagate from transmitter to receiver is proportional to the distance of object. For contact less measurement of distance, the device has to rely on the target to reflect the pulse back to itself. The target needs to have a proper orientation that is it needs to be perpendicular to the direction of propagation of the pulses. The amplitude of the received signal gets significantly attenuated and is a function of nature of the medium and the distance between the transmitter and target. The pulse echo or time-of-flight method of range measurement is subject to high levels of signal attenuation when used in an air medium, thus limiting its distance range. Ultrasonic sensors are great tools to measure distance without actual contact and used at several places like water level measurement, distance measurement etc. This is an efficient way to measure small distances precisely. In this project we have used an **Ultrasonic Sensor** to determine the distance of an obstacle from the sensor. Basic principal of ultrasonic distance measurement is based on ECHO. When sound waves are transmitted in environment then waves are return back to origin as ECHO after striking on the obstacle. So we only need to calculate the travelling time of both sounds means outgoing time and returning time to origin after striking on the obstacle. As speed of the sound is known to us, after some

calculation we can calculate the distance.

Download Free Project Synopsis

Working Video:

Disclaimer:

This is a handmade complete working Models, Projects & Activity kits supported by rough study material to make a suitable projects report by the student. It is using Cardboard/Wooden base, Paper, Foam based board, stationary items, Electronic-Electrical Components, Mechanical & Scientific goods as per the requirement of a particular model. Colour of product and decoration item may be varying according to availability of material but we make ensure that we will deliver the product with same working, structure and dimensions as describe in product description section.