

**Mini Project Report**  
**On**  
**PORTABLE ULTRASONIC RADAR SYSTEM**

Guided by  
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# **CERTIFICATE**

*This is to certify that following students of T.E. (Electronics and Telecommunication), have done bonafide work on the Mini project entitled – “**PORTABLE ULTRASONIC RADAR SYSTEM**”.*

*They are allowed to submit this work to the Savitribai Phule Pune University towards partial fulfilment of the requirement for term work completion of Third Year Engineering (Electronics and Telecommunication) during the year 2016-2017.*

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## **ACKNOWLEDGEMENT**

In the accomplishment of this project successfully many people have best owned upon me their blessings and heart pledged support, this time I am utilizing to thank all the people who have been concerned with project.

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I am taking this project not only for marks but also increase my knowledge .

THANKS AGAIN TO ALL WHO HELPED ME.

## ABSTRACT

**Radar**(Radio Detection And Ranging) is an object detection system which uses radio waves to determine the range, altitude, direction, or speed of objects. Now, the radar is rotating 180 degrees and calculating the distance away from the ultrasonic sensor. It is sending the data (angle and distance) to the computer using serial port. Processing application is converting the polar to rectangular coordinates and showing them on screen.

Ultrasonic system is the most useful and widely used system in the RADAR communication, and the object detector as well as it mostly used in SONAR system. (i.e. to measure the depth of sea) It is wireless technology and the wave are used in the communication are not hazardous to human being.

In this project we deal with the issues of pertain to the subject such as object detection distance measurement. Here we present the ultrasonic radar system which is very useful in object detection as well as distance measurement.

## CONTENT

Sr No.	Title	Page No.
1.	Chapter 1 :INTRODUCTION	1
2.	Chapter 2:REVIEW AND LITERATURE SURVEY	2
3.	Chapter 3:SYSTEM DEVELOPMENT 3.1. Hardware 3.2. Software	3-10
4.	Chapter 4:RESULT AND DISCUSSION	11-13
5.	Chapter 5:CONCLUSION AND FUTURE SCOPE	14-16
6.	Chapter 6: Attachment and Programmes	17-33
7.		