

Wheatstone Bridge

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

Spoken Tutorial & FOSSEE Team
IIT Bombay

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Learning Objectives



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We will learn how



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- **Wheatstone Bridge is used to measure the unknown resistance in the circuit**



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- **Wheatstone Bridge is used to measure the unknown resistance in the circuit**
- **To check the balance condition of Wheatstone Bridge**



System Requirement



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- **Ubuntu Linux 20.04 OS**



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- **CircuitJS Application**



Pre-requisites



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To follow this tutorial, you should have basic knowledge of

- **Electrical Circuits**



Wheatstone Bridge - Balance condition



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- Ratio of resistance is $P/Q = R/S$
- The current flowing through the Ammeter is zero



Summary

In this tutorial, we learnt how

- **The Wheatstone Bridge is used to measure unknown resistance in the circuit**
- **To check the balance condition in Wheatstone Bridge**



Assignment

- 1 Change the values of resistor P to 60 ohms, resistor Q to 150 ohms, resistor R to 300 ohms
- 2 Use the Wheatstone Bridge balance condition formula to find value of resistor S



About the Spoken Tutorial Project

- Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates to those who pass an online test
- For more details, please write to contact@spoken-tutorial.org



Answers for THIS Spoken Tutorial

- Questions in THIS Spoken Tutorial?
- Visit <https://forums.spoken-tutorial.org>
- Choose the minute and second where you have the question
- Explain your question briefly
- The Spoken Tutorial project will ensure an answer



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Thank You

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