

LCR Circuit

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

Spoken Tutorial & FOSSEE Team

IIT Bombay

13 September 2023



Learning Objectives



Learning Objectives

We will learn how



Learning Objectives

We will learn how

- **A resistor, capacitor and an inductor behaves in the AC circuit when connected in series**



System Requirement



System Requirement

- **Ubuntu Linux 20.04 OS**



System Requirement

- **Ubuntu Linux 20.04 OS**
- **CircuitJS Application**



Pre-requisites



Pre-requisites

To follow this tutorial, you should have basic knowledge of

- **Electrical Circuits**



Applications of LCR circuit



Applications of LCR circuit

LCR circuits are commonly used in

- **Filter designs to selectively pass or stop certain frequencies of an AC signal**
- **Radio receivers and transmitters**
- **Generating periodic waveforms at specific frequency**



Applications of LCR circuit



Applications of LCR circuit

LCR circuits are commonly used in

- **Sensors such as proximity, pressure and humidity to detect changes in the surrounding values**



Summary

In this tutorial, we learnt how

- **A resistor, capacitor and an inductor behaves in the AC circuit when connected in series**



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



Acknowledgements

Spoken Tutorial project was established by the Ministry of Education(MoE), Govt of India



Thank You

**This tutorial has been contributed by
FOSSEE and Spoken Tutorial Project,
IIT Bombay.**

