

# LCR Circuit

**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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**We will learn how**

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



# System Requirement



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- **Ubuntu Linux 20.04 OS**



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



# Pre-requisites





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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](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](mailto: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

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# Thank You

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