

# Programming OpenPLC

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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# Learning Objectives



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- Program the OpenPLC Mainboard



# System Requirements



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- **Ubuntu Linux 18.04 operating system**



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- **Ubuntu Linux 18.04 operating system**
- **OpenPLC Mainboard**
- **24V, 2A SMPS**
- **USBasp programmer**



# Pre-requisites



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- How to generate a hex file of a ladder diagram in LDmicro



# Pre-requisites

- How to generate a hex file of a ladder diagram in LDmicro
- If not, please refer to the relevant tutorials in this series from <https://spoken-tutorial.org>



# Code Files-sample.hex



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- The files used in this tutorial are available in the **Code Files** link on this tutorial page



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- The files used in this tutorial are available in the Code Files link on this tutorial page
- Please download and extract them



# Code Files-sample.hex

- The files used in this tutorial are available in the Code Files link on this tutorial page
- Please download and extract them
- Make a copy and then use them while practising



# Additional reading material



# Additional reading material

- Precautions that should be taken before programming



# Additional reading material

- **Precautions that should be taken before programming**
- **Ways to troubleshoot when the Mainboard is not programmed properly**



# Controller's part number list

List of part number for Controllers and Programmers is given in the below link:

[https://www.nongnu.org/avrdude/user-manual/avrdude\\_4.html#Option-Descriptions](https://www.nongnu.org/avrdude/user-manual/avrdude_4.html#Option-Descriptions)



# Summary

- Program the OpenPLC Mainboard



# 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)



# Forum questions

- 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

You will have to register to ask questions



# Forum for specific questions

- Questions not related to the Spoken Tutorial?
- Do you have general / technical questions on the Software?
- Please visit the FOSSEE Forum  
<https://forums.fossee.in/>
- Choose the Software and post your question



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# THANK YOU!

For more Information, visit our website  
<https://fossee.in/>

