

CNC Milling CAM Software User Manual - v1.0

1. Introduction

This software provides a comprehensive solution for CNC Milling operations. It supports CAD file import, toolpath generation, G-code export, and real-time simulation. The software is designed to streamline CNC workflows for professionals and hobbyists.

2. Installation Instructions

1. Install Python (version 3.8 or above).
2. Install dependencies using pip:

```
pip install pyqt5 numpy ezdxf fpdf
```
3. Run the main.py file to launch the software.

3. Software Features

1. Import CAD files (DXF and STEP).
2. Generate 2D and 3D toolpaths.
3. Simulate toolpaths in real-time.
4. Export G-code for CNC machines.
5. Communicate directly with CNC machines via USB.

4. How to Use

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1. Load a CAD file through the File Importer.
2. Configure toolpath settings in the Settings dialog.
3. Simulate the toolpath in the Simulation window.
4. Export the G-code for your CNC machine.
5. Send the G-code to the CNC machine and monitor its operation.

5. Troubleshooting

1. Missing dependencies: Ensure all Python libraries are installed.
2. CAD file import errors: Verify the file format and ensure it is valid.
3. CNC connection issues: Check the USB port and ensure the CNC machine is powered on.

6. Contact and Support

For support, contact us at: support@cnccamssoftware.com