



Eding-CNC Quick Start

Eding-CNC

Every CNC machine requires software for its operation, which converts the description of a workpiece encoded in a file into control commands for its manufacture. The Windows program Eding-CNC has proven to be outstanding when used on Sorotec machines for many years. Sorotec recommends using Eding-CNC with an Ethernet connection and uses the program itself every day to manufacture machine parts.

Eding-CNC is constantly being further developed, the license fee is included in the purchase price of the hardware. A hardware controller from Eding is required to operate the software, which is available in various performance classes in the Sorotec web shop.



Attention!

Each user is responsible for the proper installation and use of the Eding-CNC control software, the safe connection of the control and the safe operation of the CNC system as intended. It is essential that you familiarize yourself with the dangers and safety precautions of your machine before you switch it on for the first time! Sorotec disclaims any liability for damage to property or personal injury caused by use other than the intended purpose or by disregard of applicable regulations.

1. Requirements

To operate a CNC machine with Eding CNC you need:

1. A PC with Windows XP or newer as the operating system. Ideally, the computer should only be used for control.
2. A CNC control with Eding controller that matches the drives of the machine.
3. The connection between PC and controller, depending on the version, via network or USB cable.
4. The Eding-CNC program in a suitable version. See next point, „Installation“.

2. Installation

- Download Eding-CNC from the Eding website. The address:
<https://edingcnc.com/download-software/>
- Run the install.
- Wait with the first start of the program until after the next step, „cnc.ini and macro.cnc“.

Note:

V4.03.46 is the latest version of Eding-CNC for Windows XP and is still available for download in the “archive” at the time these instructions were produced (April 2024). All other editions require at least Windows 7.

3. cnc.ini and macro.cnc

For example, when you buy a controller from Sorotec, you will receive an order confirmation email. There are two files attached to this email:

1. cnc[xxx].ini
e.g. cnc720.ini
2. macro.cnc

Proceed with it as follows:

- Rename the cnc[xxx].ini file to cnc.ini
- Copy or move the cnc.ini file to the Eding-CNC installation directory. If there is already a cnc.ini file there, it must be overwritten.
- Copy or move the macro.cnc file to the Eding-CNC installation directory.

The program is now ready for the first start.

- Always run Eding-CNC as an administrator.

Note:

Eding-CNC saves the entire configuration in the cnc.ini file. Each time the program is started, the settings are read from this file. Instead of entering all the adjustments for your machine by hand, you can use the .ini file prepared by Sorotec for this purpose. Most of the settings are already done.

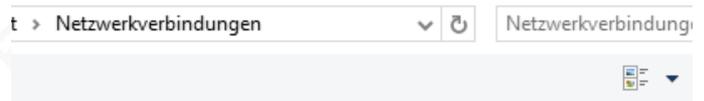
The macro.cnc file contains automated processes programmed by Sorotec.

4. After the first launch

IP address

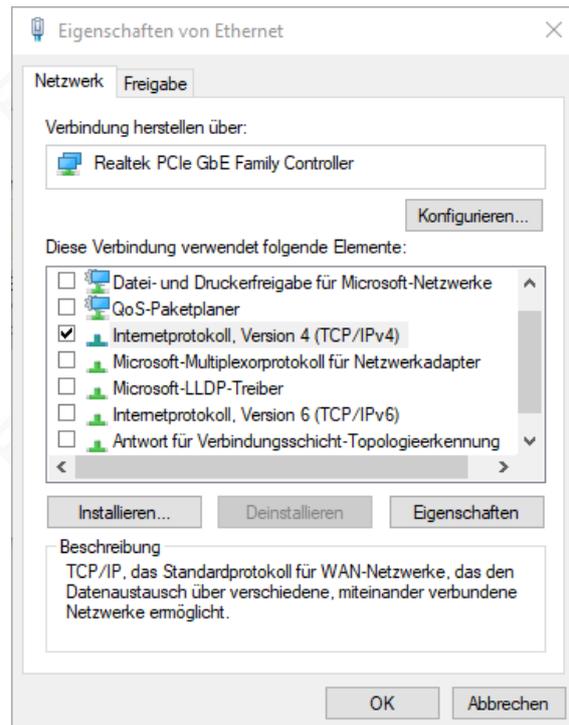
If you connect to the Eding controller via USB, you can skip this section.

To operate with an Ethernet connection, you need a dedicated network card that is connected directly to the controller with a cross-link cable. A connection via a switch is not possible - this avoids the risk of disruption due to heavy network load.



Open the network connection settings by double-clicking the icon.

Check TCP/IP V 4 and mark the entry as shown in the image. Then click on "Properties".

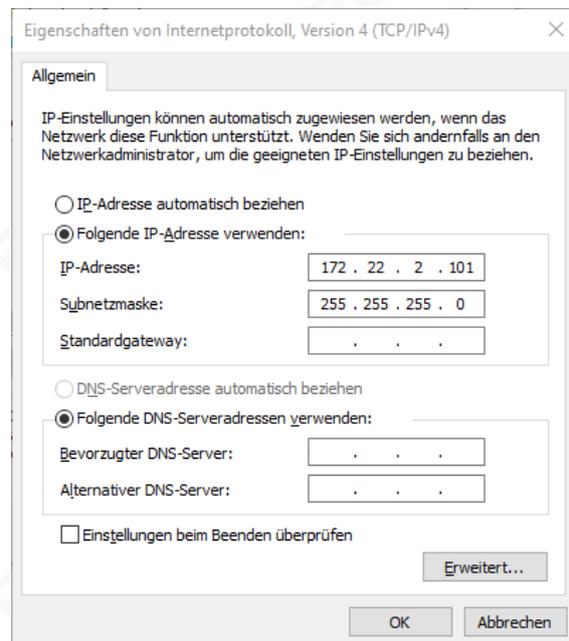


A minimal configuration is sufficient to connect to the controller.

Der Controller hat die feste Adresse

172.22.2.101

Die anderen Einträge können offen bleiben.
Bestätigen Sie die Einstellung mit „OK“.

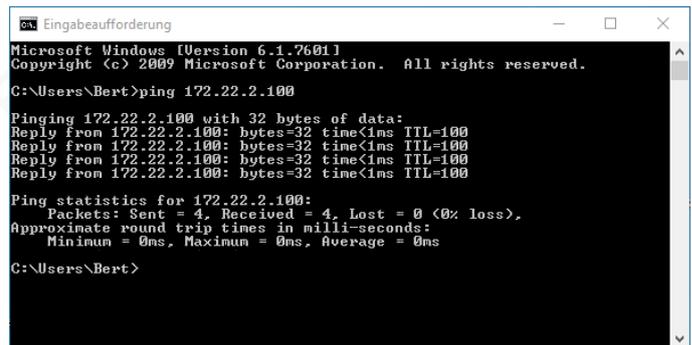


The IP address is immutable

Now open a command line window (with “cmd” in the “Run” input of the Start menu). Check the connection to the controller by sending a ping:

```
ping 172.22.2.101
```

The controller’s response should look something like the one shown in the image. If the connection fails, check the cable connection and the correct IP address setting.



```
Eingabeaufforderung
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Bert>ping 172.22.2.100

Pinging 172.22.2.100 with 32 bytes of data:
Reply from 172.22.2.100: bytes=32 time<1ms TTL=100

Ping statistics for 172.22.2.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\Bert>
```

The connection works

Size of the machine

To adapt it specifically to your machine, a few parameters still need to be entered. These relate in particular to dimensions and are explained in detail in a YouTube video by Sorotec. The address: <https://youtu.be/v6oxt94MNcA>

Also note point 5, „Error sources“.

Detailed information on working with Eding-CNC can be found in the program manual, which is available for download on the manufacturer’s website: <https://edingcnc.com/manuals/>

A German (not regularly updated) translation of the manual can be found in the Sorotec shop for the Eding controllers, in each case in the „Documentation“ area of the product description.

5. Sources of error

If the control does not work as expected right away, it does not necessarily have to be a defect. The following two mistakes are common initially and are easy to fix.

1. Missing reset

If your controller is equipped with a safety relay, the „Reset“ button must first be pressed after each switch-on. Otherwise the controller will not start.

Even after pressing the emergency stop switch and then switching it on again, unlocking must be confirmed with a reset in order to fully activate the control.



Note:

It has proven good practice to keep a copy of `cnc.ini` and `macro.cnc`, e.g. on a data stick, as a backup close to the controller after configuration is complete. In the event of a necessary reinstalation, the configuration is restored in the shortest possible time.



Reset button

2. Frequency converter at spindle socket

If a frequency converter is used to control the spindle speed, it must never be connected to the „Spindel“ socket on the back of the control.

This socket, switched by the controller, is intended exclusively for the connection of milling motors that cannot be regulated by frequency converters. In the idle state, the spindle socket is de-energized, so a frequency converter operated on it cannot even switch on.



Fig. 2: Spindle socket not for frequency converters