Installation guide

(AKKON application documentation and operating system)

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Attachments:
Table of versions

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Summary for English speaking users

This installation guide is currently only available in English language.

This document outlines the installation steps how to install the AKKON CNC application the related help files and actualize the AKKON operating system.

The description starts with a short introduction about the concept of AKKON CNC. After that the installation of the software and hardware will be discussed. In a further step the configuration of the software according to the used hardware will be shown. The document will end with a description of the essential functions of the CNC software AKKON Desk.
## Installation guide

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1 Introduction

Please see summary.

2 Install AKKON Desk

2.1 Execute installation file

2.2 Select language
2.3 Confirm welcome dialog

Welcome to the AKKON Setup Wizard

This will install AKKON Version 1.1b on your computer.

It is recommended that you close all other applications before continuing.

Click Next to continue, or Cancel to exit Setup.

---

2.4 Read and agree or disagree the license principles

License Agreement
Please read the following important information before continuing.

Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.

GNU GENERAL PUBLIC LICENSE
Version 2, June 1991

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Preamble

The licenses for most software are designed to take away your

- I accept the agreement
- I do not accept the agreement

Next > Cancel
2.5 Read the agreements

**Setup - AKKON**

**Information**

Please read the following important information before continuing.

When you are ready to continue with Setup, click Next.

1. Acknowledgment
   - By using this product, you acknowledge that you have read this limited warranty, understand it, and agree to be bound by its terms and conditions. You also agree that the limited warranty is the complete and exclusive statement of agreement between the parties and supersede all proposals or prior agreements, oral or written, and any other communications between the parties relating to the subject matter of the limited warranty.

2.6 Select installation directory

**Setup - AKKON**

**Select Destination Location**

Where should AKKON be installed?

Setup will install AKKON into the following folder:

C:\Program Files\AKKON

To continue, click Next. If you would like to select a different folder, click Browse.

At least 11.0 MB of free disk space is required.
2.7 Choose program menu name

Select Start Menu Folder
Where should Setup place the program's shortcuts?

Setup will create the program's shortcuts in the following Start Menu folder.

To continue, click Next. If you would like to select a different folder, click Browse.

AKKON
Browse...

Don't create a Start Menu folder

2.8 Select icon arrangement

Select Additional Tasks
Which additional tasks should be performed?

Select the additional tasks you would like Setup to perform while installing AKKON, then click Next.

Additional icons:
- [ ] Create a desktop icon
- [x] Create a Quick Launch icon
2.9 Confirm selection and start installation

Click Install to continue with the installation, or click Back if you want to review or change any settings.

Destination location:
C:\Program Files\AKKON

Start Menu folder:
AKKON

Additional tasks:
Additional Icons:
Create a desktop icon
Create a Quick Launch icon

2.10 Read installation notes and press next

When you are ready to continue with Setup, click Next.

Installation notes
AKKON V1.1 is now installed on your PC system. Please update also the current firmware for the AKKON USB CNC controller.
Have a look at the folder documentation. Here you will find a description how to configure and set up the AKKON CNC system.
Further Information can be found on: www.burger-web.com

Please read the release notes in AKKON_ReleaseNotes.txt or in under menu item info of Akkon Desk
2.11 Finish installation

Completing the AKKON Setup Wizard

Setup has finished installing AKKON on your computer. The application may be launched by selecting the installed icons.

Click Finish to exit Setup.

- Launch AKKON

2.12 Now you have successfully installed AKKON Desk
3 Install help files for AKKON

3.1 Execute installation file of AKKON Manual

3.2

Select Setup Language

Select the language to use during the installation:

English

OK  Cancel

3.3

Welcome to the AKKON user manual Setup Wizard

This will install AKKON user manual V1.0 on your computer.

It is recommended that you close all other applications before continuing.

Click Next to continue, or Cancel to exit Setup
3.6 Select language

![Select Setup Language](image)

3.7 Confirm welcom dialog

![Setup - AKKON user manual](image)

Welcome to the AKKON user manual Setup Wizard

This will install AKKON user manual V1.0 on your computer.

It is recommended that you close all other applications before continuing.

Click Next to continue, or Cancel to exit Setup.
3.8 Read and agree or disagree the license principles

License Agreement
Please read the following important information before continuing.

Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.

GNU GENERAL PUBLIC LICENSE
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,
59 Temple Place, Suite 330, Boston, MA 02111-1307 USA
Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.

Preamble
The licenses for most software are designed to take away your

- I accept the agreement
- I do not accept the agreement

Cancel

3.9 Read the agreements

Information
Please read the following important information before continuing.

When you are ready to continue with Setup, click Next.

The possibility of direct
DAMAGES:
1.2 ACKNOWLEDGMENT
BY USING THIS PRODUCT YOU ACKNOWLEDGE THAT YOU HAVE READ
THIS LIMITED WARRANTY,
UNDERSTAND IT, AND AGREE TO BE BOUND BY ITS TERMS AND
CONDITIONS. YOU ALSO AGREE THAT
THE LIMITED WARRANTY IS THE COMPLETE AND EXCLUSIVE STATEMENT
OF AGREEMENT BETWEEN THE
PARTIES AND SUPERSEDE ALL PROPOSALS OR PRIOR AGREEMENTS,
ORAL OR WRITTEN, AND ANY
OTHER COMMUNICATIONS BETWEEN THE PARTIES RELATING TO THE
SUBJECT MATTER OF THE LIMITED
WARRANTY.
3.10 Select installation directory

Select Destination Location
Where should AKKON user manual be installed?

Setup will install AKKON user manual into the following folder.

To continue, click Next. If you would like to select a different folder, click Browse.

At least 5.5 MB of free disk space is required.

3.11 Choose program menu name

Select Start Menu Folder
Where should Setup place the program's shortcuts?

Setup will create the program's shortcuts in the following Start Menu folder.

To continue, click Next. If you would like to select a different folder, click Browse.
3.12 Select icon arrangement

Select Additional Tasks
Which additional tasks should be performed?

Select the additional tasks you would like Setup to perform while installing AKKON user manual, then click Next.

Additional icons:
- [ ] Create a desktop icon
- [ ] Create a Quick Launch icon

3.13 Confirm selection and start installation

Ready to Install
Setup is now ready to begin installing AKKON user manual on your computer.

Click Install to continue with the installation, or click Back if you want to review or change any settings.

Destination location:
C:\Program Files\AKKON

Start Menu folder
AKKON

Additional tasks:
- Additional icons:
  - [ ] Create a desktop icon
  - [ ] Create a Quick Launch icon
### 3.14 Read installation notes and press next

**Information**

Please read the following important information before continuing.

When you are ready to continue with Setup, click **Next**.

**Installation notes**

AKKON V1.0b is now installed on your PC system. Please update also the current firmware for the AKKON USB CNC controller.

Have a look at the folder documentation. Here you will find a description how to configure and set up the AKKON CNC system.

Further information can be found on: [www.burger-web.com](http://www.burger-web.com)

### 3.15 Finish installation

**Completing the AKKON user manual Setup Wizard**

Setup has finished installing AKKON user manual on your computer. The application may be launched by selecting the installed icons.

Click **Finish** to exit Setup.

- **Launch AKKON user manual**
3.16 Now you have successfully installed AKKON user manual

The manual can now be accessed also in AKKON Desk
4 Install Documentation of supported G- and M-Codes

4.1 Execute installation file of AKKON Manual

Follow installation steps similar to installation of AKKON Desk.

4.2 Documentation of G- and M-Codes is now installed

The manual can now be accessed also in AKKON Desk
5 Install AKKON CNC Controller Board

5.1 Put power on AKKO USB CNC Controller Board

Use power supply with around 9V DC or 5V AC. The board can not be powered over USB

5.2 Plug in USB cable to PC

5.3 Driver installation dialog will appear, please select location

![Found New Hardware Wizard]

Welcome to the Found New Hardware Wizard

This wizard helps you install software for:

FTC18F4550 Family Device

If your hardware came with an installation CD or floppy disk, insert it now.

What do you want the wizard to do?

- Install the software automatically (Recommended)
- Install from a list or specific location (Advanced)

Click Next to continue.
5.4 Select location of USB driver

Found New Hardware Wizard

Please choose your search and installation options.

- Search for the best driver in these locations.
  - Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
  - **Search removable media (floppy, CD-ROM...)**
  - **Include this location in the search:**
    - C:\Program Files\AKKON\Drivers\Release

- Don't search. I will choose the driver to install.
  - Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.

5.5 The device will be searched

Found New Hardware Wizard

Please wait while the wizard searches...

- PIC18F4550 Family Device
5.6 Select next to agree the found driver

Found New Hardware Wizard

Please choose your search and installation options.

- Search for the best driver in these locations.
  - Use the checkboxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
  - [ ] Search removable media (floppy, CD-ROM...)
  - [ ] Include this location in the search:
    - C:\Program Files\AKKON\Drivers\Release
    - [ ] Browse

- Don’t search. I will choose the driver to install.
  - Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.

5.7 Select a driver

Found New Hardware Wizard

Please select the best match for your hardware from the list below.

<table>
<thead>
<tr>
<th>Description</th>
<th>Version</th>
<th>Manufacturer</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>PICT8F4550 Family Device</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Microchip Technology, Inc.</td>
</tr>
<tr>
<td>AKKON CNC control</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Microchip Technology, Inc.</td>
</tr>
</tbody>
</table>

This driver is not digitally signed!
Tell me why driver signing is important

[Back] [Next] [Cancel]
5.8 Complete installation

Completing the Found New Hardware Wizard

The wizard has finished installing the software for:

AKKON CNC control

Click Finish to close the wizard.
6 Put power on AKKON USB CNC Controller Board

6.1 Set AKKON USB CNC Controller Board by pressing firmware update button and reset button

6.2 Start AKKON USB firmware update tool

6.3 Start PDFSUSB
6.4 Select AKKON firmware

6.5 Press Load HEX File

MICROCHIP

ADDR. 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F

PROGRAM MEMORY:

000000 A7 EF 31 F0 12 00 XX XX XX XX XX XX XX XX XX
000010 XX XX XX XX XX XX XX XX XX XX XX XX XX XX
000020 XX XX XX XX XX XX XX XX XX XX XX XX XX XX
000030 XX XX XX XX XX XX XX XX XX XX XX XX XX XX

USB Bootbader Firmware Version 1.0

Copyright (C) Microchip Technology Inc., 2004
6.6 Run AKKON

**PICDEM(TM) FS USB Demo Tool - Version 1.00**

- **Bootload Mode**
- **Demo Mode**

**Select PICDEM FS USB Board**

- PICDEM FS USB 0 (Boot)

**Load HEX File**

**Save To HEX File**

**Program Device**

**Execute**

**Read Device**

**Erase Device**

**PICDEM FS USB Bootload Mode Entry**

Hold down push button S2 then reset the board by pressing push button S1.

**Clear Screen**

**MESSAGE - Programming FLASH Completed**

**MESSAGE - Erasing and Programming FLASH...**

**Addr. 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F**

**PROGRAM MEMORY:**

```
000000 A7 EF 31 F0 12 00 XX XX XX XX XX XX XX XX XX XX XX XX 000010 XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX
```

**USB Bootloader Firmware Version 1.0**

**Copyright (C) Microchip Technology inc., 2004**
6.7 Press execute

6.8 Now you have successfully installed the AKKON operating system

The AKKON USB CNC Controller board is ready to run
7.1 Press the red connection button
7.2 AKKON

Now you are ready to use the AKKON USB CNC Controller Board.

Please proceed with the If you have not already installed your CNC hardware, please read the "Bedienungs- und Installationsanleitung", TN005.
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