

NenTech Floppy Emulator

User Manual



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EC - Declaration of Conformity

Manufacturer Details

Brand Name

NenTech

Address details

Spuistraat 2, 8261 XB Kampen, Netherlands

Product Details

Product name

NenTech Floppy Emulator

Description

This Floppy Emulator is a replacement for a regular Floppy Drive. It does not need floppy disks anymore but uses virtual Floppy images on a USB drive.

Model

SFR1M44-U100LQD OLED 435

Applied Directives

RoHS Directive 2015/863/EU

Declaration.

We hereby declare that the above product (series) complies with the directives / standards mentioned in this declaration.

CE-responsible:

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Signature

1. Scope of supply

This manual explains how the NenTech USB Floppy Disk Emulator is installed and used to replace a legacy 3,5" Floppy Disk Drive. This manual is specifically written for the Kisters / KHS machines with a PC020 logic control.

You can find an up-to-date PDF Document of this manual on our website:

<https://NL-Nen.Tech>

2. Important Notes

All rights reserved. No part of this document may be reproduced or transmitted in any form without the written permission of NenTech. Subject to printing mistakes, errors or changes without prior notice.

All brand names or trademarks mentioned in this document serve to identify and may belong to respective owners and must, therefore, be treated as such.

The warranty claim expires immediately if the product is changed, incorrectly used, purposely or negligently damaged or impaired force majeure or operation beyond the allowed working conditions.

Caution:

The warranty claim expires upon removing the typeplate or making modifications to the drives.

Note:

Please read this manual carefully before using the device.

3. Safety information



Information:

The NenTech USB Floppy Emulator is designed for replacing a legacy 3,5" Floppy Disk drive. Using this device for any other purpose is prohibited. Follow instructions of the manufacturer of the original computer/device for installation instructions of this device. (In addition to this manual)



Warning:

Please observe the correct orientation of the ribbon cable and the power connector! Inserting ribbon cable upside down can damage the drive or connected computer!



Warning:

Do not change the floppy or remove the USB stick while the read/write LED is on. This can cause loss of data on the floppy images.

4. Overview of the device

- 1: Display
- 2: USB Stick
- 3: Buttons
- 4: Read/Write access LED
- 5: Rotary/Push button



Figure 1

5. Functioning of the device

The NenTech Floppy Emulator (NTFE) emulates the original Floppy drive. The machine thinks there is a legacy floppy drive present with legacy 720kb floppy.

For the Kisters machines with PC020 controls there are 2 floppy drives required. The machine starts from Drive 1 (*Figure 1*). Drive 2 is required for making a backup of the program. In case the machine has more than 15 formats, Drive 2 is used to store the other formats.

The NTFE has an USB flash drive with floppy images. By default the following images and files are present on each USB Flash drive:

- M0_(Machinenumber).dsd
 - This is the startup disk containing the program of the machine
- M1_(Machinenumber).dsd
 - This is the backup disk or the additional formats disk.
- KToolV1-3.hfe
 - This is the KTool disk of Kisters. This can be used to make backups.
- EMPTY.dsd
 - This is an empty floppy disk. This can be used with KTool to make a new backup.
- HXCSDFE.CFG
 - This file stores configuration information for the floppy emulator.

When the machine starts, the floppy emulator automatically loads the last used floppy image.

6. Installation



Warning:

Installation may only be carried out by a certified electrician. Read the full manual before installation.

Risks for electrical shocks and damage of the drive or machine when procedure is not followed correctly.

- Turn off the machine and switch the Main Disconnect switch to Off.
- **Wait 5 minutes to make sure the power supply's are fully discharged.**
- Disconnect the floppy drive unit with the ribbon cable on the back of the PC020.
- Disconnect the earthing cable.
- Remove the floppy drive.
- Install the new floppy drive.
- Connect the earthing cable.
- Connect the ribbon cable to the back of the PC020 and observe the right orientation. (Small notch on 1 side of the connector)
- Check if the cartridge is still in place. (Cartridge between ribbon cable and PC020)
- Switch Main Disconnect to On.
- Check if the right floppy is selected. M0_... for Drive 1(*Figure 1*) and M1_... for Drive 2(*Figure 1*). (See chapter 7 for selecting the right floppy)

7. Basic operations

a. Startup of the machine

When the power is switched on, the last used floppy is selected. For normal machine operations, the floppy in Drive 1(*Figure 1*) should start with M0_... and the floppy in Drive 2(*Figure 1*) should start with M1_...

When loaded correctly, the PC020 starts up and shows as the first line, "Loading software from disk". When the machine does not start, first, please refer to the original Kisters documentation.

b. Change startup floppy

When you want to change the startup floppy follow the next steps:

- Make sure all changed parameters are saved to the floppy.
- Stop the machine and turn off ancillaries.
- Use the rotary encoder (5) to select the right floppy image and click the rotary encoder once the right image has been selected.
- Turn the machine off.
- Wait a few seconds.
- Turn the machine back on.
- Machine starts up from the chosen floppy. (See PC020 display for information)

c. Make a backup of the floppy

There are 2 ways to make a backup of your program and the floppy.
Make sure all changed parameters are saved to the floppy.

i. Via computer

- Stop the machine and turn off ancillaries.
- Remove the USB stick from the M0 drive.
- Copy the M0_... file from the USB stick to your computer.
- Put the USB stick back in the M0 drive.
- Turn on the ancillaries and start the machine again.

ii. Via KTool floppy

- Change the startup floppy in Drive 1(*Figure 1*) to KToolV1-3 following the instructions in chapter 7.b.
- Follow the instructions in the manual of KTool or the on screen instructions.
- When finished, switch back to the machine floppy following the instructions in chapter 7.b.