

Quick Start Manual of FutureOS

I.00 Installation of the Operating System FutureOS

I.01 You have received FutureOS on the installation disc

You are the owner of one of the following ROM expansions: M4, X-MEM, MegaFlash, FlashGordon, ROM-RAM-Box, SYMBiFACE II, RAMcard etc. In this case you put the installation disc in your drive and start the installation process with: **run"disc"**. Then please follow the instructions of the installation application.

To omit problems: In case you installed FutureOS before please use identical ROM numbers. Alternatively uninstall FutureOS **including** all its expansion ROMs (XROMs) before you start the new installation process.

As the owner of the **M4 expansion**, it makes sense to download the "FutureOS" folder and copy it to the root directory of the M4's SD card. Afterwards, go to the directory:

\FutureOS\OS-Installer\OS_English\Iconset_TFM

There, enter the command **run"disc"** to start the installation or configuration. Alternatively, it's also possible to install the OS with the icons from Tolkin or MacDeath.

If you are using a **Symbiface III (SF3)**, it's recommended to install the pre-made ROM banks on the SD card of the SF3. The corresponding ROM bank can then be selected using the buttons on the SF3.

I.02 You got FutureOS on EPROM

If you are using an EPROM card, then FutureOS was either delivered on four 16 KB EPROMs or on two 32 KB EPROMs. Every one of the four 16 KB EPROMs needs its own ROM number. If you got two 32 KB EPROMs then every EPROM needs two ROM numbers. All the ROM numbers are preselected.

Please install your EPROMs in the correct sockets of your EPROM card, to be able to assign the correct ROM select. The ROM numbers may be selected by using jumpers' f. e.

It's advisable to configure the operating system before burning the EPROMs.

I.03 You got FutureOS on Cartridge

In this case please put the cartridge into the cartridge port of the 6128plus computer and switch it on. If FutureOS doesn't boot by itself then please type in the RSX command |OS.

If you use the **C4CPC** cartridge, you need to copy the FutureOS CPR to the SD card.

Afterwards, you can use the built-in software to select FutureOS.

Attention: If other ROMs or ROM expansions are connected, they may interfere with the FutureOS ROMs. In this case please switch off the corresponding ROMs.

I.10 Verify the installation

I.11 The sign on message

After the installation of FutureOS you have to reset your computer system. After a reset or after you switch the computer on the standard sign on message should appear like usually. FutureOS will add four lines. The following example shows it for the CPC6128 (English version):

```
FutureOS CPC Turbo Desk ROM active!  
FutureOS CPC Utility ROM active!  
FutureOS Floppy ROM active!  
Future Operating System CPC ©1989 - 2025
```

If one or more of the above lines are missing, then there was a problem during the installation. Or the corresponding ROMs were installed correctly, but beyond ROM number 15 (or 31 when using the ROM Booster or similar).

In case ROM numbers below 16 have been used, please switch your computer off and then disconnect other hardware expansions. Switch your computer on again. If 'start up messages' are still missing, then the CPC is not able to recognize one or more of the FutureOS ROMs. Please make sure, that there are no DOUBLE occupations of ROM numbers.

Attention: The computer needs a stable supply of 5 Volt!

I.12 Further information

The system utilities 'OS-Infor' and 'Config-OS' will provide more information about your FutureOS system ROMs and allow the configuration of important parameters.

I.20 Working with FutureOS

After successful installation you can work with FutureOS. Start the system using the RSX commands **|OS** or **|FDESK**. When starting FutureOS under BASIC using the **|FDESK** command it is possible to return from FutureOS to BASIC without changing the first 48 KB of the RAM. However, in this case additional 48 KB of expansion RAM (E-RAM) will be occupied during the FutureOS session. But usually you will start the system using the command **|OS**, to be able to use all memory for the work with FutureOS.

After starting FutureOS you will come directly to the Turbo Desktop. The upper screen part is filled with icons. Below there is the area to display file names and for the two status lines.

The Desktop can be controlled by either using icons or the keyboard. And the mouse pointer can be moved by using Cursor keys and Copy, Joystick or a mouse. In addition the icons can be activated by using the keyboard. The following 'hot keys' can be used:

SPACE: (then press key A-M) to select medium	L: Load a file
D ...: read Directories	S: Save a file
X ...: eXecute an application / RUN menu	K: call bacKground app. / shell
V ...: View text, picture or file-header	P: Print files or DIrectories
E ...: Erase files or format disc	A: tag all used files Again
N ...: reName file(s)	U: Untag all tagged files
C ...: Copy disc or files	O: Use the OK icon
G ...: Get current file (un)tagged	I: Use the I icon
F ...: FileCopy, copy files	Q: Quit the OS or restart it
R ...: Start application from ROM	
H ...: Activate shell for M4 mass storage - OS should run on the M4 expansion	
J ...: Jump to the first file name of the current DIR in file selection area	
B ...: Move the mouse pointer to the next file name, without tagging a file	
SHIFT and CONTROL browse up and down through directories	

I.21 General information about the Graphical User Interface

Enter the RSX command **|OS** in Basic to start FutureOS and enter the Desktop of the FutureOS, called Turbo-Desk. In case the Spartan mode is off, the upper screen part consists of four lines of icons, containing seven icons each. Using Spartan mode only currently usable icons are displayed. The lower half of the screen is used to work with files. The two lines at the bottom are used to display status or error messages.

If you look at the upper left corner of the screen, you see the mouse pointer. You can control the mouse pointer using the Joystick, cursor keys, mouse, track ball, analogue joystick, light pen and the Grafpad 2.

To activate an icon move the mouse pointer over the desired icon. Then press Fire or Copy. The icon will now be activated and its function will be accomplished. ESC allows you to abort icon functions.

If you have selected drive icons and subsequently clicked at the DIR icon, then you can use the mouse pointer to tag files in addition.

ATTENTION: Before you can work with files or applications you must tag the corresponding drive icons and then click at the DIR icon. This is needed since FutureOS buffers the DIrectories in E-RAM to speed up floppy access.

In case the Auto-DIR option is active the directory of a medium gets read immediately after you click at the icon of a medium (A-M).

During regular operation you HAVE to click at the DIR icon after EVERY change of a floppy disc to read and buffer the DIrectories again.

I.22 The icons of the storage media A..M - hot keys: first SPACE, then A to M

The icons for storage media are the icons of the upper line A, B, C, D, E, F, G, H and M; and the four left icons of the second line I, J, K and L. Every letter symbolizes a storage medium.

- A symbolizes the internal 3 inch drive
- B symbolizes the drive at disc-drive-B port of the CPC
- The icons C and D symbolize drives C (DS 3) and D (DS 4) of the internal FDC. If you expand the decoding of the internal FDC you can work with four drives A, B, C and D (hardware patch needed).
- The icons E and F symbolize the two 5.25" or 3.5" drives of the external Vortex F1-D, F1-S, M1-D or M1-S controller
- If you add two further drives (drive select 3 and 4) to the external Vortex controller, you can use them through the icons G and H.
- The four partitions of the (Dobbertin-)hard-disc are symbolized through the icons I, J, K and L
- The M icon symbolizes a RAM disc, compatible to the 444 KB Dobbertin RAM disc Medium M is inactive. Please don't use!
- The M4 SD card (media N and O) can be accessed by using the mass storage icon

The icon of an unused medium is shown in dark. If you want to use it, then move the mouse pointer over the icon and click at it. The icon turns from dark into bright. After selecting the storage media you need to click at the DIR icon.

By clicking on the drive icons you can select and deselect them alternately. Storage media with a striped icon can't be used, because the assigned drives are not connected.

I.24 The DIR icon - hot key: D (DIRectory)

The DIR icon is the fifth icon from left in the second icon line. DIR stands for the word DIRectory (of a floppy or hard-disc). The activation of this icon reads all the DIRectories of all tagged/activated devices. The first page of the DIRectory of the first medium will be displayed on the lower screen.

When using more than one medium at the same time, only the DIR of one medium will be displayed at a time. Using the keys SHIFT and CONTROL allow you to page the DIRectories up and down.

FutureOS buffers the DIRectories of all active media in E-RAM. Therefore it is necessary to re-read the DIRs after changing a disc by using the DIR icon. The DIR icon can also be used by pressing the key "D" on the keyboard.

To be able to perform file operations the DIRectories of the appropriate devices have to be read first. Under FutureOS all DIRectories are buffered in expansion RAM. The RAM-buffering of DIRs strongly increases the speed of all kinds of file-operations.

The selection of devices can be done by using the mouse pointer or by using the keyboard: First you press the space key, and then a message will be displayed. Now you enter a letter from "A" to "M" to select the corresponding storage medium. This procedure seems to be a little complicated, but eventually it's quicker than typing 'CAT' in BASIC.

I.25 The selection of files / start applications

To be able to start an application or to work with files you must first select the appropriate medium which contains the files. Then you must read the directory of that device by using the DIR icon.

If the lower part of the screen shows a directory you can simply tag files through moving the mouse pointer over the filename and press Copy or Fire. The name of a tagged file is now shown underlined. And the mouse pointer advances to the next file name automatically. For untagging a file just click it again.

Under FutureOS all file-operations deal with tagged files only. After using a file it's status becomes 'used' (file-name is shown streaked out).

I.26 The TYPE icon - V (View)

The TYPE icon (located right of the DIR icon) is the sixth icon from left of the second icon line. Its function is the TYPing of files, viewing pictures and the presentation of file-headers (including file-icons) on the screen.

* To show files on screen you must first tag their file-names in the directory(ies). Then you have to activate the TYPE icon, a menu appears. Now press the '1' key for TYPing files. First the file-header is shown (if it exists). Then please press any key.

If you want to view a picture then this will be loaded and shown now. You can adjust the screen MODE by using the cursor keys or joystick's Right and Left. And the screen format can be selected by the Up and Down keys.

In case of viewing a text file, after pressing any key, a second menu appears. This second menu gives you the possibility to select the screen format (rows and lines) in which the first file shall be displayed. For regular files you should display them with the usual 80 chars per line and 25 lines per screen (select 1).

FutureOS then loads the file in an E-RAM buffer and shows it on the screen. You can page up and down through the use of the cursor keys or a joystick (up and down). To end the file-show simply press COPY or Fire.

If you have tagged more files (different DIRs are possible) it's the same procedure for every file.

* Option 2) of the initial TYPE icon menu shows you the 128 bytes file-headers of all tagged files. After showing the first file-header, simply type any key to show the next file-header of the next tagged file (if there is one).

If you press the ESCape key the function is aborted and the last file remains tagged. After pressing ESC the last used file is now the first tagged one. You can start it with the RUN icon for example.

Using FutureOS the file-header is strongly expanded, all the 128 bytes are used. A pure AmsDOS file-header always contains some string-trash, but that isn't dangerous. FutureOS file-headers give you more information; they can contain additional text or a (semi-)graphic icon. But they're fully compatible to AmsDOS headers.

I.27 The LOAD icon - hot key: L (Load)

The LOAD icon is located at the right of the TYPE icon; it's the seventh icon of the second icon line. Its function is to load files into memory. Like ever only previously tagged files are used.

To load the first tagged file, just click on the LOAD icon or press 'L'. Then the LOAD menu appears. This menu asks you how to load the tagged file. There are five ways to load a file:

- **Loading type 0:** loads the file to the memory address specified by its file header, into the corresponding (expansion-)RAM
- **Loading type 1:** loads a file into the main memory at address &0000. These files may end with the extension '64K'.
- **Loading type 2:** loads files bigger than 64 KB in the expansion RAM. The file gets loaded to address &4000 of the first expansion RAM block &7FC4. This is the first byte of the first block of the expansion RAM. The file can contain up to 4 MB. Such a file may end with the extension 'X16'.
- **Loading types 3 and 4** allow loading a file at any address in the standard RAM (type 3) or any expansion-RAM (type 4).

I.28 The SAVE icon - hot key: S (Save)

The SAVE icon is the second from right of the second icon line. It allows you to save parts of the memory as files. But you can only save to a medium which is active and its directory must have been read. The SAVE menu provides four ways to save a file:

- **1) Save Foreground program:** allow you to save a previously started program back to a medium. You can edit target medium, user number, filename and the extension of the program/file. The target medium is symbolized through the letter at the beginning of the string (please use A-O only).
- **2) Save Background program:** Same as option 1). But the saved file is the actually present Background-program. You can save a Background-program only if you've started one before.
- **3) Save main memory:** gives you the possibility to save a file with the maximum length of 64 KB out of a defined RAM configuration. First you are asked for medium, user, filename and extension. This is managed through editing the string "A00:ProgNameExt". Then you are asked for the start- address. After that you're asked for the RAM configuration. Usually you enter the value &C0, that means saving from the standard 64 KB. The last question examines the file-length in KBs.
- **4) Save expansion-RAM:** This type of saving is very similar to type 3) saving. The difference is that the expansion RAM is to be saved. The file can have a length up to 4 MB, depending on the connected expansion RAM.

I.29 The OK icon - hot key: O (OK)

The OK icon is the second from the right of the third icon line. It gives you the possibility to jump back to a previously started application. But only if the application provides this feature. Some programs are using the Desktop features by enabling the OK icon. If you haven't started a program which uses the OK icon functionality and you click on OK there will be an error message.

I.30 The ERase icon - hot key: E (Erase)

The ERase icon is located at the most left end of the third icon line. It has different functions, which are all connected with erasing data. After the activation of the ERA icon you can choose one of the following functions:

- **1) Erase file(s):** By pressing '1' you'll enter the file eraser. It allows you to erase tagged files of different devices at the same time. Pressing '4' or '5' chooses the erase mode. With '4) All & now' you erase all tagged files immediately. The erased files are then gone forever - be Careful!
Using '5) With security-query' you can delete files selective. You will be queried for every file if it should be erased or not.
- **2) Format disc:** allows you to format discs. You can format Data-, System-, IBM- or Vortex. After choosing the format you will be asked for the drive in which the disc is located. Please put in the disc in the correct drive first, then press the drive-letter 'a' to 'h' and hit RETURN.
If auto-DIR is enabled, then after formatting the DIRectory will be read.

I.31 The RENAME icon - hot key: N (Name, reName)

The RENAME icon is the second icon from left in the third icon line. After activation press '1' to RENAME files. However, only tagged files are used. After pressing 1 the first tagged filename is displayed twice. The upper one remembers you how it looks like before renaming. The lower filename is there to be edited. You can change the user-number, the file-name and the file-extension. You can only use chars between 32 and 127 inclusive for the new name.

Pressing '2' in the RENAME menu allows to change the name of the disc. But only when using formats with disc-names.

I.32 The COPY icon - hot keys: C (Copy) and F (Filecopy)

The third icon from the left of the third icon line is the COPY icon. **Option 1** provides the possibility to copy files multidirectional. That means that there can be multiple sources and multiple targets of files. All tagged files will be copied. In the following menu you can decide if you want to copy all the tagged files to one target medium (option 3) or if you want to copy different files to different targets (option 4). Here you can choose target medium, user number, file-name and extension.

Attention: To copy to/from M4 SD card please use the Mass-Storage Icon!

Option 2 of the main-menu allows you to copy a complete disc. Data-, System-, IBM- or Vortex format can be used. You can use both sides of a disc, the can be single/double sided and may use double-steps.

If the source and the target drive is identical you have to swap the source-and target-discs. Messages will indicate that. The disc-format is investigated automatically. Depending on the format the target-disc may be formatted.

The hotkey 'f' will bring you directly to the file-copy mode.

I.33 The PRINT icon - hot key: P (Print)

The PRINT icon is located at the fourth left position in the third icon line. It has two features: The printing of DIRectories or files using the connected printer. Hence the icon-menu provides two options:

1. **Print file(s):** allows you the printing of all tagged files one after one. The ESC key aborts, but does not erase the printers buffer.
2. **Print DIR:** prints out the DIRectory of a medium. Just enter the letter of the device (a - m) and press RETURN.

I.34 The RETAG icon - hot key: A (All, retag All)

The fifth icon of the third icon line is the ReTag icon. Its function is the retagging of all used (previously tagged) files shown streaked out. These files will become tagged again (shown underlined).

Through the RETAG icon you can use a subset of files for different operations.

I.35 The UNTAG icon - hot key: U (Untag)

The sixth icon of the third icon line is the UNTAG icon. Its function is to UNTAG all tagged files. That includes the files on the M4 SD-card (media N and O). After a click on this icon all previously tagged (or used) files will be untagged. You can use the DIR icon to achieve the same effect (if you haven't removed a disc), it reads all DIRs again.

I.36 The MONitor icon - hot key: M (Machine Monitor)

The MONitor icon is the icon at the right end of the third icon line. It's used to start the machine monitor of FutureOS. More information is given in the big manual. Please use the monitor only if you are familiar with your CPC's hardware.

I.37 The ALARM (WECKER) icon - hot key: W (Wake up)

The second icon from the right end of the forth icon line is the ALARM / WECKER icon. Use the Cursor-keys and COPY, Joystick and Fire or ESC to set the Alarm / Wake up time video oriented.

I.38 The END icon - hot key: Q (Quit)

The END icon is located at the right of the forth icon line. It allows to:

1. **Start FutureOS new:** start FutureOS new (Cold boot)
2. **Initialize AMS-OS:** ends the current FutureOS session and initializes Amstrads firmware OS. This function is equal to a reset of the CPC.

I.39 The RUN icon - hot keys: X (eXecute) and R (ROM Application)

The RUN icon is located most left in the lower icon line. In case you click at the RUN icon and any file is tagged, then this file will be loaded into RAM and subsequently executed. The first tagged file will be used.

If there is no tagged file present the following options will be displayed:

1. **Start actual Foreground-program:** The last started program will be restarted, because it's still in the RAM and the OS has memorized its location through it's file-header.
2. **Start actual Background-program:** The actual Background program will be started. A Background program is a special program which is nested in the expansion memory.
3. **Jump into RAM:** This option allows to jump at any address in any connected (expansion-)RAM. Select RAM configuration &C0 to jump into the main memory.
Attention! You should know where to jump.
4. **Start ROM application:** Will start an application from a FutureOS expansion ROM. First you select the XROM, then the application of this XROM.
This option can be called directly using hot key 'R' of the Desktop.

I.40 The TIME and DATE icons - hot keys: Z (Time) and Y (Date)

They're located in the lower icon line. The TIME icons at the left side and the DATE icons at the right side. You can use them to set time and date. This is done by using Cursor-keys, Copy or Joystick and Fire. Press the ESCape key to abort.
Date and time of connected Real-Time-Clocks will be set.

I.41 The mass storage / IDE icon - hot key: H

This icon is located at the right end of the second icon line. It allows accessing the SD card of the M4 expansion. Therefore the fifth FutureOS ROM M is needed; this will be installed in the M4 automatically. ROM M includes convenient management of the M4 SD card and supports some of TurboDesk's 'hotkeys'.

I.42 The <I> icon - hot key: I (Information)

The <I> icon is the seventh icon of the third icon line. It will start any available INFOrmation- or Help-system. If there is no INFO/HELP system present nothing will happen except the appearance of an error-message.

Comments, critics and notices are welcome every time.

Only together, we can make the system better.

Send email to: FutureSoft@gmx.de

Important notice:

You can contact me through internet

<http://www.FutureOS.de>