

**Documentation of the file manager HFM Version 4.0**  
**Andreas Helke 14.6.94**

**Help function F1 :**

PageUp, PageDown: Paging. F: Search for a text. ESC: Quit.

**Table of contents:**

1	Help function F1 :	1
2	Table of contents:	1
3	Short reference of the HFM command list:	2
3.1	.....	2
3.2	Mouse: [Click button] or <carry out action>.....	2
3.3	Keyboard: press the given key.....	2
3.4	ESC: the ESC key can be used to go back in the directory tree and to interrupt many started processes.....	2
3.5	Help:.....	2
3.6	Drive, directory and window administration:.....	3
3.7	Single files and directory trees:.....	3
3.8	Internal file display function:.....	4
3.9	Mixed commands:.....	5
3.10	.....	5
3.11	Start of programs and DOS commands:.....	5
3.12	.....	5
3.13	Mode changes:.....	5
3.14	.....	5
3.15	End of the program:.....	5
3.16	Screen saver and password protection:.....	5
4	Line editor for command lines, file and path names:	6
5	Start of the program:	6
6	Configuration file HFM4.INI	6
7	User interface and screen display:	6
8	Basics of the navigation in the program:	7
9	Use of the mouse:	7
9.1	<u>File operations with mouse movements</u> .....	7
10	Mode of work and the integration of archive programs:	8
11	Command list of HFM:	9
11.1	Mouse: [Click button] or <carry out action>.....	9
11.2	Keyboard: press the given key.....	9
11.3	ESC: the ESC key can be used to go back in the directory tree and to interrupt many started processes.....	9
11.4	Help:.....	9
11.5	Drive, directory and window administration:.....	9
11.6	Single files and directory trees:.....	11
11.7	Internal file display function:.....	13
11.8	Mixed commands:.....	13
11.9	.....	14
11.10	Start of programs and DOS commands:.....	14
11.11	Mode changes:.....	14
11.12	End of the program:.....	14
11.13	Screen saver and password protection:.....	15
12	Line editor for command lines, file and path names:	15
13	Find command:	15

14	Sorting of filenames:	16
15	File- and path names:	16
16	Modes and displays:	16
	16.1 Different program modes:.....	16
	16.2 .....	16
	16.3 Single- and multiple-file-mode:.....	16
17	Time used for reading big sub directories:	16
18	Using archives created by ARJ, LHA, LHARC, PKARC, PKZIP and ZOO:	16
19	Integration in Windows 3.1:	17
20	Recommended precautions:	17
21	State of the development:	17
	21.1 Known bugs and misfeatures:.....	17
	21.2 What is yet missing:.....	17
22	Installation and configuration:	18
23	Important facts about the installation:	18
24	Configuration file HFM4.INI:	18
25	The following files and programs are required by HFM:	18
26	Example for the configuration file HFM4.INI:	21
27	Screen colours:	24
28	Batch file D.BAT for the start of HFM:	24
29	Use of the archive programs ARJ, LHA, LHARC, PKARC, PKZIP, ZOO :	25
30	Configuration files for the use of archive programs:	25
31	Licence, warranty and registration:	28

### Short reference of the HFM command list:

Most commands can be invoked either with a key or by clicking with the left mouse button on the relevant field or button. The right mouse button is used as an equivalent to the RETURN-key.

The most important file commands can alternatively be started by dragging with the mouse:

Copy	Drag a file or directory tree to the other file window.
Delete	Drag a file or directory tree to the lower border.
Rename (Move)	Drag a file or directory tree to the lower border of the second window.
Start	Drag a file to the left (start a program belonging to the file)
Next	Drag a file to the right (show the file)
Return	Drag a file down (change directory, show file or start program)
ESC	Go back to the last directory

**Mouse:** [Click button] or <carry out action>

**Keyboard:** press the given key

**ESC:** the ESC key can be used to go back in the directory tree and to interrupt many started processes.

**Help:**

F1 [Help] - Help (shows the documentation file).

**Drive, directory and window administration:**

- Alt- A to Alt-Z [A] to [Z] in the second line - Read the current directory of the given drive.
- S [Show] - S is a multifunctional command. According to the chosen directory entry, show the content of the file or change to the subdirectory.
- RETURN <Double-click on the required file or directory> or <press right mouse button> - According to the chosen directory entry: Start a program or batch file, switch to a subdirectory of archive or show the content of a file.
- ESC [ESC] - Back to the previous directory or stop a started action.
- Backspace - Back to the root directory.
- F [Find] - Search a directory entry in the file list.
  - Backspace removes the last character of the search string
  - CursorDown shows the next matching file
  - CursorUp goes back to the first file found
  - RETURN end of find and start the RETURN command
  - F3 end of find and start F3 command
  - ESC or SPACE end of find
- I [Inc] - Mark all files, which exist also in the second window.
- Home <Click at the start of the 4. line> - Go to the start of the file list.
- PgUp, PgDown, SPACE <Click 4. or 25. line> - Paging in the current window.
- Ctrl-PgUp, Ctrl-PgDown <4. or 25. line in the second window> - Paging in the second window.
- CursorUp, CursorDown <click on the desired file> - Move scrollbar.
- 2, 8 - Scrolling the current file list.
- End <Click the end of the last line> - Show the end of the file list.
- L, F2 - Shows the current file or directory and moves the scrollbar upward.
- N, F3 [Next] <drag file to the right> - Shows the current file or directory and moves the scrollbar downward.
- CursorRight, Left, 4, 6, F9 <click the other file window> - Switch to the other window.
- CursorRight and CursorLeft can also be used to reread the directory.
- F5, ' - Reread the directory in the left file window.
- Shift-F5, ' - Reread the directory in the right file window.
- Ctrl-F5, '-, '/' <Click the 3. line> - Reread both directories.
- \* - Reread the current directory. This variation resets the filename to \*.\*. This is useful if you had displayed a restricted file list.
- F4 - Shows the disk space requirements of the files in the file lists.
- F6 [Sort] - Sort according to file extension, name, size, date or the order on the disk.
- F7 [chdir]- Give a new path in the current file window.
- Shift-F7 - Give a new path in the second file window.

**Single files and directory trees:**

- F8 <click at the file with the mouse in the multiple file mode> - Mark or unmark a file for use in the multiple-file-mode.
- A - Start of a program according to the file extension of a datafile as given in HFM4.INI.
- Ctrl-A [Start] <drag file to the left> - Like the above command but HFM uses recursive batch files to free the RAM. {This works also with archived files}
- C [Copy] <Drag the file or directory tree to the other file window> - Copies the selected file(s).
- Ctrl-C [Copy with right mouse button] - Copy files in the multiple-file-mode. The multiple-file-mode will be started for a single action and deactivated immediately afterwards.
- D, Alt-F10 [Del] <Drag the file or directory tree to the lower border of the current window> - Delete File(s) and removing complete directory trees after additional confirmation. In the multiple-file-mode all marked files will be processed, otherwise the file selected by the scrollbar.
- Ctrl-D [Del with right mouse button] - Delete files in the multiple-file-mode. The multiple-file-mode will be started for a single action and deactivated immediately afterwards.
- E [Edit] - Call an editor for the selected file.

- M - Modifying file attributes. The start letters of the attributes will switch the attribute on and off. ESC interrupts the modifying. All other keys change the attribute.
- L, F2 - Shows the current file or directory and moves the scrollbar upward.
- N, F3 [Next] <drag file to the right> - Shows the current file or directory and moves the scrollbar downward.
- Ctrl-P [Print] - Print a file. The printer file name is defined in hfm4.ini
- R [Ren] - Renaming and moving files. You can specify a new path or name or simply press return to move to the other window.
- Ctrl-R [Ren with right mouse button] - Rename files in the multiple-file-mode. The multiple-file-mode will be started for a single action and deactivated immediately afterwards.
- S [Show] - Depending on the directory entry show a file or change to a subdirectory.
- RETURN <Double click on the file> or <press right mouse button> or <drag file down>- Depending on the selected directory entry: start a program or batch file, show a file or switch to another subdirectory or archive.
- Ctrl-RETURN - Start a program with a recursive batch file to free the total available RAM.

### Internal file display function:

- J, N, L, F2, F3, RETURN [NEXT] <Double click on the file> or <press right mouse button> - Internal file display. This display starts very fast and can show files up to two gigabytes. You can choose a word-wrap function. If you started the file display with N, F3, L or F2 you can go with these commands to the next or previous file. The file display can be left with ESC, J or Q.
- Searching:  
F (no case distinction) and S search for a text string.  
A: repeats the search.  
The search can be interrupted with any key.
- Deleting:  
D: deletes the displayed file.
- Moving:  
POS: goes to the start  
End: goes to the end of the file.  
PgUp, PgDown, U, SPACE: paging in the file.  
CursorUp, CursorDown, RETURN: moves one line.  
CursorRight CursorLeft, Ctrl-CursorRight, Ctrl-CursorLeft: moving to the side if word-wrap is active .  
L or F2: show previous file.  
N or F3: show next file.
- Change of the display:  
+ or -: change the width of tabulators and the steps for side movements. Standard is 8 characters.  
Z or W: switches word-wrap on and off.  
H: switches a filter for the hi bit of the character codes (useful for looking at wordstar files)
- Screen saver:  
; or Ö: Starts the screen saver.  
' or Ä: Starts the screen saver with password protection.  
\*: New password.
- U Internal file display for any file.

### Mixed commands:

- Ctrl-S - Shows the last DOS screen until a key is pressed.
- T - Starts a calculator or another program.
- Y - Starts an editor for changing the screen colours. (Go up and down with the cursor keys, end with ESC. You will be asked whether you want to keep the changes.

Ctrl-F1, Ctrl-F2, Ctrl-F3 - Switch between several colour combinations. For the monochrome text mode only the combination 3 is usable.

V - Show the version number of the program.

### Start of programs and DOS commands:

O [dOs] - Command line editor for starting any programs and DOS commands. The last 10 entries will be kept in a ring buffer.

Ctrl-O - Command line editor. This version frees the RAM by using a recursive batch file.

K - Call a new command processor. (Back with the command exit)

### Mode changes:

F10 [Multiple File] <click the watch in the 2. line> - Switch between single and multiple-file-mode.

B <click D in the 3. line> - change between normal deleting (D+) and moving to a \trash directory (D-).

Ctrl-V <click V in the 3. line> - Switch the HFM internal verify function on (V+) and of.

Z - Switch the directory display between file attributes and seconds.

! - Switch the directory display between upper and lower case.

### End of the program:

Q, Alt-F4 [Quit]- Leave HFM.

Ctrl-Q - Leave HFM without updating HFM4.INI. This is necessary, if you change the INI-file with an external editor.

### Screen saver and password protection:

; or Ö : Starts the screen saver.

' or Ä: Starts the screen saver with password protection.

\* : New password.

### Line editor for command lines, file and path names:

HFM stores the last 10 entries in a ring buffer.

CursorRight, CursorLeft, Home, End Move cursor  
<click at the desired position>

CursorUp, CursorDown <click a position above or below the edit line>	Call back old lines
INS	Switch between insert and overwrite
ESC [ESC]	Interrupt the process.
RETURN <press right mouse key>	End of edit and start of action

## **Start of the program:**

HFM should be started with the batch file D.BAT. This method allows to release all memory used by HFM, when starting programs. This is accomplished with the automatic recursive call of batch files.

## **Configuration file HFM4.INI**

HFM automates the use of several programs, to simplify the working with the file system of a PC. The paths and parameters of the programs are stored in a number of INI files especially the file \hfm.arc\HFM4.ini. This file can be changed with any ASCII editor. The screen colours can also be changed with the command Y.

## **User interface and screen display:**

HFM does not conform to the IBM Common User Access. It has no menu system, no movable windows and the Alt-key combinations are reserved for switching to another drive and not for calling a menu. Since I wanted to minimize the memory requirements I did not integrate a real menu system. However I provided a function line from which the most important commands can be selected with a mouse.

The program is optimized for maximal overview and minimal work while using and not for simple learning. Since there is no menu system, some commands can only be found by looking into the documentation. The standard commands should be clear however.

HFM has a multitude of windows. Those are tiled, not movable and have only rudimentary or no borders at all. They can be distinguished by different colours.

## Basics of the navigation in the program:

Screen shot:

```

dOs ESC chdir Next Find Copy Del Edit print Ren Show stArt Inc sort Hilfe Quit
  A   B   C   D                                     29.09.92  0:31:35
Vol: HFM          H: 107 KB   M: 302 KB   Vol:          D+ V+
A:\HFM\*. *      D:\*. *
|HFM             PAS    2911   5.09.92  22:32 a   |DRDOS          <DIR> 26.09.92  17:18
|HFMVIEW        PAS    7315  11.08.92  0:42 a   |LMOUSE         <DIR> 26.09.92  17:39
|HFM_DN4        PAS    3994   3.09.92  21:12 a   |MB             <DIR> 24.09.92  23:34
|HFM_EU_3       PAS    7350  24.08.92  18:36 a   |TEMP           <DIR> 26.09.92  14:18
|HFM_FDIS       PAS   26134  28.09.92  21:18 a   |DCONFIG BAK    342 26.09.92  17:16 a
|HFM_I202       PAS   38806  28.09.92  20:56 a   |COMMAND COM   52998 27.03.92  6:00 a
|HFM_MA2        PAS   13959   2.09.92  0:34 a   |DEVSWARE COM   1631 29.08.91  6:00 a
|HFM_MI1        PAS   12424   6.09.92  2:12 a   |IBMBIO COM    24618 27.03.92  6:00 ahsr
|HFM_MIX5       PAS   58008  28.09.92  21:25 a   |IBMDOS COM    39239 27.03.92  6:00 ahsr
|HFM_M_3        PAS   14792  28.09.92  21:32 a   |DISKMAP DAT  127728 28.09.92  12:13 a r
|HFM_R_13       PAS   21066   1.09.92  19:36 a   |386SPART PAR   3.1 MB 28.09.92  12:14 ahs
|HFM_SDA        PAS   85194  24.09.92  1:11 a   |SSPARTSS SWP  119 MB 24.09.92  23:19 ahsr
|HFM_SDX        PAS   66935  28.09.92  21:19 a   |DCONFIG SYS    143 26.09.92  18:01 a
|HFM_VAR1       PAS   12090   9.09.92  20:58 a   |SSTORDRV SYS   36646 27.03.92  6:00 a
|HFM_WD1        PAS    5200   1.09.92  20:02 a
|ZEILE          PAS     198  16.08.92  2:16 a
|_HFMVIEW       PAS    7176   7.08.92  3:57 a
|_HFM_SD        PAS    4575   3.08.92  3:35 a
|TURBO          TP     2183   2.09.92  18:41 a
|2              TST      82   3.09.92  15:48 a
48 Files, 174 von 1185 KB frei.          14 Files, 3148 von 127226 KB frei.

```

The first line gives a number of buttons to select the most important functions with a mouse. The second line shows the existing logical drives. On the right side is a watch which doubles as a switch between single and multiple-file-modus. The third line shows the volume names, the free Heap (used for storing the file lists and for providing a buffer needed for copying files), the remaining DOS memory, D gives information about the actually used method for deleting: + normal delete, - moving to a \trash directory, V shows whether the internal verify function of HFM is activated.

HFM uses two windows for displaying two directory lists. You can switch between the windows with a mouse click or with the cursor keys. To change to another subdirectory you can enter a new path with F7. Or you can move in the directory tree with RETURN or double-click on a subdirectory or archive file. ESC brings you back to the previous directory.

Copying and moving goes to the second window if you do not specify another path. (Simply pressing RETURN or the right mouse button.)

### Use of the mouse:

You can copy a file or directory tree by dragging it into the second window. Dragging to the lower border of the window will delete the file, dragging to the lower border of the second window will move the file. Moving of directory trees is only working, if an external program like DRDOS MOVE is available.

The right mouse button is used to mark files and to process the marked files when clicking on the Copy Del and Ren buttons. Furthermore the right mouse button is an alternative to the RETURN-key.

The screen is completely overlaid with fields which provide a function when clicked with a mouse. The details are explained in the command list.

### **File operations with mouse movements**

The most important file operations can be invoked with mouse movements. Moving a entry only a little will start the following commands: right display the file, left start a program, down RETURN, up ESC. Dragging a file to the bottom of the screen will delete it, dragging to the second window will copy it, dragging to the bottom of the other window will move it.

### **Mode of work and the integration of archive programs:**

Archives: HFM can present the archives of several archiving programs (ARJ, LHARC, LHA, PKARC, PKZIP, ZOO etc.) as simulated subdirectorys. In these archives, the commands will be executed by calling the archiving programs with the relevant parameters. For editing, changing or displaying of archived files, these are unpacked into a temporary archive directory. Afterwards the files will be re archived if necessary and deleted in the archive directory.

Comparison of directorys: HFM shows two directorys at the same time. All files, witch exist in both directorys, have a filename in a different colour combination. At the same time, the display of the date and size will be shown correspondingly, if files have the same date and time and therefore probably the same content. Due to this display, two directorys can be compared very conveniently.

Active window: The currently active window is shown by the colour of the borders (white text on red or black background in the normal colour selections). If a file in this window is selected, it is marked by a scrollbar. The active window is the source for copying and moving files, if you do not use the dragging method.

File selection: With the cursor keys you can move a scrollbar to select a file. This file will be used with subsequent commands.

Marking of several files: With the functionkey F8 you can mark and unmark a file. The marked files will be used instead of the one selected by the scrollbar if you use the multiple-file-mode. In this mode all copying and moving goes into the second file-window.

Memory requirements and freeing of memory when starting other programs: A minimal System (HFM.EXE, HFM4.INI and D.BAT) requires about 150 KB disk space. HFM uses about 300 KB RAM. If you want to start a program which needs more free memory or installs itself as a TSR you can start it with Ctrl-O, Ctrl-Return or Ctrl-A. HFM saves the current state in HFM4.INI, terminates and starts a batch file with the required command. This batch file then restarts HFM with the recursively used batch file D.BAT.



## Command list of HFM:

Most commands can be invoked either with a key or by clicking with the left mouse button on the relevant field or button. The right mouse button is used as an equivalent to the RETURN-key.

The most important file commands can alternatively be started by dragging with the mouse:

Copy	Drag a file or directory tree to the other file window.
Delete	Drag a file or directory tree to the lower border.
Rename (Move)	Drag a file or directory tree to the lower border of the second window.
Start	Drag a file to the left (start a program belonging to the file)
Next	Drag a file to the right (show the file)
Return	Drag a file down (change directory, show file or start program)
ESC	Go back to the last directory

**Mouse:** [Click button] or <carry out action>

**Keyboard:** press the given key

**ESC:** the ESC key can be used to go back in the directory tree and to interrupt many started processes.

### Help:

F1 [Help] - Help (shows the documentation file).

### Drive, directory and window administration:

Alt-A to Alt-Z [A] to [Z] in the second line - Read the current directory of the given drive. All existing logical drives will be shown in the second line. For all not existing drives the command will be ignored.

S [Show] - S is a multifunctional command. According to the chosen directory entry, show the content of the file or change to the subdirectory.

RETURN <Double-click on the required file or directory> or <press right mouse button> - According to the chosen directory entry: Start a program or batch file, switch to a subdirectory of archive or show the content of a file.

ESC [ESC] <Drag file up> - Back to the previous directory or stop a started action.

Backspace - Back to the root directory.

F [Find] - This is one of the most important commands. Search a directory entry in the file list. This positions the scrollbar on the first entry corresponding to the query. (End with RETURN, ESC, SPACE, F3. See also Find command.)

I [Inc] - Add all files, which exist also in the second window to the marked list. When invoked twice, in addition to the files subdirectories are also marked.

Ctrl-I - Add all files, which do not exist in the second window to the marked list. When invoked twice, in addition to the files subdirectories are also marked.

Home <Click at the start of the 4. line> - Go to the start of the file list.

PgUp, PgDown, SPACE <Click 4. or 25. line> - Paging in the current window.

Ctrl-PgUp, Ctrl-PgDown <4. or 25. line in the second window> - Paging in the second window.

CursorUp, CursorDown <click on the desired file> - Move scrollbar.

2, 8 - Scrolling the current file list.

End <Click the end of the last line> - Show the end of the file list.

L, F2 - Shows the current file or directory and moves the scrollbar upward.

N, F3 [Next] - Shows the current file or directory and moves the scrollbar downward.

Those commands are useful for a quick overview about a large number of directory entries. They do also function in the file display.

CursorRight, CursorLeft, 4, 6, F9 <click the other file window> - Switch to the other window.

CursorRight and CursorLeft can also be used to reread a directory

F5, ' - Reread the directory in the left file window.

Shift-F5, ' - Reread the directory in the right file window.

Ctrl-F5, '-', '/' <Click the 3. line> - Reread both directories.

\* - Reread the current directory. This variant resets the filename to \*.\*. This is useful if you had displayed a restricted file list.

F4 - Shows the disk space requirements of the files in the file lists.

F6 [Sort] - Sort according to file extension, name, size, date or the order on the disk.

F7 [chdir] - Give a new path in the current file window.

Shift-F7 - Give a new path in the second file window.

### Single files and directory trees:

- F8 <click at the file with the right mouse button> - Mark or unmark a file for use in the multiple-file-mode.
- A - Start of a program according to the file extension of a datafile as given in HFM4.INI. {This works also with archived files}
- Ctrl-A [Start] <drag file to the left> - Like the above command but HFM uses recursive batch files to free the RAM. {This works also with archived files}
- C [Copy] <Drag the file or directory tree to the other file window> - Copies the selected file(s). You can specify a new path or name or simply press return to copy to the other window. In the multiple-file-mode all marked files will be processed, otherwise the files selected by the scrollbar. If you have marked directory trees you can answer A when you are asked if you want to copy tree, then you will not be asked for the following trees. If the target file does already exist, you receive a warning. If the target file is write protected, hidden or system you can not copy. Hidden and system files will also be copied. The target file gets always the file attributes of the source file. During the copy process all file attributes are removed to allow the copying of system files. If HFM gets stopped during a copy you might have to regenerate the original file attributes. If you did choose a directory tree, you get an additional dialog box where you are asked whether you really want to proceed or if you have special wishes. You can confirm the action with Y and RETURN or clicking the [ Yes ] field. After the confirmation the whole tree with all subdirectories will be copied. A will prevent further questions in the multiple-file-mode. With U you specify that only files which already exist in the target directory, but a newer in the source directory will be copied. With S you skip all files, which are newer (or have the same age) in the target directory. Copying works also to and from archives. If you want to create a new archive, you can simply give the name with the necessary file extension as target path.
- Ctrl-C [Copy with right mouse button] - Copy files in the multiple-file-mode. The multiple-file-mode will be started for a single action and deactivated immediately afterwards.
- D, Alt-F10 [Del] <Drag the file or directory tree to the lower border of the current window> - Delete File(s) and removing complete directory trees after additional confirmation. In the multiple-file-mode all marked files will be processed, otherwise the file selected by the scrollbar. If you have marked directory trees you can answer A when you are asked if you want to delete the tree, then you will not be asked for the following trees. If you selected the directory entry . the complete directory tree will be deleted. HFM supports two methods of deleting. Normally (D+) the files will be deleted. With the command B you can switch to another mode (D-). In this case the files will not be deleted but moved to a \trash or \TRASH subdirectory. This directory is always on the drive of the deleted file and will be created if necessary. Inside of the \trash subdirectory HFM will delete normally. If you delete . in the \trash subdirectory you get rid of the deleted files. This action can also be invoked with the Alt-F10 key. Inside of archives all deletions will be permanent, because the archive program is removing the file.
- Ctrl-D [Del with right mouse button] - Delete files in the multiple-file-mode. The multiple-file-mode will be started for a single action and deactivated immediately afterwards.
- Ctrl-E - Delete all files in the directory tree, which have the same date as the currently selected file. This command is intended for quick automatic deletion of all files of a program package which have not been altered since the installation.
- E [Edit] - Call an editor for the selected file. {This works also with archived files}

- M - Modifying file attributes. The start letters of the attributes will switch the attribute on and off. ESC interrupts the modifying. All other keys change the attribute.
- L, F2 - Shows the current file or directory and moves the scrollbar upward.
- N, F3 [Next] <drag file to the right> - Shows the current file or directory and moves the scrollbar downward.
- Ctrl-P [Print] - Print a file. Works also in the multiple-file-mode. After every file a form feed command (Ctrl-L) will be sent to the printer. The printer file name is defined in HFM4.INI.
- R [Ren] - Renaming and moving files. You can specify a new path or name or simply press return to move to the other window.  
In the multiple-file-mode all marked files will be processed, otherwise the files selected by the scrollbar. The rename command will move files inside a physical partition into another subdirectory or into another logical drive. The names of subdirectory can be changed but they can not be moved with the normal rename function call. If another program (for example DRDOS MOVE) is given in HFM4.INI. This program will also move directory trees or move to another drive.
- Ctrl-R [Ren with right mouse button]- Rename files in the multiple-file-mode. The multiple-file-mode will be started for a single action and deactivated immediately afterwards.
- S [Show] - S is a multifunctional command. Depending on the directory entry show a file or change to a subdirectory. When displaying files, HFM looks at first in the list of additional file viewers (for example VPIC) then it uses an alternative file viewer (for example LIST.COM) if it is given in HFM4.INI. If free memory is lacking it will use its internal file display function. {This works also with archived files}
- RETURN <Double click on the file> or <press right mouse button> or <drag file down> - Depending on the selected directory entry: start a program or batch file, show a file or switch to another subdirectory or archive. {This works also with archived files}
- For S as well as RETURN you can give a list of alternative file display programs in HFM4.INI. These will be selected according to the file extension. If the file is stored in an archive, a changed file will be archived.
- Ctrl-RETURN - Start a program with a recursive batch file to free the total available RAM. {This works also with archived files}
- W - Start a MS-Windows program with the help of a start program. In the archive RUN18.ZIP there are two programs which allow to start a Windows program from the dos box. The windows program sched gets the order from run, to start a windows program.

### Internal file display function:

- J, N, L, F2, F3, RETURN [NEXT] <Double click on the file> or <press right mouse button> -  
Internal file display. This display starts very fast and can show files up to two gigabytes. You can choose a word-wrap function. If you started the file display with N, F3, L or F2 you can go with these commands to the next or previous file. The file display can be left with ESC, J or Q.
- Searching:  
F (no case distinction) and S search for a text string.  
A: repeats the search.  
The search can be interrupted with any key.
- Deleting:  
D: deletes the displayed file.
- Moving:  
POS: goes to the start  
End: goes to the end of the file.

PgUp, PgDown, U, SPACE: paging in the file.  
CursorUp, CursorDown, RETURN: moves one line.  
CursorRight CursorLeft, Ctrl-CursorRight, Ctrl-CursorLeft: moving to the side if word-wrap is not active .

L or F2: show previous file.

N or F3: show next file.

Change of the display:

+ or -: change the with of tabulators and the steps for side movements. Standard is 8 characters.

Z or W: switches word-wrap on and of.

H: switches a filter for the hi bit of the character codes (useful for looking at wordstar files)

Screen saver:

; or Ö: Starts the screen saver.

' or Ä: Starts the screen saver with password protection.

\*: New password.

Compatibility to Unix less:

/: Searches (no case distinction and no regular expressions) After the use of this command N no longer displays the next file but the next search result. :N and :P are then used to move in the file list.

U Internal file display for any file.

#### **Mixed commands:**

P - Switch between file and path display in PKZIP archives.

Ctrl-S - Shows the last DOS screen until a key is pressed.

T - Starts a calculator or another program.

Y - Starts a editor for changing the screen colours. (Go up and down with the cursor keys, end with ESC. You will be asked whether you want to keep the changes.

Ctrl-F1, Ctrl-F2, Ctrl-F3 - Switch between several colour combinations. For the monochrome text mode only the combination 3 is usable.

V - Show the version number of the program.

#### **Start of programs and DOS commands:**

O [dOs] - Command line editor for starting any programs and DOS commands. The last 10 entries will be kept in a ring buffer.

Ctrl-O - Command line editor. This version frees the RAM by using a recursive batch file.

K - Call a new command processor. (Back with the command exit)

W - Start a MS-Windows program with the help of the program pair SCHED (Windows program wich starts a new program) and RUN (DOS program wich tells SCHED what to do)

**Mode changes:**

F10 [Multiple File] <click the watch in the 2. line> - Switch between single and multiple-file-mode. This is no longer recommended. Use the right mouse button or the ctrl-c ctrl-d ctrl-r commands instead.

B <click D in the 3. line> - change between normal deleting (D+) and moving to a \trash directory (D-).

Ctrl-V <click V in the 3. line> - Switch the HFM internal verify function on (V+) and of. This function will find some errors missed by DOS verify, but it is only partially successful if you use a disc caching program. Verify will only operate when writing on the drives given in HFM4.ini. For example verify on drives a: and b:.

[Verify on drives]  
AB

Z - Switch the directory display between file attributes and seconds.

! - Switch the directory display between upper and lower case.

P - Switch between file and path display in PKZIP archives with subdirectories.

**End of the program:**

Q, Alt-F4 [Quit]- Leave HFM.

Ctrl-Q - Leave HFM without updating HFM4.INI. This is necessary, if you change the INI-file with an external editor.

**Screen saver and password protection:**

The screen saver is only active if HFM is in control of the computer. If you set the delay in HFM4.INI to 0 the screen saver is disabled.

HFM does only clean the screen. You can however specify a program to display anything on the screen.

Inside the screen saver Ctrl-Break is disabled to allow the password protection. The password protection is only effective if HFM is not running in a task switching environment. Otherwise task switches can not be prevented.

- ; or Ö : Starts the screen saver.
- ´ or Ä: Starts the screen saver with password protection.
- \* : New password.

**Line editor for command lines, file and path names:**

HFM stores the last 10 entries in a ring buffer.

CursorRight, CursorLeft, Home, End Move cursor  
<click at the desired position>

CursorUp, CursorDown Call back old lines  
<click a position above or below the edit line>

INS	Switch between insert and overwrite
ESC [ESC]	Interrupt the process.
RETURN <press right mouse key>	End of edit and start of action

## Find command:

Find allows the rapid selection of a file or subdirectory in the current directory. The search string will be analyzed at every keystroke. A \* as wild card is neither allowed nor necessary. If you want to select according to the file extension you simply give a . before the extension. For example FA.P looks for the first file where the name begins with FA and the file extension begins with P. You can end with ESC, SPACE, RETURN and F3. RETURN or F3 starts the corresponding command.

Backspace	removes the last character of the search string
CursorDown	shows the next matching file
CursorUp	goes back to the first file found
RETURN	end of find and start the RETURN command
F3	end of find and start F3 command
Ctrl-A	end of find and call Start command
ESC or SPACE	end of find

## Sorting of filenames:

HFM sorts according to the file extension. Subdirectories will be shown at the start of the file list. With F6 you can specify another sorting order.

## File- and path names:

The path name specifies the desired subdirectory. If you do not give a drive character the current drive will be used. Path names may begin at the current directory of any drive. A:path, or A:\path or \path are all allowed. Path names must end with \ if you want to see the files in this location. It is not necessary to specify \*.\* as filename. If you want a restricted file list you can specify the name with the wild cards ? and \* .

When you copy or rename a file, you can specify \* for either the name or the extension if you want to keep it.

## Modes and displays:

### Different program modes:

In the third line V+ or V- show whether the verify function is active. D+ (normal deleting) or D- (moving) show the type of deleting.

If a command line or a name is required, HFM starts a line editor.

### **Single- and multiple-file-mode:**

In the single-file-mode all operations work on the file selected by the scrollbar. In the multiple-file-mode the files marked by F8 or the right mouse button are used. You can interrupt a multiple file operation by pressing any key. Better is to use the ctrl-c, ctrl-d, ctrl-r commands for multiple file operations.

The multiple file mode is shown by [multiple file] in the second line.

### **Time used for reading big sub directories:**

If a subdirectory is already sorted, the sort tree degenerates to a linear list which has to be processed for every entry. A sorted directory with 2800 entries can take 10 minutes to read on a 8 MHz AT. If you want to read a big subdirectory repeatedly, it is advisable to mix the contents. The reading of subdirectories can be interrupted by pressing ESC. Then only the files already processed will be shown.

### **Using archives created by ARJ, LHA, LHARC, PKARC, PKZIP and ZOO:**

HFM can present archives as simulated subdirectories. The different operations will be started by automatic calling of the archive programs with the relevant parameters. These are given in the INI files for the different archive programs. The details are explained in the installation section of this document. The files in the archives will be extracted into the directory C:\HFM.AH if necessary and will automatically be deleted. Version 4 of HFM is able to read PKZIP archives which contain subdirectories.

### **Integration in Windows 3.1:**

I normally use HFM as a faster and more convenient alternative to the windows file manager. With the program pair WINGO and WINSTART it is possible, to start Windows programs from a DOS window in 386 enhanced mode. WINGO will tell WINSTART which program should be started. Some Windows programs will not start however. WINGO should be started after the Novell Netware Shell NETX, otherwise it will not function at all.

I now use a new combination, SCHED ( a Windows program wich starts a new program) and RUN (DOS prgogram wich tells SCHED what to do). For automatic use of RUN I have created the new command W.

### **Recommended precautions:**

HFM tries to keep the file lists in sync with the real file system. It is however not always successful. You can reread the File lists with ',' for the left window, '!' for the right window and '-' or '/' for both windows.

Since equal names in both windows are displayed independently of equal content you can have the following situation. In one window you see a file which is equal to a file in the other window. But it has an equal name with one file and equal content with another file (for example a backup file).

If you switch into a window the current directory of the computer will be changed accordingly.

If you now switch to another drive the current directory of DOS on the old drive will be another than that, which might be shown in the second window.



For copy, delete and rename you have always to be sure whether you need the single- or the multiple-file-mode.  
The best practice is to start the multiple-file-mode only when needed with Ctrl-C, Ctrl-D and Ctrl-R.

## **State of the development:**

### **Known bugs and misfeatures:**

The file display occasionally jumps to another part of the displayed file.  
If you have a normal subdirectory with an extension which is defined as an archive extension (for example c:\test.zip) then HFM will not be able to display or work in this subdirectory.

### **What is yet missing:**

A Windows version: You can start windows programs from HFM with the help of WINGO and WINSTART. I will develop a windows version of HFM later, if the demand for it shows. A OS2, Unix or Chicago version seems more likely now. The windows integration achieved with SCHED and RUN is good enough for me, but long filenames will require a new file manager.

A real menu system: I will integrate a menu system in HFM, if the program is successful as shareware. For me a menu system is not necessary.

## **Installation and configuration:**

### **Important facts about the installation:**

The automatic installation works with `INSTAL_D.BAT` or `INSTALL_E.BAT` from the current directory. The first will create the german, the second the english version of the HFM installation. This installation creates the directory `C:\HFM.AH` and copies the system into that directory.

This system can be optimized by providing archiving programs, file display programs and specifying programs which will be started according to the file extension of data files. HFM is delivered with all archive configuration files integrated but without the actual archive programs needed, if archives should be processed. Entries for programs in the `HFM4.INI` parts [Programmstart ...] and [Archive] which you do not need you can simply remove.

If you want to install HFM on another drive you have to modify the path descriptions in `INSTALL.BAT`, `D.BAT` and the `*.INI` files.

For proper operation HFM needs the file `\HFM.AH\HFM4.INI` on any drive. It starts to look for it at drive C and then goes from Z to A. If this file is damaged or totally missing, HFM tries to create a new INI file in the directory `A:\hfm.ah`.

If you want to use archive programs in HFM they must be in the path or you have to specify their complete location in the `*.INI` Files.

You should put a copy of the start file `D.BAT` into a directory, which is included in your path statement. To start HFM you should use the batch file `D.BAT` to start HFM since this is required for using the extended program start options of HFM.

### **Configuration file HFM4.INI:**

HFM uses the configuration file `HFM4.INI` to specify the preferred programs, important path information and to store information between sessions. Normally `HFM4.INI` will be updated upon ending. This can be prevented by ending with `Ctrl-Q`.

If the configuration file is damaged or missing HFM tries to create a new one in the directory `A:\HFM.AH` upon ending. HFM will only write the new INI file, if the subdirectory is already existing to prevent a undesired file creation.

### **The following files and programs are required by HFM:**

`C:\HFM.AH\HFM4.INI` or alternatively `\HFM.AH\HFM4.INI` on any drive as configuration file.

`C:\HFM.AH\D.BAT` for the program restart after starting an external program.

`HFM4_E.DOC` or `HFM4_D.DOC` as helpfile to provide the help information.

A editor. With HFM comes a version of the Borland Turbo Pascal demo program `TVEDIT.EXE`. I included the evaluation of the command line into `TVEDIT` to allow integration into HFM. The editor is used for the E command.

A file display program can be used to display any files with the S command.

A file find program to be used with the `Ctrl-F` command.

One program for example a calculator can be used with the command T.

Configuration file HFM4.INI:

[Pfade] Path names:  
 C:\HFM.AH\D.BAT path for restarting HFM  
 C:\HFM.AH\list name and path of a file display program  
 C:\HFM.AH\tvedit name and path of the editor  
 C:\HFM.AH\HFM\_EXE.BAT name and path of the batchfile used to start programs  
 C:\HFM.AH\HFM\_HLP name and path of the helpfile  
 C:\HFM.AH\RECHNER.EXE name and path of a calculator  
 C:\HFM.AH\ARC temporary archive directory  
 HFMARC.TMP filename for the directory listings  
 C:\HFM.AH\QF name and path of a file find program

[Move]  
 C:\DRDOS\MOVE name and path for a move program  
 /T /H /S parameters for the move program

[Farben] Colours

The colours are in general used for several items on the screen.

[Reserve]  
 r1 This lines are reserved.  
 ...  
 r10  
 [Print File prn lpt1 lpt2 lpt3] Logical Filename of the printer  
 prn  
 [Verify on drives] Verify will only operate on the drives given here.  
 AB  
 [Windows Programmstart] Program starter for windows programs.  
 c:\win\run.exe  
 [Doppelclick(msec)]  
 200 Delay for recognition of a doubleclick  
 [Namen]  
 0 large (1) or small (0) filenames  
 [Delete Typ (0: move, 1: delete, 2: default delete)]  
 1 (2) always begin in delete mode, (1) delete or (0) move to \TRASH directory  
 \TRASH Name of the \TRASH directory  
 [Verify (1 ist an)]  
 0 verify when copying (1) on or (0) off.  
 c:\windows\smartdrv /c Command to flush the cache. This command is only allowed if smartdrive is active. Otherwise the access to a drive packed with DRDOS superstor gets lost for the current session.  
 [Datumsformat (0 ist US)]  
 1 Format of the date  
 (1) day, month, year or (0) month, day, year  
 [Viruscheck]  
 902 Date of last viruscheck was 2. september  
 [Screensaver Delay (0 ist aus)]  
 10 screen saver delay in minutes  
 c:\bat\vpic /@i:\winshare\show1.sld program started wenn the screen saver is active.  
 [Password (1 ist an)]  
 1 Password protection: 0 is off, 1 is on  
 223 encrypted password

[Programmstart durch(A,^A) von (1) Pfad bei (2) Extension)] List of programs and fileextensions for use with the A command

[14 von maximal 20 Programmen] The EXE entry after an empty line is necessary for the windows program start.

EXE

c:\bat\vpic

PCX

c:\bat\vpic

BMP

c:\bat\vpic

GIF

c:\word5\word

TXT

c:\tp\turbo.exe

PAS

c:\qpro\q

WKS

C:\bat\hpglview.bat

PLT

c:\qpro\q

WQ1

write.exe

WRI

winhelp.exe

HLP

i:\winword2\winword.exe

DOT

i:\winword2\winword.exe

RTF

i:\winword2\winword.exe

DOC

[Programmstart durch (S,Return)] list of programs and fileextensions for S and RETURN commands.

[3 von maximal 20 Programmen]

c:\bat\vpic

BMP

c:\bat\vpic

GIF

c:\bat\vpic

PCX

[Archive] list of configuration files and file extensions for archive programs

[5 von maximal 6 Archiven]

c:\config.ah\zoo201.cfg

ZOO

c:\config.ah\arj221.cfg

ARJ

c:\config.ah\pkarc36.cfg

ARC

c:\config.ah\pkzip11.cfg

ZIP

```
c:\config.ah\lharc113.cfg
LZH
[Reserve]
[Speicher]
[Fenster]
```

This part of the configuration file is used by hfm to store the current state of the program.

### **Example for the configuration file HFM4.INI:**

```
[ HFM  Version 4.00  13.6.94 Konfigurationsfile-Die Reihenfolge der Einträge liegt fest!]
[Pfade]
c:\config.ah\d.bat
c:\config.ah\list
c:\config.ah\tvedit
c:\config.ah\d_exe.bat
c:\config.ah\d.hlp
c:\config.ah\r.exe
c:\config.ah\arc
~hfm_arc.tmp
c:\bat\s.f.bat
[Move]
d:\drdos\move.exe
/h /t /s
[Farben]
0 norm_tc
15 high_tc
7 fileinfo_tc
7 norm_bc
0 button_tc
7 button_bc
15 disk_tc
4 disk_bc
4 watch_bc
6 first_lines_bc
15 line3_tc
5 line3_text_bc
6 line3_bc
15 frame_tc
0 frame1_bc
3 frame2_bc
0 dialogbox_tc
3 dialogbox_bc
5 scrollbar_bc
6 marked_bc
15 mono_hell_tc
0 mono_hell_bc
[Reserve]
r1
```

r2  
r3  
r4  
r5  
r6  
r7  
r8  
r9  
r10  
[Print File prn lpt1 lpt2 lpt3]  
prn  
[Verify on drives]  
AB  
[Windows Programmstart]  
c:\win\run.exe  
[Doppelclick(msec)]  
200  
[Namen]  
0  
[Delete Typ (0: move, 1: delete, 2: default delete)]  
1  
\TRASH  
[Verify (1 ist an)]  
0  
c:\windows\smartdrv /c  
[Datumsformat (0 ist US)]  
1  
[Viruscheck]  
902  
[Screensaver Delay (0 ist aus)]  
10  
c:\bat\vpic /@i:\winshare\show1.sld  
[Password (1 ist an)]  
0  
0  
[Programmstart durch(A,^A) von (1) Pfad bei (2) Extension]  
[15 von maximal 20 Programmen]  
  
EXE  
c:\bat\vpic  
PCX  
c:\bat\vpic  
BMP  
c:\bat\vpic  
GIF  
c:\word5\word  
TXT  
c:\tp\turbo.exe  
PAS  
c:\qpro\q  
WKS

C:\bat\hpglview.bat  
PLT  
c:\qpro\q  
WQ1  
write.exe  
WRI  
winhelp.exe  
HLP  
i:\winword2\winword.exe  
DOT  
i:\winword2\winword.exe  
RTF  
i:\winword2\winword.exe  
DOC  
c:\tp\hfm\hfmview.exe  
BAK  
[Programmstart durch (S,Return)]  
[3 von maximal 20 Programmen]  
c:\bat\vpic  
BMP  
c:\bat\vpic  
GIF  
c:\bat\vpic  
PCX  
[Archive]  
[5 von maximal 6 Archiven]  
c:\config.ah\zoo201.cfg  
ZOO  
c:\config.ah\arj221.cfg  
ARJ  
c:\config.ah\pkarc36.cfg  
ARC  
c:\config.ah\pkzip11.cfg  
ZIP  
c:\config.ah\lharc113.cfg  
LZH  
[Reserve]  
r11  
r12  
r13  
r14  
r15  
r16  
r17  
r18  
r19  
r20  
[Speicher]  
mem  
vpic  
purge /a

```
purge
lharc u HFM4 h*.pas
vpic
format a:
arj u pb_86bmp n2.bmp pb86b.bmp pb86j.bmp
vpic
mode co80
small_names
bitmap
wallpaper
c:
b:
c:
page
a
I
matthias
c:\virus\scan.exe
b:
j:
*.pas
c:\hfm.ah\
n4.*
j:
b:
pb_86bmp.arj
n2.bmp
[Fenster]
B:\HFM\
J:\HFM\
2
HFM_FDIS
PAS
HFM_EU_3
PAS
HFM_I202
PAS
HFM_FDIS
PAS
```

### **Screen colours:**

You have the option to select three predefined colour combinations with Ctrl-F1, Ctrl-F2 and Ctrl-F3. For the monochrome text mode only the colour combination 3 is usable. You can modify all colours needed for colour text modes with the command Y. For monochrome text mode the additional colour variables `mono_hell_tc` and `mono_hell_bc` are important. Those specify the colour of the borders in this mode. One should have the colour 0 the other the colour 15. They can only be changed by modifying HFM4.INI.



## Batch file D.BAT for the start of HFM:

When you want to start a program from HFM which needs the complete RAM, the command will be written into the batch file C:\HFM.AH\HFM\_EXE.BAT. HFM stops with the error level 2 and D.BAT starts the other batch file. This in turn calls D.BAT to restart HFM.

```
ECHO OFF
C:\HFM.AH\HFM %1 %2 %3
IF ERRORLEVEL 2 C:\HFM.AH\HFM_EXE.BAT
```

### Use of the archive programs ARJ, LHA, LHARC, PKARC, PKZIP, ZOO :

These programs are started automatically with the relevant parameters. HFM will show their archives as simulated subdirectories. To read a directory into HFM the archive program writes its directory into the file C:\HFM.AH\ARC\~HFMARC.TMP. This file will be read by HFM. This works only if the display uses only one line per file.

For every archive one configuration file is necessary. The name and path of the configuration file and the file extension of the archive are given in HFM4.INI.

### Configuration files for the use of archive programs:

(Example for ARJ version 2.21)

Configuration file ARJ221.CFG for ARJ Version 2.21 and Version 2.41:

C:\HFM.AH\arj	a -e	add a file
C:\HFM.AH\arj	d	delete a file
C:\HFM.AH\arj	e -e	extract a file
C:\HFM.AH\arj	l	show the archive directory
1		position of the name
2		position of the size
5		Position of the date
1		start of year in the date
4		start of month in the date
7		start pf day in the date
6		position of the time
ARJ		fileextension of the archive
----		begin of the last line before the directory
----		begin of the first line after the directory

Configuration file PKZIP09.CFG for PKZIP and PKUNZIP version 0.9:

```
C:\HFM.AH\pkzip -a
C:\HFM.AH\pkzip -d
C:\HFM.AH\pkunzip
C:\HFM.AH\pkunzip -v
7
1
5
7
1
4
6
```

ZIP

----  
----

Configuration file PKZIP11U.CFG for PKZIP and PKUNZIP versions 1.02 and 1.1  
with american date:

C:\HFM.AH\pkzip -bc: -a  
C:\HFM.AH\pkzip -bc: -d  
C:\HFM.AH\pkunzip  
C:\HFM.AH\pkzip -v

9  
1  
5  
7  
1  
4  
6

ZIP

----  
----

Configuration file PKZIP11E.CFG for PKZIP and PKUNZIP version 1.1 with european  
date and version 2.04g:

c:\hfm.ah\pkzip -bc: -a  
c:\hfm.ah\pkzip -bc: -d  
c:\hfm.ah\pkunzip  
c:\hfm.ah\pkzip -v

9  
1  
5  
7  
4  
1  
6

ZIP

----  
----

Configuration file LHA213.CFG for LHA version 2.13:

C:\HFM.AH\lha a  
C:\HFM.AH\lha d  
C:\HFM.AH\lha e  
C:\HFM.AH\lha -v

1  
2  
5  
1  
4  
7  
6

LZH

----  
----

Configuration file PKARC36.CFG for PKARC version 3.6:

```
C:\HFM.AH\pkarc -bc: a
C:\HFM.AH\pkarc -bc: d
C:\HFM.AH\pkxarc
C:\HFM.AH\pkxarc -v
1
2
6
7
1
4
7
ARC
----
----
```

Configuration file ZOO201.CFG for ZOO version 2.01:

```
C:\HFM.AH\zoo a:
C:\HFM.AH\zoo D
C:\HFM.AH\zoo eO
C:\HFM.AH\zoo l
8
1
5
6
5
4
7
ZOO
----
----
```

Use of other archive programs. The directory display requires a directory file with one line per file. This file is used by HFM.

Special cases:

PKZIP exists in different versions with american and with european date order.

PKZIP gives no seconds in the directory display. Therefore seconds are treated separately when comparing the directory lists.

Zoo uses written names for the month. HFM translates them into numeric values.

## **Licence, warranty and registration:**

Licence: HFM is a shareware program. It can be copied and distributed freely. This documentation has to be included.

If you decide to use HFM regularly you have to acquire a licence by registration. The licence fee is 30 DM or the equivalent amount in another currency. Cash will be accepted and is preferred if the payment is not in DM.

Version 4 is a free update for registered users of an earlier HFM version.

Address:           Andreas Helke  
                      Steckelsgasse 14  
                      6900 [69121] Heidelberg  
                      Germany

E-Mail address in the internet:  
                      andreas@sirius.mgen.uni-heidelberg.de

Bank account:    Commerzbank Heidelberg  
                      Kontonummer: 1800887  
                      Bankleitzahl: 67240039

A invoice can be supplied upon request.

A warranty for correct function and can not be given and liability for eventual damages can not be taken. HFM itself is stable and should run without serious faults. When other programs are started from HFM I found several problems. If VPIC version 5.0 has not enough memory (about 150 KB) it will crash the computer. Smartdrive with the parameter /c will disable the access to a drive packed with DRDOS 6 SSTOR for the current session, if smartdrive was not loaded before.