

Handy Pilot Font Editor II v2.4r. User's manual.

# HANDY PILOT FONT EDITOR II

Raster font designing tool for PalmOS™ powered handheld computers.

Version 2.4r

user's manual

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## Introduction

**Handy Pilot Font Editor II (FE)** is a raster font designing tool for the Palm Powered™ PDA. This program allows developers an ability to use existing fonts as a template for the new fonts. Font developer have an ability to preview font in the test window either in the screen resolution density or in the single density mode. Completed fonts can be stored to the PalmOS™ database and then it may be extracted and converted to the binary resource with supplied set of desktop tools - **HPFE tools**.

## I. Installation

To install **Handy Pilot Font Editor II** you have to have Palm Powered® handheld computer with PalmOS™<sup>1</sup> version 3.5 or higher. Application requires about 500 K-bytes of OS memory to be free before installation.

To install software do the following steps:

- a) Download original archive bundle with latest version of program from author's web site (<http://www.symbioforge.com>) or partners sites.
- b) Extract last version of program from archive by appropriate unpacking tool.
- c) It is essential to read license agreement stored in the text files `License_english.txt` on English language or `License_russian.txt` on Russian language as requested by international rules of SOFTWARE distribution and use. It is strictly recommended to contact to author in case of documents absence.
- d) To prevent version incompatibility you have to remove previous version of program on handheld computer.
- e) Use installation tool<sup>2</sup> to transfer **fe.prc** file from desktop computer to the PalmOS™ powered handheld computer.
- f) To complete the installation process run installed program on handheld computer and then activate it by entering the registration code.

To uninstall **Handy Pilot Font Editor II** from the handheld computer use **APP⇒DELETE** menu command from the PalmOS™ or appropriate command of the third party application manager. Select **Font Editor** item in the database list and then tap  button in the delete window.

<sup>1</sup> It is useful to set new Palm OS® software update for your handheld computer before software install.

<sup>2</sup> For addition information on how to install PalmOS® software applications, please consult handheld manual.

## II. Program interface.

### 1. Start.

#### 1.1. Registration reminder.

When program installed on handheld computer but not activated yet the registration reminder window will appear (illustration № 1) at the first time of program start. When  button taped the registration dialog opened, in other case  button is a way to experience the program with trial period.



Illustration № 1.

#### 1.2. First start.

At the first time of program run the dialog window with two choices will appear:  - button to load existent font,  - button to create new font (illustration № 2). When create new font button taped the window of basic font header values appear (illustration № 3).



Illustration № 2.

When  button taped the load font window with list of font database names appeared on the screen. ( illustration № 5).

## 2. Dialog window of font header values.

There is allowance to change basic font header value: decimal ASCII code of 1<sup>st</sup> and last glyph, value of ascender and descender, vertical space between lines of text. In the **Edit Font Header values** window (illustration № 3).

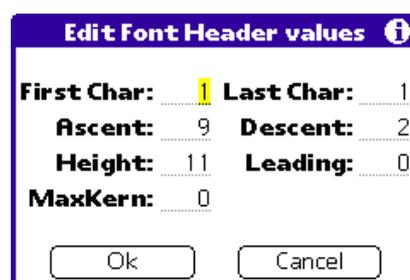


Illustration № 3.

Detailed explanation of font header values:

**First Char** filed for character decimal ASCII code of 1<sup>st</sup> font glyph.

**Last Char** field for character decimal ASCII code of last glyph of font.

**ascent** distance in pixels from the top of the font rectangle to its baseline.

**descent** distance in pixels from the baseline to the bottom of the font rectangle.

**height** the height, including ascenders and descenders, of the glyphs in this font.

**leading** the font's leading, which is the vertical space between lines of text, in pixels. This field is unused in Palm OS® and have to be set to 0.

**maxkern** distance from the font rectangle's glyph origin to the left edge of the font rectangle. When a glyph in the font kerns to the left, the amount is represented as a negative number. When the glyph origin lies on the left edge, the value is 0. This value is not currently used in Palm OS®.

to return back to the main screen with assigned changes.

to cancel changes and switch back to the main editor screen.

To open **Edit Font Header values** window once more do call **EDIT⇒HEADER** menu command.

### 3. Editor options.

There are settings which change different editors options in the dialog window (illustration № 4) called by **EDIT⇒EDITOR OPTIONS** menu command:

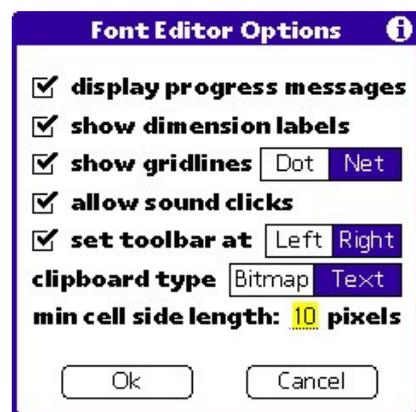


Illustration № 4.

- |                              |  |
|------------------------------|--|
| <b>show dimension labels</b> | Show or hide glyph dimensions on main editor screen.   |
| <b>show gridlines</b>        | Show or hide gridlines, kind of gridlines (net or dot) in the main editor area.  |
| <b>allow sound click</b>     | Enable or disable sound clicks in drawing operations.  |
| <b>set toolbar at</b>        | To set toolbar appearance, visible or invisible and its position at left or at right side.   |
| <b>clipboard type</b>        | The format of clipboard operations: Bitmap or Text.  |
| <b>min cell side length</b>  | A value specifies the minimum limit of cell side length in pixels. This allow to adapt editing area to the different hardwares screen densities. |

to store changes and return back to the main editor's screen.

to reject changes and and switch to the main editor screen.

#### 4. Load font to editor.

There is an ability to load either system font or font from existing font database to the editor in the load font dialog window (illustration № 5).

The font database expands to the records tree when its name taped by the stylus. Choose a record with font, its glyph images will be appeared on the preview window in the below of screen.

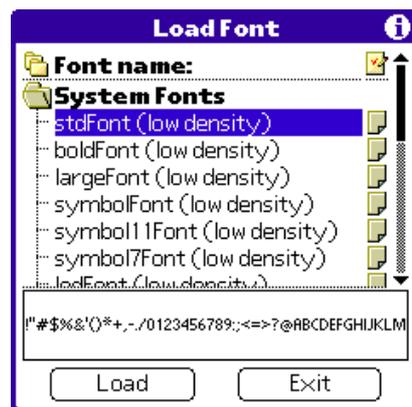


Illustration № 5.

button to load selected font to the editors memory. In case of successful operation program returns to the main editor screen<sup>3</sup>.

button returns to the main editor screen without font load.

To call Load font window use **FONT⇒LOAD** menu command.

#### 5. Main screen of editor.

There are three working groups of control elements in the main editor screen:

a) Area for pixel by pixel edit: ❶

b) Group of controls: ❷ ❸ ❹ ❺ ❻

c) Set of tools panel: ❼

NOTE: Activation or disactivation of several editor's modes may applied by the second tap on the appropriate control element.

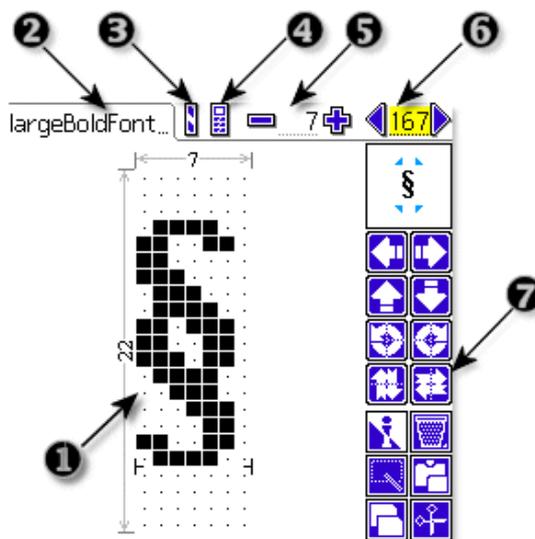


Illustration № 6.

- ❶ Area for pixel by pixel edit. Every dot of glyph inverts, draws or erases by tap to the appropriate cell with accordance of editing mode (arrow ❸).
- ❷ Font name. Name of font includes font database name and record number separated by colon - ':'. This font name is used as default in **font name** filed of **save/ren/del** window.
- ❸ Three mode of edit: **invert, draw, erase**.

<sup>3</sup> It is recommended to refer to juridical norms of font distribution and use or contact to author to prevent violence of authors rights.

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-  **Invert**      When this mode is active, the glyph dot inverted by tap of the appropriate cell.
-  **Draw**      When this mode is active, the glyph dot drawn by tap of the appropriate cell.
-  **Erase**      When this mode is active, the glyph dot erased by tap of the appropriate cell.

- ④ To turn **On** or **Off** toolbar (see ⑦).

 **Is ON**      In this mode the toolbar appear on the main editor's screen. It may appears at the left or the right screen position (see **3. Editor options** section **set toolbar at** settings).

 **Is OFF**      In this mode the toolbar is not visible on the screen.

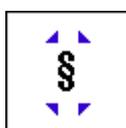
- ⑤ To change the width<sup>4</sup> of editing glyph.

 This buttons reduce or increase the width of glyph by one or moer steps. There is a numeric filed to set glyph width value among the buttons. Program accept entered glyph number value by carriage return stroke.

- ⑥ To change glyph number.

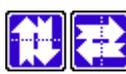
 To switch to previous or next glyph in the font use arrow buttons. Enter glyph decimal ASCII number to the field and then carriage return stroke to change the glyph. 'DFL' letters means that this symbol is default or missing.

- ⑦ Toolbar is a set of preview window and group of 14 control elements to manage whole character image or its selected part.

 Glyph preview window. Displays editing glyph in its natural view. Change made in editor also appears in this window. This also services to call glyph selector window (illustration № 7).

 Four control elements to shift whole or marked area of glyph image in four directions: to the left, to the right, up, and down.

 Two control elements allow to rotate while image or its marked area counterclockwise or clockwise.

 Two control elements allow to mirror the whole glyph image or its marked area (Up to down, right to left).

 To invert whole or marked area of glyph.

---

4 PalmOS™ display image of default (missing) glyph when when width of fonts glyph is missing (width value equals to 0). Maximum width of image which system can handle is - 127 pixels.

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To erase either whole or marked area of glyph.



Control element or **'Mark'** command in the **'Edit'** menu turns **on** or **off** marking mode. When mode is active the control element appear in the negative color. 1<sup>st</sup> stylus tap in the editor area begins marking area edge, 2<sup>nd</sup> tap completes marked area.



Control element or **'Paste'** command of **'Edit'** menu insert image in glyph edit area from system clipboard. When paste mode is active the control element have negative color. When this mode is active and screen taped by stylus in the glyph edit area the image placed to the clipboard appeared over the designed glyph. Move image to the position to place and then untap to finish paste operation.



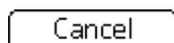
Control element or **'Copy'** command of **'Edit'** menu copies marked area or whole glyph image to the system clipboard.



Control element or **'Cut'** command in the **'Edit'** menu moves marked area to the system buffer and erase marked area.

### 6. Change glyph number.

**Glyph selector** window (illustration № 7) opens when glyph preview window taped. In the glyph selector window scroll buttons and scrollbar allow to navigate the font. Any glyph can be selected. When glyph selected and  button taped program accept changes and returns to the main editor screen.



button rejects glyph selection and returns to the main editors screen with no changes made.

Image of selected glyph also appears as either ASCII character or its control name in the first row of **Glyph selector** window. There are also ASCII codes of selected glyph in decimal, octal, and hexadecimal numeric system appeared in the second row.

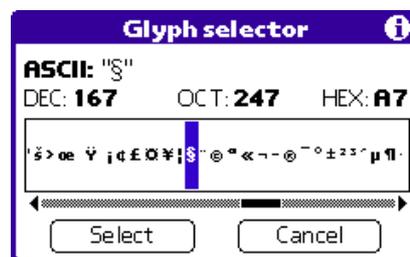


Illustration № 7.

### 7. Font test window.

**Font test window** displays different text information by designing font (Illustration № 8).

Entering different text characters to the field showed their appearance by designing font in either original screen density or single density mode.

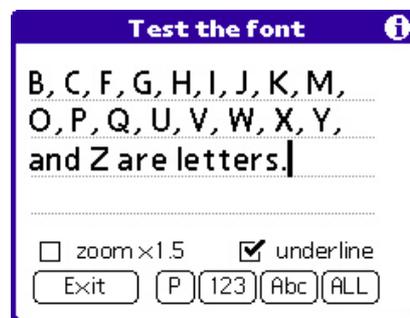


Illustration № 8.

To fill out test text field by sequence of characters use control elements explained in the below:

- by randomly chosen panagram sequence.
- by numeric sequence.
- by Latin alphabet characters range.
- by whole font characters range.

Options described in the below allows to control the view of test text field:

- **zoom x2, zoom x1.5** – check box change density of the font. It enlarges or reduces visual size of displayed characters in the test text filed.. This option available on Palm OS® 5.x and greater in HiRes screen modes: double density when hardware screen resolution is 320x320 pixels, one and a half density at 240x240 pixels.
- **underline** – this check box turns **on** or **off** underlines of test filed.

button returns program to the main editor screen.

To call **Font Test Window** use **FONT⇒TEST WINDOW** menu command.

## 8. Scale clipboard image.

This window (Illustration № 9) allows to scale image located to the clipboard up to 400%. There are several controls that help scale image in this form.

Use either slider or 'scale' field to set scale percent. Ceiling option rounds image dimensions either to the ceiling or to the floor value.

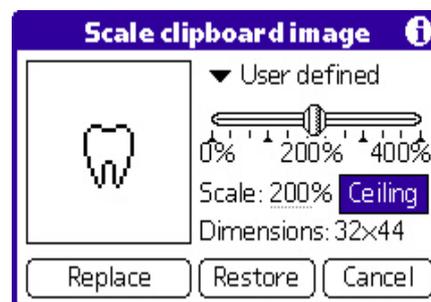


Illustration № 9.

Replace clipboard image by newer scaled image.

Reload located to the clipboard image and restore scale values to the default state.

Cancel scale operation and return program control to the main editor screen.

To open this window use **EDIT⇒SCALE CLIPBOARD** image menu command.

## 9. Information window.

Information window (Illustration № 10) displays average information about designing font: Name of the font, Dimensions – maximum width and height of the glyph, time and date of the last save, flag of modification, amount of free PalmOS™ RAM memory.

 button returns program to the main editor screen.

To call this window use **FONT⇒TEST WINDOW** menu command.

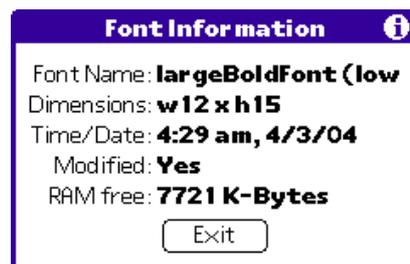


Illustration № 10.

## 10. Font Save, Rename, Delete window.

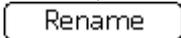
The ⇒**Save/Ren/Del** command of **Font** menu call dialog window where editing font can be saved to the database. There are also ability to rename or delete stored database in the **Save/Ren/Del Fonts** dialog window ( Illustration №11 ).

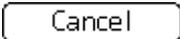
- To save font: fill out the '**Font Name:**' filed. Use colon-'!' to specify number of record. Use check box to set or clear backup status. Then tap  button.
- In case of successful operation saved font database will be appeared in the font list and transferred to the desktop after the hotsync™ if backup option was set.

NOTE: Database can handle up to 127 records with font data.



Illustration № 11.

- To rename the font database do the following: enter database name to the '**Font Name:**' field then tap  button, in the opened rename dialog window (illustration № 11a) enter new font name into the text field then tap  button. With successful rename operations program returns back to **Save/Ren/Del Fonts** dialog window.

To exit from rename window without database rename tap  button.

- To remove font database: enter database name to the '**Font Name:**' field then tap  button. Confirmation window will appear during the deletion.  Button return program control to the main editor screen.

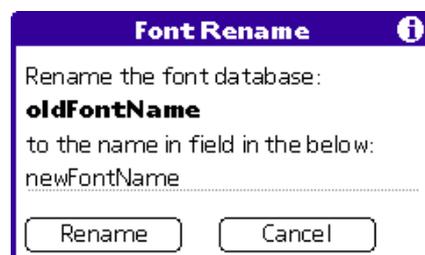


Illustration № 11a.

## 11. Menu commands explanation.

There are three group menu of commands available in Handy Pilot Font Editor II (illustration № 12):

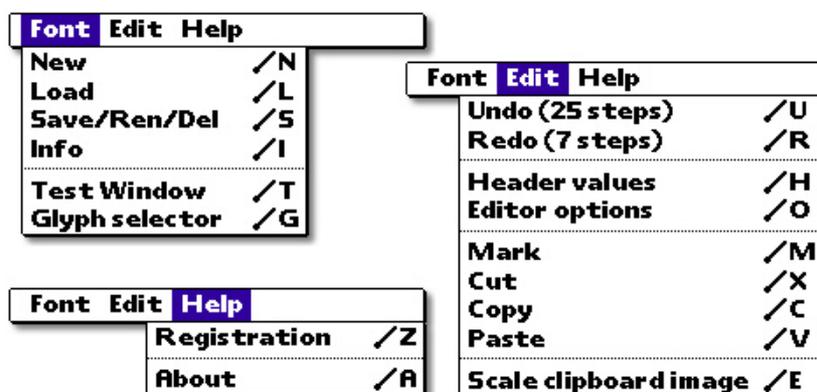


Illustration № 12.

FONT menu includes the following commands:

- New** command to create new font. It clear all editors data and then **Edit Font Header value** (Illustration № 3) window will be opened to let change new font parameters.
- Load** command to load font to the editor. Opens '**Get Font**' dialog window (Illustration № 5) where gives an ability to load font data to the editor.
- Save/Ren/Del** command opens '**Save/Ren/Del**' window to save, rename, or delete font database (Illustration № 11).
- Info** command to open '**Font Information**' window (Illustration № 10) with miscellaneous font information.
- Test window** command to open '**Test the Font**' dialog window (Illustration № 8).
- Glyph selector** command to open '**Glyph selector**' window (Illustration № 7).

EDIT menu includes the following commands:

- Undo** undo most actions applied on glyph. Use the Undo command to restore previous states of glyph.
- Redo** command to reapply a command that have been undone.
- Header values** command open '**Edit Font Header values**' dialog window (illustration № 3).
- Editor options** command open '**Editor Options**' dialog window (illustration № 4).
- Mark** command turn **ON** or **OFF** select mode.
- Cut** command put either marked or whole glyph area to the system clipboard and then erase area.

<b>Copy</b>	command put marked area or whole glyph image to the clipboard buffer.
<b>Paste</b>	command set paste mode <b>ON</b> or <b>OFF</b> . Paste mode is active when ' <b>Paste</b> ' button have negative color. Paste command puts image data from clipboard to the glyph drawing area at the pointed by stylus position.
<b>1/2 Of clipboard</b>	command scale clipboard image by half size.
<b>2/3 Of clipboard</b>	command scale clipboard image by 2/3 size.
<b>Clipboard x1½</b>	command enlarge clipboard image by 150%.
<b>Clipboard x2</b>	command enlarge clipboard image by 200%.

**HELP** menu includes the following commands:

<b>Registration</b>	command open ' <b>Font Editor registration</b> ' window (illustration № 13).
<b>About</b>	command open ' <b>Program About</b> ' window.

### III. Program registration.

The **Handy Pilot Font Editor II** software application for PalmOS™ is distributed as shareware. You can use this application with all features for a trial period of **32** day. Only font save function do not work completely during the trial period. The program do not expire but if you continue using it and you are satisfied then you have to register.

Registered version has no any shareware reminders. All further versions, updates and bug fixes are free for only registered user. Registration fee for **Handy Pilot Font Editor II** is **\$34.99 USD**.

To register **Handy Pilot Font Editor II** on-line follow links on Internet [www.symbioforge.com/products.html](http://www.symbioforge.com/products.html) web site according to the product name. Software reseller will request to fill out handheld computer user name (HotSync name), users full name and e-mail address.

After receiving the registration code from author do the following steps explained in the below:

1. Run Handy Pilot Font Editor II on PalmOS™ PDA.
2. In the '**HELP**' menu select '**REGISTRATION**' command. The dialog window for registration will appear on the screen (illustration № 12).
3. Enter registration key to the '**Registration code:**' field carefully.
4. Tap on  button to finish software registration.



Illustration № 13.

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In case of successful accept of registration code program returns to the main editor screen. If registration code accepted as invalid the warning message will be appeared on the screen. Make sure that registration code entered correctly.

To exit to the main editor screen without registration tap on  button.

### IV. Internet links

Internet links in the below may reduce time to finding addition and alternate tools to work with font:

#### 1. Alternate font editors which add developing abilities:

Pilot Font Editor <http://www.sergem.net/fontedit/>

Tool for PalmOS™ font designing for Windows® by S.Menshikov.

xFONT [http://www.geocities.com/SiliconValley/Circuit/2090/font\\_description.htm](http://www.geocities.com/SiliconValley/Circuit/2090/font_description.htm)

A software application for OC Windows® to develop custom fonts for PalmOS™.

CMF Font Editor <http://www.dd-consulting.com/cmef/>

Font editor to design CMF fonts which can be used in MobileVB® of AppForge. Program running under Windows®.

#### 2. Versatile converters, resource compilers for work with fonts:

PiIRC <http://sourceforge.net/projects/pilrc/>

Compiler for PalmOS™ resources. It works also with font data converted to the text format. Source code are also available.

PalmFontConv <http://freshmeat.net/projects/palmfontconv/>

Tool from A.Pruss. Converts font of different formats including PalmOS™.

FontsCompiler [http://palm-software.penreader.com/ru/Fonts\\_Compiler.html](http://palm-software.penreader.com/ru/Fonts_Compiler.html)

With help of this tools you may adapt any font on almost any language (exclude arabian), supported by PiLoc, to use it on PalmOS™ device.

#### 3. System extensions for PalmOS™ for font substitution:

FontHack123 <http://www.sergem.net/fonthack123/>

Extension for HackMaster dispatcher. Works for PalmOS™ version 3.x, 4.x.

FontHack V <http://www.palmgear.com/?xyz=53318>

© 2004 Yang Zhiqiang. Allows to replace system font on custom. Works only in PalmOS™ version 5.x. YAHM (Yet Another Hack Master <http://yahm.palmoid.com/>) manager have to be installed on device.

Fonts4OS5 <http://www.lubak.net/>

This tool changes system font on custom. Developer provides many different fonts to substitute.

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- [FontHack123](http://www.sergem.net/fonthack123/) <http://www.sergem.net/fonthack123/>  
Extension for [HackMaster](#) dispatcher. Works for PalmOS™ version 3.x, 4.x.
- [FontBucket](http://www.handshigh.com/html/fbdownload.html) <http://www.handshigh.com/html/fbdownload.html>  
© Hands High Software, Inc. A set of tools and library to change system fonts on developers.

### 4. Internet links on PalmOS™ font information.

- [PalmSource Knowledge Base](http://kb.palmsource.com/) <http://kb.palmsource.com/>  
Knowledge database of PalmSource provides information for software developers on working with fonts in software.
- [PalmGear:Development/Fonts](http://www.palmgear.com) <http://www.palmgear.com>  
Section on PalmGear web site with collection of fonts, font tools, and font editors.
- [Programmer's API Reference](http://www.palmos.com) <http://www.palmos.com>  
A developers manual to work with font functions on PalmOS™ .
- [Working with fonts](http://www.palmos.com) <http://www.palmos.com>  
Documentation of resource constructor for PalmOS™ version 5.x. SDK (68K) R3.

## Contact for technical support

In case you have comments, suggestions or problems contact through e-mail at [info@symbioforge.com](mailto:info@symbioforge.com). Please add the following information when contacting technical support:

- Your full name and e-mail address.
- Name, version and size of the program.
- The model of connected organizer and version of installed PalmOS™ .
- A brief description of the problem.