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Chapter 1

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1.1   Personal Fonts Maker - 1. Introduction to the Amiga Environment

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                  Cloanto Personal Fonts Maker

   The Personal Fonts Maker is a powerful tool for designing and
processing bitmapped fonts. Amiga fonts and fonts created with the
Personal Fonts Maker can be transferred to the printer memory and printed
at maximum quality and speed. The Personal Fonts Maker can output fonts in
formats which can be read by other Amiga programs, by other computers and
by a vast range of differing printers (even 48-pin and laser printers).
The program can handle IFF graphics. It is possible, for example, to work
on typographical fonts input from a scanning device. Repetitive
transformations on characters or entire fonts can be recorded, stored and
executed as macros. A special programming language can be used to define
the format in which fonts are to be saved or sent to a printer. The
Personal Fonts Maker package includes a multitude of original fonts and
support tools like the Printer Driver Modifier, which allows the user to
personalize printer drivers. It is easy – and fun – to work with the
Personal Fonts Maker, thanks to the elegant and intuitive user interface
(with stereo sound effects). The manual is full of examples and
introductory sections for novice users, and comes complete with technical
information for Amiga experts.


1.        Introduction to the Amiga Environment

   The user of a new computer system or a new piece of software often
encounters equally new words and concepts. This entire chapter is
dedicated to explaining the basic concepts which will be recalled in the
following chapters. Also in this chapter, some valuable suggestions on how
to get the best from the Amiga, and instructions on how to face some
problems that may be encountered.


1.1       Documentation

   All information necessary to use the program is contained in this
handbook. This guide was written using Personal Write, the word processor
developed by Cloanto.
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The Amiga handbooks, the printer manuals and those for the word
processors and other programs used in conjunction with the Personal Fonts
Maker provide additional information on how to interface the program with
the external environment.

The file "PFM.man" on the program disk of the Personal Fonts Maker
contains the most recent updates to the handbook, should there be any. The
file can be loaded with a simple double-click of its Workbench icon, or
with any word processor or text editor. The Amiga "Type" and "Ed"
commands, described in the Amiga documentation, can also be used to read
the text.

1.2   System Configuration

The Personal Fonts Maker works on any Amiga model with at least 512
Kbytes of main memory (RAM). Many functions of the Personal Fonts Maker
are best exploited on a 1 Mbyte machine. On a 512 Kbyte system the
Personal Fonts Maker may have to take measures to limit the amount of
occupied memory (section
                1.11
). In particular, the audio may not be
activated, more than one font may not be edited at the same time, the
Workbench screen will be closed and the number of colours of the gadgets
on the main window of the Personal Fonts Maker will be reduced. If there
is enough free memory, the Personal Fonts Maker tries to avoid requesting
the insertion of the Workbench disk after the program has been loaded
(e.g. to load the printer driver).

1.3   Memory

The Amiga computer, like most computers, has a main memory (RAM) and
peripheric storage units. The following subsections explain the most
important notions regarding memory measurement units, different types of
memory and some concepts unique to the Amiga environment.

1.3.1   Measurement Units

The smallest unit which is used to measure the quantity of memory is
called bit. One bit can be in one of two different states, just like the
switch of an electric light. The two states are generally defined as 0 and
1, off and on, false and true or cleared and set. This means that a bit
can store information.

One byte is obtained by grouping 8 bits. There are 256 combinations of
the two possible states of the bits in a byte. One byte can thus store 256
(2 to the power of 8) different values, which are usually enough to
identify all the letters, numbers and other signs used in a text.

One page of text, containing 25 lines of 80 characters each, fits in
2000 bytes. There are 1024 (2 to the power 10) bytes in one Kbyte, while a
Mbyte contains a little more than one million bytes (1024 x 1024).

The Personal Fonts Maker stores character fonts in bitmaps (also see
sections 2.1 "From Gutenberg's Type to Computer Fonts" and 2.4 "Storage

of Fonts"), i.e. rectangular planes of bits. The memory occupied by the
graphic image of each character can be calculated by multiplying the
height of the character by the width of the character (expressed in lines
and columns of dots). The result is the number of bits which are necessary
to store the character data. The number of bytes occupied by the character
can be calculated by dividing the result by 8.

   Graphical data can be processed faster if it can be handled as groups
of 8 (or multiples of 8) bits at a time. The Personal Fonts Maker
internally rounds the memory occupied by a horizontal row of bits to the
next multiple of 8, so that each row fits exactly in a given number of
bytes. Most printers and font handling programs work with similar
techniques, often rounding the values to multiples of 16 or even 32 bits.
When a font is stored in a file, space efficiency is more important than
access speed, so that other storage techniques may be preferred.

   The graphic data of a font containing 257 characters in a 9 by 7 matrix
will, for example, occupy 3598 bytes when the font is stored in RAM while
the Personal Fonts Maker is processing it. This is calculated multiplying
16 (9 rounded to the next multiple of 8) by 7 (the number of rows) by 257
(the number of characters in a font, and dividing the result by 8 (the
number of bits in a byte). In practice, the number of bytes is generally
higher, as additional information is added to the graphic data.

1.3.2   Random Access Memory (RAM)

   A computer's main memory is made of electronic circuits. A computer
must be switched on and properly working to store data in its RAM. A short
power failure, or a malfunctioning piece of software can cause the loss of
the data stored in the RAM.

   One Mbyte of RAM is the suggested minimum to fully exploit all the
functions of the Personal Fonts Maker.

   A portion of the Amiga's RAM is called Chip RAM. While the
microprocessor can access all the available RAM, the Amiga custom chips
can work only on the chip RAM. The custom chips support the microprocessor
handling graphics, sound and much more. Only chip memory can be used to
open a screen or a window (section
                 1.9.1
                 , "Screens and Windows"). For
this reason, it may be possible that even if there is a lot of free
memory, a new screen cannot be opened because there is not enough free
chip memory, or the available chip memory is fragmented (scattered in
pieces too small to be used).

   Different versions of custom chips and circuitry are mounted in the
Amiga computers. Early versions of the Amiga 500, 1000 and 2000 can work
with a maximum of 512 Kbytes of chip RAM. Some of these machines can be
upgraded by installing new custom chips. More recent models of the Amiga
can use one or two Mbytes of memory as chip RAM, or even more.

1.3.3   The AddMem Command

   Some memory expansion boards are not automatically recognized by the

Amiga. Some early Amiga 1000 RAM expansions fall into this group. When these cards were developed, there was no standard for auto-configuration. This section is dedicated to the owners of such cards.

Very often, the use of the AddMem command is the only way to let the computer know there is some additional memory available. The AddMem instruction must be inserted at the beginning of the Startup-Sequence file of all Workbench disks, including the Personal Fonts Maker disk (if it is used as a boot disk). The AddMem file must be copied into the "c" directory of the Workbench disks. The command must be followed by two hexadecimal (i.e. numbers in base 16) numbers which tell the system where the additional memory starts and ends. For some 1 Mbyte cards the command may be "AddMem 200000 2FFFFF". The documentation which is enclosed with the Amiga and with the memory expansion gives some more detailed information on this process.

1.3.4   Peripheral Units

Disk drives are peripheral storage units. These devices are slower than RAM, but the data they contain is preserved after the computer is switched off.

The Amiga computer is marketed with at least one disk drive. Standard Amiga drives read and write data on 3.5 inch disks. A 3.5" Amiga disk can contain a minimum of about 880 Kbytes, which means that dozens of high resolution fonts can be stored on an empty disk. There are, of course, other devices with different characteristics, like hard disks.

A new disk, or a disk which contains unreadable data or data to be deleted, must be formatted (initialized) prior to use. The Amiga documentation explains how to format a disk. The formatting process clears all the data previously contained on the disk. Section 14.1 ("Problems with Disks") contains some additional suggestions regarding disks.

1.4   File Names and Titles

A file is a generic expression for everything which can be stored: fonts, parameters, macros, texts, programs, pictures or other kinds of data.

When a font (or any other file) is saved for the first time it must be given a name, which is called the file name. To load the font again, the same name must be written or chosen in a list displayed in the file requester (section 3.23).

The Amiga operating system does not distinguish between upper and lower case letters. A file named "Important" can be loaded as "iMpOrTaNt".

The Amiga computer uses some abbreviations to identify its peripherals. "RAM" is the name given to the device which stores its data into main memory. "DF0" is the Amiga standard built-in disk drive. "DF1" is the second disk drive (the one on the left, if it is built inside the Amiga 2000, on the right in the Amiga 3000, the second from the top in most tower models). "DF2" and "DF3" are other drives which can be plugged-in. "RAD" is similar to "RAM", but usually maintains its data after a system

reset. "DH0", "JH0", "DH1", "JH1" are some of the names which can be given
to hard disks or partitions of hard disks. These abbreviations, which are
also called device names, cannot be modified by the user. Most devices
have another name, called the volume name, which can be set and modified
by the user. A disk, for example, can be accessed either through its
device name (e.g. "DF0") or through its volume name (e.g. "Fonts"). Device
names are labelled with a "(DEV)" at the left of the name in the file
requester (section 3.23) of the Personal Fonts Maker and the Printer
Driver Modifier, while volume names are marked with "(VOL)".

   File, device and volume names cannot exceed 30 characters in length. It
is better not to use more than 25 characters for a file name, since the
Amiga operating system adds the five-character ".info" suffix to the file
name to create a graphical Workbench icon.

   It is very useful to append standard suffixes after file names. A
suffix is usually separated from the file name it refers to by a '.' sign.
A suffix helps the user to understand immediately what is contained in a
file, by reading only the file name. The Personal Fonts Maker uses the
following standard suffixes: "fnt" for fonts, "mcr" for macros, "pft" for
fonts ready to be downloaded to a printer, "bsh" for graphic brushes,
"set" for character set definitions and "prf" for all other preferences.
An additional suffix may be appended to font names to indicate the height
of the characters in the font. This suffix will consist of a number (the
height expressed in dots) separated by a '_' (underscore) by the font
name. A font name may thus be "Andromeda_24.fnt".

1.5   Drawers

   The content of a disk can be logically grouped into parts. These parts
are often called "directories" or "drawers" (which are different from
"drives" and "drivers"). The Personal Fonts Maker and the Printer Driver
Modifier label directories with "(dir)" in the file requester (section
3.23). In this guide, as in the official Amiga documentation, "drawer" is
more often used.

   A disk drawer is very similar to the more familiar drawer we know from
the "real" world. It is a container, which can contain both files and
other drawers.

   One can, for example, use one or more disks to store all the fonts used
with the Personal Fonts Maker. The disk can, for example, contain drawers
named "Classic_Fonts", "Fantasy_Fonts" and "Printer_Fonts". The
"Printer_Fonts" drawer can again be divided into "24-pin" and "9-pin" to
distinguish between fonts specially designed for particular printers. The
drawers which do not contain other drawers will contain all the fonts of
their category. It is possible to have different files having the same
name, as long as they are stored in different drawers.

   The "path" of a file contains all the information necessary to address
it (e.g. "DF0:Printer_Fonts/24-pin/Andromeda_24.fnt"). The Amiga handbooks
explain how to create a drawer, work with its content and interpret a path
name.

   Some drawers, like "c", "devs", "l", "s" or "t" are reserved by the
Amiga operating system, and usually do not have an associated icon

(section
                   1.9.7
). The "Empty" drawer can be duplicated, moved (into other
drawers too) and renamed by the user to create new drawers. For this
reason, it is better not to write anything into the "Empty" drawer. The
"New Drawer" menu of the Workbench (version 2.0 and beyond) can also be
used to create a new drawer.

1.6   Backup Copies

    Backup copies of disks should be made as often as possible,
particularly if the disks contain important information. If a disk is
pulled out of its drive while the computer is still writing onto it (the
drive light is on), it is very likely that there will be a loss of data.
The same will happen if the computer is switched off or there is a power
black-out during a disk write. Section 14.1 ("Problems with Disks")
describes other problems and possible solutions.

    The Amiga operating system displays an error message if it is
impossible to read a disk's content properly. If this happens, using the
backup copy of the damaged disk may be the only way to recover the lost
data. If the disk is new, or if it contains unreadable data, or data which
is to be deleted, it must be initialized (formatted) before it is
(re)used. The Amiga documentation explains how to format (initialize) a
disk or make a copy of it. It is not necessary to format a disk before
using it as the target of a disk-copy operation.

    The use of non-system copying programs may cause some problems. The
Amiga operating system cannot distinguish between two identical disks.
Many programs used to make counterfeit copies of software produce such
kinds of identical disks. The insertion or removal of two identical disks
may cause a system error or deadlock. Two identical disks generated by
non-system copiers should never be in the drives at the same time. The
Amiga "DiskCopy" program inserts information like a serial number and time
data into the copied disks to distinguish them from the source disk.

    It is important that the source disk be write protected before a backup
copy is made. This is the only way to make sure that the original disk is
not mistaken for the backup disk. This could lead to the destruction of
the data which has to be protected.

    The Personal Fonts Maker can be copied with the standard Amiga copying
programs. The conditions under which a copy can be made are contained in
the agreement (appendix A), which must be approved before the program
can be used. It is not safe to experiment with the original disks of the
Personal Fonts Maker. A backup copy should be used instead. If any errors
occur, the original disks can be used to make a new work disk. It is also
preferable not to store any data (e.g. new fonts or other information) on
the original Personal Fonts Maker disks, as these are nearly 100% full of
programs and data. The remaining disk space is necessary to store the
program's parameter files.

1.7   "Virus" Programs

    Some programs which can interfere with normal system activity are

described here. The activity of the so called "Virus" programs resembles
their biological homonyms. The difference between "virus" and "worm"
programs will not be discussed here, and they will both be described as
"viruses". Several virus programs for the Amiga exist. Some virus programs
load themselves from an "infected" Workbench disk. Other programs are
activated from an apparently normal program, which certainly has obscure
origins.

  Not all virus programs damage disk-resident data. Many programs remain
hidden in main memory for most of the time. Some programs simply display a
message containing the name of the "programmer" who wrote it, while others
save a copy of the virus onto every inserted disk. One program suddenly
darkens the display. Many viruses interfere with normal disk or printer
activity. Some programs can mess up an entire hard disk, for example
adding a few bytes at the end of every accessed file.

   Many rumors concerning viruses are not true. It is impossible for a
virus program to modify the content of a write protected disk. The
registers of a standard Amiga battery backed up clock cannot be used to
store a virus program.

   Virus programs can remain in RAM for some seconds after the computer
has been switched off. The Amiga should be left off for at least 30
seconds to make sure a RAM-resident virus is removed. A
<Commodore>+<Amiga>+<Ctrl> system reset usually never removes the virus
program, but in most cases activates it, so that it can copy itself on the
next inserted Workbench disk. It is always better to keep Workbench and
other read-only disks write-protected. A backup copy (if authorized) of
every new program disk should be made. The computer should be switched off
after a "borrowed" piece of software has been run.

   A virus program can become dangerous only if it is loaded. A
"boot-block" virus is automatically loaded when the system boots up. The
AmigaDOS "Install" command is usually sufficient to remove such a program
from the disk. Both "Install" and some viruses can interfere with the copy
protection scheme used by some commercial programs, which may then not
work any more. Some viruses insert a call to themselves into the
Startup-Sequence. The AmigaDOS "Install" command mentioned here should not
be confused with the install sequence of the Personal Fonts Maker,
described in section
                 1.13.1
                      .

  Some apparently normal programs, like several AmigaDOS "dir"-like
programs, activate a virus. Almost all illegally copied disks contain
viruses. One infected disk in a clandestine reproduction centre is
sufficient to activate a chain reaction.

   Several commercially available programs detect and remove viruses, both
on disk and in RAM. One safe and inexpensive program is "VirusX", which is
regularly updated.

   Some RAM-resident "Antivirus" programs are very similar to viruses. In
fact they can even hide a virus. No program can determine if another
program has "good" or "bad" intentions, especially if the "good" program
reproduces itself like a virus. For this reason, it is possible that a
program which is not (officially) a virus may be detected and signalled as

a virus.

1.8   System Errors

   The Amiga operating system, as most other complex programs, is not
completely error-free. In some particular circumstances, as when there is
very little free memory left, some unexpected things can happen. This can
lead to a "Software Error" message, which can end with a "Guru Meditation"
alert.

   Some programs, or combinations of programs running at the same time,
can also cause such errors. Each version of the Personal Fonts Maker has
to pass months of hard testing before it can be marketed. Nevertheless, it
is sometimes possible that a system error or another program may lock the
Personal Fonts Maker.

   The first thing to do when a "Software Error" message appears is to
store all the work which could be lost if the content of the RAM is
deleted. It is very dangerous to press the "Cancel" button of the
requester before the work has been saved.

   After the current work has been saved, all running programs should be
terminated. Then all disks should be pulled out of their drives, and the
computer must be switched off. This is to make sure that a virus program,
if present, is removed from memory.

   Some Amiga programs do not have any screen depth arrangement gadgets.
It may sometimes be necessary to display another screen when one of these
programs has its own screen open. The Workbench screen always comes to the
front when the <Commodore>+<N> keys are pressed. To bring the Personal
Fonts Maker to the front, the <Help> key must be pressed while a disk is
ejected. All Cloanto programs with their own screen come to the surface in
this way.

   Sometimes, when the system is short of memory, an "Alert" message is
displayed in place of a requester. The colour of the alert message is red
for all versions of the operating system until 1.3. From version 2.0
alerts are displayed in green, while red is reserved for the more serious
"Guru Meditation" (this funny name has also been changed in newer versions
of the operating system) and other emergency messages. When the Personal
Fonts Maker cannot find enough memory to open a requester it displays a
message. The user can terminate other programs or close as many windows as
possible to try to free some memory. Alert messages can be removed by
pressing any mouse button.

1.9   The User Interface

   The physical, sensorial and intellectual space between the computer and
its user is called "user interface". The user interface can frighten or
excite the first-time computer user. The user interface can frustrate or
stimulate a computer operator.

   The Amiga user interface uses graphics, menus, requesters, gadgets, a
keyboard and a mouse to make the approach to the machine as intuitive as
possible. The Personal Fonts Maker has been designed in order to surround

the user who has to design, modify or convert fonts with an environment as
simple and complete as possible.

1.9.1   Screens and Windows

   The computer display contains one or more screens of the programs which
are running. Each screen can contain several windows (which can overlap),
requesters and gadgets. Each screen has its own resolution and colours.

   The Personal Fonts Maker adapts itself to the graphic environment when
it opens its screen. By default, the Personal Fonts Maker opens a high
resolution non-interlaced screen. The program tries to open its screen in
the same mode as the system's default mode for screens, if the available
memory allows this. Standard screens are 256 lines high in PAL mode and
200 lines in NTSC mode. PAL systems have a higher resolution, which needs
more memory, but have the same amount of RAM as NTSC systems (therefore
less memory is left for other system functions). In interlaced mode there
are twice as many lines on a screen. The Personal Fonts Maker does not
work in interlaced mode, but the Workbench screen can be set to do so.
Sometimes, when some models of the Amiga are switched on, the power supply
frequency may not be recognized correctly, so that a 200 lines NTSC
Workbench screen is opened on a PAL system (which normally supports 256
lines). This usually does not happen very frequently. Please note that PAL
and NTSC modes are not necessarily linked to the power supply frequency.
It is possible, for example, to refresh a NTSC screen 60 times every
second with a power supply frequency of 50 Hz, if the display device can
recognize the video frequencies correctly.

   A window can be as large as a screen, or much smaller. If it is
smaller, it can be dragged around the screen with the mouse. The Personal
Fonts Maker has a main window as large as the screen, and other windows
(requesters) used to set the different program parameters. The screen of
the Cloanto Personal Fonts Maker can also be dragged with the mouse when
the pointer is over the title bar.

1.9.2   The Mouse and the Pointer

   The mouse is a pointing device connected to the computer. A pointer can
be moved on the screen using the mouse. The pointer is a graphical symbol
(by default an arrow) displayed on the screen. When the mouse is moved on
the desk, the pointer moves in the same direction. The Amiga documentation
explains how to modify the standard pointer image and the speed at which
the pointer reacts to mouse movements.

   The Personal Fonts Maker uses different pointer images to inform the
user about what can be done with the mouse at a particular position on the
screen (e.g. draw, stretch a brush, record a macro or move the reference
points).

1.9.3   Requesters

   A requester is a particular kind of window which can contain text,
buttons ("gadgets") and knobs ("proportional gadgets") which can be set by
means of the mouse to change system or program parameters.

1.9.4   Gadgets

    A gadget can be selected with the mouse. To select a gadget, the mouse
pointer must be moved over the gadget and the left mouse button must be
pressed.

    The Personal Fonts Maker has one or more gadgets at the top right
corner of its screen. The gadgets can be used to move the screen to the
back or to the front of other screens. These are the default Amiga gadgets
for screen depth arrangement, and may vary depending on the version of the
Amiga operating system.

    The Personal Fonts Maker also has several other gadgets displayed on
the left of the main window. Chapter 3 explains the use of these gadgets
in detail.

    In this guide the words "key", "button" and "gadget" have different
meanings. Keys are mounted on the keyboard, buttons on the mouse, and
gadgets are displayed on the screen.

1.9.5   Proportional Gadgets

    Proportional gadgets are a particular kind of gadget. While the
graphical knob of the gadget is selected, it can be moved with the mouse.
The Personal Fonts Maker uses proportional gadgets in the file requesters
and to change volumes and colours.

1.9.6   String Gadgets

    String gadgets are yet another kind of gadget. After a string gadget
has been selected, it allows the user to modify (using the keyboard) the
text which is contained in the gadget. A string is a generic name to
describe a group of characters, usually not longer than a few words. The
existing text should be deleted before the new text is entered. String
gadgets are used, for example, to manually type the name of a file. A
string gadget is "activated" when the cursor is displayed in it. A string
gadget can be activated by selecting it with the mouse.

    The Amiga operating system interprets some keyboard shortcuts to edit
the text contained in string gadgets. <Amiga>+<X> can be used to clear all
the text in the string gadget, while <Amiga>+<Q> restores the initial text
of the string gadget. To enter these shortcuts, the <Amiga> key on the
right of the <Space> bar has to be held down while the other key is
pressed.

    There is a limit to the maximum nuber of characters that will fit in
each string gadget. If more characters are typed than the string gadget
can contain, the screen will flash to signal an overflow. If this happens,
the content of the string gadget must be deleted (or at least made
shorter) with the <BS> or <Del> keys before the new text can be typed from
the keyboard. Some string gadgets only accept numerical characters. These
are called integer gadgets. If a letter is typed in an integer gadget, the
screen will flash, and the character will not be accepted. The maximum

number of characters which fit in an integer gadget is generally designed
in such a way that unacceptable (too big) values cannot even be typed by
the user. This means that there is little margin for editing the text, and
the screen will frequently flash to remind the user that it is necessary
to delete the previous integer before typing the new one.

1.9.7   Icons

   The Workbench program of the Amiga operating system uses another type
of gadget: icons. Icons can be associated to disks, drawers and files. All
icons occupy a small amount of disk space. Files or drawers without an
associated icon are often better accessed through the Shell and CLI
environment.

   The Personal Fonts Maker can associate different kinds of icons with
the files that are saved (e.g. fonts or macros). All icons have been
designed for optimum performance on the Amiga filing systems. Almost 900
PFM file icons will fit on a standard 880 Kbyte disk. Section 7.8
explains how the Personal Fonts Maker can be programmed to save its
default icons, if so desired.

1.9.8   Menus

   The Amiga menu system offers the user an easy way to select from many
different functions without having to remember difficult commands. Menus
are the simplest and most complete method of selecting a command with the
Personal Fonts Maker.

   When the right mouse button (the menu button) is pressed, the menu bar
is displayed in the title area on the top of the screen. This does not
work when the mouse pointer is over the character editing box (section
3.1) at the center of the screen, as in this case the mouse is used to
paint, or over the reference point zone (section 3.21) on the left of the
character editing box. The mouse pointer is always displayed as an arrow
when the right mouse button can be used to display the menu bar. The menu
bar contains a list of topics, called menus. When the mouse pointer is
moved on a topic of the menu bar (with the menu button still held down), a
list of menu items appears below the menu name. An item can have a subitem
list. The subitem list is displayed when the mouse pointer is moved over
the menu item. To execute the program function associated with a menu item
or subitem, the mouse menu button must be released when the mouse pointer
is over the desired item. If a menu item has a command-key shortcut, the
appropriate command-key sequence has the same effect as the menu
selection. The user can select more than one item at a time by pressing
the select mouse button (the left mouse button) when the mouse pointer is
over the desired items, without releasing the menu button.

   When the menu button is pressed, the titles of the different menus are
displayed in the title bar. The titles of the menus of the Personal Fonts
Maker and the Printer Driver Modifier programs and the chapters in which
their content is discussed are the following:

     Chapter 4 - Personal Fonts Maker: The Project Menu
     Chapter 5 - Personal Fonts Maker: The Brush Menu
     Chapter 6 - Personal Fonts Maker: The Macro Menu

Selecting a menu item with the right mouse button, a program function is executed, or a requester is displayed. If the menu button is released when the mouse pointer is not over a menu item, nothing happens.

Some menu items, called "attribute items" (like the "Handle" and "Coordinates" menu items of the Personal Fonts Maker) can have a checkmark on the left of the text. Menu attribute items remain "checkmarked" until the user deselects them by selecting another item.

If the program "knows" that it would not make sense to select a menu item, that particular item is disabled. Disabled menu items are displayed in a "ghosted" fashion. The text normally displayed in the menu item is overlaid with a faint pattern of dots. A disabled menu item cannot be selected with the mouse. The "Brush" and "Macro" menus are among the Personal Fonts Maker menus containing items which can be automatically disabled by the program. For example, "Save Brush" is disabled when the brush mode is not active.

It is often faster and more efficient to press one or two keys on the keyboard rather than move a hand from the keyboard to the mouse. A keyboard shortcut which can be used instead of the mouse selection appears on the right of the most used menu items. In the Cloanto Personal Fonts Maker program for the Amiga computer these menu items are followed by a reference to a single key. The same functions which can be recalled using menus can be selected by pressing the indicated key. It is important that the key is typed exactly as displayed on the right of the menu, since upper and lower case keys are interpreted differently and used for different functions.

Some menu items of the Printer Driver Modifier program are followed by an Amiga 'A' symbol with a single character. This means that if the displayed character is typed when the <Amiga> key on the right of the <Space> bar is pressed, the program will behave as if the menu item was selected with the mouse.

It should be noted that in the Printer Driver Modifier the <Amiga> key must be pressed when the shortcut-key is hit, while in the Personal Fonts Maker the shortcut-key must be pressed alone. The Printer Driver Modifier follows the standard Amiga rules for shortcuts, while the Personal Fonts Maker shortcuts follows a widely used standard for graphic programs. Appendixes I and J list the shortcuts of the Personal Fonts Maker and the Printer Driver Modifier. All effects of a wrong menu selection can be undone.

Requesters appear when some menu items are selected. At the bottom of the requester there are usually two gadgets: "Proceed" and "Cancel". User changes to the content of the requester are confirmed if "Proceed" is selected, while "Cancel" restores the values which were valid before the display of the requester.

A warning requester appears if the selected function could overwrite (e.g. sections 4.4, 4.6, 4.9 and 4.13) a stored file, or cause the

loss of any kind of data which has not been saved.

   A detailed explanation of all menus and the associated commands and
requesters follows in chapters 4 to 7 (Personal Fonts Maker) and 10
to 11 (Printer Driver Modifier).

1.10   The Keyboard

   The Amiga keyboard has different types of keys. Graphical keys have an
associated character. Other keys (<Shift>, <Alt>, <Ctrl>, <Commodore>,
<Amiga>) work only if they are held down when another key is pressed.
So-called "dead keys" are used to modify the output of the next-pressed
key. Most dead keys are used to specify that a diacritical sign is to be
placed on the next character typed. Other keys are associated to program
or system functions (<Caps Lock>, cursor keys, <Return>, <BS>, <Del>,
<Help>, <Esc> and function keys).

1.10.1   The SetMap Command

   The Amiga computers are manufactured with different keyboards, designed
to match local languages. An appropriate "SetMap" command must be put in
the Startup-Sequence to tell the Amiga operating system which keyboard is
connected to the computer. The Amiga documentation explains this process
in more detail.

   If no SetMap command is executed, the Amiga behaves as if a standard
USA keyboard is connected. If a wrong SetMap argument (corresponding to a
keyboard which is not the one connected to the computer) is given, the
Amiga interprets and displays the characters of the selected keyboard,
rather than those of the real keyboard.

   The "Startup-Sequence" file in the "s" drawer of the Personal Fonts
Maker Workbench disk ("PFM" disk) contains a "SetMap" command which
instructs the Amiga to recognize the most used keyboard in the country in
which a particular version of the program is distributed. "SetMap d", for
example, is used to work with a German keyboard, while "SetMap f"
instructs the Amiga to work with a French keyboard. The line of the
Startup-Sequence containing the Setmap command has to be changed if the
argument (i.e. the language code appearing after the command) does not
match the keyboard being used. A word processor like Personal Write can be
used to modify the Startup-Sequence, as long as the file is saved in ASCII
or ANSI X3.64 format.

   Some programs are not designed to work with non-USA keyboards. These
programs directly translate key position codes into characters, using a
program-internal conversion table. The SetMap command has no effect on the
behaviour of these programs.

   Some keyboards have the <Y> and <Z> keys reversed. The command "Nimm3
-y" can be written after the Setmap (but not "SetMap usa") command to swap
the two keys. Nimm3 is a utility available from Cloanto.

   The correct SetMap command must be inserted in the Startup-Sequence of
every Workbench disk which is used.

1.10.2   Graphical Keys

   Graphical keys are the keys which can be used to display letters,
numerals and other signs. Graphical keys are used in the Personal Fonts
Maker as command shortcuts and to edit the content of string gadgets. When
a graphical key is pressed while a string gadget is activated, the
associated character is written and the cursor is moved to the right.

   Graphical keys are automatically "repeated" if they are held down for a
while. The initial repeat delay and the interval between repetitions can
be set with the "Preferences" program, as described in the Amiga
documentation.

1.10.3   Accents

   Some keyboards have one or more accent keys. Accent keys can be used
during the editing of file and macro names. Keys with accents (and other
diacritical signs) must be pressed immediately before (not at the same
time as) the key whose output has to be changed.

   Pressing, one after the other, the grave accent key (<\>) and the acute
accent key (</>), a circumflex accent is placed on the following
character.

   Special combinations of keys can be used if the keyboard does not have
accent keys to access diacritical signs directly. The keys <Alt> + <F>,
<G>, <H>, <J>, <K> respectively put on the following character an acute
accent, a grave accent, a circumflex accent, a tilde or a dieresis
(umlaut). The <Alt> key must be pressed when one of the above letters is
typed. The character on which the diacritical sign is to be put has to be
typed separately, after the <Alt>+key combination.

   Accented characters, and – in general – all characters whose code in
the computer's character set is greater than 126 (appendix D), cannot
appear in FFDL sequences. Therefore these characters should not be typed
in the string gadgets used to edit the FFDL sequences.

1.10.4   The <Shift> Keys

   On most keyboards an outline of an upward-arrow is drawn on the <Shift>
keys, while on other keyboards "Shift" is written on the keys. The two
keys are on the extreme left and right of the row of keys just over the
<Space> bar. There is no functional difference between the two <Shift>
keys.

   When a graphical key is hit while <Shift> is pressed, an upper case
letter or the character drawn on the upper part of the keytop cover are
sent to the computer.

1.10.5   The <Alt> Keys

   The two <Alt> keys are just under the <Shift> keys. There is no
functional difference between the two <Alt> keys.

The alternate ("Alt") characters associated with the keys which are hit
are sent to the computer while <Alt> is pressed. The alternate characters
do not usually appear on the keyboard, but they are described in the
handbooks and can be displayed with the "KeyShow" (or "KeyToy") program.
Several accents, special and national characters can be accessed with the
<Alt> key.

1.10.6   The <Ctrl> Key

The <Ctrl> key is on the far left of the keyboard.

If a lower case letter (from 'a' to 'z') is pressed while <Ctrl> is
held down, the associated macro will be executed. If however an upper case
letter ('A' to 'Z') is pressed, the Personal Fonts Maker will begin to
record the corresponding macro. To activate this latter function, the
<Shift> key and the <Ctrl> key must be held down while the letter key is
pressed. The whole of chapter 6 is dedicated to macros.

1.10.7   The <Commodore> Key

The <Commodore> key is on the left of the <Space> bar. On some
keyboards there is a full Amiga-like 'A', while on other keyboards there
is a Commodore sign.

The <Commodore> key is used to recall some functions of the Amiga
operating system. <Commodore>+<N> brings the Workbench screen in front of
all other screens. <Commodore>+<M> moves the screen into the background.
In version 2.0 and beyond of the operating system, <Commodore>+<M> allows
the user to flip from one screen to the next, without any distinction for
the Workbench screen.

1.10.8   The <Amiga> Key

The <Amiga> key is on the right of the <Space> bar. An outline of the
letter 'A' appears on the key.

A graphical key can be pressed while the <Amiga> key is held down to
execute a command in a string gadget (section
                1.9.6
) or in the Printer
Driver Modifier (section
                1.9.8
).

1.10.9   The <Caps Lock> Key

The <Caps Lock> key, located between the <Ctrl> and the letter keys is
the only key with a small light.

Whenever the key is pressed, the light changes state: from on to off,
and vice versa. When the light is on, the keyboard behaves as if a <Shift>
key is pressed. <Caps Lock>, unlike <Shift>, works only on letter-keys.

```
    "Nimm3 -c" (section
            1.10.1
            ) can be used to make all keys caps-able.
```

1.10.10   The Cursor Keys

    The four cursor keys are on the left of the numeric keypad.

    The cursor keys can be used to move the graphic image of the character
displayed in the main window of the Personal Fonts Maker towards the
specified direction in the character editing box, as described in section
3.19.

    When a string gadget is active, the <Cursor Left> and <Cursor Right>
keys can be used to move the cursor in the desired direction. When a
cursor key is pressed for a short moment, the cursor moves one position
towards the indicated direction. If the key is held down, the cursor
continues to move, pausing between each step. The delay between the
repetitions can be set with the Preferences program, as described in the
Amiga documentation. The cursor cannot be moved more than one position
beyond the end of the string. If the <Shift> key is held down while one of
the two cursor keys is pressed, the cursor will jump to the farthest
possible position in the specified direction.

1.10.11   The <Return> Key

    The <Return> (from "carriage return") key is on the right of the letter
keys. The Personal Fonts Maker interprets the <Enter> key on the numerical
pad like the <Return> key.

    When a requester contains only the "OK" gadget, the <Return> key can be
pressed to remove the requester.

    If a requester has only two gadgets ("Proceed" and "Cancel"), pressing
the <Return> key is equivalent to the selection of the "Proceed" gadget.
The <Esc> key can be used to choose "Cancel".

1.10.12   The <BS> Key

    The <BS> (from "BackSpace") is just over the <Return> key. Some
keyboards have a left-arrow on the keycap, while others have "BackSpace"
printed on the key.

    When a string gadget is active and <BS> is pressed, the cursor is moved
onto the preceding character, which is deleted.

1.10.13   The <Del> Key

    The <Del> (from "delete") key is on the right of the <BS> key.

    When <Del> is pressed while a string gadget is active, the character
under the cursor is deleted. The cursor is not moved.

   <Del> can be used to delete a macro (section 6.5) from the program's
memory.

1.10.14   The <Help> Key

   The <Help> key is on the right of the letter keys.

   The <Help> key can be used to restore the default colours (all colour
knobs on the central position) of the Personal Fonts Maker user interface
(section 7.14, "Colour Bias").

   Pressing <Help> when a disk is ejected from its drive, all Cloanto
programs which opened a custom screen pop to the front. This is an
emergency solution to be used if other programs do not allow the user to
move their screen back. This may seem an idiosyncrasy of the software, but
the "Disk Ejected" message is one of the very few which the Amiga
operating system transmits to programs even when their window is not the
active one.

1.10.15   The <Esc> Key

   The <Esc> (from "escape") key, at the top left of the keyboard, can be
used to stop the execution of a macro (section 6.9).

   When a requester contains only the "OK" gadget, the <Esc> key can be
pressed to remove the requester (exactly like <Return>).

   When a requester having only two gadgets ("Proceed" and "Cancel") is
displayed, pressing the <Esc> key is equivalent to selecting the "Cancel"
gadget. The <Return> key can be used to choose "Proceed".

1.10.16   The Function Keys

   The ten function keys are aligned in the topmost row of the keyboard,
over the letter keys. The keys are numbered from <F1> to <F10>.

   The Personal Fonts Maker accepts the use of function keys as a shortcut
to select certain program functions. The function keys <F1> to <F4> can be
used to shift the reference points (sections 2.3 and 3.21).

   If the <F1> key is held down while the Personal Fonts Maker is
starting, the memory save mode (section
                1.11
) is activated.

1.11   Loading the Personal Fonts Maker

   The Personal Fonts Maker, the Printer Driver Modifier, the operating
system software and some support programs are stored on a 3.5" disk.
Fonts, macros and all other material which comes with the Personal Fonts
Maker package are stored on additional disks (font disks may be enclosed
with the product as well as circulate separately).

The computer must be switched on and be operating properly in order to load the Personal Fonts Maker. If the insertion of the Kickstart disk is requested (on the Amiga 1000), the Kickstart disk must be inserted in drive 0. The Personal Fonts Maker works with Kickstart version 1.2 and beyond. Version 1.3 (or higher) of the Workbench disk contains all other library files which the program needs to run. This does not imply that version 1.3 of the system ROM or the Kickstart disk are needed. The program works fine with a 1.2 ROM (or Kickstart disk) and a 1.3 Workbench disk. The Cloanto Workbench disk containing the Personal Fonts Maker can be inserted when the system requests the insertion of the Workbench disk. If the computer has less than 1 Mbyte of RAM, the Personal Fonts Maker is loaded immediately, without giving any system resources to other Workbench functions. The Workbench screen is also closed automatically to save memory (if there is not enough RAM), and is reopened when the user exits from the Personal Fonts Maker.

If the computer has at least 1 Mbyte of RAM, the Personal Fonts Maker can be loaded from the Workbench, Shell or CLI, as described in the Amiga documentation. When the Workbench icon of the Personal Fonts Maker is selected, or the command "PFM" is given in the Shell or CLI, the program is loaded. The Personal Fonts Maker is also loaded when an icon of a data file as a font saved by the Personal Fonts Maker is selected (double-clicking the left mouse button when the pointer is over the font icon). In this case, the Personal Fonts Maker also loads the selected font. At the end of the Startup-Sequence on the Personal Fonts Maker disk the program is loaded automatically. This means that if the Personal Fonts Maker program disk is inserted when a Workbench disk is requested by the Amiga, the Personal Fonts Maker is loaded automatically.

The syntax to load the Personal Fonts Maker from the Amiga Shell or CLI is the following (the square brackets indicate that an optional font file name can be written):

    PFM [font-file]

If the program is started from within a CLI or Shell window, the window can be closed (with "EndCLI") only after the program terminates. This can be avoided (i.e. the window can be closed during the execution of the Personal Fonts Maker) if the program is started with the following command format:

    Run >NIL: <NIL: PFM >NIL: <NIL: [font-file]

If the program cannot start, it returns an error code. If the Personal Fonts Maker is run from the CLI or Shell, one of the following error codes will be returned:

    CODE   MEANING

    21   "Intuition.library" cannot be opened.
    22   "Icon.library" cannot be opened.
    23   "DiskFont.library" cannot be opened.
    24   "Graphic.library" cannot be opened.
    25   "Layers.library" cannot be opened.
    26   Screen cannot be opened.
    27   Insufficient memory for initial allocation.

    28   Main window cannot be opened.

    Appendix G contains a complete listing of program messages, explained
in detail.

    If the computer does not have a memory expansion to at least 1 Mbyte of
total RAM, the Personal Fonts Maker should be loaded by booting the system
from the original Cloanto Personal Fonts Maker disk. The Personal Fonts
Maker disk has a special startup-sequence which enters a memory-save mode
if no expansion is detected. In this case, the Personal Fonts Maker
program is loaded immediately without giving any memory to other system
programs and resources.

    The Personal Fonts Maker can be loaded by booting from a different disk
on a 512 Kbyte system if the usage of RAM is kept to a minimum. If a disk
other than the PFM disk is used, then the boot procedure should be
interrupted as soon as possible pressing <D> while the <Ctrl> key is held
down. If the Workbench program has not been loaded (i.e. if no disk icon
appears under the window after it is made smaller with the mouse) it has
to be loaded by typing "LoadWB". Then the window must be closed by typing
"EndCLI" (these commands can also be written entirely in lower case). The
PFM disk icon must be double-clicked to open the window containing the PFM
program icon. At this point, the PFM can be started by double-clicking the
program icon. As soon as the mouse pointer turns back into its standard
arrow image (from the "ZZ" busy mode), the window containing the PFM
program icon should be closed by clicking the gadget on the upper left of
the window. This requires a quick user reaction, but saves additional
memory. The Personal Fonts Maker will automatically close the Workbench
screen to save even more memory. All these measures ensure that the
Personal Fonts Maker can be used as normally as possible on a system with
only 512 Kbytes of RAM. The Personal Fonts Maker will work even if it is
loaded in a different way, but when memory is so precious it is always
preferable to have as much of it as possible free to be used by the
program.

    When the Personal Fonts Maker is loaded, it searches for the
"StartupF1.prf" and "StartupF2.prf" files in the "PFM:PFM_Prefs" drawer to
determine its initial settings. If these files do not exist, or if they
cannot be accessed or if they contain illegal values, internal default
parameters will be used. The default values for the two initial fonts are
36 x 24 in size, and 360 x 180 for the print ratio.

    The Personal Fonts Maker will also try to load the three-bitplane
graphic data (eight colours) in the "PFM_Gfx" file (accessed as
"PFM:PFM_Gfx"). The data contains the more coloured versions of the screen
gadgets and other program details. Since the graphical data occupies some
memory (more than 10 Kbytes), which it would be better to save on 512
Kbyte systems, it is not contained in the program itself, but rather
accessed on an external file only if the memory conditions allow this. A
more memory-economic version of the graphic data (1-bitplane, sufficient
for two colours) is built in the Personal Fonts Maker, and used if the
"PFM_Gfx" file cannot be found, or if the program is trying to save
memory.

    The memory save mode can be activated manually on all Amiga systems by
holding the <F1> key down while the program is starting.

1.12   Environment Variables and Standard Drawers

    Several program functions which access data on peripheral devices such
as disks, have default paths where they read or write data unless
specified otherwise by the user. The original disk on which the Personal
Fonts Maker program and some data files are stored is named "PFM". "PFM"
is therefore the volume name which appears at the beginning of the default
paths (also see section
                1.5
) used by the Personal Fonts Maker and the
Printer Driver Modifier. The Personal Fonts Maker and the Printer Driver
Modifier also use standard drawer names to access different kinds of data.
These drawers are: "PFM_Fonts" (containing PFM fonts), "PRT_Fonts"
(containing downloadable fonts), "PFM_Prefs" (program configuration
parameters), "PFM_CharSets" (character set definitions), "PFM_Macros"
(macro definitions) and "PFM_Brush" (brushes in IFF ILBM format). The
"PDM_Defs" drawer is used by the Printer Driver Modifier to store control
sequence definition files.

    As described in section
                1.13
                , the Personal Fonts Maker and the other
files can easily be installed or moved on a volume other than the "PFM"
disk. If the material on the PFM disk is moved all together, it is
sufficient to execute a command like "Assign PFM: NewPosition". If, for
example, the Personal Fonts Maker is installed inside a drawer called
"PFM", on the partition of a hard disk with the default "DH0" name, the
command will be "Assign PFM: DH0:PFM". Section
                1.5
                ("Drawers") explains
how to create a new drawer. The "Assign" command should be put at the
beginning of the Startup-Sequence file of the disk from which the system
is booted (e.g. the hard disk). The "Assign PFM: ..." command tells the
Amiga operating system where to search for the data addressed through the
"PFM" name. The new location is called a logical device, as opposed to
physical devices like disks. In this way, the data can be found even if it
is no longer on the disk called "PFM". The "Assign" command may fail if a
volume (e.g. a disk) called "PFM" is in use (e.g. currently inserted, or
used as the boot disk) while the command is executed, as it is impossible
to define a new path for a name currently in use. A physical device called
"PFM" always has priority over a logical device with the same name. This
means that if "PFM" has been defined with the "Assign" command, and a
"PFM" disk is currently in a drive, the Personal Fonts Maker accesses the
disk rather than the logical device.

    Section 12.4 explains how to use the AskAssign program to create
drawers and assign logical names using the mouse, rather than the AmigaDOS
"Assign" command.

    The most simple way to copy the Personal Fonts Maker and the data files
and drawers to a new device is by using the mouse. All Personal Fonts
Maker files and drawers have an associated Workbench icon. Moving the
files to a new position is as easy as moving their icons with the mouse.
Experience teaches that it is convenient to dedicate a disk or a drawer to
the Personal Fonts Maker files and drawers. This may, for example, be a
"PFM" drawer on a hard disk. If only part of a drawer is to be copied to a

new location, a new drawer with the same name can be created (as described
in section
                    1.5
) and the requested files from the source drawer can be
copied separately.

    Before the Personal Fonts Maker is first run after it has been
installed on a new device, the "PFM" logical device must be appropriately
defined with the "Assign" command, as described at the beginning of this
section. This can be done by typing the correct "Assign" command in the
CLI or Shell, or re-booting the system from a device having a
"Startup-Sequence" file containing the "Assign" command.

1.13   Installing the Personal Fonts Maker

    This section explains how to integrate the Personal Fonts Maker into
the hardware and software environment in which the program is to be used.
All information necessary to move the Personal Fonts Maker to a device
other than the disks on which the program is originally stored can also be
found here. In particular, the subsection at the end of this section
explains how to use the InstallPFM program, which automatically copies all
files which are necessary to work with the Personal Fonts Maker to a
destination selected by the user.

    If the Personal Fonts Maker is copied to another storage unit (e.g.
another disk), the Printer and CloantoAudio devices in the "devs" drawers
must also be copied (if not already present) to the new media. The
Personal Fonts Maker must be able to load these devices from the "devs"
drawer of the Workbench disk used to boot the system. CloantoAudio can
also be stored in the root directory (i.e. not inside a drawer) of the
disk from which the program is loaded. If the Personal Fonts Maker cannot
load these devices, the program will load and work correctly, but the
printer download and test and the audio functions will not be activated
until the necessary devices can be loaded. The "PFM_Gfx" data file must
also be moved. If the "PFM_Gfx" file is not found in the "PFM" volume, the
Personal Fonts Maker will use single bitplane graphic objects in its user
interface (as is normally done on 512 Kbyte systems).

    To install the Personal Fonts Maker on a hard disk it is sufficient to
copy the "PFM", the "CloantoAudio" and the "PFM_Gfx" icons with the mouse,
remembering that CloantoAudio cannot be put inside a drawer (except
"devs"). "PFM_Gfx" must be stored at the root of the "PFM" volume, so that
it can be accessed as "PFM:PFM_Gfx".

    The "FF" (FastFonts) program can be put in the "c" drawer of the
Workbench disk and used to speed up the display of text in the file
requester and other parts of the user interface. "FF" can be found on the
original Commodore version 1.3 Workbench disk. The startup-sequence of the
Personal Fonts Maker disk checks if the "FF" program exists and
automatically uses it.

    Section
                    1.12
                     explains how to inform the system and the Personal Fonts
Maker about the new position of the PFM if the program and the other
drawers and files are copied to a new disk or drawer.

The Personal Fonts Maker and all the support material (program and data
files) do not fit on a single 880 Kbyte Amiga disk. For this reason, some
drawers, like "PFM_Prefs", appear both on the program disk (i.e. the disk
on which the Personal Fonts Maker is stored) and on the data disk(s). The
drawers on the data disk contain several files which wouldn't have fit on
the program disk. If the Personal Fonts Maker is installed on a high
capacity storage device, it may be useful to merge the contents of drawers
having the same name on different disks into a single drawer.

It is very likely that the Personal Fonts Maker will be used in
conjunction with other software. A typical example is the combination PFM
+ Personal Write. Personal Write is a word processor developed by Cloanto
which can download font data to printers and use that data to format and
print the text. Some other programs will not be able to download the font
data, while most can be set to print the text in text mode (opposed to
graphics mode) to use downloaded data. The "PrintRawFiles" utility,
described in section 12.2, can be used in conjunction with programs which
cannot download fonts to the printer. In any case, a special disk or
directory is best reserved for all fonts used in conjunction with a
particular program. Some programs can even be programmed to look into a
particolar drawer for fonts. The Personal Fonts Maker lets the user create
an Amiga screen font and a printer downloadable file with the same
characters. The screen font can be used for text display with a word
processor, while the download version can be used to print the same text
in very high resolution at high speed. These functions should be exploited
in order to make the interaction between the Personal Fonts Maker and
other software as simple and immediate as possible.

1.13.1   Automatic Installation: The InstallPFM Program

The primary design goal of the InstallPFM program was to make it as
easy as possible for users of hard disks to install the Personal Fonts
Maker on their high capacity storage devices. This makes it possible to
use the programs which come with the package without loading them every
time from the disks. It should be noted, however, that the InstallPFM
program can only be used in accordance with the terms of the agreement
which is printed in appendix A. The single user licence, for example,
forbids the installation and use of the Personal Fonts Maker on different
sites at the same time. We trust our users will understand the necessity
for this.

InstallPFM asks the user to specify the device and/or drawer/s where
the Personal Fonts Maker material is to be installed. The program can
create a new drawer if necessary. This is recommended, as explained in
section
                    1.12
                      ("Environment Variables and Standard Drawers").

The InstallPFM program is written in the AmigaDOS command language,
using several calls to sub-programs created specifically for this purpose.
Experienced AmigaDOS users can load the "InstallPFM" file in the Personal
Fonts Maker program disk with a text editor or a word processor and
examine what the single commands do. The set of commands is executed
automatically when the "InstallPFM" Workbench icon is double-clicked.

The first thing InstallPFM does, is to ask the user where to install all the material. This is done using a file requester similar to the one described in section 3.23 ("The File Requester"). The only diference lies in the "CreateDir" string gadget at the bottom of the requester, which can be used to specify a new drawer to be created. When a name is written in this gadget and <Return> is pressed, InstallPFM creates a drawer (a directory with a Workbench icon) with the specified name. The content of the "Path" string gadget determines where the drawer is created. The name of the newly created drawer is not added to the path name. Instead, it is inserted in the list box, from where it can be selected with the mouse. More than one drawer can be created in the same session. Section 12.4 ("AskAssign") describes another application based on the same file requester.

The "Cancel" gadget of the requester can be used to interrupt the install sequence. If the "Install" gadget is selected instead, the procedure continues, asking a series of very simple "Yes/No" questions about what should be installed.

For example:

    Install PFM program .... (y/N) ?

requires the user to press the <Y> key if the file containing the Personal Fonts Maker program is to be copied to the new destination. If <N> is pressed instead, the program is not copied. The <Return> key must be pressed to confirm the choice. The <Return> key can be pressed alone (no <Y> or <N> key) to select the default "No" answer (this is why a capital 'N' follows the lower case 'y' in the question text). One of the questions gives the user the possibility of selecting (and creating, if necessary) a drawer where fonts in the Amiga format can be stored, if these fonts cannot be copied to the drawer associated with the standard "FONTS" logical device name.

The installation procedure begins to install the specified files only after all questions have been answered. Short messages inform the user – step by step- of the actions which are being taken. The install sequence can still be interrupted at any time by pressing the <Ctrl>+<D> key combination, but this leaves the operation incomplete, and is therefore strongly discouraged. In such an event, the sequence can however be executed again by re-selecting the "InstallPFM" Workbench icon.