The umlaute package*†

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Abstract

Once apon a time, there was a package called umlaute [1] which offered the portability of LaTeX 2ε documents even with special characters (with ASCII codes ≥ 128) and supported many input character encodings like `Atari`, `ISO 8859/1 (Latin1)`, `Apple Macintosh`, `PC codepage 850`, and `Roman8`.

In our days there is a package called inputenc [2] which comes with every LaTeX 2ε newer than <1994/12/01>. But: It comes only with definition files supporting the `ASCII` and `ISO 8859/1 (Latin1)` encodings!

So this package has got a new reason to exist: First of all, it comes with new encoding definition files for the inputenc package, supporting all of the input encodings which were previously supported by the umlaute package. Furthermore it comes with a new `umlaute.sty`, which is now only a dummy and just reads the new and official `inputenc.sty`. So old documents using the umlaute package will be still full supported.

1 The user interface

To use this package just type

`\usepackage[`*encoding name*`]{inputenc}`

in the preamble of your document, where *encoding name* is one of the following character encodings:

`atari`, `pc850`, `isolatin`, `mac`, or `roman8`.

For further information about the inputenc package consult the documented file `inputenc.dtx` which comes with every LaTeX 2ε.

2 Some facts about the input encoding files

- Some characters needs the AMSFonts [3], these are:

†The name of this package has historical reasons: The first versions supported only the german characters, called 'Umlaute'

*This package has version number 2.0a, last revised 1995/02/05.

■ ¥ ⌜ ⌝ ® ⌞ and ⌟

- Some characters needs the Wasy2 fonts [4, 5], these are:

  ¤ ¢ ‰ and ¦

- Some Atari math characters need a preloaded wasysym [5] package. These are:

  ⌐ and $\oint$

- Not all characters are implemented (yet), these have been set to `\NotImplemented`. In fact, 36 characters remain undefined in `atari.def`, 25 in `pc850.def`, 0 in `isolatin.def`, 11 in `mac.def`, and 1 in `roman8.def`.

  If you have any idea how to implement these charactes, please write to me!

- Some of the non-implemented characters have been defined to 'wrong' characters. This become necessary because not all characters in the encodings have a capital representation, but these are badly needed for correct working `\uppercase` and `\lowercase` commands which is e.g. necessary for correct uppercase page headings! Here's a complete list of those characters:

encoding	missing characters	set to
atari	Â Ê Ë È Ï Î Ì Ô Ò Û Ù Ÿ SS Á Ď Ó Ú	`"C0 ... "D0`
pc850	Ÿ SS (SS = `\uppercase{ß}`)	`"B0 and "B1`
isolatin	SS Ÿ	`"80 and "81`
mac	SS	`"F0`
roman8	SS	`"FF`

3 Why a new ISO 8859/1 encoding file?

The ISO 8859/1 character encoding file (`isolatin.def`) has some advantages over the one which comes with the inputenc package (`latin1.def`):

- More characters are defined (via the $\mathcal{AMS}$ and Wasy2 fonts).
- It can be loaded *after* the german or germanb (from babel) without surrounding it with `\mdqoff` and `\mdqon`.
- All characters are correcly capitalised in page headings (like 'ß' ↦ 'SS').
- The commands `\uppercase` and `\lowercase` work even for the new defined characters.

Of course, these facts are valid for all the encoding files which comes with this package.

4 Problems with foreign input encoding files

Using these character encoding definition files together with foreign ones can lead into some problems. E.g. the following example (where *fromumlaute*`.def` is a definition file from this package and *foreign*`.def` is not)

```
\documentclass{article}
\usepackage[foreign]{inputenc}[1994/12/10]
...
\begin{document}
...
\tableofcontents ...
\inputencoding{fromumlaute}
...
\section{Some german characters:  äöüß}
\end{document}
```

leads (after the 2nd pass through LaTeX) into the error

```
(error.toc
! Undefined control sequence.
<argument> ...man characters: \"a\"o\"u\as@active
                                                     {ss}
l.1 ...an characters: \"a\"o\"u\as@active {ss}}{1}

?
```

What's happening here? Well, some characters in my definition files are defined indirectly, so they use some macros like `\as@active`, `\textblacksquare`, `\mathbullet` ... In this case `\as@active` was written into the `.toc` file, because ß — one of these characters — was used in a section heading. But: While LaTeX is reading the `.toc` file, `\as@active` isn't defined because *fromumlaute*`.def` will be read in later in the text!

What can you do about this? Well, a possible solution is to replace

```
\usepackage[foreign]{inputenc}[1994/12/10]    .
```

with

```
\usepackage[someonefromumlaute]{inputenc}[1994/12/10]
\inputencoding{foreign}
```

where *someonefromumlaute* is `atari`, `pc850`, `isolatin`, `mac`, or `roman8`, it doesn't matter which one you choose.

Some questions have been left unanswered: Why are some characters in my definition files defined indirectly? Well, otherwise some of them will not be capitalised in page headings[1], these are `\aa`, `\ae`, `\^{\i}`, `\'{\i}`, `\`{\i}`, `\"{\i}`, `\o`, `\ss`, `\oe`, `\dh`, and `\th`.

5 Notes for emTeX users

If you are using emTeX you have to make sure that you don't have any character translation table built into your LaTeX 2_ε format (with option `/c`). Instead, you have to use the option `/8` to allow 8 bit character codes in your LaTeX document, so a valid command line to build the LaTeX 2_ε format would be

[1] The trick how to avoid this was taken from the german package, see the implementation part or [6] for details.

```
tex386 /i /8 latex.ltx .
```

If you don't follow this, the inputenc package won't work properly! You won't be able to compile documents with other character encodings than yours!

6 Notes for CS-TEX and MultiTEX users

CS-TEX has a build-in character translation table which converts the Atari TOS characters to Cork encoded characters. Therefore, the package inputenc doesn't work properly with CS-TEX!

There are two different things you can do about it:

1. Don't use the inputenc package!
   With the character translation table inside you can use quite much special characters by selecting the `T1` fontencoding (via `\usepackage[T1]{fontenc}` in the preamble of your document). Just before you give your documents away, just add the line `\usepackage[atari]{inputenc}`, so the documents will be compiled correctly on other implementations.

   Of course, this is only a (quite bad) workaround! Newertheless, you are not able to translate LATEX documents with foreign character encodings codes at all, so this solution isn't recommended!

2. Patch your CS-TEX to get a TEX with normal behaviour!
   This is easier than you might think: just search for the hex codes

   `00 01 02 03 ... 7E 7F FC DC C2 C3 ... BE 9E`

   in the files `INITEX_L.TTP` and (`TT-`)`TEX_L.TTP` and replace them with the hex codes

   `00 01 02 03 ... 7E 7F 80 81 82 83 ... FE FF .`

   The uuencoded ZIP archive `cs_patch.uue` with an already compiled patch program is provided with this package.[2]

   Of course, this solution is recommended.

7 Other TEX implementations

If you have trouble using any file of this package with your TEX implementation (and maybe found a solution), please send an E-Mail to

`Harald_Sommerfeldt@w.maus.de`

or

`Harald Sommerfeldt @ W` in the German MausNet.

[2]Thanks to Markus Kohm for this patch program!

8 The new umlaute package

The new version of the umlaute package just reads inputenc and nothing else.

```
⟨*package⟩
\NeedsTeXFormat{LaTeX2e}[1994/12/01]
\ProvidesPackage{umlaute}[1995/01/23 v2.0 umlaute package (AS)]
\typeout{Package: umlaute v2.0 <1995/01/23> (Axel Sommerfeldt)}
\DeclareOption{iso}{\PassOptionsToPackage{isolatin}{inputenc}}
\DeclareOption{ansi}{\PassOptionsToPackage{isolatin}{inputenc}}
\DeclareOption{850}{\PassOptionsToPackage{pc850}{inputenc}}
\DeclareOption{roman8}{\PassOptionsToPackage{roman8}{inputenc}}
\DeclareOption{amigaos}{\\PassOptionsToPackage{isolatin}{inputenc}}
\DeclareOption{amiga}{\PassOptionsToPackage{isolatin}{inputenc}}
\DeclareOption{atari}{\PassOptionsToPackage{atari}{inputenc}}
\DeclareOption{dos}{\PassOptionsToPackage{pc850}{inputenc}}
\DeclareOption{ibmpc}{\PassOptionsToPackage{pc850}{inputenc}}
\DeclareOption{hpux}{\ExecuteOptions{roman8}}
\DeclareOption{macos}{\PassOptionsToPackage{mac}{inputenc}}
\DeclareOption{mac}{\PassOptionsToPackage{mac}{inputenc}}
\DeclareOption{tos}{\PassOptionsToPackage{atari}{inputenc}}
\DeclareOption{windows}{\PassOptionsToPackage{isolatin}{inputenc}}
\DeclareOption{nogerman}{} % just declared for compatibility with v1.2
\ProcessOptions
\RequirePackage{inputenc}
⟨/package⟩
```

9 The definition files for the inputenc package

First of all, we announce the files.

```
⟨+atari⟩\ProvidesFile{atari.def}[1995/02/03 %
⟨+pc850⟩\ProvidesFile{pc850.def}[1995/02/05 %
⟨+isolatin⟩\ProvidesFile{isolatin.def}[1995/02/03 %
⟨+mac⟩\ProvidesFile{mac.def}[1995/02/03 %
⟨+roman8⟩\ProvidesFile{roman8.def}[1995/02/05 %
⟨*atari | pc850 | isolatin | mac | roman8⟩
  Input encoding file (Harald_Sommerfeldt@w.maus.de)]
```

Then we save and change the category code of the @ character because this files will not only be readin within the preamble of the document but also within the main text (via \inputencoding).

```
\chardef\atcode=\catcode`\@
\catcode`\@=11
```

The following two macros (code and comments) were 'stolen' from german.sty v2.4a and simplified. Without this code some characters will stay lowercase (like å and ß) or will broken in parts (like ï) in page headings.

\@as@active \protect (with meaning \relax) should expand to \empty. This is necessary to allow correct kerning and ligatures when these macros are used with the new DC-/EC-fonts.

```
\providecommand*{\@as@active}[1]{%
  \ifx\protect\relax\else\ifx\protect\empty\else%
  \expandafter\expandafter\expandafter\protect\fi\fi%
```

```
  \as@active{#1}}
```

\as@active For combinations \x which should be treated in a special way, `\active@as` is called with x as argument.

```
\providecommand*{\as@active}[1]{\csname @as@@#1\endcsname}
```

Here the affected characters are defined.

```
\def\@as@@aa{\aa}\def\@as@@AA{\AA}
\def\@as@@ae{\ae}\def\@as@@AE{\AE}
\def\@as@@ic{\^{\i}}\def\@as@@IC{\^I}
\def\@as@@id{\'{\i}}\def\@as@@ID{\'I}
\def\@as@@ig{\`{\i}}\def\@as@@IG{\`I}
\def\@as@@iq{\"{\i}}\def\@as@@IQ{\"I}
\def\@as@@o{\o}\def\@as@@O{\O}
\def\@as@@ss{\ss}\def\@as@@SS{\SS}
\def\@as@@oe{\oe}\def\@as@@OE{\OE}
\def\@as@@dh{\dh}\def\@as@@DH{\DH}
\def\@as@@th{\th}\def\@as@@TH{\TH}
```

These are the commands used to define some of the input characters. Note that they are defined in *every* encoding definition file, nevertheless they are used for the *single* file. This is necessary to avoid problems with these commands in `.toc`, `.lof`, or `.lot` files (also see section 4).

```
\ProvideTextCommandDefault{\textonequarter}{$\frac14$}
\ProvideTextCommandDefault{\textonehalf}{$\frac12$}
\ProvideTextCommandDefault{\textthreequarters}{$\frac34$}
\ProvideTextCommandDefault{\texttrademark}{$^\mathrm{TM}$}
```

Here come the commands which uses the $\mathcal{AMS}$Fonts.
Another solution for `\textyen` (widely used in Japan, taken from ascmac.sty for jlatex) whould be:

```
\def\yen{{\setbox0=\hbox{Y}Y\kern-.97\wd0\vbox{\hrule height.1ex
width.98\wd0\kern.33ex\hrule height.1ex width.98\wd0\kern.45ex}}}
```

```
\def\as@msa#1{{\fontencoding{U}\fontfamily{msa}\selectfont\char#1}}
\ProvideTextCommandDefault{\textblacksquare}{\as@msa{4}}
\ProvideTextCommandDefault{\textyen}{\as@msa{85}}
\ProvideTextCommandDefault{\textulcorner}{\as@msa{112}}
\ProvideTextCommandDefault{\texturcorner}{\as@msa{113}}
\ProvideTextCommandDefault{\textregistered}{\as@msa{114}}
\ProvideTextCommandDefault{\textllcorner}{\as@msa{120}}
\ProvideTextCommandDefault{\textlrcorner}{\as@msa{121}}
```

And here the ones which uses the Wasy2 fonts.

```
\def\as@wasy#1{{\fontencoding{U}\fontfamily{wasy}\selectfont\char#1}}
\ProvideTextCommandDefault{\textcurrency}{\as@wasy{27}}
\ProvideTextCommandDefault{\textcent}{\as@wasy{103}}
\ProvideTextCommandDefault{\textpermil}{\as@wasy{104}}
\ProvideTextCommandDefault{\textbrokenbar}{\as@wasy{124}}
```

At last, here come some math characters. These definitions are taken from `latin1.def` [2]. (I think the names `\mathordmasculine` and `\mathordfeminine` are interchanged, but I am not quite sure about this.)

```
\providecommand*{\mathbullet}{{{}^\bullet}}
\providecommand*{\mathdegree}{{{}^\circ}}
```

```
\providecommand*{\mathordmasculine}{{{}^a}}
\providecommand*{\mathordfeminine}{{{}^o}}
\providecommand*{\mathonesuperior}{{{}^1}}
\providecommand*{\mathtwosuperior}{{{}^2}}
\providecommand*{\maththreesuperior}{{{}^3}}
```

`\DeclareInputTextEx` `\DeclareInputMathEx`

To make the following definitions more readable the commands `\DeclareInputTextEx` and `\DeclareInputMathEx` are defined here. They just call `\DeclareInputText` and `\DeclareInputMath` and set the lowercase and uppercase codes to the right values.

```
\providecommand*{\DeclareInputTextEx}[4]{%
  \DeclareInputText{#1}{#2}%
  \lccode#1=#3\uccode#1=#4}
\providecommand*{\DeclareInputMathEx}[2]{%
  \DeclareInputMath{#1}{#2}%
  \lccode#1=#1\uccode#1=#1}
```

This is the end of the common code. Now the single input encodings will follow.

```
⟨/atari | pc850 | isolatin | mac | roman8⟩
```

9.1 The Atari and PC-Codepage 850 encoding

Some of the characters share the same codes so they are defined together. Note that the `atari` encoding uses the wasysym [5] commands `\invneg` and `\varoint`.

```
⟨*atari | pc850⟩
\DeclareInputTextEx{"80}{\c C}{"87}{"80}
\DeclareInputTextEx{"81}{\"u}{"81}{"9A}
\DeclareInputTextEx{"82}{\'e}{"82}{"90}
⟨/atari | pc850⟩
⟨*atari⟩
\DeclareInputTextEx{"83}{\^a}{"83}{"0C0}
\DeclareInputTextEx{"84}{\"a}{"84}{"8E}
\DeclareInputTextEx{"85}{\`a}{"85}{"0B6}
⟨/atari⟩
⟨*pc850⟩
\DeclareInputTextEx{"83}{\^a}{"83}{"0B6}
\DeclareInputTextEx{"84}{\"a}{"84}{"8E}
\DeclareInputTextEx{"85}{\`a}{"85}{"0B7}
⟨/pc850⟩
⟨*atari | pc850⟩
\DeclareInputTextEx{"86}{\@as@active{aa}}{"86}{"8F}
\DeclareInputTextEx{"87}{\c c}{"87}{"80}
⟨/atari | pc850⟩
⟨*atari⟩
\DeclareInputTextEx{"88}{\^e}{"88}{"0C1}
\DeclareInputTextEx{"89}{\"e}{"89}{"0C2}
\DeclareInputTextEx{"8A}{\`e}{"8A}{"0C3}
\DeclareInputTextEx{"8B}{\@as@active{iq}}{"8B}{"0C4}
\DeclareInputTextEx{"8C}{\@as@active{ic}}{"8C}{"0C5}
\DeclareInputTextEx{"8D}{\@as@active{ig}}{"8D}{"0C6}
⟨/atari⟩
⟨*pc850⟩
\DeclareInputTextEx{"88}{\^e}{"88}{"0D2}
```

```
\DeclareInputTextEx{"89}{\"e}{"89}{"0D3}
\DeclareInputTextEx{"8A}{\`e}{"8A}{"0D4}
\DeclareInputTextEx{"8B}{\@as@active{iq}}{"8B}{"0D8}
\DeclareInputTextEx{"8C}{\@as@active{ic}}{"8C}{"0D7}
\DeclareInputTextEx{"8D}{\@as@active{ig}}{"8D}{"0DE}
⟨/pc850⟩
⟨*atari | pc850⟩
\DeclareInputTextEx{"8E}{\"A}{"84}{"8E}
\DeclareInputTextEx{"8F}{\@as@active{AA}}{"86}{"8F}
\DeclareInputTextEx{"90}{\'E}{"82}{"90}
\DeclareInputTextEx{"91}{\@as@active{ae}}{"91}{"92}
\DeclareInputTextEx{"92}{\@as@active{AE}}{"91}{"92}
⟨/atari | pc850⟩
⟨*atari⟩
\DeclareInputTextEx{"93}{\^o}{"93}{"0C7}
\DeclareInputTextEx{"94}{\"o}{"94}{"99}
\DeclareInputTextEx{"95}{\`o}{"95}{"0C8}
\DeclareInputTextEx{"96}{\^u}{"96}{"0C9}
\DeclareInputTextEx{"97}{\`u}{"97}{"0CA}
\DeclareInputTextEx{"98}{\"y}{"98}{"0CB}
⟨/atari⟩
⟨*pc850⟩
\DeclareInputTextEx{"93}{\^o}{"93}{"0E2}
\DeclareInputTextEx{"94}{\"o}{"94}{"99}
\DeclareInputTextEx{"95}{\`o}{"95}{"0E3}
\DeclareInputTextEx{"96}{\^u}{"96}{"0EA}
\DeclareInputTextEx{"97}{\`u}{"97}{"0EB}
\DeclareInputTextEx{"98}{\"y}{"98}{"0B0}
⟨/pc850⟩
⟨*atari | pc850⟩
\DeclareInputTextEx{"99}{\"O}{"94}{"99}
\DeclareInputTextEx{"9A}{\"U}{"81}{"9A}
⟨/atari | pc850⟩
⟨*atari⟩
\DeclareInputTextEx{"9B}{\textcent}{"9B}{"9B}
\DeclareInputTextEx{"9C}{\textsterling}{"9C}{"9C}
\DeclareInputTextEx{"9D}{\textyen}{"9D}{"9D}
\DeclareInputTextEx{"9E}{\@as@active{ss}}{"9E}{"0CC}
\DeclareInputTextEx{"9F}{\NotImplemented}{"9F}{"9F} % holl. Gulden
\DeclareInputTextEx{"0A0}{\'a}{"0A0}{"0CD}
\DeclareInputTextEx{"0A1}{\@as@active{id}}{"0A1}{"0CE}
\DeclareInputTextEx{"0A2}{\'o}{"0A2}{"0CF}
\DeclareInputTextEx{"0A3}{\'u}{"0A3}{"0D0}
⟨/atari⟩
⟨*pc850⟩
\DeclareInputTextEx{"9B}{\@as@active{o}}{"9B}{"9D}
\DeclareInputTextEx{"9C}{\textsterling}{"9C}{"9C}
\DeclareInputTextEx{"9D}{\@as@active{O}}{"9B}{"9D}
\DeclareInputMathEx{"9E}{\times}
\DeclareInputTextEx{"9F}{\NotImplemented}{"9F}{"9F} % holl. Gulden
\DeclareInputTextEx{"0A0}{\'a}{"0A0}{"0B5}
\DeclareInputTextEx{"0A1}{\@as@active{id}}{"0A1}{"0D6}
\DeclareInputTextEx{"0A2}{\'o}{"0A2}{"0E0}
\DeclareInputTextEx{"0A3}{\'u}{"0A3}{"0E9}
```

```
⟨/pc850⟩
⟨*atari | pc850⟩
\DeclareInputTextEx{"0A4}{\~n}{"0A4}{"0A5}
\DeclareInputTextEx{"0A5}{\~N}{"0A4}{"0A5}
\DeclareInputMathEx{"0A6}{\mathordmasculine}
\DeclareInputMathEx{"0A7}{\mathordfeminine}
\DeclareInputTextEx{"0A8}{\textquestiondown}{"0A8}{"0A8}
⟨/atari | pc850⟩
⟨*atari⟩
\DeclareInputMathEx{"0A9}{\invneg} % wasysym
⟨/atari⟩
⟨*pc850⟩
\DeclareInputTextEx{"0A9}{\textregistered}{"0A9}{"0A9}
⟨/pc850⟩
⟨*atari | pc850⟩
\DeclareInputMathEx{"0AA}{\neg}
\DeclareInputTextEx{"0AB}{\textonehalf}{"0AB}{"0AB}
\DeclareInputTextEx{"0AC}{\textonequarter}{"0AC}{"0AC}
\DeclareInputTextEx{"0AD}{\textexclamdown}{"0AD}{"0AD}
\DeclareInputTextEx{"0AE}{\guillemotleft}{"0AE}{"0AE}
\DeclareInputTextEx{"0AF}{\guillemotright}{"0AF}{"0AF}
⟨/atari | pc850⟩
⟨*atari⟩
\DeclareInputTextEx{"0B0}{\~a}{"0B0}{"0B7}
\DeclareInputTextEx{"0B1}{\~o}{"0B1}{"0B8}
\DeclareInputTextEx{"0B2}{\@as@active{O}}{"0B3}{"0B2}
\DeclareInputTextEx{"0B3}{\@as@active{o}}{"0B3}{"0B2}
\DeclareInputTextEx{"0B4}{\@as@active{oe}}{"0B4}{"0B5}
\DeclareInputTextEx{"0B5}{\@as@active{OE}}{"0B4}{"0B5}
\DeclareInputTextEx{"0B6}{\`A}{"85}{"0B6}
\DeclareInputTextEx{"0B7}{\~A}{"0B0}{"0B7}
\DeclareInputTextEx{"0B8}{\~O}{"0B1}{"0B8}
\DeclareInputTextEx{"0B9}{\"{}}{"0B9}{"0B9}
\DeclareInputTextEx{"0BA}{\'{}}{"0BA}{"0BA}
\DeclareInputTextEx{"0BB}{\dag}{"0BB}{"0BB}
\DeclareInputTextEx{"0BC}{\P}{"0BC}{"0BC}
\DeclareInputTextEx{"0BD}{\copyright}{"0BD}{"0BD}
\DeclareInputTextEx{"0BE}{\textregistered}{"0BE}{"0BE}
\DeclareInputTextEx{"0BF}{\texttrademark}{"0BF}{"0BF}
\DeclareInputTextEx{"0C0}{\^A}{"83}{"0C0}
\DeclareInputTextEx{"0C1}{\^E}{"88}{"0C1}
\DeclareInputTextEx{"0C2}{\"E}{"89}{"0C2}
\DeclareInputTextEx{"0C3}{\`E}{"8A}{"0C3}
\DeclareInputTextEx{"0C4}{\@as@active{IQ}}{"8B}{"0C4}
\DeclareInputTextEx{"0C5}{\@as@active{IC}}{"8C}{"0C5}
\DeclareInputTextEx{"0C6}{\@as@active{IG}}{"8D}{"0C6}
\DeclareInputTextEx{"0C7}{\^O}{"93}{"0C7}
\DeclareInputTextEx{"0C8}{\`O}{"95}{"0C8}
\DeclareInputTextEx{"0C9}{\^U}{"96}{"0C9}
\DeclareInputTextEx{"0CA}{\`U}{"97}{"0CA}
\DeclareInputTextEx{"0CB}{\"Y}{"98}{"0CB}
\DeclareInputTextEx{"0CC}{\@as@active{SS}}{"9E}{"0CC}
\DeclareInputTextEx{"0CD}{\'A}{"0A0}{"0CD}
\DeclareInputTextEx{"0CE}{\@as@active{ID}}{"0A1}{"0CE}
```

```
\DeclareInputTextEx{"0CF}{\'O}{"0A2}{"0CF}
\DeclareInputTextEx{"0D0}{\'U}{"0A3}{"0D0}
\DeclareInputTextEx{"0D1}{\NotImplemented}{"0D1}{"0D1}
\DeclareInputTextEx{"0D2}{\NotImplemented}{"0D2}{"0D2}
\DeclareInputTextEx{"0D3}{\NotImplemented}{"0D3}{"0D3}
\DeclareInputTextEx{"0D4}{\NotImplemented}{"0D4}{"0D4}
\DeclareInputTextEx{"0D5}{\NotImplemented}{"0D5}{"0D5}
\DeclareInputTextEx{"0D6}{\NotImplemented}{"0D6}{"0D6}
\DeclareInputTextEx{"0D7}{\NotImplemented}{"0D7}{"0D7}
\DeclareInputTextEx{"0D8}{\NotImplemented}{"0D8}{"0D8}
\DeclareInputTextEx{"0D9}{\NotImplemented}{"0D9}{"0D9}
\DeclareInputTextEx{"0DA}{\NotImplemented}{"0DA}{"0DA}
\DeclareInputTextEx{"0DB}{\NotImplemented}{"0DB}{"0DB}
\DeclareInputTextEx{"0DC}{\NotImplemented}{"0DC}{"0DC}
\DeclareInputTextEx{"0DD}{\S}{"0DD}{"0DD}
\DeclareInputTextEx{"0DE}{\^{}}{"0DE}{"0DE}
\DeclareInputMathEx{"0DF}{\infty}
\DeclareInputMathEx{"0E0}{\alpha}
\DeclareInputMathEx{"0E1}{\beta}
\DeclareInputMathEx{"0E2}{\Gamma}
\DeclareInputMathEx{"0E3}{\pi}
\DeclareInputMathEx{"0E4}{\Sigma}
\DeclareInputMathEx{"0E5}{\sigma}
\DeclareInputMathEx{"0E6}{\mu}
\DeclareInputMathEx{"0E7}{\tau}
\DeclareInputMathEx{"0E8}{\Phi}
\DeclareInputMathEx{"0E9}{\Theta}
\DeclareInputMathEx{"0EA}{\Omega}
\DeclareInputMathEx{"0EB}{\delta}
\DeclareInputMathEx{"0EC}{\varoint} % wasysym
\DeclareInputMathEx{"0ED}{\NotImplemented}
\DeclareInputMathEx{"0EE}{\NotImplemented}
\DeclareInputMathEx{"0EF}{\NotImplemented}
\DeclareInputMathEx{"0F0}{\equiv}
\DeclareInputMathEx{"0F1}{\pm}
\DeclareInputMathEx{"0F2}{\ge}
\DeclareInputMathEx{"0F3}{\le}
\DeclareInputMathEx{"0F4}{\NotImplemented}
\DeclareInputMathEx{"0F5}{\NotImplemented}
\DeclareInputMathEx{"0F6}{\div}
\DeclareInputMathEx{"0F7}{\approx}
\DeclareInputMathEx{"0F8}{\mathdegree}
\DeclareInputMathEx{"0F9}{\mathbullet}
\DeclareInputMathEx{"0FA}{\cdot}
\DeclareInputMathEx{"0FB}{\protect\sqrt{}}
\DeclareInputMathEx{"0FC}{\NotImplemented}
\DeclareInputMathEx{"0FD}{\mathtwosuperior}
\DeclareInputMathEx{"0FE}{\maththreesuperior}
\DeclareInputTextEx{"0FF}{\={}}{"0FF}{"0FF}
⟨/atari⟩
⟨*pc850⟩
\DeclareInputTextEx{"0B0}{\"Y}{"98}{"0B0}
\DeclareInputTextEx{"0B1}{\@as@active{SS}}{"0E1}{"0B1}
\DeclareInputTextEx{"0B2}{\NotImplemented}{"0B2}{"0B2}
```

```
\DeclareInputTextEx{"0B3}{\NotImplemented}{"0B3}{"0B3}
\DeclareInputTextEx{"0B4}{\NotImplemented}{"0B4}{"0B4}
\DeclareInputTextEx{"0B5}{\'A}{"0A0}{"0B5}
\DeclareInputTextEx{"0B6}{\^A}{"83}{"0B6}
\DeclareInputTextEx{"0B7}{\`A}{"85}{"0B7}
\DeclareInputTextEx{"0B8}{\copyright}{"0B8}{"0B8}
\DeclareInputTextEx{"0B9}{\NotImplemented}{"0B9}{"0B9}
\DeclareInputTextEx{"0BA}{\NotImplemented}{"0BA}{"0BA}
\DeclareInputTextEx{"0BB}{\NotImplemented}{"0BB}{"0BB}
\DeclareInputTextEx{"0BC}{\NotImplemented}{"0BC}{"0BC}
\DeclareInputTextEx{"0BD}{\textcent}{"0BD}{"0BD}
\DeclareInputTextEx{"0BE}{\textyen}{"0BE}{"0BE}
\DeclareInputTextEx{"0BF}{\texturcorner}{"0BF}{"0BF}
\DeclareInputTextEx{"0C0}{\textllcorner}{"0C0}{"0C0}
\DeclareInputTextEx{"0C1}{\NotImplemented}{"0C1}{"0C1}
\DeclareInputTextEx{"0C2}{\NotImplemented}{"0C2}{"0C2}
\DeclareInputTextEx{"0C3}{\NotImplemented}{"0C3}{"0C3}
\DeclareInputTextEx{"0C4}{\NotImplemented}{"0C4}{"0C4}
\DeclareInputTextEx{"0C5}{\NotImplemented}{"0C5}{"0C5}
\DeclareInputTextEx{"0C6}{\~a}{"0C6}{"0C7}
\DeclareInputTextEx{"0C7}{\~A}{"0C6}{"0C7}
\DeclareInputTextEx{"0C8}{\NotImplemented}{"0C8}{"0C8}
\DeclareInputTextEx{"0C9}{\NotImplemented}{"0C9}{"0C9}
\DeclareInputTextEx{"0CA}{\NotImplemented}{"0CA}{"0CA}
\DeclareInputTextEx{"0CB}{\NotImplemented}{"0CB}{"0CB}
\DeclareInputTextEx{"0CC}{\NotImplemented}{"0CC}{"0CC}
\DeclareInputTextEx{"0CD}{\NotImplemented}{"0CD}{"0CD}
\DeclareInputTextEx{"0CE}{\NotImplemented}{"0CE}{"0CE}
\DeclareInputTextEx{"0CF}{\textcurrency}{"0CF}{"0CF}
\DeclareInputTextEx{"0D0}{\@as@active{dh}}{"0D0}{"0D1}
\DeclareInputTextEx{"0D1}{\@as@active{DH}}{"0D0}{"0D1}
\DeclareInputTextEx{"0D2}{\^E}{"88}{"0D2}
\DeclareInputTextEx{"0D3}{\"E}{"89}{"0D3}
\DeclareInputTextEx{"0D4}{\`E}{"8A}{"0D4}
\DeclareInputTextEx{"0D5}{\i}{"0D5}{"0D5} %"49
\DeclareInputTextEx{"0D6}{\@as@active{ID}}{"0A1}{"0D6}
\DeclareInputTextEx{"0D7}{\@as@active{IC}}{"8C}{"0D7}
\DeclareInputTextEx{"0D8}{\@as@active{IQ}}{"8B}{"0D8}
\DeclareInputTextEx{"0D9}{\textlrcorner}{"0D9}{"0D9}
\DeclareInputTextEx{"0DA}{\textulcorner}{"0DA}{"0DA}
\DeclareInputTextEx{"0DB}{\textblacksquare}{"0DB}{"0DB}
\DeclareInputTextEx{"0DC}{\NotImplemented}{"0DC}{"0DC}
\DeclareInputTextEx{"0DD}{\textbrokenbar}{"0DD}{"0DD}
\DeclareInputTextEx{"0DE}{\@as@active{IG}}{"8D}{"0DE}
\DeclareInputTextEx{"0DF}{\NotImplemented}{"0DF}{"0DF}
\DeclareInputTextEx{"0E0}{\'O}{"0A2}{"0E0}
\DeclareInputTextEx{"0E1}{\@as@active{ss}}{"0E1}{"0B1}
\DeclareInputTextEx{"0E2}{\^O}{"93}{"0E2}
\DeclareInputTextEx{"0E3}{\`O}{"95}{"0E3}
\DeclareInputTextEx{"0E4}{\~o}{"0E4}{"0E5}
\DeclareInputTextEx{"0E5}{\~O}{"0E4}{"0E5}
\DeclareInputMathEx{"0E6}{\mu}
\DeclareInputTextEx{"0E7}{\@as@active{th}}{"0E7}{"0E8}
\DeclareInputTextEx{"0E8}{\@as@active{TH}}{"0E7}{"0E8}
```

```
\DeclareInputTextEx{"0E9}{\'U}{"0A3}{"0E9}
\DeclareInputTextEx{"0EA}{\^U}{"96}{"0EA}
\DeclareInputTextEx{"0EB}{\`U}{"97}{"0EB}
\DeclareInputTextEx{"0EC}{\'y}{"0EC}{"0ED}
\DeclareInputTextEx{"0ED}{\'Y}{"0EC}{"0ED}
\DeclareInputTextEx{"0EE}{\={}}{"0EE}{"0EE}
\DeclareInputTextEx{"0EF}{\'{}}{"0EF}{"0EF}
\DeclareInputTextEx{"0F0}{\textendash}{"0F0}{"0F0}
\DeclareInputMathEx{"0F1}{\pm}
\DeclareInputMathEx{"0F2}{=}
\DeclareInputTextEx{"0F3}{\textthreequarters}{"0F3}{"0F3}
\DeclareInputTextEx{"0F4}{\P}{"0F4}{"0F4}
\DeclareInputTextEx{"0F5}{\S}{"0F5}{"0F5}
\DeclareInputMathEx{"0F6}{\div}
\DeclareInputTextEx{"0F7}{\c{}}{"0F7}{"0F7}
\DeclareInputMathEx{"0F8}{\mathdegree}
\DeclareInputTextEx{"0F9}{\"{}}{"0F9}{"0F9}
\DeclareInputMathEx{"0FA}{\cdot}
\DeclareInputMathEx{"0FB}{\mathonesuperior}
\DeclareInputMathEx{"0FC}{\maththreesuperior}
\DeclareInputMathEx{"0FD}{\mathtwosuperior}
\DeclareInputTextEx{"0FE}{\NotImplemented}{"0FE}{"0FE}
\DeclareInputTextEx{"0FF}{~}{"0FF}{"0FF}
⟨/pc850⟩
```

9.2 The ISO 8859/1 (Latin 1) encoding

```
⟨*isolatin⟩
\DeclareInputTextEx{"80}{\@as@active{SS}}{"0DF}{"80}
\DeclareInputTextEx{"81}{\"Y}{"0FF}{"81}
\DeclareInputTextEx{"0A0}{~}{"0A0}{"0A0}
\DeclareInputTextEx{"0A1}{\textexclamdown}{"0A1}{"0A1}
\DeclareInputTextEx{"0A2}{\textcent}{"0A2}{"0A2}
\DeclareInputTextEx{"0A3}{\textsterling}{"0A3}{"0A3}
\DeclareInputTextEx{"0A4}{\textcurrency}{"0A4}{"0A4}
\DeclareInputTextEx{"0A5}{\textyen}{"0A5}{"0A5}
\DeclareInputTextEx{"0A6}{\textbrokenbar}{"0A6}{"0A6}
\DeclareInputTextEx{"0A7}{\S}{"0A7}{"0A7}
\DeclareInputTextEx{"0A8}{\"{}}{"0A8}{"0A8}
\DeclareInputTextEx{"0A9}{\copyright}{"0A9}{"0A9}
\DeclareInputMathEx{"0AA}{\mathordmasculine}
\DeclareInputTextEx{"0AB}{\guillemotleft}{"0AB}{"0AB}
\DeclareInputMathEx{"0AC}{\neg}
\DeclareInputTextEx{"0AD}{\textendash}{"0AD}{"0AD}
\DeclareInputTextEx{"0AE}{\textregistered}{"0AE}{"0AE}
\DeclareInputTextEx{"0AF}{\={}}{"0AF}{"0AF}
\DeclareInputMathEx{"0B0}{\mathdegree}
\DeclareInputMathEx{"0B1}{\pm}
\DeclareInputMathEx{"0B2}{\mathtwosuperior}
\DeclareInputMathEx{"0B3}{\maththreesuperior}
\DeclareInputTextEx{"0B4}{\'{}}{"0B4}{"0B4}
\DeclareInputMathEx{"0B5}{\mu}
\DeclareInputTextEx{"0B6}{\P}{"0B6}{"0B6}
\DeclareInputMathEx{"0B7}{\cdot}
```

```
\DeclareInputTextEx{"0B8}{\c{}}{"0B8}{"0B8}
\DeclareInputMathEx{"0B9}{\mathonesuperior}
\DeclareInputMathEx{"0BA}{\mathordfeminine}
\DeclareInputTextEx{"0BB}{\guillemotright}{"0BB}{"0BB}
\DeclareInputTextEx{"0BC}{\textonequarter}{"0BC}{"0BC}
\DeclareInputTextEx{"0BD}{\textonehalf}{"0BD}{"0BD}
\DeclareInputTextEx{"0BE}{\textthreequarters}{"0BE}{"0BE}
\DeclareInputTextEx{"0BF}{\textquestiondown}{"0BF}{"0BF}
\DeclareInputTextEx{"0C0}{\`A}{"0E0}{"0C0}
\DeclareInputTextEx{"0C1}{\'A}{"0E1}{"0C1}
\DeclareInputTextEx{"0C2}{\^A}{"0E2}{"0C2}
\DeclareInputTextEx{"0C3}{\~A}{"0E3}{"0C3}
\DeclareInputTextEx{"0C4}{\"A}{"0E4}{"0C4}
\DeclareInputTextEx{"0C5}{\@as@active{AA}}{"0E5}{"0C5}
\DeclareInputTextEx{"0C6}{\@as@active{AE}}{"0E6}{"0C6}
\DeclareInputTextEx{"0C7}{\c C}{"0E7}{"0C7}
\DeclareInputTextEx{"0C8}{\`E}{"0E8}{"0C8}
\DeclareInputTextEx{"0C9}{\'E}{"0E9}{"0C9}
\DeclareInputTextEx{"0CA}{\^E}{"0EA}{"0CA}
\DeclareInputTextEx{"0CB}{\"E}{"0EB}{"0CB}
\DeclareInputTextEx{"0CC}{\@as@active{IG}}{"0EC}{"0CC}
\DeclareInputTextEx{"0CD}{\@as@active{ID}}{"0ED}{"0CD}
\DeclareInputTextEx{"0CE}{\@as@active{IC}}{"0EE}{"0CE}
\DeclareInputTextEx{"0CF}{\@as@active{IQ}}{"0EF}{"0CF}
\DeclareInputTextEx{"0D0}{\@as@active{DH}}{"0F0}{"0D0}
\DeclareInputTextEx{"0D1}{\~N}{"0F1}{"0D1}
\DeclareInputTextEx{"0D2}{\`O}{"0F2}{"0D2}
\DeclareInputTextEx{"0D3}{\'O}{"0F3}{"0D3}
\DeclareInputTextEx{"0D4}{\^O}{"0F4}{"0D4}
\DeclareInputTextEx{"0D5}{\~O}{"0F5}{"0D5}
\DeclareInputTextEx{"0D6}{\"O}{"0F6}{"0D6}
\DeclareInputMathEx{"0D7}{\times}
\DeclareInputTextEx{"0D8}{\@as@active{O}}{"0F8}{"0D8}
\DeclareInputTextEx{"0D9}{\`U}{"0F9}{"0D9}
\DeclareInputTextEx{"0DA}{\'U}{"0FA}{"0DA}
\DeclareInputTextEx{"0DB}{\^U}{"0FB}{"0DB}
\DeclareInputTextEx{"0DC}{\"U}{"0FC}{"0DC}
\DeclareInputTextEx{"0DD}{\'Y}{"0FD}{"0DD}
\DeclareInputTextEx{"0DE}{\@as@active{TH}}{"0FE}{"0DE}
\DeclareInputTextEx{"0DF}{\@as@active{ss}}{"0DF}{"80}
\DeclareInputTextEx{"0E0}{\`a}{"0E0}{"0C0}
\DeclareInputTextEx{"0E1}{\'a}{"0E1}{"0C1}
\DeclareInputTextEx{"0E2}{\^a}{"0E2}{"0C2}
\DeclareInputTextEx{"0E3}{\~a}{"0E3}{"0C3}
\DeclareInputTextEx{"0E4}{\"a}{"0E4}{"0C4}
\DeclareInputTextEx{"0E5}{\@as@active{aa}}{"0E5}{"0C5}
\DeclareInputTextEx{"0E6}{\@as@active{ae}}{"0E6}{"0C6}
\DeclareInputTextEx{"0E7}{\c c}{"0E7}{"0C7}
\DeclareInputTextEx{"0E8}{\`e}{"0E8}{"0C8}
\DeclareInputTextEx{"0E9}{\'e}{"0E9}{"0C9}
\DeclareInputTextEx{"0EA}{\^e}{"0EA}{"0CA}
\DeclareInputTextEx{"0EB}{\"e}{"0EB}{"0CB}
\DeclareInputTextEx{"0EC}{\@as@active{ig}}{"0EC}{"0CC}
\DeclareInputTextEx{"0ED}{\@as@active{id}}{"0ED}{"0CD}
```

```
\DeclareInputTextEx{"0EE}{\@as@active{ic}}{"0EE}{"0CE}
\DeclareInputTextEx{"0EF}{\@as@active{iq}}{"0EF}{"0CF}
\DeclareInputTextEx{"0F0}{\@as@active{dh}}{"0F0}{"0D0}
\DeclareInputTextEx{"0F1}{\~n}{"0F1}{"0D1}
\DeclareInputTextEx{"0F2}{\`o}{"0F2}{"0D2}
\DeclareInputTextEx{"0F3}{\'o}{"0F3}{"0D3}
\DeclareInputTextEx{"0F4}{\^o}{"0F4}{"0D4}
\DeclareInputTextEx{"0F5}{\~o}{"0F5}{"0D5}
\DeclareInputTextEx{"0F6}{\"o}{"0F6}{"0D6}
\DeclareInputMathEx{"0F7}{\div}
\DeclareInputTextEx{"0F8}{\@as@active{o}}{"0F8}{"0D8}
\DeclareInputTextEx{"0F9}{\`u}{"0F9}{"0D9}
\DeclareInputTextEx{"0FA}{\'u}{"0FA}{"0DA}
\DeclareInputTextEx{"0FB}{\^u}{"0FB}{"0DB}
\DeclareInputTextEx{"0FC}{\"u}{"0FC}{"0DC}
\DeclareInputTextEx{"0FD}{\'y}{"0FD}{"0DD}
\DeclareInputTextEx{"0FE}{\@as@active{th}}{"0FE}{"0DE}
\DeclareInputTextEx{"0FF}{\"y}{"0FF}{"81}
⟨/isolatin⟩
```

9.3 The Apple Macintosh encoding

```
⟨*mac⟩
\DeclareInputTextEx{"80}{\"A}{"8A}{"80}
\DeclareInputTextEx{"81}{\@as@active{AA}}{"8C}{"81}
\DeclareInputTextEx{"82}{\c C}{"8D}{"82}
\DeclareInputTextEx{"83}{\'E}{"8E}{"83}
\DeclareInputTextEx{"84}{\~N}{"96}{"84}
\DeclareInputTextEx{"85}{\"O}{"9A}{"85}
\DeclareInputTextEx{"86}{\"U}{"9F}{"86}
\DeclareInputTextEx{"87}{\'a}{"87}{"0E7}
\DeclareInputTextEx{"88}{\`a}{"88}{"0CB}
\DeclareInputTextEx{"89}{\^a}{"89}{"0E5}
\DeclareInputTextEx{"8A}{\"a}{"8A}{"80}
\DeclareInputTextEx{"8B}{\~a}{"8B}{"0CC}
\DeclareInputTextEx{"8C}{\@as@active{aa}}{"8C}{"81}
\DeclareInputTextEx{"8D}{\c c}{"8D}{"82}
\DeclareInputTextEx{"8E}{\'e}{"8E}{"83}
\DeclareInputTextEx{"8F}{\`e}{"8F}{"0E9}
\DeclareInputTextEx{"90}{\^e}{"90}{"0E6}
\DeclareInputTextEx{"91}{\"e}{"91}{"0E8}
\DeclareInputTextEx{"92}{\@as@active{id}}{"92}{"0EA}
\DeclareInputTextEx{"93}{\@as@active{ig}}{"93}{"0ED}
\DeclareInputTextEx{"94}{\@as@active{ic}}{"94}{"0EB}
\DeclareInputTextEx{"95}{\@as@active{iq}}{"95}{"0EC}
\DeclareInputTextEx{"96}{\~n}{"96}{"84}
\DeclareInputTextEx{"97}{\'o}{"97}{"0EE}
\DeclareInputTextEx{"98}{\`o}{"98}{"0F1}
\DeclareInputTextEx{"99}{\^o}{"99}{"0EF}
\DeclareInputTextEx{"9A}{\"o}{"9A}{"85}
\DeclareInputTextEx{"9B}{\~o}{"9B}{"0CD}
\DeclareInputTextEx{"9C}{\'u}{"9C}{"0F2}
\DeclareInputTextEx{"9D}{\`u}{"9D}{"0F4}
\DeclareInputTextEx{"9E}{\^u}{"9E}{"0F3}
```

```
\DeclareInputTextEx{"9F}{\"u}{"9F}{"86}
\DeclareInputTextEx{"0A0}{\dag}{"0A0}{"0A0}
\DeclareInputMathEx{"0A1}{\mathdegree}
\DeclareInputTextEx{"0A2}{\textcent}{"0A2}{"0A2}
\DeclareInputTextEx{"0A3}{\textsterling}{"0A3}{"0A3}
\DeclareInputTextEx{"0A4}{\S}{"0A4}{"0A4}
\DeclareInputTextEx{"0A5}{\textbullet}{"0A5}{"0A5}
\DeclareInputTextEx{"0A6}{\P}{"0A6}{"0A6}
\DeclareInputTextEx{"0A7}{\@as@active{ss}}{"0A7}{"0F0}
\DeclareInputTextEx{"0A8}{\textregistered}{"0A8}{"0A8}
\DeclareInputTextEx{"0A9}{\copyright}{"0A9}{"0A9}
\DeclareInputTextEx{"0AA}{\texttrademark}{"0AA}{"0AA}
\DeclareInputTextEx{"0AB}{\'{}}{"0AB}{"0AB}
\DeclareInputTextEx{"0AC}{\"{}}{"0AC}{"0AC}
\DeclareInputMathEx{"0AD}{\neq}
\DeclareInputTextEx{"0AE}{\@as@active{AE}}{"0BE}{"0AE}
\DeclareInputTextEx{"0AF}{\@as@active{O}}{"0BF}{"0AF}
\DeclareInputMathEx{"0B0}{\infty}
\DeclareInputMathEx{"0B1}{\pm}
\DeclareInputMathEx{"0B2}{\le}
\DeclareInputMathEx{"0B3}{\ge}
\DeclareInputTextEx{"0B4}{\textyen}{"0B4}{"0B4}
\DeclareInputMathEx{"0B5}{\mu}
\DeclareInputMathEx{"0B6}{\partial}
\DeclareInputMathEx{"0B7}{\Sigma}
\DeclareInputMathEx{"0B8}{\Pi}
\DeclareInputMathEx{"0B9}{\pi}
\DeclareInputMathEx{"0BA}{\int}
\DeclareInputMathEx{"0BB}{\mathordmasculine}
\DeclareInputMathEx{"0BC}{\mathordfeminine}
\DeclareInputMathEx{"0BD}{\Omega}
\DeclareInputTextEx{"0BE}{\@as@active{ae}}{"0BE}{"0AE}
\DeclareInputTextEx{"0BF}{\@as@active{o}}{"0BF}{"0AF}
\DeclareInputTextEx{"0C0}{\textquestiondown}{"0C0}{"0C0}
\DeclareInputTextEx{"0C1}{\textexclamdown}{"0C1}{"0C1}
\DeclareInputMathEx{"0C2}{\neg}
\DeclareInputMathEx{"0C3}{\protect\sqrt{}}
\DeclareInputMathEx{"0C4}{\NotImplemented}
\DeclareInputMathEx{"0C5}{\approx}
\DeclareInputMathEx{"0C6}{\Delta}
\DeclareInputTextEx{"0C7}{\guillemotleft}{"0C7}{"0C7}
\DeclareInputTextEx{"0C8}{\guillemotright}{"0C8}{"0C8}
\DeclareInputTextEx{"0C9}{\ldots}{"0C9}{"0C9}
\DeclareInputTextEx{"0CA}{\space}{"0CA}{"0CA}
\DeclareInputTextEx{"0CB}{\`A}{"88}{"0CB}
\DeclareInputTextEx{"0CC}{\~A}{"8B}{"0CC}
\DeclareInputTextEx{"0CD}{\~O}{"9B}{"0CD}
\DeclareInputTextEx{"0CE}{\@as@active{OE}}{"0CF}{"0CE}
\DeclareInputTextEx{"0CF}{\@as@active{oe}}{"0CF}{"0CE}
\DeclareInputTextEx{"0D0}{\textendash}{"0D0}{"0D0}
\DeclareInputTextEx{"0D1}{\textemdash}{"0D1}{"0D1}
\DeclareInputTextEx{"0D2}{\NotImplemented}{"0D2}{"0D2}
\DeclareInputTextEx{"0D3}{\NotImplemented}{"0D3}{"0D3}
\DeclareInputTextEx{"0D4}{\NotImplemented}{"0D4}{"0D4}
```

```
\DeclareInputTextEx{"0D5}{\NotImplemented}{"0D5}{"0D5}
\DeclareInputMathEx{"0D6}{\div}
\DeclareInputTextEx{"0D7}{\NotImplemented}{"0D7}{"0D7}
\DeclareInputTextEx{"0D8}{\"y}{"0D8}{"0D9}
\DeclareInputTextEx{"0D9}{\"Y}{"0D8}{"0D9}
\DeclareInputTextEx{"0DA}{/}{"0DA}{"0DA}
\DeclareInputTextEx{"0DB}{\textcurrency}{"0DB}{"0DB}
\DeclareInputTextEx{"0DC}{\guilsinglleft}{"0DC}{"0DC}
\DeclareInputTextEx{"0DD}{\guilsinglright}{"0DD}{"0DD}
\DeclareInputTextEx{"0DE}{fi}{"0DE}{"0DE}
\DeclareInputTextEx{"0DF}{fl}{"0DF}{"0DF}
\DeclareInputTextEx{"0E0}{\ddag}{"0E0}{"0E0}
\DeclareInputTextEx{"0E1}{\textperiodcentered}{"0E1}{"0E1}
\DeclareInputTextEx{"0E2}{\quotesinglbase}{"0E2}{"0E2}
\DeclareInputTextEx{"0E3}{\quotedblbase}{"0E3}{"0E3}
\DeclareInputTextEx{"0E4}{\textpermil}{"0E4}{"0E4}
\DeclareInputTextEx{"0E5}{\^A}{"89}{"0E5}
\DeclareInputTextEx{"0E6}{\^E}{"90}{"0E6}
\DeclareInputTextEx{"0E7}{\'A}{"87}{"0E7}
\DeclareInputTextEx{"0E8}{\"E}{"91}{"0E8}
\DeclareInputTextEx{"0E9}{\`E}{"8F}{"0E9}
\DeclareInputTextEx{"0EA}{\@as@active{ID}}{"92}{"0EA}
\DeclareInputTextEx{"0EB}{\@as@active{IC}}{"94}{"0EB}
\DeclareInputTextEx{"0EC}{\@as@active{IQ}}{"95}{"0EC}
\DeclareInputTextEx{"0ED}{\@as@active{IG}}{"93}{"0ED}
\DeclareInputTextEx{"0EE}{\'O}{"97}{"0EE}
\DeclareInputTextEx{"0EF}{\^O}{"99}{"0EF}
\DeclareInputTextEx{"0F0}{\@as@active{SS}}{"0A7}{"0F0}
\DeclareInputTextEx{"0F1}{\`O}{"98}{"0F1}
\DeclareInputTextEx{"0F2}{\'U}{"9C}{"0F2}
\DeclareInputTextEx{"0F3}{\^U}{"9E}{"0F3}
\DeclareInputTextEx{"0F4}{\`U}{"9D}{"0F4}
\DeclareInputTextEx{"0F5}{\i}{"0F5}{"0F5} %"49
\DeclareInputTextEx{"0F6}{\^{}}{"0F6}{"0F6}
\DeclareInputTextEx{"0F7}{\~{}}{"0F7}{"0F7}
\DeclareInputTextEx{"0F8}{\={}}{"0F8}{"0F8}
\DeclareInputTextEx{"0F9}{\NotImplemented}{"0F9}{"0F9}
\DeclareInputTextEx{"0FA}{\NotImplemented}{"0FA}{"0FA}
\DeclareInputMathEx{"0FB}{\mathdegree}
\DeclareInputTextEx{"0FC}{\c{}}{"0FC}{"0FC}
\DeclareInputTextEx{"0FD}{\~{}}{"0FD}{"0FD}
\DeclareInputTextEx{"0FE}{\NotImplemented}{"0FE}{"0FE}
\DeclareInputTextEx{"0FF}{\NotImplemented}{"0FF}{"0FF}
⟨/mac⟩
```

9.4 The HP Roman8 encoding

```
⟨*roman8⟩
\DeclareInputTextEx{"0A0}{~}{"0A0}{"0A0}
\DeclareInputTextEx{"0A1}{\`A}{"0C8}{"0A1}
\DeclareInputTextEx{"0A2}{\^A}{"0C0}{"0A2}
\DeclareInputTextEx{"0A3}{\`E}{"0C9}{"0A3}
\DeclareInputTextEx{"0A4}{\^E}{"0C1}{"0A4}
\DeclareInputTextEx{"0A5}{\"E}{"0CD}{"0A5}
```

```
\DeclareInputTextEx{"0A6}{\@as@active{IC}}{"0D1}{"0A6}
\DeclareInputTextEx{"0A7}{\@as@active{IQ}}{"0DD}{"0A7}
\DeclareInputTextEx{"0A8}{\'{}}{"0A8}{"0A8}
\DeclareInputTextEx{"0A9}{\`{}}{"0A9}{"0A9}
\DeclareInputTextEx{"0AA}{\^{}}{"0AA}{"0AA}
\DeclareInputTextEx{"0AB}{\"{}}{"0AB}{"0AB}
\DeclareInputTextEx{"0AC}{\~{}}{"0AC}{"0AC}
\DeclareInputTextEx{"0AD}{\`U}{"0CB}{"0AD}
\DeclareInputTextEx{"0AE}{\^U}{"0C3}{"0AE}
\DeclareInputTextEx{"0AF}{\textsterling}{"0AF}{"0AF} % eigentlich: Lira
\DeclareInputTextEx{"0B0}{\={}}{"0B0}{"0B0}
\DeclareInputTextEx{"0B1}{\'Y}{"0B2}{"0B1}
\DeclareInputTextEx{"0B2}{\'y}{"0B2}{"0B1}
\DeclareInputMathEx{"0B3}{\mathdegree}
\DeclareInputTextEx{"0B4}{\c C}{"0B5}{"0B4}
\DeclareInputTextEx{"0B5}{\c c}{"0B5}{"0B4}
\DeclareInputTextEx{"0B6}{\~N}{"0B7}{"0B6}
\DeclareInputTextEx{"0B7}{\~n}{"0B7}{"0B6}
\DeclareInputTextEx{"0B8}{\textexclamdown}{"0B8}{"0B8}
\DeclareInputTextEx{"0B9}{\textquestiondown}{"0B9}{"0B9}
\DeclareInputTextEx{"0BA}{\textcurrency}{"0BA}{"0BA}
\DeclareInputTextEx{"0BB}{\textsterling}{"0BB}{"0BB}
\DeclareInputTextEx{"0BC}{\textyen}{"0BC}{"0BC}
\DeclareInputTextEx{"0BD}{\S}{"0BD}{"0BD}
\DeclareInputTextEx{"0BE}{\NotImplemented}{"0BE}{"0BE} % holl. Gulden
\DeclareInputTextEx{"0BF}{\textcent}{"0BF}{"0BF}
\DeclareInputTextEx{"0C0}{\^a}{"0C0}{"0A2}
\DeclareInputTextEx{"0C1}{\^e}{"0C1}{"0A4}
\DeclareInputTextEx{"0C2}{\^o}{"0C2}{"0DF}
\DeclareInputTextEx{"0C3}{\^u}{"0C3}{"0AE}
\DeclareInputTextEx{"0C4}{\'a}{"0C4}{"0E0}
\DeclareInputTextEx{"0C5}{\'e}{"0C5}{"0DC}
\DeclareInputTextEx{"0C6}{\'o}{"0C6}{"0E7}
\DeclareInputTextEx{"0C7}{\'u}{"0C7}{"0ED}
\DeclareInputTextEx{"0C8}{\`a}{"0C8}{"0A1}
\DeclareInputTextEx{"0C9}{\`e}{"0C9}{"0A3}
\DeclareInputTextEx{"0CA}{\`o}{"0CA}{"0E8}
\DeclareInputTextEx{"0CB}{\`u}{"0CB}{"0AD}
\DeclareInputTextEx{"0CC}{\"a}{"0CC}{"0D8}
\DeclareInputTextEx{"0CD}{\"e}{"0CD}{"0A5}
\DeclareInputTextEx{"0CE}{\"o}{"0CE}{"0DA}
\DeclareInputTextEx{"0CF}{\"u}{"0CF}{"0DB}
\DeclareInputTextEx{"0D0}{\@as@active{AA}}{"0D4}{"0D0}
\DeclareInputTextEx{"0D1}{\@as@active{ic}}{"0D1}{"0A6}
\DeclareInputTextEx{"0D2}{\@as@active{O}}{"0D6}{"0D2}
\DeclareInputTextEx{"0D3}{\@as@active{AE}}{"0D7}{"0D3}
\DeclareInputTextEx{"0D4}{\@as@active{aa}}{"0D4}{"0D0}
\DeclareInputTextEx{"0D5}{\@as@active{id}}{"0D5}{"0E5}
\DeclareInputTextEx{"0D6}{\@as@active{o}}{"0D6}{"0D2}
\DeclareInputTextEx{"0D7}{\@as@active{ae}}{"0D7}{"0D3}
\DeclareInputTextEx{"0D8}{\"A}{"0CC}{"0D8}
\DeclareInputTextEx{"0D9}{\@as@active{ig}}{"0D9}{"0E6}
\DeclareInputTextEx{"0DA}{\"O}{"0CE}{"0DA}
\DeclareInputTextEx{"0DB}{\"U}{"0CF}{"0DB}
```

```
\DeclareInputTextEx{"0DC}{\'E}{"0C5}{"0DC}
\DeclareInputTextEx{"0DD}{\@as@active{iq}}{"0DD}{"0A7}
\DeclareInputTextEx{"0DE}{\@as@active{ss}}{"0DE}{"0FF}
\DeclareInputTextEx{"0DF}{\^O}{"0C2}{"0DF}
\DeclareInputTextEx{"0E0}{\'A}{"0C4}{"0E0}
\DeclareInputTextEx{"0E1}{\~A}{"0E2}{"0E1}
\DeclareInputTextEx{"0E2}{\~a}{"0E2}{"0E1}
\DeclareInputTextEx{"0E3}{\@as@active{DH}}{"0E4}{"0E3}
\DeclareInputTextEx{"0E4}{\@as@active{dh}}{"0E4}{"0E3}
\DeclareInputTextEx{"0E5}{\@as@active{ID}}{"0D5}{"0E5}
\DeclareInputTextEx{"0E6}{\@as@active{IG}}{"0D9}{"0E6}
\DeclareInputTextEx{"0E7}{\'O}{"0C6}{"0E7}
\DeclareInputTextEx{"0E8}{\`O}{"0CA}{"0E8}
\DeclareInputTextEx{"0E9}{\~O}{"0EA}{"0E9}
\DeclareInputTextEx{"0EA}{\~o}{"0EA}{"0E9}
\DeclareInputTextEx{"0EB}{\v{S}}{"0EC}{"0EB}
\DeclareInputTextEx{"0EC}{\v{s}}{"0EC}{"0EB}
\DeclareInputTextEx{"0ED}{\'U}{"0C7}{"0ED}
\DeclareInputTextEx{"0EE}{\"Y}{"0EF}{"0EE}
\DeclareInputTextEx{"0EF}{\"y}{"0EF}{"0EE}
\DeclareInputTextEx{"0F0}{\@as@active{TH}}{"0F1}{"0F0}
\DeclareInputTextEx{"0F1}{\@as@active{th}}{"0F1}{"0F0}
\DeclareInputTextEx{"0F2}{\textperiodcentered}{"0F2}{"0F2}
\DeclareInputMathEx{"0F3}{\mu}
\DeclareInputTextEx{"0F4}{\P}{"0F4}{"0F4}
\DeclareInputTextEx{"0F5}{\textthreequarters}{"0F5}{"0F5}
\DeclareInputTextEx{"0F6}{\textemdash}{"0F6}{"0F6}
\DeclareInputTextEx{"0F7}{\textonequarter}{"0F7}{"0F7}
\DeclareInputTextEx{"0F8}{\textonehalf}{"0F8}{"0F8}
\DeclareInputMathEx{"0F9}{\mathordmasculine}
\DeclareInputMathEx{"0FA}{\mathordfeminine}
\DeclareInputTextEx{"0FB}{\guillemotleft}{"0FB}{"0FB}
\DeclareInputTextEx{"0FC}{\textblacksquare}{"0FC}{"0FC}
\DeclareInputTextEx{"0FD}{\guillemotright}{"0FD}{"0FD}
\DeclareInputMathEx{"0FE}{\pm}
\DeclareInputTextEx{"0FF}{\@as@active{SS}}{"0DE}{"0FF}
⟨/roman8⟩
```

9.5 And now ... it's ... the end!

That's all folks! So we return to the previous catcode.

```
⟨*atari | pc850 | isolatin | mac | roman8⟩
\catcode`\@=\atcode
⟨/atari | pc850 | isolatin | mac | roman8⟩
```

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