

# The umlaute package<sup>\*†</sup>

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## Abstract

Once upon a time, there was a package called `umlaute` which offered the portability of  $\text{\LaTeX} 2_{\epsilon}$  documents even with special characters (with ASCII codes  $\geq 128$ ) and supported many input character encodings like `Atari`, `ISO 8859/1 (Latin1)`, `Apple Macintosh`, `PC codepage 850`, and `Roman8`.

## This package is obsolete!

This package was superseded by the `inputenc` package [1] which is included in any  $\text{\LaTeX} 2_{\epsilon}$  system since December 1994. Therefore this package is no longer supported; so please don't use `umlaute`, just use `inputenc` instead:

## 1 The user interface

Type

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

in the preamble of your document. (For further information about the `inputenc` package consult the documented file `inputenc.dtx` which comes with every  $\text{\LaTeX} 2_{\epsilon}$ .)

Here comes a *encoding name* translation table:

<b>umlaute package</b>	$\Rightarrow$	<b>inputenc package</b>
<code>atari</code>	$\Rightarrow$	<i>no replacement yet</i>
<code>isolatin</code>	$\Rightarrow$	<code>latin1</code>
<code>mac</code>	$\Rightarrow$	<code>applemac</code>
<code>pc850</code>	$\Rightarrow$	<code>cp850</code>
<code>roman8</code>	$\Rightarrow$	<i>no replacement yet</i>

Note that there are no encoding tables for the *ATARI<sup>TM</sup> ST(E)/TT/Falcon* and *HP<sup>TM</sup> Roman8* included in the `inputenc` package yet, so for these encodings you still need this package.

<sup>\*</sup>This package has version number v2.1, last revised 2006/01/29.

<sup>†</sup>The name of this package is for historical reasons: The first versions supported only the german characters, called 'Umlaute'

## 2 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 L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> format (with option /c). Instead, you have to use the option /8 to allow 8 bit character codes in your L<sup>A</sup>T<sub>E</sub>X document, so a valid command line to build the L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> format would be

```
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!

## 3 Notes for CS-T<sub>E</sub>X and MultiT<sub>E</sub>X users

CS-T<sub>E</sub>X 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-T<sub>E</sub>X!

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 L<sup>A</sup>T<sub>E</sub>X documents with foreign character encodings codes at all, so this solution isn't recommended!

2. Patch your CS-T<sub>E</sub>X to get a T<sub>E</sub>X 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.<sup>1</sup>

Of course, this solution is recommended.

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<sup>1</sup>Thanks to Markus Kohm for this patch program!

## 4 The umlaute package

The current version of the umlaute package just emulates the old options and loads the inputenc package.

```
1 (*package)
2 \NeedsTeXFormat{LaTeX2e}[1994/12/01]
3 \ProvidesPackage{umlaute}[2006/01/29 v2.1 umlaute package (AS)]
4 \PackageWarning{umlaute}{%
5   This package has been superseded by the 'inputenc' package}
6 \DeclareOption{iso}{\PassOptionsToPackage{latin1}{inputenc}}
7 \DeclareOption{ansi}{\PassOptionsToPackage{latin1}{inputenc}}
8 \DeclareOption{850}{\PassOptionsToPackage{cp850}{inputenc}}
9 %\DeclareOption{roman8}{\PassOptionsToPackage{roman8}{inputenc}}
10 \DeclareOption{amigaos}{\PassOptionsToPackage{latin1}{inputenc}}
11 \DeclareOption{amiga}{\PassOptionsToPackage{latin1}{inputenc}}
12 %\DeclareOption{atari}{\PassOptionsToPackage{atari}{inputenc}}
13 \DeclareOption{dos}{\PassOptionsToPackage{cp850}{inputenc}}
14 \DeclareOption{ibmpc}{\PassOptionsToPackage{cp850}{inputenc}}
15 \DeclareOption{hpux}{\ExecuteOptions{roman8}}
16 \DeclareOption{macos}{\PassOptionsToPackage{applemac}{inputenc}}
17 \DeclareOption{mac}{\PassOptionsToPackage{applemac}{inputenc}}
18 \DeclareOption{tos}{\PassOptionsToPackage{atari}{inputenc}}
19 \DeclareOption{windows}{\PassOptionsToPackage{latin1}{inputenc}}
20 \DeclareOption{nogerman}{} % just declared for compatibility with v1.2
21 \DeclareOption*{\PassOptionsToPackage{\CurrentOption}{inputenc}}
22 \ProcessOptions*
23 \RequirePackage{inputenc}
24 /package
```

## 5 The input encoding file atari.def for ATARI™ ST(E)/TT/Falcon

atari.def is similar as cp437.def but:

- Character 158 is defined as `\ss` instead of `\textpeseta`.
- Characters 176—233 are defined additionally
- Character 254 is defined as `\maththreesuperior` instead of `\textblacksquare`.

```
25 (*atari)
26 \ProvidesFile{atari.def}[2006/01/29 v2.1 Input encoding file (AS)]
27 \makeatletter
28 \ProvideTextCommandDefault{\textdegree}{\ensuremath{{}^\circ}}
29 \ProvideTextCommandDefault{\textonehalf}{\ensuremath{\frac{1}{2}}}
30 \ProvideTextCommandDefault{\textonequarter}{\ensuremath{\frac{1}{4}}}
31 \ProvideTextCommandDefault{\textthreequarters}{\ensuremath{\frac{3}{4}}}
32 \ProvideTextCommandDefault{\texttrademark}{\ensuremath{\textsuperscript{TM}}}
33 \ProvideTextCommandDefault{\textflorin}{\textit{f}}
34 \ProvideTextCommandDefault{\textpeseta}{Pt}
35 \ProvideTextCommandDefault{\textblacksquare}
36   {\vrule \@width .3em \@height .4em \@depth -.1em\relax}
```

```

37 \ProvideTextCommandDefault{\textcent}
38   {\TextSymbolUnavailable\textcent}
39 \ProvideTextCommandDefault{\textyen}
40   {\TextSymbolUnavailable\textyen}
41 \ProvideTextCommandDefault{\textcurrency}
42   {\TextSymbolUnavailable\textcurrency}
43 \ProvideTextCommandDefault{\textbrokenbar}
44   {\TextSymbolUnavailable\textbrokenbar}

45 \providecommand{\mathonesuperior}{^{1}}
46 \providecommand{\mathtwosuperior}{^{2}}
47 \providecommand{\maththreesuperior}{^{3}}
48 \providecommand{\mathnsuperior}{^{n}}

49 \DeclareInputText{128}{\c C}
50 \DeclareInputText{129}{\u}
51 \DeclareInputText{130}{\@tabacckludge'e}
52 \DeclareInputText{131}{\^a}
53 \DeclareInputText{132}{\a}
54 \DeclareInputText{133}{\@tabacckludge`a}
55 \DeclareInputText{134}{\r a}
56 \DeclareInputText{135}{\c c}
57 \DeclareInputText{136}{\^e}
58 \DeclareInputText{137}{\e}
59 \DeclareInputText{138}{\@tabacckludge`e}
60 \DeclareInputText{139}{\`i}
61 \DeclareInputText{140}{\^i}
62 \DeclareInputText{141}{\@tabacckludge`i}
63 \DeclareInputText{142}{\A}
64 \DeclareInputText{143}{\r A}
65 \DeclareInputText{144}{\@tabacckludge`E}
66 \DeclareInputText{145}{\ae}
67 \DeclareInputText{146}{\AE}
68 \DeclareInputText{147}{\^o}
69 \DeclareInputText{148}{\o}
70 \DeclareInputText{149}{\@tabacckludge`o}
71 \DeclareInputText{150}{\^u}
72 \DeclareInputText{151}{\@tabacckludge`u}
73 \DeclareInputText{152}{\`y}
74 \DeclareInputText{153}{\`O}
75 \DeclareInputText{154}{\`U}
76 \DeclareInputText{155}{\textcent}
77 \DeclareInputText{156}{\pounds}
78 \DeclareInputText{157}{\textyen}
79 \DeclareInputText{158}{\ss} % german sz
80 \DeclareInputText{159}{\textflorin}
81 \DeclareInputText{160}{\@tabacckludge`a}
82 \DeclareInputText{161}{\@tabacckludge`i}
83 \DeclareInputText{162}{\@tabacckludge`o}
84 \DeclareInputText{163}{\@tabacckludge`u}
85 \DeclareInputText{164}{\~n}
86 \DeclareInputText{165}{\~N}
87 \DeclareInputText{166}{\textordfeminine}
88 \DeclareInputText{167}{\textordmasculine}
89 \DeclareInputText{168}{\textquestiondown}

```

```

90 \DeclareInputMath{170}{\lnot}
91 \DeclareInputText{171}{\textonehalf}
92 \DeclareInputText{172}{\textonequarter}
93 \DeclareInputText{173}{\textexclamdown}
94 \DeclareInputText{174}{\guillemotleft}
95 \DeclareInputText{175}{\guillemotright}
96 \DeclareInputText{176}{\~a}
97 \DeclareInputText{177}{\~o}
98 \DeclareInputText{178}{\O}
99 \DeclareInputText{179}{\o}
100 \DeclareInputText{180}{\oe}
101 \DeclareInputText{181}{\OE}
102 \DeclareInputText{182}{\@tabacckludge 'A}
103 \DeclareInputText{183}{\~A}
104 \DeclareInputText{184}{\~O}
105 \DeclareInputText{185}{\ " {}}
106 \DeclareInputText{186}{\ ' {}}
107 \DeclareInputText{187}{\dag}
108 \DeclareInputText{188}{\P}
109 \DeclareInputText{189}{\copyright}
110 \DeclareInputText{190}{\textregistered}
111 \DeclareInputText{191}{\texttrademark}
112 \DeclareInputText{221}{\S}
113 \DeclareInputText{222}{\^ {}}
114 \DeclareInputMath{223}{\infty}
115 \DeclareInputMath{224}{\alpha}
116 \DeclareInputMath{225}{\beta}
117 \DeclareInputMath{226}{\Gamma}
118 \DeclareInputMath{227}{\pi}
119 \DeclareInputMath{228}{\Sigma}
120 \DeclareInputMath{229}{\sigma}
121 \DeclareInputMath{230}{\mu}
122 \DeclareInputMath{231}{\gamma}
123 \DeclareInputMath{232}{\Phi}
124 \DeclareInputMath{233}{\theta}
125 \DeclareInputMath{234}{\Omega}
126 \DeclareInputMath{235}{\delta}
127 \DeclareInputMath{236}{\infty}
128 \DeclareInputMath{237}{\phi}
129 \DeclareInputMath{238}{\varepsilon}
130 \DeclareInputMath{239}{\cap}
131 \DeclareInputMath{240}{\equiv}
132 \DeclareInputMath{241}{\pm}
133 \DeclareInputMath{242}{\ge}
134 \DeclareInputMath{243}{\le}
135 \DeclareInputMath{246}{\div}
136 \DeclareInputMath{247}{\approx}
137 \DeclareInputText{248}{\textdegree}
138 \DeclareInputText{249}{\textperiodcentered}
139 \DeclareInputText{250}{\textbullet}
140 \DeclareInputMath{251}{\surd}
141 \DeclareInputMath{252}{\mathnsuperior}
142 \DeclareInputMath{253}{\mathtwosuperior}
143 \DeclareInputText{254}{\maththreesuperior}

```

```

144 \DeclareInputText{255}{\nobreakspace}
145 \makeatother
146 \end{atari}

```

## 6 The input encoding file `isolatin.def`

```

147 \isolate
148 \ProvidesFile{isolatin.def}[2006/01/29 v2.1 Input encoding file (AS)]
149 \PackageWarning{umlaute}{%
150   This input encoding has been superseded by the 'latin1' encoding}
151 \input latin1.def
152 \end{isolatin}

```

## 7 The input encoding file `mac.def`

```

153 \mac
154 \ProvidesFile{mac.def}[2006/01/29 v2.1 Input encoding file (AS)]
155 \PackageWarning{umlaute}{%
156   This input encoding has been superseded by the 'applemac' encoding}
157 \input applemac.def
158 \end{mac}

```

## 8 The input encoding file `pc850.def`

```

159 \pc850
160 \ProvidesFile{pc850.def}[2006/01/29 v2.1 Input encoding file (AS)]
161 \PackageWarning{umlaute}{%
162   This input encoding has been superseded by the 'cp850' encoding}
163 \input cp850.def
164 \end{pc850}

```

## 9 The input encoding file `roman8.def` for HP-UX<sup>TM</sup>

```

165 \roman8
166 \ProvidesFile{roman8.def}[2006/01/29 v2.1 Input encoding file (AS)]
167 \makeatletter

168 \ProvideTextCommandDefault{\textdegree}{\ensuremath{{}^\circ}}
169 \ProvideTextCommandDefault{\textonehalf}{\ensuremath{\frac{1}{2}}}
170 \ProvideTextCommandDefault{\textonequarter}{\ensuremath{\frac{1}{4}}}
171 \ProvideTextCommandDefault{\textthreequarters}{\ensuremath{\frac{3}{4}}}
172 \ProvideTextCommandDefault{\texttrademark}{\ensuremath{\text{\textasciitilde}TM}}
173 \ProvideTextCommandDefault{\textflorin}{\textit{f}}
174 \ProvideTextCommandDefault{\textpeseta}{Pt}
175 \ProvideTextCommandDefault{\textblacksquare}
176   {\vrule \@width .3em \@height .4em \@depth -.1em\relax}
177 \ProvideTextCommandDefault{\textcent}
178   {\TextSymbolUnavailable\textcent}
179 \ProvideTextCommandDefault{\textyen}
180   {\TextSymbolUnavailable\textyen}
181 \ProvideTextCommandDefault{\textcurrency}
182   {\TextSymbolUnavailable\textcurrency}
183 \ProvideTextCommandDefault{\textbrokenbar}

```

```

184   {\TextSymbolUnavailable\textbrokenbar}

185 \providecommand{\mathonesuperior}{\^1}
186 \providecommand{\mathtwosuperior}{\^2}
187 \providecommand{\maththreesuperior}{\^3}
188 \providecommand{\mathnsuperior}{\^n}

189 \DeclareInputText{160}{~}
190 \DeclareInputText{161}{\@tabacckludge`A}
191 \DeclareInputText{162}{\^A}
192 \DeclareInputText{163}{\@tabacckludge`E}
193 \DeclareInputText{164}{\^E}
194 \DeclareInputText{165}{`E}
195 \DeclareInputText{166}{\^I}
196 \DeclareInputText{167}{`I}
197 \DeclareInputText{168}{\`{}}
198 \DeclareInputText{169}{\`{}}
199 \DeclareInputText{170}{\^{}}
200 \DeclareInputText{171}{`{}}
201 \DeclareInputText{172}{\~{}}
202 \DeclareInputText{173}{\@tabacckludge`U}
203 \DeclareInputText{174}{\^U}
204 \DeclareInputText{175}{\textlira}
205 \DeclareInputText{176}{\={}}
206 \DeclareInputText{177}{\@tabacckludge`Y}
207 \DeclareInputText{178}{\@tabacckludge`y}
208 \DeclareInputMath{179}{\mathdegree}
209 \DeclareInputText{180}{\c C}
210 \DeclareInputText{181}{\c c}
211 \DeclareInputText{182}{\~N}
212 \DeclareInputText{183}{\~n}
213 \DeclareInputText{184}{\textexclamdown}
214 \DeclareInputText{185}{\textquestiondown}
215 \DeclareInputText{186}{\textcurrency}
216 \DeclareInputText{187}{\textsterling}
217 \DeclareInputText{188}{\textyen}
218 \DeclareInputText{189}{\S}
219 \DeclareInputText{190}{\textgulden}
220 \DeclareInputText{191}{\textcent}
221 \DeclareInputText{192}{\^a}
222 \DeclareInputText{193}{\^e}
223 \DeclareInputText{194}{\^o}
224 \DeclareInputText{195}{\^u}
225 \DeclareInputText{196}{\@tabacckludge`a}
226 \DeclareInputText{197}{\@tabacckludge`e}
227 \DeclareInputText{198}{\@tabacckludge`o}
228 \DeclareInputText{199}{\@tabacckludge`u}
229 \DeclareInputText{200}{\@tabacckludge`a}
230 \DeclareInputText{201}{\@tabacckludge`e}
231 \DeclareInputText{202}{\@tabacckludge`o}
232 \DeclareInputText{203}{\@tabacckludge`u}
233 \DeclareInputText{204}{`a}
234 \DeclareInputText{205}{`e}
235 \DeclareInputText{206}{`o}
236 \DeclareInputText{207}{`u}

```

```

237 \DeclareInputText {208} {\AA}
238 \DeclareInputText {209} {\^i}
239 \DeclareInputText {210} {\O}
240 \DeclareInputText {211} {\AE}
241 \DeclareInputText {212} {\aa}
242 \DeclareInputText {213} {\@tabacckludge'i}
243 \DeclareInputText {214} {\o}
244 \DeclareInputText {215} {\ae}
245 \DeclareInputText {216} {"A}
246 \DeclareInputText {217} {\@tabacckludge'i}
247 \DeclareInputText {218} {"O}
248 \DeclareInputText {219} {"U}
249 \DeclareInputText {220} {\@tabacckludge'E}
250 \DeclareInputText {221} {"i}
251 \DeclareInputText {222} {\ss}
252 \DeclareInputText {223} {\^O}
253 \DeclareInputText {224} {\@tabacckludge'A}
254 \DeclareInputText {225} {\~A}
255 \DeclareInputText {226} {\~a}
256 \DeclareInputText {227} {\DH}
257 \DeclareInputText {228} {\dh}
258 \DeclareInputText {229} {\@tabacckludge'I}
259 \DeclareInputText {230} {\@tabacckludge'I}
260 \DeclareInputText {231} {\@tabacckludge'O}
261 \DeclareInputText {232} {\@tabacckludge'O}
262 \DeclareInputText {233} {\~O}
263 \DeclareInputText {234} {\~o}
264 \DeclareInputText {235} {\v{S}}
265 \DeclareInputText {236} {\v{s}}
266 \DeclareInputText {237} {\@tabacckludge'U}
267 \DeclareInputText {238} {"Y}
268 \DeclareInputText {239} {"y}
269 \DeclareInputText {240} {\TH}
270 \DeclareInputText {241} {\th}
271 \DeclareInputText {242} {\textperiodcentered}
272 \DeclareInputMath {243} {\mu}
273 \DeclareInputText {244} {\P}
274 \DeclareInputText {245} {\textthreequarters}
275 \DeclareInputText {246} {\textemdash}
276 \DeclareInputText {247} {\textonequarter}
277 \DeclareInputText {248} {\textonehalf}
278 \DeclareInputMath {249} {\mathordmasculine}
279 \DeclareInputMath {250} {\mathordfeminine}
280 \DeclareInputText {251} {\guillemotleft}
281 \DeclareInputText {252} {\textblacksquare}
282 \DeclareInputText {253} {\guillemotright}
283 \DeclareInputMath {254} {\pm}
284 \DeclareInputText {255} {\nobreakspace}

285 \makeatother
286 </roman8>

```



## References

- [1] Alan Jeffrey & Frank Mittelbach: *An input encoding package for  $\text{\LaTeX} 2_{\epsilon}$  (v0.99a)*, 2001/07/10