

1 The Cyrillic font encodings: T2A, T2B, T2C, and X2

Since the number of Cyrillic glyphs exceeds the limit for a ‘T’ encoding, it is necessary to create multiple glyph containers. The output encodings ‘T2A’, ‘T2B’, and ‘T2C’ are the result of long discussions in various Internet mailing lists; they emerged from the ‘X2’ glyph container which was previously called ‘T2’. Please consult section 6.4 (‘Naming conventions’) in the file `fmtguide.tex` of the base $\text{\LaTeX 2}_{\epsilon}$ distribution for details on the differences between \LaTeX font encodings.

When typesetting Cyrillic texts, there is a tradition to use Cyrillic letters (in some situations) inside math formulæ just like Latin letters. By default, this does not work, because symbols declared with `\DeclareTextSymbol` may not be used inside math. If you need to ‘transparently’ typeset symbols in math formulæ which are declared in encoding definition files, you could use the `mathtext` package available at `CTAN:macros/latex/contrib/supported/t2`. Note that this package uses at least one additional math alphabet per font encoding.

To make code more compact, we use the `\LastDeclaredEncoding` macro to share the same lines in the DTX file for different encodings. This macro appeared in the December 1998 $\text{\LaTeX 2}_{\epsilon}$ release (together with the integration of Cyrillic stuff), thus we use `\NeedsTeXFormat` below. We will probably change this ‘sharing mechanism’ to use a yet-to-be-written `docstrip` extension (namely, substring substitution) in the future.

```
1 (*X2 j T2A j T2B j T2C)
2 \NeedsTeXFormat{LaTeX2e}[1998/12/01]
3 \X2\ProvidesFile{x2enc.def}
4 \T2A\ProvidesFile{t2aenc.def}
5 \T2B\ProvidesFile{t2benc.def}
6 \T2C\ProvidesFile{t2cenc.def}
7 [2005/09/27 v1.0i Cyrillic encoding definition file]
```

To assure that `\MakeUppercase` and `\MakeLowercase` will work correctly, `\@uclclist` (defined in the \LaTeX kernel) contains all Cyrillic uppercase-lowercase letter pairs. This also needs at least December 1998 $\text{\LaTeX 2}_{\epsilon}$ release.

```
8 \X2\DeclareFontEncoding{X2}{-}{-}
9 \T2A\DeclareFontEncoding{T2A}{-}{-}
10 \T2B\DeclareFontEncoding{T2B}{-}{-}
11 \T2C\DeclareFontEncoding{T2C}{-}{-}
12 \DeclareFontSubstitution{\LastDeclaredEncoding}{cmr}{m}{n}
```

Common accents.

```
13 \DeclareTextAccent{\`}{\LastDeclaredEncoding}{0}
14 \DeclareTextAccent{\'}{\LastDeclaredEncoding}{1}
15 \DeclareTextAccent{\^}{\LastDeclaredEncoding}{2}
16 \DeclareTextAccent{\~}{\LastDeclaredEncoding}{3}
17 \DeclareTextAccent{\"}{\LastDeclaredEncoding}{4}
18 \DeclareTextAccent{\H}{\LastDeclaredEncoding}{5}
19 \DeclareTextAccent{\r}{\LastDeclaredEncoding}{6}
20 \DeclareTextAccent{\v}{\LastDeclaredEncoding}{7}
21 \DeclareTextAccent{\u}{\LastDeclaredEncoding}{8}
22 \DeclareTextAccent{\=}{\LastDeclaredEncoding}{9}
23 \DeclareTextAccent{\.}{\LastDeclaredEncoding}{10}
24 % 11 cedilla
25 % 12 ogonek
26 % Cyrillic flex (inverted breve) accent:
27 \DeclareTextAccent{\f}{\LastDeclaredEncoding}{18}
28 % double grave (Cyrillic umlaut) accent:
29 \DeclareTextAccent{\C}{\LastDeclaredEncoding}{19}
30 % Cyrillic breve accent:
31 \DeclareTextAccent{\U}{\LastDeclaredEncoding}{20}
```

In these definitions we no longer use the helper function `\sh@ft` from `plain.tex` since that now has two incompatible definitions.

```

32 \DeclareTextCommand{\b}{\LastDeclaredEncoding}[1]
33   {\hmode\bgroup\o@lign{\relax#1\crrc\hidewidth\ltx@sh@ft{-3ex}%
34     \vbox to.2ex{\hbox{\char9}\vss}\hidewidth}\egroup}
35 \DeclareTextCommand{\c}{\LastDeclaredEncoding}[1]
36   {\leavevmode\setbox\z@\hbox{#1}\ifdim\ht\z@=1ex\accent11 #1%
37     \else{\ooalign{\hidewidth\char11\hidewidth
38       \crrc\unhbox\z@}\fi}
39 \DeclareTextCommand{\d}{\LastDeclaredEncoding}[1]
40   {\hmode\bgroup
41     \o@lign{\relax#1\crrc\hidewidth\ltx@sh@ft{-1ex}.\hidewidth}\egroup}
42 \DeclareTextCommand{\k}{\LastDeclaredEncoding}[1]
43   {\oalign{\null#1\crrc\hidewidth\char12}}
44 \DeclareTextCommand{\textperthousand}{\LastDeclaredEncoding}
45   {\%\char 24 }
46 \DeclareTextCommand{\textpertenthousand}{\LastDeclaredEncoding}
47   {\%\char 24\char 24 }
48 \(*!X2 & AAhack)
49 \DeclareTextCompositeCommand{\r}{\LastDeclaredEncoding}{A}
50   {\leavevmode\setbox\z@\hbox{!}\dimen@ \ht\z@ \advance \dimen@ -1ex%
51     \rlap{\raise.67\dimen@\hbox{\char6}}A}
52 \(/!X2 & AAhack)

```

Common symbolic glyphs.

```

53 \DeclareTextSymbol{\textendash}{\LastDeclaredEncoding}{21}

```

Slot 22 is a ‘cyrillic emdash’ — `\cyrdash` which is longer than endash, but shorter than english emdash (but we define an alias too).

```

54 \DeclareTextSymbol{\cyrdash}{\LastDeclaredEncoding}{22}
55 \DeclareTextSymbol{\textemdash}{\LastDeclaredEncoding}{22}
56 \DeclareTextSymbol{\textcompwordmark}{\LastDeclaredEncoding}{23}
57 % 24 perthousandzero
58 \DeclareTextSymbol{\textvisiblespace}{\LastDeclaredEncoding}{32}
59 \DeclareTextSymbol{\textdollar}{\LastDeclaredEncoding}{36}
60 \DeclareTextSymbol{\textless}{\LastDeclaredEncoding}{60}
61 \DeclareTextSymbol{\textgreater}{\LastDeclaredEncoding}{62}
62 %\DeclareTextSymbol{\texthyphenchar}{\LastDeclaredEncoding}{127}
63 %\DeclareTextSymbol{\texthyphen}{\LastDeclaredEncoding}{45}
64 \DeclareTextSymbol{\textbackslash}{\LastDeclaredEncoding}{92}
65 \DeclareTextSymbol{\textasciicircum}{\LastDeclaredEncoding}{94}
66 \DeclareTextSymbol{\textunderscore}{\LastDeclaredEncoding}{95}
67 \DeclareTextSymbol{\textbraceleft}{\LastDeclaredEncoding}{123}
68 \DeclareTextSymbol{\textbar}{\LastDeclaredEncoding}{124}
69 \DeclareTextSymbol{\textbraceright}{\LastDeclaredEncoding}{125}
70 \DeclareTextSymbol{\textasciitilde}{\LastDeclaredEncoding}{126}
71 \DeclareTextSymbol{\textnumero}{\LastDeclaredEncoding}{157}
72 \DeclareTextSymbol{\textcurrency}{\LastDeclaredEncoding}{158}
73 \DeclareTextSymbol{\textsection}{\LastDeclaredEncoding}{159}
74 %
75 \DeclareTextSymbol{\textquotedbl}{\LastDeclaredEncoding}{34}
76 \DeclareTextSymbol{\textquoteleft}{\LastDeclaredEncoding}{96}
77 \DeclareTextSymbol{\textquoteright}{\LastDeclaredEncoding}{39}
78 \DeclareTextSymbol{\textquotedblleft}{\LastDeclaredEncoding}{16}
79 \DeclareTextSymbol{\textquotedblright}{\LastDeclaredEncoding}{17}
80 \DeclareTextSymbol{\quotedblbase}{\LastDeclaredEncoding}{189}
81 \DeclareTextSymbol{\CYRpalochka}{\LastDeclaredEncoding}{13}
82 \DeclareTextSymbol{\cyrlangle}{\LastDeclaredEncoding}{14}
83 \DeclareTextSymbol{\cyrrangle}{\LastDeclaredEncoding}{15}
84 \DeclareTextSymbol{\guillemotleft}{\LastDeclaredEncoding}{190}
85 \DeclareTextSymbol{\guillemotright}{\LastDeclaredEncoding}{191}

```

`\i` and `\j` are unused in Cyrillic languages, so are absent in X2. Slots 25,

26, 27 in the X2 encoding are ‘cross grave’, ‘cross acute’, and ‘hcross’ modifiers, respectively.

```
86 (!X2)\DeclareTextSymbol{\i}{\LastDeclaredEncoding}{25}  
87 (!X2)\DeclareTextSymbol{\j}{\LastDeclaredEncoding}{26}  
88 \DeclareTextComposite{.}{\LastDeclaredEncoding}{i}{\i}
```

Here are the letters common to all font encodings.

```
89 \DeclareTextSymbol{\CYRA}{\LastDeclaredEncoding}{192}  
90 \DeclareTextSymbol{\cyra}{\LastDeclaredEncoding}{224}  
91 \DeclareTextSymbol{\CYRB}{\LastDeclaredEncoding}{193}  
92 \DeclareTextSymbol{\cyrb}{\LastDeclaredEncoding}{225}  
93 \DeclareTextSymbol{\CYRV}{\LastDeclaredEncoding}{194}  
94 \DeclareTextSymbol{\cyrv}{\LastDeclaredEncoding}{226}  
95 \DeclareTextSymbol{\CYRG}{\LastDeclaredEncoding}{195}  
96 \DeclareTextSymbol{\cyrg}{\LastDeclaredEncoding}{227}  
97 \DeclareTextSymbol{\CYRD}{\LastDeclaredEncoding}{196}  
98 \DeclareTextSymbol{\cyrd}{\LastDeclaredEncoding}{228}  
99 \DeclareTextSymbol{\CYRE}{\LastDeclaredEncoding}{197}  
100 \DeclareTextSymbol{\cyre}{\LastDeclaredEncoding}{229}  
101 \DeclareTextSymbol{\CYRZH}{\LastDeclaredEncoding}{198}  
102 \DeclareTextSymbol{\cyrzh}{\LastDeclaredEncoding}{230}  
103 \DeclareTextSymbol{\CYRZ}{\LastDeclaredEncoding}{199}  
104 \DeclareTextSymbol{\cyrz}{\LastDeclaredEncoding}{231}  
105 \DeclareTextSymbol{\CYRI}{\LastDeclaredEncoding}{200}  
106 \DeclareTextSymbol{\cyri}{\LastDeclaredEncoding}{232}  
107 \DeclareTextSymbol{\CYRISHRT}{\LastDeclaredEncoding}{201}  
108 \DeclareTextSymbol{\cyrishrt}{\LastDeclaredEncoding}{233}  
109 \DeclareTextSymbol{\CYRK}{\LastDeclaredEncoding}{202}  
110 \DeclareTextSymbol{\cyrk}{\LastDeclaredEncoding}{234}  
111 \DeclareTextSymbol{\CYRL}{\LastDeclaredEncoding}{203}  
112 \DeclareTextSymbol{\cyr1}{\LastDeclaredEncoding}{235}  
113 \DeclareTextSymbol{\CYRM}{\LastDeclaredEncoding}{204}  
114 \DeclareTextSymbol{\cyrm}{\LastDeclaredEncoding}{236}  
115 \DeclareTextSymbol{\CYRN}{\LastDeclaredEncoding}{205}  
116 \DeclareTextSymbol{\cyrn}{\LastDeclaredEncoding}{237}  
117 \DeclareTextSymbol{\CYRO}{\LastDeclaredEncoding}{206}  
118 \DeclareTextSymbol{\cyro}{\LastDeclaredEncoding}{238}  
119 \DeclareTextSymbol{\CYRP}{\LastDeclaredEncoding}{207}  
120 \DeclareTextSymbol{\cyrp}{\LastDeclaredEncoding}{239}  
121 \DeclareTextSymbol{\CYRR}{\LastDeclaredEncoding}{208}  
122 \DeclareTextSymbol{\cyr1}{\LastDeclaredEncoding}{240}  
123 \DeclareTextSymbol{\CYRS}{\LastDeclaredEncoding}{209}  
124 \DeclareTextSymbol{\cyr1}{\LastDeclaredEncoding}{241}  
125 \DeclareTextSymbol{\CYRT}{\LastDeclaredEncoding}{210}  
126 \DeclareTextSymbol{\cyr1}{\LastDeclaredEncoding}{242}  
127 \DeclareTextSymbol{\CYRU}{\LastDeclaredEncoding}{211}  
128 \DeclareTextSymbol{\cyr1}{\LastDeclaredEncoding}{243}  
129 \DeclareTextSymbol{\CYRF}{\LastDeclaredEncoding}{212}  
130 \DeclareTextSymbol{\cyr1}{\LastDeclaredEncoding}{244}  
131 \DeclareTextSymbol{\CYRH}{\LastDeclaredEncoding}{213}  
132 \DeclareTextSymbol{\cyr1}{\LastDeclaredEncoding}{245}  
133 \DeclareTextSymbol{\CYRC}{\LastDeclaredEncoding}{214}  
134 \DeclareTextSymbol{\cyr1}{\LastDeclaredEncoding}{246}  
135 \DeclareTextSymbol{\CYRCH}{\LastDeclaredEncoding}{215}  
136 \DeclareTextSymbol{\cyrch}{\LastDeclaredEncoding}{247}  
137 \DeclareTextSymbol{\CYRSH}{\LastDeclaredEncoding}{216}  
138 \DeclareTextSymbol{\cyrsh}{\LastDeclaredEncoding}{248}  
139 \DeclareTextSymbol{\CYRSHCH}{\LastDeclaredEncoding}{217}  
140 \DeclareTextSymbol{\cyrshch}{\LastDeclaredEncoding}{249}  
141 \DeclareTextSymbol{\CYRHRDSN}{\LastDeclaredEncoding}{218}  
142 \DeclareTextSymbol{\cyrhrdsn}{\LastDeclaredEncoding}{250}  
143 \DeclareTextSymbol{\CYRERY}{\LastDeclaredEncoding}{219}
```

```

144 \DeclareTextSymbol{\cyrery}{\LastDeclaredEncoding}{251}
145 \DeclareTextSymbol{\CYRSFTSN}{\LastDeclaredEncoding}{220}
146 \DeclareTextSymbol{\cyrstfn}{\LastDeclaredEncoding}{252}
147 \DeclareTextSymbol{\CYREREV}{\LastDeclaredEncoding}{221}
148 \DeclareTextSymbol{\cyrerev}{\LastDeclaredEncoding}{253}
149 \DeclareTextSymbol{\CYRYU}{\LastDeclaredEncoding}{222}
150 \DeclareTextSymbol{\cyrYu}{\LastDeclaredEncoding}{254}
151 \DeclareTextSymbol{\CYRYA}{\LastDeclaredEncoding}{223}
152 \DeclareTextSymbol{\cyrYa}{\LastDeclaredEncoding}{255}

```

And now the remaining letters.

```

153 (*X2)
154 \DeclareTextSymbol{\CYRGUP}{X2}{128}
155 \DeclareTextSymbol{\cyrGup}{X2}{160}
156 \DeclareTextSymbol{\CYRGHCRS}{X2}{129}
157 \DeclareTextSymbol{\cyrghcrs}{X2}{161}
158 \DeclareTextSymbol{\CYRGDSC}{X2}{130}
159 \DeclareTextSymbol{\cyrGdsc}{X2}{162}
160 \DeclareTextSymbol{\CYRGHK}{X2}{131}
161 \DeclareTextSymbol{\cyrghk}{X2}{163}
162 \DeclareTextSymbol{\CYRSHHA}{X2}{132}
163 \DeclareTextSymbol{\cyrshha}{X2}{164}
164 \DeclareTextSymbol{\CYRZHDSC}{X2}{133}
165 \DeclareTextSymbol{\cyrzhDsc}{X2}{165}
166 \DeclareTextSymbol{\CYRZDSC}{X2}{134}
167 \DeclareTextSymbol{\cyrzdsc}{X2}{166}
168 \DeclareTextSymbol{\CYRABHDZE}{X2}{135}
169 \DeclareTextSymbol{\cyrabhdze}{X2}{167}
170 \DeclareTextSymbol{\CYRYI}{X2}{136}
171 \DeclareTextSymbol{\cyrYi}{X2}{168}
172 \DeclareTextSymbol{\CYRKDSC}{X2}{137}
173 \DeclareTextSymbol{\cyrkdsc}{X2}{169}
174 \DeclareTextSymbol{\CYRKBEAK}{X2}{138}
175 \DeclareTextSymbol{\cyrkbeak}{X2}{170}
176 \DeclareTextSymbol{\CYRKHK}{X2}{139}
177 \DeclareTextSymbol{\cyrkhk}{X2}{171}
178 \DeclareTextSymbol{\CYRLHK}{X2}{140}
179 \DeclareTextSymbol{\cyrLhk}{X2}{172}
180 \DeclareTextSymbol{\CYRNDSC}{X2}{141}
181 \DeclareTextSymbol{\cyrndsc}{X2}{173}
182 \DeclareTextSymbol{\CYRNG}{X2}{142}
183 \DeclareTextSymbol{\cyrng}{X2}{174}
184 \DeclareTextSymbol{\CYRNHK}{X2}{143}
185 \DeclareTextSymbol{\cyrnhk}{X2}{175}
186 \DeclareTextSymbol{\CYROTLD}{X2}{144}
187 \DeclareTextSymbol{\cyrotld}{X2}{176}
188 \DeclareTextSymbol{\CYRSDSC}{X2}{145}
189 \DeclareTextSymbol{\cyrsdsc}{X2}{177}
190 \DeclareTextSymbol{\CYRUSHRT}{X2}{146}
191 \DeclareTextSymbol{\cyrushrt}{X2}{178}
192 \DeclareTextSymbol{\CYRY}{X2}{147}
193 \DeclareTextSymbol{\cyrY}{X2}{179}
194 \DeclareTextSymbol{\CYRYHCRS}{X2}{148}
195 \DeclareTextSymbol{\cyrYhcrs}{X2}{180}
196 \DeclareTextSymbol{\CYRHDSC}{X2}{149}
197 \DeclareTextSymbol{\cyrhdsc}{X2}{181}
198 \DeclareTextSymbol{\CYRHHK}{X2}{150}
199 \DeclareTextSymbol{\cyrhkhk}{X2}{182}
200 \DeclareTextSymbol{\CYRCHLDSC}{X2}{151}
201 \DeclareTextSymbol{\cyrchldsc}{X2}{183}
202 \DeclareTextSymbol{\CYRCHRDSC}{X2}{152}
203 \DeclareTextSymbol{\cyrchrDsc}{X2}{184}
204 \DeclareTextSymbol{\CYRIE}{X2}{153}

```

205 \DeclareTextSymbol{\cyrie}{X2}{185}
 206 \DeclareTextSymbol{\CYRSCHWA}{X2}{154}
 207 \DeclareTextSymbol{\cyrswa}{X2}{186}
 208 \DeclareTextSymbol{\CYREPS}{X2}{155}
 209 \DeclareTextSymbol{\cyreps}{X2}{187}
 210 </X2>
 211 %
 212 {*T2A}
 213 \DeclareTextSymbol{\CYRGUP}{T2A}{128}
 214 \DeclareTextSymbol{\cyrgup}{T2A}{160}
 215 \DeclareTextSymbol{\CYRGHCRS}{T2A}{129}
 216 \DeclareTextSymbol{\cyrghcrs}{T2A}{161}
 217 \DeclareTextSymbol{\CYRDJE}{T2A}{130}
 218 \DeclareTextSymbol{\cyrdje}{T2A}{162}
 219 \DeclareTextSymbol{\CYRTSHE}{T2A}{131}
 220 \DeclareTextSymbol{\cyrtshe}{T2A}{163}
 221 \DeclareTextSymbol{\CYRSHHA}{T2A}{132}
 222 \DeclareTextSymbol{\cyrshha}{T2A}{164}
 223 \DeclareTextSymbol{\CYRZHDSC}{T2A}{133}
 224 \DeclareTextSymbol{\cyrzhdsc}{T2A}{165}
 225 \DeclareTextSymbol{\CYRZDSC}{T2A}{134}
 226 \DeclareTextSymbol{\cyrzdsc}{T2A}{166}
 227 \DeclareTextSymbol{\CYRLJE}{T2A}{135}
 228 \DeclareTextSymbol{\cyrlje}{T2A}{167}
 229 \DeclareTextSymbol{\CYRYI}{T2A}{136}
 230 \DeclareTextSymbol{\cyryi}{T2A}{168}
 231 \DeclareTextSymbol{\CYRKDSC}{T2A}{137}
 232 \DeclareTextSymbol{\cyrkdsc}{T2A}{169}
 233 \DeclareTextSymbol{\CYRKBEAK}{T2A}{138}
 234 \DeclareTextSymbol{\cyrkbeak}{T2A}{170}
 235 \DeclareTextSymbol{\CYRKVCRS}{T2A}{139}
 236 \DeclareTextSymbol{\cyrkvcrs}{T2A}{171}
 237 \DeclareTextSymbol{\CYRAE}{T2A}{140}
 238 \DeclareTextSymbol{\cyrae}{T2A}{172}
 239 \DeclareTextSymbol{\CYRNDSC}{T2A}{141}
 240 \DeclareTextSymbol{\cyrndsc}{T2A}{173}
 241 \DeclareTextSymbol{\CYRNG}{T2A}{142}
 242 \DeclareTextSymbol{\cyrng}{T2A}{174}
 243 \DeclareTextSymbol{\CYRDZE}{T2A}{143}
 244 \DeclareTextSymbol{\cyrdze}{T2A}{175}
 245 \DeclareTextSymbol{\CYROTLT}{T2A}{144}
 246 \DeclareTextSymbol{\cyrotld}{T2A}{176}
 247 \DeclareTextSymbol{\CYRSDSC}{T2A}{145}
 248 \DeclareTextSymbol{\cyrsdsc}{T2A}{177}
 249 \DeclareTextSymbol{\CYRUSHRT}{T2A}{146}
 250 \DeclareTextSymbol{\cyrushrt}{T2A}{178}
 251 \DeclareTextSymbol{\CYRY}{T2A}{147}
 252 \DeclareTextSymbol{\cyry}{T2A}{179}
 253 \DeclareTextSymbol{\CYRYHCRS}{T2A}{148}
 254 \DeclareTextSymbol{\cyryhcrs}{T2A}{180}
 255 \DeclareTextSymbol{\CYRHDSC}{T2A}{149}
 256 \DeclareTextSymbol{\cyrhdsc}{T2A}{181}
 257 \DeclareTextSymbol{\CYRDZHE}{T2A}{150}
 258 \DeclareTextSymbol{\cyrdzhe}{T2A}{182}
 259 \DeclareTextSymbol{\CYRCHVCRS}{T2A}{151}
 260 \DeclareTextSymbol{\cyrchvcrs}{T2A}{183}
 261 \DeclareTextSymbol{\CYRCHRDSC}{T2A}{152}
 262 \DeclareTextSymbol{\cyrchrds}{T2A}{184}
 263 \DeclareTextSymbol{\CYRIE}{T2A}{153}
 264 \DeclareTextSymbol{\cyrie}{T2A}{185}
 265 \DeclareTextSymbol{\CYRSCHWA}{T2A}{154}
 266 \DeclareTextSymbol{\cyrswa}{T2A}{186}

```

267 \DeclareTextSymbol{\CYRNJE}{T2A}{155}
268 \DeclareTextSymbol{\cyrnje}{T2A}{187}
269 \end{T2A}
270 %
271 \begin{T2B}
272 \DeclareTextSymbol{\CYRGDSCHCRS}{T2B}{128}
273 \DeclareTextSymbol{\cyrgdschcrs}{T2B}{160}
274 \DeclareTextSymbol{\CYRGHCRS}{T2B}{129}
275 \DeclareTextSymbol{\cyrgchcrs}{T2B}{161}
276 \DeclareTextSymbol{\CYRGDSC}{T2B}{130}
277 \DeclareTextSymbol{\cyrgdsc}{T2B}{162}
278 \DeclareTextSymbol{\CYRGHK}{T2B}{131}
279 \DeclareTextSymbol{\cyrghk}{T2B}{163}
280 \DeclareTextSymbol{\CYRSHHA}{T2B}{132}
281 \DeclareTextSymbol{\cyrshha}{T2B}{164}
282 \DeclareTextSymbol{\CYRZHDSC}{T2B}{133}
283 \DeclareTextSymbol{\cyrzhdsc}{T2B}{165}
284 \DeclareTextSymbol{\CYRDELTA}{T2B}{134}
285 \DeclareTextSymbol{\cyrdelta}{T2B}{166}
286 \DeclareTextSymbol{\CYRABHDZE}{T2B}{135}
287 \DeclareTextSymbol{\cyrabhdze}{T2B}{167}
288 \DeclareTextSymbol{\CYRLJE}{T2B}{136}
289 \DeclareTextSymbol{\cyrlje}{T2B}{168}
290 \DeclareTextSymbol{\CYRKDSC}{T2B}{137}
291 \DeclareTextSymbol{\cyrkdsc}{T2B}{169}
292 \DeclareTextSymbol{\CYRLDSC}{T2B}{138}
293 \DeclareTextSymbol{\cyrldsc}{T2B}{170}
294 \DeclareTextSymbol{\CYRKHK}{T2B}{139}
295 \DeclareTextSymbol{\cyrkhk}{T2B}{171}
296 \DeclareTextSymbol{\CYRLHK}{T2B}{140}
297 \DeclareTextSymbol{\cyrllhk}{T2B}{172}
298 \DeclareTextSymbol{\CYRNDSC}{T2B}{141}
299 \DeclareTextSymbol{\cyrndsc}{T2B}{173}
300 \DeclareTextSymbol{\CYRNG}{T2B}{142}
301 \DeclareTextSymbol{\cyrng}{T2B}{174}
302 \DeclareTextSymbol{\CYRNHK}{T2B}{143}
303 \DeclareTextSymbol{\cyrnhk}{T2B}{175}
304 \DeclareTextSymbol{\CYROTL D}{T2B}{144}
305 \DeclareTextSymbol{\cyrotld}{T2B}{176}
306 \DeclareTextSymbol{\CYRSACRS}{T2B}{145}
307 \DeclareTextSymbol{\cyrsacrs}{T2B}{177}
308 \DeclareTextSymbol{\CYRUSHRT}{T2B}{146}
309 \DeclareTextSymbol{\cyrushrt}{T2B}{178}
310 \DeclareTextSymbol{\CYRY}{T2B}{147}
311 \DeclareTextSymbol{\cyry}{T2B}{179}
312 \DeclareTextSymbol{\CYRHHCRS}{T2B}{148}
313 \DeclareTextSymbol{\cyrhhcrs}{T2B}{180}
314 \DeclareTextSymbol{\CYRHDSC}{T2B}{149}
315 \DeclareTextSymbol{\cyrhdsc}{T2B}{181}
316 \DeclareTextSymbol{\CYRHHK}{T2B}{150}
317 \DeclareTextSymbol{\cyrhhk}{T2B}{182}
318 \DeclareTextSymbol{\CYRCHLDSC}{T2B}{151}
319 \DeclareTextSymbol{\cyrchldsc}{T2B}{183}
320 \DeclareTextSymbol{\CYRCHRDSC}{T2B}{152}
321 \DeclareTextSymbol{\cyrchrdsc}{T2B}{184}
322 \DeclareTextSymbol{\CYRNJE}{T2B}{153}
323 \DeclareTextSymbol{\cyrnje}{T2B}{185}
324 \DeclareTextSymbol{\CYRSCHWA}{T2B}{154}
325 \DeclareTextSymbol{\cyrschwa}{T2B}{186}
326 \DeclareTextSymbol{\CYREPS}{T2B}{155}
327 \DeclareTextSymbol{\cyreps}{T2B}{187}
328 \end{T2B}

```

```

329 %
330 {*T2C}
331 \DeclareTextSymbol{\CYRPHK}{T2C}{128}
332 \DeclareTextSymbol{\cyrphk}{T2C}{160}
333 \DeclareTextSymbol{\CYRTETSE}{T2C}{129}
334 \DeclareTextSymbol{\cyrtetse}{T2C}{161}
335 \DeclareTextSymbol{\CYRTDSC}{T2C}{130}
336 \DeclareTextSymbol{\cyrtdsc}{T2C}{162}
337 \DeclareTextSymbol{\CYRGHK}{T2C}{131}
338 \DeclareTextSymbol{\cyrghk}{T2C}{163}
339 \DeclareTextSymbol{\CYRSHHA}{T2C}{132}
340 \DeclareTextSymbol{\cyrshha}{T2C}{164}
341 \DeclareTextSymbol{\CYRRDSC}{T2C}{133}
342 \DeclareTextSymbol{\cyrrdsc}{T2C}{165}
343 \DeclareTextSymbol{\CYRRTICK}{T2C}{134}
344 \DeclareTextSymbol{\cyrrtick}{T2C}{166}
345 \DeclareTextSymbol{\CYRABHDZE}{T2C}{135}
346 \DeclareTextSymbol{\cyrabhdze}{T2C}{167}
347 \DeclareTextSymbol{\CYRMDSC}{T2C}{136}
348 \DeclareTextSymbol{\cyrmdsc}{T2C}{168}
349 \DeclareTextSymbol{\CYRKDSC}{T2C}{137}
350 \DeclareTextSymbol{\cyrkdsc}{T2C}{169}
351 \DeclareTextSymbol{\CYRLDSC}{T2C}{138}
352 \DeclareTextSymbol{\cyrldsc}{T2C}{170}
353 \DeclareTextSymbol{\CYRKHCRS}{T2C}{139}
354 \DeclareTextSymbol{\cyrkhcrs}{T2C}{171}
355 \DeclareTextSymbol{\CYRLHK}{T2C}{140}
356 \DeclareTextSymbol{\cyr1hk}{T2C}{172}
357 \DeclareTextSymbol{\CYRNDSC}{T2C}{141}
358 \DeclareTextSymbol{\cyrndsc}{T2C}{173}
359 \DeclareTextSymbol{\CYRMHK}{T2C}{142}
360 \DeclareTextSymbol{\cyrmhk}{T2C}{174}
361 \DeclareTextSymbol{\CYRNHK}{T2C}{143}
362 \DeclareTextSymbol{\cyrnhk}{T2C}{175}
363 \DeclareTextSymbol{\CYROTLD}{T2C}{144}
364 \DeclareTextSymbol{\cyrotld}{T2C}{176}
365 \DeclareTextSymbol{\CYRABHCH}{T2C}{145}
366 \DeclareTextSymbol{\cyrabhch}{T2C}{177}
367 \DeclareTextSymbol{\CYRABCHDSC}{T2C}{146}
368 \DeclareTextSymbol{\cyrabhchdsc}{T2C}{178}
369 \DeclareTextSymbol{\CYRSEMISFTSN}{T2C}{147}
370 \DeclareTextSymbol{\cyrsemisftsn}{T2C}{179}
371 \DeclareTextSymbol{\CYRISHRTDSC}{T2C}{148}
372 \DeclareTextSymbol{\cyrishrtdsc}{T2C}{180}
373 \DeclareTextSymbol{\CYRHDSC}{T2C}{149}
374 \DeclareTextSymbol{\cyrhdsc}{T2C}{181}
375 \DeclareTextSymbol{\CYRDZHE}{T2C}{150}
376 \DeclareTextSymbol{\cyrdzhe}{T2C}{182}
377 \DeclareTextSymbol{\CYRABHHA}{T2C}{151}
378 \DeclareTextSymbol{\cyrabhha}{T2C}{183}
379 \DeclareTextSymbol{\CYRCHRDSC}{T2C}{152}
380 \DeclareTextSymbol{\cyrchrds}{T2C}{184}
381 \DeclareTextSymbol{\CYRNLHK}{T2C}{153}
382 \DeclareTextSymbol{\cyrnlhk}{T2C}{185}
383 \DeclareTextSymbol{\CYRSCHWA}{T2C}{154}
384 \DeclareTextSymbol{\cyrschwa}{T2C}{186}
385 \DeclareTextSymbol{\CYRRHK}{T2C}{155}
386 \DeclareTextSymbol{\cyr rhk}{T2C}{187}
387 (/T2C)
388 %
389 \DeclareTextSymbol{\CYRYO}{\LastDeclaredEncoding}{156}
390 \DeclareTextSymbol{\cyryo}{\LastDeclaredEncoding}{188}

```

The final block of Cyrillic letters occupies the space covered with Latin letters in ASCII. These letters are only present in X2 encoding (which does not contain Latin letters at all). However, some Cyrillic glyphs here look exactly like some Latin analogues, and we declare them also for T2* encodings, so that they are accessible from inputenc files. In T2* encodings, these letters share the same slots with the corresponding Latin letters. The affected letters are: \CYRII, \CYRJE, \CYRQ, \CYRDZE, \CYRW (and lowercase forms).

```

391 <*X2>
392 \DeclareTextSymbol{\CYRAE}{X2}{65}
393 \DeclareTextSymbol{\cyrae}{X2}{97}
394 \DeclareTextSymbol{\CYRDJE}{X2}{66}
395 \DeclareTextSymbol{\cyrdje}{X2}{98}
396 \DeclareTextSymbol{\CYRTSHE}{X2}{67}
397 \DeclareTextSymbol{\cyrtshe}{X2}{99}
398 \DeclareTextSymbol{\CYRABHCH}{X2}{68}
399 \DeclareTextSymbol{\cyrabhch}{X2}{100}
400 \DeclareTextSymbol{\CYRABHCHDSC}{X2}{69}
401 \DeclareTextSymbol{\cyrabhchdsc}{X2}{101}
402 \DeclareTextSymbol{\CYRKVCRS}{X2}{70}
403 \DeclareTextSymbol{\cyrkvcrs}{X2}{102}
404 \DeclareTextSymbol{\CYRKHCRS}{X2}{71}
405 \DeclareTextSymbol{\cyrkhcrs}{X2}{103}
406 \DeclareTextSymbol{\CYRLDSC}{X2}{72}
407 \DeclareTextSymbol{\cyrl dsc}{X2}{104}
408 </X2>
409 \DeclareTextSymbol{\CYRII}{\LastDeclaredEncoding}{73}
410 \DeclareTextSymbol{\cyrii}{\LastDeclaredEncoding}{105}
411 \DeclareTextSymbol{\CYRJE}{\LastDeclaredEncoding}{74}
412 \DeclareTextSymbol{\cyrje}{\LastDeclaredEncoding}{106}
413 <*X2>
414 \DeclareTextSymbol{\CYRLJE}{X2}{75}
415 \DeclareTextSymbol{\cyrlje}{X2}{107}
416 \DeclareTextSymbol{\CYRMDSC}{X2}{76}
417 \DeclareTextSymbol{\cyrmdsc}{X2}{108}
418 \DeclareTextSymbol{\CYRNJE}{X2}{77}
419 \DeclareTextSymbol{\cyrnje}{X2}{109}
420 \DeclareTextSymbol{\CYRABHHA}{X2}{78}
421 \DeclareTextSymbol{\cyrabhha}{X2}{110}
422 \DeclareTextSymbol{\CYRPHK}{X2}{79}
423 \DeclareTextSymbol{\cyrphk}{X2}{111}
424 \DeclareTextSymbol{\CYRRDSC}{X2}{80}
425 \DeclareTextSymbol{\cyrrdsc}{X2}{112}
426 </X2>
427 \DeclareTextSymbol{\CYRQ}{\LastDeclaredEncoding}{81}
428 \DeclareTextSymbol{\cyrq}{\LastDeclaredEncoding}{113}
429 <*X2>
430 \DeclareTextSymbol{\CYRTDSC}{X2}{82}
431 \DeclareTextSymbol{\cyrt dsc}{X2}{114}
432 </X2>
433 <! T2A> \DeclareTextSymbol{\CYRDZE}{\LastDeclaredEncoding}{83}
434 <! T2A> \DeclareTextSymbol{\cyrdze}{\LastDeclaredEncoding}{115}
435 <*X2>
436 \DeclareTextSymbol{\CYRTETSE}{X2}{84}
437 \DeclareTextSymbol{\cyrtetse}{X2}{116}
438 \DeclareTextSymbol{\CYRDZHE}{X2}{85}
439 \DeclareTextSymbol{\cyrdzhe}{X2}{117}
440 \DeclareTextSymbol{\CYRCHVCRS}{X2}{86}
441 \DeclareTextSymbol{\cyrchvcrs}{X2}{118}
442 </X2>
443 \DeclareTextSymbol{\CYRW}{\LastDeclaredEncoding}{87}
444 \DeclareTextSymbol{\cyrw}{\LastDeclaredEncoding}{119}
445 <*X2>

```



```

446 \DeclareTextSymbol{\CYRYAT}{X2}{88}
447 \DeclareTextSymbol{\cyryat}{X2}{120}
448 \DeclareTextSymbol{\CYRBYUS}{X2}{89}
449 \DeclareTextSymbol{\cyrbyus}{X2}{121}
450 \DeclareTextSymbol{\CYRIZH}{X2}{90}
451 \DeclareTextSymbol{\cyrizh}{X2}{122}
452 \</X2>
453 \< *X2>
454 \DeclareTextSymbol{\CYRDELTA}{X2}{28}
455 \DeclareTextSymbol{\cyrdelta}{X2}{29}
456 \DeclareTextSymbol{\CYRNLHK}{X2}{30}
457 \DeclareTextSymbol{\cyrnlhk}{X2}{31}
458 \</X2>
459 \</X2 j T2A j T2B j T2C>

```

Text composites. The following declarations will not work for 8-bit chars generated via `inputenc` unless a `dblacnt` package is used.

```

460 \DeclareTextComposite{\}{\LastDeclaredEncoding}{\CYRE}{156}
461 \DeclareTextComposite{\}{\LastDeclaredEncoding}{\cyre}{188}
462 \DeclareTextComposite{\U}{\LastDeclaredEncoding}{\CYRI}{201}
463 \DeclareTextComposite{\U}{\LastDeclaredEncoding}{\cyri}{233}
464 \< *X2 j T2A>
465 \DeclareTextComposite{\}{\LastDeclaredEncoding}{\CYRII}{136}
466 \DeclareTextComposite{\}{\LastDeclaredEncoding}{\cyrii}{168}
467 \DeclareTextComposite{\c}{\LastDeclaredEncoding}{\CYRZ}{134}
468 \DeclareTextComposite{\c}{\LastDeclaredEncoding}{\cyrz}{166}
469 \DeclareTextComposite{\k}{\LastDeclaredEncoding}{\CYRS}{145}
470 \DeclareTextComposite{\k}{\LastDeclaredEncoding}{\cyrS}{177}
471 \</X2 j T2A>
472 \< *X2 j T2A j T2B>
473 \DeclareTextComposite{\U}{\LastDeclaredEncoding}{\CYRU}{146}
474 \DeclareTextComposite{\U}{\LastDeclaredEncoding}{\cyru}{178}
475 \</X2 j T2A j T2B>
476 \< *X2>
477 \DeclareTextComposite{\k}{X2}{\CYRABHCH}{69}
478 \DeclareTextComposite{\k}{X2}{\cyrabhch}{101}
479 \</X2>
480 \< *T2C>
481 \DeclareTextComposite{\k}{T2C}{\CYRABHCH}{146}
482 \DeclareTextComposite{\k}{T2C}{\cyrabhch}{178}
483 \</T2C>

```