

# CJKpunct 使用说明

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**CJKpunct** 是一个 L<sup>A</sup>T<sub>E</sub>X 宏包，用于排版中文标点，提供多种标点样式，以实现行末对齐、标点挤压等效果。其基本方法来自 CCT。

## 1 调用方式

```
\usepackage{CJKpunct}
```

## 2 常用宏命令

```
\punctstyle{<punct style>}
```

设置标点格式，有效值分别为

punct style	
banjiao	半角式
quanjiao	全角式
kaiming	开明式
hangmobanjiao	行末半角式
CCT	CCT 格式
plain	CJK 缺省格式

注意：为了得到最好的排版效果，需要制作字体相关的 CJKpunct.spa 文件。  
请参考 source/README.txt

```
\CJKpunctallowbreakbetweenpuncts  
\CJKpunctnobreakbetweenpuncts
```

缺省状态下，**CJKpunct** 禁止在相邻的标点间换行（行末半角和 CJK 缺省格

式除外)。使用

`\CJKpunctallowbreakbetweenpuncts`

改变这一设置。注意：行末半角和 CJK 缺省格式总是允许相邻标点间换行。

`\CJKpunctsetkern{<标点1>}{<标点2>}{<间距>}`

设置标点 1 与标点 2 之间的距离。例如，`\CJKpunctsetkern{:}{ “}{0.4em}`

`\CJKpunctmapfamily{<font encoding>}{<font family>}{<font series>}{<font shape>}{<punct family>}`

缺省状态下，`CJKpunct` 根据 `CJKfamily` 确定当前标点符号的实际字体。但这对 C19com 等组合字体不适用。此命令提供一个解决方案：用户可以指定 `{<font encoding>}`/`{<font family>}`/`{<font series>}`/`{<font shape>}` 所对应的标点符号字体。例如，对于 C19rm，可以做如下设置：

```
\CJKpunctmapfamily{C19}{rm}{m}{n}{song}
\CJKpunctmapfamily{C19}{rm}{bx}{n}{hei}
\CJKpunctmapfamily{C19}{rm}{m}{sl}{song}
\CJKpunctmapfamily{C19}{rm}{bx}{sl}{hei}
\CJKpunctmapfamily{C19}{rm}{m}{it}{kai}
\CJKpunctmapfamily{C19}{rm}{bx}{it}{kai}
```

### 3 制作 CJKpunct.spac 文件

文件 `CJKpunct.spac` 保存了字体相关的标点符号宽度。制作方法请参考 `source/README.txt`

## File I

# CJKpunct.sty

CJKpunct

```
1 \endlinechar \m@ne
2
3 \newif\if@CJKpunct
4 \newif\if@CJKpunct@dokerning
5 \newcount\CJKpunct@cnta
6 \newcount\CJKpunct@cntb
7 \newcount\CJKpunct@cntc
8 \newcount\CJKpunct@cntd
9 \newcount\CJKpunct@cnte
```

为使 `CJKpunct` 起作用，重定义一些 CJK 宏。

```
10 \let\CJKo@testLastCJK\CJK@testLastCJK
11 \def\CJKpunct@testLastCJK{
12   \global\CJK@false
13   \global\edef\CJKpunct@lastkern{\number\lastkern}}
14
15 \let\CJKo@testLastKern\CJK@testLastKern
16 \def\CJKpunct@testLastKern{
17   \global\CJK@false}
18
19 \let\CJKo@testPrePunct\CJK@testPrePunct
20 \let\CJKo@testPostPunct\CJK@testPostPunct
21 \def\CJKpunct@testPrePunct#1#2#3{}
22 \def\CJKpunct@testPostPunct#1#2#3{}
23
24
25 \let\CJKo@nobreakglue\CJK@nobreakglue
26 \let\CJKoglue\CJKglue
```

`\CJKsymbol` 的定义中需要三重括号以保证兼容 `CJKfntef` 宏包。

```
27
28 \let\CJKosymbol\CJKsymbol
29 \def\CJKpunct@CJKsymbol#1{
30   {{{
31     \ifnum\CJKpunct@lastkern>0\relax
32     \ifnum\CJKpunct@lastcharclass=0\relax
33       \CJKoglue
```

```

34 \else
35 \CJKpunct@ULspecials
36 \fi
37 \fi
38 \CJKosymbol{#1}
39 \gdef\CJKpunct@lastcharclass{0}}}}}}
40
41 \def\CJKpunct@lastcharclass{0}
42 \def\CJKpunct@lastkern{0}

```

标点符号的排版规则:

```

43 \let\CJKopunctsymbol\CJKpunctsymbol
44 \def\CJKpunct@CJKpunctsymbol#1{
45 \CJKpunct@setfamily
46 \CJKpunct@setmarginkerning
47 \edef\CJKpunct@currentpunct{\CJK@plane/\the#1}
48 \ifcsname CJKpunct@\CJK@enc @\CJKpunct@currentpunct\endcsname
49 \edef\CJKpunct@currentcharclass{
50 \csname CJKpunct@\CJK@enc @\CJKpunct@currentpunct\endcsname}
51 {{% We need three braces for CJKulem to work
52 \@CJKpunctfalse
53 \ifnum\CJKpunct@lastkern>0\relax
54 \ifnum\CJKpunct@lastcharclass>0\relax
55 \unkern
56 \unkern
57 \ifnum\CJKpunct@punctstyle>0\relax
58 \@CJKpuncttrue
59 \else
60 \ifcsname CJKpunct@specialpunct\CJK@enc \CJKpunct@currentpunct\endcsname
61 \@CJKpuncttrue
62 \fi
63 \fi
64 \fi
65 \fi
66 \if@CJKpunct
67 \CJKpunct@unskip
68 \CJKpunct@setkern{\CJKpunct@lastpunct}{\CJKpunct@currentpunct}
69 \kern \csname CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family
70 @kern\CJKpunct@lastpunct @\CJKpunct@currentpunct\endcsname
71 \CJKpunct@nobreak
72 \else
73 \CJKpunct@ULspecials
74 \ifnum\CJKpunct@currentcharclass=1\relax

```

```

75     \hskip \csname CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family
76     @lglue@\CJKpunct@currentpunct\endcsname plus 0.1em minus 0.1 em
77   \else
78     \ifcsname CJKpunct@specialpunct\CJK@enc \CJKpunct@currentpunct\endcsname
79     \CJKoglue % breakable
80   \else
81     \nobreak
82   \fi
83 \fi
84 \fi
85 \global\edef\CJKpunct@lastpunct{\CJKpunct@currentpunct}
86
87 \vrule width \csname CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family
88 @lrule@\CJKpunct@currentpunct\endcsname depth \z@ height \z@
89
90 \CJKopunctsymbol{#1}
91 \vrule width \csname CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family
92 @rrule@\CJKpunct@currentpunct\endcsname depth \z@ height \z@
93
94 \ifnum\CJKpunct@currentcharclass=2\relax
95   \hskip \csname CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family
96   @rglue@\CJKpunct@currentpunct\endcsname plus 0.1em minus 0.1 em
97   \fi
98   \global\let\CJKpunct@lastcharclass\CJKpunct@currentcharclass}}
99 \else
100   \CJKsymbol{#1}
101   \global\def\CJKpunct@lastcharclass{0}
102 \fi}

```

设置当前 font family.

```

103 \def\CJKpunct@setfamily{
104   \ifcsname \CJK@enc @\CJK@family @\f@series @\f@shape\endcsname
105   \global\edef\CJKpunct@family{\csname \CJK@enc @\CJK@family @\f@series @\f@shape\endcsname
106   \else
107     \edef\CJKpunct@family{\CJK@family}
108   \fi}
109
110 \def\CJKpunctmapfamily#1#2#3#4#5{
111   \expandafter\edef\csname #1@#2@#3@#4\endcsname{#5}}
112
113 \CJKpunctmapfamily{C19}{rm}{m}{n}{song}
114 \CJKpunctmapfamily{C19}{rm}{bx}{n}{hei}
115 \CJKpunctmapfamily{C19}{rm}{m}{sl}{song}
116 \CJKpunctmapfamily{C19}{rm}{bx}{sl}{hei}

```

```

117 \CJKpunctmapfamily{C19}{rm}{m}{it}{kai}
118 \CJKpunctmapfamily{C19}{rm}{bx}{it}{kai}
119
120 \CJKpunctmapfamily{C19}{com}{m}{n}{song}
121 \CJKpunctmapfamily{C19}{com}{bx}{n}{hei}
122 \CJKpunctmapfamily{C19}{com}{m}{sl}{kai}
123 \CJKpunctmapfamily{C19}{com}{bx}{sl}{kai}
124 \CJKpunctmapfamily{C19}{com}{m}{it}{kai}
125 \CJKpunctmapfamily{C19}{com}{bx}{it}{kai}
126
127 \CJKpunctmapfamily{C19}{sf}{m}{n}{you}
128 \CJKpunctmapfamily{C19}{sf}{bx}{n}{you}
129 \CJKpunctmapfamily{C19}{sf}{m}{sl}{you}
130 \CJKpunctmapfamily{C19}{sf}{bx}{sl}{you}
131 \CJKpunctmapfamily{C19}{sf}{m}{it}{you}
132 \CJKpunctmapfamily{C19}{sf}{bx}{it}{you}
133
134 \CJKpunctmapfamily{C19}{tt}{m}{n}{fs}
135 \CJKpunctmapfamily{C19}{tt}{bx}{n}{fs}
136 \CJKpunctmapfamily{C19}{tt}{m}{sl}{fs}
137 \CJKpunctmapfamily{C19}{tt}{bx}{sl}{fs}
138 \CJKpunctmapfamily{C19}{tt}{m}{it}{fs}
139 \CJKpunctmapfamily{C19}{tt}{bx}{it}{fs}

```

CJK 缺省标点符号格式

```

140 \def\CJKpunct@plainpunctsymbol#1#2{
141   \CJKpunctsymbol{#2}}

```

设置标点符号边界宽度。

```

142 \def\CJKpunct@setmarginkerning{
143   \ifcsname CJKpunct @\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family\endcsname
144   \else
145     \expandafter\gdef\csname CJKpunct @\CJKpunct@punctstyle @\CJK@enc
146       @\CJKpunct@family\endcsname{
147       \ifcsname CJKpunct@\CJKpunct@family @spaces\endcsname
148         \PackageInfo{CJKpunct}{use punctuation spaces for family '\CJKpunct@family'
149           \space with punctstyle (\CJKpunct@currentpunctstyle)}\relax
150         \edef\CJKpunct@spaces{\csname CJKpunct@\CJKpunct@family @spaces\endcsname}
151       \else
152         \ifcsname CJKpunct@spaces@\CJKpunct@family\endcsname
153         \else
154           \PackageInfo{CJKpunct}{punctuation spaces for family '\CJKpunct@family' do not exist
155             \space Use family 'def' instead.}\relax

```

```

156     \global\expandafter\def\csname CJKpunct@spaces@\CJKpunct@family\endcsname{}
157     \fi
158     \edef\CJKpunct@spaces{\csname CJKpunct@def@spaces\endcsname}
159     \fi
160     \CJKpunct@cnta=0\relax
161     \expandafter\CJKpunct@@setmarginkerning\CJKpunct@spaces
162 \fi}
163
164 \def\CJKpunct@@setmarginkerning#1,#2,{
165     \edef\CJKpunct@temp{#1}
166     \ifx\CJKpunct@temp\@empty
167         \def\CJKpunct@temp{}
168     \else
169         \def\CJKpunct@temp{\CJKpunct@@setmarginkerning}
170         \ifnum\CJKpunct@cnta<12
171             \def\CJKpunct@lr{1}
172         \else
173             \def\CJKpunct@lr{r}
174         \fi
175         \edef\CJKpunct@encpn{\csname CJKpunct@pn@\CJK@enc @\the\CJKpunct@cnta\endcsname}
176         \if 1\CJKpunct@lr
177             \expandafter\gdef\csname CJKpunct@\CJK@enc @\CJKpunct@encpn\endcsname{1}
178         \else
179             \expandafter\gdef\csname CJKpunct@\CJK@enc @\CJKpunct@encpn\endcsname{2}
180         \fi
181
182         \@CJKpunct@dokerningtrue
183         \ifnum\CJKpunct@punctstyle=\CJKpunct@ps@plain\relax
184             \@CJKpunct@dokerningfalse
185         \else
186             \ifcsname CJKpunct@specialpunct\CJK@enc\CJKpunct@encpn\endcsname
187                 \@CJKpunct@dokerningfalse
188             \fi
189         \fi
190
191         \ifnum\CJKpunct@punctstyle=\CJKpunct@ps@banjiao
192             \def\CJKpunct@sidespaces{12}
193         \else
194             \def\CJKpunct@sidespaces{15}
195         \fi
196
197         \ifnum\CJKpunct@cnta=12\relax
198             {\CJKpunct@cntb=#1\relax
199             \advance\CJKpunct@cntb #2\relax

```

```

200 \advance\CJKpunct@cntb 2\relax
201 \CJKpunct@numtostring{\CJKpunct@cntb}
202 \edef\CJKpunct@temp{\csname CJKpunct@pn@\CJK@enc @12\endcsname}
203 \CJKpunct@cntc=0\relax
204 \loop
205 \global\expandafter\edef\csname CJKpunct\CJKpunct@punctstyle
206 @\CJK@enc @\CJKpunct@family @kern\CJKpunct@temp @\CJKpunct@temp\endcsname{
207 -0.\CJKpunct@decimal em}
208 \advance \CJKpunct@cntc 1\relax
209 \ifnum\CJKpunct@cntc<6\repeat}
210 \fi
211 \if@CJKpunct@dokerning
212 \CJKpunct@cntb=#1\relax
213 \advance\CJKpunct@cntb -\CJKpunct@sidespaces\relax
214 \ifnum\CJKpunct@cntb<0\relax
215 \CJKpunct@cntb=0\relax
216 \fi
217 \CJKpunct@cntc=#2\relax
218 \advance\CJKpunct@cntc -\CJKpunct@sidespaces\relax
219 \ifnum\CJKpunct@cntc<0\relax
220 \CJKpunct@cntc=0\relax
221 \fi
222
223 \CJKpunct@cntd=\CJKpunct@cntb
224 \advance\CJKpunct@cntd\CJKpunct@cntc\relax
225
226 \ifcase\CJKpunct@punctstyle
227 % hangmoban jiao
228 \or % quan jiao
229 \or % ban jiao
230 \advance\CJKpunct@cntd -50\relax
231 \or % kaiming
232 \ifcsname CJKpunct@kaiming\CJK@enc\CJKpunct@encpn\endcsname
233 \else
234 \advance\CJKpunct@cntd -50\relax
235 \fi
236 \or %CCT
237 \advance\CJKpunct@cntd -20\relax
238 \fi
239 \CJKpunct@cnte=\CJKpunct@cntd
240 \ifnum\CJKpunct@cntd<0\relax
241 \CJKpunct@cntd=0\relax
242 \fi
243 \else

```



```

244 \CJKpunct@cntb=0\relax
245 \CJKpunct@cntc=0\relax
246 \CJKpunct@cntd=0\relax
247 \CJKpunct@cnte=0\relax
248 \fi
249 \CJKpunct@numtostring{\CJKpunct@cntb}
250 \global\expandafter\edef\csname CJKpunct\CJKpunct@punctstyle
251 @\CJK@enc @\CJKpunct@family @lrule@\CJKpunct@encpn\endcsname{
252 -0.\CJKpunct@decimal em}
253 \CJKpunct@numtostring{\CJKpunct@cntc}
254 \global\expandafter\edef\csname CJKpunct\CJKpunct@punctstyle
255 @\CJK@enc @\CJKpunct@family @rrule@\CJKpunct@encpn\endcsname{
256 -0.\CJKpunct@decimal em}
257 \CJKpunct@numtostring{\CJKpunct@cntd}
258 \global\expandafter\edef\csname CJKpunct\CJKpunct@punctstyle
259 @\CJK@enc @\CJKpunct@family @\CJKpunct@lr glue@\CJKpunct@encpn\endcsname{
260 0.\CJKpunct@decimal em}
261 \global\expandafter\edef\csname CJKpunct\CJKpunct@punctstyle
262 @\CJK@enc @\CJKpunct@family @\CJKpunct@lr oglue@\CJKpunct@encpn\endcsname{
263 \the\CJKpunct@cnte}
264 \fi
265 \advance \CJKpunct@canta 1\relax
266 \CJKpunct@temp}
267
268 \def\CJKpunct@numtostring#1{
269 \edef\CJKpunct@decimal{\the#1}
270 \ifnum\CJKpunct@decimal<10\relax
271 \edef\CJKpunct@decimal{0\CJKpunct@decimal}
272 \fi}

```

设置相邻标点之间的距离

```

273 \def\CJKpunct@setkern#1#2{
274 \ifcsname CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family @kern#1@#2\endcsname
275 \else
276 \CJKpunct@canta=0\relax
277 \ifcsname CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family @roglue@#1\endcsname
278 \advance\CJKpunct@canta\csname
279 CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family @roglue@#1\endcsname
280 \fi
281 \ifcsname CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family @loglue@#2\endcsname
282 \advance\CJKpunct@canta\csname CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family
283 @loglue@#2\endcsname
284 \fi
285 \relax

```

```

286 \ifcase\CJKpunct@punctstyle
287     % hangmoban jiao
288 \or % quan jiao
289     \advance\CJKpunct@canta -50\relax
290 \or % ban jiao
291 \or % kaiming
292     \ifcsname CJKpunct@kaiming#1\endcsname
293     \ifcsname CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family @loglue@#2\endcsname
294     \advance\CJKpunct@canta -50\relax
295     \fi
296 \fi
297 \fi
298 \ifnum\CJKpunct@canta<0\relax
299     \CJKpunct@canta=0\relax
300 \fi
301 \CJKpunct@numtostring{\CJKpunct@canta}
302 \global\expandafter\edef\csname
303     CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family @kern#1@#2\endcsname{
304     0.\CJKpunct@decimal em}
305 \fi}

```

CJKfntef 宏包兼容命令:

```

306
307 \let\CJKpunct@unskip\unskip
308 \def\CJKpunct@UL@unskip{
309     \ifcsname CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family
310         @rglue@\CJKpunct@lastpunct\endcsname
311         \hskip -\csname CJKpunct\CJKpunct@punctstyle @\CJK@enc @\CJKpunct@family
312             @rglue@\CJKpunct@lastpunct\endcsname \relax
313     \fi}
314
315 \@ifundefined{UL@hskip}{\let\UL@hskip\relax}{}
316
317 \def\CJKpunct@punctUL@group{
318     \ifx\hskip\UL@hskip
319         \egroup
320         \UL@stop
321         \UL@start
322         \bgroup
323     \fi}
324
325 \def\CJKpunct@UL@specials{}
326
327 \AtBeginDocument{

```

```

328 \ifcsname UL@hook\endcsname
329   \addto@hook\UL@hook{\let\CJK@ignorespaces\ignorespaces
330     \let\CJKpunct@unskip\CJKpunct@UL@unskip
331     \let\CJKpunct@ULspecials\CJKpunct@punctUL@group}
332 \fi}

```

设置相邻标点间是否允许换行（缺省不允许）。

```

333 \def\CJKpunctallowbreakbetweenpuncts{
334   \def\CJKpunct@nobreak{
335     \ifnum\CJKpunct@lastcharclass=2
336       \hskip Opt
337     \fi}}
338
339 \def\CJKpunctnobreakbetweenpuncts{
340   \let\CJKpunct@nobreak\nobreak}
341 \CJKpunctnobreakbetweenpuncts

```

标点符号样式：

```

342 \def\CJKpunctstyle#1{
343   \ifcsname CJKpunct@ps@#1\endcsname
344     \edef\CJKpunct@currentpunctstyle{#1}
345     \edef\CJKpunct@punctstyle{\csname CJKpunct@ps@#1\endcsname}
346     \ifnum\CJKpunct@punctstyle=\CJKpunct@ps@plain\relax
347       \CJKpunctallowbreakbetweenpuncts
348       \let\CJK@testLastCJK\CJKo@testLastCJK
349       \let\CJK@testLastKern\CJKo@testLastKern
350       \let\CJK@testPrePunct\CJKo@testPrePunct
351       \let\CJK@testPostPunct\CJKo@testPostPunct
352       \let\CJKpunct@punctsymbol\CJKpunct@plainpunctsymbol
353       \let\CJKsymbol\CJKosymbol
354       \let\CJKpunctsymbol\CJKopunctsymbol
355       \let\CJKglue\CJKoglue
356       \let\CJK@nobreakglue\CJKo@nobreakglue
357       \let\CJKpunct@utfsymbol\CJKpunct@utfbsymbol
358     \else
359       \let\CJK@testLastCJK\CJKpunct@testLastCJK
360       \let\CJK@testLastKern\CJKpunct@testLastKern
361       \let\CJK@testPrePunct\CJKpunct@testPrePunct
362       \let\CJK@testPostPunct\CJKpunct@testPostPunct
363       \let\CJKpunct@punctsymbol\CJKpunct@@punctsymbol
364       \let\CJKsymbol\CJKpunct@CJKsymbol
365       \let\CJKpunctsymbol\CJKpunct@CJKpunctsymbol
366       \let\CJKglue\relax

```

```

367 \let\CJK@nobreakglue\relax
368 \let\CJKpunct@utfsymbol\CJKpunct@utfasymbol
369 \fi
370 \else
371 \PackageWarning{CJKpunct}{Punctstyle #1\space is not defined.}\relax
372 \fi}
373
374 \let\punctstyle\CJKpunctstyle
375 \def\CJKpunct@ps@hangmobanjiangiao{0}
376 \def\CJKpunct@ps@marginkerning{0}
377 \def\CJKpunct@ps@quanjiao{1}
378 \def\CJKpunct@ps@fullwidth{1}
379 \def\CJKpunct@ps@banjiangiao{2}
380 \def\CJKpunct@ps@halfwidth{2}
381 \def\CJKpunct@ps@kaiming{3}
382 \def\CJKpunct@ps@mixedwidth{3}
383 \def\CJKpunct@ps@CCT{4}
384 \def\CJKpunct@ps@plain{5}
385 \AtBeginDocument{\punctstyle{quanjiao}}
386
387 \def\CJKplainout{\punctstyle{plain}}
388 \let\CJKnormalout\relax

```

允许用户使用 `\CJKpunctsetkern` 调整相邻标点之间的距离

```

389 \def\CJKpunctsetkern#1#2#3{
390   \CJKpunct@setplanenumber{#1}
391   \edef\CJKpunct@pna{\CJKpunct@char@pn}
392   \CJKpunct@setplanenumber{#2}
393   \edef\CJKpunct@pnb{\CJKpunct@char@pn}
394   \global\expandafter\edef\csname CJKpunct\CJKpunct@punctstyle
395     @\CJK@enc @\CJKpunct@family @kern\CJKpunct@pna @\CJKpunct@pnb\endcsname{
396     #3}}
397
398 \def\CJKpunct@setplanenumber#1{{
399   \def\CJK@testPrePunct##1##2##3{
400     \global\edef\CJKpunct@charplane{\CJK@plane}
401     \global\edef\CJKpunct@charnumber{\the\@tempcnta}
402     \savebox\voidb@x{#1}
403     \global\edef\CJKpunct@char@pn{\CJKpunct@charplane/\CJKpunct@charnumber}}
404
405 %
406 % 标点符号表，不能改变顺序!!
407 % pre  “「『〔〈{《【
408 % post  —…、。、…;!?%)))]>>>】’”』

```

设置标点符号所对应 CJKplane 和字符序号，与编码有关。

```
409 \def\CJKpunct@punctlist#1{
410   \CJKpunct@canta=0\relax
411   \def\CJKpunct@enc{#1}
412   \CJKpunct@setpunctfamilynumber}
413
414 \def\CJKpunct@setpunctfamilynumber#1,{
415   \edef\CJKpunct@temp{#1}
416   \ifx\CJKpunct@temp\@empty
417     \def\CJKpunct@temp{}
418   \else
419     \expandafter\def\csname CJKpunct@pn@\CJKpunct@enc @\the\CJKpunct@canta\endcsname{#1}
420     \advance \CJKpunct@canta 1\relax
421     \def\CJKpunct@temp{\CJKpunct@setpunctfamilynumber}
422   \fi
423   \CJKpunct@temp}
424
425 \CJKpunct@punctlist{C70}20/24,20/28,30/12,30/14,30/20,ff/8,ff/59,ff/91,%
426 30/8,30/10,30/22,30/16,%
427 20/20,20/38,30/1,30/2,ff/12,ff/14,ff/26,ff/27,ff/1,ff/31,ff/5,30/21,ff/9,%
428 ff/61,ff/93,30/9,30/11,30/23,30/17,20/25,20/29,30/13,30/15,,
429
430 %gb
431 \CJKpunct@punctlist{C10}01/13,01/15,01/23,01/25,01/17,01/195,01/246,02/22,01/19,%
432 01/21,01/27,01/29,%
433 01/9,01/12,01/1,01/2,01/199,01/201,01/213,01/214,01/188,01/218,01/192,01/18,%
434 01/196,01/248,02/24,01/20,01/22,01/28,01/30,01/14,01/16,01/24,01/26,,
435
436 %gbk
437 \CJKpunct@punctlist{C19}25/45,25/47,25/55,25/57,25/49,26/163,26/214,26/246,25/51,%
438 25/53,25/59,25/61,%
439 25/41,25/44,25/33,25/34,26/167,26/169,26/181,26/182,26/156,26/186,26/160,%
440 25/50,26/164,26/216,26/248,25/52,25/54,25/60,25/62,25/46,25/48,25/56,25/58,,
441
442 \def\CJKpunct@totalpuncts{35}
```

恢复 CJKutf8 重定义的引号

```
443 \ifcsname DeclareUnicodeCharacter\endcsname
444   \DeclareUnicodeCharacter{2018}{\CJKpunct@utfsymbol{"80"}{"98"}}
445   \DeclareUnicodeCharacter{2019}{\CJKpunct@utfsymbol{"80"}{"99"}}
446   \DeclareUnicodeCharacter{201C}{\CJKpunct@utfsymbol{"80"}{"9C"}}
447   \DeclareUnicodeCharacter{201D}{\CJKpunct@utfsymbol{"80"}{"9D"}}
448   \DeclareUnicodeCharacter{2014}{\CJKpunct@utfsymbol{"80"}{"94"}}
```

```

449 \DeclareUnicodeCharacter{2026}{\CJKpunct@utfsymbol{"80"}{"A6"}}
450 \fi
451 \def\CJKpunct@utfasymbol#1#2{
452   \CJK@punctchar{\CJK@uniPunct}{0}{#1}{#2}}
453 \def\CJKpunct@utfbsymbol#1#2{
454   \ifnum #2=148
455     \textemdash
456   \else
457     \ifnum #2=166
458       \textellipsis
459     \else
460       \ifnum #2=152
461         \textquoteleft
462       \else
463         \ifnum #2=153
464           \textquoteright
465         \else
466           \ifnum #2=156
467             \textquotedblleft
468           \else
469             \ifnum #2=157
470               \textquotedblright
471             \fi
472           \fi
473         \fi
474       \fi
475     \fi
476   \fi}

```

省略号和破折号:

```

477 \def\CJKpunct@setspecialpunct#1#2{
478   \expandafter\def\csname CJKpunct@specialpunct#1#2\endcsname{}}
479 \CJKpunct@setspecialpunct{C70}{20/20}
480 \CJKpunct@setspecialpunct{C70}{20/38}
481 \CJKpunct@setspecialpunct{C19}{25/41}
482 \CJKpunct@setspecialpunct{C19}{25/44}
483 \CJKpunct@setspecialpunct{C10}{01/9}
484 \CJKpunct@setspecialpunct{C10}{01/12}

```

开明式中的全角标点。

```

485 \def\CJKpunct@setkaimingpunct#1#2{
486   \expandafter\def\csname CJKpunct@kaiming#1#2\endcsname{}}
487 \CJKpunct@setkaimingpunct{C70}{30/02}

```

```

488 \CJKpunct@setkaimingpunct{C70}{ff/1}
489 \CJKpunct@setkaimingpunct{C70}{ff/31}
490 \CJKpunct@setkaimingpunct{C19}{25/34}
491 \CJKpunct@setkaimingpunct{C19}{26/156}
492 \CJKpunct@setkaimingpunct{C19}{26/186}
493 \CJKpunct@setkaimingpunct{C10}{01/2}
494 \CJKpunct@setkaimingpunct{C10}{01/188}
495 \CJKpunct@setkaimingpunct{C10}{01/218}

```

缺省标点符号宽度

```

496 \def\CJKpunct@def@spaces{69,18,60,6,63,2,63,3,69,8,69,6,69,1,39,%
497 37,63,4,56,2,63,5,63,6,6,6,12,11,23,50,24,54,16,71,20,69,12,76,13,%
498 74,26,61,3,50,3,4,8,69,6,69,2,69,38,39,4,62,2,55,5,62,7,62,16,71,9,%
499 58,3,62,3,62,, ,}

```

调入字体相关的设置

```

500 \IfFileExists{CJKpunct.spa}{\input{CJKpunct.spa}}{}
501
502 \endlinechar '\^M

```

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