

# The leaflet document class

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## 1 Usage

Process the file `leaflet-manual.tex` with  $\text{\LaTeX}$  to see details of usage and layout.

## 2 Implementation

```
1 <*class>
```

### 2.1 Test whether the LaTeX format is new enough

We use the 'shipout/before' hook.

```
2 \providecommand\IfFormatAtLeastTF{\@ifl@t@r\fmtversion}
3 \IfFormatAtLeastTF{2020/10/01}{-}{%
4   \ClassError{leaflet}{%
5     LaTeX version equal to or newer \MessageBreak
6     than '2020/10/01' is required%
7   }{%
8     Renew your TeX installation.%
9   }%
10 }
```

### 2.2 Saving some internal macros...

```
11 \let\LL@beginvdi\@beginvdi
```

### 2.3 Option processing

```
12 \@ifundefined{iflandscape}{\newif\iflandscape}{-}%
13 \@ifundefined{iftumble}{\newif\iftumble}{-}%
14 \@ifundefined{iftwopart}{\newif\iftwopart}{-}%
15 \@ifundefined{iffoldcorr}{\newif\iffoldcorr}{-}%
16 \newlength\LL@tempdima
```

```

17 \newcommand\LL@debug@info[1]{}%
18 \DeclareOption{dvips}{\PassOptionsToPackage{\CurrentOption}{graphics}}
19 \DeclareOption{pdftex}{\PassOptionsToPackage{\CurrentOption}{graphics}}
20 \DeclareOption{vtex}{\PassOptionsToPackage{\CurrentOption}{graphics}}
21 \DeclareOption{dvipdfm}{\PassOptionsToPackage{\CurrentOption}{graphics}}
22 \DeclareOption{twoside}{\OptionNotUsed}
23 \DeclareOption{twocolumn}{\OptionNotUsed}
24 \DeclareOption{landscape}{\landscapetrue}
25 \DeclareOption{portrait}{\landscapefalse}
26 \DeclareOption{debug}{\let\LL@debug@info\typeout}
27 \DeclareOption{twopart}{\twoparttrue}
28 \DeclareOption{notwopart}{\twopartfalse}
29 \DeclareOption{nospecialtricks}{}%
30 \AtEndOfClass{%
31   \ifLL@combine
32     \let\immediate\@@@immediate\let\write\@@@write
33     \let\openout\@@@openout\let\closeout\@@@closeout
34     \let\special\@@@special\let\@@@exec@outs\relax
35   \fi}}

```

`\LL@setPaperSize` Some paper sizes are not supported by the article class. Hence this work-around. These page dimensions *must* be given in landscape orientation!

```

36 \newcommand*\LL@setPaperSize{}
37 \DeclareOption{a3paper}{\def\LL@setPaperSize{%
38   \paperwidth=420mm\paperheight=297mm\relax}}%
39 \ifdefinable\ifLL@combine{\newif\ifLL@combine}
40 \DeclareOption{combine}{\LL@combinetrue}
41 \DeclareOption{nocombine}{\LL@combinefalse}

```

`\LL@selectOutput`

```

42 \newcommand*\LL@selectOutput{}
43 \DeclareOption{frontside}{\def\LL@selectOutput#1#2{#1}}
44 \DeclareOption{backside}{\def\LL@selectOutput#1#2{#2}}
45 \DeclareOption{bothsides}{\def\LL@selectOutput#1#2{#1#2}}

46 \DeclareOption{tumble}{\tumbletrue}
47 \DeclareOption{notumble}{\tumblefalse}

```

`\LL@foldmark` Drawing code for the fold mark. (Will be called within a picture environment.)

```

48 \newcommand*\LL@foldmark{}
49 \DeclareOption{foldmark}{%
50   \def\LL@foldmark{%
51     \begingroup
52       \linethickness{\foldmarkrule}%
53       \@tempdima=\dimexpr\paperheight-\LL@tmargin
54       \put(0,\@tempdima){%
55         \line(0,-1){\foldmarklength}}%
56     \endgroup}%
57 }

58 \DeclareOption{nofoldmark}{\def\LL@foldmark{}}%

59 \DeclareOption{foldcorr}{\foldcorrtrue}
60 \DeclareOption{nofoldcorr}{\foldcorrfalse}

61 \newcommand*\LL@toomanypages[2]{}
62 \DeclareOption{draft}{\PassOptionsToClass{\CurrentOption}{article}}%
63 \AtEndOfClass{%
64   \def\LL@toomanypages#1#2{%
65     \ClassWarningNoLine{leaflet}{#1.\MessageBreak#2}}%
66 }%
67 }

68 \DeclareOption{final}{\PassOptionsToClass{\CurrentOption}{article}}%
69 \AtEndOfClass{}

```

```

70 \ifLL@combine
71 \def\LL@toomanypages#1#2{%
72 \ClassError{leaflet}{#1}{#2.}}%
73 \else
74 \def\LL@toomanypages#1#2{%
75 \ClassWarningNoLine{leaflet}{#1.\MessageBreak#2}}%
76 \fi
77 }%
78 }
79 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{article}}
80 \PassOptionsToClass{landscape,a4paper}{article}
81 \ExecuteOptions{tumble,foldmark,bothsides,combine,landscape,notwopart}
82 \ProcessOptions\relax
83 \ifLL@combine

```

`\LL@rotate@I` Rotates the output pages.

```

\LL@rotate@II 84 \newcommand*\LL@rotate@I{\newcommand*\LL@rotate@II{}}%
85 \iflandscape
86 \def\LL@rotate@I#1{%
87 \iftumble
88 \def\LL@rotate@II#1{\rotatebox[origin=c]{180}{#1}}%
89 \else
90 \def\LL@rotate@II#1{%
91 \fi
92 \else
93 \def\LL@rotate@I#1{\rotatebox[origin=c]{90}{#1}}%
94 \iftumble
95 \def\LL@rotate@II#1{\rotatebox[origin=c]{270}{#1}}%
96 \else
97 \def\LL@rotate@II#1{\rotatebox[origin=c]{90}{#1}}%
98 \fi
99 \fi

```

`\immediate` In the following we redefine the  $\TeX$  primitives `\immediate`, `\write`, `\openout`, and `\closeout`. All of them not “immediate” executed statements are added to the macro `\openout` `\@@@pending@outs` (comma list). So especially the `\write` statements independent of  $\TeX$ ’s `\shipout` run at a convenient time. For  $\text{V}\TeX$  we must keep in mind that `\immediate\special` exist.

```

100 \def\@@@pending@outs{\let\@@@immediate\immediate
101 \let\@@@write\write \let\@@@special\special
102 \let\@@@openout\openout \let\@@@closeout\closeout
103 \def\immediate{%
104 \let\write\immediate@write%
105 \let\openout\immediate@openout%
106 \let\closeout\immediate@closeout%
107 \let\special\immediate@special}%
108 \def\reset@immediate{%
109 \let\write\pending@write%
110 \let\openout\pending@openout%
111 \let\closeout\pending@closeout%
112 \let\special\@@@special}%
113 \long\def\pending@write#1#1{\pending@write{#1}}
114 \def\immediate@write{%
115 \reset@immediate\@@@immediate\@@@write}%
116 \def\immediate@openout{%
117 \reset@immediate\@@@immediate\@@@openout}%
118 \def\immediate@closeout{%
119 \reset@immediate\@@@immediate\@@@closeout}%
120 \def\immediate@special{%
121 \reset@immediate\@@@immediate\@@@special}%
122 \let\write\pending@write
123 \let\openout\pending@openout
124 \let\closeout\pending@closeout

```

`\@dummy@whatsit` Makes our redefined primitives more like “whatsits” (???). ‘`\special{}`’ is also possible for pdfTeX but we get a lot of strange warnings (“Non-PDF special ignored!”) in this case.

```

125 \def\@dummy@whatsit{\special{}}
126 \begingroup\@ifundefined{pdfoutput}%
127 {\endgroup}
128 {\endgroup}
129 \ifnum\pdfoutput>\z@\def\@dummy@whatsit{\pdfliteral{}}\fi

130 \begingroup\expandafter\expandafter\expandafter\endgroup
131 \expandafter\ifx\csname eTeXversion\endcsname\relax
132   %% Test is from Markus Kohm (d.c.t.t, 29 Jun 2004)
133   \ClassWarningNoLine{leaflet}{%
134     *****\MessageBreak
135     * It's very recommended to use eTeX \MessageBreak
136     * with this package! \MessageBreak
137     *****}%

```

`\pending@@write` Doesn't work correctly without any `\mark` or `\special` or `\pdfliteral` command inside.

```

138 \long\def\pending@@write#1#2{%
139   \@dummy@whatsit
140   \g@addto@macro\@@@pending@outs{\@@@immediate\@@@write\number#1{#2},}}%

```

`\pending@openout`

```

141 \def\pending@openout#1 {%
142   \@dummy@whatsit
143   \g@addto@macro\@@@pending@outs{\@@@immediate\@@@openout\number#1,}}%

```

`\pending@closeout`

```

144 \def\pending@closeout#1{%
145   \@dummy@whatsit
146   \g@addto@macro\@@@pending@outs{\@@@immediate\@@@closeout\number#1,}}%

```

`\@@@exec@outs` Note to this implementation: The out commands and the page breaks are not allways in sync, which means possible wrong page references.

```

147 \newcommand*\@@@exec@outs{%
148   \@@@pending@outs\gdef\@@@pending@outs{%
149     \LL@debug@info{%
150       >>> execute the output commands of the current page <<<}}%

151 \else
152   \RequirePackage{etex}

Allocation of a new mark class.

153 \globmarks\@@@out@mark
154 \newcounter{\@@@total@outs}\setcounter{\@@@total@outs}{0}
155 \newcounter{\@@@last@exec}\setcounter{\@@@last@exec}{0}

```

`\pending@@write` Doesn't work correctly without any `\mark` or `\special` or `\pdfliteral` command inside.

```

156 \long\def\pending@@write#1#2{%
157   \global\advance\c@@@total@outs\@ne%
158   \marks\@@@out@mark{\the\c@@@total@outs}%
159   \g@addto@macro\@@@pending@outs{\@@@immediate\@@@write\number#1{#2},}}%

```

`\pending@openout`

```

\pending@@openout 160 \def\pending@openout#1 {%
\pending@@@openout 161 \global\advance\c@@@total@outs\@ne%
  \ifequalsign 162 \marks\@@@out@mark{\the\c@@@total@outs}%
163 \g@addto@macro\@@@pending@outs{\@@@immediate\@@@openout\number#1,}}%

```

`\pending@closeout`

```

164 \def\pending@closeout#1{%
165   \global\advance\c@@@total@outs\@ne%
166   \marks\@@@out@mark{\the\c@@@total@outs}%
167   \g@addto@macro\@@@pending@outs{\@@@immediate\@@@closeout\number#1,}}%

```

`\@@@exec@outs` With the call of `\@@@exec@outs` we simulate  $\TeX$ 's execution of non-immediate output commands. The number of pending commands which can be executed must be decremented by `\value{@@total@outs} - \botmarks\@@@out@mark`. The remaining commands must still wait until the next output page is ready. It works only for output commands in the main text which moved to the next page but not for floating output commands.

```

168 \newcommand*\@@@exec@outs{%
169   \begingroup
Pending io's = \@tempcntb = TOTAL-OUTS - LAST-EXEC
170   \@tempcntb\c@@@total@outs\advance\@tempcntb-\c@@@last@exec%
171   \edef\reserved@a{\botmarks\@@@out@mark}%
172   \ifx\reserved@a\@empty\@tempcnta\z@ \else \@tempcnta\reserved@a\fi%
173   \LL@debug@info{PENDING-OUTS:\the\@tempcntb\space\space
174                 TOTAL-OUTS:\the\c@@@total@outs\space\space
175                 LAST-EXEC:\the\c@@@last@exec\space\space
176                 TOPMARK:\topmarks\@@@out@mark\space\space
177                 FIRSTMARK:\firstmarks\@@@out@mark\space\space
178                 BOTMARK:\botmarks\@@@out@mark}%
Last valid pending entry = \@tempcntb = PENDING-OUTS - TOTAL-OUTS + BOTMARK
Number of invalid (moved) out's = \@tempcnta = TOTAL-OUTS - BOTMARK
179   \advance\@tempcnta-\c@@@total@outs \advance\@tempcntb\@tempcnta
180   \@tempcnta-\@tempcnta%
181   \ifnum\@tempcnta>\z@
182     \LL@debug@info{%
183       >>> resave \the\@tempcnta\space output command(s).
184       Too early to execute! <<<}&
185   \fi
186   \@tempcnta\z@ \def\reserved@b{}%
187   \set@display@protect
188   \for\reserved@a :=\@@@pending@outs\do{%
189     \ifx\reserved@a\@empty\else
190       \ifnum\@tempcnta<\@tempcntb%
191         \reserved@a% execute output's related to the current page box.
192         \global\advance\c@@@last@exec\@ne
193         \LL@debug@info{>>> execute output command number
194                       \the\c@@@last@exec\space<<<}&
195       \else
Other output's must be resaved and still pending.
196         \expandafter\g@addto@macro\expandafter\reserved@b\expandafter{%
197           \reserved@a,}%
198         \fi
199         \advance\@tempcnta\@ne%
200       \fi}%
201   \expandafter\@temptokena\expandafter{\reserved@b}%
202   \xdef\@@@pending@outs{\the\@temptokena}%
203 \endgroup}%
204 \fi% end of eTeX test.

```

`\protected@write` Because our redefined `\write` is expandable we must protect it inside of  $\LaTeX$ 's `\protected@write`.

```

205 \long\def\protected@write#1#2#3{%
206   \begingroup
207   \let\thepage\relax
208   #2%
209   \let\protect\@unexpandable@protect
210   \edef\reserved@a{\noexpand\write#1{#3}}%
211   \reserved@a%
212   \endgroup
213   \if@nobeak\ifvmode\nobreak\fi\fi}%

```

`\@begindvi` Delay `\@begindvi` to be executed until the real page output.

```
214 \let\@begindvi\@empty
215 \fi% end of \ifLL@combine
```

\LL@toomanypages Now elsewhere ...

```
216 \LoadClass{article}
217 \RequirePackage{graphicx}
```

\LL@pagesize@specials Now the graphics driver is known. We will check the graphics driver and set special code for page dimensions and other.

```
218 \newcommand*\LL@pagesize@specials[2]{%
219 \@ifundefined{Gin@driver}{}{%
220 \ifx\Gin@driver\@empty\else%
221 \filename@parse{\Gin@driver}\@tempswafalse%
222 \def\reserved@a{dvips}%
223 \ifx\filename@base\reserved@a\@tempwattrue\fi%
224 \def\reserved@a{dvipdfm}%
225 \ifx\filename@base\reserved@a\@tempwattrue\fi%
226 \if@tempswa
227 \ClassInfo{leaflet}{Generating code for dvips}%
228 \def\LL@pagesize@specials#1#2{%
229 \@tempdima=#1\@tempdimb=#2 %
230 \AtBeginDvi{\special{papersize=\the\@tempdima,\the\@tempdimb}}}%
231 \fi
232 \def\reserved@a{pdftex}%
233 \ifx\filename@base\reserved@a
234 \ClassInfo{leaflet}{Generating code for pdfTeX}%
235 \def\LL@pagesize@specials#1#2{%
236 \@tempdima=#1\@tempdimb=#2 %
237 \pdfpagewidth\@tempdima\pdfpageheight\@tempdimb}%
238 \fi
239 \def\reserved@a{luatex}%
240 \ifx\filename@base\reserved@a
241 \ClassInfo{leaflet}{Generating code for LuaTeX}%
242 \ifx\pdfpagewidth\@undefined
243 \def\LL@pagesize@specials#1#2{%
244 \@tempdima=#1\@tempdimb=#2 %
245 \pagewidth\@tempdima\pageheight\@tempdimb}%
246 \else
247 \def\LL@pagesize@specials#1#2{%
248 \@tempdima=#1\@tempdimb=#2 %
249 \pdfpagewidth\@tempdima\pdfpageheight\@tempdimb}%
250 \fi
251 \fi
252 \def\reserved@a{xetex}%
253 \ifx\filename@base\reserved@a
254 \ClassInfo{leaflet}{Generating code for XeTeX}%
255 \def\LL@pagesize@specials#1#2{%
256 \@tempdima=#1\@tempdimb=#2%
257 \pdfpagewidth\@tempdima\pdfpageheight\@tempdimb}%
258 \fi
259 \def\reserved@a{vtex}%
260 \ifx\filename@base\reserved@a
261 \ClassInfo{leaflet}{Generating code for VTeX}%
262 \def\LL@pagesize@specials#1#2{%
263 \@tempdima=#1\@tempdimb=#2%
264 \mediawidth\@tempdima\mediaheight\@tempdimb}%
265 \fi
266 \fi
267 }
```

\LL@CmdIgnored

```
268 \newcommand*\LL@CmdIgnored[1]{%
```

```

269 \ClassWarning{leaflet}{%
270   '\string#1' ignored}}

```

## 2.4 Changing the class properties

```

271 \setlength{\parskip}{1ex plus 2pt}
272 \@listi%
273 \setlength{\labelwidth}{\leftmargin}
274 \addtolength{\labelwidth}{-\labelsep}
275 \pagestyle{empty}
276 \AddToHook{cmd/maketitle/after}{\thispagestyle{empty}}%
277 \headheight\z@
278 \headsep\z@
279 \footskip\z@
280 \marginparwidth\z@
281 \marginparsep\z@
282 \sloppy
283 \setcounter{secnumdepth}{0}
284 %\renewcommand\marginpar[2][\LL@CmdIgnored{\marginpar}]
285 \renewcommand\twocolumn[1][\LL@CmdIgnored{\twocolumn}]
286 \renewcommand\onecolumn{\LL@CmdIgnored{\onecolumn}}
287 \renewcommand\topfraction{0.7}
288 \renewcommand\bottomfraction{0.7}
289 \setlength{\textfloatsep}{10pt plus 4pt minus 3pt}
290 \setlength{\parindent}{\z@}
291 \setlength{\leftmargini}{1.5em}
292 \setlength{\leftmarginii}{1.5em}
293 \setlength{\leftmarginiii}{1.5em}
294 \setlength{\leftmarginiv}{1.5em}
295 \setlength{\leftmarginv}{1.5em}
296 \setlength{\leftmarginvi}{1.5em}
297 \setlength{\labelsep}{.5em}
298 \setlength \labelwidth{\leftmargini}
299 \addtolength\labelwidth{-\labelsep}

```

`\noparskip`

```

300 \def\noparskip{\par\vspace{-\parskip}}

```

Modification of list and section parameters for a more compact layout.

```

301 \let\old@small\small
302 \renewcommand{\small}{\old@small\let\@listi\@listI}
303 \let\old@footnotesize\footnotesize
304 \renewcommand{\footnotesize}{\old@footnotesize\let\@listi\@listI}

```

`\sectfont` User macro for changing the font of the typesetted parameter of the `\?section` commands.

```

305 \newcommand{\sectfont}{\bfseries}

306 \renewcommand\section{\@startsection{section}{1}{\z@}%
307   {-3.5ex \@plus -.75ex}%
308   {1ex} %\{1.5ex}%
309   {\normalfont\large\sectfont}}
310 \renewcommand\subsection{\@startsection{subsection}{2}{\z@}%
311   {-2.5ex plus -.5ex}%
312   {1\p@} %\{1ex}%
313   {\normalfont\normalsize\sectfont}}
314 \renewcommand\subsubsection{\@startsection{subsubsection}{3}{\z@}%
315   {-2.5ex plus -.5ex}%
316   {-1em}%
317   {\normalfont\normalsize\sectfont}}
318 \def\part{\LL@CmdIgnored{\part}\secdef\@part\@spart}
319 \def\@part[#1]#2{}
320 \def\@spart#1{}
321
322 \renewcommand*\descriptionlabel[1]{%

```

```

323 \hspace\labelsep\normalfont\descfont #1}

\descfont User macro for changing the font of the description label.
324 \newcommand*\descfont{\bfseries}

325 \iffalse
326 % Doesn't work!
327 \g@addto@macro\enumerate{\parsep2\p@\@plus2\p@\@minus\z@}
328 \g@addto@macro\itemize{\parsep2\p@\@plus2\p@\@minus\z@}
329 \g@addto@macro\description{\parsep2\p@\@plus2\p@\@minus\z@}
330 \else
331 \newcommand*\LL@listsetup{%
332 % \parsep.445ex\@plus.445ex\@minus.2225ex%
333 % \parsep.5ex\@plus.5ex\@minus.25ex%
334 \parsep1ex\@plus.5ex\@minus.25ex%
335 \LL@debug@info{***parsep=\the\parsep}%
336 % \itemsep.25\parsep
337 \itemsep\z@
338 \LL@debug@info{***itemsep=\the\itemsep}%
339 \topsep\z@
340 \LL@debug@info{***topsep=\the\topsep}%
341 % \partopsep\z@
342 \LL@debug@info{***partopsep=\the\partopsep}%
343 }
344 \def\enumerate{%
345 \ifnum \@enumdepth >\thr@@\@toodeep\else
346 \advance\@enumdepth\@ne
347 \edef\@enumctr{enum\romannumeral\the\@enumdepth}%
348 \expandafter
349 \list
350 \csname label\@enumctr\endcsname
351 {\usecounter\@enumctr
352 \def\makelabel##1{\hss\llap{##1}}%
353 %\def\makelabel##1{##1\hfill}%
354 %\def\makelabel##1{\hss##1}%
355 \LL@listsetup
356 }%
357 \fi}
358 \def\itemize{%
359 \ifnum \@itemdepth >\thr@@\@toodeep\else
360 \advance\@itemdepth\@ne
361 \edef\@itemitem{labelitem\romannumeral\the\@itemdepth}%
362 \expandafter
363 \list
364 \csname\@itemitem\endcsname
365 {%
366 \def\makelabel##1{\hss\llap{##1}}%
367 %\def\makelabel##1{##1\hfill}%
368 %\def\makelabel##1{\hss##1}%
369 \LL@listsetup
370 }%
371 \fi}
372 \renewenvironment{description}
373 {\list{}{\labelwidth\z@ \itemindent-\leftmargin
374 \let\makelabel\descriptionlabel
375 \LL@listsetup}}
376 {\endlist}
377 \fi

```

## 2.5 Changing the page dimensions

`\setmargins` User command to specify the margins. (o, u, l, r)  
`\setmargins{<top>}{<bottom>}{<left>}{<right>}`



The new user interface! By default, the leaflet class does not use headings, footings and marginal notes. If the user desires, these can be restored by setting the respective lengths *before* calling `\setmargins`. Setting the margins should *always* be done using `\setmargins`; if the user assigns to any of the length registers `\topmargin`, `\evensidemargin`, `\oddsidemargin` using `\setlength`, chaos will happen.

```

378 \newcommand*\setmargins[4]{%
temp. top!
379 \setlength\topmargin{#1}%
380 \edef\LL@tmargin{\the\topmargin}%
temp. bottom!
381 \setlength\evensidemargin{#2}%
382 \textheight=\dimexpr\paperheight
383 -\topmargin-\evensidemargin-\headheight-\headsep-\footskip
temp. left!
384 \setlength\oddsidemargin{#3}%
temp. right!
385 \setlength\evensidemargin{#4}%
386 \textwidth=\dimexpr\paperwidth
387 -\oddsidemargin-\evensidemargin-\marginparwidth-\marginparsep
real top!
388 \addtolength\topmargin{-1in}%
real left!
389 \addtolength\oddsidemargin{-1in}%
probably not necessary
390 \evensidemargin\oddsidemargin
391 }

```

The dimensions of a single small page.

```

392 \LL@setPaperSize
393 \paperwidth=0.333333334\paperwidth
394 \setmargins{11mm}{11mm}{8mm}{8mm}

```

## 2.6 Additional user macros

`\foldmarkrule` The dimension of the foldmark between page 2 and page 3.

```

\foldmarklength 395 \newcommand*\foldmarkrule{0.4pt}
396 \newcommand*\foldmarklength{2mm}

```

`\AddToBackground` Adds the given parameter #2 (some picture commands) to a macro which will be used inside a zero-dimensional picture environment located at the lower left corner of a page. Parameter #1 selects the page number. The star version adds the picture commands to the background of one of the combined large pages instead of one of the small pages.

```

397 \newcommand\AddToBackground{%
398 \@ifstar{\@tempswatrue\LL@AddToBackground}
399 {\@tempswafalse\LL@AddToBackground}}
400 \@onlypreamble\AddToBackground
401 \newcommand\LL@AddToBackground[2]{%
402 \if@tempswa\def\@tempa{\LL@largePic}\else\def\@tempa{\LL@smallPic}\fi
403 \expandafter\providecommand\csname\@tempa\@Roman{#1}\endcsname{}}%
404 \expandafter\g@addto@macro\csname\@tempa\@Roman{#1}\endcsname{#2}}

```

`\CutLine` Adds a line with two scissors on the left side of the page given as parameter #1. The starred `\CutLine*` version draws only the line.

```

\Scissors 405 \newcommand*\CutLine{%
406 \@ifstar{\@tempwafalse\LL@CutLine}{\@tempwatrue\LL@CutLine}}
407 \@onlypreamble\CutLine
408 \newcommand*\LL@CutLine[2][.]{%

```

```

409 \ifLL@combine
410   \ifx\Scissors\@empty\@tempwafalse\fi
411   \if .#1%
412     \def\@tempa{\dotfill}%
413   \else\if -#1%
414     \def\@tempa{\hrulefill}%
415   \fi\fi
416   \edef\@tempb{%
417     \noexpand\AddToBackground{#2}{%
418       \noexpand\put(0,0){%
419         \noexpand\rotatebox{90}{\noexpand\makebox(\paperheight,0){%
420           \noexpand\normalsize\@tempa\if@tempswa\noexpand\Scissors%
421             \@tempa\@tempa\noexpand\Scissors\@tempa\fi}}}%
422     }%
423   \@tempb
424 \fi}
425 \IfFileExists{pifont.sty}
426   {\RequirePackage{pifont}%
427   \newcommand*\Scissors{\raisebox{-0.85ex}{\large\ding{34}}}%
428   {\newcommand*\Scissors{}}}

```

Adds the fold mark code between page 2 and page 3.

```
429 \AddToBackground{3}{\LL@foldmark}
```

## 2.7 Page construction and output

### 2.7.1 Intercepting the small pages

`\vb@xt@` Similar to `\hb@xt@` (should be part of the L<sup>A</sup>T<sub>E</sub>X kernel).

```
430 \providecommand*\vb@xt@{\vbox to}
```

We use our own page saving macro instead of real L<sup>A</sup>T<sub>E</sub>X output.

```
431 \AtBeginDocument{\AddToHook{shipout/before}{\LL@processPage}}
```

`LL@page` A counter for the small pages (absolute counting).

```
432 \newcounter{LL@page}\setcounter{LL@page}{1}
```

```
433 \newcommand\LL@tempa{}
```

`\LL@processPage` With “combine” option the six small pages will be saved in box registers (`\LL@boxI...` `\LL@boxVI`). The `\ShipoutBox` with the page content must be a bit moved to get a “normal-sized” box. In “nocombine” mode only put the background picture.

```

434 \newcommand*\LL@processPage{%
435   \ifLL@combine\DiscardShipoutBox\fi
436   \ifnum\c@LL@page<7\relax
437     \LL@tempdima=\paperwidth
438     \ifLL@combine
439       \iffoldcorr
440         \@tempwafalse
441       \ifnum\c@LL@page=4\relax
442         \@tempwatrue
443       \else
444         \ifnum\c@LL@page=5\relax
445           \@tempwatrue
446         \fi
447       \fi
448       \if@tempswa\LL@tempdima=0.9797979798\paperwidth
449       \else\LL@tempdima=1.0101010101\paperwidth \fi
450     \fi
451     \@@@exec@outs
452     \expandafter\newsavebox\c@name LL@box\Roman{LL@page}\endc@name%
453     \setbox\ShipoutBox=\vbox{\vskip1in\unvbox\ShipoutBox}%
454     \setbox\ShipoutBox=\vbox{\moveright1in\box\ShipoutBox}%
455     \setbox\ShipoutBox=\hb@xt@\paperwidth{\box\ShipoutBox\hss}%

```

```

456     \iffoldcorr
457     \setbox\ShipoutBox=\hb@xt@\LL@tempdima{\hss\box\ShipoutBox\hss}\fi
Add a background picture to a single small page ('combine').
458     \setbox\ShipoutBox=\vb@xt@\paperheight{%
459     \vbox{%
460     \pictur@(0,0)(0,\paperheight)%
461     \begingroup
462     \set@typeset@protect
463     \paperwidth=\LL@tempdima
464     \@nameuse{LL@smallPic\Roman{LL@page}}}%
465     \endgroup
466     \endpicture
467     }%
468     \nointerlineskip\box\ShipoutBox\vss
469     }%
470     \global\expandafter\setbox
471     \c@name LL@box\Roman{LL@page}\endcsname=\box\ShipoutBox
472     \typeout{\@spaces[\the\c@LL@page] ==> [\Roman{LL@page}]}%
473     \else

```

Add a background picture to a single small page ('nocombine').

```

474     \setbox\ShipoutBox\vbox{%
475     \vbox{\@tempdima=1in\relax
476     \@tempdimb=\paperheight\advance\@tempdimb-\@tempdima
477     \pictur@(0,0)(\@tempdima,\@tempdimb)%
478     \begingroup
479     \set@typeset@protect
480     \@nameuse{LL@smallPic\Roman{LL@page}}}%
481     \endgroup
482     \endpicture
483     }%
484     \nointerlineskip\box\ShipoutBox
485     }%
486     \fi
487     \fi
488     \ifnum\c@LL@page=7\relax

```

Make this an error or warning message, depending on class option. (--> warning in all cases?)

```

489     \begingroup
490     \set@typeset@protect
491     \LL@toomanypages{%
492     The text you supplied fills more than six pages\MessageBreak
493     and will therefore not fit onto a single flyer}{%
494     Try using smaller fonts or reducing vertical space}%
495     \endgroup
496     \fi
497     \stepcounter{LL@page}}

```

NOTE TO OURSELVES: All the following must be done if the document code is already processed.

`\LL@add@empty@pages` Generating missing small pages

```

498 \newcommand*\LL@add@empty@pages{%
499 \clearpage\pagestyle{empty}%
500 \loop\ifnum\c@LL@page<7\relax
501 \ClassInfo{leaflet}{Generating empty page \the\c@page}%
502 \null\newpage
503 \repeat
504 }

```

`\LL@shipout@combined@pages`

```

505 \newcommand*\LL@shipout@combined@pages{%

```

## 2.7.2 Reassembling the small pages

Suppresses all shipout hook's clients (removing other kinds of background pictures). Our page saving macro is still needed for the next step and must be set again.

```
506 \RemoveFromHook{shipout/foreground}[*]
507 \RemoveFromHook{shipout/background}[*]
508 \RemoveFromHook{shipout/lastpage}[*]
509 \RemoveFromHook{shipout/before}[*]
510 \AddToHook{shipout/before}{\LL@processPage}
```

Create empty pages if necessary.

```
511 \LL@add@empty@pages
```

Here begins the real output. LaTeX's `\shipout` will no more suppressed. The begin dvi hook is reactivated. Final removing content from the hook.

```
512 \RemoveFromHook{shipout/before}[*]
513 \let\@begindvi\LL@begindvi
514 \paperwidth=3\paperwidth
515 \iflandscape
516 \LL@pagesize@specials{\paperwidth}{\paperheight}%
517 \else
518 \LL@pagesize@specials{\paperheight}{\paperwidth}%
519 \fi
```

`\LL@shipoutPage` This is similar to L<sup>A</sup>T<sub>E</sub>X's `\@outputpage`, but without a group; `\set@display@protect` seems to work as well.

`\LL@preparePages` Helper macros for page output: reassemble the small pages.

```
\LL@preparePage
520 \newcommand*\LL@shipoutPage[1]{%
521 % \set@display@protect
522 \let \protect \noexpand
523 \shipout\vb@xt@\paperheight{%
524 \set@typeset@protect
525 \vskip-1in%
526 \@begindvi\hb@xt@\paperwidth{\hskip-1in##1\hss}\vss}}%
527 \newcommand*\LL@preparePages[3]{%
528 \typeout{[\@Roman{##1}\space\@Roman{##2}\space\@Roman{##3}] ==>}%
```

Add a background picture to a large page.

```
529 \pictur@(0,0)\@nameuse{\LL@largePic\Roman{page}}\endpicture%
530 \LL@preparePage{##1}\LL@preparePage{##2}\LL@preparePage{##3}%
531 \newcommand*\LL@preparePage[1]{%
532 \expandafter\box\csname LL@box\@Roman{##1}\endcsname}%
```

Combine and output the frontside and the backside. The option two part arranges the pages in a different than the “natural” order, to allow the typesetting of a 4 page leaflet and a detachable 2 page form, for summaries, fill-in forms, applications, questionnaires, etc.

```
533 \LL@selectOutput
534 \iftwopart
535 {\setcounter{page}{1}%
536 \LL@shipoutPage{\LL@rotate@I{\LL@preparePages{6}{4}{1}}}%
537 {\setcounter{page}{2}%
538 \LL@shipoutPage{\LL@rotate@II{\LL@preparePages{2}{3}{5}}}%
539 \else
540 {\setcounter{page}{1}%
541 \LL@shipoutPage{\LL@rotate@I{\LL@preparePages{5}{6}{1}}}%
542 {\setcounter{page}{2}%
543 \LL@shipoutPage{\LL@rotate@II{\LL@preparePages{2}{3}{4}}}%
544 \fi
545 }%

546 \ifLL@combine
547 \AddToHook{enddocument/end}{\LL@shipout@combined@pages}
548 \else
```

Create empty pages if necessary and then call the normal L<sup>A</sup>T<sub>E</sub>X end.

```

549 \LL@pagesize@specials{\paperwidth}{\paperheight}%
550 \AtEndDocument{%
551   \LL@add@empty@pages
552 }
553 \fi
554 \</class>

```

Done. Phew! (Did you hear that deep-drawn sigh?)

## Change History

v0.8c	General: Repacked as dtx file. (RN) . . . . . 1	v1.0pre3	General: Options ‘landscape’ and ‘portait’. (RN) . . . . . 1
v0.9d	General: LPPL 1.3 (HjG) . . . . . 1	v1.1a	General: New options ‘foldcorr/nofoldcorr’ suggested by Walter Schmidt. (RN) . . . . . 2
	M-x delete-trailing-whitespace (HjG) . 1		Using <code>\dimexpr</code> instead of package ‘calc’. (RN) . . . . . 6
	More code documentation; some caveats. (HjG) . . . . . 1		<code>\LL@processPage</code> : Additions for new option ‘foldcorr’. (RN) . . . . . 10
v0.9e	General: Add option ‘finish’. (RN/HjG) . 1	v1.1b	<code>\LL@pagesize@specials</code> : Adding code for LuaTeX >0.85. Thanks to Knut Lickert for his bug report. (RN) . . . . . 6
v0.9f	General: Merge v0.9d and v0.9e (hastily). (HjG) . . . . . 1	v2.0a	General: The macro <code>\LenToUnit</code> is no longer required. (RN) . . . . . 1
v0.9g	General: Rename option ‘finish’ to ‘combine’. (RN/HjG) . . . . . 1		<code>\LL@processPage</code> : Do not call <code>\@@@exec@outs</code> temporarily. (RN) . . . 10
v1.0	General: CTAN release. (RN/HjG) . . . . . 1		Using L <sup>A</sup> T <sub>E</sub> X’s new ‘shipout/before’ hook. (RN) . . . . . 10
v1.0a	General: Option ‘debug’. (RN) . . . . . 1	v2.0b	General: Using hooks instead of redefinition of <code>\@@end</code> . (RN) . . . . . 11
v1.0b	General: New option <code>nospécialtricks</code> for testing purposes. (RN) . . . . . 1		<code>\LL@processPage</code> : Renamed <code>\LL@savePage</code> to <code>\LL@processPage</code> . (RN) . . . . . 10
	<code>\closeout</code> : <code>\special</code> must be processed similar to e.g. <code>\write (V<sub>T</sub>E<sub>X</sub>)</code> . (RN) . 3		<code>\LL@shipout@combined@pages</code> : Suppress other background images. (RN) . . . . . 12
v1.0c	<code>\LL@shipoutPage</code> : Fix <code>\protect-ion</code> problems. (RN/HjG) . . . . . 12	v2.0c	<code>\@@@exec@outs</code> : Missing <code>\set@display@protect</code> (RN) . . . . . 5
v1.0d	General: Options ‘twopart/notwopart’ suggested by Luis Rivera. No more ‘final’ in <code>\ExecuteOptions</code> suggested by Axel Berger (RN) . . . . . 1		<code>\LL@processPage</code> : Activated <code>\@@@exec@outs</code> again. (RN) . . . . . 10
	<code>\LL@foldmark</code> : Invalid code for option “nofoldmark” changed. Thanks to Una Smith. (RN) . . . . . 2	v2.0d	General: Using UTF8 in the preamble for author names to prevent unpacking issue. (RN) . . . . . 1
v1.0e	<code>\LL@pagesize@specials</code> : Patch from Toby Thurston for XeLaTeX. (RN) . . 6	v2.1a	<code>\CutLine</code> : Optional parameter for line type . . . . . 9
v1.0pre1	General: Redefinition of <code>\immediate</code> , <code>\write</code> , <code>\openout</code> and <code>\closeout</code> . (RN) . . . . . 1		
v1.0pre2	General: eTeX support. (RN) . . . . . 1		

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