

# The leaflet document class

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## 1 Usage

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

## 2 Implementation

```
1 (*class)
```

### 2.1 Saving some internal macros...

```
2 \let\LL@shipout\shipout \let\LL@outputpage\@outputpage
3 \let\LL@begindvi\@begindvi \let\LL@end\@end
```

### 2.2 Option processing

```
4 \ifundefined{iflandscape}{\newif{iflandscape}}{%
5 \ifundefined{iftumble}{\newif{iftumble}}{%
6 \newcommand\LL@debug@info[1]{}%
7 \DeclareOption{dvips}{\PassOptionsToPackage{\CurrentOption}{graphics}}
8 \DeclareOption{pdftex}{\PassOptionsToPackage{\CurrentOption}{graphics}}
9 \DeclareOption{vtex}{\PassOptionsToPackage{\CurrentOption}{graphics}}
10 \DeclareOption{dvipdfm}{\PassOptionsToPackage{\CurrentOption}{graphics}}
11 \DeclareOption{twoside}{\OptionNotUsed}
12 \DeclareOption{twocolumn}{\OptionNotUsed}
13 \DeclareOption{landscape}{\landscapetrue}
14 \DeclareOption{portrait}{\landscapefalse}
15 \DeclareOption{debug}{\let\LL@debug@info\typeout}
16 \DeclareOption{nospecialtricks}{%
17 \AtEndOfClass{%
18 \ifLL@combine
19 \let\immediate\@immediate\let\write\@write
20 \let\openout\@openout\let\closeout\@closeout
21 \let\special\@special\let\@exec\@outs\relax
22 \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!
23 \newcommand*\LL@setPaperSize{}
24 \DeclareOption{a3paper}{\def\LL@setPaperSize{%
25   \paperwidth=420mm\paperheight=297mm\relax}}%
26 \@ifdefinable\ifLL@combine{\newif\ifLL@combine}
27 \DeclareOption{combine}{\LL@combinetrue}
28 \DeclareOption{nocombine}{\LL@combinefalse}

\LL@selectOutput
29 \newcommand*\LL@selectOutput{}
30 \DeclareOption{frontside}{\def\LL@selectOutput#1#2{#1}}
31 \DeclareOption{backside}{\def\LL@selectOutput#1#2{#2}}
32 \DeclareOption{bothsides}{\def\LL@selectOutput#1#2{#1#2}}

33 \DeclareOption{tumble}{\tumbletrue}
34 \DeclareOption{notumble}{\tumblefalse}

\LL@foldmark Drawing code for the fold mark. (Will be called within a picture environment.)
35 \newcommand*\LL@foldmark{}
36 \DeclareOption{foldmark}{%
37   \def\LL@foldmark{%
38     \begingroup
39       \linethickness{\LenToUnit{\foldmarkrule}}%
40       \setlength\@tempdima{\paperheight-\LL@tmargin}%
41       \put(0,\LenToUnit{\@tempdima}){%
42         \line(0,-1){\LenToUnit{\foldmarklength}}}%
43     \endgroup}%
44 }

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

46 \newcommand*\LL@toomanypages[2]{}
47 \DeclareOption{draft}{\PassOptionsToClass{\CurrentOption}{article}}%
48 \AtEndOfClass{%
49   \def\LL@toomanypages#1#2{%
50     \ClassWarningNoLine{leaflet}{#1.\MessageBreak#2}}%
51 }%
52 }

53 \DeclareOption{final}{\PassOptionsToClass{\CurrentOption}{article}}%
54 \AtEndOfClass{%
55   \ifLL@combine
56     \def\LL@toomanypages#1#2{%
57       \ClassError{leaflet}{#1}{#2.}}%
58   \else
59     \def\LL@toomanypages#1#2{%
60       \ClassWarningNoLine{leaflet}{#1.\MessageBreak#2}}%
61   \fi
62 }%
63 }

64 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{article}}
65 \PassOptionsToClass{landscape,a4paper}{article}
66 \ExecuteOptions{tumble,foldmark,bothsides,combine,landscape,final}
67 \ProcessOptions\relax
68 \ifLL@combine

\LL@rotate@I Rotates the output pages.
\LL@rotate@II
69 \newcommand*\LL@rotate@I{}\newcommand*\LL@rotate@II{}%
70 \iflandscape
71   \def\LL@rotate@I#1{#1}%
72   \iftumble
73     \def\LL@rotate@II#1{\rotatebox[origin=c]{180}{#1}}%
74   \else
75     \def\LL@rotate@II#1{#1}%

```

```

76 \fi
77 \else
78 \def\LL@rotate@I#1{\rotatebox[origin=c]{90}{#1}}%
79 \iftumble
80 \def\LL@rotate@II#1{\rotatebox[origin=c]{270}{#1}}%
81 \else
82 \def\LL@rotate@II#1{\rotatebox[origin=c]{90}{#1}}%
83 \fi
84 \fi

```

`\immediate` Im Folgenden definieren wir die T<sub>E</sub>X primitives `\immediate`, `\write`, `\openout` und `\closeout` um. Alle nicht “immediate” ausgeführten Anweisungen werden dem Makro `\@@@pending@outs` (Kommaliste) hinzugefügt. So können speziell die `\write`-Anweisungen unabhängig von T<sub>E</sub>X’s `\shipout` zu einem günstigen Zeitpunkt ausgeführt werden. For V<sub>T</sub>E<sub>X</sub> we must keep in mind that `\immediate\special` exist.

```

85 \def\@@@pending@outs{\let\@@@immediate\immediate
86 \let\@@@write\write \let\@@@special\special
87 \let\@@@openout\openout \let\@@@closeout\closeout
88 \def\immediate{%
89 \let\write\immediate@write%
90 \let\openout\immediate@openout%
91 \let\closeout\immediate@closeout%
92 \let\special\immediate@special}%
93 \def\reset@immediate{%
94 \let\write\pending@write%
95 \let\openout\pending@openout%
96 \let\closeout\pending@closeout%
97 \let\special\@@@special}%
98 \long\def\pending@write#1#\pending@@write{#1}}
99 \def\immediate@write{%
100 \reset@immediate\@@@immediate\@@@write}%
101 \def\immediate@openout{%
102 \reset@immediate\@@@immediate\@@@openout}%
103 \def\immediate@closeout{%
104 \reset@immediate\@@@immediate\@@@closeout}%
105 \def\immediate@special{%
106 \reset@immediate\@@@immediate\@@@special}%
107 \let\write\pending@write
108 \let\openout\pending@openout
109 \let\closeout\pending@closeout

```

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

```

110 \def\@dummy@whatsit{\special{}}
111 \begingroup\ifundefined{pdfoutput}{%
112 { \endgroup}
113 { \endgroup}
114 \ifnum\pdfoutput>z@\def\@dummy@whatsit{\pdfliteral{}}\fi

115 \begingroup\expandafter\expandafter\expandafter\endgroup
116 \expandafter\ifx\csname eTeXversion\endcsname\relax
117 %%% Test is from Markus Kohm (d.c.t.t, 29 Jun 2004)
118 \ClassWarningNoLine{leaflet}{%
119 *****\MessageBreak
120 * It’s very recommended to use eTeX \MessageBreak
121 * with this package! \MessageBreak
122 *****}%

```

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

```

123 \long\def\pending@@write#1#2{%
124 \@dummy@whatsit
125 \g@addto@macro\@@@pending@outs{\@@@immediate\@@@write\number#1{#2},}}%

```

```

\pending@openout
126 \def\pending@openout#1 {%
127 \@dummy@whatsit
128 \g@addto@macro\@@@pending@outs{\@@@immediate\@@@openout\number#1,}}%

\pending@closeout
129 \def\pending@closeout#1{%
130 \@dummy@whatsit
131 \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.
132 \newcommand*@@@exec@outs{%
133 \@@@pending@outs\gdef\@@@pending@outs{%
134 \LL@debug@info{%
135 >>> execute the output commands of the current page <<<}}%

136 \else
137 \RequirePackage{etex}

Allocation of a new mark class.
138 \globmarks\@@@out@mark
139 \newcounter{@@total@outs}\setcounter{@@total@outs}{0}
140 \newcounter{@@last@exec}\setcounter{@@last@exec}{0}

\pending@@write Doesn't work correctly without any \mark or \special or \pdfliteral command inside.
141 \long\def\pending@@write#1#2{%
142 \global\advance\c@@@total@outs\@ne%
143 \marks\@@@out@mark{\the\c@@@total@outs}%
144 \g@addto@macro\@@@pending@outs{\@@@immediate\@@@write\number#1{#2},}}%

\pending@openout
\pending@@openout 145 \def\pending@openout#1 {%
\pending@@@openout 146 \global\advance\c@@@total@outs\@ne%
\@ifequalsign 147 \marks\@@@out@mark{\the\c@@@total@outs}%
148 \g@addto@macro\@@@pending@outs{\@@@immediate\@@@openout\number#1,}}%

\pending@closeout
149 \def\pending@closeout#1{%
150 \global\advance\c@@@total@outs\@ne%
151 \marks\@@@out@mark{\the\c@@@total@outs}%
152 \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 com-
mands. 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.
153 \newcommand*@@@exec@outs{%
154 \begingroup

Pending io's = \@tempcntb = TOTAL-OUTS - LAST-EXEC
155 \@tempcntb\c@@@total@outs\advance\@tempcntb-\c@@@last@exec%
156 \edef\reserved@a{\botmarks\@@@out@mark}%
157 \ifx\reserved@a\@empty\@tempcnta\z\else\@tempcnta\reserved@a\fi%
158 \LL@debug@info{PENDING-OUTS:\the\@tempcntb\space\space
159 TOTAL-OUTS:\the\c@@@total@outs\space\space
160 LAST-EXEC:\the\c@@@last@exec\space\space
161 TOPMARK:\topmarks\@@@out@mark\space\space
162 FIRSTMARK:\firstmarks\@@@out@mark\space\space
163 BOTMARK:\botmarks\@@@out@mark}%

```

Last valid pending entry =  $\@tempcntb = \text{PENDING-OUTS} - \text{TOTAL-OUTS} + \text{BOTMARK}$   
 Number of invalid (moved) out's =  $\@tempcnta = \text{TOTAL-OUTS} - \text{BOTMARK}$

```

164     \advance\@tempcnta-\c@@total@outs \advance\@tempcntb\@tempcnta
165     \@tempcnta-\@tempcnta%
166     \ifnum\@tempcnta>z@
167     \LL@debug@info{%
168     >>> resave \the\@tempcnta\space output command(s).
169     Too early to execute! <<<}%
170     \fi
171     \@tempcnta\z@ \def\reserved@b{}%
172     \@for\reserved@a :=\@@@pending@outs\do{%
173     \ifx\reserved@a\@empty\else
174     \ifnum\@tempcnta<\@tempcntb%
175     \reserved@a% execute output's related to the current page box.
176     \global\advance\c@@@last@exec\@ne
177     \LL@debug@info{>>> execute output command number
178     \the\c@@@last@exec\space<<<}%
179     \else
180     \expandafter\g@addto@macro\expandafter\reserved@b\expandafter{%
181     \reserved@a,}%
182     \fi
183     \advance\@tempcnta\@ne%
184     \fi}%
185     \expandafter\@temptokena\expandafter{\reserved@b}%
186     \xdef\@@@pending@outs{\the\@temptokena}%
187     \endgroup}%
188 \fi% end of eTeX test.

```

`\protected@write` Because our redefined `\write` is expandable we must protect it inside of L<sup>A</sup>T<sub>E</sub>X's `\protected@write`.

```

189 \long\def\protected@write#1#2#3{%
190 \begingroup
191 \let\thepage\relax
192 #2%
193 \let\protect\@unexpandable@protect
194 \edef\reserved@a{\noexpand\write#1{#3}}%
195 \reserved@a%
196 \endgroup
197 \if@nobreak\ifvmode\nobreak\fi\fi}%

```

`\shipout` We make L<sup>A</sup>T<sub>E</sub>X's `\shipout` inefficacious (no more shipout at all).

```

198 \def\shipout{\deadcycles\z@\setbox\@tempboxa=}

```

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

```

199 \let\@begindvi\@empty
200 \fi% end of \ifLL@combine

```

`\LL@toomanypages` Now elsewhere ...

```

201 \LoadClass{article}
202 \RequirePackage{everyshi,calc,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.

```

203 \newcommand*\LL@pagesize@specials[2]{}
204 \@ifundefined{Gin@driver}{}%
205 {%
206 \ifx\Gin@driver\@empty\else%
207 \filename@parse{\Gin@driver}\@tempwafalse%
208 \def\reserved@a{dvips}%

```

```

209 \ifx\filename@base\reserved@a\@tempwatruetruet\fi%
210 \def\reserved@a{dvipdfm}%
211 \ifx\filename@base\reserved@a\@tempwatruetruet\fi%
212 \if@tempswa%
213 \ClassInfo{leaflet}{Generating code for dvips}%
214 \def\LL@pagesize@specials#1#2{%
215 \@tempdima=#1\@tempdimb=#2%
216 \AtBeginDvi{\special{papersize=\the\@tempdima,\the\@tempdimb}}}%
217 \fi%
218 \def\reserved@a{pdftex}%
219 \ifx\filename@base\reserved@a
220 \ClassInfo{leaflet}{Generating code for pdfTeX}%
221 \def\LL@pagesize@specials#1#2{%
222 \@tempdima=#1\@tempdimb=#2%
223 \pdfpagewidth\@tempdima\pdfpageheight\@tempdimb}%
224 \fi%
225 \def\reserved@a{vtex}%
226 \ifx\filename@base\reserved@a
227 \ClassInfo{leaflet}{Generating code for VTeX}%
228 \def\LL@pagesize@specials#1#2{%
229 \@tempdima=#1\@tempdimb=#2%
230 \mediawidth\@tempdima\mediaheight\@tempdimb}%
231 \fi%
232 \fi
233 }

```

\LL@CmdIgnored

```

234 \newcommand*\LL@CmdIgnored[1]{%
235 \ClassWarning{leaflet}{%
236 '\string#1' ignored}}

```

### 2.3 Changing the class properties

```

237 \setlength{\parskip}{1ex plus 2pt}
238 \@listi%
239 \setlength{\labelwidth}{\leftmargin}
240 \addtolength{\labelwidth}{-\labelsep}
241 \pagestyle{empty}
242 \headheight\z@
243 \headsep\z@
244 \footskip\z@
245 \marginparwidth\z@
246 \marginparsep\z@
247 \sloppy
248 \setcounter{secnumdepth}{0}
249 %\renewcommand\marginpar[2][\LL@CmdIgnored{\marginpar}]
250 \renewcommand\twocolumn[1][\LL@CmdIgnored{\twocolumn}]
251 \renewcommand\onecolumn{\LL@CmdIgnored{\onecolumn}}
252 \renewcommand\topfraction{0.7}
253 \renewcommand\bottomfraction{0.7}
254 \setlength{\textfloatsep}{10pt plus 4pt minus 3pt}
255 \setlength{\parindent}{\z@}
256 \setlength{\leftmargini}{1.5em}
257 \setlength{\leftmarginii}{1.5em}
258 \setlength{\leftmarginiii}{1.5em}
259 \setlength{\leftmarginiv}{1.5em}
260 \setlength{\leftmarginv}{1.5em}
261 \setlength{\leftmarginvi}{1.5em}
262 \setlength{\labelsep}{.5em}
263 \setlength \labelwidth{\leftmargini}
264 \addtolength\labelwidth{-\labelsep}

```

\noparskip

```

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

```

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

```
266 \let\old@small\small
267 \renewcommand{\small}{\old@small\let\@listi\@listI}
268 \let\old@footnotesize\footnotesize
269 \renewcommand{\footnotesize}{\old@footnotesize\let\@listi\@listI}

\sectfont User macro for changing the font of the typesetted parameter of the \?section commands.
270 \newcommand{\sectfont}{\bfseries}

271 \renewcommand\section{\@startsection{section}{1}{\z@}%
272 {-3.5ex \@plus -.75ex}%
273 {1ex} %\{1.5ex}%
274 {\normalfont\large\sectfont}}
275 \renewcommand\subsection{\@startsection{subsection}{2}{\z@}%
276 {-2.5ex plus -.5ex}%
277 {1\p@} %\{1ex}%
278 {\normalfont\normalsize\sectfont}}
279 \renewcommand\subsubsection{\@startsection{subsubsection}{3}{\z@}%
280 {-2.5ex plus -.5ex}%
281 {-1em}%
282 {\normalfont\normalsize\sectfont}}
283 \def\part{\LL@CmdIgnored{\part}\secdef\@part\@spart}
284 \def\@part[#1]#2{
285 \def\@spart#1{
286
287 \renewcommand*\descriptionlabel[1]{%
288 \hspace\labelsep\normalfont\descfont #1}

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

290 \iffalse
291 % Doesn't work!
292 \g@addto@macro\enumerate{\parsep2\p@\@plus2\p@\@minus\z@}
293 \g@addto@macro\itemize{\parsep2\p@\@plus2\p@\@minus\z@}
294 \g@addto@macro\description{\parsep2\p@\@plus2\p@\@minus\z@}
295 \else
296 \newcommand*\LL@listsetup{%
297 % \parsep.445ex\@plus.445ex\@minus.2225ex%
298 % \parsep.5ex\@plus.5ex\@minus.25ex%
299 \parsep1ex\@plus.5ex\@minus.25ex%
300 \LL@debug@info{***parsep=\the\parsep}%
301 % \itemsep.25\parsep
302 \itemsep\z@
303 \LL@debug@info{***itemsep=\the\itemsep}%
304 \topsep\z@
305 \LL@debug@info{***topsep=\the\topsep}%
306 % \partopsep\z@
307 \LL@debug@info{***partopsep=\the\partopsep}%
308 }
309 \def\enumerate{%
310 \ifnum \@enumdepth >\thr@@\@toodeep\else
311 \advance\@enumdepth\@ne
312 \edef\@enumctr{enum\romannumeral\the\@enumdepth}%
313 \expandafter
314 \list
315 \csname label\@enumctr\endcsname
316 {\usecounter\@enumctr
317 \def\makelabel##1{\hss\llap{##1}}%
318 %\def\makelabel##1{##1\hfill}%
319 %\def\makelabel##1{\hss##1}%
320 \LL@listsetup
321 }%
322 \fi}
```

```

323 \def\itemize{%
324   \ifnum \@itemdepth >\thr@@\@toodeep\else
325     \advance\@itemdepth\@ne
326     \edef\@itemitem{labelitem\romannumeral\the\@itemdepth}%
327     \expandafter
328     \list
329       \csname\@itemitem\endcsname
330       {%
331         \def\makelabel##1{\hss\llap{##1}}%
332         %\def\makelabel##1{##1\hfill}%
333         %\def\makelabel##1{\hss##1}%
334         \LL@listsetup
335       }%
336   \fi}
337 \renewenvironment{description}
338   {\list{}{\labelwidth\z@ \itemindent-\leftmargin
339     \let\makelabel\descriptionlabel
340     \LL@listsetup}}
341   {\endlist}
342 \fi

```

## 2.4 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.

```

343 \newcommand*\setmargins[4]{%
temp. top!
344   \setlength\topmargin{#1}%
345   \edef\LL@tmargin{\the\topmargin}%
temp. bottom!
346   \setlength\evensidemargin{#2}%
347   \setlength\textheight{%
348     \paperheight-\topmargin-\evensidemargin%
349     -\headheight-\headsep-\footskip}%
temp. left!
350   \setlength\oddsidemargin{#3}%
temp. right!
351   \setlength\evensidemargin{#4}%
352   \setlength\textwidth{%
353     \paperwidth-\oddsidemargin-\evensidemargin-\marginparwidth-\marginparsep}%
real top!
354   \addtolength\topmargin{-1in}%
real left!
355   \addtolength\oddsidemargin{-1in}%
probably not necessary
356   \evensidemargin\oddsidemargin%
357 }

```

The dimensions of a single small page.

```

358 \LL@setPaperSize
359 \paperwidth=0.333333334\paperwidth
360 \setmargins{11mm}{11mm}{8mm}{8mm}

```

## 2.5 Additional user macros

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

```
\foldmarklength 361 \newcommand*\foldmarkrule{0.4pt}
362 \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.

```
\AddToBackground* 363 \newcommand\AddToBackground{%
364   \ifstar{\@tempwatrue\LL@AddToBackground}
365             {\@tempwafalse\LL@AddToBackground}}
366 \@onlypreamble\AddToBackground
367 \newcommand\LL@AddToBackground[2]{%
368   \if@tempswa\def\@tempa{\LL@largePic}\else\def\@tempa{\LL@smallPic}\fi
369   \expandafter\providecommand\csname\@tempa\@Roman{#1}\endcsname{}}
370   \expandafter\g@addto@macro\csname\@tempa\@Roman{#1}\endcsname{#2}}
```

`\LenToUnit` `\LenToUnit{<dimension>}` can be used in a picture environment instead of multiples of `\unitlength`.

```
371 \newcommand\LenToUnit[1]{#1\@gobble}
```

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

`\CutLine*` starred version draws only the dotted line.

`\Scissors`

```
372 \newcommand*\CutLine{%
373   \ifstar{\@tempwatrue\LL@CutLine}{\@tempwafalse\LL@CutLine}}
374 \@onlypreamble\CutLine
375 \newcommand*\LL@CutLine[1]{%
376   \ifLL@combine
377     \ifx\Scissors\@empty\@tempwatrue\fi
378     \if@tempswa
379       \AddToBackground{#1}{%
380         \put(0,0){%
381           \rotatebox{90}{\makebox(\LenToUnit{\paperheight},0){%
382             \normalsize
383             \dotfill}}}}}%
384     \else
385       \AddToBackground{#1}{%
386         \put(0,0){%
387           \rotatebox{90}{\makebox(\LenToUnit{\paperheight},0){%
388             \normalsize
389             \dotfill\Scissors\dotfill\dotfill\Scissors\dotfill}}}}}%
390     \fi
391   \fi}
392 \IfFileExists{pifont.sty}
393   {\RequirePackage{pifont}}
394   {\newcommand*\Scissors{\raisebox{-0.85ex}{\large\ding{34}}}}%
395   {\newcommand*\Scissors{}}
```

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

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

## 2.6 Page construction and output

### 2.6.1 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).

```
397 \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.

```
398 \AtBeginDocument{\EveryShipout{\LL@savePage}}
```

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

```
399 \newcounter{LL@page}\setcounter{LL@page}{1}
400 \newcommand\LL@tempa{}
```

\LL@savePage With “combine” option the six small pages will be saved in box registers (\LL@boxI... \LL@boxVI). The box255 with the page content must be a bit moved to get a “normal-sized” box.

```
401 \newcommand*\LL@savePage{%
402   \ifnum\c@LL@page<7\relax
      Add a background picture to a single small page.
403   \setbox\@cclv\vbox{%
404     \vbox{\@tempdima=1in\relax
405       \@tempdimb=\paperheight\advance\@tempdimb-\@tempdima
406       \pictur@(0,0)(\LenToUnit{\@tempdima},\LenToUnit{\@tempdimb})%
407         \begingroup
408           \set@typeset@protect
409           \@nameuse{LL@smallPic\Roman{LL@page}}%
410           %\set@display@protect
411           \endgroup
412         \endpicture}%
413     \nointerlineskip\box\@cclv}%
414   \ifLL@combine
415     \@@@exec@outs
416     \expandafter\newsavebox\c@name LL@box\Roman{LL@page}\endcsname%
417     \setbox\@cclv=\vbox{\vskip1in\unvbox\@cclv}%
418     \setbox\@cclv=\vbox{\moveright1in\box\@cclv}%
419     \setbox\@cclv=\hb@xt@\paperwidth{\box\@cclv\hss}%
420     \setbox\@cclv=\vb@xt@\paperheight{\box\@cclv\vss}%
421     \global\expandafter\setbox%
422     \c@name LL@box\Roman{LL@page}\endcsname=\box\@cclv%
423     \typeout{\@spaces [\the\c@LL@page] ==> [\Roman{LL@page}]}%
424     \fi
425   \fi
426   \ifnum\c@LL@page=7\relax
```

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

```
427   \begingroup
428     \set@typeset@protect
429     \LL@toomanypages{%
430       The text you supplied fills more than six pages\MessageBreak
431       and will therefore not fit onto a single flyer}%
432     Try using smaller fonts or reducing vertical space}%
433   \endgroup
434   \fi
435   \stepcounter{LL@page}}
```

## 2.6.2 Generating missing small pages

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

```
436 \ifLL@combine
```

\@@@end

```
437 \def\@@@end{%
438   \clearpage\pagestyle{empty}%
      Restore the original \@outputpage command (removing any related background pictures).
439   \let\@outputpage\LL@outputpage
      Suppresses all everyshi’s clients (removing other kinds of background pictures) but our page
      saving macro is still needed for the next step and must be set again.
440   \def\@EveryShipout@Hook{}%
441   \def\@EveryShipout@AtNextHook{}%
442   \EveryShipout{\LL@savePage}%
```

Create empty pages if necessary.

```
443 \loop\ifnum\c@LL@page<7\relax
444   \ClassInfo{leaflet}{Generating empty page \the\c@page}%
445   \null\newpage
446 \repeat
```

### 2.6.3 Reassembling the small pages

Here begins the real output using L<sup>A</sup>T<sub>E</sub>X's original `\shipout`. The `everyshi` package isn't active any more. The `begin dvi` hook is reactivated.

```
447 \let\shipout\LL@shipout \let\@begindvi\LL@begindvi
448 \paperwidth=3\paperwidth
449 \iflandscape
450   \LL@pagesize@specials{\paperwidth}{\paperheight}%
451 \else
452   \LL@pagesize@specials{\paperheight}{\paperwidth}%
453 \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
454 \newcommand*\LL@shipoutPage[1]{%
455 % \set@display@protect
456 \let \protect \noexpand
457 \shipout\vb@xt@\paperheight{%
458   \set@typeset@protect
459   \vskip-1in%
460   \@begindvi\hb@xt@\paperwidth{\hskip-1in##1\hss}\vss}}%
461 \newcommand*\LL@preparePages[3]{%
462 \typeout{[\@Roman{##1}\space\@Roman{##2}\space\@Roman{##3}] ==>}%
```

Add a background picture to a large page.

```
463 \pictur@(0,0)\@nameuse{LL@largePic\Roman{page}}\endpicture%
464 \LL@preparePage{##1}\LL@preparePage{##2}\LL@preparePage{##3}}%
465 \newcommand*\LL@preparePage[1]{%
466 \expandafter\box\c@name LL@box\@Roman{##1}\endcsname}%
```

Combine and output the frontside and the backside.

```
467 \LL@selectOutput
468 {\setcounter{page}{1}%
469 \LL@shipoutPage{\LL@rotate@I{\LL@preparePages{5}{6}{1}}}}%
470 {\setcounter{page}{2}%
471 \LL@shipoutPage{\LL@rotate@II{\LL@preparePages{2}{3}{4}}}}%
472 \LL@@end
473 }%
```

End of the redefinition of `\@@end`.

```
474 \else
```

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

```
475 \LL@pagesize@specials{\paperwidth}{\paperheight}%
476 \AtEndDocument{%
477 \clearpage\pagestyle{empty}%
478 \loop\ifnum\c@LL@page<7\relax
479   \ClassInfo{leaflet}{Generating empty page \the\c@page}%
480   \null\newpage
481 \repeat
482 }
483 \fi
484 \</class>
```

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

# Change History

v0.8c	General: Repacked as dtx file. (RN) . . . . 1	<code>\LenToUnit</code> : New macro <code>\LenToUnit</code> . (RN) . . . . . 9
v0.9d	General: LPPL 1.3 (HjG) . . . . . 1	v1.0b
	M-x delete-trailing-whitespace (HjG) . 1	General: New option <code>nospecialtricks</code> for testing purposes. (RN) . . . . . 1
	More code documentation; some caveats. (HjG) . . . . . 1	<code>\closeout</code> : <code>\special</code> must be processed similar to e.g. <code>\write</code> (V <sub>T</sub> E <sub>X</sub> ). (RN) . 3
v0.9e	General: Add option ‘finish’. (RN/HjG) . 1	v1.0c
v0.9f	General: Merge v0.9d and v0.9e (hastily). (HjG) . . . . . 1	<code>\LL@shipoutPage</code> : Fix <code>\protect</code> -ion problems. (RN/HjG) . . . . . 11
v0.9g	General: Rename option ‘finish’ to ‘combine’. (RN/HjG) . . . . . 1	v1.0pre1
v1.0	General: CTAN release. (RN/HjG) . . . . 1	General: Redefinition of <code>\immediate</code> , <code>\write</code> , <code>\openout</code> and <code>\closeout</code> . (RN) . . . . . 1
v1.0a	General: Add option ‘debug’. (RN) . . . . 1	v1.0pre2
		General: eTeX support. (RN) . . . . . 1
		v1.0pre3
		General: Options ‘landscape’ and ‘portrait’. (RN) . . . . . 1

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