

# The **leaflet** document class

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## 1 Usage

Process the file `leaflet-manual.tex` with L<sup>A</sup>T<sub>E</sub>X 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 \@ifundefined{iftwopart}{\newif\iftwopart}{}
7 \newcommand{\LL@debug@info}[1]{}
8 \DeclareOption{dvips}{\PassOptionsToPackage{\CurrentOption}{graphics}}
9 \DeclareOption{pdftex}{\PassOptionsToPackage{\CurrentOption}{graphics}}
10 \DeclareOption{vtex}{\PassOptionsToPackage{\CurrentOption}{graphics}}
11 \DeclareOption{dvipdfm}{\PassOptionsToPackage{\CurrentOption}{graphics}}
12 \DeclareOption{twoside}{\OptionNotUsed}
13 \DeclareOption{twocolumn}{\OptionNotUsed}
14 \DeclareOption{landscape}{\landscapetrue}
15 \DeclareOption{portrait}{\landscapefalse}
16 \DeclareOption{debug}{\let\LL@debug@info\typeout}
17 \DeclareOption{twopart}{\twoparttrue}
18 \DeclareOption{notwopart}{\twopartfalse}
19 \DeclareOption{nospécialtricks}{}
20 \AtEndOfClass{%
21   \ifLL@combine
22     \let\immediate\@Immediate\let\write\@Immediate
```

```

23      \let\openout\@openout\let\closeout\@closeout
24      \let\special\@special\let\@execouts\relax
25      \fi}%
26 \newcommand*\LL@setPaperSize{%
27 \DeclareOption{a3paper}{\def\LL@setPaperSize{%
28   \paperwidth=420mm\paperheight=297mm\relax}}%
29 \if definable\ifLL@combine{\newif\ifLL@combine}%
30 \DeclareOption{combine}{\LL@combinetrue}%
31 \DeclareOption{nocombine}{\LL@combinefalse}%
32 \newcommand*\LL@selectOutput{%
33 \DeclareOption{frontside}{\def\LL@selectOutput#1#2{\#1}}%
34 \DeclareOption{backside}{\def\LL@selectOutput#1#2{\#2}}%
35 \DeclareOption{bothsides}{\def\LL@selectOutput#1#2{\#1\#2}}%
36 \DeclareOption{tumble}{\tumbletrue}%
37 \DeclareOption{notumble}{\tumblefalse}%
38 \newcommand*\LL@foldmark{}%
39 \DeclareOption{foldmark}{%
40   \def\LL@foldmark{%
41     \begingroup
42       \linethickness{\LenToUnit{\foldmarkrule}}%
43       \setlength\tempdima{\paperheight-\LL@tmargin}%
44       \put(0,\LenToUnit{\tempdima}){%
45         \line(0,-1){\LenToUnit{\foldmarklength}}}%
46     \endgroup}%
47 }%
48 \DeclareOption{nofoldmark}{\def\LL@foldmark{}}%
49 \newcommand*\LL@toomanypages[2]{%
50 \DeclareOption{draft}{\PassOptionsToClass{\CurrentOption}{article}}%
51 \AtEndOfClass{%
52   \def\LL@toomanypages#1#2{%
53     \ClassWarningNoLine{leaflet}{#1.\MessageBreak#2}}%
54 }%
55 }%
56 \DeclareOption{final}{\PassOptionsToClass{\CurrentOption}{article}}%
57 \AtEndOfClass{%
58   \ifLL@combine
59     \def\LL@toomanypages#1#2{%
60       \ClassError{leaflet}{#1}{#2.}}%
61   \else
62     \def\LL@toomanypages#1#2{%
63       \ClassWarningNoLine{leaflet}{#1.\MessageBreak#2}}%
64   \fi
65 }%
66 }%
67 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{article}}%
68 \PassOptionsToClass{landscape,a4paper}{article}%
69 \ExecuteOptions{tumble,foldmark,bothsides,combine,landscape,notwopart}%
70 \ProcessOptions\relax
71 \ifLL@combine
72 \newcommand*\LL@rotate@I{} \newcommand*\LL@rotate@II{}%
73 \if landscape
74   \def\LL@rotate@I{\#1}%
\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!
\LL@selectOutput Drawing code for the fold mark. (Will be called within a picture environment.)
\LL@foldmark Rotates the output pages.
\LL@rotate@II

```

```

75      \iftumble
76          \def\LL@rotate@I{\rotatebox[origin=c]{180}{#1}}%
77      \else
78          \def\LL@rotate@I{\#1}%
79      \fi
80  \else
81      \def\LL@rotate@I{\rotatebox[origin=c]{90}{#1}}%
82  \iftumble
83      \def\LL@rotate@II{\rotatebox[origin=c]{270}{#1}}%
84  \else
85      \def\LL@rotate@II{\rotatebox[origin=c]{90}{#1}}%
86  \fi
87 \fi

\immediate  Im Folgenden definieren wir die TeX primitives \immediate, \write, \openout und \closeout
\write   um. Alle nicht "immediate" ausgeführten Anweisungen werden dem Makro \@@@pending@outs
\openout  (Kommaliste) hinzugefügt. So können speziell die \write-Anweisungen unabhängig von TeX's
\closeout \shipout zu einem günstigen Zeitpunkt ausgeführt werden. For VTeX we must keep in mind
that \immediate\special exist.
88 \def\@@@pending@outs{} \let\@@@immediate\immediate
89 \let\@@@write\write \let\@@@special\special
90 \let\@@@openout\openout \let\@@@closeout\closeout
91 \def\immediate{%
92     \let\write\immediate@write%
93     \let\openout\immediate@openout%
94     \let\closeout\immediate@closeout%
95     \let\special\immediate@special}%
96 \def\reset@immediate{%
97     \let\write\pending@write%
98     \let\openout\pending@openout%
99     \let\closeout\pending@closeout%
100    \let\special\@@@special}%
101 \long\def\pending@write#1{\pending@write{#1}}
102 \def\immediate@write{%
103     \reset@immediate\@@@immediate\@@@write}%
104 \def\immediate@openout{%
105     \reset@immediate\@@@immediate\@@@openout}%
106 \def\immediate@closeout{%
107     \reset@immediate\@@@immediate\@@@closeout}%
108 \def\immediate@special{%
109     \reset@immediate\@@@immediate\@@@special}%
110 \let\write\pending@write
111 \let\openout\pending@openout
112 \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.
113 \def\@dummy@whatsit{\special{}}
114 \begingroup\@ifundefined{pdfoutput}%
115 { \endgroup
116 { \endgroup
117   \ifnum\pdfoutput>z@\def\@dummy@whatsit{\pdfliteral{}\fi}

118 \begingroup\expandafter\expandafter\expandafter\endgroup
119 \expandafter\ifx\csname eTeXversion\endcsname\relax
120   %% Test is from Markus Kohm (d.c.t.t, 29 Jun 2004)
121   \ClassWarningNoLine{leaflet}{%
122   *****\MessageBreak
123   * It's very recommended to use eTeX \MessageBreak
124   * with this package! \MessageBreak
125   *****}%

```

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

```

126  \long\def\pending@@write#1#2{%
127    \g@addto@macro{\@@pending@outs{\@@immediate\@@@write\number#1{#2},}}%
128    \g@addto@macro{\@@pending@outs{\@@immediate\@@@openout\number#1{#2},}}%
129  \def\pending@openout#1 {%
130    \g@addto@macro{\@@pending@outs{\@@immediate\@@@openout\number#1{#1},}}%
131  }%
132  \def\pending@closeout#1 {%
133    \g@addto@macro{\@@pending@outs{\@@immediate\@@@closeout\number#1{#1},}}%
134  }%
135  \newcommand*\@@@exec@outs{%
136    \@@@pending@outs\gdef\@@@pending@outs{}%
137    \LL@debug@info{%
138      >>> execute the output commands of the current page <<<}%
139  \else
140  \RequirePackage{etex}
Allocation of a new mark class.
141  \globmarks\@@@out@mark
142  \newcounter{@@total@outs}\setcounter{@@total@outs}{0}
143  \newcounter{@@last@exec}\setcounter{@@last@exec}{0}
\pending@@write Doesn't work correctly without any \mark or \special or \pdfliteral command inside.
144  \long\def\pending@@write#1#2{%
145    \global\advance\c@@@total@outs\@ne%
146    \marks\@@@out@mark{\the\c@@@total@outs}%
147    \g@addto@macro{\@@@pending@outs{\@@immediate\@@@write\number#1{#2},}}%
\pending@openout
\pending@@openout 148 \def\pending@openout#1 {%
\pending@@openout 149  \global\advance\c@@@total@outs\@ne%
\@ifequalsign 150  \marks\@@@out@mark{\the\c@@@total@outs}%
151  \g@addto@macro{\@@@pending@outs{\@@immediate\@@@openout\number#1,}}%
\pending@closeout
152 \def\pending@closeout#1 {%
153  \global\advance\c@@@total@outs\@ne%
154  \marks\@@@out@mark{\the\c@@@total@outs}%
155  \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.
156  \newcommand*\@@@exec@outs{%
157  \begingroup
Pending io's = \tempcntb = TOTAL-OUTS - LAST-EXEC
158  \tempcntb\c@@@total@outs\advance\tempcntb-\c@@@last@exec%
159  \edef\reserved@a{\botmarks{@@out@mark}}%
160  \ifx\reserved@a\empty\tempcnta\z@\else\tempcnta\reserved@a\fi%
161  \LL@debug@info{PENDING-OUTS:\the\tempcntb\space\space
TOTAL-OUTS:\the\c@@@total@outs\space\space
LAST-EXEC:\the\c@@@last@exec\space\space
TOPMARK:\topmarks{@@out@mark\space\space
FIRSTMARK:\firstmarks{@@out@mark\space\space
BOTMARK:\botmarks{@@out@mark}}%

```

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

```
167      \advance\@tempcnta-\c@@@total@outs \advance\@tempcntb\@tempcnta
168      \@tempcnta-\@tempcnta%
169      \ifnum\@tempcnta>\z@
170          \LL@debug@info{%
171              >>> resave \the\@tempcnta\space output command(s).
172              Too early to execute! <<<}%
173      \fi
174      \@tempcnta\z@ \def\reserved@b{}%
175      \@for\reserved@a :=\@@@pending@outs\do{%
176          \ifx\reserved@a\@empty\else
177              \ifnum\@tempcnta<\@tempcntb%
178                  \reserved@a% execute output's related to the current page box.
179                  \global\advance\c@@@last@exec\@ne
180                  \LL@debug@info{>>> execute output command number
181                      \the\c@@@last@exec\space<<<}%
182          \else
183              \expandafter\g@addto@macro\expandafter\reserved@b\expandafter{%
184                  \reserved@a,}%
185              \fi
186              \advance\@tempcnta\@ne%
187          \fi}%
188          \expandafter\@temptokena\expandafter{\reserved@b}%
189          \xdef\@@@pending@outs{\the\@temptokena}%
190      \endgroup}%
191 \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.

```
192 \long\def\protected@write#1#2#3{%
193     \begingroup
194         \let\thepage\relax
195         #2%
196         \let\protect\unexpandable@protect
197         \edef\reserved@a{\noexpand\write#1{#3}}%
198         \reserved@a%
199     \endgroup
200     \ifnobreak\ifvmode\nobreak\fi\fi}%
201 \def\shipout{\deadcycles\z@\setbox\@tempboxa=}
```

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

```
202 \let\@begindvi\@empty
203 \fi% end of \ifLL@combine
```

\LL@toomanypages Now elsewhere ...

```
204 \LoadClass{article}
205 \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.

```
206 \newcommand*\LL@pagesize@specials[2]{}
207 \@ifundefined{Gin@driver}{}{%
208 {%
209     \ifx\Gin@driver\@empty\else%
210         \filename@parse{\Gin@driver}\@tempswafalse%
211         \def\reserved@a{dvips}%
212     \fi
213 }
```

```

212     \ifx\filename@base\reserved@a\@tempswatrue\fi%
213     \def\reserved@a{\dvipdfm}%
214     \ifx\filename@base\reserved@a\@tempswatrue\fi%
215     \if@tempswa%
216         \ClassInfo{leaflet}{Generating code for dvips}%
217         \def\LL@pagesize@specials#1#2{%
218             \tempdima=#1\tempdimb=#2%
219             \AtBeginDvi{\special{papersize=\the\tempdima,\the\tempdimb}}%
220         \fi%
221         \def\reserved@a{\pdftex}%
222         \ifx\filename@base\reserved@a
223             \ClassInfo{leaflet}{Generating code for pdfTeX}%
224             \def\LL@pagesize@specials#1#2{%
225                 \tempdima=#1\tempdimb=#2%
226                 \pdfpagewidth\tempdima\pdfpageheight\tempdimb}%
227             \fi%
228             \def\reserved@a{\vtx}%
229             \ifx\filename@base\reserved@a
230                 \ClassInfo{leaflet}{Generating code for VTeX}%
231                 \def\LL@pagesize@specials#1#2{%
232                     \tempdima=#1\tempdimb=#2%
233                     \mediawidth\tempdima\mediaheight\tempdimb}%
234             \fi%
235         \fi
236     }

\LL@CmdIgnored
237 \newcommand*\LL@CmdIgnored[1]{%
238   \ClassWarning{leaflet}{%
239     'string#1' ignored}}

```

### 2.3 Changing the class properties

```

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

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

```

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

```
269 \let\old@small\small
270 \renewcommand{\small}{\old@small\let\@listi\@listI}
271 \let\old@footnotesize\footnotesize
272 \renewcommand{\footnotesize}{\old@footnotesize\let\@listi\@listI}
```

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

```
273 \newcommand{\sectfont}{\bfseries}
274 \renewcommand{\section}{\@startsection{section}{1}{\z@}%
275 {-3.5ex \plus -.75ex}%
276 {1ex} {\{1.5ex}\}%
277 {\normalfont\large\sectfont}}
278 \renewcommand{\subsection}{\@startsection{subsection}{2}{\z@}%
279 {-2.5ex plus -.5ex}%
280 {1\p@} {\{1ex}\}%
281 {\normalfont\normalsize\sectfont}}
282 \renewcommand{\subsubsection}{\@startsection{subsubsection}{3}{\z@}%
283 {-2.5ex plus -.5ex}%
284 {-1em}%
285 {\normalfont\normalsize\sectfont}}
286 \def\part{\LL@CmdIgnored{\part}\secdef\@part\@spart}
287 \def\@part[#1]{#2}
288 \def\@spart#1{}
289
290 \renewcommand*\descriptionlabel[1]{%
291 \hspace\labelsep\normalfont\descfont #1}
```

\descfont User macro for changing the font of the description label.

```
292 \newcommand*\descfont{\bfseries}
293 \iffalse
294 % Doesn't work!
295 \g@addto@macro\enumerate{\parsep2\p@\plus2\p@\minus\z@}
296 \g@addto@macro\itemize{\parsep2\p@\plus2\p@\minus\z@}
297 \g@addto@macro\description{\parsep2\p@\plus2\p@\minus\z@}
298 \else
299 \newcommand*\LL@listsetup{%
300 % \parsep.445ex\plus.445ex\minus.2225ex%
301 % \parsep.5ex\plus.5ex\minus.25ex%
302 \parsep1ex\plus.5ex\minus.25ex%
303 \LL@debug@info{***parsep=\the\parsep}%
304 % \itemsep.25\parsep
305 \itemsep\z@
306 \LL@debug@info{***itemsep=\the\itemsep}%
307 \topsep\z@
308 \LL@debug@info{***topsep=\the\topsep}%
309 % \partopsep\z@
310 \LL@debug@info{***partopsep=\the\partopsep}%
311 }
312 \def\enumerate{%
313 \ifnum \c@enumdepth >\thr@@\@toodeep\else
314 \advance\c@enumdepth\one
315 \edef\c@enumctr{enum\romannumeral\the\c@enumdepth}%
316 \expandafter
317 \list
318 \csname label\c@enumctr\endcsname
319 \usecounter\c@enumctr
320 \def\makelabel##1{\hss\llap{##1}}%
321 \%def\makelabel##1{##1\hfill}%
322 \%def\makelabel##1{\hss##1}%
323 \LL@listsetup
324 }%
325 \fi}
```

```

326 \def\itemize{%
327   \ifnum \citemdepth >\thr@@\cdoodeep\else
328     \advance\citemdepth\one
329     \edef\citemitem{\labelitem\romannumeral\the\citemdepth}%
330     \expandafter
331     \list
332       \csname\citemitem\endcsname
333     \f%
334       \def\makelabel##1{\hss\llap{##1}}%
335       \%def\makelabel##1{##1\hfill}%
336       \%def\makelabel##1{\hss##1}%
337       \LL@listsetup
338     }%
339   \fi}
340 \renewenvironment{description}
341   {\list{}{\labelwidth\z@\itemindent-\leftmargin
342             \let\makelabel\descriptionlabel
343             \LL@listsetup}}
344   {\endlist}
345 \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.

```

346 \newcommand*\setmargins[4]{%
  temp. top!
  347   \setlength\topmargin{#1}%
  348   \edef\LL@tmargin{\the\topmargin}%
  temp. bottom!
  349   \setlength\evensidemargin{#2}%
  350   \setlength\textheight{%
  351     \paperheight-\topmargin-\evensidemargin%
  352     -\headheight-\headsep-\footskip}%
  temp. left!
  353   \setlength\oddsidemargin{#3}%
  temp. right!
  354   \setlength\evensidemargin{#4}%
  355   \setlength\textwidth{%
  356     \paperwidth-\oddsidemargin-\evensidemargin-\marginparwidth-\marginparsep}%
  real top!
  357   \addtolength\topmargin{-1in}%
  real left!
  358   \addtolength\oddsidemargin{-1in}%
  probably not necessary
  359   \evensidemargin\oddsidemargin%
  360 }

```

The dimensions of a single small page.

```

361 \LL@setPaperSize
362 \paperwidth=0.33333334\paperwidth
363 \setmargins{11mm}{11mm}{8mm}{8mm}

```

## 2.5 Additional user macros

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

```
364 \newcommand*\foldmarkrule{0.4pt}
365 \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.

```
366 \newcommand\AddToBackground{%
367   \@ifstar{\@tempswatru\LL@AddToBackground}%
368   {\@tempswafalse\LL@AddToBackground}}%
369 \@onlypreamble\AddToBackground
370 \newcommand\LL@AddToBackground[2]{%
371   \if@tempswa\def\@tempa{\LL@largePic}\else\def\@tempa{\LL@smallPic}\fi
372   \expandafter\providecommand\csname\@tempa\@Roman{\#1}\endcsname{}%
373   \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.

```
374 \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.

\Scissors

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

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

```
399 \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).

```
400 \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.

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

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

```
402 \newcounter{LL@page}\setcounter{LL@page}{1}
403 \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.

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

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

```
430   \begingroup
431     \set@typeset@protect
432     \LL@toomanypages{%
433       The text you supplied fills more than six pages\MessageBreak
434       and will therefore not fit onto a single flyer}%
435       Try using smaller fonts or reducing vertical space}%
436   \endgroup
437 \fi
438 \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.

```
439 \ifLL@combine
```

```
\@@end
```

```
440 \def\@@end{%
441   \clearpage\pagestyle{empty}%

```

Restore the original `\@outputpage` command (removing any related background pictures).

```
442 \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.

```
443 \def\@EveryShipout@Hook{}%
444 \def\@EveryShipout@AtNextHook{}%
445 \EveryShipout{\LL@savePage}%

```

Create empty pages if necessary.

```
446   \loop\ifnum\c@LL@page<7\relax
447     \ClassInfo{leaflet}{Generating empty page \the\c@page}%
448     \null\newpage
449   \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.

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

Add a background picture to a large page.

```
466   \pictur@(0,0)\nameuse{\LL@largePic\Roman{page}}\endpicture%
467   \LL@preparePage{\#1}\LL@preparePage{\#2}\LL@preparePage{\#3}%
468 \newcommand*\LL@preparePage[1]{%
469   \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.

```
470   \LL@selectOutput
471   \iftwopart
472     {\setcounter{page}{1}%
473      \LL@shipoutPage{\LL@rotate@I{\LL@preparePages{6}{4}{1}}}%
474     {\setcounter{page}{2}%
475      \LL@shipoutPage{\LL@rotate@II{\LL@preparePages{2}{3}{5}}}%
476   \else
477     {\setcounter{page}{1}%
478      \LL@shipoutPage{\LL@rotate@I{\LL@preparePages{5}{6}{1}}}%
479     {\setcounter{page}{2}%
480      \LL@shipoutPage{\LL@rotate@II{\LL@preparePages{2}{3}{4}}}%
481   \fi
482   \LL@end
483 }%
```

End of the redefinition of `\@end`.

```
484 \else
```

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

```
485 \LL@pagesize@specials{\paperwidth}{\paperheight}%
486 \AtEndDocument{%
487   \clearpage\pagestyle{empty}%
}
```

```

488     \loop\ifnum\c@LL@page<7\relax
489         \ClassInfo{leaflet}{Generating empty page \the\c@page}%
490         \null\newpage
491     \repeat
492 }
493 \fi
494 </class>

```

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

## Change History

v0.8c	v1.0b
General: Repacked as dtx file. (RN) . . . . .	General: New option <code>nospecialtricks</code> for testing purposes. (RN) . . . . .
v0.9d	<code>\closeout</code> : <code>\special</code> must be processed similar to e.g. <code>\write</code> (VTeX). (RN) . . . . .
General: LPPL 1.3 (HjG) . . . . .	<code>\LL@shipoutPage</code> : Fix <code>\protect</code> -ion problems. (RN/HjG) . . . . .
M-x delete-trailing-whitespace (HjG) . . . . .	v1.0c
More code documentation; some caveats. (HjG) . . . . .	General: Options ‘twopart/notwopart’ suggested by Luis Rivera. No more ‘final’ in <code>\ExecuteOptions</code> suggested by Axel Berger (RN) . . . . .
v0.9e	v1.0d
General: Add option ‘finish’. (RN/HjG) . . . . .	v1.0pre1
v0.9f	General: Redefinition of <code>\immediate</code> , <code>\write</code> , <code>\openout</code> and <code>\closeout</code> . (RN) . . . . .
General: Merge v0.9d and v0.9e (hastily). (HjG) . . . . .	v1.0pre2
v0.9g	General: eTeX support. (RN) . . . . .
General: Rename option ‘finish’ to ‘combine’. (RN/HjG) . . . . .	v1.0pre3
v1.0	General: Options ‘landscape’ and ‘portrait’. (RN) . . . . .
General: CTAN release. (RN/HjG) . . . . .	
v1.0a	
General: Option ‘debug’. (RN) . . . . .	
<code>\LenToUnit</code> : New macro <code>\LenToUnit</code> . (RN) . . . . .	
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