

# The `eso-pic` package\*

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## 1 Introduction

This package makes it easy to add some picture commands to every page at absolute positions.

## 2 Usage

See also the example L<sup>A</sup>T<sub>E</sub>X documents (`eso-*.tex`).

### 2.1 Basic commands for adding L<sup>A</sup>T<sub>E</sub>X stuff to the page background

`\AddToShipoutPictureBG`

All the picture commands which are parameters of an `\AddToShipoutPictureBG` command will be added to the internal macro `\ESO@HookIBG`. This macro is part of a zero-length `picture` environment with basepoint at the lower left corner of the page (default) or at the upper left corner (package option "texcoord"). The `picture` environment will be shipped out at every new page.

`\AddToShipoutPictureBG*` works like `\AddToShipoutPictureBG` but only for the current page. It used the internal macro `\ESO@HookIIBG` which contents will be removed automatically.

For compatibility the macros `\AddToShipoutPicture` and `\AddToShipoutPicture*` are aliases for `\AddToShipoutPictureBG` and `\AddToShipoutPictureBG*`.

Works like `\AddToShipoutPictureBG` but the picture commands are on the top oft the normal document content.

A call of `\ClearShipoutPictureBG` clears the contents of `\ESO@HookIBG`.

For compatibility the macro `\ClearShipoutPicture` is an alias for `\ClearShipoutPictureBG`.

A call of `\ClearShipoutPictureFG` clears the contents of `\ESO@HookIFG`.

Allows a length as parameter to a picture command. Note that this macro is no more necessary when using `\usepackage{picture}`.

`\gridSetup[gridunitname]{{gridunit}}{labelfactor}{griddelta}{{gridDelta}}{gap}`. For details see the implementation section.

---

\*This document corresponds to `eso-pic` v2.0i, dated 2020/09/27.

```
\AtPageUpperLeft Helper macros for easier positioning on the page.
```

```
\AtPageLowerLeft  
  \AtPageCenter  
\AtTextUpperLeft  
\AtTextLowerLeft  
  \AtTextCenter  
\AtStockUpperLeft  
\AtStockLowerLeft  
  \AtStockCenter
```

## 2.2 Package options

Option	Value	Comments
<code>pscoord</code>	empty or <i>true, false</i>	The zero point of the coordinate system is the lower left corner of the page (the default).
<code>texcoord</code>	empty or <i>true, false</i>	The zero point of the coordinate system is the upper left corner of the page.
<code>grid</code>	empty or <i>true, false</i>	A grid is drawing; default: false.
<code>gridBG</code>	empty or <i>true, false</i>	Put the grid in the background; default: false.
<code>gridunit</code>	<i>mm, in, bp, pt</i>	Distance between gridlines are multiples of <code>gridunit</code> . default: mm.
<code>gridcolor</code>	a valid color name	Color of the main gridlines; default: black
<code>subgridcolor</code>	a valid color name	Color of the subgridlines; default: black.
<code>subgridstyle</code>	<i>solid or dotted</i>	'dotted' is very slow! default: solid.
<code>colorgrid</code>	empty or <i>true, false</i>	Shortcut for 'grid=true', 'gridcolor=red' and 'subgridcolor=green'; default: false.
<code>dvips</code>	empty or <i>true, false</i>	Is also true if the package option <code>dvips</code> is used by <code>color</code> or <code>graphics</code> . If true package <code>eepic</code> is loaded for better performance of dotted lines.

## 3 Implementation

### 3.1 The main functionality

```
1 \RequirePackage{atbegshi}  
  
\LenToUnit  
2 \providecommand*\LenToUnit[1]{\strip@pt\dimexpr#1*\p@\/\unitlength}  
  
\ESO@tempdima Some auxiliary dimension registers  
\ESO@tempdimb 3 \newdimen\ESO@tempdima  
4 \newdimen\ESO@tempdimb  
  
\ESO@isMEMOIR Support for the memoir class.  
5 \newcommand\ESO@isMEMOIR[2]{#2}  
6 \ifclassloaded{memoir}{\renewcommand\ESO@isMEMOIR[2]{#1}}{}  
  
\AtPageUpperLeft  
7 \newcommand\AtPageUpperLeft[1]{%  
8   \put(0,\LenToUnit{-\ESO@yoffsetI}){\#1}%">  
9 }
```

```

\AtPageLowerLeft
10 \newcommand\AtPageLowerLeft[1]{\AtPageUpperLeft{%
11   \put(0,\LenToUnit{-.paperheight}){#1}}}

\AtPageCenter
12 \newcommand\AtPageCenter[1]{\AtPageUpperLeft{%
13   \put(\LenToUnit{.5\paperwidth},\LenToUnit{-.5\paperheight}){#1}}%
14 }

\AtStockLowerLeft
15 \newcommand\AtStockLowerLeft{}
16 \ESO@isMEMOIR{%
17   \renewcommand\AtStockLowerLeft[1]{%
18     \begingroup
19       \ESO@tempdima=-\stockwidth
20       \advance\ESO@tempdima\trimedge
21       \advance\ESO@tempdima\paperwidth
22       \if@twoside\ifodd\c@page\else
23         \ESO@tempdima=-\trimedge
24       \fi\fi
25       \ESO@tempdimb=-\stockheight
26       \advance\ESO@tempdimb\paperheight
27       \advance\ESO@tempdimb\trimtop
28       \AtPageLowerLeft{%
29         \put(\LenToUnit{\ESO@tempdima},\LenToUnit{\ESO@tempdimb}){#1}%
30       }%
31     \endgroup
32   }%
33 }{%
34   \let\AtStockLowerLeft=\AtPageLowerLeft
35 }

\AtStockUpperLeft
36 \newcommand\AtStockUpperLeft{}
37 \ESO@isMEMOIR{%
38   \renewcommand\AtStockUpperLeft[1]{%
39     \AtStockLowerLeft{%
40       \put(0,\LenToUnit{\stockheight}){#1}}%
41     }%
42   }%
43 }{%
44   \let\AtStockUpperLeft=\AtPageUpperLeft
45 }

\AtStockCenter
46 \newcommand\AtStockCenter{}
47 \ESO@isMEMOIR{%
48   \renewcommand\AtStockCenter[1]{%
49     \AtStockLowerLeft{%
50       \put(\LenToUnit{.5\stockwidth},\LenToUnit{.5\stockheight}){#1}}%
51     }%
52   }%
53 }

```

```

54     \let\AtStockCenter=\AtPageCenter
55 }

\AtTextUpperLeft
56 \ESO@isMEMOIR{%
57   \newcommand\AtTextUpperLeft[1]{%
58     \begingroup
59     \ifodd\c@page
60       \ESO@tempdima=\spinemargin
61     \else
62       \ESO@tempdima=\paperwidth
63       \advance\ESO@tempdima-\textwidth
64       \advance\ESO@tempdima-\spinemargin
65     \fi
66     \ESO@tempdimb=-\uppermargin
67     \AtPageUpperLeft{%
68       \put(\LenToUnit{\ESO@tempdima},\LenToUnit{\ESO@tempdimb}){\#1}%
69     }%
70   \endgroup
71 }
72 }{%
73   \newcommand\AtTextUpperLeft[1]{%
74     \begingroup
75       \ESO@tempdima=1in\relax
76       \if@twoside
77         \ifodd\c@page
78           \advance\ESO@tempdima\oddsidemargin
79         \else
80           \advance\ESO@tempdima\evensidemargin
81         \fi
82       \else
83         \advance\ESO@tempdima\oddsidemargin
84       \fi
85       \ESO@tempdimb=-1in\relax
86       \advance\ESO@tempdimb-\topmargin
87       \advance\ESO@tempdimb-\headheight
88       \advance\ESO@tempdimb-\headsep
89       \AtPageUpperLeft{%
90         \put(\LenToUnit{\ESO@tempdima},\LenToUnit{\ESO@tempdimb}){\#1}%
91       }%
92     \endgroup
93   }
94 }

\AtTextLowerLeft
95 \newcommand\AtTextLowerLeft[1]{\AtTextUpperLeft{%
96   \put(0,\LenToUnit{-\textheight}){\#1}}}

\AtTextCenter
97 \newcommand\AtTextCenter[1]{\AtTextUpperLeft{%
98   \put(\LenToUnit{.5\textwidth},\LenToUnit{-.5\textheight}){\#1}}}

\ESO@HookIBG
\ESO@HookIIBG
\ESO@HookIIIBG
\ESO@HookIFG
\ESO@HookIIFG
\ESO@HookIIIFG

```

```

100 \newcommand{\ESO@HookIIBG}{}
101 \newcommand{\ESO@HookIIIBG}{}
102 \newcommand{\ESO@HookIFG}{}
103 \newcommand{\ESO@HookIIFG}{}
104 \newcommand{\ESO@HookIIIFG}{}
105 \newcommand{\ESO@HookI}{}
106 \newcommand{\ESO@HookII}{}
107 \newcommand{\ESO@HookIII}{}
108 \let\ESO@HookI=\ESO@HookIBG
109 \let\ESO@HookII=\ESO@HookIIBG
110 \let\ESO@HookIII=\ESO@HookIIIBG

\AddToShipoutPictureBG
\AddToShipoutPictureFG 111 \newcommand{\AddToShipoutPictureBG}{%
112   \@ifstar{\g@addto@macro\ESO@HookIIBG}{\g@addto@macro\ESO@HookIBG}%
113 \newcommand{\AddToShipoutPicture}{%
114 \let\AddToShipoutPicture=\AddToShipoutPictureBG

\AddToShipoutPictureFG
115 \newcommand{\AddToShipoutPictureFG}{%
116   \ifstar{\g@addto@macro\ESO@HookIIFG}{\g@addto@macro\ESO@HookIFG}%

\ClearShipoutPictureBG
\ClearShipoutPicture 117 \newcommand{\ClearShipoutPictureBG}{\global\let\ESO@HookIBG\empty}
\ClearShipoutPictureFG 118 \newcommand{\ClearShipoutPicture}{%
119 \let\ClearShipoutPicture=\ClearShipoutPictureBG
120 \newcommand{\ClearShipoutPictureFG}{\global\let\ESO@HookIFG\empty}

\AtBeginShipout (see package atbegshi)
\AtBeginShipoutUpperLeft 121 \ESO@isMEMOIR{%
\inShipoutUpperLeftForeground 122 \AtBeginShipout{%
123   \ESO@tempdima=-\trimedge
124   \advance\ESO@tempdima-\paperwidth
125   \advance\ESO@tempdima\stockwidth
126   \if@twoside\ifodd\c@page\else
127     \advance\ESO@tempdima2\trimedge
128     \advance\ESO@tempdima\paperwidth
129     \advance\ESO@tempdima-\stockwidth
130   \fi\fi
131   \ESO@tempdimb=\ESO@yoffsetI
132   \advance\ESO@tempdimb-\trimtop
133   \nointerlineskip
134   \AtBeginShipoutUpperLeft{%
135     \put(\LenToUnit{\ESO@tempdima},\LenToUnit{\ESO@tempdimb}){%
136       \ESO@HookIIIBG\ESO@HookIBG\ESO@HookIIBG
137       \global\let\ESO@HookIIBG\empty
138     }%
139   }%
140   \AtBeginShipoutUpperLeftForeground{%
141     \put(\LenToUnit{\ESO@tempdima},\LenToUnit{\ESO@tempdimb}){%
142       \ESO@HookIFG\ESO@HookIIFG\ESO@HookIIIFG
143       \global\let\ESO@HookIIFG\empty
144     }%
145   }%

```

```

146  }
147 }{%
148   \AtBeginShipout{%
149     \nointerlineskip
150   \AtBeginShipoutUpperLeft{%
151     \put(0,\LenToUnit{\ESO@c offsetI}){%
152       \ESO@HookIIIBG\ESO@HookIBG\ESO@HookIIBG
153       \global\let\ESO@HookIIBG@\empty
154     }%
155   }%
156   \AtBeginShipoutUpperLeftForeground{%
157     \put(0,\LenToUnit{\ESO@c offsetI}){%
158       \ESO@HookIFG\ESO@HookIIFG\ESO@HookIIIFG
159       \global\let\ESO@HookIIFG@\empty
160     }%
161   }%
162 }
163 }

```

### 3.2 The background grid

```

164 \RequirePackage{keyval}
Initialising some macros
165 \newif\ifESO@dvips\ESO@dvipsfalse \newif\ifESO@grid\ESO@gridfalse
166 \newif\ifESO@texcoord\ESO@texcoordfalse \newif\ifESO@gridBG\ESO@gridBGfalse
167 \newcommand*\ESO@gridunitname{}
168 \newcommand*\ESO@gridunit{}
169 \newcommand*\ESO@labelfactor{}
170 \newcommand*\ESO@griddelta{}\newcommand*\ESO@griddeltaY{}
171 \newcommand*\ESO@gridDelta{}\newcommand*\ESO@gridDeltaY{}
172 \newcommand*\ESO@gridcolor{}
173 \newcommand*\ESO@subgridcolor{}
174 \newcommand*\ESO@subgridstyle{dotted}{} ???
175 \newcommand*\ESO@gap{}
176 \newcommand*\ESO@c offsetI{}\newcommand*\ESO@c offsetII{}
177 \newcommand*\ESO@gridlines{\thinlines}
178 \newcommand*\ESO@subgridlines{\thinlines}
179 \newcommand*\ESO@hline[1]{\ESO@subgridlines\line(1,0){#1}}
180 \newcommand*\ESO@vline[1]{\ESO@subgridlines\line(0,1){#1}}
181 \newcommand*\ESO@Hline[1]{\ESO@gridlines\line(1,0){#1}}
182 \newcommand*\ESO@Vline[1]{\ESO@gridlines\line(0,1){#1}}
183 \newcommand\ESO@fcolorbox[3]{\fbox{#3}}
184 \newcommand\ESO@color[1]{}
185 \newcommand\ESO@colorbox[2]{%
186   \begingroup
187     \fboxrule=\z@\fbox{#2}%
188   \endgroup
189 }
\gridSetup
190 \newcommand\gridSetup[6][]{%
191   \edef\ESO@gridunitname{\#1}\edef\ESO@gridunit{\#2}
192   \edef\ESO@labelfactor{\#3}\edef\ESO@griddelta{\#4}
193   \edef\ESO@gridDelta{\#5}\edef\ESO@gap{\#6}}

```

All the key-value options

```
194 \define@key{ESO}{texcoord}[true]{\csname ESO@texcoord#1\endcsname}
195 \define@key{ESO}{pscoord}[true]{\csname @tempswa#1\endcsname
196   \if@tempswa\ESO@texcoordfalse\else\ESO@texcoordtrue\fi}
197 \define@key{ESO}{dvips}[true]{\csname ESO@dvips#1\endcsname}
198 \define@key{ESO}{grid}[true]{\csname ESO@grid#1\endcsname
199   \setkeys{ESO}{gridcolor=black,subgridcolor=black}}
200 \define@key{ESO}{gridBG}[true]{\csname ESO@gridBG#1\endcsname}
201 \define@key{ESO}{colorgrid}[true]{\csname ESO@grid#1\endcsname
202   \setkeys{ESO}{gridcolor=red,subgridcolor=green}}
203 \define@key{ESO}{gridcolor}{\def\ESO@gridcolor{\#1}}
204 \define@key{ESO}{subgridcolor}{\def\ESO@subgridcolor{\#1}}
205 \define@key{ESO}{subgridstyle}{\def\ESO@subgridstyle{\#1}}%
206 \define@key{ESO}{gridunit}{%
207   \def\@tempa{\#1}
208   \def\@tempb{bp}
209   \ifx\@tempa\@tempb
210     \gridSetup[\@tempa]{1bp}{1}{10}{50}{2}
211   \else
212     \def\@tempb{pt}
213     \ifx\@tempa\@tempb
214       \gridSetup[\@tempa]{\p@}{1}{10}{50}{2}
215     \else
216       \def\@tempb{in}
217       \ifx\@tempa\@tempb
218         \gridSetup[\@tempa]{.1in}{.1}{2}{10}{.5}
219       \else
220         \gridSetup[mm]{1mm}{1}{5}{20}{1}
221       \fi
222     \fi
223   \fi
224 }
225 \setkeys{ESO}{subgridstyle=solid,pscoord=true,gridunit=mm}
226 \providecommand*\@classoptionslist{}
```

\ProcessOptionsWithKV This macro can process package options using ‘key=value’ syntax.

```
227 \def\ProcessOptionsWithKV#1{%
228   \let\@tempc\@empty
229   \@for\CurrentOption:=\@classoptionslist\do{%
230     \ifundefined{KV@#1@\CurrentOption}%
231     {}{\edef\@tempc{\@tempc,\CurrentOption,}}%
232   \edef\@tempc{%
233     \noexpand\setkeys{#1}{\@tempc\@optionlist{\@currname.\@currext}}}%
234   \AtEndOfPackage{\let\@unprocessedoptions\relax}%
235 \ProcessOptionsWithKV{ESO}%
236 }
```

\ESO@div Divides length #1 by #2  $\times$  \ESO@gridunit and adds one. Result is in \@tempcnta.

```
237 \newcommand\ESO@div[2]{%
238   \ESO@tempdima=#1\relax\ESO@tempdimb=\ESO@gridunit\relax
239   \ESO@tempdimb=#2\ESO@tempdimb\divide\ESO@tempdima by \ESO@tempdimb
240   \AtEndOfPackage{\@tempcnta\ESO@tempdima\advance\@tempcnta\@ne}}
```

```

241 \O@ifundefined{colorbox}{%
242   \IfFileExists{xcolor.sty}{\RequirePackage{xcolor}}{\%
243     {\RequirePackage{color}}\%
244   }\}%
245 \let\ESO@color=\color
246 \renewcommand\ESO@colorbox[2]{%
247   \begingroup
248     \fboxsep=.4ex %
249     \colorbox{#1}{#2}%
250   \endgroup
251 }
252 \renewcommand\ESO@fcolorbox[3]{%
253   \begingroup
254     \fboxsep=.5ex %
255     \fcolorbox{#1}{#2}{#3}%
256   \endgroup
257 }
258 \AtBeginDocument{%
259   \ESO@dvipsfalse
260   \O@ifundefined{Gin@driver}{}{%
261     {%
262       \ifx\Gin@driver\empty\else%
263         \filename@parse{\Gin@driver}\def\reserved@a{dvips}%
264         \ifx\filename@base\reserved@a\ESO@dvipstrue\fi
265       \fi
266     }\%
267     \ifESO@dvips\def\@tempb{epic}\else\def\@tempb{epic}\fi
268     \def\@tempa{dotted}{}\def\ESO@gap{\LenToUnit{6\@wholewidth}}%
269     \ifx\@tempa\ESO@subgridstyle
270       \OIfExists{\@tempb.sty}{%
271         {%
272           \RequirePackage{\@tempb}
273           \renewcommand*\ESO@hline[1]{\ESO@subgridlines\dottedline{\ESO@gap}%
274             (0,0)(##1,0)}
275           \renewcommand*\ESO@vline[1]{\ESO@subgridlines\dottedline{\ESO@gap}%
276             (0,0)(0,##1)}
277         }{%
278           \else
279             \ifx\ESO@gridcolor\ESO@subgridcolor
280               \renewcommand*\ESO@gridlines{\thicklines}
281             \fi
282           \fi
283         }%
284       \ifESO@texcoord
285         \def\ESO@yoffsetI{\z@\def\ESO@yoffsetII{-\paperheight}%
286           \edef\ESO@griddeltaY{-\ESO@griddelta}\edef\ESO@gridDeltaY{-\ESO@gridDelta}%
287         \else
288           \def\ESO@yoffsetI{-\paperheight}\def\ESO@yoffsetII{\z@\def\ESO@yoffsetI{\z@\def\ESO@yoffsetII{-\paperheight}%
289           \edef\ESO@griddeltaY{\ESO@griddelta}\edef\ESO@gridDeltaY{\ESO@gridDelta}%
290         \fi
291       \newcommand\ESO@gridpicture{%
292         \begingroup

```

```

293      \setlength\unitlength{\ESO@gridunit}%
294      \ESO@color{\ESO@subgridcolor}%
— horizontal subgrid lines —
295      \ESO@div{\paperheight}{\ESO@griddelta}%
296      \multiput(0,0)(0,\ESO@griddeltaY){\@tempcnta}%
297          {\ESO@hline{\LenToUnit{\paperwidth}}}%
— vertical subgrid lines —
298      \ESO@div{\paperwidth}{\ESO@griddelta}%
299      \multiput(0,\LenToUnit{\ESO@yoffsetII})(\ESO@griddelta,0){\@tempcnta}%
300          {\ESO@vline{\LenToUnit{\paperheight}}}%
301      \ESO@color{\ESO@gridcolor}%
— horizontal grid lines —
302      \ESO@div{\paperheight}{\ESO@gridDelta}%
303      \multiput(0,0)(0,\ESO@gridDeltaY){\@tempcnta}%
304          {\ESO@Hline{\LenToUnit{\paperwidth}}}%
— vertical grid lines —
305      \ESO@div{\paperwidth}{\ESO@gridDelta}%
306      \multiput(0,\LenToUnit{\ESO@yoffsetII})(\ESO@gridDelta,0){\@tempcnta}%
307          {\ESO@Vline{\LenToUnit{\paperheight}}}%
— horizontal numbers —
308      \fontsize{10}{12}\normalfont%
309      \ESO@div{\paperwidth}{\ESO@gridDelta}%
310      \multiput(0,\ESO@gridDeltaY)(\ESO@gridDelta,0){\@tempcnta}{%
311          \@tempcntb=\@tempcnta\advance\@tempcntb-\@multicnt
312          \ifnum\@tempcntb>1\relax
313              \multiply\@tempcntb by \ESO@gridDelta\relax
314              \ESO@tempdima=\@tempcntb sp\ESO@tempdima=\ESO@labelfactor\ESO@tempdima
315              \@tempcntb=\ESO@tempdima%
316              \makebox(0,0)[c]{\ESO@colorbox{white}{\the\@tempcntb}}%
317          \fi}%
— vertical numbers —
318      \ifx\ESO@gridunitname\empty\def\@tempa{0}\else\def\@tempa{1}\fi
319      \ESO@div{\paperheight}{\ESO@gridDelta}%
320      \multiput(\ESO@gridDelta,0)(0,\ESO@gridDeltaY){\@tempcnta}{%
321          \@tempcntb=\@tempcnta\advance\@tempcntb-\@multicnt%
322          \ifnum\@tempcntb>\@tempa\relax
323              \multiply\@tempcntb by \ESO@gridDelta\relax%
324              \ESO@tempdima=\@tempcntb sp\ESO@tempdima=\ESO@labelfactor\ESO@tempdima
325              \@tempcntb=\ESO@tempdima%
326              \makebox(0,0)[c]{\ESO@colorbox{white}{\the\@tempcntb}}%
327          \fi
328      }%
— the unit label —
329      \ifx\ESO@gridunitname\empty\else
330          \thicklines\fboxrule=\@wholewidth
331          \put(\ESO@gridDelta,\ESO@gridDeltaY){\makebox(0,0)[c]{%
332              \ESO@fcolorbox{\ESO@gridcolor}{white}{%
333                  \textbf{\ESO@gridunitname}}}}%
334      \fi
335      \normalcolor%

```

```

336 \endgroup
337 }

```

Add the grid to the shipout picture (`\ESO@HookIIIFG` or `\ESO@HookIIIBG`) is indepedend from the user commands `\AddToShipoutPictureBG` and `\AddToShipoutPictureBG*`.

```

338 \ifESO@grid
339   \ifESO@gridBG
340     \g@addto@macro\ESO@HookIIIBG{\ESO@gridpicture}%
341   \else
342     \g@addto@macro\ESO@HookIIIFG{\ESO@gridpicture}%
343   \fi
344 \fi

```

## Change History

v0.4	v1.1a
General: Initial version .....	1 <code>\ESO@gridpicture</code> : Font setting added. ....
v0.5	9
General: Some bug corrections ...	1     v1.1b
v0.6	General: New command
General: Some corrections for compatibility with the <code>html</code> package suggested by Ross Moore and a licence note .....	1     v1.1c
v0.7	General: Remove the disadvantageous check of ‘pdfTeX’. Now using with Xe <sup>A</sup> TEX should be possible. ...
v1.0	8
General: New commands	v2.0a
<code>\LenToUnit</code> ,	<code>\AtStockCenter</code> : New .....
<code>\AtPageUpperLeft</code> ,	<code>\AtStockLowerLeft</code> : New .....
<code>\AtPageCenter</code> ,	<code>\AtStockUpperLeft</code> : New .....
<code>\AtTextUpperLeft</code> , and	<code>\AtTextUpperLeft</code> : Works now for class <code>memoir</code> .....
<code>\AtTextColor</code> . ....	4
v1.0a	General: Better test of color/xcolor 8
<code>\ClearShipoutPictureFG</code> :	v2.0b
Changed <code>\let</code> to <code>\global\let</code> (suggested by Alberto Lusiani). 5	<code>\AddToShipoutPictureFG</code> : New command <code>\AddToShipoutPictureFG</code> ....
v1.0c	5
General: New command	v2.0c
<code>\AtTextLowerLeft</code> and corrections to	<code>\AtBeginShipoutUpperLeftForeground</code> : bugfix for memoir class (reported by YI Hoze) ....
<code>\AtTextUpperLeft</code> . ....	5
v1.0d	v2.0d
<code>\LenToUnit</code> : Using <code>\providetcommand</code> instead of <code>\newcommand</code> for <code>\LenToUnit</code> ... 2	General: grid should be in foreground .....
v1.1	v2.0e
General: New commands and package options for background grids. ....	10 Improved color commands .... 8 <code>\AtTextUpperLeft</code> : Wrong horizontal position in one-column mode .... 4

v2.0f		New macro \ESO@HookIIIFG for foreground grid. . . . .	4	
\LenToUnit:	Changed definition for better compatibility with package <i>curve2e</i> suggested by Claudio Beccari. . . . .		2	
v2.0g	General: Foreground/background grid. . . . .	10	v2.0h	
	New \ifESO@gridBG for foreground/background grid. . . . .	6	General: \@classoptionslist must not be \relax . . . . .	7
			General: no more system dimension registers . . . . .	2

## Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

Symbols			
\@classoptionslist . . . . .	\AddToShipoutPictureBG . . . . .	186, 247, 253, 292	
..... 226, 229	\AddToShipoutPictureBG* . . . . .	<b>C</b>	
\@currex . . . . .	..... 1	\c@page . . . . . 22, 59, 77, 126	
\@currname . . . . .	\AddToShipoutPictureFG . . . . .	\ClearShipoutPicture . . . . . 117	
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