

# 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.

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\*This document corresponds to `eso-pic` v2.0h, dated 2018/04/12.

```
\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@isMEMOIR Support for the memoir class.
3 \newcommand\ESO@isMEMOIR[2]{#2}
4 \@ifclassloaded{memoir}{\ renewcommand\ESO@isMEMOIR[2]{#1}}{}
```

```
\AtPageUpperLeft
5 \newcommand\AtPageUpperLeft[1]{%
6   \put(0,\LenToUnit{-\ESO@yoffsetI}){\#1}%
7 }
```

```
\AtPageLowerLeft
8 \newcommand\AtPageLowerLeft[1]{\AtPageUpperLeft{%
9   \put(0,\LenToUnit{-\paperheight}){\#1}}}
```

```
\AtPageCenter
10 \newcommand\AtPageCenter[1]{\AtPageUpperLeft{%
```

```

11   \put(\LenToUnit{.5\paperwidth},\LenToUnit{-.5\paperheight}){\#1}%
12 }

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

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

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

\AtTextUpperLeft
54 \ESO@isMEMOIR{%
55   \newcommand\AtTextUpperLeft[1]{%
56     \begingroup

```

```

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

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

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

\ESO@HookIBG
\ESO@HookIIBG 97 \newcommand{\ESO@HookIBG}{}
\ESO@HookIIIBG 98 \newcommand{\ESO@HookIIBG}{}
\ESO@HookIFG 99 \newcommand{\ESO@HookIIIBG}{}
\ESO@HookIIFG 100 \newcommand{\ESO@HookIFG}{}
\ESO@HookIIIFG 101 \newcommand{\ESO@HookIIFG}{}
102 \newcommand{\ESO@HookIIIFG}{}
103 \newcommand{\ESO@HookI}{}
104 \newcommand{\ESO@HookII}{}

```

```

105 \newcommand{\ESO@HookIII}{}
106 \let\ESO@HookI=\ESO@HookIBG
107 \let\ESO@HookII=\ESO@HookIIBG
108 \let\ESO@HookIII=\ESO@HookIIIBG

\AddToShipoutPictureBG
\AddToShipoutPictureFG 109 \newcommand{\AddToShipoutPictureBG}{%
110   @ifstar{\g@addto@macro\ESO@HookIIBG}{\g@addto@macro\ESO@HookIBG}}
111 \newcommand{\AddToShipoutPicture}{}
112 \let\AddToShipoutPicture=\AddToShipoutPictureBG

\AddToShipoutPictureFG
113 \newcommand{\AddToShipoutPictureFG}{%
114   @ifstar{\g@addto@macro\ESO@HookIIFG}{\g@addto@macro\ESO@HookIFG}%

\ClearShipoutPictureBG
\ClearShipoutPicture 115 \newcommand{\ClearShipoutPictureBG}{\global\let\ESO@HookIBG\empty}
\ClearShipoutPictureFG 116 \newcommand{\ClearShipoutPicture}{}
117 \let\ClearShipoutPicture=\ClearShipoutPictureBG
118 \newcommand{\ClearShipoutPictureFG}{\global\let\ESO@HookIFG\empty}

\AtBeginShipout (see package atbegshi)
\AtBeginShipoutUpperLeft 119 \ESO@isMEMOIR{%
ginShipoutUpperLeftForeground 120 \AtBeginShipout{%
121   @tempdima=-\trimedge
122   \advance@tempdima-\paperwidth
123   \advance@tempdima\stockwidth
124   @if@twoside@ifodd{c@page}{else
125     \advance@tempdima2\trimedge
126     \advance@tempdima\paperwidth
127     \advance@tempdima-\stockwidth
128   }fi
129   @tempdimb=\ESO@yoffsetI
130   \advance@tempdimb-\trimtop
131   \nointerlineskip
132   \AtBeginShipoutUpperLeft{%
133     \put(\LenToUnit{@tempdima},\LenToUnit{@tempdimb}){%
134       \ESO@HookIIBG\ESO@HookIBG\ESO@HookIIBG
135       \global\let\ESO@HookIIBG\empty
136     }%
137   }%
138   \AtBeginShipoutUpperLeftForeground{%
139     \put(\LenToUnit{@tempdima},\LenToUnit{@tempdimb}){%
140       \ESO@HookIFG\ESO@HookIIFG\ESO@HookIIIFG
141       \global\let\ESO@HookIFG\empty
142     }%
143   }%
144 }
145 }{%
146 \AtBeginShipout{%
147   \nointerlineskip
148   \AtBeginShipoutUpperLeft{%
149     \put(0,\LenToUnit{\ESO@yoffsetI}){%
150       \ESO@HookIIBG\ESO@HookIBG\ESO@HookIIBG

```

```

151      \global\let\ESO@HookIIBG@\empty
152      }%
153      }%
154      \AtBeginShipoutUpperLeftForeground{%
155          \put(0,\LenToUnit{\ESO@yoffsetI}){%
156              \ESO@HookIFG\ESO@HookIIFG\ESO@HookIIIFG
157              \global\let\ESO@HookIIFG@\empty
158          }%
159      }%
160  }
161 }

```

### 3.2 The background grid

```

162 \RequirePackage{keyval}

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

\gridSetup
188 \newcommand\gridSetup[6][]{%
189     \edef\ESO@gridunitname{\#1}\edef\ESO@gridunit{\#2}
190     \edef\ESO@labelfactor{\#3}\edef\ESO@griddelta{\#4}
191     \edef\ESO@gridDelta{\#5}\edef\ESO@gap{\#6}}

```

All the key-value options

```

192 \define@key{ESO}{texcoord}[true]{\csname ESO@texcoord#1\endcsname}
193 \define@key{ESO}{pscoord}[true]{\csname @tempswa#1\endcsname
194     \if@tempswa\ESO@texcoordfalse\else\ESO@texcoordtrue\fi}
195 \define@key{ESO}{dvips}[true]{\csname ESO@dvips#1\endcsname}
196 \define@key{ESO}{grid}[true]{\csname ESO@grid#1\endcsname}

```

```

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

```

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

```

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

```

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

```

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

239 \@ifundefined{colorbox}{%
240   \IfFileExists{xcolor.sty}{\RequirePackage{xcolor}}{%
241     \RequirePackage{color}}}}%
242 }{%
243 \let\ESO@color=\color

```

```

244 \renewcommand{\ESO@colorbox}[2]{%
245   \begingroup
246     \fboxsep=.4ex %
247     \colorbox{#1}{#2}%
248   \endgroup
249 }
250 \renewcommand{\ESO@fcolorbox}[3]{%
251   \begingroup
252     \fboxsep=.5ex %
253     \fcolorbox{#1}{#2}{#3}%
254   \endgroup
255 }
256 \AtBeginDocument{%
257   \ESO@dvipsfalse
258   \Qifundefined{Gin@driver}{}{%
259     {%
260       \ifx\Gin@driver\empty\else%
261         \filename@parse{\Gin@driver}\def\reserved@a{\dvips}%
262         \ifx\filename@base\reserved@a\ESO@dvipstrue\fi
263       \fi
264     }%
265     \ifESO@dvips\def\@tempb{eepic}\else\def\@tempb{epic}\fi
266     \def\@tempa{dotted}%
267     \ifx\@tempa\ESO@subgridstyle
268       \IfFileExists{\@tempb.sty}{%
269         {%
270           \RequirePackage{\@tempb}
271           \renewcommand*\ESO@hline[1]{\ESO@subgridlines\dottedline{\ESO@gap}%
272             (0,0)(##1,0)}
273           \renewcommand*\ESO@vline[1]{\ESO@subgridlines\dottedline{\ESO@gap}%
274             (0,0)(0,##1)}
275         }{%
276           \else
277             \ifx\ESO@gridcolor\ESO@subgridcolor
278               \renewcommand*\ESO@gridlines{\thicklines}
279             \fi
280           \fi
281         }{%
282           \ifESO@texcoord
283             \def\ESO@yoffsetI{\z@\def\ESO@yoffsetII{-\paperheight}%
284               \edef\ESO@griddeltaY{-\ESO@griddelta}\edef\ESO@gridDeltaY{-\ESO@gridDelta}%
285             \else
286               \def\ESO@yoffsetI{-\paperheight}\def\ESO@yoffsetII{\z@\def\ESO@griddeltaY{\ESO@griddelta}%
287                 \edef\ESO@gridDeltaY{\ESO@gridDelta}%
288             \fi
289           \newcommand{\ESO@gridpicture}{%
290             \begingroup
291               \setlength\unitlength{\ESO@gridunit}%
292               \ESO@color{\ESO@subgridcolor}%
293               — horizontal subgrid lines —
294               \ESO@div{\paperheight}{\ESO@griddelta}%
295             \endgroup
296           }%
297         }%
298       }%
299     }%
300   }%
301 }

```

```

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

```

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

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

## Change History

v0.4		added. . . . .	9
	General: Initial version . . . . .	1	v1.1b
v0.5		General: New command	
	General: Some bug corrections . . .	1	<code>\AtPageLowerLeft</code> . . . . .
v0.6		New package options "texcoord"	
	General: Some corrections for		and "pscoord" . . . . .
	compatibility with the <code>html</code>		1
	package suggested by Ross		
	Moore and a licence note . . . . .	1	
v0.7		General: Remove the	
	General: New command		disadvantageous check of
	<code>\AddToShipoutPicture*</code> . . . . .	1	'pdfTeX'. Now using with
v1.0		<code>XeLaTeX</code> should be possible. . .	7
	General: New commands		
	<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
	<code>\AtTextCenter.</code> . . . . .	1	class <code>memoir</code> . . . . .
v1.0a		General: Better test of color/xcolor	7
	<code>\ClearShipoutPictureFG:</code>		
	Changed <code>\let</code> to <code>\global\let</code>		<code>\AddToShipoutPictureFG</code> : New
	(suggested by Alberto Lusiani). . .	5	command . . . . .
v1.0c		<code>\AddToShipoutPictureFG</code> . . . . .	5
	General: New command		
	<code>\AtTextLowerLeft</code> and		<code>\AtBeginShipoutUpperLeftForeground</code> :
	corrections to		bugfix for <code>memoir</code> class
	<code>\AtTextUpperLeft.</code> . . . . .	1	(reported by YI Hoze) . . . . .
v1.0d		<code>\AtTextUpperLeft</code> : Wrong	
	<code>\LenToUnit</code> : Using		horizontal position in
	<code>\providecommand</code> instead of		one-column mode . . . . .
	<code>\newcommand</code> for <code>\LenToUnit</code> . .	2	3
v1.1		<code>\AtTextUpperLeft</code> : Wrong	
	General: New commands and		
	package options for background		
	grids. . . . .	1	
v1.1a		<code>\LenToUnit</code> : Changed definition	
	<code>\ESO@gridpicture</code> : Font setting		for better compatibility with

package <code>curve2e</code> suggested by Claudio Beccari. . . . .	2	New macro <code>\ESO@HookIIIFG</code> for foreground grid. . . . .	4
<b>v2.0g</b>		New option ‘gridBG’. . . . .	6
General: Foreground/background grid. . . . .	10	<b>v2.0h</b>	
New <code>\ifESO@gridBG</code> for foreground/background grid. . .	6	General: <code>\@classoptionslist</code> must not be <code>\relax</code> . . . . .	7

## 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.

<b>Symbols</b>	86, 88, 129, 130, 133, 139, 236, 237		
<code>\@classoptionslist</code> . . . . .	224, 227	<code>\@unprocessedoptions</code> . . . . .	233
<code>\@currext</code> . . . . .	231	<code>\@wholewidth</code> . . . . .	266, 328
<code>\@currname</code> . . . . .	231		
<code>\@empty</code> 115, 118, 135, 141, 151, 157, 226, 260, 316, 327		<b>A</b>	
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