

Y. B.

kdpcover: L^AT_EX Package for Amazon Book Covers*

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1 Introduction

This class will render you a book cover, suitable for Kindle Direct Publishing (KDP). I use it for [all my books](#). This is how you make your L^AT_EX document look like:



```
1 \documentclass[pages=200,6x9]{kdpcover}
2 \begin{document}
3 \putSpine{kdpcover, a LaTeX class for KDP books}
4 \putVolume{1}
5 \putVersion{0.6.1}
6 \putPrice{\$0.00}
7 \putCopyright{\the\year}{Yegor Bugayenko}
8 \putTitle{kdpcover}
9 \putAuthor{Yegor Bugayenko}
10 \putTLDR{This book will tell you
11   an interesting story!}
12 \putPicture{cactus.pdf}
13 \end{document}
```

The problem this class solves is the necessity to change the size of the cover PDF according to the number of pages in the book — the bigger the book, the larger the spine of the book must be. The provided class makes the necessary calculations on-the-fly, using the `qpdf` tool. Obviously, you need to have it installed. Also, you must run `pdflatex` with the `--shell-escape` option, in order to allow L^AT_EX to run `qpdf`.

2 Class Options

`pages` With `pages` you can set the total count of the pages in the book:

```
\documentclass[pages=120]{kdpcover}
```

*The sources are in GitHub at [yegor256/kdpcover](#)

```
\begin{document}
\end{document}
```

pdf It's better not to use pages option, but let the class calculate the size of your book from the PDF file (using qpdf command line tool, which has to be installed):

```
\documentclass[pdf=book.pdf]{kdpcover}
\begin{document}
\end{document}
```

6x9 With this option you can set the size of the page to 6x9 inches. You can also set your own size like this:

```
\documentclass[6x9]{kdpcover}
\setlength\kdpysize{8.1in}
\setlength\kdpysize{12.7in}
\begin{document}
\end{document}
```

barless To get rid of the black bar at the center of the page, just add barless option:

```
\documentclass[barless]{kdpcover}
\begin{document}
\end{document}
```

3 Commands

- `\putSpine` The `\putSpine` command puts a vertical black spine line with two white elements inside: the text at the top and the logo at the bottom. Make sure the text is short enough so that it doesn't touch the logo. It's a good practice to mention the volume number at the end of the text, if you have more than one volume, e.g. "my book, vol. 1". I suggest using small caps in the text only.
- `\putVolume` This one prints the volume picture. It is intentionally made large, in order to make it obvious.
- `\putVersion` This one prints the version and it will also add the date of the latest Git commit in the current directory. If it's not a Git repository, the hash won't be printed.
- `\putPrice` This one prints the price, which is a good practice to mention, I believe.
- `\putCopyright` This one prints the copyright short message with the year and the name of the author.
- `\putTitle` This one prints the title of the book
- `\putAuthor` This one prints the author.
- `\putTLDR` This one prints the TL;DR paragraph, which summarizes the message of the entire book.
- `\putPicture` This one prints the front picture. You can use `cactus.pdf`.
- `\putBack` This is prints the text on the back of the book, which usually I suggest to omit and keep the back empty and white.

4 Implementation

First, we load our parent class:

```
1 \LoadClass{article}
```

Then, we define a few internal commands:

```
2 \makeatletter
3 \newcount\kdp@pages
4 \kdp@pages=100
5 \newlength\kdp@xsize
6 \setlength\kdp@xsize{6in}
7 \newlength\kdp@ysize
8 \setlength\kdp@ysize{9in}
9 \makeatother
```

Then, we include iexec for being able to execute qpdf and git:

```
10 \RequirePackage{iexec}
```

Then, we parse class options with the help of the pgfopts package:

```
11 \RequirePackage{pgfopts}
12 \makeatletter
13 \pgfkeys{
14 /kdp/.cd,
15 barless/.store in = \kdp@barless,
16 pdf/.code = {
17 \IfFileExists{#1}
18 {}
19 {\PackageError{kdpcover}{The "#1" file is absent}{}}%
20 \iexec[trace,quiet,stdout=kdpcover-pages-count.txt]
21 {qpdf --show-npages --no-warn #1 | tr -d '[:space:]'}
22 \openin1=kdpcover-pages-count.txt
23 \read1 to \temp
24 \closein1
25 \kdp@pages=\temp
26 },
27 6x9/.code = {
28 \setlength\kdp@xsize{6in}
29 \setlength\kdp@ysize{9in}
30 },
31 7x10/.code = {
32 \setlength\kdp@xsize{7in}
33 \setlength\kdp@ysize{10in}
34 },
35 8x10/.code = {
36 \setlength\kdp@xsize{8in}
37 \setlength\kdp@ysize{10in}
38 },
39 pages/.code = {
40 \kdp@pages=#1
41 }
42 }
43 \ProcessPgfPackageOptions{/kdp}
44 \makeatother
```

Then, we include a few useful packages:

```

45 \RequirePackage{anyfontsize}
46 \RequirePackage{tikz}
47 \RequirePackage[letterspace=-50]{microtype}
48 \RequirePackage{xcolor}
49 \RequirePackage{graphicx}
50 \RequirePackage{calc}

```

Then, we set spacing using `setspace`:

```

51 \RequirePackage{setspace}
52 \setstretch{1.2}

```

Then, we calculate size. The height of the page is 9 inches plus 0.125 "bleed" on top and on the bottom, see [this](#). The width is 6 inches plus 0.125 "bleed" on each side. The width of the "spine" depends on the amount of pages in the book.

```

53 \makeatletter
54 \newlength\kdp@height
55 \setlength\kdp@height{0.125in + \kdp@ysize + 0.125in}
56 \newlength\kdp@width
57 \setlength\kdp@width{
58   0.125in + \kdp@xsize
59   + 0.125in + \kdp@xsize
60   + 0.0025in * \kdp@pages}
61 \makeatother

```

Then, we set the size of the page, using `geometry`:

```

62 \RequirePackage{geometry}
63 \makeatletter
64 \geometry{
65   paperwidth=\kdp@width,
66   paperheight=\kdp@height,
67   left=0pt,
68   right=0pt,
69   top=0pt,
70   bottom=0pt
71 }
72 \makeatother

```

Then, we set coordinates using `textpos`:

```

73 \RequirePackage[absolute]{textpos}
74 \TPGrid{16}{16}

```

`\putSpine` Then, we define `\putSpine`:

```

75 \makeatletter
76 \newcommand\putSpine[2][kdpcover-signature]{%
77   \ifdefined\kdp@barless\else%
78     \begin{textblock}{2.4}[0.5,0](8,0)%
79     \begin{tikzpicture}%
80       \node [rectangle, inner sep=0em, fill=black,
81         minimum width=2.4\TPHorizModule,
82         minimum height=16\TPVertModule] at (0,0) {};
83     \end{tikzpicture}%
84   \end{textblock}%
85   \fi%
86   \begin{textblock}{1}[0.5,0](8,2)%
87   \begin{tikzpicture}%

```

```

88     \node [color=white, inner sep=0cm, outer sep=0cm,
89           rotate=270, minimum height=\TPHorizModule] at (0,0) {
90       \Large #2%
91     };
92     \end{tikzpicture}%
93   \end{textblock}%
94   \begin{textblock}{2.4}[0.5,1](8,14)%
95     \centerline{\includegraphics[width=0.32in]{#1}}%
96   \end{textblock}%
97 }
98 \makeatother

\putPicture Then, we define \putPicture:
99 \newcommand\putPicture[1]{%
100   \begin{textblock}{4}(10,2)%
101     \includegraphics[width=\textwidth]{#1}
102   \end{textblock}%
103 }

\putVolume Then, we define \putVolume:
104 \newcommand\putVolume[1]{%
105   \begin{textblock}{2}[1,1](15,14)%
106     \raggedleft%
107     \includegraphics[height=0.4in]{kdpcover-vol-#1}%
108   \end{textblock}%
109 }

\putPrice Then, we define \putPrice:
110 \newcommand\putPrice[1]{%
111   \begin{textblock}{4}[0,1](1,2)%
112     \small #1%
113   \end{textblock}%
114 }

\putBack Then, we define \putBack:
115 \newcommand\putBack[1]{%
116   \begin{textblock}{5}[0,0](1,3)%
117     \small #1%
118   \end{textblock}%
119 }

\putTitle Then, we define \putTitle:
120 \newcommand\putTitle[1]{%
121   \begin{textblock}{5}(10,9)%
122     \fontsize{32}{32}\selectfont #1%
123   \end{textblock}%
124 }

\putAuthor Then, we define \putAuthor:
125 \newcommand\putAuthor[1]{%
126   \begin{textblock}{4}(10,10)%
127     \large by #1%
128   \end{textblock}%
129 }

```

`\putTLDR` Then, we define `\putTLDR`:

```
130 \newcommand\putTLDR[1]{%
131   \begin{textblock}{5}(10,11)%
132     TL;DR #1%
133   \end{textblock}%
134 }
```

`\putVersion` Then, we define `\putVersion`:

```
135 \newcommand\putVersion[1]{%
136   \begin{textblock}{4}[0,1](10,14)%
137     #1%
138     \IfFileExists{.git}
139       {\quad\iexec{git log -n 1 --pretty='format:%ad' --date='format:%e-%b-%Y'}}
140       {}%
141   \end{textblock}%
142 }
```

`\putCopyright` Then, we define `\putCopyright`:

```
143 \newcommand\putCopyright[2]{%
144   \begin{textblock}{4}[0,1](1,14)%
145     \small (c)~%
146     #1 #2%
147   \end{textblock}%
148 }
```

Finally, a few layout instructions:

```
149 \AtBeginDocument{%
150   \ttfamily%
151   \raggedright%
152   \setlength\parindent{0pt}%
153   \setlength\parskip{0pt}%
154   \interfootnotelinepenalty=10000%
155 }
156 \endinput
```

Change History

v0.2.0		The base class is now <code>article</code>	3
	General: Initial version		3
v0.5.0			
	General: The <code>docshots</code> package is used to render the documentation.		1
		v0.6.1	
		General: If the PDF file is absent, an error is printed.	3

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