

Y.B.

# kdpcover: $\text{\LaTeX}$ Package for Amazon Book Covers\*

Yegor Bugayenko  
[yegor256@gmail.com](mailto:yegor256@gmail.com)

2022.11.30, 0.5.1

## 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  $\text{\LaTeX}$  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{0.5.1}
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  $\text{\LaTeX}$  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](https://github.com/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 \newcommand*\kdp@pages{100}
4 \newlength\kdp@xsize
5 \setlength\kdp@xsize{6in}
6 \newlength\kdp@ysize
7 \setlength\kdp@ysize{9in}
8 \makeatother
```

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

```
9 \RequirePackage{iexec}
```

Then, we parse class options:

```
10 \RequirePackage{xkeyval}
11 \makeatletter
12 \DeclareOptionX{6x9}
13   {\setlength\kdp@xsize{6in}\setlength\kdp@ysize{9in}}
14 \DeclareOptionX{7x10}
15   {\setlength\kdp@xsize{7in}\setlength\kdp@ysize{10in}}
16 \DeclareOptionX{8x10}
17   {\setlength\kdp@xsize{8in}\setlength\kdp@ysize{10in}}
18 \DeclareOptionX{pages}
19   {\renewcommand*\kdp@pages{\#1}}
20 \newif\ifkdp@barless
21 \DeclareOptionX{barless}{\kdp@barlesstrue}
22 \DeclareOptionX{pdf}{%
23   \iexec[trace,quiet,stdout=kdpcover-pages-count.txt]
24     {qpdf --show-npages #1 | tr -d '[:space:]' | \{ cat; echo \%;\ \} \%}
25   \newread\kdp@pagescount%
26   \openin\kdp@pagescount=kdpcover-pages-count.txt
27   \read\kdp@pagescount to \kdp@pages%
28 }
29 \ProcessOptionsX\relax\makeatother
```

Then, we include a few useful packages:

```
30 \RequirePackage{anyfontsize}
31 \RequirePackage{tikz}
32 \RequirePackage[letterspace=-50]{microtype}
33 \RequirePackage{xcolor}
34 \RequirePackage{graphicx}
35 \RequirePackage{calc}
```

Then, we set spacing using `setspace`:

```
36 \RequirePackage{setspace}
37   \setstretch{1.2}
```

Then, we set 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.

```
38 \makeatletter
39   \newlength\kdp@height
```

```

40 \setlength{\kdp@height}{0.125in + \kdp@ysize + 0.125in}
41 \newlength{\kdp@width}
42 \setlength{\kdp@width{
43   0.125in + \kdp@xsize
44   + 0.0025in * \kdp@pages
45   + \kdp@xsize + 0.125in}
46 \makeatother

```

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

```

47 \RequirePackage{geometry}
48 \makeatletter
49 \geometry{paperwidth=\kdp@width,paperheight=\kdp@height,
50 left=0pt,right=0pt,top=0pt,bottom=0pt}
51 \makeatother

```

Then, we set coordinates using `textpos`:

```

52 \RequirePackage[absolute]{textpos}
53 \TPGrid{16}{16}

```

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

```

54 \makeatletter\newcommand\putSpine[2] [kdpcover-signature]{%
55   \ifkdp@barless\else
56     \begin{textblock}{2.4}[0.5,0](8,0)%
57       \begin{tikzpicture}%
58         \node [rectangle, inner sep=0em, fill=black,
59             minimum width=2.4\TPHorizModule,
60             minimum height=16\TPVertModule] at (0,0) {};
61       \end{tikzpicture}%
62     \end{textblock}%
63   \fi
64   \begin{textblock}{1}[0.5,0](8,2)%
65     \begin{tikzpicture}%
66       \node [color=white, inner sep=0cm, outer sep=0cm,
67           rotate=270, minimum height=\TPHorizModule] at (0,0) {
68         Large #2
69       };%
70     \end{tikzpicture}%
71   \end{textblock}%
72   \begin{textblock}{2.4}[0.5,1](8,14)%
73     \centerline{\includegraphics[width=0.32in]{#1}}%
74   \end{textblock}%
75 }\makeatother

```

`\putPicture` Then, we define `\putPicture`:

```

76 \newcommand\putPicture[1]{%
77   \begin{textblock}{4}(10,2)%
78     \includegraphics[width=\textwidth]{#1}%
79   \end{textblock}%
80 }

```

`\putVolume` Then, we define `\putVolume`:

```

81 \newcommand\putVolume[1]{%
82   \begin{textblock}{2}[1,1](15,14)%
83     \raggedleft

```

```

84     \includegraphics [height=0.4in]{kdpcover-vol-#1}
85     \end{textblock}%
86 }

\putPrice Then, we define \putPrice:
87 \newcommand\putPrice[1]{%
88   \begin{textblock}{4}[0,1](1,2)%
89     \small #1
90   \end{textblock}%
91 }

\putBack Then, we define \putBack:
92 \newcommand\putBack[1]{%
93   \begin{textblock}{5}[0,0](1,3)%
94     \small #1
95   \end{textblock}%
96 }

\putTitle Then, we define \putTitle:
97 \newcommand\putTitle[1]{%
98   \begin{textblock}{5}(10,9)%
99     \fontsize{32}{32}\selectfont #1
100  \end{textblock}%
101 }

\putAuthor Then, we define \putAuthor:
102 \newcommand\putAuthor[1]{%
103   \begin{textblock}{4}(10,10)%
104     \large by #1
105   \end{textblock}%
106 }

\putTLDR Then, we define \putTLDR:
107 \newcommand\putTLDR[1]{%
108   \begin{textblock}{5}(10,11)%
109     TL;DR #1
110   \end{textblock}%
111 }

\putVersion Then, we define \putVersion:
112 \newcommand\putVersion[1]{%
113   \begin{textblock}{4}[0,1](10,14)%
114     #1
115     \IfFileExists{.git}%
116       {\quad\iexec{git log -n 1 --pretty='format:\%ad' --date='format:\%e-\%b-\%Y'}}%
117       {}%
118   \end{textblock}%
119 }

\putCopyright Then, we define \putCopyright:
120 \newcommand\putCopyright[2]{%
121   \begin{textblock}{4}[0,1](1,14)%
122     \small (c)

```

```
123     #1 #2
124     \end{textblock}%
125 }
```

Finally, a few layout instructions:

```
126 \AtBeginDocument{%
127   \ttfamily%
128   \raggedright%
129   \setlength{\parindent}{0pt}%
130   \setlength{\parskip}{0pt}%
131   \interfootnotelinepenalty=10000%
132 }
```

## Change History

v0.2.0	used to render the documentation. . . 1
General: Initial version . . . . .	3
v0.5.0	The base class is now <code>article</code> . . . . 3
General: The <code>docshots</code> package is	

# 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	
\%	24, 116
\{	24
\}	24
\6x9	1
	<b>A</b>
\AtBeginDocument	126
	<b>B</b>
\barless	1
\begin	56, 57, 64, 65, 72, 77, 82, 88, 93, 98, 103, 108, 113, 121
	<b>C</b>
\centerline	73
	<b>D</b>
\DeclareOptionX	12, 14, 16, 18, 21, 22
	<b>E</b>
\end	61, 62, 70, 71, 74, 79, 85, 90, 95, 100, 105, 110, 118, 124
	<b>F</b>
\fontsize	99
	<b>G</b>
\geometry	49
	<b>I</b>
\iexec	23, 116
\IfFileExists	115
\ifkdp@barless	20, 55
\includegraphics	73, 78, 84
	<b>K</b>
\kdp@barlesstrue	21
\kdp@height	39, 40, 49
\kdp@pages	3, 19, 27, 44
\kdp@pagescount	25, 26, 27
\kdp@width	41, 42, 49
\kdp@xsize	4, 5, 13, 15, 17, 43, 45
\kdp@ysize	6, 7, 13, 15, 17, 40
	<b>L</b>
\Large	68
\large	104
\LoadClass	1
	<b>M</b>
\makeatletter	2, 11, 38, 48, 54
\makeatother	8, 29, 46, 51, 75
	<b>N</b>
\newif	20
\newlength	4, 6, 39, 41
\newread	25
\node	58, 66
	<b>O</b>
\openin	26
	<b>P</b>
\pages	1
\parindent	129
\parskip	130
\pdf	1
	<b>R</b>
\quad	116
	<b>S</b>
\selectfont	99
\setlength	5, 7, 13, 15, 17, 40, 42, 129, 130
\setstretch	37
\small	89, 94, 122
	<b>T</b>
\textwidth	78
\TPGrid	53
\TPHorizModule	59, 67
\TPVertModule	60
\ttfamily	127