

# The clrstrip package

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## 1 Introduction

This package provides the `colorstrip` environment, that places its contents into a full page width colour strip. It requires the macro `\color` to be defined and working, but doesn't load a package doing so on its own. So for everything to work out properly, you'd have to load a package like `color` or `xcolor` in your preamble, too.

It is meant to be lightweight and fast. So while packages like `tcolorbox` provide very pretty output, this package has a simplistic look achieved with less than 100 lines of code.

It is written as a docstrip file: executing `latex clrstrip.dtx` generates the `clrstrip.sty` file and typesets this documentation; execute `tex clrstrip.dtx` to only generate `clrstrip.sty`.

## 2 Examples

The following is an example showing the results of

```
\begin{colorstrip}{red!5}
  \blindduck
\end{colorstrip}
```

---

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with `xcolor` and `duckuments` loaded:

There once was a very smart but sadly blind duck. When it was still a small duckling it was renowned for its good vision. But sadly as the duck grew older it caught a sickness which caused its eyesight to worsen. It became so bad, that the duck couldn't read the notes it once took containing much of inline math. Only displayed equations remained legible. That annoyed the smart duck, as it wasn't able to do its research any longer. It called for its underduckling and said: "Go, find me the best eye ducktor there is. He shall heal me from my disease!"

The title of this documentation was typeset with

```
\vspace*{-6cm}%
\begin{colorstrip}{blue!15}
  [%
    inner bot=1cm, outer bot=\bigskipamount, width=\paperwidth,
    inner top=6cm, left=-\dimexpr\marginparwidth+\marginparsep\relax
  ]
  \centering
  \LARGE The \pkg{clrstrip} package\[\bigskipamount]
  \large
  Jonathan P. Spratte\footnotemark\[\medskipamount]
  Released \csname clrstrip@date\endcsname
\end{colorstrip}
\footnotetext{E-mail: jspratte@yahoo.de}
```

And the code boxes in this section (except this one) are surrounded by

```
\begin{colorstrip}{gray!15}[inner bot=0pt, inner top=2ex]
\begin{verbatim}
\end{verbatim}
\end{colorstrip}
```

## 3 Documentation

### 3.1 Macros and Environments

---

`\colorstripSet` `\colorstripSet{<key=value>}`

This macro can be used to set the options listed in [subsection 3.2](#) outside of `colorstrip` (the package makes no global assignments).

---

`colorstrip` `\begin{colorstrip}[<color model>]{<color>}[<key=value>]`

This environment typesets its contents inside a `\vbox` which gets surrounded by a strip of the specified `<color>` which reaches across the full page width. `<color model>` and `<color>` are the arguments passed to `\color`. In the second optional argument `<key=value>` you can specify any of the options listed in [subsection 3.2](#). After this environment starts a new paragraph with the document specific `\parindent`. As always you can suppress this indent with `\noindent`. The result is not page breakable.

## 3.2 Options

The package doesn't support load time options. The following options can be either set with `\colorstripSet` or inside of `colorstrip`.

`inner=<skip>`

Sets both `inner top` and `inner bot` to `<skip>`. Initially this is set to `\medskipamount`.

`inner top=<skip>`

Specifies additional padding between the upper border of the strip and its contents.

`inner bot=<skip>`

Specifies additional padding between the lower border of the strip and its contents.

`outer=<skip>`

Sets both `outer top` and `outer bot` to `<skip>`. Initially this is set to `\medskipamount`.

`outer top=<skip>`

Specifies the vertical skip above the colour strip.

`outer bot=<skip>`

Specifies the vertical skip below the colour strip.

`width=<width>`

Sets the `\hsize` of the `\vbox` for the contents, resulting in the specified `<width>`. If `<width>` is `0pt` (which is the initial value) the width is the current `\linewidth`.

`left=<skip>`

Specifies a horizontal skip from the left border of the text field for the contents. If `<skip>` is `1sp` (which is the initial value) the `\vbox` is horizontally centred (not its contents).

`afterheading`

Ignores every value given to it. If used the indentation of the first line in a `colorstrip` will be prevented using the L<sup>A</sup>T<sub>E</sub>X macros `\@afterindentfalse` and `\@afterheading`. This is the package default since version 2018-09-25.

`noindent`

Ignores every value given to it. If used the indentation of the first line in a `colorstrip` will be prevented using the T<sub>E</sub>X primitives `\noindent` and `\ignorespaces`. This was the package default before version 2018-09-25.

## 3.3 Dependencies

`clrstrip` depends on the `keyval` package. In addition it needs a package defining `\color` such as `color` or `xcolor` but doesn't load one on its own.

## 4 Implementation

<sup>1</sup> `<*pkg>`

### 4.1 Initializing Variables

`\clrstrip@box` Stores the contents of `colorstrip`.

<sup>2</sup> `\newsavebox\clrstrip@box`

*(End definition for \clrstrip@box. This variable is documented on page ??.)*

`\clrstrip@innerT` Stores the upper inner padding. Gets reused to store the overall height of the colour strip locally.

```
3 \newlength\clrstrip@innerT
4 \clrstrip@innerT\medskipamount
```

*(End definition for \clrstrip@innerT. This variable is documented on page ??.)*

`\clrstrip@innerB` Stores the lower inner padding. Gets reused to store the overall depth of the colour strip locally.

```
5 \newlength\clrstrip@innerB
6 \clrstrip@innerB\clrstrip@innerT
```

*(End definition for \clrstrip@innerB. This variable is documented on page ??.)*

`\clrstrip@outerT` Stores the upper outer padding.

```
7 \newlength\clrstrip@outerT
8 \clrstrip@outerT\clrstrip@innerT
```

*(End definition for \clrstrip@outerT. This variable is documented on page ??.)*

`\clrstrip@outerB` Stores the lower outer padding.

```
9 \newlength\clrstrip@outerB
10 \clrstrip@outerB\clrstrip@innerT
```

*(End definition for \clrstrip@outerB. This variable is documented on page ??.)*

`\clrstrip@width` Stores the width the text block inside of the colour strip should be wide. Might be reused to calculate the skip to centre the text block locally.

```
11 \newlength\clrstrip@width
```

*(End definition for \clrstrip@width. This variable is documented on page ??.)*

`\clrstrip@left` Stores the left skip from the left border of the text field. Might be reused to store the necessary left skip for centred alignment locally.

```
12 \newlength\clrstrip@left
13 \clrstrip@left1sp
```

*(End definition for \clrstrip@left. This variable is documented on page ??.)*

`\clrstrip@oarg` Stores the first optional argument to `colorstrip` for later use.

```
14 \newcommand*\clrstrip@oarg{}
```

*(End definition for \clrstrip@oarg. This variable is documented on page ??.)*

`\clrstrip@marg` Stores the mandatory argument to `colorstrip` for later use.

```
15 \newcommand*\clrstrip@marg{}
```

*(End definition for \clrstrip@marg. This variable is documented on page ??.)*

## 4.2 Internal Macros

`\clrstrip@key` Shortcut to define new keys with `keyval`.

```
16 \newcommand*\clrstrip@key{\define@key{clrstrip}}
```

*(End definition for \clrstrip@key. This function is documented on page ??.)*

`\clrstrip@strip` Draws the colour strip using `\vrule`. `\clrstrip@strip` should be called with the expanded `\clrstrip@margin` as its argument. It tests whether the first optional argument is empty, sets the colour accordingly and draws the `\vrule`. The arguments to `\color` need to be expanded as `color` doesn't work with the unexpanded once depending on the chosen colour model.

```
17 \newcommand*\clrstrip@strip[1]
18   {%
19     \begingroup
20       \ifx\clrstrip@oarg\@empty
21         \color{#1}%
22       \else
23         \expandafter\color\expandafter[\clrstrip@oarg]{#1}%
24       \fi
25       \advance\clrstrip@innerT\ht\clrstrip@box
26       \advance\clrstrip@innerB\dp\clrstrip@box
27       \rlap
28         {%
29           \hskip-\paperwidth
30           \vrule
31             width 2\paperwidth
32             height \clrstrip@innerT
33             depth \clrstrip@innerB
34         }%
35     \endgroup
36   }
```

*(End definition for \clrstrip@strip. This function is documented on page ??.)*

`\clrstrip@start` Used to grab the second optional argument to `colorstrip`. Sets the specified keys and starts the grabbing of the contents inside the `\vbox`.

```
37 \newcommand\clrstrip@start[1] []
38   {%
39     \colorstripSet{#1}%
40     \ifdim\clrstrip@width=\z@
41       \clrstrip@width\linewidth
42     \fi
43     \setbox\clrstrip@box\vbox\bgroup
44       \hsize\clrstrip@width
45       \clrstrip@preventIndent
46   }
```

*(End definition for \clrstrip@start. This function is documented on page ??.)*

`\clrstrip@afterheading` These two macros are the two options to suppress the indentation in a `colorstrip`.

`\clrstrip@noindent`

```
47 \newcommand*\clrstrip@afterheading{\@afterindentfalse\@afterheading}
48 \newcommand*\clrstrip@noindent{\noindent\ignorespaces}
```

(End definition for `\clrstrip@afterheading` and `\clrstrip@noindent`. These functions are documented on page ??.)

`\clrstrip@preventIndent` Used to prevent the indentation of the first line in a `colorstrip`. It will be let to one of `\clrstrip@afterheading` or `\clrstrip@noindent`.

```
49 \newcommand*\clrstrip@preventIndent{}
50 \let\clrstrip@preventIndent\clrstrip@afterheading
```

(End definition for `\clrstrip@preventIndent`. This function is documented on page ??.)

### 4.3 Initializing Keys

```
51 \clrstrip@key{inner}{\clrstrip@innerT#1\relax\clrstrip@innerB#1\relax}
52 \clrstrip@key{outer}{\clrstrip@outerT#1\relax\clrstrip@outerB#1\relax}
53 \clrstrip@key{inner top}{\clrstrip@innerT#1\relax}
54 \clrstrip@key{inner bot}{\clrstrip@innerB#1\relax}
55 \clrstrip@key{outer top}{\clrstrip@outerB#1\relax}
56 \clrstrip@key{outer bot}{\clrstrip@outerB#1\relax}
57 \clrstrip@key{width}{\clrstrip@width#1\relax}
58 \clrstrip@key{left}{\clrstrip@left#1\relax}
59 \clrstrip@key{afterheading}[]{\let\clrstrip@preventIndent\clrstrip@afterheading}
60 \clrstrip@key{noindent}[]{\let\clrstrip@preventIndent\clrstrip@noindent}
```

### 4.4 User Level Macros

`\colorstripSet` Shortcut for `keyval`'s `\setkeys`.

```
61 \newcommand*\colorstripSet{\setkeys{clrstrip}}
```

(End definition for `\colorstripSet`. This function is documented on page 2.)

`colorstrip`

```
62 \newenvironment{colorstrip}[2] []
63 {%
```

Save the arguments for the usage in `\end{colorstrip}`.

```
64 \def\clrstrip@oarg{#1}%
65 \def\clrstrip@marg{#2}%
```

Start grabbing the contents

```
66 \clrstrip@start
67 }
68 {%
69 \egroup
70 \par
71 \vskip\clrstrip@outerT
72 \noindent
73 \expandafter\clrstrip@strip\expandafter{\clrstrip@marg}%
74 \ifdim\clrstrip@left=1sp
75 \advance\clrstrip@width-\linewidth
76 \clrstrip@left-.5\clrstrip@width
77 \fi
78 \rlap{\hskip\clrstrip@left\copy\clrstrip@box}%
79 \par
80 \vskip\clrstrip@outerB
81 }
```

*(End definition for colorstrip. This function is documented on page 2.)*

82 `\endinput`

83 `</pkg>`