

# The xcolor-solarized package\*

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## Abstract

Built on top of the xcolor package, the xcolor-solarized package defines the sixteen colors of Ethan Schoonover's popular color palette, **Solarized**, for use in documents typeset with L<sup>A</sup>T<sub>E</sub>X & friends.

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\*This document corresponds to xcolor-solarized v0.4, dated 2016/08/05.

# 1 User's guide

## 1.1 Installation

### 1.1.1 Package dependencies

The `xcolor-solarized` package requires relatively up-to-date versions of the `xcolor` and `koptions` packages, both of which ship with popular T<sub>E</sub>X distributions. It loads those two packages without any options.

### 1.1.2 Installing `xcolor-solarized`

Once the package is officially released on CTAN, you should be able to install it directly through your package manager. However, if you need to install `xcolor-solarized` manually, you should run

```
latex xcolor-solarized.ins
```

and copy the file called `xcolor-solarized.sty` to a path where L<sup>A</sup>T<sub>E</sub>X (or your preferred typesetting engine) can find it. To generate the documentation, run

```
pdflatex xcolor-solarized.dtx
```

twice.

## 1.2 Usage

### 1.2.1 Loading `xcolor-solarized`

Simply write

```
\usepackage{xcolor-solarized}
```

somewhere in your preamble.

You may want to load the `xcolor` and `koptions` packages with some options; in that case, make sure those options are passed to those two packages *before* loading the `xcolor-solarized` package.

### 1.2.2 Package option

The `xcolor-solarized` currently offers only one option:

**prefix**=*<prefix>*

Defines the sixteen **Solarized** colors with prefix *<prefix>*, for namespacing purposes; the default prefix is “**solarized-**”.

What is the point of this option? Well, the **Solarized** colors must be namespaced in one way or another, because many of their official names, such “red”, “green”, etc. would conflict with colors defined by the `xcolor` package.

For convenience, you may want to use a custom prefix, shorter, perhaps, than the default one. The **prefix** option allows you to do just that. For instance, if you want to use the prefix “sol”, you should load the package like so:

```
\usepackage[prefix=sol]{xcolor-solarized}
```

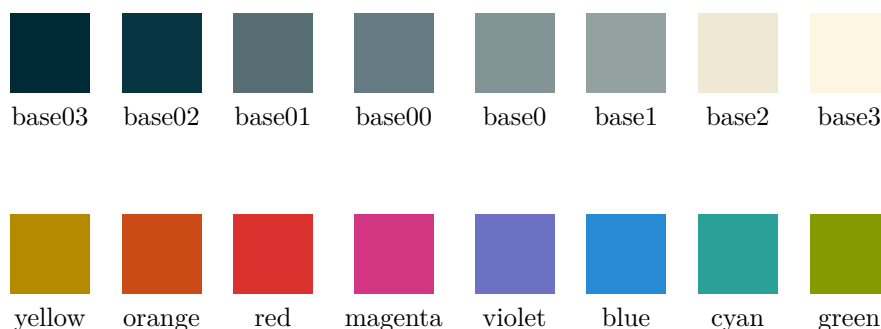


Figure 1: The sixteen colors of Ethan Schoonover’s Solarized palette

### 1.2.3 Using the Solarized colors in your document

Loading the `xcolor-solarized` package defines those colors at the global scope of your document, using the `xcolor` package; you should refer to the documentation of the latter for more details about how to use colors in your documents.

The sixteen colors of the Ethan Schoonover’s Solarized palette are shown on fig. 1; for more details, see the official Solarized website. The name under which `xcolor-solarized` defines each Solarized color has the form  $\langle prefix \rangle \langle name \rangle$ , where

- $\langle prefix \rangle$  corresponds to the value of the prefix set via the package option `prefix`, and
- $\langle name \rangle$  is the official name of the color (see fig. 1).

For example, by default (if you don’t set a custom prefix), the red Solarized color will be available in your document under the name “`solarized-red`”.

The `xcolor-solarized` package also defines one convenient user-level command:

**`\solarizedPalette`**

Prints the sixteen colors of the palette, along with their official names

This command was used to produce fig. 1. Use it as a tool for consulting the Solarized palette within your documents during the writing phase, without having to refer to some external resource (e.g. the official Solarized website).

## 1.3 Bug reports and feature suggestions

The development version of `xcolor-solarized` is currently hosted on GitHub at [Jubobs/xcolor-solarized](https://github.com/Jubobs/xcolor-solarized). If you find an issue in `xcolor-solarized` that this manual does not mention, if you would like to see a feature implemented in the package, or if you can think of ways in which the `xcolor-solarized` documentation could be improved, please open a ticket in the GitHub repository’s issue tracker; alternatively, you can send me an email at [jubobs.tex@gmail.com](mailto:jubobs.tex@gmail.com)

## 1.4 Acknowledgments

Thanks to Uwe Kern, author of the `xcolor` package, Heiko Oberdiek, author of the `kvoptions` package, and Ethan Schoonover, originator of the Solarized color palette.

## 2 Implementation

Be aware that, for “namespacing”, the xcolor-solarized package uses the prefix “solarized” (followed by an @ character) throughout.

### 2.1 Required packages

xcolor-solarized requires the following two packages:

```
1 \RequirePackage{xcolor}[2007/01/21]
2 \RequirePackage{kvoptions}[2011/06/30]
```

### 2.2 Package options

First, we set up kvoptions.

```
3 \SetupKeyvalOptions{
4   family=solarized,
5   prefix=solarized@
6 }
```

Then, we declare the `prefix` key-value option, with default value “solarized-”, and we throw an error if any other option is passed to the xcolor-solarized package.

```
7 \DeclareStringOption[solarized-]{prefix}
8 \DeclareDefaultOption{%
9   \OptionNotUsed
10  \PackageError{xcolor-solarized}{Unknown ‘\CurrentOption’ option}
11 }
12 \ProcessKeyvalOptions*
```

### 2.3 Colour definitions

```
\solarized@definecolor Here is a convenient internal macro for defining colors with a custom prefix.
13 \newcommand\solarized@definecolor[2]
14   {\expandafter\definecolor\expandafter{\solarized@prefix #1}{RGB}{#2}}
```

We now define the sixteen Solarized colors.

```
15 \solarized@definecolor{base03}{000, 043, 054}
16 \solarized@definecolor{base02}{007, 054, 066}
17 \solarized@definecolor{base01}{088, 110, 117}
18 \solarized@definecolor{base00}{101, 123, 131}
19 \solarized@definecolor{base0}{131, 148, 150}
20 \solarized@definecolor{base1}{147, 161, 161}
21 \solarized@definecolor{base2}{238, 232, 213}
22 \solarized@definecolor{base3}{253, 246, 227}
23 \solarized@definecolor{yellow}{181, 137, 000}
24 \solarized@definecolor{orange}{203, 075, 022}
25 \solarized@definecolor{red}{220, 050, 047}
26 \solarized@definecolor{magenta}{211, 054, 130}
27 \solarized@definecolor{violet}{108, 113, 196}
28 \solarized@definecolor{blue}{038, 139, 210}
29 \solarized@definecolor{cyan}{042, 161, 152}
30 \solarized@definecolor{green}{133, 153, 000}
```

## 2.4 User-level macro

`\solarizedPalette` Finally, here is a user-level macro for printing the palette in a document. It takes one optional argument, which corresponds to both the length of the of the colored squares' sides and the vertical space between the two rows of squares (3em, by default).

```

31 \newcommand\solarizedPalette[1][3em]{%
32   \newcommand\solarized@square{\rule{#1}{#1}}
33   \newcommand\solarized@showcolor[1]{%
34     \textcolor{\solarized@prefix ##1}{\solarized@square}%
35   }
36   \noindent
37   \begin{tabular}{cccc cccc}
38     \solarized@showcolor{base03} & & & & & & & & & \\
39     \solarized@showcolor{base02} & & & & & & & & & \\
40     \solarized@showcolor{base01} & & & & & & & & & \\
41     \solarized@showcolor{base00} & & & & & & & & & \\
42     \solarized@showcolor{base0}  & & & & & & & & & \\
43     \solarized@showcolor{base1}  & & & & & & & & & \\
44     \solarized@showcolor{base2}  & & & & & & & & & \\
45     \solarized@showcolor{base3}  & & & & & & & & & \\
46     base03 & base02 & base01 & base00 & & & & & & \\
47     base0  & base1  & base2  & base3  & & & & & & \\
48     \solarized@showcolor{yellow} & & & & & & & & & \\
49     \solarized@showcolor{orange}  & & & & & & & & & \\
50     \solarized@showcolor{red}     & & & & & & & & & \\
51     \solarized@showcolor{magenta} & & & & & & & & & \\
52     \solarized@showcolor{violet}  & & & & & & & & & \\
53     \solarized@showcolor{blue}    & & & & & & & & & \\
54     \solarized@showcolor{cyan}    & & & & & & & & & \\
55     \solarized@showcolor{green}   & & & & & & & & & \\
56     yellow & orange & red  & magenta & & & & & & \\
57     violet & blue  & cyan & green  & & & & & & \\
58   \end{tabular}
59 }
```