

# Package ‘palette’

May 9, 2026

**Title** Color Scheme Helpers

**Version** 0.0.3

**Description** Hexadecimal codes are typically used to represent colors in R. Connecting these codes to their colors requires practice or memorization. 'palette' provides a 'vctrs' class for working with color palettes, including printing and plotting functions. The goal of the class is to place visual representations of color palettes directly on or, at least, next to their corresponding character representations. Palette extensions also are provided for data frames using 'pillar'.

**License** MIT + file LICENSE

**Encoding** UTF-8

**RoxygenNote** 7.3.2

**URL** <https://github.com/christopherkenny/palette>,  
<https://christophertkenny.com/palette/>

**BugReports** <https://github.com/christopherkenny/palette/issues>

**Imports** cli, pillar, vctrs

**Suggests** ggplot2, spelling, testthat (>= 3.0.0), vdiffr

**Config/testthat/edition** 3

**Language** en-US

**Depends** R (>= 4.1.0)

**NeedsCompilation** no

**Author** Christopher T. Kenny [aut, cre] (ORCID:  
<<https://orcid.org/0000-0002-9386-6860>>)

**Maintainer** Christopher T. Kenny <ctkenny@proton.me>

**Repository** CRAN

**Date/Publication** 2025-09-13 05:10:29 UTC

## Contents

brightness	2
palette	3
palette_browse	3
palette_decode_url	4
palette_function	5
plot_palette	5
roygbiv	6
saturation	6

<b>Index</b>	<b>8</b>
--------------	----------

---

brightness	<i>Control palette brightness</i>
------------	-----------------------------------

---

## Description

Generic function to control the brightness of a palette.

## Usage

```
darken(x, amount = 0.1, ...)
```

```
lighten(x, amount = 0.1, ...)
```

```
## Default S3 method:
darken(x, amount = 0.1, ...)
```

```
## S3 method for class 'palette'
darken(x, amount = 0.1, ...)
```

```
## Default S3 method:
lighten(x, amount = 0.1, ...)
```

```
## S3 method for class 'palette'
lighten(x, amount = 0.1, ...)
```

## Arguments

x	A vector of colors
amount	A numeric value to control the brightness of the palette
...	Additional arguments passed to other methods. Currently ignored.

## Value

A palette vector with the brightness adjusted

**Examples**

```
darken(palette(roygbiv))
lighten(palette(roygbiv))
```

---

palette	<i>Create a palette</i>
---------	-------------------------

---

**Description**

A palette is a class for color palettes built on `vctrs`. It is represented as a character vector of hexadecimal color codes. Named colors (like 'red') are translated to hexadecimal color codes.

**Usage**

```
palette(x = character())
validate_palette(x)
is_palette(x)
as_palette(x)
```

**Arguments**

x                    A character vector of colors

**Value**

a palette vector

**Examples**

```
palette(roygbiv)
```

---

palette_browse	<i>Browse a palette on colors.co</i>
----------------	--------------------------------------

---

**Description**

Browse a palette on [colors.co](https://colors.co)

**Usage**

```
palette_browse(x)
palette_browse_url(x)
```

**Arguments**

x                    A palette

**Value**

A URL to the palette

**Examples**

```
palette_browse(roygbiv)
```

---

palette\_decode\_url     *Convert a URL to a palette*

---

**Description**

This function takes a URL from either <colors.co> or <colorhunt.co> and returns the palette.

**Usage**

```
palette_decode_url(x)
```

**Arguments**

x                    A URL from either 'colors.co' or 'colorhunt.co'

**Value**

a vector of type palette

**Examples**

```
palette_decode_url('https://colors.co/ff4444-ffae4d-ffff60-50ff50-3939fa')
palette_decode_url('https://www.colorhunt.co/palette/b5c0d0ccd3caf5e8ddeed3d9')
```

---

palette_function	<i>Build a palette function</i>
------------------	---------------------------------

---

**Description**

Creates a palette function for use within `ggplot2` as an argument to `discrete_scale`. If the number of colors requested is greater than the length of the palette, the palette will be repeated. If the number of colors requested is less than the length of the palette, the palette will be truncated. This is done explicitly, as `vctrs` recycling purposefully does not recycle to partial lengths, like a vector of size 10 to a vector of size 3 or 13.

**Usage**

```
palette_function(x)
```

**Arguments**

`x` a palette

**Value**

a function which takes an integer `n` and returns a vector of `n` colors

**Examples**

```
palette_function(palette(roygbiv))(10)
```

---

plot_palette	<i>Plot Palette Colors</i>
--------------	----------------------------

---

**Description**

Plot Palette Colors

**Usage**

```
plot_palette(x, use_names = TRUE, use_ggplot = TRUE)
```

**Arguments**

`x` a palette

`use_names` Should the names of the palette be used as labels? Default: TRUE.

`use_ggplot` Should the plot be made with `ggplot2` if available? Default: TRUE.

**Value**

A ggplot (if ggplot2 is available) or base plot of the palette

**Examples**

```
plot_palette(roygbiv)
```

---

roygbiv	<i>Rainbow Colors</i>
---------	-----------------------

---

**Description**

Rainbow Colors

**Usage**

```
roygbiv
```

**Format**

character vector of 7 hex codes

**Examples**

```
palette(roygbiv)
```

---

saturation	<i>Control palette saturation</i>
------------	-----------------------------------

---

**Description**

Generic function to control the saturation of a palette.

**Usage**

```
saturate(x, amount = 0.1, ...)
```

## Default S3 method:  
saturate(x, amount = 0.1, ...)

## S3 method for class 'palette'  
saturate(x, amount = 0.1, ...)

```
desaturate(x, amount = 0.1, ...)
```

```
## Default S3 method:  
desaturate(x, amount = 0.1, ...)  
  
## S3 method for class 'palette'  
desaturate(x, amount = 0.1, ...)
```

**Arguments**

x	A vector of colors
amount	A numeric value to control the saturation of the palette
...	Additional arguments passed to other methods. Currently ignored.

**Value**

A palette vector with the saturation adjusted

**Examples**

```
saturate(palette(roygbiv))  
desaturate(palette(roygbiv))
```

# Index

## \* datasets

roygbiv, 6

as\_palette (palette), 3

brightness, 2

darken (brightness), 2

desaturate (saturation), 6

is\_palette (palette), 3

lighten (brightness), 2

palette, 3

palette\_browse, 3

palette\_browse\_url (palette\_browse), 3

palette\_decode\_url, 4

palette\_function, 5

plot\_palette, 5

roygbiv, 6

saturate (saturation), 6

saturation, 6

validate\_palette (palette), 3