

# Package ‘colorhex’

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**Type** Package

**Title** Colors and Palettes from Color-Hex

**Version** 0.1.1

**Description** The website <<https://www.color-hex.com>> is a great resource of hex colour codes and palettes. This package allows you to retrieve palettes and colour information from the website directly from R. There are also custom scale-functions for 'ggplot2'.

**License** MIT + file LICENSE

**Encoding** UTF-8

**Imports** rvest, xml2, grDevices, graphics, ggplot2

**RoxygenNote** 7.1.1

**URL** <https://github.com/Athanasiamo/colorhex>

**BugReports** <https://github.com/Athanasiamo/colorhex/issues>

**Suggests** spelling, scales

**Language** en-US

**NeedsCompilation** no

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| get_color | <i>Get color information</i> |
|-----------|------------------------------|

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### Description

Get color information from [www.color-hex.com](http://www.color-hex.com) of a hex-color.

### Usage

```
get_color(hex)
```

### Arguments

hex                    character string that is a hexadecimal color

### Value

list of class 'colorhex'

### Examples

```
get_color("#470f0f")
get_color("#f2f2f2")
```

---

|                     |                            |
|---------------------|----------------------------|
| get_latest_palettes | <i>Get latest palettes</i> |
|---------------------|----------------------------|

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### Description

Retrieve the most recently made palettes from [www.color-hex.com](http://www.color-hex.com)

### Usage

```
get_latest_palettes()
```

### Value

data.frame with name, id and colours

### Examples

```
get_latest_palettes()
```

---

|             |                             |
|-------------|-----------------------------|
| get_palette | <i>Get palettes from id</i> |
|-------------|-----------------------------|

---

**Description**

Get palette information from [www.color-hex.com](http://www.color-hex.com) based on the palette id (can be found in the url)

**Usage**

```
get_palette(id)
```

**Arguments**

id                    numeric id of a palette

**Value**

data.frame with palette information

**Examples**

```
get_palette(103107)

# Lookup multiple palettes
id <- c(103161, 103107)
get_palette(id)
```

---

|                    |                           |
|--------------------|---------------------------|
| get_popular_colors | <i>Get popular colour</i> |
|--------------------|---------------------------|

---

**Description**

[www.color-hex.com](http://www.color-hex.com) has a list of colours that have been liked by the most users. This function will retrieve all of these.

**Usage**

```
get_popular_colors()
```

**Value**

character vector of hex colours

**Examples**

```
get_popular_colors()
```

---

get\_popular\_palettes    *Get most popular palettes*

---

**Description**

Retrieve the palettes most users have favourited from www.color-hex.com

**Usage**

```
get_popular_palettes()
```

**Value**

data.frame with name, id and colours

**Examples**

```
get_popular_palettes()
```

---

get\_random\_color    *Generate random HEX colour*

---

**Description**

Generate random HEX colour

**Usage**

```
get_random_color()
```

**Value**

character hex value

**Examples**

```
get_random_color()
```

---

|        |                     |
|--------|---------------------|
| is_hex | <i>Validate Hex</i> |
|--------|---------------------|

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**Description**

validate if string is hexadecimal color code

**Usage**

```
is_hex(x)
```

**Arguments**

x                    hexadecimal character

**Value**

logical. TRUE if object is a hexadecimal code

---

|                |                                  |
|----------------|----------------------------------|
| scale_colorhex | <i>Colour scales for ggplot2</i> |
|----------------|----------------------------------|

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**Description**

Colour and fill scales for ggplot2 plots, using object of class colorhex as basis for colour choices.

**Usage**

```
scale_colour_colorhex_d(x, type = "triadic", reverse = FALSE, ...)
```

```
scale_color_colorhex_d(x, type = "triadic", reverse = FALSE, ...)
```

```
scale_fill_colorhex_d(x, type = "triadic", reverse = FALSE, ...)
```

```
scale_colour_colorhex_c(x, type = "complementary", reverse = FALSE, ...)
```

```
scale_color_colorhex_c(x, type = "complementary", reverse = FALSE, ...)
```

```
scale_fill_colorhex_c(x, type = "complementary", reverse = FALSE, ...)
```

**Arguments**

x                    object of class colorhex

type                character. Type of colours to use. One of c("complementary", "triadic" (default), "shades", "tints", "related")

reverse            logical. If scale should be reversed (default: FALSE)

...                arguments to be passed to [discrete\\_scale](#)

## Details

The `colorhex` class is a list where there is a variety of extra information on the hex colour selected. This information can be used to create colour scales to be used in `ggplot2`.

## Value

a `ggplot2`-proto

## Functions

- `scale_colour_colorhex_d`: Discrete colour scale
- `scale_color_colorhex_d`: Discrete colour scale
- `scale_fill_colorhex_d`: Discrete fill scale
- `scale_colour_colorhex_c`: Continuous colour scale
- `scale_color_colorhex_c`: Continuous colour scale
- `scale_fill_colorhex_c`: Continuous fill scale

## Examples

```
library(ggplot2)

x <- get_color("#008080")

ggplot(mtcars, aes(mpg)) +
  geom_density(aes(fill = disp, group = disp)) +
  scale_fill_colorhex_c(x)

ggplot(mtcars, aes(mpg)) +
  geom_density(aes(fill = disp, group = disp)) +
  scale_fill_colorhex_c(x, "tints")

ggplot(mtcars, aes(mpg)) +
  geom_density(aes(fill = disp, group = disp)) +
  scale_fill_colorhex_c(x, "shades")

ggplot(mtcars, aes(mpg, disp, colour = factor(cyl))) +
  geom_point() +
  scale_color_colorhex_d(x, "triadic")

ggplot(mtcars, aes(mpg, disp, colour = factor(cyl))) +
  geom_point() +
  scale_color_colorhex_d(x, "shades")
```

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scale-palettes      *Colour scales for ggplot2*

---

## Description

Colour and fill scales for ggplot2 plots, using object of class palette.

## Usage

```
scale_colour_palette_d(x, which = 1, reverse = FALSE, ...)
```

```
scale_color_palette_d(x, which = 1, reverse = FALSE, ...)
```

```
scale_fill_palette_d(x, which = 1, reverse = FALSE, ...)
```

```
scale_colour_palette_c(x, which = 1, reverse = FALSE, ...)
```

```
scale_color_palette_c(x, which = 1, reverse = FALSE, ...)
```

```
scale_fill_palette_c(x, which = 1, reverse = FALSE, ...)
```

## Arguments

|         |   |
|---------|---|
| x       | object of class palette   |
| which   | selection of which palette of a set to choose. Either by name, id or numeric index. |
| reverse | logical. If scale should be reversed (default: FALSE)                               |
| ...     | arguments to be passed to <a href="#">discrete_scale</a>                            |

## Details

The palette class is a data.frame of many palettes. This function takes such a data.frame and a choice of palette by name, id or numeric index can be made for the scale.

## Value

ggplot2-proto

## Functions

- `scale_colour_palette_d`: Discrete colour scale
- `scale_color_palette_d`: Discrete colour scale
- `scale_fill_palette_d`: Discrete fill scale
- `scale_colour_palette_c`: Continuous colour scale
- `scale_color_palette_c`: Continuous colour scale
- `scale_fill_palette_c`: Continuous fill scale

**Examples**

```
library(ggplot2)

x <- get_popular_palettes()

ggplot(mtcars, aes(mpg)) +
  geom_density(aes(fill = disp, group = disp)) +
  scale_fill_palettehex_c(x)

ggplot(mtcars, aes(mpg)) +
  geom_density(aes(fill = disp, group = disp)) +
  scale_fill_palettehex_c(x, 3)

ggplot(mtcars, aes(mpg, disp, colour = factor(cyl))) +
  geom_point() +
  scale_color_palettehex_d(x)

ggplot(mtcars, aes(mpg, disp, colour = factor(cyl))) +
  geom_point() +
  scale_color_palettehex_d(x, 1872)
```



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