

# Converting Colors

Hex(231D31)

Have a look what the booklet for  
Hex(231D31) contains.

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# Color

**Hex(231D31)**

# Conversions

## Conversions Part 1

Format	Color
Hex	231D31
RGB	35, 29, 49
RGB Percent	14%, 11%, 19%
CMY	0.8627, 0.8863, 0.8078
CMYK	0.29, 0.41, 0.00, 0.81
HSL	258°, 26%, 15%
HSV	258°, 41%, 19%
XYZ	1.6869, 1.4578, 3.0982
YIQ	33.0740, -2.8440, 7.4920

# Conversions

## Conversions Part 2

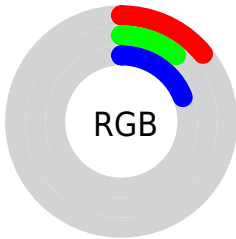
Format	Color
<a href="#">RYB</a>	<a href="#">35, 29, 49</a>
Decimal	<a href="#">2301233</a>
CIELab	<a href="#">12.34, 8.28, -12.20</a>
CIElCh	<a href="#">12, 14.745, 304.158</a>
Yxy	<a href="#">1.4578, 0.2702, 0.2335</a>
Android (android.graphics.Color)	<a href="#">4280491313 (0xFF231D31)</a>
YUV	<a href="#">33.0740, 7.8515, 1.6891</a>
Hunter-Lab	<a href="#">12.0740, 3.8092, -6.7622</a>

# Details

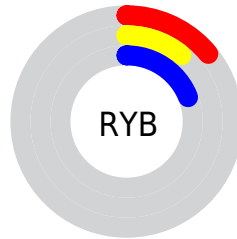
The Hex color **231D31** is a dark color, and the websafe version is hex **333333**. A complement of this color would be **2B311D**, and the grayscale version is **212121**.

A 20% lighter version of the original color is **50495F**, and **000000** is the 20% darker color. If you saturate the color by 10%, you get **201831**, and if you desaturate by 10%, it is **262231**.

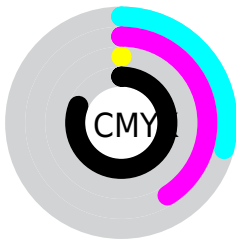
# Distribution



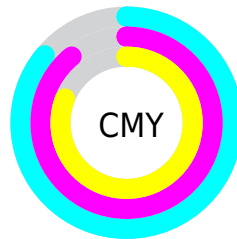
- Red (14%)
- Green (11%)
- Blue (19%)



- Red (14%)
- Yellow (11%)
- Blue (19%)



- Cyan (29%)
- Magenta (41%)
- Yellow (0%)
- Black (81%)



- Cyan (86%)
- Magenta (89%)
- Yellow (81%)

# Brightness & Saturation Gradients

These gradients show how the Hex color 231D31 changes by changing the brightness by 10 percent. The first figure shows a shift by +10% for each color and the second figure -10%.

Similar to the brightness gradients but the following saturation gradients show a change of the Hex color 231D31 by changing the saturation by 10% instead.



■ 231D31

■ 231D31

FFFFFF

■ 0F031C

■ 50495F

■ 000000

■ 686078

■ 817992

■ 9B93AC

■ B6ADC8

■ D2C9E4

■ EEE5FF

■ 231D31

■ 231D31

■ 201831

■ 262231

■ 1C1331

■ 2A2731

■ 190E31

■ 2D2C31

■ 150931

■ 313131

■ 120431

■ 343631

■ 0F0031

■ 383A31

■ 3B3F31

■ 3E4431

■ 424931

# Harmonies

## Analogous

The Analogous color harmony consists of three colors that are next to each other on the color wheel.



122134



231D31



2E1929

# Triad

The Triadic color harmony groups three colors that are evenly spaced from another and form a triangle on the color wheel.



231D31



2E1C0C



002521

# Complementary

The Complementary color scheme is a pair of colors which are on the opposite of each other on the color wheel.



231D31



2B311D

# Split Complementary

Split-complementary colors differ from the complementary color scheme. The scheme consists of three colors, the original color and two neighbors of the complement color.



0E2517



231D31



262009

# Square

The Square scheme is like the rectangle color scheme, but the four colors are evenly spaced on the color wheel.



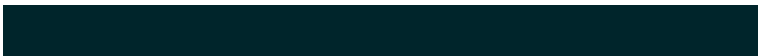
231D31



331915



1B230E



00252B

# Rectangle

The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



231D31



321823



1B230E



03251E



# Sweetspot

The Sweet Spot groups the original color and five complimentary colors.



231D31



3A3840



1D2B31



1E1D21



A1A1A1



212121



# Same Dimension

The Same Dimension uses a secret algorithm to generate beautiful new colors.



231D31



2A2140



2D1D31



18171A



1B0059



4100D9



# Inverse Universe

The Inverse Universe completely reimagines the original color for something new.



311D2B



402136



21311D



1A1719



59003E



D90098



# Previews

## White Background



This preview shows how the Hex color 231D31 looks on a white background.

## Color Contrast Check

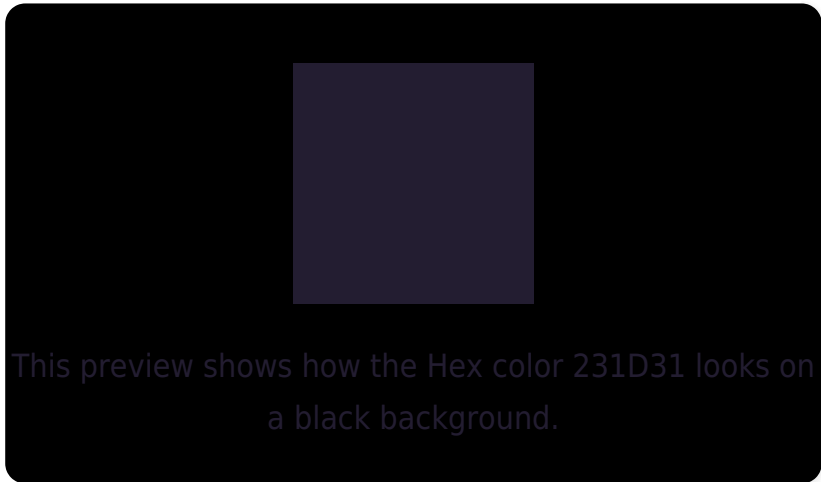
Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

# Black Background



## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

Any Text WCAG AA × Fail

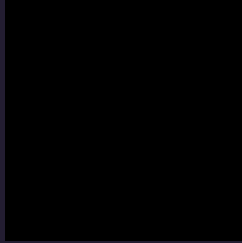
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

If you want to check with other color combinations, try the [Color Contrast Checker](#).



## Hex 231D31 Background



This preview shows how black text looks on a background with the Hex color 231D31.



This preview shows how white text looks on a background with the Hex color 231D31.

# Color Blindness Simulation

Color vision deficiency is a very complex topic, and I could not describe the different causes any better than Wikipedia does, so if you want to learn more, you should check out their [article about color blindness](#).

## Dichromacy



**Original Color**  
231D31

**Protanopia**  
192033

**Deuteranopia**  
192030



# Trichromacy



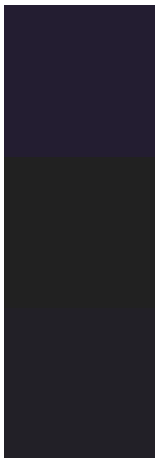
**Original Color**  
231D31

**Protanomaly**  
1D1F32

**Deuteranomaly**  
1D1F30

**Tritanomaly**  
211F28

# Monochromacy



**Original Color**  
231D31

**Achromatopsia**  
212121

**Achromatomaly**  
222027

# CSS Examples

## Text

The CSS property to change the color of the text to Hex 231D31 is called "color". The color property can be set on classes, ids or directly on the HTML element.

This example shows how text in the color #231D31 looks like.

```
.text, #text, p{  
    color:#231D31  
}
```

If you want to add a text shadow in that color use the text-shadow property, you can generate a text shadow directly with our [CSS Text Shadow Generator](#).

Here you see how black text with a 4 pixel #231D31 colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px #231D31
}
```

## Border

The CSS property to change the border of an element to Hex 231D31 is called "border". The border property can be set on classes, ids or directly on the HTML element.

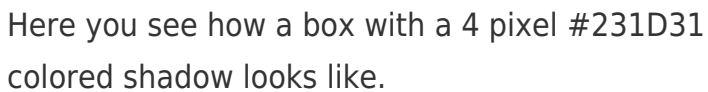
This example shows the color as border, it can be applied via the CSS property "border" or "border-color".

```
.border, #border, table{ border:4px solid
#231D31 }
```

If only the border color should be changed use the property `border-color`.

```
.border{ border-color:#231D31 }
```

If you want to add a box shadow in that color use:



Here you see how a box with a 4 pixel #231D31 colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px #231D31; -webkit-box-shadow:4px 4px  
4px 4px #231D31; box-shadow:4px 4px 4px  
4px #231D31 }
```

# Background

The CSS property to change the background color of an element to Hex 231D31 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background:#231D31 }
```

If only the background color should be changed can be used:

```
.background{ background-color:#231D31 }
```

This example shows the color as background, it is applied via the CSS property "background".

To optimize and compress your CSS code, you can use our [online CSS compressor and optimizer](#) based on csstidy. If you want to create a linear or radial gradient as background or border, check our [CSS Gradient Generator](#).



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