

# Converting Colors

XYZ(31.7314, 16.3502, 1.8431)

Have a look what the booklet for  
XYZ(31.7314, 16.3502, 1.8431)  
contains.

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# Color

**XYZ(31.7449, 16.3574,  
1.8320)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	E3000C
RGB	227, 0, 12
RGB Percent	89%, 0%, 5%
CMY	0.1098, 0.9998, 0.9529
CMYK	0.00, 1.00, 0.95, 0.11
HSL	357°, 100%, 45%
HSV	357°, 100%, 89%
XYZ	31.7449, 16.3574, 1.8320
YIQ	69.2410, 131.4400, 51.8560

# Conversions

## Conversions Part 2

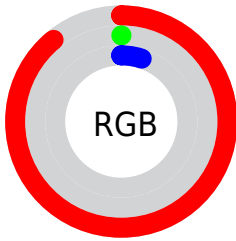
<b>Format</b>	<b>Color</b>
<b>RYB</b>	227, 0, 12
Decimal	14876684
CIELab	47.44, 73.46, 58.13
CIELCh	47, 93.678, 38.355
Yxy	16.3574, 0.6357, 0.3276
Android (android.graphics.Color)	4293066764 (0xFFE3000C)
YUV	69.2410, -28.2198, 138.3546
Hunter-Lab	40.4443, 69.3280, 25.6253

# Details

The XYZ color **31.7449, 16.3574, 1.8320** is a dark color, and the websafe version is hex **CC0000**. The color can be described as dark washed red. A complement of this color would be **39.7418, 59.8470, 73.7810**, and the grayscale version is **5.7306, 6.0290, 6.5656**.

A 20% lighter version of the original color is **45.7934, 28.9312, 7.8733**, and **14.6979, 7.5771, 0.6879** is the 20% darker color. If you saturate the color by 10%, you get **31.7444, 16.3572, 1.8304**, and if you desaturate by 10%, it is **32.2615, 17.0464, 3.0662**.

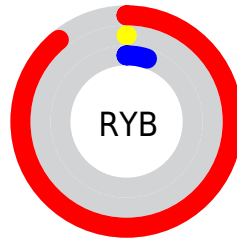
# Distribution



Red (89%)

Green (0%)

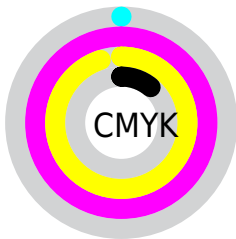
Blue (5%)



Red (89%)

Yellow (0%)

Blue (5%)

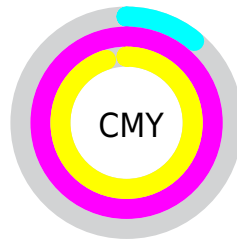


Cyan (0%)

Magenta (100%)

Yellow (95%)

Black (11%)



Cyan (11%)

Magenta (100%)


Yellow (95%)


# Brightness & Saturation Gradients


These gradients show how the XYZ color 31.7449, 16.3574, 1.8320 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 XYZ color 31.7449, 16.3574, 1.8320 by changing the saturation by 10% instead.





 31.7449, 16.3574,  
1.8320


 31.7449, 16.3574,  
1.8320


 301.7215,  
231.4415, 119.7110


 21.3213, 9.7774,  
0.4489


 61.7789, 37.2176,  
8.5762


 13.4729, 5.2516,  
0.0000


 82.1199, 52.2665,  
14.8608

 7.8342, 2.3956,  
0.0000

 106.4976, 70.9073,  
23.6451

 4.0400, 0.8236,  
0.0000

 135.2771, 93.5242,  
35.3476

 1.7248, 0.0000,  
0.0000

 168.8240,  
120.5017, 50.3869


 0.4717, 0.0000,  
0.0000


 207.5034,


 0.0000, 0.0000,


152.2241, 69.1816


0.0000


 251.6808,  
189.0760, 92.1501


 31.7449, 16.3574,  
1.8320

 31.7449, 16.3574,  
1.8320


 31.7444, 16.3572,  
1.8304

 32.2615, 17.0464,  
3.0662

 33.3239, 18.5182,  
5.4338

 35.0772, 21.0125,  
9.1389

 37.6124, 24.6700,  
14.3398

 41.0067, 29.6092,  
21.1725

■ 45.3280, 35.9342,  
29.7580

■ 50.6375, 43.7383,  
40.2057

■ 56.9910, 53.1067,  
52.6161

■ 64.4403, 64.1182,  
67.0825

# Harmonies

## Analogous

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



37.3200, 16.3574, 11.9542



31.7449, 16.3574, 1.8320



22.2171, 16.3574, 0.0000

# Triad

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



31.7449, 16.3574, 1.8320



4.9226, 16.3574, 5.7019



17.9865, 16.3574, 112.2875

# Complementary

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



31.7449, 16.3574, 1.8320



39.7418, 59.8470, 73.7810

# 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.



10.3668, 16.3574, 103.1901



31.7449, 16.3574, 1.8320



4.4912, 16.3574, 25.3216

# Square

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



31.7449, 16.3574, 1.8320



7.5905, 16.3574, 0.5825



6.0819, 16.3574, 63.9717



27.7196, 16.3574, 83.1923



# Rectangle

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



31.7449, 16.3574, 1.8320



16.0105, 16.3574, 0.0000



6.0819, 16.3574, 63.9717



15.0930, 16.3574, 113.8882

# Sweetspot

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



31.7452, 16.3585, 1.8322



65.7582, 56.6994, 52.0207



40.9793, 19.5248, 74.2813



13.4152, 11.1653, 9.8390



0.0000, 0.0000, 0.0000



20.3446, 21.4041, 23.3091



# Same Dimension

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



31.7452, 16.3585, 1.8322



41.3154, 21.2902, 2.3272



36.0834, 25.1406, 2.9523



14.4076, 14.3802, 15.0808



18.5265, 9.5448, 1.1358



1.3800, 0.7097, 0.1414



# Inverse Universe

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



31.7452, 16.3585, 1.8322



41.3154, 21.2902, 2.3272



21.6707, 21.1563, 75.6139



14.4076, 14.3802, 15.0808



18.5265, 9.5448, 1.1358



1.3800, 0.7097, 0.1414



# Previews

## White Background



This preview shows how the XYZ color 31.7449, 16.3574, 1.8320 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 × Fail



# Black Background



## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

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](#).

**XYZ 31.7449, 16.3574, 1.8320**

## **Background**



This preview shows how black text looks on a background with the XYZ color 31.7449, 16.3574, 1.8320.



This preview shows how white text looks on a background with the XYZ color 31.7449, 16.3574,



# 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

31.7449, 16.3574, 1.8320

### Protanopia

15.3073, 16.9605, 3.9058

### Deuteranopia

16.9702, 16.8666, 2.3611



## Tritanopia

31.3195, 16.5439, 1.5426

# Trichromacy



## Original Color

31.7449, 16.3574, 1.8320

## Protanomaly

17.8679, 12.7278, 2.4347

## Deuteranomaly

19.6056, 13.2637, 1.6417

## Tritanomaly

31.5299, 16.4654, 1.6312

# Monochromacy



## Original Color

31.7449, 16.3574, 1.8320

## Achromatopsia

5.6565, 5.9511, 6.4808

## Achromatomaly

10.0384, 6.4504, 3.5123

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 31.7449, 16.3574, 1.8320 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 `rgb(227, 0, 12)` looks like.

```
.text, #text, p{  
    color:rgb(227, 0, 12)  
}
```

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 rgb(227, 0, 12) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(227, 0, 12) }
```

## Border

The CSS property to change the border of an element to XYZ 31.7449, 16.3574, 1.8320 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 rgb(227, 0, 12) }
```



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

```
.border{ border-color:rgb(227, 0, 12) }
```

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

Here you see how a box with a 4 pixel `rgb(227, 0, 12)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(227, 0, 12); -webkit-box-  
shadow:4px 4px 4px 4px rgb(227, 0, 12);  
box-shadow:4px 4px 4px 4px rgb(227, 0, 12)  
}
```

# Background

The CSS property to change the background color of an element to XYZ 31.7449, 16.3574, 1.8320 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(227, 0, 12) }
```

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

```
.background{ background-color: rgb(227, 0,  
12) }
```

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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