

# Converting Colors

XYZ(49.7942, 38.3685, 4.7814)

Have a look what the booklet for  
XYZ(49.7942, 38.3685, 4.7814)  
contains.

<b>XYZ(49.7651, 38.3102, 4.7717)</b> .....	3
<b><i>Conversions</i></b> .....	4
<b><i>Details</i></b> .....	6
<b><i>Harmonies</i></b> .....	12
<b><i>Previews</i></b> .....	24
<b><i>Color Blindness Simulation</i></b> .....	28
<b><i>CSS Examples</i></b> .....	31

# **Color**

**XYZ(49.7651, 38.3102,  
4.7717)**

# Conversions

## Conversions Part 1

Format	Color
Hex	FF8600
RGB	255, 134, 0
RGB Percent	100%, 53%, 0%
CMY	0.0000, 0.4745, 1.0000
CMYK	0.00, 0.47, 1.00, 0.00
HSL	32°, 100%, 50%
HSV	32°, 100%, 100%
XYZ	49.7651, 38.3102, 4.7717
YIQ	154.9030, 115.1300, -16.0220

# Conversions

## Conversions Part 2

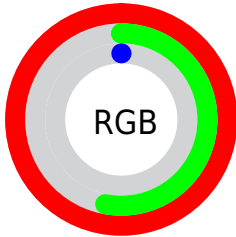
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	230, 255, 0
Decimal	16745984
CIE <sub>Lab</sub>	68.25, 39.85, 74.74
CIE <sub>LCh</sub>	68, 84.705, 61.933
Yxy	38.3102, 0.5360, 0.4126
Android (android.graphics.Color)	4294936064 (0xFFFF8600)
YUV	154.9030, -76.3672, 87.7851
Hunter-Lab	61.8952, 35.2012, 38.7558

# Details

The XYZ color **49.7651, 38.3102, 4.7717** is a dark color, and the websafe version is hex **FF9900**. The color can be described as dark saturated orange. A complement of this color would be **24.8875, 20.8951, 97.3284**, and the grayscale version is **31.4061, 33.0417, 35.9824**.

A 20% lighter version of the original color is **60.4593, 57.7209, 14.4333**, and **24.5032, 17.1110, 2.0113** is the 20% darker color. If you saturate the color by 10%, you get **49.7652, 38.3109, 4.7718**, and if you desaturate by 10%, it is **51.7162, 41.9232, 6.3151**.

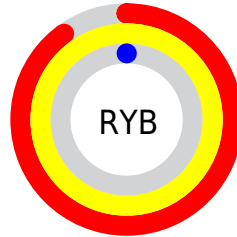
# Distribution



Red (100%)

Green (53%)

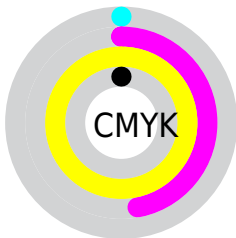
Blue (0%)



Red (90%)

Yellow (100%)

Blue (0%)

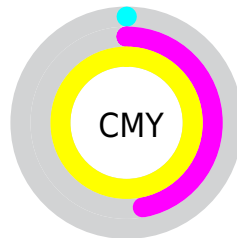


Cyan (0%)

Magenta (47%)

Yellow (100%)

Black (0%)



Cyan (0%)

Magenta (47%)


Yellow (100%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 49.7651, 38.3102, 4.7717 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 49.7651, 38.3102, 4.7717 by changing the saturation by 10% instead.





 49.7651, 38.3102,  
4.7717


 49.7651, 38.3102,  
4.7717


376.2138,  
338.9488, 156.4513


 35.4438, 26.2235,  
2.0576


 89.0206, 72.5833,  
15.7537


 24.1731, 16.9909,  
0.5903


 114.6856, 95.5386,  
24.8586


 15.5875, 10.2280,  
0.0000


 144.8626,  
122.8855, 36.9309

 9.3217, 5.5504,  
0.0000

 179.9168,  
155.0085, 52.3890

 5.0104, 2.5737,  
0.0000

 220.2137,  
192.2919, 71.6516


 2.2882, 0.9135,  
0.0000


 266.1186,


 0.7886, 0.0000,


235.1202, 95.1372


0.0000


 317.9968,  
283.8777, 123.2642


 0.0000, 0.0000,  
0.0000


 49.7651, 38.3102,  
4.7717


 49.7651, 38.3102,  
4.7717


 49.7652, 38.3109,  
4.7718

 51.7162, 41.9232,  
6.3151

 54.0997, 46.0234,  
9.1652

 56.9943, 50.6534,  
13.7040

 60.4498, 55.8420,  
20.1656

 64.5084, 61.6147,  
28.7463

69.2077, 67.9949,  
39.6180

74.5816, 75.0041,  
52.9348

80.6613, 82.6626,  
68.8371

87.4758, 90.9895,  
87.4547

# Harmonies

## Analogous

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



62.6002, 38.3102, 13.7963



49.7651, 38.3102, 4.7717



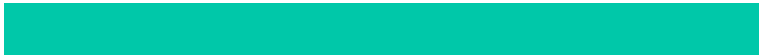
35.5599, 38.3102, 3.0289

# Triad

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



49.7651, 38.3102, 4.7717



16.4221, 38.3102, 44.2238



51.6213, 38.3102, 139.3487

# Complementary

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



49.7651, 38.3102, 4.7717



24.8875, 20.8951, 97.3284

# 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.



37.2791, 38.3102, 165.4092



49.7651, 38.3102, 4.7717



18.7865, 38.3102, 93.4408

# Square

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



49.7651, 38.3102, 4.7717



18.2390, 38.3102, 15.9376



25.6917, 38.3102, 144.9227



63.8419, 38.3102, 86.3294



# Rectangle

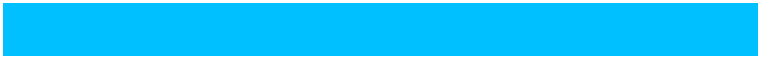
The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



49.7651, 38.3102, 4.7717



27.7002, 38.3102, 4.0356



25.6917, 38.3102, 144.9227



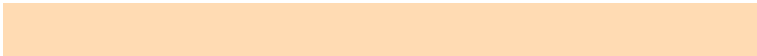
46.7836, 38.3102, 152.6249

# Sweetspot

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



49.7659, 38.3123, 4.7724



74.5798, 75.0017, 52.9292



44.8309, 22.6965, 20.8407



15.4602, 15.4042, 10.0615



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.



49.7659, 38.3123, 4.7724



49.7656, 38.3112, 4.7719



75.4532, 91.9821, 13.7778



18.7994, 19.5670, 18.9303



26.1543, 20.3199, 2.5436



2.6560, 2.1974, 0.2841



# Inverse Universe

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



24.8875, 20.8951, 97.3284



24.8869, 20.8939, 97.3290



18.1033, 7.2477, 95.0517



17.7139, 18.7994, 22.9450



13.1510, 11.2116, 50.9055



1.3889, 1.3085, 4.9926



# Previews

## White Background



This preview shows how the XYZ color 49.7651, 38.3102, 4.7717 looks on a white 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



# Black Background



This preview shows how the XYZ color 49.7651, 38.3102, 4.7717 looks on a black 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

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

**XYZ 49.7651, 38.3102, 4.7717**

## **Background**



This preview shows how black text looks on a background with the XYZ color 49.7651, 38.3102, 4.7717.



This preview shows how white text looks on a background with the XYZ color 49.7651, 38.3102,



# 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

49.7651, 38.3102, 4.7717

### Protanopia

34.7026, 38.3867, 6.3394

### Deuteranopia

39.0908, 38.3026, 5.3328



## Tritanopia

53.4031, 38.4759, 27.9045

# Trichromacy



**Original Color**

49.7651, 38.3102, 4.7717

**Protanomaly**

38.9520, 37.4714, 5.5952

**Deuteranomaly**

42.4260, 37.8258, 5.0650

**Tritanomaly**

50.9429, 37.9134, 13.6499

# Monochromacy



**Original Color**

49.7651, 38.3102, 4.7717

**Achromatopsia**

31.1553, 32.7778, 35.6950

**Achromatomaly**

34.1717, 32.8447, 16.3430

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 49.7651, 38.3102, 4.7717 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(255, 134, 0)` looks like.

```
.text, #text, p{  
    color:rgb(255, 134, 0)  
}
```

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(255, 134, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(255, 134, 0) }
```

## Border

The CSS property to change the border of an element to XYZ 49.7651, 38.3102, 4.7717 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(255, 134, 0) }
```



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

```
.border{ border-color:rgb(255, 134, 0) }
```

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

Here you see how a box with a 4 pixel `rgb(255, 134, 0)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(255, 134, 0); -webkit-box-  
shadow:4px 4px 4px 4px rgb(255, 134, 0);  
box-shadow:4px 4px 4px 4px rgb(255, 134,  
0) }
```

# Background

The CSS property to change the background color of an element to XYZ 49.7651, 38.3102, 4.7717 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(255, 134, 0) }
```

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

```
.background{ background-color: rgb(255,  
134, 0) }
```

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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