

# Converting Colors

XYZ(87.2211, 56.4428, 9.0985)

Have a look what the booklet for  
XYZ(87.2211, 56.4428, 9.0985)  
contains.

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# Color

**XYZ(49.4927, 36.9117,  
7.3124)**

# Conversions

## Conversions Part 1

Format	Color
Hex	FF8030
RGB	255, 128, 48
RGB Percent	100%, 50%, 19%
CMY	0.0000, 0.4980, 0.8118
CMYK	0.00, 0.50, 0.81, 0.00
HSL	23°, 100%, 59%
HSV	23°, 81%, 100%
XYZ	49.4927, 36.9117, 7.3124
YIQ	156.8530, 101.3720, 2.0440

# Conversions

## Conversions Part 2

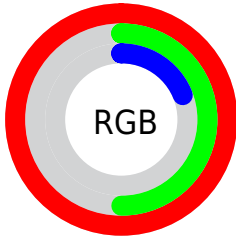
<b>Format</b>	<b>Color</b>
R <sub>Y</sub> B	255, 178, 48
Decimal	16744496
CIE Lab	67.21, 43.59, 62.17
CIE LCh	67, 75.931, 54.965
Yxy	36.9117, 0.5281, 0.3939
Android (android.graphics.Color)	4294934576 (0xFFFF8030)
YUV	156.8530, -53.6645, 86.0749
Hunter-Lab	60.7550, 39.0898, 35.3924

# Details

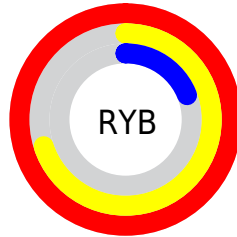
The XYZ color **49.4927, 36.9117, 7.3124** is a dark color, and the websafe version is hex **FF9933**. The color can be described as middle washed orange. A complement of this color would be **34.5977, 38.5059, 100.2161**, and the grayscale version is **32.1846, 33.8607, 36.8743**.

A 20% lighter version of the original color is **60.5224, 56.0666, 19.9440**, and **24.0703, 16.2452, 1.8670** is the 20% darker color. If you saturate the color by 10%, you get **47.2239, 32.9886, 4.6632**, and if you desaturate by 10%, it is **52.3797, 41.5889, 11.6578**.

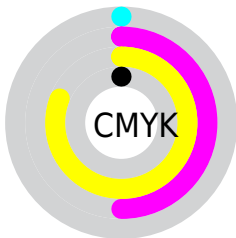
# Distribution



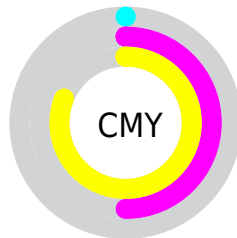
- Red (100%)
- Green (50%)
- Blue (19%)



- Red (100%)
- Yellow (70%)
- Blue (19%)



- Cyan (0%)
- Magenta (50%)
- Yellow (81%)
- Black (0%)




- Cyan (0%)
- Magenta (50%)
- Yellow (81%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 49.4927, 36.9117, 7.3124 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 49.4927, 36.9117, 7.3124 by changing the saturation by 10% instead.





 49.4927, 36.9117,  
7.3124


 49.4927, 36.9117,  
7.3124


375.1636,  
332.9281, 179.9631


 35.2266, 25.1391,  
3.5768


 88.6191, 70.4370,  
21.1225


 24.0048, 16.1807,  
1.3962


 114.2102, 92.9584,  
32.0340


 15.4620, 9.6521,  
0.1387


 144.3069,  
119.8317, 46.1747

 9.2327, 5.1689,  
0.0000

 179.2747,  
151.4411, 63.9629

 4.9516, 2.3467,  
0.0000

 219.4789,  
188.1710, 85.8174

 2.2533, 0.7983,  
0.0000

 265.2849,

 0.7706, 0.0000,

230.4059, 112.1565

0.0000

317.0580,  
278.5301, 143.3989

■ 0.0000, 0.0000,  
0.0000

■ 49.4927, 36.9117,  
7.3124

■ 49.4927, 36.9117,  
7.3124

■ 47.2239, 32.9886,  
4.6632

■ 52.3797, 41.5889,  
11.6578

■ 45.6599, 30.1002,  
3.4034

■ 55.9411, 47.0590,  
17.9398

■ 60.2280, 53.3645,  
26.3618

■ 65.2852, 60.5425,  
37.1000

■ 71.1533, 68.6274,  
50.3127

77.8700, 77.6518,  
66.1437

85.4701, 87.6463,  
84.7259

93.9867, 98.6402,  
106.1829

95.0498, 99.9999,  
108.9000

# Harmonies

## Analogous

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



59.4083, 36.9117, 18.8259



49.4927, 36.9117, 7.3124



37.0758, 36.9117, 4.2473

# Triad

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



49.4927, 36.9117, 7.3124



17.2394, 36.9117, 34.8456



45.3529, 36.9117, 130.2388

# Complementary

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



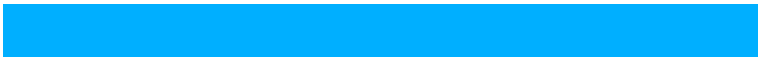
49.4927, 36.9117, 7.3124



34.5977, 38.5059, 100.2161

# 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.



33.1638, 36.9117, 143.1608



49.4927, 36.9117, 7.3124



18.5123, 36.9117, 73.5876

# Square

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



49.4927, 36.9117, 7.3124



19.8190, 36.9117, 13.5599



23.7835, 36.9117, 118.3544



56.6729, 36.9117, 89.0830



# Rectangle

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



49.4927, 36.9117, 7.3124



29.6386, 36.9117, 4.6906



23.7835, 36.9117, 118.3544



41.1573, 36.9117, 138.7340

# Sweetspot

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



49.4935, 36.9137, 7.3130



75.8852, 75.0062, 61.3993



50.0987, 26.4948, 43.3667



15.7278, 15.3634, 11.9269



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.



49.4935, 36.9137, 7.3130



46.1573, 31.0275, 3.7758



70.3072, 78.5410, 14.2509



18.5850, 19.1382, 18.8588



23.9922, 15.9956, 1.8229



2.4381, 1.7616, 0.2115

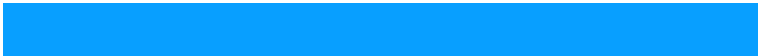


# Inverse Universe

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



34.5977, 38.5059, 100.2161



30.6124, 32.2027, 99.2100



21.5961, 12.5028, 95.8822



17.9308, 19.2333, 23.0173



15.8314, 16.5724, 51.7990



1.6475, 1.8256, 5.0788



# Previews

## White Background



This preview shows how the XYZ color 49.4927, 36.9117, 7.3124 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 49.4927, 36.9117, 7.3124 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 49.4927, 36.9117, 7.3124**

## **Background**



This preview shows how black text looks on a background with the XYZ color 49.4927, 36.9117, 7.3124.



This preview shows how white text looks on a background with the XYZ color 49.4927, 36.9117,



# 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

49.4927, 36.9117, 7.3124

### Protanopia

33.5676, 36.9237, 9.3608

### Deuteranopia

37.6760, 37.0323, 6.9125



## Tritanopia

52.2288, 36.7908, 25.4677

# Trichromacy



## Original Color

49.4927, 36.9117, 7.3124

## Protanomaly

38.0270, 35.9549, 8.4258

## Deuteranomaly

41.4196, 36.5652, 6.9726

## Tritanomaly

50.7479, 36.5954, 16.4455

# Monochromacy



## Original Color

49.4927, 36.9117, 7.3124

## Achromatopsia

32.0474, 33.7164, 36.7171

## Achromatomaly

35.4821, 33.1796, 21.3638

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 49.4927, 36.9117, 7.3124 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, 128, 48)` looks like.

```
.text, #text, p{  
    color:rgb(255, 128, 48)  
}
```

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, 128, 48) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(255, 128, 48) }
```

## Border

The CSS property to change the border of an element to XYZ 49.4927, 36.9117, 7.3124 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, 128, 48) }
```



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

```
.border{ border-color:rgb(255, 128, 48) }
```

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

Here you see how a box with a 4 pixel rgb(255, 128, 48) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(255, 128, 48); -webkit-box-  
shadow:4px 4px 4px 4px rgb(255, 128, 48);  
box-shadow:4px 4px 4px 4px rgb(255, 128,  
48) }
```

# Background

The CSS property to change the background color of an element to XYZ 49.4927, 36.9117, 7.3124 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(255, 128, 48) }
```

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

```
.background{ background-color: rgb(255,  
128, 48) }
```

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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