

# Converting Colors

$Y_{xy}(45.1727, 0.4952, 0.4160)$

Have a look what the booklet for  
Yxy(45.1727, 0.4952, 0.4160)  
contains.

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# Color

**Yxy(45.3225, 0.4948, 0.4165)**

# Conversions

## Conversions Part 1

Format	Color
Hex	FF9C38
RGB	255, 156, 56
RGB Percent	100%, 61%, 22%
CMY	0.0000, 0.3882, 0.7804
CMYK	0.00, 0.39, 0.78, 0.00
HSL	30°, 100%, 61%
HSV	30°, 78%, 100%
XYZ	53.8429, 45.3225, 9.6521
YIQ	174.2010, 91.1040, -10.1120

# Conversions

## Conversions Part 2

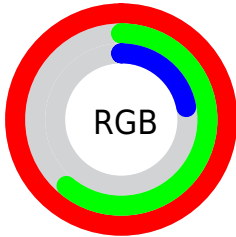
<b>Format</b>	<b>Color</b>
R <sub>Y</sub> B	253, 255, 56
Decimal	16751672
CIE Lab	73.10, 29.65, 64.45
CIE LCh	73, 70.942, 65.299
Yxy	45.3225, 0.4948, 0.4165
Android (android.graphics.Color)	4294941752 (0xFFFF9C38)
YUV	174.2010, -58.2731, 70.8607
Hunter-Lab	67.3220, 24.9476, 38.6248

# Details

The Yxy color **45.3225, 0.4948, 0.4165** is a light color, and the websafe version is hex **FF9933**. The color can be described as light washed orange. A complement of this color would be **31.5038, 0.1939, 0.1945**, and the grayscale version is **42.7084, 0.3127, 0.3290**.

A 20% lighter version of the original color is **68.9743, 0.4187, 0.4288**, and **21.1071, 0.5289, 0.4183** is the 20% darker color. If you saturate the color by 10%, you get **41.0977, 0.5190, 0.4154**, and if you desaturate by 10%, it is **50.1231, 0.4679, 0.4123**.

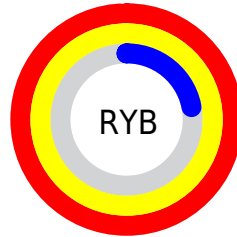
# Distribution



Red (100%)

Green (61%)

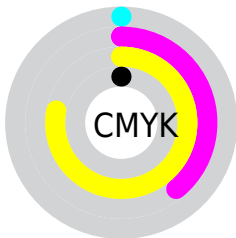
Blue (22%)



Red (99%)

Yellow (100%)

Blue (22%)

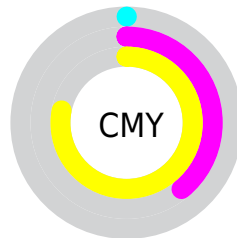


Cyan (0%)

Magenta (39%)

Yellow (78%)

Black (0%)



Cyan (0%)

Magenta (39%)


Yellow (78%)


# Brightness & Saturation Gradients

These gradients show how the Yxy color 45.3225, 0.4948, 0.4165 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 Yxy color 45.3225, 0.4948, 0.4165 by changing the saturation by 10% instead.





 45.3225, 0.4948,  
0.4165

 45.3225, 0.4948,  
0.4165


368.0781, 0.4087,  
0.3841


 31.7115, 0.5128,  
0.4201


 83.2041, 0.4658,  
0.4080

 21.1413, 0.5334,  
0.4222


 108.2436, 0.4542,  
0.4038

 13.2273, 0.5569,  
0.4211


 137.8613, 0.4441,  
0.3998

 7.5852, 0.5848,  
0.4152

 172.4418, 0.4352,  
0.3961

 3.8307, 0.6071,  
0.3929

 212.3693, 0.4274,  
0.3927

 1.5793, 0.6424,  
0.3576

 258.0282, 0.4204,

 0.3436, 0.7566,

0.3896

0.2434

309.8030, 0.4143,  
0.3867

■ 0.0000, 0.0000,  
0.0000

■ 45.3225, 0.4948,  
0.4165

■ 45.3225, 0.4948,  
0.4165

■ 41.0977, 0.5190,  
0.4154

■ 50.1231, 0.4679,  
0.4123

■ 37.4057, 0.5392,  
0.4088

■ 55.5231, 0.4401,  
0.4039

■ 36.7361, 0.5429,  
0.4072

■ 61.5515, 0.4130,  
0.3926

■ 68.2327, 0.3876,  
0.3796

■ 75.5899, 0.3644,  
0.3659

 83.6444, 0.3438,  
0.3523

 92.4167, 0.3256,  
0.3391

100.0000, 0.3127,  
0.3290

# Harmonies

## Analogous

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



45.3225, 0.5033, 0.3475



45.3225, 0.4948, 0.4165



45.3225, 0.4352, 0.4821

# Triad

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



45.3225, 0.4948, 0.4165



45.3225, 0.1878, 0.3635



45.3225, 0.2511, 0.1949

# Complementary

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



45.3225, 0.4948, 0.4165



31.5038, 0.1939, 0.1945

# 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.



45.3225, 0.1856, 0.1856



45.3225, 0.4948, 0.4165



45.3225, 0.1534, 0.2634

# Square

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



45.3225, 0.4948, 0.4165



45.3225, 0.2584, 0.4717



45.3225, 0.1536, 0.2057



45.3225, 0.3470, 0.2292



# Rectangle

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



45.3225, 0.4948, 0.4165



45.3225, 0.3793, 0.5107



45.3225, 0.1536, 0.2057



45.3225, 0.2255, 0.1889

# Sweetspot

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



45.3246, 0.4948, 0.4165



79.5581, 0.3537, 0.3590



26.4725, 0.4465, 0.2432



16.4156, 0.3614, 0.3640



0.0000, 0.0000, 0.0000



21.4041, 0.3127, 0.3290



# Same Dimension

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



45.3246, 0.4948, 0.4165



38.8350, 0.5315, 0.4120



93.0656, 0.4125, 0.4940



19.4956, 0.3282, 0.3410



19.4943, 0.5403, 0.4092



2.1166, 0.5228, 0.4231



# Inverse Universe

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



31.5038, 0.1939, 0.1945



24.5251, 0.1799, 0.1643



10.8900, 0.1653, 0.0854



18.8706, 0.2979, 0.3167



11.9826, 0.1768, 0.1565



1.3850, 0.1826, 0.1772



# Previews

## White Background



This preview shows how the Yxy color 45.3225, 0.4948, 0.4165 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 Yxy color 45.3225, 0.4948, 0.4165 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](#).

**Yxy 45.3225, 0.4948, 0.4165**

## Background



This preview shows how black text looks on a background with the Yxy color 45.3225, 0.4948, 0.4165.



This preview shows how white text looks on a background with the Yxy color 45.3225, 0.4948, 0.4165.

# 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

45.3225, 0.4948, 0.4165

### Protanopia

45.4078, 0.4219, 0.4641

### Deuteranopia

45.5336, 0.4582, 0.4485



## Tritanopia

45.2581, 0.4103, 0.3188

# Trichromacy



**Original Color**

45.3225, 0.4948, 0.4165

**Protanomaly**

44.8242, 0.4494, 0.4457

**Deuteranomaly**

45.5340, 0.4717, 0.4366

**Tritanomaly**

45.1216, 0.4469, 0.3602

# Monochromacy



**Original Color**

45.3225, 0.4948, 0.4165

**Achromatopsia**

42.3268, 0.3127, 0.3290

**Achromatomaly**

41.9726, 0.3804, 0.3753

# CSS Examples

## Text

The CSS property to change the color of the text to Yxy 45.3225, 0.4948, 0.4165 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, 156, 56)` looks like.

```
.text, #text, p{  
    color:rgb(255, 156, 56)  
}
```

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, 156, 56) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(255, 156, 56) }
```

## Border

The CSS property to change the border of an element to Yxy 45.3225, 0.4948, 0.4165 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, 156, 56) }
```

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

```
.border{ border-color:rgb(255, 156, 56) }
```

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

Here you see how a box with a 4 pixel rgb(255, 156, 56) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(255, 156, 56); -webkit-box-  
shadow:4px 4px 4px 4px rgb(255, 156, 56);  
box-shadow:4px 4px 4px 4px rgb(255, 156,  
56) }
```



# Background

The CSS property to change the background color of an element to Yxy 45.3225, 0.4948, 0.4165 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(255, 156, 56) }
```

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

```
.background{ background-color: rgb(255,  
156, 56) }
```

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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