

# Converting Colors

$Y_{xy}(31.2218, 0.5704, 0.3853)$

Have a look what the booklet for  
Yxy(31.2218, 0.5704, 0.3853)  
contains.

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# **Color**

**Yxy(31.1606, 0.5707, 0.3850)**

# Conversions

## Conversions Part 1

Format	Color
Hex	FF6800
RGB	255, 104, 0
RGB Percent	100%, 41%, 0%
CMY	0.0000, 0.5921, 0.9992
CMYK	0.00, 0.59, 1.00, 0.00
HSL	24°, 100%, 50%
HSV	24°, 100%, 100%
XYZ	46.1905, 31.1606, 3.5855
YIQ	137.2930, 123.3800, -0.3320

# Conversions

## Conversions Part 2

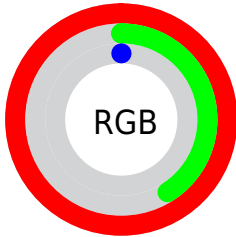
<b>Format</b>	<b>Color</b>
R <sub>Y</sub> B	255, 176, 0
Decimal	16738304
CIE Lab	62.64, 54.13, 71.49
CIE LCh	63, 89.666, 52.869
Yxy	31.1606, 0.5707, 0.3850
Android (android.graphics.Color)	4294928384 (0xFFFF6800)
YUV	137.2930, -67.6854, 103.2290
Hunter-Lab	55.8217, 50.0147, 35.2669

# Details

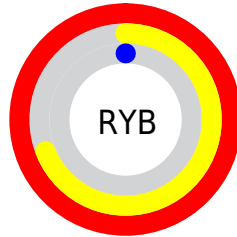
The Yxy color **31.1606, 0.5707, 0.3850** is a dark color, and the websafe version is hex **FF6600**. The color can be described as dark saturated orange. A complement of this color would be **29.4130, 0.1853, 0.1870**, and the grayscale version is **25.3695, 0.3127, 0.3290**.

A 20% lighter version of the original color is **46.4859, 0.4845, 0.4117**, and **13.0611, 0.6074, 0.3559** is the 20% darker color. If you saturate the color by 10%, you get **31.1387, 0.5709, 0.3849**, and if you desaturate by 10%, it is **34.5548, 0.5478, 0.3941**.

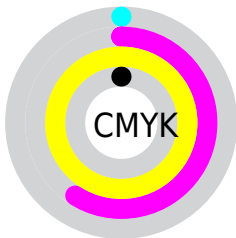
# Distribution



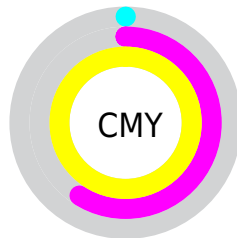
- Red (100%)
- Green (41%)
- Blue (0%)



- Red (100%)
- Yellow (69%)
- Blue (0%)



- Cyan (0%)
- Magenta (59%)
- Yellow (100%)
- Black (0%)




- Cyan (0%)
- Magenta (59%)
- Yellow (100%)


# Brightness & Saturation Gradients

These gradients show how the Yxy color 31.1606, 0.5707, 0.3850 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 31.1606, 0.5707, 0.3850 by changing the saturation by 10% instead.





 31.1606, 0.5707,  
0.3850

 31.1606, 0.5707,  
0.3850


307.2775, 0.4456,  
0.3779


 20.7212, 0.5957,  
0.3787


 61.4928, 0.5291,  
0.3885

 12.9203, 0.6272,  
0.3687


 82.1544, 0.5121,  
0.3880


 7.3737, 0.6543,  
0.3457


 106.9922, 0.4972,  
0.3868

 3.6969, 0.6885,  
0.3115

 136.3905, 0.4842,  
0.3852

 1.5055, 0.7388,  
0.2612

 170.7338, 0.4727,  
0.3835


 0.2926, 0.8634,  
0.1366

 210.4065, 0.4626,


 0.0000, 1.0000,


0.3816


0.0000

 255.7929, 0.4536,  
0.3798


 0.0000, 0.0000,  
0.0000


 31.1606, 0.5707,  
0.3850


 31.1606, 0.5707,  
0.3850

 31.1387, 0.5709,  
0.3849

 34.5548, 0.5478,  
0.3941

 38.6140, 0.5198,  
0.3982

 43.3937, 0.4883,  
0.3970

 48.9351, 0.4560,  
0.3915

 55.2754, 0.4249,  
0.3829

62.4488, 0.3963,  
0.3725

70.4870, 0.3708,  
0.3613

79.4202, 0.3484,  
0.3500

89.2767, 0.3292,  
0.3392

# Harmonies

## Analogous

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



31.1606, 0.5583, 0.3053



31.1606, 0.5707, 0.3850



31.1606, 0.5007, 0.4781

# Triad

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



31.1606, 0.5707, 0.3850



31.1606, 0.1715, 0.4498



31.1606, 0.1871, 0.1468

# Complementary

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



31.1606, 0.5707, 0.3850



29.4130, 0.1853, 0.1870

# 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.



31.1606, 0.1263, 0.1469



31.1606, 0.5707, 0.3850



31.1606, 0.1150, 0.2798

# Square

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



31.1606, 0.5707, 0.3850



31.1606, 0.2742, 0.5871



31.1606, 0.1036, 0.1837



31.1606, 0.2976, 0.1764



# Rectangle

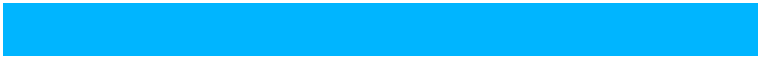
The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



31.1606, 0.5707, 0.3850



31.1606, 0.4303, 0.5432



31.1606, 0.1036, 0.1837



31.1606, 0.1619, 0.1434

# Sweetspot

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



31.1624, 0.5707, 0.3850



70.4242, 0.3709, 0.3614



23.5661, 0.4571, 0.2292



14.3259, 0.3813, 0.3661



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.



31.1624, 0.5707, 0.3850



31.1396, 0.5709, 0.3849



77.5848, 0.4384, 0.4901



19.2022, 0.3284, 0.3387



16.5464, 0.5679, 0.3872

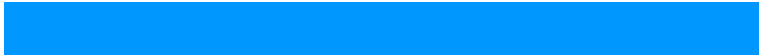


1.8193, 0.5473, 0.4036

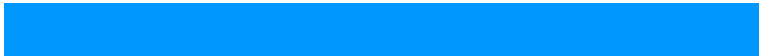


# Inverse Universe

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



29.4130, 0.1853, 0.1870



29.3869, 0.1853, 0.1869



7.9455, 0.1515, 0.0654



19.1674, 0.2979, 0.3191



15.6563, 0.1859, 0.1894



1.7393, 0.1908, 0.2069



# Previews

## White Background



This preview shows how the Yxy color 31.1606, 0.5707, 0.3850 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

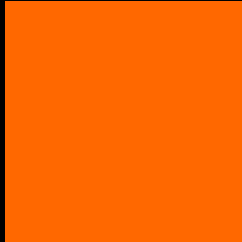
Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the Yxy color 31.1606, 0.5707, 0.3850 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 31.1606, 0.5707, 0.3850**

## **Background**



This preview shows how black text looks on a background with the Yxy color 31.1606, 0.5707, 0.3850.



This preview shows how white text looks on a background with the Yxy color 31.1606, 0.5707, 0.3850.

# 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

31.1606, 0.5707, 0.3850

### Protanopia

31.1846, 0.4349, 0.4810

### Deuteranopia

31.1530, 0.4719, 0.4635



## Tritanopia

31.2036, 0.5011, 0.3240

# Trichromacy



## Original Color

31.1606, 0.5707, 0.3850

## Protanomaly

29.9219, 0.4902, 0.4429

## Deuteranomaly

30.1476, 0.5129, 0.4310

## Tritanomaly

30.9726, 0.5411, 0.3573

# Monochromacy



## Original Color

31.1606, 0.5707, 0.3850

## Achromatopsia

25.0158, 0.3127, 0.3290

## Achromatomaly

25.0586, 0.4268, 0.3836

# CSS Examples

## Text

The CSS property to change the color of the text to Yxy 31.1606, 0.5707, 0.3850 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, 104, 0)` looks like.

```
.text, #text, p{  
    color:rgb(255, 104, 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, 104, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(255, 104, 0) }
```

## Border

The CSS property to change the border of an element to Yxy 31.1606, 0.5707, 0.3850 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, 104, 0) }
```

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

```
.border{ border-color:rgb(255, 104, 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, 104, 0) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(255, 104, 0); -webkit-box-  
shadow:4px 4px 4px 4px rgb(255, 104, 0);  
box-shadow:4px 4px 4px 4px rgb(255, 104,  
0) }
```



# Background

The CSS property to change the background color of an element to Yxy 31.1606, 0.5707, 0.3850 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(255, 104, 0) }
```

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

```
.background{ background-color: rgb(255,  
104, 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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