

# Converting Colors

XYZ(42.4732, 23.7264, 2.3411)

Have a look what the booklet for  
XYZ(42.4732, 23.7264, 2.3411)  
contains.

<b>XYZ(42.4680, 23.7160, 2.3393)</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(42.4680, 23.7160,  
2.3393)**

# Conversions

## Conversions Part 1

Format	Color
Hex	FF3400
RGB	255, 52, 0
RGB Percent	100%, 20%, 0%
CMY	0.0000, 0.7960, 1.0000
CMYK	0.00, 0.80, 1.00, 0.00
HSL	12°, 100%, 50%
HSV	12°, 100%, 100%
XYZ	42.4680, 23.7160, 2.3393
YIQ	106.7690, 137.6800, 26.8640

# Conversions

## Conversions Part 2

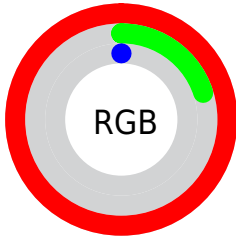
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	255, 65, 0
Decimal	16724992
CIE Lab	55.80, 72.75, 68.20
CIE LCh	56, 99.720, 43.148
Yxy	23.7160, 0.6198, 0.3461
Android (android.graphics.Color)	4294915072 (0xFFFF3400)
YUV	106.7690, -52.6371, 129.9986
Hunter-Lab	48.6991, 70.4374, 31.2413

# Details

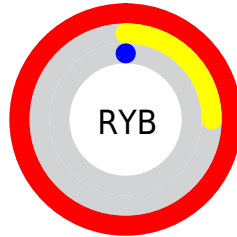
The XYZ color **42.4680, 23.7160, 2.3393** is a dark color, and the websafe version is hex **FF3300**. The color can be described as dark saturated red. A complement of this color would be **39.4015, 49.9233, 102.1665**, and the grayscale version is **14.0279, 14.7584, 16.0719**.

A 20% lighter version of the original color is **48.4708, 34.3304, 8.6292**, and **20.7390, 10.6914, 0.9706** is the 20% darker color. If you saturate the color by 10%, you get **42.4684, 23.7174, 2.3396**, and if you desaturate by 10%, it is **43.7585, 26.0080, 3.6620**.

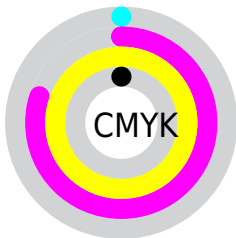
# Distribution



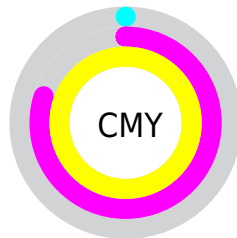
- Red (100%)
- Green (20%)
- Blue (0%)



- Red (100%)
- Yellow (25%)
- Blue (0%)



- Cyan (0%)
- Magenta (80%)
- Yellow (100%)
- Black (0%)




- Cyan (0%)
- Magenta (80%)
- Yellow (100%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 42.4680, 23.7160, 2.3393 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 42.4680, 23.7160, 2.3393 by changing the saturation by 10% instead.




 42.4680, 23.7160,  
2.3393


 42.4680, 23.7160,  
2.3393

347.3780,  
271.3815, 127.4410


 29.6606, 15.1231,  
0.7531


 78.1682, 49.5664,  
9.9492


 19.7279, 8.9058,  
0.0000


 101.7917, 67.5926,  
16.8251

 12.3045, 4.6798,  
0.0000


 129.7513, 89.5320,  
26.3063

 7.0251, 2.0606,  
0.0000

 162.4123,  
115.7691, 38.8114

 3.5243, 0.6424,  
0.0000

 200.1401,  
146.6882, 54.7588


 1.4367, 0.0000,  
0.0000

 243.3001,


 0.2821, 0.0000,


182.6737, 74.5672


0.0000


 292.2577,  
224.1100, 98.6551


 0.0000, 0.0000,  
0.0000


 42.4680, 23.7160,  
2.3393


 42.4680, 23.7160,  
2.3393


 42.4684, 23.7174,  
2.3396

 43.7585, 26.0080,  
3.6620

 45.7179, 29.2601,  
6.3703

 48.4571, 33.5795,  
10.8567

 52.0545, 39.0521,  
17.3649

 56.5780, 45.7548,  
26.0999

62.0884, 53.7576,  
37.2412

68.6413, 63.1250,  
50.9502

76.2878, 73.9173,  
67.3739

85.0756, 86.1912,  
86.6483

# Harmonies

## Analogous

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



51.1124, 23.7160, 14.0702



42.4680, 23.7160, 2.3393



29.4662, 23.7160, 0.0540

# Triad

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



42.4680, 23.7160, 2.3393



7.4577, 23.7160, 11.6282



27.8698, 23.7160, 146.7154

# Complementary

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



42.4680, 23.7160, 2.3393



39.4015, 49.9233, 102.1665

# 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.



16.7965, 23.7160, 143.4170



42.4680, 23.7160, 2.3393



7.2847, 23.7160, 42.7770

# Square

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



42.4680, 23.7160, 2.3393



10.6825, 23.7160, 1.8099



10.0887, 23.7160, 96.3245



40.9671, 23.7160, 103.3476



# Rectangle

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



42.4680, 23.7160, 2.3393



21.3658, 23.7160, 0.0000



10.0887, 23.7160, 96.3245



23.7593, 23.7160, 151.6792

# Sweetspot

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



42.4685, 23.7175, 2.3396



68.6414, 63.1249, 50.9497



52.1387, 25.6195, 59.3235



14.0728, 12.6295, 9.5991



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.



42.4685, 23.7175, 2.3396



42.4688, 23.7176, 2.3396



57.2597, 53.2999, 7.2700



18.3094, 18.5871, 18.7670



22.2747, 12.5607, 1.2505



2.2421, 1.3696, 0.1462

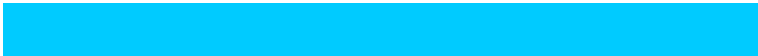


# Inverse Universe

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



39.4015, 49.9233, 102.1665



39.4018, 49.9235, 102.1673



20.6689, 12.4581, 95.9223



18.2217, 19.8150, 23.1142



20.6982, 26.3060, 53.4212



2.0911, 2.7128, 5.2267



# Previews

## White Background



This preview shows how the XYZ color 42.4680, 23.7160, 2.3393 looks on a white 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



# Black Background



This preview shows how the XYZ color 42.4680, 23.7160, 2.3393 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 × Fail

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

**XYZ 42.4680, 23.7160, 2.3393**

## **Background**



This preview shows how black text looks on a background with the XYZ color 42.4680, 23.7160, 2.3393.



This preview shows how white text looks on a background with the XYZ color 42.4680, 23.7160,



# 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

42.4680, 23.7160, 2.3393

### Protanopia

21.5219, 23.7232, 4.6730

### Deuteranopia

23.9516, 23.6138, 3.2955



## Tritanopia

42.9350, 23.7630, 5.2295

# Trichromacy



## Original Color

42.4680, 23.7160, 2.3393

## Protanomaly

26.0541, 20.7665, 3.2512

## Deuteranomaly

28.3766, 21.3937, 2.6338

## Tritanomaly

42.6711, 23.7266, 3.6270

# Monochromacy



## Original Color

42.4680, 23.7160, 2.3393

## Achromatopsia

13.9749, 14.7027, 16.0113

## Achromatomaly

19.1495, 14.8108, 7.3183

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 42.4680, 23.7160, 2.3393 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, 52, 0)` looks like.

```
.text, #text, p{  
    color:rgb(255, 52, 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, 52, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(255, 52, 0) }
```

## Border

The CSS property to change the border of an element to XYZ 42.4680, 23.7160, 2.3393 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, 52, 0) }
```



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

```
.border{ border-color:rgb(255, 52, 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, 52, 0) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(255, 52, 0); -webkit-box-  
shadow:4px 4px 4px 4px rgb(255, 52, 0);  
box-shadow:4px 4px 4px 4px rgb(255, 52, 0)  
}
```

# Background

The CSS property to change the background color of an element to XYZ 42.4680, 23.7160, 2.3393 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(255, 52, 0) }
```

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

```
.background{ background-color: rgb(255, 52,  
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](#).

Hey! You found this booklet interesting? Support Converting Colors with the new Membership Option!

The pro membership hides all ads, plus gives you double the colors in the color bucket, and more awesome pro features!

**[Learn more, Memberships starting at \\$2.50/m!](#)**

**Follow me  
on Twitter!**

**@ConvertingColor**