

# Converting Colors

XYZ(23.6350, 12.1718, 1.6718)

Have a look what the booklet for  
XYZ(23.6350, 12.1718, 1.6718)  
contains.

<b>XYZ(23.6624, 12.1858, 1.6772)</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(23.6624, 12.1858,  
1.6772)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	C70012
RGB	199, 0, 18
RGB Percent	78%, 0%, 7%
CMY	0.2196, 0.9998, 0.9294
CMYK	0.00, 1.00, 0.91, 0.22
HSL	355°, 100%, 39%
HSV	355°, 100%, 78%
XYZ	23.6624, 12.1858, 1.6772
YIQ	61.5530, 112.8260, 47.7860

# Conversions

## Conversions Part 2

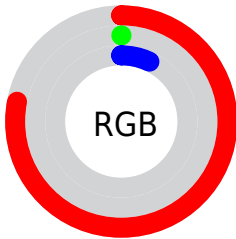
<b>Format</b>	<b>Color</b>
<b>RYB</b>	199, 0, 18
Decimal	13041682
CIELab	41.51, 66.65, 49.39
CIELCh	42, 82.959, 36.540
Yxy	12.1858, 0.6306, 0.3247
Android (android.graphics.Color)	4291231762 (0xFFC70012)
YUV	61.5530, -21.4716, 120.5410
Hunter-Lab	34.9082, 59.9064, 21.5871

# Details

The XYZ color **23.6624, 12.1858, 1.6772** is a dark color, and the websafe version is hex **CC0000**. The color can be described as dark washed red. A complement of this color would be **28.7684, 44.1847, 50.7496**, and the grayscale version is **4.5360, 4.7722, 5.1970**.

A 20% lighter version of the original color is **45.3645, 27.9823, 8.0112**, and **9.9917, 5.1509, 0.4676** is the 20% darker color. If you saturate the color by 10%, you get **23.6619, 12.1856, 1.6756**, and if you desaturate by 10%, it is **24.1222, 12.7683, 2.8705**.

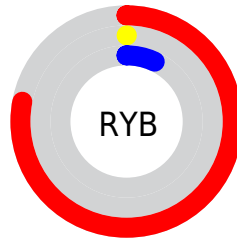
# Distribution



Red (78%)

Green (0%)

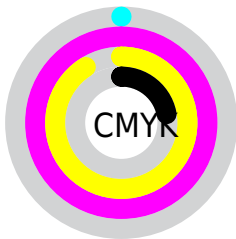
Blue (7%)



Red (78%)

Yellow (0%)

Blue (7%)

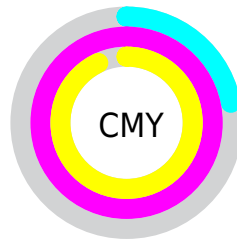


Cyan (0%)

Magenta (100%)

Yellow (91%)

Black (22%)



Cyan (22%)

Magenta (100%)


Yellow (93%)


# Brightness & Saturation Gradients


These gradients show how the XYZ color 23.6624, 12.1858, 1.6772 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 23.6624, 12.1858, 1.6772 by changing the saturation by 10% instead.





 23.6624, 12.1858,  
1.6772


 23.6624, 12.1858,  
1.6772


 263.5815,  
205.6315, 117.1440


 15.2068, 6.8703,  
0.3450


 48.9374, 29.8331,  
8.1379


 9.0519, 3.3811,  
0.0000


 66.4875, 42.9336,  
14.2266

 4.8324, 1.3338,  
0.0000

 87.7998, 59.3981,  
22.7789

 2.1830, 0.1672,  
0.0000

 113.2396, 79.6107,  
34.2134


 0.7338, 0.0000,  
0.0000


 143.1723,  
103.9560, 48.9486


 0.0000, 0.0000,  
0.0000


 177.9633,


132.8183, 67.4031


 217.9779,  
166.5820, 89.9954


 23.6624, 12.1858,  
1.6772


 23.6624, 12.1858,  
1.6772


 23.6619, 12.1856,  
1.6756

 24.1222, 12.7683,  
2.8705

 24.9772, 13.9172,  
4.8855

 26.3352, 15.8186,  
7.8495

 28.2586, 18.5721,  
11.8610

 30.8007, 22.2622,  
17.0060

■ 34.0085, 26.9632,  
23.3617

■ 37.9247, 32.7418,  
30.9981

■ 42.5880, 39.6592,  
39.9804

■ 48.0348, 47.7718,  
50.3690

# Harmonies

## Analogous

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



27.4020, 12.1858, 9.8253



23.6624, 12.1858, 1.6772



16.8559, 12.1858, 0.0000

# Triad

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



23.6624, 12.1858, 1.6772



3.8547, 12.1858, 3.9357



12.9577, 12.1858, 81.4768

# Complementary

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



23.6624, 12.1858, 1.6772



28.7684, 44.1847, 50.7496

# 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.



7.5422, 12.1858, 73.2643



23.6624, 12.1858, 1.6772



3.4449, 12.1858, 17.4341

# Square

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



23.6624, 12.1858, 1.6772



5.9467, 12.1858, 0.3437



4.5264, 12.1858, 44.6132



19.9767, 12.1858, 62.0423



# Rectangle

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



23.6624, 12.1858, 1.6772



12.2984, 12.1858, 0.0000



4.5264, 12.1858, 44.6132



10.8945, 12.1858, 82.0010

# Sweetspot

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



23.6627, 12.1866, 1.6774



66.0599, 56.8201, 53.6094



28.9235, 13.7204, 55.1563



13.4837, 11.1927, 10.1997



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.



23.6627, 12.1866, 1.6774



41.3948, 21.3219, 2.7454



26.3945, 17.8245, 2.0505



10.6721, 10.6522, 11.2566



15.2296, 7.8414, 1.1528



0.7348, 0.3768, 0.1265



# Inverse Universe

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



23.6627, 12.1866, 1.6774



41.3948, 21.3219, 2.7454



16.9557, 17.4166, 56.5006



10.6721, 10.6522, 11.2566



15.2296, 7.8414, 1.1528



0.7348, 0.3768, 0.1265



# Previews

## White Background



This preview shows how the XYZ color 23.6624, 12.1858, 1.6772 looks on a white 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



# Black 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

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

**XYZ 23.6624, 12.1858, 1.6772**

## **Background**



This preview shows how black text looks on a background with the XYZ color 23.6624, 12.1858, 1.6772.



This preview shows how white text looks on a background with the XYZ color 23.6624, 12.1858,



# 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

23.6624, 12.1858, 1.6772

### Protanopia

11.6391, 12.8735, 3.4615

### Deuteranopia

12.8446, 12.6964, 1.7737



## Tritanopia

23.5050, 12.4384, 1.1620

# Trichromacy



## Original Color

23.6624, 12.1858, 1.6772

## Protanomaly

13.5568, 9.6848, 2.3172

## Deuteranomaly

14.7911, 10.0194, 1.3554

## Tritanomaly

23.4467, 12.2605, 1.3317

# Monochromacy



## Original Color

23.6624, 12.1858, 1.6772

## Achromatopsia

4.5787, 4.8172, 5.2459

## Achromatomaly

7.9008, 5.0930, 3.1514

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 23.6624, 12.1858, 1.6772 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(199, 0, 18)` looks like.

```
.text, #text, p{  
    color:rgb(199, 0, 18)  
}
```

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(199, 0, 18) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(199, 0, 18) }
```

## Border

The CSS property to change the border of an element to XYZ 23.6624, 12.1858, 1.6772 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(199, 0, 18) }
```



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

```
.border{ border-color:rgb(199, 0, 18) }
```

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

Here you see how a box with a 4 pixel rgb(199, 0, 18) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(199, 0, 18); -webkit-box-  
shadow:4px 4px 4px 4px rgb(199, 0, 18);  
box-shadow:4px 4px 4px 4px rgb(199, 0, 18)  
}
```

# Background

The CSS property to change the background color of an element to XYZ 23.6624, 12.1858, 1.6772 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(199, 0, 18) }
```

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

```
.background{ background-color: rgb(199, 0,  
18) }
```

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