

# Converting Colors

$Y_{xy}(12.8382, 0.6399, 0.3299)$

Have a look what the booklet for  
Yxy(12.8382, 0.6399, 0.3299)  
contains.

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**Color**

**Yxy(12.8374, 0.6401, 0.3300)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	CC0000
RGB	204, 0, 0
RGB Percent	80%, 0%, 0%
CMY	0.2000, 0.9997, 1.0000
CMYK	0.00, 1.00, 1.00, 0.20
HSL	0°, 100%, 40%
HSV	0°, 100%, 80%
XYZ	24.9007, 12.8374, 1.1631
YIQ	60.9960, 121.5840, 43.2480

# Conversions

## Conversions Part 2

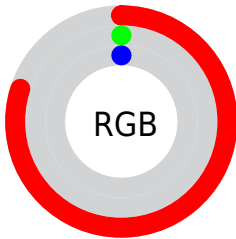
<b>Format</b>	<b>Color</b>
<a href="#">RYB</a>	<a href="#">204, 0, 0</a>
<a href="#">Decimal</a>	<a href="#">13369344</a>
<a href="#">CIELab</a>	<a href="#">42.52, 67.70, 56.84</a>
<a href="#">CIELCh</a>	<a href="#">43, 88.404, 40.016</a>
<a href="#">Yxy</a>	<a href="#">12.8374, 0.6401, 0.3300</a>
<a href="#">Android (android.graphics.Color)</a>	<a href="#">4291559424 (0xFFCC0000)</a>
<a href="#">YUV</a>	<a href="#">60.9960, -30.0710, 125.4145</a>
<a href="#">Hunter-Lab</a>	<a href="#">35.8293, 61.3527, 23.1558</a>

# Details

The Yxy color **12.8374, 0.6401, 0.3300** 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 **47.5051, 0.2246, 0.3286**, and the grayscale version is **4.7032, 0.3127, 0.3290**.

A 20% lighter version of the original color is **28.0049, 0.5682, 0.3528**, and **5.4890, 0.6401, 0.3300** is the 20% darker color. If you saturate the color by 10%, you get **12.8384, 0.6400, 0.3300**, and if you desaturate by 10%, it is **13.4057, 0.6224, 0.3299**.

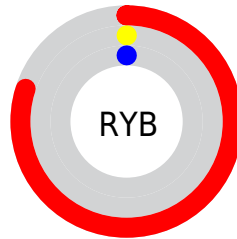
# Distribution



Red (80%)

Green (0%)

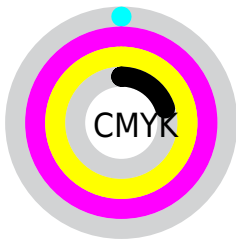
Blue (0%)



Red (80%)

Yellow (0%)

Blue (0%)

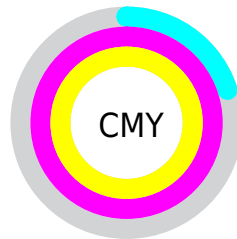


Cyan (0%)

Magenta (100%)

Yellow (100%)

Black (20%)



Cyan (20%)

Magenta (100%)


Yellow (100%)


# Brightness & Saturation Gradients

These gradients show how the Yxy color 12.8374, 0.6401, 0.3300 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 12.8374, 0.6401, 0.3300 by changing the saturation by 10% instead.





 12.8374, 0.6401,  
0.3300


 12.8374, 0.6401,  
0.3300


 209.8729, 0.4593,  
0.3574


 7.3167, 0.6880,  
0.3120


 31.0114, 0.5753,  
0.3502

 3.6609, 0.7262,  
0.2738

 44.4334, 0.5501,  
0.3545

 1.4858, 0.7800,  
0.2200

 61.2580, 0.5287,  
0.3569

 0.2787, 0.8975,  
0.1025

 81.8695, 0.5105,  
0.3580


 0.0000, 1.0000,  
0.0000


 106.6523, 0.4948,  
0.3584


 0.0000, 0.0000,  
0.0000


 135.9909, 0.4813,

0.3583


 170.2697, 0.4696,  
0.3580

 12.8374, 0.6401,  
0.3300


 12.8374, 0.6401,  
0.3300


 12.8384, 0.6400,  
0.3300

 13.4057, 0.6224,  
0.3299

 14.5718, 0.5905,  
0.3299

 16.5404, 0.5469,  
0.3297

 19.4211, 0.4989,  
0.3296

 23.3060, 0.4531,  
0.3295

■ 28.2763, 0.4129,  
0.3293

■ 34.4047, 0.3793,  
0.3292

■ 41.7578, 0.3520,  
0.3291

■ 50.3969, 0.3302,  
0.3291

# Harmonies

## Analogous

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



12.8374, 0.5818, 0.2515



12.8374, 0.6401, 0.3300



12.8374, 0.5717, 0.4283

# Triad

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



12.8374, 0.6401, 0.3300



12.8374, 0.1726, 0.6020



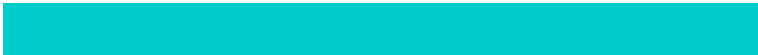
12.8374, 0.1237, 0.1090

# Complementary

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



12.8374, 0.6401, 0.3300



47.5051, 0.2246, 0.3286

# 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.



12.8374, 0.0786, 0.1212



12.8374, 0.6401, 0.3300



12.8374, 0.0910, 0.3409

# Square

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



12.8374, 0.6401, 0.3300



12.8374, 0.3001, 0.6792



12.8374, 0.0673, 0.1807



12.8374, 0.2234, 0.1277



# Rectangle

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



12.8374, 0.6401, 0.3300



12.8374, 0.4872, 0.5128



12.8374, 0.0673, 0.1807



12.8374, 0.1040, 0.1094

# Sweetspot

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



12.8384, 0.6400, 0.3300



56.5465, 0.3805, 0.3292



17.1961, 0.3209, 0.1542



11.1308, 0.3941, 0.3293



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.



12.8384, 0.6400, 0.3300



21.2622, 0.6401, 0.3300



22.3389, 0.5417, 0.4081



11.2144, 0.3290, 0.3291



8.0814, 0.6400, 0.3300



0.4172, 0.6399, 0.3301



# Inverse Universe

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



47.5051, 0.2246, 0.3286



78.6767, 0.2246, 0.3286



13.8617, 0.1769, 0.1567



12.7263, 0.2984, 0.3289



29.9022, 0.2246, 0.3286



1.5429, 0.2246, 0.3286



# Previews

## White Background



This preview shows how the Yxy color 12.8374, 0.6401, 0.3300 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



This preview shows how the Yxy color 12.8374, 0.6401, 0.3300 looks on a 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](#).

**Yxy 12.8374, 0.6401, 0.3300**

## **Background**



This preview shows how black text looks on a background with the Yxy color 12.8374, 0.6401, 0.3300.



This preview shows how white text looks on a background with the Yxy color 12.8374, 0.6401, 0.3300.

# 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

12.8374, 0.6401, 0.3300

### Protanopia

13.4881, 0.4270, 0.4706

### Deuteranopia

13.4812, 0.4690, 0.4658



## Tritanopia

13.0223, 0.6333, 0.3354

# Trichromacy



## Original Color

12.8374, 0.6401, 0.3300

## Protanomaly

10.2328, 0.5433, 0.3898

## Deuteranomaly

10.6133, 0.5690, 0.3864

## Tritanomaly

12.9595, 0.6362, 0.3330

# Monochromacy



## Original Color

12.8374, 0.6401, 0.3300

## Achromatopsia

4.6665, 0.3127, 0.3290

## Achromatomaly

5.1082, 0.5098, 0.3296

# CSS Examples

## Text

The CSS property to change the color of the text to Yxy 12.8374, 0.6401, 0.3300 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(204, 0, 0)` looks like.

```
.text, #text, p{  
    color:rgb(204, 0, 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(204, 0, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(204, 0, 0) }
```

## Border

The CSS property to change the border of an element to Yxy 12.8374, 0.6401, 0.3300 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(204, 0, 0) }
```

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

```
.border{ border-color:rgb(204, 0, 0) }
```

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

Here you see how a box with a 4 pixel rgb(204, 0, 0) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(204, 0, 0); -webkit-box-shadow:4px  
4px 4px 4px rgb(204, 0, 0); box-shadow:4px  
4px 4px 4px rgb(204, 0, 0) }
```



# Background

The CSS property to change the background color of an element to Yxy 12.8374, 0.6401, 0.3300 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(204, 0, 0) }
```

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

```
.background{ background-color: rgb(204, 0,  
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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