

# Converting Colors

$Y_{xy}(20.4692, 0.4610, 0.4722)$

Have a look what the booklet for  
Yxy(20.4692, 0.4610, 0.4722)  
contains.

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**Color**

**Yxy(20.4470, 0.4611, 0.4721)**

# Conversions

## Conversions Part 1

Format	Color
Hex	997900
RGB	153, 121, 0
RGB Percent	60%, 47%, 0%
CMY	0.4001, 0.5254, 1.0000
CMYK	0.00, 0.21, 1.00, 0.40
HSL	47°, 100%, 30%
HSV	47°, 100%, 60%
XYZ	19.9706, 20.4470, 2.8932
YIQ	116.7740, 57.9130, -30.8470

# Conversions

## Conversions Part 2

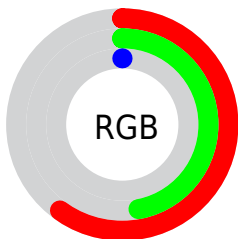
<b>Format</b>	<b>Color</b>
<b>RYB</b>	40, 153, 0
Decimal	10057984
CIELab	52.34, 2.69, 58.14
CIELCh	52, 58.207, 87.356
Yxy	20.4470, 0.4611, 0.4721
Android (android.graphics.Color)	4288248064 (0xFF997900)
YUV	116.7740, -57.5696, 31.7702
Hunter-Lab	45.2184, -0.2980, 27.8594

# Details

The Yxy color **20.4470, 0.4611, 0.4721** is a dark color, and the websafe version is hex **996600**. A complement of this color would be **3.3299, 0.1565, 0.0832**, and the grayscale version is **17.8838, 0.3127, 0.3290**.

A 20% lighter version of the original color is **44.1294, 0.4351, 0.4488**, and **7.3065, 0.4674, 0.4671** is the 20% darker color. If you saturate the color by 10%, you get **20.4481, 0.4611, 0.4721**, and if you desaturate by 10%, it is **21.2733, 0.4523, 0.4705**.

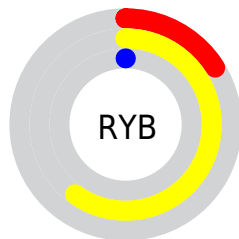
# Distribution



Red (60%)

Green (47%)

Blue (0%)



Red (16%)

Yellow (60%)

Blue (0%)

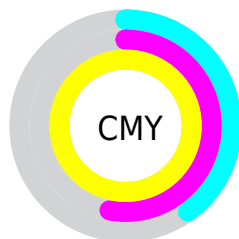


Cyan (0%)

Magenta (21%)

Yellow (100%)

Black (40%)



Cyan (40%)

Magenta (53%)

Yellow (100%)

# Brightness & Saturation Gradients

These gradients show how the Yxy color 20.4470, 0.4611, 0.4721 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 20.4470, 0.4611, 0.4721 by changing the saturation by 10% instead.





 20.4470, 0.4611,  
0.4721


 20.4470, 0.4611,  
0.4721


254.3248, 0.3859,  
0.4012


 12.7204, 0.4756,  
0.4847


 44.1654, 0.4357,  
0.4488


 7.2363, 0.4969,  
0.5031


 60.9259, 0.4253,  
0.4391


 3.6103, 0.4994,  
0.5006

 81.4665, 0.4163,  
0.4305

 1.4581, 0.5036,  
0.4964

 106.1716, 0.4085,  
0.4231


 0.2589, 0.5462,  
0.4538


 135.4256, 0.4017,  
0.4166


 0.0000, 0.0000,  
0.0000


 169.6129, 0.3958,


0.4108


 209.1178, 0.3905,  
0.4057

 20.4470, 0.4611,  
0.4721


 20.4470, 0.4611,  
0.4721


 20.4481, 0.4611,  
0.4721

 21.2733, 0.4523,  
0.4705

 22.1506, 0.4415,  
0.4653

 23.0922, 0.4280,  
0.4558

 24.1033, 0.4125,  
0.4423

 25.1882, 0.3956,  
0.4259

■ 26.3506, 0.3782,  
0.4074

■ 27.5943, 0.3607,  
0.3877

■ 28.9222, 0.3438,  
0.3677

■ 30.3375, 0.3277,  
0.3480

# Harmonies

## Analogous

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



20.4470, 0.5142, 0.3992



20.4470, 0.4611, 0.4721



20.4470, 0.3746, 0.5244

# Triad

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



20.4470, 0.4611, 0.4721



20.4470, 0.1503, 0.2822



20.4470, 0.3195, 0.2119

# Complementary

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



20.4470, 0.4611, 0.4721



3.3299, 0.1565, 0.0832

# 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.



20.4470, 0.2253, 0.1826



20.4470, 0.4611, 0.4721



20.4470, 0.1421, 0.2097

# Square

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



20.4470, 0.4611, 0.4721



20.4470, 0.1960, 0.3988



20.4470, 0.1666, 0.1801



20.4470, 0.4298, 0.2634



# Rectangle

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



20.4470, 0.4611, 0.4721



20.4470, 0.3100, 0.5225



20.4470, 0.1666, 0.1801



20.4470, 0.2847, 0.1993

# Sweetspot

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



20.4481, 0.4611, 0.4721



49.3000, 0.3617, 0.3889



6.8804, 0.5997, 0.3077



10.6933, 0.3684, 0.3965



76.7769, 0.3127, 0.3290



12.5967, 0.3127, 0.3290



# Same Dimension

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



20.4481, 0.4611, 0.4721



36.3593, 0.4620, 0.4713



26.0655, 0.3708, 0.5438



7.0037, 0.3265, 0.3465



16.9548, 0.4607, 0.4724



0.3026, 0.4394, 0.4893



# Inverse Universe

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



3.3299, 0.1565, 0.0832



5.7434, 0.1557, 0.0805



2.8201, 0.1694, 0.0707



6.2251, 0.2988, 0.3109



2.7944, 0.1568, 0.0843

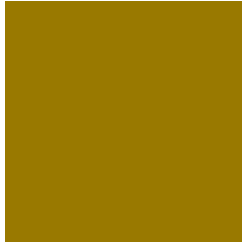


0.0862, 0.1754, 0.1513



# Previews

## White Background



This preview shows how the Yxy color 20.4470, 0.4611, 0.4721 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



## 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](#).

**Yxy 20.4470, 0.4611, 0.4721**

## **Background**



This preview shows how black text looks on a background with the Yxy color 20.4470, 0.4611, 0.4721.

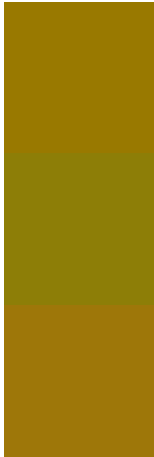


This preview shows how white text looks on a background with the Yxy color 20.4470, 0.4611, 0.4721.

# 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

20.4470, 0.4611, 0.4721

### Protanopia

20.5998, 0.4371, 0.4871

### Deuteranopia

20.4825, 0.4678, 0.4619



## Tritanopia

20.3397, 0.3641, 0.3146

# Trichromacy



## Original Color

20.4470, 0.4611, 0.4721

## Protanomaly

20.4438, 0.4458, 0.4820

## Deuteranomaly

20.5140, 0.4647, 0.4659

## Tritanomaly

19.9654, 0.4184, 0.3908

# Monochromacy



## Original Color

20.4470, 0.4611, 0.4721

## Achromatopsia

17.7888, 0.3127, 0.3290

## Achromatomaly

18.1971, 0.3827, 0.4115

# CSS Examples

## Text

The CSS property to change the color of the text to Yxy 20.4470, 0.4611, 0.4721 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(153, 121, 0)` looks like.

```
.text, #text, p{  
    color:rgb(153, 121, 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(153, 121, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(153, 121, 0) }
```

## Border

The CSS property to change the border of an element to Yxy 20.4470, 0.4611, 0.4721 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(153, 121, 0) }
```

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

```
.border{ border-color:rgb(153, 121, 0) }
```

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

Here you see how a box with a 4 pixel `rgb(153, 121, 0)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(153, 121, 0); -webkit-box-  
shadow:4px 4px 4px 4px rgb(153, 121, 0);  
box-shadow:4px 4px 4px 4px rgb(153, 121,  
0) }
```



# Background

The CSS property to change the background color of an element to Yxy 20.4470, 0.4611, 0.4721 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(153, 121, 0) }
```

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

```
.background{ background-color: rgb(153,  
121, 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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