

# Converting Colors

$Y_{xy}(21.3820, 0.2716, 0.6642)$

Have a look what the booklet for  
Yxy(21.3820, 0.2716, 0.6642)  
contains.

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**Color**

**Yxy(22.7825, 0.3000, 0.6000)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	009900
RGB	0, 153, 0
RGB Percent	0%, 60%, 0%
CMY	1.0000, 0.4000, 1.0000
CMYK	1.00, 0.00, 1.00, 0.40
HSL	120°, 100%, 30%
HSV	120°, 100%, 60%
XYZ	11.3912, 22.7825, 3.7971
YIQ	89.8110, -42.0750, -80.0190

# Conversions

## Conversions Part 2

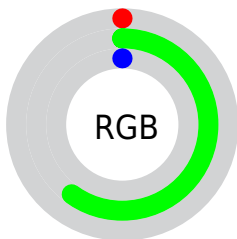
<b>Format</b>	<b>Color</b>
<b>RYB</b>	0, 153, 153
Decimal	39168
CIELab	54.85, -58.86, 56.81
CIELCh	55, 81.803, 136.016
Yxy	22.7825, 0.3000, 0.6000
Android (android.graphics.Color)	4278229248 (0xFF009900)
YUV	89.8110, -44.2768, -78.7642
Hunter-Lab	47.7310, -40.9293, 28.6951

# Details

The Yxy color **22.7825, 0.3000, 0.6000** is a dark color, and the websafe version is hex **009900**. A complement of this color would be **9.0722, 0.3209, 0.1542**, and the grayscale version is **10.2887, 0.3127, 0.3290**.

A 20% lighter version of the original color is **48.2168, 0.3126, 0.5360**, and **9.1143, 0.3000, 0.6000** is the 20% darker color. If you saturate the color by 10%, you get **22.7834, 0.3000, 0.6000**, and if you desaturate by 10%, it is **22.9229, 0.3005, 0.5896**.

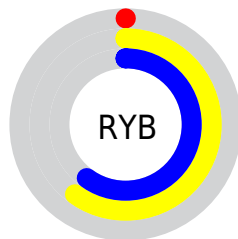
# Distribution



Red (0%)

Green (60%)

Blue (0%)



Red (0%)

Yellow (60%)

Blue (60%)

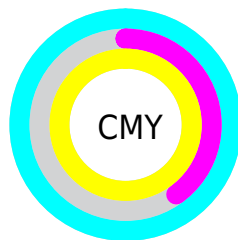


Cyan (100%)

Magenta (0%)

Yellow (100%)

Black (40%)



Cyan (100%)

Magenta (40%)

Yellow (100%)


# Brightness & Saturation Gradients

These gradients show how the Yxy color 22.7825, 0.3000, 0.6000 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 22.7825, 0.3000, 0.6000 by changing the saturation by 10% instead.





 22.7825, 0.3000,  
0.6000


 22.7825, 0.3000,  
0.6000


266.6059, 0.3201,  
0.4394


 14.4330, 0.2864,  
0.6458


 48.0359, 0.3126,  
0.5362


 8.4224, 0.2658,  
0.7147


 65.7087, 0.3156,  
0.5137

 4.3664, 0.2190,  
0.7810

 87.2579, 0.3174,  
0.4954

 1.8806, 0.0625,  
0.9375

 113.0681, 0.3185,  
0.4802


 0.5367, 0.0000,  
1.0000


 143.5236, 0.3193,  
0.4675

 0.0000, 0.0000,  
0.0000

 179.0088, 0.3197,


0.4567


 219.9081, 0.3199,  
0.4475


 22.7825, 0.3000,  
0.6000


 22.7825, 0.3000,  
0.6000


 22.7834, 0.3000,  
0.6000

 22.9229, 0.3005,  
0.5896

 23.1654, 0.3013,  
0.5727

 23.5585, 0.3024,  
0.5479

 24.1211, 0.3039,  
0.5171

 24.8694, 0.3055,  
0.4829

■ 25.8179, 0.3071,  
0.4478

■ 26.9793, 0.3087,  
0.4138

■ 28.3656, 0.3102,  
0.3824

■ 29.9878, 0.3115,  
0.3540

# Harmonies

## Analogous

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



22.7825, 0.4184, 0.5543



22.7825, 0.3000, 0.6000



22.7825, 0.1901, 0.4935

# Triad

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



22.7825, 0.3000, 0.6000



22.7825, 0.1166, 0.1500



22.7825, 0.5431, 0.2874

# Complementary

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



22.7825, 0.3000, 0.6000



9.0722, 0.3209, 0.1542

# 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.



22.7825, 0.4125, 0.2170



22.7825, 0.3000, 0.6000



22.7825, 0.1679, 0.1426

# Square

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



22.7825, 0.3000, 0.6000



22.7825, 0.1014, 0.1978



22.7825, 0.2672, 0.1657



22.7825, 0.5793, 0.3653



# Rectangle

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



22.7825, 0.3000, 0.6000



22.7825, 0.1385, 0.3690



22.7825, 0.2672, 0.1657



22.7825, 0.5072, 0.2628

# Sweetspot

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



22.7834, 0.3000, 0.6000



48.1806, 0.3086, 0.4158



29.5560, 0.4193, 0.5053



10.4536, 0.3080, 0.4287



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.



22.7834, 0.3000, 0.6000



40.8009, 0.3000, 0.6000



23.3122, 0.2717, 0.4983



6.9256, 0.3116, 0.3520



18.8293, 0.3000, 0.6000



0.2815, 0.3000, 0.6000



# Inverse Universe

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



9.0722, 0.3209, 0.1542



16.2466, 0.3209, 0.1542



7.3014, 0.4929, 0.2489



6.3236, 0.3137, 0.3071



7.4977, 0.3209, 0.1542

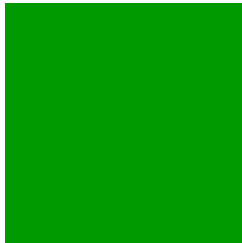


0.1121, 0.3209, 0.1542



# Previews

## White Background



This preview shows how the Yxy color 22.7825, 0.3000, 0.6000 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

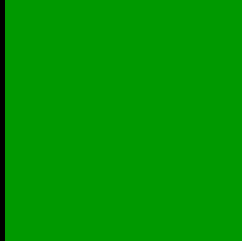
Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the Yxy color 22.7825, 0.3000, 0.6000 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

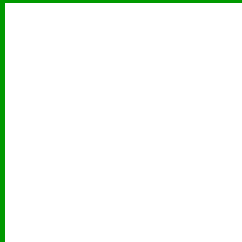
If you want to check with other color combinations, try the [Color Contrast Checker](#).

**Yxy 22.7825, 0.3000, 0.6000**

## **Background**



This preview shows how black text looks on a background with the Yxy color 22.7825, 0.3000, 0.6000.



This preview shows how white text looks on a background with the Yxy color 22.7825, 0.3000, 0.6000.

# 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

22.7825, 0.3000, 0.6000

### Protanopia

22.4356, 0.4394, 0.4893

### Deuteranopia

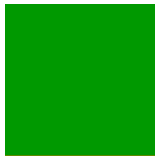
22.4176, 0.4579, 0.4504



## Tritanopia

22.7691, 0.2367, 0.3059

# Trichromacy



## Original Color

22.7825, 0.3000, 0.6000



## Protanomaly

20.8449, 0.3646, 0.5487



## Deuteranomaly

20.3251, 0.3749, 0.5252



## Tritanomaly

21.9110, 0.2659, 0.4349

# Monochromacy



## Original Color

22.7825, 0.3000, 0.6000



## Achromatopsia

10.2242, 0.3127, 0.3290



## Achromatomaly

12.9755, 0.3058, 0.4763

# CSS Examples

## Text

The CSS property to change the color of the text to Yxy 22.7825, 0.3000, 0.6000 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(0, 153, 0)` looks like.

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

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

## Border

The CSS property to change the border of an element to Yxy 22.7825, 0.3000, 0.6000 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(0, 153, 0) }
```

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

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

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

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

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



# Background

The CSS property to change the background color of an element to Yxy 22.7825, 0.3000, 0.6000 is called "background". The background property can be set on classes, ids or directly on the HTML element.

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

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

```
.background{ background-color: rgb(0, 153,  
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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