

# Converting Colors

$Y_{xy}(36.5658, 0.1982, 0.2149)$

Have a look what the booklet for  
Yxy(36.5658, 0.1982, 0.2149)  
contains.

<b>Yxy(36.6733, 0.1983, 0.2153)</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> .....	27
<b><i>CSS Examples</i></b> .....	30

# Color

**Yxy(36.6733, 0.1983, 0.2153)**

# Conversions

## Conversions Part 1

Format	Color
Hex	33AAFF
RGB	51, 170, 255
RGB Percent	20%, 67%, 100%
CMY	0.8009, 0.3332, 0.0001
CMYK	0.80, 0.33, 0.00, 0.00
HSL	205°, 100%, 60%
HSV	205°, 80%, 100%
XYZ	33.7776, 36.6733, 99.8849
YIQ	144.1090, -98.2090, 1.2070

# Conversions

## Conversions Part 2

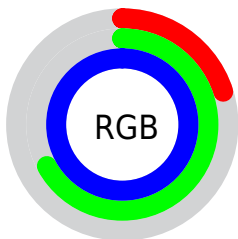
<b>Format</b>	<b>Color</b>
R <sub>YB</sub>	51, 126, 255
Decimal	3386111
CIE <sub>Lab</sub>	67.03, -3.73, -51.17
CIE <sub>LCh</sub>	67, 51.310, 265.828
Yxy	36.6733, 0.1983, 0.2153
Android (android.graphics.Color)	4281576191 (0xFF33AAFF)
YUV	144.1090, 54.6693, -81.6566
Hunter-Lab	60.5585, -6.4157, -55.4017

# Details

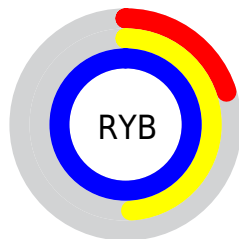
The Yxy color **36.6733, 0.1983, 0.2153** is a light color, and the websafe version is hex **0099FF**. The color can be described as light washed azure. A complement of this color would be **39.0237, 0.5184, 0.3999**, and the grayscale version is **27.7173, 0.3127, 0.3290**.

A 20% lighter version of the original color is **65.6596, 0.2405, 0.2932**, and **17.0341, 0.1862, 0.1902** is the 20% darker color. If you saturate the color by 10%, you get **32.3681, 0.1903, 0.1992**, and if you desaturate by 10%, it is **41.6638, 0.2085, 0.2317**.

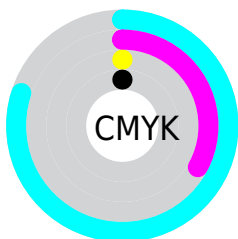
# Distribution



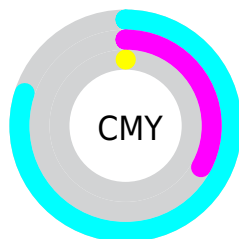
- Red (20%)
- Green (67%)
- Blue (100%)



- Red (20%)
- Yellow (49%)
- Blue (100%)



- Cyan (80%)
- Magenta (33%)
- Yellow (0%)
- Black (0%)




- Cyan (80%)
- Magenta (33%)
- Yellow (0%)

# Brightness & Saturation Gradients

These gradients show how the Yxy color 36.6733, 0.1983, 0.2153 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 36.6733, 0.1983, 0.2153 by changing the saturation by 10% instead.





 36.6733, 0.1983,  
0.2153


 36.6733, 0.1983,  
0.2153


331.8939, 0.2539,  
0.2712

 24.9546, 0.1854,  
0.2022


 70.0700, 0.2179,  
0.2351


 16.0433, 0.1696,  
0.1860


 92.5169, 0.2254,  
0.2427

 9.5548, 0.1499,  
0.1657


 119.3086, 0.2319,  
0.2492

 5.1048, 0.1251,  
0.1399

 150.8296, 0.2375,  
0.2548

 2.3089, 0.0941,  
0.1072

187.4642, 0.2424,  
0.2597

 0.7784, 0.0557,  
0.0668

229.5969, 0.2467,

 0.0000, 0.0000,

0.2640

0.0000

277.6120, 0.2505,  
0.2678

■ 36.6733, 0.1983,  
0.2153

■ 36.6733, 0.1983,  
0.2153

■ 32.3681, 0.1903,  
0.1992

■ 41.6638, 0.2085,  
0.2317

■ 28.6818, 0.1844,  
0.1838

■ 47.3953, 0.2207,  
0.2480

■ 53.9196, 0.2346,  
0.2639

■ 61.2817, 0.2495,  
0.2791

■ 69.5222, 0.2652,  
0.2932

■ 78.6787, 0.2811,  
0.3063

■ 88.7862, 0.2970,  
0.3182

99.8775, 0.3126,  
0.3289

99.9984, 0.3127,  
0.3290

# Harmonies

## Analogous

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



36.6733, 0.1797, 0.2432



36.6733, 0.1983, 0.2153



36.6733, 0.2447, 0.2146

# Triad

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



36.6733, 0.1983, 0.2153



36.6733, 0.4526, 0.3309



36.6733, 0.2951, 0.4534

# Complementary

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



36.6733, 0.1983, 0.2153



39.0237, 0.5184, 0.3999

# 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.



36.6733, 0.3692, 0.4713



36.6733, 0.1983, 0.2153



36.6733, 0.4651, 0.3879

# Square

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



36.6733, 0.1983, 0.2153



36.6733, 0.3947, 0.2781



36.6733, 0.4321, 0.4407



36.6733, 0.2297, 0.3840



# Rectangle

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



36.6733, 0.1983, 0.2153



36.6733, 0.2897, 0.2273



36.6733, 0.4321, 0.4407



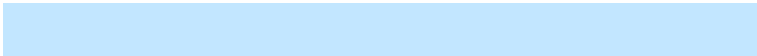
36.6733, 0.3198, 0.4659

# Sweetspot

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



36.6745, 0.1983, 0.2153



75.0005, 0.2749, 0.3013



73.8809, 0.2767, 0.4950



15.3598, 0.2692, 0.2966



0.0000, 0.0000, 0.0000



21.4041, 0.3127, 0.3290

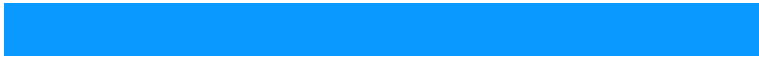


# Same Dimension

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



36.6745, 0.1983, 0.2153



30.1200, 0.1866, 0.1899



12.4475, 0.1667, 0.0958



19.1405, 0.2979, 0.3189



15.2917, 0.1851, 0.1863



1.7047, 0.1901, 0.2041



# Inverse Universe

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



26.5065, 0.4255, 0.2271



23.7866, 0.4565, 0.2305



80.6549, 0.4277, 0.4830



18.1650, 0.3202, 0.3152



12.2717, 0.4610, 0.2313



1.2166, 0.4406, 0.2201



# Previews

## White Background



This preview shows how the Yxy color 36.6733, 0.1983, 0.2153 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

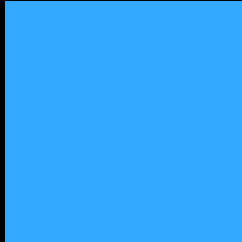
Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the Yxy color 36.6733, 0.1983, 0.2153 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

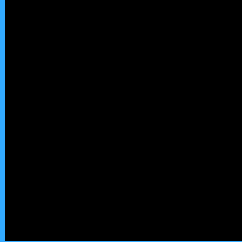
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

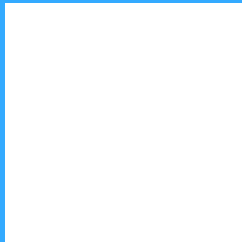
If you want to check with other color combinations, try the [Color Contrast Checker](#).

**Yxy 36.6733, 0.1983, 0.2153**

## **Background**



This preview shows how black text looks on a background with the Yxy color 36.6733, 0.1983, 0.2153.



This preview shows how white text looks on a background with the Yxy color 36.6733, 0.1983, 0.2153.

# 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

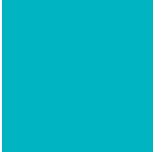
36.6733, 0.1983, 0.2153

### Protanopia

36.2944, 0.2312, 0.2186

### Deuteranopia

36.3757, 0.2156, 0.2097



## **Tritanopia**

36.5376, 0.2184, 0.3062

# Trichromacy



**Original Color**

36.6733, 0.1983, 0.2153

**Protanomaly**

35.8587, 0.2147, 0.2158

**Deuteranomaly**

36.2050, 0.2072, 0.2112

**Tritanomaly**

36.1371, 0.2090, 0.2682

# Monochromacy



**Original Color**

36.6733, 0.1983, 0.2153

**Achromatopsia**

27.8894, 0.3127, 0.3290

**Achromatomaly**

29.5582, 0.2505, 0.2797

# CSS Examples

## Text

The CSS property to change the color of the text to Yxy 36.6733, 0.1983, 0.2153 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(51, 170, 255)` looks like.

```
.text, #text, p{  
    color:rgb(51, 170, 255)  
}
```

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(51, 170, 255) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(51, 170, 255) }
```

## Border

The CSS property to change the border of an element to Yxy 36.6733, 0.1983, 0.2153 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(51, 170, 255) }
```

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

```
.border{ border-color:rgb(51, 170, 255) }
```

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

Here you see how a box with a 4 pixel `rgb(51, 170, 255)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(51, 170, 255); -webkit-box-  
shadow:4px 4px 4px 4px rgb(51, 170, 255);  
box-shadow:4px 4px 4px 4px rgb(51, 170,  
255) }
```



# Background

The CSS property to change the background color of an element to Yxy 36.6733, 0.1983, 0.2153 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(51, 170, 255) }
```

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

```
.background{ background-color: rgb(51, 170,  
255) }
```

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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