

# Converting Colors

XYZ(12.7733, 5.5596, 65.8752)

Have a look what the booklet for  
XYZ(12.7733, 5.5596, 65.8752)  
contains.

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# Color

**XYZ(12.8113, 5.5836,  
66.0481)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	0016D9
RGB	0, 22, 217
RGB Percent	0%, 9%, 85%
CMY	0.9998, 0.9138, 0.1490
CMYK	1.00, 0.90, 0.00, 0.15
HSL	234°, 100%, 43%
HSV	234°, 100%, 85%
XYZ	12.8113, 5.5836, 66.0481
YIQ	37.6520, -75.7070, 55.9810

# Conversions

## Conversions Part 2

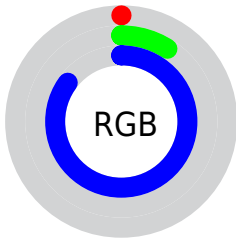
<b>Format</b>	<b>Color</b>
<b>RYB</b>	0, 20, 217
Decimal	5849
CIELab	28.34, 65.26, -92.86
CIELCh	28, 113.496, 305.097
Yxy	5.5836, 0.1517, 0.0661
Android (android.graphics.Color)	4278195929 (0xFF0016D9)
YUV	37.6520, 88.4186, -33.0208
Hunter-Lab	23.6296, 55.4256, -149.1830

# Details

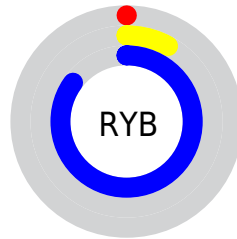
The XYZ color **12.8113, 5.5836, 66.0481** is a dark color, and the websafe version is hex **0000CC**. The color can be described as dark washed blue. A complement of this color would be **48.1447, 53.8099, 7.8504**, and the grayscale version is **1.7469, 1.8379, 2.0015**.

A 20% lighter version of the original color is **26.9411, 15.6401, 96.2066**, and **6.3452, 2.5381, 33.4132** is the 20% darker color. If you saturate the color by 10%, you get **12.8103, 5.5814, 66.0480**, and if you desaturate by 10%, it is **13.6601, 6.7980, 66.2380**.

# Distribution



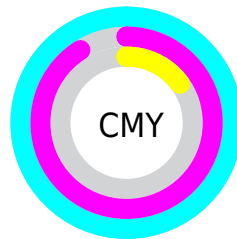
- Red (0%)
- Green (9%)
- Blue (85%)



- Red (0%)
- Yellow (8%)
- Blue (85%)



- Cyan (100%)
- Magenta (90%)
- Yellow (0%)
- Black (15%)



- Cyan (100%)
- Magenta (91%)
- Yellow (15%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 12.8113, 5.5836, 66.0481 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 12.8113, 5.5836, 66.0481 by changing the saturation by 10% instead.



■ 12.8113, 5.5836,  
66.0481

■ 12.8113, 5.5836,  
66.0481

203.3669,  
155.3136, 464.9578

■ 7.3748, 2.5936,  
47.8547

■ 30.5686, 17.0609,  
115.1830

■ 3.7460, 0.9234,  
33.3527

■ 43.6201, 26.3169,  
146.9617

■ 1.5595, 0.0000,  
22.1234

■ 59.9407, 38.4304,  
184.1058

■ 0.3658, 0.0000,  
13.7484

■ 79.8956, 53.7857,  
227.0339

■ 0.0000, 0.0000,  
7.8092

■ 103.8504, 72.7673,  
276.1647


■ 0.0000, 0.0000,  
3.8871


■ 132.1703, 95.7596,

■ 0.0000, 0.0000,


331.9166


1.5636


 165.2207,  
123.1469, 394.7081

 0.0000, 0.0000,  
0.2646

 0.0000, 0.0000,  
0.0000


 12.8113, 5.5836,  
66.0481


 12.8113, 5.5836,  
66.0481

 12.8103, 5.5814,  
66.0480

 13.6601, 6.7980,  
66.2380

 15.2087, 8.8710,  
66.5565

 17.6205, 11.9508,  
67.0239

 20.9997, 16.1459,  
67.6555

■ 25.4351, 21.5503,  
68.4649

■ 31.0055, 28.2482,  
69.4641

■ 37.7821, 36.3159,  
70.6642

■ 45.8305, 45.8240,  
72.0752

■ 55.2111, 56.8382,  
73.7068

# Harmonies

## Analogous

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



6.1922, 5.5836, 92.6037



12.8113, 5.5836, 66.0481



19.3327, 5.5836, 26.0966

# Triad

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



12.8113, 5.5836, 66.0481



10.3672, 5.5836, 0.0000



0.2220, 5.5836, 8.8169

# Complementary

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



12.8113, 5.5836, 66.0481



48.1447, 53.8099, 7.8504

# 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.



0.4686, 5.5836, 0.0745



12.8113, 5.5836, 66.0481



4.5105, 5.5836, 0.0000

# Square

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



12.8113, 5.5836, 66.0481



17.4112, 5.5836, 0.0000



1.5156, 5.5836, 0.0000



0.7148, 5.5836, 38.7232



# Rectangle

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



12.8113, 5.5836, 66.0481



21.4018, 5.5836, 8.7000



1.5156, 5.5836, 0.0000



0.2212, 5.5836, 4.0465

# Sweetspot

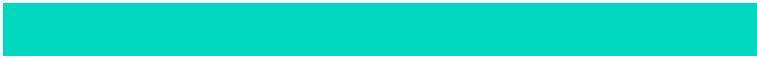
The Sweet Spot groups the original color and five complimentary colors.



12.8118, 5.5836, 66.0483



54.1337, 51.9615, 101.7842



34.2937, 53.4182, 58.1924



10.6555, 10.0155, 21.6215



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.



12.8118, 5.5836, 66.0483



18.4147, 7.9494, 95.1716



16.1114, 6.8598, 66.1207



12.4441, 12.8280, 16.4723



7.7904, 3.4503, 39.9938



0.5416, 0.2972, 2.6033



# Inverse Universe

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



28.7607, 14.8108, 2.1015



41.4241, 21.3336, 2.8993



34.6188, 54.6809, 8.7314



13.1093, 13.0728, 13.8367



17.4276, 8.9721, 1.3658

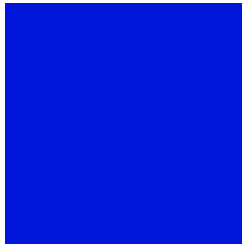


1.1476, 0.5887, 0.1864



# Previews

## White Background



This preview shows how the XYZ color 12.8113, 5.5836, 66.0481 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

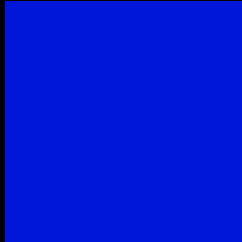
Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass



# Black Background



This preview shows how the XYZ color 12.8113, 5.5836, 66.0481 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

Any Text WCAG AA × Fail

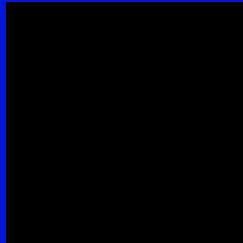
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

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

**XYZ 12.8113, 5.5836, 66.0481**

## **Background**



This preview shows how black text looks on a background with the XYZ color 12.8113, 5.5836, 66.0481.



This preview shows how white text looks on a background with the XYZ color 12.8113, 5.5836,



# 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

12.8113, 5.5836, 66.0481

### Protanopia

6.4057, 5.5867, 24.4076

### Deuteranopia

5.3425, 5.6413, 17.3303



## Tritanopia

3.8912, 5.5822, 8.0801

# Trichromacy



## Original Color

12.8113, 5.5836, 66.0481

## Protanomaly

7.9812, 4.9498, 36.6111

## Deuteranomaly

7.0229, 4.8461, 30.7022

## Tritanomaly

5.3766, 4.4133, 21.3374

# Monochromacy



## Original Color

12.8113, 5.5836, 66.0481

## Achromatopsia

1.8423, 1.9382, 2.1107

## Achromatomaly

3.3414, 2.2065, 13.0817

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 12.8113, 5.5836, 66.0481 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, 22, 217)` looks like.

```
.text, #text, p{  
    color:rgb(0, 22, 217)  
}
```

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, 22, 217) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(0, 22, 217) }
```

## Border

The CSS property to change the border of an element to XYZ 12.8113, 5.5836, 66.0481 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, 22, 217) }
```



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

```
.border{ border-color:rgb(0, 22, 217) }
```

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

Here you see how a box with a 4 pixel `rgb(0, 22, 217)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(0, 22, 217); -webkit-box-  
shadow:4px 4px 4px 4px rgb(0, 22, 217);  
box-shadow:4px 4px 4px 4px rgb(0, 22, 217)  
}
```

# Background

The CSS property to change the background color of an element to XYZ 12.8113, 5.5836, 66.0481 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(0, 22, 217) }
```

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

```
.background{ background-color: rgb(0, 22,  
217) }
```

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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