

# Converting Colors

XYZ(9.9969, 13.2284, 12.9932)

Have a look what the booklet for  
XYZ(9.9969, 13.2284, 12.9932)  
contains.

<b>XYZ(10.0020, 13.1897, 13.0850)</b> .....	3
<i><b>Conversions</b></i> .....	4
<i><b>Details</b></i> .....	6
<i><b>Harmonies</b></i> .....	12
<i><b>Previews</b></i> .....	24
<i><b>Color Blindness Simulation</b></i> .....	28
<i><b>CSS Examples</b></i> .....	31

# Color

**XYZ(10.0020, 13.1897,  
13.0850)**

# Conversions

## Conversions Part 1

Format	Color
Hex	436E60
RGB	67, 110, 96
RGB Percent	26%, 43%, 38%
CMY	0.7372, 0.5686, 0.6235
CMYK	0.39, 0.00, 0.13, 0.57
HSL	160°, 24%, 35%
HSV	160°, 39%, 43%
XYZ	10.0020, 13.1897, 13.0850
YIQ	95.5470, -21.1340, -13.4700

# Conversions

## Conversions Part 2

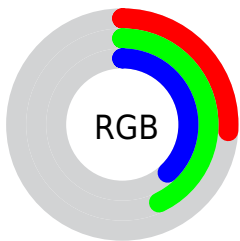
<b>Format</b>	<b>Color</b>
<b>RYB</b>	67, 93, 110
Decimal	4419168
CIELab	43.05, -18.46, 3.11
CIELCh	43, 18.718, 170.436
Yxy	13.1897, 0.2757, 0.3636
Android (android.graphics.Color)	4282609248 (0xFF436E60)
YUV	95.5470, 0.2233, -25.0357
Hunter-Lab	36.3176, -14.3963, 4.0605

# Details

The XYZ color **10.0020, 13.1897, 13.0850** is a dark color, and the websafe version is hex **336666**. A complement of this color would be **9.9232, 7.9238, 8.7916**, and the grayscale version is **11.0121, 11.5856, 12.6167**.

A 20% lighter version of the original color is **25.4448, 31.6979, 31.9714**, and **2.5669, 3.8140, 3.6185** is the 20% darker color. If you saturate the color by 10%, you get **9.1573, 12.7732, 12.2043**, and if you desaturate by 10%, it is **10.9983, 13.6842, 14.0126**.

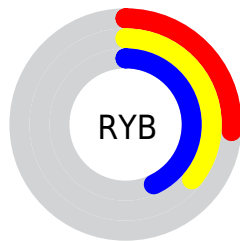
# Distribution



Red (26%)

Green (43%)

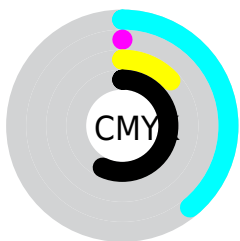
Blue (38%)



Red (26%)

Yellow (36%)

Blue (43%)

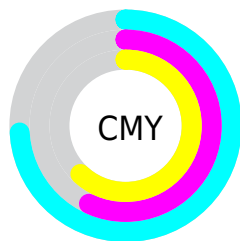


Cyan (39%)

Magenta (0%)

Yellow (13%)

Black (57%)



Cyan (74%)

Magenta (57%)

Yellow (62%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 10.0020, 13.1897, 13.0850 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 10.0020, 13.1897, 13.0850 by changing the saturation by 10% instead.



■ 10.0020, 13.1897,  
13.0850

■ 10.0020, 13.1897,  
13.0850

184.7397,  
212.1299, 222.6886

■ 5.4626, 7.5593,  
7.3557

■ 25.4489, 31.6442,  
32.1498

■ 2.5587, 3.8143,  
3.6037

■ 37.0871, 45.2370,  
46.3224

■ 0.9249, 1.5702,  
1.4106

■ 51.8222, 62.2528,  
64.1465

■ 0.0000, 0.3374,  
0.1499

■ 70.0197, 83.0760,  
86.0407

■ 0.0000, 0.0000,  
0.0000

■ 92.0448, 108.0909,  
112.4234

118.2629,

137.6819, 143.7133

149.0394,  
172.2334, 180.3289

■ 10.0020, 13.1897,  
13.0850

■ 10.0020, 13.1897,  
13.0850

■ 9.1573, 12.7732,  
12.2043

■ 10.9983, 13.6842,  
14.0126

■ 8.4547, 12.4288,  
11.3688

■ 12.1526, 14.2589,  
14.9870

■ 7.8857, 12.1524,  
10.5776

■ 13.4724, 14.9180,  
16.0094

■ 7.4401, 11.9388,  
9.8299

■ 14.9644, 15.6650,  
17.0806

■ 7.1062, 11.7819,  
9.1246

■ 16.6347, 16.5030,  
18.2013

■ 6.8420, 11.6601,  
8.4590

■ 18.4894, 17.4351,  
19.3723

■ 6.8184, 11.6493,  
8.4003

■ 20.5340, 18.4642,  
20.5944

■ 22.7740, 19.5931,  
21.8682

■ 25.2147, 20.8245,  
23.1945

# Harmonies

## Analogous

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



10.5228, 13.1897, 9.8837



10.0020, 13.1897, 13.0850



10.1191, 13.1897, 17.3085

# Triad

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



10.0020, 13.1897, 13.0850



13.5271, 13.1897, 23.1363



14.3819, 13.1897, 9.0794

# Complementary

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



10.0020, 13.1897, 13.0850



9.9232, 7.9238, 8.7916

# 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.



15.3109, 13.1897, 11.7693



10.0020, 13.1897, 13.0850



14.7918, 13.1897, 20.0206

# Square

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



10.0020, 13.1897, 13.0850



12.0824, 13.1897, 23.6742



15.4664, 13.1897, 15.7181



13.0016, 13.1897, 7.8808



# Rectangle

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



10.0020, 13.1897, 13.0850



10.5469, 13.1897, 20.1360



15.4664, 13.1897, 15.7181



14.7616, 13.1897, 9.8120

# Sweetspot

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



10.0024, 13.1902, 13.0853



22.8784, 25.8075, 27.5254



10.0115, 13.3218, 7.3541



5.2760, 5.9816, 6.3686



54.2243, 57.0482, 62.1254



6.0569, 6.3724, 6.9395



# Same Dimension

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



10.0024, 13.1902, 13.0853



16.1958, 22.4877, 21.5589



9.9633, 11.9870, 16.5411



3.4310, 3.7976, 4.0760



8.1771, 13.9884, 10.0194



40.3254, 69.5188, 47.7604



# Inverse Universe

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



9.9232, 7.9238, 8.7916



16.0387, 11.8204, 12.8774



9.9039, 8.6405, 6.4562



3.4251, 3.4178, 3.7655



8.0916, 4.1290, 2.2921



39.9493, 20.4251, 9.5313



# Previews

## White Background



This preview shows how the XYZ color 10.0020, 13.1897, 13.0850 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

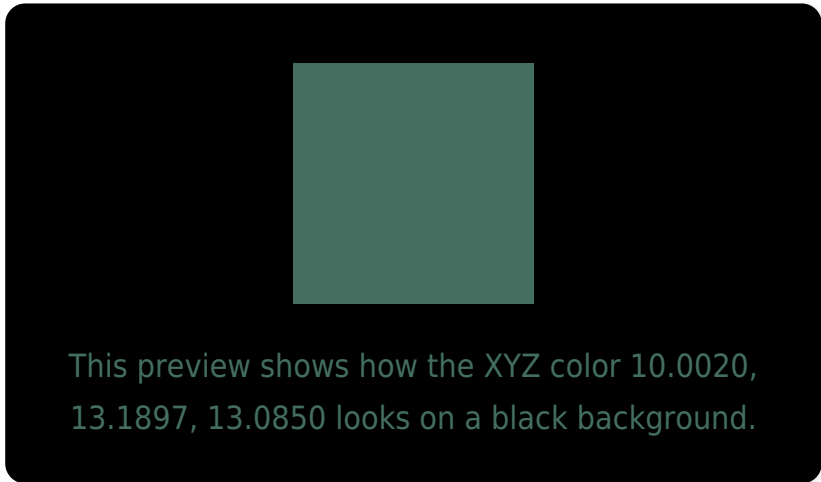
Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail



# Black Background



## 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](#).

# XYZ 10.0020, 13.1897, 13.0850

## Background



This preview shows how black text looks on a background with the XYZ color 10.0020, 13.1897, 13.0850.



This preview shows how white text looks on a background with the XYZ color 10.0020, 13.1897,



# 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

10.0020, 13.1897, 13.0850

### Protanopia

12.3677, 13.0659, 11.7677

### Deuteranopia

13.3019, 13.0810, 13.6282



## Tritanopia

11.0826, 13.1541, 18.4779

# Trichromacy



## Original Color

10.0020, 13.1897, 13.0850

## Protanomaly

11.2405, 12.9151, 12.2564

## Deuteranomaly

11.7798, 12.8714, 13.4188

## Tritanomaly

10.6487, 13.1313, 16.4414

# Monochromacy



## Original Color

10.0020, 13.1897, 13.0850

## Achromatopsia

11.1181, 11.6971, 12.7381

## Achromatomaly

10.5113, 12.0832, 12.8446

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 10.0020, 13.1897, 13.0850 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(67, 110, 96)` looks like.

```
.text, #text, p{  
    color:rgb(67, 110, 96)  
}
```

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(67, 110, 96) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(67, 110, 96) }
```

## Border

The CSS property to change the border of an element to XYZ 10.0020, 13.1897, 13.0850 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(67, 110, 96) }
```



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

```
.border{ border-color:rgb(67, 110, 96) }
```

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

Here you see how a box with a 4 pixel `rgb(67, 110, 96)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(67, 110, 96); -webkit-box-  
shadow:4px 4px 4px 4px rgb(67, 110, 96);  
box-shadow:4px 4px 4px 4px rgb(67, 110,  
96) }
```

# Background

The CSS property to change the background color of an element to XYZ 10.0020, 13.1897, 13.0850 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(67, 110, 96) }
```

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

```
.background{ background-color: rgb(67, 110,  
96) }
```

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](#).

Hey! You found this booklet  
interesting? Support Converting  
Colors with the new Membership  
Option!

The pro membership hides all ads, plus gives you  
double the colors in the color bucket, and more  
awesome pro features!

**[Learn more, Memberships starting at \\$2.50/m!](#)**

**Follow me  
on Twitter!**

@ConvertingColor