

# Converting Colors

CIELCh(48, 1.880, 40.632)

Have a look what the booklet for  
CIELCh(48, 1.880, 40.632) contains.

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# Color

**CIELCh(48, 1.733, 39.183)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	757170
RGB	117, 113, 112
RGB Percent	46%, 44%, 44%
CMY	0.5408, 0.5564, 0.5604
CMYK	0.00, 0.03, 0.04, 0.54
HSL	12°, 2%, 45%
HSV	12°, 4%, 46%
XYZ	16.1970, 16.7945, 17.7473
YIQ	114.0820, 2.7050, 0.5370

# Conversions

## Conversions Part 2

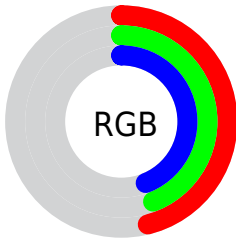
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	117, 113, 112
Decimal	7696752
CIE Lab	48.00, 1.34, 1.09
CIE LCh	48, 1.733, 39.183
Yxy	16.7945, 0.3192, 0.3310
Android (android.graphics.Color)	4285886832 (0xFF757170)
YUV	114.0820, -1.0264, 2.5591
Hunter-Lab	40.9810, -1.1682, 3.0105

# Details

The CIELCh color **48, 1.733, 39.183** is a dark color, and the websafe version is hex **666666**. A complement of this color would be **49, 1.693, 219.844**, and the grayscale version is **48, 0.006, 296.813**.

A 20% lighter version of the original color is **68, 1.613, 39.121**, and **28, 1.918, 39.218** is the 20% darker color. If you saturate the color by 10%, you get **45, 6.022, 39.235**, and if you desaturate by 10%, it is **51, 2.243, 219.830**.

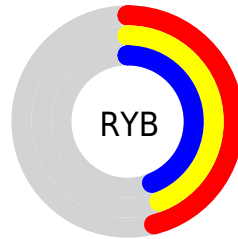
# Distribution



Red (46%)

Green (44%)

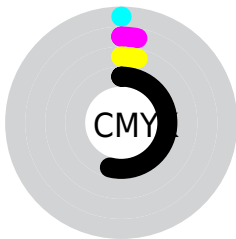
Blue (44%)



Red (46%)

Yellow (44%)

Blue (44%)

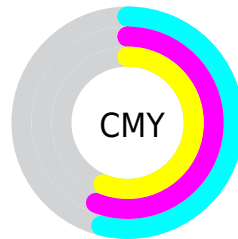


Cyan (0%)

Magenta (3%)

Yellow (4%)

Black (54%)



Cyan (54%)

Magenta (56%)













Yellow (56%)









# Brightness & Saturation Gradients

These gradients show how the CIELCh color 48, 1.733, 39.183 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 CIELCh color 48, 1.733, 39.183 by changing the saturation by 10% instead.



 48, 1.733, 39.183	 48, 1.733, 39.183
 100, 1.733, 39.183	 38, 1.733, 39.183
 68, 1.733, 39.183	 28, 1.733, 39.183
 78, 1.733, 39.183	 18, 1.733, 39.183
 88, 1.733, 39.183	 8, 1.733, 39.183
 98, 1.733, 39.183	 0, 1.733, 39.183

 48, 1.733, 39.183	 48, 1.733, 39.183
 45, 6.022, 39.235	 51, 2.243, 219.830
 42, 10.656, 39.212	 54, 5.937, 220.007
 39, 15.657, 39.303	 57, 9.381, 220.302

37, 21.041, 39.548

60, 12.602,  
220.637

34, 26.797, 39.983

63, 15.629,  
220.994

32, 32.883, 40.631

29, 39.188, 41.476

66, 18.483,  
221.364

27, 45.472, 42.413

69, 21.187,  
221.740

26, 50.994, 42.872

72, 23.758,  
222.116

75, 26.211,  
222.491

# Harmonies

# Complementary

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



48, 1.733, 39.183



49, 1.693, 219.844

# Rectangle

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



48, 1.733, 39.183



48, 1.733, 89.183



48, 1.733, 219.183



48, 1.733, 269.183

# Sweetspot

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



48, 1.733, 39.232



63, 0.498, 38.614



48, 3.127, 330.712



32, 0.281, 38.540



82, 0.010, 296.813



33, 0.005, 296.813



# Same Dimension

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



48, 1.733, 39.232



61, 2.534, 39.252



49, 2.131, 93.140



24, 1.379, 39.256



26, 55.846, 43.286



55, 98.310, 43.071





# Inverse Universe

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



49, 1.693, 219.844



62, 2.463, 219.832



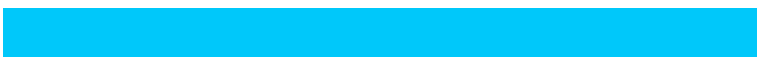
48, 2.144, 274.266



24, 1.337, 219.830



38, 25.447, 234.142



75, 43.363, 236.478



# Previews

## White Background



This preview shows how the CIELCh color 48, 1.733, 39.183 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



This preview shows how the CIE LCh color 48, 1.733, 39.183 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

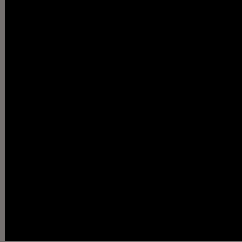
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

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

# CIELCh 48, 1.733, 39.183

## Background



This preview shows how black text looks on a background with the CIELCh color 48, 1.733, 39.183.



This preview shows how white text looks on a background with the CIELCh color 48, 1.733, 39.183.

# 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


48, 1.733, 39.183

### Protanopia

48, 1.353, 45.012

### Deuteranopia

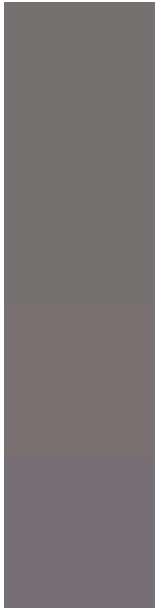
48, 6.442, 4.290



**Tritanopia**  
48, 5.853, 314.942



# Trichromacy



## Original Color

48, 1.733, 39.183

## Protanomaly

48, 1.353, 45.012

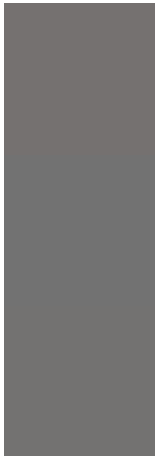
## Deuteranomaly

48, 4.680, 5.364

## Tritanomaly

48, 4.310, 324.666

# Monochromacy



## Original Color

48, 1.733, 39.183

## Achromatopsia

48, 0.006, 296.813

## Achromatomaly

48, 0.706, 74.874

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 48, 1.733, 39.183 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(117, 113, 112)` looks like.

```
.text, #text, p{  
    color:rgb(117, 113, 112)  
}
```

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(117, 113, 112) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(117, 113, 112) }
```

## Border

The CSS property to change the border of an element to CIELCh 48, 1.733, 39.183 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(117, 113, 112) }
```

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

```
.border{ border-color:rgb(117, 113, 112) }
```

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

Here you see how a box with a 4 pixel `rgb(117, 113, 112)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(117, 113, 112); -webkit-box-  
shadow:4px 4px 4px 4px rgb(117, 113, 112);  
box-shadow:4px 4px 4px 4px rgb(117, 113,  
112) }
```

# Background

The CSS property to change the background color of an element to CIELCh 48, 1.733, 39.183 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(117, 113, 112) }
```

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

```
.background{ background-color: rgb(117,  
113, 112) }
```

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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