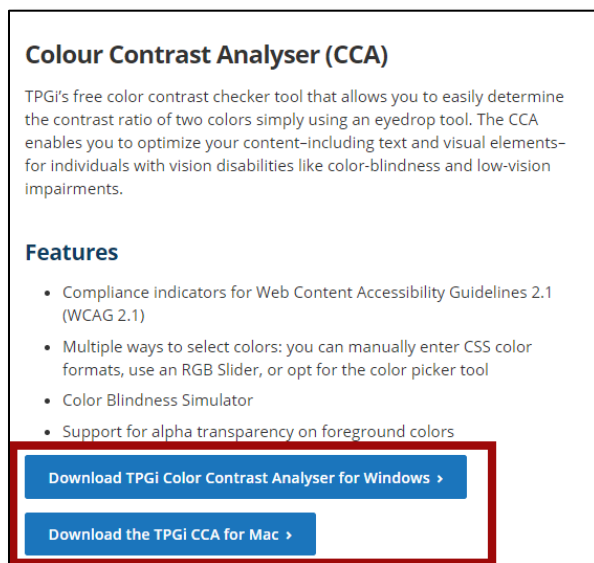# Accessibility – Tools – Color Contrast Analyser

The Color Contrast Analyser is an accessibility tool that helps with determining the readability of text and visual elements for color contrast.

Color contrast is the compatibility of two colors from opposite sides of the color spectrum and having strong contrast allows users with low-visibility or color deficiencies to tell the difference between text and visual elements.

This guide will walk through the steps needed to setup this tool and begin using it.

Download and Installation

1. Open an internet browser and navigate to the [Color Contrast Analyser](https://www.tpgi.com/color-contrast-checker/)[1] website.
2. On the website, select one of the buttons **Download TPGi Color Contrast Analyser for Windows or Download TPGi CCA for Mac**.

3. Navigate to where the file was downloaded, which is normally the downloads folder, and open the executable file. Follow the prompts to install the Color Contrast Analyser tool on to the computer.
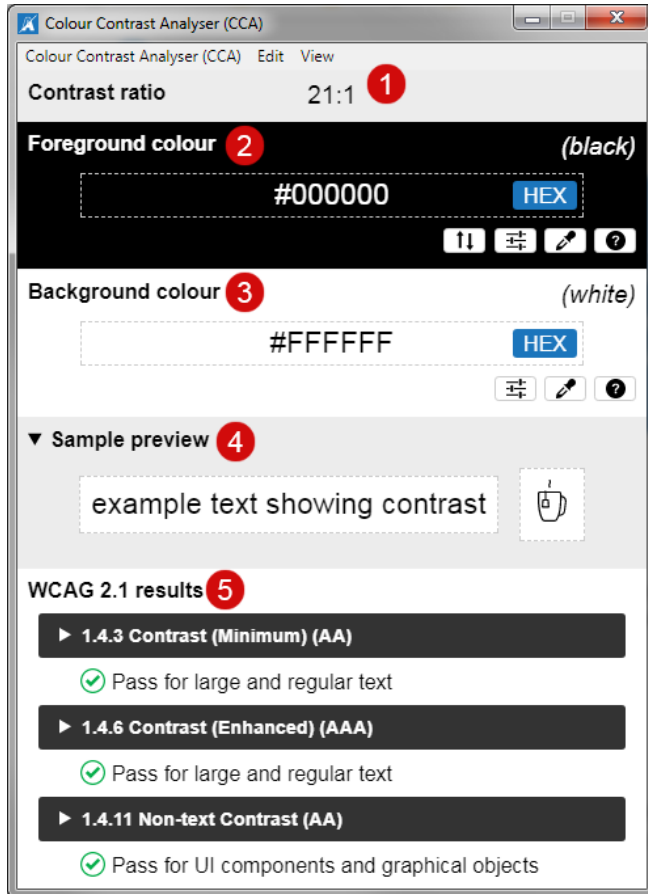
Tool Usage: Tool Overview

Navigate to the install location of the Color Contrast Analyser and launch the tool. It's normally located on the computer desktop.

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[1] https://www.tpgi.com/color-contrast-checker/

KEYBOARD SHORTCUT: If this location is unknown, press the windows key on the keyboard and type in **Colour**. Select **Colour Contrast Analyser** to launch the tool.
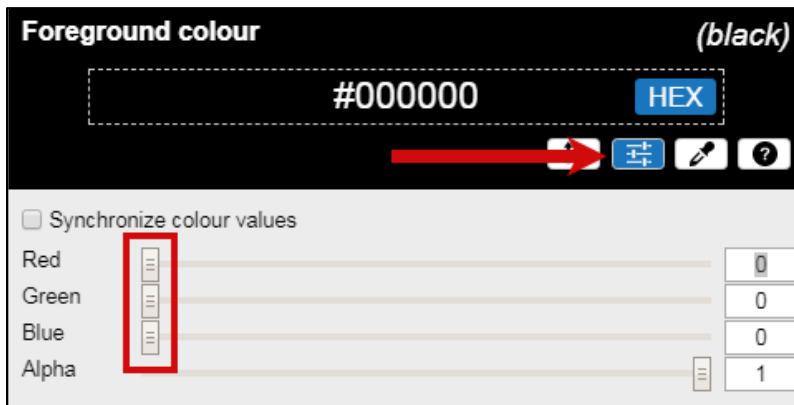

1. **Contrast ratio** – The color contrast ratio of the foreground and background colors. WCAG 2.1 states that the contrast ratio for normal text is 4.5:1. Large text is 3:1.
2. **Foreground** – Color of the Foreground element. This refers to text within the background.
3. **Background** – Color of the Background element. This houses the foreground element.
4. **Sample preview** – Shows an example of text and an object with the foreground and background colors combined.
5. **WCAG 2.1 results** – Indicates whether large and regular-sized text passes AA or AAA standards. This section also shows if UI components and graphical objects pass AA standards.

How to Enter a Foreground/Background Color

The Foreground and Background colors can be entered in one of three ways –through color values, through the dropper tool, or through hex code.
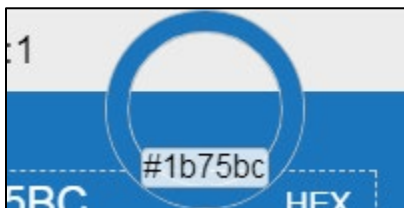
Option One: Entering Color Values

1. Select the slider button.
2. Move the sliders for Red, Green and Blue, to the designated values, or simply enter the values into each text box. *Note*: Select the **Synchronize colour values** checkbox to sync the values.

Option Two: Using the Dropper Tool

The Dropper Tool allows a user to select a color from anywhere on their computer screen. When selecting the Dropper Tool, a zoomed-circle will replace the mouse cursor. As you move across colors on the computer screen, the circle change colors and reveal the hex code for the color. Left-click on the color to select it.

Option Three: Using Hex Code

The Hex field can be filled with a colors' hex code if it is known. Enter the code to the right of the pound sign and the associated color will appear.

Colour Blindness Simulation

The Colour Blindness Simulation shows samples of how text or objects will be seen by the different types of color blindness.