Computer Settings for Visually Impairment – Color Blindness

Color blindness (color vision deficiency) is the decreased ability to see color of differences in color. Typically, people with color blindness have the inability to process red and green or blue and yellow. Computers offer tools to aid users with color blindness.

WINDOWS 10

Windows 10 offers filters that change the color palette on the screen and can help users distinguish between things that differ only by color.

To use a color filter:

1. Go to **Settings** > **Ease of Access**.
2. On the left sidebar, select **Color filters** under the **Vision** section.
3. Turn on/enable the **Turn on color filters** slider.
4. Depending on what kind of color blindness, select from the following:
a. Red-green (green weak - Deuteranopia)
b. Red-green (red weak - Protanopia)
c. Blue-yellow (Tritanopia)
5. Use the color wheel to verify the colors are distinct.

Older Versions of Windows

Earlier versions of Windows do not have a color blindness mode, but do provide high-contrast mode, which help differentiate on-scree items.

1. Go to **Control Panel** > **Ease of Access Center**.
2. Select **Make the Computer Easier to See**.
3. Make sure **High Contrast** shortcut is selected.
4. Click **Choose a High Contrast theme**. Depending on what color blindness, select:
a. High Contrast #1
b. High Contrast #2
c. High Contrast Black
d. High Contrast White

macOS

macOS uses accessibility screen filters to assist users.

1. Click the **Apply Menu**, then open **System Preferences** and navigate to **Accessibility** preference.
2. From the left column, select **Display**.
3. The Display pane has three tabs, select **Color Filters**.
4. Check the **Enable Color Filters** option.
5. Using **Filter type** dropdown, select a filter:
a. Greyscale
b. Red/Green filter (Protanopia)
c. Green/Red filter (Deuteranopia)
d. Blue/Yellow (Tritanopia)
6. Each filter type has an Intensity meter to further tweak the filter's intensity