

## :mod:`colorsys` --- Conversions between color systems

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]colorsys.rst, line 1); [backlink](#)

Unknown interpreted text role "mod".

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]colorsys.rst, line 4)

Unknown directive type "module".

```
.. module:: colorsys
   :synopsis: Conversion functions between RGB and other color systems.
```

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]colorsys.rst, line 7)

Unknown directive type "sectionauthor".

```
.. sectionauthor:: David Ascher <da@python.net>
```

Source code: :source:`Lib/colorsys.py`

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]colorsys.rst, line 9); [backlink](#)

Unknown interpreted text role "source".

The `:mod:`colorsys`` module defines bidirectional conversions of color values between colors expressed in the RGB (Red Green Blue) color space used in computer monitors and three other coordinate systems: YIQ, HLS (Hue Lightness Saturation) and HSV (Hue Saturation Value). Coordinates in all of these color spaces are floating point values. In the YIQ space, the Y coordinate is between 0 and 1, but the I and Q coordinates can be positive or negative. In all other spaces, the coordinates are all between 0 and 1.

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]colorsys.rst, line 13); [backlink](#)

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**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]colorsys.rst, line 21)

Unknown directive type "seealso".

```
.. seealso::

More information about color spaces can be found at
https://poynton.ca/ColorFAQ.html and
https://www.cambridgeincolour.com/tutorials/color-spaces.htm.
```

The `:mod:`colorsys`` module defines the following functions:

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Unknown interpreted text role "mod".

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]colorsys.rst, line 30)

Unknown directive type "function".

```
.. function:: rgb_to_yiq(r, g, b)
```

Convert the color from RGB coordinates to YIQ coordinates.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]colorsys.rst, line 35)**

Unknown directive type "function".

```
.. function:: yiq_to_rgb(y, i, q)
```

Convert the color from YIQ coordinates to RGB coordinates.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]colorsys.rst, line 40)**

Unknown directive type "function".

```
.. function:: rgb_to_hls(r, g, b)
```

Convert the color from RGB coordinates to HLS coordinates.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]colorsys.rst, line 45)**

Unknown directive type "function".

```
.. function:: hls_to_rgb(h, l, s)
```

Convert the color from HLS coordinates to RGB coordinates.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]colorsys.rst, line 50)**

Unknown directive type "function".

```
.. function:: rgb_to_hsv(r, g, b)
```

Convert the color from RGB coordinates to HSV coordinates.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]colorsys.rst, line 55)**

Unknown directive type "function".

```
.. function:: hsv_to_rgb(h, s, v)
```

Convert the color from HSV coordinates to RGB coordinates.

Example:

```
>>> import colorsys
>>> colorsys.rgb_to_hsv(0.2, 0.4, 0.4)
(0.5, 0.5, 0.4)
>>> colorsys.hsv_to_rgb(0.5, 0.5, 0.4)
(0.2, 0.4, 0.4)
```