

Reference > brightness()

brightness()

Gets the brightness value of a color.

`brightness()` extracts the HSB brightness value from a `p5.Color` object, an array of color components, or a CSS color string.

By default, `brightness()` returns a color's HSB brightness in the range 0 to 100. If the `colorMode()` is set to HSB, it returns the brightness value in the given range.

Examples

```
function setup() {
  createCanvas(100, 100);

  background(200);

  // Use HSB color.
  colorMode(HSB);

  // Create a p5.Color object.
  let c = color(0, 50, 100);

  // Draw the left rectangle.
  noStroke();
  fill(c);
  rect(15, 15, 35, 70);

  // Set 'brightValue' to 100.
  let brightValue = brightness(c);

  // Draw the right rectangle.
  fill(brightValue);
  rect(50, 15, 35, 70);

  describe('Two rectangles. The left one is salmon pink and the right one is white.');
```

```
function setup() {
  createCanvas(100, 100);

  background(200);

  // Use HSB color.
  colorMode(HSB);

  // Create a color array.
  let c = [0, 50, 100];

  // Draw the left rectangle.
  noStroke();
  fill(c);
  rect(15, 15, 35, 70);

  // Set 'brightValue' to 100.
  let brightValue = brightness(c);

  // Draw the right rectangle.
  fill(brightValue);
  rect(50, 15, 35, 70);

  describe('Two rectangles. The left one is salmon pink and the right one is white.');
```

```
function setup() {
  createCanvas(100, 100);

  background(200);

  // Use HSB color.
  colorMode(HSB);

  // Create a CSS color string.
  let c = 'rgb(255, 128, 128)';

  // Draw the left rectangle.
  noStroke();
  fill(c);
  rect(15, 15, 35, 70);

  // Set 'brightValue' to 100.
  let brightValue = brightness(c);

  // Draw the right rectangle.
  fill(brightValue);
  rect(50, 15, 35, 70);

  describe('Two rectangles. The left one is salmon pink and the right one is white.');
```

```
function setup() {
  createCanvas(100, 100);

  background(200);

  // Use HSB color with values in the range 0-255.
  colorMode(HSB, 255);

  // Create a p5.Color object.
  let c = color(0, 127, 255);

  // Draw the left rectangle.
  noStroke();
  fill(c);
  rect(15, 15, 35, 70);

  // Set 'brightValue' to 255.
  let brightValue = brightness(c);

  // Draw the right rectangle.
  fill(brightValue);
  rect(50, 15, 35, 70);

  describe('Two rectangles. The left one is salmon pink and the right one is white.');
```

Syntax

`brightness(color)`

Parameters

color `p5.Color`|`Number[]`|`String`: `p5.Color` object, array of color components, or CSS color string.

Returns

Number: the brightness value.

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Related References

setAlpha Sets the alpha (transparency) value of a color.	setBlue Sets the blue component of a color.	setGreen Sets the green component of a color.	setRed Sets the red component of a color.
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