

Reference > background()

background()

Sets the color used for the background of the canvas.

By default, the background is transparent. `background()` is typically used within `draw()` to clear the display window at the beginning of each frame. It can also be used inside `setup()` to set the background on the first frame of animation.

The version of `background()` with one parameter interprets the value one of four ways. If the parameter is a `Number`, it's interpreted as a grayscale value. If the parameter is a `String`, it's interpreted as a CSS color string. RGB, RGBA, HSL, HSLA, hex, and named color strings are supported. If the parameter is a `p5.Color` object, it will be used as the background color. If the parameter is a `p5.Image` object, it will be used as the background image.

The version of `background()` with two parameters interprets the first one as a grayscale value. The second parameter sets the alpha (transparency) value.

The version of `background()` with three parameters interprets them as RGB, HSB, or HSL colors, depending on the current `colorMode()`. By default, colors are specified in RGB values. Calling `background(255, 204, 0)` sets the background a bright yellow color.

The version of `background()` with four parameters interprets them as RGBA, HSBA, or HSLA colors, depending on the current `colorMode()`. The last parameter sets the alpha (transparency) value.

Examples



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

  // A grayscale value.
  background(51);

  describe('A canvas with a dark charcoal gray background.');
```



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

  // A grayscale value and an alpha value.
  background(51, 0.4);
  describe('A canvas with a transparent gray background.');
```



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

  // R, G & B values.
  background(255, 204, 0);

  describe('A canvas with a yellow background.');
```



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

  // R, G, B, and Alpha values.
  background(255, 0, 0, 128);

  describe('A canvas with a semi-transparent red background.');
```



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

  // Use HSB color.
  colorMode(HSB);

  // H, S & B values.
  background(255, 204, 100);

  describe('A canvas with a royal blue background.');
```



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

  // A CSS named color.
  background('red');

  describe('A canvas with a red background.');
```



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

  // Three-digit hex RGB notation.
  background('#fae');

  describe('A canvas with a pink background.');
```



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

  // Six-digit hex RGB notation.
  background('#222222');

  describe('A canvas with a black background.');
```



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

  // Integer RGB notation.
  background('rgb(0, 255, 0)');

  describe('A canvas with a bright green background.');
```



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

  // Integer RGBA notation.
  background('rgba(0, 255, 0, 0.25)');

  describe('A canvas with a transparent green background.');
```



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

  // Percentage RGB notation.
  background('rgb(100%, 0%, 10%)');

  describe('A canvas with a red background.');
```



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

  // Percentage RGBA notation.
  background('rgba(100%, 0%, 100%, 0.5)');

  describe('A canvas with a transparent purple background.');
```



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

  // A p5.Color object.
  let c = color(0, 0, 255);
  background(c);

  describe('A canvas with a blue background.');
```

Syntax

`background(color)`

`background(colorstring, [a])`

`background(gray, [a])`

`background(v1, v2, v3, [a])`

`background(values)`

`background(image, [a])`

Parameters

color	p5.Color: any value created by the <code>color()</code> function
colorstring	String: color string, possible formats include: integer rgb() or rgba(), percentage rgb() or rgba(), 3-digit hex, 6-digit hex.
a	Number: opacity of the background relative to current color range (default is 0-255).
gray	Number: specifies a value between white and black.
v1	Number: red value if color mode is RGB, or hue value if color mode is HSB.
v2	Number: green value if color mode is RGB, or saturation value if color mode is HSB.
v3	Number: blue value if color mode is RGB, or brightness value if color mode is HSB.
values	Number[]: an array containing the red, green, blue and alpha components of the color.
image	p5.Image: image created with <code>loadImage()</code> or <code>createImage()</code> , to set as background. (must be same size as the sketch window).

This page is generated from the comments in `src/color/setting.js`. Please feel free to edit it and submit a pull request!

Related References

background Sets the color used for the background of the canvas.	beginClip Starts defining a shape that will mask any shapes drawn afterward.	clear Clears the pixels on the canvas.	clip Defines a shape that will mask any shapes drawn afterward.
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