



Hydra Beginner Workshop

The basic basic

Open <https://hydra-editor-v1.glitch.me> in Chrome or Firefox

[ctrl + return/enter] RUN 1 LINE OF CODE

[ctrl + shift + return/enter] RUN MULTIPLE LINES OF CODE OF CODE

OR

Open atom with everything installed

[shift + return/enter] RUN 1 LINE OF CODE

[ctrl + alt + return/enter] RUN MULTIPLE LINES OF CODE OF CODE

The most basic visual

A boring black to white gradient

```
osc(1).out()
```

Add more lines

```
osc(20).out()
```

Make it move

```
osc(20, 0.03).out()
```

 Change the value of 0.03 to change speeds

Add some colour to it

```
osc(20, 0.03, 1).out()
```

Most functions in Hydra follow this pattern

function (value, animation speed, variation)

Transforms

```
.rotate(angle in radians)
```

To convert degrees to radians multiply it by (3.14/180) so 90° is $90 * (3.14/180) = 1.57$

```
osc(20, 0.03, 1).rotate(90 * 3.14 / 180).out()
```

In a pinch you can just do

```
osc(20, 0.03, 1).rotate(1.5).out()
```

Or if you are having fun just make something up and put that as the value of rotation.

Move in X axis

scrollX(Percent of the screen)

To the right *.scrollX(0.5)* and to the left *.scrollX(-0.5)*

.scale(size, x multiplier, y multiplier)

So something like *scale(0.5)* will reduce size by half and *.scale(1, 0.5, 1)* will squeeze from the sides

Effects

.pixelate(pixels, pixels)

Will break down the visual into the number of pixels specified

.kaleid(number of sides)

Will make fun house of mirrors style kaleidoscopic visuals. Change the value to specify the number of copies.

.color(red, green, blue)

Colour up boring patterns

.colorama(amount)

Shift colours to different colours

.contrast

Add contrast

.invert(amount)

Invert color.

Blending modes

.add(texture, amount)

.mult(texture, amount)

.diff(texture, amount)

.blend(texture, amount)

More reading material

<https://github.com/ojack/hydra/blob/master/docs/funcs.md>