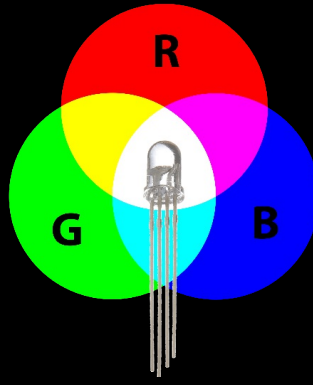


Who?

Alasdair
Alex
Jonathan
Zach

Color Maker



How?

The color maker is a piece of electronics that allows you to “make” any color you want. This is done by turning three dials where each one corresponds to a particular color. For instance, if you turned the blue dial up then the resulting color will become more blue. The color maker also functions as an interesting tune generator, it generates a pitch depending on the positions of the dials and also by using information from the ultrasonic sensor.

Instructions

The color maker is controlled by turning any one of 3 dials.

Each dial corresponds to a color. For instance, if you turn the green dial up then the LED will become more green etc...

To turn a dial up, turn it right and to turn it down, turn it left.

The sound that you hear is generated by a mini speaker that we programmed to make a sound that corresponds to the average turn of each dial.

Why?

The color maker was designed to allow anyone to be able to interface with a physical piece of hardware and by doing so, be able to “make” a custom color.

Then once the user has chosen their color they could then go to a image to color website and extract their color from their image as a hex value. This is useful if you want to choose a color for a website, document or anything and you want to interface with something physical to do so.



This is a QR code that will direct you to a site which will tell you what the hex color is of the LED. Ask us about this if you don't understand.

Code:

```
nblocks = (gidsetsize + NGROUPS_PER_BLOCK - 1) / NGROUPS_PER_BLOCK;
/* Make sure we always allocate at least one indirect block pointer */
nblocks = nblocks ? : 1;
group_info = kmalloc(sizeof(*group_info) + nblocks*sizeof(gid_t *), GFP_USER);
if (!group_info)
    return NULL;
group_info->ngroups = gidsetsize;
group_info->nblocks = nblocks;
atomic_set(&group_info->usage, 1);

if (gidsetsize <= NGROUPS_SMALL)
```



Scan this QR code to go to the official color maker website that we made.

