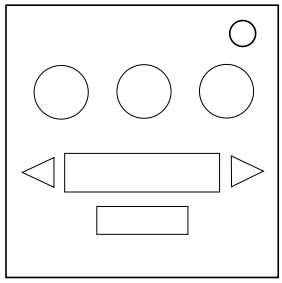
On the Subject of RGB Mixing



Also known as the colour mixing boys!

- This module has 3 coloured LEDs, a frequency selector and a submit button.
- Use the RGB values of each of the coloured LEDs on the module in step 1 to determine which colour to use.
- Then using the colour determined in step 1, use the table in step 2 to determine which frequency to submit.
- Each LED can be made up of a red value, green value and blue value of either 0 or 1.
- The possible LED colours are: Red, Green, Blue, Yellow, Magenta, Cyan, Black and White.
- Use Appendix ACM for help determining the RGB values of the LEDs.

Step 1

Read the rules below and take the colour of LED referred of the first rule that applies.

1. If all three LEDs have green values of 1, use the first LED.
2. Otherwise, if all three LEDs have red values of 0, use the third LED.
3. Otherwise, if there is only one LED that has a blue value of 1, use the LED with the blue value of 1.
4. Otherwise, if there is only one LED that has a green value of 0, use the LED with the green value of 0.
5. Otherwise, use the second LED.

Step 2

Use the table below to determine which frequency to submit based on the colour found in step 1.

Colour	Frequency
White	98.43
Cyan	98.48
Red	98.53
Green	98.63
Magenta	98.68
Yellow	98.78
Black	98.83
Blue	98.88

Appendix ACM: Additive Color Mixing

For those born before 1980.