

Takes serial input then outputs it onto LED "ports". Each port is paired and can be linked, this can work to create a brighter mode for the LEDs connected (or burn something if you skipped doing the math). Modules can be chained for more outputs.

Sheet: /		
File: RC Light System Output.sch		
Title: RC Light System Output		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad (5.1.8)–1		Id: 1/2

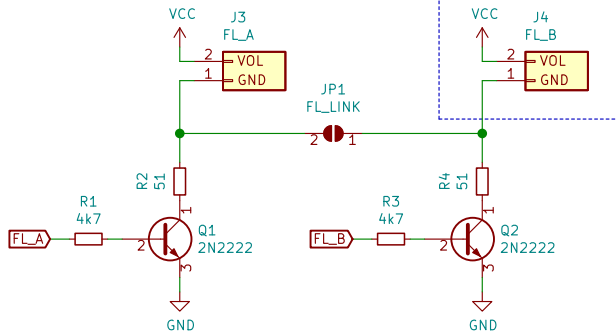
VCC when calculating LED loading resistors have been assumed to be at 8V, but you're really supposed to do the actual calculations using real information about how you're wiring it up and the components you're using.

<https://ledcalculator.net/>

Assuming 2 WHITE LEDs in series, 3.5V voltage drop and 20mA current.

When linked, double R2/R4 value as starting point. Unlinked, 2x LEDs for FL_A and FL_B if needed.

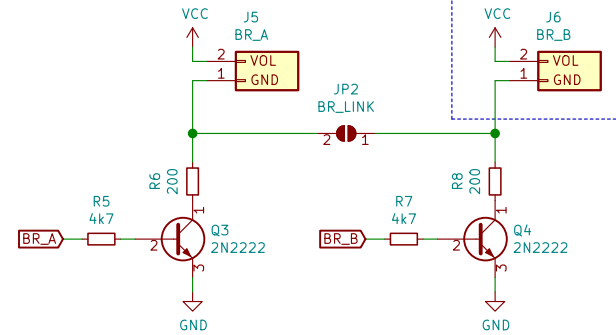
When linking the ports, you would generally not install these parts.



Assuming 2 RED LEDs in series, 2.1V voltage drop and 20mA current.

When linked, double R6/R8 value as starting point. Unlinked, 2x LEDs for BR_A and BR_B if needed.

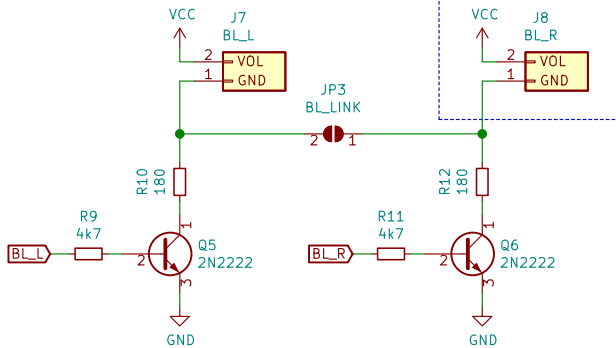
When linking the ports, you would generally not install these parts.



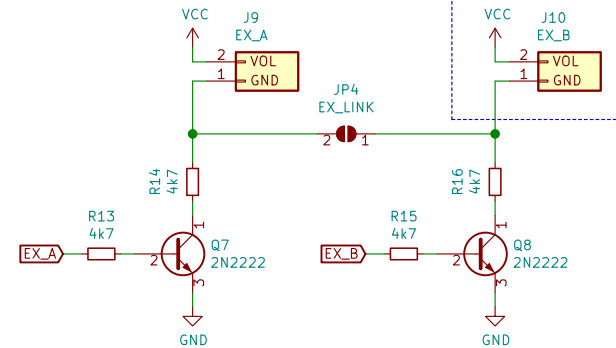
Assuming 2 ORANGE LEDs in series, 2.2V voltage drop and 20mA current.

When linked, double R10/R12 value as starting point. Unlinked, 2x LEDs for BL_L and BL_R if needed.

When linking the ports, you would generally not install these parts.



When linking the ports, you would generally not install these parts.



Each port is paired, and can be linked to essentially halve the resistance for that port (if you used equal loading resistors).

Sheet: /Ports/
File: Ports.sch

Title: RC Light System Output Ports

Size: A4
KiCad E.D.A. kicad (5.1.8)-1

Date:

Rev:
Id: 2/2