On the Subject of Multi-Colored Switches

"AAAAA AAAAA! MY EYES! SOO MANY COLORS!"

- This module will have five colored switches with colored sockets, 10 LEDs that will flash constantly with two colors, and a tiny LED in the middle to indicate in which cycle the LEDs are showing.
- To solve this module, you need to flip the switches until you reach a "solved" state.
- Trying to flip any switch to set the switches to a "wrong" state will give you a strike.

<u>Identifying the sets:</u>

- The LEDs will flash one of 7 colors or will be off (red, green, blue, magenta, yellow, cyan, white).
- The switches and sockets will be colored with one of 8 colors (red, green, blue, magenta, yellow, cyan, white, black)
- The LEDs, switches and sockets colors are actually a mixture of red, green or blue light. (Check Appendix: COLOR5)
- The LEDs will flash the first cycle when the tiny led is on and the second if it's not.
- When decomposing the LEDs colors into primary color components (R G B), each row of 5 LEDs will create a set.
- Each set has three states (R G B).
- You will always have 4 sets with 3 different states (R,G,B).
- The rules below will tell which state is a "solve", "ignored" and "wrong" state.

Solving the module:

Finding the correct set:

- Count the number of red, green and blue coloring in all of the switches.
- Then find the color with the minimum and the other with the maximum amount of coloring.
 - (If two colors shares the same max/min value, take the first one in this order (R G B))
 - (Else if all are equal, then take red as your minimum and maximum color)
- Find the two states with the corresponding color that have more or less lit LEDs based on the color(s) you found.
- If they both share parity, then the "solve" and "ignored" states must be in the set that has the minimum one.
- Else they will be in the set that has the maximum.

Finding the "solve"/"ignored" state:

- Start by counting the number of red, green and blue coloring in all of the sockets.
- Find the color with the minimum and the other with the maximum amount of coloring.
 - (If two colors shares the same max/min value, take the first one in this order (R G B))
 - (Else if all are equal, then check Appendix: T4BL3).
- The state with the chosen minimum color will be the "solve" state and the state with the chosen maximum will be the "ignored" state.
- The other states are "wrong" with no exception.

Appendix: T4BL3:

Lit top set: R (2,3)	Lit top set: G (1,3)	Lit top set: B (1,2)
Lit bottom set: R (3,4)	Lit bottom set: G (2,4)	Lit bottom set: B (2,3)
Unlit top set: R (4,5)	Unlit top set: G (3,5)	Unlit top set: B (3,4)
Unlit bottom set: R (5,6)	Unlit bottom set: G (4,6)	Unlit bottom set: B (4,5)

- The chosen LED state in the last step will give you the ("solve", ignored") states.
- Find it in the table and take that number's position in the table in reading order.
- Those will be your "solved" and ignored states.

Appendix: COLOR5:

Fun fact: this section is the only colored section in the entire manual other than the flavour text

