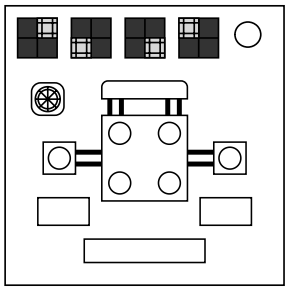
On the Subject of Rust.G.B.



1-2-4-1, no, 3-1-2-2...I'm lost

Using the diagram & methods on Page 2 & 3, find and set the 4 center lights to the correct pattern, then press the long button on the bottom to disarm the module.

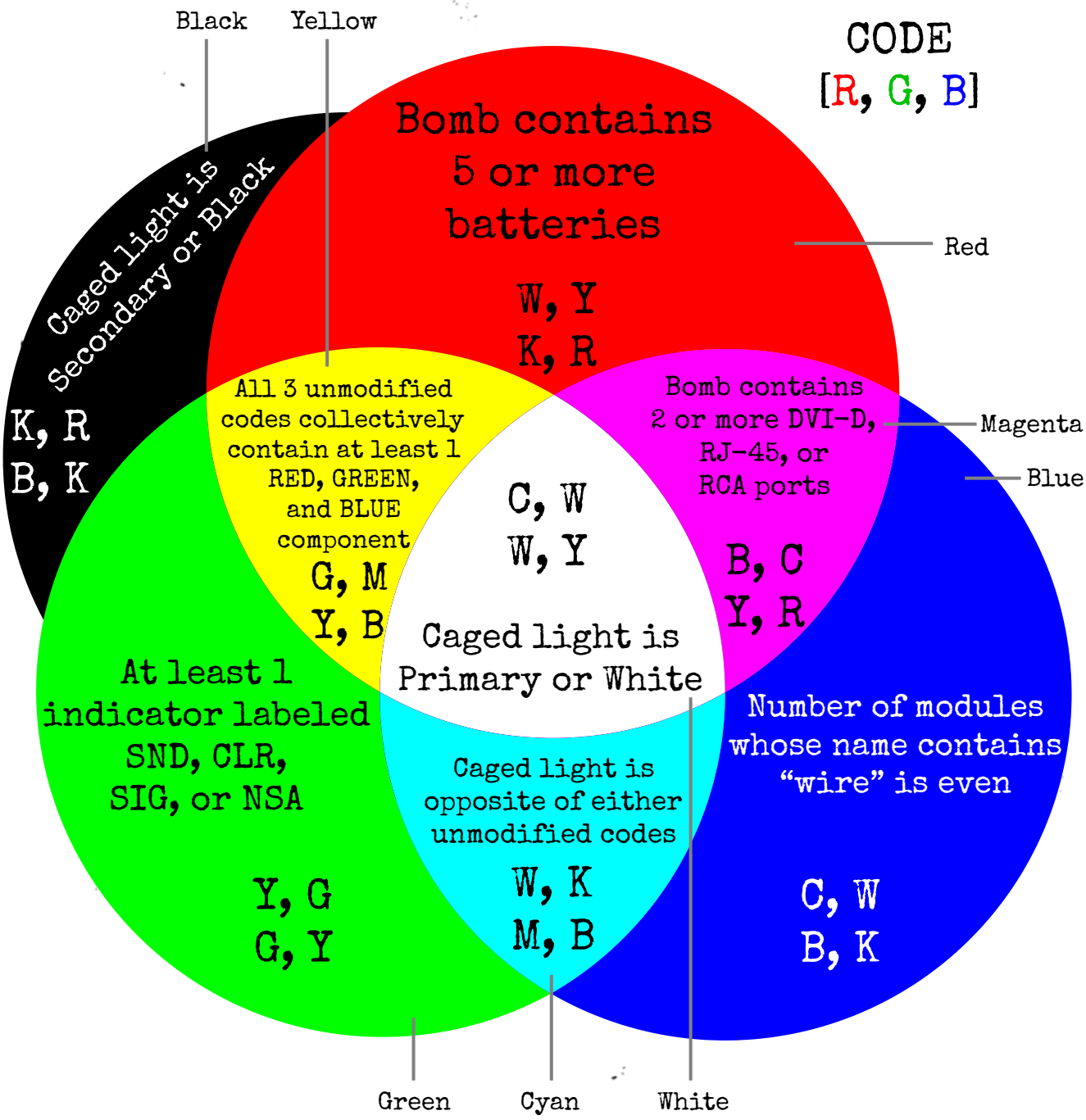
- Turn the serial code into 6 numbers, converting letters into numbers starting at 1 (A -> 1)
- Modulo all 6 numbers by 2 until you have a 6-digit code of 1s and 0s
  - EXAMPLE: A2G85J -> 101010
- Next, split the code into 2 smaller codes. The MAIN code uses the odd positions, the SECONDARY uses the even
  - EXAMPLE: 101010 -> M: 111 S: 000

- Each code forms an RGB value, adding #Red, #Green, and #Blue respectively. Convert the color found in the module's cage into this same sequence.

- Modify the MAIN and SECONDARY codes by adding the #Red, #Green, and #Blue values from the caged value, converting 2s to 0s (XOR both codes with the caged code).
  - EXAMPLE: if caged = #011 and MAIN = #110 -> Main = #101

- Finally, locate the pattern (A 2×2 grid of letters) in the Venn Diagram using your modified main color. If the color's condition is false, use the pattern from your modified second color, regardless of the condition.

VENN DIAGRAM



Appendix III: Solution Notes & Methods

Because of course it's not that simple

The top 4 buttons are each assigned a unique set from the chart below, used for the methods chart at the bottom. Each set will cycle 3 lights (**X**) between one of the 3 primary colors in RGB order.

1	X-/ X-X	2	X-X /-X	3	X-X X-/	4	/-X X-X

- **START** – Every method below starts with all 4 LEDs set to 1 color (referred to as the dominant color, or **D**)
- **RGB SHIFT** – To shift all the colors in RGB order, click all 4 buttons ***once*** in any order
- **SWAPPING** – Entering a method twice swaps the non-dominant color with the unused color*
- **INVERT** – the long buttons above the submit button will invert 2 LEDs, the left inverts the major diagonal (TL/BR), the right inverts the minor. The solution methods do not change and the button can be pressed whenever

SOLUTION METHODS

2 -> 3 ROW 1 -> 4		1 -> 3 COLUMN 2 -> 4		1 -> 2 DIAGONAL 3 -> 4	
D-D N-N	N-N D-D	D-N D-N	N-D N-D	D-N N-D	N-D D-N

--NOTES--	--KEY--
[N] is the next color after [D] in RGB order. White Pairs only use 1 method.	D – Dominant // N – Non-dominant U – Unused 3rd primary // W –White # -> # – SET A -> SET B

WHITE PAIRS		ROWS		COLUMNS		DIAGONALS	
To set [N] colors to white: – start with the [Start] method – push one of the remaining sets twice	Start	2 -> 3	1 -> 4	1 -> 3	2 -> 4	1 -> 2	3 -> 4
	Lower Set	U-D W-W	W-W D-U	U-W D-W	W-D W-U	U-W W-D	W-D U-W
	Higher Set	D-U W-W	W-W U-D	D-W U-W	W-U W-D	D-W W-U	W-U D-W

*Also applies to white pairs