

The Subject of 7

It got half as many lines as its counterpart. But double the problems as the counterpart.

The module shows a 7-segment display, a rotated diamond consisting of 8 unique RGB colors, a stage indicator, and an LED, which is pressable.

If the LED is not pressable, there are more segments, the diamond is not rotated, or the stage indicator is showing more than 1 digit, you are looking at the wrong module.

The module will start on stage 0 with a black LED to denote the initial stage. The module will also generate stages based on the number of modules present, up to 7 extra stages maximum.

The 7-segment will display a variated pattern formed by mixing red, green, blue channels respectively. These channels denote initial values, where an inverted display of that channel denotes a negative number. These values are displayed in decimal format, known as base-10.

Refer to [Faulty Seven Segment Displays](#)

([Faulty%20Seven%20Segment%20Display.html](#)) for the digits that are shown on this module.

Perform the operation given based on the color of the LED for each stage, using the table on the next page.

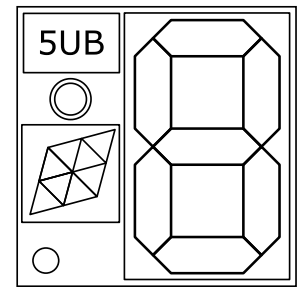
Press the LED to advance to the next stage of the module, unless the module is on the last stage, the module will loop back to stage 0.

Once you calculated the final value for each channel, press the stage indicator to enter submission mode.

From there, all of triangles that make part of the diamond will colorize into a pallet. The LED will also turn off or blink if very specific conditions are satisfied.

Enter the final values of all 3 channels, inverting that channel if needed, and mixing them additively using the diamond to select the given color and the segment to apply on. Press the stage indicator to submit the given set, which is labeled as "SUB".

An incorrect submission will result in a strike and reveal segments that are incorrect, marked in red. From there, selecting a color/segment will clear the segments that were marked correct/incorrect, and the defuser/expert can resubmit a new set if needed.



If at any point after the current stage calculations, the value is:

- less than -9, keep adding 10 until it is no longer less than -9.
- greater than 9, keep subtracting 10 until it is no longer greater than 9.

T_x denotes the current value after X steps, while D_x is the displayed number on the X th step. Note that this table assumes D_n as a positive number, including inverted values.

Indicator Color	Operation	
	Given Value is Standard	Given Value is Inverted
Black	Initial Value ($T_n = D_n$)	Initial Value ($T_n = -D_n$)
Red	$T_n = T_{n-1} + D_n$	$T_n = T_{n-1} - D_n$
Green	$T_n = T_{n-1} - D_n$	$T_n = T_{n-1} + D_n$
Blue	$T_n = T_{n-1} \times D_n$	$T_n = T_{n-1} \times (-D_n)$

You might be surprised about the specific conditions for this module to have the LED blink. A blinking LED allows the defuser to regrab the stages by just pressing the LED.

If the bomb started on Zen Mode or any mode that makes the timer tick up instead of down, the stages can be regrabbed during submission phase regardless of how many strikes obtained.

If the bomb started on Time Mode, at least 2 strikes must be accumulated on this specific module alone to regrab the stage.

Otherwise, at least 2 strikes from itself or other modules, must be accumulated to regrab the stages.

Module Reference Sheet

Each color is denoted by the respective letter of the color's name.

R is red; G is green; B is blue; M is magenta; Y is yellow; C is cyan; W is white; K is black.

5UB

