

On the Subject of Lasers

Why exactly do lasers move you from place to place anyway?

The module will initially show 9 red lasers, in a 3x3 grid. Each laser will be numbered a digit from 1-9.

For each stage, choose a laser that is not forbidden based on the rules listed in table 1. Choosing a forbidden laser will earn a strike, and reset the module to its initial state.

Upon clearing a stage, the lasers will change to the next color in order, and the laser that was used will be removed from the module. The numbers on the lasers do NOT change position. Make it through all 7 stages to defuse the module.

Based on the lasers chosen in earlier stages, it is possible to reach a later stage in which no remaining lasers are valid; however, there is always at least one path that can be taken from start to finish that will not lead to such a situation.

Stage Color	Forbidden Lasers
Red	Any laser in the row containing the laser equal to the digital root of the sum of the digits in the serial number plus one.
Orange	Any laser orthogonally adjacent to the laser taken in the red stage.
Yellow	Any laser in the column originally containing the laser equal to the digital root of the sum of the number of ports plus the number of indicators plus one.
Green	Any laser NOT diagonally adjacent to the laser taken in the yellow stage.
Blue	Any laser in the row or the column originally containing the laser equal to $(2 \text{ times the number of D batteries}) + (\text{number of A batteries}) + 1$
Purple	Any laser that shares parity (that is, matches even/odd condition) with the number of modules originally on the bomb
White	Any laser originally adjacent to the laser taken in the blue stage.

*Digital root is calculated by adding the sum of the digits of a number, and repeating until left with a single number. (ie., $1356 = 1+3+5+6=15$, $15 = 1+5 = 6$. The digital root of 1356 is 6.