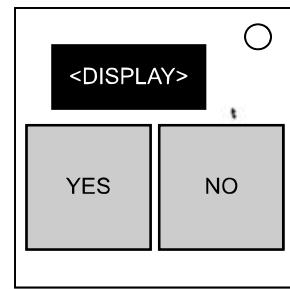


On the Subject of Cruel Colour Flash

Turns out it's a bit harder...

- A Cruel Colour Flash module will display a continuous transmission of different words representing different colours.
- This transmission can be broken down into six repeating Morse code transmissions, one for each of the three R, G, and B components belonging to both the words displayed and the colours they are displayed in.
- The characters corresponding to the Morse code transmissions are to be interpreted as base 36 numbers.
- The numbers belonging to either the words or the colours correspond to functions, with the other being the inputs of those functions.
- Applying each function to the input that shares its RGB component yields three output values.
- These values are used to determine the final value of the module. This value corresponds to a rule that determines which button must be pressed and when it must be pressed in order to solve the module.

(All numbers in this manual following this sentence are in base 36.)



If there is a duplicate word number, the word numbers correspond to functions.

Otherwise if there is a duplicate colour number, the colour numbers correspond to functions.

Otherwise if any word number is the same as any colour number, the colour numbers correspond to inputs.

Otherwise if three or more transmitted numbers are less than A, the word numbers correspond to inputs.

Otherwise if no transmitted numbers are less than A, the word numbers correspond to functions.

Otherwise if the serial number contains two or more transmitted numbers, the colour numbers correspond to functions.

Otherwise if the serial number contains no transmitted numbers, the word numbers correspond to inputs.

Otherwise count the number of batteries on the bomb and zero-index into the serial number, wrapping around if there are more than five batteries:

If the serial number character at the above index is a numeric digit, the word numbers correspond to functions.

Otherwise the colour numbers correspond to functions.

Each number can be found in exactly one of the codes below,
apply the corresponding operations to the corresponding inputs.

Code	Operation
SLIM	If the input is odd, double it, otherwise halve it.
15BRO	Use the next input in RGB order (with wrapping).
20DGT	Evaluate the total number of dots and dashes in the Morse code of the inputs. If the input is less than J, add this value. Otherwise, subtract this value.
34XYZ	Subtract the input from Z.
6WUF	Add the smallest input
7HPJ	If the input is a multiple of three, divide it by three, otherwise add all inputs that are less than A.
8CAKE	Multiply the number by one plus the number of transmitted numbers less than A.
9QVN	Subtract the previous input, in RGB order (with wrapping), from Z.

If all three outputs are equal, the final value is also equal.

Otherwise if two of the three outputs are equal, the final value is the remaining output.

Otherwise if two of the three outputs are equal to a transmitted number, the final value is the sum of those two outputs, modulo 10.

Otherwise if one of the three outputs is equal to a transmitted number, the final value is the difference between the other two.

Otherwise if the sum of the outputs is greater than 22, the final value is the Red output.

Otherwise if the sum of the transmitted numbers is greater than 4K, the final value is the Green output.

Otherwise if the sum of the transmitted numbers is less than twice the sum of the outputs, the final value is the Blue output.

Otherwise if the serial number contains any output, the final value is the second-largest output.

Otherwise if the outputs, when arranged in RGB order, are in ascending or descending order, the final value is the largest output minus the smallest.

Otherwise if the largest output is greater than all of the word numbers, the final value is the smallest output.

Otherwise if the smallest colour number is greater than all of the outputs, the final value is the largest output.

Otherwise the final value is the hexatrigesimal digital root of the inputs.

If the final value is greater than or equal to A:

Value	Press	When
A	Yes	Word is White
B	Yes	Both Word and Colour have active B components
C	No	Time remaining is a multiple of seven
D	No	Colour is Black
E	Yes	Word is a primary colour, Colour is a secondary colour
F	No	Colour is White
G	Yes	Both Word and Colour have active G components
H	No	Both Word and Colour are secondary colours
I	No	Both Word and Colour are primary colours
J	Yes	Even minutes and seconds remain on the timer
K	Yes	Word is Black
L	No	Word is a secondary colour, Colour is a primary colour
M	Yes	Tens digit of the seconds timer is zero

Value	Press	When
N	No	Word and Colour match
O	No	Word is Black
P	Yes	Both Word and Colour are primary colour
Q	No	Even minutes and odd seconds remain on the timer
R	Yes	Both Word and Colour have active R components
S	Yes	Both Word and Colour are secondary colours
T	No	Difference between starting time and remaining time is a multiple of 7
U	Yes	Neither Word nor Colour have an active R component
V	Yes	Neither Word nor Colour have an active G component
W	No	Neither Word nor Colour have an active B component
X	No	Odd minutes and seconds remain on the timer
Y	Yes	Word and Colour match
Z	No	Word is White

If the final value is less than A:

Press the correct button when the last digit of the seconds timer is equal to the final value:

If the final value is one of transmitted numbers, Yes is the correct button.

Otherwise if the sum of the numeric digits in the serial number is less than the final value, No is the correct button.

Otherwise if the final value is equal to the last minutes digit of the starting time, Yes is the correct button.

Otherwise if the final value is less than the number of ports, No is the correct button.

Otherwise if the last digit of the number of modules present is equal to the final value, Yes is the correct button.

Otherwise if the final value is less than the number of batteries, No is the correct button.

Otherwise if the final value has the same parity as the number of solved modules, Yes is the correct button.

Otherwise No is the correct button.