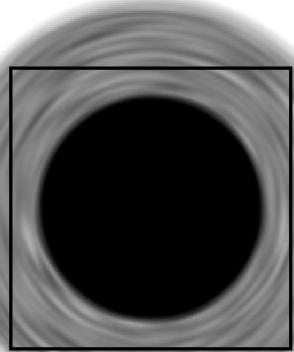


On the Subject of SMBH

Newton's third law. You gotta leave something behind.

The module consists of a spherical Supermassive Black Hole (SMBH). To solve the module, you must enter 12 correct base36 digits into SMBH. If the correct entry is made within the first minute after the appearance of the accretion disk, then two entries will be counted instead of one. The input is possible only if SMBH has an accretion disk.



Refer to "Appendix - BHSCII Table" for how to enter digits. In this table a dot represents a tick of the bomb's countdown timer (i.e., a change in the seconds value) going from left to right. A vertical line represents a tap on the module. Make sure that you press and release SMBH between two ticks. A bracket indicates holding SMBH across one or more ticks. If the instruction says to enter a number greater than 35, enter that number modulo 36.

If you enter a non-base36 digit, the SMBH will display a "?". If you enter an invalid base36 digit, the entered digit will be displayed on SMBH. In both cases, you will receive a strike.

Has no accretion disk

When SMBH has no accretion disk, no action is required. Wait for the accretion disk to appear for input.

Special case: bomb has unsolved "Black Hole" module(s)

If the bomb has at least one unsolved "Black Hole" module, then the color of the accretion disk should be ignored (but the accretion disk still needs to be present). In this case, the sum of digits entered in the "Black Hole" modules must be entered into SMBH. The next accretion disk will not appear until the next digit is entered into the "Black Hole" module.

Single-colored accretion disk

If the accretion disk is single-colored and does not change every second, then determine the digit to enter using the table below.

Orange	Number of solved modules
White	Number of strikes + sum of least significant digits of each 2-factor code (add 0 if there are no 2-factor codes on the bomb)
Red	Get the number of serial and parallel ports modulo 6 plus 1. Enter character of serial number located under that position
Yellow	Enter voltage of the bomb round down. If there are no Voltage Meter on the bomb enter sum of serial number digits + number of modules
Green	Number of ports
Blue	Starting time in minutes + least significant digit of greatest 2-factor code (add 0 if there are no 2-factor codes on the bomb)

Two-color accretion disk

The accretion disc can be painted in different colors in three ways:

- Rings – each color is represented by different rings of the accretion disk;
- Sectors – each color is represented by different sectors;
- Dynamic – the accretion disk changes color every second.

The accretion disc can rotate in two directions: clockwise (CW) and counterclockwise (CCW).

Using these parameters, find the appropriate column in the table below. The top-most color in this column that is not currently on the disc is the third color.

Rings		Sectors		Dynamic	
CW	CCW	CW	CCW	CW	CCW
White	Red	Orange	Yellow	Green	Blue
Red	Yellow	Yellow	Orange	Orange	Orange
Green	Green	White	White	Yellow	White

Three-color accretion disc

Using all three colors, determine the character to be entered into SMBH. The first column and first row of each table is the first letter of the color.

If one of the colors is Orange

	W	R	Y	G	B
W	O	B	M	O	C
R	B	O	V	I	K
Y	M	V	O	W	Ø
G	O	I	W	O	S
B	C	K	Ø	S	O

If one of the colors is White

	O	R	Y	G	B
O	O	B	M	O	C
R	B	O	T	X	9
Y	M	T	O	D	Z
G	O	X	D	O	L
B	C	9	Z	L	O

If one of the colors is Red

	O	W	Y	G	B
O	O	B	V	I	K
W	B	O	T	X	9
Y	V	T	O	5	2
G	I	X	5	O	J
B	K	9	2	J	O

If one of the colors is Yellow

	O	W	R	G	B
O	O	M	V	W	Ø
W	M	O	T	D	Z
R	V	T	O	5	2
G	W	D	5	O	Y
B	Ø	Z	2	Y	O

If one of the colors is Green

	O	W	R	Y	B
O	O	O	I	W	S
W	O	O	X	D	L
R	I	X	O	5	J
Y	W	D	5	O	Y
B	S	L	J	Y	O

If one of the colors is Blue

	O	W	R	Y	G
O	O	C	K	Ø	S
W	C	O	9	Z	L
R	K	9	O	2	J
Y	Ø	Z	2	O	Y
G	S	L	J	Y	O

Appendix — BHSCII Table

(Only digits and English capital letters)

0	1	2	3
4	5	6	7
8	9	10 (A)	11 (B)
12 (C)	13 (D)	14 (E)	15 (F)
16 (G)	17 (H)	18 (I)	19 (J)
20 (K)	21 (L)	22 (M)	23 (N)
24 (O)	25 (P)	26 (Q)	27 (R)
28 (S)	29 (T)	30 (U)	31 (V)
32 (W)	33 (X)	34 (Y)	35 (Z)