



# BOMB DEFUSAL MANUAL

**Version 1**

Verification Code: 241

*Welcome to the dangerous and challenging world of bomb defusing.*

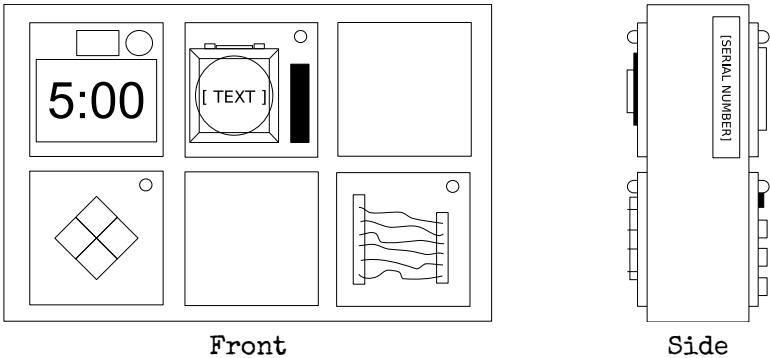
*Study this manual carefully; you are the expert. In these pages you will find everything you need to know to defuse even the most insidious of bombs.*

*And remember — One small oversight and it could all be over!*

# Defusing Bombs

A bomb will explode when its countdown timer reaches 0:00 or when too many strikes have been recorded. The only way to defuse a bomb is to disarm all of its modules before its countdown timer expires.

Example Bomb



## Modules

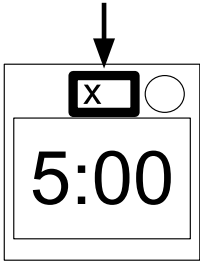
Each bomb will include one or several modules that must be disarmed. Each module is discrete, but some modules must be solved before others.

## Strikes

When the Defuser makes a mistake the bomb will record a strike which will be displayed on the indicator above the countdown timer. Bombs with a strike indicator will explode upon the third strike. The timer will begin to count down faster after a strike has been recorded.

If no strike indicator is present above the countdown timer, the bomb will explode upon the first strike, leaving no room for error.

Strike Indicator



## Gathering Information

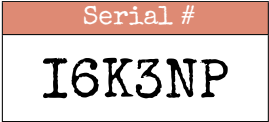
Some disarming instructions will require specific information about the bomb, such as the serial number. For detailed descriptions see the next page "On the Subject of Edgework".

# On the Subject of Edgework

The term edgework describes all kinds of widgets that can be found on the side casings of a bomb. The different kinds and their meanings are described in the following sections. Many modules ask for specific information about the edgework.

## Serial Number

The serial number is a code of six symbols and is made up of uppercase letters and digits. There is always at least one digit in the serial number. A zero has a diagonal line crossing through it, while the letter O does not.



## Indicator Lights

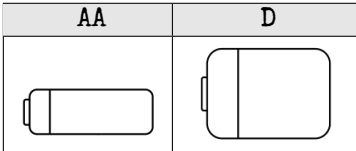
Indicator lights can be lit or unlit and are accompanied by a three-letter code. Common codes include:

BOB, CAR, CLR, FRK, FRQ, IND, MSA, NSA, SIG, SND, TRN



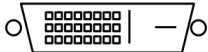
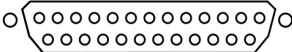
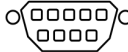
## Batteries




There are two types of batteries that can occur on a bomb. They are always placed in battery holders. A holder contains two AA batteries or one D battery. For some modules the number of holders is relevant.



## Ports

There are six types of ports that can occur on a bomb. Note that the stereo RCA port consists of two individual sockets, one white and one red, but both together count as a single port only.

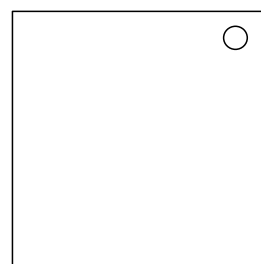
DVI-D	Parallel	Serial
		

PS/2	RJ-45	Stereo RCA
		

## Section 1: Modules

Modules can be identified by an LED in the top right corner.  
When this LED is lit green the module has been disarmed.

All modules must be disarmed to defuse the bomb.

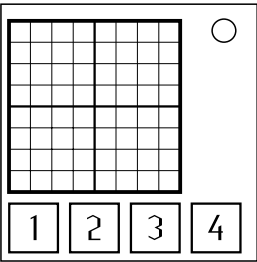




On the Subject of Bitmaps

Over 18 quintillion combinations, only some of them actually matter.

- Have the defuser count the number of light pixels (called "white") and dark pixels (called "black") per quadrant.
- There are 16 pixels per quadrant and 64 pixels in total.
- Start at the box numbered with the last digit in the serial number (top left). Search clockwise for the first box whose condition (middle) applies, then read its answer (bottom).
- Finally, with the answer from the previous step, use the instructions in the center between the boxes to determine which button to press.



#01x □ < 6

Exactly one quadrant has less than 6 white pixels.

The total number of white pixels in the other three quadrants



#1□ = lit [??]

There are exactly as many mostly-white quadrants as there are lit indicators.

The number of batteries (not holders).



#2— or |

Exactly one row or column (8 pixels length) is completely white or completely black.

Its x-/y-coordinate, starting from 1 in the top left.



#9□ = □

There are exactly as many mostly-white quadrants as mostly-black quadrants.

The first numeric digit of the serial number.



#8■ or □

There is a 3x3 square that is completely white or completely black.

The x-coordinate (starting at 1) of the center of the first such square in reading order.



#7□ = unlit [??]

There are exactly as many mostly-black quadrants as there are unlit indicators.

The number of ports.



#61x □ < 6

Exactly one quadrant has less than 6 black pixels.

The total number of black pixels in the other 3 quadrants.



#5□ > □

There are more mostly-white quadrants than mostly black quadrants.

The smallest number of black pixels in any quadrant.



#4□ > 35

The entire bitmap has more than 35 white pixels.

The total number of white pixels.



#3□ < □

There are fewer mostly-white quadrants than mostly-black quadrants.

The number of mostly-black quadrants.



Choosing the Button:

Repeatedly add or subtract 4 from the answer until the result is between 1 and 4. Have the defuser press the corresponding button to disarm the module.

B

Cut  
me  
off

#  
A

Keep Talking and Nobody Explodes v.1

Bitmaps

B

Cut  
me  
off



On the Subject of Boolean Venn Diagrams

Why is there a big Venn diagram? Why are there some weird symbols? Oh no...

- This module has eight buttons, one for each enclosed section of the Venn diagram and one representing the area not enclosed in any section of the diagram.
- The three circles are referred to as "A" (top), "B" (bottom left), and "C" (bottom right).
- Above the circles a boolean logic expression is displayed. The operators used in the expression are:  
AND ( $\wedge$ ), OR ( $\vee$ ), XOR ( $\underline{\vee}$ ), IMPLIES ( $\rightarrow$ ), NAND ( $\mid$ ), NOR ( $\downarrow$ ), XNOR ( $\leftrightarrow$ ) and IMPLIED BY ( $\leftarrow$ ).
- Use the boolean logic expression to determine the correct solution given in the table below or in the one on the next page.
- Press all buttons that are marked green in the solution. If the background is green, then the small circular button in the top right on the module must be pressed.
- If an incorrect button is pressed, a strike will be recorded and the section will turn red.

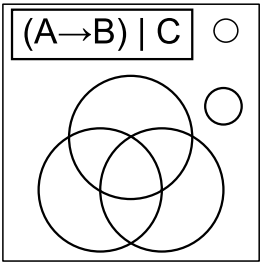


Table 1: (A \* B) \* C formulas

	(A $\wedge$ B)	(A $\vee$ B)	(A $\underline{\vee}$ B)	(A $\rightarrow$ B)	(A $\mid$ B)	(A $\downarrow$ B)	(A $\leftrightarrow$ B)	(A $\leftarrow$ B)
$\wedge$ C								
$\vee$ C								
$\underline{\vee}$ C								
$\rightarrow$ C								
$\mid$ C								
$\downarrow$ C								
$\leftrightarrow$ C								
$\leftarrow$ C								

B

#  
A

**Table 2: A \* (B \* C) formulas**

B

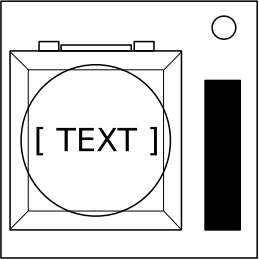
	$A \wedge$	$A \vee$	$A \underline{\vee}$	$A \rightarrow$	$A \mid$	$A \downarrow$	$A \leftrightarrow$	$A \leftarrow$
$(B \wedge C)$								
$(B \vee C)$								
$(B \underline{\vee} C)$								
$(B \rightarrow C)$								
$(B \mid C)$								
$(B \downarrow C)$								
$(B \leftrightarrow C)$								
$(B \leftarrow C)$								

On the Subject of The Button 🔑

You might think that a button telling you to press it is pretty straightforward. That's the kind of thinking that gets people exploded.

See the section on edgework for indicator and battery identification reference.

Use the edgework to identify which of the tables below should be used to disarm The Button. Use the first table whose condition in its top left cell matches the widgets present in the edgework.



0-1 Battery	BLUE	YELLOW	RED	WHITE
"Detonate"	HOLD			
"Abort"				
"Press"				
"Hold"				

lit FRK and 3+ Batt	BLUE	YELLOW	RED	WHITE	
"Detonate"	lit CAR – HOLD otherwise PRESS & RELEASE				
"Abort"					HOLD
"Press"					
"Hold"					

Otherwise	BLUE	YELLOW	RED	WHITE
"Detonate"	PRESS & RELEASE			
"Abort"	HOLD			
"Press"				
"Hold"				

Releasing a Held Button:

If you start holding the button down, a colored strip will light up on the right side of the module. Based on its color you must release the button at a specific point in time:

HOLDING	BLUE	YELLOW	Otherwise
"Release when X in timer"	4	5	1

#  
A

Keep Talking and Nobody Explodes v.1

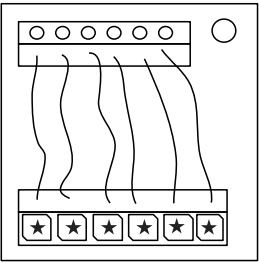
The Button

B

Cut  
me  
off

# On the Subject of Complicated Wires 🔑

These wires aren't like the others. Some have stripes! That makes them completely different. The good news is that we've found a concise set of instructions on what to do about it! Maybe too concise...



C

- Check the 4 sections one after another.
- If a section applies, cut all wires matching any of its conditions.

## Hints:

- **PURPLE** means that the wire has both **RED** and **BLUE** in it.
- **Plain WHITE** means that the wire has neither **RED** nor **BLUE** in it.
- **RED** means that the wire has no **BLUE** in it.
- **BLUE** means that the wire has no **RED** in it.

## Always:

- a. LED off, **Plain WHITE**
- b. LED off, **RED** with STAR

## If there is a Parallel Port:

- a. LED on, **BLUE**
- b. LED off, **PURPLE** with STAR















## If there are 2+ Batteries:

- a. LED on, **Plain WHITE** with STAR
- b. LED on, **RED**

## If the Last Digit of the Serial# is Even:

- c. LED off, no STAR
- d. **PURPLE**, no STAR

## Compact KV-Diagram

	No RED		Has RED		
LED on	 Parallel Port		 Don't Cut	 Serial# even	Has BLUE
	 Don't Cut	 Two or more Batteries			No BLUE
LED off	Cut				
	 Serial# even	 Don't Cut	 Parallel Port	 Serial# even	Has BLUE
	No STAR	STAR		No STAR	

Cut  
me  
off

#  
A

Keep Talking and Nobody Explodes v.1

Complicated Wires

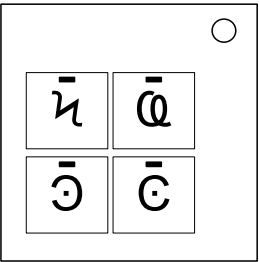
B

C

On the Subject of Keypads 🔑

I'm not sure what these symbols are, but I suspect they have something to do with occult.

- Only one column below has all four of the symbols from the keypad.
- Press the four buttons in the order their symbols appear from top to bottom within that column.
- The framed symbols on white occur only once each.
- The colored symbols each occur a second time in a distant position.
- The gray symbols each occur a second time in a nearby position.



Q	Э	©	Ψ	б	б
А	Q	ٲ	ٲ	¶	Э
λ	᠐	Q	᠐	᠐	✕
h	Q	Ж	©	ИЖ	æ
ИЖ	☆	ʒ	¶	Ж	Ψ
ж	ж	λ	з	¿	Й
᠐	¿	☆	★	ٲ	Ω

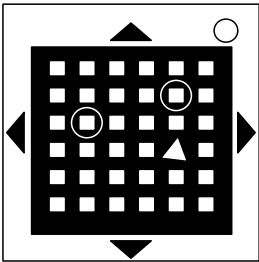
#	Keep Talking and Nobody Explodes v.1	Keypads
A		
B		
C		
D		
E		
F		
G		
H		
I		
J		
K		



On the Subject of Mazes 🔑

This seems to be some kind of maze, probably stolen off a restaurant placemat.

- Have the defuser name any of the circular markings using a letter for columns and a number for lines.
- Find the matching maze using the helpful chart on the left below. The black square identifies which of the nine mazes matches the given circle coordinate.
- The defuser must navigate the white light to the red triangle using the arrow buttons.
- **WARNING:** Do not cross the lines of the maze. These lines are invisible on the bomb.



A1

A2

A4

A5

B1

B4

B6

C2

C4

C5

D1

D4

D6

E1

E2

E3

F3

F4

A B C D E F

1

2

3

4

5

6

A B C D E F

1

2

3

4

5

6

A B C D E F

1

2

3

4

5

6

A B C D E F

1

2

3

4

5

6

A B C D E F

1

2

3

4

5

6

A B C D E F

1

2

3

4

5

6

A B C D E F

1

2

3

4

5

6

A B C D E F

1

2

3

4

5

6

A B C D E F

1

2

3

4

5

6

M

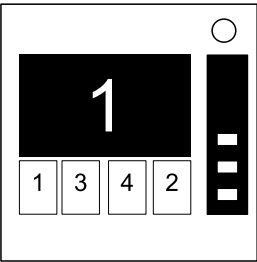
Cut  
me  
off

#	Keep Talking and Nobody Explodes v.1	Mazes
A		
B		
C		
D		
E		
F		
G		
H		
I		
J		
K		
L		
M		

On the Subject of Memory 🔑

Memory is a fragile thing but so is everything else when a bomb goes off, so pay attention!

- Press the correct button to progress the module to the next stage. Complete all stages A-E to disarm the module.
- Pressing an incorrect button will reset the module back to stage A and record a strike.
- Button positions are ordered from left to right.



Use the table to determine which button to press in which stage. As in the last two columns below, take note of the label and the position of the pressed button. If the instruction references a position, press the button in that position. If the instruction references a label, press the button with that label. The colors serve as a quick reference and do not appear in the module.

Stage	Display	Instruction	Label	Position
A	1	Position 2		
	2			
	3	Position 3		
	4	Position 4		
B	1	Label "4"		
	2	Position from A		
	3	Position 1		
	4	Position from A		
C	1	Label from B		
	2	Label from A		
	3	Position 3		
	4	Label "4"		
D	1	Position from A		
	2	Position 1		
	3	Position from B		
	4			
E	1	Label from A		
	2	Label from B		
	3	Label from D		
	4	Label from C		

M

#  
A      Keep Talking and Nobody Explodes v.1

Memory

B

C

D  
E

F

G  
H

I  
J  
K

L

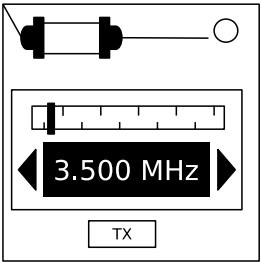
M

Cut  
me  
off

On the Subject of Morse Code 🔑

An antiquated form of naval communication? What next? At least it's genuine Morse Code, so pay attention and you might just learn something.

- Interpret the signal from the flashing light using the Morse Code chart on the next page.
- The signal will loop, with a long gap between repetitions.
- Identify the word that is being signaled.
- Once the word is identified, adjust the response frequency of the module as indicated in the table on the last page and press the transmit (TX) button.
- Refer to the next double-page for defusing the module.



Morse Code Mnemonic

Ignore this if you aren't here to learn Morse Code.

The words below show each Morse Code letter in a graphic form. Letters deviating from the base line signify a dash, others a dot.

A — a t	J — e d g y (\ 'e-jê \)	S — s a x
B — b e a n	K — K i t (-Kat)	T — (Mr) T
C — C a t e	L — e l s e	U — u m p (ire)
D — d a m	M — M M (Millenia)	V — v e a l
E — e	N — N o	W — w h y
F — c a f e	O — O O P (Object Oriented Programming)	X — f o x y
G — g y m	P — a p p s	Y — y e l l
H — e a r s (hear)	Q — p l a q (ue)	Z — Z h o u (Province in China)
I — i n	R — r y e	

M

#  
A

### Morse Code Alphabet Tree

B

This tree shows the complete morse alphabet. Navigate it as the defuser tells you individual Morse symbols. Letters marked in **red** do not appear in any of the solution words. Letters marked in **green** are unique to a single solution word.

C

- If the defuser sees a short flash (dot / ·), move up and to the right.
- If the defuser sees a long flash (dash / -), move down and to the right.
- If the defuser sees a gap, read the letter at the current position.

D  
E

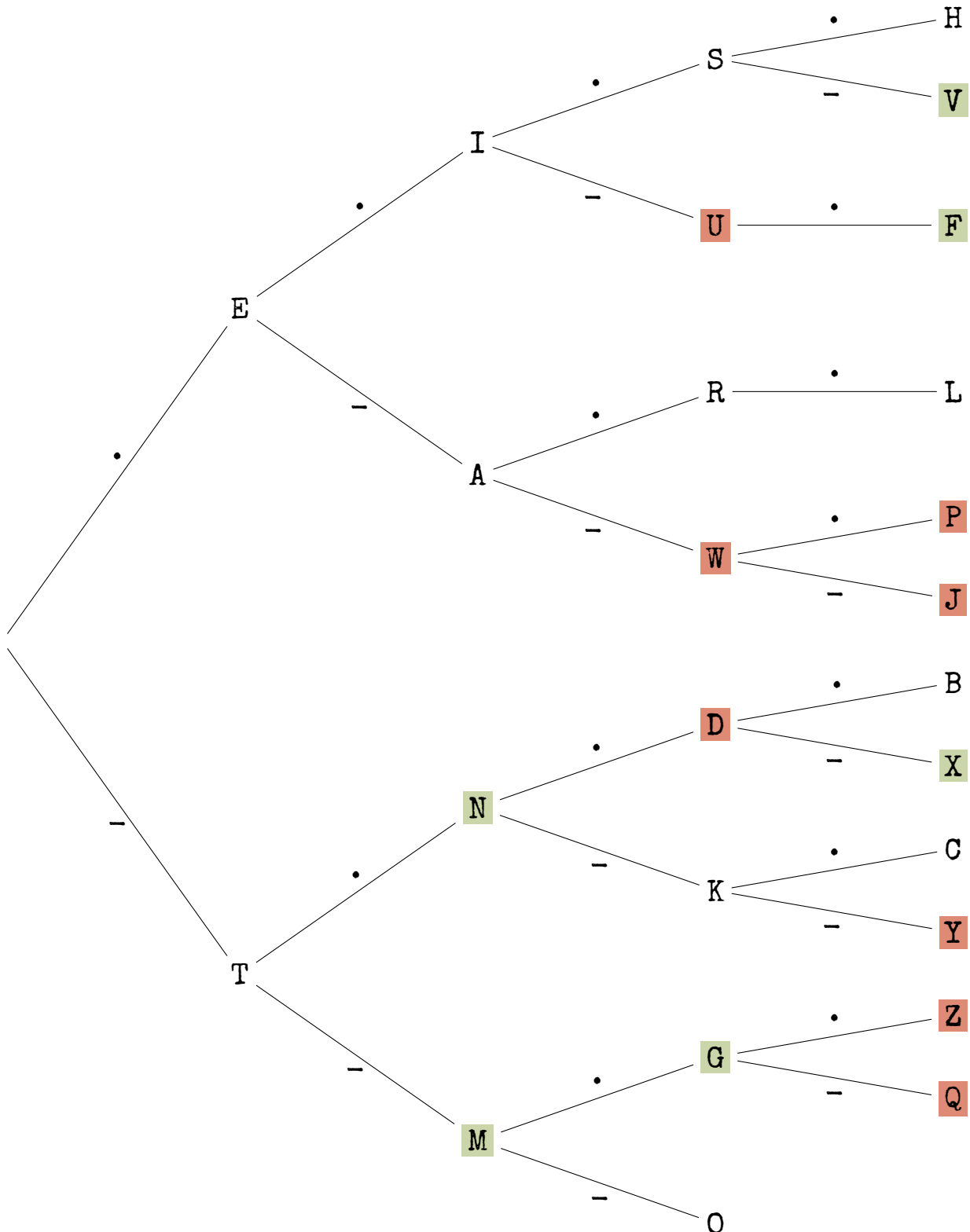
F

G  
H

I  
J  
K

L

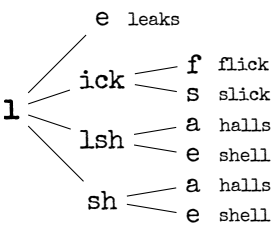
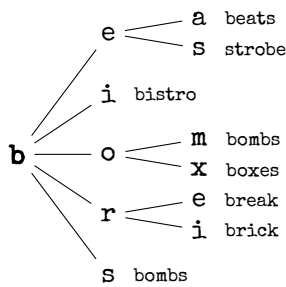
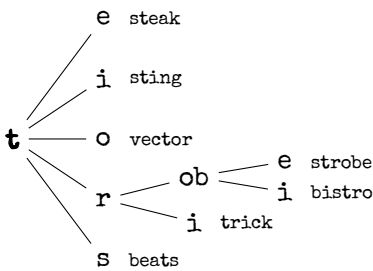
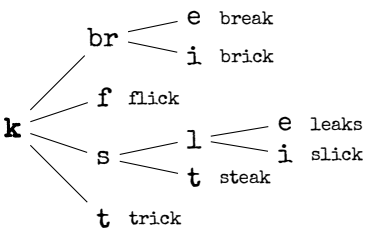
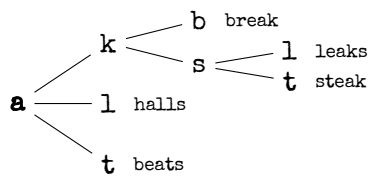
M



Cut  
me  
off

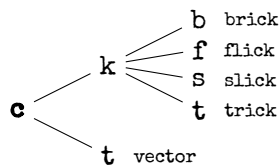
Word Recognition Trees

If you identify any letter in the signal, start at the corresponding tree below. It shows the possible continuations after the identified letter, thereby allowing to identify the target word as quickly as possible. The trees are built such that the long gap between signal repetitions can be ignored.



**v** vector

**x** boxes



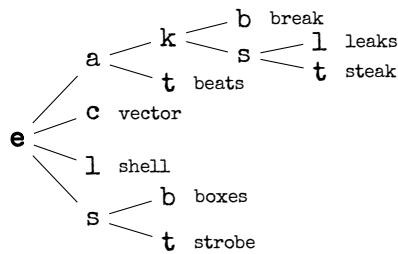
**m** bombs

**n** sting

Response Frequencies

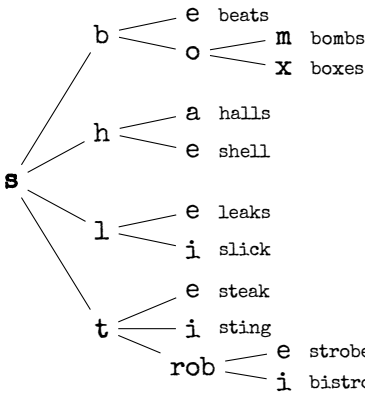
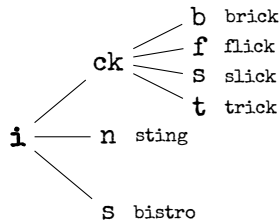
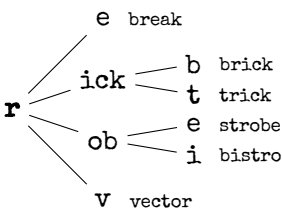
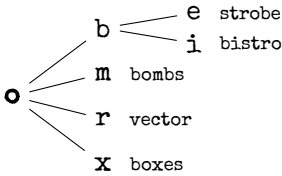
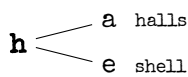
Each word corresponds to a specific response frequency:

If the word is:	Respond at frequency:
beats	3.600 MHz
bistro	3.552 MHz
bombs	3.565 MHz
boxes	3.535 MHz
break	3.572 MHz
brick	3.575 MHz
flick	3.555 MHz
halls	3.515 MHz
leaks	3.542 MHz
shell	3.505 MHz
slick	3.522 MHz
steak	3.582 MHz
sting	3.592 MHz
strobe	3.545 MHz
trick	3.532 MHz
vector	3.595 MHz



**f** flick

**g** sting



M

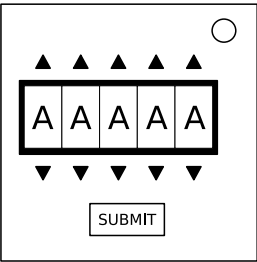
Cut  
me  
off

#	Keep Talking and Nobody Explodes v.1	Morse Code
A		
B		
C		
D		
E		
F		
G		
H		
I		
J		
K		
L		
M		



On the Subject of Passwords 🔑

Fortunately this password doesn't seem to meet standard government security requirements: 22 characters, mixed case, numbers in random order without any palindromes above length 3.



- The buttons above and below each letter will cycle through the possibilities for that position.
- Only one combination of the available letters will match a password from the list.
- Press the submit button once the correct word has been set.

Step 1

Ask the defuser to spell out the letters of the first and fourth position. Write them down as in the example below:

1.	4.
B	E
X	S
A	Z
L	Q
U	V
W	L

Step 2

Look for potential matches in the table on the right.

For the above examples:

- AE — after
- WE — water
- WL — world
- WL — would

Step 3

If too many matches are found and the defuser does not have enough time to test them, ask them to spell out the second position as well.

There are only four words that need even further differentiation: thing, think, world and would.

**Hint:** It is helpful if the defuser does not report the letters J, K, Q, X, Y or Z to the expert, as they do not appear in the positions 1, 4 or 2 of any password.

1.	4.	2.	Password
A	E	F	after
	I	G	again
	U	B	about
B	O	E	below
C	L	O	could
E	R	V	every
F	N	O	found
	S	I	first
G	A	R	great
H	S	O	house
L	G	A	large
	R	E	learn
N	E	E	never
O	E	T	other
P	C	L	place
	N		plant
			O
R	H	I	right
S	D	T	study
	L	M	small
		P	spell
		T	still
	N	O	sound
T	E	H	three
	I		their
	N		thing
			think
	R		there
	S		these
W	C	H	which
	E	A	water
	L	O	world
			would
	R	H	where
	T	R	write

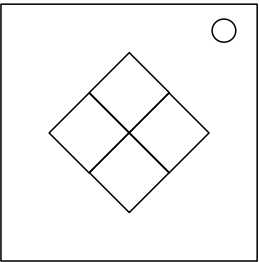
P

Cut  
me  
off

# A	Keep Talking and Nobody Explodes v.1	Passwords
B		
C		
D E		
F		
G H		
I J K		
L		
M		
N O		
P		

On the Subject of Simon Says 🔑

*This is like one of those toys you played with as a kid where you have to match the pattern that appears, except this one is a knockoff that was probably purchased at a dollar store.*



- One of the four colored buttons on the module will flash.
- Using the correct scheme from below, transform the color to the corresponding button.
- After pressing that button, the flashing pattern will increase in length and start from the beginning.
- Enter the transformed color sequences of increasing length until the module is disarmed.

Strikes	Vowel in serial number (A, E, I, O, U, Y)	No vowel in serial number
0		
1		
2		

B

C

D  
E

F

G  
H

I  
J  
K

L

M

N  
O

P

Q  
R

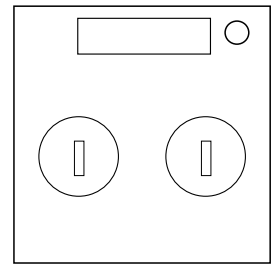
S

## On the Subject of Turn The Keys

*Order is everything.*

This module has two keys and a display. The display indicates the module's priority (higher is more important). Any other module affected by this module is marked with a key symbol (🔑).

If the defuser is handling multiple bombs, the below rules apply to all bombs collectively, not individually.



### WARNING:

Do **NOT** disarm any of these five modules before disarming all Turn The Keys modules:

- Complicated Wires
- Memory
- Cryptography
- Wire Sequence
- Maze

### 1. Step

Disarm all the following modules:

- The Button
- Round Keypad (Not "Keypad")
- Colour Flash
- Two Bits
- Morse Code
- Wires (Not "Complicated Wires" nor "Wire Sequence")

### 2. Step

Turn all right keys in order of their priority (highest to lowest).

### 3. Step

Disarm all the following modules:

- Astrology
- Password
- Combination Lock
- Plumbing
- Crazy Talk
- Semaphore
- Keypad (Not "Round Keypad")
- Simon Says
- Listening
- Switches
- Orientation Cube
- Who's On First

### 4. Step

Turn all left keys in **reverse** order of their priority (lowest to highest).

B

C

D  
E

F

G  
H

I  
J  
K

L

M

N  
O

P

Q  
R

S

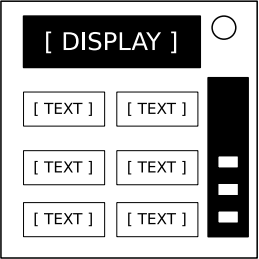
T

**On the Subject of Who's On First** 🔑

*This contraption is like something out of a sketch comedy routine, which might be funny if it wasn't connected to a bomb. I'll keep this brief, as words only complicate matters.*

- Read the display content and use step 1 to determine which button label to read.
- Using this button label, use step 2 to determine which button to push.
- Repeat until the module has been disarmed.

The following pages provide detailed information for the two steps.



#  
A

**Step 1:**

B

C

D  
E

F

G  
H

I  
J  
K

L

M

N  
O

P

Q  
R

S

T

U  
V  
W

Cut  
me  
off

- Based on the display content, read the label of the correct button and proceed to step 2.
- The eye symbol (👁️) indicates which button label to read.
- The colors below do not appear on the module. They group words and expressions that could easily be confused with each other, in order to draw the expert's attention to potential misunderstandings.
- The colors in step 2 have no correlation to the colors in step 1 as new words and expressions appear.

		BLANK	C	CEE	DISPLAY	FIRST
			👁️			👁️
		👁️			👁️	
				👁️		
HOLD ON	LED	LEAD	LEED	NO	NOTHING	
	👁️				👁️	
		👁️				
				👁️		
OKAY	READ	RED	REED	SAYS	SEE	
		👁️	👁️		👁️	
			👁️	👁️		
THEIR	THERE	THEY ARE	THEY'RE	UR	YES	
				👁️		
		👁️			👁️	
			👁️			
	YOU	YOU ARE	YOU'RE	YOUR		
			👁️	👁️		
		👁️				



**Step 2:**

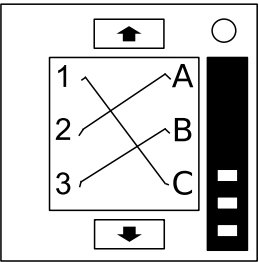
- Find the button label from step 1 in the first column of the table below.
- Read the words in the second column from left to right and press the first button that matches a word from this list.
- The match must be exact. Pay special attention to the question mark after "WHAT?", which may not be present.
- The colors are used to group words and expressions that could easily be confused with each other, in order to draw the expert's attention to potential misunderstandings.

BLANK	WAIT, RIGHT, OKAY, MIDDLE, BLANK
DONE	SURE, UH HUH, NEXT, WHAT?, YOUR, UR, YOU'RE, HOLD, LIKE, YOU, U, YOU ARE, UH UH, DONE
FIRST	LEFT, OKAY, YES, MIDDLE, NO, RIGHT, NOTHING, UHHH, WAIT, READY, BLANK, WHAT, PRESS, FIRST
HOLD	YOU ARE, U, DONE, UH UH, YOU, UR, SURE, WHAT?, YOU'RE, NEXT, HOLD
LEFT	RIGHT, LEFT
LIKE	YOU'RE, NEXT, U, UR, HOLD, DONE, UH UH, WHAT?, UH HUH, YOU, LIKE
MIDDLE	BLANK, READY, OKAY, WHAT, NOTHING, PRESS, NO, WAIT, LEFT, MIDDLE
NEXT	WHAT?, UH HUH, UH UH, YOUR, HOLD, SURE, NEXT
NO	BLANK, UHHH, WAIT, FIRST, WHAT, READY, RIGHT, YES, NOTHING, LEFT, PRESS, OKAY, NO
NOTHING	UHHH, RIGHT, OKAY, MIDDLE, YES, BLANK, NO, PRESS, LEFT, WHAT, WAIT, FIRST, NOTHING
OKAY	MIDDLE, NO, FIRST, YES, UHHH, NOTHING, WAIT, OKAY
PRESS	RIGHT, MIDDLE, YES, READY, PRESS
READY	YES, OKAY, WHAT, MIDDLE, LEFT, PRESS, RIGHT, BLANK
RIGHT	YES, NOTHING, READY, PRESS, NO, WAIT, WHAT, RIGHT
SURE	YOU ARE, DONE, LIKE, YOU'RE, YOU, HOLD, UH HUH, UR, SURE
U	UH HUH, SURE, NEXT, WHAT?, YOU'RE, UR, UH UH, DONE, U
UH HUH	UH HUH
UH UH	UR, U, YOU ARE, YOU'RE, NEXT, UH UH
UHHH	READY, NOTHING, LEFT, WHAT, OKAY, YES, RIGHT, NO, PRESS, BLANK, UHHH
UR	DONE, U, UR
WAIT	UHHH, NO, BLANK, OKAY, YES, LEFT, FIRST, PRESS, WHAT, WAIT
WHAT	UHHH, WHAT
WHAT?	YOU, HOLD, YOU'RE, YOUR, U, DONE, UH UH, LIKE, YOU ARE, UH HUH, UR, NEXT, WHAT?
YES	OKAY, RIGHT, UHHH, MIDDLE, FIRST, WHAT, PRESS, READY, NOTHING, YES
YOU	SURE, YOU ARE, YOUR, YOU'RE, NEXT, UH HUH, UR, HOLD, WHAT?, YOU
YOU ARE	YOUR, NEXT, LIKE, UH HUH, WHAT?, DONE, UH UH, HOLD, YOU, U, YOU'RE, SURE, UR, YOU ARE
YOU'RE	YOU, YOU'RE
YOUR	UH UH, YOU ARE, UH HUH, YOUR

# A	Keep Talking and Nobody Explodes v.1	Who's On First
B		
C		
D E		
F		
G H		
I J K		
L		
M		
N O		
P		
Q R		
S		
T		
U V W		
Cut me off		

On the Subject of Wire Sequences 🔑

It's hard to say how this mechanism works. The engineering is pretty impressive, but there must have been an easier way to manage nine wires.



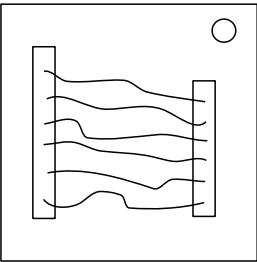
- Within this module there are several panels with wires on them, but only one panel is visible at a time. Switch to the next panel by usihng the down button and the previous panel by using the up button.
- Do not switch to the next panel until you are sure that you have cut all necessary wires on the current panel.
- Cut the wires as directed by the following tables. Wire occurrences are cumulative over all panels within the module.
- Wire occurrences are counted per color, so the first red wire you encounter is the first red wire occurrence, even if there was a blue wire before it.
- The wires should be assessed from top to bottom when looking at the numbers on the left, regardless of whether the wire itself goes up or down.
- Hint: Walk through the module together with the defuser while keeping the position for each color with one finger in each table.

RED Wire Occurrences		BLUE Wire Occurrences		BLACK Wire Occurrences	
Wire Occurrence	Cut if connected to:	Wire Occurrence	Cut if connected to:	Wire Occurrence	Cut if connected to:
1st	C	1st	B	1st	A, B or C
2nd	B	2nd	A or C	2nd	A or C
3rd	A	3rd	B	3rd	B
4th	A or C	4th	A	4th	A or C
5th	B	5th	B	5th	B
6th	A or C	6th	B or C	6th	B or C
7th	A, B or C	7th	C	7th	A or B
8th	A or B	8th	A or C	8th	C
9th	B	9th	A	9th	C

# A	Keep Talking and Nobody Explodes v.1	Wire Sequences
B		
C		
D E		
F		
G H		
I J K		
L		
M		
N O		
P		
Q R		
S		
T		
U V W		
Cut me off		

On the Subject of Wires 🔑

Wires are the lifeblood of electronics! Wait, no, electricity is the lifeblood.  
Wires are more like arteries. The veins? No matter...



- Have the defuser count the wires.
- Select the correct instruction set from the table below.
- Follow the instructions from top to bottom and cut the corresponding wire of the first condition that applies.

3 wires	a. BLUE, BLUE, RED - Cut 2nd wire b. No RED wires - Cut 2nd wire c. Otherwise - Cut last wire	
	Last digit of the serial# is	
	EVEN	ODD
4 wires	a. Last is YELLOW and no RED wires - Cut 1st wire b. 1 BLUE wire - Cut 1st wire c. 1+ YELLOW wires - Cut last wire d. Otherwise - Cut 2nd wire	a. 2+ RED wires - Cut last RED wire b. Last is YELLOW and no RED wires - Cut 1st wire c. 1 BLUE wire - Cut 1st wire d. 1+ YELLOW wires - Cut last wire e. Otherwise - Cut 2nd wire
5 wires	a. 1 RED wire and 2+ YELLOW wires - Cut 4th wire b. No BLACK wires - Cut 2nd wire c. Otherwise - Cut 1st wire	a. Last wire is BLACK - Cut 4th wire b. 1 RED wire and 2+ YELLOW wires - Cut 4th wire c. No BLACK wires - Cut 2nd wire d. Otherwise - Cut 1st wire
6 wires	a. 1 YELLOW wire and 2+ WHITE wires - Cut 4th wire b. No RED wires - Cut last wire c. Otherwise - Cut 4th wire	a. No YELLOW wires - Cut 3rd wire b. 1 YELLOW wire and 2+ WHITE wires - Cut 4th wire c. No RED wires - Cut last wire d. Otherwise - Cut 4th wire

#  
A

Keep Talking and Nobody Explodes v.1

Wires

B

C

D  
E

F

G  
H

I  
J  
K

L

M

N  
O

P

Q  
R

S

T

U  
V  
W

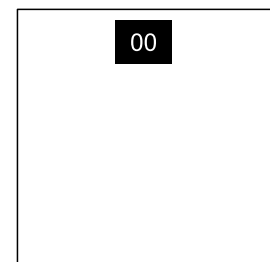
Cut  
me  
off

## Section 2: Needy Modules

Needy modules cannot be disarmed, but pose a recurrent hazard.

Needy modules can be identified as a module with a small 2-digit timer in the top center. Interacting with the bomb may cause them to become activated. Once activated, these needy modules must be tended to regularly before their timer expires in order to prevent a strike.

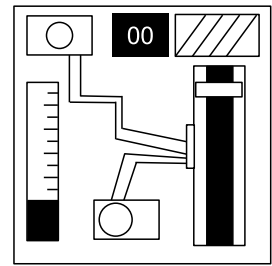
Stay observant: needy modules may reactivate at any time.



## On the Subject of Capacitor Discharge

*I'm going to guess that this is just meant to occupy your attention, because otherwise this is some shoddy electronics work.*

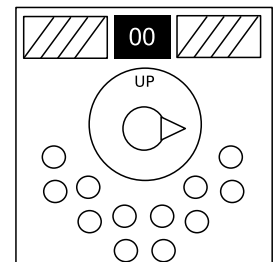
- Discharge the capacitor before it overloads by holding down the lever.



## On the Subject of Knobs

*Needlessly complicated and endlessly needy. Imagine if such expertise were used to make something other than diabolical puzzles.*

- The knob can be turned to one of four different positions.
- The knob must be in the correct position when this module's timer hits zero.
- The correct position can be determined by looking at the left half of the LEDs on the module. The six LEDs on the right are not relevant for solving this module.
- Knob positions are relative to the "UP" label, which may be rotated differently every time the module activates.



### The left six LEDs:

- 0 or 1 LEDs lit - Left
- 3 LEDs lit - Down
- 4 LEDs lit - Up
- 5 LEDs lit in "U"-Shape - Right

X		X
X	X	X

X marks a lit LED.

- Otherwise - Down

## On the Subject of Venting Gas

*Computer hacking is hard work! Well, it usually is. This job could probably be performed by a simple drinking bird pressing the same key over and over again.*

- Respond to the computer prompts by pressing "Y" for "Yes" or "N" for "No".

