



BOMB DEFUSAL MANUAL

Modified Vanilla Rules

Rules are based on Seed #: 6502

Welcome to the dangerous and challenging world of bomb defusing.

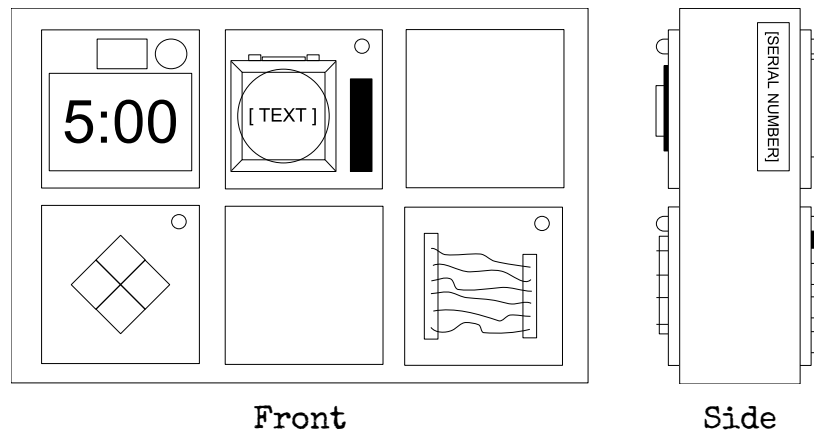
Study this manual carefully; you are the expert. In these pages you will find everything you need to know to defuse even the most insidious of bombs.

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

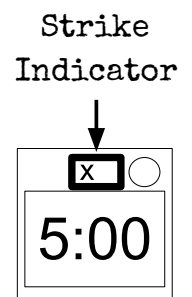
Each bomb will include up to 11 modules that must be disarmed. Each module is discrete and can be disarmed in any order.

Instructions for disarming modules can be found in Section 1. "Needy" modules present a special case and are described in Section 2.

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.



Gathering Information

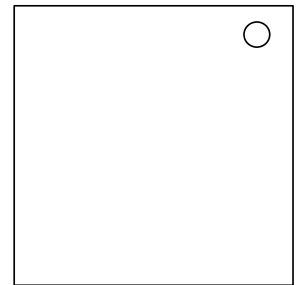
Some disarming instructions will require specific information about the bomb, such as the serial number. This type of information can typically be found on the top, bottom, or sides of the bomb casing. See Appendix A, B, and C for identification instructions that will be useful in disarming certain modules.

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.

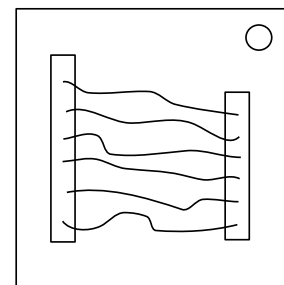
All modules must be disarmed to defuse the bomb.



On the Subject of Wires

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

- A wire module can have 3–6 wires on it.
- Only the one correct wire needs to be cut to disarm the module.
- Wire ordering begins with the first on the top.



3 wires:

If there is exactly one red wire and there are no white wires, cut the red wire.
Otherwise, If there is more than one black wire, cut the last black wire.
Otherwise, If the last wire is black, cut the last wire.
Otherwise, cut the first wire.

4 wires:

If there are no white wires and there is a RJ-45 port present on the bomb, cut the last wire.
Otherwise, If the last wire is black and there is an empty port plate present on the bomb, cut the third wire.
Otherwise, If there is more than one blue wire, cut the last blue wire.
Otherwise, cut the second wire.

5 wires:

If there is more than one white wire and there is a DVI-D port present on the bomb, cut the first wire.
Otherwise, If there are no black wires and there is a serial port present on the bomb, cut the second wire.
Otherwise, If there is exactly one blue wire, cut the blue wire.
Otherwise, If the last wire is black, cut the second wire.
Otherwise, cut the third wire.

6 wires:

If there is more than one black wire, cut the first black wire.
Otherwise, If there are no white wires, cut the third wire.
Otherwise, If there is exactly one black wire, cut the fifth wire.
Otherwise, If the last wire is yellow, cut the last wire.
Otherwise, cut the third wire.

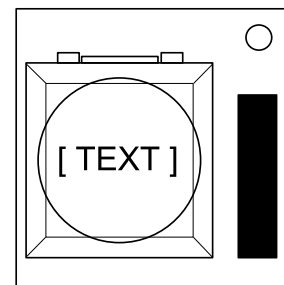
On the Subject of The Button

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 Appendix A for indicator identification reference.

See Appendix B for battery identification reference.

See Appendix C for port identification reference.



Follow these rules in the order they are listed. Perform the first action that applies:

1. If the button is yellow and the button says "Detonate", hold the button and refer to "Releasing a Held Button".
2. If there is a parallel port present on the bomb, press and immediately release the button.
3. If the button is blue and there is a lit indicator with label IND, hold the button and refer to "Releasing a Held Button".
4. If the button is white and there is a lit indicator with label SIG, press and immediately release when the two seconds digits on the timer match..
5. If there is an empty port plate present on the bomb and the button says "Hold", press and immediately release when the two seconds digits on the timer match..
6. If there is a RJ-45 port present on the bomb and the serial number starts with a letter, press and immediately release the button.
7. If none of the above apply, hold the button and refer to "Releasing a Held Button".

Releasing a Held Button

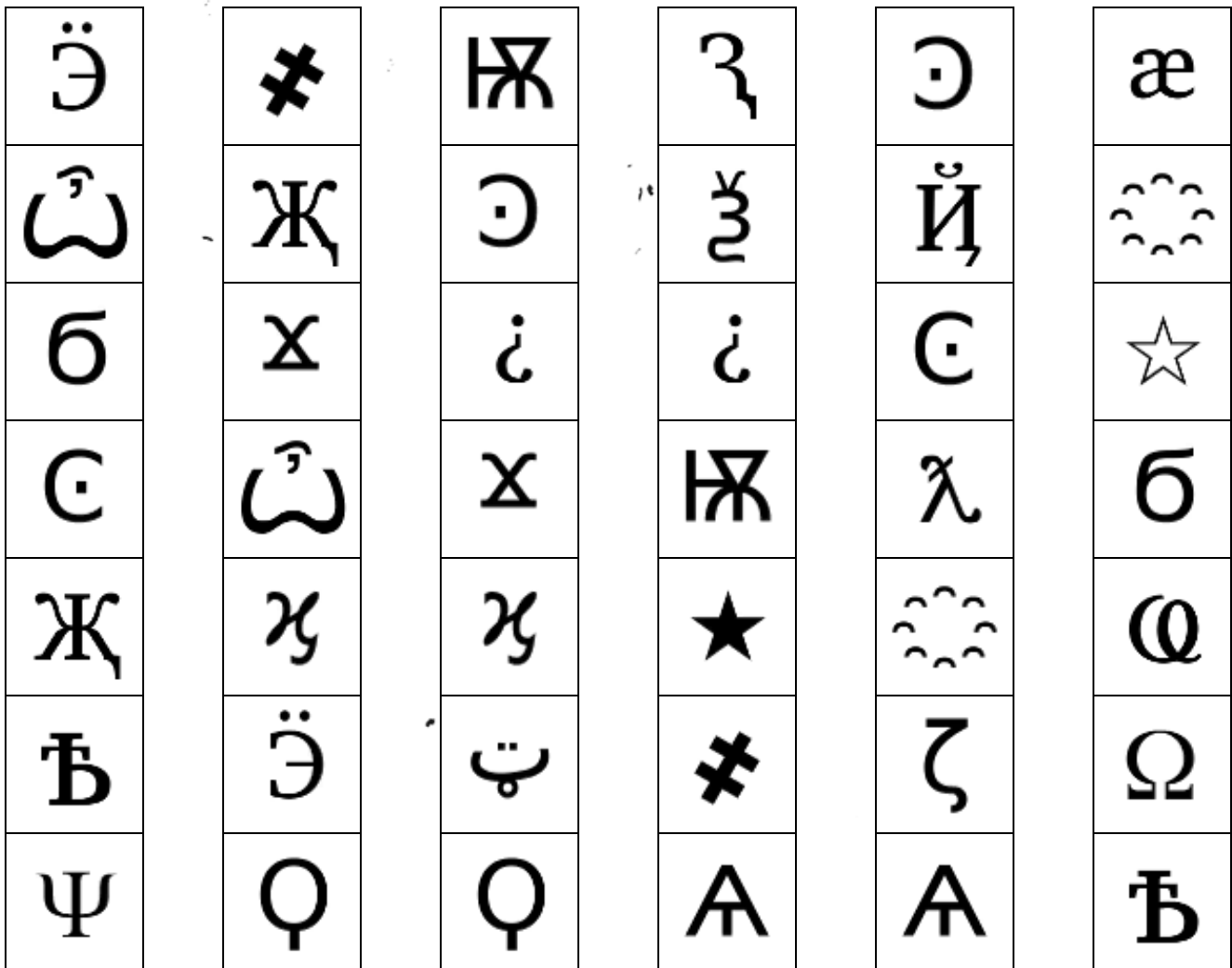
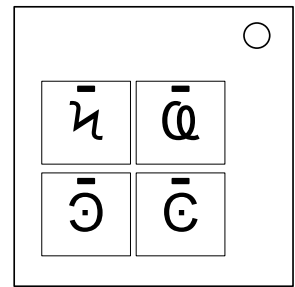
If you start holding the button down, a colored strip will light up on the right side of the module. Based on its color you must release the button at a specific point in time:

- Yellow strip: release when right most seconds digit is 9.
- Red strip: release when right most seconds digit is 7.
- Blue strip: release when right most seconds digit is 9.
- Any other color strip: release when the countdown timer has a 4 in any position.

On the Subject of Keypads

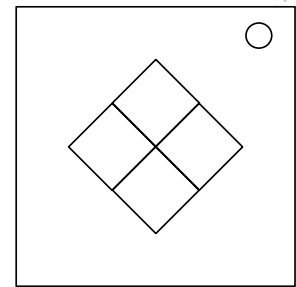
I'm not sure what these symbols are, but I suspect they have something to do with occult.

- 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.

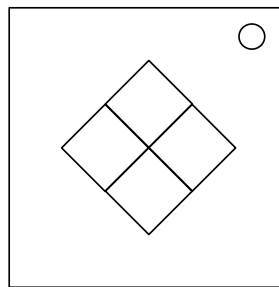


On the Subject of Simon Says

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.



1. One of the four colored buttons will flash.
2. Using the correct table below, press the button with the corresponding color.
3. The original button will flash, followed by another. Repeat this sequence in order using the color mapping.
4. The sequence will lengthen by one each time you correctly enter a sequence until the module is disarmed.



If the serial number contains a vowel:

		Red Flash	Blue Flash	Green Flash	Yellow Flash
Button to press:	No Strikes	Blue	Blue	Green	Red
	1 Strike	Yellow	Green	Red	Green
	2+ Strikes	Blue	Green	Yellow	Red

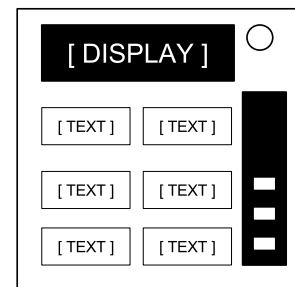
If the serial number does not contain a vowel:

		Red Flash	Blue Flash	Green Flash	Yellow Flash
Button to press:	No Strikes	Blue	Red	Yellow	Blue
	1 Strike	Blue	Blue	Yellow	Blue
	2+ Strikes	Yellow	Yellow	Yellow	Red

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.

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



Step 1:

Based on the display, read the label of a particular button and proceed to step 2:

YES	FIRST	DISPLAY	OKAY	SAYS	NOTHING
RED	REED	LEED	HOLD ON	YOU	YOU ARE
YOUR	YOU'RE	UR	THERE	THEY'RE	THEIR
THEY ARE	SEE	C	CEE		

Step 2:

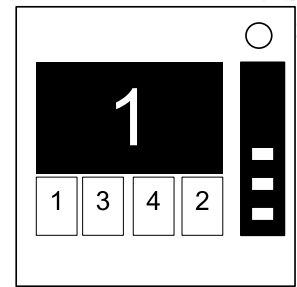
Using the label from step 1, push the first button that appears in its corresponding list:

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

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 to disarm the module.
- Pressing an incorrect button will reset the module back to stage 1.
- Button positions are ordered from left to right.



Stage 1:

If the display is 1, press the button in the third position.

If the display is 2, press the button in the first position.

If the display is 3, press the button labeled "4".

If the display is 4, press the button in the fourth position.

Stage 2:

If the display is 1, press the button in the same position as you pressed in stage 1.

If the display is 2, press the button in the first position.

If the display is 3, press the button in the second position.

If the display is 4, press the button in the third position.

Stage 3:

If the display is 1, press the button with the same label you pressed in stage 1.

If the display is 2, press the button with the same label you pressed in stage 2.

If the display is 3, press the button labeled "4".

If the display is 4, press the button in the fourth position.

Stage 4:

If the display is 1, press the button in the same position as you pressed in stage 2.

If the display is 2, press the button in the same position as you pressed in stage 2.

If the display is 3, press the button in the same position as you pressed in stage 1.

If the display is 4, press the button in the same position as you pressed in stage 2.

Stage 5:

If the display is 1, press the button with the same label you pressed in stage 2.

If the display is 2, press the button with the same label you pressed in stage 3.

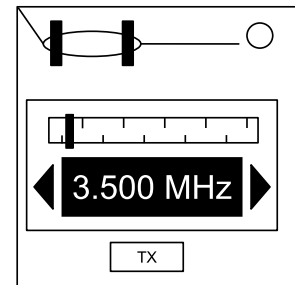
If the display is 3, press the button with the same label you pressed in stage 2.

If the display is 4, press the button with the same label you pressed in stage 4.

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 to spell one of the words in the table.
- The signal will loop, with a long gap between repetitions.
- Once the word is identified, set the corresponding frequency and press the transmit (TX) button.



How to Interpret

1. A short flash represents a dot.
2. A long flash represents a dash.
3. There is a long gap between letters.
4. There is a very long gap before the word repeats.

A ● ■■■
 B ■■■ ● ● ●
 C ■■■ ● ■■■ ●
 D ■■■ ● ●
 E ●
 F ● ● ■■■ ●
 G ■■■ ■■■ ●
 H ● ● ● ●
 I ● ●
 J ● ■■■ ■■■ ■■■
 K ■■■ ● ■■■
 L ● ■■■ ● ●
 M ■■■ ■■■
 N ■■■ ●
 O ■■■ ■■■ ■■■
 P ● ■■■ ■■■ ●
 Q ■■■ ■■■ ● ■■■
 R ● ■■■ ●
 S ● ● ●
 T ■■■

U ● ● ■■■
 V ● ● ● ■■■
 W ● ■■■ ■■■
 X ■■■ ● ● ■■■
 Y ■■■ ● ■■■ ■■■
 Z ■■■ ■■■ ● ●

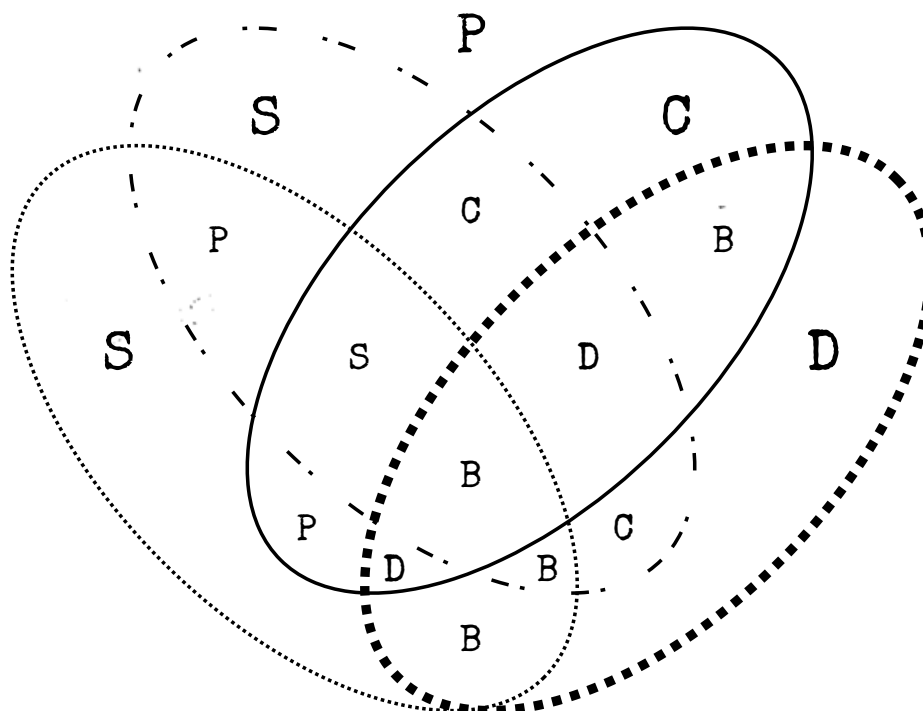
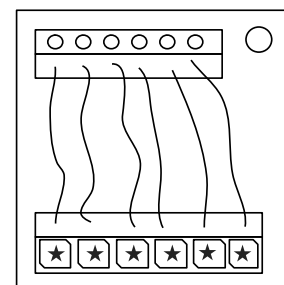
1 ● ■■■ ■■■ ■■■ ■■■
 2 ● ● ■■■ ■■■ ■■■
 3 ● ● ● ■■■ ■■■
 4 ● ● ● ● ■■■
 5 ● ● ● ● ●
 6 ■■■ ● ● ● ●
 7 ■■■ ■■■ ● ● ●
 8 ■■■ ■■■ ■■■ ● ●
 9 ■■■ ■■■ ■■■ ■■■ ●
 0 ■■■ ■■■ ■■■ ■■■ ■■■

If the word is:	Respond at frequency:
quick	3.522 MHz
place	3.525 MHz
hotel	3.532 MHz
texas	3.535 MHz
spell	3.542 MHz
house	3.545 MHz
level	3.552 MHz
ulcer	3.555 MHz
these	3.562 MHz
kitty	3.572 MHz
other	3.575 MHz
brain	3.582 MHz
every	3.585 MHz
zulu	3.592 MHz
below	3.595 MHz
olive	3.600 MHz

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...

- Look at each wire: there is an LED above the wire and a space for a "★" symbol below the wire.
- For **each** wire/LED/symbol combination, use the Venn diagram below to decide whether or not to cut the wire.
- Each wire may be striped with multiple colors.



— — —	Wire has red coloring
—————	Wire has blue coloring
.....	Has ★ symbol
■ ■ ■ ■ ■ ■ ■	LED is on

Letter	Instruction
C	Cut the wire
D	Do not cut the wire
S	Cut the wire if the last digit of the serial number is even
P	Cut the wire if the bomb has a parallel port
B	Cut the wire if the bomb has two or more batteries

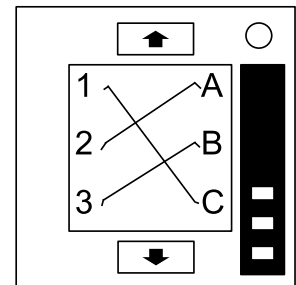
See Appendix B for battery identification reference.

See Appendix C for port identification reference.

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 using 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 table. Wire occurrences are cumulative over all panels within the module.

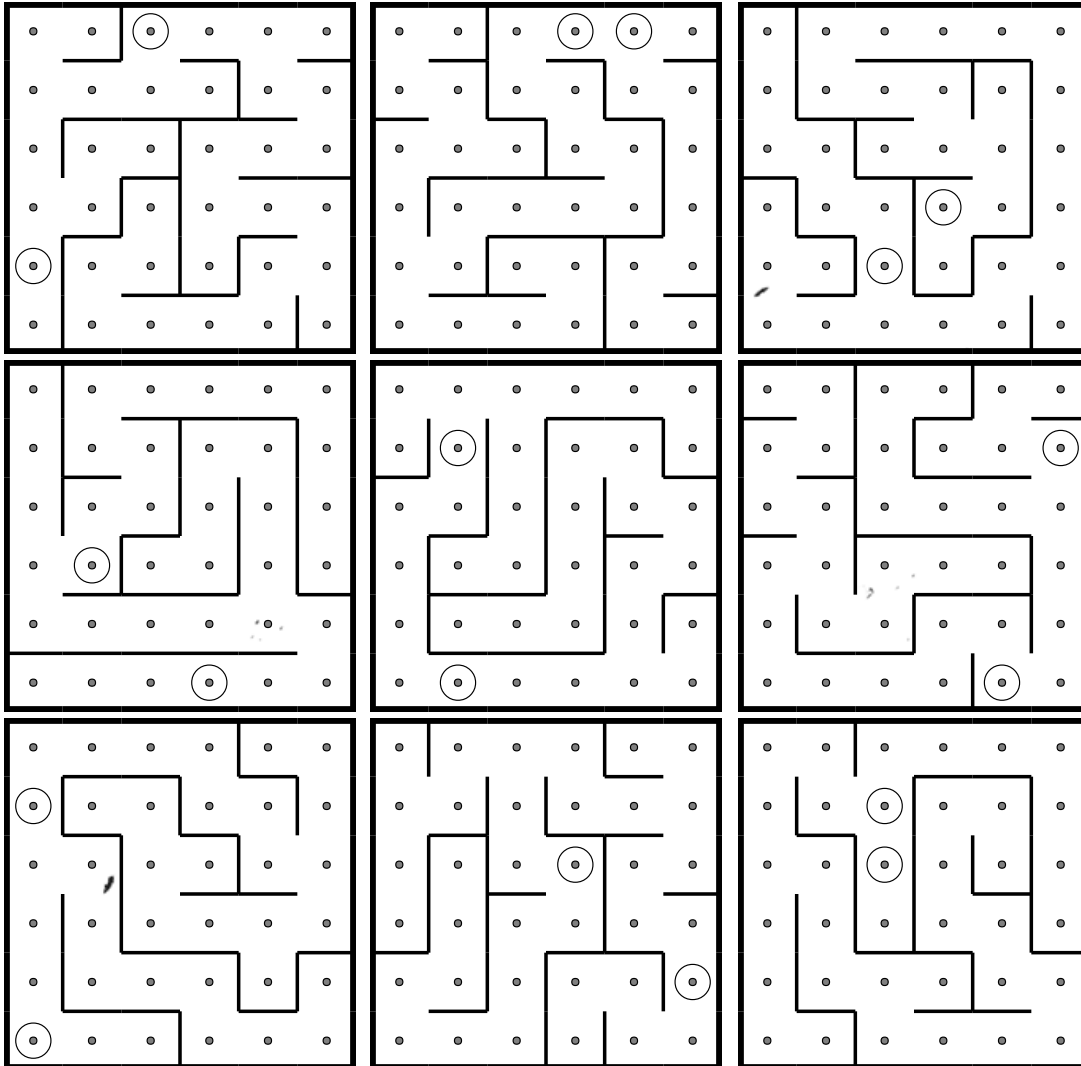
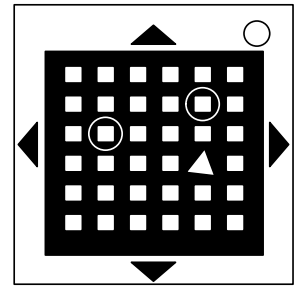


Red Wire Occurrences		Blue Wire Occurrences		Black Wire Occurrences	
Wire Occurrence	Cut if connected to:	Wire Occurrence	Cut if connected to:	Wire Occurrence	Cut if connected to:
First red occurrence	C	First blue occurrence	A, B or C	First black occurrence	C
Second red occurrence	B or C	Second blue occurrence	A or C	Second black occurrence	A or C
Third red occurrence	Never Cut	Third blue occurrence	B	Third black occurrence	B or C
Fourth red occurrence	A or B	Fourth blue occurrence	B or C	Fourth black occurrence	B or C
Fifth red occurrence	C	Fifth blue occurrence	B	Fifth black occurrence	B
Sixth red occurrence	Never Cut	Sixth blue occurrence	A, B or C	Sixth black occurrence	Never Cut
Seventh red occurrence	A or C	Seventh blue occurrence	Never Cut	Seventh black occurrence	A
Eighth red occurrence	A or B	Eighth blue occurrence	A or C	Eighth black occurrence	B
Ninth red occurrence	A, B or C	Ninth blue occurrence	A or B	Ninth black occurrence	B

On the Subject of Mazes

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

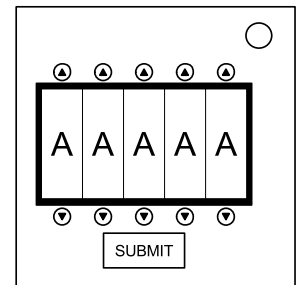
- Find the maze with matching circular markings.
- The defuser must navigate the white light to the red triangle using the arrow buttons.
- **Warning:** Do not cross the lines shown in the maze. These lines are invisible on the bomb.



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 below.
- Press the submit button once the correct word has been set.



after	aloof	arena	butts	crate
debit	fails	gangs	goals	joule
ktane	lemon	mains	major	olive
other	pingu	plant	quack	safer
sails	scoop	snake	sound	spawn
spell	timwi	toons	vinyl	virus
wagon	would	years	youth	zones

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.

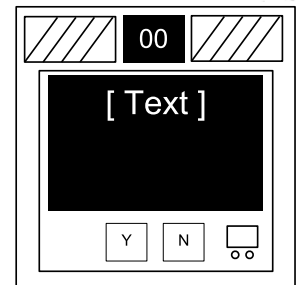
Stay observant: needy modules may reactivate at any time.

00

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.

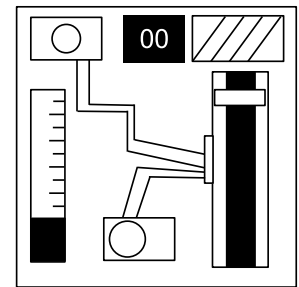
- Respond to the computer prompts by pressing "Y" for "Yes" or "N" for "No".



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.

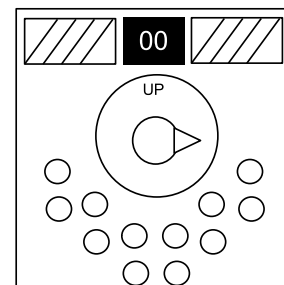
- Discharge the capacitor before it overloads by holding down the lever.



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 the on/off configuration of the twelve LEDs.
- Knob positions are relative to the "UP" label, which may be rotated.



LED Configurations

Up Position:

X			X		
X	X	X	X	X	X

				X	X
	X	X		X	

Down Position:

X			X		X
X					

X			X		
		X	X		X

Left Position:

	X				X
X	X	X	X		

					X
	X	X		X	

Right Position:

X			X		X
		X		X	X

	X			X	
X	X	X	X		

X = Lit LED

Appendix A: Indicator Identification Reference

Labelled indicator lights can be found on the sides of the bomb casing.





Common Indicators

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

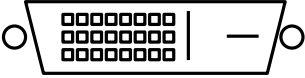
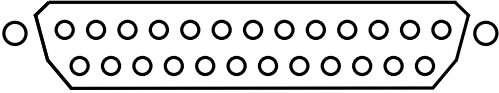

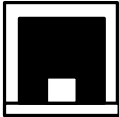
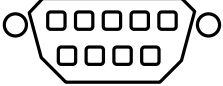

Appendix B: Battery Identification Reference

Common battery types can be found within enclosures on the sides of the bomb casing.

Battery	Type
	AA
	D

Appendix C: Port Identification Reference

Digital and analog ports can be found on sides of the bomb casing.

Port	Name
	DVI-D
	Parallel
	PS/2
	RJ-45
	Serial
	Stereo RCA