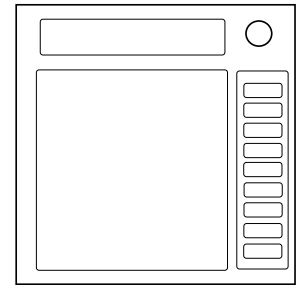# On the Subject of 100 Levels of Defusal

Who said that one module couldn't serve multiple purposes?

This module will operate differently if a mission from the
100 Levels of Defusal Missions mission pack is played. If one
of those missions is being played, refer to Section A. If not,
refer to Section B.

Section A

The display on the top screen will display the level number of what mission was
selected. The module will start in a locked state, and will unlock when a
certain amount of modules have been solved.

The progress bar on the right of the module will gradually fill when a module is
solved. When the progress bar is completly filled, the module will unlock. Refer
to Section C. On higher levels, more modules need to be solved to fill the
progress bar.

Section B

The module has not selected a level, so no solves are required to unlock it, as it
is already unlocked. Refer to Section C.

Section C – The Levels Cipher

The module is now unlocked. Some letters, a submit button, and a toggle button
will appear on the main screen. Pressing a letter will change it to the next
letter in the alphabet. Use the initial display of letters to solve the module.

Each letter is assigned two values which are found in Table A. For every
combination of two letters on the screen, multiply the lowest values in their
pairs together. The sum of these multiplied values is Value A. Repeat with the
highest values to obtain Value B. Add Values A and B together and multiply by the
level number (or 15 if there is none). Convert this new number from base 10 to
base 6, and replace any zeros with sixes.

Starting with the last two digits of the calculated number, convert each pair of
digits into a letter as if that letter's two values from Table A were those two
digits. Replace the last encrypted letter in reading order on the screen with
this newly decrypted letter. Repeat this by continuing leftward in the
calculated number using the next pair of digits* until there are no more letters
left to decrypt. If the calculated number doesn't have enough digits to satisfy
all the letters, add leading zeros until it does.

After the letters have been changed on the screen to match the decrypted letters, press the submit button at the bottom of the screen. If the answer is correct, the module will solve. If the answer is incorrect, the module will display the correct solution, and generate new letters.

The toggle button at the top of the screen will toggle the direction the letters will change when pressing a letter on the screen. By default, pressing a letter will move it one position forward. Pressing the toggle button will make the letter move one position backward.

The letters can only be changed on the screen when they're solid white. Other colors represent different statuses of the module, and the letters cannot be pressed at those times.

Table A

Use this table to obtain the two values for each letter, which are the numbers in the same row and column as the letter.

	0	1	2	3	4	5	6
0	A	A	E	E	I	O	U
1	A	B	C	D	F	G	H
2	E	C	J	K	L	M	N
3	E	D	K	P	Q	R	S
4	I	F	L	Q	T	V	W
5	O	G	M	R	V	X	Y
6	U	H	N	S	W	Y	Z

* When selecting a pair of digits, use the digits that are N and N − 1 digits away from rightmost digit of the calculated number, in which the Nth letter is being decrypted.

For example, if the calculated number was 654321 and you needed to decrypt 6 letters, the 1st letter uses the pair (2,1), the 2nd letter uses the pair (3,2), the 3rd letter uses the pair (4,3), and so on. The 6th letter uses the pair (0,6), since a leading zero needed to be added to satisfy all 6 letters.