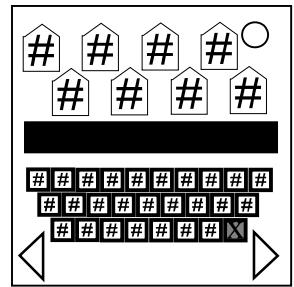


On the Subject of The Cryptic Cycle

This module is as \$HILLjji fCTy as it looks.

This module consists of a screen, eight labelled dials, and three randomised keyboards that can be cycled through using the arrow buttons.



The labels on the dials, when decrypted and read from left to right, spell out an eight letter word.

Each dial gives two bits, which, when put into the module's corresponding logical operators, returns two truth values.

- Add the number of ports to the number of 90° clockwise rotations, starting from north, to direction the dial is pointing.
If the is number is odd, the first bit of the dial is a 1, otherwise it is a 0.
- Find the number of 90° clockwise rotations, starting from the direction the dial is pointing, to the direction the label is pointing.
If the is number is odd, the second bit of the dial is a 1, otherwise it is a 0.

These truth values dictate what each letter in the word changes to in order to produce the encrypted word.

Each letter of the encrypted word is translated into a glyph from one of three sets.

The negative spaces of these glyphs are labelled on the dials.

Once deciphered, find the word in the table below, the word written below it is the word that should be entered.

Apply the same encryption to the response word, and type out the encrypted response word using the keys.

The encrypted response must use the glyphs from the same set as the dial labels.

The word is automatically submitted when eight keys are pressed.

The red button can be pressed at any time before the eighth key is pressed to delete the last input.

Inputting any of the eight glyphs incorrectly will cause a strike to be issued and reset the module.

Operators

Separate the eight dials into two groups of four, consisting of the four upper and four lower dials respectively.

Starting from **OR**, move one space in the direction of each dial in each set:

- The first operator is given by the upper dials.
- The second operator is given by the lower dials.

Note:

If both sets of dials give the same operator, the second operator becomes **NAND**.

				AND				
			XNOR		XOR			
		NOR		⇒		NOR		
	XOR		⇐		⇐		XNOR	
AND		⇒		OR		⇒		AND
	XNOR		⇐		⇐		XOR	
		NOR		⇒		NOR		
			XOR		XNOR			
				AND				

		Truth Value									
First bit	Second bit	AND	OR	XOR	NAND	NOR	XNOR	⇒	⇐		
1	1	T	T	F	F	F	T	T	T		
1	0	F	T	T	T	F	F	F	T		
0	1	F	T	T	T	F	F	T	F		
0	0	F	F	F	T	T	T	T	T		

Encryption Tables

The glyphs in the table are facing north.
This is also how they appear on the keyboards.

	Set 1	Set 2	Set 3
A	X	◻	Y
B	◻	◻	◻
C	◻	◻	◻
D	◻	▼	◻
E	◻	◻	▼
F	◻	◻	◻
G	◻	◻	◻
H	+	◻	◻
I	◀	◀	◀
J	◻	◻	◻
K	◻	◀	◻
L	◻	◻	◀
M	◻	◻	◻
N	◻	◻	◆
O	◻	◻	◻
P	◻	◻	◻
Q	◻	◻	◻
R	◻	◻	◻
S	◻	◻	◻
T	X	◻	◻
U	◻	◻	◻
V	◻	◻	◻
W	◻	◻	◻
X	X	◻	◻
Y	◻	◻	◻
Z	◻	◻	◻

Letter	1st truth value	T		F	
	2nd truth value	T	F	T	F
A	G	V	C	X	
B	O	E	M	A	
C	R	N	F	S	
D	I	J	O	D	
E	Y	X	V	T	
F	S	D	G	W	
G	H	H	I	R	
H	Q	P	A	P	
I	B	S	N	U	
J	F	C	R	J	
K	L	R	Q	Z	
L	P	G	W	F	
M	Z	K	B	Y	
N	A	B	J	Q	
O	T	M	D	G	
P	N	Q	H	E	
Q	K	L	T	I	
R	V	Y	Z	L	
S	C	A	E	C	
T	U	F	Y	K	
U	J	T	K	V	
V	M	W	X	O	
W	D	Z	U	H	
X	E	I	L	N	
Y	X	U	P	M	
Z	W	O	S	B	

Keyword Table