

On the Subject of The Enigma Cycle



Round and round and round it goes. When will it stop? Hell if I know.

This module consists of a screen, eight dials with brown labels, and a QWERTY keyboard.

The labels on the dials, when decrypted and read from left to right, in a zig-zag formation, spell out an eight letter word in the table provided.

We are required by the Cipher Cycle Committee to say this.

The word has been encrypted through an Enigma Cipher, with the orientation of the dials depicting the initial setup of the Enigma Decoder.

- The number of 120° clockwise rotations of the first dial from north, plus one is the alphabetical position of the reflector being used.
- The number of 45° clockwise rotations of the second, third and fourth dials from north, plus one, are the top, middle and bottom rotors, respectively.
- The number of 30° clockwise rotations of the fifth, sixth and seventh dials from north, plus one, are the initial rotations of the top, middle and bottom rotors, respectively.
- The direction of the eight dial determines the modifier:
 - If the dial is facing north, the encryption is performed normally.
 - If the dial is facing northeast, then the reflector must be used backwards. (I.E. AX reflection pair when read forwards, Z follows AX reflection to C)
 - If the dial is facing east, southeast or south, the bottom, middle or top rotor, respectively, will instead rotate to the right instead of the left during the encryption process.
 - If the dial is facing southwest, west or northwest, the bottom, middle or top rotor's initial rotation is backwards, respectively. (I.E. If the initial rotation requires going 5 left initially, you would go 5 right instead.)

Use the correct rotor charts and correct reflector chart to use to create an Enigma Decryptor.

They are read in this order: Reflector - Bottom Rotor - Middle Rotor - Top Rotor.
Above the top rotor, you will type A-Z to use as the plugboard.

Use the schematic at the last 3 pages provided to help you create the Enigma Decryptor.

We were legally required to say that by an entity that manages Enigma Machines.

The default encryption follows after aligning the rotors to their initial positions (default referring to when the 8th dial is pointing north):

1. Take the first initial letter and note the new letter on upper half of the top rotor in the same position as the plugboard.
2. Find the new letter on the bottom half of the top rotor and find the next letter on the top half of the middle rotor in the same position. Note the resulting letter.
3. Repeat the previous step using the bottom half of the middle rotor and the top half of the bottom rotor, and then using the bottom half of the bottom rotor and the top half of the reflector.
4. Look at the letter directly underneath the reflector in the same position and find it in the top half of the reflector.
5. Go up from that letter in the reflector to the letter in the bottom half of the rotor in the same position.
6. Find the new letter on the top half of the bottom rotor and find the next letter on the bottom half of the middle rotor in the same position. Note the resulting letter.
7. Repeat the previous step using the top half of the middle rotor and the bottom half of the top rotor, and then using the top half of the top rotor and the plugboard.
8. This is one letter of the encrypted message.
9. If the middle rotor's marking is at the left edge, shift all of the rotors to the left by 1.
10. Otherwise, if the top rotor's marking is at the left edge, shift this rotor and the middle rotor to the left by 1.
11. Otherwise, shift the top rotor to the left by 1.
12. Repeat this procedure with the next letter until you have the encrypted message.

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 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 cancel the input.

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

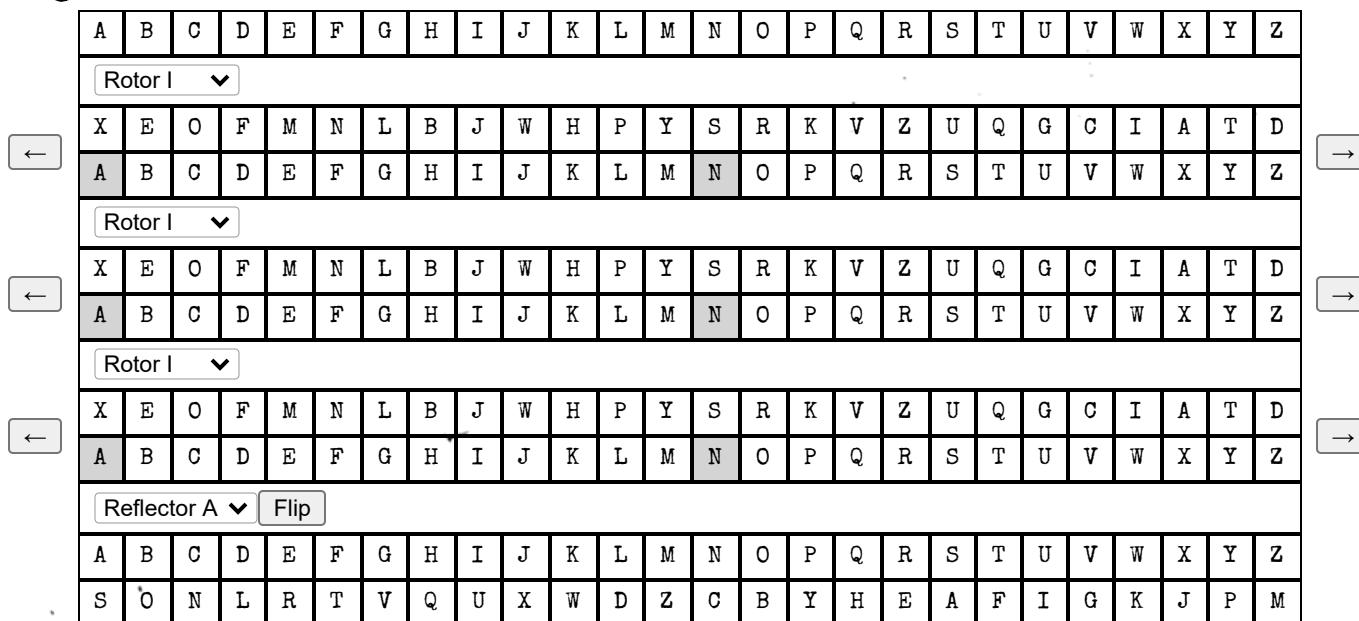
The Cipher Cycle Committee also required us to say this.

Message and Response Words

Bolded text refers to the message (referring to decrypting the letters read out by the defuser) and text underneath the bolded text refers to the response (the one the expert is trying to submit, unencrypted).

ABNORMAL	AUTHORED	BACKDOOR	BOULDERS	CHANGING	CUMBERED	DEBUGGED	DODGIEST	EDITABLE
ZILLIONS	GROANING	PROVOKED	WACKIEST	VOLATILE	WORKFLOW	YABBERED	HUDDLING	FAIRYISM
EXCESSES	FAIRYISM	FRAGMENT	GIBBERED	GROANING	HEADACHE	HUDDLING	ILLUSORY	IRONICAL
ORDERING	EDITABLE	XANTHENE	KINDLING	EXCESSES	MOBILITY	LIKENESS	QUITTERS	JUDGMENT
JOKINGLY	JUDGMENT	KEYNOTES	KINDLING	LIKENESS	LOCKOUTS	MOBILITY	MUFFLING	NEUTRALS
NEUTRALS	QUOTEABLE	XENOLITH	SUBLIMES	DEBUGGED	IRONICAL	PHANTASM	HEADACHE	BACKDOOR
NOTIONAL	OFFTRACK	ORDERING	PHANTASM	PROVOKED	QUITTERS	QUOTEABLE	RHETORIC	ROULETTE
TARTNESS	VARIANCE	MUFFLING	BOULDERS	FRAGMENT	NOTIONAL	DODGIEST	KEYNOTES	AUTHORED
SHUTDOWN	SUBLIMES	TARTNESS	TYPHONIC	UNPURGED	UGLINESS	VARIANCE	VOLATILE	WACKIEST
CHANGING	OFFTRACK	UGLINESS	ROULETTE	ZAPPIEST	CUMBERED	RHETORIC	ILLUSORY	ABNORMAL
WORKFLOW	XENOLITH	XANTHENE	YABBERED	YOURSELF	ZAPPIEST	ZILLIONS		
GIBBERED	LOCKOUTS	SHUTDOWN	JOKINGLY	UNPURGED	TYPHONIC	YOURSELF		

Enigma Interactive



Appendix: Enigma Wheel Printout

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
Top Rotor																									
Middle Rotor																									
Bottom Rotor																									
Reflector																									

Reflector A

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
S	O	N	L	R	T	V	Q	U	X	W	D	Z	C	B	Y	H	E	A	F	I	G	K	J	P	M

Reflector B

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
H	D	X	B	I	R	O	A	E	K	J	Q	P	Y	G	M	L	F	T	S	Z	W	V	C	N	U

Reflector C

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
T	K	E	U	C	S	Y	N	M	L	B	J	I	H	Q	X	O	Z	F	A	D	W	V	P	G	R

Rotor I

X	E	O	F	M	N	L	B	J	W	H	P	Y	S	R	K	V	Z	U	Q	G	C	I	A	T	D
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

Rotor II

Q	C	U	W	R	X	V	G	E	A	T	H	F	D	L	Z	P	N	Y	J	K	O	B	S	I	M
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

Appendix: Enigma Wheel Printout (Continued)**Rotor III**

P	W	G	X	F	E	N	S	Q	T	K	L	H	Y	A	B	M	O	D	C	V	Z	U	J	R	I
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

Rotor IV

O	N	Q	F	S	X	T	D	A	I	L	K	B	C	J	Y	U	E	P	G	M	R	W	H	Z	V
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

Rotor V

J	T	Z	M	D	N	R	K	L	V	W	X	C	E	B	Q	P	A	O	I	F	Y	G	S	H	U
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

Rotor VI

F	Z	X	D	T	G	V	Y	W	J	K	N	S	C	M	A	L	B	E	Q	U	R	O	I	P	H
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!

Rotor VII

E	B	Q	I	G	L	D	H	V	P	F	U	Y	R	A	S	K	Z	O	X	J	N	C	T	W	M
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

Rotor VIII

Y	S	L	B	C	X	Z	G	Q	A	N	J	D	K	M	V	F	I	E	O	R	U	T	W	P	H
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